

DISSERTATION

IT TAKES A VILLAGE TO SUPPORT THE NATIONAL PARK SERVICE

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ABSTRACT

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As the United States becomes more diverse, the National Park Service will need to continue to adapt if it is going to continue to garner public, political, and financial support in the future. In these three chapters, the role of citizens, funders, politicians and visitors is investigated. The first two chapters of this study explore the historic role of citizens and legislators in creating and developing the National Park System. The third chapter takes park visitor data, joined with market research data, to explore different theories on barriers for diverse audiences, in-group heterogeneity of park visitors, and opportunities to use this research to engage new park visitors and boosters from diverse backgrounds.

The first chapter provides a historical perspective on the origins of the National Park Service. This chapter considers the early advocates and park champions from all walks of life who helped shaped the system in its earliest years. In particular it focuses on those outside the government bureaucracy who helped provide the infrastructure and resources, and who got the country energized around the concept of government investment in conservation and heritage work.

The second chapter explores political aspects of designating new sites into the National Park System. Federally designated protected lands represent a variety of political, economic, recreational and ideological costs and benefits. The chapter reviews some of the main arguments for and against creating new National Park sites, the legislative steps that proposed parks go through in the process to become an official national park unit, and tests the electoral

competition theory, an adaptation of economic rational choice theory applied to political behavior. The electoral competition theory hypothesizes that as the congressional majority margin decreases (gets more competitive), politicians will act in a more strategic & less partisan manner. This study examined the creation of new National Park units from 1934-2010 in the US, and found evidence in support of partisanship, electoral competition, and that presidential election years heightened the competitive behaviors of legislators. This suggests that the evolution of the parks system has been influenced by political interests and political gamesmanship.

The third chapter explored in-group racial and ethnic heterogeneity among National Park visitors. Park visitation rates for minority visitors are low compared to white visitors. Teasing out the in-group heterogeneity of visitors provides park administrators with better information on which specific audience segments they are currently drawing to the parks. In this study three theories were tested to evaluate and compare the role of (a) cultural differences, (b) affluence and proximity, and (c) an integrated model that includes race, resources, geography, and lifestyles factors in specifying statistically relevant differences between and within groups. For the study, park visitor information was joined with psychographic and geo-demographic data. The results show that there is significant heterogeneity within racial or ethnic groups and the model with the strongest effect size is the integrated model that considers visitors in a broadest context, though each model provided insights about visitor heterogeneity. Also included was a sample of ways park administrators could apply the information from the study to develop targeted outreach and programming.

Keywords: Diversity Research, Electoral Competition, Market Research, National Park Service, Political Economy, Social History

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I was fortunate that early on in my program my advisor, Dr. Jerry Vaske, invited me to work with him on National Parks research that incorporated Census data. It opened a whole new world to me; at the time I only had a cursory knowledge of the National Park Service and hadn't done much work integrating large data sets. It lit a spark in me that has come to kindle a true love of both the Park Service and data management and analysis methods. It has also taught me how investigate questions and inspired me to ask questions I couldn't have conceived of before this journey. I can't thank Dr. Vaske enough for his encouragement, rich intellectual challenges and discussions, and patient guidance: I have transformed professionally and personally through the past few years because I had the chance to work with him.

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DEDICATION

“I am a woman with a foot in both worlds; and I refuse the split.
I feel the necessity for dialogue. Sometimes I feel it urgently.”
— Cherríe L. Moraga, *This Bridge Called My Back*

This work is dedicated to the people who have inspired and challenged me.
You helped me develop the grit to walk my own path, cross and bridge boundaries, and
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Introduction

The following work reflects the interdisciplinary nature of the field of Human Dimensions of Natural Resources. We live in an era where science can answer many of our technical questions, but to address the complex environmental and natural resources issues we face we also need to draw on the social sciences, including political science, sociology, and psychology. The social sciences provide a lens through which to understand the human context, that is: the cognitive, emotional and behavioral factors that maintain status quo; how to design interventions to promote change; and how to encourage motivation by building a sense of self-efficacy and co-responsibility.

The National Park Service is the focus of the present work. It is a unique government agency in that it provides the legislative mechanism and technical knowledge for effective conservation, but it is much more than that. As an agency it has both practical and transcendent impacts on our society. The NPS manages attractions that promote a wide range of leisure and recreational options throughout the country. It provides place-based opportunities to inform and engage the public about issues like climate change, local natural resources, our nation's heritage, civic engagement, and social change. For some the parks are sacred and inspiring spaces of renewal. Through the educational and interpretive programming the National Park Service offers, the public can form their own opinions on environmental challenges, resource use, environmental protection, and public health. The nature-based parks are among the most unique and diverse natural places on the planet. The culture-based sites provide tangible touchpoints to our history and insights on who we want to be as a nation.

The National Park Service provides an excellent canvas on which to examine human dimensions of natural resources because of the variety of ways in which it operates and engages society. The challenges this agency faces – in terms of securing funding, adapting to changing social needs and expectations, balancing conservation with use, navigating the needs of diverse stakeholders, audience development and engagement – embody the fundamental challenges of any organization doing public environmental and natural resource work.

The present work takes up the issue of the human dimensions of the National Park Service – the people who have helped push the idea of the National Parks, who have provided the political and economic support for parks, who have used their federal powers to create new parks, and the people who visit the parks. While not diminishing the work of the hundreds of thousands of people who have been employed by the National Park Service, this is a look at the people outside of the agency who have also been instrumental in helping it evolve.

The first chapter takes a historical perspective on the origins of the National Park Service. Unlike a purely administrative history, this chapter considers the social context and the people who helped push the idea early on, in particular those outside the government bureaucracy who helped provide the infrastructure and resources, and who got the country energized around the concept of government investment in conservation and heritage work. Unlike the European monarchies and aristocracies where land use was determined by private ownership, there were opportunities and choices that our rapidly expanding nation had to make. As a representative democracy public opinion had a heightened role in shaping the direction of the young country and the role of government. Understanding the social history of the parks gives us an opportunity to consider how many different voices and interests have been woven together in the

making of the modern day NPS. In this regard, parks are both physical spaces and social objects that bear the imprint of the desires, politics, and economic forces over time.

Because parks are embedded in physical as well as social and political constructs, creating new parks requires decisions balancing costs and benefits. A variety of stakeholders are involved and they may not all have the same interests or agendas. At times the National Park System has been wholly dependent upon interested parties to donate or fund new park sites. Economic viability and sustainability is not insignificant considerations for park units, whether it be for procuring space, development, staffing, interpretation and programming, building amenities or maintenance. There have been fierce debates throughout the history of the National Park Service over what should or shouldn't be protected, the proper role of the government versus private rights, and acceptable ways to generate funding. At times the concerns have been related to property rights and access. At other times, parks have been the battleground for cultural wars over whose stories should be told, and from what perspectives. Each unit in the National Park System represents a significant effort of a number of people over time.

The second chapter explores political aspects of designating new sites into the National Park System. Federally designated protected lands represent a variety of political, economic, recreational and ideological costs and benefits. The chapter reviews some of the main arguments for and against creating new National Park sites, the legislative steps that proposed parks go through in the process to become an official national park unit, and tests the electoral competition theory, an adaptation of economic rational choice theory applied to political behavior. Historical data on when parks were created, which political parties were in power, and how much of a margin the majority party has was used to test the level of partisan behavior under conditions of low and high competition. What this chapter underscores is that parks are

political objects: the results of the analysis indicate clear partisan and competitive influences in the legislative process of park creation. This is another way in which the National Park System is a social object: it is a reflection of the political forces at play at the time that parks are put forth for consideration. In the political process, parks may be considered for their role in public interest, but they may also be used as bargaining chips to gain political advantage or reinforce partisan power.

The third chapter explores ways to understand National Park visitor heterogeneity, including using cultural, demographic, and geographic factors. Minority participation in national parks is disproportionately low. While undoubtedly there are a number of factors that go into differential minority participation rates, this chapter tests three of the theories to evaluate the role of (a) cultural/lifestyle differences, (b) affluence and proximity, and (c) an integrated model that includes race, resources, geography, and lifestyles. For the study, park visitor information was joined with psychographic and geo-demographic data. The results show that there is significant heterogeneity within racial or ethnic groups and the model with the strongest effect size is the integrated model that considers visitors in a broadest context, though each model provided insights about visitor heterogeneity. Teasing out the in-group heterogeneity provides park administrators with better information for decision making, programming and outreach. A sample of ways park administrators could apply the information from the study to develop targeted outreach and programming was explored. With attention and intention, in-roads to effectively serving diverse audiences can be made.

Addressing diversity at the national parks is not just an abstract prosocial or social justice issue; as the nation moves toward a minority majority it also is a pragmatic issue. The National Park Service is a public institution that exists because of public will and public funding, and if it

isn't able to represent or engage a majority of America it will have a new set of challenges in the future. As funding models have shifted to put more emphasis on entrance fees and donations, economic viability directly relies on how effectively the National Park Service can engage diverse audiences. Park programming, development and maintenance all suffer without adequate funding, which can further exacerbate lack of participation and engagement by the public.

Beyond fiscal issues, the more people that are involved, the stronger the National Park Service can be. As an institution of conservation, education, and national pride the NPS needs public support and engagement. As this work demonstrates, people – beyond park staff – are the engine behind the park system. Because the social and political context of the nation continues to evolve, the National Park Service will continue to evolve along with it. By encouraging more people to come to the table, it is possible to ensure continued public support and engagement in the parks. The institution is important not just for the recreational and entertainment value for individuals, but because it plays a critical role in public education about the environmental and social challenges our country faces.

Chapter 1: Park Origins

“History is the essence of innumerable biographies”

– Thomas Carlyle, Historian (1830)

The happy convergence of many disparate interests permitted Congress and the public to sustain the contradictory, but compatible, beliefs that permitted a park system to flourish: on one side a repugnance at the seemingly boundless materialism that infused American life, a spiritual attachment to untrammelled nature, and a self-congratulatory attitude toward preservation of nature’s bounty; and on the other a commitment to economic progress wherever it could be extracted, nationalistic pride, and the practical use of nature as a commodity supportive of tourism and commercial recreation.

– Joseph L. Sax, Environmental Lawyer (2001, p. 9-10)

Birth of an Idea

In the first half of the nineteenth century Americans were grappling with a unique set of circumstances when the idea of national parks began to emerge. Steam engine technology was revolutionizing transportation and manufacturing. Private industry and the government were making massive investments in infrastructure. The increased productivity created new opportunities for robber barons and workers alike. The size of the country tripled with the Louisiana Purchase and the Treaty of Guadalupe Hidalgo. Hundreds of scientific and scouting expeditions were stimulating interest in the unique natural resources and peoples of the western United States. Popular culture romanticized the relationship between nature and man in works like Emerson’s *Nature* (1836) and Thoreau’s *Walden* (1854). As the industrial revolution drew more people to the cities for work, cities started investing in more green space like New York’s Central Park (1853). Popular natural attractions like Niagara Falls were being over run by commercial development, prompting concerns about the protection of unique natural places and

whether they should only be allowed for the rich, or if the public should have rights to access them (Runte, 2010).

When compared to European nations, the United States was a young, industrial nation developing its unique character and a national identity. Major American cities couldn't compete with the historical charm and attractions that cities like London, Paris, Berlin or Prague had been building since medieval times. What the United States had, and was busy acquiring more of in the early 1800s, was undeveloped land. This land, framed in popular imagination as pristine and wild, provided a ready canvas for nation building both physically and psychologically.¹

The role of the government was evolving as the nation wrestled with what it takes to build a country for the people, by the people. It was a period of momentous economic, social and technological change. During this time debates were raging about states' rights versus federal rights, the role of private industry and the government, how to manage competing interests, and what the proper domain and scope of government power should be. With the rapid expansion of the country, issues about how to manage our new natural resources became pressing. The government was grappling with developing policies on issues ranging from productive & extractive land use, land conservation, flora and fauna protection, and the preservation of natural and cultural heritage. Like any large, complex challenge, important answers were found on the frontlines with those who had firsthand knowledge of the practical realities of the situation.

Early champions of the National Parks. Artists, writers, naturalists, scientists, and private industry helped champion the idea of national parks. Artist George Catlin (1796-1872) is credited with being one of the first people to propose the idea of protecting the unique landscapes

¹ Of course this framing by the Americans didn't take into consideration the many indigenous nations who had lived on and cultivated the land in environmentally sensitive and sustainable ways for generations.

and cultures in America. He spent much of his professional career in the West painting the Native American communities and scenic vistas he encountered. With a front row seat to the effects of westward expansion, he was concerned about the impact migrating Americans were having on the landscape and indigenous tribes' cultures. He suggested social and natural conservation could be accomplished "by some great protecting policy of government . . . in a magnificent park . . . A nation's park, containing man and beast, in all the wild and freshness of their nature's beauty!" (Pitcaithley, 2001, p. 1). People from all walks of life, with different interests and personal stakes, were responding to the dramatic changes in society and across the landscape in similar ways. Folks like Jesuit missionary Father Francis Xavier Kuppens and the Montana Territorial governor Thomas Meagher wanted to protect the land based on its own intrinsic beauty. Lawyer, reporter and explorer Cornelius Hedges suggested it was important to protect land for "public good rather than private aggrandizement" (Haines, 1974). Businessmen like A.B. Nettleson of the Northern Pacific Railroad were keen to use natural attractions to develop their business interests. The modern day National Park Service is a reflection of how park administrators navigated all these different stakeholders with the political constraints and public interests they also had to manage.

The first parks emerged on the edges of the growing nation. The country was only 30 years old and the ink had barely begun to dry on the Louisiana Purchase when entrepreneurial Americans started developing what is now the Hot Springs National Park in Arkansas as a health resort and spa for tourists. It was clear to the Arkansas Territorial Legislature that the area was unique and about to be overrun by commercial interests, and in 1820 they requested intervention from the federal government to protect the springs. Their bid was successful and the area was set aside by Presidential decree as a Reservation in 1832. As more settlers and entrepreneurs

migrated to the area, there were territorial disputes and in 1878 the park boundaries were expanded to provide additional protection to the springs. Finally, in 1921, just five years after the Organic Act established the National Park Service as a federal agency, the Hot Springs were re-designated by the NPS as the nation's eighteenth national park. Though it took 89 years to become a national park, Hot Springs was the first parcel of land in the nation to be protected from commercial development through a legislative process so that it could be preserved and enjoyed by the public.

The next major chapter in the history of the National Parks Service happened in the 1860s at Yosemite, which was included in the land ceded in 1848 by Mexico after the Mexican-American war. At that time the California gold rush was beginning to ebb but had marked the largest mass migration in the nation's history: over 300,000 people (over 1% of the population) moved to California between 1848 and the mid-1850s (Maranzani, 2013). The Civil War was in full swing as the nation struggled over human rights and citizenship, states' rights, and taxation. A number of large-scale infrastructure initiatives were started by President Lincoln using public funding and land. The initiatives included the transcontinental railroad (1862-1866 Pacific Railroad Acts), new economic opportunities for farmers and settlers (1862 Homestead Act), a single currency system and a national bank (1863 & 1864 National Banking Acts), and a public education system to support "the industrial classes" in developing knowledge in agriculture, engineering, and military tactics (1862 Morrill Land-Grant College Act) (Diamant, 2014). As westward expansion and development picked up, a disparate group of people with commercial and conservation interests coalesced to advocate for federal protection of the now iconic Yosemite Valley.

The man credited with first sparking the idea for Yosemite National Park was Israel Ward Raymond, a California representative of the Central American Steamship Transit Company (Sax, 2001). At the time the only way to get to the Yosemite Valley was to take a boat from San Francisco into Stockton, then travel three more days over land. The Central American Steamship Transit Company kept vessels in the port of San Francisco and had a financial interest in increasing the volume of visitors through this port.

Raymond recognized the commercial opportunities in protecting the Yosemite Valley, and knew that political support would be necessary. Raymond planted the idea in the mind of the California Senator John Conness. Senator Conness had the political power to move the idea forward through the political machine, but it was popular artists like Thomas Ayers (1816-1858), Thomas Moran (1837-1926), and William Henry Jackson (1843-1942) who would inspire public support and political will for the idea of national parks. They provided the first popular images of the western territories, and for Americans it was love at first sight.

Explorer Jim Bridger (1804-1881) played a special role in inspiring the public and promoting awareness of our unique American treasures. Though illiterate, he spent most of his adult life traversing the West, as a military scout, guide, and entrepreneur. He shared his stories with travelers as well as journalists and writers. His vivid descriptions ignited interest in areas like Yellowstone and the Montezuma Castle cliff dwellings (Caesar, 1961; Gunnison, 1852). Where the artists were able to represent the breathtaking beauty of the West, Bridger was able to convey the excitement and emotional appeal that drew people in.

Publisher and promoter James Hutchings (1820-1902) stoked the imaginations of the public about the West and Yosemite. He one of the first settlers there, making his first fortune during the Gold Rush, and his second fortune as a publisher (National Park Service, n.d.f).

Through his well-known Hutchings' California Magazine he popularized Yosemite and the Sierra Madres. He travelled around the country giving lectures, wrote books, started a travel office, and owned hotels near Yosemite. He engaged artists including Thomas Ayers to create images for his magazine, books, and lectures (Palmquist & Kailbourn, 2002). It was through this kind of national media and promotion that most Americans learned about the West.

There were also advocates like John Muir and Frederick Law Olmsted. John Muir was a naturalist, environmental philosopher, writer, activist for wilderness preservation, and one of the most famous conservationists in America. Frederick Law Olmsted established the field of landscape architecture, an interdisciplinary field that focuses on the integration of natural and human considerations in designing public areas. He is famous for his work with New York's Central Park, but was involved with many greenspace projects across the nation. They both wanted to protect and preserve the Yosemite landscape for perpetuity because they recognized it as a unique asset with its own intrinsic value.

Senator Conness used a clever tactic manipulating how he framed the value of the park in order to secure support for the Yosemite land grant. To make it politically palatable, he framed the land as one "of the greatest wonders of the world" but "for all public purposes worthless", "of no value to the Government" – so in essence invaluable, and without value, at the same time (Runte, 2010, Kindle Locations 606-609). He also chose to emphasize that in providing federal protection there would be "no appropriation whatever" needed, in essence making it more politically viable, but creating a challenge for administrators who would need funding to manage and protect the site (Runte, 2010, Kindle Locations 606-609). The Senator was trying to navigate between two major concerns of critics: either that the land would be better used in a different capacity (had an alternative use value), or that it would be too costly to develop,

maintain and protect. Senator Conness made a compelling case for government involvement: there was nothing to lose and no real trade-offs in creating the park.

The United States Congress made the land grant to the State of California with the direction that the state should steward it in a way that ensured it would be available was for “public use, resort, and recreation... inalienable forever.” This was another political calculation, this time on behalf of the Congress, to ensure broad support for the parks by the public since they would be direct beneficiaries with no financial stake (Meringolo, 2012; Runte, 2010). This rationale became the foundation for national parks, and led to administrators who had to be creative about partnering to find resources for investment and funding to develop and maintain the parks. It also created the challenge that persists today of how to balance conservation with public use.

This collection of businessmen, explorers, artists, publishers, promoters, and naturalists would be successful in getting the Yosemite Park Act passed in 1864. Israel Ward Raymond, James Hutchings and Thomas Ayers all benefitted commercially and professionally by promoting the cause of national conservation. Israel Ward Raymond and Frederick Law Olmsted became the first set of Yosemite park commissioners and embodied the competing interests of how to manage these public lands: whether it was best to allow the area to be developed by private interests to attract tourists, or to manage it in order to minimize human impacts and keep it in its natural state (Runte, 1990). Because there weren't many state funds available for the park, tourism was one way that the Park Commission could garner fiscal support and justify investment in the area.

Galen Clark was chosen to be the local overseer of Yosemite and Mariposa Grove by the commissioners, and would be the first park administrator to grapple with how to protect the land,

but still allow visitors to use and engage with the park. A guardian with passion for the landscape, he was one of the most ardent lobbyists for the protection of the wilderness that made these parks so unique. Clark wrote *Indians of the Yosemite Valley and Vicinity* (1904), *The Big Trees of California* (1907), and *The Yosemite Valley, Its History* (1910), in order to stimulate interest and tourism in the area. The tourists provided the very funding necessary to pay for improvements like trail and road construction that made the area accessible but preserved its beauty (National Park Service, n.d.e).

For four decades, while Yosemite was controlled by the State of California, significant investments were made in transportation and tourist amenities which stimulated economic development, but also had the unintended effect of encouraging extraction and grazing within the park boundaries (History Channel, 2012). Concerned about balancing commercial interests in Yosemite, activists like John Muir and Robert Underwood Johnson continued to advocate for the park to be expanded and brought under federal control. These conservationists were ultimately successful, and in 1890 the park was expanded to include an additional 1,500 square miles of wilderness around the Yosemite Valley, and put under federal protection. The two segments of the Park, the original land grant that was under state control and the 1890 addition, were combined and brought under federal control in 1906 when Yosemite was named the nation's third national park.

Although Hot Springs was the first federal land set aside as a Reservation, and Yosemite was the first federally designated state managed park, Yellowstone enjoys the title as the nation's first federally mandated and federally managed national park. The first scouting trip to Yellowstone set out in 1859 but was disrupted as the Civil War broke out (Zaslowsky & Watkins, 1994). The 1871 Hayden Geographic Survey of Yellowstone was the first government-

sponsored trip after the end of the war, and would prove to be a game changer. One of the most influential delegates on the trip was Thomas Moran, the painter, who was responsible for documenting the trip. He was funded by both Jay Cooke (head of the Northern Pacific Railroad and one of the nation's largest banks) and Scribner's Monthly magazine. During congressional hearings on whether or not to make Yellowstone a national park, Thomas Moran proved more persuasive than geologist Ferdinand Hayden in his testimony on the uniqueness of the area. It wasn't the science, or the love of nature, that built the political will to protect the site. It was being able to glimpse the majesty of the western wilderness, through works like The Grand Canyon of the Yellowstone, which moved peoples' hearts and minds and compelled them to act. The 7x12-foot panorama, entitled "The Grand Canyon of the Yellowstone", was purchased by Congress after the congressional hearings and debates about Yellowstone. The painting was sent on a multi-city tour to demonstrate to the public why the government was getting involved in land conservation. This work of art was a huge hit, inspiring "Yellowstone Fever". The painting returned to Washington and hung in the Senate lobby until 1950, when it was sent to its current home at the Department of the Interior (Johns, 1996; Kinsey, 1992).

For different reasons public, private, and individual supporters stepped up and joined forces to advocate for the early park acquisitions. The critical mass of public support necessary to get the government involved in land conservation was a result of inspiration from artists and storytellers who made the parks tangible for people, and opportunism from capitalists who provided funding and infrastructure to provide access and develop the sites. Early on the railroad companies, and agents of the railroads, would be important political allies and investors in the parks.

Railroads: Economic and Political Engines For Change

An unlikely symbiotic partnership manifested between those responsible for administering the parks and the railroad companies because of the political and economic dynamics at that time. Between 1868 and 1873 there was a boom in railroad construction and investment, fueled by the government land grants and subsidies, which spurred on large investment from speculators. It was a massive undertaking, with expensive overhead (costing up to \$48,000 a mile to build in the most difficult spots) becoming the largest employment sector outside of agriculture at the time (Oberholtzer, 1926). Financiers were willing to take on the risk of the high overhead and low initial returns because the investments were expected to pay off handsomely.

In 1873 the country fell into an economic depression, which set off a chain reaction throughout the entire economy. Over the course of just six years, the depression led to a number of major US bank failures, a real estate bust, massive factory layoffs, nearly 90 of the nation's railroads went into bankruptcy, and 14% of the country was unemployed (PBS, 2002). Things became even more tense in 1877 after railroad workers went on strike over wage cuts and poor working conditions, and federal troops were sent in to end it by whatever means necessary (PBS, 2002). The government got involved in busting the strike because the future of the country depended on the success of the railroads. There was too much capital and too many jobs tied up with railroads – they were too big to fail. To promote fiscal stability, the government chose to prop up the railroads, using federal force, contracts, and economic tools to help them through tough economic times.

Jay Cooke was one of the beneficiaries of this government support. He was the chief financier behind the Union military during the Civil War, head of the nation's largest bank, one

of the primary financiers of the railroads, and owner of the Northern Pacific Railroad. Cooke had a vested interest in the long-term success of the railroads, and was very involved in American politics and economics. Prior to the depression Cooke had been investing in both infrastructure and PR so he could capitalize on the opening of the American West and westward expansion. He was one of Thomas Moran's key patrons, not just funding his trip on the Hayden Survey of Yellowstone, but also employing him to help promote Western tourism and the trains in general. Cooke knew these national attractions would help create a boom for the railroads (Runte, 2010).

Cooke was able to weather the depression, and by 1883 the Northern Pacific Railroad was fully operational. The railroads made Yellowstone easily accessible to the public. In 1883 park attendance at Yellowstone grew five-fold (Duncan, 2009). The uptick in visitors that year proved pivotal for both the NPS and the railroads, demonstrating the critical role that transportation played in the amount of attention and attendance the national parks would receive.

Not only did the railroad companies create the infrastructure to reach the parks, they were the primary contractors operating the concessions for the government that provided hotels, services and other amenities so park visitors could enjoy their stay, and stay longer (Culpin, 2003). The railroad companies also paid for promoting the parks, because in getting people excited to visit, they were building a whole new audience for their transportation services as well as creating new sources of revenue by getting in the hotel and concession services industry (Culpin, 2003; Duncan, 2009; Runte, 2010).

The Organic Act, which created the National Park Service in 1916, was heavily lobbied for by both the railroads and preservationist groups like the American Civic Association (Hinton, 2000). Steven Mather, the first Director of the National Park Service, recognized a powerful ally

in the railroads that could help him continue to finance and develop the infrastructure needed to build up the system (Rothman, 1989). The partnership made sense, especially since the government continued to be bearish on providing funding for the National Parks management and site development, and the railroads stood to benefit financially from the arrangement.

Douglas White, an agent of the Los Angeles and Salt Lake Railroad, was very busy lobbying for initiatives that would help the railroads in the southwest. In addition to advocating for more tourism development at the Mukuntuweap National Monument (now Zion National Park) in 1917, he also helped organize the Arrowhead Trails Association which stumped for a highway between Los Angeles and Salt Lake City (Hinton, 2000). As cars became more prevalent, railroad executives knew they would be the next big way for people to access the parks. While the railroads might miss out on income from transportation as more highways were built, they bargained that the concession side of their businesses would benefit from an increased flow of visitors.

Although the railroads were working in their own best interest, their investment in developing the infrastructure and tourist amenities in national parks was critical in attracting public support for the National Park Service. It made it easier for the American people to appreciate the parks firsthand, which in turn made it easier for politicians to support further development of the NPS.

People Pushing An Idea: Advocates Behind The Parks

Engaged citizens have shaped the development, priorities and inventory of the National Park Service since the very beginning. One of the most important contributions people have made is to identify, promote, and help fund the sites, demonstrating the public support needed to secure legislative support for the parks. Given the constraints on government funding for national

parks, park champions had to be creative in how they acquired the land and resources needed. The following examples demonstrate a range of fundraising approaches used in the past, including gifts from the wealthy, corporate philanthropy, crowd funding, and celebrity endorsements. There are other funding mechanisms, such as local or federal purchase of lands, using eminent domain to procure lands, matching funds partnerships, endowments, royalties from extractive activities on national land, and entrance and recreational fees, but they lack the community engagement and emotional appeal of the more community engagement and philanthropic approaches. The community engaged approaches reflect the passion and commitment that pushed the idea of what national parks could be.

Wealthy philanthropists: William Kent and John D. Rockefeller Jr. Both Muir Woods and Acadia National Parks exist today because of the personal philanthropic efforts of affluent American families. Muir Woods owes its existence to the passion for conservation and persistence of U.S. Congressman William Kent (R-CA) and his wife. They decided to purchase over 600 acres of old growth redwood forest after community efforts to fundraise and turn it into a national park failed. The Kent's supported public access and planned on opening it up as a public park. Before they could do that they got embroiled in a battle with a Sausalito Water Company who wanted to erect a dam that would have flooded the forest. The only way to save the redwoods was to give them to the federal government. It was the first time private land had been donated for conservation, and in 1908 it became the Muir Woods National Monument (Auwaerter & Sears, 2006).

This set the stage for other private donations, and a few years later this is exactly how the first national park on the east coast was created. Originally Mount Desert Island in Maine was a summer retreat for the rich, but by the end of the nineteenth century, an inflow of new tourist and

residents were threatening the bucolic landscape. A handful of the locals formed the Hancock County Trustees of Public Reservations in 1901, and proceeded to buy up as much property as they could in order to control development on the island. By 1913 the group had amassed 5000 acres and began working with the government to seek federal protection for the area. In 1916, President Woodrow Wilson designated it the Sieur de Monts National Monument. In 1919 it was reestablished as Lafayette National Park, and in 1929 it was renamed Acadia National Park. By the 1940s over 13,000 more acres were donated to expand the park, much of it coming from John D. Rockefeller, Jr. (National Park Service, 2009; National Park Service, 2012). Rockefeller helped fund the infrastructure that provided for access and protection of the land in this park, as well as in the Great Smoky Mountains National Park, Shenandoah National Park, Grand Teton National Park, and Virgin Islands National Park. Other parks that owe their existence to the personal philanthropy of wealthy families include Wolf Trap National Park for the Performing Arts and Cumberland Island National Seashore (Bullard, 2005; Wolf Trap Foundation for the Performing Arts, n.d).

An engaged business community and corporate philanthropy: St. Louis. The idea for the Gateway Arch in downtown St. Louis was developed after a contingent from St. Louis visited a highly publicized memorial dedication in Indiana in 1933. They were impressed at the economic effect the memorial had on the city and were in desperate need for some kind of stimulus in their own hometown (Hartzog, 1988). The city didn't have enough funds to build a memorial, so the politically savvy Mayor went to Washington. President Roosevelt knew he would need the help of St. Louis if he was going to win Missouri in his bid for reelection, and a memorial would go a long way towards securing that. After some consultation with the Attorney General, they decided the best vehicle for a partnership between the local and federal

government would be to use the Historic Sites Act to build a memorial. The site was officially designated by a Presidential Executive Order in 1935 (Hartzog, 1988). Unfortunately, the memorial was still in the planning stage when WWII broke out, so the project ended up on hold for more than a decade. It wasn't until 1956 that Congress appropriated money for the project, and the official construction and groundbreaking commenced in the early 1960s.

