About the Authors

We are a group of eleven graduate students from the Urban Affairs and Planning Program at Hunter College. This report on bicycle planning in New York City is the culmination of a yearlong research project. As part of our coursework towards attaining Masters degrees in Urban Planning, we took on endless hours of research, conducted countless interviews, and developed and debated ideas at weekly meetings throughout the year. This report, however, would not have been possible without the assistance of many people outside of our group.

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This report is the culmination of a yearlong research project, working with the New York City Department of Transportation (DOT) Bicycle Program to recommend improvements to the planning, implementation and location of bicycle infrastructure in New York City. Our recommendations are designed primarily for DOT and the Bicycle Program, but also speak to the city at large, as it strives for a more livable and sustainable urban environment. As progressive transportation planners, we begin with the assumption that bicycle infrastructure is a positive addition to the city’s streetscape. Bicycling promotes physical health, eases congestion on roads and public transit, increases mobility, and improves air quality. Therefore, this studio focused on determining how cycling infrastructure in New York City can best serve the needs of current and future cyclists, and how its longevity can be secured into the future.

The Hunter College bicycle studio performed extensive research on the history and best practices of bicycle planning. We interviewed cycling activists, community board members, and transportation experts in New York City, and examined the history of bicycle advocacy and infrastructure in the city as far back as the opening of the nation’s first bicycle lane on Ocean Parkway in 1896. We also reviewed the academic literature on cycling, as well as transportation plans from other major cities. Most importantly, we developed a comprehensive needs-based methodology to determine New York City’s infrastructure needs.
**Sustaining Bicycle Planning in NYC**

Bicycling is booming in New York City. According to official DOT counts, commuter cycling increased by 88 percent between 2007 and 2010. Over 250 new miles of bicycle lanes have been installed under current DOT commissioner Janette Sadik-Kahn, providing many New Yorkers with the option of a more sustainable and active mode of transportation. While we fully support cycling in New York, two issues have emerged as the development of new infrastructure has proceeded over the last few years. These two issues frame the research and recommendations of this report, and include:

- The lack of infrastructure in traditionally underserved areas outside of the core of Manhattan and northwest Brooklyn.
- The vulnerability of this new infrastructure in light of incomplete transportation planning processes involving city agencies (including DOT), community boards, and other community and advocacy organizations.

**The Bicycle Network: An Issue of Transportation Justice**

- New bike lanes and parking facilities are largely concentrated in lower Manhattan and northwestern Brooklyn, and are oriented toward central business district (CBD) commuters. This infrastructure excludes large numbers of cyclists in the outer boroughs, who bicycle within their neighborhoods or to transit stops, or who use their bicycles for work.

The design and development of the bicycle network now places a strong emphasis on commutation to the CBD from northwest Brooklyn and other parts of Manhattan, as is evident from the concentration of bicycle lanes in these neighborhoods. This emphasis on CBD commutation is also reflected in current data collection practices by DOT. Cyclists are counted at Whitehall Ferry Terminal, the East River Bridges, and at each of the avenue intersections along Manhattan’s 50th Street. Counts at these locations provide a picture of CBD commuter cycling, but omit the thousands who bicycle entirely within the outer boroughs.

This emphasis on CBD commuters raises issues of transportation justice. Transportation justice is the concept that transportation infrastructure should aim to equally and equitably
address the needs of all people, regardless of economic class, race, sex, age, ability or any other kind of social distinguisher. New York City’s bicycle network is currently most built out in the city’s wealthiest neighborhoods. Low-income cyclists, however, make up a large part of the urban bicycling constituency. These cyclists are concentrated in Queens, the Bronx, and outer Brooklyn. Many of these individuals rely on cycling because they live in neighborhoods poorly served by mass transit. Residents of northern Queens often must travel more than a mile to get to their closest subway stops, while the neighborhoods where most cycling infrastructure is currently located have the best transit access in the city. In order to serve the people of New York who need it most, the bicycle network must expand its focus.

Community Participation and Institutional Vulnerability

- The increase in bicycling and bicycle infrastructure has produced an emotional backlash. The backlash is attributable to numerous sources, from the structure of community boards to an ingrained culture of driving. While some opponents may never be placated, part of the opposition could be diffused by improvements to the community outreach and involvement process followed by DOT.

Misconceptions have grown around the proliferation of bicycle lanes and streetscape changes that have been implemented over the last five years. The backlash against bicyclists represents a perfect storm of class relations. As areas of the city gentrify, many long-time New Yorkers fear for the stability of their neighborhoods, and perceive cyclists to belong to one of two threatening classes: people who are richer than them (“white yuppies in spandex”); and people who are poorer than them (commercial cyclists, immigrants, people of color and punks). This “donut-hole theory” suggests that middle class citizens are furious with the city for helping everyone around them, while seeming to ignore their outer borough auto- and transit-oriented needs.

This framing of cyclists and city agencies ignores many inconvenient truths: bicycle ridership is representative of all social strata of New York City; street infrastructure improvements often enhance safety and public spaces for all New Yorkers, not just those who cycle; bicycling has been an important part of New York City residents’ commutation patterns since the early 19th century; implementing bicycle lanes costs far less than building or maintaining streets for cars and transit systems; and finally, the city is not prioritizing the needs of low-income people of color over the white middle class.
Regardless of the source of the opposition, bicycle lanes must have genuine citizen support if they are to remain a part of the city’s transportation landscape into the coming decades. This necessitates improving relationships between DOT and New York City’s community boards (CBs), which are the primary vehicle for public participation in the city. While CBs have no official power over the city streets, opposition by some boards has proven decisive in derailing the expansion of the citywide bicycle network. Their approval can dramatically impact the way bicycle infrastructure is received in a community. In many cases, however, opposition to bicycle lanes fails to recognize the large numbers of cyclists in these communities.

**PROPOSALS AND RECOMMENDATIONS**

**Methodology for Counting Cyclists and Assessing Needs**

A critical first step in recognizing the needs of all cyclists in the city is to expand the methods used to determine need and count cyclists. The methodology we propose is based on identifying previously uncounted cyclists and their cycling needs. The results inform our recommendations concerning network design and facility location. The following steps detail the methodology, which we developed and tested in Flushing, Queens in late 2010 and early 2011:

- **Spot Count** — Brief counts lasting 15 minutes give a rough picture of cycling in each neighborhood. The counts should include cyclists’ gender, their approximate age, which direction they are riding, and which routes are taken.

- **Windshield Survey** — A windshield survey is a simple tour of an area, either on foot, by bicycle, or by car, to observe cyclist habits and bicycle infrastructure. The primary purpose is to determine how many cyclists are in an area and where they are concentrated. We recommend focusing on areas around transit stations, libraries, retail districts, hospitals, and other major trip generators.

- **Focus Group** — In the interest of collecting qualitative cycling data, we recommend conducting focus groups. The goal should be to attract a broad range of cyclists in order to learn about cycling conditions, cyclists’ opinions on bicycle infrastructure, and which types of infrastructure they need most. Focus groups are resource-intensive, and we do not expect DOT to conduct one for every project. We
found that a greater volume of data, albeit quantitative in nature, can be collected with the use of surveys, which require significantly less resources to implement.

- **Survey** — The centerpiece of our methodology is the handlebar survey. We recommend the distribution of at least 300 surveys per neighborhood. They should be written in the native languages of the residents of the neighborhood (for example, English, Spanish, and Chinese in Flushing) to ensure that a diverse array of cyclists will be able to respond. Our survey’s 20 questions asked people why they choose to ride, how long their trips last, what types of safety equipment they use, which streets they perceive to be the most dangerous, and what kinds of infrastructure would be most beneficial for them. The survey also included a map of the area, on which respondents were asked to draw their routes.

**Bicycle Network Design Recommendations**

Our application of this methodology in Queens has lead us to propose two important changes in the design and planning of the city’s bicycle network. These changes address the equity of bicycle infrastructure distribution in New York, and the benefits of an intermodal approach to transportation planning.

- **Build Neighborhood-Based Networks**

  Our research shows that there are three principal types of cyclists in Flushing, Corona, and Jackson Heights: commuters riding to and from transit hubs, workers riding within the neighborhood to and from work, and messengers riding according to their delivery routes. These results show that DOT— in partnership with community boards and local advocacy groups— has an opportunity to build neighborhood-based bicycle networks that correspond to the most frequently used routes, ensuring that infrastructure matches local needs.

- **Create Transit Connectivity**

  Our study’s most significant finding was the existence of demand for bike racks on and around the 7 train subway corridor in Queens. The number of bicycles parked in this area, and the number of survey respondents who said they rode to the subway
shows that there is a significant unrecognized need for bicycle connectivity and parking in and around transit stations. Commuters indicated their need and desire to cycle to subway and train stations, safely leave their bicycles at these transit hubs, commute to their jobs, and then return to cycle home.

**Community Involvement and Community Board Recommendations**

The following recommendations are based on research into New York City’s community boards and their working relationships with DOT. We found that the lack of resources provided to community boards is a major impediment to their effective engagement with transportation plans. We also found that CBs often fail to recognize the need for cycling infrastructure in their districts, even where there is a large quantity of cyclists. These factors have made community boards a frequent impediment to the installation of bicycle infrastructure.

The Department of Transportation’s relationship with CBs is one that is best described by two related sets of power dynamics. First, CBs are advisory bodies and have no power to set or veto policy decisions set by local government. Secondly, DOT has no legal or institutional obligation to meet with CBs. In the past, these dynamics have fostered conflict between CBs and DOT when they sought to implement new bicycle projects. In recent years, however, DOT has intensified its outreach to community boards and stated on many occasions its interest in fostering a good working relationship with CBs and their constituents. Such a relationship will improve the chances that a CB will work with DOT toward the implementation of future projects, rather than regard DOT as a hostile outside force. We have assembled a series of recommendations to make this outreach more effective.

While we stress that community boards have the right to be consulted and participate in planning for bicycle infrastructure, they do not and should not have the right to veto or impede the design and implementation of safer streets throughout New York City. Community boards have a clear responsibility to plan for the rights of all users of the street. This responsibility should be explicitly outlined for every community board and transportation committee. If not clarified, increased community board participation will contradict the goal of creating a just transportation network.
• **Establish a public and standardized review process**

The current community board notification process is not widely understood, contributing to the mistrust of the Bicycle Program among CBs. A written notice of any proposed bicycle project should be issued six months in advance of scheduled installation. This will make it clear that DOT seeks community involvement, and will provide a predictable process through which community boards can provide input. This will also ensure that DOT is able to present the rationale behind a project before it comes to a vote.

• **Demonstrate a local need for bicycle infrastructure.**

When presenting a new project to a community board, DOT has often encountered the argument that it is unnecessary for that particular neighborhood. The methodology described in this report shows who is cycling in a community, and which routes they use. This data can be used to assist DOT and community boards in their determination of the bicycle infrastructure needs of particular districts.

• **Develop an integrated transportation plan for each neighborhood that provides the context for increased bicycle infrastructure.**

The Department of Transportation's efforts to build out the bicycle network have been frustrated by opposition in some community boards. Several CBs have complained that DOT ignores longstanding transportation needs in their communities in the interest of building bicycle projects. We suggest that DOT present its cycling projects in the context of multimodal plans for improvement.

DOT has challenged the longstanding dominance of the road by cars with a vision of Complete Streets, the physical redesign of our roadways to serve pedestrians, bicyclists, and buses, as well as the private automobile. Complete Streets should go beyond the design of the actual roadway to take into consideration transit connectivity and the location of trips. Bicycle projects will also be more palatable to CBs as part of comprehensive transportation plans that serve the needs of all community residents.
• **Support community board transportation committees with time, information, and technical assistance.**

Community boards do not have the resources to hire professional planners, even though they are tasked with evaluating plans, Environmental Impact Statements, traffic analyses, and other complex technical documents created by land use consultants. The city should provide all board members with regular trainings on relevant issues, including multi-modal transportation planning. Additionally, CBs should be furnished with the necessary tools to conduct transportation analysis, such as geographic information systems programs. Such assistance could encourage broader thinking about planning issues, including the role of cyclists and cycling infrastructure in every neighborhood’s transportation network.

In addition to these broad approaches to working with CBs, DOT could also benefit by applying the following tactics to ensure a better working relationship with CBs:

• **Partner with community-based organizations (CBOs) and bicycle advocacy organizations to gather data on cyclists and cycling conditions.**

These organizations offer a wealth of information concerning the location and makeup of populations in particular communities. Several of our surveys were distributed through CBOs, which assisted us in achieving our response rate.

• **Bring a familiar face: one who knows local conditions, streets, and neighbors.**

Community boards will be more receptive to opinions offered by someone they know and trust. This does not have to be a neighborhood resident, but can be a DOT staffer who has spent time in the community, listening to residents and CB members.

• **Create a travel and transportation education program.**

Specific strategies include distributing wallet-sized bus timetables to homes in the catchment area, distributing local maps of bike-route access and pedestrian friendly walking routes, and providing free “test tickets” to try out transit. A similar strategy in Perth, Australia led to a measurable decrease in car-dependency for participants.
• *Bring allies to community board meetings.*

Cyclists from particular community districts should be invited to attend community board meetings when cycling infrastructure is on the agenda. Local CBOs with underserved cyclists among their membership can be helpful in bringing support to community board meetings.

This executive summary outlines the issues, process, and recommendations of the Hunter Bicycle Studio. As proponents of sustainable urban transportation, our goal is to assist the DOT Bicycle Program in its implementation of bike lanes and other infrastructure. To that end, we provide a number of recommendations on how the community involvement process can be improved. We also present several recommendations on the issue of transportation justice and how bicycle infrastructure can be more equitably distributed in New York. The research and recommendations of the studio are further explained in our full report.
New York City has made tremendous progress towards producing a robust bicycle network but to achieve the goal of establishing cycling as a true ‘third option’ to driving and public transit, expansion of the network must be accelerated. Cycling holds great potential to improve the overall health and safety of the city. It generates virtually no noise or air pollution, requires only as much energy as provided by the cyclist, and provides excellent cardiovascular exercise that can help guard individuals against obesity and diet-related diseases. Bicycles consume far fewer non-renewable resources than motorized vehicles, and take up a fraction of the space. Also, bicycles are highly affordable, making cycling one of the most equitable modes of transportation. In addition to providing cyclists with a safer space to travel, bicycle infrastructure calms traffic, improving the overall safety of city streets for all users. These potential benefits increase exponentially as the bicycle network expands.

In this report, we outline a comprehensive strategy to ensure that cycling continues to grow in New York City. For anyone involved in the movement to promote this dynamic form of transport and recreation, it is clear that it continues to face many challenges. Recent anti-cyclist “backlash” and protests against bicycle lanes, such as those at Prospect Park West, undermine the many benefits that bicycle infrastructure provides, and threaten to limit the expansion of New York City’s bicycle network.

To confront these challenges, we present two sets of recommendations to the New York City Department of Transportation (DOT).

First, DOT should implement a new methodology for counting New York's cyclists and better understanding their needs. In a city as large as New York, different areas have different needs in terms of infrastructure design and location that must be understood in order to successfully grow the bicycle network to a citywide scale.

Second, DOT should establish a participatory planning process that involves the city's neighborhoods and community boards in the planning of new bicycle infrastructure and situates bicycle planning within the context of integrated local transportation planning. In doing so, the DOT Bicycle Program will strengthen its resilience to political challenges like the current “backlash” and ensure that access to transportation infrastructure is equitable in terms of geography, class, ethnicity, gender, ability, etc.

Situating bicycle planning within “Complete Streets” policy is crucial. The pursuit of a streetscape that is accessible to all users, whether they are children, seniors, drivers, cyclists or pedestrians, is necessary for building a just and safe urban environment and a network of streets and sidewalks that is more integrated with New York’s public transit, one of the city’s greatest and most environmentally beneficial assets. Accordingly, we urge that DOT strengthen these programs to complement its bicycle planning efforts.

A Brief History of Cycling in New York

In 1896, New York City’s first bicycle path opened on Ocean Parkway in Brooklyn and was greeted by an estimated 10,000-strong parade of cyclists and bicycle clubs from all over the region and nearly 100,000 spectators. According to The New York Times, “The trolley cars were covered as with flies, and any old conveyance, so long as it held together, was good enough to ride in to the fête of the pedalers. There were plenty of smart turnouts noticed, victorias, tallyhos, and breaks being stationed all along the route during the progress of the procession.” Designed by Frederick Law Olmstead and Calvert Vaux, this bicycle path stretched from Prospect Park to Coney Island and was the only portion of their proposed greenway network that was fully

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implemented. It still exists to this day.  

In 1980, eighty-four years later, the city’s first on-street bicycle lanes were installed on Sixth and Seventh Avenues in Manhattan by directive of Mayor Ed Koch. There was no procession this time. While the cycling community was resolute in its support for the bicycle lanes, many New Yorkers vehemently protested the arrival of such inconveniences on their major thoroughfares. The concrete-separated bicycle lanes were removed and replaced by painted lanes and the issue was all but dropped for almost two decades.

With the exception of Mayor Koch’s brief flirtation with bicycle lanes, the private automobile has ruled the streets of New York City since the closure of the last trolley lines in the 1950s. From the days of Robert Moses to the tenure of Mayor Bloomberg’s first DOT Commissioner Iris Weinshall, city transportation policy primarily sought to maximize the speed and convenience of car travel throughout the five boroughs.

Although largely ignored by city policymakers once the car came along, cycling remained active, upheld by numerous bicycle clubs. Today’s New York Cycle Club, the Five Borough Bicycle Club, and the Fast and the Fab, to name a few, owe much to their predecessors dating all the way back to 1880 when the first club was established in New York.

A century later, after decades of auto-centric streets planning, bicycle advocacy organizations began to form in order to pressure policymakers to make New York more bicycle-friendly. Transportation Alternatives (TA), an organization devoted to promoting bicycling, walking and public transportation over automobile use, and Time’s Up!, an environmental advocacy group that promotes cycling, formed in 1973 and 1987 respectively. These two organizations, among others, were influential in pushing for the changes that would eventually take place on the city’s streets.

Groups like Transportation Alternatives and Time’s Up! played a crucial role in bringing bicycling back into the transportation policy discussion. In the 1990s, key policy changes at the federal level reestablished cycling’s status as a true mode of transportation by making Federal funding available for bicycle lane construction: first, through the Intermodal Surface

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Transportation Efficiency Act (ISTEA) in 1991 and then the Congestion Mitigation Air Quality (CMAQ) program of the Federal Transportation Equity Act of the 21st Century (TEA-21). In 1997, the Department of City Planning (DCP), in collaboration with DOT and cycling advocates, released the New York City Bicycle Master Plan, which laid out a comprehensive bicycle network throughout the five boroughs and a detailed political plan to institutionalize cycling.

Gradually over the next decade, the concept of bicycle planning began to percolate in urban policy-making circles after decades of car-centric ideology. A monumental shift occurred when Mayor Bloomberg introduced his long-term sustainability strategy PlaNYC 2030 in April 2007, and subsequently replaced outgoing Commissioner Weinshall with Janette Sadik-Khan. As DOT Commissioner, Sadik-Khan has challenged the longstanding dominance of the road by cars with her vision of Complete Streets, the physical redesign of our roadways to serve pedestrians, bicyclists, and buses, as well as the private automobile. Streets like First Avenue between First and 34th Streets have been transformed from four-lane traffic arteries to colorful multi-use boulevards with separated, painted bus lanes and bicycle lanes. Of the 909 miles of bicycle lanes proposed in the Bicycle Master Plan, over 200 had been installed between 2007 and 2009.

**Responding to Anti-Bicycle Lane Sentiment**

Expansion of the city’s network of bicycle lanes is an important aspect of PlaNYC 2030’s emissions reduction goals and vision for a “greener, greater New York.” The long-term objective is to gradually build out a complete, interconnected citywide network following the Bicycle Master Plan, with lanes stretching to the farthest reaches of the five boroughs. New York has added more than 250 miles of new bike lanes and commuter cycling has more than doubled since Sadik-Khan become commissioner.

It would seem that no other venture has been so simultaneously lauded and disparaged as this rapid expansion, with equally vocal adversaries on either side. Nowhere is this more perfectly encapsulated than in the recent lawsuit filed by bike lane opponents demanding the removal of

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the recently installed Prospect Park West bicycle path in Park Slope, Brooklyn. Suits challenging bicycle infrastructure are not new, but the outcome following the case filed against the Koch Administration\textsuperscript{13} is today fueling anxieties over the fate of cyclist- and pedestrian-friendly policy. Paul Steely White, executive director of TA, has been quoted as saying; “It’s all hands on deck because the future of our city does, quite frankly, hang in the balance.”\textsuperscript{14}

Although the Bloomberg administration initially remained quiet on the issue, it has since voiced strong support for DOT’s work and the role that bicycle lanes serve in making this city’s streets safer.\textsuperscript{15} Come 2013, however, the Bicycle Program may have trouble garnering such an

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endorsement from new mayoral candidates that will be actively looking for flashy signature issues to run on. In this political environment, DOT’s bicycle planning process must be revised to be more responsive and inclusive of all New Yorkers.

In this report, we map out strategies to ensure the longevity and equity of bicycle infrastructure as we move into the next mayoral administration. If cycling and the bicycle network are to thrive and grow in New York City, they must become a sustained part of both the city’s and DOT’s operations and planning, as well as ensure equitable access to all citizens. Here, we will discuss the context of current bicycle planning efforts, both as it relates to issues of transportation justice and contemporary planning policy.

The concept of transportation justice has been largely missing in action from the current political debate on bicycle infrastructure and bicycle planning. Here, we note that transportation infrastructure in New York City is inequitably distributed. Thus far, bicycle infrastructure has been most often built in the dense Central Business District (CBD) areas of Manhattan and North Brooklyn where there is a good deal of local support for bicycling. These areas tend to consist of wealthier, majority white, and, quite often, gentrified neighborhoods. As a result, the (false) impression is created that bicycle lanes help to further upscale development.

Second, there is no clearly defined, publicly endorsed methodology for assessing the diverse needs for bicycle infrastructure in the city’s diverse neighborhoods. As a solution to this problem, we have tested and propose a methodology that is designed to identify those populations most in need of bicycle infrastructure: a survey that targets those areas where little infrastructure exists, but where there are many cyclists, and reaches the local cyclists via distribution on parked bicycles. Its goal is to ascertain from the cyclists themselves what and where specific improvements should be made. We selected our study area in collaboration with DOT: the area in Queens from Flushing to Jackson Heights along the number 7 subway train corridor. After an initial pilot survey in Fall 2010 followed by a, much larger and more successful sample in Spring 2011, we recommend its adoption by DOT.

We then analyze existing planning documents and policy to explore how these might be expanded and utilized in more flexible ways, to improve access and equity for all of New York’s commuters. Specifically, we look to the New York City Bicycle Master Plan and Complete Streets policy as frameworks for institutionalizing participatory and community-based bicycle planning processes.
In order to mitigate the effects of the current backlash we explore the benefits that participatory planning can offer, both to reframe present definitions of success and build public support of bicycle infrastructure. As the primary vehicle for public participation, New York City’s community boards play an instrumental— albeit officially only “advisory”—role in shaping the urban landscape. The DOT Bicycle Program recognizes that community board approval is crucial to the sustainability of bicycle infrastructure. Still, structural barriers affecting community boards and current DOT procedure inhibit true participatory bicycle planning at this level. We therefore extend our analysis of participatory planning beyond the context of community boards. Through interviews with community board members, transportation and bicycle advocates, and DOT staff we establish that DOT, the mayor’s office, and community boards must strive to improve their working relationships to ensure the longevity of the bicycle network, and the health and safety of the New York City. We then lay out our recommendations to address current deficiencies in DOT planning procedure, reframe goals and objectives, and improve public outreach strategies.
Transportation justice is the concept that transportation infrastructure should aim to equally and equitably address the needs of all people, regardless of economic class, race, sex, age, ability or any other kind of social distinguisher. In the 1960’s John Lewis and the Freedom Riders defined just transportation as “the freedom to travel without fear of intimidation.”

