

Bus Rapid Transit

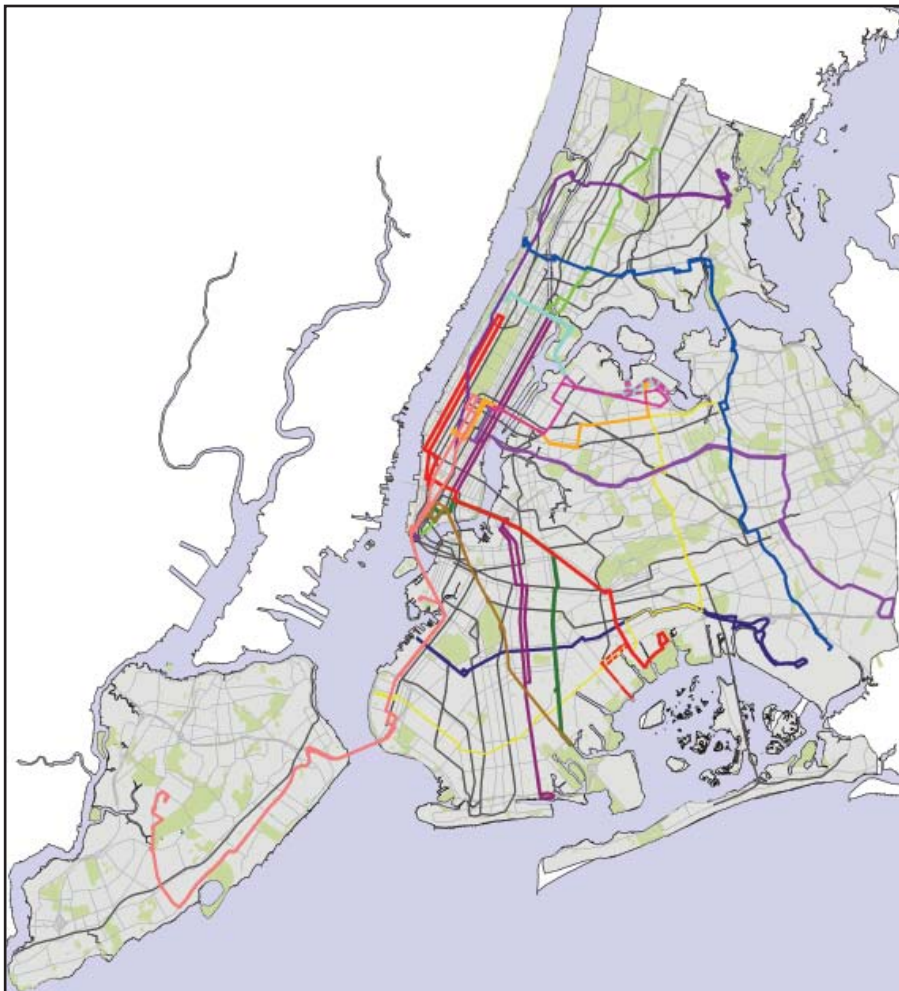
A Transportation Revolution at a Bargain Price

This spring, the New York City Department of Transportation (DOT) and MTA are holding a series of community workshops across the five boroughs seeking public input on the rollout of bus rapid transit (BRT) – a vital new addition to New York City’s transit landscape that will make speedier commutes a reality for tens of thousands of New Yorkers now forced to rely on slow local buses.

The Pratt Center’s Transportation Equity Project has assessed and proposed possible BRT routes, with the objective of making sure they serve commuters who most urgently need better transit service – those with low incomes and long rides to work. Our findings have helped inform the current DOT/MTA plans for BRT.

This Issue Brief from the Pratt Center explains what’s at stake as the two agencies work to roll out BRT citywide, and outlines what community groups can do to make sure that BRT fulfills its potential to liberate New Yorkers to move where they need to, quickly and inexpensively. It’s a revolutionary notion that’s about to become reality, but only if communities become productive partners in planning.

Pratt Center’s Proposed BRT Routes



The Pratt Center envisions bus rapid transit as a citywide “third mode” of public transportation, in addition to subways and local buses.

Working with members of COMMUTE, Communities United for Transportation Equity, and using census data on commuting patterns, we identified areas where a critical mass of riders have commutes of one hour or more. Citywide, two out of three of these extreme commuters have household incomes of less than \$35,000 a year.

Our analysis then identified existing bus corridors serving those areas that can be incorporated into a bus rapid transit system linking underserved riders with job centers and other important destinations around New York City.

What Is Bus Rapid Transit?

Bus rapid transit was first introduced in Curitiba, Brazil, in the 1980s, and has since been implemented in some 40 cities worldwide, including many in South America and Asia. The Transmilenio system in Bogotá, Colombia, is the best-known example of high-performing BRT. Key features of bus rapid transit include:

- Rights of way dedicated exclusively to buses, protected from use by other traffic by physical barriers or other means;
- Electronic coordination of traffic signals with bus movements;
- Widely spaced bus stops at which riders pay fares before boarding the bus;
- Buses with low floors and wide doors for efficient boarding, and with a visual identity that distinguishes the BRT system from traditional buses.