Based on the partnership agreement, the local community was responsible for one-quarter of the project funding. Various local commissions and associations fundraised throughout the 1950s and 1960s, and they managed to raise \$3 million toward the project, including funds from downtown businesses, association members, private backers, private trusts, and the voters (Brown, 1984; Moore, 1994). They also raised funds via a creative interpretation of the elevator in the arch, allowing it to be bond funded through the local Bi-State Development Agency under the auspice of it acting as a "transportation system" (Hartzog, 1988). The project was plagued by delays and unexpected setbacks, and it wasn't completed until 1965, three full decades after the site had been incorporated into the National Park System. The Jefferson National Expansion Memorial and Gateway Arch demonstrated how a city and the business community came together to create a monument to an abstract idea (to westward expansion) that had tangible community economic benefits.

Today corporate philanthropy provides millions of dollars towards the NPS budget annually through the National Park Foundation (Sheppard, 2012). Corporations support programming, site maintenance and restoration, accessibility, and promotional campaigns like the recent Find Your Park campaign (Repanshek, 2015; Salem, 1996). Companies including Amtrak, American Express, Anheuser-Busch, Boeing, Canon, Coca-Cola, Disney, Gannett, Humana, Marriott International, Mobil Oil, REI, Subaru, and Target have all donated to the NPS

(National Park Foundation, Repanshek, 2015; Salem, 1996; Sheppard, 2012). The National Park Service has been selective in the companies they work with, and attentive to concerns about the philosophical alignment and risk of undue influence large corporate donors might have on park policies. In general the partnerships are considered a win-win for both parties and provide an important pipeline of support for the parks.

Crowdsourcing and the power of celebrities: The Statue of Liberty and the World War II Valor in the Pacific National Monument. Well before crowd sourcing was a common term, there were very successful fundraising campaigns aimed at engaging everyday individuals and promoting the parks. One of the earliest examples of a direct appeal to the masses came in 1884 for the Statue of Liberty. When French Sculptor Frederic-Auguste Bartholdi offered the Statue of Liberty as a gift to the United States, the US Congress unanimously voted to accept it, but did not set aside any money for building the pedestal that was required to receive it. After Congress voted against funding it twice, and the American Committee for the Statue of Liberty came up short on funds, newspaperman Joseph Pulitzer went to his readers to see if he could crowd source the funding. Pulitzer used his paper, *New York World*, as a platform to promote the cause, but also to chastise the nation's wealthy for not helping to fund the pedestal (National Park Service, n.d.g). Not content to let anyone off the hook, he criticized "the mass of citizens of lesser means who had been content to depend upon the rich to do the job" and he "called upon every citizen of the country to assist in averting the shame of rejecting what he considered the most generous gesture one nation had ever offered to another" (Levine & Story, 1961, p.1). He turned the issue into a national crusade, not just a local issue, and the fundraising began in earnest.

The paper's readership took off during the campaign, as people were eager to follow how well the fundraising was going. In an editorial promising to publish the names of all the people who donated to the cause, Pulitzer again appealed to the power of the masses: "Let us not wait for the millionaires to give this money. It is not a gift from the millionaires of France to the millionaires of America, but a gift of the whole people of France to the whole people of America" (CBS Forum, 2003, p. 128). When Pulitzer started the campaign he had a few thousand readers; by the end his was the most widely read newspaper in the western hemisphere (Javna, 2007). It took him six months to engage 120,000 readers to give more than \$100,000 for the pedestal (National Park Service, Statue of Liberty). The early support and publicity that the statue received not only helped fund it but also helped create a sense of connection for the donors with the Statue of Liberty. Although the site was dedicated in 1886, it wasn't until nearly 40 years later that it was designated as a national monument under the Antiquities Act, by President Calvin Coolidge in 1924.

Proponents for the World War II Valor in the Pacific National Monument also leveraged popular culture through the media and celebrities to garner public support and funds. It started when a private group, the Pacific War Memorial Commission, started a fundraising campaign to recognize and honor the men that died when the USS Arizona was attacked at Pearl Harbor. The commission worked with TV host Ralph Edwards to feature the USS Arizona on the popular program "This is Your Life". They shared the stories of the men on the Arizona and viewers were asked to make donations. That episode raised \$95,000 for the memorial (Song, 2011). Newspapers in Hawaii and California ran editorials in support of the cause. The Fleet Reserve Association was able to raise \$40,000 by selling models of the Arizona (National Park Service, USS Arizona Memorial Discovery Packet). Even Elvis Presley did a charity concert in support

of building a memorial that raised \$64,000 (National Park Service, n.d.c; Song, 2011). Though it took four years, the memorial was finally dedicated in 1962, and it was designated as a National Monument by executive order of the President in 2008 using the Antiquities Act of 1906. It was the combination of celebrities, popular media, and a meaningful cause that made the fundraising campaign so successful.

Conclusion

These examples demonstrate the breadth and depth of support for national parks, even at a time when the idea of national parks was still fairly new. Today there are over four hundred park sites, and the new challenge for park administrators is how to stay relevant and continue to stimulate public interest. Developing financial and public support today takes on a heightened importance as environmental challenges are multiplying and intensifying, and the need to engage and represent a more diverse audience is more pressing. The National Park Service not only provides critical conservation services, but the education and interpretive services needed to help us respond effectively to the changes facing the nation.

The history of the National Park Service is the history of many people, often acting independently, pursuing their own interests, and using their own talents and resources, which were the driving force behind the parks. Prominent families and corporations have been instrumental in the building of this unique American institution, but so were regular citizens from all walks of life. They have fought, built awareness, stoked the public imagination, generated political will, and gathered the resources needed to protect sites that reflect our nation's natural assets and cultural heritage. Although the legislative process is the critical final step for transforming a site into a National Park unit, that isn't what really makes a National Park. Whether they were inspired by natural beauty like Senator Kent and John Muir, wanted to

be involved in leaving a legacy like the Rockefellers and Carnegies, or had their own personal reasons, thousands of people have been a part of building the modern day park system. It is an example of applied democracy: the parks have been created by the people, for the people.

While the parks reflect what is truly unique and amazing about our landscape and our history, hidden just beneath the surface is what is great about the people who make up the country. Insofar as the actions of a nation can tell us about its soul, the tremendous amount of energy and resources that people have invested in preserving and sustaining our rich natural, recreational, historic and cultural heritage reflects well on America, both past and present. As the National Park Service prepares for the next hundred years it will continue to evolve and reflect the interests and priorities of the people. The efficacy of the NPS' outreach and engagement initiatives will help co-create that future.

Chapter 2: The Politics of Protected Areas

Introduction

Citizens play a critical role in identifying and advocating for new parks based on their natural uniqueness, their recreational opportunities, or historical significance. When these areas become tourism destination sites, they provide long-term benefits for the communities in which they are located (Galston & Baehler, 1995; Poudyal, Hodges, & Cordell, 2008; Power, 1996; Rudzitis, 1999; Shumway & Otterstrom, 2001). In the case of the creation of new National Park units, these protected areas represent not only opportunities for federally funded and promoted tourist destination sites, they also carry with them new local employment, positive spillover effects from the preservation of natural and cultural amenities, and positive economic ripple effects (Booth, 1999; Deller, Tsai, Marcouiller, & English, 2001; Henderson, & McDaniel, 2005; Johnson & Rasker, 1995; Partridge, 2010).

Economically, national parks represent important growth engines for the private sector. In 2014 parks generated nearly \$16 billion of local economic activity, contributed \$29.7 billion to the national economy, and supported 277,000 private sector jobs in the gateway communities surrounding the parks (Cullinane, 2015, p. vi). Having the power to stimulate economic growth by designating parks is a useful policy tool available to politicians. Not only is it possible to satisfy constituents who place a high priority on conservation, recreation and historical preservation, legislators can also provide incentives for constituents who are more concerned about economic stimulus.

The costs for creating and maintaining national parks are not borne by the hosting communities, except for the costs of roads and services connecting the parks to the local

communities. Local communities don't pay for the infrastructure, staffing, marketing or policing costs inside the parks; those come out of the federal budget. For many local communities this is a welcome benefit. For those concerned about the national budget, or who advocate for a smaller government, this is not as attractive. In addition to the use of taxpayer funds and an intrusive government, people who oppose federally protecting land also voice concerns over how it inhibits extractive activities (e.g., logging, grazing, gas & oil drilling) as well as other private uses, such as new residential and commercial developments or private tourism development.

The designation of new National Park units is a political process that includes decision-making about land use. Legislators evaluate alternative uses and the potential impacts of federal protection in order to determine the best use. Politicians must navigate carefully between stakeholders with very different priorities and sometimes diametrically opposed viewpoints on land use and the proper role of government. For proponents of smaller government and more fiscal austerity, the long term obligation accompanying the creation of a federally protected area may be less attractive. For free market advocates, federal protection inhibits the opportunities for development and can lead to economically inefficient land use. For advocates of conservation and social investment, National Parks represent an opportunity to stimulate economic growth and create social goods by maintaining an area's aesthetic and cultural value.

There are two primary methods of designating a new park; either through presidential decree, or through Congress. The Antiquities Act gives the president the authority to protect sites and objects of historic or scientific interest by designating them as national monuments. It is not uncommon for sites originally designated as national monuments to be re-designated later-on through the second method for declaring a national park, through Congress.

When a site is proposed for Congressional review, most of the proposals go through a formal evaluation process. The process starts when a citizen, group, local or state government official, Native American tribe, member of Congress or National Park employee makes a proposal to a National Park Service regional office. Then the National Park Service, and the NPS's Division of Park Planning and Special Studies, reviews the proposal for the new park, hears public testimony, and does a feasibility analysis on the area if it is believed to have national significance. When an area is under consideration for National Park status the following factors are taken into consideration (as listed in Additional Areas for National Park System, 16 U.S. C. § 1a-5): (a) the rarity and integrity of the resources; (b) the threats to those resources; (c) if similar resources are already protected in the National Park System or in other public or private ownership; (d) the public use potential; (e) the interpretive and educational potential; (f) costs associated with acquisition, development and operation; (g) the socioeconomic impacts of any designation; (h) the level of local and general public support; and (i) whether the area is of appropriate configuration to ensure long-term resource protection and visitor use.

Each year the National Park Service compiles a report of possible new sites and sends it to Congress. There it is evaluated by Congressional Committees that consider the implications for public and private use. The Congressional committees that have jurisdiction over the National Park Service include: the House Committee on Natural Resources; the House Subcommittee on Public Lands and Environmental Regulation; the House Committee on Appropriations; the House Appropriations Subcommittee on the Interior, Environment and Related Agencies; the Senate Committee on Energy & Natural Resources; the Senate Subcommittee on National Parks; the Senate Committee on Environment & Public Works; the Senate Committee on Appropriations; and the Senate Appropriations Subcommittee on the

Interior, Environment and Related Agencies. Congress can ask the Secretary of the Interior for recommendations and hold hearings to help evaluate the proposal. If Congress supports federal protection for a new area, they will pass legislation authorizing the site. In that legislation, Congress usually provides directions on the management, allowable uses, operations, planning and, as needed, land acquisition for the site.

Some site proposals spark long political and public debates, not just about the site itself but about national policy overall. For instance, Carter's 1978 invocation of the Antiquities Act to protect lands in Alaska that were threatened by the sunset provision of the Alaska Native Claims Settlement Act provoked significant debate. Although it ultimately resulted in the 1980 Alaska National Interest Lands Conservation Act (ANILCA), there was significant compromise and politicking along the way, which only intensified after the Congressional election of 1978 led to a more conservative Congress (the Democrats had a narrow margin of just 54%), and then again after the 1980 election which ushered in a Republican president, a Republican majority in the Senate, and narrowed the Democratic margin in the House even more (the Democrats only had 51% of the majority) (Office of the Clerk of the US House of Representatives, n.d.).

For a variety of reasons beyond political jockeying, new park site proposals can sit in committee for years before Congress makes a decision about designating a site. At times consideration for new park sites by Congress doesn't follow the formal process. Just because the NPS endorses a site doesn't mean that Congress will decide favorably toward the site. For instance, Congress can act without an NPS study or endorsement to make new parks; or without the final report from the NPS.

The Omnibus Public Land Management Act of 2009 is an example of how political decision-making can be strongly influenced by political process considerations. In the case of

this piece of legislation it was a conglomeration of 159 separate bills, many of which had actually been considered in the 2008 Congressional session, some of which were proposed even earlier, and at least one—Muscle Shoals—which hadn't gotten through the conventional evaluation process at the time it was put forward. After the 2008 election, Democrats took back a majority in both the Senate (by a 58% margin) and the House of Representatives (by a 53% margin), and won their presidential bid with Barack Obama. The 111th US Congress was convened starting on January 3rd and the Omnibus bill was proposed on January 7th, 2009. It was one of the first political skirmishes of the year, drawing strong partisan support from Democrats and opposition from Republicans. In rapid succession the Senate passed a cloture motion to end the debate and passed the bill with a 55% margin by January 15th. When it went to the House of Representatives it was again subject to intense debate; on March 11th it failed to pass under a “suspension of the rules” which required a 2/3rds vote in favor to pass it. After some more politicking the bill finally passed both the House and the Senate and was signed into law by the President on March 30, 2009 (Nasaw, 2009).

Electoral competition. This study investigates the theory of electoral competition applied to national park creation. Electoral competition theory was adopted from an economic theory of rational choice first proposed by Hotelling (1929). Key (1949) used it to explain Southern politics, Lockard (1959) applied it to politics in New England, and it has become a commonly accepted framework for understanding political behavior. According to the theory, electoral competition increases as the majority margin gets smaller. In response to heightened competition, legislators will act in a more strategic and less partisan manner as the margin of votes gets closer to 50/50 in order to try and appeal to the widest possible audience (Barrilleux, Holbrook & Langer, 2002; Holbrook & Van Dunk, 1993). By incentivizing politicians to be

more aware and act in accordance with their constituents, more competition can increase political accountability. Alternatively, when the level of inter-party competition is low, there is less incentive for the majority party to incorporate other ideological positions into their decision making, and the tendency is for political parties to demonstrate more partisanship.

Electoral competition scholars agree that heightened competition leads to more strategic behavior, but they differ in the strategies they expect politicians to use. Key (1949), in his analysis of politics in the Southern states, hypothesized that as competition increases politicians will move more towards more liberal policies that help the most needy in order to continue to get the support of the greatest number of people (Barrilleux, Holbrook & Langer, 2002). Downs (1957), building off of Hotelling's economic model of spatial competition, believed it would cause politicians to behave in a more centrist manner. Others have looked at the role of special interests in influencing electoral competition (Grossman & Helpman, 1996), probabilistic choice and dynamic game theory in electoral competition (Coughlin & Nitzan, 1981), ideological adaptation in response to voter demands and political conditions (Kousser, Lewis & Masket, 2007), and how politicians maximize utility for swing voters to increase their chances for electoral success (Krasa & Polborn, 2010).

Study Objectives

In this study the legislative patterns of new park creation over time were investigated. National Park units represent a variety of costs and benefits to local communities. Individual politicians may personally support or oppose a particular park site for a number of reasons, but legislating protection and limiting potential land uses can trigger partisan behaviors. Data from newly created National Park units from 1934 to 2014 was used to test party partisanship and the effects of electoral competition on the average number of parks created annually. Electoral

competition in general was analyzed, as well as electoral competition during Presidential election years (“election years”). Election years were included for two reasons. First, because the increased media attention around election years results in higher visibility and higher stakes for both parties; it gives them a platform on which to highlight their legislative behavior in order to sway the American public. The second reason that election years were included were because at times, as a shift in power between the Democrats and Republicans is on the horizon, the party in power will act while they are still in power (e.g. what happened in regard to the Alaskan National Parks between 1978 and 1980).

With respect to the average number of new National Park units created each year, the following hypotheses about political gamesmanship under different conditions were tested:

- H₁ Political party will affect the number of parks created ($\mu_{\text{Democrats}} \neq \mu_{\text{Republicans}} \neq \mu_{\text{MixedParty}}$). Determining if there is a priori partisanship in the number of new national parks created each year creates a baseline to determine what the effects of electoral competition might be.
- H₂ Electoral competition will affect the average annual number of parks created by each party ($\mu_{\text{HighCompetition}} \neq \mu_{\text{LowCompetition}}$). This hypothesis is a straightforward examination of whether electoral competition affects political decision making.
- H₃ Presidential election years will affect the number of parks created under different levels (high vs. low) of electoral competition ($\mu_{\text{ElectionCompetition}} \neq \mu_{\text{Non-ElectionCompetition}}$). This test is to evaluate if election years, because of the increased media attention, higher level of salience about political issues in the general public, and anticipated power shifts between parties affect electoral competition and political decision making.

Methods

Data collection. Data for this study were obtained from public records, including the Office of the Clerk of the US House of Representatives (n.d.), the National Park Service (National Park Service, 1986; National Park Service 2016; Mackintosh, 2005), and the National Parks and Conservation Association (Liguori, 2014). Data for 328 national parks created either through executive order or by Congress between 1934 and 2014 were included. The year 1934 was chosen as a cut-off date because parks created since 1934 more accurately reflect the current political process by which parks are created or designated.

This study focused on the House of Representatives because: (a) they are chosen based on district populations, (b) they are elected every two years, (c) their terms are not staggered, (d) it was possible to determine the effect of presidential elections since all House members are up for election in presidential election years, and (e) they are chosen via a single-choice plurality voting system (the winner is the person with the most votes; they do not need to get a majority of the votes). During the 20th century, members of the House of Representatives had an average tenure of nine years of service and an average of 80-90% of the House members sought re-election, (Glassman & Wilhelm, 2015, p. 3-5). Given these conditions, they were expected to exhibit legislative behaviors to maximize their chances at re-election.

Over the time period studied, Democrats were the majority party in the House of Representatives 79% of the time. The House Majority varied from 51% to 79%, with an average margin of 59%. (Figure 1)

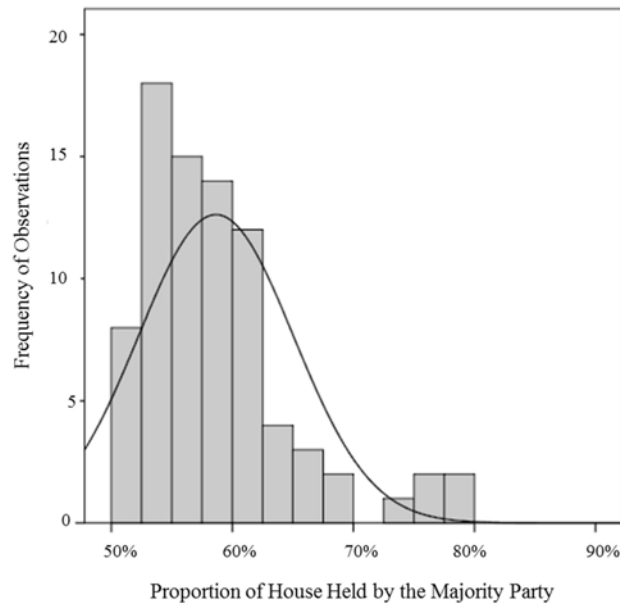


Figure 1. Distribution of the Proportion of the House of Representatives held by the Majority, 1934-2014
 Note. M = 59%, SD = 6%, n = 81

Variables measured. Independent variables. Three independent variables were included in this study. The first independent variable was a categorical variable representing the political parties in control (PoliticalMix). The variable was calculated based on a combination of what party was elected to the role of president, and what party controlled the majority of the House of Representatives. Three levels were identified, two where one party had total control, and one where the parties shared control (Mixed Party). For 40 of the 81 years included in the study a single party controlled both the President and House (n = 33 for Democrats, n = 7 for Republicans).

The third level of the political mix variable, Mixed Party, includes the years when there was either a Democratic President and Republican controlled House, or vice versa. During these years there is an assumption that both parties experience heightened political pressure as they pursued their own party agendas, but also had to work with the opposing party in either the legislative or executive branch. In the Mixed Party level of the Political Mix, there were 28

years where there was a Republican President and Democratic House, and 13 years when it was a Democratic President and a Republican House. An Analysis of Variance was performed to see if there was a significant difference between the two conditions represented by the Mixed Party grouping –that is to see if it made a difference if there was a Republican President and Democratic House or vice versa. No significant difference was found between these two conditions (Overall $F(1, 39) = .729, p = .398$). This is why these two conditions were combined into one level of the Political Mix variable.

The second independent variable was electoral competition, a dichotomous variable. The cut point separating low competition from high competition in the House of Representatives was set at a 55% majority. If there was a 55% or less majority, then it was considered a high electoral competition condition. If the majority had more than a 55% majority it was determined to be a period of low electoral competition. There was high electoral competition 32% of the years studied.

The third independent variable was a dichotomous variable for presidential election years (e.g. 2004, 2008, 2012). Because of the longitudinal nature of the data, there were 20 election years included in the data set. Presidential elections years were used instead of Congressional election years because of the greater media attention and voter engagement that happens during presidential election years. Hereafter a presidential election year is simply called an election year. Information about: which parties were in control, the margin of the House of Representatives held by the party in control, whether it was an election year, and number of parks created each year is included in Appendix A2-2.

Dependent variable. The dependent variable used in this study was the total number of national park units (ParkCount) designated each year from 1934 to 2014. It includes all types of

park units (e.g. history sites, parks, preserves, memorials, lakeshores) and both those created by the President and Congress. The number of parks created in a given year ranged from none up to 33, averaging four (SD = 4.8). In nearly one third of the years studied, either no parks were created (n = 13) or one park was created (n = 13). In 80% of the sample there were five or fewer parks created in a given year. A complete list of the park units included in the study is included in the appendix (Table A2-1).

Statistical/modeling approaches. Analysis of variance was used to test each hypothesis, including the effect of the following conditions on the average number of new national park units created each year: (a) PoliticalMix; (b) CompetitionLevel; and (c) CompetitionLevel x ElectionYear. Levene's tests were performed to determine the appropriate post hoc tests; they indicated that the error variance was equal across the groups. The variables were tested to determine if there were interactions between the independent variables in the analyses. No statistically significant interactions were found in the tests.

To evaluate if there were specific differences between competition levels and/or election years a new grouping variable was created by changing the design into a one-factor design which resulted in a four-level variable "Competition Level-Election Year" which included: Low Competition Election Year, Low Competition non-Election Year, High Competition Election Year, and High Competition non-Election Year.

Fisher's Least Significant Difference (LSD) post hoc tests were used for the statistically relevant results from the ANOVA analyses to evaluate which levels among the multilevel variables were different. LSD was used because of its power, even though the chance of alpha inflation or a cumulative Type I error was possible. The cut point for statistically significant results was set at $p < .05$. Eta (η) was used to determine the strength of the relationships (the

effect size) between the variables. The cut points used for η were: minimal = .1, typical = .243, and substantial = .371 (Vaske, 2008).

Results

Hypothesis 1. Hypothesis one examined whether or not there were differential patterns of new park creation based on the political party in power (partisanship). The null hypothesis was rejected for the years when Democrats were in control as compared to Republicans or Mixed Parties ($p = .034$) ($\mu_{Dem} \neq \mu_{Rep}$, $\mu_{Dem} \neq \mu_{Mixed}$) (Table 1). There was no significant difference in terms of number of parks created when either Republicans or Mixed Parties were in control ($\mu_{Rep} = \mu_{Mixed}$). When Democrats controlled both the Presidency and the House, nearly six parks per year were created. By comparison, when Mixed Parties were in control an average of three parks per year were created and only one park on average was created each year when Republicans were in control.

Table 1

Number of Parks Created Annually, by Party

President and House Party	Number of Parks Created Annually		
	Mean	Standard Deviation	n
Democrat	5.55 ^a	6.24	33
Mixed Party	3.34 ^b	3.31	41
Republican	1.14 ^b	1.22	7

Note. Overall $F(2, 78) = 3.54$, $p = .034$, $\eta = .289$, significant at the $p < .05$ level. Means with different subscripts are significant at $p < .05$ based on LSD method.

The post hoc test (LSD) indicated there was a statistically significant difference between the Democrat versus Republican controlled years ($p = .026$), and the Democrat controlled years versus the Mixed Party years ($p = .046$). There was no statistically significant difference between the Republican controlled years and the Mixed Party years ($p = .252$). The overall differences were calculated to have a typical effect size ($\eta = .289$).

Hypothesis 2. Hypothesis two examined whether conditions of low or high electoral competition would affect the average number of parks created annually by each party. Evidence in support of the electoral competition was found as the average number of parks created during conditions of low electoral competition on average were higher (5) than during periods of high electoral competition (2.04) ($F(1, 79) = 7.24, p = .009, \eta = .084$) (Table 2). This evidence supports Down's theory of electoral competition theory that predicted that as electoral competition increases, the parties move towards being more centrist, that is Democrats act more conservatively, and Republicans act more liberally. There were no years in which Republicans enjoyed a low electoral competition context; the greatest margin they held over the time period studied was 53%. Thus that condition is a reflection of Democrat and Mixed Party controlled years.

Table 2

Electoral Competition and Number of Parks Created Annually

	Low Electoral Competition			High Electoral Competition		
	Mean	Standard Deviation	n	Mean	Standard Deviation	n
Number of Parks Created Annually	5.00	5.450	55	2.04	1.843	26

Note. Overall $F(1, 79) = 7.24, p = .009, \eta = .084$ significant at the $p < .05$ level. High electoral competition defined as when the majority party has a 55% or less majority.

Hypothesis 3. The third hypothesis examined whether election years heightened the effects of normal electoral competition. Evidence in support of heightened electoral competition during election years was found (Overall model: $F(2, 78) = 7.041, p = .002, \eta = .153$; Election Year: $F(1, 79) = 6.35, p = .014, \eta = .075$; Competition Level: $F(1, 79) = 8.23, p = .005, \eta = .095$) (Table 3). There were no significant interactions in the model. There were no years in which Republicans enjoyed a low electoral competition context, the greatest margin they held

over the time period studied was 53%. Thus that condition is a reflection of Democrat and Mixed party controlled years.

When the grouping variable Competition Level-Election Year was analyzed using the LSD post hoc test, statistically significant differences were found. During election years, there was a statistically significant difference between the years with low electoral competition (which would be expected to show the most partisanship) (7.85) as compared to during high electoral competition years (3.00). For non-election years, there was also a statistically significant difference in the number of parks created in the low competition (4.12) versus high competition conditions (1.68), further reinforcing the electoral competition theory. In the high electoral competition condition, there was no statistically significant difference between the number of parks created during election (3.00) and non-election years (1.68). This supports both the electoral competition theory that under high electoral competition parties act more competitively regardless of whether it is an election year or not. Though not a statistically reliable difference, the fact that nearly double the number of parks were created during high competition election years as compared to non-election years would provide some support to the theory that election years amplify the normal behavior of the parties demonstrated in non-election years. In the low electoral competition condition, there was a statistically significant difference between the number of parks created during election (7.85) and non-election years (4.12), reinforcing the hypothesis that election years amplify partisan behavior during periods of low electoral competition.

Table 3

The Effect of Election Years on Electoral Competition and Number of Parks Created Annually

	Low Electoral Competition						High Electoral Competition					
	Election Year			Non-Election Year			Election Year			Non-Election Year		
	Mean	SD	n	Mean	SD	n	Mean	SD	n	Mean	SD	n
Number of Parks Created Annually	7.85 ^a	4.32	13	4.12 ^b	5.51	42	3.00 ^{b,c}	1.73	7	1.68 ^{c,d}	1.80	19

Note. Only Presidential election years were included in this analysis. Overall model: $F(2, 78) = 7.041, p = .002, \eta = .153$; Election Year: $F(1, 79) = 6.35, p = .014, \eta = .075$; Competition Level: $F(1, 79) = 8.23, p = .005, \eta = .095$. Significant at the $p < .05$ level. High electoral competition defined as when the majority party has a 55% or less majority. Different superscripts denote cells that are significantly different from one another at the $p < .05$ level based on a one-factor grouped variable analysis and a LSD test.

Discussion

The results of this investigation demonstrated evidence of partisanship (hypothesis one), electoral competition (hypothesis two), and that Presidential election years amplified the normal effects of electoral competition (hypothesis three). The results from the partisan test reinforced commonly expressed party platforms. On the Republican side, priorities that include fiscal responsibility, privatization and free markets would lead to less support of creating new National Parks. On the Democratic side, an interest in investment in social goods would be expected to mean more support of National Parks.

The results of hypothesis two demonstrated that the concept of electoral competition was applicable to the issue of the creation of new National Parks. The political behavior demonstrated reinforced the Down’s interpretation of competitive behavior where the Democrats acted more conservatively and the Republicans acted more liberally. This was reflected in the fact that when the parties were under a higher level of electoral competition, fewer parks were created than when the Democrats were in power, and slightly more were created than when Republicans were in power.

There was also evidence that there was support that election years amplified normal partisan or competitive behavior. Election years resulted in more parks on average being created under both low and high competition conditions, though it was only significantly different in the low competition context. Whether the effects seen during election years is a result of increased media attention, increased interest among the electorate, or political calculations made by parties in the face of a shift in congressional power is unclear, but the outcome is the same nonetheless.

Limitations

A key limitation in this analysis is that there were only seven years in which Republicans were in control of both the presidency and the Congress, and these were all during high competition times. This led to the analysis being more focused on what Democrats and Mixed Parties do under different levels of electoral competition. This analysis also did not take into consideration other factors that might have affected Congressional priorities, such as times of recession, war, etc.

Conclusion

This study investigated whether there was evidence that political competition affected the designation of new National Parks, and evidence in support of this was found. Party affiliation, electoral competition, and election years all had significant relationships to how many new National Parks were created each year. National Parks represent a number of different political, economic, recreational, and ideological costs and benefits, and depending on a person or party's priorities and preoccupations, those can add up in very different ways. For those who favor National Parks, the parks represent a dedication to natural conservation, cultural preservation, access to recreational areas, and a public policy mechanism to stimulate local economic growth. For others, setting aside protected lands represents long term economic obligations with few

direct economic benefits (e.g. the parks themselves aren't moneymakers), and legislative interference in private land ownership and development.

