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### Gulf Coast Research Center for Evacuation and Transportation Resiliency

The LSU / UNO University Transportation Center

# Active Transportation Measurement and Benchmarking Development:

## New Orleans State of Active Transportation Report 2010

January 2012

**Final Report** 

### Billy Fields, Ph.D.

Prepared by:



The Pedestrian and Bicycle Resource Initiative Merritt C. Becker Jr. University of New Orleans Transportation Institute New Orleans, Louisiana 70148

**Prepared for:** Gulf Coast Research Center for Evacuation and Transportation Resiliency Department of Planning and Urban Studies University of New Orleans New Orleans, LA 70148

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### GULF COAST RESEARCH CENTER FOR EVACUATION AND TRANSPORTATION RESILIENCY

The Gulf Coast Research Center for Evacuation and Transportation Resiliency is a collaborative effort between the Louisiana State University Department of Civil and Environmental Engineering and the University of New Orleans' Department of Planning and Urban Studies. The theme of the LSU-UNO Center is focused on Evacuation and Transportation Resiliency in an effort to address the multitude of issues that impact transportation processes under emergency conditions such as extreme weather conditions causing evacuation, a national emergency or other major events. This area of research also addresses the need to develop and maintain the ability of transportation systems to economically, efficiently, and safely respond to the changing demands that may be placed upon them.

#### Research

The Center focuses on addressing the multitude of issues that impact transportation processes under emergency conditions such as evacuation and other types of major events as well as the need to develop and maintain the ability of transportation systems to economically, efficiently, and safely respond to the changing conditions and demands that may be placed upon them. Work in this area includes the development of modeling and analysis techniques; innovative design and control strategies; and travel demand estimation and planning methods that can be used to predict and improve travel under periods of immediate and overwhelming demand. In addition to detailed analysis of emergency transportation processes, The Center provides support for the broader study of transportation resiliency. This includes work on the key components of redundant transportation systems, analysis of congestion in relation to resiliency, impact of climate change and peak oil, provision of transportation options, and transportation finance. The scope of the work stretches over several different modes including auto, transit, maritime, and non-motorized

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The educational goal of the Institute is to provide undergraduate-level education to students seeking careers in areas of transportation that are critical to Louisiana and to the field of transportation in general with local, national and international applications. Courses in Transportation Planning, Policy, and Land use are offered at UNO, under the Department of Planning and Urban Studies. In addition to the program offerings at UNO, LSU offers transportation engineering courses through its Department of Civil and Environmental Engineering. The Center also provides on-going research opportunities for graduate students as well as annual scholarships.

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The LSU/UNO UTC conducts technology transfer activities in the following modes: 1) focused professional, specialized courses, workshops and seminars for private sector entities (business and nonprofits) and government interests, and the public on transport issues (based on the LSU-UNO activities); 2) Research symposia; transport issues (based on the LSU-UNO activities); 3) Presentations at professional organizations; 4) Publications. The Center sponsors the National Carless Evacuation Conference and has co-sponsored other national conferences on active transportation.

### ACTIVE TRANSPORTATION MEASUREMENT AND BENCHMARKING DEVELOPMENT: NEW ORLEANS STATE OF ACTIVE TRANSPORTATION REPORT 2010

### Final Report 11-05 (Part 1)

Prepared by:

Billy Fields, PhD Director for the Center of Urban and Public Affairs The Pedestrian and Bicycle Resource Initiative Merritt C. Becker Jr. University of New Orleans Transportation Institute University of New Orleans

Prepared for:

Gulf Coast Research Center for Evacuation and Transportation Resiliency Department of Planning and Urban Studies University of New Orleans New Orleans, LA 70148

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#### **EXECUTIVE SUMMARY**

Communities around the country are striving to create high quality, livable neighborhoods that center around active modes of transportation. From high-profile efforts to redesign Times Square to improve walkablility in New York City to the proposed Lafitte Greenway Project designed to revitalize a string of neighborhoods in the heart of New Orleans, communities around the country are planning active transportation alongside a lively mix of businesses and housing.

The Pedestrian/Bicycle Resource Initiative at the University of New Orleans surveyed bicycle and pedestrian plans from around the country to determine best practices for monitoring trends in walking and bicycling. The **State of Active Transportation: New Orleans** provides an overview of key indicators that trace existing conditions for walking and bicycling in New Orleans.

These indicators are designed to:

- Identify Needs through an examination of current conditions and trends for walking and bicycling in New Orleans
- **Prioritize Policies** designed to improve conditions

To accomplish these tasks, the research team undertook a comprehensive analysis of existing data on active transportation and collected new data on walking and bicycling rates in New Orleans. This included an extensive literature review of active transportation studies from around the country to establish best practices, a review of Census data on active transportation trends, and primary data collection of walking and bicycling rates at 14 locations around New Orleans.



The analysis uncovered some promising trends:

*New Orleans has the potential to become a regional leader in active transportation.* New Orleans currently ranks in the top tier of cities in terms of the number of pedestrians and bicyclists.

- In 2009, New Orleans ranked 6<sup>th</sup> in the nation among cities over 250,000 in bicycle mode share with 2.47% of all commute trips taken on bicycle. This ranking makes New Orleans the regional leader in the South and shows its potential to become a national leader in active transportation.
- With a combined mode share for bicycling and walking of 8.22% in 2009, New Orleans ranks 12<sup>th</sup> in the nation overall for communities over 250,000.

New Orleans is experiencing a dramatic increase in the scope and quality of bicycle and pedestrian infrastructure. Through the federal Submerged Roads Program designed to rebuild roads Katrina and the ARRA following ("stimulus program"), New Orleans is rehabilitating miles of sidewalks and adding over 40 miles of new bicycle facilities by the end of 2010. This should help to move New Orleans from an "Honorable Mention" Bicycle Friendly Community to an emerging regional leader in active transportation.

*There is, however, considerable room for improvement.* New Orleans has experienced a dramatic decrease in transit use following Hurricane Katrina.

• In 2008, transit use had fallen 75% from pre-Katrina levels (Cohen 2008). While some commuters shifted to walking and cycling after the dramatic disruption in service following Hurricane transit Katrina, the majority of commuters shifted to single occupancy auto commuting. The New Orleans Metro Area experienced the largest increase in single occupancy commuting in the entire country from 2000 to 2008 (Puentes 2010). Transit use has, however, been slowly rising post-Katrina, increasing from 5.3% in 2006 to 7.4% in 2009 (ACS 2006-2009).

 New Orleans continues to struggle with high pedestrian and bicyclist crash rates. The current rate of over 120 bicycle and pedestrian crashes per 100,000 people places New Orleans well above the national average of just over 40 crashes per 100,000 people. Only New York City and San Francisco were found to have higher rates of per capita crashes in our comparative analysis.

With careful planning and implementation of the new Master Plan and the leveraging of federal funds, New Orleans can dramatically increase the extent of facilities and improve safety for active transportation users.

The New Orleans Master Plan lays out a well-crafted agenda for ensuring that safe streets designed for all users--including bicyclists, pedestrians, transit users, and drivers--become part of standard street design. New Orleans should work to strategically implement four vital components from the Master Plan over the next year to help build momentum for active transportation.

These four key policies from the Master Plan are:

- Implement a Complete Streets Policy to Create a Safe and Convenient Active Transportation Network (Master Plan Vol 2, Chapter 11, p.11.8 and 11.23)
- Maintain and Build Capacity for Policy and Project Implementation Through

Ensuring Adequate Funding for Staff (Master Plan 2, Chapter 11, p11.8 and 11.23)

- Enhance Funding and Ensure Implementation for Active Transportation Infrastructure and Programming like Safe Routes to School and the Lafitte Greenway (Master Plan Vol 2, Chapter 11, p11.8-11.10, 11.23-11.29)
- Begin to Plan for a Comprehensive, Interconnected Network of Active Transportation Facilities that Connect to Transit (Master Plan Vol 2, Chapter 11, p11.8-11.9, 11.23-11.26)

Overall, there is tremendous potential to utilize active transportation as a key component of creating a greener, healthier New Orleans. With the dramatic increase in facilities and the surge in users, New Orleans is poised to become a national leader. Numerous organizations around New Orleans are leading the charge. In addition to UNO's PBRI, AARP, the Metropolitan Bicycle Coalition, the Regional Planning Commission's Complete Streets Advisory Committee, the Kids Walk Coaliton, Transit for NOLA, and the Friends of the Lafitte Greenway are actively advocating for improved facilities and programming to make New Orleans а safer, healthier community for active transportation. Policy makers in New Orleans have the opportunity to help build momentum for this emerging success story.



### INTRODUCTION

Walking and bicycling are becoming increasingly important modes of transportation for communities trying to achieve improved livability, economic vitality, and overall sustainability. After dramatic decreases in walking and cycling rates from the 1950's to 1990's, recent efforts are showing signs of success. While communities such as Minneapolis and Portland that invested in their active transportation facilities have shown the largest increases in use, many older cities around the country that were built during the pre-automobile era have continued to show strong usage rates. New Orleans falls into this category and is the southern stronghold for active transportation. Prior to Katrina, New Orleans' rate of walking, bicycling, and transit use exceeded Portland's rate with over 20% of commuting trips involving active transportation.

After Katrina, however, the New Orleans area experienced a simultaneous decrease in transit use and the largest increase in single-occupancy commuting in the country (Puentes 2010). While Orleans Parish also experienced an uptick in walking and bicycling rates, the City's overall share of walking, bicycling, and transit trips has fallen from over 20% in 2000 to just under 16% in 2009 (US Census Bureau, ACS 2000-2009).

While the transit system continues to struggle to recover, the overall trend for active transportation in New Orleans is promising. New Orleans continues to be in the top 15 in the nation in terms of pedestrian commuter rates and has emerged into the top 10 in terms of bicycling rates. New Orleans is also adding and improving its active transportation infrastructure. New Orleans is moving from just under 5 miles of bicycling facilities prior to Katrina to over 40 miles by the end of 2010. This large increase, coupled with an improving policy framework in the City's Master Plan, is a promising sign for the future of active transportation in New Orleans.

#### **ORGANIZATION OF THE REPORT**

The **State of Active Transportation** for the first time provides a complete portrait of walking and bicycling conditions in New Orleans. This study selected key indicators to track based on proven models utilized in Toronto, Minneapolis, Portland, San Francisco, and Seattle. The report tracks eight key indicator areas.

These are:

- Facilities
- Mode Share
- Equity: Community Income and Active Transportation
- Health
- Safety and Crashes

- Active Transportation Funding
- Bicycle and Pedestrian Counts
- Policy and Funding

In addition to the detailed examination of conditions in New Orleans, the **State of Active Transportation** provides an overview of regional conditions in a chapter provided by the Regional Planning Commission

This first edition of the **State of Active Transportation** provides important benchmarks to judge future success. A second edition will be released in 2011 to track progress towards improving conditions.



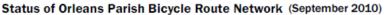
# **ACTIVE TRANSPORTATION INDICATORS**

### **INDICATOR 1: FACILITIES OVERVIEW**

The extent of facilities for walking and bicycling is an important indicator of the state of active transportation. The quantity (number of miles) of available facilities designed to serve bicyclists, pedestrian, and transit users affects the total number of users who take advantage of these facilities.

The City of New Orleans is experiencing a drastic increase in the number of miles of bicycle facilities. New Orleans has moved from 4.9 miles of bicycle facilities in 2005 to 32 miles today. One way to understand how this compares to other communities is to look at the number of miles per 100,000 population. Currently, New Orleans has approximately 10.29 miles of bicycle facilities per 100,000 people. While the growth in bicycling facilities represents a vast improvement from the pre-Katrina era, the proportion of facilities per population is still low compared to national leaders (See table below).





Source: New Orleans City Planning Commission, New Orleans Regional Planning Commission, ESRI 2009 StreetMap (other features and boundaries). Developed and Maintained by: LPH: Information Service Runding for bicycle route projects, as shown, is from various federal, state, and local programs.

New Orleans Facility Comparison with Other Cities							
City	Bicycle Facilities (Miles)*	Miles of Bicycle Facilities/100,000 Population*	Bicycle Mode Share**				
Seattle	140	24.91	2.99%				
Portland, OR	259	47.97	5.81%				
Minneapolis	90	24.39	3.86%				
San Francisco	145	19.49	2.98%				
Washington, DC	142	23.68	2.17%				
Toronto	331	13.22	0.80%*				
Vancouver, BC	124	21.45	1.90%*				
New Orleans	32***	10.29	2.47%				
Source: *Canzi 2008	, **ACS 2009, ***PBI	RI 2010					

### **INDICATOR 2: MODE SHARE**

Mode share calculates the percentage of users of a specific type of transportation (mode) to the total number of users. For example, if 10 people out of 100 walked or rode bicycles to work, the mode share for walking and bicycling would be 10%. One of the most common types of mode share information is Census data. Because these data are available nationally, they provide a good way to compare active transportation trends across the country. This section examines active transportation mode share in New Orleans from 3 different angles:

- Combined Walking, Bicycling, and Transit Analysis
- Detailed Pedestrian and Bicycle Mode Share Breakdowns
- Combined Walking and Bicycling Analysis

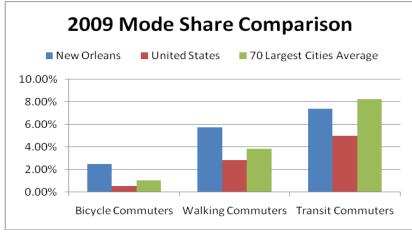
### Walking, Bicycling, and Transit: National Comparison

When compared to both the national average of active transportation mode share and the average of the largest U.S. cities, New Orleans' bicycling, walking, and transit mode shares consistently rank high. Taking advantage of well-connected street grid and corridor-centered transit options, New Orleanians support high levels of active transportation use.

While New Orleans ranks well above the national averages in walking, bicycling, and transit use, the comparison to other large cities shows room for improvement. New Orleans has a high walking commuter percent of just under 6% of all commute trips. This figure places New Orleans ahead of the

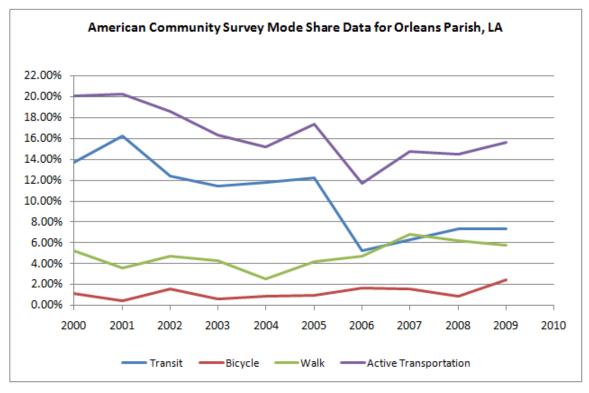
average for the larger U.S. cities. The bicycling commuter percentage of 2.47% is more than twice that of the average for larger U.S. cities.

	Bicycle Commuters	Pedestrian Commuters	Transit Commuters			
New Orleans	2.47%	5.75%	7.37%			
United States	0.55%	2.86%	5.00%			
Largest 70 Cities Average	1.02%	3.86%	8.25%			
Source: ACS Census 2009 Commute to Work Data and League of American Bicyclists. 70 Largest Cities.						



Data source: ACS 2009

Where New Orleans falls short is in terms of transit commute percentage. While the 7.37% commute share for transit is above the overall national average, it falls below the larger U.S. cities average. This is particularly troublesome given the long history of high transit commute mode shares that New Orleans sustained prior to Katrina. In 2000, for instance, New Orleans had a transit commute share of 13.67%. The decline in service and population movement appears to have interacted to produce a sharp decrease following Katrina. The percentage of commuters using transit in New Orleans has, however, been steadily rising post-Katrina, increasing from 5.3% in 2006 to 7.4% in 2009 (ACS 2009). Unfortunately that growth seems to be tapering off as New Orleans experienced a very minimal increase (<1%) from 2008 to 2009. Efforts to improve service are currently underway, but the lack of efficient and convenient transit service should be monitored carefully to ensure improvements.

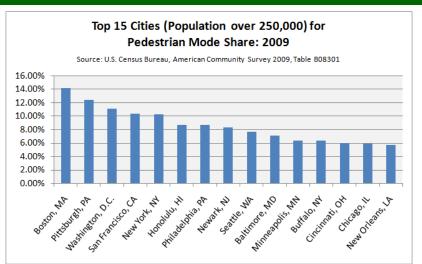


Data source: ACS 2000-2009

### Walking and Bicycling Mode Shares: A Closer Look

In 2009, New Orleans ranked 15<sup>th</sup> among cities over 250,000 in pedestrian mode share, placing New Orleans higher than cities such as Portland. Oregon. This was a slight decline from 2008 when pedestrian mode share ranked 9th. While it is possible that this was caused by an actual decrease in pedestrian rates, the more likely cause was the sample size of the ACS data source. This trend should be carefully monitored.

In 2009, New Orleans ranked 6<sup>th</sup> in bicycle mode share. With an expansion of bicycling facilities, there is a tremendous opportunity to increase the bicycling mode share. The bicycling count program (discussed Indicator 6) in detailed provides more research platform for monitoring trends.



Тс	Top 25 Cities (Over 250,000 Population) for Bicycle Mode Share: 2009				
1	Portland, OR	5.81%			
2	Minneapolis, MN	3.86%			
3	Seattle, WA	2.99%			
4	San Francisco, CA	2.98%			
5	Oakland, CA	2.53%			
6	New Orleans, LA	2.47%			
7	Honolulu, HI	2.34%			
8	Washington, D.C.	2.17%			
9	Philadelphia, PA	2.16%			
10	Boston, MA	2.11%			
11	Sacramento, CA	2.08%			
12	Tucson, AZ	1.87%			
13	Denver, CO	1.81%			
14	Anaheim, CA	1.54%			
15	Santa Ana, CA	1.46%			
16	Albuquerque, NM	1.42%			
17	Pittsburgh, PA	1.35%			
18	St. Paul, MN	1.35%			
19	Chicago, IL	1.15%			
20	Buffalo, NY	1.12%			
21	Mesa, AZ	1.12%			
22	Atlanta, GA	1.08%			
23	Long Beach, CA	1.06%			
24	Austin, TX	1.04%			
25	Baltimore, MD	0.99%			
	Source: U.S. Census Bureau, ACS 2009				

Combined Walking and Bicycling Mode Share: New Orleans as a National Leader

New Orleans has a high national walking and bicycling mode share.

In 2009, New Orleans ranked **12<sup>th</sup>** in the nation in bicycling and walking mode share. While New Orleans fell out of the top 10 in 2008 and 2009 (7<sup>th</sup> place in 2007), this decrease could be attributed to factors such as small sample size amongst the bicycling population. The decrease could also represent an actual decrease in active transportation This use. indicator should be closely monitored to ensure any actual decreases in active transportation are acknowledged.

Top 15 Cities in Bicycling and Walking Com- bined Mode Share 2009 (Population Over 250,000)				
1	Boston, MA	16.25%		
2	Pittsburgh, PA	13.77%		
3	San Francisco, CA	13.33%		
4	Washington, D.C.	13.27%		
5	Portland, OR	11.38%		
6	Honolulu, HI	11.07%		
7	New York, NY	10.90%		
8	Philadelphia, PA	10.85%		
9	Seattle, WA	10.67%		
10	Minneapolis, MN	10.26%		
11	Newark, NJ	8.40%		
12	New Orleans, LA	8.22%		
13	Baltimore, MD	8.15%		
14	Buffalo, NY	7.49%		
15	Chicago, IL	7.08%		
Soui	Source: U.S. Census Bureau, ACS 2009			



### **INDICATOR 3: EQUITY: COMMUNITY INCOME AND ACTIVE TRANSPORTATION**

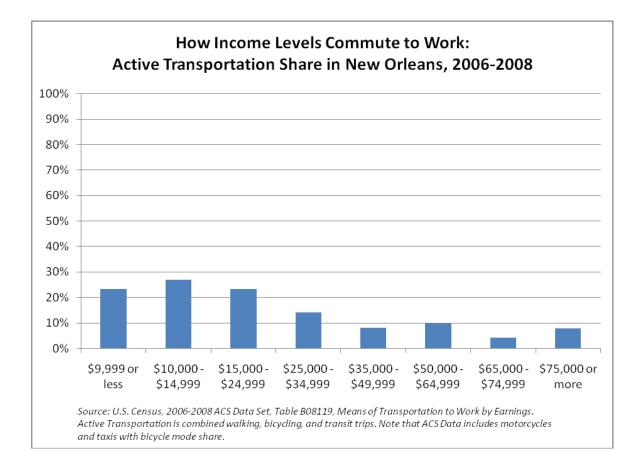
While the popular perception of bicycling as the domain of lycra-clad road warriors certainly captures a segment of the bicycling population, a hidden segment of the bicycling population is the low-income, utilitarian cyclist who uses cycling as a low cost transportation mode. When combined with the transit dependent population and low-income commuters that walk to work, a true portrait of the reliance of the low-income population on active transportation modes comes into focus.

