CYCLING IN THE CITY

Cycling Trends in NYC

2018

Cycling in the City

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Over the past two decades, New York City has seen tremendous growth in cycling, reflecting broad efforts to expand the city's bicycle infrastructure. In the mid-1990s, New York City Department of Transportation (DOT) established a bicycle program to oversee development of the city's fledgling bike network. Since then, DOT has led the charge to build an expansive network that serves an ever growing number of New Yorkers. These efforts were accelerated following the release of PlaNYC in 2007, which set ambitious goals toward creating a more sustainable city, and have been expanded further—with increased emphasis on transportation safety and equity—under the framework of OneNYC.

In the last five years, DOT has expanded and enhanced the on-street bike network by nearly 330 miles, including more than 68 protected lane miles, with a record 25 miles installed in 2017. DOT installed over 65 miles of dedicated cycling space in 2017, the most of any year.

With this expansion of bicycle routes on City streets, along with the miles of new greenway paths in public parks, and the introduction of bike share, there have never been more people biking in New York City. Creation of local bike networks beyond the Manhattan Core in communities such as Glen Oaks, Bronxwood, and Ridgewood encourages people to use a bicycle to get around their own neighborhoods to run errands or visit friends. Development of new stretches of protected bike lanes in neighborhoods like Rego Park and Inwood makes cycling more accessible for parents with young children to go for family bike rides. Miles of protected on-street bike lanes are emboldening the more cautious and risk-averse New Yorkers to take to the streets on a bike, while the expanding reach of Citi Bike makes cycling increasingly more convenient for quick trips and multi-modal commutes—even for those who do not own a bicycle.

This Cycling in the City brief, which will be updated annually, seeks to answer two basic questions:

- ***How frequently are New Yorkers using cycling as a mode of transportation?***
- ***How is that frequency changing over time?***

Centre St, Manhattan

St Nicholas Ave, Manhattan

Understanding who is biking in New York City and how often they ride is incredibly valuable, but cycling demographics and trends are very challenging to evaluate. Historically, evaluation of cyclist activity in New York City was centered on counting the number of bicycles entering and exiting the core. However, cycling has grown and matured dramatically as a mode of transportation since the first counts were conducted in 1980. New Yorkers are using bikes for a much wider variety of trips, making it even more difficult to assess bicycle use in the City.

In an effort to better understand the widening breadth of cycling, DOT partnered with the New York City Department of Health and Mental Hygiene (DOHMH) to include several questions about cycling in DOHMH's annual Community Health Survey. Beginning in 2009, and expanding in 2013, these questions shed light on how frequently New York City residents cycle each day, each week, and each year, as well as for what purpose they bike. The recent introduction of a Citywide Mobility Survey provides another important data source to better understand the transportation choices of New Yorkers.

By focusing on the cyclist and not the trip, these surveys provide a more holistic approach to quantifying cycling activity, especially when used in combination with national surveys, on-going bike counts, and Citi Bike trip data. Taken as a whole, this information helps paint a more accurate picture of cycling in New York City than we have ever had before.

*This brief examines these data sources in order to provide a **snapshot** of cycling in the city today and an evaluation of **trends over time**, providing a better understanding of how cycling has grown over the past decades.*

For details regarding the data presented in this document, please consult the Data Types, Sources, and Limitations page of the Appendix.

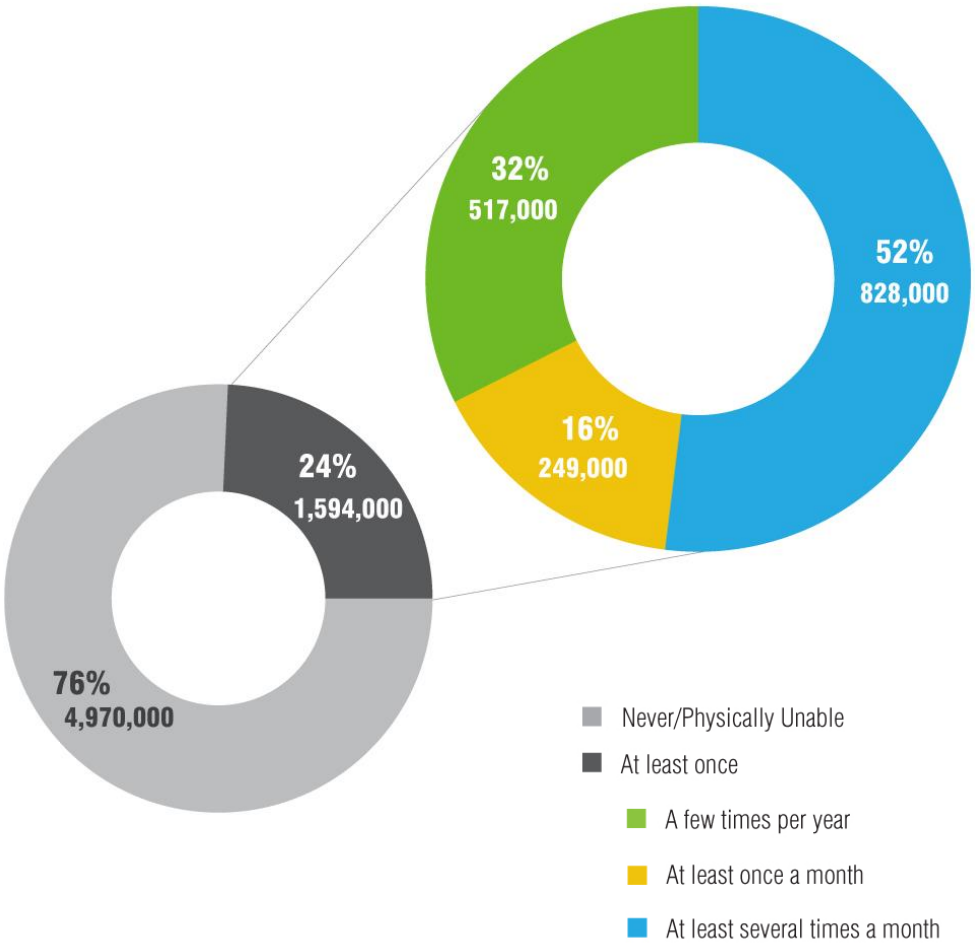
Cycling in the City

A Snapshot

1

NUMBER OF CYCLISTS

Percent of Adult New Yorkers who Ride a Bike (NYC DOHMH)



Community Health Survey Population Estimate = 6.56 million Adult New Yorkers.
NYC Department of Health and Mental Hygiene 2016 Community Health Survey

24% of adult New Yorkers, nearly 1.6 million people, ride a bike
(at least once in past year)

Of those adult New Yorkers, more than eight hundred thousand (828,000) ride a bicycle regularly
(at least several times a month)

Glen Oaks Oval, Queens

COMMUTERS AND TRIPS PER DAY

About **86,000** adult New Yorkers, **2.5%** of all commuting residents, usually bike to **work or school**

Source: Most recent data available, New York City Department of Health and Mental Hygiene, Community Health Survey 2014, see appendix

On a typical day, there are about **460,000 cycling trips** made in New York City

Source: U.S. Census Bureau's American Community Survey Journey to Work 2016, see appendix