Based on the significant differences in legislative behavior identified in this data set, the costs and benefits were calculated differently across party lines. This was further reconfirmed as the influences of electoral competition and election years elicited more strategic behavior from legislators. This manifested as either more partisanship in times of low electoral competition, or more centrist behavior in terms of high electoral competition, all of which is heightened during election years.

Through these three hypotheses it has been demonstrated that creating new National Park units is subject to political gamesmanship. There is partisanship, competitive political behaviors, and that when political issues are more salient during election years a difference in political behaviors. This suggests that the evolution of the parks system has been significantly influenced by political interests and forces in motion over the course of the last 80 years. The political conditions at play when parks are put forth for consideration may have a greater effect in dictating whether or not a park gets created than the merits of a given park.

Future research. The results of this study support further research into political factors as they relate to the creation of protected areas. Investigating the structural, institutional, and competitive factors underlying legislative policy making illuminates important forces that affect national conservation and preservation. Research looking at other factors that amplify strategic voting, such as if there is a difference among legislators whose districts stand to benefit directly from new national parks (or if they fall into line along party lines), when legislators anticipate a shift of political power (e.g. between 1978 and 1980), for legislators with more urban or rural constituencies, or for legislators who are not seeking re-election. Additionally a regression

analysis could be illuminating and incorporate other factors, such as the general economic health of the country, whether we were ramping up military forces for war, or other major national events (e.g. September 11th). These lines of inquiry could also form the basis for identifying the key factors that predict support for conservation and preservation, beyond simply political affiliation. Political ideologies and gamesmanship play important roles in the on-going evolution of the National Park System. Better understanding them can help us guide the future development of the park system.

Chapter 3: National Park Visitor Heterogeneity

Introduction

America is undergoing a significant cultural change, as traditionally minority populations become the majority: the minority population is projected to grow from 37% to 57% of the total population by 2060 (U.S. Census, 2012). Institutions serving the American public are under increased pressure to serve more diverse populations effectively. The National Park Service, which historically has had lower minority visitation and participation rates, will be affected by these changes in a variety of ways. In order for the NPS to fulfill its function as an institution of natural and heritage conservation, it needs to engage and inform more diverse populations to build the public support for its mission. Public interest is the basis for both political and financial support for the National Park Service, ensuring that it has a place among the many other competing national priorities. As funding increasingly shifts towards park entrance fees and philanthropy, engaging more diverse visitor markets enables individual park sites to fund programming, development, and maintenance. Funding is critical for the parks to fulfill their dual missions to both conserve and to “promote... and provide for the enjoyment of the [park sites] in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations” (U.S. Congress, 1997). The challenge for park administrators is how to serve a more diverse audience with a wider range of needs and interests effectively. By developing a better understanding of the context and barriers to visitation for minority audiences, administrators are better equipped to (a) promote the parks, and (b) provide for the enjoyment of visitors to the parks.

Park administrators and researchers have been interested in diversity and participation rates for the past half-century. Researchers have investigated the personal, structural, environmental, management, and emotional factors that drive (or inhibit) participation (Figure 1) (Floyd, 1999; Floyd, Bocarro, & Thompson, 2008; Gomez, 2003; Gramann, 1996; Gramann & Allison, 1999; Johnson, Bowker, English, & Worthen, 1997; McDonald & Hutchinson, 1987; Roberts & Rodriguez, 2008; Rodriguez, Clarke, & Alamillo, n.d.; Rodriguez & Roberts, 2002).

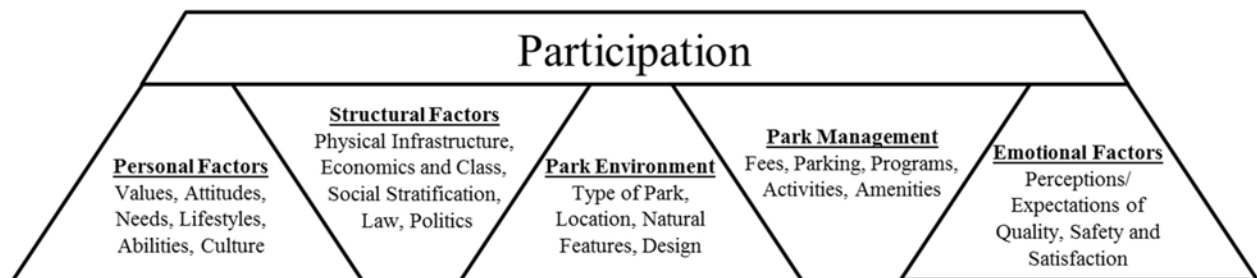


Figure 1. Factors that Influence Participation Rates at National Park Sites.

Since the 1990's a branch of recreation and diversity research has focused on the role intersecting factors (e.g., race/ethnicity combined with personal, structural, park environment, park management, and emotional factors) have on visitors and visitation rates (Carr & Williams, 1993; Floyd & Gramann, 1993; Floyd & Shinew, 1999; Ghimire, Green, Poudyal, & Cordell, 2014; Hibbler & Shinew, 2002; Hung, 2003; Johnson, Bowker, & Cordell, 2005; Roberts, 2003; Shaull & Gramann, 1998; Taylor, Grandjean, & Dorssom, 2011). A niche within this body of research evaluates interlocking structural, personal and emotional barriers to participation, with some researchers looking at the role of historic patterns of discrimination and marginalization (Johnson, Bowker, English, & Worthen, 1998; Roberts, 2003; Shores, Scott, & Floyd, 2007). The present study adopts the approach of looking at the connection between structural and personal factors, but incorporates geo-demographics and psychographics to explore the intersection of race, resources, physical space, and lifestyles among park visitors. Investigations into the complex relationship between factors affecting participation is important both from a

scholarly and a practical standpoint because it provides insights that can help managerial decision-making, programmatic development, and policy making in order to promote more diverse citizen engagement with the National Parks Service.

Literature Review

Through their managerial power, leaders within the National Park Service can create more inviting spaces for people from different racial and ethnic backgrounds through choices they make that affect the park environment, park management, and the emotional factors (Figure 1) for visitors. Though personal and structural barriers that affect participation are outside of the Park Services' control, a better understanding of how those factors operate can guide leaders in how to connect with and engage diverse audiences more effectively. Ultimately a successful strategy to engage diverse audiences will integrate all the factors of participation, both those within and those outside the National Park Service's control. This paper investigates personal and structural factors that can create barriers to participation, including race, culture, affluence, geography and proximity to parks. A review of the past research in these areas will establish the foundation and help position this work within the larger body of research.

Ethnicity theory: Cultural differences as personal and emotional barriers.

Ethnicity theory researchers investigate the role of cultural differences in different participation outcomes (Cordell, Lane, & Green, 2012; Washburne, 1978). Cultural differences – characterized by different systems of values, motivations, and frameworks for the world – explain how group membership shapes individual preferences and behaviors. Cultural differences are based on experiences a person might have as a part of a group, whether that group is based on race, class, nationality, religion, membership in a majority/minority group, or some other unit of social organization.

A popular framework for studying cultural differences evaluates the effect of acculturation and assimilation on peoples' perceptions, behavior and participation in social institutions. The theory predicts that as an individual is more acculturated into the dominant paradigms, their perceptions and behavior will mirror that of the dominant group. Ethnicity theory and acculturation has been studied as it relates to perceived benefits of outdoor recreation (Shaul & Gramann, 1998), the effect of frequency of interracial contacts on leisure preferences (Floyd & Shinen, 1999), self-construal in recreational motivations (the extent to which the self is defined as either independent from or interdependent with others) (Walker, Deng, & Dieser, 2001), the role of family in recreation (Shaul & Gramann, 1998), the effect of residency in urban versus rural communities (Woodard, 1988), and the effect of country of origin and term of residency in the country for immigrants (Carr & Williams, 1993; Hung, 2003; Johnson, Bowker, and Cordell, 2005). Much of the research confirms the predictions of ethnicity theory, demonstrating the power of acculturation in minimizing differences between people from dominant and minority groups.

Ethnicity researchers have explored ways in which group identity and culture operate in different contexts to affect people's choices and behaviors. For example, among Mexican Americans structural assimilation (increased minority participation in social institutions of the majority) affected whether or not people visited recreational sites, while acculturation (the level of adoption of another group's cultural traits) affected their activity patterns once they were in a recreational setting (Floyd & Gramann, 1993). Studies investigating ethnicity and language found that perceptions that NPS units were unpleasant or unsafe places were reported more than three times more frequently for Hispanic respondents interviewed in Spanish compared to those who were interviewed in English (Taylor, Grandjean, & Dorssom, 2011). In another study

Hispanic recreationalists with lower levels of Spanish language competency and more education were less likely to report ethnic-based discrimination (Floyd & Gramann, 1995). The role of family can be a complicated factor: while the importance of family and family-related recreation for Hispanics was consistently ranked high regardless of levels of assimilation (Shaull & Gramann, 1998), interracial couples were less likely to participate in public recreational or cultural activities for fear of racism and discrimination (Hibbler & Shinew, 2002). This body of research indicates how complex the relationships between identity, culture, and inter-cultural interactions are, and how those dynamics can vary greatly based on group or sub-group. The cultural factors that affect preferences and behavior of potential visitors can differ significantly; approaches that may boost participation rates for one group may not be at all relevant for another. Administrators seeking to address barriers based on cultural differences must clarify how they are framing the audience they are seeking to engage, and recognizing that there are a number of other factors that may be intertwined with race or ethnicity such as the role of family, self-construal, or identity-based perceptions of safety.

Opportunity/marginality theory: Cost and access as structural barriers.

Research investigating structural differences ramped up after the 1962 Outdoor Recreation Resources Review Commission (ORRRC) report identified high costs and a lack of availability of facilities as an explanation for lower participation rates (Hauser, 1962). This approach, referred to as either the opportunity theory or demographic theory, focuses specifically on the role of access (physical and financial) and proximity to natural/cultural resources as a driver of participation (Johnson, Bowker, English, & Worthen, 1997; Lindsay & Ogle, 1972). Fifty years later National Park survey respondents across races and ethnic groups still identify access (measured by cost) and proximity issues (measured as distance or time) as being among the top

barriers to participation (Solop, Hagen & Ostergren, 2003; Taylor, Grandjean, & Dorssom, 2011).

A branch of opportunity theory research called marginality theory focuses on how resource disparities (and patterns of settlement for minority communities) arise from historic social and economic discrimination (Johnson, Bowker, English, & Worthen, 1998). Marginality theory emerged in response to the fact that minority groups experienced access and proximity issues more ubiquitously and/or more intensely than white Americans. Hispanic and African American respondents across a number of studies report experiencing higher levels of constraints based on transportation, economics, knowledge, fear of crime, and health than their White counterparts (Johnson, Bowker, English, & Worthen, 1998; Roberts, 2003; Shores, Scott, & Floyd, 2007; Solop, Hagen & Ostergren, 2003). In the most recent National Park Service Comprehensive Survey of the American Public, 33% of white respondents reported access and proximity issues compared to 47% of Hispanic Americans and 54% of African Americans (Taylor, Grandjean, & Dorssom, 2011). It is these types of race/ethnic-based patterns that have led some researchers to focus on marginality theory (which predicts racial differences) over opportunity theory (which doesn't specify the role of race).

The push for the more urban national park sites—to reduce the cost and distance to visit parks, as well as build a broader base of public support—was one response to these concerns (Mott, 1987). This is also important because the number of minority citizens living in urban areas. The National Parks Service first convened an urban Superintendents' conference in 1987. Since 2012 an Urban Caucus has been convened to advance an Urban Agenda for the National Park Service focusing on staying relevant, promoting sustainability and collaboration, and to

identify action items to support both urban parks and a community of practice within the NPS (National Park Service, 2012).

Multiple social stratification theories: Integrated personal/structural barriers. Building off of insights from both ethnicity researchers and marginality researchers, a third body of research investigates in-group heterogeneity that incorporates multiple social stratification factors such as level of education or wealth, occupation, gender, and age that affect patterns of participation among different groups (Arnold & Shiness, 1998; Blahna & Black, 1993; Dwyer, 1994; Floyd, Shiness, McGuire, & Noe, 1994; Floyd & Stodolska, 2013; Ghimire, Green, Poudyal, & Cordell, 2014; Hartmann & Cordell, 1989; Hartmann & Overdeest, 1990; Hutchison, 1987; Johnson, Bowker, English, & Worthen, 1998; Johnson, Horan, & Pepper, 1997; Lee & Scott, 2011; Shores, Scott, & Floyd, 2007). One vein of this research looks at the role and effects of location (urban versus rural) on cultural differences, value orientations and differential access and resources (Fesenmaier, Goodchild, & Lieber, 1981; Hendee, 1969; Liu & Bradley, 2013; Manfredo, Teel & Henry, 2009).

These three branches of research incorporate multiple factors that are the basis for the current study. By combining available National Parks Visitor Survey data with the geo-demographic and psychographic data from Nielsen it is possible to approach issues of race, ethnicity, lifestyle and culture, affluence, proximity, and urbanization. In this study individual factors, socio-economic factors, and an integration individual, socioeconomic and geo-demographic factors are examined.

Psychographics: Investigating personal and lifestyle factors. Differences in individual level values, attitudes and lifestyles help explain personal and cultural factors that lead to in-group heterogeneity. Psychographic frameworks for classifying people by attitudes and

lifestyles gained momentum with the introduction of cluster analysis in the 1960s. This allowed researchers to test the psychographic approaches for statistical significance and to validate their findings (Demby, 1994; Frank & Green, 1968). Nielsen has developed a 66-item psychographic categorization called PRIZM (PRIZM66) based on integrating data from lifestyle surveys, consumer information, geographic information, and demographic data (Nielsen, 2013; Nielsen, 2015c). Nielsen also has put together the Social14, a framework developed by combining the 66 individual level profiles into 14 groups based on levels of urbanization and socioeconomic rank. This allows researchers to simultaneously evaluate personal and structural factors affecting different groups (Figure 2) (Nielsen, 2015a). The levels of urbanization categorization Nielsen uses includes four distinct classes of urbanization: Urban (highest population density and a population center), Suburban (middle to high population density but not a population center), Second City (middle to high population density and a population center for the surrounding community), and Town and Rural (low population density areas) (Nielsen, 2015b). The socioeconomic rank is based on relative affluence within each urbanization group.

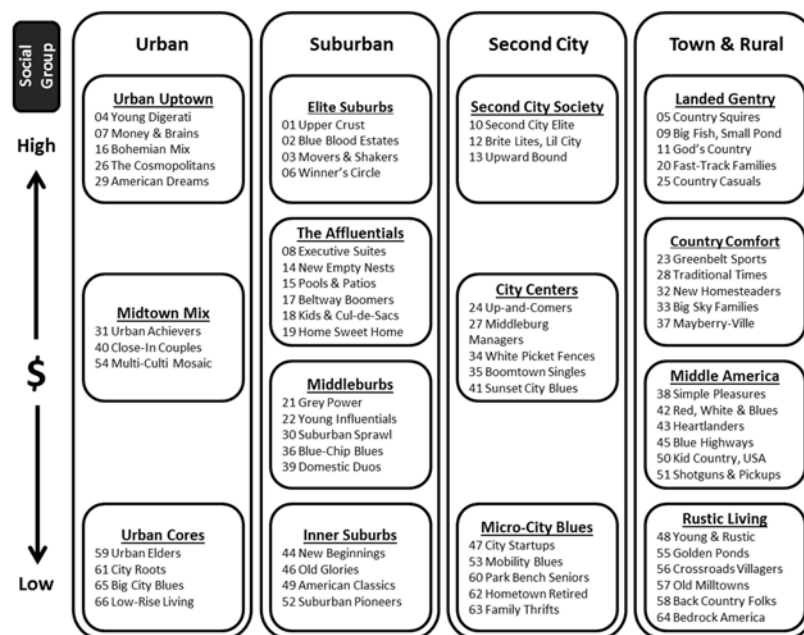


Figure 2. PRIZM Social14 Categories (The PRIZM66 Segments Grouped Based on Urbanization and Affluence)

The use of geo-demographic and psychographic data in recreational research has been used to connect visitors' needs, wants, preferences, and intentions to reported and observed actions (Hafner & Grabler, 2015). PRIZM data, in particular, has been used in tourism, socio-environmental research, and natural resource research to identify specific market segments (Shoemaker, 1989; Silverberg, Backman, & Backman, 1996), to develop targeted outreach and programming (Amerson, Arbise, Kelly, & Traore, 2014), to understand changing/declining attendance (Jager & Halpenny, 2012), and identify ways to stay relevant (Jager & Halpenny, 2012). It has even been used to predict patterns of vegetation on private property (residential landscape architecture) and outdoor expenditures in urban areas (Grove, Locke, & O'Neil-Dunne, 2014; Zhou, Troy, Morgan Grove, & Jenkins, 2009). In the present study the PRIZM66, and Social14, are used to connect personal psychographic and geo-demographic structural factors to visitors based on race and ethnicity.

Connecting individual- and neighborhood-level data. One of the challenges in incorporating PRIZM research into National Park Service data is that the PRIZM data is available at the household level or a neighborhood zip code level. National Park visitor surveys are only specified to the zip code level. In order to incorporate the two data sets it was necessary to connect individual visitor's racial and ethnicity information to a neighborhood level of information about socio-economics, urbanicity, and psychographics through zip codes. Moving from the individual to the neighborhood level provides valid results because of strong evidence of neighborhood-level segregation based on race and socio-economics in this country (Bischoff & Reardon, 2013; Reardon & Bischoff, 2011a; Reardon & Bischoff, 2011b; Sharaievska, Stodolska, & Floyd, 2013; Watson, 2009). Research indicates that neighborhood level classification is "as good a discriminator as other discriminators such as age, income, educational

attainment or household type, that operate at the personal or household level” (Webber, 2004, p. 223). Neighborhood-based racial/ethnic segregation is driven by the affordability and availability of housing, mortgage lending trends, the location of amenities (including educational, social, and cultural institutions), zoning and housing policies, and preferences for neighbors of shared ethnicities or values. According to Bischoff and Reardon (2013), overall income segregation increased 29% from 1970 to 2009, but it grew faster for Black (65%) and Hispanic (50%) families compared to White families. Put another way, Black and Hispanic families from low-income communities were less likely than White families from low-income communities to have middle class neighbors (Bischoff & Reardon, 2013 p. 13-15). There are similar studies that show geographically-based segregation based on race/ethnicity (Sharaievskia, Stodolska, & Floyd, 2013). In this study visitors were considered a representative sample of (a) national park visitors, but also (b) racial and socioeconomic groups, and (c) their own local communities.

Park visitors have complex social and cultural identities that arise out of race and ethnicity as well as their demographics, socioeconomics, and other factors related to the context of their lives. The present study uses a combination of data sets to evaluate three hypotheses about participation which frame diversity in turn as an issue of either: race, access, or the intersection of race, resources, geography, and lifestyles. By using these different frameworks, we are able to gain insights of both theoretical and practical applications.

Research Objectives

By combining data from multiple National Parks Visitor Surveys (taken from around the country between 2007-2011) with psychographic and geo-demographic data from Nielsen, three approaches to explaining race-/ethnicity-based differences in national park visitation are tested

and compared: (a) ethnicity theory (cultural/lifestyle differences); (b) opportunity/marginality theory (resources and proximity differences); and (c) multiple social stratification theory (socioeconomics, urbanization, proximity and lifestyle differences).

Hypotheses. The three hypotheses tested in this analysis are:

- H₁: Ethnicity theory test: cultural/lifestyle differences drive differences between groups. Support for this hypothesis would indicate a higher propensity for differences in psychographic segments along ethnic lines (between White and Hispanic visitors) than along racial lines (between White and Black visitors) because ethnicity is based on cultural differences by definition, whereas race is not. There might also be evidence of urban-rural or class differences between groups. The PRIZM66 segments were determined by Nielsen on the basis of differences in attitudes, preferences, beliefs and practices, which all represent manifestations of cultural differences.
- H₂: Opportunity theory/marginality theory test: differences in resources (affluence) and proximity to park sites drive differences in visitation to national parks. According to opportunity theory, lower affluence visitors are expected to be present in higher proportions among local visitors than among destination visitors. For marginality theory to be supported, local visitors should show more racial, ethnic, and socioeconomic diversity than destination visitors who have to travel from further away and therefore incur higher travel and time costs.
- H₃: Multiple social stratification theory test: participation is effected by a combination of cultural, socioeconomic and proximity factors. Support for the multiple social stratification theory will be demonstrated if the analysis uncovers patterns of difference related to the intersection of race, class, and geo-demographics that provides additional insights into in-group and across-group heterogeneity.

Methods

This study used research on National Park visitors conducted by the University of Idaho's Visitor Survey Project (VSP)² combined with Nielsen's PRIZM data to explore the intersection of race, resources, physical space, and lifestyles for National Park visitors. The surveys were done at recreational, cultural and natural parks from across the continental US (See Appendix Table A3-1). Some sites were surveyed more than once: 42 VSP surveys from 35 national park sites taken between 2007 and 2011 were used (see Appendix Table A3-2 for park types and Appendix Table A3-3 for more details). Thirteen of the sites were identified by the National Park Service as sites that reflect the heritage and history of minorities in the US (National Park Service, n.d.) (see Appendix Table A3-3 for more details). The National Park Service visitor data provided information on race, ethnicity and place of origin (home zip code). A total of 16,640 respondents, from 8,203 different zip codes, were included in the VSP surveys.

Variables. National Park visitor survey variables. The VSP variables used in this analysis included the Park, Respondent Zip Code, and race/ethnicity. The race/ethnicity categorical variable was coded as a three level variable for this analysis, people who identified as either being (a) Hispanic alone with no race identified (n = 225), or (b) Black (n = 112) or White (n = 16,303). These three race/ethnicity categories have been the most widely studied, and were the most frequently occurring among national park visitors surveyed through the VSP initiative at the University of Idaho Park Studies Unit.

The VSP questionnaires posed the ethnicity and race questions in the following ways:

1. Are you Hispanic or Latino? (Yes/No)

² Data originated from the University of Idaho Park Studies Unit, Visitor Services Project. Database creation is supported by funding from the National Park Service, Social Science Division, and from individual National Park Service units.

2. For you only, what is your race? Please check (✓) one or more, including the following categories: Asian, Black or African American, American Indian/Alaska Native, White, Native Hawaiian or Pacific Islander

Respondents identifying with multiple racial/ethnic categories were excluded, as were respondents who answered something other than Hispanic, Black or White.

ZIP codes and proximity. The VSP data included 8,302 unique zip codes (aka communities) as reported by park visitors as their home location. Respondents who did not provide a valid five digit US zip code were excluded from the data set. The minimum number of observations from a zip code was one, the maximum number of observations was 345 (in Mentor, OH). To determine if there were unique patterns of visitors based on proximity, a variable was added based on whether the respondent was from a county adjacent to the park they visited. This was coded as a dichotomous variable. Whether visitors were considered local visitors (from a county adjacent to a national park) or destination visitors (from a county not adjacent to the park visited) was determined based on VSP reported zip codes and the park site the visitor attended. If a particular visitor lived adjacent to a national park, but visited one that they did not live in proximity to, they were coded as a destination visitor for the purpose of that visit.

Linking VSP and PRIZM data: Going from the individual to the community level. The VSP data included demographic information on the individual respondent's race, ethnicity, and zip code but provided little insight into the respondents' values, preferences or lifestyles. Nielsen's PRIZM segments provided rich information about people's psychographics (values, attitudes, preferences) and behaviors. By combining them it was possible to uncover community-level patterns among national park visitors.

Zip code information was used to connect the National Park visitors to representative psychographic segments. Nielsen reported the top psychographic segments for each zip code. For each VSP respondent who provided a valid, five-digit US zip code, the top PRIZM segments in that zip code were able to be identified. For most communities Nielsen identified five dominant segments, though for some communities it ranged as few as one and as many as seven. The first step involved adding the PRIZM segments to each case (respondent) in the dataset, thereby extending the number of variables in the dataset by seven.

The data were then transposed so each case represented not one respondent, but rather one PRIZM observation for each respondent. This resulted in each respondent case being transformed into five PRIZM observations (unless there were more or less PRIZM segments given by Nielsen, in which case there were a corresponding number of PRIZM observations created). By joining the respondent information to the Nielsen data, a total of 81,809 PRIZM observations were identified that represent visitor psychographic profiles were created. There was a monotonic transformation, broken down into: (a) Hispanic alone with no race identified (n = 1098), or (b) Black (n = 547) or White (n = 80,164).

The PRIZM segments included psychographic and geo-demographic data that provided information on lifestyles and preferences, socioeconomic status, and level of urbanicity (whether the respondent was from an urban, suburban, small city, or town and rural area) for each observation. A variable called Social14 was created and coded categorically from 1-14, using a categorization developed by Nielsen (2015a) which grouped the PRIZM66 segments based on relative affluence and urbanicity. To identify the statistical differences for each segment, dummy variables were created for each of the PRIZM66 segments as well as each of the Social14 categories which added an additional 80 variables to the data set.

A three level ordinal affluence variable was created. Levels of affluence were determined by splitting the average household income data from the 2007-2011 American Community Survey into three approximately even intervals. The levels of affluence were defined as low = \$0-34,999 (33%), middle = \$35,000-\$74,999 (32%), and high = \$75,000+ (35%) (U.S. Census Bureau, n.d.). Nielsen (2015c) provided average household income for each segment which was then coded based on an ordinal scale where 1=low affluence, 2=middle affluence, and 3=high affluence.

To clarify what level of data were used, individual responses based on the VSP data were referred to as ‘respondents’; zip code level data were referred to as ‘communities’; and PRIZM data were referred to as ‘observations’. Unless otherwise noted, the reported sample sizes were based on the PRIZM observations.

Statistical/modeling approaches. The ethnicity theory was tested by looking for statistically significant differences in culture/lifestyles between racial and ethnic groups based on the PRIZM66 segments. Groups were compared to one another to determine if there were patterns of differences that were racially-based (White vs. Black), ethnically-based (White vs. Hispanic), or minority-based (Hispanic vs. Black).

The opportunity theory was tested by evaluating if there were differences among visitors based on affluence level and proximity to park. Before testing the marginality theory (a sub-theory of opportunity theory that integrates race, proximity, and affluence), two tests were run to determine if there was sufficient evidence to merit testing for the marginality theory. The tests were: (1) if there was a difference in affluence based on race/ethnicity, and (2) whether there were differences between local and destination visitor patterns on the basis of race/ethnicity. Once it was established that differences based on affluence and proximity were correlated with

race/ethnicity, a test was run to evaluate the evidence for the outcomes predicted by marginality theory of increased diversity among local low- and middle-income visitors. To test the marginality theory, the proportion of visitors from each race and level of affluence were evaluated to determine if there were statistically relevant differences. Chi-square tests were run on the local visitors group separately from the destination visitors group.

To test the multiple social stratification theory, the PRIZM Social14 segmentation was used to represent relative affluence and level of urbanization. The Social14 data were tested against data on race/ethnicity and proximity to park for each observation. The proportion of each group visiting a national park site and the results of the Cramer's V significance tests were mapped onto the PRIZM Social Group 14 categories graph to show the relative position of statistically significant segments according to the different levels of urbanization and affluence. The infographic uncovered patterns between these factors among the Social14 groups.

For the analyses of categorical data, nonparametric likelihood ratio chi-square tests were performed to evaluate whether there were statistically significance differences between groups and across different conditions. For the ordinal data, nonparametric linear chi-square tests were used to determine if there were statistically significant differences between groups. The chi-square tests did not require equality of variances or homoscedasticity in the data, and it did not require that the sample sizes of the study groups be equal. The cut point for statistically significant results was set at $p < .05$. Cramer's V was used to determine the strength of the relationships (the effect size) between the variables. The cut points used for Cramer's V were: minimal = .1, typical = .3, and substantial = .5 (Vaske, 2008).

Results

Hypothesis 1: Ethnicity theory. Support for the ethnicity theory hypothesis – that cultural/lifestyle differences account for differences in participation – was found. Between the White and Hispanic visitors (a comparison based on ethnicity) 52% of the PRIZM66 segments showed a statistically significant difference (Table 1). In this analysis there was evidence of a statistically significant ethnic and geo-spatial pattern urban-rural difference between Hispanic and White visitors. In this analysis there was no evidence of socioeconomic patterns (Figure 3). It was unclear if this urban-rural divide was the result of geo-cultural factors (that is cultural differences based on living in either urban or rural areas), or geo-structural factors related to settlement patterns and proximity issues.

Between White and Black visitors (a comparison based on race) only 21% of the PRIZM66 segments showed a statistically significant difference (Table 2). This analysis also showed some evidence of an urban-rural difference among Black and White visitors, and possibly some socio-economic patterns (Figure 4). Sixty percent of the segments where Black visitors were present in higher proportions than White visitors were in the lowest-affluence segments and/or in the urban segments. In the few segments where White visitors were present in statistically higher proportions, 75% were in middle-affluence groups from Town & Rural areas. The complete results are available in the Appendix (Table A2).

Black and Hispanic visitors differed in only eight segments (12% of the PRIZM66) (Table 3), but there were indications of possible underlying geographic and socioeconomic patterns (Figure 5). The Hispanic visitors who were present in statistically significantly higher proportions came from the affluent Urban Uptown and suburban Affluentials group. Black

visitors who were present in statistically significantly higher proportions were from the lower affluence Middleburb and Inner Suburb groups.

The effect sizes between the race/ethnicity variables and PRIZM66 variables were minimal ($V < .10$), but larger when either Hispanic visitors (V range: .008 to .034, $M = .020$) or Black visitors (V range: .006 to .016, $M = .012$) were present in statistically significant higher proportions as compared to White visitors. When White visitors were present in higher proportions compared to Black or Hispanic visitors, V ranged from .006 to .012 ($M = .009$).

