Subway Ridership 1975-2015

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Contents

Cover Image: Will O'Hare Photography

Introduction

Ridership on the New York City Subway has grown drastically in the last four decades, from 966 million in 1975 to 1.7 billion in 2015; at the Times Square subway station alone, rides increased by 29 million. This explosive growth in usage demonstrates the system's importance to both the city and region. New York City's 24-hour subway promotes a dynamic economy, livability, and connectivity giving residents access to economic opportunities and a quality of life that is unparalleled in most world cities.

Growth in subway ridership reflects the changes in New York City. The city's declining population in the 1970s, the high homicide rate in the late 1980s and early 1990s, the 2008 Financial Crisis, leading to an economic downturn and job losses, and the attacks of September 11, 2001 all influenced subway ridership. Several key events since 1975 have contributed to increased subway usage, including:

- Early 1980s: The massive, $7.6 billion capital investment in the New York City subway system in the form of new equipment and improved maintenance, plus graffiti removal, boosted ridership.
- 1998: The replacement of tokens with the MetroCard permitted unlimited 7- and 30-day trip options and to transfer between subways and buses without charge. Ridership increased in Brooklyn by 16% and the Bronx by 17% in the following year.
- 1995-2015: New York City's population grew significantly.
- 2010-2015: Tourism increased in New York City by nearly 10 million people to 58.5 million, increasing reliance on the subway.[1]

The health and continued growth of the subway system is critical to New York City's future. As such, the system must be improved to reflect New Yorkers' increasing reliance. Recommended system upgrades include:

1. System-wide implementation of advanced signaling technologies, such as Communications Based Train Control
2. Cellular and wifi access in all stations for an informed ridership
3. Improved information dissemination to riders through:
    a. Train tracking and countdown clocks, and
    b. Development of a weekend subway map to reflect construction and other planned diversions
    c. Continuation of investment in all equipment to achieve state of good repair across the system

[1] NYC & Company, NYC Visitation Statistics. http://www.nycandcompany.org/research/nyc-statistics-page

1975 - 2015

Between 1975 and 1998, New York City subway ridership hovered between about 900 million and 1 billion riders annually. The net change between the annual ridership in 1975 and 1997 was about 100 million, an average increase of just over 4 million per year. However, 1997 was a turning point for the relatively stagnant ridership growth experienced by New York City's subway system. In 1998, just after the introduction of the MetroCard, over 137 million more rides were taken than the year before. The boom continued for the next two years, during which time another 181 million rides had been added to the annual total. Over the next 15 years, the system continued to increase its ridership totals at an average of 25 million more rides per year. In 2015, subway rides totaled more than 1.7 billion.

The dramatic increase in ridership as a result of the MetroCard was the product of a calculated decision by the MTA to encourage more people to use the public transportation system that, despite a great deal of investment on their part, had a hard time shedding negative associations from its past. At the time, Governor Pataki told *The New York Times*, "The goal… was very simply to empower the rider. Empower the person who takes the subway and the person who takes the bus by giving them the broadest possible range of options as to how they want to choose to use the mass transit system."[2] As a result of this newfound power and flexibility, ridership in New York City has skyrocketed.

While nearly every station that still exists is experiencing higher annual ridership totals now than before the MetroCard was introduced (only eight stations experienced a decline in ridership between 1997 and 2015) this large-scale growth has not been distributed evenly throughout the city. When station ridership is viewed as a percentage of system-wide ridership, and that value is compared across time, patterns emerge that describe the ebb and flow of relative importance for neighborhoods across the city over the last 40 years.

[2] http://www.nytimes.com/1997/12/09/nyregion/pataki-announces-unlimited-passes-for-city-transit.html?pagewanted=all

25 Busiest Stations in 1975	Borough	1975	2015	1975 Rank	2015 Rank
Times Square 42 St (N,Q,R,S,1,2,3,7)/42 St (A,C,E)	MH	36,982,138	66,359,208	1	1
Grand Central 42 St (S,4,5,6,7)	MH	30,604,700	46,737,564	2	2
34 St Herald Square (B,D,F,M,N,Q,R)	MH	23,886,616	39,541,865	3	3
34 St Penn Station (1,2,3)	MH	17,053,384	28,309,160	4	5
Lexington Av 53 St (E,M)/51 St (6)	MH	15,526,429	20,479,923	5	11
14 St Union Square (L,N,Q,R,4,5,6)	MH	15,276,436	35,320,623	6	4
Fulton St (A,C,J,Z,2,3,4,5)	MH	15,220,074	21,671,684	7	8
47-50 Sts Rockefeller Center (B,D,F,M)	MH	14,796,263	18,469,446	8	13
Lexington Av (N,Q,R)/59 St (4,5,6)	MH	13,795,209	21,407,792	9	9
34 St Penn Station (A,C,E)	MH	13,015,194	26,147,434	10	6
Flushing Main St (7)	QN	12,784,614	19,082,391	11	12
42 St Bryant Park (B,D,F,M)/5 Av (7)	MH	12,760,122	16,220,605	12	16
Chambers St (A,C)/WTC (E)/Park Place (2,3)	MH	10,318,043	16,910,084	13	15
59 St Columbus Circle (A,B,C,D,1)	MH	10,231,059	23,299,666	14	7
14 St (F,M,1,2,3)/6 Av (L)	MH	9,874,367	16,121,318	15	17
86 St (4,5,6)	MH	9,683,447	20,890,828	16	10
Jamaica179 St (F)	QN	8,642,373	6,898,938	17	63
Brooklyn Bridge City Hall (4,5,6)/Chambers St (J,Z)	MH	7,505,784	10,481,576	18	29
West 4 St Washington Square (A,B,C,D,E,F,M)	MH	7,388,022	14,147,148	19	20
Canal St (J,N,Q,R,Z,6)	MH	7,341,503	15,094,135	20	18
South Ferry (1)/Whitehall St (R)	MH	7,272,640	8,750,364	21	40
5 Av 53 St (E,M)	MH	7,236,005	7,597,212	22	57
23 St (6)	MH	6,883,746	8,627,481	23	42
74 Bway (7)/Jackson Heights Roosevelt Av (E,F,M,R)	QN	6,812,453	17,224,537	24	14
68 St Hunter College (6)	MH	6,671,766	10,237,854	25	30

25 Busiest Stations in 2015	Borough	1975	2015	1975 Rank	2015 Rank
Times Square 42 St (N,Q,R,S,1,2,3,7)/42 St (A,C,E)	MH	36,982,138	66,359,208	1	1
Grand Central 42 St (S,4,5,6,7)	MH	30,604,700	46,737,564	2	2
34 St Herald Square (B,D,F,M,N,Q,R)	MH	23,886,616	39,541,865	3	3
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Fulton St (A,C,J,Z,2,3,4,5)	MH	15,220,074	21,671,684	7	8
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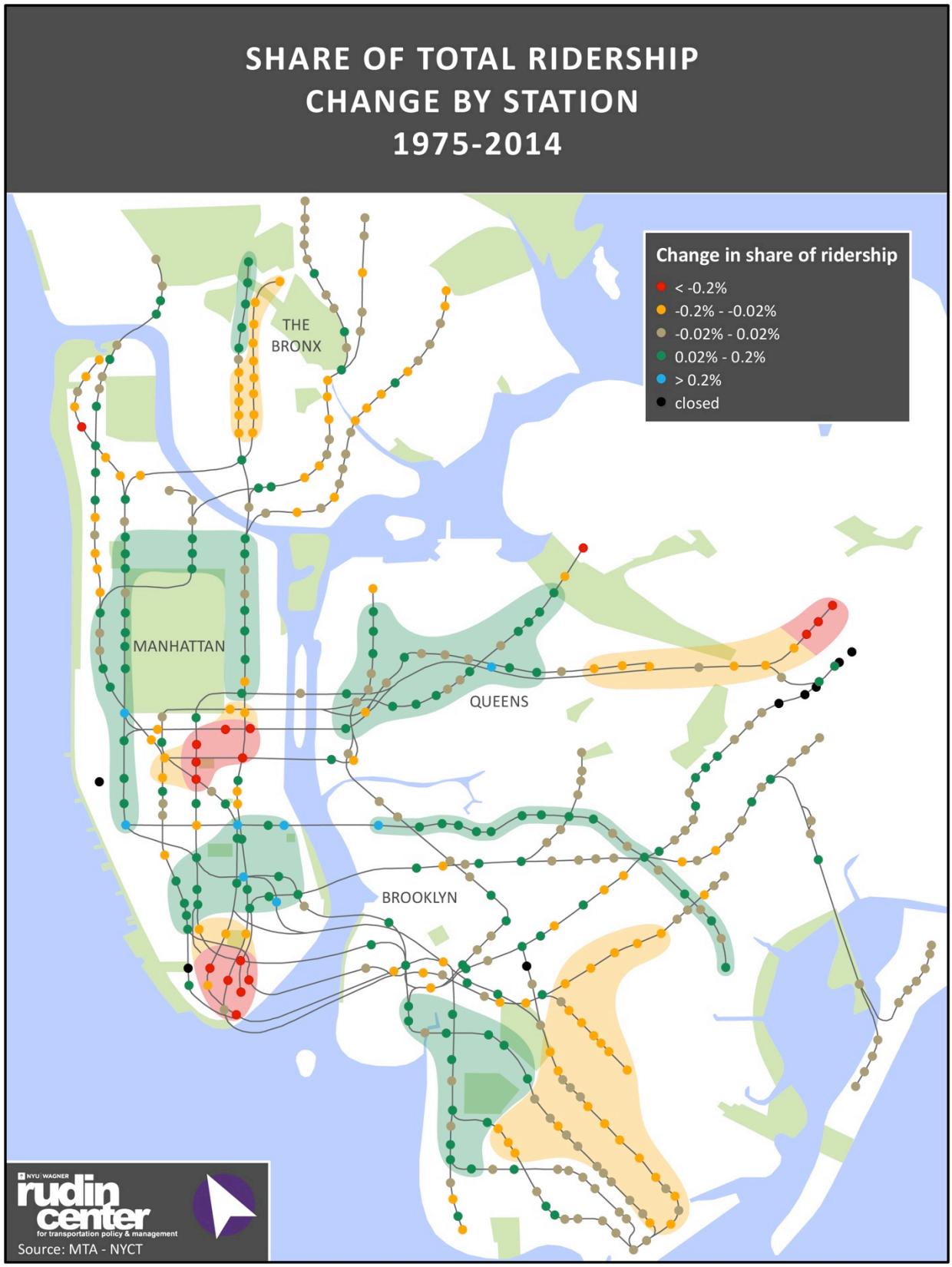
Chambers St (A,C)/WTC (E)/Park Place (2,3)	MH	10,318,043	16,910,084	13	15
42 St Bryant Park (B,D,F,M)/5 Av (7)	MH	12,760,122	16,220,605	12	16
14 St (F,M,1,2,3)/6 Av (L)	MH	9,874,367	16,121,318	15	17
Canal St (J,N,Q,R,Z,6)	MH	7,341,503	15,094,135	20	18
14 St (A,C,E)/8 Av (L)	MH	4,457,131	14,763,727	46	19
West 4 St Washington Square (A,B,C,D,E,F,M)	MH	7,388,022	14,147,148	19	20
Atlantic Av (B,Q,2,3,4,5)/Pacific St (D,N,R)	BK	6,019,770	13,690,678	31	21
72 St (1,2,3)	MH	5,923,229	13,341,361	32	22
96 St (1,2,3)	MH	6,524,636	13,008,596	27	23
Jay St MetroTech (A,C,F,R)	BK	6,255,494	12,765,132	30	24
Broadway Lafayette St (B,D,F,M)/Bleecker St (6)	MH	3,866,841	12,666,868	56	25

