

Center for  
Business and  
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Forecasting, Inc.



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**TOURISM JOBS  
GAIN GROUND  
IN COLORADO**

**APRIL 27, 2001**

**1999 ESTIMATES  
OF STATE & COUNTY  
TOURISM JOBS**

**CENTER FOR BUSINESS AND ECONOMIC FORECASTING, INC**

**PREPARED FOR THE DEMOGRAPHY SECTION OF THE  
COLORADO DEPARTMENT OF LOCAL AFFAIRS (DOLA),**

**THIS REPORT IS THE PRODUCT OF A  
PARTNERSHIP CONSISTING OF THE USDA FOREST  
SERVICE, USDI BUREAU OF LAND MANAGEMENT,  
AND THE COLORADO TOURISM OFFICE.**

This unique work would not have been possible without the technical and financial contributions provided by these partners. This report is available on the DOLA Website at: <http://www.dola.state.co.us/demog/cbef/tourism99.pdf>. The first report with 1997 data is available at <http://www.dola.state.co.us/demog/cbef/tourism.pdf>

Other Demography Section and CBEF reports may be useful in combination with this data. Go to the following addresses:

<http://www.dola.state.co.us/demog/>

<http://www.dola.state.co.us/demog/cbef/JELFS.htm>

<http://www.dola.state.co.us/demog/cbef/regproj.htm>

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## TOURISM JOBS GAIN GROUND IN COLORADO

April, 27 2001

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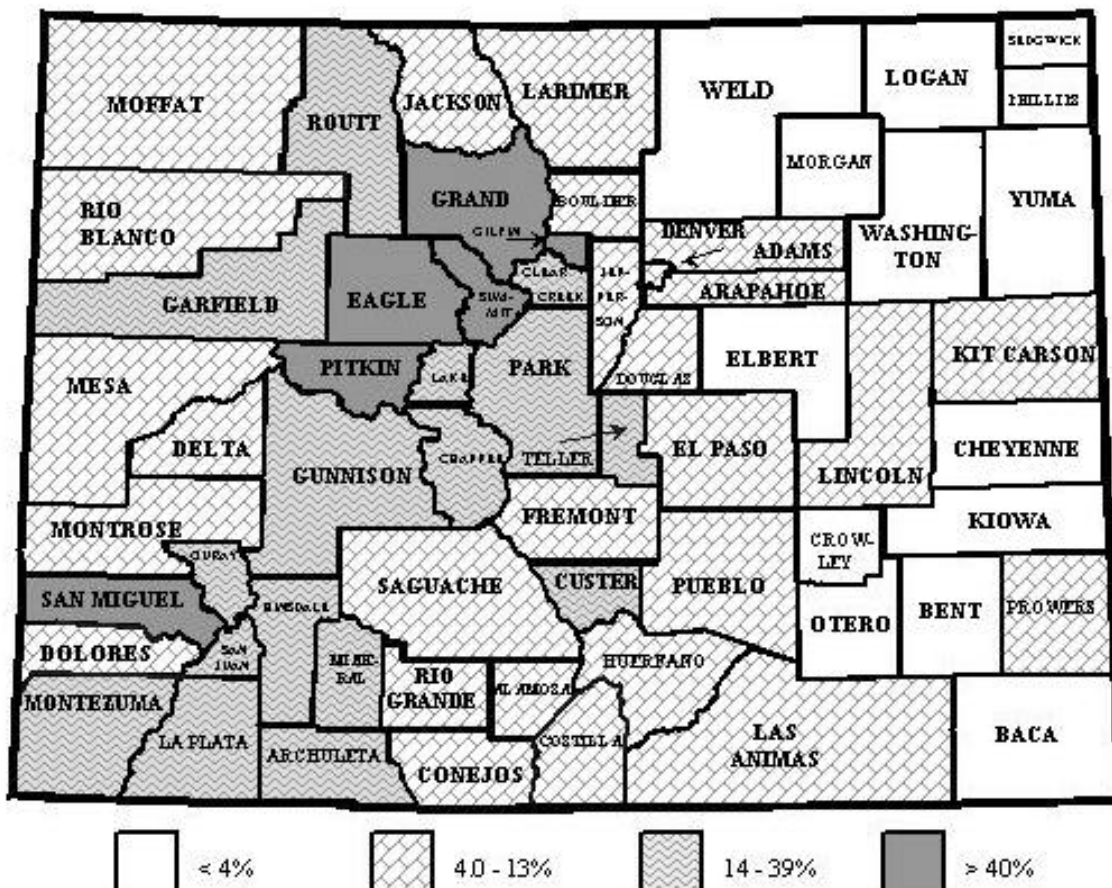
## TOURISM JOBS GAIN GROUND IN COLORADO

This report was prepared for the Colorado Tourism Office and the Demography Section of the Colorado Department of Local Affairs (DOLA). It is a product of a state and federal government partnership. The USDA Forest Service and USDI Bureau of Land Management are the federal partners. This unique work would not have been possible without the technical and financial contributions provided by these partners. This update was assembled with the 1997 methodologies, but key findings have been updated to 1999 and trend analysis has been included.

### Key Findings

Tourism plays a major role in the Colorado economy. Tourism jobs totaled 212,222 statewide in 1999, or 8% of all jobs. More than half of those jobs were in the Front Range metropolitan counties, with the Denver-Boulder Metropolitan Region capturing the lion's share. Another 45% (96,077 jobs) were found on the Western Slope and in the Central Mountains. Although most of the jobs were found in metropolitan areas, tourism's impact was much greater on the local economies of the state's mountainous regions. In these parts of the state, tourism jobs accounted

**Map 1. 1999 Colorado Tourism Jobs as a % of Total Jobs**



for at least 48% of the total jobs in six counties and 34% or more in seven other counties (see Map 1 and Table 1). This study documents the role of tourism, including the impacts of second homes in Colorado’s economy.<sup>1</sup> Among the counties, Gilpin had the highest percentage of tourism jobs. Most of these were in the gaming industry and jobs serve more residents in the Front Range than out of state tourists. Excluding the six-county Denver-Boulder area, the counties with the most tourism jobs were Eagle and El Paso, with 16,833 and 15,916 jobs in 1999, respectively.

TABLE 1. Tourism Jobs by County							
Tourism as a % of Total Jobs							
County Name	1999 JOBS	Tourism Jobs	Tourism Percent	County Name	1999 JOBS	Tourism Jobs	Tourism Percent
Gilpin	5,341	4,315	81%	Mesa	66,660	5,098	8%
Summit	22,887	13,121	57%	Larimer	141,227	9,373	7%
Grand	8,112	4,283	53%	Alamosa	9,702	642	7%
San Miguel	6,811	3,464	51%	Las Animas	7,158	438	6%
Eagle	33,998	16,833	50%	El Paso	305,010	15,916	5%
Pitkin	19,467	9,355	48%	Denver Metro	1,567,115	80,244	5%
San Juan	381	150	39%	Rio Grande	6,213	310	5%
Mineral	845	332	39%	Dolores	815	40	5%
Ouray	2,003	765	38%	Lincoln	3,473	166	5%
Hindsdale	506	191	38%	Costilla	1,160	51	4%
Gunnison	10,526	3,625	34%	Kit Carson	4,918	197	4%
Routt	17,649	6,043	34%	Pueblo MSA	68,771	2,722	4%
Teller	9,757	3,281	34%	Prowers	8,450	330	4%
Archuleta	5,126	1,473	29%	Conejos	3,060	117	4%
La Plata	29,353	7,955	27%	Saguache	2,560	98	4%
Clear Creek	3,959	1,003	25%	Weld/Greeley	84,070	2,784	3%
Chaffee	8,782	2,117	24%	Morgan	15,110	392	3%
Park	3,572	674	19%	Logan	11,867	307	3%
Montezuma	13,521	2,163	16%	Otero	10,328	194	2%
Lake	2,817	435	15%	Sedgwick	1,619	29	2%
Custer	1,334	193	15%	Elbert	5,205	70	1%
Garfield	25,605	3,604	14%	Crowley	1,831	24	1%
Rio Blanco	3,781	359	9%	Yuma	6,020	68	1%
Montrose	18,751	1,741	9%	Baca	2,720	30	1%
Fremont	17,954	1,533	9%	Bent	2,410	23	1%
Jackson	900	75	8%	Phillips	2,575	19	1%
Delta	11,511	941	8%	Cheyenne	1,438	11	1%
Huerfano	3,389	266	8%	Kiowa	1,261	7	1%
Moffat	7,016	543	8%	Washington	3,085	15	0%

\*The Denver Metro Area includes Adams, Arapahoe, Boulder, Denver, Douglas and Jefferson Counties

<sup>1</sup> All data in this section is sum-of-county data and is confined to just direct basic employment. State totals that subtract instate tourism are discussed beginning on page 10.

**Two-year growth.** Tourism held steady at 8% of total employment in 1999. Tourism jobs grew 7.2% during the two-year period while total employment in the state rose only 6.5% (See Table 2). Between 1999 and 1997, growth in tourism jobs varied significantly across Colorado. The

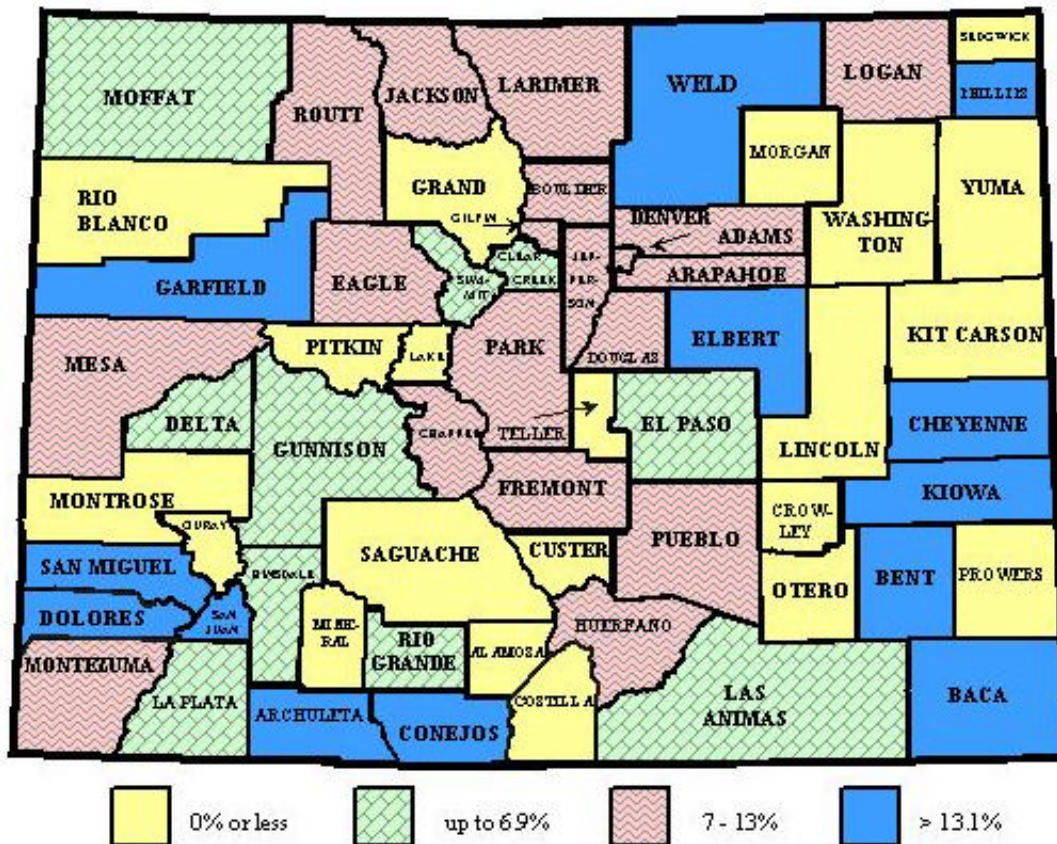
STATE TOTAL	Total Jobs	Tourism Jobs	Tourism %
TOTAL 99	2,641,485	212,222	8.0%
TOTAL 97	2,480,827	197,898	8.0%
Growth	6.5%	7.2%	

fastest growth occurred in tourism counties such as Garfield and Archuleta that border two large, mature tourism counties, Pitkin and La Plata. Weld County benefited from strong gains in hotel and restaurant jobs (see Map 2).

