

Reimagining and Reconfiguring New York City's Streets

Written by David Luberoff

DRAFT



Transforming Urban Transport – The Role of Political Leadership

Sponsored by Volvo Research and Educational Foundations (VREF)

Hosted at the Harvard University Graduate School of Design

Table of Contents

Overview	1
Setting the Agenda	2
Showing Early Results	6
Tapping the Power of Partnerships and Interim Projects	11
Using Data Strategically	14
Recalibrating the Efforts	19
Reframing the Issue.....	23
Works Cited	29

DRAFT

This case was written by David Luberoﬀ, Lecturer on Sociology at Harvard University, for the project on “Transforming Urban Transport – the Role of Political Leadership,” at Harvard’s Graduate School of Design (GSD), with financing from the Volvo Research and Educational Foundations (VREF). Alan Altshuler, Distinguished Service Professor at Harvard emeritus, provided counsel and editorial advice. The author is responsible for the facts and the accuracy of the information in the case, which does not necessarily reflect the views of VREF or GSD.

© 2016 The President and Fellows of Harvard College.

Overview

Over the last ten years and under two different mayors, New York City has made its streets safer, more attractive, and more appealing for pedestrians and bicycle users. Since 2007, New York City's Department of Transportation (NYC DOT) has converted more than 40 acres of city streets into more than 70 new pedestrian plazas in locations that range from world-famous commercial centers, such as Times Square, to little-known business districts in all five of the city's boroughs. Since 2007, NYC DOT has also built more than 400 miles of interconnected bicycle lanes and launched Citi Bike, which is the world's largest unsubsidized bike-share system. More recently, the city has launched an ambitious effort to greatly reduce the number of pedestrians, cyclists, and motorists killed or seriously injured in crashes.

In carrying out these policies, New York City drew on approaches pioneered in European cities that had long been championed in New York by a small group of activists, business leaders and design professionals. Initially, the Bloomberg Administration, which was in office from 2002 until 2014, was not particularly interested in these ideas. However, by the mid-2000s, key administration officials – most notably Daniel Doctoroff, the Deputy Mayor for Economic Development and Reconstruction – became convinced that improving the city's public realm should be a key part of their efforts to sustain and enhance New York's central role in the global economy. Consequently, the plaza and bike initiatives were among key recommendations of PlaNYC, a comprehensive long-range plan released by then Mayor Michael Bloomberg in April 2007.

The task of translating these proposals into action fell to Janette Sadik-Khan, who became NYC DOT Commissioner a few days after PlaNYC was released. In carrying out that mandate, Sadik-Khan and her senior staff developed three particularly effective strategies. First, they moved quickly, using paint and easily available materials, such as boulders and planters, to create new plazas and bike lanes as “interim” projects that could be easily removed or changed. Second, they relied on partnerships with non-governmental entities to fund and operate key elements of the program. Third, they used data (often from novel sources), to develop, assess and improve key initiatives.

The dramatic changes facilitated by these approaches brought the city international acclaim. In 2012, the second Lee Kuan Yew World City Prize honored the Bloomberg Administration for “strategically orchestrating the remarkable transformation of New York City over the last decade” via a “holistic and integrated” series of initiatives that included the new bike lanes and plazas.¹

¹ (Lee Kuan Yew World City Prize Secretariat 2012)

Despite these successes, by the middle of Bloomberg's third and final term, several leading mayoral candidates questioned whether the streets initiatives truly reflected New Yorkers' values. Leaders of Transportation Alternatives (TA), a non-profit that had been at the forefront of efforts to remake the city's streets, responded with a sophisticated effort to reframe the initiatives as part of a broader safety-oriented agenda that their polling showed was particularly popular with voters. Moreover, they persuaded then-candidate Bill de Blasio, who was elected mayor in 2013, to support this approach under the rubric of Vision Zero, an approach initially developed in Sweden.

While it is still early to fully assess these efforts, the number of those killed or seriously injured in traffic crashes has fallen. And, despite some controversies reviewed below, the broader campaign to make the city's streets more pedestrian- and cyclist-friendly seems to be firmly on track.

Setting the Agenda

Long the nation's most populous city, New York had more than 7.9 million residents in 1950. Like many older cities in the United States, over the next three decades, New York lost population and became more racially and ethnically diverse. However, unlike many other older American cities, it reversed course and by 2000 was home to over 8 million people. During this time New York lost most of its manufacturing jobs but (particularly after the 1970s) gained many jobs in finance, management, and business services, which became its dominant industries.²

Bloomberg, who founded a major financial information company, took office a few months after the 9/11 attacks and in the midst of an economic downturn. He was committed not only to rebuilding Lower Manhattan, but also more generally to the city's economic recovery and growth. As he said in 2003:

New York is in a fierce, worldwide competition; our strategy must be to hone our competitive advantages. ... Our unique value added is our diverse eight million citizens and workforce. ... To capitalize on that strength, we'll continue to transform New York physically – giving it room to grow for the next century – to make it even more attractive to the world's most talented people.³

In keeping with his general approach to management, Bloomberg gave Doctoroff, who previously was a successful private-sector financier, leeway to implement this broad agenda. As Doctoroff later recalled: "The mayor provided a huge umbrella for people who were ambitious, and who were willing to take risks. ... You can't over-

² See (Gladstone and Fainstein 2013, 85) and (Glaeser 2005)

³ (City of New York 2003)

appreciate the importance of his creating that kind of environment, and then being willing to back it with a really staunch loyalty.”⁴

Doctoroff and other key officials believed that while the city had been able to accommodate its growth since the 1980s in existing residential and commercial areas, future growth should be directed to formerly industrial areas such as the far West Side in midtown Manhattan and the East River waterfront in Brooklyn. Doctoroff linked the development goals with plans for the city’s ultimately unsuccessful bid to host the 2012 Olympics. Despite that defeat, the city pressed forward and by the time Bloomberg left office, the City Planning Commission had rezoned 37 percent of the city and the subway was being extended to the West Side of midtown Manhattan.⁵

The Olympic plan had not called for major changes at NYC DOT, which oversees more than 6,000 miles of streets, more than 12,000 miles of sidewalks, and over 12,000 signalized intersections. Rather, under the leadership of Commissioner Iris Weinshall, a respected public administrator who Bloomberg retained, NYC DOT, which had been beset by management problems, focused on basic operations and improving traffic flow. As a result, DOT’s senior officials generally resisted advocates’ calls to substantially expand the city’s nascent network of bicycle lanes or to assign more street space to pedestrians. This approach generally reflected the values of Bloomberg, who in 2006 had said, “We like traffic [because] it means economic activity.”⁶

However, by mid 2005 the city’s economy was doing so well that it was straining existing facilities and networks. As Tim Tompkins, who became president of the Times Square Alliance in 2002, later noted, “The problem used to be that you couldn’t get through Times Square without being killed or mugged. By the mid 2000s, you just couldn’t get through Times Square.”⁷

The emergence of such problems along with a series of disputes that broke out when the city tried to relocate facilities such as salt piles and transfer stations so it could create new open space amenities in changing neighborhoods, convinced Doctoroff to focus on strategic land-use planning in the mayor’s second term. Moreover, he decided his office, which oversaw about 40 units involved in physical development, including DOT, should manage this process. He later explained:

The reason why government – or any big bureaucracy – moves slowly is largely [because of] agency competition or misaligned agency priorities. ... Government ... or any large bureaucracy ... works best... when there is someone who is empowered to make decisions

⁴ (Doctoroff 2015)

⁵ See (Moss 2011), (Brash 2011), (Larson 2013) and (New York Times 2013).

⁶ (Naparstek 2006) See also (Chan 2007)

⁷ (Tompkins 2015)

and move things along. So if it had been left to the city planning commission, we would not have been able to get the rapid buy-in that I needed to move things along.⁸ As the planning process moved forward, two transportation-related issues moved to the fore. First, even though New Yorkers were much more likely than other Americans to use transit or walk to work, the city's congestion was among the nation's worst. Second was lack of open space in growing business and residential areas. Since buying land for new parks was prohibitively expensive, planners began to focus on NYC DOT's substantial land holdings.

City officials found some inspiration in policies being carried out in several Western European cities. Copenhagen had spent decades converting street space into pedestrian plazas and bicycle lanes. London and Stockholm introduced congestion pricing schemes in 2003 and 2006, respectively. Paris created popular temporary summer beaches on highways along the Seine and was preparing to launch Vélib', a massive bicycle-sharing system. In a May 2006 report prepared for Doctoroff's team, Alexander Garvin, an eminent architect and planner who had worked with Doctoroff on the Olympics bid, cited many of these initiatives as examples the city should follow in key spots, such as Times Square, adding:

... a fundamental shift needs to occur in planning and capital investment for streets. Currently, the DOT includes public realm improvements as a subsidiary of traffic improvements but only when the public realm improvement does not limit projected traffic flow. Vehicular traffic is one component, albeit an essential one, of the mixed-use public realm. It does not always deserve the highest priority.⁹

While Garvin provided an important affirmation of new approaches, Paul Steely White, executive director of Transportation Alternatives (TA), an influential non-profit focused on cycling and pedestrian issues, maintains that "the more significant story... is that there was a community of New Yorkers – from bloggers to advocates to planners to philanthropists" – who were actively promoting these issues.¹⁰ These efforts were greatly aided by Mark Gorton, a hedge fund manager and avid cyclist who gave TA about \$5 million between 2002 and 2012. In 2005 TA joined with the Project for Public Spaces, an influential non-profit dedicated to helping people create and sustain public spaces, to launch a high-profile campaign that used events with outside experts, exhibitions, and workshops to build support for the new approaches.¹¹

In 2006, Gorton also provided funding to launch *Streetsblog*, a website on transportation issues in New York City that soon drew 30,000-to-90,000 unique visitors a month. While one goal was to make sure that advocates knew about key discussions and decisions, Aaron Naparstek, the blog's founding editor, was

⁸ (Doctoroff 2015)

⁹ (Alex Garvin & Associates, Inc. 2006, 61)

¹⁰ (Steely White 2015). See also (Tsay 2015, 14, 35-36)

¹¹ See (Project for Public Spaces n.d.).

particularly focused on making sure the articles found their way to Doctoroff because “we wanted him to know that New York City transportation policy was really an embarrassment and we were being lapped by London and Paris.”¹²

By mid 2006 NYC DOT and Doctoroff’s office began developing a program of pedestrian and cycling improvements to be carried out by DOT. During this time, the city’s overall planning effort was also being transformed to include environmental issues. In a major address given in December 2006, Bloomberg detailed ten specific goals that would be addressed in a new comprehensive plan, to be called PlaNYC. These included creating “enough housing for almost a million more people” and “ensuring that even as land becomes more scarce, every New Yorker lives within a 10-minute walk of a park.” He also called for increasing the capacity of the region’s mass transit system “so congestion doesn’t bring our economy to a grinding halt.” However, while some business and advocacy groups had been calling on the city to explore congestion pricing to both reduce traffic and provide new funding for transit, Bloomberg did not mention this or identify other revenue sources for his proposed investments.¹³

In January 2007, Weinshall resigned. After a few months, the search for her replacement narrowed to two finalists. One was Sadik-Khan, a Senior Vice President at Parsons Brinckerhoff, an international engineering firm, who also had served as Deputy Administrator of the Federal Transit Administration in the Clinton Administration and as transportation advisor to NYC Mayor David Dinkins in the early 1990s.