Historically and currently in the United States, ethnic and racial minorities, the poor and working class, the young and elderly, the disabled, and women have had unequal access to mass transit, private automobiles, and air free of excessive auto emissions. Just as the environmental justice movement works to ensure that minorities and low-income populations are not exposed to disproportionately high adverse health and environmental effects, the transportation justice movement works to make sure these populations are not disproportionately affected by the consequences of transit fare hikes, spatial mismatch, facilities inaccessible to the disabled, service reductions, and the locations of highways, truck and bus depots, and airports. New York City’s transportation infrastructure, including the expanding bicycle network, reflects and reproduces some of these inequalities.

This section identifies the ways that New York’s bicycle network reproduces broader transportation inequalities, and considers how DOT and other parts of city government might address these shortcomings. After identifying the impacts of transportation injustices on

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underserved cyclists, we consider how these dynamics play out in two cases: DOT’s Safe Routes to School programming, and the accusation among critics that bicycle lanes cause gentrification. These fundamental problems are later addressed by a new methodology for counting and assessing the needs of underserved cyclists, which focuses on neighborhoods with high demand but little bicycle infrastructure.

**Transportation Justice and Bicycles**

Bicycles are a low cost and environmentally friendly mode of transportation; they enrich riders’ health and calm automobile traffic. Streetscape improvements that facilitate cycling increase safety for all users of streets and sidewalks. Elderly, young and disabled pedestrians benefit greatly from traffic calming measures, including the provision of bicycle infrastructure. Bicycle planning and advocacy organizations across the country are turning to a transportation justice framework to guide their work, both to present bicycles as viable alternatives to cars and to represent the needs of underserved cyclists, many of whom cycle because of structural constraints, including economic inequality and transportation injustice.

Low-income cyclists make up a large part of the urban bicycling constituency. Many cyclists choose this mode because it is the cheapest way to get from place to place; bicycles are relatively inexpensive to buy, store, and maintain. As transit fares and gas prices rise around the country, cycling may become an increasingly appealing option for low-income travelers. At the same time, many workers perform their jobs on bicycles. Urban economies run, in part, on two wheels, with businesses relying on fast courier services and residents becoming used to quick restaurant deliveries. These cyclists often use the roads more than any other kind of bicycle commuter or recreational cyclist. Unsafe streets compound the unsafe working conditions of some of New York’s most vulnerable workers.

Another, often overlapping, group of New York cyclists are those who rely on cycling because they live in neighborhoods poorly served by mass transit. For example, residents of northern Queens often must travel more than a mile to get to their closest subway stop, making this one of the most underserved regions in the city. Bicyclists in areas like northern Queens may prefer to ride a bus or train (and may even cycle just to get to the bus stop or train station), but public transportation options are not located close to their homes. Geographically isolated cyclists often earn low incomes, as houses and apartments near transit stops tend to be valued higher.
than more remote residences. Due to persistent residential segregation, these transit-poor neighborhoods are often also largely minority and/or new immigrant groups, adding a layer of racial and ethnic injustice to the geographic isolation. As we can see from figures 2, 3 and 4, cyclists in Flushing, a largely new immigrant neighborhood in northern Queens, do not enjoy the freedom to travel without fear of intimidation, while cyclists in more wealthy and largely white parts of New York like Chelsea enjoy some of the most serene cycling in all of urban America.

New immigrants, a third segment of cyclists, are so underserved by both municipal government and transportation advocates that researchers are beginning to refer to them as “invisible cyclists.” Researchers like Michael Smart of

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Percent of Households which are Foreign Born by Census Tracts

- 0 - 15
- 15 - 25
- 25 - 35
- 35 - 45
- 45 - 100

Bicycle Network

Map created by Jennifer Harris-Hernandez

Figure 5: This map shows a correlation in high-foreign populations, particularly throughout Queens with scant bicycle infrastructure.
UCLA have found that new immigrants are twice as likely to cycle as native-born Americans for reasons including reduced access to credit and drivers licenses, a desire to keep a low profile, and an inability to afford private automobile or mass transit expenses. This pattern remains true even after controlling for income, age, geography and access to cars, suggesting that many new immigrants bring a favorable opinion of cycling with them from their countries of origin.\textsuperscript{18} A recent poll conducted by Quinnipiac University found that while 54 percent of both black and white New Yorkers thought that the expansion of bicycle lanes in New York City was a good thing, 59 percent of Hispanic New Yorkers favored the expansion of bicycle lanes.\textsuperscript{19}

While new immigrants cycle more than their native-born neighbors, they are often exposed to heightened risks, especially if they are undocumented and live in low-income neighborhoods. These risks can include more dangerous streets with less cycling infrastructure; increased threat of theft, robbery, and police harassment; a lack of health insurance options; poorly maintained bicycles and a lack of safety equipment; lack of knowledge about cyclists' rights; and a lack of political representation or public advocacy.\textsuperscript{20} New immigrant groups are less likely to be represented in community boards (the main conduit for public participation with DOT) and, as demonstrated in the maps below, new immigrant neighborhoods are less likely to be served by the New York City bicycle network.

Women are also disproportionately affected by streets that lack bicycle infrastructure. As John Pucher's research shows, cities with extensive bicycling infrastructure, like those in the Netherlands, Denmark, Germany, Belgium, and Sweden, have almost the same proportion of female cyclists as male cyclists. Also, in these places cycling is evenly distributed among all age groups. Meanwhile in U.S. cities with comparatively fewer bicycle facilities, bicycling is more popular with younger adults, mostly men, who have a higher tolerance for the risks of dueling with cars and trucks for space on the road.\textsuperscript{21} Therefore a lack of bicycle infrastructure is inherently discriminatory to women. If only certain neighborhoods have bicycling infrastructure, this means that only certain neighborhoods are accommodating to less adventurous bicyclists. Concentrating bicycle infrastructure in some neighborhoods and not others, assures that women, seniors, and children in some neighborhoods will bicycle less than in others.

Figure 6: Again many speakers of languages other than English, often new immigrants have less access to bicycle lanes, especially in northern Queens and southern Brooklyn.
Across lines of class, geography, race, nationality, and gender, children and the elderly face unique challenges to safe bicycle riding. Though children are more likely to cycle than adults, they usually have to ride on roads designed for adult drivers. Perhaps as a result of this mismatch, children comprise a disproportionate amount of bicycle injuries resulting in emergency room visits in the U.S. Bicycle infrastructure funding is often tied to US Census data on cycling, which only counts trips to work. This method systematically undercounts children, who may frequently bicycle to school or for recreation. Youth cyclists have a great deal of motivation to bicycle—there is no minimum cycling age, bicycling is free, and kids tend to be able-bodied and energetic—but they are frequently not the target audience for street re-design projects or political advocacy. In many areas, children bicycle on sidewalks, which, in the absence of a wider ethic of safe riding on sidewalks, can create conflicts with pedestrians.

Similarly, transportation infrastructure frequently fails to serve the needs of the elderly. Seniors are especially sensitive to the need for traffic calming, and may embrace increases in bicycle infrastructure. According to a recent report by John Pucher and Ralph Buehler, the number of cyclists aged 65 and older grew by 25 percent (from 4 percent to 5 percent) between 2001 and 2009. As a form of exercise, cycling is well suited to senior citizens: bicycling involves smooth, regular movements, and does not cause a great deal of stress on riders’ joints. Older cyclists, however, are particularly vulnerable to severe bicycle accidents. Between 1996 and 2005, men aged 45 to 54 years old had the highest bicycle fatality rate in the city, and 55 to 64 year old men had the second highest. Bicycle lanes also take cyclists off the sidewalks where they can be especially hazardous to elderly pedestrians. Creating safer streets for bicyclists, pedestrians and drivers has an important and often overlooked impact on the elderly. For this reason, advocacy groups like Transportation Alternatives and the American Association of Retired Persons have sought out elderly voices when considering ways to implement Complete Streets.

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Low-income workers, transit-poor commuters, new immigrants and people of color, children, women, and the elderly comprise a very large portion of the cycling– and potential cycling– population, and their needs must be addressed with creativity and vigor by transit planners and cycling advocates.

**Considering Cycling Justice in New York: Children and Gentrification**

Examining the linkage between cycling and transportation justice is especially timely in New York, as the city continues to struggle with affordable housing, cuts in the transit system, and myriad public health issues such as obesity, diabetes, and asthma that disproportionately affect young people in communities of color.

In order to explore how these issues play out locally, this report explores two critical cycling issues: the implementation of Safe Routes to School programs, and the rising discourse linking bicycle lanes to gentrification. The following sections provide two examples of ways to apply a transportation justice approach to bicycle planning in New York City. Safe Routes to School offers a clear opportunity to integrate bicycle planning within an existing transportation justice policy framework. Transportation justice also provides a compelling argument for extending bicycle lanes to neighborhoods throughout the City and counters the perception that bike lanes are linked with gentrification and unwanted neighborhood change.

**Example 1: Safe Routes to School as Transportation Justice**

Communities around the country are struggling with congested roads, increasing automobile pollution, and an obesity epidemic that is particularly pernicious for children. Many municipalities are looking for ways to encourage young people to be healthier, safer, and less imperiled by drivers. Safe Routes to School (SRTS) programs offer a compelling integrated approach for addressing these problems. SRTS programs aim to make walking and cycling to school more appealing to young people through streetscape improvements, educational campaigns, and increased traffic enforcement. Though targeted at students, SRTS programs can help improve safety for all of the city’s bicyclists and pedestrians, while simultaneously calming traffic and reducing air pollution in the vicinity of schools.
In New York City around 80 percent of children walk to school. This is astonishingly high compared to the national average of about 13 percent, and emphasizes the need for a robust safety agenda.  

In recent years, DOT has examined accident histories around the city’s 1,471 elementary and middle schools, and has established an initial list of 135 priority schools to be considered for traffic safety improvements. Of the 135 schools, 25 were in the Bronx, 46 were in Brooklyn, 23 were in Manhattan, 33 were in Queens and 8 were in Staten Island. Each priority school underwent a thorough study that included outreach to principals, meetings with parents, collection and analysis of data on traffic conditions and student travel patterns, and evaluation and approval of pedestrian safety improvement plans. These plans focused on students who walk to school, and did not create any new bicycle lanes. This focus on walking was chosen based on

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Figure 8: This map shows that many schools in New York City are not on the bicycle lane network. Most of the schools on the network are in Manhattan while much of Queens, Brooklyn and almost all of Staten Island are not. Including bicycle safety features in the Safe Routes to School programming could make it safer for the children of New York to bicycle to school.
the data, which shows that less than one percent of students cycle to school. This data is an estimate made by school principals, however, and may not be wholly accurate. It may also fail to reflect the desire of students to cycle to school, should sufficient infrastructure be built to support that mode of transit.

Most schools in the city are isolated from the current bicycle network, and could benefit from additional bicycle infrastructure development. Of the 33 priority schools in Queens, only 8 are within a quarter mile of a bicycle lane; in Manhattan, however, 80 percent of priority schools are within a quarter mile of a bicycle lane.

In finding ways to expand its services for young people, DOT might consider the examples set by several other cities’ SRTS programs, which combine pedestrian safety measures with bicycle infrastructure and more active educational and promotional campaigns.

- **SRTS in London: Walk Once a Week (WoW)**

  The city of London instituted a walking promotion plan that encourages parents and children to walk to school throughout the school year. Children who walk at least once a week each month receive a badge. These badges are designed by the children themselves in a national competition open to all WoW schools. Children have truly embraced the badges; they enjoy collecting them, making the program extremely popular. This program is a proven way to increase walking levels, which helps reduce congestion at the school gates, gets children to exercise a little bit more, increases independence and road safety awareness, and improves relations with local communities due to decreased traffic and demand for parking. This program could be readily adopted for a bike once a week initiative in New York City schools.

- **SRTS in Colorado: Web Organizing**

  Colorado Safe Routes to School is primarily a web-based program created by Bicycle Colorado and the Colorado Department of Transportation. The website is designed to get more students cycling and walking to school throughout the state by encouraging classrooms to sign up, set classroom goals and track

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all their walking and cycling trips throughout the school year. The website allows classrooms to see their cumulative data, including their classroom’s total number of miles traveled, calories burned, and carbon emissions saved.30

• **SRTS in San Francisco: Bike to School Day**

  Bike to School Day is an event designed to encourage San Francisco students and their families to safely try cycling to school on one day each spring. It is one component of the larger San Francisco Safe Routes to School program. The first Bike to School Day in San Francisco was launched on May 28th, 2009, and approximately 500 students in 25 schools participated. In its second year, 1,000 students from 32 schools joined over 450 parents and adult volunteers as part of their school commute. Bike to School Day is promoted in part through an annual poster contest and event, open to all pre-kindergarten through 12th grade public and private schools in the city. The winning poster design is used as the official annual Bike to School Day poster. Through this program, children are encouraged to be more familiar with cycling and walking to school.31

The New York City Department of Transportation has made significant progress in addressing the needs of young New Yorkers, especially in improving their journeys to school. In partnership with Bike New York, DOT has initiated Bike to School Day here in New York City. There is, however, more DOT can do to consider the unique needs of young pedestrians and cyclists. Evidence from other cities, as well as an analysis of the large numbers of schools poorly serviced by bicycle lanes, suggests that DOT could consider introducing a bicycle component into its SRTS program, and increasing the amount of student and parent participation and outreach that go along with such programs. This kind of a program could be supported by the Department of Health and the Department of Education, which are both working on campaigns to curb childhood obesity. New York City’s SRTS initiatives could also be expanded to include more educational and outreach programs. Moreover, DOT needs to develop a strategy to make schools more bike-able, including such features as guaranteed bicycle parking at every school, bicycle lanes connecting schools to residential areas, and in-school cycling promotion and instruction.

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30 Bicycle Colorado’s Safe Routes to School, “New Web Site Aims to Reach More Colorado Communities.” Bicycle Colorado.
A stronger, more robust and inclusive Safe Routes to School program would be a significant move towards transportation justice for New York City. The Department of Transportation should similarly explore ways to apply these strategies in programming for seniors, including Safe Streets for Seniors and design for the disabled.

**Example 2: Gentrification and Bicycle Infrastructure in New York City**

In recent decades, many neighborhoods in New York City have undergone dramatic shifts in socioeconomic and racial composition. These changes have often been linked under the common heading of “gentrification.” In its original formulation, this term described the process by which well located, aesthetically desirable urban neighborhoods changed in composition from low-income to upper middle-class. While the term has since been used to describe more varied and nuanced forms of neighborhood change, its use usually connotes a singular reality: poorer people are displaced by wealthier newcomers and in the face of rising rents, lose their neighborhood ties and community institutions.

To a greater or lesser extent, gentrification has touched every low-income neighborhood in the city. Displacement has been particularly devastating for communities of color; however, as long-standing minority and new immigrant neighborhoods are struggling to retain their community institutions in the face of skyrocketing rents and in-migration of well-off whites. Gentrification and displacement are prominent features of New York City’s changing physical and demographic landscape, shaping its economy, housing market and built environment. All citywide policies implemented today—whether or not they are aimed at affecting this reality—are occurring within the context of gentrification.

Many residents and critics have observed the simultaneous explosion of gentrification in New York City neighborhoods and the growth in bicycle- and pedestrian-friendly streetscape alterations. It has become a popular practice to link these two phenomena in a simple cause and effect equation: bicycle lanes cause gentrification. This is an overly broad, simplistic, and inaccurate formulation. Bicycle infrastructure development is fundamentally about creating safer and cleaner environments for all New Yorkers, and can help improve mobility for underserved communities and move the city towards transportation equity. In addition, cycling is an important form of commutation for people of all economic classes and ethnic backgrounds, and is not the exclusive

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domain of any one group. Bicycle lanes have been laid in some neighborhoods that are not facing rapid gentrification, and the presence of these new lanes has not led to a precipitous increase in rents or a rash of displacement. Similarly, intense gentrification has occurred in other neighborhoods without any substantial bicycle infrastructure.

For many New Yorkers, these facts, however, do not obscure the perception that bicycle infrastructure is being built for the leisure class, and is causing unwanted neighborhood change. In order to address the anti-bicycle backlash and to complete its mission of creating a fully functioning citywide bicycle network, DOT and other city agencies must address the criticism that bicycle lanes cause or codify gentrification, and consider ways to ensure that those most negatively impacted by gentrification are better served by New York’s expanding cycling infrastructure.

Public Perception: Class and the Backlash

In public forums and press accounts, a sort of popular rage has grown around the proliferation of bicycle lanes and streetscape changes occurring over the last five years. Members of the public have associated the creation of bicycle lanes with their fears of losing control over their neighborhoods, and perhaps their destinies. While some New Yorkers will oppose any change to the city they know so well, there seems to be a distinctive class element to many of the arguments against cycling and DOT.

One prominent transportation expert (who preferred to remain anonymous) argues that the backlash against bicyclists can be seen as a perfect storm of class relations. As the city is gentrifying and many long-time New Yorkers fear for the stability of their neighborhoods, many perceive cyclists to belong to one of two threatening classes: people who are richer than them (“white yuppies in spandex”); and people who are poorer than them (commercial cyclists, immigrants, people of color and punks). This “donut-hole theory” suggests that middle class citizens are furious with the city for helping everyone around them, while seeming to ignore their outer borough auto and transit needs. Participants in the backlash are acting out of a fear of losing control over their “authentic urban spaces,”33 while also reflecting their anger and resentment towards people of color and social outsiders, whom they imagine the city prioritizes before the middle class.34

Many middle class car owners in New York see the automobile as a symbol of their rise out of the working class, and may resent DOT’s efforts to slow traffic and reduce free on-street parking. Outer borough residents’ displeasure at DOT’s focus on lower Manhattan also reflects long-simmering resentments over the public transit system’s orientation around the CBD. While the trains and buses form a tightly knit grid in downtown Manhattan and downtown Brooklyn, they form a radial network for most outer borough residents. Recent cuts to bus service have been particularly hard on those outer borough residents who live further from subway lines. These bus riders are witnessing simultaneous cuts to the bus network on which they rely, and an expansion of a cycling network that feels alien to their needs.

While this framing of cyclists and city agencies makes sense within this larger narrative of outer borough neglect, it perversely distorts the truth about cycling: bicycle ridership is representative of all strata of New York society; street infrastructure improvements often improve safety and public spaces for all New Yorkers, not just those who cycle; bicycling has been an important part of New York City residents’ commutation patterns since the early 19th century; and the cost of instituting bicycle lanes pales in comparison to the cost of running a transit system. It is unclear what proportion of New York’s population actually believes that bicycle lanes are a threat to their middle-class status, but those who do seem particularly mobilized in the current political moment.

This type of middle class resentment is unlikely to be resolved through urban planning alone, but a transportation justice framework and an increased attention to inclusionary processes and public participation will make strides in diminishing New Yorkers’ fears over loss of control of the city. It can also increase access to those who are currently underserved.

**Planning and Gentrification**

While gentrification is fundamentally a product of market forces, it is often encouraged through public policy. “Global cities” around the world, including New York, compete with each other to attract international capital and investment. These cities look to urban planners and policymakers to develop strategies to attract capital. Rezonings, tax abatements, and subsidies

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as well as transportation infrastructure development can be used to increase land values and spur high-end development. One of the explicit goals of Mayor Bloomberg’s PlaNYC 2030 is to compete with global cities like Chicago, Los Angeles, London and Shanghai on the basis of livability.\(^{36}\) Common strategies to attract capital include enabling the creation of gentrified neighborhoods, developing entertainment districts, encouraging high-end consumption markets (artisanal food and alcohol, and specialty retail), and creating recreational open spaces.\(^{37}\) Another key strategy for creating capital-friendly urban environments is reducing traffic congestion, and promoting forward-looking environmental consciousness by encouraging alternative modes of transportation. In this sense, while much broader in scope and intent, DOT’s work fits into a larger citywide competitive strategy to attract and retain global capital.\(^{38}\)

Gentrification may once have seemed like an opportunity for DOT’s Bicycle Program. The rise of young professionals, artists and generally able-bodied people with liberal attitudes towards the environment, fewer savings to spend on cars and gasoline, and less long-term attachments to New York City’s street form helped spur the rise of cycling in the city. But building bicycle infrastructure in gentrifying neighborhoods has created long-term problems for extending the network and building broader community support. Long-term residents are alienated by capital investments in their streets that appear to arrive only after their neighborhood has been gentrified. This can be especially true in neighborhoods where residents have been long-time cyclists, but have not seen street improvements targeted to their needs until now.\(^{39}\) Gentrification can also lead to the displacement of low-income workers and new immigrants, who, as research in this report has shown, often cycle for both work and commutation. Key potential beneficiaries of DOT’s streetscape improvements are therefore missing from the neighborhoods where much of the building is taking place.

**Bicycle Lanes and Real Estate**

While DOT does not create bicycle infrastructure in order to purposely raise property values, building owners and developers have learned that the city’s streetscape improvements create more attractive spaces, and that the presence of bicycle infrastructure near a development can be

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a selling point for affluent young newcomers. Tall new luxury developments in such neighborhoods as the Lower East Side, Williamsburg, and Downtown Brooklyn are touting bicycle-friendly buildings and the presence of nearby cycling infrastructure in advertisements geared towards young potential residents. Meanwhile, the largest retail rent hikes in the city—over 71 percent—coincided with DOT’s installation of a pedestrian plaza in Times Square. The Hudson River Park Trust has observed that the presence of the extended Riverside bicycle lane has increased neighboring property values by approximately 20 percent. Richard Florida, a proponent of gentrification and advocate for the so-called “creative class”, has publicly commended DOT’s bicycle infrastructure improvements as a tool to attract young, highly paid professionals to the city.

These examples show that bicycle infrastructure can serve elite interests, and play a small part in neighborhoods’ overall gentrification. By no means, however, should this correlation be interpreted as sole causation, or as inevitable. Many working class neighborhoods and communities of color are reliant on cycling, and would stand to benefit greatly by the introduction of new infrastructure. Streets like Bedford Avenue in Brooklyn, the borough’s longest bicycle route, have received a great deal of attention from DOT’s Bicycle Program because a small section of it was removed after community protests, but these infrastructure improvements have not brought on the immediate gentrification of the many south Brooklyn neighborhoods through which the lane extends.

If re-conceptualized as a tool to correct transportation injustices and designed specifically around the needs of low-income and new immigrant cyclists, bicycle infrastructure could play an active role in fostering stability and empowering local communities.

**Considering Alternatives: Urban Design for Whom?**

The Department of Transportation aims to design infrastructure that benefits all New Yorkers. At the same time, the agency recognizes that its bicycle and street redesign programs

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Figure 9: Higher income New Yorkers in Manhattan and Downtown Brooklyn have greater access than lower income residents throughout Queens and Brooklyn.
play a large part in the city’s strategy to attract global capital.