Transportation costs comprise a significant portion of a household's annual income. For people with lower incomes or disabilities, the cost of owning and operating motor vehicles can be a tremendous economic burden. Several key statistics stand out in New Orleans:

- About 24% of New Orleans citizens live below the poverty level (ACS 2009, B17001). Car ownership and operation can be a significant burden for low-income families.
- In 2009, 18.16% of New Orleanians had no access to a car compared to the national average of 8.90% (ACS 2009, B08201).

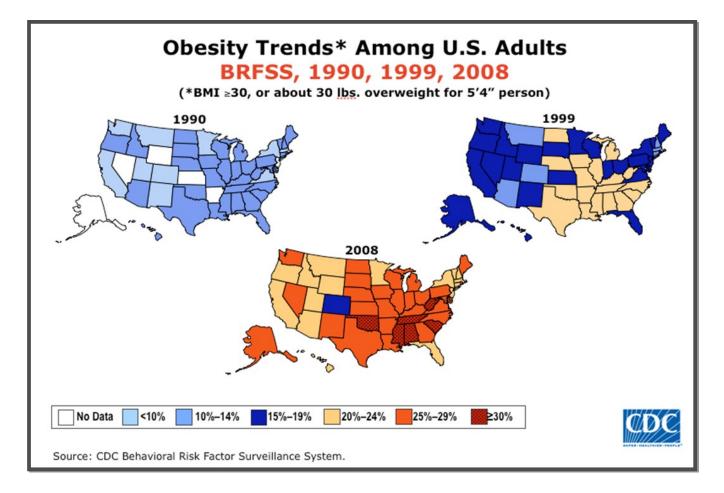
Vehicles Available in New Orleans Households, 2009							
	United S	States	Orleans Parish, LA				
	Estimate	Percent	Estimate	Percent			
No vehicle available	10,109,389	8.90%	23,297	18.16%			
1 vehicle available	38,279,972	33.69%	58,869	45.90%			
2 vehicles available	42,671,629	37.56%	34,983	27.27%			
3 vehicles available	15,804,048	13.91%	8,926	6.96%			
4 or more vehicles available	6,751,191	5.94%	2,192	1.71%			
Source: U.S. Census Bureau, ACS 2	009, 1-year Est	imates, Tab	le B08201				

The chart on the next page breaks down the active transportation use by income categories. Over 20% of commuters in each of the three income categories defined by the Census below \$ 25,000 rely on active transportation to get to work. The heavy reliance on active transportation for low-income residents in the City of New Orleans makes the provision of a strong, efficient transit system and safe bicycle and pedestrian networks a serious equity concern. With the large percentage of low-income residents already commuting using active transportation, improving the facilities for walking, bicycling, and transit becomes an important issue in terms of access to jobs as well.

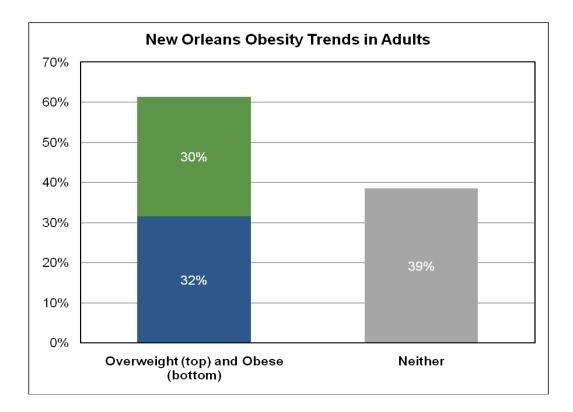


### **INDICATOR 4: PUBLIC HEALTH**

The growth in obesity over the last two decades has been striking with the Center for Disease Control (CDC) identifying obesity as a national epidemic (see CDC map below). While these trends are troubling, public health professionals have established that changes in lifestyle, diet, and in the built environment can help to reverse these trends.



Louisiana ranks towards the bottom nationally in terms of overweight and obese individuals. Louisiana's Report Card on Physical Activity and Health for Children and Youth gives Louisiana a "D". This means that physical activity opportunities are unavailable to the majority of Louisiana's children and youth (2009). Louisiana scored an "F" in the overweight and obese category with one-third of adolescents categorized as overweight or obese. Physical activity levels are also extremely low. Only 25% of students in Louisiana met the recommendations for daily physical activity (Louisiana's Report Card 2009). In New Orleans, 31.5% of adults are classified as obese with an additional 29.8% classified as overweight (BRFSS, 2006). Only 24% of New Orleans adults reported meeting the current recommended levels of physical activity. 37% of adults reported participating in no physical activity during the reporting period (BRFSS, 2006).



In terms of New Orleans high school students, the level of physical activity is even lower. Only 19.2% of high school students report achieving the currently recommended levels of physical activity (YRBS 2005).

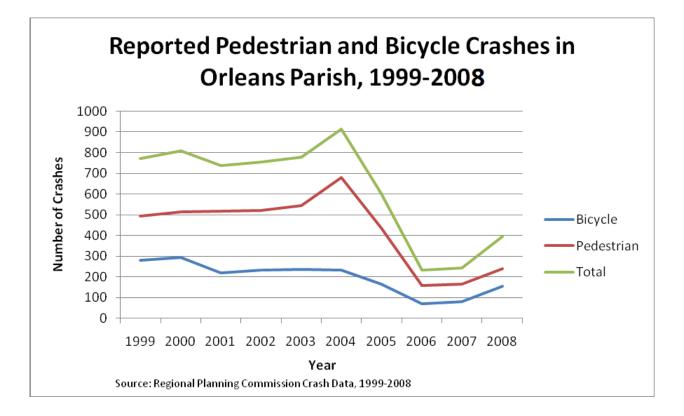
Research indicates that providing facilities for active transportation and encouraging programming like Safe Routes to School can have a significant impact on increasing physical activity. By encouraging policies to improve facilities and programming, the City of New Orleans can work to increase physical activity and improve public health. The Kids Walk Coalition is actively working to pursue improved policies in this arena.

### **INDICATOR 5: SAFETY AND CRASHES**

Analysis of bicycle and pedestrian crash data provides an important indicator of bicycle and pedestrian safety. Safety impacts individual transportation choices and can either encourage or discourage active transportation. This analysis for Orleans Parish crash data identified three key trends:

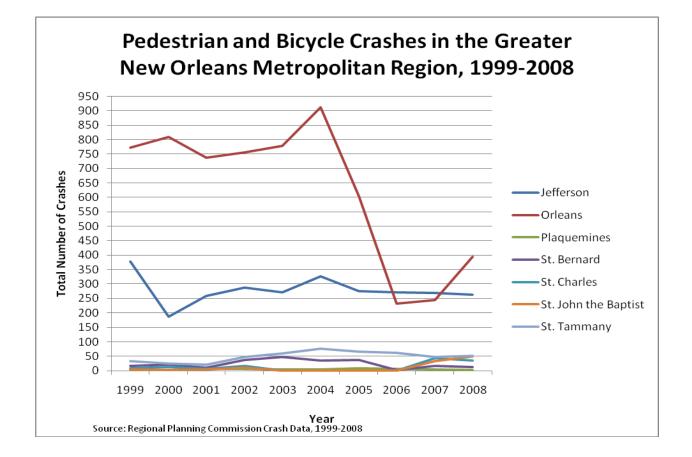
- The number of reported crashes in Orleans Parish decreased dramatically following Hurricane Katrina, but recent increases in the crash rate are a sign of concern.
- The number of crashes in Orleans Parish is significantly higher than crashes in the surrounding parishes.
- The New Orleans crash rate is high in comparison to other comparable U.S. cities.

As seen in the chart below, Orleans Parish saw a significant decrease in the number of reported crashes following Katrina. While much of this decrease can probably be explained by the smaller population following the storm, the lower figure may represent an improvement in bicycle and pedestrian safety in New Orleans. Walking and bicycling rates climbed during this period and may have resulted in an increase in awareness by drivers. While pedestrian and bicycle safety has improved since 2004, the recent increase in reported crashes is cause for concern and deserves attention from policy makers. As more of the population returns and VMT begins to climb, safety concerns may be increasing.

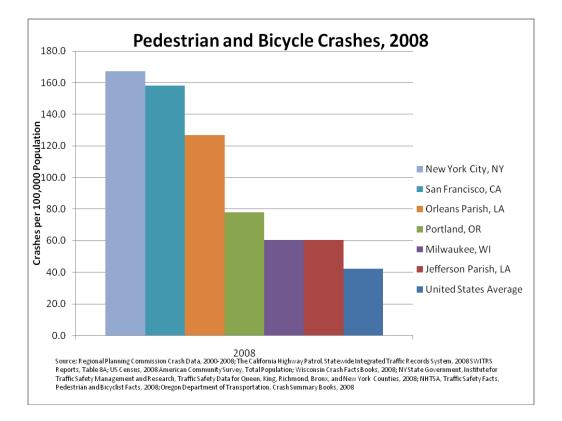


As illustrated in the table below, the number of reported crashes in Orleans Parish is significantly higher than the number of crashes reported in surrounding parishes. While Jefferson Parish surpassed the number of reported crashes in Orleans Parish for 2006 and 2007, the Orleans Parish crash numbers rebounded in 2008 with over one hundred more reported crashes than Jefferson Parish. None of the other parishes even come close to the high number of crashes in Orleans Parish.

otal Pedestrian and Bicycle Crashes in the Greater New Orleans Metropolitan Region, 1999-										
2008										
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Jefferson	378	186	259	288	271	327	276	271	270	264
Orleans	772	809	737	755	779	912	603	232	244	395
Plaquemines	4	2	6	6	4	4	9	6	4	2
St. Bernard	16	20	10	37	48	36	37	2	17	13
St. Charles	9	13	7	17	0	0	0	0	44	36
St. John the Baptist	5	3	4	10	0	0	0	0	32	49
St. Tammany	33	25	20	48	60	76	65	61	47	52
Source: Regional Planr	ning Com	mission	's Crash	Data, 1	999-20	800				



By calculating crashes per 100,000 population, Orleans Parish statistics can be comparatively analyzed against other cities and parishes/counties. These comparisons show that New Orleans ranks high in its total number of crashes both regionally and nationally. The peak in crashes in New Orleans in 2004 is reflected by a rate of 205.2 crashes per 100,000 population. This rate surpasses the highest national comparison rates found in New York and San Francisco. Even after crashes decreased in New Orleans after Hurricane Katrina, the rates still ranged from 102.0 to 126.7 per 100,000 population.



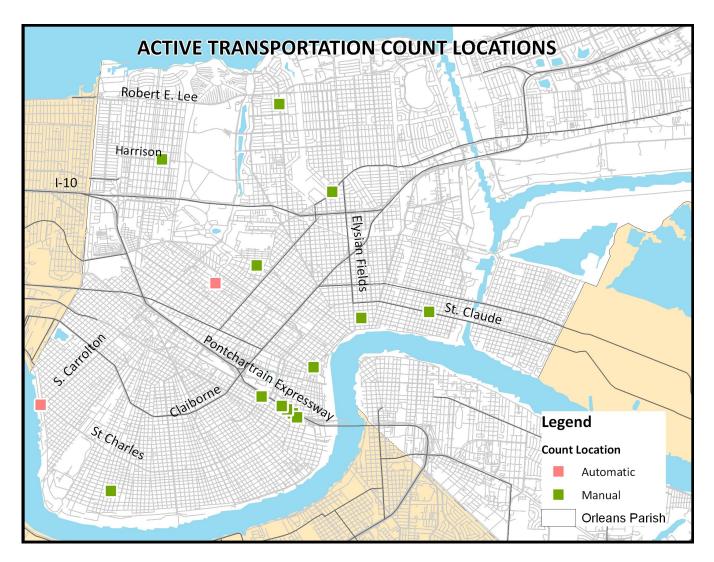
All of these comparisons show that while conditions in New Orleans are improving, the City still has major issues with bicycle and pedestrian safety. The recent rise in 2008 of both the number of reported crashes and the number of crashes per 100,000 population rate should be of special concern.

involuent Deductrics Creakes and 400,000 Develotion, 2000, 2000										
Bicycle and Pedestrian Crashes per 100,000 Population, 2000-2008										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	
United States Average	48.9	47.8	43.2	41.7	38.9	38.7	36.9	39.2	42.1	
Jefferson Parish, LA	40.8	*	64.2	60.5	72.8	**	62.8	63.8	60.5	
Portland, OR	***	***	***	68.9	61.0	67.4	72.6	64.3	77.8	
Mecklenburg County, NC	70.3	*	61.5	66.6	73.7	62.8	59.1	62.5	***	
Toronto, Canada	*	*	*	*	*	*	67.6	*	*	
Milwaukee, WI	110.7	*	103.1	95.3	69.8	70.8	73.0	69.6	60.5	
Washington, D.C.	160.8	*	153.1	169.1	***	***	***	***	***	
San Francisco, CA	175.6	168.4	159.5	155.5	145.3	156.2	145.0	166.3	158.2	
Orleans Parish, LA	166.9	*	165.6	172.6	205.2	**	103.9	102.0	126.7	
New York City, NY	195.1	*	194.4	187.3	177.3	174.7	169.1	169.2	167.2	

Source: Regional Planning Commission Crash Data, 2000-2008; The California Highway Patrol, Statewide Integrated Traffic Records System, 2000-2006 SWITRS Reports, Table 8A; US Census,2000 Census and 2001-2008 American Community Survey, Total Population; City of Toronto Transportation Services, 2009 Cyclist Collision Summary Leaflet and 2009 Pedestrian Collision Summary Leaflet; Statistics Canada, 2006; Wisconsin Crash Facts Books, 2000-2008; NY State Government, Institute for Traffic Safety Management and Research, Traffic Safety Data for Queen, King, Richmond, Bronx, and New York Counties, 2000-2008; NHTSA, Traffic Safety Facts, Pedestrian and Bicyclist Facts, 2000-2008; District Department of Transportation's Bicycle Program, Bicycle and Pedestrian Crash Summaries, 2000-2003;Oregon Department of Transportation, Crash Summary Books, 2003-2008; \*No yearly population data; \*\*No reliable population data due to Hurricane Katrina; \*\*\*No accessible crash data

### INDICATOR SIX: BICYCLE AND PEDESTRIAN COUNTS

Counting bicyclists and pedestrians at key locations around the New Orleans is another important active transportation indicator. Tracking the number of bicyclists and pedestrians over time provides a good way to gauge progress towards meeting goals of increased active transportation use. Counts also can provide data on demographic characteristics of users as well important usage trends tracking time of day and helmet use.



#### MANUAL COUNTS

### **Methodology**

Manual counts were taken at fourteen locations throughout the City of New Orleans during April and May 2010. These sites were selected to represent a cross-section of New Orleans' active

transportation infrastructure. The methodology for conducting and extrapolating counts are as follows:

- Counters sat in view of each other on opposite sides of the street, creating a visual plane for users to cross and be counted. If there was a neutral ground each counter was to count their side of the street and their sidewalk while one of them also accounted for traffic on the neutral ground. If there was no neutral ground, both counters were responsible for the entire street and both sidewalks and their counts were averaged together.
- Counters tallied pedestrians and bicyclists and noted their respective gender. For bicyclists they also noted helmet usage and right-way vs. wrong-way use.
- Counts were performed between 7-9 a.m. and 4-6 p.m. between Tuesday and Thursday as recommended by the National Bicycle and Pedestrian Documentation (NBPD) Project (Alta Planning and Design). Two counts were taken at each site with an average count number defined for each location.
- Counts were then extrapolated based on adjustment factors by NBPD methodology. This approach:
  - Divides counts into A.M. and P.M. periods and averages the combined (bicycle and pedestrian) users observed for each time period.
  - These averages are used to derive a daily and weekly extrapolation for each time period based on time of the day and day of the week counts were observed.
  - Weekly extrapolations for A.M. and P.M counts were then averaged together for each location in order to form an aggregate weekly extrapolation.
  - This weekly figure is multiplied to get the estimated monthly users.
  - Finally, estimated annual counts are extrapolated by using the NBPD climate adjustment factor which accounts for regional variation in use.
  - More research is ongoing to determine the overall effectiveness of this approach.

### **Overall Trends**

• New Orleans, like other U.S. cities, has a higher number of men bicycling than women. Research from around the country shows that as safety increases this disparity should begin to close.

- New Orleans has extremely low rates of helmet use compared to national leaders in active transportation.
- As expected, the highest rates of bicycling and walking are in the French Quarter, Marigny/Bywater, and the Central Business District where density of destinations and population make active transportation a competitive mode.

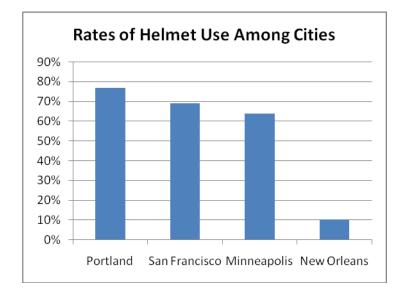
### Gender Trends

- Gender is an important issue to track in terms of active transportation. Currently around the country, men are the predominant cycling users. As more women feel comfortable cycling and the gender gap begins to close, the active transportation system can generally be said to be stronger (Dill 2009).
- Gender trends in bicycle use in the City of New Orleans are consistent with national trends: more males are bicycling than females.
- In 2009 New Orleans had a slightly higher percentage of female bicyclists than the national average (ACS 2009), but still fell well-short of other bicycling leaders such as Minneapolis, Portland, and San Francisco.
- The sites with the highest percentage of female riders are mostly those that serve predominantly as gateways to the Central Business District (CBD).

	Male	Female
United States, 2009	73%	27%
New Orleans, 2009	71%	29%
Minneapolis, 2009	55%	45%
Portland, 2009	61%	39%
San Francisco, 2009	69%	31%
New Orleans, 2010*	73%	27%

#### Helmet Use

- New Orleans' rates of helmet use are extremely low when compared to other cities.
- The sites with the highest rates of helmet usage are in Gentilly or are gateways into the Central Business District (CBD).



Rates of Helmet Use in Selected Cities				
Portland, 2009	77%			
San Francisco, 2009	69%			
Minneapolis, 2009	64%			
New Orleans, 2010	10.38%			
Source: New Orleans Manual Counts				
2010; Bike Walk Twin Cities 2009; San				
Francisco Bicycle Counts 2009; Portland				
Bicycle Counts 2009.				

#### **Bicycle and Pedestrian Traffic**

• The areas with the highest bicycle and pedestrian traffic are in the French Quarter, the Marigny/Bywater, and gateways into the Central Business District (CBD). These areas are mixed-use, higher density, and have grid-like street patterns, making bicycling an attractive mode of transportation.

Highest Traffic Sites (Combined Bicycle and Pedestrian)					
Site	Estimated Daily Users	Estimated Annual Users			
Decatur St (French Quarter/CBD)	4,779	1,744,178			
Simon Bolivar Ave (CBD Gateway)	2,677	977,069			
St. Charles Ave (CBD Gateway)	2,580	941,504			
Royal St (Marigny)	1,963	716,522			
St. Claude Ave (Bywater)	1,484	541,771			
Magazine St (Uptown) 1,175 428,850					
Source: 2010 Manual Counts, State of Active Transportation New Orleans; Average Daily Users based					
on the National Bicycle and Pedestrian Docum	entation (NBPD) Project m	ethodology.			

### **ELECTRONIC COUNTS**

Electronic count devices were installed in May 2010 along two off-street, multi-use, urban trails. The two sites equipped with Eco-counters are the Jefferson Davis Trail in Mid-City and the Mississippi River Trail in the Riverbend area of Uptown New Orleans. These Eco-Counters use infrared sensor technology to record pedestrians and bicyclists. However, research has shown that Eco-

counters tend to undercount users because they cannot distinguish between groups and individuals (Greene-Roesel, Diogenes, Ragland & Lindau 2007). The averages and yearly extrapolations here are based on data from July 2010. Extrapolations for the yearly figure were conducted using methodology pioneered by the National Bicycle and Pedestrian Documentation (NBPD) Project. The counts will continue throughout the year and will be refined for next year's **State of Active Transportation** report.