Viewing Sadik-Khan as more supportive of their views, advocates, according to Steely White, “did everything we could to get her appointed.”¹⁴ However, her interview with the mayor and his senior aides did not go well. Asked to describe NYC DOT’s recent accomplishments, she said: “nothing of note had really happened,” during Bloomberg’s first five years in office. When Bloomberg asked her, “Why do you want to be Traffic Commissioner?” she reportedly replied, “I don’t want to be Traffic Commissioner; I want to be Transportation Commissioner,” which, she later recalled, “went over like a lead balloon.”¹⁵ Despite the interview, Bloomberg decided to appoint her. Doctoroff supported this decision not only because Sadik-Khan “totally bought into the PlaNYC vision” but also because she was someone with “high energy, lots of ideas, [and] sort of fearless.”¹⁶

The mayor released PlaNYC on Earth Day (April 22) 2007. In a surprise development, the plan called for a weekday congestion-pricing program in Manhattan below 86th Street. Net annual revenues from the \$8/day charge on most vehicles

¹² (Naparstek 2015)

¹³ (City of New York 2006)

¹⁴ (Steely White 2015)

¹⁵ (Sadik-Khan 2015)

¹⁶ (Doctoroff 2015)

entering the area were projected to rise to almost \$900 million a year in 2030. The money would help fund \$30 billion in improvements in the region's transit system (when combined with funding from federal and state sources). PlaNYC also called for several transportation-related initiatives that the city could carry out on its own, including creating at least one public plaza (usually on DOT-owned land) in each of the city's 59 Community Board districts, completing the city's 1,800-mile bicycle master plan, and exploring opportunities for a citywide bicycle-sharing program.¹⁷

Showing Early Results

Believing that Bloomberg would leave office in January 2010, at the end of his second term, Sadik-Khan moved quickly to carry out the new transportation agenda. She began by assembling a diverse team that included several of the department's most notable critics, long-time senior DOT officials, and younger DOT employees who had chafed at the department's previous policies.

She also pressed forward with projects begun during the development of PlaNYC because, she said, "we needed to show some visible change in the street, and we needed to do that quickly in order to get some buy-in."¹⁸ In May 2007, the department unveiled plans developed in conjunction with the DUMBO Business Improvement District (BID)¹⁹ to quickly create a pedestrian plaza at the intersection of three streets in that Brooklyn neighborhood (which drew its name from the fact that it was located **Down Under the Manhattan Bridge Overpass**). Tucker Reed, who then headed the BID, recalled: "Our rationale at the time was: let's just try this and see what happens," particularly given the fact that the project required eliminating a few parking spaces, which in New York City is "in the holy trinity of things you don't touch" (the others being pension funds and union contracts.)²⁰

Thanks in large measure to support organized by the BID, the local Community Board overwhelmingly supported this project. Created quickly using paint, granite blocks from DOT's bridge division, planters and temporary street furniture (some of it provided by local merchants), the plaza was heavily used as soon as it was built. Andy Wiley-Schwartz, who Sadik-Khan had hired away from Project for Public Spaces to develop and oversee the plazas initiative, told *Streetsblog* that: "We want to

¹⁷ (City of New York 2007)

¹⁸ (Sadik-Khan 2015)

¹⁹ BIDs are non-profit entities created by the city at the request of local businesses. They are funded by per-square foot assessments on commercial property owners (who also have the majority of seats on the BID's board). They generally provide enhanced security and services in the areas they serve. (City of New York, "Business Improvement Districts," n.d.)

²⁰ (Reed 2015)

find places in every Community Board district where there are community partners who can help maintain and run a place like this.”²¹

DOT carried out another important early project in the Meatpacking District, which had been the focus of workshops that had been part of the campaign launched by TA and the Project for Public Spaces. Picking up on key ideas developed in that process, in June 2007 the department proposed to quickly create a public plaza at the intersection of 9th Avenue, 14th Street, and Hudson Street. The department’s plan also took advantage of a scheduled repaving of 9th Avenue to extend sidewalks at intersections, shorten pedestrian crossing distances, and convert one traffic lane into a bicycle lane. (See Figure 1)

Figure 1: 9th Avenue Before and After Changes



²¹ (Naparstek 2007)

Designing the lane required developing new approaches, according to Ryan Russo, a young planner who had become head of DOT's bicycle and pedestrian programs. In a subsequent paper, he and his co-authors explained: "Traditional bicycle lanes are located between the parking lane and travel lane of a roadway, where they are subject to violation by motor vehicles, but where visibility between motorists and cyclists is good." In contrast, "European cycle tracks" are usually located between the sidewalk and parking, and "are typically raised." This configuration, Russo and his co-author, noted, tends to be "costly and difficult to build quickly."²²

Lacking a precedent, Russo and others at DOT created a first-in-the-nation design that drew on both traditions. Like the Europeans, they placed the bicycle lanes between the sidewalk and relocated parking spaces. But drawing on U.S. models, they used paint rather than raised pavement to designate the bike lanes and barriers to separate them from the parked cars. They also gave cyclists their own traffic signals at cross streets and slowed turning traffic via left-turn bays. This generic design has since been used in the construction of about two dozen New York City bike lanes, and in at least 16 other American cities.²³

While the pipeline projects were moving forward, Sadik-Khan also called on NYC DOT to develop its first-ever strategic plan, which was needed, said Wiley-Schwartz, because PlaNYC was "text not Talmud,"²⁴ (i.e. it had only brief descriptions of the policies and programs that the department was supposed to launch). As part of this process, Sadik-Khan pressed for establishing ambitious and measurable goals such as reducing deaths from traffic crashes. More broadly, she strongly encouraged DOT's staff to be pro-active in addressing legal, institutional or political obstacles. Wiley-Schwartz recalled:

Janette understands how to tell people, whether they're engineers or they're lawyers. ... "This is the outcome that I want. ... You figure out how to get us from where we are now to there." ... This is what gets their buy-in. Because this is the part where they have to be creative thinkers and own the solution. With me, she basically said: "You go make this program. I know what you did [before]. I know what you believe in. I know what your value systems are. And I'm on board with you. You come to me when you have a problem, I'll solve it. Now go make this program work."²⁵

Sadik-Khan and several of her senior staff members also pressed for changes in the ways that the department related to the community. She said:

It used to bother me tremendously that people would write into the Department of Transportation and ask for a stop sign or a stoplight.... And the answer always came back, "No. It doesn't meet the guidelines [as detailed in standard manuals]."

²² (Russo, et al. 2008)

²³ (Green Lane Project 2015)

²⁴ (Wiley-Schwartz 2015)

²⁵ (Wiley-Schwartz 2015)

... But people didn't want a specific treatment. ... [There] was a problem that they were asking us to solve. So we changed the way we went to Community Boards. ... We didn't go in saying: "No" or "here's a bike lane [or] here's a bus lane." We went in saying: "What's the problem you're trying to solve?" We also started with the statistics, going into all the Community Boards, about how many people were injured or killed in the district ... and then working with communities ... to deal with the problems that either we saw or they saw.²⁶

She also started to "renegotiate" NYC DOT's relationship with advocacy groups, which she felt needed to shift away from their longstanding practice of mainly criticizing the department and become more "supportive," which "they were not used to doing."²⁷ Describing this relationship, Thomas Wright, executive director of the Regional Plan Association, recalled that Sadik-Khan "was not shy about calling us up and saying 'I need you guys to be out there pushing this stuff.'²⁸ Illustratively, at her request, TA tapped its network to raise money for the non-profit Mayor's Fund to Advance New York City, which often used the money to quickly hire outside consultants, such as Jan Gehl, a Danish architect and urban designer best known for his work in Copenhagen, who was hired to help NYC DOT implement PlaNYC.

CONGESTION PRICING'S DEMISE

While NYC DOT was able to quickly move forward with the plaza and bicycle initiatives, it was unable to go forward with the plan's congestion pricing proposal. The problem was that the proposal needed approval by the state legislature, where it faced strong opposition from members from the city's outer boroughs and nearby suburbs. Governor Eliot Spitzer agreed to back the proposal, as did the (Republican) State Senate leadership, but Assembly Speaker Sheldon Silver, a powerful Democrat from lower Manhattan, balked.

Unable to agree on the measure's fate before they prepared to adjourn in July 2007, Spitzer and the legislative leaders referred the matter to a 17-member commission that was to report back in January. Meanwhile, the U.S. Department of Transportation agreed to provide \$354 million to fund a variety of transit improvements in New York City but only if the city adopted a congestion-pricing plan (or a policy that would produce similar results) by early April.