The location and design of street changes often implies the type of user the city expects to benefit from a project. While DOT is building bicycle infrastructure in neighborhoods across the city, there is a clear concentration around the locus of gentrification: downtown Manhattan and northwestern Brooklyn. There are a number of good reasons for this choice: these areas are two of the biggest employment centers in the city, they are home to bicycle-friendly community boards, and they are the sites of many transit connections. While the *New York City Bicycle Master Plan* calls for lanes all around the city, the agency has largely followed an operative policy of building where it seems most possible, or where enthusiasm is high and resistance is low. Focusing on these areas, however, reinforces the impression that gentrification follows bicycle planning, and vice versa. Again you can see on the map below concentrations of bicycle infrastructure in the gentrifying areas of Manhattan and Brooklyn while more distant and lower income neighborhoods in Queens and Brooklyn have far fewer bicycle lanes. This practice, in turn, makes it more difficult for DOT to build outside the most bicycle-friendly community districts.

Building bicycle infrastructure with working class and new immigrant riders in mind might take various forms, all of which are consistent with DOT’s mission and goals. These include, but are not limited to: connecting working class residential neighborhoods to local job centers rather than to the downtown CBD; making travel to transit stations safer and faster, especially in areas suffering from bus cutbacks; creating connections between nearby neighborhoods not adequately served by mass transit (such as connecting northern Queens and the south Bronx); and creating lanes that mirror the routes taken by commercial cyclists in the outer boroughs.

A bike share program could also be an incredibly useful tool for low-income New Yorkers, especially those who cannot afford to buy a bicycle, those without space in their apartments for bikes or safe neighborhoods for everyday parking, and those who do not work in large office buildings with bicycle parking. Participants in a focus group, detailed later in this report’s discussion of new methodologies, expressed a great deal of enthusiasm for bike share in their neighborhoods. Current plans for a bike share program, however, prioritize accessibility for tourists and CBD workers. This siting choice perpetuates transportation inequality, and does little to increase mobility, as it focuses on the areas with the most dense transit connections.

Public infrastructure is almost never created exclusively for any single demographic group; its nature as a public benefit implies that it should be open to any potential user. At the same time, however, infrastructure is never completely neutral, and will always have unequally distributed
Figure 10: Neighborhoods like Flushing feature high levels of cyclists, but little cycling infrastructure.
costs and benefits. This dual nature is readily apparent in the design of New York City’s bicycle network, which is simultaneously open to all New Yorkers, yet is most robust in some of the city’s wealthiest and most transit-served neighborhoods. In order to move the network towards transportation equity while simultaneously expanding ridership, DOT must consider building in high-need areas outside of the city’s CBD.

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We have developed a new methodology for identifying cycling-heavy neighborhoods outside of lower Manhattan and northwestern Brooklyn. This methodology was tested and refined in Flushing and Corona, Queens, where we found a large number of cyclists and a limited amount of bicycle infrastructure (compared to other cycling-heavy areas), making Flushing a prime example of an underserved community.

Often, when approaching areas outside the CBD that are in need of bicycle infrastructure, DOT will coordinate with the New York City Economic Development Corporation (EDC)
to build bicycle lanes through and around major new developments. This approach was taken, for example, in creating the Hunts Point Avenue bicycle lane while EDC was developing the Greenway and Gateway Center projects. This is a logical approach, as EDC projects often involve building new roads or reconstructing old ones, presenting DOT with an opportunity to reshape the streets as they are created.

This approach, however, will be problematic in Flushing, which is currently preparing for the impending construction of “Flushing Commons”, one of EDC’s current projects. This project is an $850 million endeavor that will include a 1.5 acres public plaza, 620 residential units, 275,000 square feet of retail (potentially including big box stores), 234,000 square feet of office and hotel space, 98,000 square feet of community facility space, and 1,600 parking spots. While the project received support from the community board, it has nonetheless proven highly controversial in the community, and has been called a “Trojan horse” for gentrification.

If DOT waits until the Flushing Commons project is implemented and builds bicycle lanes aimed at new residents and mall shoppers, many long-term Flushing community members could perceive DOT’s actions as perpetuating gentrification. Focusing exclusively on roads rebuilt as a part of Flushing Commons would ignore the demonstrated local need, as well as the established routes currently taken by Flushing cyclists. Waiting until EDC completes construction could easily be interpreted as DOT privileging developers and newcomers to the neighborhood over today’s predominantly low-income, immigrant cyclists.

Instead of waiting for EDC’s mega-project to be completed, DOT should take this opportunity to build a bicycle network oriented around existing and future need, and public transportation in Flushing. Taking this action, rather than waiting to design infrastructure around controversial new construction, will demonstrate DOT’s commitment to promoting safety, environmental health, and equal transportation opportunities for all New Yorkers, while simultaneously helping the agency reach its annual bicycle build-out goals. While major EDC developments present opportunities for expanding the city’s bicycle infrastructure, these new lanes must be built as a part of a broader neighborhood network based on local need and route desires.

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Infrastructure for the Underserved

Like all citywide policies and public phenomena, DOT’s bicycle projects and the recent backlash are occurring in the context of New York City’s advanced gentrification. This inescapable fact colors both DOT’s programs and the public’s mixed reaction to them. The department can simultaneously deal with the backlash and fulfill its mission by being attentive to underserved cyclists’ needs in their own neighborhoods. This will require that the agency build the kind of infrastructure that is in demand in low-income and new immigrant neighborhoods, as well as expanding the Safe Routes to School program to include more cycling infrastructure construction designed for young people. The bicycle network as it stands today reflects and reproduces the city’s transportation injustices on the basis of class, race, age and geographic isolation. New methodologies for defining infrastructure needs and incorporating public participation are necessary to correct these inequities, and to create a cycling network that works for all New Yorkers.
METHODOLOGY: FINDING THE INVISIBLE CYCLIST

Too much focus on Manhattan – outer boroughs are forgotten – Bloomberg is a mayor for all of us, not only of Manhattan.

– Cyclist and focus group participant, December 2010

While New York City’s bicycle network provides abundant connectivity to the CBDs of Manhattan and downtown Brooklyn, there remain many underserved areas in parts of the Bronx, Queens, outer Brooklyn, and Staten Island. While many cyclists live where the network is strong, there are other cyclists who must survive with little or no bicycle infrastructure. In the previous section, we argue that DOT, supported by other city agencies and community boards, has an opportunity to promote transportation justice by building bicycle infrastructure based on the needs of current cyclists in a given community. By learning more about these cyclists, their routes and their needs, DOT will be able to better plan for all of New York City’s cyclists. In this section, we will present methods that can be used to ascertain the needs of all cyclists, especially those who do not rely on the existing network.

Counting these cyclists and planning with them in mind will create a more equitable and relevant network while countering recent claims that bicycling in New York City is for the privileged. We have identified two areas for the development and testing of possible methodologies: Flushing and Corona in Queens and the Pelham Parkway neighborhood in the Bronx. These areas were selected based upon recommendations from urban planners, local residents, and cycling activists.
Background

Current DOT Bicycle Program Data Collection

The DOT Bicycle Program maintains and uses data regarding bicycle facility locations, sign placement and installation, bicycle “commuter” counts, bicycle accidents, vehicle traffic counts, and the proximity of bicycle facilities to mass transit, commercial corridors, and other attractions. The Mayor and DOT Commissioner use this information to measure progress made towards PlaNYC 2030 goals; in particular, increasing bike lane miles as laid out in the Bicycle Master Plan. This data is generated within DOT and is stored in spreadsheets, GIS, intranet and even Disk Operating Systems (DOS) that have not changed format since the 1980s.

The Bicycle Program uses crash data from the New York City Police Department and vehicle and bicycle counts supplied by other agencies and companies to campaign for future bicycle facilities. This data is often the basis for making the case for bicycle corridors both within DOT and to local communities. High bicycle counts on a street without a bike lane, for example, could indicate a location with high demand for bicycle infrastructure. An intersection with many crashes could be a place for DOT to implement traffic calming measures. At the same time, high vehicle traffic will often temper an ambitious bicycle plan.

Automatic Traffic Recorder (ATR) machines, which have sensitive tubes that are placed across roadways to count vehicles as they pass over them, are used to record vehicle counts. Bicycle counts, conducted by humans who observe an area for 12 to 18 hour stretches, count bicyclists, noting their direction of travel, observation of traffic laws, gender and whether or not the bicyclists wear helmets. The Department of Transportation has collected counts of cyclists since 1980. Currently, bicycle counts take place at project locations and what is called the “screen line”, which includes the Staten Island Ferry Terminal at Whitehall Street, the East River Bridges, and each of the intersections along 50th Street in Manhattan. The screen line is used to track bicycle commutation over time. Counts at the screen line, however, overlook cross-town commuters and bicyclists whose journeys begin and end either outside of Manhattan or within the catchment area, such as delivery people and messengers. These counts may also over-count bicycle delivery workers in midtown. Bicycle Program project managers also collect automobile speed counts before they design their facilities.
Research, Implementation and Safety (RIS), another division within DOT, uses traffic calming measures such as markings, plantings, and roadway narrowing at sites selected solely on the basis of safety issues. When RIS chooses a location that overlaps with the Bicycle Master Plan, it will collaborate with the Bicycle Program to create a bicycle route in that location. These initiatives are more data driven than the projects of the Bicycle Program, however, and are less concerned with the overall connectivity of the bicycle network.

**Data Collection by Other Organizations**

There are several surveys that analyze bicycling and bike facilities throughout New York City and the metropolitan area. Conducted by various organizations and city agencies, these surveys count bicyclists and related fatalities or injuries, as well as analyze bicyclists' behavior and bike facility conditions. Some surveys are derived from statistical data and by cross-referencing other departments' surveys (DCP, NYPD, etc.). Others, such as those by Transportation Alternatives, are conducted on the Internet.

The Department of City Planning undertook an Internet survey of cyclists in 2007. 48 While this survey provided some useful information about the typical trip patterns and preferences of some cyclists, it was a self-selecting Internet survey administered only in English and thus was unscientific and unrepresentative of the full New York City cycling population. Respondents were overwhelmingly commuter cyclists in Manhattan and northern Brooklyn. Internet-based surveys also tend to be biased against residents without access to the Internet or who possess limited computer skills. Nevertheless, it was a helpful document revealing some information about cyclists and cycling that the City is interested in learning more about.

Additionally, one of the main gaps in current survey methodology is the lack of qualitative data collection. Qualitative data could significantly enhance city agencies' knowledge of the transportation needs and desires of key urban constituencies. In the chart below we list some of the most popular surveys conducted in recent years in the New York City metro area.

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<table>
<thead>
<tr>
<th>Survey</th>
<th>Organization</th>
<th>Year</th>
<th>Purpose</th>
<th>Data source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYC Commuter Cycling Indicator</td>
<td>DOT</td>
<td>1980 – 2009</td>
<td>Count the number of commuting bicyclists</td>
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<tr>
<td>(Bicycle Screen-line Count)</td>
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<td>– Hourly Screen-line counts with 7 monthly counts from April to October</td>
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<td></td>
<td></td>
<td></td>
<td>– Major entry points to Manhattan’s CBD (50th Street corridor; East River bridges and Staten Island Ferry Terminal)</td>
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<tr>
<td>Bicyclist Fatalities and Serious Injuries in New York City</td>
<td>DOT, DOHMH, DPR, NYPD</td>
<td>1996 – 2006</td>
<td>Analyze and map statistical data about fatalities and serious injuries</td>
<td></td>
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<tr>
<td>1996-2005</td>
<td></td>
<td></td>
<td>– Fatalities: Accident Information System database maintained by the NYS DMV</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>– Serious Injuries: the NYS DOT Safety Information Management System</td>
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<td></td>
<td></td>
<td></td>
<td>– A total of 476 locations</td>
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<td></td>
<td></td>
<td></td>
<td>– Each location was counted during at least one of the four years, some two and three years</td>
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<tr>
<td>Bicycle Lane and Trail Inventory</td>
<td>DCP</td>
<td>2000, 2002, 2007</td>
<td>Survey the conditions of signs, pavement, lane markings, and symbols along bicycle lanes and bridges or each borough</td>
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<td></td>
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<td></td>
<td>– Inventory of existing on-street bicycle lanes, off-street bicycle trails, and bridges</td>
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<td></td>
<td></td>
<td></td>
<td>– Type &amp; condition of sign and the lane markings, whether it is a regulatory, warning, informational</td>
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<td></td>
<td></td>
<td></td>
<td>– Material used to pave the facility</td>
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<tr>
<td>Annual Counts at Bike Lanes</td>
<td>DCP</td>
<td>1999 – 2009</td>
<td>Count by helmet use, gender, and age</td>
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<td></td>
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<td>– Counts in the fall for 12 consecutive hours for on-street bicycle lanes and during the peak periods of the day for off-street paths</td>
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<td></td>
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<td></td>
<td>– Counting for a select group of bike facilities in Manhattan</td>
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<tr>
<td>Bike Facilities Profiles</td>
<td>DCP</td>
<td>2001 – 2008</td>
<td>Information about how the bicycle lanes and greenway paths are being used</td>
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<td></td>
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<td></td>
<td>– Using Annual Counts at Bike Lanes</td>
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<td>– Description of observed conditions that affected the bicycle lane</td>
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<tr>
<td>The New York City Bicycle Survey (Internet)</td>
<td>DCP</td>
<td>2007</td>
<td>Collect information about public consciousness and seek public feedback</td>
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<td></td>
<td>– Suggest general trends and overall profile of the cycling community in NYC</td>
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<td></td>
<td>– 1,086 people took the online survey.</td>
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<td></td>
<td></td>
<td></td>
<td>– Gathered information about their age, gender, skill level, reasons for riding, riding preferences, commutation, etc.</td>
<td></td>
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<tr>
<td>Crashstat.org</td>
<td>Transportation Alternatives</td>
<td>1995 – 2005</td>
<td>Map injuries and fatalities of pedestrians and bicyclists by locations</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>– Identify dangerous intersections</td>
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<td></td>
<td></td>
<td></td>
<td>– Data from NYSDOT, 1995-2005</td>
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Figure 11: Types of surveys and statistics collected and used in bicycle planning.

NYC Commuter Cycling Indicator,1 Bicyclist Fatalities and Serious Injuries in New York City,2 Bicycle Data Collection Program,3 Bicycle Lane and Trail Inventory,4 Annual Counts at Bike Lanes,5 Bike Facilities Profiles,6 The New York City Bicycle Survey,7 and Crashstat.org.8

International Bicycling Studies

After reviewing DOT’s current bicycle planning practices, we elected to design an improved methodology for understanding the needs, wants, and behaviors of cyclists—especially in the often overlooked outer borough neighborhoods—to update current data collection methods. Our research began with field visits to select outer borough neighborhoods, an analysis of city government policy, and a review of transportation planning journals for existing methodologies.

The methods we uncovered for collecting data on cyclists were far more complex than the self-selecting Internet surveys or screen-line counts conducted in New York City. In Minneapolis, Krizek and Johnson examined the relationship between proximity to bicycle infrastructure and bicycle use, concluding that the presence of such infrastructure plays a strong role in encouraging cycling.49 The Krizek and Johnson methodology could be used to examine several incentives and disincentives to cycling in addition to other transportation modes; though, it is very intensive and requires a large random sample of an area’s population. Another method examining the relationship between existing infrastructure and cycling potential is Rybarczyk and Wu’s “Bicycle Level of Service (BLOS) + DEMAND” formula.50 Rybarczyk and Wu’s method for finding the most optimal areas for bicycle infrastructure uses an algorithm that includes parameters such as traffic volume, employment centers, and crime rates to generate a theoretical map of citywide bicycle demand. When designing our own survey, we incorporated questions relating to the infrastructural factors emphasized by this methodology.

Hyodo et al. examined cyclists’ route choice behavior in two mid-sized Japanese cities via surveys that asked the cyclists to map their routes.51 This is a behavioral model that is different from straight statistically based studies because it incorporates qualitative “revealed preference data.” The authors then plugged the results into GIS and compared the results with the route that would have been the shortest distance path. Hyodo et al. also found that cyclists frequently detour from the shortest distance path to take wider roads that are perceived as more safe.

We concluded that this method of having cyclists draw their routes on a map is useful, especially in New York City where there is little knowledge about cyclists’ full routes to and from

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destinations and how these routes are decided. There is also a lack of knowledge about the routes and destinations of cyclists who commute within their neighborhoods or within the outer boroughs. Another methodology from the U.K. looks at the social, cultural, and personal factors that affect cyclists. McKenna and Whaling’s methodology focused on the deep study of first-hand, lived experience, a critical aspect of cycling data that few methods attempt to interpret. In seeking to design a methodology that captures the full spectrum of information on cyclists and their behavior, this kind of information is absolutely necessary.

In Toronto and Ottawa, Canada, Aultman-Hall and Hall’s study combined the mapping of routes with detailed information on cyclist behavior through a “bag survey”: attaching a survey in a bag to the handlebars of parked bikes, with a self-addressed stamped envelope for the respondent to return the survey to the researchers. On one side of the survey there was a series of questions that asked for basic demographic information, reasons for cycling, reasons for choosing particular routes, and their accident and theft histories. The opposite side had a map of the area and asked the respondent to trace his or her daily route.

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Methodology to Identify New York City’s Cyclists

After reviewing current survey methods and the existing literature on surveying cyclists, we designed a series of methods built upon several strategies already in use, and introduced new techniques to glean the most important information on cycling and cyclists’ behavior. The central method we elected to explore was the “bag survey” described above, as it would be especially appropriate for collecting cyclist data in the outer boroughs of New York City, especially in neighborhoods such as Flushing in Queens and Pelham Parkway in the Bronx, where there exists little information on who is cycling, why they cycle there, what routes they are taking and their ultimate destinations.

Spot count

Recognizing the importance of simple bike counts as a method for identifying locations with significant cycling populations, we set out to identify just a few of the neighborhoods with populations of undercounted cyclists. A staff member at DOT directed us to the informal bike paths in the Pelham Parkway section of the Bronx. The Queens Committee of Transportation Alternatives recommended Roosevelt Avenue and Main Street in Flushing around the Queens Library, the Long Island Rail Road (LIRR), and along the MTA bus and 7 train subway transit stations. Our goal was to conduct spot counts in several locations in each neighborhood to determine if there were a significant number of cyclists. Brief, informal counts lasting 15 minutes each were used to develop a rough description of cycling in each neighborhood that included cyclists’ gender, their approximate age, where they were riding, and traffic conditions in those areas. These spot counts were conducted in Pelham Parkway on Sunday, October 17, 2010 and in Flushing, Queens on Monday, October 18, 2010, both on days with warm, mild, and dry weather.

In Pelham Parkway, cyclists were first observed at the intersection at the Bronx River Parkway and the Pelham Parkway. We selected this location upon the discovery of an improvised bicycle path, a visible dirt pathway across Bronx Park created by cyclists riding from the Fordham neighborhood to the Pelham Parkway neighborhood. We observed as many as 10 cyclists on this path between approximately 2:30 PM and 2:45 PM. While observing these cyclists, we also discovered that other dirt trails exist connecting Pelham Parkway with the Bronx River Parkway bike lane, though these paths are less frequently used. All of the observed cyclists were males of
Methodology: Finding the invisible cyclist

varying age and race, and many carried backpacks or plastic bags. While the traffic on Sunday was not as busy or congested as peak-hour weekday traffic, the area visibly posed numerous hazards to the cyclists, as they had to navigate around the entrance and exit ramps of the Bronx River Parkway.

Also in Pelham Parkway, we conducted a spot count at various points along Yates Avenue. This street has a painted bike lane that extends for four blocks and, according the New York City Cycling Map, attempts to connect the Pelham Parkway Greenway to the Hutchinson River Parkway bicycle path. Observations were conducted along this bike lane from 3:30 PM until 4:00 PM, during which we observed no cyclists. Traveling east along the proposed bike routes on Bronx Park East, and Bronxdale and Rhinelander Avenues, cyclists were observed between 3:00 PM and 3:30 PM. Two of these cyclists were children.

All of these cyclists were observed near the commercial areas in close proximity to Bronx Park.

In the Flushing, Queens, we first observed cyclists at the intersection at Main Street and 37th Avenue, between 5:05 PM and 5:20 PM. During this period, seven cyclists passed by and all were riding in the street. There were two middle-aged Latino males, one middle-aged Asian male, and one young African American male; all riding in congested traffic, with dozens of buses and pedestrians. Some cyclists rode with plastic bags on their handlebars and some rode with backpacks. At one point a man rode straight down the middle of the two-way Main Street on the double-yellow line while traffic moved around him.
We then observed the intersection at Roosevelt Avenue and Union Street in Flushing from 5:40 PM to 5:55 PM. During this time, we observed 15 cyclists riding in the street and one on the sidewalk crowded with pedestrians. We observed what we presumed were nine Latino males under the age of 30, four middle-aged Latino males, one middle-aged Asian male, and one young male of indeterminate race. These riders also carried plastic bags and backpacks.

**Windshield survey**

A “windshield survey” is a simple tour of an area, either on foot, by bicycle or by car, to observe habits or infrastructure. These surveys are quick, relatively inexpensive, and require little manpower. We conducted a total of four windshield surveys in Flushing, Corona, and Pelham Parkway. Researchers traveled by car, taking a rough count of bicycles in these neighborhoods, specifically surrounding each area’s transit stations, libraries, retail districts, and hospitals. Photographs were taken to illustrate areas with high bicycle concentrations. This windshield survey revealed that Flushing is flooded with bicycles, which were observed tethered to poles, posts, fences, doors, fire hydrants, trees, Armco railings, streetlights, and traffic lights. In Pelham Parkway, large numbers of bicycles were observed chained to immobile structures along Pelham Parkway, Boston Road, and White Plains Road.

Based on our findings from the spot counts and windshield surveys, we decided to focus our study on Flushing, Queens, as it contains several key facilities that Pelham Parkway lacks: a library that is a hub of community activity, multiple transit stations including subway, LIRR...

Figure 13: An example of improvised bicycle parking in Flushing. Image: Scott Richmond

Figure 14: An example of improvised bicycle parking in Flushing. Image: Scott Richmond
Methodology: Finding the Invisible Cyclist

Flushing Library later provided access to the public to advertise our efforts, as well as a convenient and central location to conduct focus groups. The large number of bikes around the 7 train subway and the LIRR transit stops indicated that many people were using bicycles to travel to these stations to continue on to other destinations via public transit. The existing bicycle racks and large number of bicycles tethered to them informed our decision to use a handlebar survey to count cyclists and obtain their opinions on bicycle infrastructure.

Community Outreach

A simple, potentially fruitful method for creating focus groups or charrettes is to work with community based organizations (CBOs) in neighborhoods lacking cycling infrastructure. Three such CBOs, Make The Road New York, Queens Community House, and New Immigrant Community Empowerment (NICE), assisted us with a trial survey, which yielded very favorable results. Make The Road mobilizes immigrants and workers in western queens and northeast Brooklyn around such issues as citizenship for undocumented immigrants, eviction protection, illegal deportations and wage theft. Queens Community House takes on issues concerning public space and the environment and is now focusing on bike lanes and working cyclists. New Immigrant Community Empowerment organizes and advocates on behalf of the multi-national immigrant communities of western Queens on issues such as civic engagement, non-citizen voting, language skills, and hate-crime prevention.

Each of these organizations distributed surveys to its members and returned them to us. Make the Road, however, hosted us at its office in Jackson Heights, Queens on April 7, 2011. This organization was an ideal participant in our study because it has a broad base of support in western Queens, a track record of success in advocating for its membership and experience working with the city for increased services in the neighborhoods of its membership. Make the Road was excited to participate in the study, and recognizes that many of its constituents rely on bicycling and would benefit from more infrastructure.