South 5th Place and South 4th Street, Brooklyn

Cycling in the City

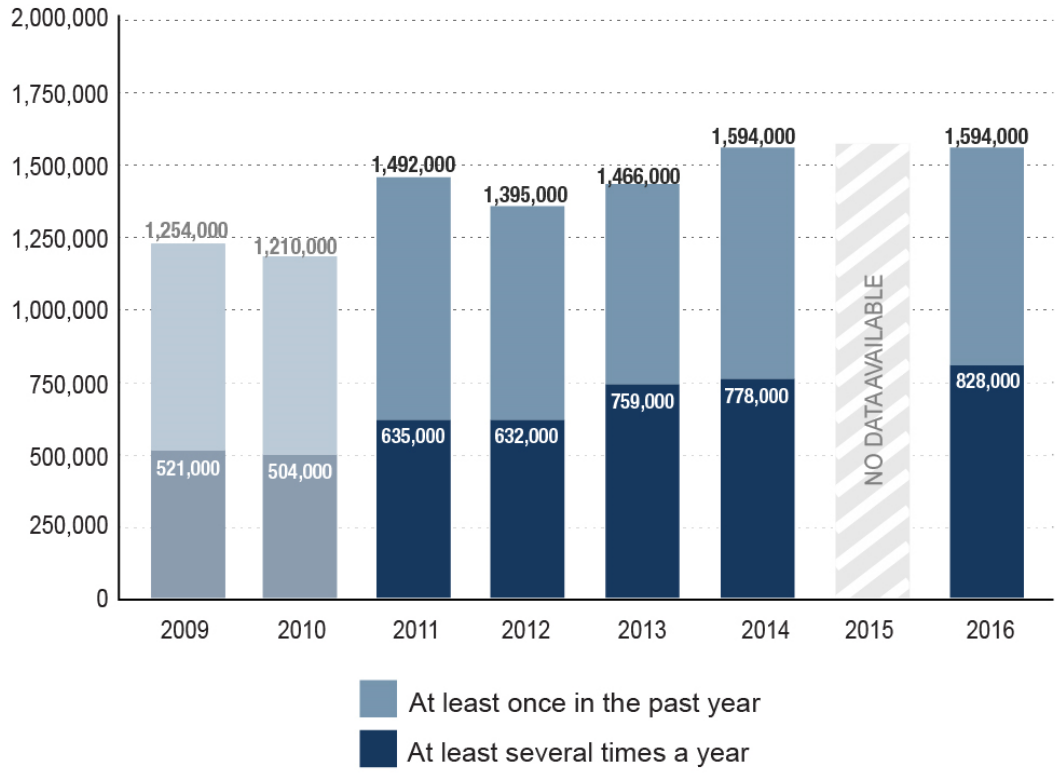
Trends Over Time

2

CITYWIDE TOTAL AND FREQUENT CYCLISTS

Since 2009, the NYC DOHMH Community Health Survey has asked respondents how many times they rode a bike in the past 12 months. Since even the most avid cyclist must begin riding a bike at some point, a clear upward trend in both novice and experienced cyclists illustrates the widening appeal of cycling.

Number of Adult New Yorkers Who Rode a Bike at Least Once in the Past Year, 5 Year Trend



+30% Growth
in the number of New Yorkers who ride a bike several times a month, 2011-2016

+102k Increase
in the number of New Yorkers who bike at least once a year, 2011-2016

DAILY AND ANNUAL CYCLING

The Decennial Census and the American Community Survey (ACS) Journey to Work data provide long-term statistics on the number of people in New York City who use a bicycle as their primary mode of commuting to work (Daily Bike Commuters).

Commuters typically make two commute trips each day (Daily Bike Commute Trips) and research shows that commuting represents approximately one-in-five travel trips in New York City, therefore we can estimate that there are approximately four additional non-commuting bike trips for each commuting bike trip (Total Daily Cycling Trips).

Census data is available for 1980, 1990, 2000 and American Community Survey data has been collected annually since 2005. Because the sample size is smaller for the ACS, a rolling three year average is used for each year after 2000 (e.g. the 2016 number is based on the 2014, 2015, and 2016 surveys).

31st Ave, Queens

Estimates of Daily Cycling Activity by Year

	1980	1990	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Bike Commuters (to work)	9,700	9,600	15,000	16,500	18,200	20,900	23,500	24,400	25,000	26,900	31,500	37,600	41,800	45,000	45,800
Bike Commute Trips (to work)	19,400	19,200	30,000	33,000	36,400	41,800	47,000	48,900	50,000	53,800	63,000	75,200	83,600	90,000	91,600
Total Daily Cycling Trips	100,000	100,000	150,000	170,000	180,000	210,000	240,000	240,000	250,000	270,000	320,000	380,000	420,000	450,000	460,000
Total Annual Cycling Trips (in millions)	36.6	36.5	54.8	62.1	65.7	76.7	87.8	87.6	91.3	98.6	117.1	138.7	153.3	164.3	167.9

+156% Growth
in daily cycling between 2006 and 2016

+70% Growth
in daily cycling between 2011 and 2016

+11.2%
Average Annual Growth Rate
of daily cycling between 2011 and 2016

COMMUTERS BY BOROUGH

Percent Growth: 2011-2016

+107% Manhattan

+65% Brooklyn

+30% Bronx

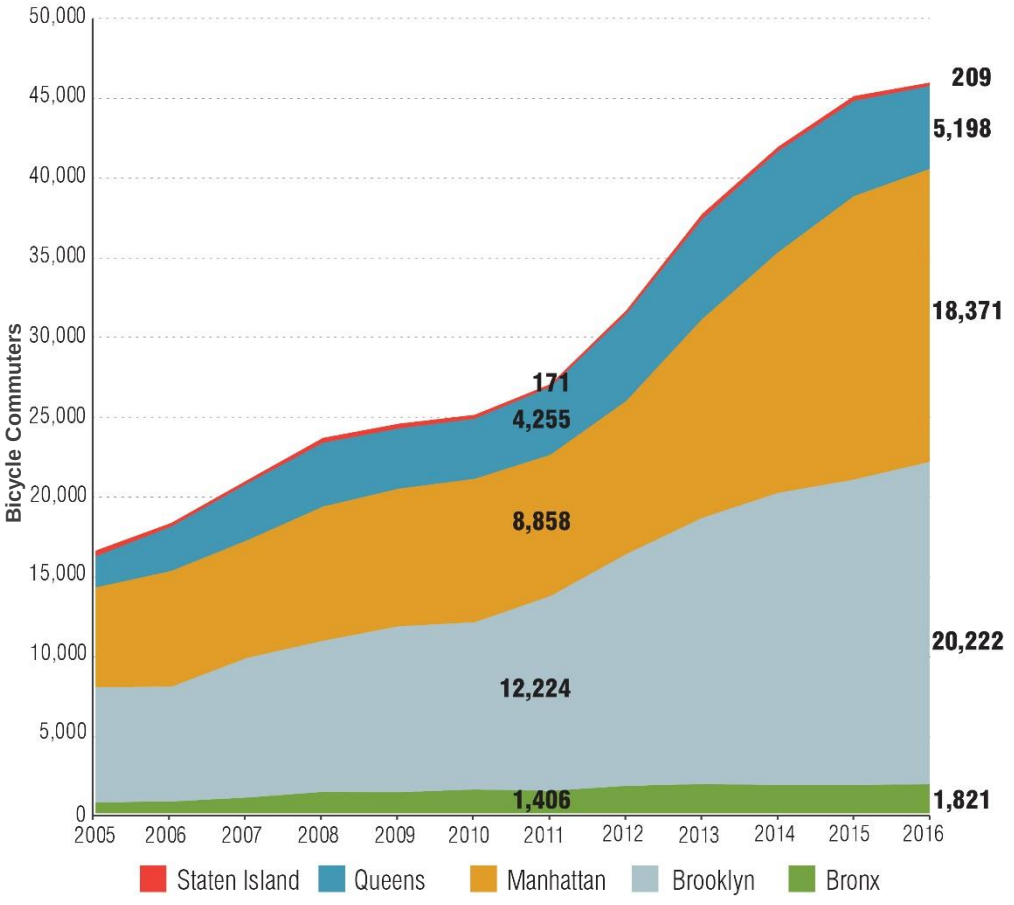
+23% Staten Island

+22% Queens

Knickerbocker Ave, Brooklyn

+107% Growth in commuting to work in Manhattan between 2011 and 2016, the fastest of any borough

