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The Economic Foundations of Public Parks

The Human Purposes of Parks

state, and national parks, were not primarily created for what we would now call "ecological" reasons. Human use and benefit were central from the beginning of park creation. For our national parks, for instance, human visitation and enjoyment ("pleasuring") were a central part of the legislative purpose (National Park Service Organic Act, 16 U.S. Code 1). Even a cursory review of the character of the national parks created during the first 85 years of existence of the National Park Service indicates not an attempt to protect the biologically most fragile and threatened ecosystems, but an attempt to protect the most "charismatic" of our natural landscapes, those that awed and inspired human visitors. The establishment of our first national parks was motivated by a "monumentalism" that aimed at "putting the most extraordinary displays of nature" within public parks (Runte 1982; Smith 2000, 233).

At the same time, what we would now recognize as environmental or ecological concerns were also part of the motivation: "To conserve the scenery and the natural ... objects and the wild life therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations" (16 U.S. Code 1). But human "enjoyment" was a central purpose. This emphasis on human use of public parks clearly conflicts with some of our contemporary environmental sensibilities that are skeptical of a purely anthropocentric view of the environment.

The conflict between the original objective, human use and enjoyment, and the contemporary concern with potential environmental damage con-

tinues to be important in the management of even our "premier" national parks: Witness the ongoing battles over the use of snowmobiles in Yellowstone, the use of personal watercraft in many national parks, sightseeing overflights of Grand Canyon, efforts to control visitor congestion by mandatory use of public transportation, etc.

When "public parks" in general are considered, the focus on human needs as opposed to protecting natural systems is even clearer. The first urban parks were created in response to the impacts of industrialization on the urban environment. As factories, crowded working-class tenements, and the accompanying congestion and air and water pollution transformed cities, public health became an impor-

tant issue. Public parks were partially a somewhat naïve public health initiative: to provide access to fresh air, uncrowded space, and some contact with the natural world in an otherwise degraded industrialized setting (Ward 2002). Urban parks continue to provide relief from an urban industrial landscape by introducing a humandesigned "natural" landscape, but rarely do these urban parks seek to preserve or recreate indigenous ecosystems. Instead, they focus on creating spaces free of dense building, opportunities for recreation, and places of quiet contemplation.

There are other human purposes that public parks served, especially in an urban setting; for instance, the provision of open public spaces to which all citizens have a right to access. Such public spaces have important political and cultural meaning within the European tradition that dates back to ancient Greece and Rome. industrialization and the rise to dominance of private property and capitalism, such public spaces were lost, especially in "new" cities and neighborhoods. With that "enclosure" of "public space" went a loss of social and civic vitality that had economic implications as those new or expanded urban places failed to develop the economic dynamism of earlier urban centers (Jacobs 1961). Many contemporary civic organizations (e.g., the Project for Public Spaces, Trust for Public Lands, and Partners for Livable Communities) are focused on repairing this loss as a way of revitalizing our urban areas. Public parks play a role here too.

The Economic Purposes of Parks

In popular public policy dialogue, the word "economics" is often equated with the worlds of commerce and finance. But as a social science, economics focuses on improving the ways in which we use scarce resources to satisfy human needs and desires. The objective is either to boost the satisfaction we can derive from the limited resources at our disposal, or to reduce the waste of those scarce resources as we satisfy our highest priority needs and desires, or both. In that conventional economic setting, the focus is on all human needs and desires that rely on the use of scarce resources. should be noted that there are areas where economic analysis may not be appropriate because the trade-off analysis that is central to economics is considered ethically or culturally inappropriate.) In that context, public parks, because they seek to serve important human needs and desires, have an important economic aspect to

The above discussion of the human objectives of public parks lays the basis for the discussion of the economic role of public parks. In a variety of ways public parks improve the "livability" of neighborhoods, cities, and regions. They do this by providing a flow of valuable environmental services: open space, reduced congestion, contact with nature and wildlife, recreational opportunities, scenic beauty, improved air and water quality, quiet, a slowed pace of human activity, a relaxed place to meet and interact with fellow citizens, and so on. Just as the well-to-do can pursue such amenities through the purchase of large estates or homes in gated park-like settings or through membership in private clubs, the general public can pursue them through a political process that establishes accessible public parks in their neighborhoods or communities. In both cases, scarce resources are allocated to the satisfaction of important human needs and desires. Both types of actions are economic in character, even though one is private and relies on markets and the other is public and relies on the government.

As a result of changes in the American economy, the quality of the living environment ("livability") has become increasingly important to people and an increasingly important economic force. This is clear in the near-consensus nationally that environmental quality is important and ought to be pursued even if there are economic costs associated with it. This is partly a result of the success of our economy in providing a reliable level of affluence that has allowed citizens to confidently consider the full range of values they would like to pursue, not just their survival needs. It is also tied to the negative side of that economic success: the damage that ongoing economic growth has caused to natural and social environments. Our rising ability to afford higher-quality living environments has coincided with degradation of those same environments. Hence the broad-based movement to reverse that degradation.

