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Giving Parks Back to People

Increasing the Walkability and Bikeability of New Orleans City Park



Photo Source: <http://outdoors.wikistatic.com/photos/000/50157/0504701QIG66S>

Applied Techniques of Transportation
Planning

MURP 4062; Spring 2009

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Executive Summary

The purpose of this study was to gain an understanding of current transportation patterns of City Park users; to identify lessons learned from other large urban parks; to determine how to increase the walkability and bikeability of New Orleans City Park; and to examine the feasibility of temporary or permanent street closures. In support of these four objectives, this report will:

1. Provide an introduction to New Orleans City Park through a historical background of the Park in **Chapter 1**.
2. Present literature, case studies, and lessons learned from various academic literature and parks from around the United States in **Chapter 2**.
3. Present an in depth analysis of the New Orleans City Park Pedestrian Intercept Survey, which was conducted by the University of New Orleans in March 2009 in **Chapter 3**.
4. And present meaningful recommendations for increasing walkability and bikeability in City Park in **Chapter 4**.



Chapter One

Introduction and Background



Figure 1. New Orleans City Park



"The beautiful 'City Park'—New Orleans.

Source: www.neworleanscitypark.com, 2009.

1. History of New Orleans City Park

City Park, which occupies an expansive area of land in New Orleans, serves as a natural buffer between the Mid-City, Lakeview, and Gentilly neighborhoods. City Park was once a swampy, oak-filled forest, home to Accolapissa and Biloxi Indians who traded by dugout canoes along the banks of Bayou St. John. Recognizing the valuable waterway of the bayou from Lake Ponchartrain, located just north of the park, explorer Jean

Baptist-Lemoyne, sieur de Bienville, was able to establish the location for the crown of France.

Some years later, philanthropist John McDonogh obtained City Park. During the 1860's, McDonogh granted the land to the City of New Orleans and declared it a public park.

No history of City Park is complete without mention of the enormous efforts of the Roosevelt Administration in City Park during the Great Depression. It was during this tumultuous period in American history that more than \$12 million in federal dollars were spent and more than 20,000 men and women were employed through the Works Progress Administration building bridges, roadways, fountains, a garden and stadium and digging over 10 miles of lagoons – work all done by hand (History of CityPark www.neworleanscitypark.com, 2009).

Figure 2. Stadium Construction/WPA



Source: www.neworleanscitypark.com, 2009.



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Figure 3. Street Construction/WPA



Source: www.neworleanscitypark.com, 2009.

2. City Park Today

Today, City Park spans 1,300 acres, making it one of the largest urban parks in the United States. Once the site of Allard Plantation facing Bayou St. John, City Park offers visitors a sample of the city's riches, both in fine art and natural splendor. City Park is home of the New Orleans Museum of Art and the largest collection of mature live oaks in the world. Trees in the oldest grove are more than 600 years old. As a popular place to picnic, play a favorite sport, wander through gardens or take a boat ride; City Park hosts 11 million visitors each year (neworleanscitypark.com, 2009). It is located in the heart of New Orleans and is the largest recreation area within the metropolitan region.

City Park is operated as a unique state agency of the Department of Culture, Recreation and Tourism operated by the non-profit City Park Improvement Association (CPIA). CPIA was established in 1891 to provide for the improvement of City Park. The Louisiana Legislature placed City Park under the control of CPIA in 1896 and invested it with the authority to operate and develop the park.

Figure 4. New Orleans City Park Today



Source: www.neworleanscitypark.com, 2009.

Photos by Rrik™ © Rrik Beck



3. New Orleans City Park as a Popular Destination

New Orleans City Park attractions include the New Orleans Botanical Garden, Storyland Fairytale Playground, and Carousel Gardens Amusement park, which delight visitors of all ages. Also, several facilities are available to host any public or private event, from a formal wedding to a casual picnic, a concert to a business meeting.

Additionally, City Park is a popular destination for walkers, joggers, and bicyclists who enjoy winding through the park's streets and trails. Nonetheless, in the lower one-third of the park where many facilities are located, congestion often presents a problem, especially during special events.

4. New to City Park in 2009

According to the City Park website, the following projects will be started or completed in 2009

- Renovations of the Big Lake area (renderings)
- Break ground on the Festival Grounds area (rendering)
- Construct the Great Lawn (renderings)
- Repave Wisner Avenue north of I-610
- Repave Harrison and install bike lanes on both sides
- Commence construction of new Administration Building

Figures 5, 6, and 7. Attractions within New Orleans City Park, including New Lagoon Pedestrian and Bike Lane



Source: www.neworleanscitypark.com, 2009. Source of New Lagoon Bike/Pedestrian Lane: Brian Baldwin



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- Begin implementation of the Couturie Forest Master Plan
- Further upgrade the Amusement Park
- Construct Cinderella's Castle in Storyland (rendering)
- Begin construction of our new Tennis Complex (rendering)
The funds have been approved by the State; we are currently waiting for the State to release the funds
- Construct a new fishing pier along Marconi
- Construct a new dog park - City Bark! (rendering)



Figure 8. New to New Orleans City Park in 2009



Source: www.neworleanscitypark.com, 2009.



Chapter Two

Literature Review, Case Studies, and Lessons for New Orleans City Park



1. Transportation in Urban Parks

A study by Amy I. Zlot and Tom L. Schmid found that walking and bicycling for transportation purposes are positively correlated with total acres of parkland. Among 34 cities studied, New York City was found to have the highest percentage of people walking or bicycling for transportation, and one of the highest percentages of parkland. The summary of the study included the possibility for cities to improve walking/bicycling infrastructure as a means of creating a more accessible city (Zlot & Schmid, 2005).

A similar study by Wendel-Vos, et al looked at walking and bicycling as a means of commuting in the Netherlands and how it is related to physical environmental factors of neighborhood “sports grounds,” or park space. The study used GIS databases for the recreational and park spaces. It was found that bicycling for commuting purposes is associated with the square area of neighborhood parks; though walking for commuting purposes is not associated with the park size.

2. Road Closures in Urban Parks

Many cities are arriving at the realization that they do not want to continue to plan around cars, and especially not when it comes to parks (Greenfield, 2008). This thinking has become a national trend. At least 22 urban park drives in the U.S., totaling over 40 miles, have been closed to cars either permanently or on a part-time basis (Harnik & Welle, 2008).

Many benefits to closing urban park roads have been found and reported in academic journals. For the park user, closed roads provide an improved park environment (reduced sights, sounds, and smells of automobiles), help enhance physical and mental health, and increase safety. Atlanta’s Piedmont Park was frequented by prostitutes and drug dealers before road closures,

and Brackenridge Park in San Antonio found that increased park users after road closures led to decreased crime (Harnik & Welle, 2008).

There are benefits for the park managers as well. Road closures can save money. They also generally lead to increased use of the park. Golden Gate Park in San Francisco experiences a 116% increase in use when its roads are closed on Sundays, compared to when the roads are not closed on Saturdays (Harnik & Welle, 2008).

There are some concerns for road closures in urban parks. Spillover traffic can occur in the surrounding neighborhoods. Those with physical disabilities have a harder time getting to the interior of the park. Not having people in cars driving through can translate to a decreased sense of security. Those who use urban park roads as a commuting path can be opposed to closures. And the loss of curbside parking is a problem that will be discussed below (Harnik & Welle, 2008).

Despite these concerns, the closure of urban park roads is a national trend that is gaining in popularity and appears to be working well in the parks that are enforcing it. When New York City did a test closure of the roads in Washington Square Park in the 1950s, no traffic impacts were found. The park is now one of the most frequently used ten acres of parkland in the country. New York City also conducted a test closure of the Central Park Loop Road in 2004 and again found minimal impacts. In some areas, the traffic time and volume actually decreased (Harnik & Welle, 2008).

An explanation for urban park road closures not leading to increased congestion is given by Wiley Brown of Transportation Alternatives in the article, “Wreck-less and Car-free.” Though many think that traffic blocked in one place will simply go elsewhere, Brown explains that in actuality what is happening is



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“induced demand.” People drive places because they are allowed to drive through them. If they are no longer able to do so, like after a park road closure, many will choose not to drive as often because they do not have the incentive of being able to. This is sometimes called “traffic evaporation” (Greenfield, 2008).

There are different ways for managers of urban parks to handle road closures. Some do not close entire roadways, but instead just a portion of the road. Breckinridge Park has closed one mile of a road, and Garfield Park in Indianapolis has closed just a quarter mile of a road. Others choose to close roads on certain days, such as Golden Gate Park’s closures on Sundays, which have now expanded to Saturdays and Sundays (Harnik & Welle, 2008). Phoenix, Arizona has started “Silent Sundays” in which roads to South Mountain’s summit are closed just one Sunday a month; they have experienced more success each month (Greenfield, 2008).