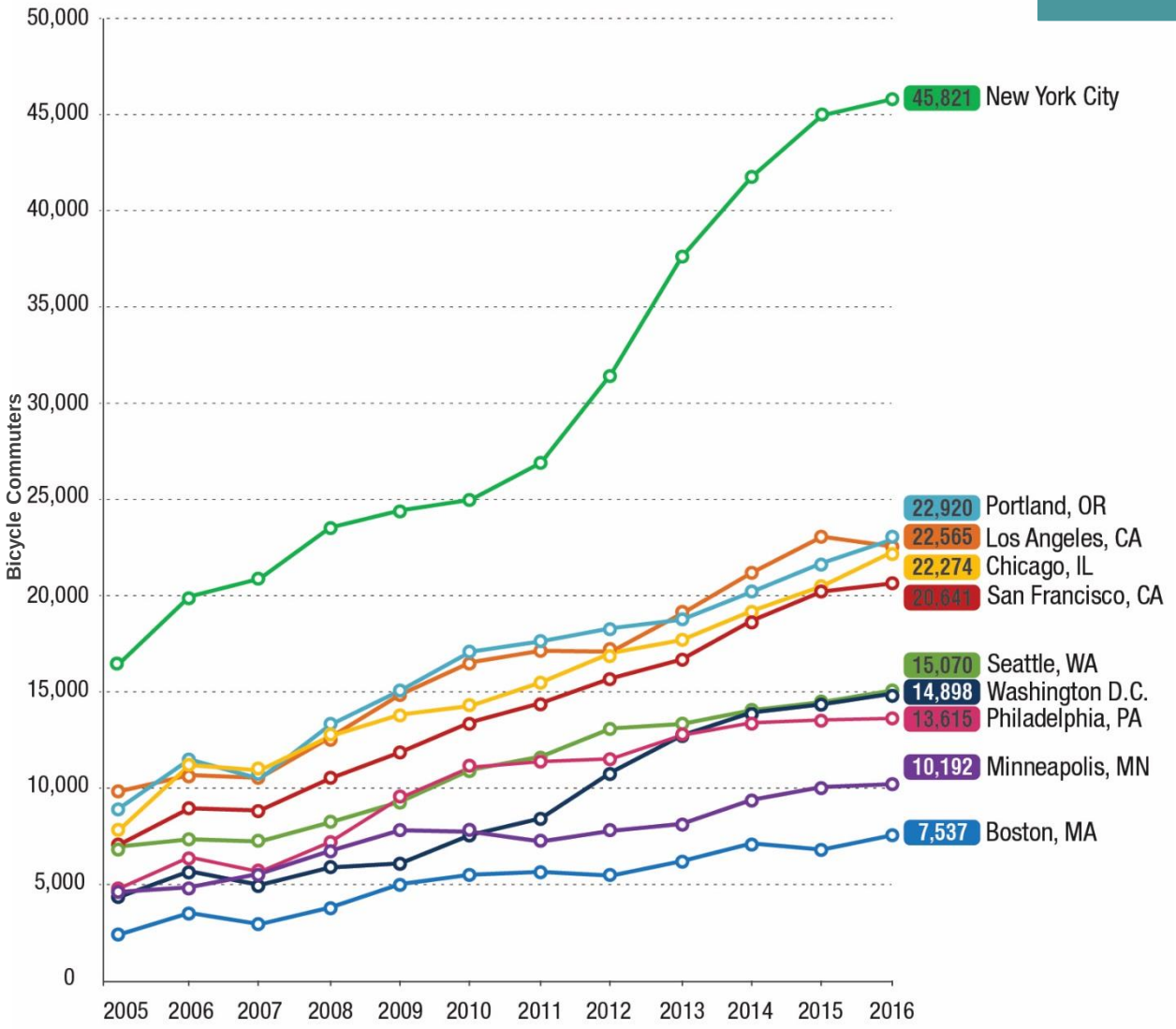
Commute to Work – Rolling 3 Year Average from ACS by Borough



PEER CITIES

Commute to Work - Rolling Three Year Average comparing NYC to Other Cities

Cycling to work in NYC has grown nearly 2x faster as other major cities (2011 and 2016)



Percent Growth: 2011-2016

+70% New York

+37% Peer Cities

+32% Los Angeles, CA

+30% Portland, OR

+44% Chicago, IL

+43% San Francisco, CA

+30% Seattle, WA

+77% Washington DC

+20% Philadelphia

+41% Minneapolis, MN

+34% Boston, MA

Peer cities include Los Angeles, CA; San Francisco, CA; Portland, OR; Seattle, WA; Minneapolis, MN; Chicago, IL; Boston, MA; Washington, D.C.; Philadelphia, PA

EAST RIVER BRIDGES

Many New York City cyclists use the Queensboro, Williamsburg, Manhattan and Brooklyn bridges to connect between the boroughs and the Manhattan core. Comparing counts on these bridges from year to year is a strong indicator of trends in cycling use over time.

From 1980-2013, NYC DOT conducted periodic manual East River bridge bike counts. In 2014, NYC DOT installed automated counters, which provide continuous 24 hour data every day of the year that is averaged on a monthly basis.

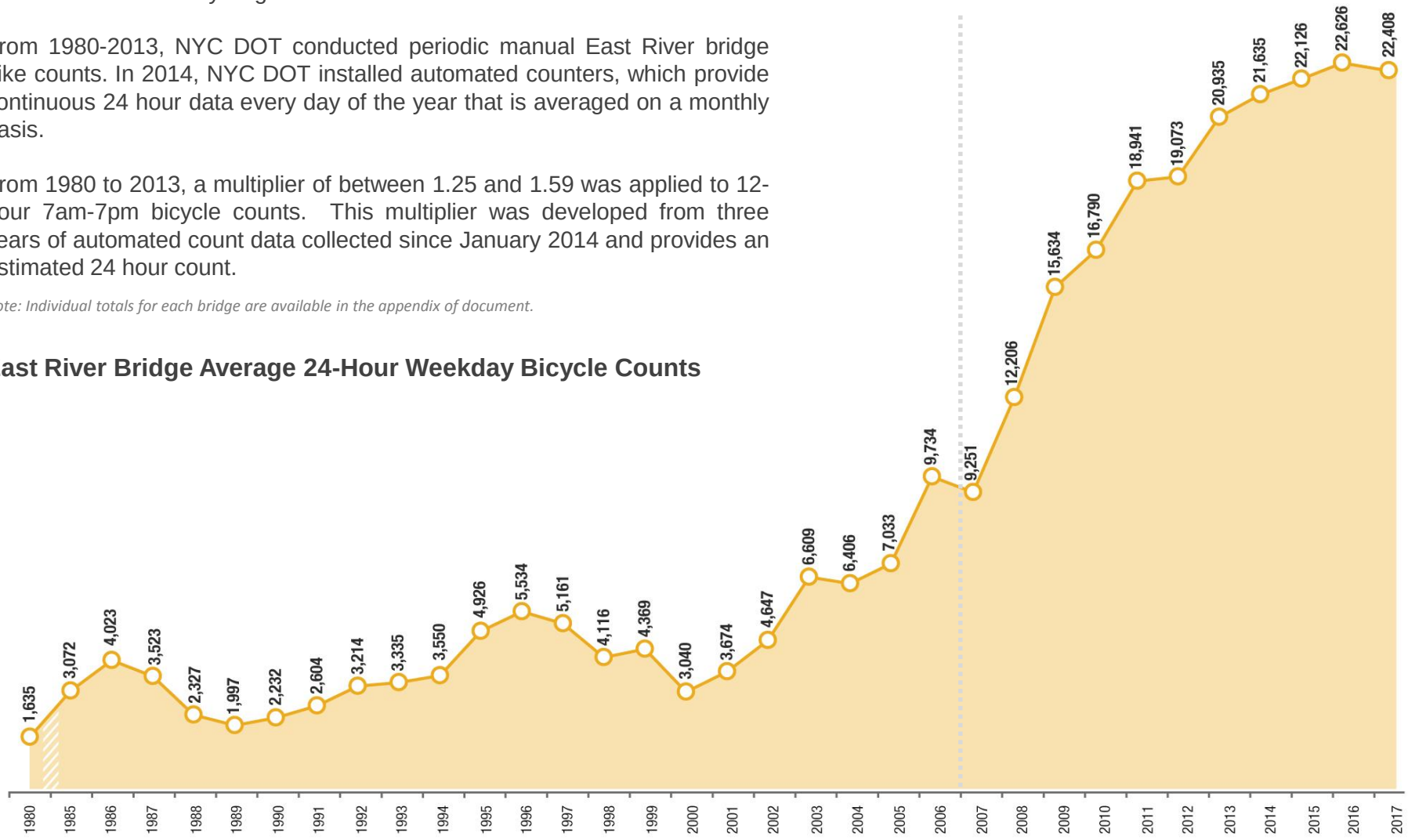
From 1980 to 2013, a multiplier of between 1.25 and 1.59 was applied to 12-hour 7am-7pm bicycle counts. This multiplier was developed from three years of automated count data collected since January 2014 and provides an estimated 24 hour count.