With two researchers from our team present, members of the Make the Road Workers’ Committee filled out surveys. All of these respondents were Spanish speaking, most commuted to work and then home or cycled as a part of their jobs, and all stated a clear need for more bike racks. Most of these cyclists submitted a ‘most dangerous place to ride’ response and highlighted its location on the map on the opposite side of the survey. Make the Road was happy to work with us and we received a positive reception from participants. These results, and the stories the
activists told us, provided us with an idea of the kinds of results we might be able to produce upon full implementation at more meetings and with additional CBOs.

**Focus Group**

As outlined earlier, one of the most significant gaps in current data collection methods for cycling is the lack of qualitative research. We conducted a focus group, first, to get a more in-depth understanding of cyclists’ motivations and desires, and second, to learn how they discuss cycling and their needs as members of a group, rather than as individuals. We were interested in why people feel a certain way, how they might respond to each other’s views, and how they might work together to form consensus.

The focus group was held in the Flushing Library after 6.30 PM on Monday December 6, 2010. The library is centrally located in downtown Flushing just a few blocks from the #7 subway and LIRR stations and is a hub for the cycling community, made apparent by the dozens of bicycles parked at bike racks stretching along two entire sides of the building. The focus group was promoted by distributing fliers at stores and on the handlebars of parked bicycles. The focus group was prepared in three languages by printing materials in English, Spanish, and Chinese and arranging facilitators who spoke each language. Facilitators were Jennifer Harris-Hernandez, who is part of our research group Maurizio Leandro and Pengfei Li, who are both doctoral students at CUNY Graduate Center. Only one Chinese speaker and no Latino cyclists attended, and the
remainder of participants was comprised of native English speakers. Five adults attended; one Asian-American female, one African American female, one African American male and two white males. All of the participants were middle-aged and none were currently employed in a bicycle related profession.

During the focus group, participants were given educational materials and handouts about cycling, including printed examples of bicycle infrastructure. They were also given nametags and food to facilitate a relaxed and friendly environment. The entire session was recorded using a digital audio recorder and hand-written notes were taken. Facilitators introduced themselves and asked participants to fill out an information sheet requesting demographic information and descriptions of their cycling habits. To stimulate conversation, the facilitators then posed very open-ended questions organized around three main categories: general cycling issues, safety concerns and infrastructure preferences. The goals of this session were to attract a broad range of cyclists in order to learn their opinions on bicycle infrastructure, which types of infrastructure they need most, and what cycling conditions are like in Flushing and Corona through the perceptions and opinions of active and passive cyclists.

The participants bicycled for recreation, to visit family and friends, and to go to work. The Asian cyclist specifically mentioned that she limits her cycling to the suburbs and the beach. Participants enthusiastically discussed why they cycle, where they travel, dangerous locations for cyclists, how they felt about different types of bicycle infrastructure, and what new types of infrastructure they would most like to see in Flushing.

All of the participants felt left out of the current push to make New York City more bikeable. The attendees were aware of improvements for cyclists in Manhattan but had not witnessed them in Queens. They all had specific ideas of where they would like to see bicycle facilities, which prominently included Northern Boulevard, Roosevelt Avenue and bridges such as the Whitestone Bridge. The participants found the streets of Queens to be confusing and sometimes dangerous, and expressed feelings of isolation due to the difficulty of riding out of Flushing to other parts of Queens, Manhattan, and the Bronx. All participants wanted more visibility as cyclists and expressed a need for more bike lanes and bike racks. The participants provided much specific and thoughtful qualitative information.
The Pilot Survey

We next devised a survey consisting of twenty-four questions addressing the same topics as those covered by Aultman-Hall & Hall, with additional questions related to cyclists' perceptions of safety and attitudes towards different types of bicycle infrastructure. We decided to pilot the bag survey methodology using a relatively small sample of 150 bags distributed in both Flushing and Corona. To ensure that new immigrant cyclists in the area would be able to participate, each bag included surveys in English, Spanish and Chinese printed on 11 by 17 inch paper, an NYC Cycling Map, a golf pencil, a self-addressed stamped envelope, and a colorful cover sheet explaining the survey's purpose. We distributed these surveys on handlebars of parked bikes on Sunday, November 14 and Monday, November 15, 2010.

Pilot Survey Results

Thirteen completed surveys were returned over the course of three weeks, a response rate of 8.66 percent. This rate was much lower than that of Aultman-Hall and Hall’s Canadian study. Contributing factors to the relatively low rate of response may also have included the mid-November date of the study (past the peak cycling season) and what may have been a burdensome length of 24 questions for would-be participants. Moreover, some recent immigrants, who compose most of the cycling population in Flushing and Corona, may be averse to participating in the survey for reasons concerning privacy.

Of the 13 surveys that were returned in this pilot study, we noted several key results. Eleven men and two women returned surveys. The survey managed to reach a diverse group that was fairly representative of the area’s diversity: four white respondents, three Hispanic, five Asian, and one “other.” Six of the surveys were completed in English, four in Spanish, and three in Chinese. All of the respondents were frequent cyclists, with ten riding daily and three riding “two to five times a week.” Nine respondents self-identified themselves as “commuter cyclists,” and seven used bicycles to get to transit stops. The top three reasons for cycling among respondents include “health,” “financial cost,” and “convenience,” while “speed,” “road quality,” “presence of marked/protected bike path,” and “presence of other cyclists” were rated as the top factors contributing to route choice.

“Downtown Flushing,” “Flushing Main Street,” and “Roosevelt Avenue” were identified by multiple respondents as the most dangerous areas of their route. Cycling in Flushing-Corona seemed to be perilous, as 10 of 13 respondents had experienced falls due to potholes and had
been “doored” at least once.

Eleven of the thirteen surveys came from Flushing rather than Corona and ten of the thirteen respondents filled out their routes on the map provided on the back of the survey. The eight Flushing residents who mapped their routes all cycled relatively short distances (2 miles or less) from surrounding neighborhoods to Downtown Flushing, presumably either for work within Downtown Flushing or to get to the 7 train subway or LIRR stations. The Corona respondent represented by the red route used her bike to commute to her job in Jackson Heights while the second Corona respondent represented in purple used his bike to get to the 7 train subway stop at 103rd Corona Plaza from his home in East Elmhurst.

With a sample of only 13 surveys, none of these results from the pilot of the bag survey method are statistically significant. Nevertheless, the results indicate that the bag survey may be an effective way to learn about communities of cyclists in the outer boroughs, including new immigrant cyclists.

**Pilot Survey Review**

After reviewing the implementation and results from the pilot survey, we decided the information received was promising and an improved survey with an increased sample size had great potential. The first step was to review the survey and rewrite, add and subtract questions based on prior results and the relevance questions would have for DOT. For the final handlebar survey, we conducted a close inspection of the pilot both to analyze the success of the survey and to identify ways to improve response rates. As successful as the pilot was, we felt that upon reviewing the questions and respondents’ answers an improved survey could be created.

What follows are key conclusions identified through this reflection:

- **Too Long:** With 24 questions, the pilot survey asked too many questions, asked too many redundant questions through repetition or similarly phrased questions, and took too long to fill out. Our goal was to reduce the amount of questions on the final survey. We eliminated the unnecessary questions and reduced the amount of questions from 24 to 20.

- **Too Complicated:** The survey asked several questions with too many variables, too broad or too narrow in scope, with too much complexity, and poor wording. This might have been one cause for the low response rate for several questions.
We therefore eliminated the most superfluous questions and rephrased others to be more concise. While we kept many questions from pilot, we reoriented the second survey more specifically around cyclists who commute to train stations. At the same time, we did not limit the questions to just this group because we wanted to find out if this was even a significant portion of the cyclists. Our goal was to simplify the questions so that they would be concise and easy to read and understand, encouraging people to answer all of the questions.

• **Confusing:** The pilot survey was conducted in English, Chinese, and Spanish on three separate 11 by 17 pages. Since these are the three predominant languages in the Flushing and Corona sections of Queens, surveys in each of these languages were needed to correctly identify the invisible and underserved cycling community, to get a fair and broad spectrum of the respondents, and to make them feel comfortable by having the ability to respond in their native language. After consulting with people not involved in the design of the 2010 pilot survey, however, we determined that opening the survey bag and finding a survey not in a person’s native language may be off-putting, or make the person feel the questionnaire was not intended for them. Also, The Canadian survey conducted by Altman-Hall and Hall simply contained a survey, a pencil, and a return envelope in a bag attached to the handlebars of the respondents’ bicycles. Our pilot study had these elements but also included three separate surveys, an instruction sheet, and an NYC Cycling Map, totaling seven elements in each bag and adding to confusion. For the complete survey the largest change was to the layout. The three-sheet, separate language format was scrapped in favor of a single page format questionnaire. All three languages were fitted to a single 11 by 17 inch page with a map on the reverse side. This made a much easier document for cyclists to work with. We also did not include the bike map in order to eliminate the confusion.

• **Not Wide Enough:** The pilot survey was distributed at two locations: the Flushing library and Corona Plaza. We believed that these two small points of distribution might not have provided us with a wide enough area of study. For the second implementation, we enlarged the map and distributed the survey along the entire 7 train subway corridor from Flushing to Jackson Heights. The original map extended from Murray hill to the east, La Guardia Airport and college point to
the north, Forest Hills to the south and Junction Boulevard to the West. Due to the lower response rate in Corona, we believed that by expanding the map further west, we could better identify cyclists. Our complete survey extended further west to Jackson Heights.

- **Distribution Was Too Small**: For the pilot survey, we distributed 150 surveys in November. This was sufficient for a pilot study to determine if the survey and the study area were viable. Our 8 percent response rate, however, was not significant enough to accurately determine the opinions, experiences, and needs of cyclists in these areas. For the complete survey we increased our distribution in the hopes of receiving a statistically significant response.

Our review process also included meeting with Michael Amabile from the DOT. We consulted with Mr. Amabile to determine what thrust the survey should take. The suggestions that emerged from DOT for additional questions, however, were of a very different nature than those we had proposed. The DOT working group wanted us to ask questions about how much knowledge cyclists had about cycling rules. We, on the other hand, hoped to find out what routes cyclists take and what their needs are from a planning perspective. While we certainly recognize the need for general knowledge of cycling rules, we decided that the most important planning-related knowledge was to ascertain the needs of cyclists who have not benefited from current planning practice. His input guided us towards a larger study area and generated new questions. After this meeting and our own review, we included some of his suggestions and settled on several fundamental changes to the final survey's format, layout and questions.
Spring 2011 Complete Survey

After reworking the survey, we again had it translated into Chinese and Spanish. For survey preparation this time around, we mobilized a large group to prepare the bag surveys over two days. On the survey date, Tuesday, March 22, 2011, a team of six distributed 320 surveys on bicycle handlebars. We started at the Flushing Public Library and split up into three pairs to cover different parts of Flushing, Corona and Jackson Heights. Since the 7 train subway is the only convenient train for most people in these areas of Queens, we focused our distribution along the 7 train corridor, hoping to include cyclists who ride to the train station as well as those who commute in and around this highly trafficked corridor. In Flushing we distributed surveys along Main Street and its intersecting side streets from Sanford Avenue to 39th Avenue. In Corona and Jackson Heights, surveys were distributed along the 7 train subway corridor from the 111th Street station to 86th Street, and in a large area around the Roosevelt Avenue subway station.

Spring 2011 Complete Survey Results

Of the 320 surveys distributed, 68 were returned giving us a response rate greater than 21 percent. The improved response rate may indicate that the changes to the pilot survey encouraged a significantly greater percent of people to respond.

For the complete survey, there were several important characteristics of our sample. Of the 68 returned surveys, 49 respondents were male and 15 were female, with 4 that did not specify a gender. The survey was successful in reaching a diverse group, as represented by respondents’ various ages, languages and ethnicities. Respondents ranged from 17 to 69 years of age, with an average age of 35. Unlike the pilot survey, the respondents of the 2011 survey were majority Hispanic/Latino with 36 respondents, but also included 13 White respondents, 3 Black respondents, 12 Asian respondents, 3 respondents identifying as “Other”, and 3 respondents left the question blank. The majority
50 of respondents chose to answer the survey in languages other than English. More than 60 percent of the surveys were returned in either Chinese or Spanish, indicating that the survey was successful in reaching new immigrant cyclists that may not speak English or prefer to speak their native language. Also, 30 cyclists answered the question for “which zip code they start their route in,” with 14 separate zip codes being represented.

The sample of cyclists we reached in Corona and Flushing were not casual weekend rides. Over 70 percent of respondents claimed to ride “daily” with the remainder of respondents riding 2 to 5 times per week for an average cycling trip time of 29.84 minutes per ride. The chart at right shows 48 respondents riding daily and 19 respondents riding 2 to 5 times a week.

When asked why they rode a bicycle, the majority (64.7 percent) of the respondents answered that they rode to commute to either work or school. When asked where they rode, 42 respondents (61.8 percent) answered that they rode to work and an additional 34 respondents (33.8 percent) responded that they rode to a bus or train stop.

According to answers received on where they cycle and how routes were drawn on the map, we found that there are large numbers of cyclists who commute to work by bicycle but do
not ride to Manhattan. Instead, they either live and work within the neighborhoods of Flushing, Corona, or Jackson Heights, or ride their bicycle to the subway and continue their commute by train into Manhattan.

When asked where they cycled, 66 percent selected at least two types of destinations and 52 percent selected at least three types, including work, the bus or train, the homes of friends or family, and stores. Other answers on where they cycle show that 34 respondents also use their bike to ride to homes of friends and family (50 percent) and 32 respondents ride to stores (47.1 percent). This shows that many riders rely on their bicycles for non-commuting activities, and travel frequently to stores within their own neighborhoods. While most respondents checked more than one choice, nine out of the twelve respondents who checked that they rode their bikes for work as either messengers or for delivery purposes only checked that one option.
When not cycling, 35 of the respondents walked (51.5 percent) and 27 took a subway (39.7 percent). Only 14 respondents (20.6 percent) chose driving and only 15 (22.1 percent) chose using the bus as an alternative to cycling. In addition, when asked why they choose cycling over other modes, the majority with 37 respondents (54.4 percent) reported that they ride a bike because it is less expensive.

This may show that most respondents do not own cars and that cycling is a legitimate substitute for the bus for short or midrange trips within the borough. As additional reasons to ride, most respondents checked many answers, showing that approximately half of our sample also chooses to ride out of concern for the environment, for health benefits, and for convenience.

When choosing a route, an overwhelming majority with 51 of the respondents (75 percent) identified speed as a factor; the second most popular answer, with 29 respondents (42.6 percent) “less traffic,” indicating that safety is indeed an important concern for this group of cyclists. While only 13 (16 percent) chose a route based on the presence of a protected bike lane, this may be due to the lack of bike lanes in their neighborhoods. Since the majority of cyclists choose routes for speed and with less traffic, we believe that if more bike lanes were present (leading to faster trips with less traffic), many more riders may choose to ride in
the bike lanes. Further, when asked they would ride more if bike lanes were more available, 89.7 percent responded that they would.

One important finding from our survey identified the need for more bike racks. The majority with 56 of the respondents (82.5 percent) preferred to park their bikes at bike racks, yet while distributing the survey we observed that the supply of neighborhood bike racks does not match the demand, as the vast majority of bikes were not parked on bike racks. Also, 92.6 percent of the respondents answered that they would ride more often if more bike racks were available.

Our survey also revealed that the streets of this area of Queens are extremely dangerous for cyclists. Of the respondents, 42.6 percent claim they had been hit by a car door, with 75 percent of these 'doored' respondents having been hit multiple times. Also, 27.9 percent responded that they had been hit by a car while cycling.
Despite these crash statistics, more than 50 percent of the respondents reported using helmets, lights, and an “awareness of cycling rules.” When identifying the most dangerous part of their routes their answers ranged in type of road and geographic area. Nonetheless, the two most common locations cited were Main Street in Flushing and Roosevelt Avenue with the crossing between Flushing and Corona identified as particularly treacherous. Almost 90 percent of riders reported riding on “the edge of the road”, leaving them at risk in many of the danger zones. Despite the fact that there are very few bike lanes in the study area, 20 percent of the respondents answered that they rode in bike lanes.
When asked what improvements would make their rides easier, an overwhelming majority of respondents chose three answers: 52 chose painted lanes (76.5 percent), 44 chose physically separate lanes (64.7 percent), and 50 chose more bike racks (73.5 percent). These numbers show that there is a significant population that wants to see improvements from the DOT that will improve their daily rides.
Discussion and Recommendations

For DOT to implement a more thorough and effective methodology for identifying underserved cyclists and their needs and acquiring their unique thoughts on where bicycle infrastructure should be placed, we present the following recommendations.

1. Move Beyond Screen Line Counts and Adopt the Following New Methods for Needs Assessment

Below are the methods that were successfully used to find and sample opinions from cyclists in the neighborhoods of Flushing and Corona in Queens, New York. By using these methods DOT will be able to identify a neighborhood with high bicycle use, the underserved cyclists within it, and their unique needs. The methods are progressively arranged:

- There are a number of ways to identify study areas that require a minimal investment of time and resources. We selected Flushing and Corona because the Queens Committee of Transportation Alternatives recommended these areas due to their high densities of “invisible cyclists”, the need for bicycle infrastructure in these areas, and of the presence of some of the New York City's most dangerous roads cyclists.

- The windshield survey should be the first method used to determine where bicycling is occurring. The mid-spring through mid-Autumn months will yield the greatest concentrations of cyclists. These months yield larger numbers of casual riders, female riders and commuters who often do not like to cycle during cold, wet and snowy periods. The survey, though dubbed a “windshield survey,” can be conducted on foot, while riding a bicycle, or in a car. Many researchers on our team found it to be particularly informative to personally experience the cycling conditions in Flushing and Corona. Riding through a study area will allow an unprecedented insight into an area’s cycling environment. To maximize efficiency, begin by analyzing “magnet” areas that we have identified as having large concentrations of bicycles, such as subway, bus and rail stations; schools and universities; hospitals; and commercial and retail districts. We have observed that cyclists tend to circulate around these areas.
• Contact local CBOs to learn about local cyclists and cycling conditions. These organizations offer a wealth of information concerning the makeup of populations in the communities and where they are situated. In particular, our meeting with Make the Road New York helped shed light on the local patterns we had earlier observed. We discovered that cyclists in Corona mainly consist of male riders either traveling from home to work in Corona or neighboring areas (often at construction sites) or to working as delivery people for local businesses. Due to the fact that some individuals are unable or unwilling to participate in planning exercises, CBOs are often best equipped to represent these individuals, especially in districts where the makeup of the community board is not representative of a community’s diversity.

• Focus groups have the potential to be the most beneficial method for obtaining qualitative data on cyclists and cycling conditions. Care must be taken so that the views expressed in these settings actually come from cyclists and not an anti-cycling individual or group. We arranged small focus groups of cyclists by placing flyers on bicycle handlebars in Flushing and Corona. To be effective in these areas it may require the help of several CBOs and interpreters to clearly understand the needs of cyclists. Focus groups, however, do not come without challenges, including: attracting a substantial number of participants or group that is representative of the cycling community; and logistics that can be consuming in terms of time and resources, such as establishing a venue, distributing flyers and providing food.

• Handlebar bag surveys yield vast amounts of data in a short time period and are relatively cost effective. Based on our results, with a group of just six people, we were able to create and distribute a handlebar survey within two weeks, and we began to receive data within as little as one week. Based on the results of the pilot survey and the complete survey, surveys should be no more than 20 questions to encourage more participation. Further, questions should be relevant to cyclists’ concerns without probing too intensely, so as avoid alienating cyclists concerned for their privacy. In our complete handlebar survey, we were able to obtain more quantitative and qualitative data than the focus group, with approximately the same time and resource investment. Similar to focus groups, handlebar surveys also have the unexpected benefit
of making cyclists in the area feel less invisible and more in touch with those making decisions in their neighborhood. Handlebar surveys are an easy but effective tool to determine whom these cyclists are, and understand their needs.

Based on our observations and the results of this study, cyclists in Queens were pleased to be consulted when it came to infrastructure creation. Moreover, when approached on the street, cyclists actually enjoyed being asked about their behavior through both the handlebar survey and CBO outreach. Most importantly, outreach from DOT to cyclists will help create an environment of goodwill, trust, support, and sustain all types of bicycle infrastructure in the future.

2. Build Neighborhood-Based Networks

Our research proves that there are many types of local cyclists in Flushing, Corona and Jackson Heights. Commuters ride to and from transit hubs, workers bicycle within the neighborhood to and from work, messengers and delivery people ride within the confines of their routes, and residents use their bicycle for the daily activities.

As described in our introduction, DOT’s current objective is to build out an interconnected citywide network of bicycle routes with a clear emphasis on access to the Manhattan CBD. While many riders in Flushing, Corona, and the 7 train corridor will use the infrastructure provided by the bicycle network as it expands into their neighborhoods, a network oriented towards the Manhattan CBD is not the most useful outcome for the majority of cyclists in this area.

To better serve these cyclists, we recommend neighborhood-oriented networks that focus on enabling safe access to outer borough commercial and transit centers like downtown Flushing and Roosevelt Avenue in Corona. These networks will meet the needs of outer borough cyclists as their lanes will connect to commercial areas, parks, schools or other points of interest that are popular among cyclists. As several respondents in our surveys and focus group might agree, physically separated lanes may or may not be the most desirable solution for these areas. Lanes delineated by painted lines on congested roadways such Main Street in Flushing and Roosevelt Avenue through Corona may be more
contextually appropriate in those neighborhoods.

3. Create Transit Connectivity

One of our study’s most significant findings was the demand for bike racks on and around the 7 train subway corridor in Queens. Based on the number of bicycles parked in this area and the number of survey respondents who said they rode to a transit location, there is a clear need for bicycle connectivity and parking in and around transit stations. A majority of survey respondents indicated they were commuters and many expressed their need and desire to cycle to subway and train stations, safely leave their bicycles at these transit hubs, commute to their jobs, and then return to bicycle home. This highlights what the DOT can do to make cyclists’ trips to and from these transit stations safer and easier.

While our research shows that many more bike racks are needed, we also recommend locally oriented bicycle networks to allow for safe and fast journeys through congested areas to connect to transit hubs. In Flushing and Corona, these smaller networks run in all directions from transit stations, through quieter streets and wider avenues so cars and buses are not interfering with cyclists. Situating bicycle infrastructure in this way would reinforce an equitable transportation network, where women, children and seniors are able to bicycle in congested areas where infrastructure is currently not found.
When I become mayor, you know what I’m going to spend my first year doing?” Mr. Weiner said to Mr. Bloomberg, as tablemates listened. “I’m going to have a bunch of ribbon-cuttings tearing out your [expletive] bike lanes.”

– New York City Congressman Anthony Weiner, June 2010

Anti-bicycle lane sentiment in New York City, as expressed above by Congressman Weiner, has increasingly made headlines over the past three years. Since 2007, DOT has installed over 250 miles of bike lanes throughout the city, removing hundreds of parking spaces and reshaping the balance between cars and other users of the street. The growing antipathy to bicycle projects in some communities now represents a major political challenge to the future of DOT’s Bicycle Program.

What is the best approach for DOT to adopt in addressing this political “backlash” against bike lanes? While there is no single “magic bullet” approach, the analysis and recommendations in this report suggest that if bike lanes are to remain a part of the city’s transportation landscape into the coming decades, they must have genuine citizen support throughout the city’s neighborhoods and communities. This requires building and sustaining strong working relationships between DOT and the city’s community boards, neighborhood associations, and cyclists. A key component of this effort is to enhance DOT’s Complete Streets initiatives and ensure that they live up to the vision of a holistic local planning process.