No matter how the road is closed, it is important that access is still available to park users. Proper infrastructure for walking and bicycling must be provided, and other transportation alternatives like buses and trolleys can help. Houston’s Hermann Park has linked their miniature train that was already running in the park to the light-rail stop nearest the park. Piedmont Park, located in Atlanta, Georgia has improved pedestrian connections, such as car drop-off areas and transit-bike projects (Harnik & Welle, 2008).

An interesting way to temporarily close streets is by having a ciclovia. The ciclovia model, which started in Bogota, Colombia in the 1980s, is common in Europe and Latin America. Generally, a network of roads is closed to automobiles (70 miles every Sunday in Bogota) every so often and people can bicycle, walk, socialize, etc. In the summer of 2007, El Paso, because of its proximity to Juarez, Mexico, and its large obese population,

was the first U.S. city to host a ciclovia. The City of Chicago is also proposing one that will be called Sunday Parkways. Cities that have had ciclovias have found that people resist at first, but end up loving the concept. In addition, ciclovias are cheap and easy to plan (Greenfield, 2008).

3. Parking

As previously mentioned, the loss of curbside parking is often a concern for the closure of urban park roads. Also, there is the concern of surface parking lots taking up green space in parks. When internal roadways in Piedmont Park closed in 1982, parking problems were experienced. Because parking was also needed for Atlanta’s botanical gardens which are located in the park, a parking garage was built unobtrusively into a hill. Additionally, though, it helped to add pedestrian and bicycle paths. There are other solutions to dealing with the issue of parking in parks. Charging fees for parking often discourages users from driving into parks. It also helps to have alternative ways of access. Public transit stops near the park are helpful. Greenways and trails from parks into neighborhoods are also good ways to increase access while decreasing auto use (Harnik, Welle, & Hortie, 2007).

4. Park Usage of Neighborhood Residents

In a direct observation study of eight U.S. public parks, it was found that those living closest to an urban park tend to use the park more. 43% of users lived within 0.25 miles of the park and 21% between 0.25 and 0.5 miles of the park. Residents who visited the park more often lived on average 0.7 miles away, compared with those using the park less frequently living 1.07



miles away. Those who lived closer to the park were also found to engage in more leisurely exercise than those living farther away (Cohen et al, 2007).

The results of this study suggest that the opinions of those living closest to the park should be incorporated into the decision about road closures in urban parks.

Peter Harnik and Ben Welle report that park agencies in all sections of the country are closing roadways within parks permanently or on selective days and times. They state that of 10,000 roadway miles in a 2007 survey by the Center for City Park Excellence more than 49 miles comprising at least 22 part drives have been closed full or part time (2008, p. 25). While roadway closings are controversial, reflecting an attack on our core freedom to drive anywhere, they in fact have increased the number of people using parks rather than decreasing use. A city of San Francisco study in 2006 found a 116 percent increase in park use on Sundays, with a major drive closed, versus Saturdays when it is not closed (Harnik & Welle, 2008, p. 26). “If private automobiles are banned, then walking and bicycling options are needed as well as better transit—whether in the form of trolleys, buses, taxis, or horse-drawn carriages” (Harnik & Welle, 2008, p. 27). Another effect has been that Car-free, hard-surface spaces can feature an astonishing number of activities; lovers strolling, children biking, roller skaters and skateboarders twirling and leaping, parents pushing baby strollers, seniors power-walking, runners marathon-training, girls hula-hooping, jugglers juggling, dogs barking and sniffing (Harnik & Welle, 2008, p. 26). While this article discussed parks in sixteen cities (with two cities having multiple parks), the observations and conclusions are very applicable to the proposals for New Orleans City Park. Paul H. Gobster in “Managing Urban Parks for a Racially and Ethnically Diverse Clientele” studied Lincoln Park, a large urban

park, in Chicago. The study objectives in part were to “identify park users’ patterns, activities, preferences, and perceptions of safety, and compare these findings across racial and ethnic groups (2002).” “Results showed a core of activities that occur in the park regardless of race or ethnicity. These activities included walking, swimming or sunning at the beaches, picnicking and barbecuing, going to zoo, sitting and relaxing, and bicycling (Gobster, 2002).” The study did find varying levels of participation within each category. There were also differences between activity categories. The study presented a detailed breakdown by groups and activities. City Park officials should consider reading this study as it plans future park changes.

Lincoln Park offers a diverse list of activities that “includes a zoo, a conservatory, two museums, three harbors, a nine-hole golf course, two field houses, three beach houses, and four beaches. Athletic facilities include 11 playgrounds, 16 ball diamonds, 9 football-soccer fields, 33 tennis courts, and a variety of paths (Gobster, 2002).” While differing in category sizes, the offerings are quite similar to City Park offerings. The attraction’s similarity allows us to understand how this project’s survey results are compare and contrast to results from the Chicago study

5. Case Studies

Case studies are important to the exploration of increased walkability and bikeability in City Park because they offer successful models of what City Park can achieve through utilizing creative planning. In this section, four case study parks were chosen from around the country based on their name recognition, as well as the respect they have gained as successful models of bike and pedestrian friendly parks.



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Case study parks include:

Golden Gate Park, San Francisco, California
 Central Park, New York City, New York
 Prospect Park, New York City, New York
 Millennium Park, Chicago, Illinois

Golden Gate Park, San Francisco, California

Founded in 1870, Golden Gate Park has welcomed pedestrians, skaters, bicyclist, and other forms of active transportation for over forty years. Golden Gate Park is located in the Northwest section of San Francisco. Occupying 1,027 acres, it attracts more than 13 million visitors annually. It ranks fourth in terms of total annual visitors (Center for City Park Excellence, 2008). Over the years

growing numbers of residents and visitors have been drawn to the Park to use its car-free facilities on the weekends.

In 1967, JFK Drive was initially closed from automobiles on Sundays. Thomas Hoving was recruiting by the San Francisco Planning and Urban Research Association to craft a policy to reclaim the park for people and restrict automobiles. Hoving was credited with closing Central Park to cars during his tenure as the Parks Commission for New York City. After a meeting attended by over 1,000 supporters, the San Francisco Recreation and Parks Commission approved the closure of JFK Drive on a trial basis (Miles, 2000). JFK runs the length the Park: from the Panhandle on the eastern side to the Great Highway which runs parallel to the Pacific Ocean on the western side of the Park. Nearly half of



it, from Fell Street to Crossover drive has been free from automobiles every Sunday since April 2nd, 1967.

The success of the Sunday Closure motivated several groups to petition for a Saturday closure as well. After numerous campaigns, a portion of the JFK was finally closed off from vehicles in 2007. Concessions were gained along the way. For example, in July 1985, the Golden Gate Park Transportation Management Plan increased the portion of JFK closed from auto traffic and closed the street to vehicular traffic for an additional seven Monday holidays per year (Miles, 2000). In 2006, Healthy Saturday's legislation was approved by the City Council but vetoed by Mayor Gavin Newsom. The Mayor called for a study of the impacts of closing the Park on a second weekend day.

The *Golden Gate Park Transportation Access Study*, conducted in 2006, provided overwhelming evidence that a park closure was supported by the public and would have a negligible impact to areas surrounding the Park. Completed by the San Francisco County Transportation Authority (Authority), in cooperation with the Municipal Transportation Agency's Department of Parking and Traffic (MTA), differences in park use and access on Saturdays and Sundays were examined. Although some contention remained from nearby residents and disabled visitors after results were publicized, the supporters of Healthy Saturdays ultimately gained the closure of a section JFK Drive beginning May 26, 2007 (Wood, 2007; Jones, 2007). The portion of JFK Drive between Hagiwara Tea Garden Drive (West) and Transverse Drive is now closed on Saturdays, April through September (see map).

Figure 10. Photography of JFK Drive With and Without Traffic



Source: www.sfpix.com, 2009.



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Supportive findings from the 2006 *Golden Gate Park Transportation Access Study* include:

- Sunday road closure attracts more non-vehicular traffic to Golden Gate Park, its institutions, and nearby shops (approximately 40% more), with average differences in vehicular traffic ranging between a decrease of 7% and increase of 8%.
- Nearly 45% of visitors walks or bicycle to the park.
- Sunday road closure encourages 38% of users to visit the park, with 10% less likely to visit due to closure.
- The closure does not impact the decision to visit for about half of park users.
- The top reasons given for coming to the Park are to visit the institutions and to walk around or exercise.
- Access to parking is both a challenge and an opportunity. High usage of on-street parking spaces can be attributed to a preference for these spaces, or to lack of knowledge of the existence or size of the Concourse Garage. Currently, the Concourse Garage is underutilized, with average occupancy at 40% on Saturdays and 62% on Sundays.
- Access to parking is both a challenge and an opportunity. High usage of on-street parking spaces can be attributed to a preference for these spaces, or to lack of knowledge of the existence or size of the Concourse Garage. Currently, the

Concourse Garage is underutilized, with average occupancy at 40% on Saturdays and 62% on Sundays.