**Jobs by industry.** Tourism creates jobs across traditional industry lines. It has been difficult to measure in the past since traditional industry definitions do not isolate tourism. In this study, the appropriate slices

were carved out of other tourism-related industry sectors. For example, the restaurant (eating and

**Map 2. Growth of Colorado Tourism Jobs**



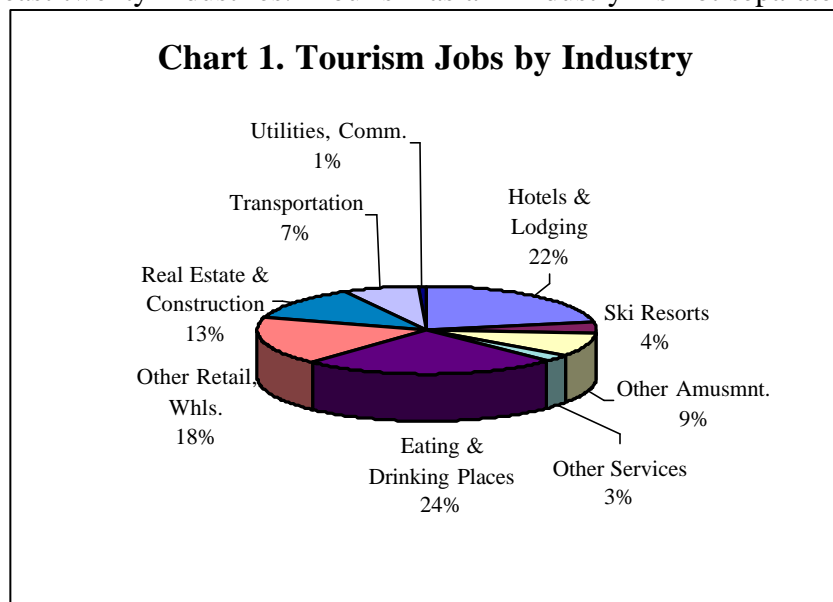
drinking) sector was the largest with nearly one quarter of all tourism jobs. Statewide, tourism accounted for 28% of all

restaurant jobs (see Table 3). Hotel and lodging establishments were the second largest source of

<u>INDUSTRY DESCRIPTION</u>	<u>1999 Jobs</u>	<u>Tourism Jobs</u>	<u>1997 Jobs</u>	<u>Tourism Jobs</u>	<u>99 vs 97 % Chg</u>
<b>TOTAL</b>	<b>2,641,485</b>	<b>212,222</b>	<b>2,480,827</b>	<b>197,898</b>	<b>7.2%</b>
Real Estate & Construction	252,491	26,606	214,071	23,270	14.3%
Amusement - Skiing and All Other	59,225	26,819	54,671	25,495	5.2%
Eating & Drinking Places	182,726	51,180	167,397	47,069	8.7%
Transportation - Air, Auto Rental, etc.	64,707	15,291	62,224	14,786	3.4%
Hotels & Other Lodging Places	52,934	46,550	50,476	44,457	4.7%

tourism jobs. Hotel jobs were 88% tourism-related. In third place, amusement and recreation service jobs, which included ski resort operations, totaled 26,819 jobs. Restaurant jobs are part of the retail sector while hotel and amusement jobs are part of the service sector. The real estate boom that is spurring second home transactions and building was the leading source of growth in tourism employment. Restaurant jobs were also growing at healthy levels during the two years.

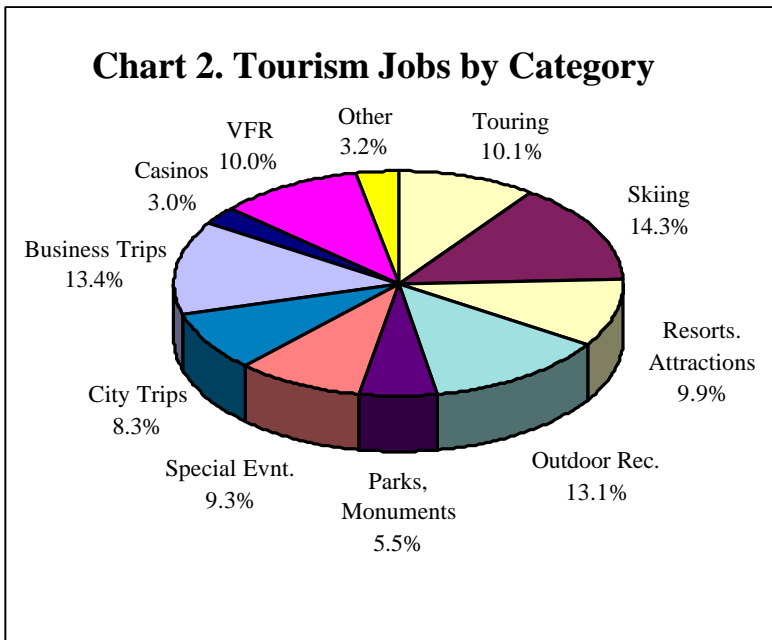
Tourism jobs are found in at least twenty industries. Tourism as an “industry” is not separately identified in the current standard industrial classification (SIC) systems, nor will it exist in the new NAICS system that will replace the SIC system in 2003. Chart 1 shows tourism jobs by industry. Both Chart 1 and Table 3 show the total jobs for all counties in the state, including the jobs due to spending by instate tourists.



**Second homes.** This study incorporates all aspects of the tourism sector, including the effects of second-home owners. Second homes were 4.3% of the state’s total housing units and numbered 77,740 in 1998. Yet in 13 Western Slope counties, second homes were more than 30% of the county’s total housing units. Our 1997 report was the first to include the jobs generated from second home impacts by taking portions of the construction, real estate, property

rental and other industries such as landscaping. The strong construction activity documented in Table 3 reflects the importance of second home related activity in Colorado's tourism mix.

**Jobs by category.** To understand the impact of tourism on the economy, it is important to measure the effects of different types of visitor attractions or activities. Tourism jobs were estimated for eleven categories depicting the type of visit. Skiing generated the most jobs according to this classification scheme, followed closely by business visits and outdoor recreation (see Chart 2).



Skiing encompasses many other industries besides just ski resorts and operators. As an industry, skiing created 8,756 jobs, but as a category, skiing supported 30,347 jobs. It grew 6.7% during the two years as strong real estate and construction activity for second homes, and as gains in some types of retail sales positions and restaurants more than made up for below average growth in ski company jobs.

The combination of state, federal and local parks and monuments with outdoor recreation, generated 39,486 private sector jobs, 18.6% of the total (see Table 5 and Table 4). Table 4 is a summary of the more detailed data presented in Table 5. In-state visitors accounted for more than a third of those outdoor recreation-related jobs. These instate jobs are discussed on p. 11.

TOURISM EMPLOYMENT BY CATEGORY	Tourism		99 vs 97 % Chg
	1999	1997	
<b>TOTAL</b>	<b>212,222</b>	<b>197,898</b>	<b>7.2%</b>
Business Trips	28,433	26,364	7.8%
Skiing	30,347	28,441	6.7%
Friends & Relatives	21,320	19,798	7.7%
Touring	21,335	19,930	7.1%
Outdoor Recreation	27,891	25,456	9.6%
All Other	82,896	77,909	6.4%

**The Tourism Matrix.** The tourism job estimates for each county can be viewed as a two-dimensional array or matrix with the dimensions being the eleven tourism

categories and the industry groupings. Data for each dimension of the matrix can be shown across all geographic areas. This array allows accounting of all tourism employment by category,



industry and area. It can be viewed as a rectangular block with the height as industries, the width as categories and the depth as counties.

Table 5 presents a 2-dimensional view of tourism jobs summed across all counties and showing state totals by industry and by category. The figures in the table are for all tourism jobs including those due to instate travelers. Business travelers are responsible for 7,956 hotel jobs, the most of any category, followed by Skiing. Business travelers are also responsible for the most jobs in Eating and Drinking places followed closely by Visiting Friends and Relatives and Outdoor Recreation. As many skiers are second homeowners, Skiing is the largest contributor to jobs in Construction and Real Estate. Unfortunately, the detail presented in Table 5 at the state level cannot be disclosed for all individual counties for reasons of employer confidentiality.

Table 6 is another way of displaying the matrix. This table shows tourism jobs by area and by category. Just as in Table 5, the columns in Table 6 are the eleven categories. The estimates shown in this view of the tourism matrix sum across all industries. The information in this table demonstrates the diversity of Colorado's tourism industry. Skiing dominates the tourism industry in Region 12, which has 64% of the state's skiing jobs (19,345 out of a total 30,349). Resorts, attractions, park-related and other types of outdoor recreation are most important in the rest of the Western Slope and in the Central Mountains. Business travel is the largest source of tourism employment in Metro Denver, employing 16,554 or 21% of the metro area's 80,244 tourism jobs. While business travel is also important in the remaining Front Range counties, other categories contribute more jobs than business visitors. For example, in Larimer County (Fort Collins) resort and park visits are bigger drivers of tourism. The City of Estes Park and Rocky Mountain National are major attractions. In El Paso County, the Broadmoor's resort activity and attractions such as the Cave of the Winds and Cheyenne Mountain Zoo pull in visitors. City trips also figure prominently such as trips to museums and the Air Force Academy. Casinos account for 85% of tourism jobs in Gilpin County and 58% in Teller County.