### <u>Methodology</u>

- Counts were taken from the electronic counters and put into a database.
- The July monthly total was extrapolated using NBPD adjustment factors:
  - In order to get the estimated annual totals we divided the July total by its respective percentage of the annual total for our climate as figured by NBPD.
  - After electronic count data is collected for an entire year, we can determine New Orleans' true patterns and temporal composition.

### The Jefferson Davis Trail

- Averages 490 users a day and 178,843 annually (NBPD Extrapolation).
- Surveys conducted in May 2010 of Jeff Davis Trail users show that it is used primarily as a commuter bicycle route on a daily basis and functions as a heavily used bicycle route during local festivals, such as Jazz Fest and Bayou Boogaloo (Judge 2010).
- Will intersect with the future Lafitte Greenway, creating a potential nexus for commuters. The Lafitte Greenway will run from the French Quarter, Treme, Mid-City, and Lakeview.
- Surveys show current users have safety, maintenance, and infrastructure concerns (Judge 2010).
- There is potential to improve this trail as there is already high ridership despite a lack of safety features, connections to other trails or lanes, and maintenance.

### The Mississippi River Trail

- Averages 590 users a day and 215,414 annually (NBPD Extrapolation).
- Is primarily used for exercise and recreation because of lack of connections to businesses.
- Has the potential for greater tourism since it is part of the larger Mississippi River trail that goes through multiple states and consists of 3,000 miles of off-road trails.

### **Urban Trail Comparisons**

The Jefferson Davis Trail and the Mississippi River Trail have lower user numbers than urban trails in other cities with more established bicycle networks. Given that the New Orleans trails lack major connections with other facilities, the ridership has potential to increase.

Urban Trail Comparisons: Average Daily Users						
Trail	Location	Year	Average Daily Users			
Midtown Greenway	Minneapolis, MN	2009	3,445			
Pinellas Trail	Pinellas County, FL	2008	3,000			
Burke Gilman Trail	Seattle, WA	2008	1,200			
Capital Crescent	Washington, DC	2006	3,288			
Monon Trail	Indianapolis, IN	2000	2,012			
Guadalupe River Trail	San Jose, CA	2007	1,000			
Minuteman Commuter Bikeway	Boston, MA	2010	2,908			
Mississippi River Trail	New Orleans, LA	2010	590*			
Jefferson Davis Trail	New Orleans, LA	2010	490*			

Sources: Bike Walk Twin Cities Report and Transit for Livable Communities (2009); Pinnellastrails.org; City of Seattle and WA DOT; CCtrail.org; Cathy Buckley of Boston Region MPO (2010), Lindsey & Nguyen, (January 2002).

Notes: \*The New Orleans trail numbers are based on preliminary data from electronic counts. The Minuteman Trail number is the result of a 12-hour count (7am-7pm) on 9/20/08, so actual count is higher. Some sites had only monthly volumes (Pinellas) or weekly volumes (Capital Crescent), so in these cases the monthly volume was divided by 30 and weekly divided by 7 to derive a daily user average.

### **INDICATOR SEVEN: FUNDING & POLICY**

### FUNDING

New Orleans has been particularly reliant on federal transportation funds as a source of funding for active transportation. While there was a \$5 million portion of a larger local bond approved for walking and bicycling in 2004, the largest share of funding has come through federal funding from programs such as Transportation Enhancements and Recreational Trails. These federally funded, state administered projects form the backbone of funding for local AT infrastructure. The table below shows federal expenditures on AT infrastructure in New Orleans. The table was derived from federal FMIS records and shows all federal funds obligated for projects in Orleans Parish.



### Safe Routes to School Funding

One new area of federal funding that has emerged deserves special attention. The Safe Routes to School Program has opened up a great source of funding for improving both the built environment surrounding school sites as well as an important source of funding for programming designed to help create a school culture that embraces and encourages walking and bicycling to school. Contracts were recently signed to begin infrastructure improvements around these schools. Below is a table detailing the funding received by three elementary schools in Orleans Parish.

Safe Routes to School Funding in New Orleans, 2010			
	Infrastructure	Non-Infrastructure	
School	Funding	Funding	Total
Drew Elementary	\$250,000.00	\$15,222.00	\$265,222.00
Esperanza Charter School	\$250,000.00	\$45,000.00	\$295,000.00
International School of Louisiana	\$250,000.00	\$50,000.00	\$300,000.00
Total	\$750,000.00	\$110,222.00	\$860,222.00
Source: Louisiana Department of Transportation and Development, SRTS Projects Summary,			
Orleans Parish			

The Safe Routes to School Program is also an important source of funding for improving the state of active transportation and built environment for the community at large. Due to the fact that the improvements are done within walking distance of schools (usually a half mile radius), all residents of the adjacent community can benefit from these repairs, not simply the children, parents, and volunteers that will use these routes to walk or bicycle to the school campus.



If every school in New Orleans were buffered by half a mile of pedestrian and bicycle-friendly roadways, this would create a safe environment for bicyclists and pedestrians across the city. This image illustrates how much of the city of New Orleans would be covered by such a buffer.

### POLICY

Policy and specific programmatic outcomes of policies can be used as an indicator of the level of support for active transportation and the possibility for future improvements in facilities and increases in the extent of active transportation in a region.

Currently there are a number of statewide, regional, and local efforts that are helping to increase and improve bicycle and pedestrian facilities in the City of New Orleans. These initiatives include:

- The Safe Routes to School program and the Louisiana Safe Routes to School Network
- Implementation of the Louisiana Complete Streets Working Group
   Recommendations
- The Regional Planning Commission's Complete Streets Advisory Group
- The KidsWalk Coalition
- The New Orleans Master Plan's provisions for Complete Streets

Through all of these efforts, the focus on creating complete streets that safely serve the needs of all users is significantly strengthened. Through site audits, design guidelines, and implementation of necessary changes, all of these programs work to improve the built environment and encourage active transportation.

### Consensus Active Transportation Policy Recommendations: New Orleans 2010/2011

The City's newly adopted Master Plan, The Plan for the 21st Century, commits the City to moving forward on a series of key changes designed to help make active transportation use safer and more widespread. A definitive timeline for implementation of <u>The Plan for the 21st Century</u> is, however, still lacking. In order to provide more clarity on the immediate policies that need to be implemented, PBRI convened key New Orleans active transportation leaders to establish a set of key policies and projects that the City should advance within the next year. Organizations convened by PBRI included: the Metro Bicycle Coalition, AARP, the KidsWalk Coalition, the Regional Planning Commission, the Prevention Research Center at Tulane University, the Friends of Lafitte Corridor, Transport for NOLA and Louisiana Public Health Institute's Active Environment Planning.

The New Orleans Master Plan encourages the adoption and implementation of a Complete Streets policy. This policy is designed to provide safe access for all transportation users across New Orleans. To facilitate this, the plan suggests creating a multimodal position with the Department of Public Works. It also supports developing a pedestrian plan that addresses sidewalk maintenance, street-scape and infrastructure improvements, and ADA compliance in addition to developing a comprehensive bicycle strategy. Until such plans and strategies are adopted, both pedestrian and bicycle improvements should be considered for roadways currently planned for resurfacing or reconstruction. Also, future bonds should include funding appropriation for pedestrian and bicycle improvements.

Some of the recommended actions in the Master Plan include: creating a Pedestrian and Bicycle Advisory Committee, developing the Lafitte Greenway as a key pedestrian and bicycle corridor, reviewing and prioritizing recommendations from previous pedestrian and bicycle plans, studying and establishing a network of bike boulevards on streets with less automobile traffic, creating more bicycle racks/storage, developing a public bicycle rental system, creating programs that address enforcement, education, and encouragement of bicycling.

While these policies should move forward over time, the group identified four key policies and projects found in <u>The Plan for the 21st Century</u> that the City should immediately implement. The City should:

- Implement a formal complete streets policy to create a safe and convenient active transportation network (Vol 2, Chapter 11, p11.8 and 11.23)
- Maintain and build capacity for policy and project implementation through ensuring adequate funding for staff at DPW and City Planning (Vol 2, Chapter 11, p11.8 and 11.23)
- Enhance funding for active transportation infrastructure and programming for programs like Safe Routes to School and the Lafitte Greenway (Vol 2, Chapter 11, p11.8-11.10, 11.23-11.29)
- Begin to plan for a comprehensive, interconnected network of active transportation facilities that increase connections to transit (Vol 2, Chapter 11, p11.8-11.9, 11.23-11.26)

#### **REGIONAL PLANNING COMMISSION OVERVIEW OF REGIONAL ACTIVE TRANSPORTATION FACILITIES**

For over a decade, the Regional Planning Commission (RPC) has taken the lead in promoting and providing safe and convenient active transportation options for all users in the New Orleans region. These efforts have lead to the construction of levee top trails, on-street bike lanes, workshops for engineers and law enforcement officers, public outreach campaigns and more. This success has been the result of RPC's ability to leverage state and federal funding to implement projects and programming. Since the passage of ISTEA in 1991, over \$40 million have been spent on active transportation in the New Orleans region. RPC's efforts have been further enhanced through the variety of strategic relationships developed over the years with partners including universities, public health organizations, and transportation advocates.

The recently established Complete Streets Advisory Committee (CSAC) marks a new stage in RPC's efforts to creating a regional pedestrian and bicycle network that meets the various needs of our member Parishes. The Committee is comprised of representatives from all 7 Parishes of the region and is tasked with assisting RPC staff in identifying appropriate pedestrian and bicycle accommodations at a project level as well as proposing policy level changes that will promote active transportation.

As the core of the urban area, the City of New Orleans has a high concentration of active transportation options and users. However, other communities in the metropolitan area are suitable for active transportation and would receive substantial benefits from improved transportation options. The suburban parishes of New Orleans are each at a separate stage of development in regards to their active transportation networks and the level of public and political interest in furthering this development. This section provides an overview of conditions in parishes around the region that RPC serves.



#### Jefferson Parish

Jefferson Parish has assembled a sizable network of multi-use trails over the past 10-15 years, constructing trails along the Lake Pontchartrain Lakefront and both the East and West Banks of the Mississippi River. These trails comprise a critical part of a regional network, connecting Jefferson Parish to Orleans and St. Charles Parishes. The residents of Jefferson and neighboring Parishes have embraced these trails as both recreational and transportation use, as was witnessed by the outcry to news that US Army Corps project would remove portions of the trail without provisions for restoration.

With the foundation of these multi-use trails, Jefferson Parish is in a position to begin envisioning an expanded bicycle network that addresses on-street facilities. This vision of a more pedestrian and bicycle friendly Jefferson has received strong interest amongst both the public and private sectors. Building off of this objective, the Parish and the RPC jointly prepared an application to the Louisiana Recreational Trails program to fund implementation of one of the critical Eastbank Lake-to-River routes, which would mark the Parish's first on-street bicycle facility. This proposal was selected for funding and marked the Recreational Trails program's first "urban trail" project. In the pedestrian realm, the Parish has begun the process of evaluating conditions and developing a plan to address pedestrian conditions including ADA issues. Additional projects are underway to close the gaps on the Westbank Mississippi River Trail and to reopen the Lakefront Trail as levee work is completed.

In recent years, the Jefferson Chamber of Commerce has established itself as a leading voice for a pedestrian and bicycle friendly Jefferson Parish. In addition to their ever growing annual bike ride, the Tour de Jefferson, the Chamber has created the Bicycle Advocacy Committee as a forum to bring together agencies, individuals and ideas to promote bicycling in the Parish.

#### **Plaquemines Parish**

Following Hurricane Katrina, the RPC worked with Plaquemines Parish to develop the "Plaquemines Parish Land Use and Transportation Plan." Given the mostly rural nature and unique topography of Plaquemines Parish, pedestrian and bicycle planning has often not been included in transportation planning. However, the regional vision of a Plaquemines Parish bicycle network connecting to neighboring Jefferson, Orleans and St. Bernard Parishes provided a foundation to include pedestrian and bicycle recommendations in the Land Use and Transportation Plan. In addition to the bicycle network, some basic policy recommendations were included to help the Parish establish policies and procedures to begin to address the pedestrian and bicycle environment of the Parish.

Work will soon be underway for Plaquemines Parish's first on-street bicycle route, constructed along F. Edward Hebert Blvd. This marks an important first step in connecting Plaquemines Parish residents to community amenities and to neighboring Orleans Parish. The Parish has also embarked on efforts to implement the 2001 Plaquemines Parish Bike Path Plan by seeking funds to begin levee top trail construction along the Mississippi River in the Belle Chasse area.

#### St. Bernard Parish

The RPC also worked with St. Bernard Parish in the aftermath of Hurricane Katrina to develop the "St. Bernard Parish Land Use and Transportation Plan." This plan provided an opportunity to introduce new ideas and concepts to the transportation system of the Parish. As with Plaquemines, the bicycle network and policy recommendations were included in the St. Bernard plan as a first step towards a sustainable transportation system as part of the Parish's recovery.

St. Bernard Parish is moving forward with levee top trail projects along the Mississippi River near Meraux with two funded projects that will result in approximately 3.2 miles of trail. On-street bicycle projects have not yet begun in St. Bernard Parish, but there are some opportunities in the coming years in conjunction with state overlay projects. A large number of sidewalk improvements have been constructed with the addition of American Recovery and Reinvestment Act (Stimulus) funds to the Submerged Roads Program.

### St. Charles Parish

Similar to Jefferson Parish, St. Charles Parish established an impressive foundation for an active transportation through the construction of levee top trails along both the Eastbank and Westbank of the Mississippi River. In partnership with the US Army Corps of Engineers, the Parish has plans to construct trails along the 33 miles of Mississippi River levees in the Parish. Over the last 10 years, St. Charles Parish has constructed or secured funding for 70% of this trail system.

As the river trail system is built out, the momentum to establish an on-street active transportation network is growing. Concurrently, the Parish is currently developing a Master Plan which will provide a more defined vision for the growth of this active transportation network.

### St. John the Baptist Parish

Following the model of Jefferson and St. Charles Parishes, St. John the Baptist Parish has set out to construct levee top trails along the Mississippi River in LaPlace as foundation for its active transportation network. The Parish has secured funding for 5.5 miles of trail along the Eastbank that will connect LaPlace to the Mississippi River Trail system heading downriver to New Orleans. The recently completed Louisiana Mississippi River Trail Feasibility Study provides a vision of a completed trail along the length of the river from Baton Rouge to New Orleans and a blueprint for St. John Parish to expand its levee trail and connect the trail to residential and commercial centers of the Parish.

#### St. Tammany Parish

Lake Pontchartrain presents a significant barrier to an interconnected regional bicycle network between the Northshore and Southshore. There are just five roadway connections across the Lake, on which only two, Old US 51 and US 90, can safely be used by cyclists. However, St. Tammany Parish is home to the popular Tammany Trace, Louisiana's first Rails-to-Trails project. Connecting the population centers of Covington, Abita Springs, Mandeville, Lacombe and Slidell the Trace has become a popular amenity to the citizens of St. Tammany. There are currently plans to extend the



Trace into Olde Town Slidell, which is also driving interest in addressing the on-street conditions for cyclists on the Northshore.

#### Louisiana

At the state level, the Department of Transportation and Development has taken several significant steps in the last several years to advance active transportation in Louisiana. The 10-year old Statewide Bicycle and Pedestrian Master Plan was updated in 2009 in a process which generated sizable interest from the public across the state. This plan reviewed existing conditions, laid out a vision for walking and biking and proposed policies for DOTD to promote active transportation.

Elements of this plan were then quickly put to use by the Complete Streets Work Group, convened in fall 2009 at the request of the Louisiana Legislature. This diverse set of stakeholders worked with DOTD to develop a plan to implement a Complete Streets Policy

internally at DOTD. The final report included the proposed policy, recommended implementation steps and an overview of legislation to support the policy. DOTD Secretary Sherri LaBas signed the Complete Streets Policy in July 2010 and DOTD has begun developing the policies and procedures to implement Complete Streets at a project level.

The Complete Streets Work Group also identified state laws that needed to be modified to support the Complete Streets Policy. Out of the report recommendations came HB 1125 (Act 840) and HB 1137 (Act 618). Both bills passed the Legislature and were signed by Governor Jindal during the 2010 Legislative Session. The new laws cleanup and modernize a variety of bicycle related traffic statutes and remove restrictions on DOTD's ability to implement Complete Streets. Together, these developments are encouraging signs for continued and increasing support for active transportation from both DOTD and the Legislature.

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Wisconsin Crash Fact Books available online at: http://www.dot.wisconsin.gov/safety/motorist/ crashfacts/

# **APPENDICES**

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# APPENDIX I: TECHNICAL APPENDIX

State of Active Transportation Models State of Active Transportation Indicators Mode Share Analysis: Facilities Ratio Mode Share Analysis: Top Cities in Bicycling and Walking Mode Share Analysis: 70 Largest Cities Mode Share Analysis: Active Transportation Mode Share Analysis: Commuting Data Gas Price Analysis Census Income and Transportation Data Census Data: Vehicles Available **BRFSS and CDC Health Data** Safety and Crash Data **Plans Analysis Policy Analysis** Manual Bicycle and Pedestrian Counts Methodology Manual Bicycle and Pedestrian Count Results Automatic Bicycle and Pedestrian Counts Methodology Automatic Bicycle and Pedestrian Count Results Automobile Counts **Transit Counts Urban Trail Comparisons** Jefferson Davis User Profile

#### I. State of Active Transportation Models

The New Orleans State of Active Transportation Report has several predecessors, including similar reports from cities such as Minneapolis, Portland, San Francisco, Toronto, and Seattle. These reports served as models for what indicators to include, how to format the report, and how to create a document consistent with national documentation trends.

Minneapolis Portland San Francisco Toronto Seattle

Sources: New Orleans State of Active Transportation 2010; Toronto State of Active Transportation 2008; Portland Bicycle Counts 2009; San Francisco Bicycle Counts 2009; Minneapolis Bike Ped Counts with the City of Minneapolis and Transit for Livable Communities; Seattle Bicycle Counts 2008.

### **II. State of Active Transportation Indicators**

The main indicators included in this report are:

Facilities Mode Share Income Health Crashes Funding Policy and Planning Bicycle and Pedestrian Counts Recommendations

Indicators can be used to influence policy-makers. Performance indicators have links to programmatic and financial planning in governments such as evidence-based policies that are used to inform development. Those who favor performance measurements note their impacts "on organizational goals and strategies as well as reporting for public accountability" (Hezri, Dovers, p. 89). So how do indicators influence policy? The answer lies with the "criterion of resonance," where 'resonance' connotes a situation where an indicator 'strikes a cord' with its intended audience (Hezri, Dovers, p. 92). Indicators "that describe a condition that users in planning agencies are able to influence are more likely to induce instrumental utilization" and be used for action (Hezri, Dovers, p. 96). Bicycling and walking can be used as sustainability indicators, commuting indicators, etc.

Other indicators were considered based on the reports of other cities. These reports were analyzed to see what indicators were included in their study.

	State of A	ctive Trans	portation In	dicators		
	New Orleans	Toronto	Portland	San Francisco	Minneapolis	Seattle
Manual Bicycle Counts	x		х	х	x	х
Manual Pedestrian Counts	x				x	х
Automatic Bike Ped Counts	5x		x	x	x	
Before and After Facilitiy	x					
Implementation						
Multiple Year Comparisons	5		х	x	x	
Facilities	x	x			x	х
Transit Ridership/	x	х	х	х	x	
Integration						
Auto Ridership/Counts	x		x	х	x	х
Health	x	х				
Census Data	x	х	x	х	x	
Bike Parking		х				
Income	x					
Gender	x		х	х	x	
Race	x					
Helmet Use	x		х	х	x	
Crashes	x					
Funding	x	х				
Gas Prices				х		
Sidewalk Riders	x			x	x	
Wrong Way Riders	x			х		
Weather	x			x	×	х
Bicycle Advocacy Groups	x	х				
Policy and Plans	x	х				

Sources: New Orleans State of Active Transportation 2010; Toronto State of Active Transportation 2008; Portland Bicycle Counts 2009; San Francisco Bicycle Counts 2009; Minneapolis Bike Ped Counts with the City of Minneapolis and Transit for Livable Communities; Seattle Bicycle Counts 2008.

### III. Mode Share Analysis: Facilities Ratio

To calculate the ratio of facilities to population, 2009 American Community Survey Census Data were used to determine the bicycle mode share and population. The Toronto State of Active Transportation Report (2008) utilized this analysis and we modeled ours after that. The number of bicycle facilities was gathered from reports by Jensen, the Thunderhead Alliance, Velo Quebec, Stary, and Bicycle Friendly Community data from the League of American Bicyclists.