In early 2008, the commission voted 13-2 to recommend a modified congestion-pricing plan. (Silver's appointees cast the two negative votes.) Key city officials worked to build support for the revised plan, which was ultimately backed by 135 civic, business, labor, environmental and advocacy groups, as well as the editorial

²⁶ (Sadik-Khan 2015)

²⁷ (Sadik-Khan 2015)

²⁸ (Rubinstein 2014)

boards of the *Times*, the *Daily News*, and *Newsday*. Moreover, polling showed that a majority of the voters in each of the city's five boroughs (and more than two-thirds overall) supported the proposal, on the condition that the net revenue was applied toward transit improvements.²⁹

Nevertheless, many officials from the city's outer boroughs, viewing the fees as a new tax on their constituents, were opposed. In late March, after an intense lobbying campaign, the City Council voted 30-to-20 to approve the plan.³⁰ Backers generally came from Manhattan, the Bronx, and those parts of Brooklyn and Queens closer to Manhattan.³¹

The action then returned to Albany where the proposal was backed by David Patterson, who had become governor (following Spitzer's resignation in the wake of a scandal) in mid March. Sadik-Khan lobbied hard, but reportedly offended opponents when she told them: "You are either for this historic change in New York or you're against it. And if you're against it, you're going to have a lot of explaining to do."³² Facing the federal government's April deadline, the Assembly's Democrats had a lengthy caucus to discuss the revised plan. After the caucus, Silver announced: "the congestion-pricing bill did not have anywhere near a majority of the Democratic conference, and will not be on the floor of the Assembly. ... They made a decision. If I were making the decision alone, I might have made a different decision."³³

Bloomberg, who had seen Silver kill some of his other signature initiatives, sharply criticized Silver, but he did not pursue this matter in subsequent years. U.S. DOT redistributed the funds it had reserved for New York to other jurisdictions. NYC DOT staff quickly edited out all references to the congestion-pricing program in DOT's strategic plan, which was released in late April. The plan's most conspicuous goals were to reduce traffic fatalities by 50 percent by 2030, to double bicycle commuting in the city by 2015, and to significantly increase bus travel speeds. Presenting the plan at the Municipal Arts Society, Sadik-Khan observed that while many people had called on New York to follow the lead of cities like London, Paris and Copenhagen, "I want to ... be clear that... we are implementing the New York City model."³⁴

²⁹ (Quinnipiac University Poll 2008)

³⁰ (Gonzalez 2008)

³¹ (Fried 2008)

³² (Cardwell and Hakim 2008)

³³ (Lisberg and Benjamin 2008)

³⁴ (Streetsfilms 2008) and (NYC DOT 2008).

Tapping the Power of Partnerships and Interim Projects

While PlaNYC had called for creation of new plazas in each of the city's 59 Community Board districts (and for building more than half of them by 2009), it provided little guidance on how those plazas would be selected or managed. Doctoroff expected that most would be sponsored by BIDs, which, he said, were appealing partners because "we were constantly trying to find ways to get these places paid for by someone else that would have a more stable source of revenue than the city."³⁵

The task of designing a process that would identify and select promising partners fell to Wiley-Schwartz. Drawing on his analyses of partnerships that New York City had successfully used to renovate and manage public parks, he established a competitive process that relied on non-profit neighborhood organizations. He explained: They had to agree to be the maintenance partner, to get the Community Board to sign off on it, and to amass as many letters of support from neighborhood institutions and local merchants and whomever else as possible. Basically [they had to] make the case for the space, and inoculate us against the inevitable backlash from parts of the neighborhood that said they didn't get a chance to consult on it.³⁶

Bruce Schaller, another "outsider" brought in by Sadik-Khan, added that that the competitive process helped spur interest in the program because: It's very different to say to a store owner, a resident, or an elected official: "I think this is a good idea, and I'd like to convince you of it" or to say: "We're giving out things a lot of people want. Are you interested in thinking about whether you want it, and what it would look like? Because if you're not, that's fine. We'll give it to some other folks." [They are all concerned,] is someone else getting an advantage over me?"

Once local interest had been aroused, he added, DOT officials could have more substantive conversations with local merchants, who often were "very fearful of change," particularly the loss of parking spaces to create the new plazas. He continued:

You pose the question: "Do you really think that taking these ten parking spaces out is going to do you more damage than [the offsetting benefit of] having a place that's attractive for people to come and have lunch ... and sit in the sun? ... It poses the question in a way that they have to ask: "What's best for me?" And that's what this is all about."³⁷

In practice, the demand for new plazas outstripped DOT's ability to supply them. In 2008, 22 entities applied and DOT could fund only eight. Over the next several

³⁵ (Doctoroff 2015)

³⁶ (Wiley-Schwartz 2015)

³⁷ (Schaller 2015)

years, DOT annually received eight to twelve additional proposals – most of them from BIDs – and generally selected three or four.³⁸ Illustratively, leaders of the Fulton Area Business Alliance (FAB), a BID created in 2009 that serves Brooklyn’s Fort Greene and Clinton Hill neighborhoods, focused on two underutilized triangular spaces at three-way intersections on Fulton Street, a commercial corridor that runs through both neighborhoods. There were local critics of both proposals, concerned about the loss of parking and possible traffic problems, as well as fearful about how the plazas might be used and possible gentrifying effects. FAB and DOT assuaged many of these concerns with promises that the plazas’ impacts would be reviewed before DOT decided whether to make them permanent. In fact, people began using the new plazas as soon as they opened, which both created a constituency for the program and helped inform the plazas’ final designs. As Sadik-Khan later noted:

A lot of the ideas that we put into play ... weren’t new. ... But [we] did pioneer the idea of changing streets in real time. Going straight to the people with the ideas, and showing them [with] temporary materials what can happen was a game changer. Instead of going through the years and years of planning studies, and years and years of computer modeling, and showing a dry engineering drawing that nobody could really understand, you got a very different buy-in when people could see, touch, and feel [the] changes.³⁹

The city’s strategy also relied, in part, on authorizing the non-profits to use the plazas for commercial activities that would help defray the costs of maintaining them. In practice, because the revenue-generating opportunities were quite limited, the plazas often presented fiscal challenges for the managing entities, particularly smaller BIDs and those in less affluent areas. In an effort to respond to these problems, in 2013 the New York Horticultural Society created the Neighborhood Plaza Partnership and raised money from private philanthropies and others to provide subsidized maintenance services and other assistance for these groups. Moreover, in 2015, the city budget for the first time included some funding to assist them.

REPLICATING THE MODEL WITH CITIBIKE

Private financing and management were also hallmarks of Citi Bike, the signature bike-sharing program that the city launched in 2013 after several years of detailed planning. As with the plaza and bike lane initiatives, New York was not the first major city to launch such a system. However, it was the first to launch one without public subsidies or financial guarantees. For example, the capital costs of Paris’ Vélib’ bike-sharing system, which is larger and older than Citi Bike, were subsidized by revenues from over 1,500 city-owned billboards and ads at the bike stations. In contrast, Citi Bike’s capital costs were funded by the \$41 million that Citibank paid to be the system’s “name sponsor” for its first six years and the \$6.5 million that

³⁸ (NYC DOT n.d.)

³⁹ (Sadik-Khan 2015). See also (Lydon and Garcia 2015, 156-164)

MasterCard paid to have its logo on the payment machines at the system’s more than 300 stations. This proved to be a major boon for Citibank, which saw its favorability ratings among New Yorkers rise by 17 percentage points in the months after the system was launched.⁴⁰

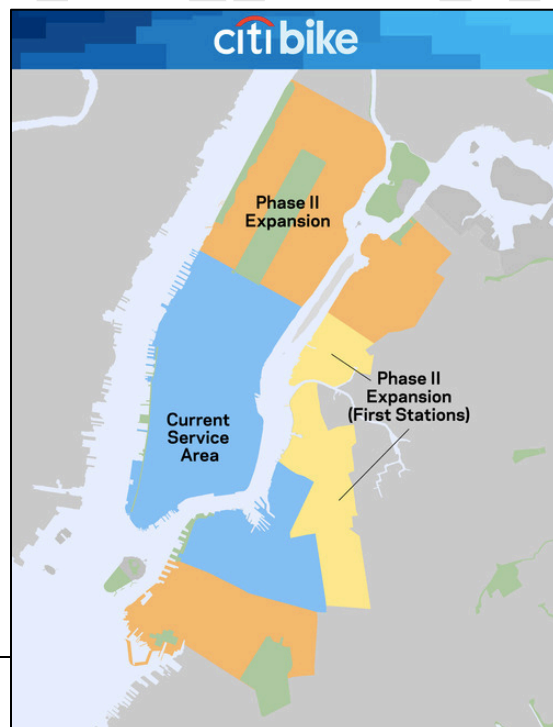
In a reflection of how some investors viewed the opportunities created by a heavily used bike-sharing system, in October 2014, a privately-held company backed by a group of eminent local investors that included senior executives from the Related Companies, a major New York-based developer, bought out Alta, the original system operator, which was having major financial and operational problems.

The new owners, who changed the company’s name to “Motivate,” hired Jay Walder, a former head of New York’s Metropolitan Transportation Authority, as CEO. The new entity raised fees, moved to improve service quality, and started a required expansion of the system which in its first phase had covered only Manhattan south of 59th Street and the parts of Brooklyn closest to downtown Manhattan. (See

Figure 2)

In addition, Citibank agreed to pay \$70.5 million to extend its sponsorship of the system for another five years (until 2024) and Motivate actively began to explore other revenue strategies such as sponsorships of individual docking stations. Motivate also brought its model to other areas, such as the San Francisco Bay area where in May 2015 it announced it would expand an existing bike-share program ten-fold. It remains to be seen whether this model will be profitable outside the highest density portions of New York City, San Francisco, and other major cities.

Figure 2



⁴⁰ (Summers 2013)

Using Data Strategically

Although the plaza program produced dozens of well-used public spaces, its signature project has been a hotly debated reconfiguration of Times Square, where the city has set aside roughly 140,000 square feet for pedestrians and cyclists. Finding and using new data to assess the impacts of this change was a critically important element of its success.

The impetus for this initiative dates to the mid 2000s, when leaders of the Times Square Alliance, which includes the area's BID, began asking DOT to utilize some of the area's street space for sidewalk widening and pedestrian islands. DOT initially resisted, but in 2006 Weinshall approved a plan to turn parts of Broadway and 7th Avenue over to pedestrian uses.

Sadik-Khan, who inherited this project, pushed for an even more ambitious approach, drawing upon Jan Gehl's analysis in which he found that even with the changes Times Square did not have leisure spaces where pedestrians could "stop, enjoy, and soak in the unique atmosphere."⁴¹ In September 2008, consequently, DOT converted two of Broadway's four lanes into new plazas and bicycle lanes from the northern edge of Herald Square at 35th Street to 42nd Street, in the heart of Times Square.