Largest Increases Between 1975 and 2015	Borough	1975 Total	2015 Total	Change	1975 Rank	2015 Rank
Times Sq 42 St (N,Q,R,S,1,2,3,7)/42 St (A,C,E)	MH	36,982,138	66,359,208	29,377,070	1	1
14 St Union Sq (L,N,Q,R,4,5,6)	MH	15,276,436	35,320,623	20,044,187	5	4
Grand Central 42 St (S,4,5,6,7)	MH	30,604,700	46,737,564	16,132,864	2	2
34 St Herald Square (B,D,F,M,N,Q,R)	MH	23,886,616	39,541,865	15,655,249	3	3
34 St Penn Station (A,C,E)	MH	13,015,194	26,147,434	13,132,240	7	6
59 St Columbus Circle (A,B,C,D,1)	MH	10,231,059	23,299,666	13,068,607	9	7
Jamaica Center Parsons Archer (E,J,Z)*	QN	0	12,622,977	12,622,977	19	18
34 St Penn Station (1,2,3)	MH	17,053,384	28,309,160	11,255,776	4	5
86 St (4,5,6)	MH	9,683,447	20,890,828	11,207,381	10	9
74 Bway (7)/Jackson Hts Roosevelt Av (E,F,M,R)	QN	6,812,453	17,224,537	10,412,084	13	10
14 St (A,C,E)/8 Av (L)	MH	4,457,131	14,763,727	10,306,596	16	13
Broadway Lafayette St (B,D,F,M)/Bleecker St (6)	MH	3,866,841	12,666,868	8,800,027	17	17
Bedford Av (L)	BK	1,319,757	9,388,289	8,068,532	18	19
Canal St (J,N,Q,R,Z,6)	MH	7,341,503	15,094,135	7,752,632	12	12
Atlantic Av (B,Q,2,3,4,5)/Pacific St (D,N,R)	BK	6,019,770	13,690,678	7,670,908	14	15
Sutphin Blvd Archer Av JFK Airport (E,J,Z)*	QN	0	7,767,728	7,767,728	19	20
Lexington Av (N,Q,R)/59 St (4,5,6)	MH	13,795,209	21,407,792	7,612,583	6	8
72 St (1,2,3)	MH	5,923,229	13,341,361	7,418,132	15	16
West 4 St Washington Sq (A,B,C,D,E,F,M)	MH	7,388,022	14,147,148	6,759,126	11	14
Chambers St (A,C)/WTC (E)/Park Place (2,3)	MH	10,318,043	16,910,084	6,592,041	8	11

Largest Decreases Between 1975 and 2015	Borough	1975 Total	2015 Total	Change	1975 Rank	2015 Rank
Broad St (J,Z)	MH	5,374,006	1,834,780	-3,539,226	31	258
Parsons Blvd (F)	QN	4,382,701	2,094,007	-2,288,694	43	230
169 St (F)	QN	5,044,982	2,858,542	-2,186,440	35	175
Jamaica 179 St (F)	QN	8,642,373	6,898,938	-1,743,435	11	56
Sutphin Blvd (F)	QN	2,704,116	1,506,607	-1,197,509	86	301

Rockaway Av (3)	BK	1,083,659	526,505	-557,154	243	399
Hunters Point Av (7)	QN	2,388,542	1,848,769	-539,773	97	254
Van Siclen Av (3)	BK	745,472	304,082	-441,390	307	406
Cortlandt St (R)	MH	3,121,320	2,713,532	-407,788	65	178
55 St (D)	BK	868,795	595,157	-273,638	287	392
Buhre Av (6)	BX	929,055	661,527	-267,528	273	387
175 St (A)	MH	4,451,434	4,197,373	-254,061	41	112
East 143 St St Mary's St (6)	BX	494,518	298,462	-196,056	364	407
50 St (D)	BK	1,118,505	968,612	-149,893	236	361
City Hall (R)	MH	1,974,210	1,828,806	-145,404	127	260
Liberty Av (C)	BK	978,489	858,554	-119,935	262	372
Neptune Av (F)	BK	636,877	531,011	-105,866	333	398
Avenue X (F)	BK	684,859	589,962	-94,897	322	393
Rector St (R)	MH	1,970,469	1,896,968	-73,501	128	248
Hoyt St (2,3)	BK	2286,773	2,249,892	-36,881	103	213

Annual Ridership	Manhattan	Brooklyn	Queens	Bronx	NYC
1975	538,910,304	199,836,762	134,296,317	93,232,287	966,275,670
1976	516,739,686	189,712,959	131,743,848	87,245,060	925,441,553
1977	516,027,293	186,504,391	131,514,688	83,111,854	917,158,226
1978	539,927,543	196,000,450	137,607,270	84,529,078	958,064,341
1979	559,335,211	202,257,349	143,517,317	84,605,190	989,715,067
1980	543,792,768	192,504,016	136,909,098	78,585,898	951,791,780
1981	551,594,630	193,317,711	141,334,348	76,373,948	962,620,637
1982	538,359,498	187,758,519	140,488,693	71,651,775	938,258,485
1983	547,626,059	189,590,630	143,084,213	73,755,549	954,056,451
1984	542,420,427	186,246,009	142,493,891	72,599,853	943,760,180
1985	542,792,533	189,333,408	143,131,314	74,334,669	949,591,924
1986	556,299,792	190,446,692	143,443,752	75,761,805	965,952,041
1987	574,198,751	196,052,217	145,185,913	79,500,505	994,937,386
1988	582,950,776	198,397,111	146,544,929	80,027,045	1,007,919,861
1989	579,774,514	198,137,212	150,035,879	78,379,237	1,006,326,842
1990	546,213,452	193,385,230	147,906,398	74,354,774	961,859,854
1991	526,697,601	185,709,033	143,433,187	73,608,297	929,448,118
1992	527,492,476	186,186,116	143,785,172	73,539,692	931,003,456
1993	544,982,733	193,241,656	150,450,710	76,397,652	965,072,751
1994	574,482,637	201,306,922	158,642,472	79,553,788	1,013,985,819
1995	580,058,866	202,425,157	159,541,313	81,337,626	1,023,362,962
1996	593,327,459	204,970,904	160,965,148	81,827,553	1,041,091,064
1997	605,771,514	209,686,381	163,132,828	83,235,668	1,061,826,391
1998	674,929,738	242,272,072	184,435,867	97,692,543	1,199,330,220
1999	726,691,263	257,384,734	196,124,427	102,898,566	1,283,098,990
2000	788,260,736	276,129,236	208,241,824	108,515,469	1,381,147,265
2001	789,627,822	288,697,529	215,077,696	113,364,916	1,406,767,963
2002	786,417,386	292,329,777	219,081,790	116,822,017	1,414,650,970
2003	771,340,261	283,959,846	213,240,027	116,584,637	1,385,124,771
2004	799,523,452	293,034,511	216,303,863	118,529,291	1,427,391,117
2005	812,376,957	298,405,584	218,606,499	121,197,389	1,450,586,429
2006	838,479,535	310,403,942	226,094,469	125,269,882	1,500,247,828
2007	876,966,709	324,264,155	231,638,780	130,833,982	1,563,703,626
2008	904,312,751	340,763,988	240,665,986	139,326,991	1,625,069,716
2009	872,984,163	335,374,660	234,583,304	138,321,301	1,581,263,428
2010	883,711,067	344,584,252	236,865,227	140,641,852	1,605,802,398
2011	904,762,522	352,296,972	240,626,516	142,957,026	1,640,643,036
2012	912,045,393	356,868,204	240,626,903	145,029,400	1,654,569,900
2013	940,342,922	372,392,182	245,692,630	149,111,695	1,707,539,429
2014	965,303,064	382,724,843	250,683,329	152,510,555	1,751,221,791
2015	970,332,468	387,548,598	252,328,123	152,317,861	1,762,527,050


SHARE OF TOTAL RIDERSHIP
CHANGE BY STATION
1975-2014
Change in share of ridership
< -0.2%
-0.2% - -0.02%
-0.02% - 0.02%
0.02% - 0.2%
> 0.2%
closed
THE BRONX
MANHATTAN
QUEENS
BROOKLYN
NYU WAGNER
rudin center
for transportation policy & management
Source: MTA - NYCT

1975 - 1984

NYC shed 4% of its population between 1975 and 1984. This population loss was not constant through the decade, however. Between 1980 and 1984, the city's population loss slowed and began to rebound for a net gain of 100,000 residents between 1980 and 1984. Total employment increased significantly through the decade, growing by 20% in 1984. Through these transitions, subway ridership remained relatively stagnant overall, with the improving conditions of subway stations and hubs, tracks and cars on the minds of many New Yorkers. Through this period, changes in annual subway ridership are better explained through changes in use of individual stations and hubs, as well as changes in ridership by borough.