### IV. Mode Share Analysis: Top Cities in Bicycling and Walking

To analyze the various mode share distributions of bicycling and walking in cities, 2009 and 2008 ACS Commute to Work data were sorted by descending values to determine the cities with the highest mode share in bicycling and walking. Analysis includes bicycling and walking as individual modes and as combined modes.

### V. Mode Share Analysis: 70 Largest Cities

The League of American Bicyclists compiled average statistics from the largest 70 cities in the United States for bicycling, walking, and transit mode share. This report used that figure to compare with 2009 Census data for Commute to Work mode share for the United States and the City of New Orleans, which was broken down into bicycling, walking, and transit.

### VI. Mode Share Analysis: Active Transportation

To determine the active transportation mode share (combined walking, bicycling, and transit), the percentages of each mode share were added together to come up with a percentage for active transportation. This was done using American Community Survey Census data from 2004, 2006, 2007, 2008, and 2009 with tables B01003 (Total Population) and B0301 (Travel to Work). The year 2005 was excluded due to Hurricane Katrina. The 2004 ACS data do not separate bicycling mode share, so an educated estimate was used.

#### VII. Mode Share Analysis: Commuting Data

Overall commuting data was gathered from the US Census Data from the American Community Survey 1-year estimates from 2000-2009, excluding 2005 due to Hurricane Katrina. Tables B01003 and B08301 (Travel to Work and Total Population) were used.

#### VIII. Gas Price Analysis

The San Francisco Bicycle Count Report (2009) included gas prices as an indicator of bicycle use. They used it to highlight the peak in gas prices in 2008 and the effect that had on alternate modes of transportation. This report considered gas prices and could not determine any direct causation, but included the information in an appendix as a resource to consider as gas prices are steadily rising. The website, Gasbuddy.com produces graphs on gas prices within the last 18 months, 2, 3, or 4 years for a city and/or the country.

#### **Census Income and Transportation Data**

The 2009 American Community Survey Data includes a table called Means of Transportation to Work by Earnings (Table B08119). Combined mode shares of walking, bicycling, and transit trips

provide an overall percentage of active transportation by income. Note that in this data set, bicycle mode share includes motorcycle and taxi trips.

### X. Census Data: Vehicles Available

The American Community Survey in the U.S. Census provides data on the amount of vehicles available per household at the household level for cities and the nation (Table B08201). We used the 1-year estimates from 2009 to show the vehicles available in New Orleans as compared to the nation.

### XI. BRFSS and CDC Data

Analysis of health data from the BRFSS provided us with obesity trends in adults in New Orleans. The CDC data was able to provide an overall picture of the nation's obesity trends and the Louisiana Report Card gave insight into obesity trends in the state of Louisiana. YRBS data gave information on health trends in children and teenagers.

Sources: Behavioral Risk Factor Surveillance System (BRFSS) 2006; Centers for Disease Control and Prevention (CDC); Louisiana's Report Card on Physical Activity and Health for Children and Youth; Tulane University Prevention Research Center; YRBS 2005.

#### XII. Safety and Crash Data

Safety and Crash Data were compiled from a variety of sources including the Pedestrian Bicycle Resource Initiative at the University of New Orleans, U.S. Census Data, Regional Planning Commission Crash Data, and crash data of other cities.

### XIII. Plans Analysis

The New Orleans related planning documents were analyzed to determine the need and support for active transportation in the City. These plans included: The Unified New Orleans Plan (2006); The Regional Planning Commission's Bicycle and Pedestrian Master Plan (2005); The Metropolitan Transportation Plan for the New Orleans Urbanized Area, FY 2032 (2007); Gaining Momentum: New Orleans 2010 Campaign for Active Transportation Case Statement; New Orleans Department of Public Works Plan; and The New Orleans Master Plan.

### **XIV. Policy Analysis**

Analysis of existing and proposed policies at the local, state, and federal levels was conducted to gain an understanding of the direction of law with active transportation.

### XV. Manual Bicycle and Pedestrian Count and Extrapolation Methodology

For this study, we are interested in the most efficient and reliable way to conduct user counts. Counts involve observing and actually counting the number of users at a facility. There are two types of counts: manual and automatic. Bicycle and pedestrian counts provide planners, policy-makers, and officials with quantifiable measurements of usage. As the Alliance for Bicycling and Walking report states, "What gets measured gets funded." The need to do bicycle and pedestrian counts is necessary as "documenting changes in pedestrian and bicycle activity, safety, and facilities over time... justify continued spending, particularly given budget constraints; determining peak-hour and seasonal adjustment factors... can be used to estimate pedestrian and bicycle volumes; [they identify] locations for pedestrian and bicycle facility improvements; [data can be used] in pedestrian and planning documents; and [allows for the integration of] non-motorized transportation modes into multimodal transportation models and analyses" (Schneider, Patten, and Toole, 2005, p. 78). "Pedestrian [and bicycle] volumes are a key performance measure necessary to evaluate the impacts of infrastructure improvements, to develop estimates of risk, and to understand the environmental correlates" (Greene-Roesel, 2008, p. 3).

Manual counts are performed by people observing bicyclists and pedestrians going across a given plane. Manual counts are "commonly recorded using data collection sheets or clickers in the field" (Schneier, Arnold, and Ragland, 2008, p.2). This study used data collection sheets that marked the number of bicyclists and pedestrians traversing an imaginary plane at the count site. Trained and paid counters marked on the sheets the time the bicyclist or pedestrian crossed, their gender, race, and helmet use. Counts were done during peak days and hours: Tuesday, Wednesday and Thursdays from 7-9am and 4-6pm. This methodology is modified from Alta Planning and Design and the Minneapolis Bicycle and Pedestrian Count Study.

In order to extrapolate daily figures from the raw count data, we followed the method used in the Minneapolis Bike of 2008. Two assumptions were used: 1) 75% of bicycle and pedestrian traffic occurs between 6:30 am and 6:30 pm. And 2) 20% of bicycle traffic and 18% of pedestrian traffic occurs between 4:00 pm and 6:00 pm. The 75% figure in the first assumption originates from Robert Seyfried, Director of Transportation Safety at the Northwestern University Center for Public Safety, and is based upon motor vehicle traffic between 7:00 am and 7:00 pm. Also, the most common time period measured in non-motorized travel is 4:00 to 6:00 pm (commonly referred to as the peak travel period).

To calculate the annual figures, the National Bicycle Pedestrian Documentation Project adjustment factors utilized by Alta Planning and Design were used to adjust the data. More information on extrapolation can be found in Appendix II.

#### **XVI. Manual Bicycle and Pedestrian Count Results**

Manual count results were entered into an excel database and analyzed based on several variables including by site location, gender, race, helmet-use, right-way/wrong-way, sidewalk, neutral ground, street, and number of users. This data can be found in Appendix III.

#### XVII. Automatic Bicycle and Pedestrian Count Methodology

The other type of count is automatic. Automated count technologies are "useful in conducting longerterm counts, establishing daily, weekly, or monthly variations and almost always require fewer person hours" (Alta NBPD, 2009, p. 1). There are different methods of performing automated counts that include infrared sensors and video. One study identified the dual passive infrared sensor as a "practical, relatively costs effective device" that may "be suited to obtain reasonable estimates of pedestrian volume" (Greene-Roesel, 2007, p. 13). Video analysis is a reliable method and "analyzing video may be the most accurate manual count method, but it is more costly" (Schneider, Arnold, and Ragland, 2008, p. 2). One counter that has seemingly come out on top is the EcoCounter which collects continuous counts, but "tends to undercount" (Schneider, Arnold, and Ragland, 2008, p. 11). This study used the Eco-Counter at two trail locations in New Orleans: the Jefferson Davis Trail (more commuter-use) and the Mississippi River Trail (more recreation-use). The Eco-Counter was tested thoroughly and properly positioned to count bicyclist and pedestrian traffic.

### **XVIII. Automatic Bicycle and Pedestrian Count Results**

Results from the Eco-Counter are uploaded onto a Pocket PC with Eco-Pocket Software and then uploaded onto a PC with Eco-Counter Software. Data are broken into 15-minute, 1-hour, daily, monthly, and annual increments. The results are analyzed to give an accurate and overall view of bicycle and pedestrian traffic for that location.

#### **XIX.** Automobile Counts

Automobile count data was provided by the New Orleans Regional Planning Commission for each count location. Special thanks goes to Karen Parsons.

### **XX. Transit Counts**

The New Orleans Regional Transit Authority provided transit counts for each site location. Special thanks goes to Stefan Marks.

#### **XXI. Urban Trail Comparisons**

To provide perspective on the ridership of New Orleans' trails, other urban trail ridership numbers were collected via email, via news articles, via city websites, and via master plans. Sources: Bike Walk Twin Cities Report and Transit for Livable Communities (2009); Pinnellastrails.org; City of Seattle and WA DOT; CCtrail.org; Cathy Buckley of Boston Region MPO (2010), Lindsey & Nguyen, (January 2002).

#### XXII. Jefferson Davis User Profile

Graduate Research Assistant, Cole Judge performed her thesis on ridership of the Jefferson Davis Trail in New Orleans and data on the users of the trail are from her survey field work from April 25, 2010 to June 1, 2010.

APPENDIX II: COUNT METHODOLOGY

#### MANUAL COUNTS

Manual Counts were performed at 14 sites throughout the City of New Orleans. With the exception of the Jazz Fest count on Esplanade Avenue and Drew Elementary site, all count sites represent a total of 4 observation periods: 2 AM counts (7-9 AM) and 2 PM counts (4-6 PM). For all sites, two volunteers observed from opposite sides of the street, creating a "plane" of observation. Observers differentiated between pedestrians and bicyclists and noted gender, race, age group, and helmet use. From the data collected the following extrapolation methods were used to derive daily, weekly, monthly, and annual traffic volumes of pedestrians and bicyclists.

#### MANUAL COUNT EXTRAPOLATION METHODOLOGY

- Divide counts into AM and PM sessions. There should be 2, 2-hour counts for each session. However, if there is not, take this into account in the steps below.
- Come up with separate bicycle and pedestrian averages for AM and PM sessions. (i.e. for AM bicycle average, add both 2-hour AM bicycle counts and divide by the amount of hours observed, which should be four.) If there is an irregularity in the number of counts observed, be sure that this is taken into account and that you divide the total users (pedestrian or bicycle) by the number of hours observed in order to get the average.
- Add the bicycle and pedestrian averages together for a total user average. Then, multiply this number by 1.05 (this multiplier accounts for traffic between 11pm and 6am which is rarely manually counted and assumed to make up 5% of all daily volume).
- To calculate the daily volume, note the time (hours) that were observed for AM and PM counts. These should always be 7-9am for AM counts and 4-6pm for PM counts. Also note the month of the year. Use Alta's NBPD methodology to find the correct adjustment factor(s). For our purposes, all manual counts are PED trails and should have been observed on a weekday. If the counts happen to fall into two different times of the year, which they shouldn't, take an average. Divide total user averages by their appropriate adjustment factor to get the daily user average.
- For weekly volumes, determine the days that the AM and PM counts were observed. They may be the same or different. Use Alta's NBPD methodology to find the correct adjustment factor(s) for the AM and PM counts. If, for example, one AM count (2 hours) was taken on a Tuesday and the other count (2 hours) was taken on a Thursday, take the average of the two adjustment factors and apply it. Divide the AM and PM session daily user averages by their appropriate adjustment factor to get the weekly averages for AM and PM sessions.
- At this point, average the weekly user averages for the AM and PM sessions together since all unique data attributes have now been accounted for.
- Get the monthly user average by multiplying the combined AM and PM weekly average by 4.33 (the number of weeks in a year).

- In order to get the annual estimate, note the month that the counts were observed. This is done
  to account for seasonal variation in use. Use Alta's NBPD methodology to find the respective adjustment factor for the month observed under our climate pattern and divide the monthly user
  average by this number. NBPD methodology provides 3 climates to choose from. For New Orleans, choose "very hot summer, mild winter." Climate is accounted for because it affects
  monthly patterns. Counts should be performed in the same month but may differ. If they were
  performed in two or more months, average the necessary adjustment factors.
- To get monthly or daily averages from the annual estimate above, simply divide by 12 or 365 respectively.
- In order to get individual bicycle and pedestrian averages, multiply the desired average (daily, weekly, monthly, annual) by the bicycle or pedestrian percentage observed from the manual counts at that site.

#### **ELECTRONIC COUNTS**

Electronic counts were performed at 2 multi-use trails in New Orleans: The Jefferson Davis Trail in Mid-City and the Mississippi River Trail in Uptown. Eco-Counter devices were installed in May 2010 and provide raw numbers of combined bicycle and pedestrian users. At this point we have yet to establish patterns for New Orleans so we used the following extrapolation methods to get annual estimates for each site.

### ELECTRONIC COUNT EXTRAPOLATION METHODOLOGY

- From the electronic count data, combine daily values and get monthly averages.
- Then, get annual estimates by dividing by Alta's NBPD adjustment factor for the month observed in our respective climate (very hot summer, mild winter).
- To get monthly or daily averages from the annual estimate above, simply divide by 12 or 365 respectively.
- This can be done for a single month or can be done by averaging the annual estimates for each month together. These two methods will provide significantly variable results. Either way this is temporary and after one year of data collection we should be able to create our own adjustment factors which fit our unique setting.

#### NATIONAL BICYCLE & PEDESTRIAN DOCUMENTATION PROJECT

#### Count Adjustment Factors

March 2009

While more year-long automatic count data is needed from different parts of the county, especially for pedestrians and on-street bicyclists, enough data now exists to allow us to adjust counts done almost any period on multi-use paths and pedestrian districts to an annual figure.

All percentages in the following tables represent the percentage of the total period (day, week, or month).

#### How to Use This Data

The factors in the following tables are designed to extrapolate daily, monthly, and annual users based on counts done during any period of a day, month, or year. The factors currently are designed to be used by (a) multi-use pathways (PATH) and (b) higher density pedestrian and entertainment areas (PED).

#### How Many Counts Can it Be Based On?

Given the variability of bicycle and pedestrian activity, we strongly encourage that all estimates be based on the average of at least two (2) and preferably three (3) counts during the same time period and week, especially for lower volume areas. For example, counts could be done from 2-4pm on consecutive weekdays (Tuesday – Thursday) during the same week, or, in consecutive weeks. Weekday counts should always be done Tuesday through Thursday, and never on a holiday. Weekend counts can be done on either day.

#### **Bicyclists versus Pedestrians**

The factors used in these formulas are for combined bicyclist and pedestrian volumes. Once you have calculated your total daily, monthly, or annual volume, you can simply multiple the total by the percent breakdown between bikes and pedestrians based on your original count information.

#### Start with the Hour Count

Once you have collected your count information and developed an average weekday and weekend count volume for bicyclists and/or pedestrians, pick any one (1) hour period from either of those days.

#### Adjustment Factor

Your next step is to multiply those counts by 1.05.

Sample #1

Average 1 hour weekday count: 236 bikes/peds x 1.05 = 248

Average 1 hour weekend day count: 540 bikes/peds x 1.05 = 567

#### NBPD Count Adjustment Factors (March 2009)

This adjustment factor is done to reflect the bicyclists/pedestrians who use the facility between 11pm and 6am, or, about 5% of the average daily total. The count formulas are all based on total counts between 6am and 10pm, since many available counts only cover those periods. If you are certain your facility gets virtually no use between those hours, you can forgo this step.

#### Calculate Daily Weekday and Weekend Daily Total

Identify the weekday and weekend hour your counts are from in Table 1 below. Be sure to use the PATH column for all multi-use paths, and the PED column for all higher density pedestrian areas with some entertainment uses such as restaurants. Be sure to select the correct time of year (April-September, or, October-March) as well.

Sample #2: done in June on a multiuse path (weekday = 4-5pm, weekend day = 12-1pm):

Adjusted weekday hourly count = 248/.07 = 3,542 daily users

Adjusted weekend day hourly count = 567/.1= 5,670 daily users

#### Calculating Average Weekly Volumes

We need to adjust these figures based on the day of the week. See table 2 below. Find the day of the week your counts were done, and factor them by that percent. If you did multiple counts on different days of the week, then take the average of those factors.

Sample #3: counts were done on a Tuesday and a Saturday.

Adjusted weekday count = 3,542/.13 = 27,246 average weekly users

Adjusted weekend count = 5,670/.18 = 31,500

Add these two figures together, and divide by 2: 27,246+31,500=58,746/2 = 29,373 people

The average weekly volumes for that month are 29,373 people.

#### Convert to Monthly Volumes

To convert from average weekly volumes to an average monthly volume, multiply the average weekly volume by the average number of weeks in a month (4.33 weeks).

#### Sample #4: 29,373 x 4.33 = 127,282 people.

This is the average monthly volume for the month the counts were conducted.

#### Convert to Annual Totals

To convert from the average monthly volume for the month the counts were taken into an annual total, divide the average monthly figure by the factor from Table 3 for the month the counts were conducted. Use the general climate zones described. Some climate zone types are not included.

Sample #5: counts were done in June in a moderate climate zone.

Average monthly volumes = 127,282/.08 = 1,591,037 people.

Based on these sample figures, it is estimated that almost 1.6 million people use the pathway annually.

2

NBPD Count Adjustment Factors (March 2009)

#### Average Monthly and Daily Figures

To identify the average monthly and daily figures, simply divide the annual figure by 12 (for month) or by 365 (for daily figures).

Monthly average = 1,591,037/12 = 132,586 people

Daily Average = 1,591,037/365 = 4,359 people

3

#### Table 1

Hourly Adjustment Factors

Multi-use paths and pedestrian entertainment areas by season

		April - Se	ptembe	r			October	- March	
		6am -	9pm				6am -	9pm	
	PA	тн	P	'ED		PA	ГН	PE	D
	wkdy	wkend	wkdy	wkend		wkdy	wkend	wkdy	wkend
0600	2%	1%	1%	1%	0600	2%	0%	1%	0%
0700	4%	3%	2%	1%	0700	4%	2%	2%	1%
0800	7%	6%	4%	3%	0800	6%	6%	3%	2%
0900	9%	9%	5%	3%	0900	7%	10%	5%	4%
1000	9%	9%	6%	5%	1000	9%	10%	6%	5%
1100	9%	11%	7%	6%	1100	9%	11%	8%	8%
1200	8%	10%	9%	7%	1200	9%	11%	9%	10%
1300	7%	9%	9%	7%	1300	9%	10%	10%	13%
1400	7%	8%	8%	9%	1400	9%	10%	9%	11%
1500	7%	8%	8%	9%	1500	8%	10%	8%	8%
1600	7%	7%	7%	9%	1600	8%	8%	7%	7%
1700	7%	6%	7%	8%	1700	7%	5%	6%	6%
1800	7%	5%	7%	8%	1800	6%	3%	7%	6%
1900	5%	4%	7%	8%	1900	4%	2%	7%	6%
2000	4%	3%	7%	8%	2000	2%	1%	6%	6%
2100	2%	2%	6%	8%	2100	2%	1%	5%	5%

NBPD Count Adjustment Factors (March 2009)

#### Table 2

**Daily Adjustment Factors** 

Note: Holidays use weekend rates.

MON	14%
TUES	13%
WED	12%
THURS	12%
FRI	14%
SAT	18%
SUN	18%

5

#### Table 3

Monthly Adjustment Factors by Climate Area

Climate Region								
Month	Long Winter Short summer	Moderate Climate	Very hot summer Mild winter					
JAN	3%	7%	10%					
FEB	3%	7%	12%					
MAR	7%	8%	10%					
APR	11%	8%	9%					
MAY	11%	8%	8%					
JUN	12%	8%	8%					
JUL	13%	12%	7%					
AUG	14%	16%	7%					
SEP	11%	8%	6%					
ост	6%	6%	7%					
NOV	6%	6%	8%					
DEC	3%	6%	8%					

APPENDIX III: MANUAL COUNT RESULTS

Site	Total Bicyclists	Female Bicyclists	Male Bicyclists	White Bicyclists	Black Bicyclists	Other Bicyclists	Helmets		Total WW Bicyclists		
Harrison Ave	27	5	22	n/a	n/a	n/a	3	21	3	2	
Esplanade Ave	105	38	67	82	22	1	8	87	8	10	
Esplanade - Jazz Fest	63	26	37	51	7	5	5	56	1	6	
Gentilly Blvd	46	4	42	15	27	4	6	31	8	7	
St. Claude Ave	96	24	72	37	49	10	2	83	10	3	(
Paris and Burbank	13	0	13	11	2	0	4	9	3	1	(
Royal St	377	84	293	323	28	26	25	313	59	5	n/
Decatur St	150	39	111	112	18	20	12	125	10	15	n/a
Camp St	157	57	100	124	13	20	18	109	5	43	n/a
Magazine St (Uptown)	38	7	31	35	0	3	3	10	2	26	n/a
Simon Boli- var Ave	86	6	80	18	66	2	7	49	24	13	
Magazine St (Gateway)	153	56	97	122	16	15	15	105	30	18	n/a
Carondelet St	87	27	60	47	34	6	10	61	19	6	:
St. Charles Ave	191	57	134	140	24	27	47	140	2	45	
Notes	Each site's to		re a combina	ation of four	2-hour count	ts (total of 8	hours), exce		lists are separ z Fest Esplana ts (6 hours).		ich had jus

At Harrison Ave site, race/ethnicity wasn't included in one of the four counts.