This approach will protect current and future efforts to expand and permanently integrate cycling and bicycle infrastructure into New York’s transportation landscape. The experience of the city’s first separated bicycle lanes on Sixth and Seventh Avenues in 1980 remains a stark omen: soon after installation, they were removed amid fierce opposition. Without establishing strong community support for bicycle lanes and infrastructure, there is nothing to prevent any future administration from realizing threats to uproot bicycle infrastructure.

**Long-term Support Through Community Partnership**

The idea that an effective and successful planning process begins by partnering with the community to build support is neither new nor radical. It is grounded in mainstream best practice methods throughout the planning profession, and most planners agree that “plan making is a consensus-building process built upon open and inclusive community discourse.” When this essential part of planning is overlooked or sidestepped when seeking to alter the physical landscape, the results are often not supported within that community. The reasons for this lack of support are obvious, and they drive governmental agencies and planning departments to create mechanisms to involve communities in the planning process. This involvement and participation, however, must not simply be a step in the planning process; rather it must be the central means to ensure the longevity of local planning efforts.

The central premise to consider is that any changes made will have little chance of surviving unless they are rooted in significant community support and defense of those changes. Otherwise, any changes made to a given community may be subject to continual challenges and reversals, emanating from both within and from outside the community.

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The Bicycle Master Plan: A Flexible Organizing Document

The New York City Bicycle Master Plan is a collaborative document that was written in 1997 by the Department of City Planning (DCP) and DOT. It mapped out a bicycle network throughout New York City, and recommended steps and programs to increase cycling. Among other things, it outlined ways to educate the public and encourage cycling, sought to improve access to mass transit for cyclists, and established design standards for bicycle lanes and facilities. One section sought the “Institutionalization of Bicycle Planning,” as the title indicates, into the political and policy framework of the city.

While there is much to be gleaned from its contents, the Bicycle Master Plan outlines two significant insights. First, it sets out a vision for what a bicycle network would look like in New York City in the form of an actual physical plan, providing the basis for an interconnected, bicycle-friendly, and more diverse transportation network. Second, it recognizes the necessity for institutionalizing and integrating a bicycle planning process into the policy framework of the city. The authors of the plan understood that creating and planning bicycle infrastructure could not be realized and sustained unless it was integrated into the work of various governmental agencies and policies that guide this city’s transportation development. Although DOT has often developed partnerships on various initiatives, political leadership from the Mayor’s Office is necessary to create and sustain the inter-agency cooperation required to promote the integration of bicycle use into the transportation framework of the city.

The Bicycle Master Plan, however, has prompted resentment in some communities, as many residents view it as an attempt to impose bicycle infrastructure in their neighborhoods with no community input. This plan was not intended to be imposed on neighborhoods or community boards, but rather was designed as a flexible document, laying down a baseline vision on how to promote bicycle planning and infrastructure development in the city. A strategy for securing meaningful and lasting community involvement throughout the overall process is one essential component absent from the Bicycle Master Plan.

58 New York City Bicycle Master Plan, p. 31-33 and Appendix E. These initiatives were:
(1) An All-Agency Bicycle Policy
(2) Mayoral Bicycle /Pedestrian Advisory Council
(3) New York Metropolitan Transportation Council Bicycle /Pedestrian Work Group
Prioritizing Process and Redefining Success

Backlash is often the result of a planning process that lacks community involvement and local political support in creating plans and infrastructure. One method to counter, and possibly preempt, the backlash is to drastically modify the traditional relationship between planning agencies and the communities in which they work. Instead of emphasizing the involvement of community stakeholders in the decision-making process itself, the traditional relationship prioritizes the outcomes or built infrastructure.

To achieve and maintain community involvement, we recommend incorporating principles from an alternative planning process into DOT’s work with communities: participatory planning. Participatory planning represents a shift from the traditional role played by government agencies in New York City. In this process, the planning agency acts as a facilitator helping to empower citizens with the knowledge and methods necessary to deliberate, decide, and act to improve the built environment within their own neighborhoods. Collaborative, communicative engagement is equally important to the project as the results are; the experience generates social and intellectual capital for the community, helping to “build a civic culture in which people creatively participate in public life.”

If DOT were to seek to achieve a higher level of citizen participation in the overall process, it would have a better chance to mobilize the diverse sectors of local communities in support and would therefore be more sustainable in the long-term. Placing the same emphasis on the planning process as is placed on its intended products may mitigate, and even undermine, the emergence of backlash towards future outcomes.

Given the current political climate, it is not unreasonable to suggest that much of the existing bicycle network, as well as plans for future expansion hang in the balance. Shifting gears in light of the recent political backlash is crucial, both to answer the critics and to continue the pursuit of the agency’s overall mission. We are not suggesting that DOT radically shift its goals, but rather that it reconsider which results constitute success.

It is an ideal time for DOT to redefine success, not in physical terms (e.g., how many bicycle lane miles exist at the close of the year), but rather by the degree to which communities and

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neighborhoods develop a stake in the viability and expansion of bicycle infrastructure throughout New York City. This criterion would place a premium on working and partnering with communities to cultivate and advance collaborative planning practices, with the goal of creating new and expanding bicycle networks. By redefining success in this way, DOT will sustain the continued expansion of bicycle infrastructure while also ensuring that such infrastructure has greater local support in communities and neighborhoods in which it exists. A close analysis of Complete Streets policy will allow us to explore more inclusive and robust participatory planning processes.

**Participatory Planning and Complete Streets**

It has long been recognized that car-dominated streets contribute to the creation of unsafe, unhealthy, and inconvenient environments for pedestrians, bicyclists, transit riders and drivers alike. A more holistic transportation vision is one response to counteract this auto-centric orientation to street planning. In 2003, the term “Complete Streets” was coined to define the collaborative efforts of a wide range of organizations that sought to include bicycles in everyday transportation planning, albeit with a broader capacity than the routine accommodation of cyclists. Under the leadership of America Bikes, the nation-wide Complete Streets Task Force was formed, including the active participation of The American Association of Retired Persons (AARP), the American Planning Association (APA), the American Public Transportation Association (APTA), the American Society of Landscape Architects (ASLA), and the American Heart Association. The task force set out to “share the best practices of communities that had already developed a commitment to ensuring all transportation projects served the needs of all road users” at the federal, state, and local levels.

Many states and cities have adopted Complete Streets policy, while some have sought to institutionalize Complete Streets in order to transition from car-dominated streets into a more inclusive streetscape. While Complete Streets legislation is currently pending in the New York State legislature, the New York City DOT has already integrated Complete Streets policy into several of its initiatives, including the *Street Design Manual* (May 2009) and its *Sustainable Streets* strategic plan (updated in 2009).

Through the implementation of these policies and the incorporation of design modifications into the existing streetscape, there is ample opportunity for DOT to pursue a more sustainable planning process that incorporates deeper community investment in the overall policy. Other cities have demonstrated that partnerships between governments and community groups play an important role, not only in producing a powerful advocacy network to influence the success of the Complete Streets policy, but by providing a planning process with local context.

**Defining Complete Streets**

Complete Streets is the planning, scoping, design, implementation, operation, and maintenance of roads in order to reasonably address the safety and accessibility needs of users of all ages and abilities. Complete Streets considers the needs of motorists, pedestrians, transit users and vehicles, bicyclists, and commercial and emergency vehicles moving along and across roads, intersections, and crossings in a manner that is sensitive to the local context and recognizes that the needs vary in urban, suburban, and rural settings.

– Minnesota Complete Streets Law, 2010

Traditional traffic engineering focuses on “traffic mitigation”, or moving as many cars as quickly and efficiently as is practicable. As a result, the safety and accessibility needs of pedestrians, bicyclists, and transit riders have often been overlooked. Complete Streets policy pursues a new paradigm in which pedestrians, cyclists, persons of every age, and transit considerations are the core concern in designing streets. For instance, Complete Streets strives to ensure that children can safely walk to school, seniors have ample time to cross the street, and people feel comfortable to cycle anywhere. Essentially, transportation and road systems should work well for all users. The above definition, taken directly from *The Complete Streets Law for Minnesota*, is a typical example of how the concept can be defined and expressed as adopted policy.

Two elements of Complete Streets are worth noting here. First, it considers the needs of all users to be equally important and it advocates that such needs be incorporated into the

62 From the definition of Minnesota Complete Streets Law, Chapter 351 of 2010 Session Law, signed May 15, 2010 by Governor Tim Pawlenty
planning process. Second, it advocates that within the planning process there should be a clear sensitivity to local context and setting. A well-conceived Complete Streets policy should provide communities with a seat at the table throughout the planning process, to inform and direct transportation planners and engineers in designing a streetscape that provides access to all users regardless of age, ability, or chosen mode of transport. This policy is becoming the rule around the country, with 208 local or state jurisdictions adopting or committing to Complete Streets policy.\(^{63}\) The NYC Department of Transportation has already effectively implemented its own version of Complete Streets policy, even though State legislation is still pending.\(^{64}\)

A comprehensive Complete Streets planning commitment focuses as much on policy and institutional change as it does on design.\(^ {65}\) Design addresses a community’s need for specific traffic calming strategies, such as widening sidewalks, installing bicycle and bus lanes, creating accessible mass transit stops, ensuring safe crosswalks, etc. The success of any Compete Streets plan, however, will depend largely on the degree to which the decision making process incorporates the active participation and involvement of all transportation stakeholders.

**Complete Streets in New York City**

The Department of Transportation’s Sustainable Streets and the Street Design Manual provide the current framework for DOT’s Complete Streets policy. As DOT commissioner Janette Sadik-Khan describes Sustainable Streets as the guiding philosophy for the transportation policy themes established by Mayor Bloomberg in PlaNYC 2030; specifically, creating a more mobile and attractive bus system, expanding the bicycle network in order to increase ridership, giving more attention to the quality of the public realm, and keeping the city’s infrastructure in good working condition.\(^ {66}\) The Street Design Manual is a practical document created by DOT and eight other city agencies detailing a common framework for street design and construction by all city agencies and contractors, as well as technical guidelines for creating livable and sustainable streets.

Viewed together, these two documents inform many of DOT’s individual endeavors, including

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\(^{64}\) Senate Transportation Committee Chair Martin Dilan (D-Brooklyn) introduced S. 1332 in 2011. In 2010, the State Senate overwhelmingly passed their bill, but the Assembly’s bill did not make it to a full floor vote. Bill no. A01863 or S01332.


the Safe Streets programs, the Plaza Program, various Complete Streets initiatives, traffic calming measures and many of the bicycle planning projects underway throughout the city.

Although Sustainable Streets and the Street Design Manual are comprehensive technical manuals containing the principles of Complete Streets policy, they lack any statement, instruction, or planning mechanisms for achieving meaningful community involvement in the planning process itself. As noted earlier, Complete Streets is not simply a new technical approach to altering the streetscape; it requires an improved planning process that views community input and participation as central to defining its success. Such an approach ensures that the core elements of the policy will be realized, that the needs and concerns of all transportation stakeholders will be addressed, and that adequate attention is given to local context.

The Department of Transportation’s current methodology for project development of Complete Streets initiatives lacks a concrete role for local community groups. While an active local community group might decide on its own initiative to organize and petition DOT to consider a particular project, there is no institutionalized role for local community involvement in the development and design process.

**Laying the Groundwork for Integrated Community Involvement**

There are many steps that DOT can take to create meaningful, integrated community involvement in the planning process to realize a more comprehensive Complete Streets policy. The box to the right outlines examples of other cities’ plans that have attempted to do just that.

While each of these examples are informed by and tailored to specific local contexts and unique municipal conditions, there is a clear and stated commitment to integrate community resources, organizations, and voices into the planning process. There are ways in which DOT might conceptualize and implement a process that fosters stronger partnerships and community ties. Sustaining a Complete Streets policy that integrates ongoing community involvement throughout the planning process, however, requires an understanding that partnerships with communities are the critical end result.
Beyond the Backlash: Equity and participation in bicycle planning.

Seattle, Washington | The 2007 Seattle Bicycle Master Plan

Action 3.2: Promote bicycle and pedestrian education and encouragement in Seattle through partnerships with community organizations.

Action 4.6: Continue to receive regular input and guidance from the Seattle Bicycle Advisory Board. The Seattle Bicycle Advisory Board should continue to provide regular input and guidance to the Pedestrian and Bicycle Program on bicycle issues. This will include monitoring the progress of implementation.

Chicago, Illinois | Bike 2015 Plan

Partnership with community health programs to promote bicycling for Chicago’s minority youth. African-American and Latino children in Chicago are disproportionately burdened by obesity. Partner with organizations to promote bicycling in public health programs for minority youth (e.g., the YMCA’s Healthy Kids Camp).

Portland, Oregon | Portland Bike Plan for 2030

For promoting innovation in the design of bicycle parking, facilities are made through partnerships with local artists, institutions and City of Portland bureaus.

Developing partnerships with community organizations to provide bicycle training and education to residents with whom the City of Portland does not sufficiently engage.

Increasing partnerships with local advocacy groups and supporting award programs that promote bicycling in Portland.

“Safe Routes to School” is a partnership between the City of Portland, schools, neighborhoods, community organizations and agencies.

Los Angeles, California | 2010 Bicycle Plan

Implementation principle of the 2010 Plan states up front that one of the goals of the city is to forge “a strong partnership with Los Angeles’ bicycling community.”

In partnership with the community and local schools, identify, develop and adopt a Comprehensive Safe Routes to School Strategic Plan.

Gated Communities: Encourage community members to work with their Council office, Neighborhood Councils, other community organizations and gated communities to identify opportunities to permit bicycles through gated entryways.

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67 Seattle Department of Transportation, Seattle Bicycle Master Plan (City of Seattle, 2009), 45, 52.
68 Mayor’s Bicycle Advisory Council, City of Chicago: Bike 2015 Plan (City of Chicago, 2006), 35.
69 Bureau of Transportation, Portland Bicycle Plan For 2030: A World Class Bicycling City (City of Portland, 2010), 101.
70 City of Los Angeles, 2010 Bicycle Plan: A Component of the City of Los Angeles’ Transportation Element (City of Los Angeles, 2010), 11, 73.
As the primary vehicle for local participation in city government, community boards (CBs) play a prominent role in New York City politics. Although CB approval has never been requisite for DOT projects, the DOT Bicycle Program has come to value CB participation in the implementation of new bicycle infrastructure. While initially successful in the community boards of the CBDs of Lower Manhattan and northwestern Brooklyn, this process has proven to be challenging as the Bicycle Program has expanded its reach over past years. The Department of Transportation now needs comprehensive methods for integrating public involvement that can be used to work with all CBs on new bicycle projects.

Before making specific recommendations regarding DOT’s community engagement practices, it is first necessary to describe the role and function of this unique system of neighborhood governance, as well as to explore the structural issues that limit its capacities for legitimate community planning. Because they consist of volunteers appointed by the Borough President and local City Council Member and lack the technical knowledge and resources of other branches of city government, community boards can often be parochial, short-sighted, and not truly representative of the full breadth of the local community.

From there, our analysis of the working relationships between DOT and CBs continues through investigative research, interviews with community leaders; CB members; bicycle advocates; and DOT officials, and by attending various CB meetings and public forums on bicycle infrastructure and the ensuing backlash. We conclude with a set of recommendations to address current strains on this working relationship that limit both DOT goals and objectives and the equitable expansion of the bicycle network.
The History and Functioning of Community Boards

Although a product of the mid 1960s, the rationale for New York City’s CBs can perhaps be traced to earlier forms of decentralized city government created in the late 1800s through the early 1900s. The dominant rule of Tammany Hall was contingent upon decentralized support from this city’s new immigrant groups, expecting that municipal services would be delivered in return.\textsuperscript{71}

The fiscal crisis of the 1930s, however, brought an end to the Tammany era, ushering in a new wave of concentrated power in the hands of urban reformers such as Mayor Fiorello H. LaGuardia. The City Planning Commission was established as a seven-member body appointed by the mayor in 1936, and charged with creating a comprehensive plan for the city’s growth. In practice, however, the city’s planning efforts at the time were dominated by Robert Moses’ park and highway construction and urban renewal schemes. Moses ruled over transportation policy in New York until the mid 1960s, when his Triborough Bridge and Tunnel Authority was absorbed into the newly created Metropolitan Transportation Authority (MTA). At this time, the Landmarks Preservation Commission and “community planning board” system were also created by Mayor Robert Wagner in order to protect the city’s historic urban fabric and increase the role for local communities in the planning process.\textsuperscript{72}

In 1968, Mayor John Lindsay led the passage of Local Law 39 which expanded the role of the CBs, authorized them to hold public meetings on issues affecting their districts, reformed the recruiting and appointment process of board members, and clearly delineated a planning function for the boards, although this role remained nonbinding. Under the law, the number of board members for each board was increased from roughly twenty members, to fifty.\textsuperscript{73}

In 1975, the Uniform Land Use Review Procedure (ULURP) was established in the City Charter in an attempt to further democratize land-use decision making and move further away from the Robert Moses model of top-down mega-projects. Community boards were given an official voice in the process for the first time, as all major land use decisions such as zoning changes and site selection for city facilities now had to begin with the consultation and recommendation


of the affected CB. The fifty-nine CBs as they exist today were firmly established.

The City Charter requires CBs to meet each month with the exception of July and August, and meetings must be publicized throughout the community and made available for broadcasting. Meetings generally include a charter-mandated public session, a public hearing, time allocated for reports from the chairperson, and the district manager, time for committee presentations, and finally action items and voting. Actions and decisions can only be authorized by a majority vote in the presence of a quorum, or more than half of all board members.74

Each board also participates in the citywide budget process by submitting a “Community Needs Statement,” outlining local priorities to be considered in the city’s expense and capital budgets. While the city is not obligated to obey the will of CBs, they do exercise significant influence with the support of the media and local population.

Community boards gained an additional tool for influencing local policy with the 1989 City Charter revision. Amendments to Section 197-a of the charter gave CBs new rights to compose and submit community-based “plans for the development, growth, and improvement” of their districts for adoption by the City Planning Commission (DCP) and City Council. This charter revision also required that every CB be provided funds to hire a designated professional planner; but this requirement has never been explicitly followed and appropriate funding has never been allotted. Instead, the borough planners at DCP are considered the designated planners for CBs.

Structural Barriers Facing Community Boards

The establishment of CBs represented a significant development in New York City’s political history and a triumph for advocates of community control and democratic planning. Since CBs were created, however, some structural barriers to their complete fruition have come to light. Barriers to CBs’ mission of achieving an authentic community voice in city policy include understaffing and under-funding, lack of training and consistent committee organization, lack of representative diversity, and lack of actual authority to enforce their recommendations. Some reformers, including Manhattan Borough President Scott Stringer, have implemented changes to address many of the problems plaguing CBs. The structural barriers to planning at the CB level

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have direct and serious implications for the development of bicycle infrastructure in New York City, and to the functioning relationship between DOT and CBs.

**Understaffing, Lack of Training and Access to Technology**

Community boards are tasked with evaluating some extremely complicated projects, including their attendant applications and studies, and making decisions that could have monumental significance in their neighborhoods. This is equally true of major developments coming to CBs through the ULURP process as it is of street design changes proposed by DOT. Given the great weight and complexity of these issues, one might assume that CBs were provided with access to ample training on transportation and land use issues, the relevant technology to map potential impacts of changes and imagine alternatives, and a staff member trained in urban planning and transportation.

This, however, is not the case. Community boards do not have the resources to hire professional planners, even though they are tasked with evaluating plans, Environmental Impact Statements, traffic analyses, and other complex technical documents created by land use consultants. CB members are unpaid volunteers and their budget allocations barely cover rent and a small office staff. In this respect, Queens CB7 Transportation Committee Chair Joseph Femenia comments, “We can’t do DOT traffic studies…that’s a huge responsibility and liability. We’re a community board, we’re volunteers, we’re not out there having all this different equipment and expertise to do that.”

This puts community boards at a serious disadvantage, and also gives a leg up to developers and city agencies because CB’s lack the resources they have to hire planners and technical experts. Finally, the lack the professional planning staff is a major barrier to CBs’ ability to envision alternative plans and craft successful 197-a documents. While all CBs are encouraged to create 197-a plans, they are forced to hire planners out of their own already stretched budgets. As a result, many CBs simply never write their own community plans, and are therefore denied a key opportunity to imagine a locally relevant role for cycling infrastructure in their neighborhoods.

76 Interview with Queens CB7 Transportation Committee Chair Chair Joseph Femenia, 2/26/11.
Manhattan Borough President Scott Stringer has suggested that every CB should hire a planner, and has created a program for planning students to work for CBs, but as of yet planners are still absent from the formal structure of community boards.\textsuperscript{78}

There’s no doubt that community boards would be much better equipped to engage with city agencies in the policy-making process if each board had a planner on staff. Short of providing resources to hire a staff planner, it would also help if the city were to provide all board members with regular trainings on relevant issues, including multi-modal transportation planning. Such trainings could encourage broader thinking about planning issues, including the role of cyclists and cycling infrastructure in every neighborhood’s transportation network. While this kind of work was begun with the “DOT Academy” program, it seems to have fallen by the wayside. In addition to trainings on such planning issues as cycling infrastructure, trainings could be provided on land use law, ethics and dynamic meeting facilitation.

In addition to trainings, CBs need greater access to relevant technologies in order to evaluate planning issues and communicate better with the public. Some CBs do not have websites. None are furnished with GIS programs. They do not have the tools or technical expertise to conduct their own transportation surveys or analyses. Few CBs have the capacity to film meetings and provide them to the public online, or stream meetings online to constituents who cannot attend a meeting in person. Increased technical capacity could allow all proposals before a CB, including street changes, to be made public to the community before meetings. Comments could be solicited in advance, and DOT representatives and CB members could be more prepared for their presentations before meetings. Increased technical capacity would allow for greater planning capacity at the CB level, while simultaneously improving the CBs’ ability to communicate with its constituents.

\textit{Lack of Committees, Lack of Diversity}

All community boards contain committees of select members with an interest or specialty in a particular planning issue. These committees often deal with proposed changes before they are brought to the full board, and can act to mediate potential difficulties later in the process. Many boards have transportation committees, which are essential in the creation of new cycling...
infrastructure. Effective transportation committees can also work out potential conflicts with local stakeholders, such as businesses requiring street-side deliveries, with which they may hold positive relationships.

In many CBs, however, neither the full board membership nor the transportation committees are representative of the full spectrum of the local population and local transportation users. Since they are appointed by the Borough President and local Council Member, community board members usually have a long history of local political involvement and residence in the neighborhood. In many New York City neighborhoods this means that the board will often be wealthier and less racially diverse than the community as a whole because recent immigrants are disproportionately left out.

In Queens CB7 in Flushing, for example, the predominance of drivers on the transportation committee and full board appears to be directly connected to the lack of representative diversity among the board’s membership. Although the population of Queens CB7 is highly diverse with no single group in the majority (46 percent white, 42 percent Asian, 17 percent Hispanic, 3 percent African American), the CB’s membership is not correspondingly diverse. White residents in Queens CB7 are significantly more likely to drive to work (58 percent) than either the Hispanic (41 percent) or Asian residents (43 percent). In total, only a narrow plurality (49 percent) of Queens CB7 residents drive to work, while 40 percent take public transportation and 7 percent walk to work, yet the board and transportation committee remain dominated by drivers, as observed by the attendance of only one cyclist at a recent committee meeting.

**Unclear Roles, Unenforceable Powers**

The role of CBs in the city planning process is unclearly defined. Their position in the ULURP process is purely advisory, and their 197-a plans need only be “recognized” by the City Planning Commission. The Department of Transportation is not required by law to consult with CBs when making street changes, but it is politically advisable for them to do so. This uncertainty may create a disincentive for CBs to work seriously on neighborhood planning issues, and may also push them into a reactionary mode, encouraging CB leaders to search for ways to assert themselves.