**TABLE 5. Tourism Jobs  
By Industry and by Category in 1999**

INDUSTRY DESCRIPTION	Tourism Jobs	CATEGORY										
		Skiing	Resorts	Outdoor	Parks	Spl Evnt	City	Busns	Casinos	Touring	VFR	Other
<b>TOTAL</b>	<b>212,222</b>	<b>30,347</b>	<b>20,912</b>	<b>27,891</b>	<b>11,595</b>	<b>19,660</b>	<b>17,706</b>	<b>28,433</b>	<b>6,305</b>	<b>21,335</b>	<b>21,320</b>	<b>6,717</b>
<i>Services</i>	79,696	15,204	9,485	8,805	3,663	8,107	5,213	10,734	5,952	7,725	3,304	1,503
Hotels & Other Lodging Places	46,550	7,214	4,945	5,624	2,664	6,170	3,786	7,956	448	5,948	659	1,137
Amusement & Rec. - Ski Resorts *	8,756	6,438	2,112	115	0	23	0	34	0	11	11	11
Amusmnt.- Film Rentals, Production	98	35	17	9	1	24	0	5	1	2	2	0
Amusmnt & Rec. - All Other	18,063	917	1,594	2,067	804	1,245	1,077	1,387	5,475	1,412	1,980	104
Pers. Serv. - Laundry, Cleaning	819	138	111	115	27	67	49	163	3	77	49	20
Pers. Serv. - All Other	1,177	79	124	133	26	156	77	198	16	122	183	62
Business Services -film dvlpmt., etc.	1,890	49	171	46	23	220	166	831	0	104	214	65
Private Education Services	435	11	34	73	38	53	57	44	5	31	74	16
Agricultural Livestock, outfitters	651	0	47	452	28	50	0	1	0	18	39	17
Ag. Services - Landscape	1,278	323	331	184	51	99	0	116	4	4	96	71
<i>Retail Trade</i>	84,931	7,124	7,103	12,510	5,306	7,489	9,083	10,390	234	10,290	12,464	2,939
Eating & Drinking Places	51,180	3,710	4,956	7,078	3,229	4,750	5,083	7,586	163	5,789	7,163	1,672
Building Material, Hardware, Garden	2,010	194	240	334	146	79	286	199	6	13	380	133
General Merch.,Apparel, & Furniture	9,197	993	507	1,366	535	823	1,514	798	4	991	1,335	330
Food Stores	4,986	438	301	947	360	438	511	189	21	688	913	182
Service Stations	7,034	305	276	1,195	461	544	754	762	14	1,318	1,145	260
Drugs, Liquor, Used	2,068	129	145	344	124	180	247	198	7	278	347	70
Goods	8,456	1,355	679	1,246	452	675	688	657	18	1,212	1,182	292
<i>Real Estate &amp; Construction</i>	26,606	5,891	3,492	4,429	1,572	2,303	1,080	3,253	55	1,337	1,789	1,406
Real Estate	9,266	2,754	1,429	1,469	464	827	246	999	6	266	262	421
Building Construction	6,223	1,168	627	1,077	338	611	360	869	14	295	476	388
Maintenance - Special Trades	9,833	1,838	1,325	1,662	664	749	378	1,193	34	520	944	526
Heavy Const. other than building	1,283	131	111	220	106	116	97	192	2	132	106	70
<i>Transportation</i>	15,291	1,781	630	1,290	742	1,221	1,393	3,478	14	1,316	2,802	623
Local & Suburban Transit	2,027	336	123	182	91	172	137	434	3	50	427	73
Air Transportation	8,828	1,008	283	680	422	678	834	2,118	0	690	1,705	410
Arrangements	1,109	94	70	119	58	92	56	290	0	142	176	9
Auto Rental	2,201	254	92	165	103	168	211	559	0	205	349	95
Parking	97	9	2	9	4	8	11	27	10	8	5	4
Repair Services	1,029	80	61	134	64	103	144	50	1	220	140	32
<i>Wholesale Trade</i>	4,025	107	37	637	220	385	798	354	0	499	793	193
Apparel	290	22	12	39	12	37	45	40	0	15	55	13
Groceries	1,831	44	20	306	106	164	381	59	0	234	433	85
Beverages	254	8	5	45	20	19	42	9	0	37	57	12
All other wholesale	1,650	33	0	247	82	165	330	247	0	214	247	82
<i>Public Utilities, Communication *</i>	1,675	239	165	220	91	156	140	224	50	168	168	53
Communications	1,428	204	141	188	78	133	119	191	42	144	143	45
Electric & Gas	247	35	24	32	13	23	21	33	7	25	25	8

\* The skiing row is understated because Keystone and Copper appear as part of the hotel industry and Telluride appears as part of other amusement. However, the skiing column properly reflects the impact of these three ski employers.

**TABLE 6. Tourism Jobs  
By Region and by Category in 1999**

REGION OR COUNTY	Tourism Jobs	CATEGORY										
		Skiing	Resorts	Outdoor	Parks	Spl Evnt	City	Busns	Casinos	Touring	VFR	Other
STATE TOTAL *	212,222	30,349	20,912	27,888	11,595	19,660	17,706	28,431	6,305	21,334	21,321	6,720
FRONT RANGE	111,038	2,137	7,435	12,260	6,932	12,007	16,814	20,917	0	13,339	14,664	4,533
Denver Metro	80,244	1,901	801	9,461	4,132	9,102	12,503	16,554	0	10,090	11,641	4,058
Colo. Springs	15,916	218	3,221	738	310	1,316	3,871	2,383	0	2,159	1,573	127
Fort Collins	9,373	0	3,122	883	1,814	437	256	1,111	0	849	605	295
Pueblo MSA	2,722	18	0	358	676	689	120	337	0	92	434	0
Greeley PMS	2,784	0	291	819	0	463	63	533	0	149	412	53
WSTRN. SLOPE	81,821	26,795	11,531	12,255	3,457	6,948	753	6,372	669	5,726	5,467	1,846
Region 9	11,781	1,558	2,289	2,501	1,701	200	0	688	669	894	1,067	212
La Plata	7,955	1,372	1,335	1,804	916	182	0	559	346	584	706	151
Montezuma	2,163	25	175	504	753	18	0	100	323	98	167	0
Region 10	10,726	3,549	1,040	2,164	584	837	0	678	0	716	767	391
Gunnison	3,625	1,441	623	504	59	155	0	327	0	159	286	71
Montrose	1,741	180	0	291	314	242	0	213	0	246	175	79
San Miguel	3,464	1,883	352	602	0	352	0	91	0	48	59	78
Region 11	15,646	2,343	1,990	3,242	474	906	753	1,356	0	2,481	1,681	421
Garfield	3,604	272	939	1,269	45	100	0	56	0	516	300	106
Mesa	5,098	133	0	838	155	153	753	515	0	1,671	683	198
Routt	6,043	1,929	1,033	765	219	542	0	713	0	208	518	116
Region 12	43,667	19,345	6,211	4,347	698	5,006	0	3,650	0	1,636	1,952	823
Eagle	16,833	7,424	2,741	1,560	128	1,887	0	1,482	0	693	715	204
Grand	4,283	1,608	766	818	315	105	0	163	0	175	132	202
Pitkin	9,355	2,570	1,324	913	0	2,473	0	1,208	0	205	245	417
Summit	13,121	7,743	1,380	1,023	244	541	0	793	0	543	854	0
CENTRAL MTNS	14,256	1,022	1,574	2,208	800	378	0	626	5,585	1,083	739	241
Region 13	4,279	689	723	1,370	0	187	0	256	0	559	428	68
Chaffee	2,117	623	263	610	0	58	0	112	0	224	189	38
Region 14	704	33	58	199	199	7	0	21	0	125	27	35
Region 3n	5,318	300	146	351	48	148	0	248	3,679	245	96	57
Gilpin	4,315	0	0	124	48	127	0	196	3,679	68	48	26
Region 4n	3,955	0	646	288	553	35	0	102	1,907	154	189	81
Teller	3,281	0	457	101	408	27	0	85	1,907	100	138	58
E. PLAINS, SLV	3,432	155	207	944	314	171	0	292	0	1,018	282	47
Region 1	829	17	0	94	15	31	0	109	0	479	84	0
Region 5	444	8	22	196	0	52	0	61	0	52	52	0
Region 6	608	0	46	297	0	50	0	66	0	87	63	0
Region 8	1,551	130	140	357	299	39	0	57	0	399	83	47

\* Regional totals do not add to state total because of the utility and communications positions allocated only at the state level.

**Instate Tourism.** When examining tourism’s impact on the state economy as a whole, it is necessary to isolate those jobs generated by purchases of tourists from outside the state. Instate tourism jobs accounted for 28% of the total tourism positions in 1999. For example, a Denver resident’s visit to the Broadmoor in El Paso County is basic to El Paso County, but it doesn’t bring outside dollars into the state as a whole. From a state-level perspective, it is equivalent to a local resident visiting the hotel.

**TABLE 7. Total and Instate Tourism Jobs By Category**

1999	CATEGORY											
Jobs	Skiing	Resorts	Outdoor	Parks	Spl Evnt	City	Busns	Casinos	Touring	VFR	Other	Total
Total	30,347	20,912	27,891	11,595	19,660	17,706	28,433	6,305	21,335	21,320	6,717	212,222
Instate	5,055	5,019	10,515	3,143	5,701	7,720	4,749	5,989	4,922	4,030	1,612	58,456
Instate %	17%	24%	38%	27%	29%	44%	17%	95%	23%	19%	24%	28%
<b>Longwoods Resident Use % By Category</b>												
Instate %	50%	n.a.	15%	n.a.	29%	44%	17%	20%	23%	19%	n.a.	24%

Nearly 60,000 tourism jobs are due to visitors from one Colorado county to another (see Table 7). Nearly one third of the total tourism and recreation jobs were generated from the activities of those living and vacationing within the state. Table 7 shows the distribution of total and instate jobs by tourism category and compares percentages to data from the 1999 Longwoods International Colorado Visitor Study. The Longwoods study attributed 24% of all overnight pleasure trips to Colorado residents. Skiing and city trips had the largest instate share while the smallest share occurred in outdoor recreation and business trips, according to the Longwoods Study, which is described in the Method and Process section of our previous report.

The estimates of the share of jobs accounted for by instate tourists were done for the state as a whole for each of the 11 categories. No instate estimates were done for individual counties. Industrial sector detail is available only for the state as a whole. For most categories, the estimates were based on the Longwoods estimates of the share of instate trips.<sup>2</sup>

Activities associated with second homes are responsible for many of these instate jobs. Increasing numbers of Coloradoans own secondary residences or weekend retreats (mountain homes, ski condos or lakeside cabins). Knowing about this “resident” visitor group helps in further understanding the present uses of Colorado’s extensive public lands and growing residential (instate) tourism industry. Data about tourist behavior can be used to better plan for future demand.

<sup>2</sup> There were only three categories where this was not applicable: skiing, outdoor recreation and casino visits. See p. 36 of our previous report for a full description of the methods used to estimate instate visitors in these three categories.

Among the jobs generated by Colorado tourists, outdoor recreation contributed the most to the total with 10,515. Examples of such tourists include resident hikers and other outdoor enthusiasts who work in the Front Range and drive to the mountains in the Western Slope on weekends to recreate. In the winter, they take advantage of a wide array of outdoor activities, such as snowmobiling, cross-country skiing or ice fishing. Table 7 shows that 38% of outdoor recreation visitors to the state were from within Colorado. The Longwoods study found in-state activity at 15% of visitation in 1999. This was a dramatic change from 1997 when 58% of outdoor recreation was from in-state visitors.

For most categories, the in-state estimates were based on the Longwoods survey results showing of the share of in-state trips. This reflected the assumption that overnight trips by Coloradoans resulted in roughly the same amount of spending and the same number of jobs per category as trips by out-of-state visitors. There were four categories where this was not applicable: skiing, outdoor recreation, parks and monuments and casinos. The methods used to estimate in-state visitors for these four categories are described in the methodology section, p. 23 and p. 24.

## Overview and Background

The estimates were developed by the Center for Business and Economic Forecasting (CBEF), under contracts with the Demography Section of the Colorado Department of Local Affairs (DOLA) and the Colorado Tourism Office (CTO). It is part of a larger effort by the Demography Section of to identify the basic industries or drivers of each county or metropolitan economy in Colorado.

**The partnership.** This report is the product of a partnership consisting of the U.S. Department of Agriculture (USDA) Forest Service, Rocky Mountain Region; the U.S. Department of Interior (USDI) Bureau of Land Management (BLM), Colorado State Office; the State of Colorado Tourism Office (CTO) and its predecessor, the Colorado Tourism Board, as well as private donors. The Demography Office has become the umbrella organization in this new partnership. This unique work would not have been possible without the technical and financial contributions provided by the partners.

