

# The Trust for Public Land's Guide to Facts & Figures on the Economic Benefits of Land Conservation

## Tourism and Outdoor Recreation

Outdoor recreation is a significant component of the nation's tourism industry. Parks and open space provide invaluable places for people to participate in recreation activities. These participants inject money into the economy through their purchases on things such as food, lodging, and equipment. Residents and visitors also gain value by visiting the parks and trails and engaging in activities (e.g., walking, picnicking, biking) because they would have otherwise had to paid to do these things.



Phil Schermeister

### General Tourism and Outdoor Recreation Facts & Figures:

- According to the Outdoor Industry Association more than 140 million Americans make outdoor recreation a priority in their daily lives. Each year \$646 billion is spent on outdoor recreation. To put that in perspective, spending on motor vehicles and parts only accounts for \$340 billion in annual spending.<sup>1</sup>
- The employment impact of outdoor recreation is also substantial. Outdoor recreation is responsible for 6.1 million U.S. jobs.<sup>2</sup>
- Nationwide spending on outdoor recreation generates \$39.9 billion in federal tax revenue and \$39.7 billion in state and local tax revenue.<sup>3</sup>
- In 2011, 91.1 million U.S. residents fished, hunted, or wildlife watched, an increase of 2.6 million participants since 2006. These residents spent \$145 billion on their activities. Since 2006, participation in fishing increased by 11 percent, hunting by 9 percent, and wildlife watching by 2 percent.<sup>4</sup>
- Residents and visitors save money by not having to pay market rates to indulge in park activities like trails for walking or biking. The U.S. Army Corps of Engineers estimates the value of participating in a general recreation activity to be between \$3.72 and \$11.17.<sup>5</sup>

**For data and information specific to your state or community please see the following:**

Economic impact, spending, jobs, tax revenue from outdoor recreation industry

- **Outdoor Industry Association**  
<http://www.outdoorindustry.org/advocacy/recreation/economy.html>  
Reports for each state and the nation overall are available. Wildlife-associated recreation (fishing, hunting, wildlife-watching): Participants and spending.

<sup>1</sup> Outdoor Industry Association. 2012. The Outdoor Recreation Economy.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

<sup>4</sup> U.S. Fish and Wildlife Service. 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation

<sup>5</sup> U.S. Army Corps of Engineers. Calculation of Unit Day Value for recreation 2012.  
[http://planning.usace.army.mil/toolbox/library/EGMs/EGM12\\_03.pdf](http://planning.usace.army.mil/toolbox/library/EGMs/EGM12_03.pdf)

- **U.S. Fish and Wildlife Service's National Survey of Fishing, Hunting and Wildlife-Associated Recreation.**

<http://www.census.gov/prod/www/abs/fishing.html>

Presents data on individuals involved in fishing, hunting, and other wildlife-associated recreation, such as wildlife observation, photography, and feeding. Data include state in which these activities occurred; number of trips taken; duration of trips; and expenditures for food, lodging, transportation, and equipment. Data are available for all states.

#### Public Use of National Park System

- **National Park Service Public Use Statistics Office**

<http://www.nature.nps.gov/stats/index.cfm>

Data on recreation visits by type of unit is available. Includes: non-recreation visits, recreation hours; non-recreation hours; concessioner lodging; concessioner campgrounds; tent campers; recreational vehicle campers; backcountry campers; non-recreation overnight stays; and miscellaneous.

#### Economic Impact of National Wildlife Refuges on surrounding communities

- <http://www.fws.gov/refuges/about/bankingonnature.html>

Data available on select National Wildlife Refuges. Includes recreation visits, expenditures, and economic impact measured by value added, jobs, job income, and tax revenue.

## Agriculture

Farmland preservation supports a strong agriculture industry by keeping farmland in active production and enabling farmers to reinvest in their businesses and hire additional workers.