That impetus to protect and enhance the environments that we inhabit has become an economic force as well as a political force because of other changes that have taken place in the economy. The shift away from natural resource industries and heavy manufacturing towards light manufacturing (including high tech) and services has made economic activity much less tied to particular places. Economic activity is more "footloose." Higher levels of income, the difference in the cost of housing in larger metropolitan areas and smaller urban and rural areas, the rise in the importance of investment and retirement income, improvements in transportation and communication, and the mobility of families during the Great Depression, World War II, and the post-war period have all combined to make for a much more mobile population and workforce. People are more "footloose" too.

As a result of these changes, perceived differences in the attractiveness of different areas as places to live, work, and do business can lead to shifts of population and economic activity. Subjective judgments about the site-specific amenities associated with different places have led to significant in- and out-migration that has transformed the economic geography of the United States in the last half of the 20th century. These include the shifts from center-cities to suburbs: the shift from the frost-belt to the sunbelt, especially the Southwest; and the "resettlement" of both the Deep South and the Mountain West. Tens of millions of people and a good part of the American economy have changed location. Often it has been people moving and economic activity following, rather than the other way around (see Power 1996a, 1996b; Power and Barrett 2001; USDA 1999; Shumway and Otterstrom 2001).

The point is that local environmental quality—natural, social, and cultural—matters to people, and, because of that, has significant economic importance. It is the contribution of public parks to those site-specific local amenities that is the basis of their economic importance.

From an economic point of view, the economic importance of public parks should be measured by the contribution they make to individuals' overall well-being. It is the direct satisfaction of human needs that is the basis of economic value. Economists measure this through the sacrifices that people are willing to make to gain access to such parks. Studies of how property values vary with distance from parks and of the travel costs incurred to reach parks, as well as the analysis of survey data, are used to quantify the economic value of public parks to their direct beneficiaries. Those estimated values are usually quite high in dollar terms.

In addition to the direct value of public parks to those who actively use and enjoy them, there is the potential that those parks support local economic vitality by drawing residents and visitors to the park area, stimulating local businesses. For those worried about declining communities or regions, this type of economic impact of public parks may also be very important.

The Impact of Parks on Local Economic Vitality versus the Economic Value of Parks

Because many of our original national parks are located in relatively

isolated areas, distant from urban population centers, considerable travel is required for their enjoyment. As a result, "tourism" is a necessary aspect of human enjoyment of those parks. But when the focus shifts to all public parks, including community, city, county, and state parks, human use takes on a somewhat different meaning since it is largely local residents who use and enjoy those parks. Tourism and commercial businesses facilitating visitation from distant locations play a relatively modest role or no role at all. This, it turns out, is an important economic distinction.

The economic impact of public parks often has been analyzed almost exclusively from the point of view of their ability to attract visitors who spend money in the local economy. Although these tourist impacts can be significant in some locations, there are two drawbacks to this approach to measuring the impact of public parks on local economic vitality. First, the approach tends to emphasize large volumes of temporary visitors—so large a volume that the community may be disrupted and the park damaged. Second, it turns out that from a quantitative point of view, the ability of public parks to help communities hold on to current residents and attract new permanent residents is usually a more important economic force than tourist visitation. This is especially the case when the public parks are not nationally or internationally "charismatic."

Focusing on the local economic impact of public parks through their impact on making a community a more attractive place to live has the additional advantage of going back to the primary economic concern: to what extent are human needs and desires being satisfied by the park. A focus on residents who value the park, rather than on the economic activity stimulated by tourist spending, is closer to the actual direct economic values at issue.

National Parks and Local Economic Vitality

Analysis of the impact of national parks on local economic vitality provides some important evidence of the role that public parks can play in supporting local economies. Our analysis here focuses on all of the large national parks (including the designations "national monument" and "national preserve") in the lower 48 states. "Large" was arbitrarily taken to mean those covering more than 250,000 acres, of which there are 21. The economic vitality of the 45 counties in which those large national parks are located was analyzed by looking at growth in population, employment, and real income. Two time periods were used: the 30-year period 1969-1998, and the 10-year period 1989-1998. For summary purposes, we combine all of the counties adjacent to a particular national park in a "national park area" and report on them together.

For the longer period of analysis (1969-1998), almost all the areas surrounding the large national parks showed above-average economic vitality. Ninety-one percent showed above-average population and job growth; 86% saw aggregate real income rise at above-average rates. A third had

above-average growth in average real income. Averaged across all 21 large national park areas, population growth was almost four times faster than the national average. Job growth was almost three times faster. Aggregate real income grew twice as fast as the national average.