Many people from local governments, businesses, professional associations, Colorado State University, and the University of Colorado, Boulder provided valuable input as part of the technical advisory committee. Local governments and community leaders helped to verify the data. In many cases, local governments helped to create the estimates, but their ultimate validation of the data was a distinguishing mark of this study.

**Coverage.** The report examines tourism jobs at the county level by industry and by type of visit (category). The study is comprehensive since it begins with the whole economy in each county, as measured by total employment. The study and its predecessor *Tourism Jobs In Colorado*, published in March of 2001, are more thorough than any previous estimates, since they incorporate all aspects of the tourism sector.

**Background.** CBEF developed estimates of the tourism industry by building upon the Local Economic Information and Forecasting Assistance (LEIFA) data for 1997 described in the background section of earlier report that is also on the DOLA web site. This study focused only on the direct employment impacts of different tourism activities. The secondary effects are not quantified in either this or the previous study.<sup>3</sup>

This report is an update of the 1997 study. It is part of a larger effort by the Colorado Demography Section to understand the economies of each county. The Section, by law, is responsible for working with national and state forecasters and local planners and policy-makers to forecast future population. Experience with these efforts has shown that population forecasts are more reasonable and accurate if they incorporate economic forecasts. The Section has developed a program of economic data and analysis<sup>4</sup> to support and enhance its forecasting efforts. The identification of “basic industries” is an important part of this analysis.

**Tourism as a basic industry.** In economic base analysis, local economies are divided into “basic industries” and “local resident services.” Basic industries are those that export goods or provide services to non-residents such as tourists. They bring in outside dollars that, in turn, provide jobs and income to residents. A portion of basic industry income and wages is spent on locally-produced goods and services. Local resident services (LRS) result from the spending of residents. LRS include housing, retail goods, health services, education, fire and police protection, transportation, and utilities. The basic industries can be viewed as “drivers” of the local economy, in the sense that they generate the outside income that, in turn, stimulate LRS jobs and wages (see Appendix B definitions, p. 29).

Tourism, by definition, is a base industry because it brings in outside dollars. Industries such as skiing create demand for local resident services, because the ski instructors and lift operators need to have housing and grocery stores. As a base industry grows or declines, the local resident services will similarly increase or decrease.

**Uses of the data.** The information in this study will have many uses. For some, merely understanding the magnitude and composition of tourism will be beneficial. More specifically, the data can serve to inform the development of local, federal and state policies for land use.

In the course of developing the tourism categories, a distinction was made between those activities that took place on public and those on private lands. This distinction helped to clarify the difference between the impacts of public park and other outdoor recreation versus those from private resort recreation. This public/private split was valuable to the federal partners, because it enabled them to see the direct economic impact of activities that take place on lands they manage. However, most of the employment that results from all of these activities actually takes place in

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<sup>3</sup> These estimates do not include indirect base industries or induced local resident services. Examples of indirect base industries are laundry or landscaping services for hotels and restaurants. Examples of local resident services are housing, and public safety (police and fire protection).

<sup>4</sup> Local Economic Information and Forecasting Assistance (LEIFA) publications are available from the Demography Section.

the private sector on private lands, the exception being skiing since it takes place on public lands. Often, activities that take place on private land, such as horseback riding at a dude ranch, wouldn't occur without the scenic environment or amenities provided by the public lands.

At the local level, the information can be used to enhance local economic development efforts and to assist localities in the planning for (or managing) growth. The identification of each type of existing activity in an area suggests strategies for enhancing existing base industries and/or attracting new ones. For example, the use of this data has led Gunnison County to consider how to expand the markets of its skiing industry and to explore strategies for attracting retirees.

Data and forecasts of tourism activities can be used in conjunction with estimates of the secondary effects to analyze likely future growth patterns. For example, in Eagle County, specific forecasts of expected growth in resorts and outdoor recreation can be used to more accurately project the needs for housing, transportation, and community services. In essence, this enables local governments to understand the tourism industry's complexity and to plan more accurately for future growth and its numerous secondary effects.

## Tourism Trends in Colorado Regions

Colorado's regions showed diverse growth patterns between 1997 and 1999. Many key tourism areas are spotlighted in the next few pages. Principal attention was paid to the large tourism economies either in terms of numbers of employed or in terms of proportion of jobs due to tourism. The twelve metro areas or counties highlighted below reflect a divergent tourism sector that is undergoing rapid change and facing numerous and varied challenges. The ski counties face increasing challenges as an aging U.S. population looks for less stressful recreational activities. More urban counties have to adapt to changes, as well, e.g. El Paso County lost a major air carrier to Denver.

**Tourism in the Denver-Boulder Metro Area.** Total employment in the Denver-Boulder Metro Area was 1,567,115 in 1999. Tourism-related employment was 5.1% of the total in 1999 with

**Table 8. Denver Metro Tourism Jobs, Proprietors**

DENVER METRO	Total Jobs	Tourism Jobs	Tourism %
TOTAL 99	1,567,115	80,244	5.1%
TOTAL 97	1,454,011	73,625	5.1%
Growth	7.8%	9.0%	

80,244 jobs. Tourism grew 9% during the two-year period while total employment in the area grew 7.8%. Tourism-related jobs in air transportation, hotels, restaurants and amusement positions grew at robust rates. As measured by industrial sector, those four rapidly rising sectors offset slower growth in general merchandise, apparel, furniture and other retail sectors that have exposure to tourism, including service stations, sporting goods, liquor and food stores. By category or by

source of aggregate demand, business, special events, park-related and other leisure categories were the most important generators of tourism employment. As in 1997, business visitors

continued to generate the largest numbers of tourism jobs in the six-county area (see Appendix A p. 27 for the participants of the metro area estimating committee).

**Tourism in Select Ski Counties.** Overcrowding in the winter in Summit County due to the popularity of the buddy passes, poor snow conditions in many parts of the state, and the ramifications of second home are some of the challenges facing these tourism dependent counties. The declining popularity of skiing as an aging U.S. population looks for less risky sports is coupled with the risks from a slowing economy that set discretionary income back and may dampen tourism spending.

**Summit County.** Total employment in Summit County rose to 22,887 in 1999. Tourism accounted for 57.3% of total employment in 1999 with 13,121 jobs. Tourism grew 5.7% during the two-year period while total employment in the county grew 8.1%. Strength in skiing contrasted with slower growth in hotel and restaurant employment. Skiing in the four resorts: Copper, Breckenridge, A-Basin and Keystone rose more than 8% as the buddy pass program drew large numbers of Front Range day skiers. Hotels and restaurants with respective growth rates of 2.6% and 3.4% took the brunt of the impact related to poor snow conditions. Sporting goods store jobs rose 66.5% during the two years as retailers found more visitors shopping because of poor snow conditions. Overall, the tourism-sensitive souvenir shops, galleries, sporting goods, luggage and jewelry shops posted a 32% increase. The four resorts employed 3,900 in 1999, but if the impact of skiing is factored into other industries such as hotel and construction employment, skiing's impact totaled 7,743 jobs in 1999.

**Eagle County.** Total employment in Eagle County was 33,998 in 1999. Tourism jobs grew at a slower pace than the total jobs county-wide. Tourism grew 8.7% during the two-year period while total employment in the county grew 9.9%. Tourism was 49.5% of total employment in 1999 with 16,833 jobs.

Sluggish growth in skiing and other amusement jobs contrasts with rapid growth in restaurant, real estate, construction and retail sporting goods employment. A poor snow year contributed to the slower trend in tourism. Early closure of Vail and Beaver Creek contributed to slippage for the ski company. By category, outdoor recreation and business trips showed the most strength.

**Grand County.** Total employment in Grand County was 8,112 in 1999. Tourism was 52.8% of total employment in 1999 with 4,283 jobs. Tourism grew 11.3% during the two-year period while total employment in the county grew more moderately at 8.2%. Real Estate and construction were the leading contributors among the major industrial sectors, while among the categories other leisure and park visits led the rise. The three ski resort employers: Silver Creek, Berthoud Pass and Winter Park had an annual average of 950 on the payroll, accounting for a substantial portion of the total employment in the amusement and recreation industry for the county. Skiing employment rose only 7.9%, but the total impact of skiing including all industries such as hotels, restaurants and construction employment, rose 11%, as the strength in second home market continued. For instance, Zephyr Mountain Lodge, a time share and condo resort added 220 units at the base of Winter Park. Estes Park and Rocky Mountain National Park were responsible for the 12.1% increase in private sector, park-related jobs. Second homes are also



affecting other leisure, as more people visit to escape the city or the phones and relax in the quiet of a mountain retreat.

**Pitkin County.** Total employment in Pitkin County was 19,467 in 1999. Tourism was 48.1% of total employment in 1999 with 9,355 jobs. Tourism declined 0.6% during the two-year period while total employment in the county grew 0.6%. The decline came as a bad snow year impacted the tourism-related businesses.

Real estate, construction and sporting goods positions showed growth when tourism is measured by industrial sector. Amusement and recreation jobs, including Aspen Ski Co., contributed to the decline as did hotel and restaurant employment. The ski company is trying to move to more full time employment, which may have accounted for some of the decline. By category, tourism was strongest in terms of outdoor recreation. Category proportions differ dramatically from 1997, since new weights are based on input from the ski co. and the county planner.

**San Miguel County.** Total employment in San Miguel County was 6,811 in 1999. Tourism was 50.9% of total employment in 1999 with 3,464 jobs. Tourism grew 13.3% during the two-year period while total employment in the county grew 15.1%. By industrial sector, hotel jobs, restaurants and retail in tourism-sensitive shops surged. Amusement and recreation jobs, were bogged down by flat employment at Telluride Ski Area. By category, tourism was strongest in terms of skiing. Although the ski company remained flat during the two years, it spurred construction, lodging, restaurant and retail sales, as the appeal of the area grew among second home owners and other visitors. By category, skiing captured 1,478 of the total jobs or 48% of the total. It encompasses many other industries and it grew 27.9% during the two years. Special events declined as the repertory theater and bluegrass festival employment slowed. Outdoor recreation increased a slightly as a few new outfitters/guides and a horseback riding firm opened.

**Gunnison County.** Total employment in Gunnison County rose to 10,526 in 1999. Tourism slipped to 34.7% of total employment in 1999 with 3,625 jobs. Tourism grew 2.0% during the two-year period while total employment in the county grew 4.3% and tourism statewide grew 7.3%. By industry, strength in amusement and recreation services, including skiing offset job losses in hotels and retail sporting goods. The hotel declines came as key properties changed hands and some jobs shifted into the amusement sector. By category, skiing advanced as the Crested Butte ski company acquired hotels. Growth in other amusement positions like those at Elk Creek Marina, outfitting and rafting boosted outdoor recreation. Business tourism slipped slightly.

**Routt County.** Total employment in Routt County was 17,649 in 1999. Tourism accounted for 34.2% of total employment in 1999 with 6,043 jobs. Tourism grew 8.6% during the two-year period while total employment in the county advanced 10%. Real estate, construction and restaurant positions gained in the face of declining amusement and recreation jobs. Steamboat Ski & Resort Company lost 12.8% of its jobs and Howelsen Hill gained a few employees. Snowmobiling firms boosted winter outdoor recreation while resort positions were bolstered by golf, tennis and hot air ballooning.