Site	Total Pedestrians	Female Pedestrians	Male Pedestrians	White Pedestrians	Black Pedestrians	Other Pedestrians
Harrison Ave	124	73	51	n/a	n/a	n/a
Esplanade Ave	230	117	113	154	65	11
Esplanade - Jazz Fest	249	90	159	197	38	14
Gentilly Blvd	126	39	87	14	105	7
St. Claude Ave	230	94	136	28	195	7
Paris and Burbank	13	2	11	7	5	1
Royal St	324	119	205	250	54	20
Decatur St	1,313	600	713	1,011	206	96
Camp St	144	57	87	101	34	9
Magazine St (Uptown)	330	195	135	267	30	33
Simon Bolivar Ave	608	153	455	57	491	60
Magazine St (Gateway)	159	48	111	113	34	12
Carondelet St	81	23	58	30	39	12
St. Charles Ave	550	182	368	330	138	82
Notes	Each site's total fig nade count which	ures are a combina had just 4 hours to	ation of four 2-hour tal and the Drew El	counts (total of 8 l ementary count wh	Ground cyclists are nours), except for th nich was a total of 3 of the four counts.	ne Jazz Fest Espla- counts (6 hours).

Site	Combined Users Observed	Est Daily Bicyclists	Est Daily Pedestrians	Est Weekly Bicyclists	Est Weekly Pedestrians	Est Monthly Bicyclists	Est Monthly Pedestrians	Est Annual Bicyclists	Est Annual Pedestrians				
Harrison Ave	151	71	325	496	2,278	2,150	9,873	25,797	118,476				
Esplanade Ave	335	330	723	2,315	5,072	10,033	21,978	120,401	263,736				
Esplanade - Jazz Fest	312		This	s is an annud	al, special eve	ent so it was	sn't extrapola	ted.					
Gentilly Blvd	172	151	412	1,057	2,895	4,579	12,544	54,952	150,522				
St. Claude Ave	326	437	1,047	3,068	7,351	13,295	31,853	159,540	382,231				
Paris and Burbank	26	49	49	347	347	1,503	1,503	18,042	18,042				
Royal St	701	1,056	907	7,411	6,369	32,112	27,598	385,348	331,174				
Decatur St	1,463	490	4,289	3,439	30,103	14,902	130,446	178,829	1,565,349				
Camp St	301	598	548	4,195	3,847	18,176	16,671	218,114	200,054				
Magazine St (Uptown)	368	121	1,054	852	7,396	3,690	32,047	44,283	384,567				
Simon Bolivar Ave	694	332	2,345	2,328	16,461	10,090	71,333	121,078	855,991				
Magazine St (Gateway)	312	471	490	3,307	3,437	14,331	14,893	171,970	178,714				
Carondelet St	168	322	300	2,261	2,105	9,797	9,121	117,564	109,456				
St. Charles Ave	741	665	1,915	4,667	13,439	20,223	58,235	242,682	698,822				
Notes	Each site's tot		ay cyclists only in a combination o				-	-	ount which had				
		•			•	<i>·</i> ·· ·	Each site's total figures are a combination of four 2-hour counts (total of 8 hours), except for the Jazz Fest Esplanade count with just 4 hours total and the Drew Elementary count which was a total of 3 counts (6 hours).						

# HARRISON AVENUE

	Site Statistics									
2-Hour Counts	7-9 AM 4/7/2010	4-6 PM 4/7/2010	7-9 AM 4/20/2010	4-6 PM 4/22/2010	Total					
Bicyclists	2	17	2	6	27					
Pedestrians	17	58	12	37	124					
Site	Observed	Daily Users	Weekly Users	Monthly Users	Annual Users					
	Users									
Harrison Avenue	151	396	2,774	12,023	144,273					
Average users	extrapolat	ed from 2-ho	our counts base	ed on the Nation	al Bicycle					
	Ped	<u>estrian Doci</u>	umentation Pro	ject.						
Bicyclist	S			Pedest	rians					
Female	18.52%			Female	58.87%					
Male	81.48%			Male	41.13%					
Right-Way	74.07%									
Wrong-Way	14.81%									
Sidewalk	7.41%									
Neutral Ground	3.70%									
Helmets	11.11%									
Daily Bikers	71			Daily Peds	325					

## ESPLANADE AVENUE

		Site St	atistics		
2-Hour Counts	7-9 AM	4-6 PM	7-9 AM	4-6 PM	Total
	4/21/2010	4/21/2010	4/22/2010	4/22/2010	
Bicyclists	9	41	12	43	105
Pedestrians	56	63	55	56	230
			-		
Site	Observed	Daily Users	Weekly Users	Monthly Users	Annual Users
	Users				
Esplanade Avenue	335	1,053	7,387	32,011	384,137
Average users	extrapolate	d from 2-hou	ir counts based	on the Nationa	Bicycle
	Pede	<u>strian Docur</u>	nentation Proje	ect.	
Bicyclist	s			Pedest	rians
Female	36.19%			Female	50.87%
Male	63.81%			Male	49.13%
Right-Way	82.86%				
Wrong-Way	7.62%				
Sidewalk	9.52%				
Neutral Ground	0.00%				
Helmets	7.62%				
Daily Bikers	330			Daily Peds	723

# ESPLANADE AVENUE, JAZZ FESTIVAL

		SITE ST	ATISTICS		
2-Hour Counts	7-9 AM	4-6 PM	7-9 AM	4-6 PM	Total
	4/29/2010	4/29/2010			
Bicyclists	18	45			63
Pedestrians	122	127			249
Site	Observed	Daily Users	Weekly Users	Monthly Users	Annual Users
	Users				
Esplanade Ave.	312		ocial events a	re not extrapola	ted
Jazz Fest	512	31	Sectar events an	e not extrapola	leu
Average use	-			d on the Nationa	l Bicycle
		lestrian Docu	<u>mentation Proj</u>		
Bicycli	sts			Pedest	trians
Female	41.27%			Female	36.14%
Male	58.73%			Male	63.86%
Right-Way	88.89%				
Wrong-Way	1.59%				
Sidewalk	9.52%				
Neutral Ground	0.00%				
Helmets	7.94%				
Daily Bikers	n/a			Daily Peds	n/a

# **GENTILLY BOULEVARD**

		SITE ST	ATISTICS		
2-Hour Counts	7-9 AM	4-6 PM	7-9 AM	4-6 PM	Total
	4/14/2010	4/14/2010	4/15/2010	4/15/2010	
Bicyclists	16	10	11	9	46
Pedestrians	25	39	24	38	126
Site	Observed	Daily Users	Weekly Users	Monthly Users	Annual Users
	Users				
Gentilly Blvd	172	563	3,952	17,123	205,474
Average use	ers extrapolat	ed from 2-ho	ur counts base	d on the Nationa	l Bicycle
	Pec	lestrian Docu	mentation Proj	ect.	
Bicyclis	sts			Pedest	rians
Female	8.70%			Female	30.95%
Male	91.30%			Male	69.05%
Right-Way	67.39%				
Wrong-Way	17.39%				
Sidewalk	15.22%				
Neutral Ground	0.00%				
Helmets	13.04%				
Daily Bikers	151			Daily Peds	412

# ST. CLAUDE AVENUE

	SITE STATISTICS						
2-Hour Counts	7-9 AM	4-6 PM	7-9 AM	4-6 PM	Total		
	4/21/2010	4/21/2010		4/27/2010			
Bicyclists	19	51		26	96		
Pedestrians	91	107		32	230		
Site	Observed	Daily Users	Weekly Users	Monthly Users	Annual Users		
	Users						
St. Claude Ave	326	1,484	10,419	45,148	541,771		
Average use	-		ur counts base mentation Proj	d on the Nationa ect	l Bicycle		
Bicyclis				Pedestrians			
Female	25.00%			Female	40.87%		
Male	75.00%			Male	59.13%		
Right-Way	86.46%						
Wrong-Way	10.42%						
Sidewalk	3.13%						
Neutral Ground	0.00%						
Helmets	2.08%						
Daily Bikers	437			Daily Peds	1,047		

## PARIS AND BURBANK

	SITE STATISTICS						
2-Hour Counts	7-9 AM	4-6 PM	7-9 AM	4-6 PM	Total		
	4/27/2010	4/27/2010	4/28/2010	4/28/2010			
Bicyclists	1	3	6	3	13		
Pedestrians	6	0	5	2	13		
Site	Observed	Daily Users	Weekly Users	Monthly Users	Annual Users		
	Users						
Paris and	20		<b>CO 4</b>	2.000	26.004		
Burbank	26	98	694	3,006	36,084		
Average us	ers extrapola	ted from 2-ho	ur counts base	d on the Nationa	l Bicycle		
	Pe	destrian Docu	imentation Proj	ect.			
Bicycli	sts			Pedest	rians		
Female	0.00%			Female	15.38%		
Male	100.00%			Male	84.62%		
Right-Way	69.23%						
Wrong-Way	23.08%						
Sidewalk	7.69%						
Neutral Ground	0.00%						
Helmets	30.77%						
Daily Bikers	49			Daily Peds	49		

# **ROYAL STREET**

	SITE STATISTICS						
2-Hour Counts	7-9 AM	4-6 PM	7-9 AM	4-6 PM	Total		
	4/27/2010	5/6/2010	4/28/2010	4/28/2010			
Bicyclists	43	108	40	186	377		
Pedestrians	48	102	51	123	324		
Site	Observed	Daily Users	Weekly Users	Monthly Users	Annual Users		
	Users						
Royal St	701	1,963	13,780	59,710	716,522		
Average user	s extrapolat	ed from 2-ho	our counts base	ed on the Nation	al Bicycle		
	Ped	<u>estrian Doci</u>	umentation Pro	ject.			
Bicyclis	sts			Pedestrians			
Female	22.28%			Female	36.73%		
Male	77.72%			Male	63.27%		
Right-Way	83.02%						
Wrong-Way	15.65%						
Sidewalk	1.33%						
Neutral Ground	n/a						
Helmets	6.63%						
Daily Bikers	1,056			Daily Peds	907		

# DECATUR STREET

	SITE STATISTICS						
2-Hour Counts	7-9 AM	4-6 PM	7-9 AM	4-6 PM	Total		
	5/11/2010	5/11/2010	5/12/2010	5/12/2010			
Bicyclists	34	41	32	43	150		
Pedestrians	239	656	209	209	1313		
Site	Observed	Daily Users	Weekly Users	Monthly Users	Annual Users		
	Users						
Decatur St	1463	4,779	33,542	145,348	1,744,178		
Average user	rs extrapolat	ed from 2-ho	our counts base	ed on the Nation	al Bicycle		
	Ped	<u>lestrian Docu</u>	umentation Pro	ject.			
Bicyclis	sts			Pedest	rians		
Female	26.00%			Female	45.70%		
Male	74.00%			Male	54.30%		
Right-Way	83.33%						
Wrong-Way	6.67%						
Sidewalk	10.00%						
Neutral Ground	n/a						
Helmets	8.00%						
Daily Bikers	490			Daily Peds	4,289		

# CAMP STREET

	SITE STATISTICS						
2-Hour Counts	7-9 AM	4-6 PM	7-9 AM	4-6 PM	Total		
	5/11/2010	5/11/2010	5/18/2010	5/18/2010			
Bicyclists	37	33	62	25	157		
Pedestrians	26	33	51	34	144		
Site	Observed Users	Daily Users	Weekly Users	Monthly Users	Annual Users		
Camp St	301	1,146	8,042	34,847	418,168		
Average use	rs extrapolat	ed from 2-ho	our counts base	ed on the Nation	al Bicycle		
		<u>lestrian Docu</u>	umentation Pro				
Bicyclis	sts			Pedest	rians		
Female	36.31%			Female	39.58%		
Male	63.69%			Male	60.42%		
Right-Way	69.43%						
Wrong-Way	3.18%						
Sidewalk	27.39%						
Neutral Ground	n/a						
Helmets	11.46%						
Daily Bikers	598			Daily Peds	548		

# MAGAZINE STREET (UPTOWN)

	SITE STATISTICS						
2-Hour Counts	7-9 AM	4-6 PM	7-9 AM	4-6 PM	Total		
	5/13/2010	5/13/2010	5/20/2010	5/11/2010			
Bicyclists	7	17	2	12	38		
Pedestrians	45	115	58	112	330		
Site	Observed	Daily Users	Weekly Users	Monthly Users	Annual Users		
	Users						
Magazine St	200	4 4 7 5	0.240	25 727	420.050		
(Uptown)	368	1,175	8,248	35,737	428,850		
Average use	rs extrapolat	ed from 2-ho	our counts base	ed on the Nation	al Bicycle		
		<u>lestrian Docu</u>	umentation Pro				
Bicyclis	sts			Pedest	rians		
Female	18.42%			Female	59.09%		
Male	81.58%			Male	40.91%		
Right-Way	26.32%						
Wrong-Way	5.26%						
Sidewalk	68.42%						
Neutral Ground	n/a						
Helmets	7.89%						
Daily Bikers	121			Daily Peds	1,054		

## SIMON BOLIVAR AVENUE

	SITE STATISTICS						
2-Hour Counts	7-9 AM	4-6 PM	7-9 AM	4-6 PM	Total		
	5/12/2010	5/12/2010	5/13/2010	5/13/2010			
Bicyclists	24	23	14	25	86		
Pedestrians	152	148	156	152	608		
			-				
Site	Observed	Daily Users	Weekly Users	Monthly Users	Annual Users		
	Users						
Simon Bolivar Ave	694	2,677	18,789	81,423	977,069		
Average users	extrapolate	d from 2-hou	ir counts based	on the National	Bicycle		
	Pede	<u>strian Docur</u>	nentation Proje	ect.			
Bicyclist	s			Pedest	rians		
Female	6.98%			Female	25.16%		
Male	93.02%			Male	74.84%		
Right-Way	56.98%						
Wrong-Way	27.91%						
Sidewalk	15.12%						
Neutral Ground	0.00%						
Helmets	8.14%						
Daily Bikers	332			Daily Peds	2,345		

# MAGAZINE STREET (GATEWAY)

	SITE STATISTICS						
2-Hour Counts	7-9 AM	4-6 PM	7-9 AM	4-6 PM	Total		
	5/12/2010	5/12/2010	5/13/2010	5/13/2010			
Bicyclists	18	54	16	65	153		
Pedestrians	17	64	26	52	159		
Site	Observed	Daily Users	Weekly Users	Monthly Users	Annual Users		
	Users						
Magazine St	242	0.04	6.744	20.224	250.004		
(Gateway)	312	961	6,744	29,224	350,684		
Average use	-			ed on the Nation	al Bicycle		
Bicyclis			umentation Pro	Pedest	rians		
Female	36.60%			Female	30.19%		
Male	63.40%			Male	69.81%		
Right-Way	68.63%						
Wrong-Way	19.61%						
Sidewalk	11.76%						
Neutral Ground	n/a						
Helmets	9.80%						
Daily Bikers	471			Daily Peds	490		

# CARONDELET STREET

SITE STATISTICS						
2-Hour Counts	7-9 AM	4-6 PM	7-9 AM	4-6 PM	Total	
	5/19/2010	5/19/2010	5/18/2010	5/20/2010		
Bicyclists	24	31	22	10	87	
Pedestrians	21	28	14	18	81	
Site	Observed Users	Daily Users	Weekly Users	Monthly Users	Annual Users	
Carondelet St	168	622	4,366	18,918	227,020	
Average users extr	apolated from	n 2-hour coui	nts based on th	e National Bicyc	le Pedestrian	
		Documenta	tion Project.			
Bicyclis	ts			Pedest	rians	
Female	31.03%			Female	28.40%	
Male	68.97%			Male	71.60%	
Right-Way	70.11%					
Wrong-Way	21.84%					
Sidewalk	6.90%					
Neutral Ground	1.15%					
Helmets	11.49%					
Daily Bikers	322			Daily Peds	300	

# ST. CHARLES AVENUE

SITE STATISTICS						
2-Hour Counts	7-9 AM	4-6 PM	7-9 AM	4-6 PM	Total	
	5/18/2010	5/18/2010	5/19/2010	5/19/2010		
Bicyclists	40	46	38	67	191	
Pedestrians	123	129	113	185	550	
Site	Observed	Daily Users	Weekly Users	Monthly Users	Annual Users	
	Users					
St. Charles Ave	741	2,580	18,106	78,458	941,504	
Average user	s extrapolate	ed from 2-ho	ur counts base	d on the Nationa	al Bicycle	
	Pede	<u>estrian Docu</u>	<u>mentation Proj</u>	ect.		
Bicyclis	ts			Pedest	trians	
Female	29.84%			Female	33.09%	
Male	70.16%			Male	66.91%	
Right-Way	73.30%					
Wrong-Way	1.05%					
Sidewalk	23.56%					
Neutral Ground	2.09%					
Helmets	24.61%					
Daily Bikers	665			Daily Peds	1,915	

APPENDIX IV: AUTOMATIC COUNT DATA

	JEFFERSON DAV	VIS TRAIL DAIL	Y USERS		
Dete			Temp. (°F)		
Date	Trail Count	average	high	low	Precip (in)
Wednesday 19 May 2010	458	80	89	70	0
Thursday 20 May 2010	501	83	90	75	0
Friday 21 May 2010	1,124	83	91	75	0
Saturday 22 May 2010	2,654	84	92	76	0
Sunday 23 May 2010	2,469	84	91	76	0
Monday 24 May 2010	474	83	93	72	0
Tuesday 25 May 2010	462	84	94	73	0
Wednesday 26 May 2010	462	80	90	70	0.79
Thursday 27 May 2010	428	81	92	70	0
Friday 28 May 2010	468	83	93	72	0
Saturday 29 May 2010	415	83	92	74	0.01
Sunday 30 May 2010	319	80	88	72	2.74
Monday 31 May 2010	361	81	90	71	0.49
Tuesday 01 Jun 2010	410	83	91	74	0.02
Wednesday 02 Jun 2010	454	81	87	74	Т
Thursday 03 Jun 2010	393	80	86	73	0.37
Friday 04 Jun 2010	431	80	86	73	0.27
Saturday 05 Jun 2010	440	83	91	75	0.02
Sunday 06 Jun 2010	294	83	92	73	2.58
Monday 07 Jun 2010	413	85	94	76	0
Tuesday 08 Jun 2010	438	86	93	78	0
Wednesday 09 Jun 2010	419	86	92	80	0
Thursday 10 Jun 2010	401	85	91	79	0
Friday 11 Jun 2010	493	86	92	79	0.1
Saturday 12 Jun 2010	271	87	94	79	Т
Sunday 13 Jun 2010	331	87	94	79	Т
Monday 14 Jun 2010	401	87	94	79	Т
Tuesday 15 Jun 2010	418	83	91	74	0.69
Wednesday 16 Jun 2010	386	84	90	77	0.09
Thursday 17 Jun 2010	413	86	94	77	0
Friday 18 Jun 2010	420	86	92	79	0
Saturday 19 Jun 2010	381	86	94	77	0
Sunday 20 Jun 2010	327	85	94	76	0
Monday 21 Jun 2010	377	88	96	79	0
Tuesday 22 Jun 2010	355	83	89	76	1.15
Wednesday 23 Jun 2010	440	83	89	77	0.07
Thursday 24 Jun 2010	440	86	93	80	0
Friday 25 Jun 2010	414	86		77	0
Saturday 26 Jun 2010	413	86	93	78	0
Sunday 27 Jun 2010	345	87	95	79	0.04
Monday 28 Jun 2010	358	83	91	74	1.73
Tuesday 29 Jun 2010	293	81	84	77	0.88
Wednesday 30 Jun 2010	298	81	85	77	1.72

