

Reservation Policies and Equity in National Park Access

Jonathan E. Hughes^{1,2*}

August 12, 2025

Abstract

National parks face unprecedented demand, straining infrastructure, damaging ecosystems, and diminishing visitor experience through congestion. To manage peak use, many parks now require reservations, but concerns remain that such systems may limit equitable access. I quantify the effects of two reservation features—advance purchase windows and competition for permits—on visitor income at seven national parks. Both disproportionately favor higher-income users. In the most competitive day-ahead and advance markets, reservation holders come from zip codes with 3–5% higher median household income. Extending the advance purchase window to six months is associated with a 5% increase in user income. These findings underscore a key challenge for park managers: designing reservation systems that protect resources while ensuring broad access. Without attention to distributional impacts, efforts to control crowding risk exacerbating income-based disparities in who can visit and enjoy the nation’s most treasured public lands.

*I thank seminar participants at the University of Colorado for helpful comments.

¹Department of Economics, University of Colorado at Boulder. ²Renewable and Sustainable Energy Institute, University of Colorado at Boulder. *email*: jonathan.e.hughes@colorado.edu