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80 American Community Survey, 2005-2009 for Queens Community District 7.
81 Queens Community Board 7 Transportation Committee Meeting, February 24, 2011.
which might include vehemently opposing bicycle lanes. In the long term, the city must create a more clearly defined role for CBs in the planning process. In the meantime, however, DOT may be able to create a formal place for CBs in their infrastructure planning process, including early consultation, trainings on inter-modal transportation planning, and community planning processes.

**Narrow Focus**

Community boards are neighborhood-oriented bodies functioning within an enormous metropolitan area. They are almost never charged with considering the citywide consequences of local decisions. Accepting infrastructure development meant to serve areas both within and beyond their community districts may run counter to the instincts of some board members. Community Boards are not sovereign entities, however, and there is a limit to the extent to which they should be permitted to appropriate the public space of streets in favor of their own residents or for strictly auto-oriented uses. While its implementation may antagonize some CB members, a citywide bicycle network is a vital element to the development of complete and safe streets for all New Yorkers, and is a legitimate exercise of DOT authority.

**Community Boards and the Department of Transportation**

**Current Relationships**

The Department of Transportation’s relationship with CBs is one that is best described by two related sets of power dynamics. First, as stated above, CBs are advisory bodies. As such, they have no power to set or veto policy decisions set by local government. Secondly, DOT has no legal or institutional obligation to meet with CBs. When DOT does so, it is on its own terms (in contrast with DCP’s obligations throughout the ULURP process).

These underlying dynamics make for potentially tenuous and contentious interactions when DOT chooses to involve itself in the CB process. Politically, DOT has a vested interest in fostering a good working relationship with CBs and their constituents, wherever possible. In recent years, DOT has elected to always inform and meet with affected CBs in advance of proposed bike lane
projects, despite the fact that the agency is not legally required to do so. According to Hayes Lord, Director of the Bicycle Program at DOT, extensive interaction between this program and CBs started in 2007, with the adoption of a 200-mile bicycle lane expansion program as part of PlaNYC 2030.82

On major projects, DOT typically notifies the CB of the project, and then attends a meeting at which DOT staff present the details of the plan via a PowerPoint slide show. Maps, schematic diagrams and illustrations of the existing conditions, and proposed changes are presented alongside statistics on safety and speed. The Department of Transportation’s usual “pitch” in support of the given project is that it will increase safety by calming traffic, help achieve emissions goals outlined in PlaNYC 2030, allow space on the road for all users (including bicyclists and pedestrians), and enhance both PlaNYC 2030’s and the agency’s goals of establishing an interconnected, citywide network of bicycle lanes.83 Community board members are then given the opportunity to comment on or ask questions about the plan.

**New Challenges**

This model to inform—present—discuss—execute worked well for the first two years of the Bicycle Program under Commissioner Sadik-Khan. Due to initial focus on serving commuters to the CBD, as well as an informal policy of selecting districts of least resistance, DOT was mostly dealing with CBs in downtown Manhattan and northwestern Brooklyn that were largely supportive of the program. In some cases, the process actually began via a request from the CB for DOT to undertake a bicycle lane and/or traffic-calming project on a particular street.

As progress on the bicycle network has proceeded, however, DOT has encountered resistance—and in some cases, outright hostility—when attempting to expand the network into community districts less familiar with and supportive of the program. On the Upper West Side, the Columbus Avenue parking-protected bike lane, although approved by Manhattan CB7, has provoked intense and lasting opposition from the business community that has caused some

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82 Interview with DOT Bicycle Program Director Hayes Lord, October 2010.
bik lane supporters on the board to second guess their decision.\textsuperscript{84} In the outer boroughs, CBs in South Brooklyn and parts of Queens have become increasingly entrenched in opposition to the expansion of the bike lane network.

This opposition has been most intense in CBs in South Brooklyn, especially CB10 in Bay Ridge and CB18 in Canarsie, where DOT attempted to expand the network in the summer of 2010. The hostile reactions of CB members\textsuperscript{85} to DOT’s plans illustrate how the structural weaknesses of the CB system—lack of technical and policy knowledge, lack of representative diversity, and lack of clearly established roles and powers—were exacerbated by DOT’s limited outreach methods.

According to Brooklyn CB10 Transportation Committee Chair Doris Cruz, the board never had any interaction with DOT’s Bicycle Program until a meeting was called in fall 2009 to discuss a proposed bicycle route on Bay Ridge Parkway. At the meeting, the board was told that their approval was not needed because of the presence of the route on the Bicycle Master Plan. Cruz argues that this experience of essentially being told that their opinions “didn’t matter” engendered a hostile attitude among the board members.\textsuperscript{86} The transportation committee also felt that the Bicycle Program staff had a clear lack of familiarity with the local conditions. As an example, Cruz noted that DOT staff had no knowledge about the Bay Ridge Parkway “Doctors’ Row,” where residents often double park to pick up and drop off patients. Board members were also angered by a perceived lack of response to past board requests for traffic calming measures, such as longer traffic signal times with countdown clocks at other intersections throughout the district.

Although DOT staff explained that bike lanes were an effective traffic-calming device, they were met with skepticism by board members who believed that the presence of bicycles would actually increase danger to pedestrians.\textsuperscript{87} Members were also concerned about the effect of the lanes on car traffic and were dismissive of DOT’s claims that traffic would not be adversely affected.

At the June 2010 full board meeting, Brooklyn CB10 decided to take a vote on the issue

\textsuperscript{86} Interview with Brooklyn Community Board 10 Transportation Chair Doris Cruz, March 2011.
\textsuperscript{87} Brooklyn Community Board 10 Meeting Minutes, June 21, 2010.

BEYOND THE BACKLASH: Equity and participation in bicycle planning.
of bicycle lanes on Shore Road and Bay Ridge Parkway, despite the fact that DOT had not yet met with the full board to present the plan details. Minutes of the meeting reveal the lack of knowledge on transportation policy described above and a fear that DOT would go ahead and install the bicycle lanes over the summer (when the board does not meet) before the board got a chance to vote on the issue.

“BM Vella-Marrone stated that as a Board Member and President of the Dyker Heights Civic Association, she is totally opposed to the bike lane on Bay Ridge Parkway. It is a safety issue as this location is a high traffic area with a lot of pedestrian traffic. It is already hard for pedestrians to cross the street...She feels that the City has an overall plan for bike lanes and that they don’t look at any particular location or statistics as to whether there were accidents...BM Stelter spoke as a pedestrian, motorist and rider of public transportation saying that he sees bicyclists as a nuisance as they ride against traffic, they don’t stop for traffic lights or stop signs. If bike lanes encourage bike riders, he does not feel this benefits the community.”

“BM Bortnick noted we have two problems. As of tonight, there are no more meetings until September. That means what they are planning to do on Shore Road may very well happen. He wanted to know if the Community Board could do anything to stop it, period...BM Rasinya agreed with BM Vella-Marrone that we...vote on this issue tonight and not wait until September because then we will have no input.”

Brooklyn CB10 proceeded to vote against the two bike lanes by margins of 28 to 7 for Shore Road and 31 to 4 for Bay Ridge Parkway.

The DOT Bike Program’s experience with Brooklyn CB10 in Summer 2010 is revealing of the problems with CBs discussed above. Many board members lacked understanding of basic transportation policy and had no interest in considering the citywide perspective. But the hostility to the bike lane proposals in this instance was clearly exacerbated by the DOT Bicycle Program’s lack of a sustained working relationship with this board and the lack of clear procedural guidelines.
Similarly, when DOT proposed changes to the Coney Island Avenue intersections around the Belt Parkway overpass, it set off widespread complaints from CB15 and other local civic groups. Board members claimed that rather than look for simple solutions (such as increased signal lights) to alleviate existing safety and roadway confusion problems, DOT was pushing for drastic changes that would make matters worse.88

Lack of established and understood procedural guidelines for DOT–CB interactions is a complaint of community boards across the City. The CBs of Queens are attempting to address the lack of clear procedure by circulating a letter to other CBs calling for a mandatory 60-day review period for any bike lane proposals. While a mandatory review period won’t guarantee a positive outcome, it will at least reassure CB’s that they will have an opportunity to be heard and thus avoid outcomes like the panicked “no” vote at Brooklyn CB 10.

Appeals for Increased Participation

Despite the challenges inherent in the effort to promote cycling to community boards, we believe that further participation by these institutions is necessary for the long-term success of cycling in New York City. While CBs have no official power over the city streets, their opposition has proven decisive in both supporting and derailing the expansion of the citywide bike lane network, and their approval can dramatically impact the way bike lanes are received in a community. Community board approval has been vital in maintaining the bike lanes along Ninth Avenue in Manhattan and Prospect Park West in Brooklyn, despite powerful opposition from other sources. Paul Steely White, executive director of Transportation Alternatives, believes that the community workshops DOT ran to discuss parking during the congestion pricing debate could serve as a useful model going forward:

> It was useful in eroding the historic mistrust and cynicism that both sides have towards that kind of public process and I think that if DOT invests more in that kind of process, then a lot of this stuff can succeed and they can actually strengthen a lot of these plans rather than watering them down as they’re doing now in many cases.89

Eroding “historic mistrust and cynicism” is definitely a necessity when dealing with outer borough CBs like Brooklyn CB18, where bike lanes have come to be regarded as yet another chapter in a series of transportation proposals by the Bloomberg administration that are seen as “Manhattan-centric,” such as congestion pricing, tolls on the East River bridges, and bus service cuts concentrated in the outer boroughs.

The need for more comprehensive and consistent public participation, however, goes deeper than simply addressing the concerns of the outer borough boards. As Commissioner Sadik-Khan often notes, DOT’s bicycle lanes and other Complete Streets projects represent the first major change in the city’s streetscape in over half a century. If DOT’s long-term vision of transforming New York’s streets and establishing cycling as a viable “third option” for citywide transportation is to come to fruition, DOT needs both the CBs and the general public to understand the policy and support its execution.

The Bicycle Program may not be able to rely on a friendly Mayor’s Office past 2013. The experience of Miami’s sustainability plan, the MiPlan\(^\text{90}\) should serve as a cautionary example of what can happen to well-intentioned, sound policies during mayoral transition if they are not firmly embedded in participatory processes. The MiPlan was composed by Miami’s city government, under the leadership of Mayor Manny Diaz in the summer of 2008. The project was led by a small Mayor’s Office of Sustainable Initiatives and a “Green Team” of city employees drawn from various agencies and was supposed to be followed up with a detailed implementation plan within a year. But Miami’s new Mayor Tomas Regalado appears to have abandoned the MiPlan after campaigning on a message of “back to the basics” and “no grand plans.”\(^\text{91}\)

A Revised Community Process

As it currently operates, the DOT Bicycle Program presents CBs with written notification to inform them of proposed bicycle lane installations within their districts. For projects that simply add bike lanes, without the removal of on-street parking or alterations to traffic patterns, the CB receives a letter three months in advance of installation. If, however, the project requires more

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dramatic alterations to the streetscape, the CB receives such notification six months prior to any scheduled implementation. What typically follows shortly thereafter is a presentation to the CB’s Transportation Committee or other relevant committee at regularly scheduled committee meetings. This forum allows DOT to present the rationale behind the project and it gives the community an opportunity to voice its own concerns pertaining to the proposed changes. As decisions are normally made by the full board, committees frequently request that DOT also present to the entire CB.

As demonstrated in this report, not all CBs are familiar with this protocol. In the example of Brooklyn CB10 and proposals for bike lanes on Bay Ridge Parkway and Shore Road, the written letter and subsequent presentation to the transportation committee only induced resentment, as the community came to believe that DOT was not seeking the permission of the CB, and the project would proceed “as is” without the community’s input.92

Karen Nieves, transportation committee chair for Brooklyn CB1, is familiar with current DOT procedure. Nevertheless, she believes that it, “only adds to the mystery of what DOT is doing.”93 Upon taking her post as committee chair, Nieves was not fully aware of all DOT proposals already in circulation, as many require rapid response from the CB and others receive little follow-up on behalf of DOT.

Nieves’ sentiments highlight two deficiencies in DOT’s current protocol. First, it is unreasonable to expect a volunteer CB member to have a complete grasp of all DOT proposals, both presently and previously in circulation. Second, she underscores what other communities are already seeking: a formal review period so that each CB is able to respond to DOT proposals.94 While DOT does present projects either three or six months in advance, it remains unclear whether CBs are aware of their rights and responsibilities once that notification is in hand. Furthermore, the encounter between Brooklyn CB10 and DOT demonstrates that a community, previously unengaged with the Bicycle Program, is only further estranged through current processes that do not foster a dialogue.

Hayes Lord notes that the Bicycle Program increasingly seeks community input. “The more we can interact with [community boards] on a regular basis, the better,” Lord explains, adding

92 Interview with Brooklyn Community Board 10 Transportation Chair Doris Cruz, March 2011.
93 Interview with Brooklyn Community Board 1 Transportation Chair Karen Nieves, March 2011.
94 Interview with Queens Community Board 7 Transportation Chair Joseph Femenia, February 2011.
that DOT is always looking for opportunities to “break the ice with [community boards], and give them a sense of who we are and what we do.”\footnote{Interview with DOT Bicycle Program Director Hayes Lord, October 2010.} The methods presented here, however, often minimize direct contact and, as Karen Nieves points out, perpetuate mistrust between the community and DOT.

Benefits of a Tailored Approach

Through recent expansion of bicycle infrastructure, DOT has worked diligently to establish connectivity and lay down a record number of lane miles extending from the existing network into the outer boroughs. As described here, community backlash to this approach is often rooted in fears of gentrification and change emanating from these cores. In light of such responses, it is often assumed that these CBs are opposed outright to bicycle infrastructure in their districts. This, as we have learned, is not always the case.

There is, however, a clear and negative reaction to the citywide focus of the Bicycle Program’s growth targets. These targets can make street changes, which directly impact people’s lives, seem like they serve an abstract goal dreamed up in a Manhattan office. Using Brooklyn CB18 as an example, District 46 City Council Member Lewis Fidler defends his board’s opposition to DOT proposals to install a bike lane in Canarsie. “In a sense Canarsie is being used as nothing other than a thoroughfare to connect the bike lanes,” he explains, “which to me is nonsensical and is nonsensical to a lot of [board members].”\footnote{Interview with District 46 – City Council Member Lewis A. Fidler, February 2011.} He argues that had DOT engaged the community and sought its opinion on where bike infrastructure might be most appropriate in Canarsie, “I think they would have gotten a productive dialogue.”\footnote{Ibid. Lewis A. Fidler}

James Vacca, former community board district manager who is now District 13 City Council Member and chair of the City Council transportation committee, notes that, “to think that people will ride bicycles from the outskirts of the outer boroughs to Manhattan every day is a stretch.”\footnote{Interview with District 13 – City Council Member James Vacca, February 2011.} Fidler reinforces this claim, noting, “there is nobody who lives in Canarsie who’s going to get on a bicycle and commute to Downtown Brooklyn.”\footnote{Ibid. Lewis A. Fidler} The function of cycling in communities similar to Brooklyn CB18 and Bronx CB10 is often viewed as purely recreational, and is underestimated.
as a legitimate alternative to commuting via automobile or mass transit.

Perhaps it is this attitude that inspired Murray Lantner, a resident of Mill Basin and advocate for livable streets, to undertake his own study of commuters in southern Brooklyn. Lantner’s unscientific but revealing study surveyed bus riders, asking if they would like to see more bicycle lanes in their neighborhood. Of the respondents, 64 percent responded positively, citing safety while cycling as a primary concern. Half of these respondents claimed that they would start cycling if there was a bike lane network linked to the King’s Highway B and Q Subway station, rather than wait for the bus.99 Fidler himself concedes that if cycling infrastructure were promoted as an alternative for commuting in his district, the bike lanes would link to the Rockaway Parkway Subway station, rather than to Eastern Parkway as they do now.100

The situation in South Brooklyn, as elsewhere throughout the outer boroughs, indicates that a portion of would-be cyclists are currently both underserved by cycling infrastructure and underrepresented by their CBs. It also highlights the fact that communities previously perceived as closed to the notion of bicycle lanes may be more amenable given the opportunity to voice their opinions, and site infrastructure where it might best serve their constituency. This will require DOT to adopt a more localized approach to bicycle planning, one that looks beyond a Manhattan- or CBD-centric perspective. And it will require that community boards which have traditionally represented car owners and drivers do a better job of engaging cyclists, pedestrians and mass transit riders and planning for a safe and inclusive transportation system.

Many transportation committees currently center their efforts on maintaining what little mass-transit options remain within their districts, as a result of recent cuts to MTA Bus service.101 Taking these cuts into account, DOT must proceed in expanding the bicycle network, albeit in a manner more contextually appropriate to each neighborhood. The current transportation climate presents DOT and community boards with a prime opportunity to address local needs, while expanding the bicycle network and appealing to new and would-be cyclists.

Chicago’s Bike 2015 Plan aims to provide a bicycle network that is within one-half mile of every resident and neighborhood in the city.102 Similarly, the Los Angeles Draft Bicycle Plan 2010

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100 Ibid. Lewis A. Fidler
101 Interviews with Brooklyn Community Board 1 and Community Board 10 Transportation Chairs Karen Nieves and Doris Cruz, March 2011.
emphasizes equity in establishing its bicycle network, outlining goals to provide the majority of residents access to a bikeway within one mile of their homes and connections to their nearest transit stations.\textsuperscript{103} New York City’s \textit{Bicycle Master Plan}, however, identifies travel corridors that directly link to major destinations in its methodology for lane location. These destinations include CBDs, universities, hospitals, educational and cultural institutions, and parks. In a sense, there is no specific language linking bike lanes to people and transit in their neighborhoods. Likewise, \textit{PlaNYC 2030} and its subsequent updates aspire to complete the \textit{Bicycle Master Plan}, touting completed lane miles as a measure of accomplishment. All of these objectives hold merit, if applied at the local level. Still, many districts have yet to discover how bicycle infrastructure can benefit their communities.

\section*{Benefits of Early Involvement and Familiarity}

In cases where the affected CB has limited familiarity with the Bicycle Program or lacks a working relationship with Bicycle Program staff, failure to engage the board early in the planning process has been the cause of DOT–CB conflict. Many CBs, especially in the outer boroughs, lack prior knowledge of the \textit{Bicycle Master Plan} and have a limited understanding of the underlying transportation policy and Complete Streets, and thus react defensively. Although the \textit{Bicycle Master Plan} has existed since 1997, board members who have not encountered the plan often feel “ambushed” by the sudden presentation of a route of which they had no prior knowledge.\textsuperscript{104}

The profusion of press coverage on DOT’s Bicycle Program has also led some boards to discover the planned routes of the 1997 \textit{Bicycle Master Plan} (drawn as red dashes on DOT’s official Bike Maps) for the first time. Recently, Queens CB7 called a meeting with DOT after the District Manager, Marilyn Bitterman, “discovered” the \textit{Bicycle Master Plan} routes when she came across the bike map at a meeting at Queens Borough Hall.\textsuperscript{105} “I was very upset when I noticed the proposed bike lanes drawn across our community,” said Ms. Bitterman, who conveyed this information to her transportation committee.

On February 25th 2011, DOT met with the Queens CB7 transportation committee to discuss the status of the \textit{Bicycle Master Plan} routes. With the exception of the district manager

\textsuperscript{103} Los Angeles, DRAFT City Bike Plan, Mayor Antonio Villaraigosa, June 2010.
\textsuperscript{104} Ibid, D. Cruz
\textsuperscript{105} Interview with Queens Community Board 7 District Manager Marilyn Bitterman, January 2011.
and chair; this was the first time that any of the members had seen the map, and they spent the first several minutes of the meeting looking it over with dismay before going around the room taking turns criticizing particular routes. “It seemed like they didn’t really know the roads they were placing [the lanes] on,” said Transportation Committee Chair Joseph Femenia in a later interview.  

The actions of DOT staff in response to this initial negative response illustrate that DOT is already learning from its past mistakes in CB engagement. Rather than aggressively defend the Bicycle Master Plan and insist that the lanes could be installed without board approval, Queens Borough Commissioner Maura McCarthy pledged to the committee, “We have no plans to install lanes in your district anytime during the coming year… We used to not ask the CBs at all but now I always come to the CB, show the plans.”

With this pledge, the tone of the meeting became much more relaxed and transitioned into an explanatory discussion about the policy underlying DOT’s Bicycle Program. When asked by a

Figure 19: Queens CB7 transportation committee meets with DOT Bicycle Program staff and Queens Borough Commissioner Maura McCarthy to discuss Master Plan routes. February 24, 2011.  
Image: Brian Paul

106 Interview with Queens Community Board 7 Transportation Committee Chair Joseph Femenia, February 2011.
committee member what DOT’s “end game” was, Josh Benson, director of bicycle and pedestrian programs, explained: “Our goal is to move people and goods safely and efficiently. Part of that is providing bicycling as an option. In the neighborhoods where we have lanes, more and more people are choosing to bike, this removes some pressure from traffic and transit.” Committee Chair Femenia agreed that cycling “should be an option,” and noted the rising price of gasoline as one reason for exploring it. While other transportation committee members remained skeptical, this meeting seemed to open the door for further dialogue between DOT and the board on bike lanes in Queens CB7.

The second reason why this meeting with Queens CB7 was positive and productive was the presence of Queens Borough Commissioner Maura McCarthy, a Flushing native. Community Board members appreciate dealing with someone they can relate to and have an established relationship with. This is especially true for the outer boroughs, where CBs often react on the assumption that any “bureaucrat” from Manhattan automatically does not understand what is good for Queens or Brooklyn. The Queens CB7 transportation members had a good rapport with McCarthy throughout the meeting. When one transportation committee member stated he had “never seen” a cyclist on the Utopia Parkway bike lane, Ms. McCarthy was right there.
to personally testify to using the bike lane herself. Ms. McCarthy also stayed after the meeting was over to hear board members’ individual concerns about other transportation issues in the neighborhood.

The advantages of having a familiar face present in the process were also evident in DOT’s highly successful Jackson Heights street redesign. Willa Ng, the leader of community outreach on the project, participated in so many neighborhood events that she began to find herself recognized on the streets. Despite not being from the neighborhood, Ms. Ng was able to become something of a local through repeated interaction. “You just have to be there,” she says with regard to establishing a relationship with the community. Combined with prompt responses to comments on the project website message board, Ms. Ng’s presence helped secure community support for the project.  

Education: Essential for the Community and the Community Board

The mentality of Queens is ‘I want to go to a store, I want to park right in front of the store, I’m not willing to walk five, six, seven blocks.’ I don’t know how you overcome that mindset …I think there has to be more education and outreach on the bike issues.

— Marilyn Bitterman, Queens CB7 District Manager

The need and desire for more education regarding transportation and bicycle policy—both for the CB itself and for the general public—was expressed by each of the CB members we interviewed, and is also recognized by DOT.

As mentioned earlier, CB members, the general public, and also the press often lack an understanding of transportation policy, especially the core idea that the bike lane network is intended to provide a safe, convenient, and healthy alternative to driving that will help remove cars from the road and reduce congestion. Many individuals assume that the presence of bicycle lanes will increase traffic. While Copenhagen and Amsterdam are often cited as examples where this policy has worked, it might be a better idea to point to the success of these policies in

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107 Interview with DOT staffers Michael Amabile and Willa Ng, March 2011
American cities. In Minneapolis and Chicago, cycling currently enjoys a higher mode share than it does in New York, and the number of cyclists continues to rise.\textsuperscript{109} These cities, both of which have more inclement climates than New York, could be cited as examples of successful cycling programs close to home.