### General Agriculture Facts & Figures:

- In 2011, the value of U.S. agricultural production was \$370 billion. There are over 2.2 million farm operators across the nation.<sup>6</sup>
- The agribusiness sector makes up a major part of the national economy by adding value to farm products and providing farmers with necessary inputs such as machinery and other tools. The economic impact of agribusiness accounts for one-eighth of the U.S. gross domestic product and employs over one-sixth of the U.S. civilian labor force (24.1 million workers).<sup>7</sup>



Karl Nielsen Photography

**For data and information specific to your state or community please see the following:**

#### Value of Production, Jobs, Agri-Tourism, General Facts & Figures

- **USDA National Agricultural Statistics Service's QuickStats**

<http://quickstats.nass.usda.gov>

NASS publishes U.S., State, County and other geographic level agricultural statistics for many commodities and years. Quick Stats is a web based application that gives you the

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<sup>6</sup> USDA Economic Research Service. 2011. *State Fact Sheets: United States Overview*.

<sup>7</sup> U.S. Environmental Protection Agency. "Ag 101: Economic Overview." Accessed online at <http://www.epa.gov/agriculture/ag101/printeconomics.html>.

ability to query the agricultural census and survey statistics based on the simple filtering rules of *what*, *where*, and *when*.

**Key Statistics:**

*Note: Some data are available for more recent years by selecting ‘Survey’ instead of ‘Census.’*

- **Value of agricultural production (sales):** Census-> Economics -> Income -> Income, Farm-Related Totals -> Receipts -> Income, Farm-Related Totals – Receipts Measured in \$ -> Total
- **Number of *Direct Agriculture Jobs*:** Census-> Demographics -> Operators **AND** Census -> Economics -> Expenses -> Labor -> Labor, Hired – Number of Workers (can choose workers hired greater than 150 days, less than 150 days, or both).
- **Agri-tourism statistics:** Census ->Economics -> Income -> Agri-Tourism & Recreational Services
  
- **USDA Economic Research Service State Fact sheets**  
<http://www.ers.usda.gov/data-products/state-fact-sheets.aspx>  
 The ERS collects data from several different sources (including the Census of Agriculture which is in the process of being updated to 2012) and combines them into a single fact sheet for each state.

Acres of agricultural land converted to developed land (State-level)

- **Farmland Information Center (USDA Natural Resources Conservation Service & American Farmland Trust)**  
[http://www.farmlandinfo.org/agricultural\\_statistics/](http://www.farmlandinfo.org/agricultural_statistics/)  
 Here you will find frequently requested data from the National Resources Inventory, the Census of Agriculture and Farmland Information Center fact sheets. You also can link to additional information and data sources.

Agriculture supported industries and businesses (non-manufacturing)

- **U.S. Census Bureau, County Business Patterns**  
<http://www.census.gov/econ/cbp/>  
 The County Business Patterns tool provides economic data annually by industry. It includes the number of establishments, employment, and annual payroll. ZIP Code Business Patterns data are available shortly after the release of County Business Patterns.

**Key Statistics:**

Agriculture-related NAICS codes include: (1151) Support activities for crop production; (1152) Support Activities for Animal Production; (444220) Nursery, garden center, and farm supply stores; (423820) Farm and garden machinery and equipment merchant wholesalers, (49313) Farm Product Warehousing and Storage; (4245) Farm product raw material merchant wholesalers; (42491) Farm Supplies Merchant Wholesalers

Agriculture supported industries and businesses (manufacturing)

- **U.S. Census Bureau, Annual Survey of Manufactures**  
<http://factfinder2.census.gov>  
 The Annual Survey of Manufactures (ASM) provides sample estimates of statistics for all manufacturing establishments with one or more paid employee. It is conducted annually, except for years ending in 2 and 7, at which time ASM statistics are included in the manufacturing sector of the Economic Census. It provides statistics on employment, payroll, supplemental labor costs, cost of materials consumed, operating expenses, value of

shipments, value added by manufacturing, detailed capital expenditures, fuels and electric energy used, and inventories.

*Note: dollar figures are given in \$1,000's*

For States: Geography -> State. Then Topics -> Program -> Annual Survey of Manufactures. Then select 'Annual Survey of Manufactures: Geographic Area Statistics: Statistics for All Manufacturing by State.'

**Key Statistics:**

Agriculture-related manufacturing sectors include NAICS codes: (311) Food Manufacturing; (313) Textile Manufacturing; (333111) Farm Machinery and Equipment Manufacturing; (31212) Breweries; (31213) Wineries; (31214) Distilleries.

## Forest Products

Forest conservation helps sustain the resources on which the forest products industry depends, thus providing an economic boost to rural communities. Timber harvesting and production supports key manufacturing sectors including forest products, paper, and furniture.