Boroughs

In general, the Bronx and Brooklyn experienced annual subway ridership declines. The total share of annual subway ridership for the Bronx and Brooklyn declined by 2% and 1%, respectively. In 1975, subway ridership in the Bronx comprised about 9.5% of the total annual ridership, but by the end of the decade had declined to 7.5%. In fact, by 1984 ridership in the Bronx had declined by over 20,600,000 rides annually. The share decline in the Bronx's subway ridership may be attributed to the infamous conditions of the borough during the 1970s and 1980s, which left swaths of neighborhoods empty and business corridors dilapidated.

Similar to the Bronx, albeit less drastic, Brooklyn's share of total ridership declined by 1% from 20.7% to 19.7% at the decade's end. Over the course of the decade, Brooklyn's annual ridership decreased by more than 13,500,000 rides.

In contrast, Manhattan's share of subway usage increased from 55.5% to 57.5% in 1984, and would continue to increase in the start of the new decade. As may also be seen, Queens share of ridership increased from 13.9% to 15.1%, with an increase of more than 8 million in annual ridership.

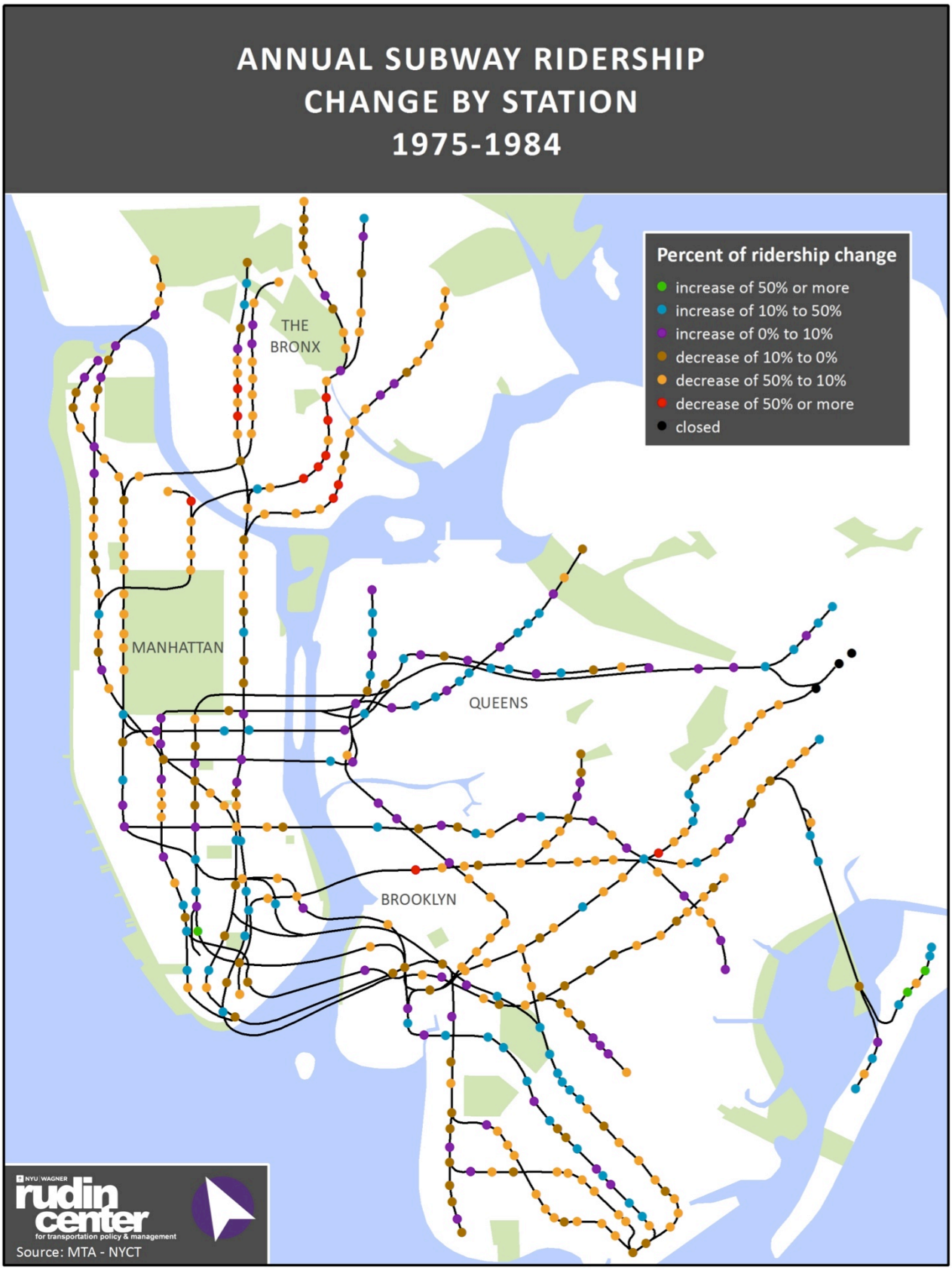
Stations

From 1975 to 1984, annual subway ridership at many stations decreased by more than 50%, while only a single hub in Manhattan (Chambers St (A, C)/WTC (E)/Park Place (2,3)) and two stations in Queens (Beach 60 St (A) and Beach 36 St (A)) experienced increases of more than 50%.

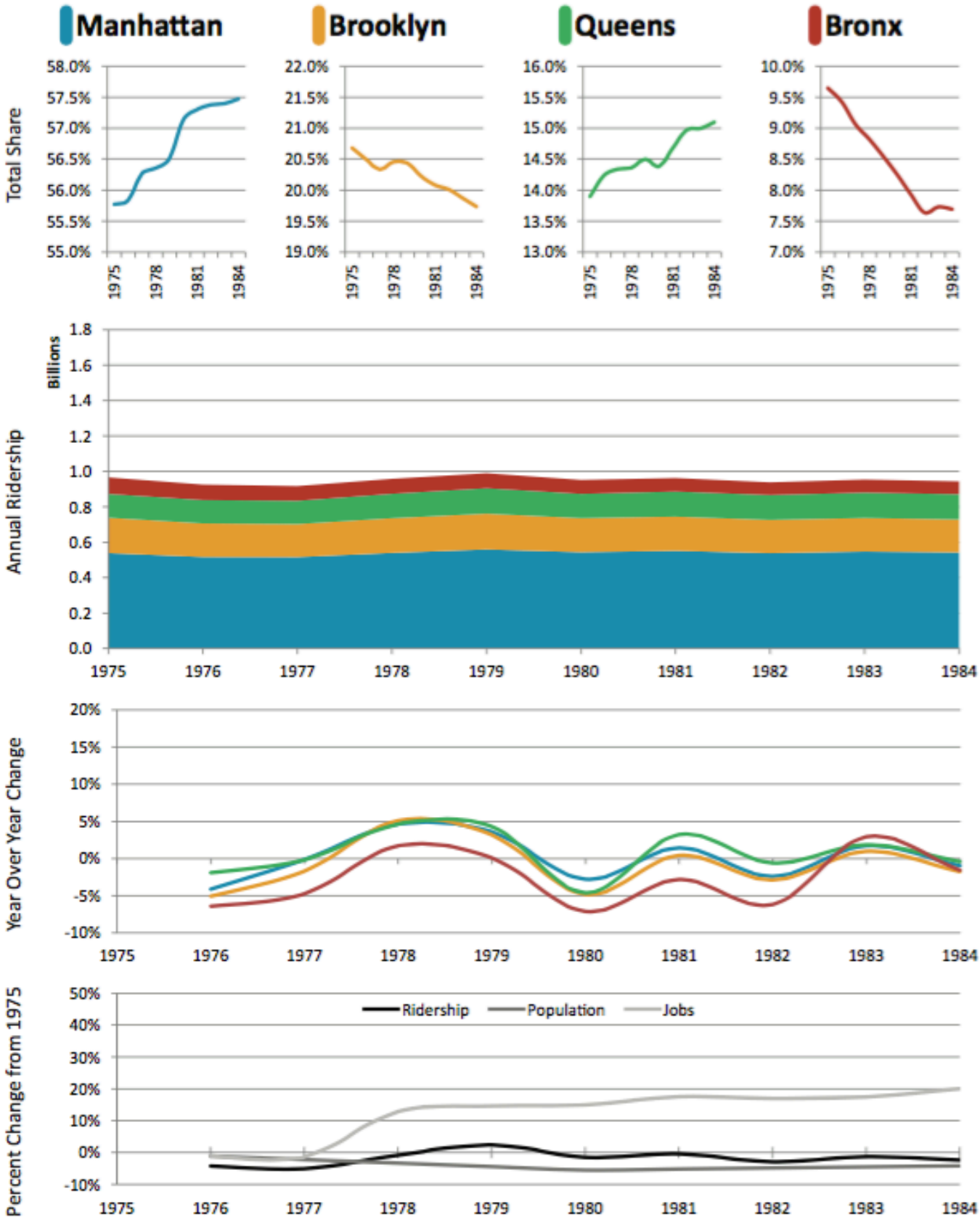
In Queens, three stations – 168 St (J), 160 St (J), and Sutphin Blvd (Jamaica Av) (J) – experienced large declines due to complete station closures in 1978. The stations in Queens with the largest increase in number of riders were Jamaica-179 St (F) and 74-Bway (7)/Jackson Hts-Roosevelt Av (E, F, M, R), both of which grew by more than 1 million rides annually. Overall, the borough experienced an increase in ridership of approximately 6%.

In Brooklyn, two stations had significant annual ridership decreases – Alabama Av (J) and Marcy Av (J, M, Z).

During this decade, the Bronx experienced the greatest decline in ridership: nine stations and hubs had decreased ridership by 50% or more, the most of any borough. The stations that experienced the greatest percentage declines in the Bronx were: East 143 St-St Mary's St (6); East 149 St (6); Freeman St (2, 5); Prospect Av (2, 5); Intervale Av (2, 5); 174 St (2, 5); Jackson Av (2, 5); 176 St (4); and 170 St (4). These stations are primarily located in the Mott Haven and Woodstock neighborhoods.