Building on the success of this effort, in early 2009 Sadik-Khan and her staff developed a plan to extend the Broadway bicycle lanes and create more public space by completely closing five blocks of Broadway in Times Square (from 42nd to 47th Streets) and two blocks in Herald Square (from 33rd to 35th Streets).⁴² The Times Square Alliance, which was to manage the Times Square plazas, was supportive. However, some major theater owners were opposed because they feared the changes would inconvenience their most important patrons, who generally arrived by taxi, limousine, or private car. Bloomberg initially "thought this was the stupidest idea I'd ever heard,"⁴³ but he relented when he learned that DOT's traffic modeling predicted the plan would significantly improve the flow of traffic because it would eliminate several congestion-generating three-way intersections.

DOT planned to measure the actual impacts by having its employees keep track of travel times as they drove the streets at various times of day. Bloomberg was concerned that this data would be perceived as biased. Fortunately, Schaller was developing an alternative approach that used data from GPS equipment recently installed (for other purposes) in the city's taxicabs. When briefed on this approach, the mayor was enthusiastic.

⁴¹ (NYC DOT 2008).

⁴² (City of New York 2013)

⁴³ (Gertner 2013)

Some mayoral advisors wanted to announce the change after November 2009, when he would be on the ballot for a third term.⁴⁴ Bloomberg rejected such a delay, reportedly saying: “I don't ask my commissioners to do the right thing according to the political calendar. I ask my commissioners to do the right thing, period.”⁴⁵ Accordingly, the announcement occurred in February 2009, and the changes went into effect over Memorial Day weekend. (See Figure 3)

Figure 3: Times Square Before and After Changes



The new facilities immediately became great attractions, and in a July 2009 poll New York City residents supported them by a 58/34 margin. Surveys done a few months later by the Times Square Alliance also found that more than two-thirds of the area's major property owners, employers, tenants, users, and theatergoers strongly supported the changes.⁴⁶ However, not everyone was a fan. In August David Letterman, whose show was taped in Times Square, joked that the city had turned “the greatest street in

⁴⁴ In October 2008, Bloomberg announced he would seek a third term. In order for him to be eligible, the City Council had to amend the City Charter, which since 1993 had limited the mayor to two terms. After an intense lobbying campaign, the council amended the charter to allow three terms.

⁴⁵ (Holeywell 2013)

⁴⁶ (Times Square Alliance 2010)

the world” into “a petting zoo.” Donald Trump, who was his guest that night, concurred, adding in an interview after the show that the changes were “terrible for retail.”⁴⁷ In addition, many taxi drivers complained that the changes had worsened traffic and made it harder to serve customers at key locations.

The GPS data and the data collected by DOT’s drivers both showed mixed results. Contrary to projections, the GPS data found that southbound speeds on the West Side (where Broadway is located) *decreased* by about three percent while southbound speeds on the East Side, which DOT used as a control group, *increased* by about three percent. In contrast, northbound speeds on the West Side *increased* by 21 percent, about two-thirds of what DOT had projected and almost three times more than on the East Side.⁴⁸ Nevertheless, in February 2010, Bloomberg – who had been reelected – announced that the interim plazas would become permanent installations funded by the city’s long-term capital budget. “It’s fair to say that this is one of those things that has succeeded,” he observed. “Not in every way we thought but in some ways we hadn’t thought about.”⁴⁹

The new plazas seemed to have ongoing positive effects on nearby businesses. Illustratively, between fall 2008 and spring 2013 retail rents in Times Square nearly tripled, which far outpaced increases in the city’s other major commercial areas.⁵⁰ However, there were lingering problems. Most notably, while the plaza functioned like a park, it still was governed by laws that applied to public ways, which meant that the city could not limit its use by hawkers, hustlers, and solicitors, such as costumed characters who aggressively tried to get tips from tourists who photographed them.

USING CRASH DATA TO CRAFT A SAFETY AGENDA

Sadik-Khan and her team drew on sophisticated data analyses to plan and assess other key initiatives. For example, DOT drew on sales tax receipt data to show that bicycle lanes and better pedestrian spaces on 9th Avenue had a positive impact on retail sales, and data on vacancies to establish that new pedestrian plazas had benefited the area around Union Square.⁵¹

Above all, DOT focused its data analytic capabilities on safety. In a 2010 report (mandated by a 2008 city ordinance), DOT noted that the number of people killed in crashes had declined by 63 percent between 1990 and 2009 and was

⁴⁷ (Cuozzo 2009)

⁴⁸ (NYC DOT, “Green Light for Midtown,” 2010, 10)

⁴⁹ (Grynbaum 2010)

⁵⁰ (NYC DOT, “Sustainable Streets,” 2013, 141)

⁵¹ See (NYC DOT, “Sustainable Streets,” 2013, 134) and (NYC DOT 2012, 4)

lower than it had been since the city first began collecting the data in 1910.⁵² About half of the people killed in recent years had been pedestrians, with the elderly at particular risk. (See

Figure 4)

Contrary to popular opinion, fatal and serious crashes overwhelmingly involved private cars rather than taxis, trucks or buses. Moreover, 37 percent of serious crashes were mainly attributable to driver inattention; 21 percent to “speed-related” factors; and 27 percent to the failure of drivers to respect traffic signals, stop signs, or marked crosswalks. Finally, the report, which noted that pedestrian fatalities rose exponentially with vehicle speeds, added that pedestrians hit by vehicles on streets with bike lanes were much less likely to be killed than those hit on similar streets without bike lanes.

On the basis of these findings, DOT proposed to annually reengineer 60 miles of particularly dangerous streets and to lower speed limits on some neighborhood streets to 20 mph (from 30 mph, which was the default standard set by state law). DOT also called for increasing the use of red light cameras and introducing speed cameras, measures that required changes in state laws. Additionally, the report indicated that the police department, which had not previously focused significantly on traffic enforcement, would work with DOT on a targeted effort to enforce speed limits and other traffic laws. However, the report noted, this initiative was predicated on receiving funding from a competitive federal grant.⁵³ DOT’s proposals drew mixed reviews from TA, which hailed the increased focus on safety but criticized the city for not committing more forcefully to aggressive enforcement of traffic laws.⁵⁴

Over the next four years, DOT carried out many promised projects (though the state legislature allowed only limited use of speed- and red-light cameras). While these efforts did reduce fatal crashes in specific corridors, the total number of people killed in crashes throughout the city was virtually unchanged between 2009 and 2013.⁵⁵

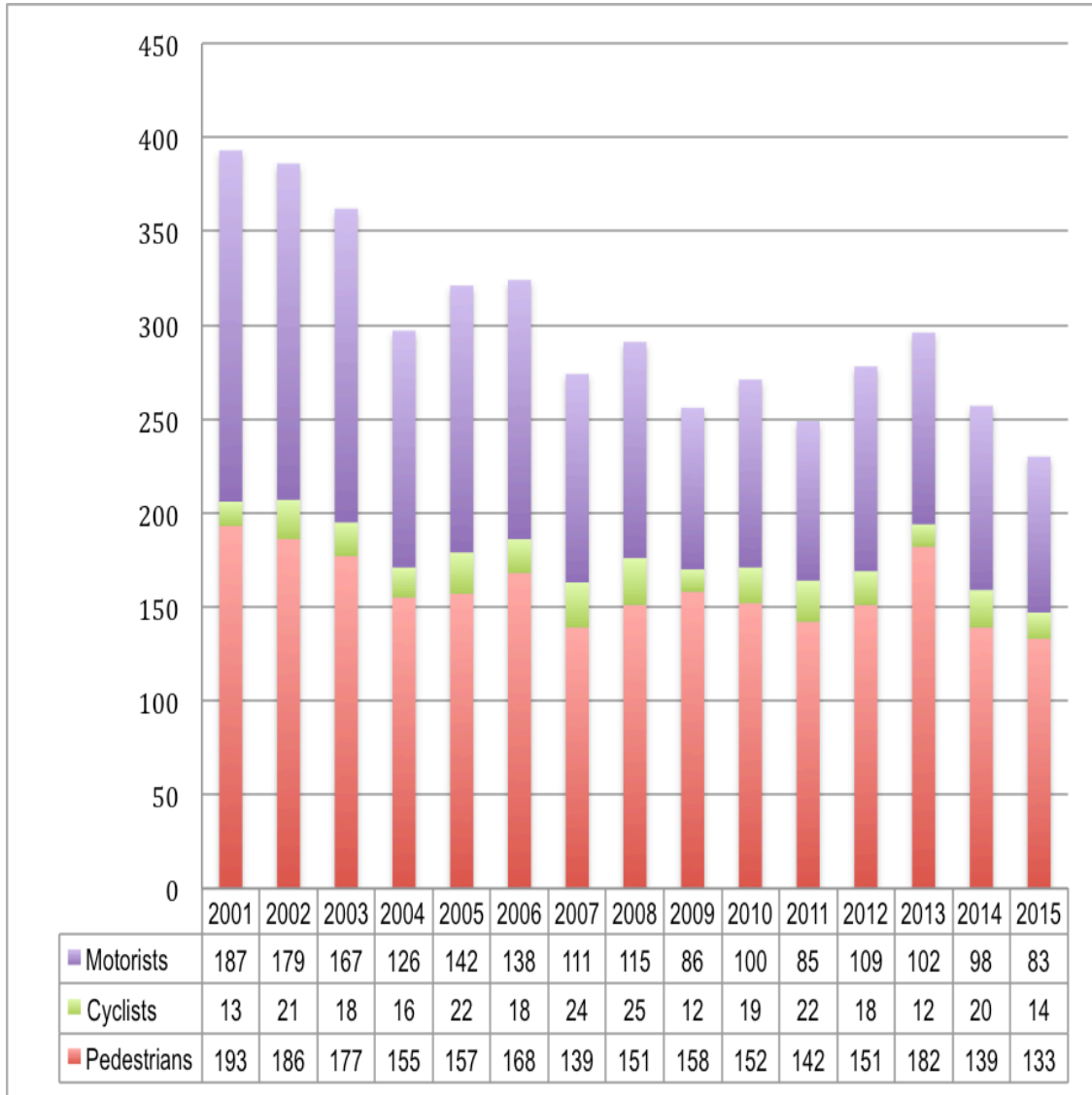
⁵² (NYC DOT, “Pedestrian Safety Study & Action Plan,” 2010, 8)

⁵³ (NYC DOT, “Pedestrian Safety Study,” 2010, 6)

⁵⁴ (Singer 2009)

⁵⁵ (NYC DOT, “Making Safer Streets,” 2013, 5)

Figure 4: Traffic Fatalities in New York City, 2001-2015⁵⁶



⁵⁶ Sources: (City of New York and NYC DOT n.d.) and (NYC DOT, “Pedestrian Safety Study,” 2010)

BECOMING A NATIONAL MODEL

The city's transport initiatives attracted national and international attention. In 2009, New York became the first American city to win a "Sustainable Transport Award" from a consortium that includes the World Bank.⁵⁷ Over the next several years long articles on New York's transport innovations, and on Sadik-Khan as their champion, appeared in a variety of national and international publications; and Sadik-Khan gave a TED Talk that has attracted more than 800,000 viewers.⁵⁸ Summing up the city's accomplishment in early 2014, Gehl asserted that New York City had done more than any other American city to "discourage commuting by car." He added that creating pedestrian plazas and bike lanes in Times Square not only was a "huge success," but also was a "fantastic influence on other cities"⁵⁹

As officials in other locales became aware of New York's efforts (and similar initiatives in other cities), many considered adopting similar practices in their own communities. They were commonly stymied, however, by the fact that the two road design manuals approved for use by the Federal Highway Administration (FHWA) had little to say about cyclist-and pedestrian-friendly design elements. Consequently, some states would not allow such projects to be built, while in others liability concerns deterred local and state transportation engineers from approving such projects.

