# REPORT ON THE PUBLIC USE OF CENTRAL PARK

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#### **FOREWORD**

This report is an extraordinary achievement in participatory social science. Not only is it the first systematic effort since 1873 to measure an entire year of Central Park's public use, the process itself is a model for how to mobilize park users to collect vital information about a public place they cherish in their daily lives. The determination to collect credible statistics about Park use is also a tribute to the highly professional leadership of the Park's managers and planners. More than a set of fascinating numbers about how we use Central Park, the report demonstrates the sheer demographic challenge entailed in managing one of the world's most beautiful and yet most heavily visited urban parks.

A public art installation is responsible for inspiring the work that led to this quite historic research. In February 2005, as the bright orange flags of Christo and Jeanne-Claude's *The Gates* were about to unfurl along 23 miles of Central Park pathways, Mayor Bloomberg had asked Conservancy President and Central Park Administrator Douglas Blonsky to estimate the number of visitors who would see the installation. Working with the Conservancy's planning and visitor services staff, more than seventy five volunteers contributed their good will and labor, standing at the Park's entrances to register hundreds of ten-minute "clicker counts" in the February sunshine and snow. Compiling all the samples, the Conservancy found that *The Gates* attracted about four million visits to the Park in sixteen days, a three- or four-fold increase over the volume believed to be typical for the entire month of February.

Most crowd estimates are of dubious scientific value as admitted police "guesstimates," but for *The Gates* installation, the Conservancy was able to publish an estimate based on careful counting, systematic sampling, and conservative interpretation. Perhaps most important, however, was the experience gained from this 2005 count for the community of park users and planners who did the data collection. Success in counting visitors at *The Gates* allowed the Conservancy leadership to see that, with more effort to recruit and train volunteer counters and interviewers, and more commitment of staff time, they could embark upon a rare Park survey and build community support for the Park at the same time, all without farming out the essential steps of data collection. It is noteworthy that the current effort at community social science, launched in 2008, was inspired by that daring work of public art, in a park which is itself a great work of public art.

Why should the Central Park Conservancy have committed scarce resources to a laborious sampling count and to the accompanying survey? Anyone experiencing the daily stream of Park visitors arriving on foot, bicycle, roller-skates, scooter, skateboard, and horse-drawn carriage, would know that many millions of local visitors and tourists visit the Park each year. But how many millions would that be? With restricted budgets and increased operating costs, managers of parks, museums, and all major urban institutions need to know as much as possible about their constituencies. Replicable measures of park use by the appropriate temporal variables (e.g., time of day and week, seasonal variations) inform decisions about capital improvements and infrastructure maintenance. Knowledge of visits by out-of-town tourists provides an important measure of how much Central Park contributes to the city's economy. Measure of park use also serves as a barometer of the city's civic well being, especially as we learn more about where people feel safe or less secure.

However, the volunteers who braved winter weather and summer heat in 2008 and 2009 to collect the figures presented in this report, and then worked many additional months to code and enter survey results, were motivated by different needs and feelings. Love of Central Park and

the desire to be among its stewards brought more than two-hundred-seventy-five volunteer counters and interviewers to their assigned gates day after day. As they observed the flow of humanity, both neighbors (and their dogs) and people from throughout the globe, they all became ever more impressed with how essential Central Park is for the life of the city.

Kristen Lawler, a young college professor, brought her students to participate in the counting and interviewing, and coding of questionnaires. She observed that these students, who typically did not live in neighborhoods adjacent to the Park,

...always tended to see Central Park from a distance, and most said they had never thought very much about it. They took it for granted that it was exquisitely tended and safe to traverse. Learning the history of the Park and the Conservancy opened the students' eyes to the political struggles around public space and public sector austerity, struggles in which they were now beginning to feel like real participants.

Working in the Park and talking with visitors, the students developed a sense of the Park as a space in which strangers, from around the city and all over the world, come together to play and relax. Their work made them feel part of the Park and through it, of the city—in the words of one student discussing her field experience, "I felt like such a New Yorker!"

The authors of this report, and all those who made it possible, can be proud of their unusual scientific achievement. We can only hope that this study of Central Park use will receive a critical reading and that its findings will be used over and again during the coming seasons of work on behalf of one of New York City's greatest public treasures.