It is also important to demonstrate the prevalence of cycling in New York. When CBs hostile to cycling are presented with proposals for lanes in their districts, they often respond with the allegation that “nobody here bikes.”\textsuperscript{110} While this critique is persistent, it is rarely true. The foremost source of this misperception is the demographic and class differences between the CBs and the cyclists in the neighborhoods that they represent. In outer borough neighborhoods, the cycling population is primarily composed of working class people, often recent immigrants. The CB, meanwhile, tends to consist of older and wealthier American-born residents, many of whom own homes and drive cars.\textsuperscript{111} The CB members do not share social or professional circles with the cyclists of their districts, leading to a situation in which the bike riders become “invisible” to the CB.\textsuperscript{112} This misrepresentation of the need for bicycle infrastructure in outer borough community districts has a pernicious impact on the safety of the numerous riders in these areas.

It is apparent from our research that many of the New Yorkers who do not currently cycle do not realize the advantages that cycling offers. In Canarsie, Flushing, and the northeast Bronx for example, nearly half of all residents commute by public transit rather than by car. Depending on the particular neighborhood within these districts, anywhere from 30 to 42 percent of households do not own a car at all. Most commuters do not actually commute to Manhattan, but rather work within their home borough.\textsuperscript{113} For short trips of three miles or less within the outer boroughs, cycling holds a strong advantage over other modes, especially in light of recent cuts to bus service in many of these communities, where cycling to transit stops can replace bus service.

\textsuperscript{110} Ibid. D. Cruz, L. Fuller
\textsuperscript{111} Interviews with unidentified, non-motorized transportation expert December 2010, Transportation Alternatives Committee Chair and Queens CB8 resident Jessame Hannus, March 16, 2011, and Interview with Lacey Tauber of Neighbors Allied for Good Growth, March 11, 2011.
\textsuperscript{113} American Community Survey, 2005-2009.
Recommendations

Through our research we have concluded that community participation is vital to the prolonged permanence and success of New York’s bicycle network. What follows are recommendations categorized into four sections, including: strategies to establish collaborative procedure, revising goals and objectives, strategies for constructive public outreach, and finally strategies for effective dialogue at community board meetings. These tools will aid in rebuilding and developing CB–DOT relationships, foster real community participation, and allow for the continued success of the Bicycle Program.

Strategies to Establish Collaborative Procedure

1. Support CB transportation committees with time, information, and technical assistance.

   In order for transportation committees to be as effective as possible, they require support from DOT and other city agencies. This is especially true with respect to bicycle infrastructure, about which there exist many misconceptions (including ideas about who cycles, how it impacts traffic, and the primacy of free on-street parking). The Department of Transportation could provide transportation committees with policy education by organizing workshops to identify and discuss local transportation and traffic issues in an informal format. Agency staff could discuss traffic demand management strategies within this local context and provide educational literature to boards. Equally important, transportation committees should be chaired by individuals who support the idea that all forms of transportation should have access to city streets, including pedestrians and cyclists. Safeguards must be put in place to ensure that committee chairs do not possess conflicts of interest that unfairly favor auto transit. Committee chairs should not, for example, be the owners of parking garages or commercial vehicle fleets.
2. **Establish a working relationship with CBs.**

   The DOT Bicycle Program’s experience with Queens CB7 contrasts starkly with the hostility seen at Brooklyn CBs 10 and 18. DOT staff met with Queens CB7 to begin to develop a relationship before proposing a project. In this case, the meeting was called by the CB rather than by DOT, again illustrating the importance of an active transportation committee. If, however, DOT is serious about expanding bike lanes far into the outer boroughs, such explanatory, relationship-building meetings must become a matter of regular policy and should be initiated by DOT for all CBs.

   This kind of meeting is the first step towards actively incorporating the CBs into the process. At this Queens CB7 meeting, DOT discussed the Bicycle Program’s underlying policies, taking steps towards educating committee members without being overly pedantic. Having a meeting with the CB without a particular lane proposal at stake allowed for a more open and honest conversation than usual. Such meetings could be even more productive if DOT planned them with this precise intent in mind.

3. **Establish a public and standardized process: undertake one uniform notification process and instate a formalized review process.**

   A written notice of any proposed bicycle project should be issued six months in advance of scheduled installation. This notification should be the first step in seeking community input in the design process, and make clear that DOT seeks such involvement. The present standards for the six-month procedure would follow, allowing ample time for community feedback and discussion, and for any amendments to be made to the proposal.

   Included in this preliminary announcement, we recommend that DOT specify that the CB assume a 60-day review of the proposal before presenting the measure to be voted on by the full board. This timeframe would allow the CB to generate community feedback, but would also grant DOT the opportunity to make a formal presentation to the community before it is voted down outright. At the close of the 60 days, it is also recommended that DOT again reach out to the CB to assess the community’s progress and schedule a formal presentation if one
has not already occurred. This 60-day cycle is appropriate for CBs, which meet on a monthly basis. This continued contact on behalf of DOT would also ensure follow-through and relieve the already overburdened CBs of the task. The early notification may carry the additional benefit of making the CB more receptive to the implementation of the plan, as it will feel ownership over the process.114

Revising Goals and Objectives

4. Develop localized bicycle networks and commensurate growth targets within each neighborhood.

The bicycle network has expanded out from New York’s largest CBDs and will continue to grow if DOT recognizes that these hubs also exist in outer-borough communities. The Bicycle Program should prioritize those destinations and transit hubs within the immediate CBD to develop a bike network that is within reach of all area residents. Once this local infrastructure is established it can then be linked to the greater network.

The department should continue to implement Complete Streets with sensitivity to local transportation and safety concerns. Rather than emphasize the citywide growth targets outlined in PlaNYC 2030, DOT

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114 Ibid. D. Cruz, K. Nieves

Figure 21: An example of what localized networks might look like. Map: Jennifer Harris-Hernandez
should establish integrated transportation growth targets for each neighborhood in which it intends to site infrastructure. By establishing localized networks before seeking linkages to the citywide map, this approach should provide DOT with the opportunity to present each project’s potential to serve the community in which it is located, rather than its role in meeting citywide quotas.

5. Develop an integrated transportation plan for each neighborhood that provides the context for increased bicycle infrastructure.

We have discussed the importance of the Complete Streets policy framework for building an inclusive transportation planning process. Complete Streets guidelines account for the needs of all street users, and DOT does well to emphasize this policy. Beyond design, however, integrated transportation planning should be the context for every bicycle infrastructure project. Community boards have complained that DOT ignores longstanding transportation needs in their communities in the interest of building bicycle projects.115 We suggest that DOT present its cycling projects in the context of multimodal plans for improvement. Bicycle projects will be more palatable to CBs as part of comprehensive transportation plans that serve the needs of all community residents. Providing a Complete Streets context was a major part of the success of the Jackson Heights transportation improvement project.116 The CB that rejects a bike lane may be more amenable to a community involvement process that presents Complete Streets improvements, with attention paid to the needs of pedestrians, drivers, transit users and cyclists.117

6. Bring a Familiar Face: one who knows local conditions, streets, and neighbors.

As discussed here, CB members value local opinion. The most fitting example of this is demonstrated by the success of the Jackson Heights visioning project, and the work of DOT staffer and Queens “local” Willa Ng. Likewise, Borough Commissioner Maura McCarthy in front of Queens CB7 proves that having someone from DOT intensively involved with the neighborhood creates a level

115 Ibid. D. Cruz
116 Ibid. M. Amabile and W. Ng
117 Ibid.
of trust that does not exist when staffers present a proposal at one or two board meetings.

**Strategies for Constructive Public Outreach**

7. **Foster Positive Promotion:** Begin a positive public service advertising campaign on the efficiency and health benefits of cycling.

   It’s like a big race out there for everybody. We need to teach people the right thing to do, the safe thing to do. You know the mayor puts out all these ads. The fact of the matter is that these public notices, even if you’re not really paying attention, after a while they input on your [sic] brain and it’s something you think about. And this is the kind of stuff you have to have when more people are riding bikes, show the bicycle rider how you can get hurt, show the driver how the car can get damaged…

   – Queens CB7 Transportation Committee Chair Joseph Femenia

While campaigns to educate the public on road rules and etiquette are necessary and effective, positive promotion of the benefits of cycling could prove to be more persuasive. DOT’s current “Don’t be a Jerk” campaign places the burden of responsible road use upon the shoulders of cyclists, when cyclists, drivers, and pedestrians should all be held accountable. This tactic has only served to offend the Bicycle Program’s strongest allies.

Advertisements boasting the health and environmental benefits of cycling, could inform the public while boosting its public image. One such example is Kaiser Permanente’s “Thrive” campaign, which is intended to improve customer health and details simple lifestyle changes, which are both good for one’s health and for the environment. A subway car could be plastered with advertisements informing New Yorkers of the time saved and calories burned while riding a bike to the subway. Queens CB7 Transportation Chair Femenia believes this type of

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118 Interview with Queens Community Board 7 Transportation Committee Chair Joseph Femenia, February 2011.
campaign would also be effective for teaching cyclists and drivers how to share the road.

8. **Create an Integrated Travel and Transportation Education Program.**

One such integrative strategy can be found in TravelSmart, developed in Perth, Australia. TravelSmart is a targeted marketing approach in which specific information regarding environmental issues, access to public transit, and bicycle lanes is tailored to, and distributed at the neighborhood level. Specific strategies include distributing wallet-sized bus timetables to homes in the catchment area, distributing local maps of bike-route access and pedestrian friendly walking routes, and providing free “test tickets” to try out transit. More than a third of the population of greater Perth has been visited by a TravelSmart officer “and provided with personalized advice about how to use cars less and become more oriented towards transit, biking, and walking.” Analyses of the results show that 15 percent of those visited by a TravelSmart officer become measurably less car-dependent. This 15 percent then serve as an example for the rest of the population leading to a chain reaction of behavioral change, hopefully followed by cultural change.

9. **Demonstrate Local Need for Bicycle Infrastructure.**

The misconception that certain neighborhoods are devoid of cyclists is an impediment to building necessary bicycle infrastructure. In order to demonstrate that there are in fact local needs for such infrastructure, DOT should implement a methodology for measuring the numbers of cyclists in a given area. This report contains one such methodology for identifying undercounted cyclists in those outer borough neighborhoods where the CBs may not recognize the prevalence of cycling. Relying on surveys and coordination with community based organizations,

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the methodology uses outreach techniques in multiple languages to account for this underserved population, which most often consists of new immigrant, lower-income, or working cyclists. This methodology can be used to counter claims that new bicycle infrastructure serves a non-existent cycling population at the expense of the community district’s driving majority.

10. **Invite the CB to Participate in the Data Collection Process.**

Data on cycling in their district will only be credible in the eyes of a CB if it is collected properly. An agency claiming to know a community district better than the CB’s own members is bound to arouse misgivings. With that in mind, we recommend that CBs be notified of data collection occurring in their district, and be invited to participate. As already outlined here, community involvement from the very beginning will encourage community buy-in, and have the added benefit of producing data that the CB will be less suspicious of.

11. **Identify CBOs Able to Speak for Underserved Cyclists.**

First and foremost, DOT should identify cyclists that may not currently have a significant voice within their community districts. The Bicycle Program has very effectively partnered with Transportation Alternatives to accomplish many of its community outreach goals. In areas such as eastern Queens and southern Brooklyn, however; TA’s organizing capacity is not as strong. Recent immigrants who make up a large percentage of cyclists in Queens and the Bronx are often suspicious of any government authority, making them more difficult for DOT to reach. In order to connect with these cyclists and bring them infrastructure, the DOT must work with CBOs that have standing relationships with these immigrant populations. Only those organizations already trusted within the community will be able to effectively marshal the support that the DOT needs to realize cycling infrastructure.

Through the methodology presented earlier, we have identified and compiled a sample list of neighborhood organizations working in western Queens that are equipped to assume outreach to new immigrants and other cyclists not included in the major advocacy community or marginalized in local politics (see Appendix III). In areas where TA does not have the capacity for extended outreach, these
organizations will be able to activate support at community meetings. Combined with the engagement of elected officials, support from these groups can help ensure that DOT projects are politically sustainable.

The project in Jackson Heights owes much of its success to the Community Advisory Committee composed of neighborhood groups, merchants, and elected officials. The groups ensured community involvement and feedback, while the elected officials helped to interpret ideas positively so they could gain acceptance. These officials were able to function as ambassadors to the CB, smoothing over what had proven to be a difficult relationship on many projects. The combination of support from local officials and involvement of neighborhood cycling advocates will be crucial to gaining acceptance of future bicycle projects.\textsuperscript{122}

\textbf{12. Bring Allies to Community Board Meetings.}

Community boards are intended to represent the needs of the neighborhood in city government. This gives them an obligation to serve all members of their community, including those who ride bicycles. Joseph Femenia, the transportation committee chair at Queens CB7, a board that has not historically been enthusiastic about bike lanes, expressed interest in hearing from local cyclists.\textsuperscript{123} When meeting with CBs to discuss bicycle projects, DOT should encourage cyclists from the neighborhood to come to the meeting to show their support. Much of the backlash against bike projects stems from the idea that “bureaucrats” and “yuppies” from outside the neighborhood are the only people who champion bicycle infrastructure.\textsuperscript{124} If such support comes from cyclists who live within the community district, the CB is likely to be much more receptive.

\begin{flushright}
\textsuperscript{122} Ibid. M. Amabile and W. Ng. \\
\textsuperscript{123} Ibid Joseph Femenia \\
\textsuperscript{124} Interview with Caroline Samponaro of Transportation Alternatives, November 12, 2010.
\end{flushright}
Cycling in New York has come a long way. More and more people are recognizing the health and environmental benefits, as well as the recreational satisfaction that cycling provides. As we have discussed, activists, both from within and outside of government, have played a key role in promoting the growth of bicycle policies and encouraging cycling habits. While a very vocal contingent expressing anti-bicycle sentiment has emerged, this backlash should not be viewed as the final referendum on the work DOT has completed towards cultivating a greater bicycle culture. Our research and methodology demonstrate that there is widespread support for DOT’s efforts. Sustaining such support, however, requires communication and developing new ways for cyclists to realize their aspirations for a more just transportation network. Building more open political processes to accomplish these goals will prove that the backlash is a fleeting phenomenon, surmountable by remaining true to the needs of pedestrians, cyclists and drivers in every corner of New York City.

The methodology that we have laid out is one way for DOT to systematically approach the neighborhoods of New York to better understand what bicycle infrastructure needs they have. We believe that DOT now has a unique opportunity to implement such a methodology. Doing so could shift the debate from whether DOT is imposing its will on resistant neighborhoods,
to how DOT can most effectively plan for the needs of those underserved by transportation infrastructure; in this case, cyclists. While great work has already been accomplished in the CBDs of Manhattan and northwest Brooklyn, now is the time for DOT to prove that it is a department that serves all New Yorkers, regardless of what class, race or gender they are, or what area of the city they live in. This strategy could undermine the most vocal—though most often the minority—of critics who argue that no cyclists exist in their neighborhoods. It will be difficult to contest a rigorous survey that provides detailed statistics on the nature of current infrastructure, who the cyclists are, where and why they cycle, and what kinds of infrastructure they need.

Implementing this methodology will require DOT to remain receptive to understanding the needs of cyclists. A focused and precise awareness of these needs will yield the most just results. For this reason, we strongly support an approach that follows the steps we have laid out: first, a rough count of bicycles by way of windshield surveys and point checks to attain a general knowledge of a given neighborhood; second, implementation of a comprehensive survey covering the entire area in question; and third, a rigorous analysis of the results with an eye towards planning for the needs that are uncovered. Application of such a methodology will reinforce DOT’s efforts to develop a just and robust bicycle network.

Community boards are the key mechanism for generating broad, community-based support for bicycle infrastructure. The Bicycle Program has made significant efforts to more fully engage communities in bicycle planning. Unclear and inconsistent protocol, however, work to further suspicion of DOT’s intentions, especially in districts previously unengaged by the Bicycle Program. Establishing clear and defined procedures to encourage communication and collaboration between DOT and community boards is the first step.

Here, we have looked to the Bicycle Master Plan and Complete Streets policy to provide the framework for establishing these communicative processes. The bicycle network as it exists in the Bicycle Master Plan may not be relevant to each community; however, the general principals of the plan and Complete Streets policy should not be discounted, as they provide the most compelling justification for safe and equitable streets. As the bicycle network expands, DOT must recognize that outer borough neighborhoods require bicycle infrastructure for reasons unique to them. Just as our new methodology provides for a more precise and contextually accurate depiction of cyclists’ needs, allowing for more inclusive and comprehensive community input at the community level will generate contextually appropriate, and valuable plans for each neighborhood.
The Department of Transportation Bicycle Program now has the unique opportunity to lead democratically inclusive bicycle planning. Working with cyclists most in need will enhance current plans and give rise to even greater visions for the future. While goals to create a fully integrated network throughout the city are bold, the application of such goals should be flexible and ensure that the needs of New York City’s most vulnerable inform our policies and our process.
Facilitators: Jennifer Harris-Hernandez, Maurizio Leandro and Pengfei Li

Participants:

- 50-years-old, Female, Malaysian, Self-employed (in Chinese focus group)
- “Alex”, 45-years-old, Male, White, Professor
- “Rita”, 36-years-old, Female, Black, Assistant File Clerk,
- “Walt” 55-years-old, Male, Black,
- “Ted”, 57-years-old, Male, White, Tour Guide

Questions:

1. Where and how often do you bike?

WALT

Walt recently started to bike again for fitness and to become healthier. He found out about the focus group from the library.

He rides on 164th bike lane. It is great because vehicles give right of way. There should be more bike lanes. He heard about the idea of the bike kiosks (bike-share program) and he thinks that would encourage a lot more people to bike.

When he was a kid, he used to go on Linden Boulevard to Ocean Parkway and then to Coney Island.

He also thinks that bike messengers give biking a bad name.

He said, “I choose routes with safety in mind. I give myself as much of a cushion as possible.”

ALEX

He bikes everywhere (except when it rains, as it later turns out). He found about the focus
group from a flyer one of the studio members handed to him. He bikes to the Upper West Side over the Tri-Borough Bridge and to Yonkers.

He bikes on the Triborough bridge, in Queens, in downtown Manhattan, but never to Brooklyn. He loves the bridges. He picks his route based on streets and places he has been before and based on the smoothness of the ride and the view. He prefers views in nice parts of towns, next to rivers or from bridges.

He might follow suggested routes on the map, but that is not an important indication for him. He chooses routes by the smoothness of the roadways and the views. Sometimes he uses the map for bridge entrances. Bridges with entrances that are hard to find are the 59th Street Bridge, Henry Hudson and Wards Island.

RITA

Rita isn’t biking now but she used to bike for her job in the early 1990s. Her boyfriend was a bike entrepreneur in Upper Manhattan. Biking was a big part of her life. She knew how to work the streets in order to sell mix tapes.

She feels there is no respect for riders. Now, she is looking at biking as an outsider. She thinks there should be more laws to protect cyclists and that identify you as a vehicle, but not a car. She likes bike paths like on the west side highway but thinks they should be more easily accessible. About the west side bike path she said, “I don’t know how to get there, especially the northern part by 145th Street to 59th Street I think.”

She said, “I went where the money went. There should be more bike paths in parks for recreation.”

2. What is difficult?

WALT

It is difficult to figure out the bike map – even if the map tells you how to get on the bridges, in reality, it is very difficult to figure out. They are poorly marked, and there are many obscure entryways. 59th bridge is difficult, Henry Hudson bridge is difficult. You get lost. It is also not clear how to continue your trip beyond the bridge, how to connect to the bikeway or walkway.
There is no signage on Randall’s Island or Ward’s Island. It is hard to take the RFK into Manhattan. From Astoria it’s easy but then at Randall’s Island the signs don’t explain. We need more signage. It is hard to find the pedestrian bridge is not good either.

Getting into Flushing is difficult on the Roosevelt Avenue Bridge. I only use it sometimes.

Usually I go on Northern Boulevard which is bad but it used to be worse. There is a lot of debris, you have to dodge people throwing garbage out their cars, cars go super fast, the sidewalk is not level, it is easy to get lost.

[Jennifer asked, “Why do you use it if it is so bad?”]

That is my only option – I live close to Northern Boulevard. All the other options are a big detour.

Northern Boulevard is the most convenient and the most dangerous at the same time.

Bloomberg is all talk and no action. There should be lobbyists. Bike companies could do it. There should be tax breaks for going green.

RITA

If Bloomberg promotes biking so much why don’t they do something about these conditions?

ALEX

He is doing a lot. I have noticed changes in Manhattan. There are not many changes where I often bike.

RITA

But it is not enough.

WALT

I have friends in the Bronx and there is no way for me to get there from Queens. They are renovating the Whitestone Bridge – why can’t they widen the bridge to build a pedestrian and bike path? They should put bikes into the plans. We could ride on the new emergency road.
3. Where are the most dangerous places you bike?

They show some places where riding is particularly dangerous (see maps).

WALT

All of Queens Boulevard and on Northern Boulevard. Those would be fantastic bike lanes. They would be good for outings, too, as it leads to Suffolk County.

City Field, Main Street and Northern Boulevard bridge are bad. Also getting out of Flushing Corona Park because everywhere I go I go onto the freeway and I get lost.

I would go very far away to use a bike and pedestrian only bridge.

TED

Kissena Corridor which you used to be able to take all the way to Alley Pond. There used to be a path through the park but now it is closed because the Botanical Garden charge for entrance now. There used to be a great network, but it doesn’t exist anymore. Kissena wasn’t well kept but now they cleaned parks and the route nicely. You can go under the expressway now. There’s a great route on Little Neck Bay. On Utopia Parkway there’s a sign that says “Caution Use Sidewalk.”

[Pointing to the map] I do not know what these orange lines mean.

Alley Pond Park is treacherous. We used to use Douglaston. We always tried to figure out how to get from Throgs Neck and Ft. Totten to College Point. It is a lot more dangerous on city streets.

When you get to Willow Park there’s nothing.

4. Where should we improve?

Along Long Island Expressway.

There is nothing in the Willow Park area.

Queens Boulevard is the boulevard of the death.
5. Have you been hit by a car or a car door?

ALEX

I have almost been hit by a car door (recount story).

Cyclists are considered second-class citizens. Drivers don't abide by rules.

73rd Avenue.

WALT

Automobile, bus and truck drivers don’t care.

ALEX

Bus drivers have always been good to me.

WALT

You can walk on the Bronx Whitestone Bridge. All bridges should have pedestrian paths.

Queensborough Bridge is iffy. Sometimes it has traffic on the bike path.

6. What kind of infrastructure would you like?

Where would you like to park your bike? Everybody thinks bike racks are the best.

Questions: is there a fine if you lock your bike to a parking meter?

WALT

Covered bike parking is nice

ALEX

I don’t bike when it rains, it is not necessary.

WALT

Bike racks would encourage people to ride their bikes.
It would be nice to have bike parking near subway stations to Manhattan – it would help eliminate a bus ride to the train which would be a drop of 5-10 minutes.

Bike kiosk is a very good idea. They should get the private sector to invest in the bike kiosks. Bloomberg has so many good contacts. He should give them inducements like on the subway. If it were free more people would bike. They could offset costs through advertising.

[Jennifer asked, “Would you pay to rent a bike?”]

I thought it was going to be free.

They have to make biking sexy. People ride it because it is green conscious. Kids should be encouraged. For them it is no problem; it’s their only way to get around.

People will bike if you make it convenient for them. If you make it hard for them, they won’t bike.

RITA

They would if it were convenient.

