Fixing the L Train and Managing the Shutdown
A Community Consensus Proposal

November 2016
The Metropolitan Transportation Authority has said it will shut down the L train tunnels under the East River for more than a year to repair the severe damage caused by Superstorm Sandy. That is grim news for the hundreds of thousands of New Yorkers who rely on the L and who will have few easy alternatives to get to where they’re going every day.

But if the crisis is handled properly, it could provide an opportunity to test new technologies and street designs that could benefit New Yorkers in the long term. It also gives the MTA a once-in-a-generation opportunity to transform the L and address overcrowding and station accessibility issues along the line.

While the MTA and New York City Department of Transportation have not released a formal mitigation plan for the shutdown, community groups, business leaders, elected officials, and transit advocates have been working together to generate their own ideas. Regional Plan Association and Riders Alliance have summarized these proposals in this document. We hope these strategies help guide the L train construction project and the transportation plan put in place during the tunnel’s closure to ensure riders across the length of the L have robust alternatives during the shutdown.

This proposal is based on input from 2,000 riders from Manhattan to Canarsie who filled out surveys this summer and fall. With dozens of meetings with stakeholders, RPA and Riders Alliance thank the following for input that helped shape the plan:

- Transportation Alternatives
- TransitCenter
- Brooklyn Allied bars and restaurants
- Brownsville Partnership
- Brooklyn Chamber of Commerce
- Greenpoint Chamber of Commerce
- Evergreen
- L Train Coalition
- Make the Road NY
- Meatpacking Business Improvement District
- Neighbors Allied for Good Growth
- Tri-State Transportation Campaign
- Congresswoman Carolyn Maloney
- Assembly Member Joseph Lentol
- Assembly Member Brian Kavanagh
- Assembly Member Latrice Walker
- State Senator Daniel Squadron
- State Senator Martin M. Dilan
- Council Member Stephen Levin
- Council Member Antonio Reynoso
- Manhattan Borough President Gale Brewer
- Brooklyn Borough President Eric L. Adams

We look forward to sharing these ideas with more stakeholders in months ahead, as the work of the NYC DOT and MTA proceeds.

Summary of Recommendations

The summary of principles is organized by three areas: governance, street and transit improvements, and transforming the L train. The order is deliberate: the proposal focused on engaging communities across Manhattan and Brooklyn first before developing the plan’s recommendations and guiding principles. This plan is as much for riders as it is for policy makers and agency officials. Additionally, it is important to note that while the street and transit improvements come first, transforming the L train should be given equal weight in the mitigation efforts, as it will significantly improve rider experience once the service is restored and will prepare the L for future ridership growth.

Governance: Engaging Communities and Businesses
- Involve stakeholders early, by creating a City working group to allow regular updates to elected officials, businesses, and key local stakeholders.
- Protect local businesses, to ensure the shutdown does not hurt businesses along both sides of the river.

Street & Transit Improvements: Implementing Robust Alternatives for Closure
- Improve station access in Brooklyn before the L train closure
  - Reopen staircases and entrances at the Lorimer Street L–Metropolitan Ave G station complex and add ADA accessibility
  - Reopen the closed entrances at the Flushing Ave, Kosciusko Street, and Gates Ave J/M stations
• Provide free street (out-of-system) transfers between Broadway G and the Hewes St and Lorimer St J/M stations and reopen closed entrances at these stations

Prioritize the movement of transit and people cross-town with a 14th Street Transitway that is closed to private vehicles

• Close all or significant portions of 14th Street to private automobiles

• Designate bus and protected bike lanes in each direction

• Utilize off-board payment systems for buses, and implement bus bulbs where possible

• Add accessible pedestrian signals at all intersections

• Widen sidewalks where they are constrained and remove unneeded furniture

Create truck delivery windows at night to accommodate freight. Allow deliveries during the day only along adjacent avenues

Implement traffic mitigation plan for neighboring streets

Create dedicated busways on the Williamsburg Bridge, and consider HOV restrictions on other crossings

• Dedicated bus lanes in each direction

• Allow only vehicles with three or more passengers on the bridge during rush hours

Ensure smooth bus connections on both sides of the bridge and extend bus service into Manhattan and Brooklyn

• Bus routes should not just terminate at the base of the bridge; buses should be given designated lanes into Brooklyn and Manhattan. Limit the number of branch lines so service level is not diluted.