By category, tourism was strongest in terms of outdoor recreation and business trips. Category proportions differ dramatically from 1997. Special events firms do not show up as predominately as in other counties such as Pitkin and San Miguel. In those two counties significant summer music festivals are large enough to show up on an annual average basis for employment.

Skiing captured 2,110 of the total jobs or 35% of the total. It encompasses many other industries and it grew 6.9% during the two years. Strong real estate and construction activity for second homes more than made up for the decline in ski company jobs.

**Garfield County.** Total employment in Garfield County was 25,605 in 1999. Tourism was 14.1% of total employment in 1999 with 3,603 jobs. Tourism grew 14.1 % during the two-year period while total employment in the county only grew 12%. Strength in resorts like the hot springs pool and in jobs related to those visiting friends and family contributed to the strong showing. Garfield is also home to the Sunlight Ski Area. By industry, restaurants showed strength as well as real estate, construction and amusement jobs over the two-year period, while hotel employment crept up only 2%. Being a neighbor to Pitkin County also helped the county, as jobs are being pushed “down valley.”

**Mesa County.** Total employment in Mesa County was 66,660 in 1999. Tourism was 7.6% of total employment in 1999 with 5,098 jobs. Tourism grew 8.6% during the two-year period while total employment in the county only grew 7.2%. Business trips and outdoor recreation had continued strength. By industry, restaurants enjoyed growth of 13% over the two-year period, while real estate and construction grew 12%.

#### **Other metropolitan or Front Range Counties.**

**El Paso County.** Total employment in the Colorado Springs Metropolitan Area was 305,010 in 1999. Tourism was 5.2% of total employment in 1999 with 15,916 jobs. Tourism grew 2.7 % during the two-year period while total employment in the county grew at a much faster 6.6%. Strength in touring and city trips contributed to the strong showing. By industry, restaurants showed strength as well as real estate and construction over the two-year period, while hotel employment was flat. The real drag was air employment, declining 44% as one of the city’s major carries moved its operations to Denver International Airport.

**Larimer County.** Total employment in Larimer County was 141,227 in 1999. Tourism was 6.6% of total employment in 1999 with 9,373 jobs. Tourism grew 10.2 % during the two-year period while total employment in the county only grew 7.5%. Strength in park-related employment, Estes Park resorts, and business-related tourism contributed to the strong showing. By industry, restaurants showed strength as well as real estate and construction over the two-year period, while hotel employment grew more moderately at 8.7% (see Appendix A, p. 28 for those who helped to create the estimates in the select counties described above).

## Methodology and Process

This study focused on the direct employment impacts of different tourism activities. CBEF developed estimates of the tourism industry by building upon and refining data initially developed by the Demography Section of the Colorado Department of Local Affairs (DOLA). The methods used to develop the job estimates were consistent with the larger base analysis estimates the Demography Section has been preparing over the past five years. Estimates of tourism jobs were developed for each pertinent industrial sector in each county and for the Denver metropolitan area. These jobs were then distributed among eleven tourism categories based on the purpose of visit.

**Updating the estimates to 1999.** The 1997 estimates were updated to 1999 based on 1999 employment. Initial estimates were developed by applying the 1997 proportions of employment in each tourism-related industry and to each tourism category to the 1999 employment estimates. The new estimates of tourism jobs were then reviewed and adjusted for major changes in industrial classification and for the addition or loss of tourism employers. In those counties with significant tourism activity, local experts further reviewed and modified the results.

Initial assignments of tourism jobs were prepared for each industry based on detailed databases covering the tourism industry and Colorado's county economies. Then, county or area workshops were conducted to review these initial assignments. Participants in the workshops were asked to identify the specific firms that produced goods or services for visitors to the county. All aspects of the tourism sector were addressed in the workshops, including the effects of second-home owners.

The county workshops were also critical in assigning the industry jobs into eleven tourism categories. First, existing information on tourism activities in the county, including destinations identified in the Colorado Atlas and Gazetteer, was compiled. Then, county-level meetings were held with tourism experts, large tourism-related businesses and other community leaders to interpret the existing data and assign the tourism employment in each industrial class to the eleven categories. Local governments and community leaders helped to verify the data. In many cases, local governments created the estimates, but their ultimate validation of the data was a distinguishing mark of this study.

Knowledgeable people at the state and industry levels then reviewed the results of the work of all the counties. In some cases, the review focused on particular tourism categories such as skiing, or fall outdoor recreation.<sup>5</sup> In the case of skiing, Ski Country USA and consulting firm, RRC Associates, reviewed the ski data. The Colorado Department of Natural Resources evaluated the Outdoor Recreation category in tandem with federal partners, the USDA Forest Service and the USDI Bureau of Land Management.

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<sup>5</sup> The Tourism Advisory Committee list of experts is in Appendix A

**The Jobs Data.** The jobs figures were developed from estimates of total jobs at the county level prepared by the Demography Section. This study is comprehensive since it begins with the whole economy in each county, as measured by total employment. The job estimates were based on data from the US Department of Commerce, Bureau of Economic Analysis. BEA supplements or edits the state-produced, non-agricultural wage and salary data, develops data for agricultural and military sectors, and produces a complete BEA wage and salary job series.

BEA's wage and salary employment estimates were built on the Labor Market Information (LMI) data from the Colorado Department of Labor and Employment. It covers all employers under the federally-mandated Unemployment Insurance Program, also known as the Employment Security Act. In the data, commonly called "ES202", individual firms are assigned a Standard Industrial Code (SIC) based on predominant activity. ES202 data are available only to the Demography Section and to other government agencies to prevent the release of firm-specific information. The use of ES202 data is governed by strict rules of disclosure that protect the confidentiality of individual firms. ES202 employer lists were essential to creating county-specific category and industry proportions.

BEA also estimates the employment of proprietors and self-employed individuals, primarily on the basis of Schedule C income tax records. Accounting for the activity of proprietors (such as store owners, consultants, doctors and dentists) is extremely important, but the implied number of "workers" reported here can be significantly overstated, especially in some industries that are tourism-related. The data may be misinterpreted to represent full or nearly full time workers in the sectors where a significant number of the people reporting Schedule Cs spend only a small amount of their time in the self-employed activity, for instance real estate sales and restaurants. The principal modification of the BEA estimates by the Demography Section was the downward adjustment of self-employed to more accurately reflect substantive employment.

**Assignment by Industry.** Tourism jobs were estimated for 25 industries shown in the list below. These industries included those with significant numbers of tourism jobs with the exception of those noted in the following "Exclusions" section. For each industry, an estimate of the proportion of all county jobs accounted for by tourism was prepared. This estimate was based on professional expertise, local knowledge and existing data sources.

### **Standard Industrial Classifications With Significant Tourism Activity**

<u><i>SIC (Industry)</i></u>	<u><i>Class Title</i></u>
<b>Services</b>	
70	Hotels and other lodging places
Select 79	Amusement & recreation - ski resorts
78	Amusement, Motion picture, video production
79, 44, exc. ski	Amusement & recreation - casinos, all other
72	Personal services - laundry, beauty shops
73, exc. 737	Business services-film process., tourist bureaus
82, 84	Private education services-zoos, hist. museums
01-09	Ag., Outfitters, river & tour guides, not in SIC 79

**Retail Trade**

58	Eating and drinking places, restaurants
52	Building materials, hardware, garden supplies
53, 56, 57	General merchandise, apparel and furniture
54	Retail food stores
55	Service stations, auto dealers
591-593	Liquor, drugs, used goods, antiques
594, 598-9	Miscellaneous - sporting goods, luggage

**Real Estate & Construction**

65	Real estate: property management, sales, rentals
15, 17	Residential construction and maintenance (2nd homes)
16	Heavy construction (interstate highways, airports)

**Transportation**

41	Local & suburban transit
45	Air transportation (commercial)
472	Transp. services-arrangements
751-753	Auto rentals, repair, parking services

**Wholesale Trade**

513	Apparel
514	Wholesale Groceries
518	Beverages

The ease of assignment of industrial jobs to tourism and tourism categories varied from one county to the next. In some places, including several of the resort counties, the tourism proportions were obvious (see Grand County discussion p. 15). In other places, such as the

<b>TABLE 9. Ratio of Restaurant to Hotel Jobs in Top Tourism-Based Counties</b>				
<b>Tourism County</b>	<b>1997 Jobs in Hotels</b>	<b>Restaurant/Eating Emplmt.</b>	<b>Ratio of Rest. to Hotel jobs</b>	<b>Tourism % of Total jobs</b>
Summit	4,423	2,699	0.6	59.0
Ouray	233	243	1.0	40.0
San Miguel	582	548	0.9	52.0
Grand	767	876	1.1	51.0
Eagle	2,966	3,389	1.1	50.0
Pitkin	1,830	2,465	1.3	49.0
La Plata	1,768	2,288	1.3	27.0
Archuleta	202	411	2.0	26.0
Routt	707	1,671	2.4	35.0
Gunnison	491	1,325	2.7	35.0
Total	13,970	15,915	1.1	8.0*
*Statewide total				

Denver metropolitan area, estimating a tourism component for all industries involved was more difficult because of the complexity of the economy. Nonetheless, a “sketch” was made for all industries in all counties.

The estimates for several industries warrant further explanation. Among these are hotels and lodging places, which primarily serve visitors in all areas of the state. However, local residents also use hotels for such activities as association meetings, Christmas parties, banquets and weddings. In addition, local businesses use hotels as extensions of their offices or plants for off-site meetings with suppliers, sales conferences even parties. Consequently, the proportions assigned for hotels were generally

something less than 100%. In the Front Range, these local resident services and business services, i.e. uses of hotels by locals, were significant, but elsewhere, hotel customers were almost all visitors and the share of tourist jobs was estimated at 90% and above.

Developing a reasonable estimate for the restaurant industry (eating and drinking places) was more difficult than for hotels, because local residents are more frequent customers of restaurants. The critical assumption in developing estimates of the share of tourism jobs in restaurants was that hotel employment is an indicator of the importance of tourist activity and therefore could be used to indicate the share of tourist jobs in restaurants. The ratio of hotel employment to restaurant employment was calculated for the tourism-based counties to estimate the ratio of tourist jobs in the two industries. This was possible because most of the jobs in both industries in these counties were due to tourism (see Minimum Requirements discussion, Appendix B). Table 9 shows these ratios for tourism-based counties. In key tourism-based counties such as Summit, Ouray, San Miguel, Grand, Eagle, Pitkin, Archuleta, La Plata, Gunnison and Routt, the ratio averages 1.1 eating and drinking employee per hotel employee. This ratio was then used as a “rule of thumb” for other counties.

Compared to other parts of the state, the Front Range receives a higher concentration of air travelers, who might eat in a local restaurant before traveling to a final destination. It also attracts a large number of convention and business visitors, who rely more heavily on restaurants than those who come to Colorado to visit friends and relatives. Finally, those who are driving through or touring the state by car often stop in the Front Range for shopping, museum visits or a sports event. Therefore, slightly higher ratios of restaurant tourism jobs to hotel tourism jobs were used in these ten counties. The estimated proportion of tourism-related eating and drinking jobs also depended on whether the county had full service hotels with their own restaurant facilities. Weld County, for example, does not have full-service hotels and visitors must go to outside restaurants or food stores for meals. Thus, a higher ratio of tourist jobs in restaurants to those in hotels was used there.