- Car-free weekends are now advertised on the Golden Gate Park's website. To increase visitor convenience, a free tram service is provided in the closure area (City & County of San Francisco Recreation and Park Department, N.D.) Citizen activism in gaining the closure along with the results of the *Golden Gate Park Transportation Access Study* and the below picture demonstrate a real demand for car-free park space.



Central Park, New York City, New York

Central Park is a large urban park located in the borough of Manhattan in New York City. Central Park occupies a total area of 843 acres. With more than twenty-five million visitors annually, Central Park is the most visited urban park in the United States.

The New York State Legislature created Central Park in 1853. The state also created a Central Park Commission to oversee the development of the Park. The boundaries of the Park are 5th Avenue, Central Park South, 110th Street and Central Park West.

Figure 11. Bicycling in Central Park



Source: www.centralpark.com, 2009.

In 1857 the Commission held a landscape design contest to determine what the Park would look like. The plan submitted by writer Frederic Law Olmsted and Calvert Vaux was selected as the winner (NHLP).

When bicyclists began using the park in greater numbers in the 1880s, bicycling in Central park was only permitted between midnight and 9:00 am. Today bicycles are permitted at any time in the Park during normal operating hours. Central Park contains one designated bike path known as Park Drive. This path circles Central Park and is approximately 6.5 miles long (centralpark.com).

Currently, Central Park is closed to automobile traffic Monday through Friday between the hours of 10:00 am and 3:00 pm. The Park is also closed between 7:00 pm to 7:00 am on weekdays. During the weekend the Park closes at 7:00 pm on Friday and reopens at 7:00 am on the following Monday morning. From the day before Thanksgiving until the first business day of the new year, the drives are still closed on weekends, but are open 24 hours a day on weekdays (ny.com, 2009). When the Park is open to traffic, a bikers' lane is always available; however, Central Park administration does not recommend that you use the Drives when they are open to traffic. Central Park requires that any cyclist under the age of fourteen wear a helmet, although all riders are encouraged to do so. Park administration requests that bikers always travel in a counterclockwise direction when circling the park (centralpark.com, 2009).

Prospect Park, New York City, New York

Prospect Park is a 585-acre public park in the New York City borough of Brooklyn located between Park Slope, Prospect-Lefferts Gardens, Kensington, Windsor Terrace and Flatbush Avenue, Grand Army Plaza and the Brooklyn Botanic Garden. It is maintained and operated by the New York City Department of Parks and Recreation and is part of the Brooklyn-Queens Greenway. Frederick Law Olmsted and Calvert Vaux designed the park after they completed Manhattan's Central Park. The creation of Prospect Park stemmed from an April 18, 1859 act of the New York State Legislature, empowering a twelve-member commission to recommend sites for parks in the City of Brooklyn. Of the seven sites mentioned in their proposal, a 320-acre plot centered on Mount Prospect was the most appealing. It was at this site that Prospect Park would officially be opened.



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Prospect Park has around 3.35 miles of designated bike trails. Prospect Park, like Central Park is closed to vehicles during the day during certain periods of time. The west drive of Prospect Park is open to automobiles on Monday through Friday between the times of 5:00 pm and 7:00 pm. The east drive of Prospect Park is open to vehicles on Monday through Friday between the hours of 7:00 am to 9:00 am, and between 5:00 pm and 7:00 pm. The park is closed to all vehicle traffic on the weekends.

Figure 12. Bike Course, Prospect Park, New York City



Source: www.citvtri.com/ndubike.htm. 2009

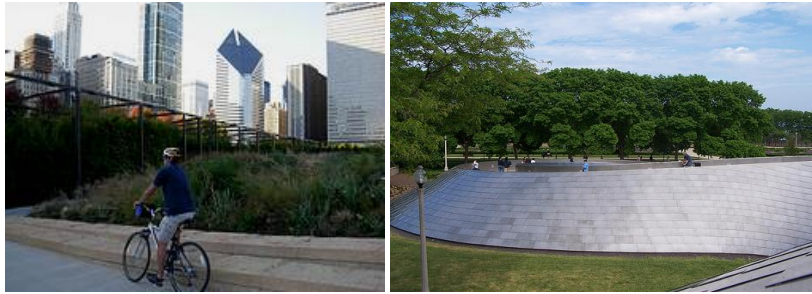
Millennium Park, Chicago, Illinois

Millennium Park is a public park located in the Chicago Loop area. It is a prominent civic center of the City of Chicago's Lake Michigan lakefront. In 2004, a 24.5 acre section of northern Grant Park, previously occupied by Illinois Central rail yards and parking lots, was built over and redeveloped as Millennium Park. It hosts an array of public art in an area that is bounded by Michigan Avenue, Randolph Street, Columbus Drive and East Monroe Drive (Ryan, 2005).

First planned in 1997 as a way to create new parkland in Grant Park and transform unsightly railroad tracks and parking lots, Millennium Park has evolved into a significant millennium project in the world (Ryan, 2005). From 1852 until 1997, the Illinois Central Railroad owned the right of way that they used for railroad tracks that separated the downtown Chicago from Lake Michigan (Gilfoyle, 2006). For a short time, in 1871, the Chicago White Stockings played home games at this location it what was then Union Baseball Grounds (Gilfoyle, 2006). In 1909, Daniel Burnham planned Grant Park. In 1997, when the city gained control of the land in the form of airspace rights, it decided to build a parking facility there (Gilfoyle, 2006). In time, the city realized that a grand civic amenity might lure private dollars that a municipal improvement would not and thus began to create Millennium Park. The park was originally planned under the name Lakefront Millennium Park. Initially, the construction of the park was under the backing of the Transportation department because the project bridges the railroad tracks. However, as the project grew and expanded, its broad variety of amenities placed it under the jurisdiction of the city's Public Buildings Commission (www.millenniumpark.com, 2009).



Figures 13 and 14. Photographs of Millennium Park



Source: www.millenniumpark.org, 2009.

Millennium Park was originally intended to open in 2000 instead of 2004 (Ryan, 2005). The park was known for its notorious delays and tripled costs. The citizens of Chicago ridiculed the project by referring to it as “next millennium” park (Ryan, 2005). Changes during the development and construction of the park and the adding, redesigning, and modifying of many structures resulted in budget increases. The total cost of the park amounted in \$500 million (<http://www.millenniumpark.org>, 2009). Much of the fundraising was borne by local business leaders. The Millennium Park cost overrun was criticized. Individuals and organizations felt that the money spent on the park might have gone to other worthy causes, specifically citing ongoing issues with poverty in Chicago and problems within the city’s schools. On the other hand, others believed that Chicago’s potential to become a new type of metropolitan Olympic city could boost investment and help to fund more long term social and educational causes.

Millennium Park, one of the larger public parks in metropolitan Chicago, is a showcase for postmodern architecture. It features the McCormick Tribune Ice Skating Rink, Peristyle at Wrigley

Square, Joan W. and Irving B. Harris Theater for Music and Dance, AT&T Plaza, Chase Promenade and Trees in Millennium Park (Ryan, 2005). The park is successful as a public art venue in part due to the grand scale of each piece and the open spaces for display. There are four major artistic highlights: Cloud Gate, Crown Fountain, Lurie Garden and the Jay Pritzker Pavilion (www.millenniumpark.org, 2009). The park is considered to be beyond the ambitions of many cities.

Millennium Park also hosts one of the greatest bicycling facilities

Figure 15. Bicycle Facility in Millennium Park



Source: www.millenniumpark.org, 2009.



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in the United States. The center was opened in July 19, 2004, and was originally planned to be 10,000 square feet and cost \$2 million. When completed the center was located on 16448 exterior plaza with a cost of \$3.2 million and is currently managed by Chicago Department of Transportation. In June 2006 Mc Donald's announced a \$5 million grant to underwrite the operations of the center for fifty years. With this agreement McDonalds sponsors a variety of free summer programs in Millennium Park for the next ten years. The bicycle facility is designed to encourage alternative transportation when commuting to Millennium and Great Park as well as other downtown locations.

The two major initiatives set forth by the Mayor: promote cycling and to make the city greener (Deardorff, 2006). The facility has 100 spaces set aside for first come, first served usage during the normal hours and after hours the facility is limited to dues-paying members. In April of 2005, the membership had skyrocketed to nearly 500 members and approximately 50,000 riders used the center annually in its first two years. The center serves commuters who may need a place to get refreshed before work. Members are provided with access to the showers and lockers, access to the shared bicycle program and a discount bike service. The center has 240 lockers that are available to members and four private stall showers for both men and women. Within two years the program had reached its maximum limit in reference to membership and currently has a waiting list (www.millenniumpark.org, 2009).