William Kornblum Chair, Center for Urban Research Graduate Center, City University of New York

#### PREFACE & ACKNOWLEDGMENTS

When I joined the staff of the Central Park Conservancy in 1985, the Park was a far different place than it is today. The Central Park that existed in 1985 was only just beginning to show signs of recovery from one of the darker periods in its history. Having been devastated by two decades of decline that paralleled the economic and social crisis of the City, the Park was unrecognizable as the green oasis at the heart of the City, created to reverse the toll of daily urban life on its inhabitants and to restore their physical and mental well-being. By the 1970s, lawns and meadows had become barren dustbowls. The Park's infrastructure was deteriorating, clogged catch basins resulted in chronic flooding, and crumbling paths and broken benches were the norm. Horticultural maintenance was non-existent: trees and shrubbery had not been pruned for years, the Park's woodlands were overgrown, shorelines of the lakes and ponds had eroded and large portions of the water bodies had silted in. Vandalism and graffiti were rampant throughout the Park, its more secluded landscapes had fallen prey to illicit use, and the general impression of the Park increasingly was that it was unsafe.

When the Conservancy was established in December of 1980, its mission was clear and compelling: to reverse the alarming decline of the Park and restore it to its former splendor. Founded by civic-minded citizens representing New York's philanthropic community and business leaders, the young organization forged a pioneering partnership with the City and immediately set about a series of early initiatives—cleaning up litter and graffiti, clearing debris out of catch basins, fixing broken benches, recruiting interns and volunteers to participate in horticultural restoration projects, reconstructing rustic structures, and establishing visitor centers in the Dairy and Belvedere—designed to make visible improvements in the Park and to send the message that the Park could (and would) be brought back to life.

Concurrent with these early initiatives, the Conservancy conducted an indepth analysis of every aspect of the Park and prepared a comprehensive plan for its restoration and management. Completed in 1985 under the leadership of founding President and Central Park Administrator Elizabeth Barlow Rogers, the plan, entitled *Rebuilding Central Park*, would serve as a case statement for the Conservancy's first capital campaign on behalf of the Park. I came on board to oversee the construction effort. By that time, people were beginning to take notice of the changes in the Park. Momentum was building, and the public began to see the possibility of a revived park as something that might actually be achievable. The glimmer of hope was there, but the monumental task of actually doing the work still lay ahead, and the mindset about the Park that had taken hold in the previous decade or more would not loosen its grip overnight. In those days, and in the years that followed as we began to rebuild the Park, we marveled at every sign that people were coming back—these were causes for celebration, affirming our belief in the future of the Park.

Fast forward twenty years, to 2005. In February of that year, the Conservancy was gearing up to launch our third capital campaign with the goal of completing the last of the major landscapes remaining to be restored, and at the same time preparing to host what would be the single largest public event in the Park's history: the sixteen-day installation *The Gates* by the artists Christo and Jeanne-Claude. At some imperceptible point in the interim, a corner had been turned: the tide-change in park use, once tentative, had gathered steam and taken on an air of inevitability. Long before *The Gates* made its debut one Saturday morning that February, attracting an unprecedented number of visitors throughout the entire Park, it had

become abundantly clear that the public had returned to the Park in full force, and was planning to stay. And with every beautiful spring day or winter snowfall since, the crowds have continued to increase.

Now more than ever, New Yorkers use the Park as their backyard, and they include it at the top of their lists of places they tell their friends and family from out of town to visit. That the Park is used more now, by more people, in more ways (and from more places) than ever before is readily apparent to those who have witnessed its transformation in recent decades and know something of its longer history. As the organization responsible for its stewardship, the Conservancy has a vital interest in understanding just how many visitors that means, and in knowing more about who they are, where they come from, what they are doing, and what they think. A comprehensive, scientific survey to answer these questions is something we often contemplated as the fact of the sea change in park use became increasingly evident. But the focus and resources required for an effort of this scale were considerable—especially in light of the many more tangible needs of restoring the Park and managing it in an era of unprecedented use—and it was not clear how we could realistically staff a survey as extensive as what was needed to paint a reliable picture of park use and users.