Constructing a new BRT line costs 4 to 20 times less than building a new tram or light rail line, and 20 to 200 times less than a conventional subway line. The cost differential in New York City may be even greater. Few cities have existing underground infrastructure of the age and complexity New York does; the difficulty of tunneling around and through what lies beneath New York's streets contributes to the greater than \$1 billion per mile cost of new subway lines.

Constructing bus rapid transit costs 20 to 200 times less than building a new subway line.

The possibility of bringing BRT to New York City was the subject of a study by the MTA in 2004, which identified a potential route in each of the five boroughs. In 2007, PlaNYC 2030 identified bus rapid transit as one of New York City's major environmental sustainability initiatives, and committed the city's Department of Transportation to working closely with MTA to implement the new system.

Planning the Rollout

In 2008, DOT and the MTA launched a limited form of bus rapid transit, called Select Bus Service, on the Fordham Road route of the Bx12 in the Bronx. Three more Select Bus Service routes — one each in Manhattan, Brooklyn and Staten Island — are set to roll out through 2011. In the Bronx Select Bus Service speeds trips along a highly congested route, but because it lacks separated bus lanes and coordinated traffic signals does not come close to the travel speeds BRT can reach.

Meanwhile, DOT and MTA are moving to bring true bus rapid transit to New York City. They have identified 31 “corridors” that are inadequately served by transit and are now working to narrow down those zones of interest into eight to ten proposed BRT routes. The agencies will be using input from the community workshops to help determine where the routes will go and how bus rapid transit can be designed to work effectively within different neighborhoods' conditions and needs, and to lay groundwork for community advisory groups that will collaborate with MTA and DOT on implementation.

Bus rapid transit is a revolutionary notion that can only become reality if communities become productive partners in planning.

Setting Priorities

Our analysis focused on the following priorities, which we urge participants in the community workshops to support:

1. Serving riders with the greatest needs

Low-income New Yorkers, defined in the Pratt Center's analysis as those whose household income is less than \$35,000 a year, are overrepresented among transit riders who are the worst served under the current subway-and-bus system. Some 464,000 low-income commuters have commutes that are longer than one hour each way, representing two in three of all riders with rides of such great length. COMMUTE's planned routes target areas with high densities of underserved, low-income riders.

2. Connecting workers with jobs that are currently hard to reach

Many riders with long commutes live in areas that are poorly served by subways, such as East Flatbush in Brooklyn or East Elmhurst in Queens. And many major centers of employment, including industrial parks, airports and medical centers, are not easily reached by a subway system designed to funnel riders into Manhattan's central business district. Retail/service and manual labor jobs tend to be especially far flung. The COMMUTE routes are designed to promote access to these widely dispersed places of employment (see map).

3. Extending BRT routes across bridges to connect the boroughs

Outside of Manhattan, the routes and corridors currently under review by the MTA and DOT begin and end in the outer boroughs, without traveling across the East or Bronx rivers. COMMUTE extends several of its proposed routes into Manhattan, so riders will not have to transfer to already crowded subways. Other routes could directly connect Brooklyn and Queens to the Bronx, so that commuters can travel a direct route between these boroughs.

Making Job Centers Accessible

Transit connections to job centers outside of Manhattan will be vital as New York City moves to diversify its economy. BRT can connect riders to industrial centers, hospitals, universities, and other destinations hard for many riders to reach by subway.

This map shows one of the Pratt Center's proposed routes, connecting the Sunset Park industrial zone in Brooklyn with JFK Airport and important destinations in between. The route falls within one half mile of 602,932 NYC residents and 206,449 workers, including 33,292 who commute more than one hour each way to earn less than \$35,000 annually. Each red dot represents 100 of these low-income extreme commuters.



Proposed route: Sunset Park to JFK

What Happens Next

Our data provides an overview of needs and opportunities, and the maps reflect an assessment about where routes can serve the most people in need, most efficiently. On-the-ground insight is just as vital, and at the workshops neighborhood residents and groups will have a valuable chance to share ideas about how to make bus rapid transit work in their communities.

Building clarity and consensus at the neighborhood level will be important to the successful implementation of bus rapid transit going forward. Local elected officials need to know that their constituents are demanding BRT and will not tolerate efforts to obstruct its progress. Bus rapid transit will likely face some opposition, particularly from drivers seeking to preserve parking spaces that dedicated lanes will remove from some major roadways. And bus-lane enforcement cameras need approval by the State legislature — the same legislature whose reluctance to approve a rescue package earlier this year almost forced the MTA to impose massive fare hikes and service cuts. But the demands of a self-serving minority cannot be allowed to override the ability of the majority of New Yorkers to move quickly and inexpensively around their own city — or New York City's progress in building a 21st century transit system.

For dates and locations of the Department of Transportation's BRT community workshops, and more details on the city and MTA's plans, visit [NYC.gov/BRT](https://nyc.gov/BRT).

For more information on the Pratt Center's work on bus rapid transit, and in support of Communities United for Transportation Equity, visit prattcenter.net/bus-rapid-transit.php