6. Summary of Best Practices

Incremental, Partial and Whole Road Closures in Urban Parks

- For the park user, closed roads provide an improved park environment (reduced sights, sounds, and smells of automobiles), help enhance physical and mental health, and increase safety. Atlanta's Piedmont Park was frequented by prostitutes and drug dealers before road closures, and Brackenridge Park in San Antonio found that increased park users after road closures led to decreased crime (Harnik & Welle, 2008).
- While roadway closings are controversial, they in fact have increased the number of people using parks rather than decreasing use. A city of San Francisco study in 2006 found a 116 percent increase in park use on Sundays, with a major drive closed, versus Saturdays when it is not closed (Harnik & Welle, 2008, p. 26).

Providing proper infrastructure for walking and bicycling, even alternative transit like buses and streetcars

- Piedmont Park has improved pedestrian connections, such as car drop-off areas and transit-bike projects (Harnik & Welle, 2008).



Ciclovias

- The City of Chicago is also proposing one that will be called Sunday Parkways. Cities that have had ciclovias have found that people resist at first, but end up loving the concept. In addition, ciclovias are cheap and easy to plan (Greenfield, 2008).

Properly dealing with loss of curbside parking

Because parking was also needed for Atlanta's botanical gardens which are located in the park, a parking garage was built unobtrusively into a hill. Additionally, though, it helped to add pedestrian and bicycle paths. There are other solutions to dealing with the issue of parking in parks. Charging fees for parking often discourages users from driving into parks. It also helps to have alternative ways of access. Public transit stops near the park are helpful. Greenways and trails from parks into neighborhoods are also good ways to increase access while decreasing auto use (Harnik, Welle, & Hortie, 2007).

Incorporate Neighborhood Residents into the decision about road closures in urban parks

In a direct observation study of eight U.S. public parks, it was found that those living closest to an urban park tend to use the park more. 43% of users lived within 0.25 miles of the park and 21% between 0.25 and 0.5 miles of the park. Residents who visited the park more often lived on average 0.7 miles away, compared with those using the park less frequently living 1.07 miles away. Those who lived closer to the park were also found to engage in more leisurely exercise than those living farther away (Cohen et al, 2007). The results of this study suggest that

the opinions of those living closest to the park should be incorporated into the decision about road closures in urban parks.

Transportation in Urban Parks

The relationship between park acreage and levels of walking/biking for transportation purposes (article will be added).

Relationship between square area of parks and bicycling for commuting purposes

Wendel-Vos, G.C. Wanda "Factors of the Physical Environment Associated with Walking and Bicycling" *Medicine & Science in Sports & Exercise*; Apr2004, Vol. 36 Issue 4, p725-730]

Cannot continue to plan around cars

Urban and park planners are realizing the inadequate conditions resulting from car-based facilities.

Conduct a detailed study of the park and break down its uses and users

Understand who is using what aspects of the park.



Chapter Three

New Orleans City Park Pedestrian City Park Pedestrian Intercept Study



1. University of New Orleans Pedestrian Intercept Study in City Park

The purpose of this study was to gain an understanding of current transportation patterns of City Park users; to identify lessons learned from other large urban parks; to determine how to increase the walkability and bikeability of New Orleans City Park; and to examine the feasibility of temporary or permanent street closures. During a two-week period, from March 10-24, 2009, students intercepted 308 pedestrians for the survey. In the lower one-third of the Park, students were strategically located throughout 6 designated zones in order to intercept pedestrians.

Figure 16. Map of New Orleans City Park, Six Zones of Study



The various zones were marked by streets and landmarks, which included:

1. Palm Drive
2. Roosevelt Mall Street
3. Dreyfus Drive
4. Lagoon
5. Christian Brothers School
6. The Museum at Esplanade

The survey consists of 36 questions, which were developed to gauge respondents' views about the walkability and bikeability of City Park, the extent of their current physical activities, as well as the personal characteristics of the respondents. Most of the questions were derived and modified from an existing survey, which was previously deployed in New Jersey by Dr. Michael Greenberg and Dr. John Renne. The results of the New Jersey study were published in the *Journal of Urban Health*, entitled, "Where Does Walkability Matter the Most? An Environmental Interpretation of New Jersey Data." Together these formulated questions help identify a wide variety of improvements that could be utilized to make City Park more pedestrian and bicycle friendly.

Seven questions gauge respondents various uses of City Park (i.e. exercise, tennis, golf, etc.), while 15 questions gauge people's perceptions of City Park highlighting perceptions of safety. Seven questions measure respondents' typical activity level (i.e. moderate, sedentary), and 7 questions capture the demographics of City Park users (See Appendix A City Park Pedestrian Intercept Survey).

Permission to administer the survey was obtained from Dr. Bob Becker, the CEO of City Park. In addition permission from the



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University of New Orleans Institutional Review Board was obtained before the survey was deployed.

2. Transportation Issues within City Park

A major challenge to increased walkability and bikeability in City Park is presented by the lack of off street parking within the Park. For the past 50 years, the City of New Orleans has allowed City Park to utilize the neutral ground on Marconi Street to accommodate special event parking. However, the City has recently prohibited the use of the neutral ground for parking, and has required the Park to create more parking on its property.

Historically, little off street parking has been constructed within the Park, in order to preserve the natural character of the Park. Instead, major thoroughfares, such as Roosevelt Mall, have been utilized continuously as on-street parking facilities. Thus, if thoroughfares such as Roosevelt Mall are closed temporarily on weekends; although it could provide a safe place for walkers and bicyclists, a critical source of special event parking would be eliminated during times when most special events occur.

Another great hindrance to temporary street closures in City Park is the suitability of roads for walking and biking. Due to the deteriorating condition of streets in City Park, particularly after Hurricane Katrina; even with temporary road closures, it is uncertain whether park visitors will utilize the roads for walking and biking. Therefore, in exploring increased bikeability and walkability in City Park, it is imperative that many options for increasing biking and walking in City Park are considered. Through an in depth analysis of the New Orleans City Park

Pedestrian Intercept Survey Results, various options for increased biking and walking in City Park have been formulated.

3. New Orleans City Park Pedestrian Intercept Survey

The analysis of the spring 2009 City Park Pedestrian Intercept Study uncovered a wide array of findings that should play an important role in the future planning decisions of City Park. In this section, key findings from the survey have been summarized and are followed by charts and graphs. There is also a section of other findings that summarize results that were not as conclusive or relevant to future transportation plans, but that could still play an important role in future planning decisions for City Park in other areas.

4. Methodology

The spring 2009 City Park Pedestrian Intercept Study was conducted over the month of March and students were in the field on multiple days of the week. The study was conducted during day-light hours and only pedestrians who appeared to be over the age of eighteen were approached. To better understand the public sentiment about possible road closures in City Park, the Park was divided into six zones for the study (Zone 1: Park Drive, Zone 2: Roosevelt Mall Street, Zone 3: Dreyfous Drive, Zone 4: Lagoon, Zone 5: Christian Brothers, and Zone 6: The Museum at Esplanade) (Reference Map). While the study was conducted in the six aforementioned zones within City Park, all data was aggregated for City Park as a whole. During the course of the study, 308 completed surveys were collected and analyzed in SPSS and Excel.



5. Key Findings

The following is a summary of key findings that were uncovered from the spring 2009 City Park Intercept Survey:

- 28.1% of respondents used alternative modes of transportation to get to City Park including walking/jogging, streetcar, bus and motorcycle/scooter.
- The most common reason for coming to City Park was for exercise (39% of respondents). Other commonly found reasons were for the Aesthetics (19.2%) and the Art Museum (17.9%).
- About half of respondents (52%) said that they would walk more frequently in a car-free zone.
- 62% of respondents that said they would walk more frequently in a car free zone said that they would use the park **at least** 1-2 times more per week. Of the 62%, 20.7% said they would use the park 4 or more days per week.
- The top three reasons that deterred people from walking in City Park were a lack of restrooms (22.8%), lack of sense of security (16.2%) and the speed of auto traffic (9.9%).
- 60.6% agreed that City Park should close some streets to auto traffic on weekends.
- 60.0% disagreed that City Park should close some streets to auto traffic permanently.

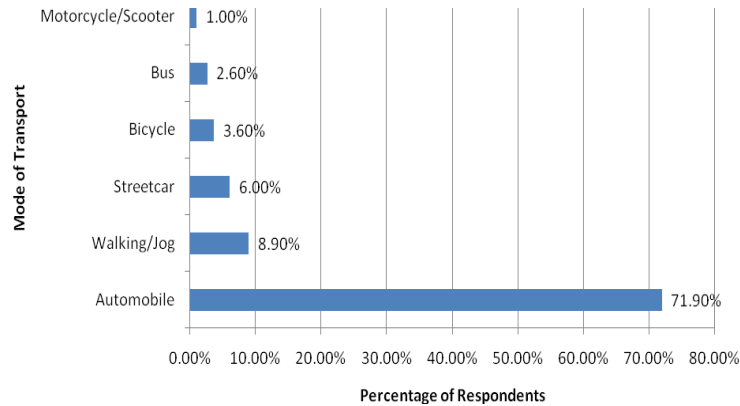
- In general people feel comfortable in City Park. For example, 67% trust people they meet in City Park, 68% feel safe from crime during the day, 90% feel that City Park is pleasant to walk in, 73% think it is easy to cross the streets, and 81% feel that there is attractive landscaping in City Park.
- Most respondents (56%) agree that sidewalks and/or bike paths are in goods conditions.
- 70% feel that City Parks needs more sidewalk and/or bike paths.