Ultimately, the Conservancy's growing contingent of volunteers would provide the solution. This study would never have been possible without the incredible commitment of time and energy by more than 275 volunteers who, working alongside 75 Conservancy staff, contributed more than 2,800 hours collecting survey data and 800 hours of data entry. The level of energy and dedication they brought to this project was nothing short of inspiring.

Bill Kornblum has been a friend of the Park and advisor to the Conservancy on numerous efforts for nearly thirty years. We first collaborated with Professor Kornblum in the early 1980s, when he conducted a comprehensive user survey in connection with the 1985 management and restoration plan for the Park. The central conclusion—that a majority of visitors to Central Park came to engage in passive recreation, while smaller but highly significant numbers came to engage in active recreation and events—played a pivotal role in justifying a restoration and management approach that was to be guided by the historic intent of the Park as a pastoral retreat, while accommodating as much as possible of the demands of contemporary use. Professor Kornblum has continued to consult for the Conservancy on subsequent user studies, including a follow-up survey in 1989 and studies in 1996 and 2000 that were somewhat more limited in scope and focus. In 2005, he worked with us on an ambitious effort to count visitors to the Park during *The Gates* installation. He has been an invaluable aide and advisor to the unprecedented effort represented by this study.

Michelle Ronda and Kristin Lawler have been our valued academic collaborators on the survey effort. Professor Ronda incorporated the survey into the curriculum of several courses she teaches in Urban Sociology and Research Methods in the Social Sciences at Marymount Manhattan College. She and her students over the course of two semesters participated throughout all four seasons of the survey. Professor Lawler, who teaches sociology at the College of Mount Saint Vincent, brought students in her independent study group to the effort to assist with the winter and spring seasons of the survey, and with data entry and survey coding. We are grateful to them both not only for the student volunteers they recruited, but for their insights and feedback throughout the survey process. We are grateful as well to two of Professor Kornblum's colleagues at the CUNY Graduate Center,

Juan Battle and David Rindskopf, for inviting us to participate in a session of their statistics research seminar and allowing us to present the survey research methodology for review and discussion.

In the decades following Frederick Law Olmsted and Calvert Vaux's tenure as the landscape architects of Park, Samuel Parsons Jr. was their successor and self-appointed guardian of their vision. A partner and trusted colleague of Vaux, he served as Superintendent of Planting (1881-1885), Superintendent of Central Park (1885-1898), and Landscape Architect of the Department of Parks (1902-1911). Much of his career in the Park was spent lobbying for adequate resources to maintain it and battling the forces of encroachment that threatened it. In the end, he left the cause feeling defeated. Yet in his memoirs, published by his daughter in 1926, he sounded a note of optimism for the future that was grounded in a belief in the Park's public as its salvation:

Let me now make a confession of Faith. Notwithstanding the fact that for twenty-five years I have been struggling not only to defend the Park from attacks of all kinds, but also hoping, above all, to make the government and the citizens realize its forlorn condition and provide a remedy, and having apparently failed, I believe still that the Park will eventually be restored to something of its pristine beauty. It may not be through my own efforts, but someone will undoubtedly do it. The New York American public will never allow their greatest treasure to pass entirely out of existence as a thing of beauty.

With the restoration of the Park over the last three decades, and the longest period of sustained management in its history, Parsons's auspicious prediction rings true. Having rescued it from its forlorn condition, the New York American public has woven the Park back into the fabric of their daily lives, and the world public has enthusiastically joined in. This report describes the extent and nature of their experience. With it, we recognize the need to renew our commitment and redouble our efforts to ensure that we can continue to sustain the Park as it sustains more use than ever.

Douglas Blonsky President, Central Park Conservancy and Central Park Administrator

#### **EXECUTIVE SUMMARY**

From July 2008 through May 2009, the Central Park Conservancy conducted a comprehensive survey of the Park's use. Data was collected from all park entrances on a Saturday, Sunday, and at least one weekday in all four seasons. The data collected included nearly 4,600 entrance counts, more than 3,300 exit interviews, and more than 9,100 observational surveys of visitors exiting the Park.