In response, Sadik-Khan turned to, and took the lead in invigorating, the National Association of City Transportation Officials (NACTO), of which she became president in 2007. In 2012, NACTO published an *Urban Bikeway Design Guide* and in 2013 an *Urban Street Design Guide*.⁶⁰ In 2013 and 2014, respectively, FHWA approved both manuals for city and state use, for use in addressing matters on which its previously approved manuals were silent.⁶¹

Recalibrating the Efforts

Despite these national successes, Sadik-Khan and DOT were increasingly criticized at home for imperiously trying to turn New York into a European city that catered to elite outsiders. Summing up this debate, a March 2011 cover article in *New York* magazine was headlined: "Not Quite Copenhagen. Is New York Too New York for

⁵⁷ (Sustainable Transport Award Committee 2009)

⁵⁸ See (Adams 2009), (Bruni 2011), (Goldstein 2008), (Seaton 2011), (Taddeo 2010), (Williams 2007) and (Sadik-Khan 2013).

⁵⁹ (Green 2014)

⁶⁰ (NACTO 2012) and (NACTO 2013)

⁶¹ (FHWA 2013) and (FHWA 2014)

Bike Lanes?”⁶² More colorfully, the frequently critical *New York Post* captioned one blurb: “Wheely crazy: Janette Sadik-Khan has imposed disastrous, bike-centered schemes across the five boroughs.”⁶³

One particularly intense dispute involved a parking-protected bicycle path on Prospect Park West, a stately boulevard bordered on one side by Brooklyn’s world-famous Prospect Park and on the other by Park Slope, an upscale liberal neighborhood of historic homes. Located between the sidewalk and relocated parking spaces, construction of the bike path required the reduction of motor vehicle traffic lanes from three to two. (Traffic flowed just one way on Prospect Park West.) It “became the most controversial slab of cement outside of the Gaza Strip,” noted *The Brooklyn Paper*.⁶⁴ (See Figure 5)

The project had originated in 2007, when the local Community Board asked DOT to study whether bike lanes would reduce speeding and improve bicycle access to the park. Following much discussion, the project was implemented in June 2010. According to data collected by DOT, the share of cars speeding on Prospect Park West fell from 74 to 20 percent while the number of weekday cyclists tripled.⁶⁵

Some, such as Richard Bashner, who chaired the local Community Board when the project was approved, hailed these results. “Thanks to this process,” he said, “Prospect Park West – the street where I live – is much safer today.”⁶⁶ But other residents strongly disagreed. Foes included Norman Steisel, who had served as the city’s first deputy mayor under David Dinkins and Iris Weinshall, Sadik-Khan’s immediate predecessor as DOT who was (and is) married to U.S. Senator Charles Schumer. Opponents tapped into their extensive networks of political and media contacts to lobby against the bike lanes. They also challenged the project in court, where Jim Walden, a former Assistant U.S. Attorney who was then a partner with a global law firm, represented them on a pro bono basis.

Two days before the lawsuit was filed, the Sunday *New York Times* featured a 3,000 word article stating that while Sadik-Khan had “earned international fame,” she had “also become notorious for a brusque, I-know-best style and a reluctance to compromise.” The article went on to suggest that some of the mayor’s closest aides were beginning to wonder if Sadik-Khan was becoming a liability for him.⁶⁷

⁶² (Schaer 2011)

⁶³ (New York Post 2011).

⁶⁴ (O’Neill 2011)

⁶⁵ (NYC DOT 2011, 5, 26, 27)

⁶⁶ (Fried 2011)

⁶⁷ (Grynbaum 2011)

Figure 5: Prospect Park West Before and After Changes



Despite these controversies, a respected polling organization reported shortly after the article appeared that New Yorkers favored bike lanes by a 54/39 margin.⁶⁸ Bloomberg and key aides then moved publicly to defend Sadik-Khan. In a two-page memo written on “Office of the Mayor” letterhead and posted on the mayor’s website, Howard Wolfson, a longtime Democratic political strategist then working as Bloomberg’s Deputy Mayor for Government Affairs and Communications, cited the poll figures and noted that many bike lanes were built at the request of local Community Boards. Wolfson, who also defended the program in interviews and media appearances, pointed out that while the city had added 255 miles of bike lanes in the previous four years, it still had over 6,000 miles of streets. Moreover, he concluded, the city’s experience with the new bike lanes was that they usually produced at least a 40 percent drop in fatalities and serious injuries to drivers, pedestrians, and cyclists.⁶⁹

Wolfson’s intervention, Sadik-Khan later observed, “made a huge difference [because] it was a very strong signal that City Hall was going to fight for this [and] we were not going to be dangling out there by ourselves.” Sadik-Khan, who now

⁶⁸ (Quinnipiac University Poll 2011)

⁶⁹ (Wolfson 2011)

works for Bloomberg Associates, a consulting service founded by the former mayor, added, “I can’t say enough about the leadership of Michael R. Bloomberg [for] standing up to just a torrential hailstorm of criticism. Having the political courage to do what he did, without blinking an eye, was extraordinary.”⁷⁰

Buoyed by the mayor’s support, advocates mobilized to support the Prospect Park West bike path. After several hundred supporters turned out in April for a Community Board meeting, the board voted to support the path, with minor revisions proposed by DOT. Moreover, in August 2011 a state Supreme Court Judge dismissed the suit challenging the project. In December 2012, a state appellate court did order the lower court to hold a new hearing on some of the issues raised in the case. However, the appeals court allowed the lane to remain open and the bike lane’s opponents did not press the issue. Consequently, as of February 2016 the hearing still had not been held.⁷¹

In the aftermath of the controversy, DOT intensified its efforts to consult with officials and community leaders. Most notably, in fall 2011 DOT staff began meeting with officials and entities to review about 3,000 potential locations for the hundreds of bike stations needed for the Citi Bike program’s first phase. By spring 2013, when the system’s 332-station first phase was launched, DOT had held more than 400 meetings and received more than 10,000 suggestions via an online portal.⁷²

Despite the outreach, some businesses and residents were unhappy about the new bike racks. (See) Most notably, in a video that went viral, Dorothy Rabinowitz, a Pulitzer-prize winning member of the *Wall Street Journal’s* editorial board, asserted:

Do not ask me to enter the mind of the totalitarians running this government. ... The majority of citizens of the city ... are appalled by ... this dreadful program. ... We now look at a city whose best neighborhoods are absolutely ... begrimed ... by these blazing blue Citibank bikes. ... It is shocking to walk around the city to see how much of this they have sneaked under the radar in the interest of the environment. ... The bike lobby is an all-powerful enterprise.⁷³

The many respondents to these comments included comedic newscaster Jon Stewart, who observed: “The good news is the *Wall Street Journal* is finally recognizing the corrosive effect of lobbying. The bad news is its [target is] the bike lobby.”⁷⁴

On the ground, the system was a hit, with more than 18 million trips taken on the shared bikes during the program’s first two years. In addition, each bike was used

⁷⁰ (Sadik-Khan 2015)

⁷¹ (Seniors for Safety vs. NYC DOT 2011)

⁷² (NYC DOT, “NYC Bike Share,” 2013)

⁷³ (WSJ Live 2013)

⁷⁴ (Comedy Central 2013)

about five times a day, far more than in any other US city with a bike-sharing program, and comparable to Paris, which, like New York, has an unusually dense network of bike stations.⁷⁵ In addition, an August 2013 poll found 73 percent support for the bike sharing system and 64 percent support for the new bike lanes on city streets.⁷⁶ Moreover, the courts rejected several suits challenging the location of bike stations, including one filed by the owners of the famed Plaza Hotel.

Figure 6: Citi Bike Station



Reframing the Issue

⁷⁵ (ITDP 2013) and (NACTO 2015)

⁷⁶ (Barbaro and Thee-Brennan 2013)

Despite the victories and successes, none of the candidates running to succeed Bloomberg in November 2013 expressed great enthusiasm for the city's bicycle and pedestrian initiatives. This concerned the policies' backers, such as Steely White, who in the summer 2012 issue of Transportation Alternative's magazine, wrote: I'm not much of a worrier, but there's something underway in Toronto that's keeping me up at night. Their new mayor, Rob Ford, has taken aim at bike lanes and mass transit: "Roads are built for buses, cars and trucks, not for people on bikes," he's said, and he's acting on his impulses, ripping up livable streets improvements as fast as he can. Normally, I'd shake my head and mutter something about how misguided he is, but New York City has a mayoral election fast approaching, and some of the candidates are saying things that don't sit well.

