

Gross Domestic Product (GDP) - **Forest Service Recreation Contributes to the National Economy**

Agency's improved methodology revises earlier GDP projections

Background:

The Draft 1995 Resources Planning Act (RPA) Program projected that the Forest Service's outdoor recreation program would generate a \$111 billion annual contribution to the national Gross Domestic Product (GDP) by the year 2000. An economic analysis for the USDA Forest Service Strategic Plan for Fiscal Years 2004-2008 revised the GDP estimate to \$11.2 billion from the recreation program for 2002. The revised estimate has generated questions about the magnitude of the difference between the two numbers and more specifically about the methods used to derive the estimates.

New methods to measure and monitor recreation visitation were developed and deployed in the last several years. Their goal was to increase the accuracy and validity of recreation use information. Key components of the new method entailed nationwide consistency in recreation use definitions, expanded and clearly defined sampling protocols, and improved survey design. The improved survey design included definitions of recreation spending that were more directly associated with a visit to National Forest System (NFS) lands.

The improved methods produced significantly lower visitation figures, and somewhat lower visitor spending figures. Both of these figures are far more statistically defensible than previous counts. The improved numbers do not change the significance or importance of the recreation program in the Forest Service.

Questions and Answers

Q1: Why and when did the Forest Service revise its visitor use monitoring methods?

A1: The Forest Service changed its monitoring methods to improve the validity of recreation use information. NFS recreation visitation reports in the mid-1990's were based on the best available information at that time. Yet, concerns about the accuracy and number of reported visits and uncertainties associated with the methods used to measure visitation were widely recognized. The process of updating procedures to improve visitor use estimates was initiated by development of the National Visitor Use Monitoring Program (NVUM). The new NVUM procedures were pilot tested in 1998. In 1999, the refinement, peer review, and documentation of the NVUM sample methods survey design and analysis process occurred. National implementation of the sampling methods began in January of 2000 and by September 2003, all National Forests had been sampled. The first visitor use estimates using the NVUM sampling procedures were reported in early 2001.

Q2: What caused the recreation GDP estimates to change from \$111 billion to \$ 11.2 billion?

A2: The difference resulted after the agency implemented new procedures to obtain valid visitor use data under the National Visitor Use Monitoring (NVUM) project. There are two primary reasons for the difference in GDP estimates:

- 1) NVUM indicated there were fewer national forest visits than previously estimated, and
- 2) NVUM reported lower estimates of recreation user spending.

The analytical methodology – the economic “model” – for estimating GDP remained the same in both cases.

The NVUM survey verified that the Draft 1995 RPA Program projections of roughly 800 million visits to NFS lands for 2000 were substantially overestimated. Instead, the NVUM survey estimated the number of visits at nearly 205 million visits per year. Because the contribution to GDP is roughly proportional to the number of recreation visits, the primary reason for the reduction in GDP parallels the 75% reduction in estimated visits. This data and methodology represent a more statistically reliable approach for GDP estimates than previous approaches.

The second reason for the difference in GDP estimates is lower estimates of user spending per visit based on NVUM data. There are several reasons for these differences:

- The NVUM survey focuses the spending question on trip-related purchases made within 50 miles of the recreation site. Spending in this area can be directly associated with the national forest visit. There is no double counting of spending for recreation users on multiple destination trips. Further, spending estimates used for the Draft 1995 RPA Program came from multiple sources. These estimates included additional spending on trip expenses beyond 50 miles and additional spending on some durable recreation equipment.
- The NVUM survey estimates are representative of all sites, including remote ones with few spending opportunities. The Draft 1995 RPA Program spending estimates were from survey sites that tended to be more developed, were closer to commercial development, and produced longer on-site visits. This contributed to higher spending averages.
- Previous methods relied on multiple sources for information about visitor spending. Although they were the best available at the time, these sources often used incompatible definitions, data standards, and accounting conventions that in aggregate resulted in higher estimates of visitor spending. NVUM is currently the source for both recreation use and visitor spending, so there is no difficulty matching units from multiple sources.