Note: Individual totals for each bridge are available in the appendix of document.

+9.3%

10 Year Average Annual Growth Rate of Cycling on the East River bridges

East River Bridge Average 24-Hour Weekday Bicycle Counts



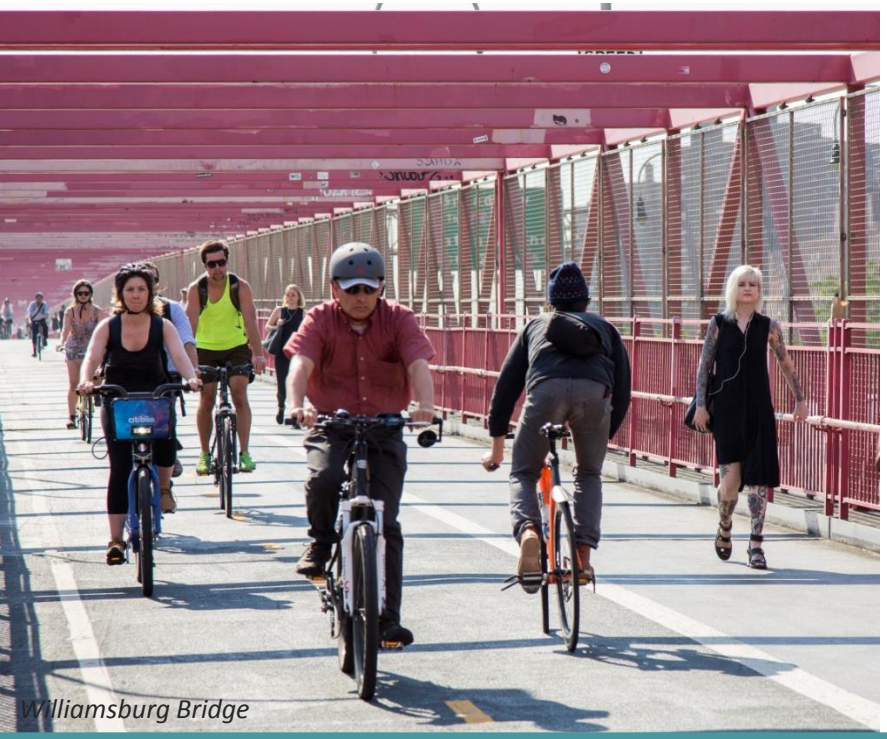
GROWTH BY BRIDGE

East River Bridges
Percent Growth: 2012-2017

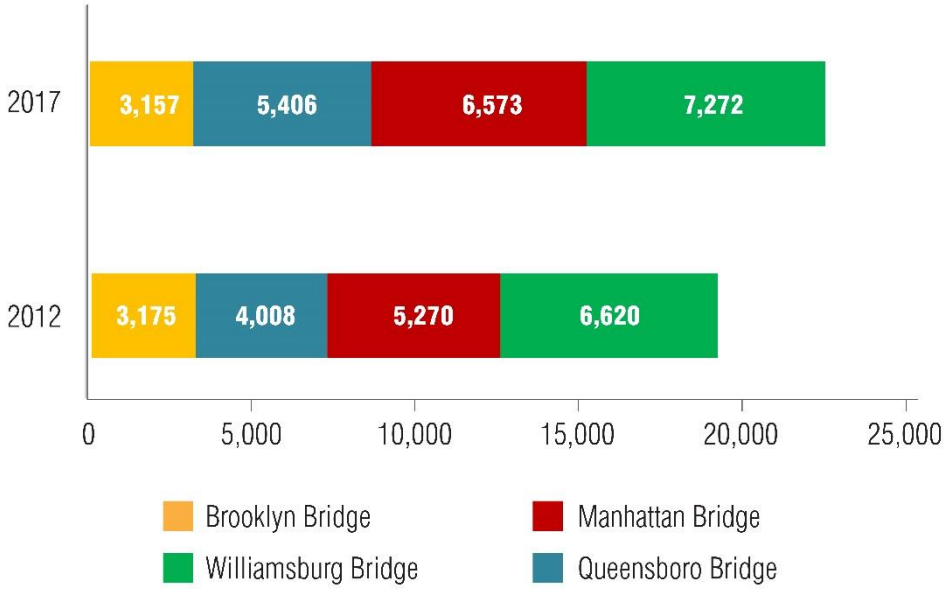
+25% Manhattan Bridge
-1% Brooklyn Bridge
+35% Queensboro Bridge
+10% Williamsburg Bridge

+17% ***All East River Bridges***

+35% Growth in cycling on the Queensboro Bridge between 2012 and 2017, the fastest of the East River bridges


Williamsburg Bridge

Cyclist Counts at East River Bridges (24-Hour Average)



MIDTOWN—CROSSING 50th ST

NYC DOT also counts cyclists entering and leaving the core at 50th Street along the avenues and Hudson River Greenway. This data was first recorded in 1980, and has been collected annually since 1985, and three times per year—typically in May, July, and September—since 2007.

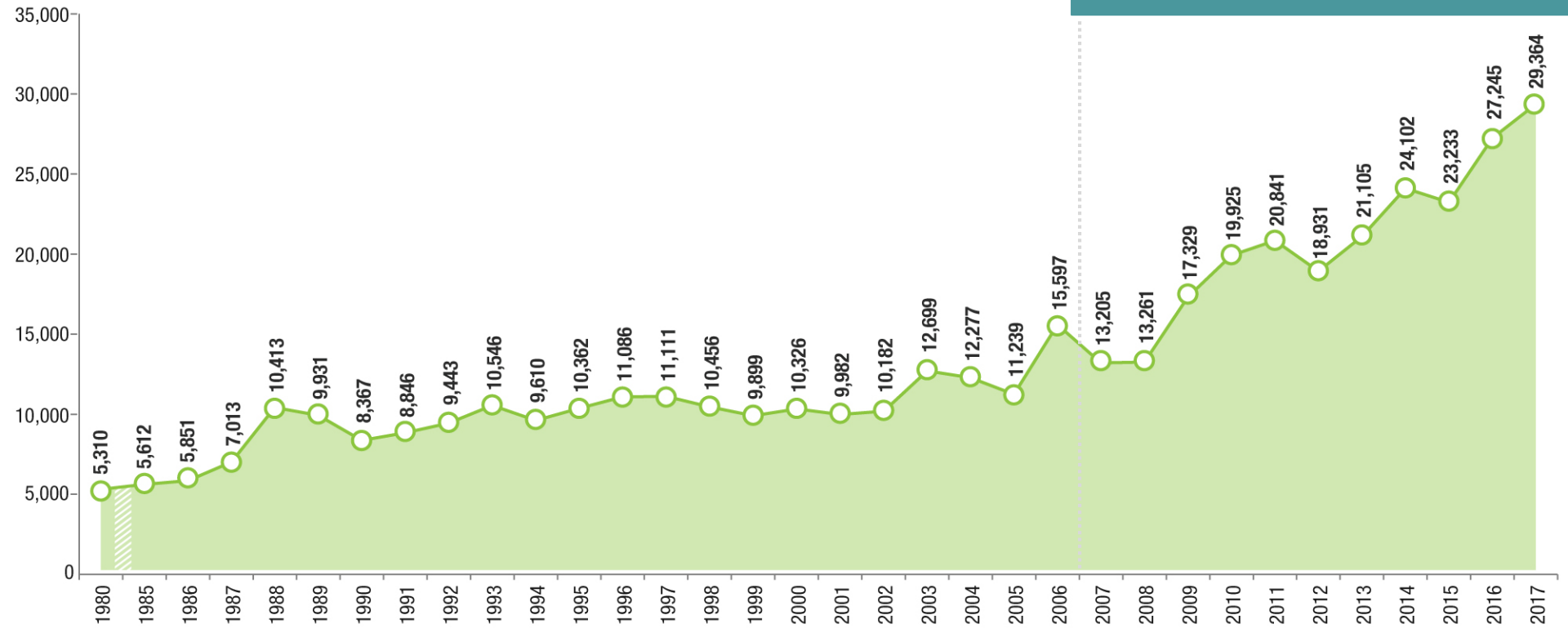
Midtown is the heart of the city where jobs and other activities are heavily concentrated, this density is both an opportunity and a challenge for growing cycling. Through Citi Bike and the enhancement of the bicycle network, cycling in midtown has seen solid growth with the potential for more.