After reviewing troubling stances taken by several of the other mayoral candidates, Steely White considered Bill de Blasio, who would ultimately prevail. De Blasio, he wrote, had said that "bike lanes are often 'ill conceived' and pledged to put the brakes on the rollout of safer street designs in favor of a more 'incremental' approach." These views, Steely White added, were surprising because "Bill is a good guy ... and, until recently, a livable streets stalwart. So what happened? When did the tide change?"⁷⁷

De Blasio's positions on these issues did seem to have changed over time. As a city councilman from 2001 to 2009, he had supported many policies favored by cycling advocates, such as creating a bike lane on 9th Street in Park Slope. But he had voted against congestion pricing and, as the city's Public Advocate from 2010 to 2013, he had questioned decisions about both Times Square and Park Plaza West. Sadik-Khan, he said in 2013, was a "radical" on bike lanes and plazas. In contrast, he saw himself as an "incrementalist."⁷⁸

In this politically charged context, Transportation Alternatives hired Penn Schoen, a nationally known polling firm, to explore voter perspectives about the pedestrian and cycling initiatives. According to Steely White, the polling found that while overwhelming majorities of likely voters supported the policies, the principal reason they did so "wasn't to make New York a world-class city. It wasn't health. It wasn't environment. It was safety."⁷⁹

Drawing on these findings, TA moved to reframe the policies as almost entirely focused on safety. To do so, it revived its call for the city to adopt a Vision Zero approach, which TA had detailed in a 2011 report that had received virtually no coverage when it was released. The report noted that between 2000 and 2009 more New Yorkers had died as a result of crashes than had been murdered by guns. To reduce that number, the report said, the city should redesign key streets to discourage

⁷⁷ (Steely White 2012)

⁷⁸ (Rubinstein, "De Blasio, who called Sadik-Khan a 'radical,' ..." 2013)

⁷⁹ (Steely White 2015) See also (Transportation Alternatives 2013)

speeding, decrease the default speed limit on city streets 20 mph, and vigorously enforce speed limits and other traffic laws. Since these approaches required the collaboration of multiple city departments, the report noted, “The Mayor must make safe streets a priority and directly lead the effort to eliminate traffic deaths and serious injuries.”⁸⁰

In the spring of 2013 Christine Quinn, a mayoral candidate who was then president of the City Council, seemed to embrace some of these approaches when she called for cutting traffic-related deaths in half by 2025.⁸¹ However, while early polling had Quinn leading the race, by the early summer she began to fade, in part because voters viewed her as too close to Bloomberg. TA’s leaders turned to de Blasio, who was rising in the polls. They not only shared their polling data and policy recommendations with his senior staff (who included TA’s former communications director), they also arranged for de Blasio to meet with people who had recently lost family members in crashes.

In August, de Blasio announced that if elected, he would “take decisive and sustained action to reduce street fatalities each year until we have achieved ‘Vision Zero’ — a city with zero fatalities or serious injuries caused by car crashes.” To do so, he promised that DOT would revamp at least 50 dangerous corridors and intersections each year. In keeping with his overall campaign focus on addressing growing inequality, he added that this effort would focus on poorer neighborhoods, areas near schools, and neighborhoods with large numbers of senior citizens. In addition, he wanted the police department to “track and prioritize the enforcement of [the laws against] speeding, failure to yield to pedestrians, and reckless driving.”⁸²

No other Democratic or Republican candidate embraced the safety agenda or sought the endorsement of StreetsPAC, a new political action committee founded by several people with close ties to TA. After interviewing both de Blasio and Quinn, the group’s board endorsed de Blasio, in part because, unlike Quinn, he promised to replace Police Commissioner Ray Kelly, who had long resisted calls for more aggressive enforcement of traffic laws. (De Blasio’s promise to replace Kelly was primarily due to the commissioner’s strong support for controversial “stop-and-frisk” policies that de Blasio opposed.)⁸³ In September, de Blasio received 41 percent of the vote in the Democratic primary, enough to avoid a runoff. In November, he was elected with 73 percent of the vote.

IMPLEMENTING VISION ZERO

⁸⁰ (Petro and Ganson 2011, 8, 14, 17)

⁸¹ (Rubinstein, “Christine Quinn wants ...” 2013)

⁸² (Aaron 2013)

⁸³ (Rubinstein, “Safe-streets advocacy group picks de Blasio ...” 2013)

Once in office, De Blasio gave First Deputy Mayor Anthony Shorris responsibility for ensuring interdepartmental collaboration in support of Vision Zero. He also made clear that it should be a high priority for his transportation commissioner, Polly Trottenberg, who had served as U.S. Undersecretary of Transportation for Policy in the Obama Administration. However, she recalled that in her interview with the mayor-elect, de Blasio “basically said, ‘Look, I love transportation but I don’t know that it’s going to be the first thing’” on the agenda, which, Trottenberg noted, was going to focus on issues such as “Pre-K, housing, and better relationships between ... the police and the minority community.”⁸⁴

William Bratton, who de Blasio appointed the city’s police commissioner, also was focused on improving relationships with minority communities. However, citing the fact that the number of people killed in crashes each year was almost equal to the total number of people murdered (by guns and other means) each year in New York City, Bratton did promise to ramp up enforcement of traffic laws as a feasible way to reduce deaths from crashes.⁸⁵

In February, a few weeks after several pedestrians were killed in crashes that received significant media attention, the new administration released a Vision Zero plan that included most of the key elements promised in the campaign, including several that required changes in state laws. The effort to pass those measures greatly benefitted from the active support of Families for Safe Streets, a new group that grew out of informal meetings convened by Amy Cohen and Gary Eckstein, long-time (but previously uninvolved) TA members whose son was killed by a van in October 2013. “What we bring to this is a human face,” Eckstein told *The New York Times*. “People are killed and families are turned inside out. It’s important for people to see this.”⁸⁶ (See Figure 7)

Among those reportedly swayed by the group’s lobbying was State Senator Jeffrey Klein, a Bronx Democrat who was a leader of the Independent Democratic Caucus, a breakaway group that joined with the Senate’s Republicans to form a governing majority. Klein reportedly made the passage of these measures a condition for his remaining in the precarious coalition. Just before it adjourned, the legislature passed measures (that the governor signed) allowing the city to lower the default speed limit to 25 mph, add 120 additional speed cameras in school zones, and continue operating its red-light camera program for five years.⁸⁷

Figure 7: Rally for Vision Zero⁸⁸

⁸⁴ (Trottenberg 2015)

⁸⁵ (Hinds 2013)

⁸⁶ (Kleinfeld 2014)

⁸⁷ (City of New York, “Initiatives: Legislation,” n.d.)

⁸⁸ Photo by Dmitry Gudkov. Reprinted with permission.



Meanwhile, NYC DOT and other key city agencies, used sophisticated data analyses and extensive community outreach to identify streets and intersections most in need of design changes and increased enforcement of traffic laws. As a result, several key streets, such as Queens Boulevard, were revamped. Moreover, in 2014, the police issued 42 percent more speeding tickets than in 2013 and recorded a 126 percent increase in the number of summons issued to drivers who failed to yield to pedestrians.⁸⁹ These efforts appear to be having an effect. The number of pedestrians killed in crashes fell to a record low 131 in 2015 while the total number of people killed in crashes fell to 230, also a record low.⁹⁰

On the other hand, in August 2015 de Blasio again expressed ambivalence about Times Square, where various street performers, most notoriously topless (though painted) women, who aggressively invite tourists to pose for pictures with them and then seek tips for doing so, continued to be a problem. Bratton was quoted as saying that his solution to the problem was: “just dig the whole damn thing up and put it back the way it was” and de Blasio said more temperately that he would consider removing the plaza. In response, Times Square Alliance President Tim Tompkins said, “We can’t govern, manage, or police our public spaces so we should just tear

⁸⁹ (Donohue 2014)

⁹⁰ (City of New York and NYC DOT n.d.)

them up. That's not a solution. It's a surrender.”⁹¹ In October, a task force appointed by de Blasio recommended that the plaza be retained, with the women and other solicitors limited to a small portion of it.

Despite this controversy, Trottenberg asserted that NYC DOT generally would continue the policies started under Bloomberg, saying: “When it comes to transportation, we're not radically different than the last administration. ... I think we try harder to work with the City Council and make the process consensual. We also benefit from the fact that a lot of these projects were a lot more controversial six or seven years ago than they are today. But I don't view us as a radical change.”⁹²

DRAFT

⁹¹ (Grynbaum and Flegenheimer 2015)

⁹² (Trottenberg 2015)

Works Cited

- Aaron, Brad. "Bill de Blasio Outlines His "Vision Zero" Plan." *Streetblog NYC*. August 7, 2013. <http://www.streetsblog.org/2013/08/07/bill-de-blasio-outlines-his-vision-zero-plan/> (accessed November 16, 2015).
- Adams, Susan. "Taking Back New York's Streets." *Forbes*. October 5, 2009. <http://www.forbes.com/forbes/2009/10/05/thought-leaders-sadik-khan-taking-back-new-york-streets.html> (accessed November 16, 2015).
- Alex Garvin & Associates, Inc. "Visions for New York City: Housing and the Public Realm." Prepared for The City of New York's Economic Development Corporation. May 26, 2006. http://www.streetsblog.org/wp-content/uploads/2006/08/Garvin_Report_Full.pdf (accessed November 12, 2015).
- Barbaro, Michael, and Megan Thee-Brennan. "Poll Shows New Yorkers Are Deeply Conflicted Over Bloomberg's Legacy." *The New York Times*. August 16, 2013. http://www.nytimes.com/2013/08/18/nyregion/what-new-yorkers-think-of-mayor-bloomberg.html?_r=0. (accessed November 16, 2015).
- Brash, Julian. *Bloomberg's Way: Class and Governance in the Luxury City*. Athens, GA: University of Georgia Press, 2011.
- Bruni, Frank. "Bicycle Visionary." *The New York Times*. September 10, 2011. <http://www.nytimes.com/2011/09/11/opinion/sunday/bruni-janette-sadik-khan-bicycle-visionary.html> (accessed November 16, 2015).
- Cardwell, Diane, and Danny Hakim. "Bloomberg Tactics Were Highhanded on Traffic Plan, Lawmakers Say." *The New York Times*. April 8, 2008. <http://www.nytimes.com/2008/04/08/nyregion/08bloomberg.html> (accessed November 12, 2015).
- Chan, Sewell. "This Blog Moves Traffic." *The New York Times*. City Room blog. June 14, 2007. <http://cityroom.blogs.nytimes.com/2007/06/14/a-blog-that-moves-traffic/> (accessed November 12, 2015).
- City of New York and NYC DOT. *Traffic Crashes*. <http://www.nycvzv.info/> (accessed January 11, 2016).
- City of New York. *Help for Neighborhoods: Business Improvement Districts*. Department of Small Business Services. <http://www.nyc.gov/html/sbs/html/neighborhood/bid.shtml> (accessed November 12, 2015).
- . *Initiatives: Legislation*. <http://www.nyc.gov/html/visionzero/pages/initiatives/legislation.shtml> (accessed January 11, 2016).
- . "Mayor Bloomberg Announces Creation of Office Of Long-Term Planning and Sustainability ." Office of the Mayor. September 21, 2006. http://www.nyc.gov/portal/site/nycgov/menuitem.c0935b9a57bb4ef3daf2f1c701c789a0/index.jsp?pageID=mayor_press_release&catID=1194&doc_name=http%3A%2F%2Fwww.nyc.gov%2Fhtml%2Fom%2Fhtml%2F2006b%2Fpr335-06.html&cc=unused1978&rc=1194&ndi=1 (accessed November 12, 2015).
- . "Mayor Bloomberg, Transportation Commissioner Sadik-Khan and Design and Construction Commissioner Burney Cut Ribbon on First Phase of Permanent Times