When Hispanic visitors were compared to Black visitors the effect sizes for segments with a statistically significant difference ranged from .047 to .069. When Hispanics were present in larger proportions the average effect size was $V = .055$; when Black visitors were present in larger proportions the average effect size was $V = .065$.

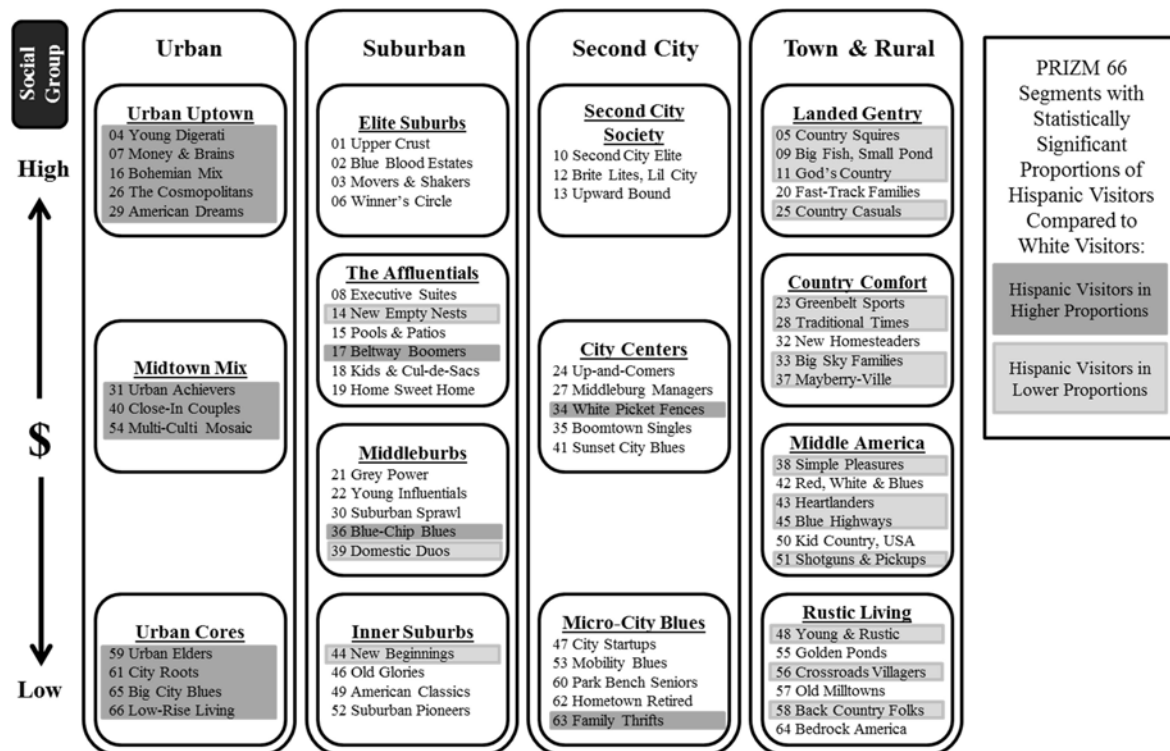


Figure 3. Social14 Map of Statistically Significant PRIZM66 Segments for Hispanic and White Visitors. Note. Hispanic Visitors $n = 1098$; White Visitors $n = 80,164$. Significant at the $p < .05$ level.

Table 1

PRIZM66 Ethnic-Based Differences: A Comparison of Hispanic and White Visitors

	PRIZM66 Segment	Hispanic		White		χ^2	p-value	Cramer's v
		n	%	n	%			
Hispanic Visitors Present in Higher Proportions than White Visitors	65 Big City Blues	25	2.3%	317	.4%	45.299	<.001	.034
	29 American Dreams	59	5.4%	1431	1.8%	51.613	<.001	.031
	54 Multi-Culti Mosaic	36	3.3%	802	1.0%	35.244	<.001	.026
	59 Urban Elders	18	1.6%	314	.4%	23.727	<.001	.023
	40 Close-In Couples	25	2.3%	500	.6%	28.097	<.001	.024
	26 The Cosmopolitans	32	2.9%	806	1.0%	26.059	<.001	.022
	16 Bohemian Mix	35	3.2%	925	1.2%	26.398	<.001	.022
	66 Low-Rise Living	14	1.3%	224	.3%	20.230	<.001	.021
	07 Money & Brains	39	3.6%	1214	1.5%	21.804	<.001	.019
	61 City Roots	16	1.5%	331	.4%	17.153	<.001	.018
	31 Urban Achievers	31	2.8%	913	1.1%	19.242	<.001	.018
	34 White Picket Fences	26	2.4%	805	1.0%	14.591	<.001	.016
	04 Young Digerati	22	2.0%	726	.9%	10.763	.001	.013
	17 Beltway Boomers	15	1.4%	440	.5%	9.303	.002	.013
	36 Blue-Chip Blues	17	1.5%	562	.7%	8.261	.004	.012
	63 Family Thrifts	28	2.6%	1239	1.5%	5.997	.014	.008
Hispanic Visitors Present in Lower Proportions than White Visitors	33 Big Sky Families	6	.5%	1597	2.0%	10.299	<.001	.012
	28 Traditional Times	19	1.7%	3092	3.9%	16.574	<.001	.013
	45 Blue Highways	13	1.2%	1866	2.3%	7.601	.006	.012
	23 Greenbelt Sports	11	1.0%	2131	2.7%	15.057	<.001	.012
	37 Mayberry-ville	14	1.3%	2349	2.9%	13.214	<.001	.011
	43 Heartlanders	9	.8%	1612	2.0%	10.057	.002	.010
	09 Big Fish, Small Pond	17	1.5%	2323	2.9%	8.433	.004	.009
	51 Shotguns & Pickups	6	.5%	1198	1.5%	8.754	.003	.009
	05 Country Squires	15	1.4%	2055	2.6%	7.488	.006	.009
	38 Simple Pleasures	16	1.5%	2015	2.5%	5.810	.016	.008
	11 Gods Country	14	1.3%	1890	2.4%	6.619	.010	.008
	48 Young & Rustic	12	1.1%	1679	2.1%	6.423	.011	.008
	25 Country Casuals	8	.7%	1250	1.6%	6.078	.014	.008
	44 New Beginnings	8	.7%	1128	1.4%	4.371	.037	.007
	58 Back Country Folks	13	1.2%	1671	2.1%	5.100	.024	.007
	56 Crossroads Villagers	16	1.5%	1872	2.3%	4.227	.040	.007
39 Domestic Duos	4	.4%	695	.9%	4.087	.043	.006	
14 New Empty Nests	3	.3%	583	.7%	4.077	.043	.006	

Note. Hispanic visitors $n = 1098$, and White visitors $n = 80,164$. The Likelihood Ratio χ^2 was used in calculating statistical significance for this data. Significant at the $p < .05$ level. The percentages reported are the percent of each group (Hispanic or White) distributed across the PRIZM66 categories, so for instance, 2.3% of all Hispanics came from the 65 Big City Blues psychographic segment.

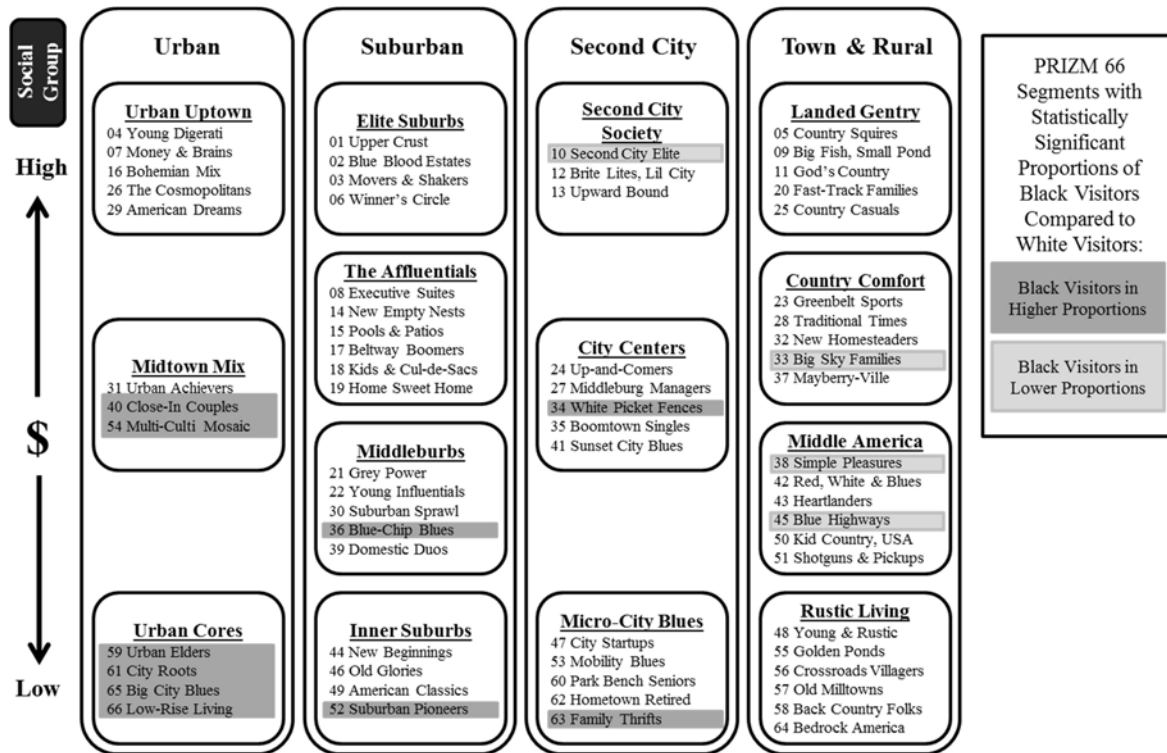


Figure 4. Social14 Map of Statistically Significant PRIZM66 Segments for Black and White Visitors. Note. Black Visitors n = 547; White Visitors n = 80,164. Significant at the p < .05 level.

Table 2

PRIZM66 Race-Based Differences: A Comparison of Black and White Visitors

		Black		White		χ^2	p-value	Cramer's v
PRIZM66 Segment		n	%	n	%			
Black Visitors in Higher Proportions Compared to White Visitors	59 Urban Elders	9	1.6%	314	.4%	12.057	.001	.016
	40 Close-In Couples	11	2.0%	500	.6%	10.570	.001	.014
	52 Suburban Pioneers	12	2.2%	579	.7%	10.574	.001	.014
	65 Big City Blues	8	1.5%	317	.4%	9.209	.002	.014
	61 City Roots	8	1.5%	331	.4%	8.714	.003	.013
	66 Low-Rise Living	6	1.1%	224	.3%	7.415	.006	.013
	54 Multi-Culti Mosaic	13	2.4%	802	1.0%	7.475	.006	.011
	36 Blue-Chip Blues	9	1.6%	562	.7%	5.027	.025	.009
Black Visitors in Lower Proportions Compared to White Visitors	63 Family Thrifts	15	2.7%	1239	1.5%	4.155	.042	.008
	34 White Picket Fences	12	2.2%	805	1.0%	5.766	.016	.006
	33 Big Sky Families	2	.4%	1597	2.0%	11.109	.001	.010
	45 Blue Highways	3	.5%	1866	2.3%	10.917	.001	.010
	38 Simple Pleasures	4	.7%	2015	2.5%	9.750	.002	.009
	10 Second City Elite	3	.5%	1282	1.6%	5.109	.024	.007

Note. Black visitors n = 547, and White visitors n = 80,164. The Likelihood Ratio χ^2 was used in calculating statistical significance for this data. Significant at the p < .05 level. The percentages reported are the percent of each group (Black or White) distributed across the PRIZM66 categories, so for instance, 1.6% of all Black visitors came from the 59 Urban Elders psychographic segment.

Support for the ethnicity theory was based on greater number of PRIZM lifestyle group differences in the ethnicity-based Hispanic-White analysis as compared to the racially-based Black-White analysis or the minority-based Hispanic-Black analysis. Insofar as the urban-rural differences may have been an expression of cultural differences (and not just spatial patterns), they are also consistent with the ethnicity theory. The comparatively high level of similarity between White and Black visitors may be due to acculturation. The comparatively high level of similarity between Hispanic and Black visitors may be explained as cultural similarities based on minority status. The differences between Hispanic and Black visitors may be due to income/class-based cultural heterogeneity and/or access issues. It is outside the scope of the present research to diagnose the precise nature of the similarities and differences, but the present research might provide a starting point for additional inquiries.

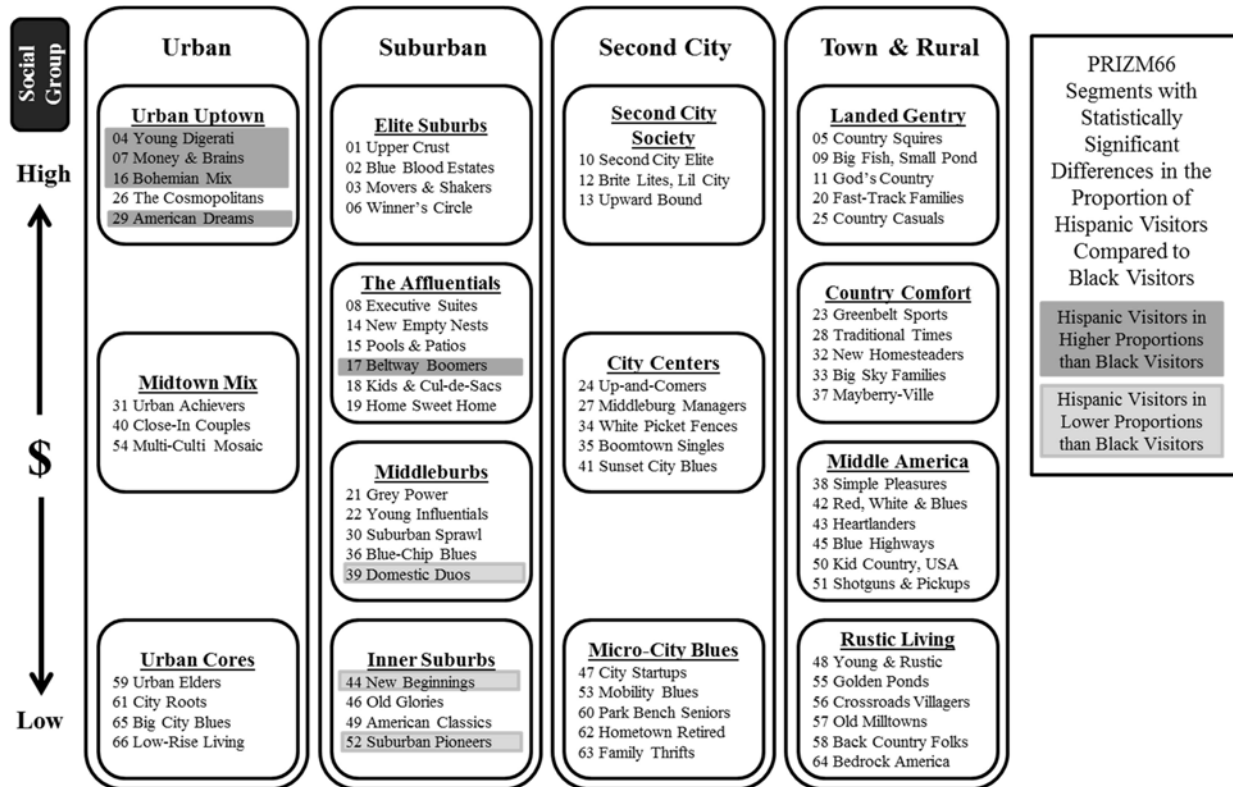


Figure 5. Social14 Map of Statistically Significant PRIZM66 Segments for Black and Hispanic Visitors. Note. Black Visitors n = 547; Hispanic Visitors n = 1098. Significant at the p < .05 level.

Table 3

PRIZM66 Minority-Based Differences: A Comparison of Black and Hispanic Visitors

	PRIZM66 Segment	Hispanic		Black		χ^2	p-value	Cramer's v
		n	%	n	%			
	04 Young Digerati	22	2.0% ^a	3	.5%	6.125	.013	.056
Hispanic Visitors Present in Higher Proportions than Black Visitors	07 Money & Brains	39	3.6% ^a	9	1.6%	5.159	.023	.053
	16 Bohemian Mix	35	3.2% ^a	8	1.5%	4.708	.030	.051
	17 Beltway Boomers	15	1.4% ^a	2	.4%	4.253	.039	.047
	29 American Dreams	59	5.4% ^a	13	2.4%	8.669	.003	.069
Hispanic Visitors Present in Lower Proportions than Black Visitors	39 Domestic Duos	4	.4% ^a	9	1.6%	7.065	.008	.068
	44 New Beginnings	8	.7% ^a	13	2.4%	7.286	.007	.069
	52 Suburban Pioneers	9	.8% ^a	12	2.2% ^a	5.089	.024	.058

Note. Black visitors n = 547 and Hispanic visitors n = 1098. The Likelihood Ratio χ^2 was used in calculating statistical significance for this data. Significant at the $p < .05$ level. The percentages reported are the percent of each group (Black or Hispanic) distributed across the PRIZM66 categories, so for instance, 2.0% of all Hispanic visitors came from the 04 Young Digerati psychographic segment.

Hypothesis 2: Opportunity/marginality theory. Two tests of the opportunity and marginality theories were performed to investigate if there was a connection between the visitor's affluence and their choice to go to either (a) a local park (in a county adjacent to their home zip code) or (b) a destination park. Three levels of affluence were identified: low affluence (<\$30,000 household income/year), middle affluence (\$30,000-\$62,499 household income/year), and high affluence (>\$62,500 household income/year).

The first test was based exclusively on the visitors' level of affluence, without regard to race/ethnicity (Table 4). While affluence was statistically significantly related to whether visitors were local or came from a distance (overall $\chi^2=17.002$, $p < .001$, $V = .017$), the results of this test did not support the opportunity theory. There were a statistically higher proportion of high affluence local visitors (34%) compared to destination visitors (33%) ($\chi^2=5.003$, $p = .025$, $V = .008$); and a statistically higher number of low affluence destination visitors (14%) compared to local visitors (12%). This finding was inconsistent with the theory because the low affluence group is expected to have fewer resources available to bear the costs of increased travel time and

the financial burden associated with visiting a park at a distance. This finding does support the research that siting park amenities in a local communities increases the value of housing, a cost of which can more easily be borne by high affluence visitors and which would cause low affluence visitors to have to travel further to access those amenities.

Table 4
Local Visitors Compared to Destination Visitors Based on Affluence

	Local Visitors		Destination Visitors		χ^2	p-value	Cramer's v
	n	%	n	%			
High Affluence	4282	34%	9646	33%	5.003	.025	.008
Middle Affluence	6745	54%	36,723	53%	1.444	.229	.004
Low Affluence	1551	12%	9646	14%	23.124	<.001	.017

Note. Local Visitors n = 12,578; Destination Visitors n = 69,231. The Linear-by-Linear χ^2 was used in calculating statistical significance for this data. Significant at the $p < .05$ level.

According to the marginality theory, a subset of the opportunity theory, unequal resources for minorities today are caused by historic racism and discrimination. Two tests were performed to evaluate if there were minority-based group differences that provided support for the marginality theory. First a test of affluence levels by race/ethnicity was conducted to see if there was evidence that there were economically-based differences between minority groups and White visitors. There were a statistically significant higher proportion of Black visitors (29%) of low affluence compared to White visitors (23%) ($\chi^2=16.092$, $p < .001$, $V = .014$). There were also a statistically significant higher proportion of White visitors (19%) of high affluence compared to Black visitors (15%) ($\chi^2=6.203$, $p = .013$, $V = .009$). Hispanic visitors in both the low affluence and high affluence group were not statistically significantly different from either their White or Black counterparts.

The second test performed was to evaluate if there were differences based on affluence and race/ethnicity for either the local visitors (Table 5) or the destination visitors (Table 6). For local visitors, statistically significant differences were found for both low affluence and high

affluence visitors. Local low affluence Black visitors (32%) were present in higher proportions than their White (23%) counterparts ($\chi^2=7.240$, $p = .007$, $V = .025$). The same was true for low affluence destination visitors who were Black (28%) compared to those who were White (23%) ($\chi^2=9.500$, $p = .002$, $V = .012$). Local high affluence Black visitors (11%) were present in lower proportions than their White counterparts (18%) ($\chi^2=5.030$, $p = .025$, $V = .021$). There was no statistically significant difference found between Hispanic visitors and the other two groups.

The relationships between race and affluence level supported the marginality theory hypothesis.

Table 5

Local Visitors: Levels of Affluence by Race/Ethnicity

	Black		Hispanic		White		χ^2	p-value	Cramer's v
	n	%	n	%	n	%			
High Affluence	16	11% ^a	35	17% ^{a,b}	2231	18% ^b	5.030	.025	.021
Middle Affluence	84	57%	121	58%	7221	59%	.290	.590	.005
Low Affluence	47	32% ^a	52	25% ^{a,b}	2771	23% ^b	7.240	.007	.025

Note. Black visitors $n = 147$, Hispanic visitors $n = 208$, and White visitors $n = 12,223$. The Linear-by-Linear χ^2 was used in calculating statistical significance for this data. Items in a given row denoted with ^a were statistically significantly different than items denoted with ^b at the $p < .05$ level. The χ^2 was decomposed to determine which groups were statistically significantly similar or different.

Table 6

Destination Visitors: Levels of Affluence by Race/Ethnicity

	Black		Hispanic		White		χ^2	p-value	Cramer's v
	n	%	n	%	n	%			
High Affluence	65	16%	156	18%	12,727	19%	2.429	.119	.006
Middle Affluence	223	56%	510	57%	39,816	59%	1.928	.165	.005
Low Affluence	112	28% ^a	224	25% ^{a,b}	15,398	23% ^b	9.500	.002	.012

Note. Black visitors $n = 400$, Hispanic visitors $n = 890$, and White visitors $n = 67,941$. The Linear-by-Linear χ^2 was used in calculating statistical significance for this data. Items in a given row denoted with ^a were statistically significantly different than items denoted with ^b at the $p < .05$ level. The χ^2 was decomposed to determine which groups were statistically significantly similar or different.

Hypothesis 3: Multiple social stratification theory. As shown in hypotheses one and two there was evidence that a mix of structural (socio-economic and geographic) and personal (lifestyle/culture and race) factors affected visitor heterogeneity at national parks. The third hypothesis tested the relationship between visitors and the following multiple social stratification factors: race/ethnicity, lifestyle/culture, affluence, level of urbanization, and proximity to park sites. The results of the statistical analyses (Table 7 and 8) were mapped onto Nielsen's Social14 graphs which provided additional insights about patterns within the data for local visitors (Figure 6) as well as destination visitors (Figure 7).

The largest proportion of visitors from each race/ethnic group were the comparatively more affluent destination visitors: for Hispanic visitors it was the Urban Uptown segment (20%), for both White (14%) and Black (10%) visitors it was the Country Comfort segment. Whereas the low affluence Urban Core segment represented between 6%-7% of Black and Hispanic visitors overall, there was a much smaller proportion of White visitors from that segment: 1% for local White visitors and 2% for destination White visitors (Local: $\chi^2=46.913$, $p < .001$, $V = .088$; Destination: $\chi^2=104.537$, $p < .001$, $V = .051$). Black and Hispanic visitors from urban areas, at all affluence levels, came in statistically significantly higher proportions than their urban White counterparts ($\chi^2=14.533$ to 145.910 , $p = < .001$ to $.001$, $V = .041$ to $.088$).

For local Town & Rural visitors there was no statistical difference at the two highest affluence levels between groups based on race/ethnicity. In the two lower affluence groups from rural areas there were statistically significant differences between local White (12%) and Black (4%-5%) visitors, but not Hispanic (8%) visitors (Middle America: $\chi^2=12.141$, $p = .002$, $V = .028$; Rustic Living: $\chi^2=13.310$, $p = .001$, $V = .029$).

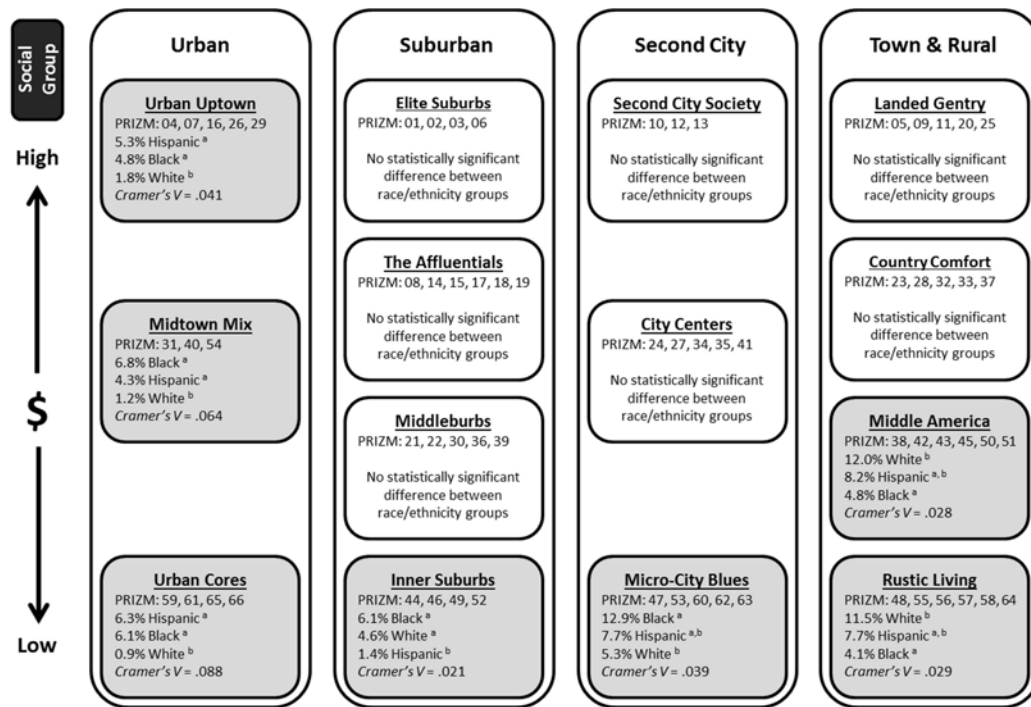


Figure 6. Local Visitors: Statistically Significant Racial/Ethnic Differences Within the Social14 Groups.

Note. Boxes highlighted were groups significant at $p < .05$. Items in a given group denoted with ^a were statistically significantly different than items denoted with ^b at the $p < .05$ level.

Table 7

Social14 Local Visitors by Race/Ethnicity

PRIZM Social Group 14	Black		Hispanic		White		χ^2	p-value	Cramer's v
	n	%	n	%	n	%			
U1 Urban Uptown	7	4.8% ^a	11	5.3% ^a	214	1.8% ^b	14.533	.001	.041
U2 Midtown Mix	10	6.8% ^a	9	4.3% ^a	142	1.2% ^b	28.478	<.001	.064
U3 Urban Cores	9	6.1% ^a	13	6.3% ^a	105	.9% ^b	46.913	<.001	.088
S1 Elite Suburbs	8	5.4%	16	7.7%	1173	9.6%	4.248	.120	.017
S2 The Affluentials	8	5.4%	19	9.1%	1117	9.1%	2.764	.251	.014
S3 Middleburbs	7	4.8%	9	4.3%	548	4.5%	.038	.981	.002
S4 Inner Suburbs	9	6.1% ^a	3	1.4% ^b	561	4.6% ^a	7.045	.030	.021
C1 Second City Society	6	4.1%	12	5.8%	779	6.4%	1.574	.455	.011
C2 City Centers	20	13.6%	26	12.5%	1395	11.4%	.876	.645	.009
C3 Micro-City Blues	19	12.9% ^a	16	7.7% ^{a,b}	645	5.3% ^b	14.213	.001	.039
T1 Landed Gentry	11	7.5%	18	8.7%	1064	8.7%	.286	.867	.005
T2 Country Comfort	20	13.6%	23	11.1%	1607	13.1%	.852	.653	.008
T3 Middle America	7	4.8% ^a	17	8.2% ^{a,b}	1467	12.0% ^b	12.141	.002	.028
T4 Rustic Living	6	4.1% ^a	16	7.7% ^{a,b}	1406	11.5% ^b	13.310	.001	.029

Note. Black visitors $n = 147$, Hispanic visitors $n = 208$, and White visitors $n = 12,223$. Items in a given row denoted with ^a were statistically significantly different than items denoted with ^b at the $p < .05$ level. The χ^2 was decomposed to determine which groups were statistically significantly similar or different.

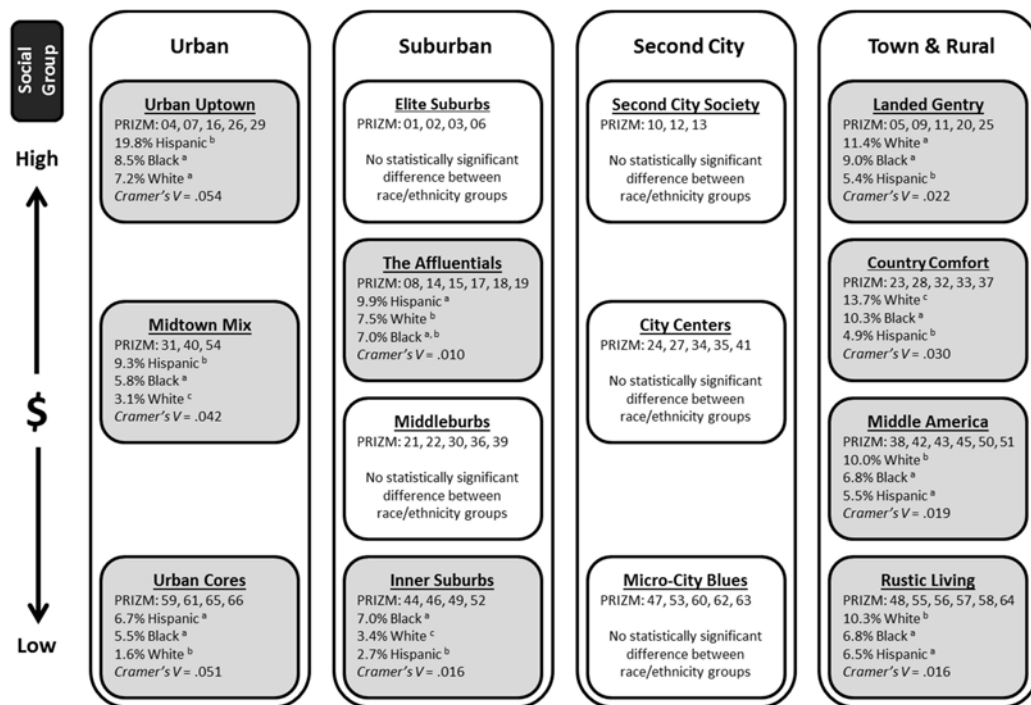


Figure 7. Destination Visitors: Statistically Significant Racial/Ethnic Differences Within the Social14 Groups. Note. Boxes highlighted were groups significant at $p < .05$. Items in a given group denoted with ^a were statistically significantly different than items denoted with ^b or ^c at the $p < .05$ level.