**For data and information specific to your state or community please see the following:**

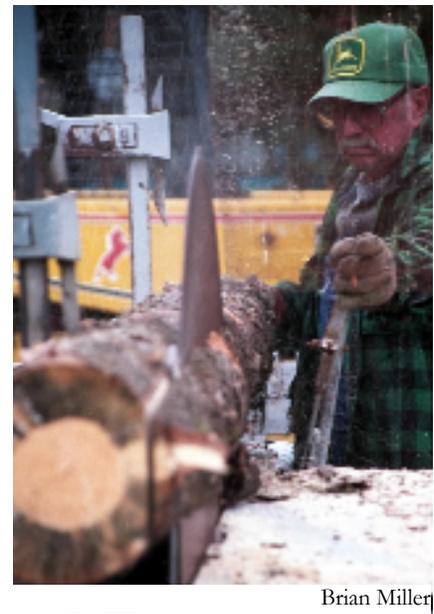
Forestry supported industries and businesses (non-manufacturing)

- **U.S. Census Bureau, County Business Patterns**  
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 The County Business Patterns tool provides economic data annually by industry. It includes the number of establishments, employment, and annual payroll. ZIP Code Business Patterns data are available shortly after the release of County Business Patterns.

**Key Statistics:** Forestry-related sectors include NAICS codes: (1131) Timber tract operations; (1133) Logging; (1153) Support activities for forestry.

Forestry supported industries and businesses (manufacturing)

- **U.S. Census Bureau, Annual Survey of Manufactures**  
<http://factfinder2.census.gov>  
 Annual Survey of Manufactures (ASM) provides sample estimates of statistics for all manufacturing establishments with one or more paid employee. It is conducted annually, except for years ending in 2 and 7, at which time ASM statistics are included in the manufacturing sector of the Economic Census. It provides statistics on employment, payroll, supplemental labor costs, cost of materials consumed, operating expenses, value of shipments, value added by manufacturing, detailed capital expenditures, fuels and electric energy used, and inventories.



Brian Miller

*Note: dollar figures are given in \$1,000's*

For States: Geography -> State. Then Topics -> Program -> Annual Survey of Manufactures. Then select 'Annual Survey of Manufactures: Geographic Area Statistics: Statistics for All Manufacturing by State.'

**Key Statistics:** Forestry-related manufacturing sectors include NAICS codes: (321) Wood product manufacturing; (322) Paper manufacturing; (337) Furniture and related product manufacturing.

## Economic Development

Open space, parks, and trails are strongly linked to residents' quality of life, which has a major impact on a place's ability to attract well-educated and talented workers. These workers look at more than just a paycheck when picking places of employment. Businesses seeking to hire highly qualified workers also know they must also be located in highly desirable communities.



Eric Swanson

### General Economic Development Facts & Figures:

- One survey of high-tech workers showed that a job's attractiveness increases by 33 percent in a community with a high quality of life.<sup>8</sup>
- Knowledge workers prefer places with a diverse range of outdoor activities. Portland, Seattle, Austin, Denver, and San Francisco are among the top cycling cities; they are also among the leaders in knowledge workers.<sup>9</sup>
- Businesses also recognize the importance of quality of life. According to CNBC, air and water quality and perceived livability are the second most important consideration for locating a business after cost of doing business.<sup>10</sup> There are many examples of major employers moving to places with a high quality of life because they will have better success in recruiting the best workforce. These include Dell moving to Austin, Boeing going to Chicago, and Volkswagen building in Chattanooga.<sup>11</sup>

**For data and information specific to your state or community please see the following:**

#### Quality of Life Rankings for Business

- **CNBC: Top States for Business**  
<http://www.cnbc.com/id/100727942>

<sup>8</sup> American Planning Association. 2002. How Cities Use Parks for Economic Development. <http://www.planning.org/cityparks/briefingpapers/economicdevelopment.htm>

<sup>9</sup> *City Parks Forum Briefing, How cities use parks for economic development. American Planning Association*