Note: Individual totals for each street are available in the appendix of document.

+8.3%
10-Yr Avg. Annual Growth (2007 – 2017)

+55%
5-Year Cycling Growth (2012 – 2017)

North-South at 50th St Trips (7am – 7pm, Weekdays)



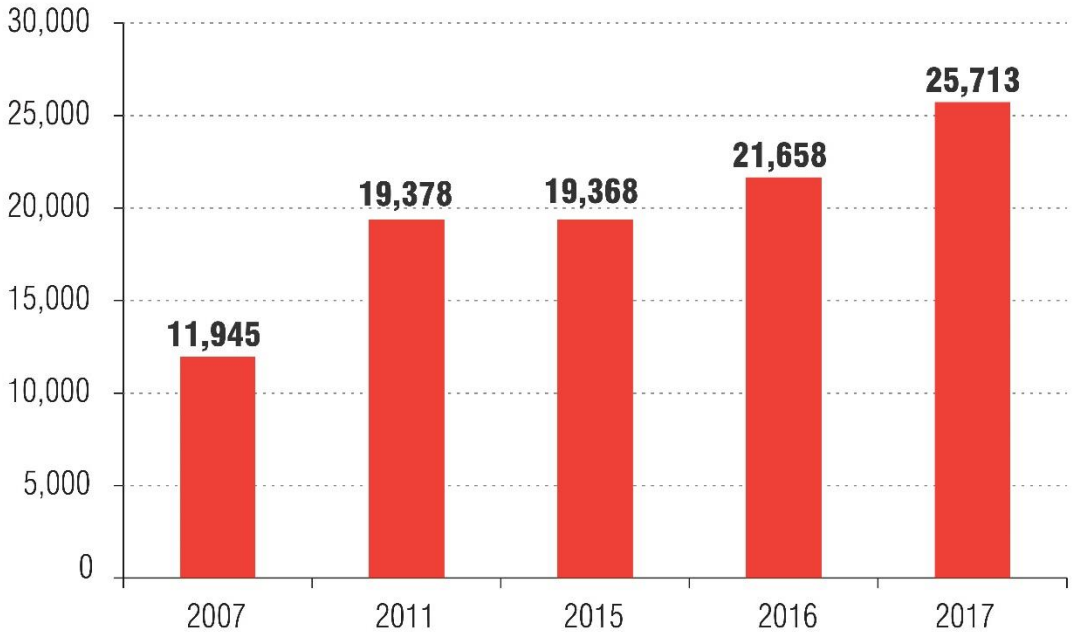
UPTOWN—CROSSING 86th ST

NYC DOT periodically counts cyclists at 86th Street along the avenues, the Hudson and East River Greenways, and inside Central Park. This data—typically collected in October--was first recorded in 2007, again in 2011, and on a yearly basis starting in 2015.

Since 2007 the network of protected bike lanes has expanded in both the Upper West Side and the Upper East Side. In 2015 cars were banned from large portions of Central Park. Also, beginning in 2015 and continuing in phases until 2017, Citi Bike expanded north to 130th Street. All of these factors to contribute to the growth in cycling in this part of the city.

Note: Individual totals for each street are available in the appendix of document.

North-South at 86th St Trips (7am – 7pm, Weekdays)



+115% Growth
in cycling on 86th St between 2007 and 2017

+19% Growth
in cycling on 86th St between 2016 and 2017

Columbus Ave, Manhattan

CITI BIKE

In 2013, New York City launched the first phase of Citi Bike—the largest bike share system in North America. After two years of operation, phase two expansion began. Further expansion occurred in 2017.

Bike share makes it more convenient for New Yorkers—even those who don't own a bicycle—to make short trips by bike and provides an important supplement to the existing transportation network, facilitating multi-modal trips.

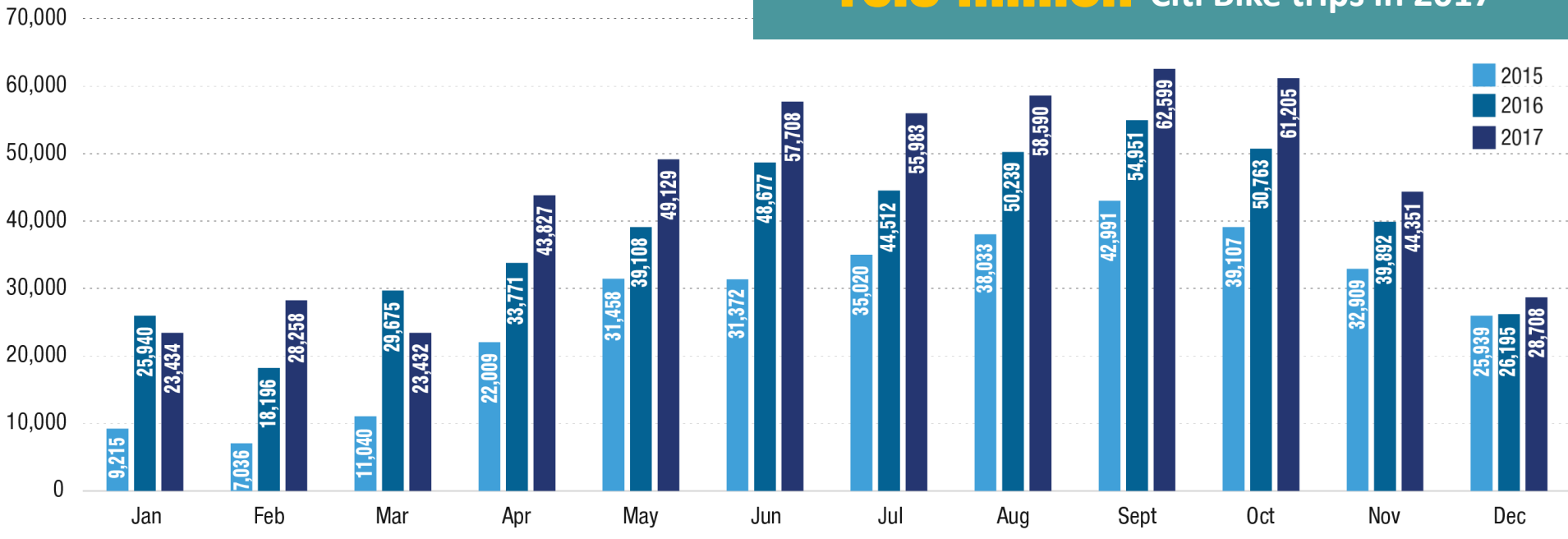
Trips per day is averaged from January through December.

