

that meeting current RPS requirements nationwide would result in 4.7 million full-time job years in renewable energy related employment.²⁰⁷ A further multi-year analysis of state-policies found that RPS policies would, in the long run, reduce electricity costs for consumers, and lower natural gas prices.²⁰⁸

Tourism Promotion

Tourism plays a significant part in many state economies. Nationwide, state leaders tout tourism as economic development: residents and visitors from other states, and around the world spend money on food, accommodations, and leisure activities, which supports local businesses, spurs employment growth, and increases state tax revenues.²⁰⁹ We could not find independent data for Vermont, but the Department of Tourism & Marketing estimated eight percent of state gross domestic product can be attributed to tourism.²¹⁰ It is clear that tourism plays an important and significant role in many state economies.²¹¹ However, the relationship between state governments' activities and tourism levels is difficult to establish.

To maximize the inflow of tourism dollars, most state governments fund tourism marketing efforts. Proponents often claim that taxpayer-funded tourism advertising is an investment with significant returns.²¹² Despite the widespread adoption of these programs, rigorous and impartial examination of effectiveness of tourism marketing is rare.²¹³ Some studies have addressed the question and we outline the findings below.

There is consensus that tourist decision-making is influenced by a broad assortment of factors, as tourists rely on a wide variety of informational inputs that influence their decision to visit a location. The influence of past experiences, word-of-mouth from friends and family and other marketing campaigns is considerable.²¹⁴ The influence of any one factor is difficult to separate from other factors and the relationship between factors is unclear.

Research indicates that the impact of tourism marketing may depend on existing attractiveness of a destination. Destinations that are widely known as attractive tourist destinations reap less

207 Mai, Trieu, et al., "A Prospective Analysis of the Costs, Benefits, and Impacts of U.S. Renewable Portfolio Standards," National Renewable Energy Laboratory, Lawrence Berkeley National Laboratory, 2016. Available [here](#).

208 "Multi-Year Analysis Examines Costs, Benefits, and Impacts of Renewable Portfolio Standards," National Renewable Energy Laboratory, Lawrence Berkeley National Laboratory, 2016. Available [here](#).

209 McDowell, Edwin, "States Turn Entrepreneurial to Augment Tourism Funds," The New York Times, available [here](#).

210 See: [here](#).

211 Bureau of Economic Analysis, "Travel and Tourism Satellite Account: Second Quarter 2017," 2017. Available [here](#).

212 Deskins, John, Seevers, Matthew, "Are State Expenditures to Promote Tourism Effective?" Journal of Travel Research, Vol. 50, No.2, 2011.

213 Platzer, Michaela, "U.S. Travel and Tourism: Industry Trends and Policy Issues for Congress," Congressional Research Service, 2014. Available [here](#).

214 See: E. Sirakaya, A.G. Woodside, "Building and Testing Theories of Decision Making by Travelers," Tourism Management Vol. 26, 2005.

benefits from marketing than lesser known destinations or those that are perceived as less attractive. One study examined all 50 states over a 20-year period, and found that states with low levels of tourism made significant gains in tourism expenditures, and saw very small but statistically significant increases in state employment growth.²¹⁵ In contrast, states that had strong existing tourism industries saw weak returns on tourism marketing, and overall, experienced negative employment outcomes.²¹⁶ This finding is echoed in broader advertising research which indicates weak and strong brands benefit differently from advertising.²¹⁷

State government studies consistently report that benefits from their tourism promotion activities outweigh the costs. Given the wide diversity of funding levels and program structures and strategies, and the methodologies they employ, researchers caution against taking these reported results at face value.²¹⁸ States risk expending resources based on studies that may or may not be properly and impartially designed, which may result in less than efficient and effective government programs. Furthermore, analyses of the work of contracted firms should be viewed with caution, as they have a clear incentive to deliver positive return-on-investment results: some clients may decline to award future contracts to consultants that do not deliver strong evidence for their mission.²¹⁹

Some studies are commissioned to support a particular policy or program rather than to find objective truth. "Often, this results in the use of mischievous procedures that produce large numbers that study sponsors seek to support a predetermined position. Examples are selected primarily from the reports of ostensibly expert consultants that illustrate 10 of these mischievous procedures: including local residents in surveys; inappropriate aggregation; inclusion of time-switchers and casuals; abuse of multipliers; ignoring costs borne by the local community; ignoring opportunity costs; ignoring displacement costs; expanding the project scope; exaggerating visitation numbers; and inclusion of consumer surplus."

(Crompton, 2006)

Surveys and studies seeking to establish tourism marketing return on investment or costs and benefits must account for a variety of confounding factors. Sampling methodologies must be carefully constructed, and account for various biases, such as nonresponse bias. Some visitors may have decided to visit an area before they saw an advertisement, or they researched visiting an area, and encountered targeted advertising as a result.²²⁰

215 Deskins, John, Seevers, Matthew, "Are State Expenditures to Promote Tourism Effective?" *Journal of Travel Research*, Vol. 50, No.2, 2011.

216 Ibid, "Are State Expenditures to Promote Tourism Effective?"

217 Broadbent, Simon, "What Do Advertisements Really Do for Brands?" *International Journal of Advertising*, Vol. 19, No. 2, 2000.