ANNUAL SUBWAY RIDERSHIP
CHANGE BY STATION
1975-1984
Percent of ridership change
increase of 50% or more
increase of 10% to 50%
increase of 0% to 10%
decrease of 10% to 0%
decrease of 50% to 10%
decrease of 50% or more
closed
THE BRONX
MANHATTAN
QUEENS
BROOKLYN
NYU WAGNER
rudin center
for transportation policy & management
Source: MTA - NYCT

1975 - 1984


Manhattan
Brooklyn
Queens
Bronx
Total Share
58.0%
57.5%
57.0%
56.5%
56.0%
55.5%
55.0%
22.0%
21.5%
21.0%
20.5%
20.0%
19.5%
19.0%
16.0%
15.5%
15.0%
14.5%
14.0%
13.5%
13.0%
10.0%
9.5%
9.0%
8.5%
8.0%
7.5%
7.0%
1975
1978
1981
1984
Annual Ridership
Billions
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
Year Over Year Change
20%
15%
10%
5%
0%
-5%
-10%
Percent Change from 1975
50%
40%
30%
20%
10%
0%
-10%
Ridership
Population
Jobs

1985 - 1994

While in the previous decade annual subway ridership modestly declined, by the end of 1994, annual subway ridership grew, surpassing 1 billion rides for the year, and increasing by more than 70 million rides over the course of the decade. Annual ridership increased by 7.4% from 1984 to 1994, but not without some volatility. Between 1989 and 1991, year over year annual ridership declined. This decline may be attributed, at least in part, to the economic recession of the 1990s and heightened crime: New York's homicide rate peaked in 1990 with 2,245 killings.[3] The total population in NYC increased 5.8% from 1984 to 1994, while total employment decreased nearly 4%. During the 1990s the US experienced a mild recession with sluggish employment recovery; the "jobless recovery," as it is commonly called, led to rising unemployment relative to economic growth throughout the country.[4] By 1994, New York had lost more than 300,000 jobs since the start of the recession in 1989-1990.

The overall growth in ridership may be attributed to growth in population, policing efforts and financial commitment from New York State. Most importantly, the reinvestment that stemmed from the first five-year MTA Capital Plan, approved and financed in 1982 for $7.6 billion, provided fertile ground for ridership growth.[5] Commitment to capital investments, along with increased security measures, undoubtedly influenced the image and usability of the subway. Ridership growth continued throughout the next two decades, surpassing both population and employment growth.

Boroughs

The only borough with an overall increase in its share of annual ridership was Queens, which increased to just over 15.5% in 1994. Manhattan's share of total annual ridership increased to nearly 58% by 1988, then decreased to 56.5% by 1994. Brooklyn and the Bronx maintained stable shares of overall annual ridership.

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[3] NYPD Crime Data Warehouse

[4] Gardner, Jennifer. *The 1990-91 Recession: How Bad Was the Labor Market?* Bureau of Labor Statistics. June 1994.

[5] Seaman, Mark; Allison L. C. de Cerreño; Seth English-Young. *From Rescue to Renaissance: The Achievements of the MTA Capital Program 1982 – 2004*. NYU Rudin Center for Transportation, December 2004.

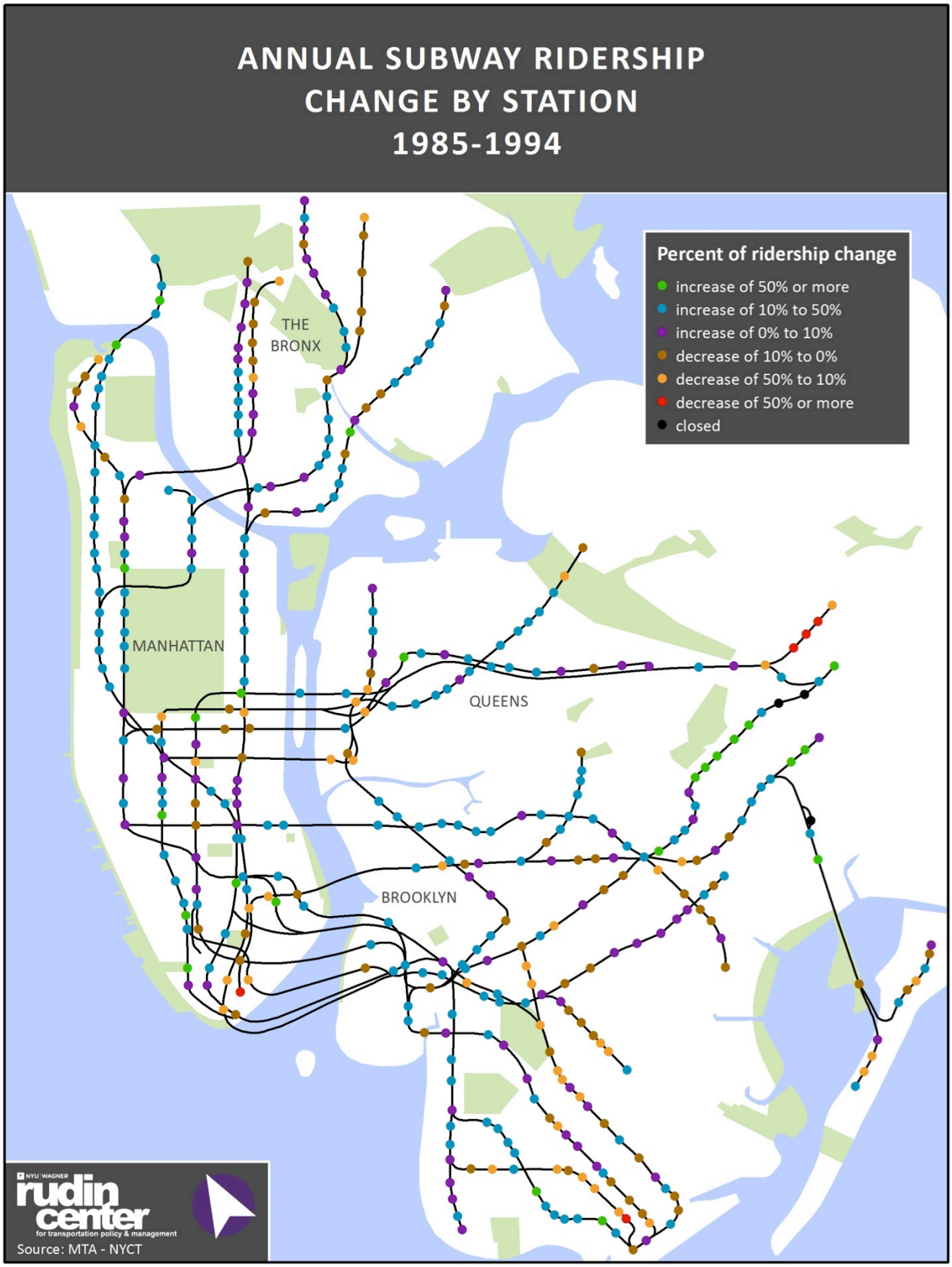
Stations

The impact of increases in annual ridership is best understood by observing changes in ridership at individual stations. While three stations were closed, six more were opened during the decade. In addition, of the 421 stations or hubs open at the decade's end, 70% (or 294 stations) experienced growth in ridership.

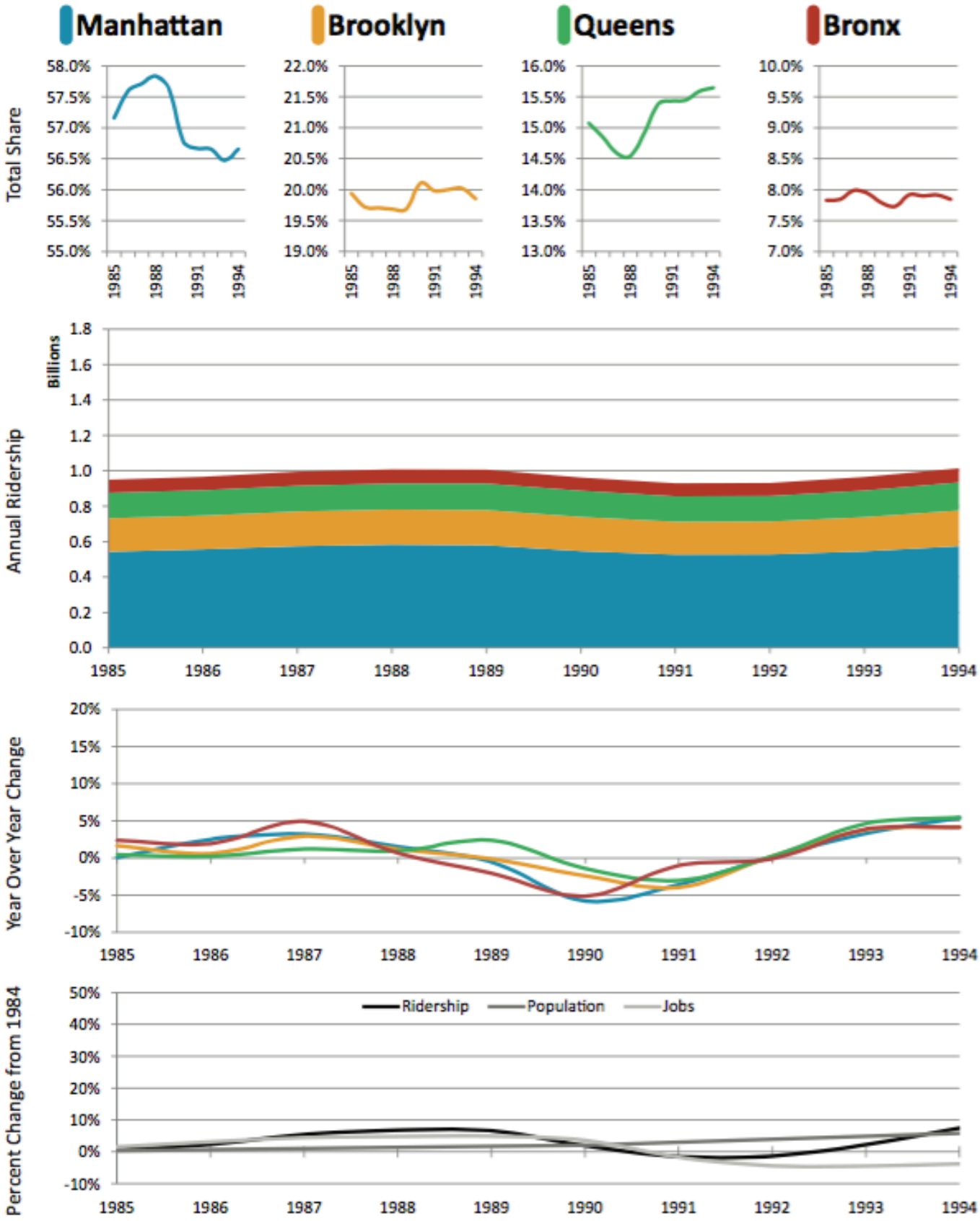
In Queens, ridership at 5 stations along the J, Z line increased by over 50%. The highest percentage increase in ridership occurred at the 111 St (J) station, where ridership grew by 105%. Still, these stations' ridership growth was not borough-wide: Queens also had the greatest number of stations with dramatic decreases in annual ridership. Two Queens stations were closed in 1986 – Queens Blvd (J) and Metropolitan Ave (J) – and three stations experienced declines of 50% or more. Also of note in Queens is the decline experienced by stations in Hunters Point, now more commonly known as Long Island City.