Wholesale trade is treated uniquely in base analysis. Those jobs mainly due to the sales of outgoing goods are treated as direct base jobs, i.e. those sold to retailers outside the county. These jobs are viewed as a service to outsiders. Wholesale sales for resale to visitors are considered service exports and hence are basic as well. For instance, wholesale jobs related to apparel purchases by a retailer to sell in its ski-slope rental and sports shops would result in direct basic wholesale jobs and these jobs are included in this report. Jobs attributed to incoming goods which do not get resold to tourists are treated as indirect base jobs, e.g. the snow shovels purchased by a ski area from a local wholesaler. Indirect basic jobs are not part of these estimates. The proportion of wholesale food, beverage or apparel attributed to tourism is similar to that in the retail stores, in addition to any unique wholesale activities that can be identified as tourism dependent. In most of the major tourism counties, wholesale jobs generated from purchases of second-home owners are a very large part of the direct-basic wholesale jobs.

**Second homes.** Among the areas showing rapid growth are those related to construction and other activities related to second-home use. Tourism is undergoing a transition in Colorado from more traditional tourism to second home tourism, especially on the Western Slope. More affluent

visitors are building seasonal-use homes in Colorado, which they are visiting more frequently and staying in for longer periods.

Employment generated by occupants of second homes is dispersed over a large number of industries. For example, second home visitors eat in restaurants like traditional visitors. However, because second-home owners have relatively high disposable incomes, they may generate greater employment in sporting goods, clothing shops and numerous services than do traditional tourists. Real estate sales and property management jobs are generated by second home activity in such counties as Summit, Eagle and Pitkin. Second homes also have a direct

TABLE 10. Second Homes					
Seasonal and Occasional Use by County					
County Name	Seasonal % in 90	Seasonal Units 98	County Name	Seasonal % in 90	Seasonal Units 98
Mineral County	71.4	948	Moffat County	4.7	256
Hinsdale County	70.9	986	Larimer County	4.2	4039
Grand County	57.4	6564	Morgan County	3.6	356
Summit County	55.7	12275	Garfield County	3.6	544
Custer County	55.7	1582	Kiowa County	2.5	22
Park County	50.4	4847	Washington County	2.3	54
Jackson County	39.1	550	Boulder County	2.1	2389
San Miguel County	36.7	1449	Montrose County	1.7	204
Gunnison County	36.2	3301	Lincoln County	1.6	37
Gilpin County	35.6	1062	Mesa County	1.6	719
Eagle County	33.1	7209	Alamosa County	1.3	73
Pitkin County	31.0	3354	Pueblo County	1.2	668
Routt County	30.4	3474	Yuma County	1.2	50
Archuleta County	27.6	1422	Phillips County	1.1	22
Teller County	26.8	2532	Cheyenne County	1.1	12
Dolores County	25.9	257	Sedgwick County	1.1	16
Ouray County	24.8	504	Elbert County	0.9	58
Clear Creek County	22.9	1216	Baca County	0.9	22
Huerfano County	22.8	985	Bent County	0.9	22
San Juan County	20.8	108	El Paso County	0.8	1532
Conejos County	18.3	716	Jefferson County	0.8	1613
Chaffee County	16.2	1242	Kit Carson County	0.7	23
Lake County	15.1	561	Logan County	0.6	49
Rio Grande County	14.5	831	Douglas County	0.6	303
La Plata County	13.7	2569	Crowley County	0.5	7
Saguache County	13.4	355	Prowers County	0.4	24
Costilla County	11.9	207	Otero County	0.3	27
Las Animas County	6.8	507	Weld County	0.3	179
Rio Blanco County	6.8	198	Adams County	0.2	250
Delta County	5.0	519	Denver County	0.2	496
Fremont County	4.9	751	Arapahoe County	0.1	191
Montezuma County	4.8	402	<b>Total Colorado</b>	<b>4.3</b>	<b>77,740</b>

*Sources: US Census, 1990, National Association of Homebuilders*

effect on the use of utilities including gas, electric and communication services. However, because of the centralized nature of utility employment, estimates of these job impacts were not prepared at the county level. These jobs were estimated only for the state as a whole. In Colorado, about half of gas and electric revenue comes from residential users.<sup>6</sup> Second homes account for 4.6% of total housing stock, according to the 1990 Census, therefore approximately 2.3% of gas and electric employment could be attributed to second home use. A similar percentage was applied to phone, cable and other communication service jobs.

The 1990 census of seasonal-use homes was a starting point for assigning a portion of construction jobs to second-home related tourism (see Table 10). This information also was important in assessing the importance of expenditures by their owners in other industries, especially in tourism-based counties. In some counties, like Summit where more current data was available, the Census estimates were revised. New Census 2000 data should provide fresh estimates of second home (seasonal use) percentages. This 2000 is available only at the national level. State data is expected at the end of 2001.

**Assignment of Jobs into Categories.** The purpose of the assignment is to further identify the type of tourism, which is driving the local economy. In Colorado's diverse county economies, different types of tourism such as downhill skiing, special events, or business conventions may be dominant. The eleven tourism categories developed for this study are listed below.

**Tourism Categories related to activity on public lands:**

1. Skiing - downhill and associated Nordic skiing with paid lift or access ticket.
2. Parks & Monuments - activities in national, state and city parks & monuments.
3. Other Outdoor Recreation - activities such as hiking, biking, fishing, hunting, rafting, and snowmobiling.  
A. Summer (May-Aug.)      B. Fall (Sept.-Nov.)      C. Winter (Dec.-April)
4. Touring - car or train trips through areas of scenic beauty, cultural or general interest.

**Tourism Categories related to activity on private lands:**

5. Resort Recreation/Attractions - activities such as golf, tennis, swimming, or commercial attractions, e.g. Silverton train, Cave of the Winds, and shopping in non-metropolitan or mountain areas. Hunting and fishing on private lands are included here.
6. Special Events - privately and publicly sponsored events, e.g. rodeos, music or film festivals, college games or professional sports, horse or auto races and the state fair.
7. City Trips - visits to a city to shop, attend plays, museums, concerts or other entertainment, dine or just stroll around (limited to census-designated metropolitan areas, e.g. Grand Junction, Boulder, Denver).
8. Business Trips - trips paid for by non-local businesses, e.g. conventions, sales trips.
9. Casino Trips - gambling visits at a casino, casino resort or Indian Reservation.
10. Visiting Friends and Relatives - visits to family & friends, including those in prison, hospitals or in nursing homes. *This refers to purpose of visit not type of accommodation!*
11. Other Leisure - other visits such as improving/building a second home, agricultural tourism (weekend ranching, harvesting, wine making), charitable/volunteer work, reading, relaxing.

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<sup>6</sup> The estimates are based on information from Xcel Energies, formerly Public Service Co.



Outdoor recreation occurs in areas where access is not controlled. Often there is no gated entry or visitor center, but open, free, public access. Outdoor recreation jobs were segmented into three key seasons. Summer activity (May-August) includes rafting, hiking, biking, swimming, camping, wildlife watching and boating. Fall activity is dominated by hunting, fishing and viewing the changing fall colors (September-November). Winter sports like back country skiing, ice fishing, snowmobiling or snowshoeing are the biggest activities in the months of December to April. Jobs generated from parks like Garden of the Gods in El Paso County, Steamboat Lake State Recreation Area, Rocky Mountain National Park and Colorado National Monument in Mesa County are separated from outdoor recreation jobs to try to better understand areas where visitor data is not collected.

In the course of developing the tourism categories, a distinction was made between those activities that took place on public and those on private lands (see Appendix B, p. 32-33). This distinction helped to clarify the difference between the impacts of public parks and other outdoor recreation versus those from private resort recreation. This public/private split was valuable to the federal partners, because it enabled them to see the direct economic impact of activities that take place on lands they manage. Furthermore, the two categories called Outdoor Recreation and Parks and Monuments were developed separately to again help the federal partners identify the impact tourism has on land they manage.

In county workshops, local experts made the initial assignments of county tourism in terms of visitation to the various tourism categories (see Profile of Tourism Activities, Appendix D). Often the local experts had access to visitor logs, hotel or second home surveys or other sources of visitor data. Typical workshop participants included the representatives of large tourism employers, county planners, chamber or visitors' bureau experts and public land managers. These local experts were encouraged to think of activities and the subsequent distribution of jobs using a visitor-day concept, i.e. the jobs were assigned based on the principal activity of the visitor each day. For example, if the visitor stayed at home visiting a friend for the whole day, the resulting jobs were counted as Visiting a Friend or Relative (VFR). If, the visitor merely used the friend's home as an evening accommodation and spent the days hiking or skiing, the jobs were classified under outdoor recreation or skiing, rather than VFR. In this way, local workshop participants made assignments of county tourism jobs in each industry to the various tourism categories. In effect, the SIC employment data was integrated with the information from studies related to visitation.

**Instate Tourism Jobs.** The estimates of the share of jobs accounted for by instate tourists were done for the state as a whole for each of the 11 categories (see p. 10). For most categories, the estimates were based on the Longwoods estimates of the share of instate trips. This reflected the assumption that overnight trips by Coloradoans resulted in roughly the same amount of spending and the same number of jobs per category as trips by out-of-state visitors. There were four categories where this was not applicable. These are described below.

For the ski industry, the allocation of jobs between instate and out-of-state tourism was based on a study done for Colorado Ski Country USA, by RRC Associates of Boulder. Differences in

spending patterns of a variety of ski visitors made RRC's expenditure data a more reliable link to jobs than the purpose of visit results that were available from Longwoods. Day visitors spend only \$49 per day visit while foreign and out-of-state visitors spend \$189 per day visit.

Detailed survey information was also available on outdoor recreation expenditures from the Colorado Book of the 1996 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation with expenditure estimates based on a very large census of Colorado visitors. Expenditures for different types of tourism are available on line (See Appendix C).

Again, this data was preferred to the Longwoods/DRA data since visitor expenditures are closely related to job creation. These estimates are done every five years and were useful in allocating jobs between resident and nonresident tourism. Instate summer outdoor recreation and park jobs were assumed to reflect patterns of wildlife-related recreation--a broadly defined activity that included sightseeing and photographing wildlife but excluded hunting and fishing. Non-residents, although fewer in number, outspent instate visitors. State visitors spent \$233 versus \$696 for non-residents for wildlife-related recreation (see Table 36 from the US Fish and Wildlife census tables, online, see Appendix C). Hunting and fishing figures were used in allocating jobs in fall outdoor recreation. Here too, nonresidents spent more. Table 21 in the Colorado Book is the source of this data and can be viewed on the website that is cited in the bibliography, Appendix C.

Customers for the casino industry, which is concentrated in Gilpin and Teller Counties, are predominately residents of Colorado's Front Range metropolitan areas. Thus, it was estimated that 95 percent of the 6,127 state jobs due to casino gaming were generated by instate tourism. The casinos in the Southwest (Region 9) are Native American and have some out-of-state visitation from Farmington, N.M.

**Exclusions.** Several industries that generate a significant number of tourism-related jobs were not included in the initial phase of this study, but are discussed below. Either the importance of these industries was not anticipated or developing defensible estimates was not possible within the time frame and the available resources.

The tourism jobs in federal, state, and local government were industrial exclusions that will be estimated in Phase 2. In the current estimate, the job impacts of tourism are limited to private sector impacts. Federal employment with the Forest Service, National Park Service, state jobs in the Parks Division of the Dept. of Natural Resources and a large number of the City of Denver jobs at the Denver International Airport are among the government sector tourism jobs excluded in this report. Many of these jobs are primarily administrative and are concentrated in the Denver metro area, but serve the whole state or even a multi-state area. Federal government is counted as a basic industry in the broader LEIFA estimates, but Federal jobs are not included in tourism.