- Square Reconstruction." Office of the Mayor. December 23, 2013.
<http://www1.nyc.gov/office-of-the-mayor/news/432-13/mayor-bloomberg-transportation-commissioner-sadik-khan-design-construction-commissioner/#/0> (accessed December 16, 2015).
- . "Mayor Michael R. Bloomberg's State of the City Address." Office of the Mayor. January 23, 2003.
http://www.nyc.gov/portal/site/nycgov/menuitem.b270a4a1d51bb3017bce0ed101c789a0/index.jsp?pageID=nyc_blue_room&catID=1194&doc_name=http%3A%2F%2Fwww.nyc.gov%2Fhtml%2Fom%2Fhtml%2F2003a%2Fstate_city_2003.html&cc=unused1978&rc=1194&ndi=1 (accessed November 12, 2015).
- . "PlaNYC: A Greener, Greater New York." Mayor's Office of Sustainability and the Mayor's Office of Recovery and Resiliency. April 22, 2007.
http://www.nyc.gov/html/planyc/downloads/pdf/publications/full_report_2007.pdf (accessed November 12, 2015).
- Comedy Central. "Full Pedal Jacket." *The Daily Show with John Stewart*. June 6, 2013.
<http://www.cc.com/video-clips/2432gv/the-daily-show-with-jon-stewart-full-pedal-racket---citi-bike> (accessed November 16, 2015).
- Cuozzo, Steve. "Killing Times Square." *The New York Post*. August 24, 2009.
<http://nypost.com/2009/08/24/killing-times-square/> (accessed November 16, 2015).
- Doctoroff, Daniel L. NYC Deputy Mayor for Economic Development and Reconstruction, 2002-2009. July 16, 2015 interview by the author.
- Donohue, Pete. "Pedestrian traffic deaths hit record low in New York City." *The New York Daily News*. December 30, 2014. <http://www.nydailynews.com/new-york/exclusive-pedestrian-traffic-deaths-hit-record-nyc-article-1.2060325> (accessed November 16, 2015).
- Federal Highway Administration (FHWA). "Bicycle and Pedestrian Facility Design Flexibility." August 20, 2013.
http://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/design_flexibility.cfm (accessed February 24, 2016).
- . "Questions & Answers about Design Flexibility for Pedestrian and Bicycle Facilities ." July 25, 2014.
http://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/design_flexibility_qa.cfm (accessed February 26, 2016).
- Fried, Ben. "Lander and Former CB6 Chair File Amicus Brief Supporting PPW Bike Lane ." *Streetsblog NYC*. June 3, 2011. <http://www.streetsblog.org/2011/06/03/lander-and-former-cb6-chair-file-amicus-brief-supporting-ppw-bike-lane/> (accessed November 16, 2015).
- . "The City Council Vote in Two Dimensions." *Streetsblog NYC*. April 2, 2008.
<http://www.streetsblog.org/2008/04/02/the-city-council-vote-in-two-dimensions/> (accessed November 2015, 2015).
- Gertner, John. "Dynamic Duos: Michael Bloomberg And Janette Sadik-Khan On The Future Of Walking, Biking, And Driving." *Fast Company*. September 11, 2013.
<http://www.fastcodesign.com/3016252/new-york-city-bloomberg-and-janette-sadik-khan> (accessed November 12, 2015).
- Gladstone, David L., and Susan S. Fainstein. "The New York and Los Angeles Economies from Boom to Crisis." In *New York and Los Angeles: The Uncertain Future*, by David

- Halle and Andrew A. Beveridge, 33-78. New York City, New York: Oxford University Press, 2013.
- Glaeser, Edward L. "Urban colossus: why is New York America's largest city?" *Federal Reserve Bank of New York Economic Policy Review*. December 2005. <http://www.newyorkfed.org/research/epr/05v11n2/0512glae.pdf> (accessed November 12, 2015).
- Goldstein, Dana. "Street Fighter." *The American Prospect*. November 21, 2008. <http://prospect.org/article/street-fighter> (accessed November 16, 2015).
- Gonzalez, Juan. "Pork handouts offered to pressure council members to OK congestion plan." *The New York Daily News*. April 2, 2008. <http://www.nydailynews.com/news/pork-handouts-offered-pressure-council-members-congestion-plan-article-1.279351> (accessed November 12, 2015).
- Green Lane Project. "Protected Bike Lanes." October 15, 2015. <https://docs.google.com/spreadsheets/d/11H0gArHxo6kMop1118yMcq7ArbNrwaGBLmIXgq11Gjk/edit#gid=3> (accessed November 12, 2015).
- Green, Jared. "Jan Gehl: The City is Big." *The Dirt: Uniting the Built & Natural Environments*. American Society of Landscape Architects. February 10, 2014. <http://dirt.asla.org/2014/02/10/jan-gehl-the-city-is-big/> (accessed November 16, 2015).
- Grynbaum, Michael M, and Matt Flegenheimer. "Mayor de Blasio Raises Prospect of Removing Times Square Pedestrian Plazas." *The New York Times*. August 20, 2015. <http://www.nytimes.com/2015/08/21/nyregion/mayor-de-blasio-raises-prospect-of-removing-times-square-pedestrian-plazas.html> (accessed November 16, 2015).
- Grynbaum, Michael M. "For City's Transportation Chief, Kudos and Criticism." *The New York Times*. March 4, 2011. <http://www.nytimes.com/2011/03/06/nyregion/06sadi-khan.html> (accessed November 16, 2015).
- . "New York Traffic Experiment Gets Permanent Run." *The New York Times*. February 11, 2010. <http://www.nytimes.com/2010/02/12/nyregion/12broadway.html> (accessed November 15, 2015).
- Hinds, Kate. "Incoming NYPD Commissioner Promises Emphasis on Traffic Fatalities." WNYC Transportation Nation Blog. December 5, 2013. <http://www.wnyc.org/story/incoming-nypd-commissioner-bratton-promises-emphasis-traffic-fatalities/> (accessed November 16, 2015).
- Holeywell, Ryan. "Will the Next NYC Mayor Continue Bloomberg's Urban Planning Legacy?" *Governing*. March 2013. <http://www.governing.com/topics/transportation-infrastructure/gov-nyc-mayor-bloombergs-urban-planning-legacy.html> (accessed November 12, 2015).
- Institute for Transportation & Development Policy. "The Bike Share Planning Guide." December 2013. https://www.itdp.org/wp-content/uploads/2014/07/ITDP_Bike_Share_Planning_Guide.pdf (accessed November 16, 2015).
- Kleinfeld, N.R. "After a Son's Death, Parents Channel Their Grief Into Activism ." *The New York Times*. January 24, 2014. <http://www.nytimes.com/2014/01/26/nyregion/after-a-sons-death-parents-turn-their-grief-to-activism.html> (accessed November 16, 2015).
- Larson, Scott. *Building Like Moses with Jacobs in Mind*. Philadelphia, PA: Temple University Press, 2013.

- Lee Kuan Yew World City Prize Secretariat. "2012 Prize Laureate: New York City." 2012. http://www.leekuaneyewworldcityprize.com.sg/laureate_newyork.htm (accessed November 12, 2015).
- Lisberg, Adam, and Elizabeth Benjamin. "Silver: NY Legislature rejects Manhattan traffic fee." *The New York Daily News*. April 7, 2008. <http://www.nydailynews.com/news/silver-ny-legislature-rejects-manhattan-traffic-fee-article-1.282901> (accessed November 12, 2015).
- Lydon, Mike, and Anthony Garcia. *Tactical Urbanism: Short-term Action for Long-term Change*. Washington, DC: Island Press, 2015.
- Moss, Mitchell L. "How New York City Won the Olympics." Rudin Center for Transportation Policy and Management, Robert F. Wagner Graduate School of Public Service, New York University. 2011. http://wagner.nyu.edu/files/faculty/publications/Olympics_in_NYC_2012_REPORT_110711.pdf (accessed November 19, 2015).
- National Association of City Transportation Officials (NACTO). *Urban Bikeway Design Guide*. Washington, DC: Island Press, 2012.
- . *Urban Street Design Guide*. Washington, DC: Island Press, 2013.
- . "Walkable Station Spacing is Key to Successful, Equitable Bike Share." April 2015. http://nacto.org/wp-content/uploads/2015/09/NACTO_Walkable-Station-Spacing-Is-Key-For-Bike-Share_Sc.pdf (accessed November 16, 2015).
- Naparstek, Aaron. Founding Editor, Streetsblog NYC. July 15, 2015 interview by the author.
- . "City Launches "Public Plaza Initiative" at DUMBO Pocket Park." *Streetsblog NYC*. August 10, 2007. <http://www.streetsblog.org/2007/08/10/city-launches-public-plaza-initiative-at-dumbo-pocket-park/> (accessed November 12, 2015).
- . "Mayor Bloomberg Says NYC Traffic Congestion is Good." *Streetsblog NYC*. August 2, 2006. <http://www.streetsblog.org/2006/08/02/mayor-bloomberg-says-nycs-traffic-congestion-is-good/> (accessed November 12, 2015).
- New York Post PageSix.com staff. "Jake and Taylor Split?" *The New York Post*. January 25, 2011. http://www.nypost.com/p/pagesix/cindy_adams/jake_taylor_split_wsTP45FkLAXpCo2aiFjbTP (accessed November 16, 2015).
- New York Times. *Reshaping New York: From buildings to bike lanes to painting over Broadway, how the city changed in 12 years of Bloomberg*. August 18, 2013. <http://www.nytimes.com/newsgraphics/2013/08/18/reshaping-new-york/?ref=nyregionspecial> (accessed November 30, 2015).
- New York City Department of Transportation (NYC DOT). "Green Light for Midtown Evaluation Report." January 2010. http://www.nyc.gov/html/dot/downloads/pdf/broadway_report_final2010_web.pdf (accessed November 16, 2015).
- . "Making Safer Streets." November 2013. <http://www.nyc.gov/html/dot/downloads/pdf/dot-making-safer-streets.pdf> (accessed November 16, 2015).
- . "Measuring the Street: New Metrics for 21st Century Streets." October 2012. <http://www.nyc.gov/html/dot/downloads/pdf/2012-10-measuring-the-street.pdf> (accessed November 16, 2015).