Based on the survey results, it is estimated that Central Park receives 37 - 38 million visits annually, by approximately 8 - 9 million different people. This represents a dramatic increase in use in recent decades—on the order of threefold or more the estimated use in the 1970s and early 1980s. The majority of visits consist of general park use on "typical" days, with peak visits occurring in the months of July and August. About one million annual visits are associated with major events. Estimated daily visits range from 40,000 on a weekday in winter to 220,000 on a summer Sunday.

Approximately three times as many visitors (i.e., 75% of all visitors) enter the southern half of the Park as the northern half. 25% enter from the three highest volume entrances (Columbus Circle, Grand Army Plaza, and West 72nd Street), out of fifty total entrances. 50% enter from the ten highest volume entrances.

Active recreation, defined as forms of recreation that primarily involve physical activity, accounts for about 15% of total park use, and passive recreation (more subdued activities that generally include observation or passive enjoyment of one's surroundings) accounts for about 85%. Nearly two-thirds of park users interviewed listed walking, wandering or sight-seeing as an activity they engaged in during their visit. Nearly two-thirds of visitors come to the Park alone.

On average, 65% of the people in Central Park on any given day are regular visitors who use the Park once a week or more, and 14% are first-time visitors. About half of all visits are an hour or less, and the average duration of park visits is about an hour and a half.

Nearly 70% of visits are by New York City residents; another 3% live in the greater New York Metropolitan Area. About 12% are from other parts of the United States and 16% are international tourists.

As compared with the results of previous studies, there appears to have been a significant increase over the last several decades in the share of total park visits by older users. Visitors aged 50 years and older account approximately 40% of visits by adults, up from an estimated 11-12% in the 1970s through early 1980s. The Park appears to be used nearly equally by male and female visitors.

The majority of visitors interviewed cite the Park landscape or its value as a retreat from the city as the single thing they appreciate most about the Park. The most common complaints registered by park users are the presence of cars and crowds.

#### INTRODUCTION

Central Park is 843 acres of green situated at the heart of one of the world's most densely populated cities. It is six percent of Manhattan's land mass reserved as a reprieve from the other ninety-four, free and open for the benefit of all New Yorkers and visitors from around the world. The life of the Park is so inextricably intertwined with that of the City that it is difficult to say where one begins and the other leaves off. By virtue of its vital purpose and ingenious design, its ample scale and unrestricted access, Central Park is so essential to New York that its significance to the City is immeasurable. As a practical matter, the same qualities that contribute to the intangible value of the Park also pose a considerable challenge to any effort to quantify its use and users.

#### The Challenge of Measuring Central Park's Use

The composition of Central Park's population in any given year is determined by millions of individual decisions to enter one of the more than fifty entrances distributed around the Park's six-mile perimeter and, once inside, to move about freely and—in the majority of cases—unrecorded in any way. Unlike the other infrastructure and amenities that are vital to the City, from its transit systems to public utilities to cultural institutions, the Park has no turnstiles, admission fees, or meters to aid in the measurement of its use. And in contrast with the City's housing stock, schools, and hospitals, there is no census, enrollment, or admissions data to describe the population of park users.

Most recreational landscapes that accommodate large numbers of visitors, including many urban parks in other cities, rely on the existence of on-site parking as a means of quantifying volumes and patterns of use. Central Park's visitors arrive on foot; the overwhelming majority walk, bike, or take public transportation to the Park, and the few who drive park on the street. Arrivals are dispersed around the perimeter, and once visitors enter, their use continues to be dispersed among the variety of landscapes and destinations and along the 70 miles of walks, drives, and bridle paths that comprise the Park's circulation system.

Adding to the challenge of measuring use that is geographically dispersed across such a large area is that presented by the hours of park use. Central Park is officially open from 6AM to 1AM, 365 days a year (and there are no gates to keep people out when it is officially closed). Volumes and patterns of use vary considerably by time of the day, days of the week, and time of year; they are also influenced significantly by the weather and by events both within and outside of the Park on any given day.

The practical result of all these factors combined is that to measure Central Park's use to the level of detail and precision that is typical for other resources and institutions of comparable value to the City would require an effort approaching the collection of data 365 days a year, for nineteen or more hours a day, from over fifty locations. In light of this, it is not surprising that relatively little statistical data about the use and users of the Park has been compiled in the course of its more than 150-year history.