In Manhattan, annual ridership at the Broad Street (J, Z) station declined by 59%, with several surrounding stations declining between 10% and 50% in annual ridership. Manhattan stations with increasing ridership were primarily located in the Upper East Side, Upper West Side and Harlem neighborhoods.

In North Brooklyn, several stations experienced significant growth, primarily along the L line between Broadway Junction and Bedford Avenue. Broadway Junction, a vital transfer hub, had the greatest percentage growth, with a 33% increase in annual ridership. Bedford Ave had a 30% increase in annual ridership. Growth was also found along the R, in neighborhoods such as Sunset Park and Bay Ridge.


ANNUAL SUBWAY RIDERSHIP
CHANGE BY STATION
1985-1994
Percent of ridership change
increase of 50% or more
increase of 10% to 50%
increase of 0% to 10%
decrease of 10% to 0%
decrease of 50% to 10%
decrease of 50% or more
closed
THE BRONX
MANHATTAN
QUEENS
BROOKLYN
NYU WAGNER
rudin center
for transportation policy & management
Source: MTA - NYCT

1985 - 1994


Manhattan
Brooklyn
Queens
Bronx
Total Share
58.0%
57.5%
57.0%
56.5%
56.0%
55.5%
55.0%
22.0%
21.5%
21.0%
20.5%
20.0%
19.5%
19.0%
16.0%
15.5%
15.0%
14.5%
14.0%
13.5%
13.0%
10.0%
9.5%
9.0%
8.5%
8.0%
7.5%
7.0%
1985
1988
1991
1994
Annual Ridership
Billions
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
Year Over Year Change
20%
15%
10%
5%
0%
-5%
-10%
Percent Change from 1984
50%
40%
30%
20%
10%
0%
-10%
Ridership
Population
Jobs

1995 - 2004

Compared to the earlier decades examined in this report, the period between 1995 and 2004 had the greatest increase in annual subway ridership. By 2004, the NYC subway recorded more than 1.4 billion rides, an increase of more than 400 million rides annually over 1995. While growth in population and employment continued through the decade, major increases in subway ridership throughout the city can be attributed to consistent and continued reinvestment in infrastructure. Most importantly, the MTA introduced the new MetroCard fare payment system in 1997. Riders could transfer for free between buses and subways, and could purchase unlimited ride cards in 1998. At this time, a single ride cost $1.50 and a 30-day unlimited pass cost $63. In 2003 fares were raised to $2 per ride and $70 for a 30-day unlimited pass.

Boroughs

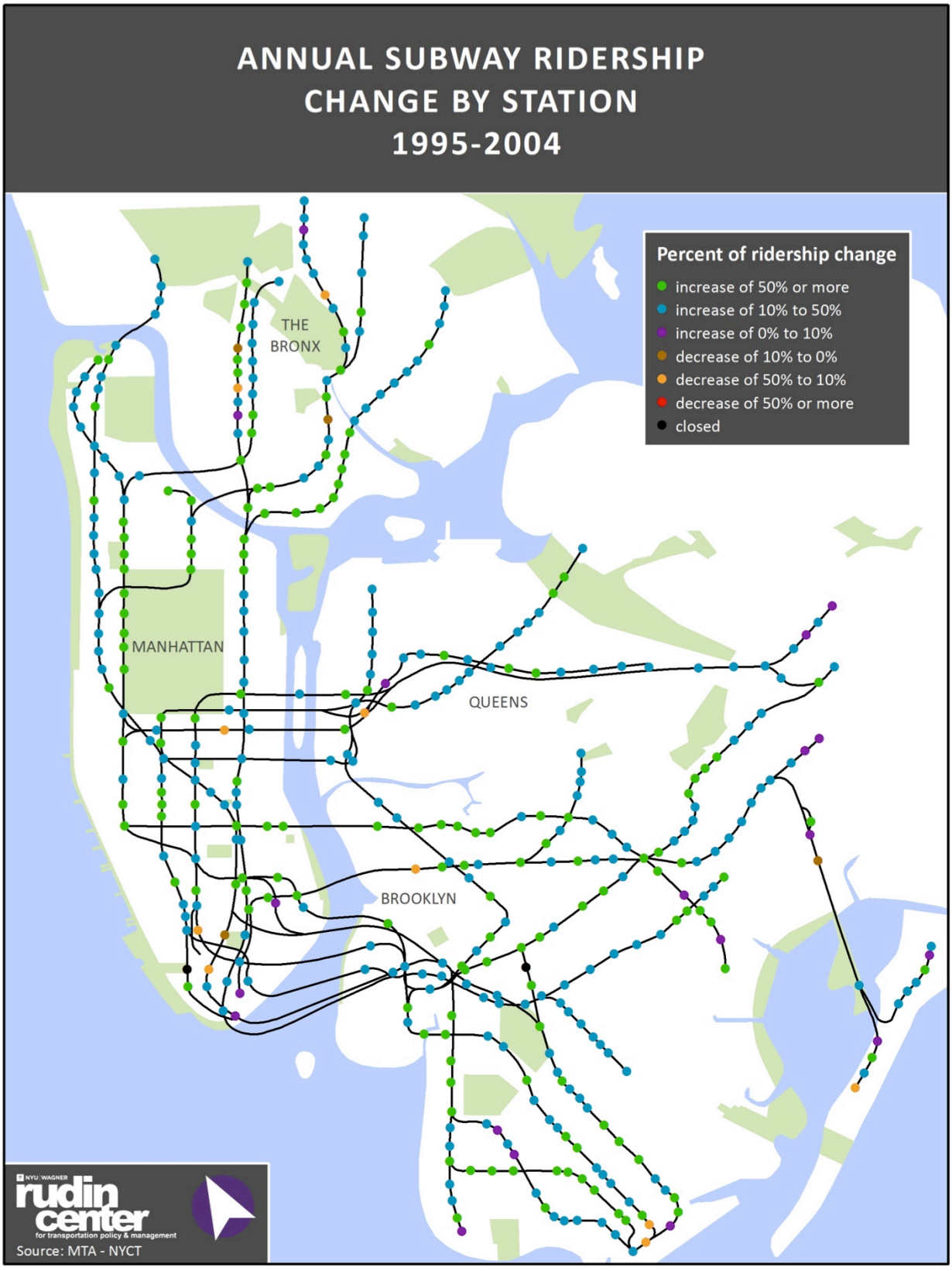
Between 1995 and 2004, large increases in ridership were distributed across all boroughs. Between 1997 and 1998 ridership increased in the Bronx (17%) and in Brooklyn (16%). Manhattan had minor ridership declines from 2001 to 2003, as a result of the terrorist attacks on September 11, 2001 and the bursting of the economic "Dot Com" bubble.

Brooklyn and the Bronx both increased their shares of annual ridership by less than 1%, while Manhattan and Queens lost less than 1%. Manhattan's share, however, showed volatility, with swings in ridership between 0.5% and 1.5% every two years. At the end of the decade, subway usage in Manhattan consisted of 56% of the total ridership, far below Manhattan's 1988 high of 58%. The decline in the relative importance of Manhattan in terms of ridership share continued into the following decade.