Table 8
Social14 Destination Visitors by Race/Ethnicity

PRIZM Social Group 14	Black		Hispanic		White		χ^2	P-value	Cramer's V
	n	%	n	%	n	%			
U1 Urban Uptown	34	8.5% ^a	176	19.8% ^b	4888	7.2% ^a	145.910	<.001	.054
U2 Midtown Mix	23	5.8% ^a	83	9.3% ^b	2073	3.1% ^c	145.910	<.001	.042
U3 Urban Cores	22	5.5% ^a	60	6.7% ^a	1081	1.6% ^b	104.537	<.001	.051
S1 Elite Suburbs	24	6.0%	43	4.8%	4059	6.0%	2.181	.336	.005
S2 The Affluentials	28	7.0% ^{a, b}	88	9.9% ^a	5111	7.5% ^b	6.644	.036	.010
S3 Middleburbs	33	8.3% ^a	51	5.7%	3633	5.3% ^b	5.945	.051	.010
S4 Inner Suburbs	28	7.0% ^a	24	2.7% ^b	2337	3.4% ^c	145.910	.001	.016
C1 Second City Society	14	3.5%	44	4.9%	3685	5.4%	3.652	.161	.007
C2 City Centers	37	9.3%	72	8.1%	6012	8.8%	.727	.695	.003
C3 Micro-City Blues	26	6.5%	50	5.6%	4257	6.3%	.689	.709	.003
T1 Landed Gentry	36	9.0% ^a	48	5.4% ^b	7720	11.4% ^c	41.04	<.001	.022
T2 Country Comfort	41	10.3% ^a	44	4.9% ^b	9287	13.7% ^c	76.01	<.001	.030
T3 Middle America	27	6.8% ^a	49	5.5% ^a	6823	10.0% ^c	33.70	<.001	.019
T4 Rustic Living	27	6.8% ^a	58	6.5% ^a	6975	10.3% ^c	21.05	<.001	.016

Note. Black visitors $n = 400$, Hispanic visitors $n = 890$, and White visitors $n = 67,941$. Items in a given row denoted with ^a were statistically significantly different than items denoted with ^b or ^c at the $p < .05$ level. The χ^2 was decomposed to determine which groups were statistically significantly similar or different.

The pattern of race/ethnicity and affluence was different for destination visitors from Town & Rural areas. In the Town & Rural middle and low affluence groups (Country Comfort, Middle America, and Rustic Living), White visitors were present in statistically significantly higher proportions (10%-14%) than Black (7%-10%) or Hispanic visitors (5%-7%) ($\chi^2=21.073-76.671$, $V = .016-.030$) in the. In the most affluent Town & Rural group (the Landed Gentry group) White (11%) and Black (9%) visitors were present in statistically significant higher proportions than Hispanic (5%) visitors ($\chi^2=40.24$, $p < .001$, $V = .022$).

In the suburbs there were two groups of note. In the lowest affluence segment from the suburbs, the Inner Suburbs, there was a similar pattern for both local and destination visitors. White (5% local, 3% destination) and Black (6% local, 7% destination) visitors from the Inner Suburbs were present in statistically significantly higher proportions in comparison to Hispanic visitors (1% local, 3% destination) (Local $\chi^2=7.045$, $p = .030$, $V = .021$; Destination $\chi^2=13.408$, $p = .030$, $V = .016$). The Affluentials segment was the other suburban group with statistically significant differences along ethnic/racial lines. For destination visitors, Hispanic visitors (10%) were present in statistically significantly higher proportions in comparison to White visitors (8%); Black visitors from this segment (7%) were not statistically significantly different from either White or Hispanic visitors ($\chi^2=6.644$, $p = .036$, $V = .010$). For local visitors from the Affluentials group there was no statistically relevant difference between groups based on race or ethnicity.

The patterns among the groups along racial/ethnic, affluence and urbanization lines supported the multiple social stratification hypothesis. Using Cramer's V as an index for the strength of association between the factors evaluated, the multiple social stratification approach provided the strongest effect sizes compared to the other hypotheses (Table 9). This approach

also provided the most detailed information on the National Park Service audiences based on personal and geo-demographic factors. Using information from both the first analysis (culture/lifestyles) and the last analysis (multiple social stratification) together yields insights with the most pragmatic and strategic utility for National Park Service administrators about in-group heterogeneity in diverse audiences.

Table 9

Factors Tested and Strength of Association for Each Hypothesis

Hypothesis	Tested	Cramer's V
1: Ethnicity Theory	PRIZM66 Lifestyles, Race and Ethnicity	.008 – .036
2a: Opportunity Theory	Affluence and Proximity	.017
2b: Marginality Theory	Race/Ethnicity and Affluence	.009 – .014
2c: Marginality Theory	Race/Ethnicity, Affluence and Proximity	.012 – .025
3: Multiple Social Stratification Theory	Social14 (Affluence and Urbanization), Race/Ethnicity, and Proximity	.010 – .088

Note. Cramer's V given only for statistically significant results at $p < .05$ levels.

Discussion

In this study three theories were tested about barriers to participation for diverse National Park Service audiences. Using psychographic and geo-demographic methods of investigation, it was possible to uncover personal-level and structural-level patterns in the data that differentiated Black, Hispanic and White visitors, and to analyze in-group heterogeneity. Mapping the results of the analyses onto the PRIZM Social14 graphics situated the results in a broader geographic and economic context. The infographics revealed the complex relationships between race/ethnicity, place, affluence, and lifestyles, and it clarified patterns across the variables.

One of the advantages of using the Nielsen PRIZM data is that they were created to provide information for market research and strategy decisions. PRIZM data could support the

NPS's goals around outreach and education by providing critical information that allows the park administrators to identify: target groups of the public they can serve well, what type of messaging and programming might be most compelling for given segments, geographic data on where to find the target groups, and what media channels to reach them through.

For instance, Nielsen (2009) research indicated people from Urban segments are more likely to blog, tweet, use Facebook and LinkedIn as compared to people from Town & Rural segments. Based on the urban-rural racial and ethnic patterns found in this study, the NPS has a unique opportunity to consider developing strategic messaging to engage urban minority populations using social media. For instance, if the NPS wanted to attract more urban young adults, it might consider focusing on the Young Digerati segment. Park sites like Yosemite and Death Valley National Park already draw high proportions of the urban segment the Young Digerati: 20% and 11% respectively. By comparison the average park site in this study only had 3% of its visitors from the Young Digerati segment. Nielsen's (2015d) maps and county information for each segment give information on the top counties in the US where particular segments can be found. The maps could be used to determine if there are particular park sites that might, for instance, target local Young Digerati segments. This knowledge can be used by park administrators to customize and geo-target messaging as a part of their community outreach efforts.

Taking the example further, Nielsen data (2015c) indicated the Young Digerati are more likely to read magazines like Dwell and watch the Independent Film Channel. These two media outlets would be useful channels for promoting national park stories to this audience. The parks could also use this knowledge to develop unique programming for parks that either already serve the Young Digerati, or who may have untapped potential because of a significantly sized local

audience. To engage technologists from the Young Digerati segment, the parks could host an interpretive multimedia/digital storytelling hackathon, creating a double dividend for the park (more engagement and new digital artifacts) as well as for the technologists (supporting the park and having fun). An initiative like this would allow participants go beyond consuming information and instead be co-creators with the National Park Service. Because this group also tends to use social media more than other segments, engaging them online can lead to viral advertising and peer-to-peer promotion. This is an example for just one segment; parallel examples could be made for any of the 66 PRIZM segments of interest.

Another example would be to compare two similar park sites and tease apart audience differences. Fire Island National Seashore and the Indiana Dunes National Lakeshore both drew primarily from suburban, family oriented outdoor enthusiasts, but their audiences represented a unique psychographic, affluence and age profile. Over 50% of the visitors to Fire Island National Seashore came from just three of the most affluent and predominantly older PRIZM segments: Beltway Boomers (22%), Blue Blood Estates (16%), and Upper Crust (12%). At Indiana Dunes the top three segments represented younger, low-middle and low income groups: Domestic Duos (11%), Blue-Chip Blues (10%), and Suburban Pioneers (9%). The average number of lifetime visits for Fire Island National Seashore visitors was nine visits (despite their older age) whereas Indiana Dunes National Lakeshore visitors on average visited the park 33 times. People in the segments frequented by Fire Island are more likely to be reached through media outlets like HBO, the Golf Channel, the Economist or the Atlantic. Visitors to Indian Dunes are more likely to be reached through media outlets like Animal Planet, the Hallmark Channel, AARP Magazine, and Pregnancy Magazine. This type of information, provided through extensive market research by Nielsen, would allow park administrators to develop

highly targeted and strategic plans to engage visitors, build philanthropic support, and craft appropriate community partnerships.

PRIZM data could be used not only to understand the communities that visitors are already coming from, but it would allow analysts to find other communities with similar value, preference and lifestyle profiles. These data could be taken into consideration when siting new parks or identifying specific communities that would be more likely to be amenable to or persuaded by promotions aimed at increasing visitor participation in the parks. For example, the zip code with the largest number of observations in this data set was in Mentor, OH. Mentor has a similar visitor psychographic fingerprint as Colonial Heights, VA (#42 in the top 50), Kingston, PA, and Cocoa, FL. Kingston is within 15 miles of multiple Pennsylvania State Game Lands, a State Park, and a State Forest. Cocoa is within five miles of Canaveral National Seashore, a Florida state regional park and preserve, two conservation areas and a wildlife management area. While it is not possible to know for sure given the data available, there is enough evidence to indicate that communities with this psychographic profile might have a higher rate of participation in outdoor recreation in general. Just as some of the patterns identified in this study would not have been as apparent without considering multiple factors, similarities in communities like these might not be as apparent using traditional demographic or socioeconomic means. Putting together psychographic and geo-demographic profiles of communities like this could be useful in siting new parks to engage diverse audiences.

Areas for additional inquiry. Though the results in this study were reported for multiple park sites across the nation, the approach could also be used either at the single-site level or multi-site level (e.g., by region or park type), in a longitudinal study, or before and after an intervention intended to diversify visitors. It could also be used to examine other racial or

ethnic groups, or to probe results by other social categories like age, gender, or family status. If visitor surveys included more specific address information it would be possible to analyze the data at an individual level rather than a community level. The population in this study only included visitors, but a similar approach could be used to compare patterns between visitors and non-visitors. The psychographic data could be combined with qualitative ethnographic research, enabling investigators to put the patterns identified into a richer context for interpretation and planning. This approach could also be used to develop multilevel models to examine determinants of visitor behavior. There are a variety of ways in which these methods could be combined to deepen our understanding of park visitors, barriers to visitation, and to develop new strategies for serving and attracting groups that might be currently under-represented.

Limitations. By looking at visitor statistics at a national level across a wide variety of types of parks, the study may have masked dynamics that are driving visitors regionally, at parks within a state, or at a type of park or individual park site. The patterns identified at this large scale cross-section of parks should not be assumed to be operating at other scales and scopes. The method used makes it easy to scale the analyses and focus them in on particular sub-segments of the nation, population or park system.

Because the observations used in this study were derived from visitors, but aren't necessarily representative of all visitors, it is important to be careful in interpreting the results. They represent the communities that visitors come from, so it is possible that some of the PRIZM66 segments as they relate to individuals were overrepresented while others may have been underrepresented. Because it was a large sample it is likely that the noise represented by over- and under-reported PRIZM segments would be minimized. This methodological limitation

could be addressed if visitor data were collected at a more specified level (e.g., if addresses were available instead of zip codes).

Additionally, because the publically available data from Nielsen were used (as opposed to that available for purchase), the top segments are represented, but it wasn't possible to include information on the rank or intensity of PRIZM segments within each community. Thus, if one segment represented 70% of the community, while the remaining four segments together represented an additional 15% of the residents in a community, it wasn't possible to weight any of the observations accordingly. Acquiring this data about the rank or intensity of each segment within each community would improve the results of the analysis.

Conclusion

One of the challenges of public institutions is to serve “the public”, a concept and goal that is rarely well-defined. The National Park Service provides a unique public service. The natural and cultural assets that NPS preserves, and the programming that they design, will appeal to different visitors not based on their socio-economics or demographics, but rather because of a fit with the interests and lifestyles of visitors. The parks ability to engage people and provide relevant interpretive and educational services is critical to helping people connect to and appreciate the nation's natural resources and cultural heritage. Engaging the public is also important so citizens can be informed and engage in decision making about the natural and cultural assets in their communities and across the nation.

By joining park visitor data with PRIZM data, not only was it possible to test theories about visitor differences across racial and ethnic groups, but it is also possible to get a glimpse of the non-recreational aspects of visitor lifestyles, and get a sense of the communities that visitors represent. This can inform management decisions about park programming, park siting, and how

to reduce barriers and increase participation rates for specific sub-groups. The results could also be used to develop new partnerships within a community and between different communities.

The PRIZM data provide a way to segment visitors and understand how to meet different constituencies' needs. There are already a number of ways National Park visitors are segmented by researchers, including by activity and skill level (Needham, Rollins, & Vaske, 2005), amenity use (Donnelly, Vaske, DeRuiter, & King, 1996), and using importance-performance analyses (Bruyere, Rodriguez, & Vaske, 2002). Segmentation on park behaviors and experiences draws on a posteriori knowledge. By using psychographic and geo-demographic segmentation it is possible to use a priori knowledge to plan interventions and programming, promote engagement, and expand and diversify visitors. Though the PRIZM segmentation approach has been used successfully in other tourism planning and audience engagement research (Amerson, Arbise, Kelly, & Traore, 2014; Hafner & Grabler, 2015; Jager & Halpenny, 2012; Shoemaker, 1989; Silverberg, Backman, & Backman, 1996) there aren't many published studies that use it in regard to the National Parks Service.

This study demonstrated how to combine personal and structural data to illuminate visitor heterogeneity and identify underlying patterns across park visitor groups. By identifying key constituencies, what they care about, and where to find them, it enables park administrators to do strategic outreach and communicate more effectively with visitors and potential community partners. As with most institutions, park personnel must be as effective and efficient as possible because they have limited time, money and resources to reach their goals. The data and technology available to park managers today allows them to be more targeted and strategic.

The National Park Service has taken a proactive stance to be more inclusive and address issues that prevent diverse audiences from being engaged (National Park Service, 2014; National

Parks Second Century Commission, 2009). Urban park superintendents and the Urban Caucus have been working for 25 years to engage diverse audiences and increase the access for urban and minority citizens (Mott, 1987; National Park Service, 2012). There has been a push to expand the range of cultural heritage sites to be more inclusive and diverse (e.g., the Martin Luther King Jr. National Historic Site or the Manzanar National Historic Site) (Weber & Sultana, 2013). The public-private partnership initiative “Find you Park/Encuentra Tu Parque” encourages people to share their personal stories about parks in order to inspire others and has incorporated both English and Spanish versions of the website (Find Your Park, 2015). In places where appropriate, the National Park Service has implemented policies and management practices that are more culturally sensitive, such as use regulations at Devil’s Tower in recognition of the site’s spiritual significance to Native Americans (Indian Law Resource Center, 2010). Priorities, practices, and policies represented by these initiatives are important in respecting cultural differences and engaging diverse stakeholders. There are a complex set of factors that affect the choice and ability of people to attend parks. The more outreach, programming, siting and policies that park leaders can implement to reduce cultural and structural barriers, the more success they will have in serving diverse populations. The more relevant information park managers have about their audiences, the more likely they will be able to plan strategically and implement more effectively. This research adds to the knowledge and toolkits available to park managers to help them conserve and promote America’s natural and cultural heritage.

Epilogue

“Cultural and cognitive diversity are among humanity’s greatest assets and provide myriad means of perceiving solutions to multiple problems.”

- Jack Loeffler (Loeffler & Loeffler, 2012, p. xii)

It is out of the discipline of natural resources that concepts like bioregionalism, thinking like a watershed and consilience have emerged. They all focus on how we develop, use, connect, and integrate different kinds of knowledge. The more we can bridge knowledge from across the domains of the sciences, humanities, social sciences, and business, the better equipped we will be to address the complex and dynamic natural resource issues we face. The present set of studies investigated different aspects of public engagement and political will in one of the nation’s largest and oldest natural resource institutions responsible for policy, conservation, and public service.

As the National Park Service prepares for the next century, one of the biggest challenges it faces is audience engagement. These studies demonstrate the ways that the National Park Service has been successful at engaging the public and politicians to support new and existing park sites. Chapter one looked at the role of citizens, artists, the business community and the media in catalyzing support for new sites. Chapter two investigated the political and legislative aspects of expanding the National Park Service. Chapter three demonstrated a methodology to provide insights into park visitor heterogeneity. It integrated visitor data with psychographic and geo-demographic data to provide information that could be used by park administrators to develop strategic outreach campaigns to promote the parks to targeted audiences. The more hearts and minds the NPS can engage, the more successful they will be and better equipped the nation will be to address the environmental challenges we face. Effective engagement of

heterogeneous audiences allows the NPS to promote their conservation and educational goals to wider audiences, and build a stronger base for economic sustainability. A higher level of engagement ensures visitor interest for entrance and use fees, the political will for federal support, and goodwill for philanthropic support.

There is an important reason for natural resource researchers and administrators alike to become comfortable and adept with interdisciplinary approaches. We have accumulated significant knowledge about the science of natural resources, as well as about behavioral economics, sociology, psychology, and social psychology, but all too often the information remains siloed. Until we can integrate the scientific and human dimensions of natural resources, we will continue to struggle with conservation, climate change, and sustainability.

Educators talk about 21st century skills that we need to nurture in students so that they will have the tools and resilience necessary to lead us in the next century. Those skills aren't just for school children though. To solve the big problems, we need more creative and integrated thinking now; more passionate, informed people with intellectual flexibility engaged today; and more cross-sector/cross-disciplinary/cross-boundary partnerships. The more models we have of this kind of pragmatic interdisciplinarity, the easier it will be for the next generation of leaders to continue to craft better approaches and solutions to the complex challenges we face.

The work presented in these three chapters is an attempt to bridge some of these domains, and to illuminate aspects of history, politics, and culture that contribute to the support of the National Park Service. By exploring the human dimensions context that the NPS operates in, I hoped to provide strategic and pragmatic information for both communities and the NPS alike. By working together, they can support the evolution of the NPS into its second century and keep it relevant through changing times.

References

Chapter 1: Park Origins

- Auwaerter, J., & Sears, J. F. (2006). Historic resource study for Muir Woods National Monument: Golden Gate National Recreation Area. Olmstead Center for Landscape Preservation. Boston, MA: National Park Service, U.S. Department of Interior. Retrieved from http://www.nps.gov/history/history/online_books/muwo/hrs.pdf
- Brown, S. A. (1984). Administrative history: Jefferson National Expansion Memorial National Historic Site, 1935-1980. Washington, DC: National Park Service, U.S. Department of Interior. Retrieved from http://www.nps.gov/history/history/online_books/jeff/adhit.htm
- Bullard, M. R. (2005). Cumberland Island: A history. Athens, GA: University of Georgia Press.
- Caesar, G. (1961). King of the mountain men: The life of Jim Bridger. New York, NY: Dutton.
- Carlyle, T. (1830). On history. Retrieved from <http://www.blupete.com/Literature/Essays/Best/CarlyleHistory.htm>
- CBS Forum. (2003). The Statue of Liberty: A priceless gift. The romance of construction – I (pp. 124-128). Retrieved from <https://books.google.com/books?id=Z8AHSWhxVLYC>
- Culpin, M. S. (2003). For the benefit and enjoyment of the people: A history of the concession development in Yellowstone National Park, 1872–1966 (YCR-CR-2003-01). Yellowstone National Park, WY: National Park Service, U.S. Department of the Interior.

Retrieved from

<http://www.nps.gov/yell/learn/historyculture/upload/ConcessionDevelopment.pdf>

Diamant, R. (2014). Lincoln, Olmstead, and Yosemite: Time for a closer look. *The George Wright Forum*, 31(1), 10-16. Retrieved from

<http://www.georgewright.org/311diamant.pdf>

Duncan, D. (2009). *The National Parks: America's best idea: An illustrated history*. New York, NY: Alfred A. Knopf.

Edwards, R. (Writer), & Gottlieb, R. (Director). (1958, December 3). Rear Admiral Samuel Fuqua (Episode 315) [Television series episode]. In A. Gruenberg (Producer), *This is your life*. New York, NY: National Broadcasting Company. Retrieved from

https://archive.org/details/this_is_your_life_samuel_g_fuqua

Haines, A. L. (1974). *Yellowstone National Park: Its exploration and establishment*.

Washington, DC: National Park Service, U.S. Department of Interior. Retrieved from

http://www.nps.gov/parkhistory/online_books/haines1/iee4a.htm

Hartzog, G. B., Jr. (1988). *Battling for the National Parks*. Mt. Kisco, NY: Moyer Bell Limited.

History Channel. (2012). *Yosemite National Park established*. Retrieved from

<http://www.history.com/this-day-in-history/yosemite-national-park-established>

Javna, G. (Ed.). (2007). *Uncle John's bathroom reader plunges into National Parks*. San Diego, CA: Portable Press.

Johns, J. (1996). Thomas Moran and the American landscape: The lure of the West. Retrieved from <http://xroads.virginia.edu/~cap/nature/cap3.html>

Kinsey, J. L. (1992). Thomas Moran and the surveying of the American West. Washington, DC: Smithsonian Books.

Levine, B., & Story, I. F. (1961). Statue of Liberty: Joseph Pulitzer. Jersey City, NJ: Liberty State Park. Retrieved from <http://www.libertystatepark.org/statueofliberty/sol3.shtml>

Maranzani, B. (2013). 8 things you may not know about the California gold rush. History.com. Retrieved from <http://www.history.com/news/8-things-you-may-not-know-about-the-california-gold-rush>

Meringolo, D. D. (2012). Museums, monuments, and National Parks: Toward a new genealogy of public history. Amherst, MA: University of Massachusetts.

Moore, B. (1994). Urban innovation and practical partnerships: An administrative history of Jefferson National Expansion Memorial, 1980-1991. Washington, DC: National Park Service, U.S. Department of the Interior. Retrieved from http://www.nps.gov/parkhistory/online_books/jeff/adhit.htm

National Park Foundation. (2016). Our partners. Retrieved from <http://www.nationalparks.org/about-us/our-partners>

National Park Service. (2015a). National Park Service bureau highlights. U.S. Department of Interior FY 2016 interior budget in brief. Washington, DC: National Park Service, U.S. Department of the Interior. Retrieved from

<https://www.doi.gov/sites/doi.gov/files/migrated/budget/appropriations/2016/highlights/upload/BH075.pdf>

National Park Service. (2015b). Park statistics. Acadia National Park. Bar Harbor, ME: National Park Service, U.S. Department of the Interior. Retrieved from <http://www.nps.gov/acad/learn/management/statistics.htm>

National Park Service. (n.d.a). American visionaries: Thomas Moran. Virtual museum exhibits. Washington, DC: Museum Management Program, National Park Service, U.S. Department of the Interior. Retrieved from <http://www.nps.gov/museum/exhibits/moran/intro1.htm>

National Park Service. (n.d.b). Brochures & guides. Yellowstone's photo collection. Yellowstone National Park, WY: National Park Service, U.S. Department of the Interior. Retrieved from <http://www.nps.gov/features/yell/slidefile/history/brochuresguides/Page.htm>

National Park Service. (n.d.c). Discovery packet: The legacy of Pearl Harbor. Honolulu, HI: USS Arizona Memorial Visitor Center, World War II Valor in the Pacific, National Park Service, U.S. Department of the Interior. Retrieved from http://www.nps.gov/valr/upload/press_kit.pdf

National Park Service. (n.d.d). Frequently asked questions. World War II Valor in the Pacific. Honolulu, HI: National Park Service, U.S. Department of the Interior. Retrieved from <http://www.nps.gov/valr/faqs.htm>

National Park Service. (n.d.e). Galen Clark. History & culture. Yosemite National Park, CA:

National Park Service, U.S. Department of the Interior. Retrieved from

<https://www.nps.gov/yose/learn/historyculture/galen-clark.htm>

National Park Service. (n.d.f). James and Elvira Hutchings. History & culture. Yosemite

National Park, CA: National Park Service, U.S. Department of the Interior. Retrieved

from <https://www.nps.gov/yose/learn/historyculture/hutchings.htm>

National Park Service. (n.d.g). Pulitzer- in depth. New York, NY: Statue of Liberty National

Monument, National Park Service, U.S. Department of the Interior. Retrieved from

<https://www.nps.gov/stli/learn/historyculture/pulitzer-in-depth.htm>

Palmquist, P. E., & Kailbourn, T. R. (2002). Pioneer photographers of the far west: A

biographical dictionary, 1840-1865. Stanford, CA: Stanford University Press.

PBS. (2012). The panic of 1873. Boston, MA: WGBH Educational Foundation. Retrieved from

<http://www.pbs.org/wgbh/americanexperience/features/general-article/grant-panic/>

Pitcaithley, D. T. (2001). Philosophical underpinnings of the national park idea. National Park

Service History: History of the National Park Service. Washington, DC: National Park

Service, U.S. Department of the Interior. Retrieved from

<https://www.nps.gov/parkhistory/hisnps/NPSThinking/underpinnings.htm>

Repanshek, K. (2015, April 28). National Park Service waived policy to allow Budweiser's

centennial partnership. National Parks Traveler. Retrieved from

<http://www.nationalparkstraveler.com/2015/04/national-park-service-waived-policy-allow-budweisers-centennial-partnership26535>

- Rothman, H. (1989). Preserving different pasts: The American National Monuments. Urbana, IL: University of Illinois Press.
- Runte, A. (1990). Yosemite: The embattled wilderness. Lincoln, NE: University of Nebraska Press. Retrieved from http://www.cr.nps.gov/history/online_books/rusticarch/index.htm
- Runte, A. (2010). National Parks: The American experience (4th ed.) [Kindle Edition]. Plymouth, UK: Taylor Trade Publishing.
- Salem, D. (1996, May 14). Tapped-out National Parks turn to corporations for aid. Los Angeles Times. Retrieved from http://articles.latimes.com/1996-05-14/news/mn-4005_1_national-park-service
- Sax, J. L. (2001). Mountains without handrails: Reflections on the National Parks. Ann Arbor, MI: University of Michigan Press.
- Sheppard, K. (2012, March 5). Should corporations bankroll national parks? Mother Jones. Retrieved from <http://www.motherjones.com/environment/2012/03/corporations-national-parks-coca-cola>
- Shugart, S. (1983). Hot Springs National Park: A brief history of the park. Hot Springs, AR: National Park Service, U.S. Department of the Interior. Retrieved from <http://www.nps.gov/hosp/historyculture/index.htm>
- Song, J. (2011). Elvis Presley's 1961 benefit concert remembered. Star Advertiser. Honolulu, HI: Associated Press. Retrieved from <http://www.staradvertiser.com/breaking-news/elvis-presleys-1961-benefit-concert-remembered/>

Wolf Trap Foundation for the Performing Arts. (n.d.). Learn about Wolf Trap. Vienna, VA:

Wolftrap Foundation for the Performing Arts. Retrieved from

http://www.wolftrap.org/Learn_About_Wolf_Trap/

Zaslowsky, D., & Watkins, T. H. (1994). *These American lands: Parks, wilderness and the public lands* (Rev. ed). Washington, DC: Island Press.

Chapter 2: The Politics of Protected Areas

Barrilleux, C. J., Holbrook, T. M., & Langer, L. (2002). Electoral competition, legislative balance, and American state welfare policy. *American Journal of Political Science*, 46(2), 415-427. doi:10.2307/3088385

Booth, D. E. (1999). Spatial patterns in the economic development of the mountain west. *Growth and Change*, 30, 384-405. doi:10.1111/j.1468-2257.1999.tb00036.x

Coughlin, P., & Nitzan, S. (1981). Electoral outcomes with probabilistic voting and Nash social welfare maxima. *Journal of Public Economics*, 15(1), 113-121. doi:10.1016/0047-2727(81)90056-6

Cullinane Thomas, C., Huber, C., & Koontz, L. (2015). 2014 National Park visitor spending effects: Economic contributions to local communities, states, and the nation (Natural Resource Report NPS/NRSS/EQD/NRR—2015/947). Fort Collins, CO: National Park Service, U.S. Department of the Interior. Retrieved from https://www.nature.nps.gov/socialscience/docs/VSE2014_Final.pdf

Deller, S. C., Tsai, T. H., Marcouiller, D. W., & English, D. B. K. (2001). The role of amenities and quality-of life in rural economic growth. *American Journal of Agricultural Economics*, 83(2), 352-65. doi:10.1111/0002-9092.00161

Downs, A. (1957). *An Economic Theory of Democracy*. New York, NY: Harper and Row.

Galston, W. A., & Baehler, H. J. (1995). *Rural development in the United States: Connecting theory, practice and possibilities*. Washington, DC: Island Press.