Some portions of the transportation industry were intentionally excluded. Truckers and passengers traveling through transportation centers were not counted as tourists. They were instead treated as part of a county's national service center (or regional service center). The employment generated at a truck stop is still considered part of a county's basic employment, but

it is classified as transportation rather than tourism. This is also true for hub activities at Denver International Airport.

In addition to the exclusions by design, described above, jobs may be underestimated in a few industries. For example, jobs in hotels or restaurants may be understated. In family-owned businesses, the participation of family members may go unreported. The number of workers in second-home construction may also be underreported. Wages in construction are sometimes paid in cash and the workers are therefore not included in job estimates.

## Appendixes A-C

### APPENDIX A

#### Partnerships and the Technical Advisory Committee

This is the first report from a partnership that was started by the State Demographer's Office of the Department of Local Affairs and the USDA Forest Service several years ago. Last year, the USDI Bureau of Land Management (BLM) and the Colorado Tourism Board joined the partnership. This work would not have been possible without the technical and financial contributions provided by these partners. Credit also goes to numerous people from local governments, businesses, associations, and state universities for their valuable insights and suggestions. The following is a list of participants in CBEF's Technical Advisory Committee:

Committee Co-Chairmen:

Bill Kendall, President, Center for Business and Economic Forecasting  
Jim Westkott, State Demography Office, Department of Local Affairs

<u>Member Name</u>	<u>Organization/Firms</u>
Tucker Hart Adams	US Bank and The Adams Group
Sue Baldwin	Colorado Ski Country USA
Dave Bamberger	Colo. Spgs., Econ. Development Research
David Becher	RRC Associates
Bob Benton	Colo. Hotel and Lodging Assoc.
Don Bruns	USDI Bureau of Land Management (BLM)
Helen Buelke	Colorado Springs Visitors Bureau
Fred Crowley	Pikes Peak Area Council of Governments (El Paso)
Harvey Cutler	Colo. State Univ. (CSU), Economics Dept.
Eugene Dilbeck	Denver Metro Visitors Bureau and Colo. Tourism Office
Maryjo (Jo) Downey	East Central Council of Governments
Tom Dunn	Legislative Council Staff, Colo. General Assembly
Ron Dutton	Hammer, Siler, George & Assoc.
Peter Fix	CSU and Colo. Dept. of Natural Res. (DNR)
Ford Frick	BBC Research & Consulting
Chuck Goeldner	Marketing and Tourism, Univ. of Colo. (CU)
Julie Hart	Governor's Office of State Planning & Budgeting
Doug Jeavons	BBC Research & Consulting
Joe Kiely	East Central Council of Governments
Dick Knoespel	Colorado Assoc. of Commerce & Industry
Judy Koucherik	CDOT-Div. of Highways, GIS & Mapping
Dave Larson	Colo. Dept. of Labor and Employment
Bob Lohney	CDOT - Division of Aeronautics
Sue Piatt	Governor's Office of Economic Development & Int'l Trade

CBEF's Tourism Advisory Committee (cont.):

<u>Member Name</u>	<u>Organization/Firms</u>
Bob Polestra	Colo. Dept. of Natural Resources (DNR)
Mike Preston	Southwest (Region 9) Coordinator
Mike Retzlaff	USDA Forest Service, Rocky Mountain Region
Chuck Romanella	USDI Bureau of Land Management (BLM)
Jeff Romine	Denver Regional Council of Governments
Eric Scorsone	Colo. State Univ. (CSU), Economics Dept.
Tim Sheesley	Xcel Energies (formerly Public Service Co.)
John Smeltzer	Colo. Dept. of Natural Resources
Linda Ventroni	Northwest Council Of Governments
Judy Walden	Publications Representatives West (Colorado.com)
Stephan Weiler	Colo. State Univ. (CSU), Economics Dept.
Rich Wobbekind	Univ.of Colo.-Boulder, Bus. Research Div.

Local experts were critical in developing these estimates. The following county workshop lists were selected to highlight the broad range of county and local government participation as well as contributions from the private sector.

**Denver-Boulder Metro Area.** Jeff Romine of DRCOG (the Denver Regional Council of Governments), Rich Wobbekind of Colorado University at Boulder, Ron Dutton of Hammer, Siler, George, Associates, Doug Jeavons, of BBC Research and Patty Silverstein, economic consultant to the Denver Chamber of Commerce assisted with the estimates. Tucker Hart Adams, chief economist of US Bank and a consultant to the Denver Metro Visitors' Bureau had a major role in producing and reviewing these estimates. She and Charles Goeldener, Tourism and Marketing Professor of CU, Boulder, helped to develop many of the methods CBEF used to estimate tourism.

**Region 12.** Local experts were again critical in developing the 1997 estimates. Linda Ventroni, NWCOG oversaw meetings in Eagle, Summit and Grand Counties. She also participated in the Tourism Technical Advisory Committee. For Pitkin County in local government, Ellen Sassano and Chris Bendon, from county and city planning, respectively, as well as Victoria Giannola and Chris Kiley of Aspen Ski Co. were a valuable part of the estimating process. Gabe Preston, Rural Planning Institute, contributed to the process in both 1997 and in 1999.

**Region 10.** In San Miguel county, experts from local government participated in the estimating process: Lynn Black and Steve Ferris, from county and city planning, respectively. The private sector also participated: from the Telluride Conference Center, John Burchmore; and Lyn Langley of the Franz Klammer Lodge.

Estimates in Gunnison County would not have been possible without local experts such as Tammy Scott at the Gunnison Chamber, Betsy Baier, Gunnison Valley Economic Development, and Jeff Moffett from the Crested Butte Ski Resort. John Hess and Colleen Hannon from the cities of Crested Butte and Gunnison, Respectively were the local government representatives.

**Region 11.** In Routt County, many people gave valuable input to the estimates. Rod Hannah who has just recently retired from Steamboat Ski and Resort Co., Chad Phillips and Ellen Hoj, of county planning, James Parker, Aviation Director of Hayden's airport, Sandy Evans of the Chamber of Commerce, and Bill Jackson, who has since left BLM, Little Snake River Office, were very knowledgeable about the local tourism economy.

In Garfield county, Colin Laird, of Healthy Mountain Communities, Mark Bean, the county planner and building director, Dennis Stranger, Lori Hogan and Marianne Virgili of the Glenwood Springs Chamber, Andrew McGregor from the City of Glenwood Springs, and Carolyn Upton from the Glenwood Office of the Forest Service were all part of the team that prepared the estimates.

Irene Carlow, of the Grand Junction Visitors' Bureau and Michael Warren, the long-range county planner, reviewed and assisted in the development of the Mesa County data. Tucker Hart Adams, chief economist of US Bank and a consultant to the Grand Junction Visitors' Bureau, also had a major role in producing these estimates.

**Other Front Range Counties.** Fred Crowley of the Pikes Peak Area COG served on the Technical Advisory Committee as well as in the El Paso County estimating sessions. Helen Buelke of the visitors bureau, Dave Bamberger and Rocky Scott who work closely with economic development, Michele Carvell, Pikes Peak Attractions, Frank Barber, a county planner and administrator, Gary Cuddeback, Eugene Smith and Sam Weber were also a central part of the team that prepared the estimates.

Two professors, Stephan Weiler and Harvey Cutler, and a graduate student, Peter Fix from CSU, in Fort Collins, Jill Bennett, a county planner, Roland Mower, an economic developer, and Judy Walden, formerly with the Colorado Travel and Tourism Authority, and now an administrator of Colorado.com for Publications Representatives West, were a central part of team that prepared the Larimer County estimate.

## APPENDIX B – DEFINITIONS AND TERMS

### Overview of Base Analysis

**Basic Industries** - Economic base analysis is predicated on the assumption that growth and change in a region is driven by industries that sell goods and services to parties residing outside the region. Typically, industries such as agriculture and manufacturing are cited as examples of basic industries. These industries produce a greater supply of goods than the local region can absorb and the excess is exported and consumed by other regions. An industry, or a firm, may export some of its output and sell the remainder within the community. The term "basic industry" would apply only to that portion of the industry or firm activity, which produces output for export. A basic industry may also sell services to businesses or people who are outside the area, as is the case for tourism-related business such as hotels. Those who visit the area have incomes and spending money earned from outside the region. The visitors use outside income to purchase locally-provided services, such as lodging and amusements.

**Indirect Basic Industries** - While direct basic industries serve outside customers and the world-at-large, indirect base industries provide services and supplies to these direct basic firms, e.g. advertising agencies that serve hotels. This study did not attempt to estimate the indirect basic industries.

**Local Resident Services** - Basic industries are distinct from local resident services. Local resident service industries act as suppliers to basic industry firms e.g. local newspapers or act as suppliers to households, e.g. grocery stores, police and fire protection, education, health services, telephone and cable services. Local resident services benefit households and residents. This study did not attempt to estimate local resident services. However, the larger DOLA base analysis effort makes estimates of LRS by county available on its website.

**Assignment Method** also called **Assignment by Industry** in the Method and Process Section (p. 34) or **Initial Assignments**. The base industry analysis was conducted by defining the economy in terms of very detailed industrial sectors. Allocation of economic activity was divided up into these sectors then further divided among sub-sectors: direct basic (DB), indirect basic (IB), or local resident services (LRS). Most often, detailed employer lists by county provided the means for assigning a base proportion or weight. The expert assignment method (or assumption approach) uses personal estimates to assign employment to basic and non-basic industries. Because assignments started with hard data on employment by sector, were constrained by regional employment control totals, considerable local input and insights, the resulting estimates can be regarded with a high level of confidence.

**Location Quotient Method** - the most widely used method to estimate base employment. A location quotient analysis helps define sectors where an economy has a greater than average -- or some "basic" -- share of a certain activity. Export-related employment is estimated by summing the export shares ( $LQ > 1$ ) of employment of those industries whose location quotient is greater than one (Richardson, 1985). A number of conditions are assumed to hold when using location quotients. Equal per employee consumption and productivity must exist between the study region and the nation.<sup>15</sup> This approach also implies that the U.S. parameters are appropriate benchmarks, which may be problematic for certain industries. In the broader DOLA study of Colorado's base, location quotients were most helpful with communications and least helpful identifying manufacturing as a basic industry. The Utah Economic and Business Review, Vol. 60, Numbers 3&4, March/April 2000, article titled *Tourism Jobs and Wages in Utah: a Quantitative and Qualitative Analysis*, had comparisons with Colorado and other western states based on this method.

**Minimum Requirements Analysis** - another method of defining "basic" activities as those above a certain minimum level. The technique evaluates a sample of comparable areas against one another to estimate base industries. Within a sample, the region with smallest employment share devoted to a given industry is identified e.g. hotels per capita in most of the Eastern Plains counties are small relative to per capita hotel employment in Summit County. Base employment for another region is calculated by subtracting the identified minimum level from that base area's employment share in the same industry. The three major assumptions are equal productivity per employee, equal consumption per employee for the same good, and that production in the minimum industry is for local consumption only.<sup>7</sup> However, it should not be used in highly-specialized regions, since in these cases the method systematically underestimates exports. Assessing which areas are indeed comparable for such analyses presents a further problem. This approach was very helpful in determining basic proportions for hotels and eating and drinking places, especially in the Denver metro area. Counties with the highest per capita employment devoted to hotels as well as eating and drinking places were identified and compared. The ratios between hotel and restaurant jobs were also useful (see Methodology, p. 20).