• In Brooklyn, options include designated lanes along Metropolitan Avenue, Grand Street, Marcy Avenue and Rodney Street, with feeder connections to L train stations and Nassau G train

• In Manhattan, routes should run along Delancey and connect to Essex/Allen to 14th Street and also connect to 1st and 2nd Avenue bus lanes

Pilot new technology that could greatly speed buses citywide: including piloting tap-and-go fare payment on buses and transit signal priority at intersections along bus routes, while increasing bus service on popular routes that will see increased ridership as L train riders are displaced.

Add additional ferry service along existing routes: developing mitigation plans with local business and commuter needs in mind.

Allow seamless transfers for buses, subways, and ferries: free transfers between ferries and buses, and free street transfers between nearby subways.

Close already crowded streets in Brooklyn to private automobiles, such as Bedford and Grand

• Allow freight deliveries and emergency vehicles

• Organize freight deliveries and movements to reduce costs and congestion

• Implement protected bicycle lanes along Delancey Street in Manhattan, Grand Street in Williamsburg, and other streets in Brooklyn; build a network of designated bike lanes from the Williamsburg Bridge into Bushwick and Ridgewood.

Transform the L Train: A Modern, Higher-Capacity and More Reliable Subway

Let’s take advantage of the shutdown to bring meaningful changes for riders by upgrading stations and track beyond what the agency currently has planned. This is an unprecedented opportunity to transform at least five subway stations in Manhattan, all of which are in serious need of upgrades. The 1st Avenue, 3rd Avenue, 14th Street-Union Square, 6th Avenue, and 8th Avenue stations should be rehabilitated and brought to a state of good repair. Some of the improvements RPA recommends include:

Make all stations ADA-accessible with the addition of escalators and/or elevators

Install platform screen doors to enhance safety and security, increase platform capacity, improve train performance, and possibly help climate control some stations

Extend tracks at 8th Ave. to allow trains to enter and exit more quickly

Better connect the L and A/C/E at 8th Avenue, to improve ease and speed of transfers

Widen platforms at Union Square and/or rebuild connection to N/R/Q to add more capacity and improve transfer

Declutter 6th Avenue platform and widen stairways to PATH and IRT to add more capacity and improve circulation

Use design-build to speed up procurement and construction
Introduction

Every weekday, 225,000 passengers ride the L train between Brooklyn and Manhattan, with another 50,000 riding intra-borough in Manhattan and another 125,000 exclusively in Brooklyn. This line serves as a critical link between over a dozen residential communities in Brooklyn to jobs in the Manhattan central business district. The MTA’s planned closure will strand many of these commuters unless robust transportation alternatives are provided to replace lost service while the tunnel under the East River is closed for repairs.

The silver lining to the closure of the L train in Manhattan is that it provides the MTA and City with a once-in-a-generation opportunity to make big changes. First, it allows the MTA to test new approaches that more efficiently use street space in New York City and move more people more quickly, and second, it allows the agency to upgrade one of its busiest subway lines, improving its reliability and preparing it for future ridership growth.

Replacing the capacity lost by the subway will be an immense undertaking. As shown in the illustration below, each subway train carries almost 2,000 people, meaning that hundreds of buses or tens of thousands of automobiles will be required to serve the future displaced riders who rely on the subway today. Making matters worse, the alternative surface streets and river crossings are already congested. 14th Street, the crosstown corridor under which the L train runs, has one of the worst-performing bus lines in the city. The M14 is extremely unreliable and slow, with an average speed of 4.4 mph during the day—just barely faster than a person can walk. The cause of this subpar performance can be attributed to large automobile and truck volumes, especially at intersections with busy avenues, where average annual traffic volumes are between 20,000 and 37,000 vehicles a day. The same is true for the free Williamsburg Bridge, which has no preference for buses and is jam-packed with automobiles avoiding other tolled crossings. Farther down the line in Brownsville, East New York, and Canarsie, riders already deal with some of the longest commutes in the city—compounding the economic inequality faced by many residents in these neighborhoods. It will be essential that greater preference for transit, cyclists and people be implemented along these major corridors and others if the MTA and City are to effectively serve those displaced by the closure.