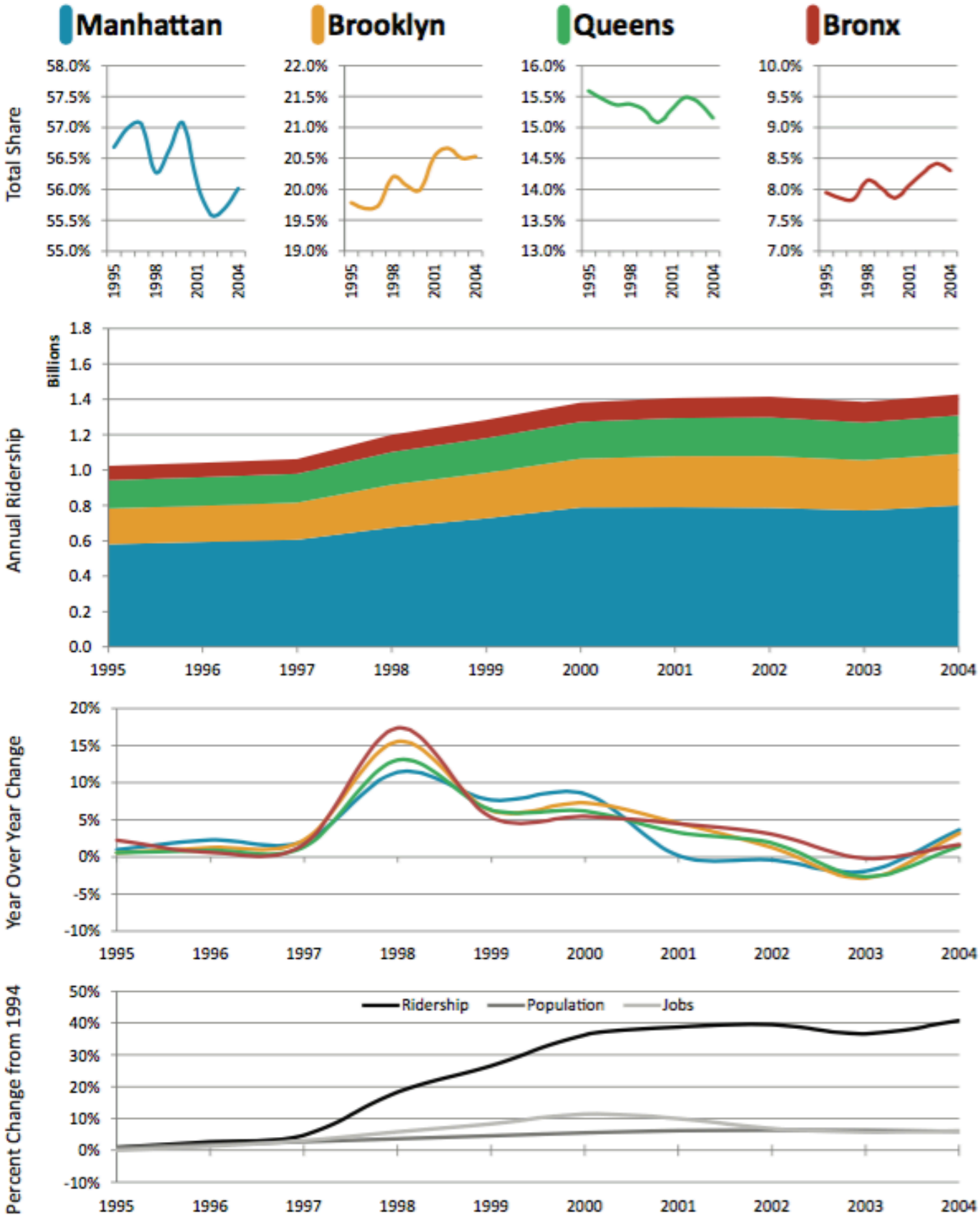
Stations

Between 1995 and 2004, annual ridership at most stations increased between 1% and 50%, with ridership at another 153 stations increasing by 50% or more. Conversely, only 14 stations experienced a decline in annual ridership, with two stations closing over the course of the decade. Within Manhattan, the following stations in the Financial District experienced declines: Chambers St, Cortlandt St, and the City Hall. In the Bronx,

ridership at the Fordham Road (4) station declined by 5%. In Brooklyn, the Neptune Av (F) and West 8th/New York Aquarium (F, Q) stations with diminishing ridership, were shut down in 2003 and reopened in 2004.



1995 - 2004


Manhattan
Brooklyn
Queens
Bronx
Total Share
58.0%
57.5%
57.0%
56.5%
56.0%
55.5%
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16.0%
15.5%
15.0%
14.5%
14.0%
13.5%
13.0%
10.0%
9.5%
9.0%
8.5%
8.0%
7.5%
7.0%
1995
1998
2001
2004
Annual Ridership
Billions
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
Year Over Year Change
20%
15%
10%
5%
0%
-5%
-10%
Percent Change from 1994
Ridership
Population
Jobs
50%
40%
30%
20%
10%
0%
-10%

2005 - 2014

Between 2005 and 2014, annual ridership continued to grow, reaching a peak of 1,751,221,791 rides by 2014. In comparison, annual ridership reached its historic peak with 1.96 billion rides in 1946. Since 2005, annual ridership numbers increased by 300 million rides despite a decline of 2.7% during the Financial Crisis (2008-2009).

Over the course of the decade, total employment continued to increase; more than 3.9 million jobs located in NYC in 2014. Population growth remained steady throughout the decade and increasing NYC's population by nearly 500,000 residents from 2005 to 2014.

Boroughs

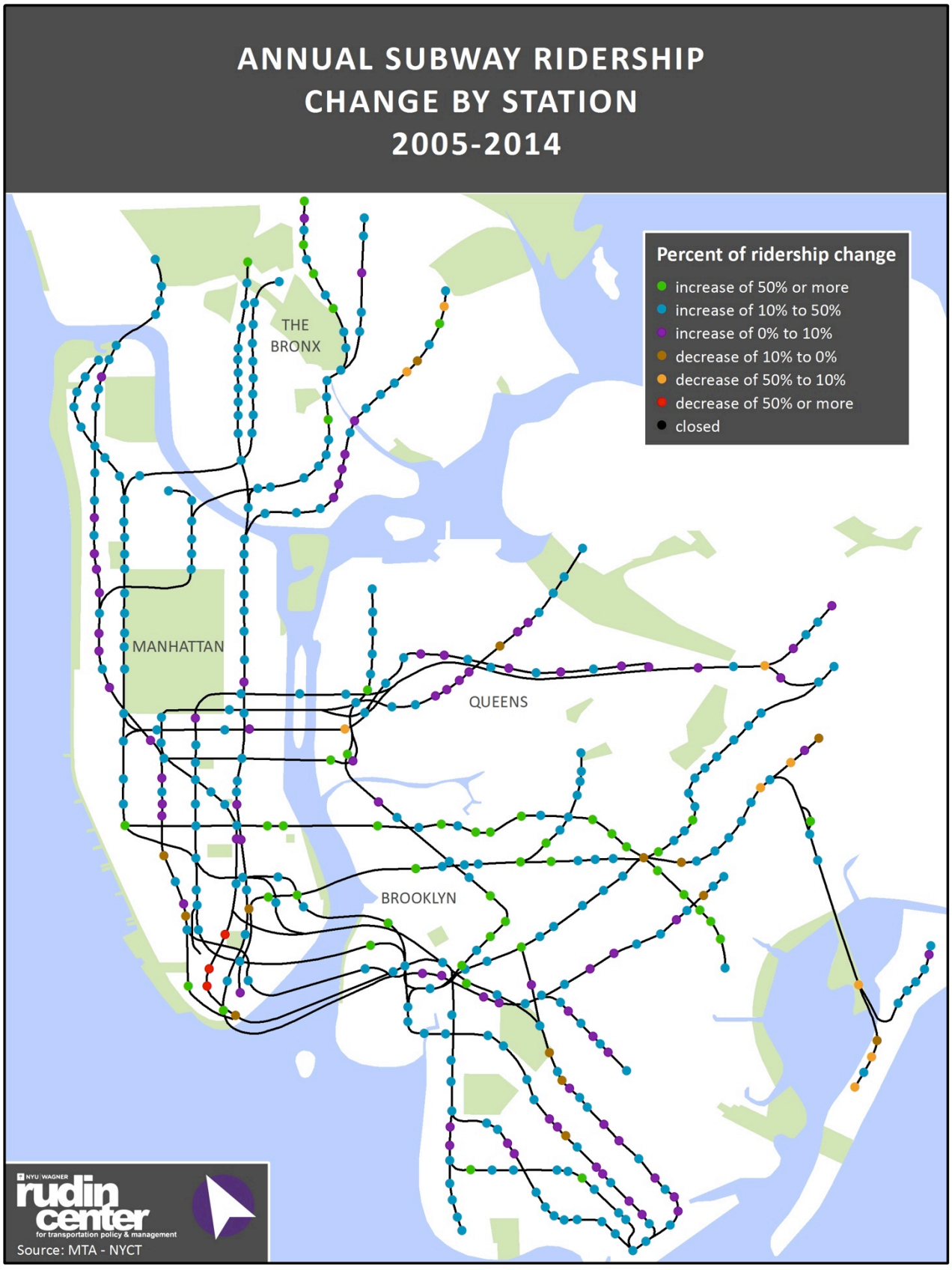
Brooklyn experienced a 1.3% increase in its share of annual ridership while Manhattan and Queens experienced decreases 1% and .8% respectively. The Bronx's share remained relatively stable at 8.7%. Growth in annual ridership over the previous decade continued for all Boroughs during this decade.

Because of the Financial Crisis, Manhattan experienced the greatest percentage drop in annual ridership of any borough over the course of the decade between 2008-2009. Post-Crisis, growth for all boroughs was relatively stable, with up to 5% growth annually.

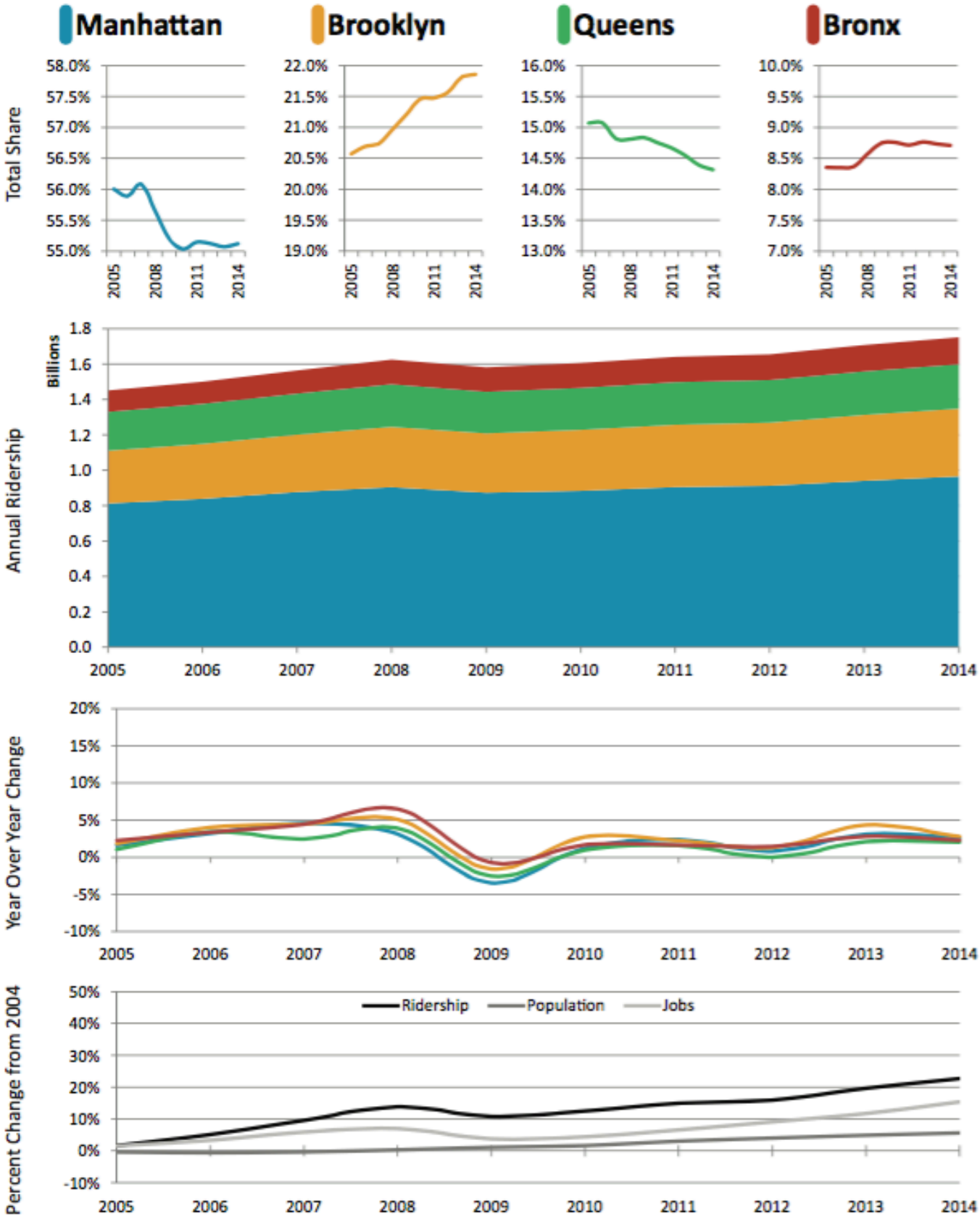
Stations

Compared to the previous decade, fewer stations experienced annual ridership growth of 50% or more. The majority of stations that did experience high growth (50% or more) were located in Brooklyn. The popularity of the L train and north Brooklyn is highlighted in the map below.

