

Comparing the economic impacts of recreation to rural and urban National Forests

Donald B.K. English¹, Eric M. White²

Keywords: economic impacts, visitor spending, GDP, urban national forests

There is renewed interest in the United States to quantify the contributions to jobs and Gross Domestic Product (GDP) that are created when visitors to National Forests spend money during their visits. A large part of that interest is due to an emphasis by the US Department of Agriculture in improving the economic health of rural communities. The impacts of recreation visitation, about \$13 billion, account for nearly half of the Forest Service's total contribution to GDP. However, not all National Forests are in rural areas. Sixteen forests have been classified as 'urban' national forests because of their proximity to major metropolitan areas. Almost half of these include major ski area complexes that draw from national and international markets, which greatly affects the average per-visit spending patterns. Some previous work has identified factors that affect spending patterns across visitors, including distance travelled, length of stay, and type of lodging (Stynes and White 2006, White and Stynes 2008). However, it is not clear whether there are consistent differences between National Forests located in urban versus rural areas in the per-visit and total impacts that come from visitation. Urban areas often have more complex economies, so the multiplier effects of visitor spending would likely be somewhat greater than in rural areas. However, the visitation and spending patterns have a greater influence on both the per-visit and the total impacts, and research on differences in these variables is lacking.

In this paper, we compare the set of urban National Forests to an equal number that are located in rural areas. The rural forests are selected to be geographically close to the urban ones, so as to have the same regional mix as the urban forests (Table 1). We compare per-party spending patterns, as well as key visitation characteristics that are related to spending patterns, including the percentage of visits from the local area, visit duration, duration of time away from home, and size of visiting party. The comparisons are made both for all visits, and excluding visits for the purpose of downhill skiing.

Table 1. Urban National Forests and associated rural National Forests.

Urban Forest	Region	Rural Forest
Arapaho – Roosevelt	2	White River
Pike – San Isabel	2	Rio Grande
Tonto	3	Coconino
Cibola	3	Carson
Wasatch – Cache	4	Ashley
Uinta	4	Fishlake
Angeles	5	Stanislaus
Cleveland	5	Sierra
Los Padres	5	Sequoia
San Bernadino	5	Inyo
Gifford Pinchot	6	Okanogan
Mt Baker – Snoqualmie	6	Wenatchee
Mount Hood	6	Willamette
Chattahoochee – Oconee	8	Cherokee
NFS in Florida	8	NFS in Mississippi
White Mountain	9	Green Mountain

Data for the analyses come from the Forest Service's National Visitor Use Monitoring (NVUM) program. The NVUM program employs a stratified random sample of dates and locations on each forest to estimate visitation use and visitor characteristics (English, et al., 2002). Data from the

¹ USDA-Forest Service, 1400 Independence Ave SW, Washington, DC, USA 20250, denglish@fs.fed.us

² Department of Forest Engineering Resources and Management, Oregon State University, 3200 SW Jefferson Way, Corvallis, OR, USA 97331, eric.white@oregonstate.edu

most recent sampling effort on each selected national forest, which range from 2004 through 2008, are used. Preliminary results show that there are important differences for spending patterns as well as for several of the visitor characteristics. We present the results and discuss implications for managers, economists, and policy makers.

References

- English, D.B.K.; Kocis, S.M.; Zarnoch, S.J.; Arnold, J.R. 2002. Forest Service national visitor use monitoring process: research method documentation. USDA Forest Service Gen. Tech. Rep. SRS-57. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 14 p.
- Stynes, D.J. and E.M. White. (2006). Reflections on measuring recreation and travel spending. *Journal of Travel Research* 45(August): 8 – 16.
- White, E.M. and D.J. Stynes. (2008). National forest visitor spending averages and the influence of trip-type and recreation activity. *Journal of Forestry* 116(1): 17 – 24.