NYU Sustainability

2019 Transportation Survey Results and Findings

February 2021
Executive Summary

In Fall 2019, the Office of Sustainability surveyed the NYU community in NYC on transportation. The survey received over 16,500 responses for an overall response rate of 23%. It is estimated that, during a typical year, 94% of the NYU community uses mass transit or self-powered modes of commuting, with the subway and walking accounting for 68% of commutes. Since 2009, bike commuting has grown seven-fold.

The following table summarizes key findings and next steps that will be led by the Office of Sustainability.

<table>
<thead>
<tr>
<th>Key Finding</th>
<th>Next Step</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety concerns deter cycling</td>
<td>Disseminate more bike safety information &amp; examine ways to encourage bike infrastructure improvement around NYU locations</td>
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<tr>
<td>More bike parking is desired</td>
<td>Bike parking spaces nearly doubled in Manhattan and Brooklyn; re-evaluate bike parking needs after full return to campus</td>
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<td>Lack of awareness of NYU’s transit programs &amp; benefits</td>
<td>Assist respective unit-owners in publicizing transit benefits/programs</td>
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<tr>
<td>Building occupancy varies greatly between weekdays/weekends</td>
<td>Work with schools/units in updating building schedules to reflect actual occupancy</td>
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<td>Significant local air travel</td>
<td>Encourage policies that discourage NYU-sponsored flights within the Northeast</td>
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Introduction

The 2019 Transportation Survey gathered information from over 16,500 respondents about how the NYU community gets to, from, and around NYU’s New York City locations. The survey’s intent was:

- To inform NYU’s decision-making in areas such as transportation benefits, bike infrastructure, and University-sponsored travel.
- To reveal changes in NYU’s commuting habits by drawing comparisons to a similar transportation survey conducted in 2009.

With guidance from the ad hoc group convened to guide and implement this survey, the Office of Institutional Research developed and administered the survey to students, faculty, administrators, and staff at NYU New York campus locations. Alumni, students and personnel at global sites, and NYU Langone Health were excluded from the survey population.

As the survey was administered prior to the COVID-19 pandemic, the survey findings reflect the state of commuting during a time when the majority of University activities were not being performed remotely. The magnitude of long-term commuting changes from the pandemic are unknown. However, we anticipate that when NYU resumes full in-person activities after the pandemic, the conclusions from this survey will regain relevance.

The survey was administered via an online form and received 16,569 responses for an overall response rate of 22.8%.

<table>
<thead>
<tr>
<th>Role</th>
<th>Response</th>
<th>Population</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>11,932</td>
<td>58,461</td>
<td>20.4%</td>
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<tr>
<td>Faculty or Instructor</td>
<td>1,367</td>
<td>7,775</td>
<td>17.6%</td>
</tr>
<tr>
<td>Staff or Administrator</td>
<td>3,270</td>
<td>6,323</td>
<td>51.7%</td>
</tr>
<tr>
<td>Overall</td>
<td>16,569</td>
<td>72,559</td>
<td>22.8%</td>
</tr>
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</table>

Table 1: Survey Response Rates

The survey results were weighted according to the above three population types. Unless otherwise noted by the term “respondents,” the results presented in this report are considered representative of the NYU population.
Travel Characteristics

Modes of transit

Mode share is the percentage of commuters that use a particular transportation method to come to their primary NYU location. The survey results indicate that 94% of all commutes involved public or self-powered modes of transportation while less than 6% of NYU commuters used a personal vehicle or for-hire-vehicle (FHV). Figure 1 shows the estimated mode share of all of NYU.

Figure 1: NYU mode share breakdown
(fraction of users primary travel type - totals add to 100%)
Since 2009, biking has increased over seven-fold, which can be attributed in large part to the introduction of Citi Bike. The share of people taking for-hire-vehicles has increased as well, as a result of ride-share services like Uber and Lyft. The share of people walking has doubled and driving has increased by 64%. Meanwhile, the number of people taking commuter rail and the NYU shuttle has dropped by 60% and 77% respectively. This is likely due to the closing of two downtown residence halls which occurred between 2009 and 2019. While fewer people may be taking the NYU shuttle to get to and from NYU, we expect that the number of people using it to get between NYU locations (e.g. Washington Square and Downtown Brooklyn) has increased.