Stations that began experiencing growth in the 1980s and 1990s typically continued on similar trajectories into the 2010s. Conversely, stations that were experiencing ridership declines in downtown Manhattan generally continued that trend as well. Of the three stations in the entire subway network that lost 50% or more of their annual ridership during the decade, all were in downtown Manhattan's Financial District.


ANNUAL SUBWAY RIDERSHIP
CHANGE BY STATION
2005-2014
Percent of ridership change
increase of 50% or more
increase of 10% to 50%
increase of 0% to 10%
decrease of 10% to 0%
decrease of 50% to 10%
decrease of 50% or more
closed
THE BRONX
MANHATTAN
QUEENS
BROOKLYN
NYU WAGNER
rudin center
for transportation policy & management
Source: MTA - NYCT

2005 - 2014


Manhattan
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Bronx
Total Share
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16.0%
15.5%
15.0%
14.5%
14.0%
13.5%
13.0%
10.0%
9.5%
9.0%
8.5%
8.0%
7.5%
7.0%
2005
2008
2011
2014
Annual Ridership
Billions
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
Year Over Year Change
20%
15%
10%
5%
0%
-5%
-10%
Percent Change from 2004
50%
40%
30%
20%
10%
0%
-10%
Ridership
Population
Jobs

2014 - 2015

In 2015, annual subway usage reached 1.76 billion rides, a record since the historic peak ridership recorded in 1946, at 1.96 billion rides. At the start of the previous decade, yearly percent growth remained stable, with an average of 1.95%. Since 2013, however, yearly growth slowed; 2015 saw the lowest percentage growth since the Financial Crisis.

Boroughs

As a total share, Manhattan held 55% of annual ridership, while Brooklyn neared 22% of the total share. For the year, both Brooklyn and Manhattan experienced an increase of about 5 million additional rides.

Stations

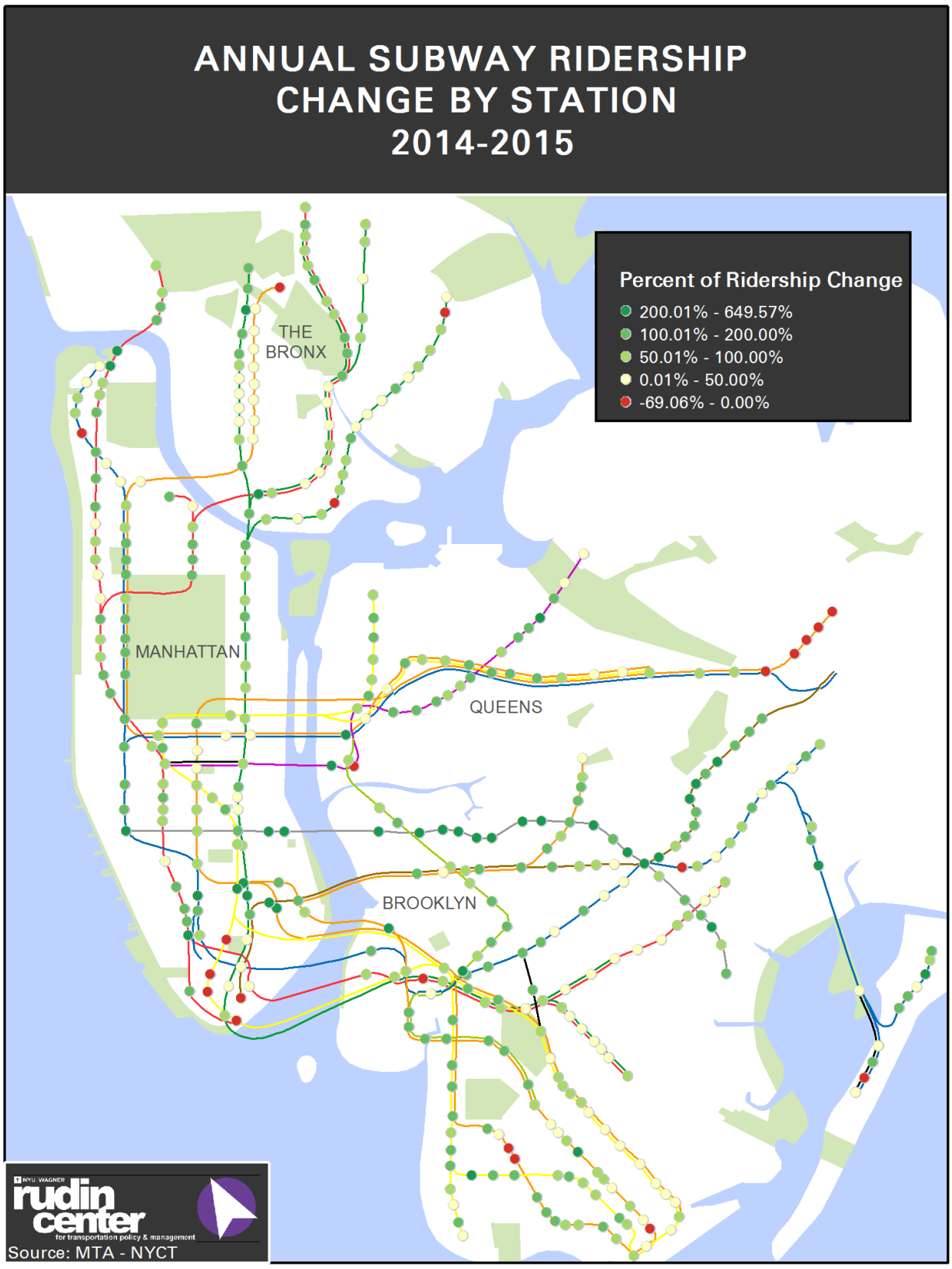
From 2014-2015, minimal change was observed in the top 10 stations used in NYC. Of note, however, is the increase in usage in the fully reopened Fulton St (A, C, J, Z, 2, 3, 4, 5) station. The station is now the 8th busiest in the city, with more than 21.6 million rides in 2015, experiencing an additional 1.5 million entries from the previous year.

In total, 255 of the 420 stations and hubs in the system (61%) experienced growth. As shown in the map below, stations with the largest percentage growth were Cortland St (R), City Hall (R), Rector St (R) and 88th St (A). The dramatic increase in annual ridership at these four stations is primarily explained by the completion of construction work. Related to stations off the R line, reconstruction work on the Montague Tubes ended in September 2014. The A line's 88th St Station was reopened in September 2014 and February 2015 for Queens-bound and Manhattan-bound trains respectively.[6]

South Ferry (1)/ Whitehall St (R), Fulton St (A, C, J, Z, 2, 3, 4, 5), and Cortlandt St (R) all had annual ridership increases of one million or more. Meanwhile, Van Siclen Av and Rockaway Av on the 3 line, both experienced declines of more than 50% of their total annual ridership. In terms of total decreases, Rockaway Av (3), 103 St

[6] MTA – NYCT Temporary Station Closures (2009-2014)

(6) and Bowling Green (4, 5) hemorrhaged riders, all experiencing annual ridership decreases of one million or more.