+16% Growth
in daily Citi Bike use from 2016 to 2017

Year-Round Average Trips per Day on Citi Bike
2015: **27,287**
2016: **38,491**
2017: **44,824**

16.3 million Citi Bike trips in 2017

Total Citi Bike Trips by Month, 3-Year Trend



Cycling in the City

Appendix

3

DATA TYPES, SOURCES AND LIMITATIONS

The ideal source of cycling data is robust, comprehensive, and goes far back in time. In reality, information about cycling in New York City is very difficult to collect due to the geographically dispersed nature of cycling activity, the wide variety of trip types, and variations in ridership affected by weather. This brief evaluates data from a variety of sources, each with its own strengths and limitations.

Bike Counts are conducted at specific locations either by human observers or automated machines. Typically, manual counts are conducted from 7am-7pm on a non-holiday weekday with no precipitation. The counting season lasts from April to October. The strengths of this approach are that these numbers represent actual bike trips, and that in New York City, regular counts have been conducted at some locations since as far back as 1980, including the four East River bridges that connect Queens and Brooklyn to the Manhattan core and at 50th Street in Midtown. The limitations are that the geographic data points are limited; and that they emphasize longer distance, inter-borough trips that are often taken by commuters. From 1980-2006, NYC DOT performed manual East River bridge bike counts only once per year. Starting in 2007, three counts were conducted annually in May, July, and September. In 2008, the number of counts further increased to 10 monthly counts at each location. In 2013, NYC DOT installed automatic counters on the four East River Bridges that now collect data 24-hours per day, 365 days per year, providing much more complete data set for these particular locations.

Citi Bike Data accounts for every trip taken on a Citi Bike and therefore provides very comprehensive data about the number of trips over time, as well as detailed information about origin, destination, time, and distance traveled. However, this data set is limited to cyclists using Citi Bikes and to trips that begin and end within the Citi Bike service area, which—at this point in time—covers only a small portion of the city's streets. In addition, it is difficult to determine how many Citi Bike trips are new cycling trips rather than trips that would have been made using a personal bike anyway.

As the years pass, these data will provide a strong sense of the magnitude of change in cycling use. System expansion will allow these robust trip data to capture cycling trends in new neighborhoods each year.

Bike Use Surveys collect information about cycling from samples of the general population. These surveys do not typically provide information about where people are cycling, but they are more geographically encompassing and can more accurately gauge the number of people who are biking, including those who may not ride past typical count locations or use bike share. The following are two major sources of cycling survey data that are used in this brief, one collected at the national level, and the second collected at a citywide level.

National Surveys, including the Decennial Census and the American Community Survey (ACS) ask respondents which mode of transportation they use to get to work. Known as, "Journey to Work," this data set was collected as part of the long form of the Census from 1980 to 2000 and since 2005 is collected as part of the ACS. The strength of this data set is that it can be used to compare cities across the country but it also has several limitations. As part of the Census, the sample size was large (approximately 1 in 6 commuters), but it was only collected every ten years. As part of the ACS, the sample size is smaller (about 2.75% of households, or 240,000 each month of the year) but it is collected annually on a rolling basis. To address the smaller sample size, this report uses a three year rolling average to determine change over time.

The Journey to Work data set is also limited in that non-commuting bike trips, such as recreational or utility trips, are excluded. It also only accounts for the primary mode of commuting and therefore does not necessarily include bike trips made as part of multi-modal commutes or by occasional bike commuters. Seasonal variations in commuting patterns can also affect the data; respondents may answer the question differently depending on the time of year they are asked.

Citywide Surveys such as the NYC DOHMH Community Health Survey and the NYC DOT Mobility Survey ask respondents specific questions about their bicycle use, providing information about cyclists who may only bike to work occasionally or who regularly bike but not for commuting purposes. The sample size for these surveys is smaller than the national surveys (between 1,000 and 10,000 people depending on the survey).

ESTIMATE OF DAILY CYCLING

The Daily Cycling Trip estimate begins with the Journey to Work data from the American Community Survey. It provides estimates of how many people use a bicycle for daily commuting trips to work. According to an average of the last three years of Journey to Work data (2014-16), there are approximately 45,800 bicycle commuters in New York City who take 91,600 trips daily (assuming that each commuter takes two trips). The New York State 2009 NHTS Comparison Report (Oak Ridge National Laboratory, 2012) indicates that 18.2% of trips that New Yorkers take using personal vehicles are commuting trips to work. This would indicate that potentially 503,000 (91,600/18.2%) total bicycle trips are taken each day. For the purposes of this report, a more conservative assumption that bike commute trips are 20% of total bike trips is used, resulting in an estimate of 458,000 daily cycling trips in 2016.

The NYC DOT Mobility Survey provides an opportunity to validate these assumptions. The survey asks how many days of the previous seven the respondent used a bicycle. The number of people who responded to this question in 2017 with a number of days greater than zero represents approximately 8.9% of all adult New Yorkers (out of a survey estimate of 6.74 million total adult New Yorkers, 590,000 adult New Yorkers rode a bike in the last seven days.) According to the survey, these New Yorkers biked an average of 3.13 days. Multiplying the number of New Yorkers who rode by the average number of days biked, and dividing by seven, yields an average of 260,000 New Yorkers biking on a typical day. Conservatively assuming an average of two bicycle trips per cyclist (there and back again) results in an estimate of 520,000 daily cycling trips.

Although, the methodology used for each of these estimates is quite different, they both arrive at a relatively similar total number of trips. Therefore, it is appropriate to apply the one-in-five commute cycling trips to total cycling trips ratio assumption in order to establish estimates dating back to 1980. In addition, the growth of the Daily Cycling Trip estimate generally follows a pattern similar to the Midtown and East River Bridge bike counts.