Although 6% of NYU travelled by car or FHV as part of their commute, 75% of those commuters also take mass transit on their commute (such as driving to a commuter rail station). The number of trips where a commuter drives or takes a FHV directly to NYU was around 1.5%, a 50% decrease since 2009 when it was roughly 3%.
Commuting Departure Locations

Figure 3 depicts the zip codes in the immediate tri-state area from which NYU community members not living in NYU housing departed to come to NYU.

NYU’s community members span the entire tri-state area. However, the largest density is in the areas immediately surrounding NYU’s Washington Square and Brooklyn locations as well as (in order of estimate number of total NYU community members) in Murray Hill, Park Slope, Bushwick, Bed-Stuy, Bay Ridge, Morningside Heights, Jersey City, Long Island City, Lower East Side, and Crown Heights.
Findings

1 The NYU community is more spread out than a decade ago
Since 2009, the NYU community has spread further across the city. In particular, neighborhoods like Bushwick, Bay Ridge, and Long Island City have seen significant increases. Compared to 2009, the share of those commuting to NYU Manhattan locations from within Manhattan has decreased by almost 10% (from 66.5% down to 61.1%). These individuals have spread out across the tri-state area.

As NYU’s Downtown Brooklyn location has grown, so has the share of the community living in Brooklyn (from 14.3% up to 20.3%). The community has also spread out beyond Manhattan and Brooklyn, with all outer boroughs and NYC suburbs showing modest increases. Overall, the share of the community living in Manhattan has fallen to 56% from 67% in 2009. These changes are an important consideration moving forward for University planning and transportation decisions.

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<tbody>
<tr>
<td></td>
<td>Manhattan</td>
<td>66.5%</td>
<td>61.1%</td>
<td>56.0%</td>
<td>-10.5%</td>
</tr>
<tr>
<td></td>
<td>Manhattan &amp; Brooklyn</td>
<td>14.3%</td>
<td>15.4%</td>
<td>20.3%</td>
<td>6.0%</td>
</tr>
<tr>
<td></td>
<td>Queens</td>
<td>7.7%</td>
<td>7.9%</td>
<td>8.2%</td>
<td>0.5%</td>
</tr>
<tr>
<td></td>
<td>New Jersey</td>
<td>6.6%</td>
<td>8.7%</td>
<td>8.5%</td>
<td>1.9%</td>
</tr>
<tr>
<td></td>
<td>Bronx</td>
<td>1.6%</td>
<td>1.7%</td>
<td>1.7%</td>
<td>0.1%</td>
</tr>
<tr>
<td></td>
<td>Long Island</td>
<td>1.4%</td>
<td>2.1%</td>
<td>2.2%</td>
<td>0.8%</td>
</tr>
<tr>
<td></td>
<td>Upstate NY and Westchester</td>
<td>1.3%</td>
<td>2.3%</td>
<td>2.2%</td>
<td>0.9%</td>
</tr>
<tr>
<td></td>
<td>Staten Island</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.8%</td>
<td>0.1%</td>
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Table 2: Share of trips from each region

2 Safety concerns deter cycling
The most commonly cited concern for both current and potential bikers is the danger from other traffic. Two thirds of the community listed this as an obstacle to biking. Specifically, more than half of all respondents indicate that adding more bike lanes or creating more protected bike lanes are desirable initiatives. Meanwhile, cost and maintenance of owning a bike was the least cited concern, chosen by only 4% of people.

These safety concerns expressed by the NYU community are consistent with sentiments across the city that biking is not a fully safe mode of transportation, even though New York City has invested (and continues to invest) in improved biking infrastructure.