The charts and graphs following the key findings more clearly depict the information found in the key findings section.



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Figure 17. Mode of Transportation Used to get to City Park



Although the majority of respondents used automobile to get to City Park, the percentage of those that used alternative modes, 28.1%. In our survey, 28.1% of respondents used alternative modes of transportation to get to City Park including walking/jogging, streetcar, bus and motorcycle/scooter.

Figure 18. Reasons for Coming to City Park

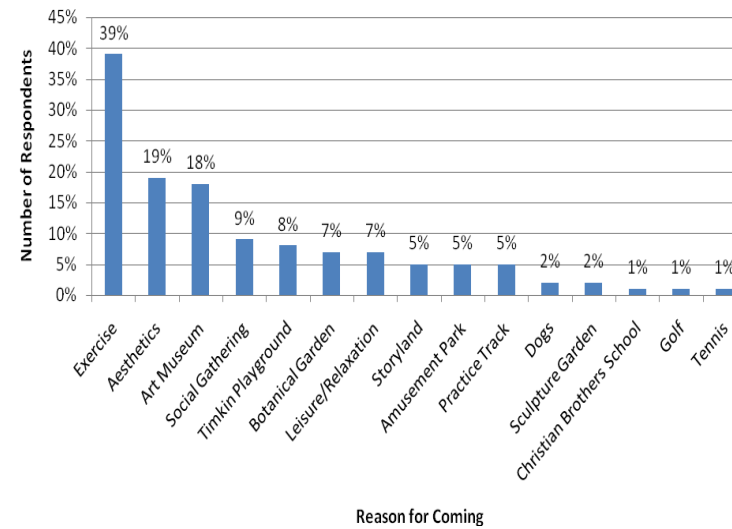
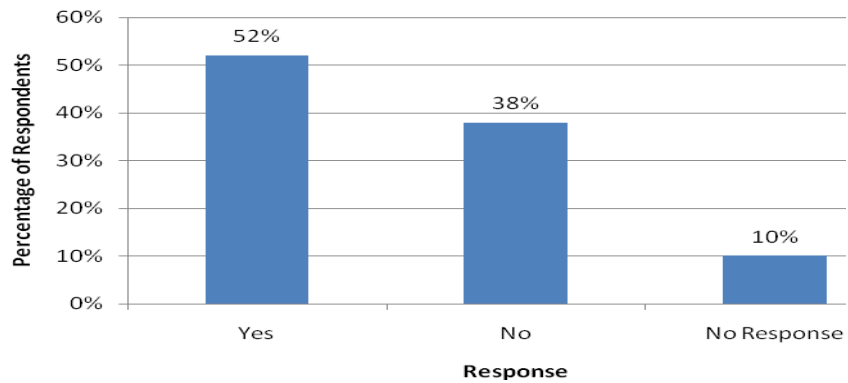
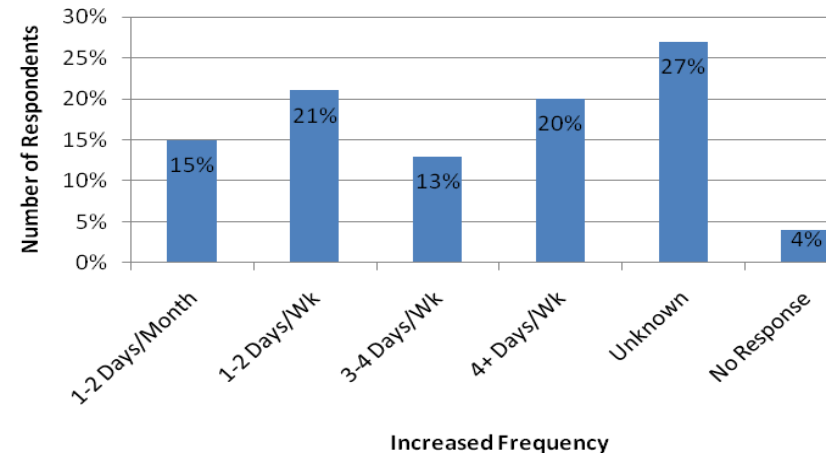


Figure 19. Would You Walk More Frequently in a car free zone?



As depicted in Figure 19, the most common reason for coming to City Park was for exercise (39% of respondents). Other commonly found reasons were for the Aesthetics (19.2%) and the Art Museum (17.9%).

Figure 20. How Much More?

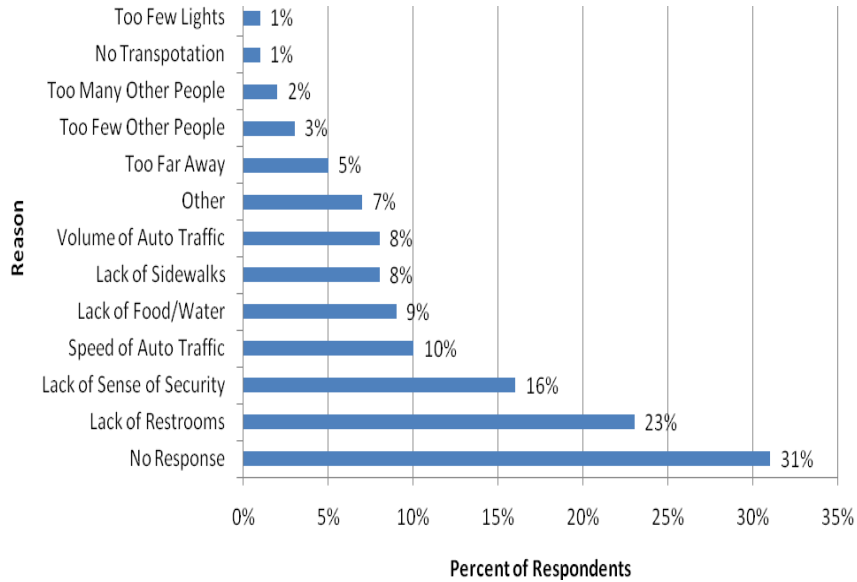


The majority of respondents (52%) said that they would walk more frequently in a car-free zone.



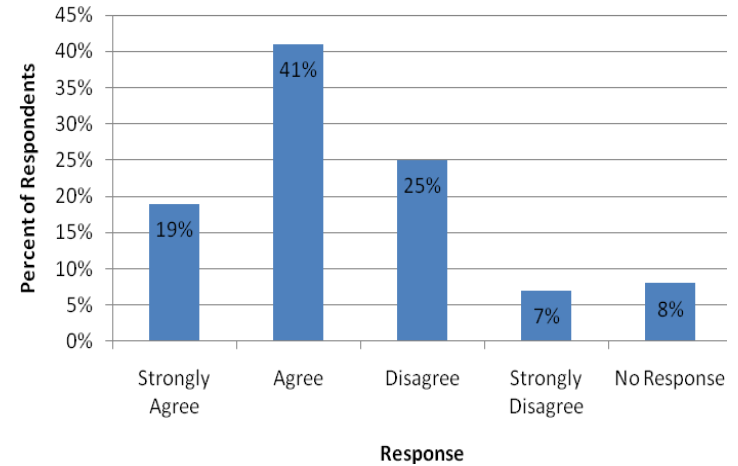
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Figure 21. What Deters You from Walking in City Park



The top three reasons that deterred people from walking in City Park were Lack of restrooms (22.8%), Lack of sense of security (16.2%) and Speed of Auto Traffic (9.9%). One should note that within the “No Response” category, many respondents commented that “nothing” deters them from walking in City Park.

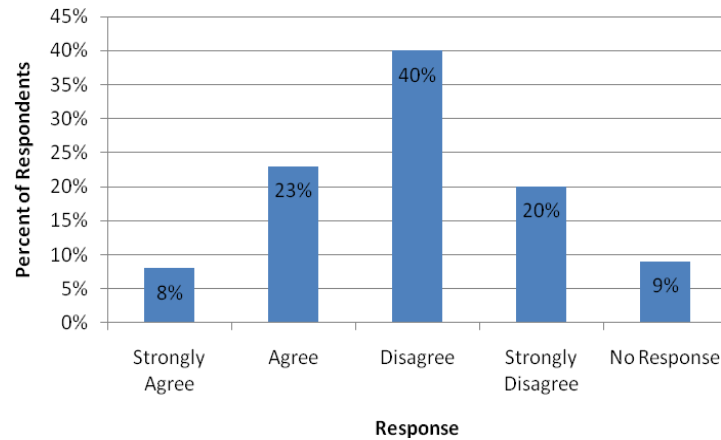
Figure 22. Should Close Some Streets to Auto Traffic on Weekends



62% of respondents that said they would walk more frequently in a car free zone would use the park at least 1-2 times more per week. Of the 62%, 20.7% said they would use the park 4 or more days per week.