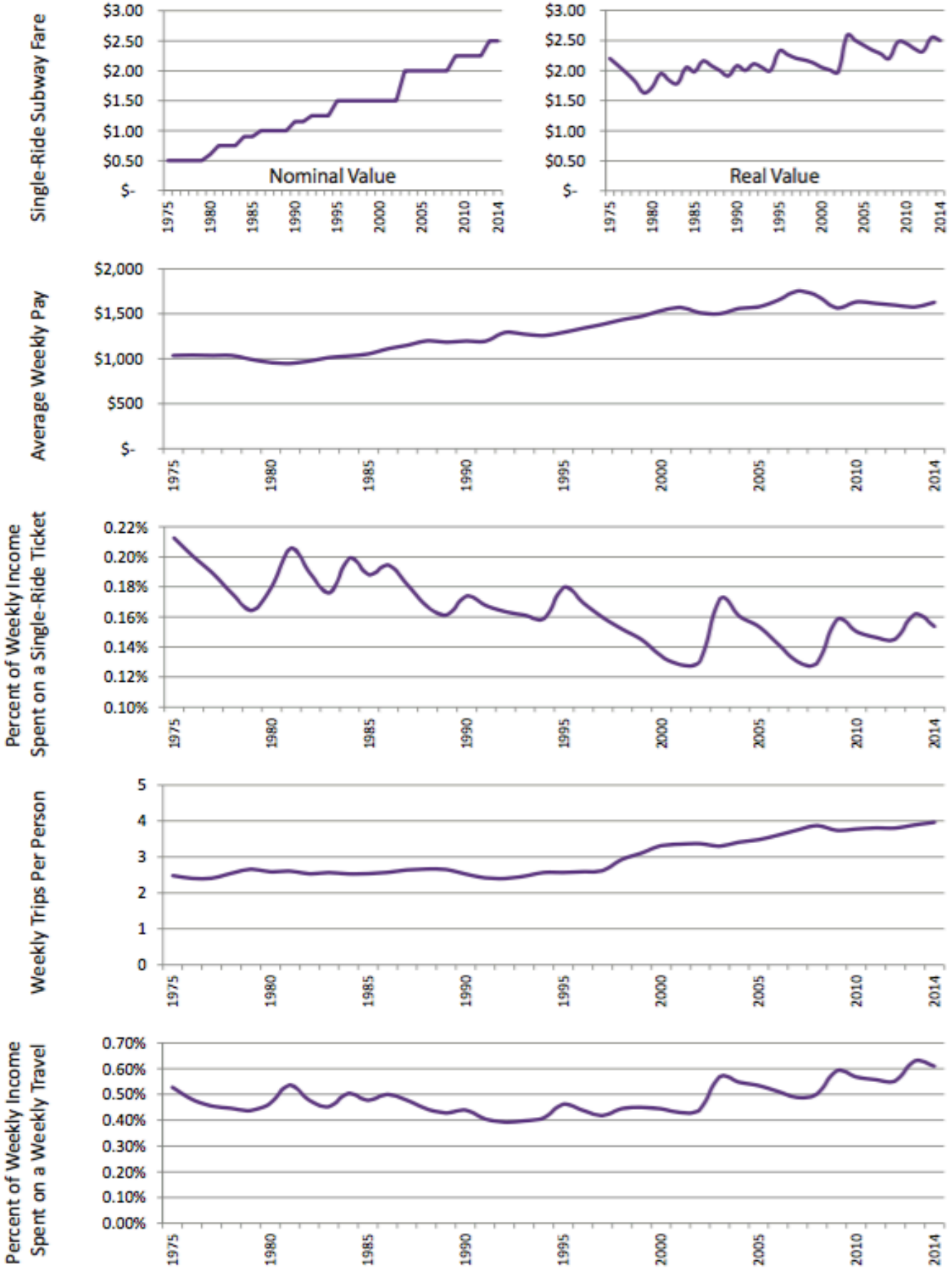


Income and Fares

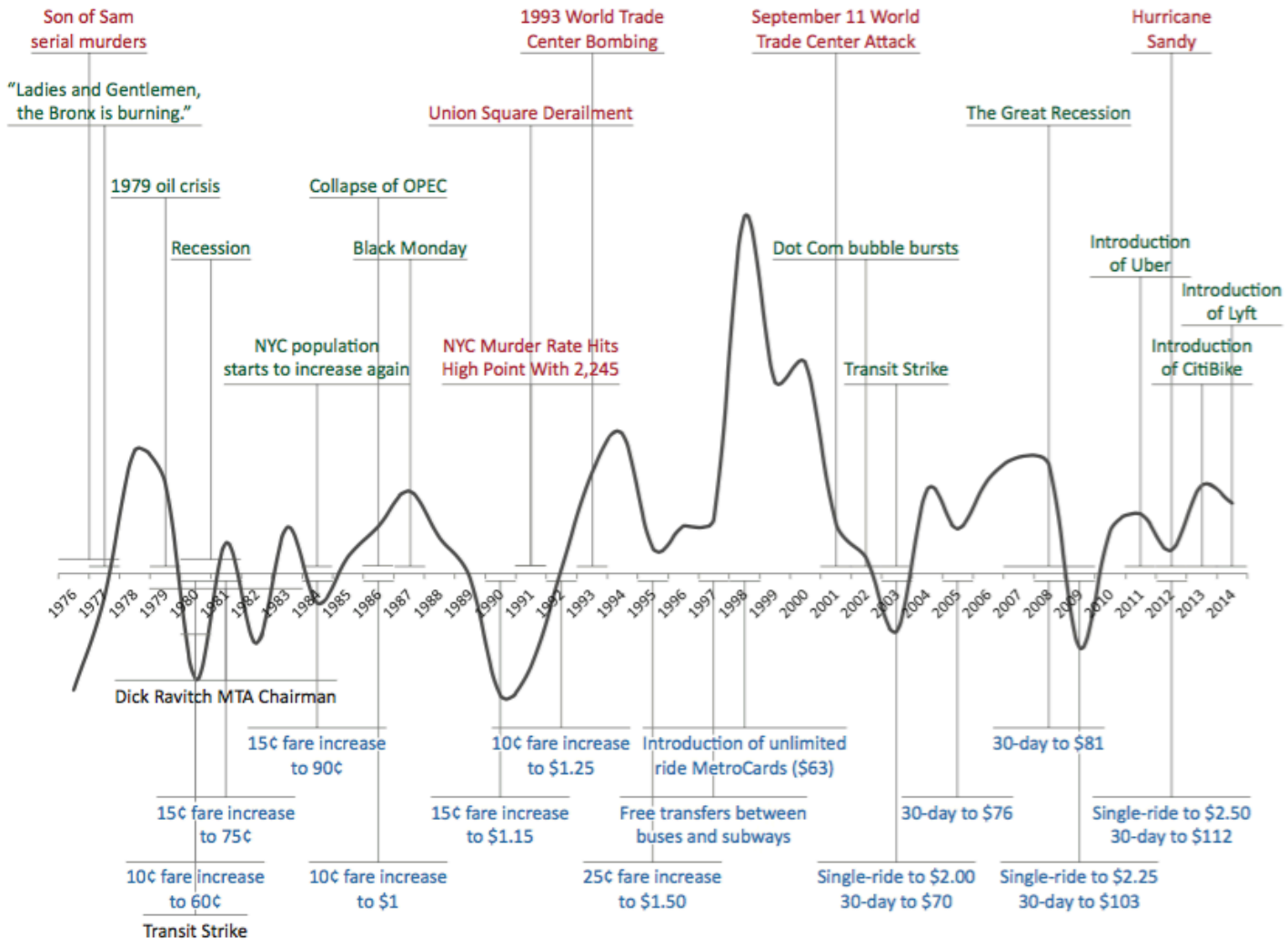
Between 1975 and 2014, single-ride fares were increased a total of ten times, from 50¢ to $2.50. However, fares have only increased by about 30¢ between 1975 and 2014, when inflation is taken into account.

Over the course of the almost 20 years that the 30 day unlimited-ride MetroCard has existed, the value of that card has been highly variable. Since its introduction in 1998, the 30-day unlimited-ride card has had eight fare increases while the single-ride fares have only increased four times. This led to a relative imbalance between single-ride and unlimited-ride options, where the economic value of the unlimited-ride card has been constantly changing. When unlimited ride cards were first introduced, they cost $63, equivalent to exactly 42 single rides at $1.50 each. This relationship held until 2003, when the next fare increase was put in place. While single-ride fares went to $2.00, 30-day passes only increased to $70. As a result, it took a historic low of only 35 rides to make the unlimited pass worthwhile. The number steadily increased until 2012 with a high of 50 rides, but has since rebalanced down to the same 42 that it was for the first five years.

These increases have not managed to stay in line with the increases experienced in the average weekly income of New Yorkers over that same period of time. As a percentage of average weekly income, the amount that New Yorkers spend on ten single-ride fares has decreased from approximately 2.1% in 1975 down to 1.5% in 2014. This picture is clouded slightly, however, by the reality of economic disparity in the city. Average weekly pay increases for jobs located in the outer boroughs has been outpaced by the subway fare increases. Instead of the downward trend seen when the city is taken in aggregate, the average outer borough employee must spend a larger share of their weekly income on ten single subway rides (from 2.5% in 1975 to 2.9% in 2014).


Single-Ride Subway Fare
$3.00
$2.50
$2.00
$1.50
$1.00
$0.50
$-
Nominal Value
Real Value
1975
1980
1985
1990
1995
2000
2005
2010
2014
Average Weekly Pay
$2,000
$1,500
$1,000
$500
Percent of Weekly Income Spent on a Single-Ride Ticket
0.22%
0.20%
0.18%
0.16%
0.14%
0.12%
0.10%
Weekly Trips Per Person
5
4
3
2
1
0
Percent of Weekly Income Spent on a Weekly Travel
0.70%
0.60%
0.50%
0.40%
0.30%
0.20%
0.10%
0.00%

Year-Over-Year Change in Subway Ridership Timeline



Methodology

Sources for subway ridership come from the NYCT and historical MTA references. Population numbers are derived from the US Census Bureau, as well as the NYC Department of Mental Hygiene.

Jobs and average weekly income data are derived from the New York State Department of Labor Statistics' Quarterly Census of Employment and Wages. Jobs are defined as total average employment for the relevant year and are not seasonally adjusted. Average wages are calculated by dividing the City's total wages earned by the total number of employed workers.

Subway fare analysis considers single-ride cost and is derived from the MTA. Adjustments for inflation are based on 2014 dollars.

In analyzing the following variables, Year-over-Year (YoY) percent changes from 1975 to 2014 are calculated.

Variables:

- *subway ridership*
- *population*
- *jobs*
- *average weekly income*
- *subway fare*

Also calculated is the yearly percent change from 1975. By using 1975 as a baseline, the analysis illustrates long term trends and aggregate changes.

Lastly, yearly percentage changes are calculated by decade for the following: 1975-1984, 1985-1994, 1995-2004, and 2005-2014; allowing for a more granular look into long term trends. For each decennial analysis, the last year of the previous decade is used as a baseline (1984 for the 1985-1994 decade), except for the decade starting in 1975 for which there was no earlier data.

In the subway ridership analysis by borough, all subway stations that existed in 1975 or 2014 were utilized – totaling 420. In actuality, however, 469 stations operated in 2014. The difference in stations analyzed is due to the methods in which the MTA aggregates ridership numbers. Stations that are connected to one another are counted as one station because of the inability to distinguish between the users of each of the stations. For the purposes of this report, these sorts of station agglomerations are referred to as hubs. The MTA defines subway ridership as consisting of all passengers who enter the subway system, including those who transfer from buses. Not included are passengers that exit the subway, nor those that transfer from other subway lines; exceptions exist for out-of-station transfers where customers use their MetroCard to transfer. Also included in the annual total is ridership on major holidays.

Not included in our numbers are system-wide adjustments, which are calculated by the MTA and depend on several variables. The difference in total ridership, however, does not adversely affect trends and general findings.