Thursday 01 Jul 20		82	86	77	0.22
Friday 02 Jul 20		84	89	79	0
Saturday 03 Jul 20		83	88	78	0.1
Sunday 04 Jul 20		84	89	79	Т
Monday 05 Jul 20		82	88	76	0.36
Tuesday 06 Jul 20		81	86	76	0.91
Wednesday 07 Jul 20		84	89	79	0
Thursday 08 Jul 20		85	92	78	0
Friday 09 Jul 20		84	92	76	0
Saturday 10 Jul 20		84	93	75	2.88
Sunday 11 Jul 20		84	90	80	0
Monday 12 Jul 20		85		77	0
Tuesday 13 Jul 20		86	92	79	0
Wednesday 14 Jul 20		85	94	76	0
Thursday 15 Jul 20		87	95	78	0
Friday 16 Jul 20		81	88	74	0.25
Saturday 17 Jul 20		85	91	78	0
Sunday 18 Jul 20		82	88	75	0.64
Monday 19 Jul 20		84	91	77	Т
Tuesday 20 Jul 20		85	93	77	0
Wednesday 21 Jul 20		87	93	81	0.05
Thursday 22 Jul 20		88	95	81	0
Friday 23 Jul 20		86		76	0
Saturday 24 Jul 20		87	93	81	Т
Sunday 25 Jul 20		86	94	78	0.84
Monday 26 Jul 20		85	92	78	0.31
Tuesday 27 Jul 20		86	94	78	0.01
Wednesday 28 Jul 20		85	94	75	0
Thursday 29 Jul 20		86	95	77	0
Friday 30 Jul 20		88	96	80	0
Saturday 31 Jul 20		89	97	80	0
Sunday 01 Aug 20		90	100	80	0
Monday 02 Aug 20		91	100	81	0
Tuesday 03 Aug 20		89	93	84	T
Wednesday 04 Aug 20				77	0.89
Thursday 05 Aug 20		84		77	0.18
Friday 06 Aug 20				78	0.16
Saturday 07 Aug 20				80	0
Sunday 08 Aug 20				80	0
Monday 09 Aug 20				78	0.22
Tuesday 10 Aug 20			95	77	0
Wednesday 11 Aug 20			89	78	0.04
Thursday 12 Aug 20				79	1.03
Friday 13 Aug 20				78	0.4
Saturday 14 Aug 20				79	Т
Sunday 15 Aug 20				78	0.01
Monday 16 Aug 20	10 386	86	94	77	0.28

			T	1	
Tuesday 17 Aug 2010	381	84	88	79	0.26
Wednesday 18 Aug 2010	373	85	90	79	Т
Thursday 19 Aug 2010	418	85	91	79	Т
Friday 20 Aug 2010	371	86	92	79	0.65
Saturday 21 Aug 2010	379	87	96	78	0.02
Sunday 22 Aug 2010	274	85	95	75	1.78
Monday 23 Aug 2010	379	85	95	75	0
Tuesday 24 Aug 2010	369	87	95	78	0
Wednesday 25 Aug 2010	435	86	93	78	0
Thursday 26 Aug 2010	446	86	92	80	0
Friday 27 Aug 2010	326	82	89	74	1.97
Saturday 28 Aug 2010	157	78	80	75	0.69
Sunday 29 Aug 2010	272	80	85	75	1.74
Monday 30 Aug 2010	429	84	90	77	0.86
Tuesday 31 Aug 2010	397	81	87	75	0.55
Wednesday 01 Sep 2010	381	82	88	76	0.22
Thursday 02 Sep 2010	446	83	92	73	0
Friday 03 Sep 2010	429	82	91	73	0
Saturday 04 Sep 2010	389	81	87	75	0
Sunday 05 Sep 2010	427	82	89	75	0
Monday 06 Sep 2010	363	85	92	77	0
Tuesday 07 Sep 2010	467	87	93	81	0
Wednesday 08 Sep 2010	476	84	92	76	0
Thursday 09 Sep 2010	431	84	91	77	Т
Friday 10 Sep 2010	400	85	92	77	0
Saturday 11 Sep 2010	464	87	94	79	Т
Sunday 12 Sep 2010	375	87	94	79	0
Monday 13 Sep 2010	483	82	90	74	0
Tuesday 14 Sep 2010	470	80	91	69	0
Wednesday 15 Sep 2010	436	83	92	73	0.02
Thursday 16 Sep 2010	492	85	91	78	0
Friday 17 Sep 2010	384	84	91	77	0
Saturday 18 Sep 2010	426	84	93	75	0
Sunday 19 Sep 2010	404	84	91	76	0
Monday 20 Sep 2010	442	83	91	75	0
Tuesday 21 Sep 2010	477	83	92	74	0
Wednesday 22 Sep 2010	495	86	92	79	Т
Thursday 23 Sep 2010	412	84	92	76	0
Friday 24 Sep 2010	417	83	90	76	0.07
Saturday 25 Sep 2010	405	81	88	74	0
Sunday 26 Sep 2010	327	80	91	68	0.02
Monday 27 Sep 2010	509	74	82	66	0
Tuesday 28 Sep 2010	574	74	82	65	0
Wednesday 29 Sep 2010	487	74	85	62	0
Thursday 30 Sep 2010	525	75	86	63	0
Friday 01 Oct 2010	512	79	86	71	0
Saturday 02 Oct 2010	534	75	83	66	0

Sunday 03 Oct 2010	432	71	79	63	0
Monday 04 Oct 2010	508	66	73	58	0
Tuesday 05 Oct 2010	517	67	75	59	0
Wednesday 06 Oct 2010	477	69	79	58	0
Thursday 07 Oct 2010	456	68	82	54	0
Friday 08 Oct 2010	441	72	88	56	0
Saturday 09 Oct 2010	535	76	90	61	0
Sunday 10 Oct 2010	444	75	88	62	0
Monday 11 Oct 2010	513	73	85	61	0
Tuesday 12 Oct 2010	447	76	83	68	0.09
Wednesday 13 Oct 2010	509	72	82	62	0.02
Thursday 14 Oct 2010	480	73	81	65	0
Friday 15 Oct 2010	455	68	80	56	0
Saturday 16 Oct 2010	495	71	85	56	0
Sunday 17 Oct 2010	456	71	85	57	0
Monday 18 Oct 2010	512	71	81	61	0
Tuesday 19 Oct 2010	482	71	83	58	0
Wednesday 20 Oct 2010	454	74	84	63	0.12
Thursday 21 Oct 2010	541	73	83	63	0
Friday 22 Oct 2010	390	72	84	59	0
Saturday 23 Oct 2010	1,607	72	84	59	0
Sunday 24 Oct 2010	332	79	85	72	0.12
Monday 25 Oct 2010	441	79	88	70	0
Tuesday 26 Oct 2010	438	84	89	78	0.23
Wednesday 27 Oct 2010	401	82	87	77	0.08
Thursday 28 Oct 2010	406	71	79	62	0.08
Friday 29 Oct 2010	503	65	73	56	0
Saturday 30 Oct 2010	566	63	76	50	0
Sunday 31 Oct 2010	484	69	78	59	0
Monday 01 Nov 2010	460	74	83	64	Т
Tuesday 02 Nov 2010	253	71	74	68	0.61
Wednesday 03 Nov 2010	393	72	77	66	0.32
Thursday 04 Nov 2010	358	59	69	49	0.07
Friday 05 Nov 2010	385	55	62	48	0
Saturday 06 Nov 2010	361	54		45	0
Sunday 07 Nov 2010	314	54	63	45	0
Monday 08 Nov 2010	375	56	69	43	0
Tuesday 09 Nov 2010	434	62	71	48	0
Wednesday 10 Nov 2010	464	66	76	56	0
Thursday 11 Nov 2010	458	64	77	50	0
Friday 12 Nov 2010	411	65	80	50	0
Saturday 13 Nov 2010	442	70	79	61	0
Sunday 14 Nov 2010	338	63	65	60	0
Monday 15 Nov 2010	211	66	71	61	0.88
Tuesday 16 Nov 2010	375	63	72	53	0.00
Wednesday 17 Nov 2010	435	59	69	48	0
	100		00	-10	0

Thursday 18 Nov 2010	347	61	67	55	0					
Friday 19 Nov 2010	389 60 66 54									
Saturday 20 Nov 2010	417 58 67 48									
Sunday 21 Nov 2010	421	421 67 79 55								
Notes:	Bayou Boogaloo was from May 21-23 on Bayou St. John, along the trail. Voodoo Fest was from October 29-31 in City Park, near the terminus of the trail. T = Trace Amount									
Sources	Jefferson Davis Trail Eco-Counter;									
Sources:	We	ather Underg	round, www.w	underground.	com					

	MISSISSIPPI RI	VER TRAIL DAI			
Data	Trail Count		Temp. (°F)		Dragin (in)
Date	Trail Count	average	high	low	Precip (in)
Tuesday 01 Jun 2010	273	83	91	74	0.02
Wednesday 02 Jun 2010	306	81	87	74	Т
Thursday 03 Jun 2010	234	80	86	73	0.37
Friday 04 Jun 2010	225	80	86	73	0.27
Saturday 05 Jun 2010	316	83	91	75	0.02
Sunday 06 Jun 2010	316	83	92	73	2.58
Monday 07 Jun 2010	571	85	94	76	0
Tuesday 08 Jun 2010	461	86	93	78	0
Wednesday 09 Jun 2010	414	86	92	80	0
Thursday 10 Jun 2010	458	85	91	79	0
Friday 11 Jun 2010	427	86	92	79	0.1
Saturday 12 Jun 2010	695	87	94	79	Т
Sunday 13 Jun 2010	717	87	94	79	Т
Monday 14 Jun 2010	337	87	94	79	Т
Tuesday 15 Jun 2010	544	83	91	74	0.69
Wednesday 16 Jun 2010	498	84	90	77	0.09
Thursday 17 Jun 2010	410	86	94	77	0
Friday 18 Jun 2010	373	86	92	79	0
Saturday 19 Jun 2010	746	86	94	77	0
Sunday 20 Jun 2010	626	85	94	76	0
Monday 21 Jun 2010	450	88	96	79	0
Tuesday 22 Jun 2010	341	83	89	76	1.15
Wednesday 23 Jun 2010	325	83	89	77	0.07
Thursday 24 Jun 2010	395	86	93	80	0
Friday 25 Jun 2010	393	86	94	77	0
Saturday 26 Jun 2010	733	86	93	78	0
Sunday 27 Jun 2010	739	87	95	79	0.04
Monday 28 Jun 2010	256	83	91	74	1.73
Tuesday 29 Jun 2010	185	81	84	77	0.88
Wednesday 30 Jun 2010	204	81	85	77	1.72
Thursday 01 Jul 2010	286	82	86	77	0.22
Friday 02 Jul 2010	420	84	89	79	0
Saturday 03 Jul 2010	587	83	88	78	0.1
Sunday 04 Jul 2010	526	84	89	79	Т
Monday 05 Jul 2010	454	82	88	76	0.36
Tuesday 06 Jul 2010	190	81	86	76	0.91
Wednesday 07 Jul 2010	438	84	89	79	0
Thursday 08 Jul 2010	496	85	92	78	0
Friday 09 Jul 2010	415	84	92		0
Saturday 10 Jul 2010	609	84	93		2.88
Sunday 11 Jul 2010	830	84	90		0
Monday 12 Jul 2010	574	85	93		0

Tuesday 13 Jul 2010	591	86	92	79	0
Wednesday 14 Jul 2010	490	85	94	76	0
Thursday 15 Jul 2010	428	87	95	78	0
Friday 16 Jul 2010	313	81	88	74	0.25
Saturday 17 Jul 2010	934	85	91	78	0
Sunday 18 Jul 2010	575	82	88	75	0.64
Monday 19 Jul 2010	427	84	91	77	Т
Tuesday 20 Jul 2010	387	85	93	77	0
Wednesday 21 Jul 2010	399	87	93	81	0.05
Thursday 22 Jul 2010	335	88	95	81	0
Friday 23 Jul 2010	367	86	95	76	0
Saturday 24 Jul 2010	651	87	93	81	Т
Sunday 25 Jul 2010	471	86	94	78	0.84
Monday 26 Jul 2010	449	85	92	78	0.31
Tuesday 27 Jul 2010	508	86	94	78	0.01
Wednesday 28 Jul 2010	536	85	94	75	0
Thursday 29 Jul 2010	422	86	95	77	0
Friday 30 Jul 2010	340	88	96	80	0
Saturday 31 Jul 2010	631	89	97	80	0
Sunday 01 Aug 2010	569	90	100	80	0
Monday 02 Aug 2010	317	91	100	81	0
Tuesday 03 Aug 2010	431	89	93	84	Т
Wednesday 04 Aug 2010	447	86	94	77	0.89
Thursday 05 Aug 2010	449	84	91	77	0.18
Friday 06 Aug 2010	380	86	94	78	0.16
Saturday 07 Aug 2010	710	88	95	80	0
Sunday 08 Aug 2010	691	88	95	80	0
Monday 09 Aug 2010	288	86	94	78	0.22
Tuesday 10 Aug 2010	312	86	95	77	0
Wednesday 11 Aug 2010	134	84	89	78	0.04
Thursday 12 Aug 2010	157	83	87	79	1.03
Friday 13 Aug 2010	303	82	85	78	0.4
Saturday 14 Aug 2010	640	86	92	79	Т
Sunday 15 Aug 2010	717	86	94	78	0.01
Monday 16 Aug 2010	351	86	94	77	0.28
Tuesday 17 Aug 2010	334	84	88	79	0.26
Wednesday 18 Aug 2010	413	85	90	79	Т
Thursday 19 Aug 2010	574	85	91	79	Т
Friday 20 Aug 2010	337	86	92	79	0.65
Saturday 21 Aug 2010	795	87	96	78	0.02
Sunday 22 Aug 2010	675	85	95	75	1.78
Monday 23 Aug 2010	318	85	95	75	0
Tuesday 24 Aug 2010	504	87	95	78	0
Wednesday 25 Aug 2010	443	86	93	78	0
Thursday 26 Aug 2010	357	86	92	80	0
Friday 27 Aug 2010	316	82	89	74	1.97
Saturday 28 Aug 2010	162	78	80	75	0.69

Sunday 29 Aug 2010	249	80	85	75	1.74
Monday 30 Aug 2010	373	84	90	77	0.86
Tuesday 31 Aug 2010	311	81	87	75	0.55
Wednesday 01 Sep 2010	471	82	88	76	0.22
Thursday 02 Sep 2010	446	83	92	73	0
Friday 03 Sep 2010	500	82	91	73	0
Saturday 04 Sep 2010	826	81			0
			87	75	
Sunday 05 Sep 2010	826	82	89	75	0
Monday 06 Sep 2010	856	85	92	77	0
Tuesday 07 Sep 2010	428	87	93	81	0
Wednesday 08 Sep 2010	412	84	92	76	0
Thursday 09 Sep 2010	337	84	91	77	Т
Friday 10 Sep 2010	364	85	92	77	0
Saturday 11 Sep 2010	786	87	94	79	Т
Sunday 12 Sep 2010	834	87	94	79	0
Monday 13 Sep 2010	493	82	90	74	0
Tuesday 14 Sep 2010	506	80	91	69	0
Wednesday 15 Sep 2010	339	83	92	73	0.02
Thursday 16 Sep 2010	369	85	91	78	0
Friday 17 Sep 2010	393	84	91	77	0
Saturday 18 Sep 2010	743	84	93	75	0
Sunday 19 Sep 2010	762	84	91	76	0
Monday 20 Sep 2010	372	83			0
	380		91	75	
Tuesday 21 Sep 2010		83	92	74	0
Wednesday 22 Sep 2010	428	86	92	79	T
Thursday 23 Sep 2010	491	84	92	76	0
Friday 24 Sep 2010	364	83	90	76	0.07
Saturday 25 Sep 2010	725	81	88	74	0
Sunday 26 Sep 2010	619	80	91	68	0.02
Monday 27 Sep 2010	611	74	82	66	0
Tuesday 28 Sep 2010	645	74	82	65	0
Wednesday 29 Sep 2010	580	74	85	62	0
Thursday 30 Sep 2010	562	75	86	63	0
Friday 01 Oct 2010	473	79	86	71	0
Saturday 02 Oct 2010	785	75	83	66	0
Sunday 03 Oct 2010	582	71	79	63	0
Monday 04 Oct 2010	475	66	73	58	0
Tuesday 05 Oct 2010	470	67	75	59	0
Wednesday 06 Oct 2010	549	69	79	58	0
Thursday 07 Oct 2010	450	68	82	54	0
Friday 08 Oct 2010	475	72	88	56	0
Saturday 09 Oct 2010	908	76	90	61	0
Sunday 10 Oct 2010	819	75	88	62	0
Monday 11 Oct 2010	496	73	85	61	0
Tuesday 12 Oct 2010	417	76	83	68	0.09
Wednesday 13 Oct 2010	504	72	82	62	0.02
Thursday 14 Oct 2010	466	73	81	65	

Friday 15 Oct 2010	484	68	80	56	0		
Saturday 16 Oct 2010	808	71	85	56	0		
Sunday 17 Oct 2010	802	71	85	57	0		
Monday 18 Oct 2010	476	71	81	61	0		
Tuesday 19 Oct 2010	573	71	83	58	0		
Wednesday 20 Oct 2010	442	74	84	63	0.12		
Thursday 21 Oct 2010	523	73	83	63	0		
Friday 22 Oct 2010	509	72	84	59	0		
Saturday 23 Oct 2010	800	72	84	59	0		
Sunday 24 Oct 2010	531	79	85	72	0.12		
Monday 25 Oct 2010	384	79	88	70	0		
Tuesday 26 Oct 2010	323	84	89	78	0.23		
Wednesday 27 Oct 2010	312	82	87	77	0.08		
Thursday 28 Oct 2010	349	71	79	62	0.08		
Friday 29 Oct 2010	337	65	73	56	0		
Saturday 30 Oct 2010	708	63	76	50	0		
Sunday 31 Oct 2010	725	69	78	59	0		
Monday 01 Nov 2010	371	74	83	64	Т		
Tuesday 02 Nov 2010	143	71	74	68	0.61		
Wednesday 03 Nov 2010	321	72	77	66	0.32		
Thursday 04 Nov 2010	293	59	69	49	0.07		
Friday 05 Nov 2010	252	55	62	48	0		
Saturday 06 Nov 2010	573	54	63	45	0		
Sunday 07 Nov 2010	590	54	63	45	0		
Monday 08 Nov 2010	345	56	69	43	0		
Tuesday 09 Nov 2010	441	62	71	48	0		
Wednesday 10 Nov 2010	383	66	76	56	0		
Thursday 11 Nov 2010	401	64	77	50	0		
Friday 12 Nov 2010	374	65	80	50	0		
Saturday 13 Nov 2010	743	70	79	61	0		
Sunday 14 Nov 2010	586	63	65	60	0		
Monday 15 Nov 2010	93	66	71	61	0.88		
Tuesday 16 Nov 2010	305	63	72	53	0		
Wednesday 17 Nov 2010	375	59	69	48	0		
Thursday 18 Nov 2010	255	61	67	55	0		
Friday 19 Nov 2010	291	60	66	54	0		
Saturday 20 Nov 2010	665	58	67	48	0		
Sunday 21 Nov 2010	662	67	79	55	0		
Notes:		Т	= Trace Amou	Int			
Courses		Jefferson I	Davis Trail Ec	o-Counter;			
Sources:	Wea	ather Undergr	ound, www.w	underground.	com		
Weather Chargeound, WWW.Wanderground.com							

APPENDIX V: NEW ORLEANS SAFETY REPORT

#### New Orleans Metropolitan Bicycle/Pedestrian Crash Analysis: 1999-2008

#### Introduction

The number of bicycle and pedestrian crashes is an important indicator of the safety of active transportation use. Communities across the country have begun to track crashes to help show progress towards meeting active transportation goals. Communities track data both in terms of the raw number of crashes per year and by evaluating these numbers in respect to those of other comparable communities.