Glassman, M. E., & Wilhelm, A. H. (2015). *Congressional careers: Service tenure and patterns of member service, 1789-2015 (Report R41545)*. Washington, DC: Congressional Research Service, Library of Congress. Retrieved from <https://www.fas.org/sgp/crs/misc/R41545.pdf>

Grossman, G. M., & Helpman, E. (1996). Electoral competition and special interest politics. *Review of Economic Studies*, 63(2), 265-286. doi:10.2307/2297852

Henderson, J. R., & McDaniel, K. (2005). Natural amenities and rural employment growth: A sector analysis. *Review of Regional Studies*, 35(1), 80-96. Retrieved from <http://journal.srsa.org/ojs/index.php/RRS/article/view/98>

Holbrook, T. M., & Van Dunk, E. (1993). Electoral competition in the American states. *American Political Science Review*, 87, 955-962. doi:10.2307/2938827

Hotelling, H. (1929). Stability in competition. *Economic Journal*, 39(153), 41-57. doi:10.2307/2224214

- Johnson, J. D., & Rasker, R. (1995). The role of economic and quality-of-life values in rural business location. *Journal of Rural Studies*, 11(4), 405-16. doi:10.1016/0743-0167(95)00029-1
- Kevin, B. (2012, July). The fight to create America's newest National Park. *Outside Magazine*. Retrieved from <http://www.outsideonline.com/1900811/fight-create-americas-newest-national-park>
- Key, V. O., Jr. (1949). *Southern politics*. New York, NY: Knopf.
- Kousser, T., Lewis, J. B., & Masket, S. E. (2007). Ideological adaptation? The survival instinct of threatened legislators. *The Journal of Politics*, 69(3) 828-843. doi:10.1111/j.1468-2508.2007.00578.x
- Krasa, S., & Polborn, M. (2010). The binary policy model. *Journal of Economic Theory*, 145(2) 661-688. doi:10.1016/j.jet.2009.11.005
- Liguori, E. R. (2014). Historic parks package passes Congress. National Parks Conservation Association. Retrieved from <https://www.npca.org/articles/412-historic-parks-package-passes-congress>
- Lockard, D. (1959). *New England state politics*. Princeton, NJ: Princeton University Press.
- National Park Service. (1986). *Parks, etc.: Park designations and how the sites are managed*. Washington, DC: National Park Service, U.S. Department of the Interior. Retrieved from <http://npshistory.com/publications/parks-etc/index.htm>

National Park Service. (2016). Recent changes in the National Park System. Washington, DC:

National Park Service, U.S. Department of the Interior. Retrieved from

www.nps.gov/aboutus/news/upload/ChangesintheNationalParkSystem_02-23-16.pdf

Mackintosh, B. (2005). The National Parks: Shaping the system. Harpers Ferry, WV: Harper's

Ferry Center, National Park Service, Department of Interior. Retrieved from

<https://archive.org/details/nationalparkssha05system>

Nasaw, D. (2009, March 11). Obama signs \$410bn spending bill. The Guardian. Retrieved from

<http://www.theguardian.com/world/2009/mar/11/obama-omnibus-spending-bill-congress>

Office of the Clerk of the US House of Representatives. (n.d.). House history. Retrieved from

http://artandhistory.house.gov/house_history/

Partridge, M. D. (2010). The duelling models: NEG vs amenity migration in explaining US

engines of growth. *Papers In Regional Science*, 89(3), 513-536. doi:10.1111/j.1435-

5957.2010.00315.x

Poudyal, N. C., Hodges, D. G., & Cordell, H. (2008). The role of natural resource amenities in

attracting retirees: Implications for economic growth policy. *Ecological Economics*,

68(1/2), 240-248. doi:10.1016/j.ecolecon.2008.02.022

Power, T. M. (1996). *Lost landscapes and failed economies: The search for a value of place.*

Washington, DC: Island Press.

Rudzitis, G. (1999). Amenities increasingly draw people to the rural West. *Rural Development Perspectives*, 14(2), 9-13. Retrieved from

<http://www.colorado.edu/AmStudies/lewis/west/amenities.pdf>

Schemmel, B. (2002). Rulers: A database of heads of state and heads of government of all countries and territories. Retrieved from http://www.rulers.org/rulu.html#united_states

Shumway, J. M., & Otterstrom, S. M. (2001). Spatial patterns of migration and income change in the mountain West: The dominance of service-based, amenity-rich counties. *Professional Geographer*, 53(4), 492-502. doi:10.1111/0033-0124.00299

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Amerson, N. L., Arbise, B. S., Kelly, N. K., & Traore, E. (2014). Use of market research data by state chronic disease programs, Illinois, 2012–2014. *Preventing Chronic Disease*, 11(E165). 1-8. doi:10.5888/pcd11.140268.

Arnold, M. L., & Shinew, K. J. (1998). The role of gender, race, and income on park use constraints. *Journal of Park and Recreation Administration*, 16(4), 39-56. Retrieved from <http://js.sagamorepub.com/jpra/article/view/1651/1613>

Beane, T. P., & Ennis, D. M. (1987). Market segmentation: A review. *European Journal of Marketing*, 21(5), 20-42. doi:10.1108/EUM0000000004695

Blahna, D. J., & Black, K. S. (1993). Racism: Is it a concern for recreation resource managers?

In P. Gobster, (Ed.) *Managing recreation in urban & high use settings* (General

Technical Report NC-163) (pp. 111-118). St. Paul, MN: North Central Forest Experiment

- Station, U.S. Forest Service, U.S. Department of Agriculture. Retrieved from <http://www.fs.fed.us/pnw/ruwit/papers/blahna/Blahna-Black-Racism.pdf>
- Bischoff, K., & Reardon, S. F. (2013). Residential segregation by income, 1970-2009. New York, NY: Russell Sage Foundation. Retrieved from <http://www.s4.brown.edu/us2010/Data/Report/report10162013.pdf>
- Bruyere, B., Rodriguez, D. A., & Vaske, J. J. (2002). Enhancing importance-performance analysis through segmentation. *Journal of Travel and Tourism Marketing*, 12(1), 81-95. doi:10.1300/J073v12n01_05
- Caro, V., & Ewert, A. (1995). The influence of acculturation on environmental concerns: An exploratory study. *Journal of Environmental Education*, 26(3), 13-21. doi:10.1080/00958964.1995.9941441
- Carr, D. S., & Williams, D. R. (1993). Understanding the role of ethnicity in outdoor recreation experiences. *Journal of Leisure Research*, 25(1), 22-38. Retrieved from www.researchgate.net/publication/269996531_Understanding_the_role_of_ethnicity_in_outdoor_recreation_experiences
- City of Mentor. (2016). Live. Retrieved from <http://cityofmentor.com/live/>
- Claritas. (2007). PRIZM ne segment narratives. Retrieved from www.gulfshores.com/stats/PRIZM%20NE%20Segment%20Narratives%202007.pdf
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Cordell, H. K., Lane, V., & Green, G. T. (2012). Linkage between demographics and EVABs (Wildlife, natural resources and environmental values, attitudes and behaviors). In Population and demographic change in North America: Implications for natural resources conservation organizations (Chapter 4). Proceedings from: Transactions of the 77th North American Wildlife and Natural Resources Conference. Atlanta, GA: Natural Resources, Recreation and Tourism Department, Warnell School of Forestry & Natural Resources, University of Georgia. Retrieved from <http://warnell.forestry.uga.edu/nrrt/nsre/NAWNRC.html>

Demby, E. H. (1994). Psychographics revisited: The birth of a technique. *Marketing Research*, 6(2), 26-29. Retrieved from archive.ama.org/archive/ResourceLibrary/MarketingResearch/documents/9511240220.pdf

Dolnicar, S. (2002). A review of data-driven market segmentation in tourism. *Journal of Travel & Tourism Marketing*, 12(1), 1-22. doi:10.1300/J073v12n01_01

Donnelly, M. P., Vaske, J. J., DeRuiter, D. S., & King, T. B. (1996). Person-occasion segmentation of state park visitors. *Journal of Park and Recreation Administration*, 14(2), 95-106. Retrieved from <http://www.cabdirect.org/abstracts/19961810464.html>

Dwyer, J. F. (1994). Customer diversity and the future demand for outdoor recreation (General Technical Report, No. RM-252). St. Paul, MN: North Central Forest Experiment Station, U.S. Forest Service, U.S. Department of Agriculture. Retrieved from <http://www.treesearch.fs.fed.us/pubs/12678>

Fesenmaier, D. R., Goodchild, M. F., & Lieber, S. R. (1981). The importance of urban milieu in

predicting recreation participation: The case of day-hiking. *Leisure Sciences*, 4(4), 459-476. doi:10.1080/01490408109512981

Find Your Park. (2015). Many parks, many stories/historias parque. Retrieved from <http://findyourpark.com/> and <http://encuentratuparque.com/>

Flood, J. P., & McAvoy, L. H. (2007). Use of National Forests by Salish-Kootenai tribal members: Traditional recreation and a legacy of cultural values. *Leisure/Loisir*, 31, 191-216. doi:10.1080/14927713.2007.9651378

Floyd, M. F. (1999). Race, ethnicity and use of the National Park System. *Social Science Research Review* 1(2), 1-24. Retrieved from https://www.nature.nps.gov/socialscience/docs/archive/SSRR_2.pdf

Floyd, M. F., Bocarro, J. N., & Thompson, T. D. (2008). Research on race and ethnicity in leisure studies: A review of five major journals. *Journal of Leisure Research*, 40(1), 1-22. Retrieved from <http://js.sagamorepub.com/jlr/article/view/453>

Floyd, M. F., & Gramann, J. H. (1993). Effects of acculturation and structural assimilation in resource-based recreation: The case of Mexican Americans. *Journal of Leisure Research*, 25(1), 6-21. Retrieved from <http://www.cabdirect.org/abstracts/19931854088.html>

Floyd, M. F., & Shinew, K. J. (1999). Convergence and divergence in leisure style among whites and African Americans: Toward an interracial contact hypothesis. *Journal of Leisure Research*, 31(4), 359-384. Retrieved from <http://www.nrs.fs.fed.us/pubs/2269>

Floyd, M. F., Shinew, K. J., McGuire, F. A., & Noe, F. P. (1994). Race, class and leisure activity

preferences: Marginality and ethnicity revisited. *Journal of Leisure Research*, 26 (2), 158-173. Retrieved from

<http://search.proquest.com/openview/2303554ee6b7733c1d68f2b195e7c3fa/1>

Floyd, M. F., & Stodolska, M. (2013). Theoretical frameworks in leisure research on race and ethnicity. In M. Stodolska, K. J. Shinew, M. F. Floyd & G. J. Walker (Eds.), *Race, ethnicity, and leisure: Perspectives on research, theory, and practice* (pp. 9-20). Champaign, IL: Human Kinetics.

Frank, R. E., & Green, P. E. (1968). Numerical taxonomy in marketing analysis: A review article. *Journal of Marketing Research*, 5(1), 83-98. doi:10.2307/3149799

Galloway, G. (2002). Psychographic segmentation of park visitor markets: Evidence for the utility of sensation seeking. *Tourism Management*, 23(6), 581-596. doi:10.1016/S0261-5177(02)00025-0

Galloway, G., & Lopez, K. (1999). Sensation seeking and attitudes to aspects of national parks: A preliminary empirical investigation. *Tourism Management*, 20(6), 665-671. doi:10.1016/S0261-5177(99)00031-X

Ghimire, R., Green, G. T., Poudyal, N. C., & Cordell, H. K. (2014). An analysis of perceived constraints to outdoor recreation. *Journal of Park and Recreation Administration*, 32(4), 52-67. Retrieved from <http://js.sagamorepub.com/jpra/article/download/6074/4846>

Gomez, E. (2003). *Ethnicity and recreation: An abridged annotated bibliography* (Unpublished report). Norfolk, VA: Recreation and Tourism Studies Program, Department of Exercise Science, Sport, Physical Education, and Recreation, Old Dominion University.

- González, A. M., & Bello, L. (2002). The construct “lifestyle” in market segmentation: The behaviour of tourist consumers. *European Journal of Marketing*, 36(1/2), 51-85.
doi:10.1108/03090560210412700
- Gramann, J. H. (1996). Ethnicity, race, and outdoor recreation: A review of trends, policy, and research (Miscellaneous Paper R-96-1). Washington, DC: Natural Resources Research Program, Waterways Experiment Station, U.S. Army Corps of Engineers.
- Gramann, J. H., & Allison, M. (1999). Race, ethnicity, and leisure. In T. Burton & E. Jackson (Eds.), *Leisure studies: Prospects for the twenty-first century* (pp. 283-297). State College, PA: Venture Press.
- Grove, J. M., Locke, D. H., & O’Neill-Dunne, J. P. M. (2014). An ecology of prestige in New York City: Examining the relationships among populations density, socio-economic status, group identity, and residential canopy cover. *Environmental Management*, 54(3), 402-419. doi:10.1007/s00267-014-0310-2
- Hafner, H., & Grabler, M. K. (2015). Psychographic segmentation and its application in the hospitality industry. Retrieved from [http://www.researchgate.net/publication/265403915 Psychographic segmentation and its application in the hospitality industry](http://www.researchgate.net/publication/265403915_Psychographic_segmentation_and_its_application_in_the_hospitality_industry)
- Hendee, J. C. (1969). Rural-urban differences reflected in outdoor recreation participation. Presented at the annual meeting of the Rural Sociological Society. San Francisco, CA: Pacific Northwest Forest Experimentation Station, U.S. Forest Service, U.S. Department of Agriculture. Retrieved from <http://files.eric.ed.gov/fulltext/ED032962.pdf>

Hartmann, L. A., & Cordell, H. K. (1989). An overview of the relationship between social and demographic factors and outdoor recreation participation (General Technical Report SE-52). In A. E. Watson (Ed.), *Outdoor Recreation Benchmark 1988: Proceedings from the National Outdoor Recreation Forum* (pp. 255-274). Asheville, NC: Southeastern Forest Experiment Station, U.S. Forest Service, U.S. Department of Agriculture. Retrieved from <http://srs.fs.usda.gov/trends/pdf/SocialDemo88.pdf>

Hartmann, L. A., & Overdeest, C. (1990). Race, ethnicity, and outdoor recreation participation: A state-of-the-knowledge review and theoretical perspective. In K. Zera (Ed.), *Proceedings of the Southeastern Recreation Research Conference Vol. 11* (pp. 53-63). Athens, GA: U.S. Forest Service, U.S. Department of Agriculture.

Hauser, P. M. (1962). Demographic and ecological changes as factors in outdoor recreation. In L. K. Frank, H. J. Gans, W. J. Goode, M. Grodzins, P. M. Hauser, M. Kaplan, P. F. Lazarsfeld, M. Mead, J. B. Nash, H. S. Perloff, L. Wingo, Jr., J. W. Smith, G. D. Stoddard & M. M. Webber (Eds.), *Trends in American living and outdoor recreation: Report to the Outdoor Recreation Resources Review Commission 22* (pp. 27-59). Washington, DC: U.S. Government Printing Office. Retrieved from <http://babel.hathitrust.org/cgi/pt?id=mdp.39015049084075;view=1up;seq=47>

Hibbler, D., & Shinew, K. (2002). Interracial couples' experience of leisure: A social network approach. *Journal of Leisure Research*, 34(2), 135-156.

* Holmes, N. (2011). Congaree National Park visitor study (Spring) (244.1-CONG) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=244.1>

Hough, J. (1991). The Grand Canyon National Park and the Havasupai people: Cooperation and conflict. In P.C. West & S.R. Brechin (Eds.), Resident peoples and National Parks: Social dilemmas and strategies in international conservation (pp. 215-230). Tucson, AZ: University of Arizona Press.

Hung, K. (2003). Achieving cultural diversity in wilderness recreation: A study of the Chinese in Vancouver (Master's thesis). University of Waterloo, Waterloo, Ontario, Canada.
Retrieved from <http://etd.uwaterloo.ca/etd/khung2003.pdf>

Hutchison, R. (1987). Ethnicity and urban recreation: Whites, blacks, and hispanics in Chicago's public parks. *Journal of Leisure Research*, 19(3), 205-222.

Indian Law Resource Center. (2010). Indian religious freedom at Devil's Tower National Monument. Retrieved from
http://www.indianlaw.org/projects/past_projects/cheyenne_river

Jacoby, K. (2001). Crimes against nature: Squatters, poachers, thieves, and the hidden history of American conservation. Berkeley, CA: University of California Press.

Jager, E., & Halpenny, E. A. (2012). Supporting the CBD AICHI biodiversity conservation targets through park tourism: A case study of parks Canada's visitor experience programme. *Parks*, 18(2), 78-91.

Johnson, C. Y., Bowker, J. M., English, D. B. K., & Worthen, D. (1997). Theoretical perspectives of ethnicity and outdoor recreation: A review and synthesis of African-American and European-American participation (General Technical Report SRS-11). Athens, GA: Southern Research Station, U.S. Forest Service, U.S. Department of

Agriculture. Retrieved from http://www.srs.fs.usda.gov/pubs/gtr/gtr_srs011.pdf

Johnson, C. Y., Bowker, J. M., English, D. B. K., & Worthen, D. (1998). Wildland recreation in the rural South: An examination of marginality and ethnicity theory. *Journal of Leisure Research* 30(1), 101-120. Retrieved from http://www.srs.fs.usda.gov/pubs/ja/ja_johnson013.pdf

Johnson, C. Y., Bowker, J. M., & Cordell, H. K. (2005). Acculturation via nature-based outdoor recreation: A comparison of Mexican and Chinese ethnic groups in the United States. *Environmental Practice*, 7(4), 257-272. doi:10.1017/S1466046605050398

Johnson, C. Y., Horan, P. M., & Pepper, W. (1997). Race, rural residence, and wildland visitation: Examining the influence of sociocultural meaning. *Rural Sociology*, 62, 89-110. doi:10.1111/j.1549-0831.1997.tb00646.x

Johnson, T. D., & Kreider, R. M. (2013). Mapping interracial/interethnic married-couple households in the United States: 2010. Washington, DC: U.S. Census Bureau. Retrieved from www.census.gov/hhes/socdemo/marriage/data/census/InterracialMarriages_PAA2013_FINAL.pdf

* Le, L. (2007a). Big Cypress National Preserve visitor study (Spring) (184.1-BICY) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=184.1>

* Le, L. (2007b). Glen Canyon National Recreation Area visitor study (Spring) (186.1-GLCA) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=186.1>

- * Le, L. (2007c). Glen Canyon National Recreation Area visitor study (Summer) (186.2-GLCA) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=186.2>
- * Le, L. (2007d). Independence National Historical Park visitor study (Summer) (195-INDE) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=195>
- * Le, L. (2007e). Rainbow Bridge National Monument visitor study (Summer) (194-RABR) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=194>
- * Le, L. (2008a). Fire Island National Seashore visitor study (Summer) (203-FIIS) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=203>
- * Le, L. (2008b). Yosemite National Park visitor study (Summer) (198-YOSE) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=198>
- * Le, L. (2009a). Boston National Historical Park visitor study (Summer) (218-BOST) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=218>
- * Le, L. (2009b). Fort Larned National Historic Site visitor study (Spring) (209-FOLS) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=209>

- * Le, L. (2009c). Homestead National Monument of America visitor study (Spring) (210-HOME) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=210>
 - * Le, L. (2009d). Minuteman Missile National Historic Site visitor study (Spring) (211-MIMI) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=211>
 - * Le, L. (2009e). Yosemite National Park visitor study (Summer) (215-YOSE) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=215>
 - * Le, L. (2010a). Curecanti National Recreation Area visitor study (Summer) (233-CURE) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=233>
 - * Le, L. (2010b). Richmond National Battlefield Park visitor study (Summer) (234-RICH) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=234>
- Lee, K. J., & Scott, D. (2011). Participation in wildlife watching: A multiple hierarchy stratification perspective. *Human Dimensions of Wildlife*, 16(5), 330-344.
doi:10.1080/10871209.2011.597825
- Lindsay, J. J., & Ogle, R. A. (1972). Socioeconomic patterns of outdoor recreation use near urban areas. *Journal of Leisure Research*, 4(1), 19-24.

- * Littlejohn, M. (2007a). Agate Fossil Beds National Monument visitor study (Summer) (191-AGFO) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=191>
- * Littlejohn, M. (2007b). Blue Ridge Parkway visitor study (Fall) (197.1-BLRI) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=197.1>
- * Littlejohn, M. (2007c). Fort Union Trading Post National Historic Site visitor study (Summer) (189-FOUS) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=189>
- * Littlejohn, M. (2007d). Mount Rushmore National Memorial visitor study (Summer) (192-MORU) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=192>
- * Littlejohn, M. (2008a). Blue Ridge Parkway visitor study (Spring) (197.2-BLRI) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=197.2>
- * Littlejohn, M. (2008b). Everglades National Park visitor study (Spring) (199.2-EVER) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=199.2>
- * Littlejohn, M. (2008c). Everglades National Park visitor study (Winter) (199.1-EVER) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=199.1>

- * Littlejohn, M. (2008d). Great Smoky Mountains National Park visitor study (Spring) (205.1-GRSM) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=205.1>
- * Littlejohn, M. (2008e). Great Smoky Mountains National Park visitor study (Fall) (205.2-GRSM) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=205.2>
- * Littlejohn, M. (2009a). Death Valley National Park visitor study (Fall) (224.1-DEVA) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=224.1>
- * Littlejohn, M. (2009b). Indiana Dunes National Lakeshore visitor study (Summer) (220-INDU) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=220>
- * Littlejohn, M. (2009c). James A. Garfield National Historic Site visitor study (Summer) (217.1-JAGA) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=217.1>
- * Littlejohn, M. (2009d). Perry's Victory and International Peace Memorial visitor study (Summer) (212-PEVI) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=212>
- * Littlejohn, M. (2009e). Women's Rights National Historical Park visitor study (Summer) (213-WORI) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=213>

- * Littlejohn, M. (2010a). Black Canyon of the Gunnison National Park visitor study (Spring) (231.2-BLCA) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=231.2>
- * Littlejohn, M. (2010b). Chattahoochee River National Recreation Area visitor study (Summer) (230-CHAT) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=230>
- * Littlejohn, M. (2010c). Death Valley National Park visitor study (Spring) (224.2-DEVA) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=224.2>
- * Littlejohn, M. (2010d). Fort Union National Historic Site visitor study (Summer) (232-FOUN) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=232>
- * Littlejohn, M. (2010e). George Washington Carver National Monument visitor study (Summer) (229-GWCA) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=229>
- * Littlejohn, M. (2010f). Little River Canyon National Preserve visitor study (Spring) (228-LIRI) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=228>

- * Littlejohn, M. (2010g). New Bedford Whaling National Historical Park visitor study (Summer) (236-NEBE) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=236>
- * Littlejohn, M. (2010h). Niobrara National Scenic River visitor study (Summer) (238-NIOB) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=238>
- * Littlejohn, M. (2010i). Rocky Mountain National Park visitor study (Summer) (235-ROMO) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=235>
- * Littlejohn, M. (2011a). Fort Scott National Historic Site visitor study (Summer) (245-FOSC) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=245>
- * Littlejohn, M. (2011b). Petersburg National Battlefield visitor study (Summer) (246-PETE) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=246>
- * Littlejohn, M. (2011c). Rocky Mountain National Park visitor study (Winter) (235.2-ROMO) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=235.2>
- * Littlejohn, M. (2011d). Shenandoah National Park visitor study (Summer) (247.1-SHEN) [Data file]. University of Idaho Park Studies Unit, Visitor Services Project. Retrieved from <https://vsp.uidaho.edu/project-detail.htm?projectNumber=247.1>

- Liu, H. L., & Bradley, M. J. (2013). Wildlife related recreation: Urban and rural perceptions. Presented at the 2013 Annual Northeastern Recreation Research Symposium. Amherst, MA: Scholarworks@UMassAmhearst. Retrieved from <http://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1043&context=nerr>
- Livengood, J. S., & Stodolska, M. (2004). The effects of discrimination and constraints negotiation on leisure behavior of American Muslims in the post-September 11 America. *Journal of Leisure Research* 36(2), 183-208.
- Manfredo, M. J., Teel, T. L., & Henry, K. L. (2009). Linking society and environment: A multilevel model of shifting wildlife value orientations in the western United States. *Social Science Quarterly*, 90(2), 407–427. doi:10.1111/j.1540-6237.2009.00624.x
- McDonald, J., & Hutchinson, I. J. (1987). Minority and ethnic variations in outdoor recreation participation: Trends and issues. *Therapeutic Recreation Journal*, 21(1), 26-35. Retrieved from <http://js.sagamorepub.com/trj/article/view/4349>
- Meeker, J. W. (1973). Red, white, and black in the National Parks. *The North American Review*, 258(3), 3-7. Retrieved from <http://www.jstor.org/stable/25117473>
- Mott, W. P. (1987). Urban superintendents' conference report. New York, NY: National Park Service, U.S. Department of the Interior. Retrieved from <https://www.nps.gov/subjects/urban/upload/Urban-Supt-Conference-Report-1987.pdf>
- National Park Service. (n.d.). Discover our shared heritage travel itinerary: Places reflecting America's diverse cultures. Washington, DC: Heritage Education Services, National Park Service, U.S. Department of the Interior. Retrieved from

http://www.nps.gov/nr/Travel/cultural_diversity/list_of_sites.html

National Park Service. (2012). Urban parks and programs affinity caucus: Conference report from the National Park Service (pp. 1-9). New York, NY: National Park Service, U.S. Department of the Interior. Retrieved from

<http://www.nps.gov/subjects/urban/upload/Urban-Parks-Caucus-Report-2012.pdf>

National Park Service. (2014). Achieving relevance in our second century. Washington, DC: National Council for Interpretation, Volunteers and Education, National Park Service, U.S. Department of the Interior. Retrieved from

http://www.nps.gov/interp/IEV%20Strategic%20Plan_FINAL.pdf

National Parks Second Century Commission. (2009). Connecting people and parks committee report. Washington, DC: National Parks Conservation Association. Retrieved from

http://www.npca.org/assets/pdf/Committee_People_and_Parks.PDF

Needham, M. D., Rollins, R. B., & Vaske, J. J. (2005). Skill level and normative evaluations among summer recreationists at alpine ski areas. *Leisure/Loisir*, 29(1), 71-94.

doi:10.1080/14927713.2005.9651324

* Nielsen. (n.d.). ZIP code look-up [Data files downloaded from August to November 2013].

Retrieved from

<https://segmentationsolutions.nielsen.com/mybestsegments/Default.jsp?ID=20>

Nielsen. (2009). The more affluent and more urban are more likely to use social networks.

Retrieved from <http://www.nielsen.com/us/en/insights/news/2009/the-more-affluent-and-more-urban-are-more-likely-to-use-social-networks.html>

Nielsen. (2013). Nielsen PRIZM segment narratives. Retrieved from

www.geographicresearch.com/PDF/2013_Nielsen_PRIZM_Segment_Narratives.pdf

Nielsen. (2015a). Nielsen PRIZM social groups. Retrieved from

<https://segmentationsolutions.nielsen.com/mybestsegments/Default.jsp?ID=7020&menuOption=learnmore&pageName=PRIZM%2BSocial%2BGroups&segSystem=CLA.PNE>

Nielsen. (2015b). Nielsen urbanization. Retrieved from

<https://segmentationsolutions.nielsen.com/mybestsegments/Default.jsp?ID=7030>

Nielsen. (2015c). Segment explorer. Retrieved from

<https://segmentationsolutions.nielsen.com/mybestsegments/Default.jsp?ID=30&pageName=Segment%2BExplorer>

Nielsen. (2016). 2016 Nielsen PRIZM segmentation system: 04 young digerati. Retrieved from

<https://segmentationsolutions.nielsen.com/mybestsegments/Default.jsp?ID=37&id1=CLA.PNE&id2=04>

Parker, K., Morin, R., Menasce Horowitz, J., & Lopez, M. H. (2015). Multiracial in America: Proud, diverse and growing in numbers. Washington, DC: Pew Research Center.

Retrieved from http://www.pewsocialtrends.org/files/2015/06/2015-06-11_multiracial-in-america_final-updated.pdf

Reardon, S. F., & Bischoff, K. (2011a). Growth in the residential segregation of families by income, 1970-2009. In J. R. Logan (Ed.), Diversity and disparities: America enters a new century (pp. 208-233). New York, NY: Russell Sage Foundation. Retrieved from

https://www.russellsage.org/sites/all/files/logan/logan_diversity_chapter7.pdf

- Reardon, S. F., & Bischoff, K. (2011b). Income inequality and income segregation. *American Journal of Sociology*, 116(4), 1092-1153. doi:10.1086/657114
- Roberts, N. S. (2003). Ethnic minority visitors and non-visitors: An examination of constraints regarding outdoor recreation participation in Rocky Mountain National Park (Unpublished Doctoral Dissertation). Colorado State University, Fort Collins, CO. Dissertation Abstracts International, No. 3114692.
- Roberts, N. S., & Rodriguez, D. A. (2008). Use of multiple methods: An examination of constraints effecting ethnic minority visitor use of national parks and management implications. *Ethnic Studies Review*, 31(2), 35-70. Retrieved from http://www.academia.edu/19734222/Use_of_Multiple_Methods_An_Examination_of_Constraints_Effecting_Ethnic_Minority_Visitor_Use_of_National_Parks_and_Management_Implications
- Rodriguez, D. A., Clarke, T., & Alamillo, J. (n.d.). Engaging and connecting non-traditional minority audiences and National Parks: Literature review and critical analysis. Thousand Oaks, CA: Coastal Southern California Science and Learning. Retrieved from http://www.mednscience.org/download_product/1365/0
- Rodriguez, D. A., & Roberts, N. S. (2002). State of the knowledge report: The association of race/ethnicity, gender and social class in outdoor recreation experiences. Fort Collins, CO: Department of Natural Resource Recreation and Tourism, Colorado State University. Retrieved from https://www.nature.nps.gov/socialscience/docs/Rodriguez_Roberts_Rep.pdf

- Sharaievska, I., Stodolska, M., Shinew, K. J., & Kim, J. (2010). Perceived discrimination in leisure settings in Latino urban communities. *Leisure/Loisir*, 34(3), 295-326.
doi:10.1080/14927713.2010.521319
- Sharaievska, I., Stodolska, M., & Floyd, M. F. (2013). Discrimination in leisure contexts. In M. Stodolska, K. J. Shinew, M. F. Floyd, & G. J. Walker (Eds.), *Race, ethnicity, and leisure: Perspectives on research, theory, and practice* (pp. 177-190). Champaign, IL: Human Kinetics.
- Shaull, S. L., & Gramann, J. H. (1998). The effect of cultural assimilation on the importance of family-related and nature-related recreation among Hispanic Americans. *Journal of Leisure Research*, 30(1), 47-63. Retrieved from <http://js.sagamorepub.com/jlr/article/view/778>
- Shoemaker, S. (1989). Segmentation of the senior pleasure travel market. *Journal of Travel Research*, 27(3), 14-21. doi:10.1177/004728758902700304
- Shores, K., Scott, D., & Floyd, M. (2007). Constraints to outdoor recreation: A multiple hierarchy stratification perspective. *Leisure Sciences*, 29, 227-246. doi:10.1080/01490400701257948
- Silverberg, K. E., Backman, S. J., & Backman, K. F. (1996). A preliminary investigation into the psychographics of nature-based travelers to the southeastern United States. *Journal of Travel Research*, 35(2), 19-28. doi:10.1177/004728759603500204
- Solop, F. I., Hagen, K. K., & Ostergren, D. (2003). *The National Park Service comprehensive survey of the American public: Racial and ethnic diversity of National Park System visitors and non-visitors technical report*. Flagstaff, AZ: Social Research Laboratory, Northern Arizona

University. Retrieved from

<http://www.nature.nps.gov/socialscience/docs/archive/EthnicAndRacialDiversity.pdf>

Spence, M. (1999). *Dispossessing the wilderness: Indian removal and the making of the National Parks*. New York, NY: Oxford University Press.