#### **Early Statistics on Park Use**

The most extensive visitor statistics for the Park were collected in the earliest part of its history. Central Park was substantially constructed between 1858 and 1873. The pace at which it was built and successive portions opened to the public is almost staggering to contemplate. Frederick Law Olmsted and Calvert Vaux's winning competition entry for the Park's design was chosen in April of 1858. By December of that year, what had been a swamp in a low-lying area in the middle of the Park was transformed into the Lake and opened to the public for skating—the activity that, for many years to come, would draw the largest crowds to the Park.

The first recorded statistics describing the use of the Park appear in the 1860 Annual Report of the Board of Commissioners. The report noted that on an average day for the six months ending in October of that year, 4,500 pedestrians, 144 equestrians, and 659 vehicles had entered the Park (for a total of about 6,000 daily visitors, assuming an average of two visitors per vehicle). The usual number of visitors on "a fine concert day" was reported to be over 10,000, the largest number on a fine Sunday was over 80,000, and the largest number during skating season surpassed 85,000. The statistics were compiled from actual counts recorded at each of the fifteen original entrances by Gate-Keepers who were employed—along with a force of fifty Park-Keepers—to aid visitors, monitor park use, and enforce the rules established by the Commissioners. By 1861, the Park was substantially completed below 86th Street. Beginning that year, the annual reports included detailed tables enumerating the number of visitors entering on foot, on horseback, and in carriages; the total visitors reported that year was 2,404,659, which amounted to more than three visits for every resident of the City. By the 1870s, annual visits surpassed 10 million.

The Panic of 1873 and ensuing fiscal crisis caused construction activity to come to a halt before the Park could be completed according to plan. It was the first of many such events that would reveal the Park's vulnerability to economic cycles and the challenge of sustaining it with strained resources. That year marks the last time that a census of Park visitors was collected. In the intervening years, the prospect of counting every visitor who enters the Park would become all the more daunting, as the number of entrances tripled with the addition of new paths and entrances, and the hours of operation were effectively doubled (more or less) with the addition of park lighting. No known record exists of any effort to count or estimate total annual visitation until precisely a century later.

#### **Twentieth-Century Studies of Park Use**

In 1973, at the depth of the most recent of several periods of decline that have characterized much of the Park's history, a project team led by E.S. Savas, Professor of Public Systems Management at Columbia's Graduate School of Business, embarked on a comprehensive study of Central Park and its management. Commissioned by the Central Park Community Fund, one of several volunteer organizations formed by concerned citizens in response to the Park's alarming condition, the study was designed to identify the underlying causes of the Park's problems and to recommend measures for addressing them. A report detailing the findings was completed and issued in 1976. The recommendations contained in the report paved the way for the formation of the Central Park Conservancy and the establishment of a pioneering public-private partnership that would ultimately be responsible for reversing the decline and restoring the Park to the ideal that it was meant to embody.

Included in the Savas study was an investigation of park use conducted by Professor Donald E. Sexton, a colleague at the Graduate School of Business. In an effort to describe the attitudes of both park users and non-users, as well as attendance and characteristics of park users, this study employed a multi-pronged approach that included: (1) counts of and interviews with visitors entering and exiting the Park, (2) interviews with visitors at specific locations inside the park, and (3) telephone interviews with city residents. The counts were conducted on three days in June of 1973. The interviews with visitors were conducted in July and August, and the telephone interviews between August 1973 and February 1974. While counts were conducted at entrances around the entire Park, interviews were limited to six high-volume entrances, all below 96th Street.

The Savas/Sexton study estimated that in 1973, there were approximately 12.8 million visits to the Park by about 3.3 million different people. This estimate was arrived at using monthly revenue data for those park concessions that were open year-round as a means of prorating the number visitors estimated for June across the balance of the year. Although based on somewhat precarious assumptions (among others) about the correlation between concession revenues and park attendance, it has remained until now the best available estimate of annual attendance based on systematic entrance counts, and the baseline for subsequent estimates. The interviews with visitors entering and exiting the Park that summer are discussed in the report as offering useful insights about patterns of use and characteristics of users, with the caveat that they could not be extrapolated to represent the entire park population, due to the limitations on the number and distribution of locations at which they were conducted. The interviews at specific locations within the Park and those conducted by telephone were used to gauge attitudes of park visitors and those of residents who did not use the Park (summed up in overwhelming consensus that what was most needed in the Park was "more cops and more flowers").