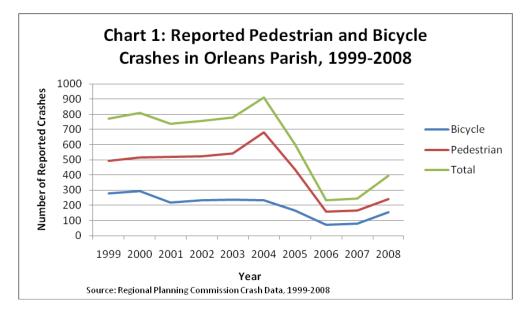
The Pedestrian and Bicycle Resource Initiative at the University of New Orleans has synthesized and analyzed bicycle and pedestrian crash data for Regional Planning Commission for the years 1999 to 2008. PBRI has used a variety of techniques to produce meaningful comparisons over the changing time periods of pre- and post-Katrina in the New Orleans region and across a variety of geographies from around the United States and Canada. This report is broken down into three main sections: analysis of crash data in New Orleans, comparison of New Orleans crashes to those in the surrounding region, and finally comparison to national crash data. Both raw data and per capita rates of crashes in New Orleans show that bicycle and pedestrian safety has improved since Hurricane Katrina, but an increase in reported crashes in 2008 indicates that safety has worsened recently. Regional comparison places New Orleans as the worst in terms of safety in the greater metropolitan area and national comparison demonstrates that New Orleans ranks amongst the most unsafe cities for pedestrian and bicycle safety. Through these comparisons, it has become obvious that New Orleans currently faces severe issues in pedestrian and bicycle safety, which need to be addressed at the policy and programmatic level. The creation and implementation of a Complete Streets policy and a stronger focus on educating the general public on current bicycle and pedestrian laws would help curb the increasing safety issue in New Orleans and help maintain the lower number of reported crashes seen since Hurricane Katrina struck in 2005.

#### Section 1: Bicycle and Pedestrian Crash Data in New Orleans

Crash data for the period 1999 to 2008 gathered by the PBRI for Regional Planning Commission highlight a significant safety problem in New Orleans (Table 1). Data prior to Hurricane Katrina show a high number of bicycle crashes. While the number of bicycle crashes peaked in 2000 at 295 crashes per year, the numbers remained high throughout the pre-Katrina period with crash numbers per year ranging between 230 and 240 in the years 2002 to 2004. Reported pedestrian crashes were a significant problem in the pre-Katrina period as well. Crashes rose from around 500 in 2000 to 680 in 2004.

Both pedestrian and bicycle crashes declined significantly immediately after Hurricane Katrina both in terms of raw numbers and per capita rates. Chart 1, below, provides a visual representation of the pedestrian, bicyclist, and total crashes in New Orleans for the 1999-2008 period. The total number of bicycle and pedestrian crashes peaked in 2004 at 912 with a per 100,000 population rate of 205.2. In the immediate post-Katrina period, total bicycle and pedestrian crashes declined sharply to 232 in 2006 and 244 in 2007. Per 100,000 rates fell to 103.9 in 2006 and 102 in 2007. This period of decline appears, however, to have ended with crashes beginning to rebound in 2008. A total of 395 bicycle and pedestrian crashes were reported in 2008. The rate per 100,000 population also increased to 126.7. These statistics show that although the number of reported crashes and the per 100,000 population rates have decreased since the hurricane, there is still a notable issue with both pedestrian and bicyclist safety within the city of New Orleans. The increase both in the number of reported crashes and the per 100,000 population rate in 2008 should be of special concern due to the fact that it shows a recent worsening of safety and a reversal of the decrease in crashes seen immediately following Hurricane Katrina. These statistics are even more worrisome when considering that the data only include reported crashes and cannot account for the large number of crashes that go unreported each year. Thus the actual pedestrian and bicyclist safety in the city is actually worse than the current statistics suggest.

Table 1: Pedestrian and Bic	Table 1: Pedestrian and Bicycle Crashes in Orleans Parish, 1999-2008										
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
Bicycle	279	295	219	233	236	232	166	72	80	155	
Pedestrian	493	514	518	522	543	680	437	160	164	240	
Total	772	809	737	755	779	912	603	232	244	395	
Per 100,000 Population	*	166.9	*	165.5	172.6	205.2	**	103.9	102.0	126.7	
Source: Regional Planning Commission Crash Data; US Census Bureau, 2000 Census, 2002-2008 American Commu-										Commu-	
nity Survey, Total Population; *No	o yearly	populati	ion data	;**No r	eliable p	opulatio	n data d	lue to Ηι	irricane l	Katrina	



# Section 2: Orleans Parish in Comparison with Regional Crash Data

When considering Orleans Parish in comparison with neighboring parishes in the Greater New Orleans Metropolitan area, it is even more obvious that bicycle and pedestrian conditions in New Orleans represents a particular safety problem. While Jefferson and St. Tammany parishes both exhibit peaks in total crashes in 2004, their peaks are only at 327 and 76 crashes, respectively, as compared to Orleans Parish with 912 crashes. The total number of crashes in Orleans Parish falls below those of Jefferson Parish only in 2006, after Hurricane Katrina, while those in St. Tammany

Parish remain only a small fraction of those in Orleans for the entire period. Pedestrian and bicycle crashes occur at a much lower frequency in the remainder of the parishes that make up the Greater New Orleans Metropolitan area. Overall, Plaquemines Parish has had the lowest number of reported crashes for the 1999 to 2008 period ranging from two reported crashes in both 2000 and 2008 to nine reported crashes in 2005. St. Bernard Parish's reported number of crashes fluctuates throughout the period with a peak at forty-eight reported crashes in 2003 and a low of two crashes in 2006. Both St. Charles and St. John the Baptist Parishes had fewer than twenty reported crashes from 1999 to 2002, saw no reported crashes from 2003 to 2006, and increased to an average of about forty crashes per year in the 2007 to 2008 period. The relation between Orleans and the surrounding parishes' total crashes can be seen in both the Table 2 and Chart 2 below. Chart 2 provides a great visual representation of the drastic difference between Orleans Parish and the surrounding parishes.

Table 2: Total Pedes	Table 2: Total Pedestrian and Bicycle Crashes in the Greater New Orleans Metropoli-											
tan Region, 1999-2008												
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
Jefferson	378	186	259	288	271	327	276	271	270	264		
Orleans	772	809	737	755	779	912	603	232	244	395		
Plaquemines	4	2	6	6	4	4	9	6	4	2		
St. Bernard	16	20	10	37	48	36	37	2	17	13		
St. Charles	9	13	7	17	0	0	0	0	44	36		
St. John the Baptist	5	3	4	10	0	0	0	0	32	49		
St. Tammany	33	25	20	48	60	76	65	61	47	52		
Source: Regional Planning	g Commis	sion's Cr	rash Data	a, 1999-2	2008							

The total number of crashes per 100,000 population, as seen in Table 3, can only be calculated for Jefferson and St. Tammany parishes due to the fact that the other surrounding parishes have populations that are too small to be represented in the American Community Survey on a yearly basis. Both the numerical count of crashes and the graphical display of the data show that the number of crashes in 2006 and 2007 in Orleans Parish are fewer than those of Jefferson Parish; however, the number of crashes per 100,000 population show that even in this year the bicycle and pedestrian safety in Orleans Parish is worse than in Jefferson Parish. The increase in New Orleans in 2008 to 126.7 crashes per 100,000 population is paired with a small decrease in Jefferson Parish to 60.5 per 100,000 population, which leaves Orleans Parish at being over double the number of crashes per 100,000 population than Jefferson Parish's rates appear even lower when compared with Orleans Parish, whose rates range from four to twelve times greater than those of St. Tammany Parish.

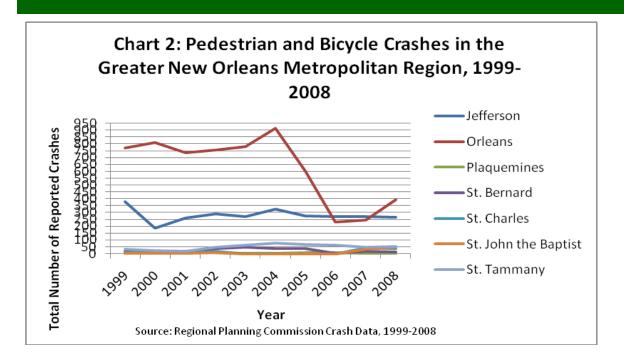
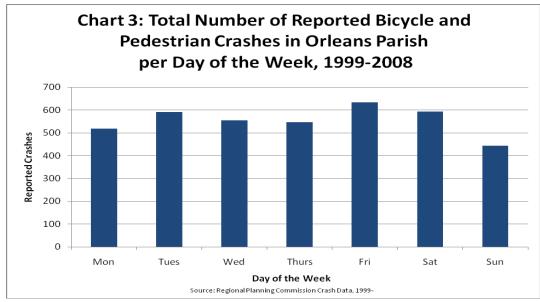


Table 3: Total Pedestrian	Table 3: Total Pedestrian and Bicycle Crashes in Jefferson and Orleans Parishes, 1999-									
2008										
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Jefferson Parish										
Total Reported Crashes	378	186	259	288	271	327	276	271	270	264
Per 100,000 Population	*	40.8	*	64.2	60.5	72.8	**	62.8	63.8	60.5
Orleans Parish										
Total Reported Crashes	772	809	737	755	779	912	603	232	244	395
Per 100,000 Population	*	166.9	*	165.5	172.6	205.2	**	103.9	102.0	126.7
St. Tammany Parish										
Total Reported Crashes	33	25	20	48	60	76	65	61	47	52
Per 100,000 Population	*	13.1	*	*	*	*	29.8	26.5	20.7	22.8
Source: US Census Bureau, 2002	Source: US Census Bureau, 2002, 2003, 2004, and 2006 American Community Survey and 2000 Census, Total									tal
Population										
*No vearly Population Data Avai	lable: **	No Relia	able Pop	ulation [	Data Due	to Hurr	icane Ka	trina		

While pedestrian and bicycle safety cannot be ignored in the surrounding parishes, safety is considerably worse in Orleans Parish and will require a greater deal of attention to address these issues. The safety conditions of Orleans Parish have improved since 2004; however, the city of New Orleans is still significantly more unsafe for pedestrians and bicyclists than its neighboring parishes. Whether considering New Orleans in comparison to its surrounding parishes using raw data or calculated rates, it is impossible to deny that pedestrian and bicycle crashes are significantly higher in Orleans Parish. A focus on pedestrian and bicycle safety is important in any community; however, within the Greater New Orleans Metropolitan region New Orleans demands a stronger focus on safety to curtail the growth of crashes and promote safe access to transportation thoroughfares.

Encouraging public awareness of bicycle and pedestrian safety and fostering the growth and implementation of Complete Streets policy could both help guide the way to a safer environment for both pedestrians and bicyclists.



# Temporal Analysis of Greater New Orleans Metropolitan Area Data

As seen in Chart 3 above, the total number of bicycle and pedestrian crashes in Orleans Parish occur with the most frequency on Fridays for the 1999-2008 period. The frequency of crashes on Friday is followed closely by Tuesday and Saturday. Sunday has the lowest frequency of reported crashes for this period.

The PBRI was unable to provide additional statistical analysis of other variables such as pedestrian or bicyclist age, sex, and race due to lack of consistency of data over the 1999 to 2008 time period. Currently, PBRI does not have demographic data on pedestrian and bicyclists involved in reported crashes for the entire period.

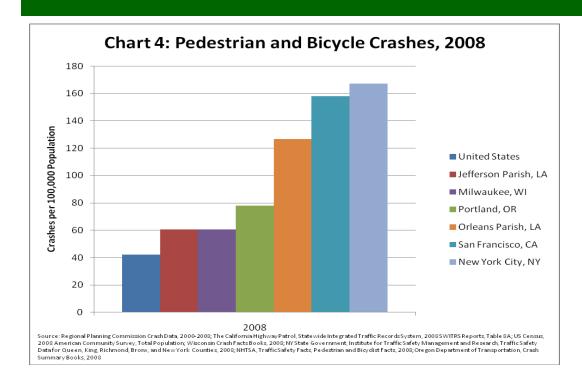
# Section 3: Orleans Parish in Comparison with Other Major Metropolises

By calculating crashes per 100,000 population, Orleans Parish statistics can be comparatively analyzed against other cities and counties. Such analysis places Orleans parish's pedestrian and bicycle safety in perspective with both the nation as a whole and various cities around North America. The cities in the above chart were chosen either because they are major metropolises that provide an interesting benchmark for New Orleans or because they have easily accessible pedestrian and bicycle crash data. Before the peak in 2004 to 205.2 crashes per 100,000 population, Orleans Parish fell between San Francisco and New York in total number of crashes. In 2002, for example, New Orleans was only slightly above San Francisco and Washington D.C. at 165.6 crashes per total population in comparison to 159.5 and 153.1 per 100,000 population, respectively. Orleans Parish's crash rate per 100,000 population even surpassed that of New York in 2004, while after Hurricane Katrina the parish's rates fell below those of both New York and San Francisco. Milwaukee, Wisconsin; Mecklenburg County, North Carolina; Portland, Oregon; and Toronto, Canada are all roughly comparable with Jefferson Par-

ish. Mecklenburg County is the county of Charlotte, which was chosen to provide comparison with another major Southern city. While Mecklenburg County and Jefferson Parish are highly similar in their crash statistics, especially in 2008 when both regions saw 60.5 crashes per 100,000 population, Mecklenburg County's crash numbers are significantly lower than those of New Orleans. All of the cities or counties chosen show higher crash rates per 100,000 population than the nation as a whole. Presumably, the rates for the chosen cities are higher than the national average because they represent urbanized areas and do not include rural areas as the national rate does. Chart 4 provides a visual comparison of these areas across North America for 2008 with Orleans Parish in orange. Both Chart 4 and Table 4 show that although New Orleans had not had the worst rate of crashes per 100,000 population since Hurricane Katrina, the rate grew between 2007 and 2008 and ranks third highest among the chosen cities. Pedestrian and bicycle safety has improved since the storm, but if something is not done to curtail the recent growth in per capita crashes New Orleans could once again see worse per capita rates than both New York and San Francisco. Policies need to be enacted to help ensure that the city does not backslide in terms of pedestrian and bicyclist safety.

able 4: Bicycle and Pedestrian Crashes per 100,000 Population, 2000-2008									
	2000	2001	2002	2003	2004	2005	2006	2007	2008
United States Average	48.9	47.8	43.2	41.7	38.9	38.7	36.9	39.2	42.1
Jefferson Parish, LA	40.8	*	64.2	60.5	72.8	**	62.8	63.8	60.5
Portland, OR	***	***	***	68.9	61.0	67.4	72.6	64.3	77.8
Mecklenburg County,									
NC	70.3	*	61.5	66.6	73.7	62.8	59.1	62.5	***
Toronto, Canada	*	*	*	*	*	*	67.6	*	*
Milwaukee, WI	110.7	*	103.1	95.3	69.8	70.8	73.0	69.6	60.5
Washington, D.C.	160.8	*	153.1	169.1	***	***	***	***	***
San Francisco, CA	175.6	168.4	159.5	155.5	145.3	156.2	145.0	166.3	158.2
Orleans Parish, LA	166.9	*	165.6	172.6	205.2	**	103.9	102.0	126.7
New York City, NY	195.1	*	194.4	187.3	177.3	174.7	169.1	169.2	167.2

Source: Regional Planning Commission Crash Data, 2000-2008; The California Highway Patrol, Statewide Integrated Traffic Records System, 2000-2006 SWITRS Reports, Table 8A; US Census,2000 Census and 2001-2008 American Community Survey, Total Population; City of Toronto Transportation Services, 2009 Cyclist Collision Summary Leaflet and 2009 Pedestrian Collision Summary Leaflet; Statistics Canada, 2006; Wisconsin Crash Facts Books, 2000-2008; NY State Government, Institute for Traffic Safety Management and Research, Traffic Safety Data for Queen, King, Richmond, Bronx, and New York Counties, 2000-2008; NHTSA, Traffic Safety Facts, Pedestrian and Bicyclist Facts, 2000-2008; District Department of Transportation's Bicycle Program, Bicycle and Pedestrian Crash Summaries, 2000-2003;Oregon Department of Transportation, Crash Summary Books, 2003-2008; \*No yearly population data; \*\*No reliable population data due to Hurricane Katrina; \*\*\*No accessible crash data



# **Bicycle and Pedestrian Fatality and Crash Rates**

Following the methodology presented in the Alliance for Biking and Walking's "Bicycling and Walking in the United States: 2010 Benchmarking Report," both bicyclist and pedestrian fatality rates have been calculated and used as another tool to compare safety in New Orleans to various other cities in the United States, as seen in Tables 5 and 6. The number of bicycle or pedestrian fatalities per year for each locality was obtained through the National Highway Traffic Safety Administration's Fatality Analysis Reporting System (FARS). The mode share of both pedestrian and bicyclists was obtained through the US Census Bureau's American Community Survey data on Means of Transportation to Work. In order to calculate the fatality rate, the FARS fatalities per year for a region was divided by the population of the region then multiplied by the mode share of either pedestrians or bicyclists and then multiplied by 100,000, to obtain the fatality rate per 100,000 population. Then an average of the rates from 2006 to 2008 was taken to smooth out the data and create a succinct representation of fatality rates. It does need to be taken into consideration, however, that the three year average may be slightly skewed for Orleans Parish due to the effect of Hurricane Katrina on fatality data in 2006 immediately following the storm.

The fatality rates displayed in Tables 5 and 6 put New Orleans' bicycle and pedestrian safety in context with other major US cities. The pedestrian fatality rate for New Orleans is fairly high at 17.55 for this period. This rate is lower than those of New York, San Francisco, and Washington, D.C., but it is also nearly six times as high as Jefferson Parish's fatality rate and considerably higher than those of the remaining cities. Although the bicyclist fatality rate for New Orleans is considerably lower than the pedestrian fatality rate, the average for the three year period shows that New Orleans has the worst bicyclist fatality rate amongst the other seven chosen localities.

Table 7: Bicycle Crash Rates, 2006-2008					
	2006	2007	2008		
Mecklenburg County, NC	1.9	8 1.24	*		
Jefferson Parish, LA	4.0	2 10.92	9.23		
Milwaukee, WI	8.4	4 8.63	3 10.15		
New York, NY	19.7	9 25.54	22.97		
New Orleans, LA	54.2	4 54.38	3 44.66		
San Francisco, CA	105.6	2 145.50	) 159.28		
Portland, OR	577.4	0 472.89	834.54		

Source: Regional Planning Commission Crash Data, 2000-2008; The California Highway Patrol, Statewide Integrated Traffic Records System, 2000-2006 SWITRS Reports, Table 8A; US Census,2000 Census and 2001-2008 American Community Survey, Total Population; City of Toronto Transportation Services, 2009 Cyclist Collision Summary Leaflet and 2009 Pedestrian Collision Summary Leaflet; Statistics Canada, 2006; Wisconsin Crash Facts Books, 2000-2008; NY State Government, Institute for Traffic Safety Management and Research, Traffic Safety Data for Queen, King, Richmond, Bronx, and New York Counties, 2000-2008; NHTSA, Traffic Safety Facts, Pedestrian and Bicyclist Facts, 2000-2008; District Department of Transportation's Bicycle Program, Bicycle and Pedestrian Crash Summaries, 2000-2003;Oregon Department of Transportation, Crash Summary Books, 2003-2008; American Community Survey, 2006-2008; Total Population and Means of Transportation to Work; \*No Crash Data Available

Table 8: Pedestrian Crash Rates, 2006-2008					
	2006	2007	2008		
Jefferson Parish, LA	44.59	38.53	64.36		
Mecklenburg County, NC	75.12	87.42	*		
Milwaukee, WI	206.52	184.05	146.85		
New Orleans, LA	314.62	470.36	479.39		
Portland, OR	646.90	464.03	578.18		
San Francisco, CA	945.88	1049.39	936.43		
New York, NY	1,316.93	1,368.82	1,346.51		

Source: Regional Planning Commission Crash Data, 2000-2008; The California Highway Patrol, Statewide Integrated Traffic Records System, 2000-2006 SWITRS Reports, Table 8A; US Census,2000 Census and 2001-2008 American Community Survey, Total Population; City of Toronto Transportation Services, 2009 Cyclist Collision Summary Leaflet and 2009 Pedestrian Collision Summary Leaflet; Statistics Canada, 2006; Wisconsin Crash Facts Books, 2000-2008; NY State Government, Institute for Traffic Safety Management and Research, Traffic Safety Data for Queen, King, Richmond, Bronx, and New York Counties, 2000-2008; NHTSA, Traffic Safety Facts, Pedestrian and Bicyclist Facts, 2000-2008; District Department of Transportation's Bicycle Program, Bicycle and Pedestrian Crash Summaries, 2000-2003;Oregon Department of Transportation, Crash Summary Books, 2003-2008; American Community Survey, 2006-2008; Total Population and Means of Transportation to Work; \*No Crash Data Available The crash rate, calculated in the same manner as the fatality crash rate, presents another technique to illustrate the pedestrian and bicyclist safety issues encountered in New Orleans. The bicycle crash rates are quite interesting for the 2006 to 2008 period due to the fact that the rate decreased from right above 54 in both 2006 and 2007 to 44.66 in 2008. This decrease, however, does not represent an improvement in safety, but rather a smaller mode share of bicyclists combined with an increase in population from 2007 to 2008. The increase in population partnered with a decrease in the number of bicyclists and an increase in the number of bicycle crashes should be of special concern to both advocates and policy makers. An increase in people moving into the city and a decrease in the number of people choosing to cycle seems to suggest that what all previous indicators in the report show as an increasing safety issue is influencing local transportation choices. The bicyclist crash rates in New Orleans for the 2006 to 2008 period are more than double those of New York City, while they are significantly lower than the rates in both San Francisco and Portland, as seen in Table 7. The pedestrian crash rates for Orleans Parish are nearly seven times higher than those of Jefferson Parish, but are still considerably below Portland, San Francisco, and New York City's astonishing crash rate of over 1,300, as seen in Table 8. Although New York City's crash rates are remarkably higher, it is still obvious that the crash rates in New Orleans represent a drastic safety issue that needs to be addressed.