Figure 23. Should Close Some Streets to Auto Traffic Permanently



60.6% of respondents agreed that City Park should close some streets to auto traffic on weekends.

Figure 24.



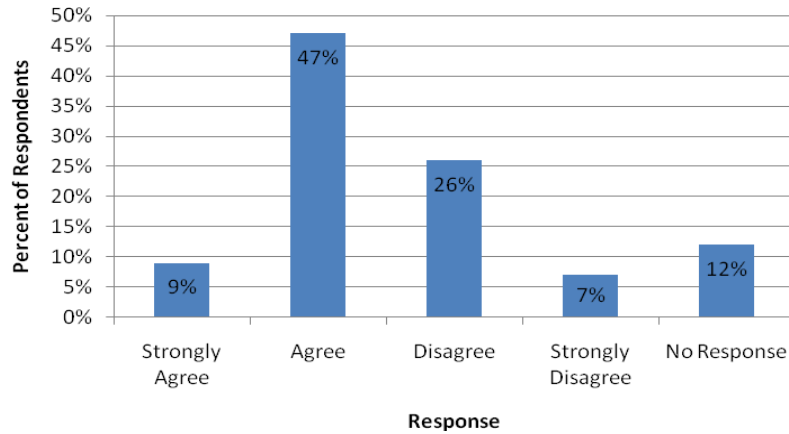
Source: www.neworleanscitypark.com, 2009.

In general people feel comfortable in City Park. For example, 67% of respondents trust people they meet in City Park; 68% feel safe from crime during the day; 90% feel that City Park is pleasant to walk in; 73% think it is easy to cross the streets; and 81% feel that there is attractive landscaping in City Park.



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Figure 25. Sidewalks and/or Bike Paths are in Good Condition



Most respondents (55.6%) agree that current sidewalks and/or bike paths are in good condition.

Figure 26. City Park needs more Sidewalks and/or bike paths

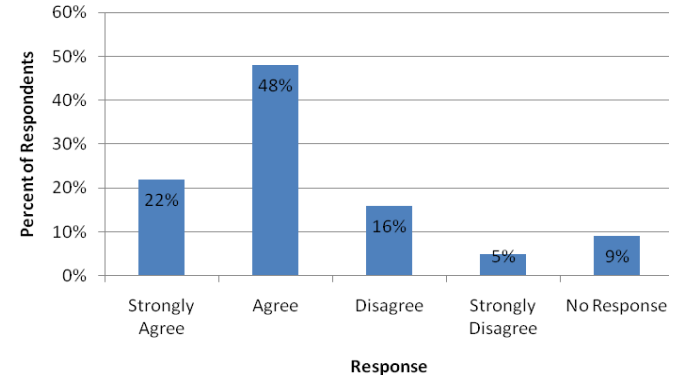


Figure 27. Bike and Pedestrian Facilities



Source: Brian Baldwin

69.9% feel that City Parks needs more sidewalk and/or bike paths.

6. Other Findings:

Additional findings, which do not directly relate to the future transportation plan for City Park, but could play an important role in terms of future land use, demographics, or other planning as related to City Park. More studies and research should be used to follow up the findings and results from this section.

Additional findings, which do not directly relate to the future transportation plan for City Park, but could play an important role in terms of future land use, demographics, or other planning as related to City Park. More studies and research should be used to follow up the findings and results from this section.

- According to the surveys in which the question was answered (90% of total), approximately 47.1% of respondents were male and 52.9% were female.
- The majority of respondents, 61.2%, came from Orleans Parish.
- 12.5% came from Jefferson Parish; 7% came from other Louisiana Parishes; 14% came from out of state; and 5.3% did not respond.
- 45% of survey responders have children.
- Responders were predominantly white, yet there is a high representation (25%) of black or African Americans.
- Over 60% of people surveyed get moderate physical activity for at least 10 minutes in the park.



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- 49.8% of people surveyed get at least 3 days of moderate exercise in the park.
- 81.1% of people surveyed felt that City Park had attractive landscaping.
- 41.1% of respondents planned on staying at the park for at least an hour.
- 58% of people surveyed used City Park at least 2 days a week.



Chapter Four

Recommendations for New Orleans City Park



Existing literature, case studies, and lessons based on academic literature along with case studies informed this report. The history and current status of City Park was discussed in Chapter One. Chapter Two identified best practices for bicycle and pedestrian planning through a review of case studies and academic literature. Chapter Three describes the purpose, methodology, and findings from the pedestrian intercept study. In this final chapter, recommendations are proposed for enhancing the experience of pedestrians and bicyclists. This recommendation section focuses mainly upon the area of City Park south of I-610.

Students found that the major problem facing bicyclists and pedestrians using New Orleans City Park is a lack of infrastructure. While some infrastructure does exist, the majority of it has been overtaken by automobiles.

Recommendations for making City Park a more bicycle and pedestrian friendly place for all to enjoy, include the following:

1. *Road Treatments*

Every street in City Park, with the exception of Stadium Drive, should receive some treatment. Those treatments would include either signage or markings, or designated bicycle lanes. As shown on the following streets, Golf Drive, Palm Drive, and City Park Avenue should receive on street bike lanes. Victoria drive and Dreyfus Drive should be come on street shared lanes with traffic calming. And Marconi and the lake will ultimately be bike pedestrian trails.

The point of this is to create a system in which the transportation options of bicycling and walking are permeating the entire park. Bicyclers and walkers should be discouraged from using Stadium Drive because it is a service road.

In addition, traffic calming strategies should be used on Dreyfus, Victory, and Friederichs, and possibly Roosevelt Mall. This will be especially helpful for the problem of morning traffic (parents driving to Christian Brothers School) endangering exercisers, and the issue of traffic near the playground.

Figure 28: Traffic Calming Infrastructure



Source: Brian Baldwin



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Figure 29: Proposed Bike Ways



City Park Intercept Study

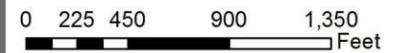
Proposed Bike Ways

-  On-Street Bike Lane
-  On Street Shared Use Bike Route w/ Traffic Calming
-  Bike/Pedestrian Trail

-  Streets
-  Parks
-  Water
-  New Facilities

Source: Spring 2009 Intercept Study, RPC 2008 aerial imagery, and City Park Master Plan

Cartography: Brian Baldwin



Source (Citation)
This imagery was provided by the Regional Planning Commission for Jefferson, Orleans, Plaquemine, St. Bernard and St. Tammany Parishes (RPC).
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The RPC is not responsible for any errors arising from any use of alterations made to the data.
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Imagery Information:
The true color aerial imagery was captured between February and April 2008 by OptiSat/GeoEye and distributed under a license for civil government.
The imagery is projected to State Plane NAD 83, unit of measure in feet.
The spatial resolution is approximately a one foot pixel.
Any use of the data must be accompanied with this citation and accompanying north arrow.




Figure 30. Before and After Road Treatment



Source: Brian Baldwin

2. Closure of Roads to Automobiles

There is a potential for closing certain streets to automobile traffic on a temporary basis. Roosevelt Mall and Palm Drive are the roads that are most likely to be closed to automobile traffic. According to City Park Management, Roosevelt Mall needs to be open on Saturday mornings during track and field season (March-early May) in order to allow adequate parking for those events. City Park Management also noted that the best/most feasible months to close roads to automobile traffic are January and February, and July and August.

There is a great opportunity to start by closing Palm Drive and Roosevelt Mall (as a loop) on the weekends. If closing Roosevelt Mall is not successful, then the closed off section of Palm Drive could connect to Marconi Drive (where we are proposing a bike/pedestrian trail). In conjunction with this loop is the current bike route on Golf Drive that should be improved in the future as an on-street bike route.

Perhaps in the beginning the routes should only be closed on

Figure 31. Existing Roosevelt Mall



Photo taken by Brian Baldwin

Sundays for the four chosen months. If Sundays in the Park are successful, it could be extended to full weekend road closures. Food and drink kiosks throughout these routes would be beneficial. It could also be valuable to have some type of festival or market on one of those Sundays each month.