By 1980, the two key recommendations of the Savas report—appointment of a "Park Executive" with centralized responsibility for planning improvements and overseeing management of the Park, and establishment of a "Board of Guardians" providing citizen oversight and continuity of purpose—were realized in the appointment by the Mayor and Parks Commissioner of a Central Park Administrator and the founding of the Central Park Conservancy. One of the earliest endeavors of the Conservancy, pursuant to the development of a comprehensive plan for the restoration and management of the Park, was to undertake a series of parkwide studies that analyzed the Park's various built and natural systems along with its history, its wildlife, and (core to the purpose of the rest) the use of the Park, which would be the subject of a 1982 study by William Kornblum, Professor of Sociology at the City University of New York's Graduate Center, and his colleague Terry Williams.

The data collected as part of the 1982 study included: (1) exit interviews conducted at ten high-volume, geographically representative entrances in August and October of 1982, (2) two parkwide "sweeps" conducted on one day in August and one day in October, in which the Park was divided into thirty-three zones for the purpose of counting the number of visitors in each, and (3) observation and counts of heavily-used areas of the Park conducted over a three-month period during the summer of 1982. The emphasis of the study was on characterizing the nature and patterns of park use and perceptions of users (not estimating

total annual visits); the central conclusion—that a majority of visitors to Central Park came to engage in passive recreation, while smaller but significant numbers came to engage in active recreation and events—supported a restoration and management approach that was guided by the historic intent of the Park as a scenic retreat, while accommodating as much as possible the ever-increasing and changing demands of contemporary use. The report cited the 1973 study as continuing to provide the best available estimate of annual attendance, and suggested that, despite population losses in the City as a whole, park use appeared to have remained relatively consistent in the decade since. Professors Kornblum and Williams noted no appreciable reduction in volumes of use for areas that were counted in both 1973 and 1982, and some apparent increase in the use of certain areas that had been cleaned-up, restored, or programmed. Based on these observations as well as unusually warm weather throughout 1982 and the occurrence of several large events and races, they adjusted the 1973 estimate accordingly, and estimated park attendance in 1982 at approximately 14.2 million. Noting the tenuous nature of this extrapolation, the report explained that to construct a more reliable estimate of annual attendance, a systematic, gate-by-gate count would be required.

#### 2009 User Survey: Purpose and Approach

Under the Conservancy's leadership, the last three decades have seen a transformation of Central Park and the longest period of sustained improvement and upkeep in its more than 150-year history. That the Park's comeback and that of the City as a whole have been accompanied by a dramatic increase in park use is readily apparent to anyone familiar with the Park in this timeframe. This study was undertaken for the purpose of quantifying the trend. It was designed to provide an updated and reliable estimate of the number and patterns of annual visits the Park receives currently and, secondarily, to describe the nature of park use, characteristics of the Park's visitors, and their perceptions and attitudes about the Park.

The survey employed a two-pronged approach to gathering data: (1) sample counts of visitors entering the Park, and (2) exit interviews with visitors leaving the Park. In total, nearly 4,600 sample counts were conducted, along with more than 3,300 interviews accompanied by observations of interview subjects, and another 5,800 "non-participation surveys" recording observable characteristics of visitors exiting the Park who were not able to be interviewed.

In an effort to achieve as representative a sample population as possible, given the varied nature of park use across time and geographic region of the Park as well the constraints of what was practically achievable with a reasonable assignment of resources, the counts and interviews were conducted at all of the Park's entrances and on fifteen survey dates over the course of a year, including a Saturday, Sunday, and at least one weekday for each of the four seasons. To avoid skewing the results and ensure that the data collected would be representative of general park use on more or less "typical" days, the survey dates were selected to exclude large-scale events in the Park (those with attendance over 10,000). Total visits in conjunction with events of this scale were estimated separately using actual event counts and permit data.