<sup>10</sup> CNBC, 2012. "America's Top States for Business 2012, A CNBC Special Report."  
[http://www.cnbc.com/id/47818860/Texas\\_Is\\_America\\_s\\_Top\\_State\\_for\\_Business\\_2012](http://www.cnbc.com/id/47818860/Texas_Is_America_s_Top_State_for_Business_2012)

<sup>11</sup> Michaels, Dave, "Panel Backs Aid for Downtown, Victory; Task Force Pushes Tax Dollars for Projects, Asks Developers to Cooperate," *Dallas Morning News*, January 24, 2002. John Warner, head of Boeing's site selection committee, cited in Bob Cox et al., "Boeing to Move Headquarters to Chicago", *Fort Worth Star-Telegram*, May 11, 2001. Crompton, John L., *Strategic Options Available to the Trust for Public Land in Texas 2000-2004* (Austin, Texas: The Trust for Public Land, 1999), p. 8, cited in John L. Crompton, *Parks and Economic Development* (Chicago: American Planning Association, 2001), p. 52. Volkswagen Group of America Announces It Will Produce Cars in Chattanooga; Decision Marks Company's Ongoing Commitment to North American Market. July 15, 2008. [www.news.tn.gov](http://www.news.tn.gov)

CNBC scores the states on several factors, including air and water quality, as well as overall perceived livability.

- **Forbes: The Best Places for Business and Careers**  
<http://www.forbes.com/best-places-for-business/list/>  
 Forbes provides a similar ranking that also includes a quality of life rank.

## Health

Land conservation promotes a physically active lifestyle. Strong evidence suggests that when people have access to parks and trails, they exercise more. Exercise reduces illness in people of all ages and fights depression, obesity and high blood pressure. A healthier workforce translates into fewer missed days of work, higher productivity at work, and lower medical bills.



Darcy Kiefel

### General Health Facts & Figures:

- Access to places for physical activity along with informational outreach has been shown to produce a 48 percent increase in the frequency of physical activity.<sup>12</sup>
- Children who spend time outdoors are less likely to be overweight by up to 41 percent.<sup>13</sup>
- Children living within 2/3 mile of a park with a playground can be 5 times more likely to have a healthy body weight.<sup>14</sup>
- Studies have shown that the very obese lose one month of productive work per year without considering the extra sick days taken. This costs employers an average of \$3,790 per very obese male worker and \$3,037 per female each year.<sup>15</sup>
- The Trust for Public Land has found that an average of \$351 in medical costs is saved annually by those under 65 who exercise regularly.<sup>16</sup>

**For data and information specific to your state or community please see the following:**

#### Obesity Statistics by State

- **CDC obesity data**  
<http://www.cdc.gov/obesity/data/adult.html>  
 The Centers for Disease Control and Prevention provides annual obesity rates by state.

<sup>12</sup> Emily B. Kahn et al. and the Task Force on Community Preventive Services, 2002. The Effectiveness of Interventions to Increase Physical Activity. American Journal of Preventive Medicine 22(48).

<sup>13</sup> National Environmental Education Foundation

<sup>14</sup> Ibid.

<sup>15</sup> Reuters, 2012. "Study: Obesity adds \$190 billion in health costs" (April 30, 2012).

<sup>16</sup> Based on studies that have been carried out in seven states, we assigned a value of \$250 as the annual medical cost difference between those who exercise regularly and those who do not.

- **Cost of Physical Inactivity**

<http://www.ecu.edu/picostcalc/costcalculator/coi.asp>

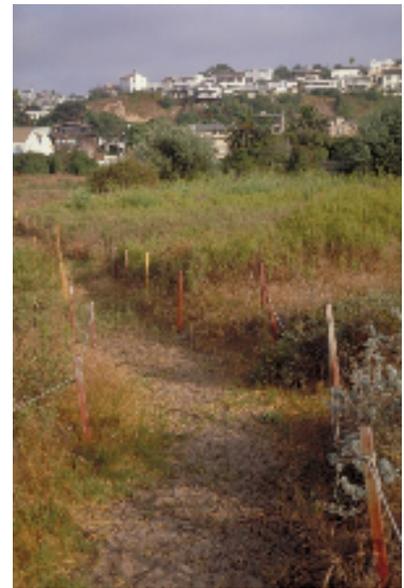
East Carolina University’s calculator allows you to calculate the health care costs associated with a physically inactive population. This tool quantifies the cost of medical care, workers compensation and lost productivity associated with physical inactivity.