Chrystie St, Manhattan

Cyclist Counts At East River Bridge Locations
24-Hour Weekday Counts

Count Year	Brooklyn Bridge	Manhattan Bridge	Williamsburg Bridge	Ed Koch Queensboro Bridge	Grand Total
1980	866	N/A	221	548	1,635
1985	1,269	N/A	594	1,209	3,072
1986	2,144	N/A	636	1,243	4,023
1987	2,270	N/A	557	695	3,523
1988	1,374	N/A	427	526	2,327
1989	959	N/A	364	674	1,997
1990	1,495	N/A	376	362	2,232
1991	1,645	N/A	N/A	959	2,604
1992	1,492	N/A	548	1,174	3,214
1993	1,659	N/A	547	1,130	3,335
1994	1,814	N/A	665	1,071	3,550
1995	2,384	N/A	1,006	1,536	4,926
1996	2,243	N/A	1,198	2,093	5,534
1997	2,361	N/A	1,548	1,252	5,161
1998	1,550	N/A	1,463	1,102	4,116
1999	1,542	N/A	1,521	1,306	4,369
2000	1,059	N/A	1,110	870	3,040
2001	1,205	207	1,200	1,063	3,674
2002	1,364	767	1,692	824	4,647
2003	1,458	929	2,101	2,120	6,609
2004	1,977	1,203	1,476	1,751	6,406
2005	1,876	1,165	2,438	1,555	7,033
2006	1,785	2,217	3,887	1,845	9,734
2007 (avg.)	**2,105**	**1,846**	**3,333**	**1,967**	**9,251**
2008 (avg.)	**2,148**	**2,993**	**4,232**	**2,832**	**12,206**
2009 (avg.)	**3,051**	**3,550**	**5,630**	**3,402**	**15,634**
2010 (avg.)	**2,704**	**4,041**	**6,205**	**3,841**	**16,790**
2011 (avg.)	**2,981**	**4,952**	**6,719**	**4,288**	**18,941**
2012 (avg.)	**3,175**	**5,270**	**6,620**	**4,008**	**19,073**
2013 (avg.)	**3,418**	**5,678**	**7,597**	**4,243**	**20,935**
2014 (avg.)	**3,408**	**6,132**	**7,154**	**4,830**	**21,524**
2015 (avg.)	**3,435**	**6,223**	**7,290**	**5,178**	**22,126**
April	2,521	5,059	5,673	3,993	17,246
May	3,642	6,765	7,673	5,315	23,395
June	3,583	6,599	7,688	5,482	23,352
July	3,667	6,277	7,474	5,328	22,746
August	3,762	6,504	7,883	5,719	23,868
September	3,727	6,604	7,924	5,679	23,934
October	3,145	5,752	6,714	4,731	20,341
2016 (avg.)	**3,640**	**6,203**	**7,580**	**5,203**	**22,626**
April	2,944	5,355	6,156	4,148	18,602
May	3,600	6,454	7,473	4,994	22,521
June	4,077	7,091	8,380	5,478	25,026
July	4,451	6,626	8,116	5,899	25,091
August	3,881	5,685	7,949	5,767	23,283
September	3,428	6,214	7,902	5,632	23,176
October	3,101	5,994	7,082	4,504	20,681
2017 (avg.)	**3,157**	**6,573**	**7,272**	**5,406**	**22,408**
April	2,758	5,087	5,797	4,039	17,680
May	3,052	6,593	7,114	5,151	21,910
June	3,244	7,122	7,940	5,612	23,918
July	3,181	6,777	7,454	5,451	22,863
August	3,454	6,970	7,631	6,038	24,093
September	3,237	6,933	7,760	5,830	23,760
October	3,175	6,528	7,208	5,722	22,633

Notes:

1. Count is on a single mid-summer weekday from 1980, and 1985-2006, on three separate weekdays in May, July, and September 2007, and from April to October after 2007.
2. There is no data available for the Williamsburg Bridge in 1991.
3. The Manhattan Bridge path opened to cycling in 2001.
4. From 1980 to 2013, a multiplier of between 1.25 and 1.59 was applied to 12 hour 7am-7pm bicycle counts. This multiplier was developed from the three years of automated count data collected since January 2014 and provides an estimated 24 hour count.
5. From January 2014 onward, data was primarily automated and is an average of each month excluding holidays and days with precipitation.

NEW YORK CITY DOT

Bicycle and Greenway Program

New York City 12-Hour Midtown Bicycle Count at 50th Street*
New York City Department of Transportation
Transportation Planning& Management

		Hudson River Greenway (b)	Twelfth Ave (a)	Eleventh Ave (a)	Tenth Ave	Ninth Ave (b)	Eighth Ave (b)	Broadway (b)	Seventh Ave	Sixth Ave	Fifth Ave	Madison Ave	Park Ave (a)	Lexington Ave	Third Ave	Second Ave (b)	First Ave (b)	Total	
1980			160	167	119	315	642	657	414	648	320	434	298	119	490	307	220	**5,310**	
1985			16	264	307	558	372		533	772	607	349	478	151	384	617	204	**5,612**	
1986			N/A	315	353	588	383		357	968	383	272	426	263	531	710	302	**5,851**	
1987			30	409	477	649	427		568	860	520	871	361	294	658	543	346	**7,013**	
1988			13	217	476	500	708		861	1,594	1,581	1,240	222	847	1,120	687	347	**10,413**	
1989			16	213	575	802	549		657	1,369	1,188	1,079	932	561	946	767	277	**9,931**	
1990			8	117	465	494	865		568	1,361	648	850	570	641	916	614	250	**8,367**	
1991			219	262	339	921	113		892	1,186	574	1,026	1,069	586	653	606	400	**8,846**	
1992			48	224	537	993	958		596	1,007	948	789	509	864	957	636	377	**9,443**	
1993			7	375	632	1,182	682		776	1,343	1,211	839	965	641	816	698	379	**10,546**	
1994			39	278	425	1,139	828		873	1,343	617	1,057	754	388	814	807	248	**9,610**	
1995			47	402	477	810	1,043		885	1,064	609	1,159	693	474	1,477	753	469	**10,362**	
1996			35	113	341	1,090	1,345		820	1,506	1,204	1,030	836	640	872	874	380	**11,086**	
1997			31	136	298	1,214	856		666	1,090	932	1,397	871	855	1,311	933	521	**11,111**	
1998			62	160	241	929	1,162		730	982	1,098	961	516	927	1,481	879	328	**10,456**	
1999			152	491	522	874	726		759	1,608	587	744	751	737	857	666	425	**9,899**	
2000			72	442	568	798	1,160	810	584	1,329	588	686	905	498	710	797	379	**10,326**	
2001 (July)		2,113	11	149	213	754	1,443	412	627	1,132	427	609	597	382	447	354	312	**9,982**	
2002 (July-Oct)**		2,366	3	165	414	599	715	664	473	1,053	617	610	433	456	641	707	266	**10,182**	
2003 (July-Sept)		2,885	85	137	501	845	783	791	721	1,433	937	729	907	486	454	648	357	**12,699**	
2004 (July-Aug)		2,686	42	323	238	963	1,138	739	557	1,358	810	623	756	345	711	645	343	**12,277**	
2005 (July)		2,037	55	264	172	794	845	689	464	1,315	946	344	990	393	694	696	541	**11,239**	
2006 (Sept)		1,958	36	535	325	1,069	1,212	1,144	1,029	1,182	1,683	1,018	1,175	808	962	829	632	**15,597**	
2007* **	**May**	2,404	63	370	514	1,048	656	1,040	761	1,327	825	688	1,210	649	795	764	430	**13,544**	
	Jul-Aug	2,392	87	387	403	866	598	899	618	941	596	891	1,037	776	936	711	245	**12,383**	**13,205**
	Sept	2,963	129	229	467	847	1,337	873	502	1,002	971	1,129	884	787	549	624	395	**13,688**	
2008	**May**	2,384	38	311	483	949	742	525	594	715	1,285	596	778	650	985	667	278	**11,980**	
	July	4,581	115	316	510	1,001	745	611	459	1,028	917	723	1,155	593	1,023	785	344	**14,906**	**13,621**
	Sept	3,597	70	322	459	1,105	854	536	704	1,134	1,237	739	900	722	701	519	379	**13,978**	
2009	**May**	3,287	116	422	536	1,132	1,038	722	863	849	1,216	728	1,061	772	966	886	369	**14,963**	
	July	5,520	68	451	538	1,191	1,171	771	756	1,367	1,131	813	694	727	1,067	1,013	777	**18,055**	**17,329**
	Sept	5,440	87	479	642	1,385	1,226	894	741	1,360	1,144	979	898	801	1,170	1,045	677	**18,968**	
2010	**May**	3,985	108	558	657	1,277	1,525	1,065	949	1,445	894	858	1,389	1,004	1,201	970	638	**18,523**	
	July	5,036	120	547	529	1,315	1,312	1,009	816	1,549	1,202	905	1,064	807	1,132	1,121	907	**19,371**	**19,925**
	Sept	5,629	131	584	714	1,480	1,527	1,206	740	1,475	1,534	1,061	1,300	960	1,341	1,262	938	**21,882**	
2011	**May**	5,267	150	572	702	1,536	1,491	1,303	791	1,468	1,047	865	1,405	886	1,281	1,093	689	**20,546**	
	July	5,486	109	529	556	1,353	1,432	674	895	1,635	1,323	914	1,084	1,028	1,214	1,245	1,122	**20,599**	**20,841**
	Sept	5,676	120	600	399	1,555	1,618	1,238	867	1,584	1,390	831	831	930	1,292	1,386	1,062	**21,379**	
2012	**May**	5,573	102	309	474	850	914	N/A	749	1,209	1,458	916	877	529	951	1,092	987	**16,990**	
	July	6,170	128	601	634	1,428	1,477	661	N/A	1,637	1,353	1,085	1,284	1,022	1,292	1,505	1,295	**21,572**	**18,931**
	Sept	4,622	72	349	562	1,092	1,082	748	755	1,817	1,645	907	901	656	827	1,261	935	**18,231**	
2013	**May**	5,461	89	375	561	1,361	1,576	964	718	1,709	1,431	910	755	696	943	1,297	1,055	**19,901**	
	July	6,255	132	399	410	1,696	1,470	1,195	750	1,814	1,197	1,037	1,047	704	1,149	2,088	1,435	**22,778**	**21,105**
	Sept	5,308	N/A	606	509	1,469	1,833	965	782	1,563	1,049	972	697	842	746	1,553	1,742	**20,636**	
2014	**May**	5,224	103	607	683	1,565	1,809	1,167	833	1,651	1,205	1,077	1,639	916	1,324	1,365	1,519	**22,687**	
	July	6,857	157	598	738	1,728	1,821	1,120	878	1,692	1,288	1,112	1,409	946	1,363	2,341	1,784	**25,832**	**24,102**
	Sept	5,841	114	413	659	1,810	1,896	1,088	874	2,119	1,245	1,362	1,002	916	1,163	2,156	1,128	**23,786**	
2015	**May**	5,065	165	374	640	1,623	1,853	1,072	825	1,757	1,386	824	1,023	938	1,107	2,246	1,638	**22,536**	
	July	5,425	116	477	675	1,579	1,917	1,112	785	1,608	1,221	1,211	1,103	896	836	1,588	1,469	**22,018**	**23,233**
	Sept	5,429	131	436	719	1,878	2,257	1,104	1,037	2,147	1,405	1,075	1,274	1,093	1,078	2,375	1,707	**25,145**	
2016	**May**	6,532	176	553	783	1,974	2,093	1,522	643	1,819	1,377	996	1,314	1,197	974	1,975	1,648	**25,576**	
	July	6,995	139	540	759	1,945	2,242	1,305	1,324	1,855	1,704	1,135	1,264	974	1,133	2,036	2,023	**27,373**	**27,245**
	Sept	6,476	206	620	698	2,193	2,338	1,240	1,149	1,932	1,816	1,366	1,410	1,188	1,247	2,706	2,201	**28,786**	
2017	**May**	5,001	215	672	771	2,199	2,240	1,204	1,119	1,682	1,832	1,079	1,563	1,394	1,358	2,258	1,994	**26,581**	
	July	7,615	154	576	910	2,177	2,518	1,220	1,413	1,639	1,802	1,110	980	1,339	1,399	3,321	1,867	**30,040**	**29,364**
	Sept	6,519	228	688	857	2,301	2,467	1,495	1,490	2,060	1,957	1,394	1,500	1,313	1,716	2,863	2,623	**31,471**	