- "NYC Bike Share: Designed by New Yorkers." April 2013.
<http://www.nyc.gov/html/dot/downloads/pdf/bike-share-outreach-report.pdf> (accessed February 25, 2016).
- "NYC Plaza Program Sites." <http://www.nyc.gov/html/dot/html/pedestrians/publicplaza-sites.shtml> (accessed November 12, 2015).
- "Prospect Park West: Bicycle Path and Traffic Calming Update, Evaluation Summary & Raw Data." NYC DOT Traffic Management Division. January 2011.
http://www.nyc.gov/html/dot/downloads/pdf/20110120_ppw_data.pdf (accessed November 16, 2015).
- "Sustainable Streets: 2013 and Beyond." 2013.
<http://www.nyc.gov/html/dot/downloads/pdf/2013-dot-sustainable-streets-lowres.pdf> (accessed November 16, 2015).
- "Sustainable Streets: Strategic Plan for the New York City Department of Transportation." 2008. http://www.nyc.gov/html/dot/downloads/pdf/stratplan_intro.pdf (accessed November 12, 2015).
- "The New York City Pedestrian Safety Study & Action Plan." August 2010.
http://www.nyc.gov/html/dot/downloads/pdf/nyc_ped_safety_study_action_plan.pdf (accessed November 16, 2015).
- "World Class Streets: Remaking New York City's Public Realm." November 2008.
http://www.nyc.gov/html/dot/downloads/pdf/World_Class_Streets_Gehl_08.pdf (accessed November 12, 2015).
- O'Neill, Natalie. "The Prospect Park West bike lane had our presses rolling all year long." *The Brooklyn Paper*. December 30, 2011.
http://www.brooklynpaper.com/stories/34/52/all_year_bikelane_2011_12_30_bk.html (accessed December 16, 2015).
- Petro, John, and Lindsey Ganson. "Vision Zero: How Safer Streets in New York City Can Save More Than 100 Lives a Year." Drum Major Institute and Transportation Alternatives. June 2011.
https://www.transalt.org/sites/default/files/news/reports/2011/Vision_Zero.pdf (accessed November 16, 2015).
- Project for Public Spaces. *New York City Streets Renaissance*.
<http://www.pps.org/projects/new-york-city-streets-renaissance/> (accessed November 12, 2015).
- Quinnipiac University Poll. "Kelly Tops List For New York City Mayor, Quinnipiac University Poll Finds; Voters Back Congestion Pricing, If Funds Go To Transit." March 13, 2008. <http://www.quinnipiac.edu/news-and-events/quinnipiac-university-poll/new-york-city/release-detail?ReleaseID=1157> (accessed November 12, 2015).
- "New York City Voters Want To Shop At Walmart 2-1, Quinnipiac University Poll Finds; Voters Back Merit For Cop, Firefighter, Teacher Layoffs." March 18, 2011.
<http://www.quinnipiac.edu/news-and-events/quinnipiac-university-poll/search-releases/search-results/release-detail?ReleaseID=1569&What=&strArea=3;0;&strTime=28> (accessed November 16, 2015).
- Reed, Tucker. President, Downtown Brooklyn Partnership and former Executive Director, DUMBO Improvement District. July 10, 2015 interview by the author.

- Rubinstein, Dana. "Christine Quinn wants to cut street fatalities in half." *POLITICO New York*. May 15, 2013.
<http://www.capitalnewyork.com/article/politics/2013/05/8530053/christine-quinn-wants-cut-street-fatalities-half> (accessed November 16, 2015).
- . "De Blasio, who called Sadik-Khan a 'radical,' comes around on an expansion of bike lanes." *POLITICO New York*. June 19, 2013.
<http://www.capitalnewyork.com/article/politics/2013/06/8531063/de-blasio-who-called-sadik-khan-radical-comes-around-expansion-bike> (accessed November 16, 2015).
- . "Sadik-Khan's rearguard." *POLITICO New York*. January 28, 2014.
<http://www.capitalnewyork.com/article/city-hall/2014/01/8539383/sadik-khan%E2%80%99s-rearguard?page=all> (accessed November 12, 2015).
- . "Safe-streets advocacy group picks de Blasio over Quinn, with Thompson out of the running." *POLITICO New York*. September 3, 2013.
<http://www.capitalnewyork.com/article/politics/2013/09/8533405/safe-streets-advocacy-group-picks-de-blasio-over-quinn-thompson-out?--bucket-headline> (accessed November 16, 2015).
- Russo, Ryan, Randy Wade, Joshua Benson, and Christopher Lucas. "Ninth Avenue Bicycle Path and Complete Street." New York City Department of Transportation. 2008.
http://www.nyc.gov/html/dot/downloads/pdf/rr_ite_08_9thave.PDF (accessed November 12, 2015).
- Sadik-Khan, Janette. Commissioner, New York City Department of Transportation, 2007-2013. July 15, 2015 interview by the author.
- . "New York's streets? Not so mean anymore." TedCity2.0. September 2013.
https://www.ted.com/talks/janette_sadik_khan_new_york_s_streets_not_so_mean_any_more (accessed July 22, 2015).
- Schaer, Matthew. "Not Quite Copenhagen Is New York too New York for bike lanes?" *New York Magazine*. March 20, 2011. <http://nymag.com/news/features/bike-wars-2011-3/> (accessed November 16, 2015).
- Schaller, Bruce. Deputy Commissioner for Planning and Sustainability, NYC DOT, 2007-2011 and Deputy Commissioner for Traffic and Planning, NYC DOT, 2012-2014. July 17, 2015 interview by the author.
- Seaton, Matt. "New York's transportation chief is a latter-day Robin Hood." *theguardian.com*. Bike blog. January 6, 2011.
<http://www.theguardian.com/environment/bike-blog/2011/jan/05/new-york-transportation-chief> (accessed November 16, 2015).
- Seniors for Safety et al. vs. NYC Department of Transportation et al.* 005210/2011 (Kings Civil Supreme, August 15, 2011).
- Singer, Jessie. "Executive Order: A Mayoral Strategy for Traffic Safety." Transportation Alternatives. July 14, 2009.
http://transalt.org/sites/default/files/news/reports/2009/Executive_Order.pdf (accessed November 16, 2015).
- Steely White, Paul. Executive Director, Transportation Alternatives. June 23, 2015 interview by the author.
- . "Northern Exposure." *Reclaim*. Magazine published by Transportation Alternatives. Summer 2012. <https://www.transalt.org/news/magazine/2012/Summer/3> (accessed November 16, 2015).

Streetsfilms. "Sustainable Streets." April 29, 2008. <http://www.streetfilms.org/janette-sadik-khans-sustainable-streets/> (accessed November 12, 2015).

Summers, Nick. "Citi Bike: Citibank's New York Marketing Coup." *Bloomberg Business*. October 31, 2013. <http://www.bloomberg.com/bw/articles/2013-10-31/citi-bike-citibanks-new-york-marketing-coup> (accessed November 12, 2015).

Sustainable Transport Award Committee. "2009: New York City, United States." Transit Center, The Institute for Transportation Development and Policy, and The World Bank. 2009. <http://staward.org/winners/2009-new-york-city-united-states/> (accessed November 16, 2015).

Taddeo, Lisa. "Janette Sadik-Khan: Urban Reengineer The new city of the future." *Esquire Magazine*. November 22, 2010. <http://www.esquire.com/entertainment/interviews/a8980/janette-sadik-khan-1210/> (accessed November 12, 2015).

Times Square Alliance. "Broadway Plaza Surveys Commissioned by the Times Square Alliance." February 11, 2010. <http://www.timessquarenyc.org/about-the-alliance/public-space-projects/times-square-bowtie/index.aspx#.VkoH-a6rRp9> (accessed November 16, 2015).

Tompkins, Tim. President, Times Square Alliance. July 10, 2015 interview by the author.

Transportation Alternatives. "The Power of Polling." *Reclaim*. Magazine published by Transportation Alternatives. Fall 2013. <https://www.transalt.org/news/magazine/2013/Fall/23> (accessed November 16, 2015).

Trottenberg, Polly. Commissioner, New York City Department of Transportation. July 15, 2015 interview by the author.

Tsay, Shin-pei. "A People's History of Recent Urban Transportation Innovation." TransitCenter. July 2015. <http://transitcenter.org/wp-content/uploads/2015/08/A-Peoples-History-of-Recent-Urban-Transportation-Innovation-Report-Pages.pdf> (accessed November 23, 2015).

Wiley-Schwartz, Andy. Assistant Commissioner for Public Space, NYC DOT, 2007-2013. June 25, 2015 interview by the author.

Williams, Timothy. "To Ease a City's Traffic, Shifting From 4 Wheels to 2." *The New York Times*. September 4, 2007. <http://www.nytimes.com/2007/09/04/nyregion/04bicycle.html> (accessed November 16, 2015).

Wolfson, Howard. "Memorandum to Interested Parties." Office of the Mayor City of New York. March 21, 2011. http://www.nyc.gov/html/om/pdf/bike_lanes_memo.pdf (accessed November 16, 2015).

WSJ Live. "Opinion: Death by Bicycle." *The Wall Street Journal*. May 31, 2013. <http://www.wsj.com/video/opinion-death-by-bicycle/C6D8BBCE-B405-4D3C-A381-4CA50BDD8D4D.html> (accessed November 2015, 2015).