After the closure’s much-needed repairs, it may bring little comfort to know that although the tunnels will be safer, they may otherwise look and feel the same. The MTA has done an excellent job so far keeping the system going and repairing tunnels that were inundated with salt water for eleven days during Hurricane Sandy. But what if the MTA took advantage of the major disruption to transform the L into a subway line that will meet the needs of our growing population and workforce? The growth that has occurred along the L is nothing short of incredible. The line is bursting at the seams: at the Bedford Avenue station in booming Williamsburg, annual ridership has surged 373% since 1995 to almost 10 million. The MTA must begin planning for growth today. It should take advantage of this opportunity to transform the L train. By spending more money now, the MTA will save millions in the future and ensure that the subway is prepared for the growth in ridership that is surely coming.

Each rush hour L train carries about 2,000 people, or 40,000 riders per hour on 20 trains.

To replace one train would require either...

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<thead>
<tr>
<th>Option</th>
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<th>Description</th>
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<tr>
<td>5 Ferry Boats</td>
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<td>5 Ferry Boats</td>
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<td>18 Articulated Buses</td>
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<td>2000 Cars</td>
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Notes

- Subway Capacity: 1956 passengers per train based on builder specifications for seated and standing passengers on R160A or R143 railcars.
- Ferry Capacity: 400 passengers per boat on the current East River Ferry service.
- Articulated Bus Capacity: 112 passengers as per manufacturer specifications.
Impact on Commuters and Residents

As part of this proposal, work destinations were assessed for the residents within ¾ of a mile or a 15 minute walk to the three main transfer hubs on the L line in Brooklyn; Lorimer Street-Metropolitan Ave, Myrtle-Wyckoff Aves, and Broadway Junction – which also serve at the three analysis zones. Data was sourced from the US Census’ Longitudinal Employment and Housing Dynamics (LEHD) Survey for the most recent year available, 2014.1 The LEHD is updated more frequently than other Census surveys, but it does not report mode choice for work destinations. The search radius was limited to a 15-minute walk from the primary transfer hubs since this is considered a reasonable walk-shed for rapid transit, and ensured the zones would not overlap.

Most work trips for all zones end in the major employment centers of Midtown Manhattan, Lower Manhattan and Downtown Brooklyn. Only 3% of the residents in the Lorimer Street-Metropolitan Ave, Myrtle-Wyckoff Aves and Broadway Junction zones end their commutes along the 14th Street Corridor. This suggests that most riders are using the L train to connect with other northbound and southbound lines in the subway system. The goal of these recommendations is to develop travel alternatives that get people directly to work, without multiple transfers between subway, shuttle bus, and subway again.

We analyzed areas within the central business district (CBD) to determine where work trips are concentrated to evaluate the best alternative routings along alternate subway lines and the commuter rail network. Additionally, potential SBS corridors in Manhattan were evaluated to see which ones would be the most beneficial for L train riders by providing direct bus service to major work destinations.

Within Brooklyn, Downtown Brooklyn is a key work destination for many commuters along the L train corridor. The 25 blocks surrounding Jay St-MetroTech is the work destination for nearly 11% of the people who live within three quarters of a mile of Broadway Junction. A smaller share of residents living near the Lorimer Street -Metropolitan Ave and Myrtle-Wyckoff Stations commute to the same area in Downtown Brooklyn; only 6% of residents surrounding each of these stations work near Jay St-MetroTech. There are also more commuters ending their trip near the Lorimer Street – Metropolitan Ave station. More work trips end within three quarters of a mile of Lorimer Street than do along the 14th Street corridor; 4% of residents adjacent to all three transfer hubs end their work trip within a 15-minute walk of the Lorimer Street-Metropolitan Ave station (Table 1).

In Manhattan, work destinations are concentrated in Midtown along the main north-south avenues. In particular, three major avenues (6th, 8th and 9th Avenues) were profiled to determine the ones that served the greatest number of rider destinations, assuming a more frequent M service that would be supplemented with SBS services to minimize transfers for L train riders.