Stansfield, R., Manning, R., Budruk, M., & Floyd, M. (2006). Racial discrimination in parks and outdoor recreation: An empirical study. In J. Peden, & R. Schuster (Comp. & Eds.), *Proceedings of the 2005 Northeastern Recreation Research Symposium (General Technical Report NE-341)* (pp. 247-253). Newton Square, PA: U.S. Forest Service, U.S. Department of Agriculture. Retrieved from

http://www.fs.fed.us/ne/newtown_square/publications/technical_reports/pdfs/2006/341%20papers/stanfield341.pdf

Taylor, P. A., Grandjean, B. D., & Dorssom, M. (2011). *National Park Service comprehensive survey of the American public, 2008–2009: Racial and ethnic diversity of National Park System visitors and non-visitors* (Natural Resource Report NPS/NRSS/SSD/NRR—2011432). Fort Collins, CO: Natural Resource Stewardship and Science, National Park Service, U.S. Department of Interior. Retrieved from

www.nature.nps.gov/socialscience/docs/CompSurvey2008_2009RaceEthnicity.pdf

U.S. Census Bureau. (n.d.). *Income in the past 12 months (in 2011 inflation-adjusted dollars), 2007-2011. American community survey 5-year estimates (Table S1901)*. Washington, DC: U.S. Census Bureau. Retrieved from

<http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

- U.S. Census Bureau. (2010). Income, poverty and health insurance coverage in the United States: 2009, current population reports (Report P60-238, and Table FINC-07). Washington, DC: U.S. Census Bureau. Retrieved from <https://www.census.gov/prod/2010pubs/p60-238.pdf>
- U.S. Census Bureau. (2012). U.S. Census Bureau projections show a slower growing, older, more diverse nation a half century from now. Washington, DC: U.S. Census Bureau. Retrieved from <https://www.census.gov/newsroom/releases/archives/population/cb12-243.html>
- U.S. Congress. (1997). Act to establish a National Park Service (Organic Act), 1916. In L. M. Dilsaver (Ed.), *America's National Park system: The critical documents* (pp. 46-47). Lanham, MD: Rowman & Littlefield Publishers. Retrieved from http://www.nps.gov/parkhistory/online_books/anps/anps_1i.htm
- Vaske, J. J. (2008). *Survey research and analysis: Applications in parks, recreation, and human dimensions*. State College, PA: Venture Publishing, Inc.
- Walker, G. J., Deng, J., & Dieser, R. B. (2001). Ethnicity, acculturation, self-construal, and motivations for outdoor recreation. *Leisure Sciences*, 23, 263-283. doi:10.1080/01490400152809115
- Washburne, R. F. (1978). Black under-participation in wildland recreation: Alternative explanations. *Leisure Sciences*, 1, 175-188. doi:10.1080/01490407809512880
- Webber, R. (2004). Designing geodemographic classifications to meet contemporary business needs. *Interactive Marketing*, 5(3), 219-237. doi:10.1057/palgrave.im.4340240

- Weber, J. & Sultana, S. (2013). The civil rights movement and the National Park System. *Tourism Geographies*, 15(3), 444-469. doi:10.1080/14616688.2012.675515
- West, P. C. (1989). Urban region parks and black minorities: Subculture, marginality, and interracial relations in park use in the Detroit metropolitan area. *Leisure Sciences*, 11(1), 11-28. doi:10.1080/01490408909512202
- Woodard, M. D. (1988). Class, regionality, and leisure among urban black Americans: The post civil rights era. *Journal of Leisure Research*, 20(2), 87-105. Retrieved from <http://search.proquest.com/openview/390eec013b8823a933a597c971da3cad/1>
- Zhou, W., Troy, A., Morgan Grove, J., & Jenkins, J. C. (2009). Can money buy green? Demographic and socioeconomic predictors of lawn-care expenditures and lawn greenness in urban residential areas. *Society and Natural Resources*, 22(8), 744-760. doi:10.1080/08941920802074330

Epilogue

- Loeffler, J., & Loeffler, C. (2012). *Thinking like a watershed: Voices from the West*. Albuquerque, NM: University of New Mexico Press.

Appendix

Chapter 2: The Politics of Protected Areas

Table A2-1

National Parks Created Between 1934-2014

Date Established	National Park Unit	State	
1934	May 30	Everglades National Park	FL
1934	June 14	Ocmulgee National Monument	GA
1934	June 19	Natchez Trace Parkway	MS, AL, TN
1934	June 21	Monocacy National Military Park	MD
1934	June 26	Thomas Jefferson Memorial	DC
1935	Jan 4	Fort Jefferson National Monument	FL
1935	June 20	Big Bend National Park	TX
1935	Aug 21	Fort Stanwix National Monument	NY
1935	Aug 27	Ackia Battleground National Monument	MS
1935	Aug 21	Andrew Johnson National Monument	TN
1935	Dec 20	Jefferson National Expansion Memorial	MO
1936	March 2	Richmond National Battlefield Park	VA
1936	March 19	Homestead National Monument of America	NE
1936	May 26	Fort Frederica National Monument	GA
1936	June 2	Perry's Victory and International Peace Memorial National Monument	OH
1936	June 29	Whitman Mission National Monument	WA
1936	Aug 16	Joshua Tree National Monument	CA
1936	Oct 13	Boulder Dam Recreational Area	NV, AZ
1936	Nov 14	Bull Run Recreational Demonstration Area	VA
1936	Nov 14	Catoctin Recreational Demonstration Area	MD
1936	Nov 14	Chopawamsic Recreational Demonstration Area	VA
1937	Jan 22	Zion National Monument	UT
1937	April 13	Organ Pipe Cactus National Monument	AZ
1937	Aug 2	Capitol Reef National Park	UT
1937	Aug 17	Cape Hatteras National Seashore	NC
1937	Aug 25	Pipestone National Monument	MN
1938	March 17	Salem Maritime National Historic Site	MA
1938	April 26	Channel Islands National Monument	CA
1938	June 1	Saratoga National Historical Park	NY
1938	June 29	Olympic National Park	WA
1938	July 16	Fort Laramie National Historic Site	WY
1938	Aug 3	Hopewell Furnace National Historic Site	PA
1938	Sept 23	Chesapeake and Ohio Canal	DC, MD, WV
1939	May 17	Santa Rosa Island National Monument	FL
1939	May 26	Federal Hall National Memorial	NY

Date Established	National Park Unit	State	
1939	May 26	Philadelphia Custom House National Historic Site	PA
1939	July 1	Mount Rushmore National Memorial	SD
1939	July 25	Tuzigoot National Monument	AZ
1940	Mar 4	Kings Canyon National Park	CA
1940	June 11	Cumberland National Gap National Historic Park	KY, VA, TN
1940	July 1	National Cemetery of Custer's Battlefield Reservation	MT
1940	Aug 12	Fort Washington Park	MD
1940	Dec 18	Vanderbilt Mansion National Historic Site	NY
1941	Apr 5	Fort Raleigh National Historic Site	NC
1943	March 15	Jackson Hole National Monument	WY
1943	July 14	George Washington Carver National Monument	MO
1944	Jan 15	Home of Franklin D. Roosevelt National Historic Site	NY
1944	June 30	Harpers Ferry National Historical Park	WV
1944	Oct 13	Atlanta Campaign National Historical Site	GA
1945	May 22	Millerton Lake Recreation Area	CA
1945	May 22	Shasta Lake Recreation Area	CA
1946	April 18	Lake Texoma Recreation Area	OK, TX
1946	Aug 12	Castle Clinton National Monument	NY
1946	Dec 9	Adams Mansion National Historical Site	MA
1946	Dec 18	Coulee Dam National Recreation Center	WA
1947	April 25	Theodore Roosevelt National Park	ND
1948	March 11	DeSoto National Memorial	FL
1948	April 28	Fort Sumter National Monument	SC
1948	June 19	Fort Vancouver National Monument	WA
1948	June 22	Hampton National Historic Site	MD
1948	June 28	Independence National Historical Park	PA
1949	Feb 14	San Juan National Historic Site	Puerto Rico
1949	June 8	Saint Croix Island International Historic Site	ME
1949	Aug 17	Suitland Parkway	DC, MD
1949	Oct 25	Effigy Mounds National Monument	IA
1950	Aug 3	Baltimore-Washington Parkway	MD
1950	Aug 3	Greenbelt Park	MD
1950	Sept 14	Grand Teton National Park	WY
1950	Sept 21	Fort Caroline National Memorial	FL
1952	Mar 4	Virgin Islands National Historic Site	VI
1952	June 27	Shadow Mountain Recreation Area	CO
1952	July 9	Coronado National Memorial	AZ
1954	June 28	Fort Union National Monument	NM
1955	July 26	City of Refuge National Historic Park	HI
1955	Dec 6	Edison Home National Historical Site	NJ
1956	April 2	Booker T. Washington National Monument	VA
1956	July 14	Edison Laboratory National Monument	NJ
1956	July 20	Pea Ridge National Military Park	AR
1956	July 25	Horseshoe Bend National Military Park	AL
1956	Aug 2	Virgin Islands National Park	VI

Date Established	National Park Unit	State	
1958	April 18	Glen Canyon National Recreation Area	UT, TX
1958	May 29	Fort Clatsop National Memorial	OR
1958	Aug 14	General Grant National Memorial	NY
1958	Sept 2	Grand Portage National Monument	MN
1959	April 14	Minuteman National Historical Park	MA
1959	Sept 1	Franklin D. Roosevelt Memorial	DC
1960	April 22	Wilson's Creek National Battlefield	MO
1960	June 3	Bent's Old Fort National Historic Site	CO
1960	July 6	Arkansas Post National Memorial	AR
1960	Sept 13	Haleakalā National Park	HI
1960	Dec 24	St. Thomas National Historic Site	VI
1961	May 11	Russell Cave National Monument	AL
1961	Aug 7	Cape Cod National Seashore	MA
1961	Sept 8	Fort Davis National Historic Site	TX
1961	Sept 13	Fort Smith National Historic Site	AK
1961	Oct 4	Piscataway Park	MD
1961	Dec 28	Buck Island Reef National Monument	VI
1962	Feb 19	Lincoln Boyhood National Memorial	IN
1962	April 27	Hamilton Grange National Memorial	NY
1962	May 31	Whiskeytown-Shasta-Trinity National Recreation Area	CA
1962	July 25	Sagamore Hill National Historic Site	NY
1962	July 25	Theodore Roosevelt Birthplace National Historic Site	NY
1962	Sept 5	Edison National Historic Site	NJ
1962	Sept 5	Frederick Douglass National Historic Site	DC
1962	Sept 13	Point Reyes National Seashore	CA
1962	Sept 28	Padre Island National Seashore	TX
1963	July 22	Flaming Gorge Recreation Area	UT, WY
1964	Aug 27	Ozark National Scenic Riverways	MO
1964	Aug 30	Fort Bowie National Historic Site	AZ
1964	Aug 31	Allegheny Portage Railroad National Historic Site	PA
1964	Aug 31	Fort Larned National Historic Site	KS
1964	Aug 31	John Muir National Historic Site	CA
1964	Aug 31	Johnstown Flood National Memorial	PA
1964	Aug 31	Saint-Gaudens National Historic Site	NH
1964	Sept 11	Fire Island National Seashore	NY
1964	Sept 12	Canyonlands National Park	UT
1964	Dec 31	Bighorn Canyon National Recreation Area	WY, MT
1965	Feb 1	Arbuckle National Recreational Area	OK
1965	Feb 11	Curecanti National Recreation Area	CO
1965	March 15	Sanford National Recreation Area	TX
1965	May 15	Nez Perce National Historic Park	ID
1965	June 5	Agate Fossil Beds National Monument	NE
1965	June 28	Pecos National Historical Park	NM
1965	July 30	Golden Spike National Historic Site	UT

Date Established	National Park Unit	State	
1965	Aug 12	Herbert Hoover National Historic Site	IA
1965	Aug 28	Hubbell Trading Post National Historic Site	AZ
1965	Aug 31	Alibates Flint Quarries National Monument	TX
1965	Sept 1	Delaware Water Gap National Recreation Area	PA, NJ
1965	Sept 21	Assateague Island National Seashore	MD, VA
1965	Oct 22	Roger Williams National Memorial	RI
1965	Nov 11	Amistad National Recreation Area	TX
1966	March 10	Cape Lookout National Seashore	NC
1966	June 20	Fort Union Trading Post National Historic Site	MT, ND
1966	June 30	Chamizal National Memorial	TX
1966	July 23	George Rogers Clark National Historical Park	IN
1966	Sept 9	San Juan Island National Historical Park	WA
1966	Oct 15	Guadalupe Mountains National Park	TX
1966	Oct 15	Pictured Rocks National Lakeshore	MI
1966	Oct 15	Wolf Trap Farm Park	VA
1966	Nov 2	Theodore Roosevelt Inaugural National Historic Site	NY
1966	Nov 5	Indiana Dunes National Lakeshore	IN
1967	May 26	John F. Kennedy National Historic Site	MA
1967	Nov 27	Eisenhower National Historic Site	PA
1968	March 12	National Visitor Center	DC
1968	April 5	Saugus Iron Works National Historic Site	MA
1968	Oct 2	Appalachian National Scenic Trail	ME, NH, VT, MA, CT, NY, NJ, PA, MD, WV, VA, TN, NC, GA
1968	Oct 2	Lake Chelan National Recreation Area	WA
1968	Oct 2	North Cascades National Park	WA
1968	Oct 2	Redwood National Park	CA
1968	Oct 2	Ross Lake National Recreation Area	WA
1968	Oct 2	Saint Croix National Scenic River	MN, WI
1968	Oct 17	Carl Sandburg Home National Historic Site	NC
1968	Oct 18	Biscayne National Park	FL
1969	Jan 20	Marble Canyon National Monument	AZ
1969	Aug 20	Florissant Fossil Beds National Monument	CO
1969	Dec 2	Lyndon B. Johnson National Historical Park	TX
1969	Dec 2	William Howard Taft National Historic Site	OH
1970	Sept 26	Apostle Islands National Lakeshore	WI
1970	Oct 16	Andersonville National Historic Site	GA
1970	Oct 16	Fort Point National Historic Site	CA
1970	Oct 21	Sleeping Bear Dunes National Lakeshore	MI
1971	Jan 8	Chesapeake and Ohio Canal National Historic Park	DC, MD, WV
1971	Jan 8	Gulf Islands National Seashore	FL, MS
1971	Jan 8	Voyageurs National Park	MN
1971	Aug 18	Lincoln Home National Historic Site	IL
1972	March 1	Buffalo National River	AR

Date Established	National Park Unit	State	
1972	June 16	John F. Kennedy Center for the Performing Arts	DC
1972	Aug 17	Pu'ukohola Heiau National Historic Site	HI
1972	Aug 25	Grant-Kohrs Ranch National Historic Site	MT
1972	Aug 25	John D. Rockefeller, Jr. Memorial Parkway	WY
1972	Oct 9	Longfellow National Historic Site	MA
1972	Oct 21	Hohokam Pima National Monument	AZ
1972	Oct 21	Mar-A-Lago National Historic Site	FL
1972	Oct 21	Thaddeus Kosciuszko National Memorial	PA
1972	Oct 23	Cumberland Island National Seashore	GA
1972	Oct 23	Fossil Butte National Monument	WY
1972	Oct 27	Gateway National Recreation Area	NY, NJ
1972	Oct 27	Golden Gate National Recreation Area	CA
1973	Dec 28	Lyndon Baines Johnson Memorial Grove on the Potomac	DC
1974	Mar 7	Big South Fork National River and Recreation Area	KY, TN
1974	Aug 1	Constitution Gardens	DC
1974	Oct 1	Boston National Historical Park	MA
1974	Oct 11	Big Cypress National Preserve	FL
1974	Oct 11	Big Thicket National Preserve	TX
1974	Oct 26	Clara Barton National Historic Site	MD
1974	Oct 26	John Day Fossil Beds National Monument	OR
1974	Oct 26	Knife River Indian Villages National Historic Site	ND
1974	Oct 26	Martin Van Buren National Historic Site	NY
1974	Oct 26	Springfield Armory National Historic Site	MA
1974	Oct 26	Tuskegee Institute National Historic Site	AL
1974	Dec 27	Cuyahoga Valley National Recreation Area	OH
1975	Jan 3	Canaveral National Seashore	FL
1976	Mar 17	Chickasaw National Recreation Area	OK
1976	June 30	Klondike Gold Rush National Historic Park	AK, WA
1976	July 4	Valley Forge National Historical Park	PA
1976	Aug 19	Ninety Six National Historic Site	SC
1976	Oct 12	Obed Wild and Scenic River	TN
1976	Oct 18	Congaree Swamp National Monument	SC
1976	Oct 18	Eugene O'Neill National Historic Site	CA
1976	Oct 21	Monocacy National Battlefield	MD
1977	May 26	Eleanor Roosevelt National Historic Site	NY
1978	Jun 5	Lowell National Historical Park	MA
1978	Aug 15	Chattahoochee River National Recreation Area	GA
1978	Aug 18	War in the Pacific National Historic Park	Guam
1978	Oct 19	Fort Scott National Historic Site	KS
1978	Nov 10	Ebey's Landing National Historical Reserve	WA
1978	Nov 10	Edgar Allan Poe National Historic Site	PA
1978	Nov 10	Friendship Hill National Historic Site	PA
1978	Nov 10	Jean Lafitte National Historical Park and Preserve	LA
1978	Nov 10	Kaloko-Honokohau National Historical Park	HI

Date Established	National Park Unit	State	
1978	Nov 10	Maggie L. Walker National Historic Site	VA
1978	Nov 10	Middle Delaware National Scenic River	PA
1978	Nov 10	Missouri National Recreational Rvier	NE, SD
1978	Nov 10	New River Gorge National River	WV
1978	Nov 10	Palo Alto Battlefield National Historical Park	TX
1978	Nov 10	Rio Grande Wild and Scenic River	TX
1978	Nov 10	Saint Paul's Church National Historic Site	NY
1978	Nov 10	San Antonio Missions National Historical Park	TX
1978	Nov 10	Santa Monica Mountains National Recreation Area	CA
1978	Nov 10	Thomas Stone National Historic Site	MD
1978	Nov 10	Upper Delaware Scenic and Recreational River	PA
1978	Dec 1	Aniakchak National Monument & Preserve	AK
1978	Dec 1	Bering Land Bridge National Preserve	AK
1978	Dec 1	Cape Krusenstern National Monument	AK
1978	Dec 1	Denali National Monument	AK
1978	Dec 1	Gates of the Arctic National Park & Preserve	AK
1978	Dec 1	Glacier Bay National Monument	AK
1978	Dec 1	Katmai National Monument	AK
1978	Dec 1	Kenai Fjords National Park	AK
1978	Dec 1	Kobuk Valley National Park	AK
1978	Dec 1	Lake Clark National Park & Preserve	AK
1978	Dec 1	Noatak National Preserve	AK
1978	Dec 1	Wrangell-St. Elias National Park & Preserve	AK
1978	Dec 1	Yukon-Charley Rivers National Preserve	AK
1979	Oct 12	Frederick Law Olmstead National Historic Site	MA
1980	Mar 5	Channel Islands National Park	CA
1980	Jun 28	Biscayne National Park	FL
1980	July 1	Vietnam Veterans Memorial	DC
1980	Sept 9	USS Arizona Memorial	HI
1980	Oct 10	Boston African American National Historic Site	MA
1980	Oct 10	Martin Luther King Jr National Historic Site	GA
1980	Dec 2	Alagnak Wild River	AK
1980	Dec 19	Chaco Culture National Historic Park	NM
1980	Dec 19	Salinas National Monument	NM
1980	Dec 22	Kalaupapa National Historical Park	HI
1980	Dec 28	James A. Garfield National Historic Site	OH
1980	Dec 28	Women's Rights National Historical Park	NY
1983	Mar 28	Natchez Trace National Scenic Trail	MS, AL, TN
1983	Mar 28	Potomac Heritage National Scenic Trail	DC, MD, PA, VA
1983	May 23	Harry S Truman National Historic Site	MO
1986	Oct 21	Steamtown National Historic Site	PA
1986	Oct 27	Great Basin National Park	NV
1986	Oct 28	Korean War Veterans Memorial	DC
1987	Jun 25	Pennsylvania Avenue National Historic Site	DC
1987	Dec 23	Jimmy Carter National Historic Site	GA

Date Established	National Park Unit	State	
1987	Dec 31	El Malpais National Monument	NM
1988	Feb 16	Timucuan Ecological and Historic Preserve	FL
1988	Jun 27	San Francisco Maritime National Historical Park	CA
1988	Sept 8	Charles Pinckney National Historic Site	SC
1988	Oct 7	Natchez National Historical Park	MS
1988	Oct 31	National Park of American Samoa	AS
1988	Oct 31	Poverty Point National Monument	LA
1988	Nov 18	City of Rocks National Reserve	ID
1988	Nov 18	Hagerman Fossil Beds National Monument	ID
1988	Nov 18	Mississippi National River and Recreation Area	MN
1988	Dec 26	Bluestone National Scenic River	WV
1988	Dec 26	Gauley River National Recreation Area	WV
1989	Oct 2	Ulysses S. Grant National Historic Site	MO
1990	Jun 27	Pecos National Historic Park	NM
1990	June 27	Petroglyph National Monument	NM
1990	Aug 6	Tumacacori National Historic Park	AZ
1990	Oct 31	Weir Farm National Historic Site	CT
1991	May 24	Niobrara National Scenic River	NE
1991	Dec 11	Mary McLeod Bethune Council House National Historic Site	DC
1992	Feb 24	Salt River Bay National Historical Park and Ecological Preserve	VI
1992	Mar 3	Manzanar National Historic Site	CA
1992	May 27	Hopewell Culture National Historical Park	OH
1992	Aug 26	Marsh-Billings National Historical Park	VT
1992	Oct 16	Dayton Aviation Heritage National Historical Park	OH
1992	Oct 21	Little River Canyon National Preserve	AL
1992	Oct 26	Brown vs. Board of Education National Historic Site	KS
1992	Oct 27	Great Egg Harbor Scenic and Recreational River	NJ
1992	Oct 27	Keweenaw National Historical Park	MI
1994	Oct 31	Death Valley National Park	CA
1994	Oct 31	Joshua Tree National Park	CA
1994	Oct 31	Mojave National Preserve	CA
1994	Oct 31	New Orleans Jazz National Historical Park	LA
1994	Nov 2	Cane River Creole National Historical Park	LA
1996	Nov 12	Boston Harbor Islands National Recreation Area	MA
1996	Nov 12	New Bedford Whaling National Historical Park	MA
1996	Nov 12	Nicodemus National Historic Site	KS
1996	Nov 12	Tallgrass Prairie National Preserve	KS
1996	Nov 12	Washita Battlefield National Historic Site	OK
1997	Oct 9	Oklahoma City National Memorial	OK
1998	Nov 6	Little Rock Central High School National Historic Site	AR
1998	Nov 6	Tuskegee Airmen National Historic Site	AL
1999	Nov 29	Minuteman Missile National Historic Site	SD
2000	Oct 11	First Ladies National Historic Site	OH

Date Established	National Park Unit	State	
2000	Oct 24	Rosie the Riveter/World War II Home Front National Historical Park	CA
2000	Nov 22	Great Sand Dunes National Preserve	CO
2001	Jan 17	Virgin Islands Coral Reef National monument	VI
2001	Jan 17	Minidoka National Historic Site	ID
2001	Jan 21	Governors Island National Monument	NY
2002	Aug 21	Craters of the Moon National Preserve	ID
2002	Sept 24	Flight 93 National Memorial	PA
2002	Dec 19	Cedar Creek and Belle Grove National Historical Park	VA
2004	May 29	National World War II Memorial	DC
2004	Sept 30	Lewis and Clark National Historic Park	OR, WA
2006	Feb 27	Carter G. Woodson Home National Historic Site	DC
2006	Feb 27	African Burial Ground National Monument	NY
2007	April 27	Sand Creek Massacre National Historic Site	CO
2009	Oct 28	Port Chicago Naval Magazine National Memorial	CA
2010	Dec 14	President William Jefferson Clinton Birthplace Home National Historic Site	AR
2010	Oct 22	River Raisin National Battlefield Park	MI
2011	Aug 28	Martin Luther King, Jr. Memorial	DC
2011	Nov 1	Fort Monroe National Monument	VA
2011	Nov 7	Paterson Great Falls National Historic Park	NJ
2012	Oct 8	Cesar E. Chavez National Monument	CA
2013	Mar 25	Harriet Tubman Underground Railroad National Monument	MD
2013	Mar 25	First State National Monument	DE
2013	Mar 25	Charles Young Buffalo Soldiers Monument	OH
2014	Dec 19	Tule Springs Fossil Beds National Monument	NV
2014	Dec 19	World War I Memorial and Pershing Park	DC
2014	Dec 19	Valles Caldera National Preserve	NM
2014	Dec 19	Blackstone River Valley National Historical Park	RI, MA
2014	Dec 19	Manhattan Project National Historical Park,	TN, NM, WA
2014	Dec 19	Coltsville National Historical Park	CT
2014	Dec 19	Harriet Tubman National Historical Park	NY

Note. List compiled based on information from: Liguori, 2014; Mackintosh, 2005; National Park Service, 1986; and National Park Service, 2016. The list includes the first time sites were designated. Parks may have subsequently been renamed, redesignated, transferred to another department, incorporated into another park, or abolished.