Q3: What caused the change in the number of visit estimates between use of NVUM and the previous data gathering methods?

A3: The Forest Service implemented the NVUM project to improve the reliability and validity of reported estimates of visitation to NFS lands. There are several reasons NVUM estimates are lower than estimates made from previous methods. The main reasons are as follows:

- The NVUM survey applies a consistent definition of a national forest recreation visit to all forests during visitor use sampling. This eliminates double counting of visits which could

occur under previous methods. For example, a visitor camping multiple days on a national forest might travel to another part of the forest to hike. Previous methods might have counted the visit twice. NVUM adjusts for visits to multiple sites, so visitation estimates are lower.

- In the previous visitation reporting system, forests used different methods to count visitation and counted different things as recreation visits. For example, people often drive on federal and state highways through or near national forests to view the forest landscape. Since these people never actually set foot on the forest for recreation, this activity is not counted as a recreation visit through NVUM. These viewing visits were included in previous estimates of recreation visits and account for a significant portion of the difference between the estimates between the two reporting systems.

Q4: Does the GDP contribution measure the total value of National Forest System recreation?

A4: No. The GDP contribution accounts only for the effects of transactions or purchases of goods and services in the vicinity of the national forests. The analysis does not include purchases of durable equipment such as snowmobiles, marine equipment and other specialized equipment purchased for use in outdoor recreation activities. These purchases contribute significant and important economic activity to the national economy, but the purchases are often made at home and can not be attributed to a specific visit to a national forest.

Additionally, the importance of recreation opportunities to the American public includes many values besides the contribution to GDP. These other values include the non-priced value of access to public recreation and broader societal values such as health and fitness benefits, family and social bonding, and other quality of life benefits associated with recreation opportunities.

Q5: Are the results of revised visitor use and GDP contributions expected to cause any major policy shifts by the Forest Service?

A5: No. This new GDP figure does not diminish the importance of recreation within the Forest Service. The \$11.2 billion contribution from recreation is still a significant figure and represents the Forest Service's share of outdoor recreation's economic contribution to the nation's total economy. Recreation remains a major component of the overall contribution of all Forest Service programs to national GDP. Outdoor recreation was included as one of six strategic goals in the current Forest Service Strategic Plan and is expected to remain an important goal in the next plan revision in 2006.

Q6: Does this kind of analysis drive Forest Service investment and budget allocation decisions?

A6: No. Many factors are used to formulate Forest Service budget requests. A program's contribution to GDP is not intended to inform budget allocation decisions and is not used in the budget formulation process. GDP is simply one measure that can be used to describe the possible outcomes of agency actions and different program emphases. Other types of analysis, particularly appropriate performance measures, are needed to evaluate budget alternatives and to

evaluate the effects of different levels of program investment. The improved reliability and validity of visitation estimates using the NVUM program allow agency leaders to include recreation use as one of several factors in deciding how to allocate funds within the recreation program.

Q7: Is the data used to compute the revised GDP estimate new information?

A7: No. The NVUM field sampling began in January 2000. The Congress was briefed in 2001 when tabulation of the first annual summaries showed substantial reductions from previous visitation estimates. The Forest Service has reported NVUM visitation estimates to Congress on an annual basis since 2003 when all forest sampling was finished. Congress continues to support the agency's recreation program based on the reliability and credibility of the NVUM's revised numbers regarding the amount and types of recreation occurring on NFS lands.

Q8: Why is an accurate accounting of recreation visitor use important?

A8: The whole reason the agency has undertaken this intensive analysis is because of the importance of outdoor recreation to the agency and the American people. The Forest Service is accountable for information provided to the public about its resource programs. Sharing this new data is the responsible thing to do.

The Forest Service uses visitor information in many aspects of its recreation program management. The agency tracks the overall trends in recreation use by activity to better understand visitors' interests. This allows forests to adjust their recreation programs based on public input. The data are requested by Congress on an annual basis to identify program trends. Evaluating the overall use levels and mix of activities within the context of the resource settings on a particular forest is a primary determinant of the recreation "niche" of that forest. Finally, the data are helpful in determining recreation program planning and investment needs.