Over this 30-year period, all of the large national park areas showed some signs of above-average economic growth. The Isle Royale area in the Upper Peninsula of Michigan only saw average incomes grow (slightly) more rapidly than the national average. That area also saw very little population growth. The Big Bend area also saw below-average population and aggregate real income growth, but had above average income and job growth. Canyonlands saw below-average growth in aggregate income, but had above-average growth in jobs and population. All of the other large national park areas had above-average growth in population, jobs, and aggregate real income.

During the most recent decade (1989-1998) the results were similar: 91% of the 21 large national park areas had above-average population and job growth. Two-thirds saw aggregate real income grow at above the average. Averaged across all of the 21 areas, during the period the population grew 2.5 times faster than the national average. Jobs grew twice as fast as in the nation as a whole, and aggregate real income expanded 65% faster.

During the 1989-1998 period, all of the large national park areas showed signs of above-average economic vitality. One, the Death Valley area, showed above-average growth only in

population while experiencing belowaverage growth in the other three economic indicators. None of the large national park areas showed a decline in population in the 1990s, although two, Big Bend and Isle Royale, had very slow population growth compared with the national average. Only one area, that around Death Valley, saw employment contract during this period. The Everglades area saw employment grow at only 90% of the national rate. All of the other large national park areas had above-average job growth. None of the national park areas saw aggregate real income decline.

Public Parks, Amenities, and Local Economic Vitality

The relatively high rates of population, job, and real income growth in counties adjacent to national parks reported here are not new findings. Economic research has repeatedly demonstrated that areas with high-quality natural environments that are protected by official park or similar status have been able to attract higher levels of economic activity and, as a result, show signs of superior economic vitality.

A study of the impact of the presence of state parks on employment and population growth in 250 rural Western counties found that state parks served as an amenity, attracting population to those counties with more state park lands while also supporting employment growth (Duffy-Deno 1997). A similar analysis of the impact of federal wilderness areas and national parks in the Mountain West found that when a rural county was adjacent to a national park, population

growth was higher. In addition, there was no negative impact of wilderness designation on employment or income (Duffy-Deno 1998).

Analysis of the economic development of rural counties near large wilderness areas found that population growth in those counties was somewhat higher than the growth rate for either the state as a whole or the major urban area in the state. During the 1990s, the advantage of the rural wilderness counties over the state and urban averages expanded (Booth 1996). Another researcher found similar results for the Rocky Mountain West even when he focused on truly rural counties—those that had no cities with a population greater than 2,500. That study included not only federal wilderness as protected areas but also national parks and national monuments. Relatively high correlations (r = .5) were found between measures of the relative importance of these federal protected lands as a percentage of total county land and several measures of economic vitality: employment, average income, total aggregate income, and population growth (Lorah 2000).

Rudzitis has also shown that federal protection of landscapes through national park and wilderness designations not only did not appear to slow local economic growth, but was associated with growth rates two to six times those for other non-metropolitan areas and two to three times those of metropolitan areas over the period 1960-1990. He showed that this was also true for National Park lands. His research clearly indicated that the protected lands drew new residents who

were willing to sacrifice a certain amount of income in order to live in the higher-quality natural environments that they perceive federal protected landscapes provide (Rudzitis 1996, Table 7.1, 112-116).

Of course, most urban and community public parks are very far removed from these large national and state parks in terms of size. But the economic vitality in the areas adjacent to national parks, state parks, wilderness and roadless areas, etc., demonstrates the very real economic importance to people and communities of higherquality living environments. In that sense, these unusual (in terms of their size) public parks dramatize the economic importance of parks in general. All public parks provides some of the same environmental qualities that large national parks do: open space, scenic vistas, some natural systems and wildlife, quiet spaces, a partial escape from the industrial or postindustrial world, recreational opportunities, and so forth. Access to these is important to people both in urban and ex-urban settings. Communities that can provide them for their residents will be stronger because their citizens will have a stronger commitment to place, their civic involvement will be greater, and their economies will be more vital. That is the reason that there has been an increased emphasis on creating new public spaces or rehabilitating old ones in revitalizing our

communities. Public parks have a large role to play in the effort.

The discussion throughout this paper should help clearly answer the question this particular issue of the FORUM poses. From the very beginning of Western European urban settlement, open spaces to which all citizens had a right of access were central to urban political and social life. With industrialization and the growth of very densely settled urban areas, public health considerations led to an expansion of that urban open space ideal: Citizens needed access to some bit of the natural world or our urban areas would become increasingly unlivable. Public parks could provide that. Public parks helped maintain crucial connections between citizens and the natural world and among fellow citizens by providing a shared common area. Our state and national parks simply extended those concepts as we became an increasingly mobile population. Community and citizenship centers on the sharing of a broad range of values and commitments. Public parks have played an important role in that civic sharing. That role has not diminished in this 21st century. The "new" urbanism that seeks to revitalize our cities has come full circle to see the importance of shared, open, common spaces in making our cities attractive, livable places where economic vitality can blossom.

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