## Property Values

Parks and open space are highly desirable community amenities. Studies have consistently shown that the market values of residential properties located near parks and natural areas are typically higher than those of comparable properties more distant from such public lands. Enhanced properties values translate into greater municipal revenues through increased property tax revenues.

### General Property Value Facts & Figures:

- In a 2011 national survey, respondents answered that places to take walks is among the top community characteristics considered when deciding where to live.<sup>17</sup>
- A National Association of REALTORS® survey found half of respondents would pay 10 percent more for a house located near a park or open space.<sup>18</sup>
- Another recent report from the Association of REALTORS® found the premium for homes near parks and open space can extend three blocks and start at 20 percent for those homes directly adjacent.<sup>19</sup>



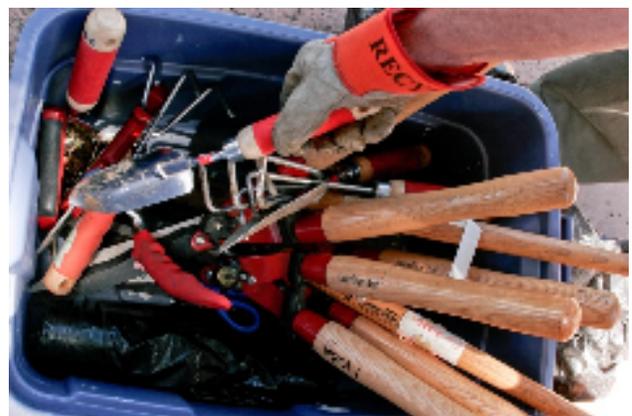
David Peever

## Jobs

Parks and open space have direct job impacts in local communities through the money invested in things such as maintenance, administration, restoration activities, and trail construction.

### General Jobs Facts & Figures:

- A recent national study found that every \$1 million invested in off-street multi-use trails creates 9.57 jobs while \$1 million invested in bicycle infrastructure creates 11.4 jobs.<sup>20</sup>
- Another national study found that even more jobs are created by conservation. For every \$1 million invested in conservation, 20.3 jobs are created. Activities



Nita Winter Photography

<sup>17</sup> National Association of Realtors. *The 2011 Community Preference Survey*

<sup>18</sup> According to a 2001 survey by the National Association of Realtors by Public Opinion Strategies, 50 percent of respondents said they would pay 10 percent more for a house located near a park or open space.

<sup>19</sup> National Association of Realtors. *On Common Ground*. Winter 2009.

<sup>20</sup> Garrett-Peltier, Heidi. 2011. *Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts*. Political Economy Research Institute.

related to conservation including reforestation, land and watershed restoration, and sustainable forest management generates approximately 40 jobs for every \$1 million invested. These job creation rates surpass many job creating investments including those made by the infrastructure and energy sectors.<sup>21</sup>

## Cost of Community Services

Protecting parks and natural areas maintains lower demand for expensive public services. Development imposes costs on communities in the form of increased demand for schools, roads, water, sewer and other community services. Studies have consistently demonstrated that parks, open space and working lands (e.g. farms and forestland) generate significantly more local tax revenue than they require in public services.



The Trust for Public Land

### General Property Value Facts & Figures:

- The national median across 151 communities over 25 years is that for every \$1 paid in local taxes, working lands and open space require \$0.36 in services compared to \$1.16 in services for the average home.<sup>22</sup>

**For data and information specific to your state or community please see the following:**

### American Farmland Trust: Cost of Community Services Studies

<http://www.farmland.org/services/fiscalplanning/default.asp>

AFT's nationally acclaimed COCS studies provide a snapshot in time of current revenues and expenditures on a land use basis. COCS studies analyze the demands on public services (e.g., schools, fire protection and road maintenance) and show how much it costs to provide public services to each land use.

## Natural Goods & Services

Conserved lands provide a multitude of valuable natural goods and services such as water quality protection, flood control, and air pollution removal. These services would otherwise be dramatically more expensive to provide.