#### Conclusion

Statistical analysis of pedestrian and bicycle crash data provided by the Regional Planning Commission allows for the identification of key trends in pedestrian and bicycle safety across the New Orleans Metropolitan region. The number of reported crashes is striking in both Orleans and Jefferson Parish, but is even more worrisome in Orleans Parish. While there has been a decrease since Hurricane Katrina in both the reported number of pedestrian and bicycle crashes and the per capita crash rates in Orleans Parish, a recent increase in both numbers shows that the state of safety in New Orleans is deteriorating. Orleans Parish not only far surpasses the number of reported crashes in any other parish in the Greater New Orleans Metropolitan Area, but it also ranks as one of the most dangerous cities for pedestrians and bicyclist amongst those analyzed in this report. A variety of statistical tools including calculations of bicycle and pedestrian crash and fatality rates and total number of crashes per 100,000 population make for an easier comparison across distinct time periods and differing geographies. These comparisons show that time and again New Orleans ranks high in its total number of crashes both regionally and nationally. The high number of reported crashes is even more alarming when considering the large number of crashes that go unreported each year. While crash data for New Orleans show a huge improvement since Hurricane Katrina in 2005, they still represent a huge safety issue in the city that requires a large degree of attention to improve and correct. Movements towards creation and implementation of Complete Streets policy as well as an increased focus on making the general public aware of pedestrian and bicycle safety, such as the recent advertisements of the law that requires three feet of clearance between bicycles and motorists, would be a start in improving bicycle and pedestrian safety in the city of New Orleans.

APPENDIX VI: SAFE ROUTES TO SCHOOL

# **Current SRTS Louisiana Partnership Collaborations**

The Safe Routes to School Louisiana Partnership is currently collaborating with a number of other bicycle and pedestrian initiatives across the city of New Orleans. These include: Tulane University's Cowan Institute, the Regional Planning Commission's Complete Streets Advisory Committee, the UNO Pedestrian and Bicycle Resource Initiative's count study and State of Active Transportation report, the Tulane Prevention Resource Center's Kids Walk Coalition, and Kellogg Wellness Program. Through working with these organizations and programs, the Partnership is presented with an opportunity to link a variety of disparate fields to help meet the goals of the Safe Routes to Schools program in Louisiana.

# **Cowan Institute at Tulane University**

Through work with the Cowan Institute at Tulane University, the Louisiana Partnership will work to forward the goal of promoting the maintenance and creation of neighborhood schools. The Cowan Institute's implementation of the Helping Johnny Walk to School sub-grant (National Trust for Historic Preservation/EPA) presents a great opportunity to advocate for a renewed reliance on the school as the center of a neighborhood and the ability of children to bicycle and walk to school. The statewide summit that will be held in mid-July will not only forward this goal, but will also present the chance to publicize and promote the efforts of the Safe Routes to Schools Partnership in Louisiana. It will also provide an opportunity broaden the reach of the Partnership by buildings working relationships with key representatives of the historic preservation and education fields.

# **Regional Planning Commission**

The Louisiana Partnership will also help convene the Complete Streets Advisory Committee, a project of the Regional Planning Commission. Participation in staffing this committee will help provide potential opportunities to include Safe Routes to Schools in important policy discussions on policy change.

# **PBRI State of Active Transportation Report**

The PBRI is currently involved in a multi-year pedestrian/bicycle count and benchmarking study. The project will result in 2010 and a 2011 State of Active Transportation reports that will include an overview of Safe Routes to School progress in New Orleans. This will present an opportunity to critically examine progress of the Safe Routes for Schools program in New Orleans through a publicity event upon release of the report.

# **Kids Walk Coalition**

Through the Kids Walk Coalition, the Safe Routes to School Partnership will build awareness of the Safe Routes to School program. The Kids Walk Coalition will also be completing infrastructure

assessments of a number of local schools to determine the physical improvements needed to promote walking and bicycling. The Safe Routes to Schools Louisiana Partnership also hopes to participate in some of these assessments, which will provide an understanding of the work that needs to be done within the city and of the current state of the built environment surrounding schools in New Orleans.

# **Kellogg Wellness**

One member of the Safe Routes to Schools Louisiana Partnership is currently working with both Warren Easton High School and the New Orleans College Prep Academy to encourage school wellness through the Kellogg Wellness program. While the USDA's Child Nutrition and WIC Reauthorization Act of 2004 required that any school that was a part of the National School Lunch Program develop a wellness policy by 2006, many schools in Louisiana are still behind in the process. The work at Warren Easton and the New Orleans College Prep Academy ensures that these two schools not only meet the requirements of this act by developing a robust school wellness program, but also provides that a clear outline for design and implementation of school wellness be created and made available to the Louisiana Department of Education. The Louisiana Partnership will benefit from maintaining a strong relationship with the school wellness program to promote the goals of the Safe Routes to Schools program through enhanced health promotion and education.

# Leveraging Resources

Through these five projects, the Louisiana Partnership hopes to gain new participants, build a stronger advocacy network, and promote both the goals and the program as a whole in the New Orleans community.

The publicity and opportunity to gain new network members from the historic preservation community through the School Siting summit will help ensure that SRTS maintains a presence in future school siting decisions. The Louisiana Partnership will continue to build a close relationship with historic preservation advocates to encourage a focus on neighborhood schools as not only a way to preserve historic buildings and culture, but also as a tool to promote the ability of children to walk and bicycle to school.

Through continued collaboration with the Regional Planning Commission's Complete Streets Advisory Committee, the Louisiana Partnership will be able to help promote policies and projects that affect Safe Routes to Schools and use any successes in project or policy implementation involving SRTS as an opportunity to publicize and celebrate the achievements of the program in Louisiana.

The Louisiana Partnership will also continue to work within the Pedestrian and Bicycle Resource Initiative at the University of New Orleans by including sections on Safe Routes to Schools in future reports and incorporate the programs goals into future projects. The Louisiana Partnership will build off of the work with the Kids Walk Coalition through providing technical assistance to prospective applicants for SRTS funds as determined by the Coalition.

The Louisiana Partnership will also focus on maintaining a strong relationship with network members involved in school wellness programs to guarantee a thorough understanding of developments in school wellness programs and to offer technical assistance to eligible schools seeking SRTS funding to complement their school wellness programs.

Through these efforts, the Partnership hopes to advance the goal of building and maintaining an en-

			Safe Routes to S	Schools, Awards for Orleans Parish	
Award	Project Type	Year	City	Project Summary	
\$300,000	Combined Infrastructure and non- infrastructure	2009	New Orleans	Sidewalk repairs, curb exten- sions, crosswalks, etc.	
\$265,222	Combined Infrastructure and non- infrastructure	2009	New Orleans	Sidewalks, curb extensions, cross- walks, etc.	
\$250,000	Infrastructure	2008	New Orleans	Sidewalks, signs, etc.	
\$50,000	Non- infrastructure	2008	New Orleans	Education, Material, Signs	
	Source: The Pedestrian Bicycle Resource Initiative, University of New Orleans, Accessed 2010.				

thusiastic and effective network.

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APPENDIX VII: NEW ORLEANS PLANS ANALYSIS

#### New Orleans Planning Documents

- The Unified New Orleans Plan (2006): As one of the most prominent recovery plans post-Katrina, it contained 85 references to key bicycle-pedestrian projects identified as "vital neighborhood projects."
- **The 2005 Regional Planning Commission's Bicycle and Pedestrian Master Plan:** The 2005 Regional Planning Commission's Bicycle and Pedestrian Master Plan stresses the importance of benchmarking by stating, "what gets measured gets managed." The plan encourages measuring well-established indicators so policy makers and the public can see clear trends. The plan's policy goals are to "improve the safety of pedestrians and cyclists, increase the extent and quality of facilities for non-motorized transportation, increase modal share of walking and biking, increase and ensure appropriate funding, create a complete bicycling and walking network for the region, and organizational effectiveness for pedestrian and bicycle planning." The plan recognizes the critical roles that both the public and private sector can take in lobbying for, creating, and sustaining a new, hospitable non-motorized landscape.
- The Metropolitan Transportation Plan for the New Orleans Urbanized Area, June 2007, FY 2032: In the New Orleans/MTP 2032, the Metro Bikeway System is described as emphasizing path locations that would encourage commuting by non-motorized means. The need for active transportation is expressed: "Motorized travel is subject to congestion that hinders economic vitality, contributes to air pollution, and consumes non-renewable fossil fuels. By encouraging the use of non-motorized travel for commuter and other trip purposes, some of these impacts can be mitigated. At the same time, facilities also have a secondary purpose as recreation facilities that improve the quality of life."
- Gaining Momentum: New Orleans 2010 Campaign for Active Transportation Case Statement: The Gaining Momentum: Campaign for Active Transportation Case Statement is a project of the Regional Planning Commission, Louisiana Public Health Institute, City of New Orleans Dept. of Public Works, and the University of New Orleans Center for Urban and Public Affairs that was created in June 2008. This campaign makes the case for New Orleans to participate in a new expanded version of the Non-motorized Transportation Pilot Program under SAFETEA-LU, which provides funding to create "a network of non-motorized transportation infrastructure facilities." The Interim Report to the US Congress on the Program found that walking, bicycling, and transit comprised 29% of all trips in the city of Minneapolis. This large base percentage in a cold weather climate shows the tremendous potential for non-motorized transportation to meet mobility needs around the country, especially in a warm, flat environment such as New Orleans.
- New Orleans Department of Public Works Plan: The City's DPW has a goal of 120 miles of improved bikeways throughout the city, including parks (New Orleans Master Plan, 11.2). In the 2009 State of the Streets Address, Robert Mendoza stated, "My desire is to bring the

citizens of New Orleans better roadways and more pedestrian and bike friendly infrastructure" (Department of Public Works).

**New Orleans Master Plan:** Chapter 11 of the Master Plan addresses transportation and it represents a significant commitment to envisioning a more pedestrian and bicycle friendly city as well as improving public transit. Of the seven goals listed, four of them directly encourage active transportation. A bike sharing program, Roulez!, is also recommended in the plan.

While the first goal remains, "Fix it First" with continued investment in rebuilding infrastructure that has been damaged from the storm, the second goal is "Integration of land-use decision making with transportation projects." For this goal, the recommended policy action is "to provide land-use regulations, guidance, and potential future transit routes" as well as "improve coordination between city, regional, and state agencies relating to transportation policies and projects." We can see the need to plan comprehensively, encouraging active transportation as well as connected networks.

The third goal in the Master Plan is to create "Roadways that integrate vehicle transportation with bicycling and walking" by establishing a "complete streets' policy to provide for pedestrians and bicycles, as well as vehicles, in repairs of major streets with design guidelines." The fourth goal is to create "Fast and efficient mass transit supported by transit-oriented development" and the fifth goal is to "Enhance intercity transportation with an upgraded airport, better passenger rail service, and ultimately, regional high speed rail."

The New Orleans Bicycle Project is listed in the Master Plan to establish "Roulez!" a 24/7shared bicycle rental system to the New Orleans area. The plan states, "Through a combination of public/private funds NOBP expects to install, operate and maintain a fleet of 1000+ bicycles. These bicycles, which are available for short-term hourly rentals, can be found at any of the proposed 120 bicycle stations strategically located throughout the New Orleans area." The vision statement of the project is: To provide New Orleans and residents and visitors with a fun, green, and healthy alternative form of transportation for traveling throughout the city, simultaneously promoting an individually responsible, ecological friendly/healthy lifestyle and to showcase innovation and recovery in New Orleans. New Orleans is uniquely suited to bicycle transportation as its municipal density and geographic layout make bicycle transportation an ideal alternative to motor vehicles. Once implemented, it is expected that Roulez! will be a self-sustaining entity through membership subscriptions, short-term one-off rentals, and advertising revenue on street furniture kiosks and stations.

# APPENDIX VIII: NEW ORLEANS BICYCLE GROUPS AND EVENTS

### **Metro Bicycle Coalition**

The Metro Bicycle Coalition is "is a grassroots organization dedicated to improving commuting and recreational cycling conditions in and around New Orleans, Louisiana. MBC works to increase transportation choice, mobility, and infrastructure by establishing a safe network of bicycle lanes, paths and facilities, educating cyclists and drivers on safety and the rules of the road, and advocating at local, state and national levels for routine accommodation of bicyclists and pedestrians" (mbcnola.org).

# **Bicycle Second Line Event**

The Metro Bicycle Coalition organizes an annual "Bicycle Second Line" event in New Orleans each spring. Kicked off in 2009, the event is a chance for citizens to bicycle as a group around the city to visit select spots in the city that promote sustainability. The 2009 stops included Global Green to see sustainable and affordable housing in Holy Cross, the Lafitte Corridor to hear about the progress of the greenway, and City Park to see the bike routes in the park. The event was a success, with bicyclists from around the city, including recovery czar Ed Blakely bicycling with the group. Planning has commenced for the 2010 event.

# Nola Cycle

Nola Cycle is "a project aimed to create a high quality cycling map of New Orleans. Cycling maps include information beyond just streets and their names that benefits cyclists. In our map, we highlight the pavement quality, car travel speed, lane width, and special caution areas (busy intersections, man-eating potholes, or high accident areas). Volunteers help to collect this data by attending mapping events. The information is then digitized to make a map of the data we collected and a map of recommended routes based on the data" (nolacycle.blogspot.com). The bicycling information for New Orleans is compiled on an online map: http://nolacycle.noladata.org/.

# **Transport for NOLA**

Transport for NOLA is "an idea: state-of-the art transportation in New Orleans as a public service and a public good. And it is a group of people: advocating for the creation of public transit in New Orleans that provides transport choices and transportation innovation for New Orleanians. We want transit that is connected to our daily lives, that is a public service, that we use by choice." Transport for NOLA is "advocating to improve the existing transit in the city, but also pushing for a vision of a world class transportation system." (Source: http://www.transportfornola.org.)

# **Friends of Lafitte Corridor**

Friends of the Lafitte Corridor (FOLC), a grassroots organization, organized in 2006 after Hurricane Katrina gave special priority to rethinking the New Orleans landscape. The Friends of Lafitte Corridor seeks to preserve and revitalize the Lafitte Corridor and adjacent neighborhoods from the French Quarter to Canal Boulevard by advocating for and facilitating the creation of a greenway that encourages active living and economic development and links neighborhoods, cultural features, historic sites, retail areas and public spaces. (http://folc-nola.org).

### The Pedestrian Bicycle Resource Initiative

The Pedestrian and Bicycle Resource Initiative (PBRI) is "joint project of the University of New Orleans Center for Urban and Public Affairs and the Regional Planning Commission that aims to improve bicycling and walking in the New Orleans metro area (http://www.planning.uno.edu/BikePed/ index.html). The PBRI provides bicycle routes, resources, links, plans, research, and information to the community.

# New Orleans Plan B Bicycle Project

The New Orleans Plan B Bicycle Project is a "community-run bike project that functions as an open workspace for bicycle repair. The workspace makes an array of professional bike tools available for use to the public for free while volunteers offer free help in bike repair. The bike shop makes parts available at low cost or for small donations. All of the proceeds from parts sales are used to keep the project running." (http://www.bikeproject.org/).

# Rusted Up Beyond All Recognition Bikes (RUBARB)

RUBARB is a community bicycling center that provides workshops, work trade opportunities, monthly field trips for youth, maintenance assistance, creative art with bicycles, build a bike options, earn a bike program for youth, and general bicycle assistance in the Upper 9th Ward of New Orleans. "Volunteers began RUBARB in March 2006, after constantly collecting unused flood bikes, pulling them from garbage piles in the streets, and fixing them up for both residents and volunteers. Bikes that would have otherwise been sitting in an overflowing dump of Post Katrina rubbish, are now being reused by many people in New Orleans. RUBARB has evolved into a full-scale upper 9th ward community bike shop." (http://www.rubarbike.org/).

APPENDIX IX: POLICIES

Law	Level	Passed	Summary of Law
Colin Goodier	State of	August 2009	The Colin Goodier Protection Act, RS 32:76:1, states
Protection Act	Louisiana		that: The operator of a motor vehicle, when overtaking
			and passing a bicycle proceeding in the same direction
			on the roadway, shall leave a safe distance between
			the motor vehicle and the bicycle of not less than three
			feet and shall maintain such clearance until safely past
			the overtaken bicycle. This act went into effect in
			August 2009 after the death of Colin Goodier,
			Louisiana doctor, and two other bicycle deaths in the
			community. This 3-Feet law states that a driver must
			leave at least three feet between the vehicle and the
			bicyclist when passing (Acts, 2009, No. 147, §1).
Harassment of	State of	2009	The harassment of bicyclists in prohibited in Penalties,
Bicyclists	Louisiana		RS 32:201, where it states: It shall be unlawful to
			harass, taunt, or maliciously throw objects at or in the
			direction of any person riding a bicycle. Any person
			who violates this Section shall be fined not less than
			two hundred dollars or imprisoned for note more than
			thirty days. (Acts, 2009, No. 147, §1).
Complete Streets	Federal/State	Introduced	The Complete Streets Act of 2009, Bill # H.R.1443, is to
Act		2009	ensure that all users of the transportation system,
			including pedestrians, bicyclists, transit users, children,
			older individuals, and individuals with disabilities, are
			able to travel safely and conveniently on and across
			federally funded streets and highways
Bicycle	Federal/IRS	January 2009	The federal Bicycle Commuter Act allows bicycle
Commuter Act			commuters to receive transportation benefits when
			commuting to work. On January 1, 2009, the qualified
			bicycle commuting reimbursement was added to the
			list of qualified transportation fringe benefits covered
			in section 132 (f) of the Internal Revenue Service Code.

Law	Level	Passed	Summary of Law
Safe Routes to	Federal/State		The Federal Safe Routes to School Program provides
School			funding for plans that enable elementary and middle
			school students to walk or pedal safely to
			school. These plans include infrastructure
			(engineering) projects and non-infrastructure
			(education, encouragement, enforcement) programs.
Interagency	Federal	2009	The Interagency Partnership for Sustainable
Partnership for			Communities is a partnership between DOT, HUD, and
Sustainable			EPA that will coordinate federal housing,
Communities			transportation, and other infrastructure investments
			to protect the environment, promote equitable devel-
			opment, and help address the challenges of climate
			change. Through a set of guiding livability principles,
			the partnership hope to achieve outcomes like more
			walkable, transit-friendly neighborhoods with ready
			access to affordable housing, to jobs, to medical care,
			and other essential services.
Active	Federal	Introduced	Introduced by Representative Earl Blumenauer
Communities		February	(D-Oregon), the Active Community Transportation Act
Transportation		2010	will "provide communities with the funds to build ac-
Act			tive transportation networks, strategically filling gaps
			to improve mobility, accessibility and safety for all
			users and help communities implement the biking and
			walking facilities essential to attractive and functional
			cities around the world."
TIGER Grants	Federal DOT	2009	New Orleans received a Transportation Investment
			Generating Economic Recovery (TIGER) Grant for \$45
			million as part of the American Recovery and Reinvest-
			ment Act of 2009- the Federal Stimulus. Awards were
			made to a mix of rail, transit, highway, port, and
			multimodal projects, including bicycling and pedes-
			trian plans. Highway projects received 23 percent of
			funding, while rail projects won 19 percent, transit
			projects 26 percent, ports 7 percent, and multimodal