Job Creation Potential If We Restore Our National Parks

Methodology

Cadmus Report Methodology

This analysis used fiscal year 2016 deferred maintenance data from the National Park Service (NPS) Facility Management Software System. The system tracks all of the known deferred maintenance by project and includes several project fields, such as asset type, condition, and estimated repair cost. To transform the cost data into jobs, this report used the Council of Economic Advisers' job creation formula from 2009. This formula estimates that each $92,000 of infrastructure investment creates one job-year (one full-time employee for one year). The total government spending required to generate one job-year was adjusted from 2009 to 2016 to $103,000 per job-year using U.S. Bureau of Labor Statistics consumer price index (CPI) inflation data. While the CPI index tracks increases in the costs of goods as well as labor, inflation remained low over this period, and adjusted job estimates are substantially similar to those created by adjusting using the employment cost index 2009-16.

The total job creation is split across direct/indirect and induced job creation. The formula predicts that 64 percent of jobs would be direct (at the construction site) or indirect (supplying materials and labor to the construction site). The remaining 36 percent of jobs are induced jobs, created by money circulating within the local economy. While more detailed job estimation models are available, they work best at a local level with community-specific materials and labor market variables. Although the Council of Economic Advisers formula is not as accurate on a local level, it should provide a reasonably accurate job-creation estimate at a state and national level across the National Park System.

In addition to data provided by the NPS in its "FY 2016 NPS Asset Inventory Summary Location Report 2016.09.30," this report uses publicly available information from the U.S. Census Bureau on metropolitan area boundaries and from the U.S. Bureau of Labor Statistics on unemployment (as of August 2017). Data analysis is based on the "state" field supplied by the NPS. The state information for some entries was modified to better reflect the physical location of some assets in multistate parks.

National Park Service Visitor Spending Effects: Definitions and Notes
Visits*

Parks count visits as the number of individuals who enter the park each day.

Visitor spending in local gateway regions*

The local gateway region for each park unit is defined as all counties contained within or intersecting a 60-mile radius around each park boundary. Only spending that took place within these regional areas is included as supporting economic activity.

Jobs supported by visitor spending*

Full and part-time jobs that are supported by NPS visitor spending.

Economic output*

Economic Output is a measure of the total estimated value of the production of goods and services supported by NPS visitor spending.

*Definitions are from 2016 National Park Visitor Spending Effects report. For more information on methodology, please visit: https://www.nps.gov/subjects/socialscience/vse.htm

Note: The national values visitor spending, jobs supported by visitor spending, and economic output differ from the sums of state-specific data for those fields. See the following excerpt from the NPS "Visitor Spending Effects" report for further explanation:

"This analysis reports economic contributions at the park-level, state-level, NPS region-level, and national level. Park-level contributions use county-level IMPLAN models comprised of all counties contained within the local gateway regions; state-level contributions use state-level IMPLAN models; regional-level contributions use regional IMPLAN models comprised of all states contained with the NPS region; and the national-level contributions use a national IMPLAN model. The size of the region included in an IMPLAN model influences the magnitude of the economic multiplier effects. As the economic region expands, the amount of secondary spending that stays within that region increases, which results in larger economic multipliers. Thus, contributions at the national level are larger than those at the regional, state, and local levels."