**Instate activity, and trade area boundary issues** - The key issue in a base study is the estimation of exports by regional industries. Because of the permeability of regional/state borders, trade flows between regions are difficult to estimate and are one of the most important sources of error in economic base analysis. This study undoubtedly suffered from some of this type of error. A bottom-up approach was used to define base industries

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<sup>7</sup> Stephan Weiler, Colo. State Univ. (CSU), Economics Dept and Eric Scorsone a CSU graduate who has taken a position at Kentucky State contributed to our understanding of base analysis and these definitions.



at the county or metropolitan area, meaning that statewide totals would be overstated. What might be an export for Denver, might not be an export for the Front Range or the state as a whole. For example, if a Denver resident stays overnight in Estes Park (Larimer County), Larimer can count that as an export of its hospitality services, but if the Front Range or state were the area of study, the visit would be considered a local resident service. In the Detailed Findings and in the Methodology Section, there are explanations of our attempts to correct for this over-estimation by subtracting out the instate tourism from the state totals.

## Terms Related to Tourism

**Visits, visitors and tourists** - In the categories,<sup>8</sup> all business and pleasure visits, including day visitors and international visitors are counted in the earnings and employment impacts. The visitor is assumed to have traveled outside his county<sup>9</sup> of residence to enjoy recreation or go on business away from home.

Tourists are essentially non-residents who visit a county for leisure or business purposes. When a county has a sizable number of second homes, tourists are classified as either “traditional” or “second-home” visitors. Traditional tourists are those that do not own lodging of any sort. Second-home visitors either own a home, condominium, or other lodging in the county or have use of the second home without payment of rent. If these second homes are rented during some or all of the year, the visitors are then counted as traditional tourists. Non-owner visitors to time share condos pay what amounts to rent and again are counted as traditional tourists. All counties were asked to make estimates regarding “traditional” tourists. But only in counties where second homes comprised more than 20% of total housing stock, were “second-home” tourism impacts more fully addressed.

**Categories or Purpose of Visit** - In the Longwoods study, visitor data can be studied by purpose of visit, as done in this study, but also by place of accommodation, e. g. second homes, hotels, friends homes or campgrounds and thirdly, by region. Below are the definitions of the different types or purposes of the visit. Purpose of visit is classified in one of eleven categories and each visitor is given just one classification, so as to avoid double counting. If a family comes to stay in an Eagle County hotel but only the kids ski, while dad gambles and mother shops, each individual’s main purpose of visit during each day of the visit is counted. They are not all lumped together under skiing. For each category, day trips and international visits were included, unlike Longwoods categories. Dean Runyon & Assoc. partially accounted for international visitors in its job impact analysis, but did not include second home visitor impacts, day visit impacts or proprietors.

**Activity on public versus private lands** – In the course of developing the tourism categories, a distinction was made between those activities that took place on public and those on private lands. This distinction helped to clarify the difference between the impacts of public park and other outdoor recreation (categories #2 and #3) versus those from private resort recreation (category #4). This public/private split was valuable to the federal partners, because it enabled them to see the direct economic impact of activities

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<sup>8</sup> The Local Economic Information and Forecasting Assistance (LEIFA) program and categories are described in the background section p. 12 and on p. 23.

<sup>9</sup> Also includes the 6-county metro Denver region, which is treated as a single economic area.

that take place on lands they manage. However, most of the employment that results from all of these activities actually takes place in the private sector on private lands, the exception being skiing since it takes place on public lands

**The first four categories below are those that involve public land.**

**Ski Trips** - include both alpine (downhill) and cross-country skiing. Snowboarders are also included in the ski category since they share the terrain with skiers. Cross country skiers who do not buy a lift ticket or who do not pay for access to a facility or groomed track are counted as back country skiers under winter outdoor recreation. The Breckenridge Cross Country Center skier visits are counted here since the employment is part of Breckenridge's larger ski company operations. Nearly all skiing in Colorado occurs on public lands.

**Park & Monument Trips** - activities in national, state and city parks & monuments like Garden of the Gods (city-owned), Steamboat Lake State Park (state-owned) as well as federally-owned lands like Rocky Mountain National Park (Larimer County), Dinosaur National Monument (Moffat County) or Mesa Verde (Montezuma County) are counted here. If the park has a visitor center, a gated entrance, issues day passes or is a public lands attraction; it is counted here rather than under the touring or outdoor recreation categories.

**Other Outdoor Recreation Trips** - are for the purpose of enjoying the natural environment where the visitor may engage in activities on public lands that can occur in any one of three key seasons: summer, fall, winter. Summer and fall activities include hiking, camping, fishing, hunting, river rafting, and boating. Autumn trips also include viewing the changing colors, which is often done on public lands. Winter sports are snowshoeing, snowmobiling, back-country and wilderness cross country or back country downhill skiing. Generally, the activities occur on public lands and involve less spending than resort, ski or city trips. Other Outdoor Recreation is compressed into three seasons: Summer (May-August), Fall (Sept-Nov), Winter (December-April) since Spring is not marketed to tourists and is not a key attraction for the state. Colorado has no Cherry Blossom season like Washington D.C.

**Touring Trips** - are usually trips by car or train through areas of scenic beauty, cultural or general interest. People can be passing through an area with no particular destination. They may visit several places, e.g. the Broadmoor, Mesa Verde then leave the state and go the Grand Canyon. The visitor may have flown to a destination like Colorado Springs before beginning the tour. Skiers who stay in Mesa or Lincoln counties and are just stopping for the night on their way to counties like Eagle or Pitkin are counted as having a skiing impact in Grand Junction (Mesa County) or Limon (Lincoln County). This type of visitor produces the curious effect of listing skiing-related jobs in a county where there

are no ski mountains or operations e.g. in the City of Limon (Lincoln County). Touring is a category that involves both public and private lands.

**Resort Trips/Attractions** - are visits to non-metropolitan areas or to mountain areas in the summer and fall for those who like to play golf or tennis, even fly general aviation aircraft. Visitors may simply come to resorts like Vail or Steamboat for reasons other than skiing, e.g. swimming and golfing in the summer or viewing the changing colors in the autumn. Since LaPlata County is not a census metropolitan area, all visits normally classified as “city” would be included here, not just visitors to resorts like Tammaron. In El Paso County, “city trips” are separate from “resort & attraction” visits to the Broadmoor or Cave of the Winds. The category also includes dude ranches, as well as private-land hunting and fishing activity.

**Special Event Trips** - are for the purpose of attending an event such as the Pueblo State Fair, the Renaissance Festival in Larkspur, the Aspen Music Festival, and the Annual Stock Show. Other events are school sports meets, college games or professional sports, horse, bike or auto races, pageants, rodeos, jazz or film festivals.

**City Trips** - are for the purpose of visiting a city to shop, attend plays, museums, concerts or other entertainment, dine or just stroll around. Shopping has become a big tourist activity at places such as the 16th Street and Cherry Creek Malls. Trips to go to theme parks like Elitch’s or WaterWorld are included here. If the county is not an official census metropolitan area or part of one, multi-purpose and other trip types listed above are usually classified as resorts/attraction visits. For example, shopping and attending a play in Aspen is a “resort” visit.

**Business Trips** - include five types of travel and are paid for by business.

1. Sales or service trips for the primary purpose of meeting a client or customer for sales, service or discussion.
2. Conventions, including political conventions, conferences, and trade shows.
3. Meeting trips where hotels, convention centers or large public meeting spaces often house an organized business event or public interest meeting, including charitable, or social meetings for Kiwanis, Shriners, League of Women Voters, and the Sierra Club.
4. Combined business and pleasure trips occur when a business trip is extended by at least one overnight for pleasure, e.g. business often pays for travelers to stay over a Saturday night to take advantage of lower airfares.
5. Professional archeological digs or scientific expeditions to Dinosaur National Monument (Moffat County) or Mesa Verde (Montezuma County) are counted here. They are not classified as park or monument visits. If the visit is paid for by a university, government or business originating outside the county and it is for predominately business purposes, it is counted here.

**Casino Trips** – are for the main purpose of gambling at a casino, casino resort or Indian Reservation. Black Hawk, Central City, Cripple Creek and the Southern Ute Indian Tribe Casinos in the Southwest counties of La Plata and Montezuma are included.

**Visiting Friends and Relatives** - (VFR) is a trip whose main purpose is to spend time with friends or relatives. Visitors who come to see inmates in prison, mental institutions, and nursing homes or those who come to visit sick friends or relatives in hospitals are included here. This refers to purpose of visit not type of accommodation!

**Other Trips** - include improving/building a second home, agricultural tourism (weekend ranching, harvesting, wine making), charitable/volunteer work, reading, and relaxing.

**Dimensions** – The purpose of visit categories discussed above are viewed as the first dimension (columns of the matrix). Columns in the first dimension are titled skiing, outdoor recreation, touring, etc. The industrial classes are the second dimension. The hard income and employment data by planning region or county for key tourist activity captured in adjusted ES-202 and BEA data for hotels, eating and drinking places, amusement air transportation, etc. is displayed in rows of the matrix. These two dimensions are available by area. The rows and columns of data (the first two dimensions) are available for the state as a whole and by county.

## APPENDIX C

### Bibliography, Research Papers and Other Sources

1. For purposes of assigning base weights, we used two studies done by Tucker Hart Adams: *The Impact of Tourism on the City and County of Denver*, December 1997 and *The Impact of Tourism on the Grand Valley*, May 1998.
2. The Forest Service draft *Environmental Impact Statement for the White River National Forest*, which covers 7 Western Slope counties. USDA Forest Service. 1997. Draft environmental impact statement: Arapaho-Roosevelt National Forest. Rocky Mountain Region. Arapaho-Roosevelt National Forest. Fort Collins, Colorado.
3. Colorado Ski Country USA's 1996/97 *Profile of Colorado Skiing*, prepared by RRC Associates, Boulder, Colo. David Becher, (303) 449-6558, assisted in estimating in-state ski visitor impacts versus out-of state visitors impacts and air transportation jobs related to skiing.
4. The report by Patrick Long and Richard Wobbekind, *How Local Tourism Business and Industry Representatives View Their Contribution to Colorado's Economy and Quality of Living*, June 1998, University of Colorado at Boulder (303) 492-3725.
5. Longwoods International, report titled *Colorado Travel, May 1998* was critical in estimates for in-state versus out-of state visitors and for data on business versus other visitors. Dean Runyan & Assoc., Portland Oregon, prepared the companion economic analysis titled *Travel Spending Trends Within Colorado 1992-1997*.
6. Travel Industry Association of America, (TIA, or sometimes TIAA) Washington D.C., Suzanne Cook, (202) 408-8422. Like Longwoods, TIA tracks tourism employment in Colorado. This organization surveys international and domestic visitors.
7. Colorado Hotel and Lodging Assoc., Eileen Kansler, E.D. and Bob Benton, publish a newsletter called *Rocky Mountain Lodging Report* with tourism data in a 4-state area. No statewide aggregates, only county level, some sub-state level, and Front Range data were available.
8. *Colorado River Use in the State of Colorado* published by Colorado River Outfitters Assoc., January 2000, Joe Greiner, Buena Vista, Colo. (719) 395-2112.
9. Utah Economic and Business Review, Vol 60, Numbers 3&4, March/April 2000. Article titled *Tourism Jobs and Wages in Utah: a Quantitative and Qualitative Analysis*. Had comparisons with Colorado and other western states.

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