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Figure 32: Closed Street Proposal



City Park Intercept Study

Closed Street Proposal

Closed Streets

Streets

Parks

Water

Source: Spring 2009 Intercept Study, RPC 2008 aerial imagery, and City Park Master Plan

Cartography: Brian Baldwin

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Imagery Information

The true color aerial imagery was captured between February and April 2009 by DigitalGlobe and distributed under a license for civil government. The imagery is projected to State Plane 8303, unit of measure is feet. The spatial resolution is approximately a one foot pixel. Any use of the data must be accompanied with the citation and accompanying scale and logo.

DIGITALGLOBE



4. Parking Management

The pedestrian intercept survey did not inventory the Park's parking. However, as part of the analysis it has been realized that parking is something that should be studied as it plays a large role in pedestrian access. It is recommended that City Park engage in a process to create a parking management plan. Currently automobiles are parking in areas that are shared roads, obstructing the bicycle markings painted on the roads. Also, all of the additions to the park that are being planned (such as the Children's Museum) will require more parking, and this issue will become increasingly important. A parking management study can help determine where cars should be taken off some of the streets to allow adequate room for bicycle lane

Figure 33. Proposed Bike Lane on Roosevelt Mall



Source: Dr. John Renne

Figure 34 and 35: Issues Parking Management Can Address



Source: Brian Baldwin



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5. Improved & Increased Bicycle Parking

City Park has expressed that it is interested in both attracting cyclists and extending the amount of time individuals spend visiting the Park. While providing safe and attractive routes are important, bicycle parking plays a powerful role in extending trips. Most cyclists will not leave their bicycles unlocked. Without adequate bicycle parking facilities cyclists will be reluctant to stop and visit attractions. Secure bike parking can allow cyclists to stop and enjoy locations across the Park.

Well-designed bicycle parking should be placed in well-marked locations at all major destinations throughout City Park.

Bicycle parking should be provided at all major destinations. Parking should be placed close to entrances and busy areas rather than behind buildings. This will enable cyclists to easily identify parking while also ensuring that there is sufficient amount of foot traffic and bystanders that constantly pass the parking area. This can help to deter theft. Many guidelines exist to help with the design and placement of bike parking. The International Bicycle Fund's Bicycle Parking Planning Criteria and the Pedestrian and Bicycle Information Center's Bicycle Parking Guide can be used as resources.

Provide bicycle valet at special events

In addition to removing a barrier to cycling, the provision of secure bike parking will also reduce clutter of randomly parked bikes. While this may not be an issue on a day-to-day basis, special events can attract large number of cyclists. Bicycle valet is similar to car valet service and can conserve space. For example, at the Santa Monica Farmer's Market, 120 bicycles are squeezed into 8 parking spaces on a weekly basis (Pondel, 2008).

Furthermore, when visitors arrive on bicycles rather than in

automobiles at large events, it can reduce the total demand for parking and reduce impacts of surrounding neighborhoods. Cars require much more space to park. Bicycle valet is usually free and run by volunteers. The Park might be able to partner with local advocacy groups such as the Metro Bicycle Coalition to coordinate and organize bicycle valet at special events.

Consider implementing bicycle parking creatively

In Louisville, the Downtown Management District has installed artistic bicycle racks that were designed and constructed by local artists. Artists were reimbursed for supplies and compensated with exposure (Martin, 2008). Cities across the country are developing similar programs. This could be a terrific way for City Park to recognize and celebrate the talent of local artists while supporting cyclists with parking (Bierman, 2008; Saffron, 2008).

Figure 36. Bike Parking Sculpture



Source: Bike-Rack in front of the Actors Theatre of Louisville. / Artist: Mary Dennis Kannapell / Picture Source: www.ldmd.org, 2009.

References

- About Prospect Park (2009). Retrieved April 12, 2009, from <http://www.prospectpark.org/about>
- Bicycle Riding. *The Complete Guide to Central Park and Central Park Zoo* Retrieved April 10, 2009, from <http://www.centralpark.com/pages/sports/bicycle-riding.html>
- Bicycling (2009). Retrieved April 12, 2009, from <http://www.prospectpark.org/visit/activities/bicycling>
- Bierman, N. Sculptors reinventing the wheel-holder. *The Boston Globe*, (B2). Retrieved from http://www.boston.com/news/local/articles/2008/11/02/sculptors_reinventing_the_wheel_holder/
- Center for City Park Excellence (2008). UPDATED: City Park Facts Retrieved March 27, 2009, from http://www.tpl.org/tier3_cd.cfm?content_item_id=20531&folder_id=3208
- Central Park. *The Paperless Guide to New York City (www.ny.com)* Retrieved April 14, 2009, from http://www.ny.com/sights/neighborhoods/central_park.html
- City & County of San Francisco Recreation and Park Department. Golden Gate Park: Car-Free Days on JFK Drive & Accessibility Information Retrieved March 29, 2009, from http://www.sfgov.org/wcm_recpark/GGP/GGPCarFreeDays.pdf
- City Park History. Retrieved April, 2009, from <http://neworleanscitypark.com/history.html>
- Cohen, D. A., Sehgal, A., Williamson, S., Golinelli, D., Lurie, N., & McKenzie, T. L. (2007). Contribution of Public Parks to Physical Activity. *American Journal of Public Health*, 97(3), 509-514.
- Deardorff, J. (2006, February 10, 2006). The fattest city a heavyweigh in pro-bike ratings. *The Charlotte Observer (Charlotte, N.C.)*. from http://www.accessmylibrary.com/coms2/summary_0286-12644959_ITM.
- Gilfoyle, T. J. (2006, August 6, 2006). Millennium Park (First Chapter). *The New York Times*. Retrieved April, 2009, from <http://www.nytimes.com/2006/08/06/books/chapters/0806-1st-gilf.html?scp=3&sq=millennium%20park%20gilfoyle&st=cse>.
- Gobster, P. H. (2002). Managing Urban Parks for a Racially and Ethnically Diverse Clientele. *Leisure Sciences*, 24(2), 143-159.
- Greenfield, J. (2008). Wreck-less and Car-free. *Parks & Recreation*, 43(5), 40-45.



Giving Parks Back to People: Increasing the Walkability and Bikeability of New Orleans City Park

Harnik, P., & Welle, B. (2008). Proceed Without Caution. *Planning*, 74(7), 24-27.

Harnik, P., Welle, B., & Hortie, H. (2007). Pavement in the Park. *Parks & Recreation*, 42(6), 58-61.

International Bicycle Fund. Bicycle Parking Planning Criteria: Bike Racks, Bicycle Lockers, Cycle Stands & Bike Storage Systems Retrieved January 13, 2009, from <http://www.ibike.org/engineering/parking.htm>

Jones, S. T. Newsom ordered a study of Golden Gate Park road closures -- but now appears to be ignoring the results. *San Francisco Bay Guardian*. Retrieved from [ww.sfbg.com/entry.php%3Fcatid%3D77%26entry_id%3D3022+steven+t+jones+'newsome+ordered'](http://www.sfbg.com/entry.php%3Fcatid%3D77%26entry_id%3D3022+steven+t+jones+'newsome+ordered')

Martin, J. (2008). Cities rack up public artwork: Sculpture Not just a place to park a bike. *USA Today*, (November 3, 2008), Pg. 03a. Retrieved from www.lexisnexis.com

Miles, D. G. (2000). Golden Gate Park: The History of the Saturday Closure of Kennedy Drive Retrieved March 28, 2009, from <http://cora.org/SaturdayClosureHistory.htm>

National Park Service. Central Park. *National Historic Landmarks Program* Retrieved April 10, 2009, from http://www.nr.nps.gov/iwisapi/explorer.dll?IWS_SCHEMA=NRIS1&IWS_LOGIN=1&IWS_REPORT=10000044

Park History. *Millennium Park (City of Chicago)* Retrieved April 9, 2009, from <http://www.millenniumpark.org/parkhistory/>

Pedestrian and Bicycle Information Center. Bicycle Parking Retrieved January 13, 2009, from <http://www.bicyclinginfo.org/engineering/parking.cfm>

Pondel, E. (2008). In L.A., valet is everywhere – and not just for cars. *The Christian Science Monitor* (June 19, 2008). Retrieved from <http://www.csmonitor.com/2008/0619/p20s01-ussc.html>

Renne, John, and Michael Greenberg. "Where Does Walkability Matter the Most? An Environmental Interpretation of New Jersey Data." *Journal of Urban Health: Bulletin of the New York Academy of Medicine* 82.1 (2005): 90-100.