218 Deskins, John, Seevers, Matthew, "Are State Expenditures to Promote Tourism Effective?" *Journal of Travel Research*, Vol. 50, No.2, 2011.

219 Crompton, John, "Economic Impact Studies: Instruments for Political Shenanigans?" *Journal of Travel Research*, Vol. 45, 2006.

220 Ibid, "Are State Expenditures to Promote Tourism Effective?"

Because of the difficulties of conducting such studies, many states hire firms to evaluate the impact of their state tourism marketing efforts. These firms specialize in conducting tourism economic impact studies, and their products are often used to make subsequent state tourism marketing funding decisions. Consultants often report large benefits to states for each tourism marketing dollar. However, some literature indicates that such studies may not be reliable.

Case Study: Tourism Marketing Consultants and Colorado Tourism

In our review of tourism marketing research and other state's tourism marketing reports, the SAO repeatedly encountered reports written by consulting firms that specialize in tourism marketing return-on-investment studies. To highlight the issues in relying on tourism marketing consultants may pose, we will discuss the case of Colorado since the 1990s below.

After the tourism and marketing budget in Colorado was eliminated in 1993, a widely contracted tourism-marketing consultant claimed that the elimination of Colorado's \$15 million state tourism budget led directly to more than \$2 billion dollars a year in tourism revenue losses (a \$6 billion a year industry for the state), and led to a relative decline in the state's tourism market share nationally.^{221 222} The consultant's estimates are part of a proprietary return-on-investment methodology that they do not share with their clients or the public. While such confidentiality is important to the consultant's long-term success, it can be problematic in terms of public accountability: without the ability to examine the methodology used to calculate tourism marketing return-on-investment or benefit-cost ratio, state governments cannot assess the veracity of these estimates. In the Colorado example, the consultant claimed that the elimination of the state tourism marketing budget was the *direct cause* of the tourism industry downturn, and that tourism only increased after the state government reinstated \$5 million in tourism funding in 2000 and \$9 million in 2006.²²³

A regional review of tourism and travel conducted Kansas City Federal Reserve, including Colorado, mentions Colorado state tourism marketing funding as an indicator that policy makers believe that the industry is important, but does not indicate that tourism marketing funding played a significant role.²²⁴ Rather, the report highlights several other factors:

- The region's tourism trends differed from those of the broader United States from the late 1980s to the early 2000s, possibly because it relied less on business and international travelers and more on domestic travelers than the United States as a whole;
- Sluggish growth in skier visits throughout the country in the 1990s may have

221 "The Rise and Fall of Colorado Tourism Case Study," Longwoods International, available [here](#).

222 See [here](#).

223 Ibid. "The Rise and Fall of Colorado Tourism Case Study."

224 Wilkerson, Chad, "Travel and Tourism: An Overlooked Industry in the U.S. and Tenth District." Kanas City Federal Reserve. Available [here](#).

disproportionally impacted ski-tourism reliant Colorado;

- Low snowfall amounts in Colorado from 1993-1994, and from 1997-2002 depressed skier visits; and the March 2001 Recession and the September 2001 terrorist attacks depressed tourism nationally.²²⁵

Further considerations not mentioned in the Federal Reserve's report include:

- Colorado was cast into the national spotlight in 1993 when voters passed a controversial law viewed as anti-gay, which led to a widely publicized national boycott of the State's tourism industry;²²⁶
- No evidence suggests that Colorado's substantial private tourism industry ceased marketing activities when the state government did.²²⁷

According to the Economic Census, the Arts, Entertainment, and Recreation industry spends about three percent of total business expenses on marketing and advertising. Accommodations and Food Services spends a bit more than three percent. The Bureau of Economic Analysis reports that the Vermont Gross State Product for those two industries in 2016 was over \$3.4 billion. Therefore, it is reasonable to assume that private sector spending on marketing and advertising for those two industries totaled about \$100 million. The State spent less than \$4 million that year (which includes considerable overhead). Thus, the State's expenditure likely represented about four percent of all tourism-related marketing and advertising. There is no methodology available to estimate the impact of our public expenditures in the context of the total amount spent.

Each of these factors may have played a role in how Colorado's tourism industry grew, and it is unclear whether or how much a reduction in the state government's marketing expenditures impacted tourism.

Housing

Housing policies are frequently examined from a social welfare perspective, where aid is provided to those that cannot afford safe housing.^{228 229} But some research analyzes housing from an economic development perspective, as well.

Since 1980, national median rents have risen faster than median household income: inflation adjusted rents increased by 64 percent while inflation adjusted median household income only

225 Wilkerson, Chad, "Travel and Tourism: An Overlooked Industry in the U.S. and Tenth District." Kanas City Federal Reserve. Available [here](#).

226 Johnson, Dirk, "Colorado Faces Boycott Over Its Gay-Bias Vote," The New York Times, December 1992. Available [here](#).

227 Searches of local and newspapers and other publications conducted on LexisNexis, a legal and business document search service, yielded no results that would indicate that private Colorado businesses followed the lead of the state and reduced their tourism expenditures.

228 See discussion of housing as economic development in: Arku, Godwin, "The Housing and Economic Development Debate Revisited: Economic Significance of Housing in Developing Countries," available [here](#).

229 Kotval, Zenia, "The Economic Impact of Affordable Housing," New England Journal of Public Policy, Vol. 16, No. 2, 2001.