Ken Sherman

### General Natural Goods & Services Facts & Figures:

- The Trust for Public Land examined the return on investment of land conservation in terms of natural goods and services across a variety of spending programs and places around the country and found that every \$1 invested in conservation returns between \$4 and \$11 in economic value of natural goods and services alone.<sup>23</sup>

<sup>21</sup> Heintz, Pollin, Garrett-Peltier. 2009. *How Infrastructure Investments Support the U.S. Economy: Employment, Productivity and Growth*. Political Economy Research Institute. January 2009.

<sup>22</sup> American Farmland Trust. 2010. *Cost of Community Services Fact Sheet*. Farmland Information Center, Northampton, Massachusetts

<sup>23</sup> Based on seven recent studies undertaken by The Trust for Public Land's Conservation Economics Program

## Recent Economic Benefits Publications by The Trust for Public Land

### Return on Investment Studies:

The Return on Investment in Parks and Open Space in Massachusetts (2013)  
<http://cloud.tpl.org/pubs/benefits-ma-roi-report.pdf>

The Economic Benefits of Clean Ohio Fund Conservation (2013)  
<http://cloud.tpl.org/pubs/benefits-oh-cleanfund-report.pdf>

Pennsylvania's Return on Investment in the Keystone Recreation, Park, and Conservation Fund (2013)  
<http://cloud.tpl.org/pubs/benefits-pa-keystone-roi-report.pdf>

Return on the Investment in Land for Maine's Future (2012)  
<http://cloud.tpl.org/pubs/local-maine-conseconomics-2012.pdf>

The Economic Benefits of New York's Environmental Protection Fund (2012)  
<http://cloud.tpl.org/pubs/local-ny-economic-benefits-rpt2012.pdf>

Economic Contributions of the Wyoming Wildlife and Natural Resource Trust (2011)  
[http://cloud.tpl.org/pubs/benefits\\_mt\\_wwnrt.pdf](http://cloud.tpl.org/pubs/benefits_mt_wwnrt.pdf)

North Carolina's Return on the Investment in Land Conservation (2011)  
<http://cloud.tpl.org/pubs/benefits-nc-return-on-investment.pdf>

Return on the Investment from the Land & Water Conservation Fund (2010)  
<http://cloud.tpl.org/pubs/benefits-LWCF-ROI%20Report-11-2010.pdf>

A Return on Investment: The Economic Value of Colorado's Conservation Easements (2008)  
<http://cloud.tpl.org/pubs/benefits-CO-easements-taxcredit.pdf>

### Community Studies:

Our Lands - Our Future, Larimer County, Colorado (2013)  
[http://larimer.org/ourlands\\_ourfuture/](http://larimer.org/ourlands_ourfuture/)

The Power of Leveraging Local and Federal Dollars to Strengthen Agricultural Land Easement Investments (2012)  
<http://www.landtrustalliance.org/policy/public-funding/frpp-economic-benefits-report>

The Economic Benefits of Open Space and Trails in Pinal County, Arizona (2012)  
<http://cloud.tpl.org/pubs/benefits-az-PinalCountyReport.pdf>

The Economic Benefits of the Park and Recreation System of Mecklenburg County, North Carolina (2011)

[http://cloud.tpl.org/pubs/ccpe\\_MecklenburgNC\\_econben.pdf](http://cloud.tpl.org/pubs/ccpe_MecklenburgNC_econben.pdf)

The Economic Benefits of the Park and Recreation System of Virginia Beach, Virginia (2011)

<http://cloud.tpl.org/pubs/ccpe-va-beach-park-analysis-report.pdf>

The Economic Benefits and Fiscal Impact of Parks and Open Space in Nassau and Suffolk Counties, New York (2010)

<http://cloud.tpl.org/pubs/ccpe--nassau-county-park-benefits.pdf>

How Much Value Does The City of Wilmington Receive from its Park and Recreation System? (2009)

[http://cloud.tpl.org/pubs/ccpe\\_WilmingtonRpt\\_vF.pdf](http://cloud.tpl.org/pubs/ccpe_WilmingtonRpt_vF.pdf)

### Fact Sheets:

Economic Benefits of the Proposed Barre Town Forest, Vermont (2012)

<http://cloud.tpl.org/pubs/local-vt-barretownforest-econbenefits-rpt.pdf>

Overview of the Economic Benefits of Conservation around Stringer's Ridge (2012)

<http://cloud.tpl.org/pubs/benefits-econ-stringersridge.pdf>

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