Ryan, K. (2005). Chicagos New Millennium Park Wins Travel & Leisure Design Award For “Best Public Space”, And The American Public Works Association “Project of the Year” Award April 12, 2005. Retrieved March 2009, from <http://www.millenniumpark.org/newsandmedia/pdfs/4.1%20Millennium%20Park%20Awards.pdf>



- Wendel-Vos, G. C. W. (2004). Factors of the Physical Environment Associated with Walking and Bicycling. *Medicine & Science in Sports & Exercise*, 36(4), 725-730.
- Wood, D. B. (2007). On the rise in American cities: the car-free zone. *The Christian Science Monitor*. Retrieved from <http://www.csmonitor.com/2007/0502/p01s03-ussc.html>
- Zlot, A. I., & Schmid, T. L. Relationships Among Community Characteristics and Walking and Bicycling for Transportation or Recreation. *American Journal of Health Promotion*, 19(4)(Mar-Apr 2005), 314-317.



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Appendix A City Park Pedestrian Intercept Survey



City Park Pedestrian Intercept Study City Park is conducting a Survey concerning a wide variety of improvements that park officials might utilize to make City Park more pedestrian and bicycle friendly. Please assist us by answering the following questions.

Part 1: These questions are used to determine the use of the park:

- 1) What modes of transportation did you use to get here today (please select all that apply)?
 - Automobile
 - Streetcar
 - Bus
 - Bicycle
 - Walk/Jog
 - Motorcycle/Scooter
- 2) Where did you come from/origin of your trip? State/Parish _____
If Orleans, what is the closest intersection to your home _____
- 3) Why did you choose to come today (please select all that apply)?
 - Exercise
 - Aesthetics of the park
 - Art Museum
 - Practice Track
 - Tennis
 - Timkin (Playground)
 - Golf
 - Botanical Garden
 - Storyland
 - Amusement Park
 - Christian Brothers School
 - Other (please explain) _____
- 4) How long do you plan on staying today?
 - 1 hour or less
 - 2-3 hours
 - 1-2 hours
 - 3+ hours

- 5) How often do you use the park?
 - 1-2 days a week
 - 3-4 days a week
 - 4+ days a week
 - Less than 1x/week
 - 6) Would you walk more frequently in a car-free zone?
 - Yes or No
 - If yes, how much more:
 - 1-2 days a month
 - 1-2 days a week
 - 3-4 days a week
 - 4+ days a week
 - Unknown
 - For each occurrence, how much longer:
 - 0-14 min
 - 15-30 min
 - 31-45 min
 - 45+ min
 - Unknown
 - 7) Currently, does anything deter you from walking more in City Park? (Check all that apply)
 - Volume of auto traffic
 - Lack of sense of security
 - Speed of auto traffic
 - Lack of food/water
 - Lack of restrooms
 - Lack of sidewalks
 - Too many other people
 - Too few other people
 - Other (explain) _____
 - 8) What time of the year do you tend to use City Park more or less frequently?

	More Frequently	Less Frequently
Summer	<input type="checkbox"/>	<input type="checkbox"/>
Fall	<input type="checkbox"/>	<input type="checkbox"/>
Winter	<input type="checkbox"/>	<input type="checkbox"/>
Spring	<input type="checkbox"/>	<input type="checkbox"/>
- You use City Park about the same amount year-round

Part 2: This section is used to gauge opinions about City Park. Circle the degree to which you agree or disagree with the following statements.

	Strongly Disagree	Disagree	Agree	Strongly Agree
1) I feel safe from automobile traffic while walking or riding a bike in City Park.	1	2	3	4
2) City Park should close <u>SOME</u> streets to automobile traffic on <u>WEEKENDS</u> .	1	2	3	4
3) City Park should close <u>SOME</u> streets to automobile traffic <u>PERMANENTLY</u> .	1	2	3	4
4) I would walk or ride a bike more frequently if more streets were closed to automobile traffic.	1	2	3	4
5) The fear of crime deters me from walking in City Park during the day.	1	2	3	4
6) I trust people I meet in City Park.	1	2	3	4
7) City Park needs more sidewalks and/or bike paths.	1	2	3	4
8) Sidewalks and/or bike paths are in good condition.	1	2	3	4
9) It is easy to cross the streets.	1	2	3	4
10) I feel safe from automobile traffic.	1	2	3	4
11) City Park is pleasant to walk in.	1	2	3	4
12) I feel safe from threatening animals.	1	2	3	4
13) There is too much automobile traffic in City Park.	1	2	3	4
14) There is attractive landscaping in City Park.	1	2	3	4

Continue on Back



Part 3: These questions are used to determine typical physical activity level:

Moderate activities cause small increases in breathing or heart rate.

- 1) In a usual week, do you do **MODERATE** activities for at least 10 minutes at a time, such as walking, bicycling, vacuuming, gardening, or anything else that causes small increases in breathing or heart rate?
 - a. Yes, please continue with question 2
 - b. No, skip to question 4
 - c. Don't know/not sure, skip to question 4
- 2) How many days per week do you do these moderate activities for at least 10 minutes at a time?
Days per week _____ Don't know/not sure _____
- 3) On days when you do moderate activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?
Hours and minutes per day _____
Don't know/not sure _____

Vigorous activities cause large increases in breathing or heart rate

- 4) In a usual week, do you do **VIGOROUS** activities for at least 10 minutes at a time, such as brisk walking, bicycling, vacuuming, gardening, or anything else that causes large increases in breathing or heart rate?
 - a. Yes, please continue with question 5
 - b. No, skip to question 7
 - c. Don't know/not sure, skip to question 7
- 5) How many days per week do you do these vigorous activities for at least 10 minutes at a time?
Days per week _____ Don't know/not sure _____
- 6) On days when you do vigorous activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?
Hours and minutes per day _____
Don't know/not sure _____
- 7) What proportion of your physical activity is walking or biking in City Park?

<input type="checkbox"/> 0-9%	<input type="checkbox"/> 9-24%	<input type="checkbox"/> 25-49%
<input type="checkbox"/> 50-74%	<input type="checkbox"/> 75%	

Part 4: The following questions are used to capture who is using City Park.

- 1) Have you ever attended a public meeting pertaining to City Park?
| Yes or | No
If yes, how recently

<input type="checkbox"/> During last 60 days
<input type="checkbox"/> During last 6 months
<input type="checkbox"/> During last year
<input type="checkbox"/> Last 5 years
- 2) Do you have children? | Yes or | No
If yes, what is the age range of your children (please select all that apply)?

<input type="checkbox"/> 0-5	<input type="checkbox"/> 6-12
<input type="checkbox"/> 13-17	<input type="checkbox"/> 18+
- 3) How would you rate your present neighborhood as a place to live?

<input type="checkbox"/> Excellent	<input type="checkbox"/> Good
<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
- 4) How does your neighborhood compare with other neighborhoods in New Orleans?

<input type="checkbox"/> Present neighborhood is better.
<input type="checkbox"/> Same
<input type="checkbox"/> Worse
- 5) How would you identify your race or ethnic background? Do you consider yourself (please select all that apply)

<input type="checkbox"/> American Indian or Alaska Native
<input type="checkbox"/> Asian
<input type="checkbox"/> Black or African American
<input type="checkbox"/> Hispanic
<input type="checkbox"/> Native Hawaiian or other Pacific Islander
<input type="checkbox"/> White, non Hispanic
- 6) What is the last grade you completed in school?

<input type="checkbox"/> Less than High School
<input type="checkbox"/> High School Diploma or Equivalent
<input type="checkbox"/> Technical School and/or Some College
<input type="checkbox"/> Graduated College
- 7) Do you currently own or rent your home?

<input type="checkbox"/> Rent
<input type="checkbox"/> Own
<input type="checkbox"/> Other: _____

If you would like to receive future information about this study please leave your email address or phone number:

Email _____

Phone Number _____

Date / Time of Study _____ / _____	Characteristics of Responder: Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female Accompanied by Children: <input type="checkbox"/> Yes <input type="checkbox"/> No						
Zone of Study (Please Select): <table border="0" style="width: 100%;"> <tr> <td><input type="checkbox"/> Zone 1: Palm Drive</td> <td><input type="checkbox"/> Zone 4: Lagoon</td> </tr> <tr> <td><input type="checkbox"/> Zone 2: Roosevelt Mall Street</td> <td><input type="checkbox"/> Zone 5: Christian Brothers</td> </tr> <tr> <td><input type="checkbox"/> Zone 3: Dreyfous Drive</td> <td><input type="checkbox"/> Zone 6: Museum at Esplanade</td> </tr> </table>	<input type="checkbox"/> Zone 1: Palm Drive	<input type="checkbox"/> Zone 4: Lagoon	<input type="checkbox"/> Zone 2: Roosevelt Mall Street	<input type="checkbox"/> Zone 5: Christian Brothers	<input type="checkbox"/> Zone 3: Dreyfous Drive	<input type="checkbox"/> Zone 6: Museum at Esplanade	Approximate Age:: <input type="checkbox"/> Young (age 18-29) <input type="checkbox"/> Middle Aged (age 30-64) <input type="checkbox"/> Elderly (age 65+)
<input type="checkbox"/> Zone 1: Palm Drive	<input type="checkbox"/> Zone 4: Lagoon						
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