Table A2-2

Percent of House Held by Majority Party and Number of Parks Created, 1934-2010

Year	Presidential Party	Majority Party in Congress	House Majority	Number of Parks Created	Presidential Election Year
1934	Democrat	Democrat	73%	5	0
1935	Democrat	Democrat	76%	6	0
1936	Democrat	Democrat	76%	10	1
1937	Democrat	Democrat	79%	5	0
1938	Democrat	Democrat	79%	7	0
1939	Democrat	Democrat	61%	5	0
1940	Democrat	Democrat	61%	5	1
1941	Democrat	Democrat	62%	1	0
1942	Democrat	Democrat	62%	0	0
1943	Democrat	Democrat	52%	2	0
1944	Democrat	Democrat	52%	3	1
1945	Democrat	Democrat	56%	2	0
1946	Democrat	Democrat	56%	4	0
1947	Democrat	Republican	57%	1	0
1948	Democrat	Republican	57%	5	1
1949	Democrat	Democrat	61%	4	0
1950	Democrat	Democrat	61%	4	0
1951	Democrat	Democrat	54%	0	0
1952	Democrat	Democrat	54%	3	1
1953	Republican	Republican	51%	0	0
1954	Republican	Republican	51%	1	0
1955	Republican	Democrat	53%	2	0
1956	Republican	Democrat	53%	5	1
1957	Republican	Democrat	54%	0	0
1958	Republican	Democrat	54%	4	0
1959	Republican	Democrat	65%	2	0
1960	Republican	Democrat	65%	5	1
1961	Democrat	Democrat	60%	6	0
1962	Democrat	Democrat	60%	5	0
1963	Democrat	Democrat	60%	1	0
1964	Democrat	Democrat	60%	10	1
1965	Democrat	Democrat	68%	14	0
1966	Democrat	Democrat	68%	10	0
1967	Democrat	Democrat	57%	2	0
1968	Democrat	Democrat	57%	13	1
1969	Republican	Democrat	56%	4	0
1970	Republican	Democrat	56%	4	0
1971	Republican	Democrat	59%	4	0
1972	Republican	Democrat	59%	13	1
1973	Republican	Democrat	56%	1	0
1974	Republican	Democrat	56%	12	0

Year	Presidential Party	Majority Party in Congress	House Majority	Number of Parks Created	Presidential Election Year
1975	Republican	Democrat	56%	1	0
1976	Republican	Democrat	67%	8	1
1977	Democrat	Democrat	67%	1	0
1978	Democrat	Democrat	67%	33	0
1979	Democrat	Democrat	64%	1	0
1980	Democrat	Democrat	64%	12	1
1981	Republican	Democrat	56%	0	0
1982	Republican	Democrat	56%	0	0
1983	Republican	Democrat	62%	3	0
1984	Republican	Democrat	62%	0	1
1985	Republican	Democrat	58%	0	0
1986	Republican	Democrat	58%	3	0
1987	Republican	Democrat	59%	3	0
1988	Republican	Democrat	59%	11	1
1989	Republican	Democrat	60%	1	0
1990	Republican	Democrat	60%	4	0
1991	Republican	Democrat	62%	2	0
1992	Republican	Democrat	62%	9	1
1993	Democrat	Democrat	59%	0	0
1994	Democrat	Democrat	59%	5	0
1995	Democrat	Republican	53%	0	0
1996	Democrat	Republican	53%	5	1
1997	Democrat	Republican	53%	1	0
1998	Democrat	Republican	53%	2	0
1999	Democrat	Republican	51%	1	0
2000	Democrat	Republican	51%	3	1
2001	Republican	Republican	51%	3	0
2002	Republican	Republican	51%	3	0
2003	Republican	Republican	53%	0	0
2004	Republican	Republican	53%	2	1
2005	Republican	Republican	53%	0	0
2006	Republican	Republican	53%	2	0
2007	Republican	Democrat	54%	1	0
2008	Republican	Democrat	54%	0	1
2009	Democrat	Democrat	59%	2	0
2010	Democrat	Democrat	59%	2	0
2011	Democrat	Republican	56%	3	0
2012	Democrat	Republican	56%	1	1
2013	Democrat	Republican	54%	3	0
2014	Democrat	Republican	54%	7	0

Chapter 3: National Park Visitor Heterogeneity

Table A3-1

Frequency of Visitor Surveys and Observations by Region

National Park Service Region	Number of Surveys	Number of Observations
Intermountain	6	17,379
Midwest	12	18,228
Northeast	8	16,169
Pacific West	2	7,331
Southeast	7	27,864

Note. Park n = 35; observations n = 86,971

Table A3-2

Frequency of Visitor Surveys and Observations by National Park Type

National Park System Designation	Number of Surveys	Number of Observations
National Battlefield	1	1119
National Battlefield Park	1	1047
National Historical Park	4	8490
National Historic Site	6	8037
National Lakeshore	1	2314
National Monument	4	4359
National Memorial	1	2564
National Park	8	30,774
National Park & Preserve	2	3386
National Recreation Area	3	9822
National Seashore	1	2917
National Scenic River	1	1555
National Parkway	1	8946
Other	1	1641

Note. Park n = 35; observations n = 86,971

Table A3-3

List of National Park Visitors Studies, 2007-2011

National Park Site	Diversity				
	Focus*	Year	VSP ID	Region	n
Agate Fossil Beds National Monument		2007	191-AGFO	Midwest	1102
Big Cypress National Preserve	NA	2007	184.1-BICY	Southeast	2379
Black Canyon of the Gunnison National Park		2010	231.2-BLCA	Intermountain	1963
Blue Ridge Parkway		2007	197.1-BLRI	Southeast	5201
		2008	197.2-BLRI	Southeast	3745
Boston National Historical Park		2009	218-BOST	Northeast	2419
Chattahoochee River National Recreation Area		2010	230-CHAT	Southeast	2923
Congaree National Park		2011	244.1-CONG	Southeast	1429
Curecanti National Recreation Area		2010	233-CURE	Intermountain	2207
		2009	224.1-DEVA	Pacific West	1200
Death Valley National Park		2010	224.2-DEVA	Pacific West	1353
		2008	199.1-EVER	Southeast	3053
Everglades National Park	NA	2008	199.2-EVER	Southeast	1052
		2008	203-FIIS	Northeast	2917
Fire Island National Seashore		2008	203-FIIS	Northeast	2917
Fort Larned National Historic Site	NA	2009	209-FOLS	Midwest	1169
Fort Scott National Historic Site	AA	2011	245-FOSC	Midwest	1137
Fort Union National Monument	H, NA	2010	232-FOUN	Intermountain	1185
Fort Union Trading Post NHS	NA	2007	189-FOUS	Midwest	1980
George Washington Carver National Monument	AA	2010	229-GWCA	Midwest	1033
Glen Canyon National Recreation Area		2007	186.1-GLCA	Intermountain	2237
		2007	186.2-GLCA	Intermountain	2455
Great Smoky Mountains National Park	NA	2008	205.1-GRSM	Southeast	3493
		2008	205.2-GRSM	Southeast	3582
Homestead National Monument of America		2009	210-HOME	Midwest	1167
Independence National Historical Park	AA, NA	2007	195-INDE	Northeast	3321
Indiana Dunes National Lakeshore		2009	220-INDU	Midwest	2314
James A. Garfield National Historic Site		2009	217.1-JAGA	Midwest	1490
Little River Canyon National Preserve		2010	228-LIRI	Southeast	1007
Minuteman Missile National Historic Site		2009	211-MIMI	Midwest	1076
Mount Rushmore National Memorial		2007	192-MORU	Midwest	2564
New Bedford Whaling National Historical Park		2010	236-NEBE	Northeast	1663

National Park Site	Diversity				
	Focus*	Year	VSP ID	Region	n
Niobrara National Scenic River		2010	238-NIOB	Midwest	1555
Perry's Victory & International Peace Memorial	AA	2009	212-PEVI	Midwest	1641
Petersburg National Battlefield	AA	2011	246-PETE	Northeast	1119
Rainbow Bridge National Monument		2007	194-RABR	Intermountain	1057
Richmond National Battlefield	AA	2010	234-RICH	Northeast	1047
Rocky Mountain National Park		2010	235-ROMO	Intermountain	3502
		2011	235.2-ROMO	Intermountain	2773
Shenandoah National Park		2011	247.1-SHEN	Northeast	2596
Women's Rights National Historical Park		2009	213-WORI	Northeast	1087
Yosemite National Park	NA	2008	198-YOSE	Pacific West	2333
		2009	215-YOSE	Pacific West	2445

Note. *Diversity Focus National Park Service. (n.d.): Highlights cultural/heritage of AA = African Americans, H = Hispanics, NA = Native American and regions determined by the National Park Service. Park n = 35; observations n = 86,971.

Table A3-4

PRIZM66 National Park Visitors Overall Differences based on Race/Ethnicity

PRIZM66 Segment	Hispanic		Black		White		χ^2	p-value	Cramer's v
	n	%	n	%	n	%			
01 Upper Crust	19	1.7%	6	1.1%	1469	1.8%	1.966	.374	.005
02 Blue Blood Estates	9	.8%	7	1.3%	907	1.1%	1.151	.563	.004
03 Movers & Shakers	19	1.7%	11	2.0%	1735	2.2%	1.091	.579	.004
04 Young Digerati	22	2.0%	^a 3	.5%	726	.9%	11.728	.003	.014
05 Country Squires	15	1.4%	^a 11	2.0%	^{a, b} 2055	2.6%	^b 8.166	.017	.009
06 Winners Circle	12	1.1%	8	1.5%	1121	1.4%	.811	.667	.003
07 Money & Brains	39	3.6%	^a 9	1.6%	1214	1.5%	21.842	<.001	.019
08 Executive Suites	13	1.2%	10	1.8%	1139	1.4%	1.060	.588	.004
09 Big Fish, Small Pond	17	1.5%	^a 10	1.8%	^{a, b} 2323	2.9%	^b 10.896	.004	.011
10 Second City Elite	11	1.0%	^{a, b} 3	.5%	^a 1282	1.6%	^b 7.887	.019	.009
11 Gods Country	14	1.3%	^a 8	1.5%	^{a, b} 1890	2.4%	^b 8.742	.013	.010
12 Brite Lites, Lil City	20	1.8%	9	1.6%	1664	2.1%	.884	.643	.003
13 Upward Bound	25	2.3%	8	1.5%	1518	1.9%	1.407	.495	.004
14 New Empty Nests	3	.3%	^a 1	.2%	^{a, b} 583	.7%	^b 7.222	.027	.008
15 Pools & Patios	18	1.6%	3	.5%	1076	1.3%	4.032	.133	.006
16 Bohemian Mix	35	3.2%	^a 8	1.5%	925	1.2%	26.740	<.001	.022
17 Beltway Boomers	15	1.4%	^a 2	.4%	440	.5%	9.723	.008	.013
18 Kids & Cul-de-sacs	29	2.6%	9	1.6%	1303	1.6%	5.871	.053	.009
19 Home Sweet Home	29	2.6%	11	2.0%	1687	2.1%	1.428	.490	.004
20 Fast-Track Families	12	1.1%	10	1.8%	1266	1.6%	2.067	.356	.005
21 Gray Power	9	.8%	4	.7%	770	1.0%	.560	.756	.003
22 Young Influentials	18	1.6%	8	1.5%	1162	1.4%	.262	.877	.002
23 Greenbelt Sports	11	1.0%	^a 11	2.0%	^{a, b} 2131	2.7%	^b 15.957	<.001	.012
24 Up-and-Comers	12	1.1%	7	1.3%	1234	1.5%	1.831	.400	.005
25 Country Casuals	8	.7%	^a 8	1.5%	^{a, b} 1250	1.6%	^b 6.105	.047	.008
26 The Cosmopolitans	32	2.9%	^a 8	1.5%	^{a, b} 806	1.0%	^b 26.935	<.001	.022
27 Middleburg Managers	27	2.5%	14	2.6%	2197	2.7%	.399	.819	.002
28 Traditional Times	19	1.7%	^a 15	2.7%	^{a, b} 3092	3.9%	^b 18.502	<.001	.014
29 American Dreams	59	5.4%	^a 13	2.4%	1431	1.8%	52.427	<.001	.031
30 Suburban Sprawl	12	1.1%	10	1.8%	992	1.2%	1.555	.460	.005
31 Urban Achievers	31	2.8%	^a 9	1.6%	^{a, b} 913	1.1%	^b 20.222	<.001	.018
32 New Homesteaders	17	1.5%	19	3.5%	1725	2.2%	5.938	.051	.009
33 Big Sky Families	6	.5%	2	.4%	1597	2.0%	27.232	<.001	.015
34 White Picket Fences	26	2.4%	12	2.2%	805	1.0%	20.123	<.001	.018
35 Boomtown Singles	11	1.0%	11	2.0%	1369	1.7%	4.080	.130	.007
36 Blue-Chip Blues	17	1.5%	9	1.6%	562	.7%	13.123	.001	.015
37 Mayberry-ville	14	1.3%	^a 14	2.6%	^{a, b} 2349	2.9%	^b 13.458	.001	.011

PRIZM66 Segment	Hispanic		Black		White		χ^2	p-value	Cramer's v
	n	%	n	%	n	%			
38 Simple Pleasures	16	1.5%	4	.7%	2015	2.5%	^a 15.448	<.001	.012
39 Domestic Duos	4	.4%	^a 9	1.6%	695	.9%	7.179	.028	.009
40 Close-In Couples	25	2.3%	11	2.0%	500	.6%	ⁱ 30.143	<.001	.027
41 Sunset City Blues	22	2.0%	13	2.4%	1802	2.2%	.348	.840	.002
42 Red, White & Blues	8	.7%	7	1.3%	718	.9%	1.171	.557	.004
43 Heartlanders	9	.8%	^a 7	1.3%	^{a, b} 1612	2.0%	^b 11.684	.003	.011
44 New Beginnings	8	.7%	^a 13	2.4%	1128	1.4%	7.490	.024	.009
45 Blue Highways	13	1.2%	3	.5%	1866	2.3%	^a 18.387	<.001	.013
46 Old Glories	4	.4%	6	1.1%	541	.7%	3.118	.210	.006
47 City Startups	13	1.2%	4	.7%	995	1.2%	1.379	.502	.004
48 Young & Rustic	12	1.1%	^a 7	1.3%	^{a, b} 1679	2.1%	^b 8.406	.015	.009
49 American Classics	6	.5%	6	1.1%	650	.8%	1.577	.455	.004
50 Kid Country, USA	14	1.3%	9	1.6%	881	1.1%	1.574	.455	.005
51 Shotguns & Pickups	6	.5%	^a 4	.7%	^{a, b} 1198	1.5%	^b 11.331	.003	.010
52 Suburban Pioneers	9	.8%	12	2.2%	^a 579	.7%	10.683	.005	.014
53 Mobility Blues	9	.8%	12	2.2%	1195	1.5%	5.619	.060	.008
54 Multi-Culti Mosaic	36	3.3%	13	2.4%	802	1.0%	^a 42.269	<.001	.028
55 Golden Ponds	9	.8%	2	.4%	924	1.2%	5.171	.075	.007
56 Crossroads Villagers	16	1.5%	^a 8	1.5%	^{a, b} 1872	2.3%	^b 6.268	.044	.008
57 Old Milltowns	10	.9%	6	1.1%	1269	1.6%	4.607	.100	.007
58 Back Country Folks	13	1.2%	^a 6	1.1%	^{a, b} 1671	2.1%	^b 8.173	.017	.009
59 Urban Elders	18	1.6%	9	1.6%	314	.4%	^a 35.219	<.001	.027
60 Park Bench Seniors	5	.5%	4	.7%	637	.8%	1.898	.387	.004
61 City Roots	16	1.5%	8	1.5%	331	.4%	ⁱ 25.489	<.001	.022
62 Hometown Retired	11	1.0%	10	1.8%	836	1.0%	2.671	.263	.006
63 Family Thrifts	28	2.6%	15	2.7%	1239	1.5%	ⁱ 10.057	.007	.012
64 Bedrock America	14	1.3%	4	.7%	966	1.2%	1.240	.538	.004
65 Big City Blues	25	2.3%	8	1.5%	317	.4%	^a 53.798	<.001	.036
66 Low-Rise Living	14	1.3%	6	1.1%	224	.3%	^a 27.235	<.001	.024

Note. Black Visitors n = 1098, Hispanic visitors n = 1098, and White visitors n = 80,164. The Likelihood Ratio χ^2 was used in calculating statistical significance for this data. The percentages reported are the percent of each group (Black, Hispanic or White) distributed across the PRIZM66 categories, so for instance, 1.7% of all Hispanic visitors came from the 01 Upper Crust psychographic segment. Items in a given row denoted with ^a were statistically significantly different than items denoted with ^b at the p < .05 level. The χ^2 was decomposed to determine which groups were statistically significantly different.

Table A3-5

National Park Local Visitors: PRIZM66 Differences based on Race/Ethnicity

PRIZM Segment	Black		Hispanic		White		χ^2	P-value	Cramer's V
	n	%	n	%	n	%			
01 Upper Crust	2	1.4%	5	2.4%	314	2.6%	1.041	.594	.008
02 Blue Blood Estates	2	1.4%	4	1.9%	254	2.1%	.441	.802	.006
03 Movers & Shakers	2	1.4%	6	2.9%	418	3.4%	2.580	.275	.013
04 Young Digerati	1	.7%	2	1.0%	23	.2%	4.224	.121	.024
05 Country Squires	1	.7%	3	1.4%	178	1.5%	.761	.684	.007
06 Winners Circle	2	1.4%	1	.5%	187	1.5%	2.070	.355	.011
07 Money & Brains	1	.7%	2	1.0%	22	.2%	4.418	.110	.025
08 Executive Suites	3	2.0%	3	1.4%	306	2.5%	1.240	.538	.009
09 Big Fish, Small Pond	2	1.4%	4	1.9%	381	3.1%	2.961	.228	.014
10 Second City Elite	0	a	2	1.0% ^{a, b}	226	1.8% ^b	6.488	.039	.017
11 Gods Country	0	a	2	1.0% ^{a, b}	235	1.9% ^b	6.855	.032	.018
12 Brite Lites, Lil City	3	2.0%	4	1.9%	334	2.7%	.839	.657	.008
13 Upward Bound	3	2.0%	6	2.9%	219	1.8%	1.212	.546	.011
14 New Empty Nests	0		0		46	.4%	2.639	.267	.010
15 Pools & Patios	0	a	3	1.4% ^{a, b}	216	1.8% ^b	5.327	.070	.015
16 Bohemian Mix	1	.7%	2	1.0%	52	.4%	1.187	.552	.011
17 Beltway Boomers	0		3	1.4%	103	.8%	3.226	.199	.013
18 Kids & Cul-de-sacs	3	2.0%	7	3.4%	195	1.6%	3.230	.199	.018
19 Home Sweet Home	2	1.4%	3	1.4%	251	2.1%	.808	.668	.008
20 Fast-Track Families	4	2.7% ^a	4	1.9% ^{a, b}	77	.6% ^b	8.794	.012	.034
21 Gray Power	0		0		67	.5%	3.847	.146	.012
22 Young Influentials	2	1.4%	2	1.0%	169	1.4%	.298	.861	.005
23 Greenbelt Sports	1	.7%	3	1.4%	316	2.6%	4.181	.124	.016
24 Up-and-Comers	2	1.4%	3	1.4%	271	2.2%	1.202	.548	.009
25 Country Casuals	4	2.7%	5	2.4%	193	1.6%	1.743	.418	.013
26 The Cosmopolitans	2	1.4%	2	1.0%	39	.3%	4.303	.116	.024
27 Middleburg Managers	6	4.1%	7	3.4%	426	3.5%	.156	.925	.004
28 Traditional Times	7	4.8%	8	3.8%	563	4.6%	.294	.863	.005
29 American Dreams	2	1.4%	3	1.4%	78	.6%	2.380	.304	.016
30 Suburban Sprawl	1	.7%	2	1.0%	124	1.0%	.188	.910	.004
31 Urban Achievers	2	1.4%	2	1.0%	55	.4%	2.575	.276	.017
32 New Homesteaders	6	4.1%	5	2.4%	202	1.7%	4.303	.116	.021
33 Big Sky Families	1	.7%	1	.5%	199	1.6%	3.344	.188	.014
34 White Picket Fences	3	2.0% ^{a, b}	7	3.4% ^b	124	1.0% ^a	7.999	.018	.031
35 Boomtown Singles	2	1.4%	3	1.4%	286	2.3%	1.534	.464	.010
36 Blue-Chip Blues	3	2.0% ^a	4	1.9% ^a	70	.6% ^b	7.115	.029	.030

PRIZM Segment	Black		Hispanic		White		χ^2	P-value	Cramer's V			
	n	%	n	%	n	%						
37 Mayberry-ville	5	3.4%	6	2.9%	327	2.7%	.302	.860	.005			
38 Simple Pleasures	0	a	3	1.4%	a, b	423	3.5%	b	13.380	.001	.025	
39 Domestic Duos	1	.7%	1	.5%		118	1.0%		.749	.688	.007	
40 Close-In Couples	4	2.7%	a	3	1.4%	a	33	.3%	b	15.553	<.001	.053
41 Sunset City Blues	7	4.8%		6	2.9%		288	2.4%		3.027	.220	.017
42 Red, White & Blues	0	a	1	.5%	a, b	182	1.5%	b	6.265	.044	.017	
43 Heartlanders	2	1.4%		3	1.4%		361	3.0%		3.572	.168	.015
44 New Beginnings	3	2.0%		1	.5%		159	1.3%		1.967	.374	.012
45 Blue Highways	0	a	5	2.4%	b	277	2.3%	b	6.723	.035	.017	
46 Old Glories	2	1.4%	0			98	.8%		3.819	.148	.013	
47 City Startups	1	.7%	2	1.0%		179	1.5%		1.169	.557	.009	
48 Young & Rustic	2	1.4%	3	1.4%		320	2.6%		2.388	.303	.013	
49 American Classics	1	.7%	1	.5%		166	1.4%		2.158	.340	.012	
50 Kid Country, USA	3	2.0%	3	1.4%		109	.9%		2.138	.343	.015	
51 Shotguns & Pickups	2	1.4%	2	1.0%		115	.9%		.241	.886	.005	
52 Suburban Pioneers	3	2.0%	1	.5%		138	1.1%		1.882	.390	.012	
53 Mobility Blues	6	4.1%	a	2	1.0%	a, b	152	1.2%	b	6.103	.047	.027
54 Multi-Culti Mosaic	4	2.7%	a	4	1.9%	a	54	.4%	b	12.850	.002	.044
55 Golden Ponds	0		2	1.0%		133	1.1%		3.223	.200	.011	
56 Crossroads Villagers	1	.7%	3	1.4%		355	2.9%		5.525	.063	.018	
57 Old Milltowns	1	.7%	1	.5%		229	1.9%		4.523	.104	.016	
58 Back Country Folks	1	.7%	5	2.4%		255	2.1%		2.012	.366	.011	
59 Urban Elders	1	.7%	a, b	4	1.9%	a	24	.2%	b	11.488	.003	.047
60 Park Bench Seniors	3	2.0%	2	1.0%		76	.6%		3.223	.200	.020	
61 City Roots	4	2.7%	a	5	2.4%	a	37	.3%	b	21.067	<.001	.061
62 Hometown Retired	4	2.7%	a	2	1.0%	a, b	73	.6%	b	6.149	.046	.029
63 Family Thrifts	5	3.4%	a, b	8	3.8%	a	165	1.3%	b	9.378	.009	.033
64 Bedrock America	1	.7%	2	1.0%		114	.9%		.113	.945	.003	
65 Big City Blues	2	1.4%	a	2	1.0%	a, b	23	.2%	b	7.357	.025	.034
66 Low-Rise Living	2	1.4%	a	2	1.0%	a, b	21	.2%	b	7.913	.019	.036

Note. Black Visitors n = 147, Hispanic visitors n = 208, and White visitors n = 12,223. The Likelihood Ratio χ^2 was used in calculating statistical significance for this data. The percentages reported are the percent of each group (Black, Hispanic or White) distributed across the PRIZM66 categories, so for instance, 1.4% of all local Black visitors came from the 01 Upper Crust psychographic segment. Items in a given row denoted with ^a were statistically significantly different than items denoted with ^b at the p < .05 level. The χ^2 was decomposed to determine which groups were statistically significantly different.

Table A3-6

National Park Destination Visitors: PRIZM66 Differences based on Race/Ethnicity

PRIZM Segment	Black		Hispanic		White		χ^2	p-value	Cramer's V
	n	%	n	%	n	%			
01 Upper Crust	4	1.0%	14	1.6%	1155	1.7%	1.450	.484	.004
02 Blue Blood Estates	5	1.3%	5	.6%	653	1.0%	2.064	.356	.005
03 Movers & Shakers	9	2.3%	13	1.5%	1317	1.9%	1.355	.508	.004
04 Young Digerati	2	.5%	20	2.2%	703	1.0%	10.848	.004	.014
05 Country Squires	10	2.5%	12	1.3%	1877	2.8%	8.148	.017	.010
06 Winners Circle	6	1.5%	11	1.2%	934	1.4%	.175	.916	.002
07 Money & Brains	8	2.0%	37	4.2%	1192	1.8%	21.314	.000	.020
08 Executive Suites	7	1.8%	10	1.1%	833	1.2%	.879	.644	.004
09 Big Fish, Small Pond	8	2.0%	13	1.5%	1942	2.9%	8.654	.013	.010
10 Second City Elite	3	.8%	9	1.0%	1056	1.6%	3.983	.137	.007
11 Gods Country	8	2.0%	12	1.3%	1655	2.4%	5.533	.063	.008
12 Brite Lites, Lil City	6	1.5%	16	1.8%	1330	2.0%	.588	.745	.003
13 Upward Bound	5	1.3%	19	2.1%	1299	1.9%	1.291	.525	.004
14 New Empty Nests	1	.3%	3	.3%	537	.8%	4.936	.085	.007
15 Pools & Patios	3	.8%	15	1.7%	860	1.3%	2.130	.345	.006
16 Bohemian Mix	7	1.8%	33	3.7%	873	1.3%	27.342	<.001	.024
17 Beltway Boomers	2	.5%	12	1.3%	337	.5%	8.726	.013	.014
18 Kids & Cul-de-sacs	6	1.5%	22	2.5%	1108	1.6%	3.393	.183	.008
19 Home Sweet Home	9	2.3%	26	2.9%	1436	2.1%	2.505	.286	.006
20 Fast-Track Families	6	1.5%	8	.9%	1189	1.8%	4.647	.098	.007
21 Gray Power	4	1.0%	9	1.0%	703	1.0%	.009	.995	.000
22 Young Influentials	6	1.5%	16	1.8%	993	1.5%	.645	.724	.003
23 Greenbelt Sports	10	2.5%	8	.9%	1815	2.7%	14.305	.001	.012
24 Up-and-Comers	5	1.3%	9	1.0%	963	1.4%	1.231	.540	.004
25 Country Casuals	4	1.0%	3	.3%	1057	1.6%	13.411	.001	.012
26 The Cosmopolitans	6	1.5%	30	3.4%	767	1.1%	26.042	<.001	.024
27 Middleburg Managers	8	2.0%	20	2.2%	1771	2.6%	1.086	.581	.004
28 Traditional Times	8	2.0%	11	1.2%	2529	3.7%	24.191	<.001	.016
29 American Dreams	11	2.8%	56	6.3%	1353	2.0%	53.807	<.001	.034
30 Suburban Sprawl	9	2.3%	10	1.1%	868	1.3%	2.614	.271	.007
31 Urban Achievers	7	1.8%	29	3.3%	858	1.3%	20.050	<.001	.020
32 New Homesteaders	13	3.3%	12	1.3%	1523	2.2%	5.396	.067	.009
33 Big Sky Families	1	.3%	5	.6%	1398	2.1%	23.921	<.001	.015
34 White Picket Fences	9	2.3%	19	2.1%	681	1.0%	12.996	.002	.016
35 Boomtown Singles	9	2.3%	8	.9%	1083	1.6%	4.213	.122	.007
36 Blue-Chip Blues	6	1.5%	13	1.5%	492	.7%	7.551	.023	.012
37 Mayberry-ville	9	2.3%	8	.9%	2022	3.0%	18.779	<.001	.014

PRIZM Segment	Black		Hispanic		White		χ^2	p-value	Cramer's V
	n	%	n	%	n	%			
38 Simple Pleasures	4	1.0% ^a	13	1.5% ^{a, b}	1592	2.3% ^b	7.388	.025	.009
39 Domestic Duos	8	2.0% ^a	3	.3%	577	.8%	8.148	.017	.011
40 Close-In Couples	7	1.8%	22	2.5%	467	.7% ^a	28.619	<.001	.026
41 Sunset City Blues	6	1.5%	16	1.8%	1514	2.2%	1.879	.391	.005
42 Red, White & Blues	7	1.8%	7	.8%	536	.8%	3.476	.176	.008
43 Heartlanders	5	1.3% ^{a, b}	6	.7% ^a	1251	1.8% ^b	9.582	.008	.010
44 New Beginnings	10	2.5%	7	.8%	969	1.4%	5.771	.056	.009
45 Blue Highways	3	.8%	8	.9%	1589	2.3% ^a	16.275	<.001	.013
46 Old Glories	4	1.0%	4	.4%	443	.7%	1.275	.529	.004
47 City Startups	3	.8%	11	1.2%	816	1.2%	.798	.671	.003
48 Young & Rustic	5	1.3% ^{a, b}	9	1.0% ^a	1359	2.0% ^b	6.636	.036	.009
49 American Classics	5	1.3%	5	.6%	484	.7%	1.640	.440	.005
50 Kid Country, USA	6	1.5%	11	1.2%	772	1.1%	.498	.780	.003
51 Shotguns & Pickups	2	.5%	4	.4%	1083	1.6% ^a	14.331	.001	.012
52 Suburban Pioneers	9	2.3% ^a	8	.9% ^{a, b}	441	.6% ^b	10.275	.006	.015
53 Mobility Blues	6	1.5%	7	.8%	1043	1.5%	3.972	.137	.007
54 Multi-Culti Mosaic	9	2.3% ^{a, b}	32	3.6% ^a	748	1.1% ^b	34.691	<.001	.028
55 Golden Ponds	2	.5%	7	.8%	791	1.2%	3.151	.207	.006
56 Crossroads Villagers	7	1.8%	13	1.5%	1517	2.2%	3.174	.204	.006
57 Old Milltowns	5	1.3%	9	1.0%	1040	1.5%	2.000	.368	.005
58 Back Country Folks	5	1.3% ^{a, b}	8	.9% ^a	1416	2.1% ^b	9.222	.010	.010
59 Urban Elders	8	2.0%	14	1.6%	290	.4% ^a	27.556	<.001	.026
60 Park Bench Seniors	1	.3%	3	.3%	561	.8%	5.495	.064	.008
61 City Roots	4	1.0% ^{a, b}	11	1.2% ^a	294	.4% ^b	10.731	.005	.015
62 Hometown Retired	6	1.5%	9	1.0%	763	1.1%	.566	.753	.003
63 Family Thrifts	10	2.5%	20	2.2%	1074	1.6%	4.011	.135	.008
64 Bedrock America	3	.8%	12	1.3%	852	1.3%	1.019	.601	.004
65 Big City Blues	6	1.5%	23	2.6%	294	.4% ^a	48.958	<.001	.037
66 Low-Rise Living	4	1.0%	12	1.3%	203	.3% ^a	20.955	<.001	.023

Note. Black Visitors n = 400, Hispanic visitors n = 890, and White visitors n = 67,941. The Likelihood Ratio χ^2 was used in calculating statistical significance for this data. The percentages reported are the percent of each group (Black, Hispanic or White) distributed across the PRIZM66 categories, so for instance, 1.0% of all destination Black visitors came from the 01 Upper Crust psychographic segment. Items in a given row denoted with ^a were statistically significantly different than items denoted with ^b at the p < .05 level. Items in a given row denoted with ^a were statistically significantly different than items denoted with ^b at the p < .05 level. The χ^2 was decomposed to determine which groups were statistically significantly different.

Table A3-7

Sample Descriptions for PRIZM66 Psychographic Segment and Social14 Group

PRIZM66 Segment	Segment Description
04 Young Digerati	Young Digerati are tech-savvy and live in fashionable neighborhoods on the urban fringe. Affluent, highly educated, and ethnically mixed, Young Digerati communities are typically filled with trendy apartments and condos, fitness clubs and clothing boutiques, casual restaurants and all types of bars—from juice to coffee to microbrew.
Social14 Group	Group Descriptions
U1 Urban Uptown	The five segments in Urban Uptown are home to the nation’s wealthiest urban consumers. Members of this social group tend to be midscale to upscale, college educated and ethnically diverse, with above-average concentrations of Asian and Hispanic Americans. Although this group is diverse in terms of housing styles and family sizes, residents share an upscale urban perspective that’s reflected in their marketplace choices. Urban Uptown consumers tend to frequent the arts, shop at exclusive retailers, drive luxury imports, travel abroad, and spend heavily on computer and wireless technology.

Note. Text is directly quoted from Claritas, 2007 p. 14.