3 Citi Bike is NYU’s preferred way to bike
Over 60% of NYU’s bikers use Citi Bike, largely because students prefer Citi Bike. Student bikers are 30% more likely to use Citi Bike compared to faculty, staff, and administrators. The desire amongst the community for a Citi Bike discount (63% of respondents) emphasizes NYU’s strong interest in Citi Bike. These results suggest that NYU Bike Share (with its low ridership and high cost) not re-open post-Covid, focusing instead on Citi Bike and full-day bike rental options for students.
4 Community members desire more bike parking on campus
At the time of the survey, about 20% of respondents desired more outdoor bike racks, while 45% desired more indoor bike storage. In Brooklyn, where there is currently no indoor bike storage available to all NYU community members, 53% of respondents indicated more indoor bike storage would encourage them to bike. Since this survey, NYU has installed 232 outdoor bike parking spots around Washington Square and in downtown Brooklyn, more than doubling the existing amount. The Office of Sustainability may revisit the need for additional bike parking and indoor availability once the community fully returns to campus.

5 There is a lack of awareness of NYU transit benefits & programs
The survey results indicate that there is a widespread lack of awareness around many of NYU’s transit services. Fewer than 30% of people are aware of the Tisch Hall bike lot, NYU Federal Credit Union Citi Bike discount, the NYU Public Safety Airport Shuttle Service, Commuter Student Council, and Kimmel lockers. There is an opportunity to educate the community about these benefits.

6 Building occupancy varies greatly between weekday and weekend
Weekend occupancy in NYU buildings (excluding housing) is approximately 14% of the weekday occupancy. This suggests an opportunity for energy savings by better aligning building schedules with real-world occupancy so that NYU may properly adjust heating, cooling and lighting for unoccupied or lightly occupied spaces.

7 Even within a global university, local air travel is still significant
Based upon an extrapolation of survey respondents’ self-reported travel, NYU traveled an estimated 176 million flight miles in 2019. Over one quarter of flight miles are from trips to Europe and one-fifth are to East & Southeast Asia. Despite its proximity to many cities accessible by train and bus, NYU’s most common destination (by number of flights) for travel by air is Eastern North America. Over one-fifth of all total NYU flights are within this region. The other most common destinations for flights are Europe (21%) and Western North America (18%). The significant number of flights within Eastern North America indicates a potential opportunity to shift some air travel to rail.
Next Steps

1 Re-examine bike parking needs upon full return to campus
   NYU added 230 bike parking spots on campus during the COVID-19 pandemic, increasing current bike parking capacity by 70%. Upon a full return to campus, the Office of Sustainability will evaluate whether any gaps remain and propose appropriate action.

2 Disseminate bike safety and transit-related benefit information
   Educating the community on bike safety is integral to helping NYU community members bike more safely and feel safer on their commutes. The Office of Sustainability will share bike safety tips and resources through social media, blog posts and updated transportation webpages. NYU may also explore how to encourage the expansion of protected bike lanes, especially around NYU locations and along corridors which the NYU community is likely to use frequently.

3 Improve transit benefit and program marketing
   The survey results also indicate there is a lack of awareness of many transit benefits and programs offered by the University. The Office of Sustainability will work with the units that operate these benefits and programs, such as Public Safety and Human Resources, to publicize them more widely.

4 Update building schedules to reflect actual occupancy
   The Office of Sustainability, in collaboration with Facilities and Energy Engineering, will work with schools and units to review their building schedules and adjust to reflect usage of space post-pandemic. Schedules have been modified at this time due to reduced capacity with remote learning and work.

5 Increase train travel within Eastern North America
   In January 2020, an EVP unit policy was put into place that discouraged air travel within the Northeast Corridor (Richmond to Boston), and between cities within four hours travel by train in Europe, without justification. This policy should be encouraged for NYU-sponsored travel; suggestions to reduce the cost of air travel were included in the FY22 Budget Memo.
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Student Affairs
University Relations and Public Affairs
University Life and Global Programs

NYU’s 2019 Transportation Survey Results

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