WALT

Class 2 bike lanes are needed in New York. Sharrows are not too cool, they don’t do anything for me. I also like parking protected lanes.

ALEX

I will ride anywhere.

Sharrows seem to be arbitrary, they don’t encourage me to ride there.

I am ambivalent about the parking protected bike lane because the go next to pedestrians. I am more afraid of pedestrians than cars. He mistrusts pedestrians more than drivers because they are less predictable.

The parking protected on Broadway is useless because it is full of pedestrians.

[Car free streets?]
They don't like the idea. Car free streets are for hanging out, not for going somewhere. It’s hard to zig in and out of pedestrians.

RITA

I likes the bike box – tells me where my place is, that I have a place on the street. They have their place, I have mine.

I like the greenway and the sign that says “3 feet, it is the law.” It provides safety for drivers and bikers.

There should be more signage – everybody emphasizes this.

[Shared bus and bike lane?]

WALT

Bus drivers are impatient.

ALEX

I would feel safe from pedestrians stopping there without looking but it is not fun to get stuck behind a bus.

Bus and bike is a good use of space.

Class two seems the most appropriate for New York for all three of them.

RITA

Tina also likes the raised bike lanes.

ALEX = most experience, ride everywhere

WALT = started again, some experience

RITA = used to bike, no current experience
7. How could we slow cars down?

WALT

Law enforcement is not enough. There should be more education and not just giving out tickets. It’s good for revenue for the city.

I can’t stand bikes on sidewalks – delivery people bike on the sidewalk.

RITA

We need some kind of on the side walk, more law enforcement on pedestrians and cars.

ALEX

We need more law enforcement on the really bad bicyclists.

RITA

But who are the bad bicyclists?

ALEX

The run red lights – they should get a ticket.

Every serious biker I know has been in court from a ticket. Delivery people break the rules the most.

Final suggestions:

RITA

Cyclists are second class citizens.

There aren’t enough laws to protect them.

WALT

The map should be more accessible for cyclists (e.g., have them in the subway, information booths, kiosks in the parks.)

Go green – go Hollywood!
Bloomberg should make a PSA to make it sexy to bike.

“I need an incentive besides my sore bones”

Too much focus on Manhattan – outer boroughs are forgotten – Bloomberg is a mayor for all of us, not only of Manhattan.

Get federal monies and greatns.

A bike garage would cost too much if it were like a car.

Public Advocate’s Office could be the green commissioner.

There are few connections to greenways.

The bike kiosk idea is a great one. I could ride from Queens to Manhattan for free and just give them a copy of my drivers license or something. They could figure it out.

ALEX

Talk to the anti-bike protestors.

Access to Staten Island.
Hi. We are a group of graduate students from Hunter College in Manhattan. We would like you to fill out this survey in the language most comfortable for you. We have included a free paid envelope for you to drop into the mail with the completed survey. IT IS FREE!!! We hope to help you enjoy better cycling in this community and by filling out this survey you can help us do so.

Thank You!!

Figure 22: 2011 Complete Survey Cover
1. Why do you ride a bicycle? (check ALL that apply)
   - Recreation/exercise
   - Errands/Shopping
   - Commuting (Work/School)
   - For Work (Messenger/Delivery)
   - Other

2. How often do you ride a bicycle? (check ONE)
   - Daily
   - A few times a week
   - Less than once a week

3. How far is your typical trip? _______ Minutes

4. Do you travel by bike to the following destinations? (check ALL that apply)
   - School
   - Bus stop/ LIRR / Subway
   - Work
   - Stores
   - Parks
   - Other

5. What is your main type of transportation when not using a bike?
   - Drive alone in a car
   - Subway
   - Bus
   - Walk
   - Other (e.g. car service, family or friends car)

6. Why do you choose to travel by bike over other options? (check ALL that apply)
   - Less expensive than taking transit or driving a car
   - Faster than transit or car
   - Health benefits
   - Environmental friendliness
   - Convenience
   - Work requirements
   - It is my only option
   - Easier to park near the train than with a car
   - Other

7. How do you choose your route? (check ALL that apply)
   - Fastest or most direct
   - Marked or protected bike lane
   - Less traffic
   - Road width
   - Other cyclists use this route
   - Other

8. ¿Cómo viaja cuando no anda en bicicleta? (Marque una o más casillas)
   - Solo en auto
   - En metro
   - En autobús
   - Caminando
   - Otros (taxi, auto de un amigo o familiar)

9. ¿Por qué anda usted en bicicleta? (Marque una o más casillas)
   - Recreación/Ejercicio
   - Trabajo como mensajero en bicicleta/ Bicimensajero
   - Otras _______________________________________________

10. ¿Cómo viaja cuando no anda en bicicleta? (Marque una o más casillas)
    - Solo en auto
    - En metro
    - En autobús
    - Caminando
    - Otros (taxi, auto de un amigo o familiar)

11. ¿Viaja en bicicleta a los siguientes lugares? (Marque una o más casillas)
    - A la escuela
    - Al trabajo
    - A las paradas de autobús/ LIRR/ o metro
    - A los parques
    - Other

12. ¿Donde prefiere estacionar su bicicleta? (Marque una o más casillas)
    - En barra para aparcar bicis
    - En las señales de tráfico/ los letreros/ los carteles
    - En la ciudad/ ciudad
del trabajo
    - En las paradas/ estaciones/ parques
    - Other

13. ¿Si hay mas parqueos para bicicletas, usted usaría mas u other? (check ALL that apply)
    - Sí ___ No ___

14. ¿Sería más fácil usar la bicicleta si hubiera lo siguiente? (check ALL that apply)
    - Painted bicycle lanes on the streets
    - More bike racks for parking
    - Lower speed limits for cars
    - Other (e.g. car service, family or friends car)

15. What bike safety features do you use? (check ALL that apply)
    - Helmet
    - Lights
    - Other

16. Have you ever been hit by a car door or an automobile? (check ALL that apply)
    - Car door:  Yes: ___ No: ___ If yes, how many times? ___
    - Automobile: Yes: ___ No: ___ If yes, how many times? ___

17. How old are you? ___________________________
8. Where do you prefer to park your bike? (check ALL that apply)
- Bike racks
- Signposts
- Parking meters
- Trees
- Indoors
- Other

9. What neighborhood/zip code do you travel?
Starting neighborhood/Zip Code
Ending neighborhood/Zip Code

10. What location is the most dangerous part of your cycling route?

11. Where do you ride your bike? (check ALL that apply)
- Bike Lane
- Sidewalk
- Center of the road
- Edge of the road
- Parks
- Other

12. If bike lanes were available, would you ride more? Yes ___ No ___

13. If bike racks were available, would you ride more? Yes ___ No ___

14. Would the following improvements make riding your bike easier? (check ALL that apply)
- Painted bicycle lanes on the streets
- Physically separated bicycle lanes on the streets
- More bike racks for parking
- Lower speed limits for cars
- Bicycle arrows on the street
- Other

15. What bike safety features do you use? (check ALL that apply)
- Helmet
- Lights
- Bell
- Awareness of cycling rules
- Other

16. Do you see the police enforcing bike rules? Yes ___ No ___

17. Have you ever been hit by a car door or an automobile?
Car door: Yes: ___ No: ___ If yes, how many times? ___
Automobile: Yes: ___ No: ___ If yes, how many times? ___

18. How old are you?

19. What is your gender?

20. What ethnicity are you?

Thank you for your time! PLEASE TURN OVER FOR THE MAP
Please return the form in the pre-addressed envelope by April 4, 2011.

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8. ¿Donde prefiere estacionar su bicicleta? (Marque una o más casillas)
- En barra para aparcarse bicis
- En las señales de tráfico/ los letreros/ los carteles
- Parquemetros
- En los Árboles
- En el centro de los edificios
- Otra

9. ¿En qué lugar o código postal anda en bicicleta?
Empleo ______________ Termín ______________

10. ¿Qué parte de su ruta en bicicleta es las más peligrosa?

11. ¿Dónde anda usted en bicicleta? (Marque una o más casillas)
- En ciclo via/ carril bici
- En la acera
- En el centro de la calle
- En el borde de calle
- En el parque
- Otras

12. ¿Si hay un ciclo via, usted usaría más su bicicleta?
Sí: ___ No: ___

13. ¿Si hay parques para bicicletas, usted usaría mas su bicicleta?
Sí: ___ No: ___

14. ¿Sería más fácil usar la bicicleta si hubiera lo siguiente? (Marque una o más casillas)
- Ciclovías pintadas en las calles
- Ciclovías separadas del tráfico
- Mas estacionamiento para bicicletas
- Una velocidad reducido para autos
- Flechas pintadas en las calles
- Otros

15. ¿Qué medidas de seguridad usa? (Marque una o más casillas)
- Casco
- Luces
- Campana
- Conocimiento de las reglas para ciclistas
- Otros

16. ¿Usted ha observado que la policía implementa las reglas para bicicletas? Sí: ___ No: ___

17. ¿Alguna vez usted ha sido golpeado por un automóvil o por la puerta de un automóvil?
Puerta: Sí: ___ No: ___ En caso afirmativo, ¿cuántas veces? ___
Auto: Sí: ___ No: ___ En caso afirmativo, ¿cuántas veces? ___

18. ¿Cuántos años tienes?

19. ¿Cuál es su género?

20. ¿Cuál es su origen étnico?

---

Translation:
100% ANONYMOUS and Confidential. No names or any other private information will be collected. The purpose of this survey is to increase knowledge and understanding of bicycle use in Flushing and Corona and surrounding communities. The results of this survey are being used to make cycling better for cycling. This survey is being conducted by a team of graduate students from Hunter College. For more information about the survey, email BikeStudyNYC@gmail.com.

1. Why do you ride a bicycle? (check ALL that apply)

2. How often do you ride your bike? Please select one

3. What is your typical bicycle trip? _____ Minutes

4. Do you travel by bike to the following destinations? (check ALL that apply)

5. How do you travel when you're not riding a bike? Other ________________________________

6. Why do you choose to ride a bicycle instead of other options? Other (Examples: car service, family or friends car, work demand, where there is less traffic).

7. What road features do you choose? (Please check all that apply)

8. Which part of your bicycle route is the most dangerous?

9. Where do you ride your bike? (check ALL that apply)

10. Would the following improvements make it easier to ride your bike? (check ALL that apply)

11. Have you ever been hit by a car door or an automobile? Car door: Yes: ___ No: ___ If yes, how many times? ___
Automobile: Yes: ___ No: ___ If yes, how many times? ___

12. How old are you?

13. What is your gender?

14. What is your ethnicity?

Thank you for your time! Return the form in the pre-addressed envelope by April 4, 2011.
Please trace with a pen or pencil where you bike and/or will bike today. Use the space below to add more information about your bike route. Also feel free to draw beyond the map if your route extends off the map.

Please turn over for survey.

Por favor, traza con una pluma o un lápiz en la que la bicicleta y/o el día de hoy bicicleta. Utilice el siguiente espacio para agregar más información sobre su ruta en bicicleta. También síntase libre para dibujar el mapa más allá de si la ruta se extiende fuera del mapa. Favor de dar vuelta de la encuesta.

Figure 24: Map on the reverse side of the 2011 Complete Survey
Please trace with a pen or pencil where you bike and/or will bike today. Use the space below to add more information about your bike route. Also feel free to draw beyond the map if your route extends off the map.

Please turn over for survey.
The individual results of this survey are 100% ANONYMOUS and CONFIDENTIAL. No names or any other private information will be collected.

The purpose of this survey is to increase knowledge and understanding of bicycle use in Flushing and Corona and surrounding communities. The results of this survey are being used to make your community better for cycling. This survey is being conducted by a team of graduate students from Hunter College.

For more information, please contact BikeStudyNYC@gmail.com

1. Why do you ride a bicycle? (check ALL that apply)
   Recreation  Exercise  Commuting (Work/School)  For Work (Messenger/Delivery)
   Other

2. How often do you ride a bicycle? (check ONE)
   Daily  2 to 5 times a week  Once per week  Less than once a week  Less than once a month

3. How far is your typical trip? (minutes and/or miles)
   Minutes  Miles

4. Do you travel by bike to the following destinations? (check ALL that apply)
   Bike Lane  Street  Side Walk  Center of the road  Parks  Edge of the road
   Other

5. What is your main mode of transportation when not using a bike?
   Car  Subway  Bus  Taxi  Walk
   Other

6. Why do you choose to travel by bike over other options? (check ALL that apply)
   _Less expensive than taking transit or driving a car
   _Faster than transit or car
   _Health benefits
   _Environmental friendliness
   _Convenience
   _Work Requirements
   _It is my only option
   Other

7. Please rank the following factors in choosing your route in terms of importance (1 – most important, 11 – least important).
   _Road quality
   _Marked or protected bike route
   _Road width
   _Other cyclists use this route
   _Air quality
   _Lighting
   _Familiarity
   _It is my only option
   Other

8. Where do you prefer to park your bike? (check ALL that apply)
   Bike racks  Signposts  Parking meters
   Trees  Indoors
   Other

9. How safe do you feel on streets with no bike lanes? (1 – least safe, 5 – most safe)
   1 2 3 4 5

10. How safe do you feel on streets with bike lanes? (1 – least safe, 5 – most safe)
    1 2 3 4 5

11. Does police presence make cycling more or less safe? (1 – least safe, 5 – most safe)
    1 2 3 4 5

12. What location is the most dangerous part of your cycling route?

13. How safe do you feel when crossing Flushing Meadows Park? (1 – least safe, 5 – most safe)
    1 2 3 4 5

14. Have you ever had a bike stolen? Y / N
   If yes, how many times? __________

15. Have you ever fallen due to a pothole or road work? Y / N
   If yes, how many times? __________

16. Have parts of your bike ever been stolen (seat, wheel, etc.)? Y / N
   If yes, which parts? _______________________

17. Have you ever been hit by an automobile? Y / N
    If yes, how many times? __________

18. Have you been hit by a car door? Y / N
    If yes, how many times? __________

19. Where do you ride your bike? (check ALL that apply)
   Bike Lane  Street  Side Walk  Center of the road  Parks  Edge of the road
   Other

20. Please rank the following improvements in terms of importance to make riding your bike easier (1 – most important, 7 – least important)
   Bike paths across Flushing Meadows Park
   Painted bicycle lanes on the streets
   Other

21. What keeps you from cycling? (check ALL that apply)
   Weather  Sickness  Inconvenience
   Too tired  Darkness  No bike rack
   Worried bike will be stolen
   Other

22. How old are you? _______________________

23. What is your gender? _______________________

24. What ethnicity are you? _______________________

Thank you for your time!

PLEASE TURN OVER FOR MAP

Please return completed questionnaire and map in the pre-addressed envelope.
<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>¿Alguna vez ha caído de su bicicleta debido a un hoyo/un bache o debido a construcción en la calle?</td>
<td>Sí / No</td>
</tr>
<tr>
<td>En caso afirmativo, ¿cuántas veces?</td>
<td>______________</td>
</tr>
<tr>
<td>¿Alguna vez ha sido golpeado por la puerta de un automóvil?</td>
<td>Sí / No</td>
</tr>
<tr>
<td>En caso afirmativo, ¿cuántas veces?</td>
<td>______________</td>
</tr>
<tr>
<td>¿Alguna vez ha sido golpeado por un automóvil?</td>
<td>Sí / No</td>
</tr>
<tr>
<td>En caso afirmativo, ¿cuántas veces?</td>
<td>______________</td>
</tr>
<tr>
<td>En caso afirmativo, ¿cuántas veces?</td>
<td>______________</td>
</tr>
<tr>
<td>¿Qué parte de su ruta en bicicleta es la más peligrosa?</td>
<td>A la parada de autobús, LIRR o escuela</td>
</tr>
<tr>
<td>Al trabajo</td>
<td>A las tiendas</td>
</tr>
<tr>
<td>A las casas de sus amigos y/o familia</td>
<td>A los parques</td>
</tr>
<tr>
<td>¿Por qué eliges andar en bicicleta?</td>
<td>Marque una o más casillas</td>
</tr>
</tbody>
</table>
此调查的每项单独结果都是100%匿名和机密的。

我们不收集姓名和任何涉及隐私的信息。

此调查的目的是为了进一步了解关于交通选择、可乐娜及附近地区的自行车的使用情况。调查结果将用于创造一个更易于自行车行驶的社区。此调查由亨特学院的一个研究生团队发起。

需要更多信息，请联系：
BikeStudyNYC@gmail.com

1. 您为什么选择自行车？（请将所在适用的）
   - 休闲娱乐
   - 锻炼
   - 办事购物
   - 通勤（上班/上学）
   - 其它 __________________________

2. 您多久骑一次自行车？（选择一个）
   - 每天
   - 每周3次
   - 每周少于3次
   - 其它 __________________________

3. 您通常骑多远？（分钟和英里）
   - 分钟 ________ 英里 ________

4. 您会骑自行车到以下的目的地吗？（请将所在适用的）
   - 学校
   - 公司
   - 亲近朋友的家
   - 公园
   - 其它 __________________________

5. 当您不骑自行车的时候，您主要的交通工具是什么？
   - 小汽车
   - 地铁
   - 公共汽车
   - 出租车
   - 步行
   - 其它 __________________________

6. 您为什么选择骑自行车而不是使用其他的交通工具？
   - 更健康
   - 更环保
   - 方便
   - 其它 __________________________

7. 以下是在选择路线时考虑的一些因素，请为这些因素排序（1 - 最重要，10 - 最不重要）？
   - 路段的长度
   - 道路的质量
   - 骑行的宽度
   - 驾驶的便利性
   - 空气质量
   - 天气
   - 马路中间
   - 其它 __________________________

8. 您倾向于把自行车停在什么地方？（请将所在适用的）
   - 路边
   - 停车场
   - 马路中间
   - 公园
   - 其它 __________________________

9. 对于没有自行车道的马路您感到安全吗？（1 - 最不安全，5 - 最安全）
   - 1
   - 2
   - 3
   - 4
   - 5

10. 在没有自行车道的马路上您感到安全吗？（1 - 最不安全，5 - 最安全）
    - 1
    - 2
    - 3
    - 4
    - 5

11. 有没有警察在巡逻使骑自行车更安全还是更不安全？（1 - 最不安全，5 - 最安全）
    - 1
    - 2
    - 3
    - 4
    - 5

12. 您的自行车线路的哪个地方是最危险的？
    - 1
    - 2
    - 3
    - 4
    - 5

13. 当您骑过哈德逊河公园时您感到安全吗？（1 - 最不安全，5 - 最安全）
    - 1
    - 2
    - 3
    - 4
    - 5

14. 您的自行车曾被偷过吗？是 / 不如果是，有几次？ ______________

15. 您曾因为肥胖或道路维修摔倒过吗？是 / 不如果是，有几次？ ______________

16. 您的自行车的部分曾经被偷过吗（座位，轮胎等）？
    - 是
    - 不如果是，什么部分？ __________________________

17. 您曾被汽车撞过吗？是 / 不如果是，有几次？ ______________

18. 您曾被小汽车汽车撞过？是 / 不如果是，有几次？ ______________

19. 您在什么地方骑自行车？（请将所在适用的）
    - 自行车道
    - 马路
    - 人行道
    - 马路中间
    - 其它 __________________________

20. 对于其它使您能骑自行车更容易的一些改进措施（1 - 最重要，7 - 最不重要）
    - 更宽的自行车道
    - 更长的自行车道
    - 更多的自行车道
    - 其它 __________________________

21. 什么原因让您不骑自行车？（请将所在适用的）
    - 天气
    - 疲劳
    - 其它 __________________________

22. 您多大？ __________________________

23. 您的性别？ __________________________

24. 您的种族？ __________________________

感谢您花时间参与！
请把填好的调查问卷和地图放到已经写好地址的信封里。

BikeStudyNYC@gmail.com
Please trace with a pen or pencil where you bike and/or will bike today. Use the space below to add more to your bike route if it extends off the map. Also feel free to drawaska route. Above your bike location, provide a brief description below.

Figure 28: Map on the reverse side of the 2010 Pilot Survey
APPENDIX III: COMMUNITY-BASED ORGANIZATIONS IN WESTERN QUEENS

The following is a list of community based organizations working in western and central Queens. The list is by no means exhaustive, but represents a number of grassroots groups that have expressed interest in working with DOT on future bicycle planning in their neighborhoods. Many of these organizations focus on organizing and representing immigrants and low income people of color. While these organizations are certainly concerned about safety for their cycling members and the community at large, they are not necessarily interested in receiving trainings from the City on how to be a safer rider. Often, they represent working cyclists, who are incentivized to ride dangerously by per-delivery pay and expectations of quick service. These groups are genuinely interested in the future of their streets, and excited to plan with DOT to make them safer, more vibrant, and more multi-modal than they are today. We recommend that DOT make inroads with community based organizations like these, and promote a process of local complete streets planning that includes grassroots organizing projects, as well as community boards.

Desis Rising Up and Moving (DRUM)
72-18 Roosevelt Avenue
Queens, NY 11372
(718) 205 – 3036
www.drumnation.org

DRUM is a Queens-based community organizing project, focusing on local as well as international issues of racial and economic justice for South Asian communities. They are well known in the community for their work with youth, as well as their organizing, advocacy and direct service on behalf new immigrants to Queens.
Jacob A. Riis Neighborhood Settlement House
10-25 41st Avenue
Queens, NY 11101
(718) 784 – 0851
www.riissettlement.org

Located among the Queensbridge Houses in Long Island City, this settlement house provides direct services to youth, seniors, and families in western Queens. Their Immigrant Services section provides free language classes, case management and legal services, and reports that there are always some program participants arriving on bicycle.

Make The Road New York
92-10 Roosevelt Avenue
Queens, NY 11372
(718) 565 - 8500
www.maketheroadny.org

Make The Road New York is one of the most dynamic and powerful community organizing projects in New York City. The organization, formerly known as “Make The Road By Walking”, focuses primarily on immigrants’, workers’ and tenants’ rights in Jackson Heights, Corona and Bushwick.

New Immigrant Community Empowerment
37-41 77th Street
Queens, NY 11372
(718) 205 – 8796
nynice.org

New Immigrant Community Empowerment, or NICE, organizes and advocates on behalf of the multi-national immigrant communities of western Queens. Previous campaigns have focused on civic engagement, non-citizen voting, language skills, and hate-crime prevention.

Queens Community House
Main location:
10825 62nd Drive
Queens, NY
(718) 699 – 1010
Queens Community House
Jackson Heights location:
74-09 37th Avenue
Queens, NY
(718) 533 6459
www.queenscommunityhouse.org

Queens Community House is a social service and community organizing project built in the “settlement house” model. Its “Action Group” has taken on issues of public space and the environment, and is interested in thinking more about bike lanes and working cyclists. The organization has been helpful in the Jackson Heights streets planning process, and is interested in continuing this work inside and beyond Jackson Heights.

**Citywide Cycling Advocacy Groups**

Times Up!
99 South 6th Street
Brooklyn, NY 11211

And:
156 Rivington Street (basement)
New York, NY 10002
(212) 802 – 8222
www.times-up.org

Times Up! is an environmental and cycling advocacy and direct action organization, which encourages all types of New Yorkers to cycle more around the city. They have been active in cycling promotion for decades, and have a strong record of accomplishment.

Transportation Alternatives
127 West 26th Street, Suite 1002
New York, NY 10001
www.transalt.org

It is no secret that Transportation Alternatives is one of the leading advocates for bicycle infrastructure all over New York City. DOT has forged a strong working relationship with TA, and we encourage DOT to continue working with this organization, and enlisting its members and activists in seeking out new sites for bicycle infrastructure, outside of the central business districts.