The sample counts of visitors entering the Park were used to generate estimates of the total number of visits for each survey date. These formed the basis of daily estimates for a

typical Saturday, Sunday, and weekday in each season, which were adjusted according to actual recorded weather conditions for every day of the survey year (June 2008 – May 2009). The estimated number of visits for each survey date, conclusions about typical daily estimates for each season, and assumptions about how these are affected by precipitation or atypical weather are discussed in detail in the methodology section of this report.

The exit interviews with visitors leaving the Park were used to collect information about the demographics of the visitor and the nature of the visit, and to ascertain their perceptions about the Park. For reasons discussed in the methodology section of this report, obtaining a truly random sample of Central Park visitors is, as a practical matter, virtually impossible. However, in an effort to ensure that the sample of visitors interviewed would be as representative of the true park population as possible, measures were taken to minimize sampling bias in the selection of interview subjects, and a series of observations of selected subjects were recorded whether or not an interview was obtained. A thorough description of the survey design and sample selection is included in methodology section of this report.

This study represents the most ambitious and comprehensive survey of Central Park's use since 1873, the last year that every visitor entering the Park was counted by Gate-Keepers at each of the entrances. It is based on significantly more data than the 1973 and 1982 studies, and on park-based data that more closely represents the park population, because it was conducted in all seasons and includes data collected at every park entrance. Though not without its limitations—which are a product of the complex and highly variable patterns of park use—it provides a sound estimate of total annual visitation, and as reliable a description of park use and users as is reasonably achievable without diverting substantial resources from the considerable and constant needs of maintaining and operating the Park.

#### I. VOLUME AND PATTERNS OF USE

In the one-year period from June 2008 through May 2009, Central Park was visited an estimated 37 - 38 million times by approximately 8 - 9 million different people. Roughly one million of the estimated visits were in connection with major permitted events. The rest were general park visits, as estimated based on extensive sample counts conducted on fifteen more typical days (without events of this scale taking place) throughout the survey year.

These numbers represent a dramatic increase in use over the last thirty years or more. In 1973, it was estimated that Central Park was visited 12.77 million times that year by about 3.3 million different people, and the user study conducted in 1982 in connection with the master plan to restore the Park suggested that park use had remained relatively constant in the decade since. Comparison to the 1973 estimate should be qualified with the fact that it was based on less comprehensive data and involved more tenuous assumptions than the current estimate. Still, it remains the last and best available estimate of annual visitation based on parkwide entrance counts and—as discussed in the methodology section of this report—the assumptions used to generate it are more likely to have resulted in an inflated estimate than an underestimate of the number of visits. It is therefore reasonable to conclude that 37 – 38 million visits today is on the order of a threefold increase in park use in the last three decades.

#### **Seasonal Patterns**

Patterns of use vary throughout the year, as described in Figure 1.1. For the purpose of these estimates, a "typical" day is defined as one with no major events and generally fair (but not exceptional) weather, with temperatures within average ranges for the season, and no appreciable precipitation, extreme temperatures, or other highly unusual weather—all factors that can significantly influence the number of visits on any particular day.

SEASON	ESTIMATED VISITS <sup>1</sup>	Typical Sunday	Typical Saturday	Typical Weekday
Summer	13,000,000	220,000	205,000	160,000
Fall	8,800,000	175,000	165,000	95,000
Winter	4,600,000	65,000	60,000	40,000
Spring	10,100,000	200,000	185,000	130,000

Figure 1.1 – Seasonal and Typical Daily Estimates

As might be expected, summer is the most popular season to visit the Park, and Sunday in any season is the most popular day. However, there is a significant baseline of use throughout the year and throughout the week, with still a third the number of visits in winter as in summer, and more total visits during the week than on the weekend.

Total annual visits is estimated at 37 - 38 million. The methodology section of his report includes a discussion of how this range was derived from the data collected. For the sake of clarity and legibility, where subsets of the total estimated visits are used in connection the analysis throughout this report, they are calculated to the midpoint of this range, or 37,500,000 visits (comprised of 36,500,000 general park visits, and one million visits in connection with large-scale events).