(a) Two-way Roadway
(b) Protected Bicycle Lane
* 7:00AM-7:00PM
** Monday Count
***Starting in 2007, counts were conducted three times per year (Spring, Summer and Fall)

New York City 12-Hour Uptown Bicycle Count at 86th Street*

New York City Department of Transportation

Transportation Planning & Management

	Hudson River Greenway (b)	Riverside Drive (a)	West End Ave (a)	Broadway (a)	Amsterdam Ave (b)	Columbus Ave (b)	Central Park West (a)	Central Park Dr West	Central Park Dr East	5th Ave	Madison Ave	Park Ave (a)	Lexington Ave	3rd Ave	2nd Ave (b)	1st Ave (b)	York Ave (a)	East End Ave (a)	East River Greenway (b)	Total
2007	1,597	207	338	573	217	486	636	2,314	2,535	285	234	658	263	223	314	297	399	144	225	**11,945**
2011	3,326	321	256	717	515	594	1,008	4,360	4,162	784	218	559	590	392	631	362	290	151	142	**19,378**
2015	1,919	309	301	512	609	724	1,075	4,795	4,796	549	243	471	181	403	940	893	236	219	193	**19,368**
2016	2,085	327	383	287	1,094	854	855	5,429	5,611	613	304	373	245	329	1,024	1,099	318	243	185	**21,658**
2017	3,203	328	442	389	1,116	1,137	1,310	5,786	5,913	730	354	565	77	455	1,924	1,187	366	237	194	**25,713**

Uptown counts are 12 hour bicycle counts that take place in October at 86th St

(a) Two-way Roadway

(b) Protected Bicycle Lane

* 7:00AM-7:00PM

Citi Bike Trips Per Day by Month

	2013*	2014	2015	2016	2017	'17 vs '16
January		9,794	9,215	25,940	23,434	-10%
February		8,117	7,036	18,196	28,258	55%
March		14,178	11,040	29,675	23,432	-21%
April		22,385	22,009	33,771	43,827	30%
May	7,643	27,974	31,458	39,108	49,129	26%
June	19,199	31,257	31,372	48,677	57,708	19%
July	28,753	31,276	35,020	44,512	55,983	26%
August	33,725	31,153	38,033	50,239	58,590	17%
September	35,288	31,794	42,991	54,951	62,599	14%
October	34,010	26,731	39,107	50,763	61,205	21%
November	22,753	17,638	32,909	39,892	44,351	11%
December	14,463	12,876	25,939	26,195	28,708	10%

Full Year Average	**23,653**	**22,172**	**27,287**	**38,491**	**44,824**
Total Trips	**5,794,885**	**8,092,952**	**9,959,627**	**14,087,576**	**16,360,772**

Year-to-Date Average Trips per Day

2015	2016	2017	'17 vs '16
27,287	38,491	44,824	16%

**Partial time period for May 2013 beginning May 27, 2013 (program launch).*

Monthly Temperature and Precipitation Totals

Temperatures are shown as monthly averages in degrees Fahrenheit
Precipitation is shown as total in inches, (s) indicates precipitation that involved snow

		2013	2014	2015	2016	2017
January	temp		29.4°	30.9°	35.7°	38.2°
	precip		1.59, 0.77(s)	3.5, 1.73(s)	2.05, 2.01(s)	4.33, 0.5(s)
February	temp		32.5°	25.5°	38.7°	42.5°
	precip		2.11, 3.37(s)	0.1, 1.94(s)	3.38, 1.02(s)	1.32, 1.16(s)
March	temp		39.2°	39.0°	49.9°	39.8°
	precip		3.51, 0.16(s)	2.37, 2.35(s)	0.99, 0.18(s)	2.89, 2.36(s)
April	temp		53.7°	55.4°	54.6°	58.1°
	precip		5.65	2.08	1.1, 0.47(s)	3.84
May	temp	63.0°	65.6°	69.9°	64.1°	62.5°
	precip	8	4.37	1.86	3.75	6.08
June	temp	73.0°	73.9°	72.3°	73.9°	74.0°
	precip	10.1	4.26	4.75	2.6	4.76
July	temp	80.0°	77.2°	79.8°	80.1°	78.0°
	precip	2.84	5.59	3.98	7.02	4.19
August	temp	75.0°	75.6°	80.2°	80.5°	75.3°
	precip	2.85	2.25	2.35	1.96	3.15
September	temp	68.0°	71.1°	75.7°	72.9°	71.7°
	precip	2.95	1.21	3.28	2.79	2
October	temp	60.0°	60.7°	58.9°	59.6°	65.0°
	precip	0.36	5.77	3.76	4.15	4.18
November	temp	46.0°	45.9°	54.1°	51.2°	48.2°
	precip	3.15	3.25, 1.22(s)	2.01	4.85	1.58
December	temp	39.0°	40.9°	51.4°	39.5°	35.7°
	precip	3.32, 1.53(s)	5.96, 0.08(s)	4.72	2.13	1.49, 0.71(s)