For work trips ending along the 6th, 8th and 9th Avenue corridors, more residents end their trip along 6th Avenue (15%); along 8th Avenue, 11% of riders end their trip, and 7% end their trip along 9th Avenue north of 14th Street (Table 1).

Table 1: Work Trip Destinations for Residents by Station Area (Home Zones)

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<thead>
<tr>
<th>Station Area</th>
<th>Percentage of Residents who Work in Destination Zone*</th>
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<tbody>
<tr>
<td>Lorimer Street Station</td>
<td>2% 3% 6%</td>
</tr>
<tr>
<td>14th Street Corridor</td>
<td>2% 3% 4%</td>
</tr>
<tr>
<td>East Midtown</td>
<td>5% 5% 6%</td>
</tr>
<tr>
<td>Central Midtown</td>
<td>13% 17% 24%</td>
</tr>
<tr>
<td>West Midtown</td>
<td>12% 15% 21%</td>
</tr>
<tr>
<td>Lower Manhattan</td>
<td>15% 15% 20%</td>
</tr>
<tr>
<td>Downtown Brooklyn</td>
<td>11% 6% 4%</td>
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*Destination zone search radii are for census blocks within 1,000 feet of the corridor or stations listed.
Source: 2014 LEHD LODES Home Census Block and Work Census Block Query

As part of the proposal, a survey of more than 2,000 L train riders from Manhattan and Brooklyn was conducted between August and October 2016 at stations throughout the route. The survey predominantly inquired about origin and destination, which alternate route or modes of transit riders depend on during current short-term L train shutdowns, and their input on new transit during the shutdown. We analyzed our findings by the riders’ origin station, categorizing our findings to account for transit needs identified by four distinct regions: Manhattan; North Brooklyn (Williamsburg and Greenpoint); Bushwick; and Brownsville, East New York, and Canarsie. Survey data
Figure 1: Worker Trip Patterns
Source: 2014 Census LEHD Survey

- Resident Home Zone
- Work Destinations
1 dot = 2 workers
revealed that 32% of residents from East New York, Brownsville, and Canarsie regularly take the L train to Manhattan, while 53% of residents from Bushwick regularly take the L train to Manhattan.

**Implications/how to prepare for the shutdown**

Given the commute patterns described, L train riders are somewhat dispersed in their work destinations, so a comprehensive strategy is needed to provide as many travel alternatives as possible. Most work trips end in Midtown from 8th Avenue and Times Square to Grand Central and Lexington/3rd Avenue. Providing SBS bus services along multiple corridors in Manhattan would serve the greatest number of L train riders and remove the need for a three-seat ride (subway to shuttle bus to subway). Any solution should consider shifting the transfer point from the 14th Street corridor to someplace in Brooklyn so that L train riders from Canarsie to Bedford (the subway will be operating in Brooklyn) can access direct transit services (likely buses) to their final work destinations. Additional improvements to existing subway routes like the M, J and Z lines as well as A/C line would help connect more residents to workplaces in Manhattan and Downtown Brooklyn. Creating better biking and walking connections along busy commercial corridors in both Manhattan and Brooklyn would also provide safer travel alternatives, linking home and work destinations for L train riders through an active transportation network.
The business communities of Williamsburg and Greenpoint will be disproportionately affected by the L train shutdown. With the help of the Brooklyn Chamber of Commerce, Greenpoint Chamber of Commerce, Evergreen Exchange, Grand Street and Graham Avenue BIDs, and Brooklyn Allied Bars and Restaurants, a survey of nearly 100 businesses in the area was conducted in order to understand how they view the potential impacts of the closure.

How much do local businesses depend on the L train?

The L train delivers customers and workers to the doorsteps of small businesses in Williamsburg and Manhattan.

75% of businesses owners indicate that their employees depend on the L train to get to work, and nearly half of all businesses have a majority customer base that depends on the L train, with customers traveling from throughout New York City, and predominantly Manhattan, Brooklyn, and Queens, to visit businesses in Greenpoint and Williamsburg.

Most establishments have the highest volumes of business on Fridays and Saturdays. Nearly 41% of businesses indicate that fall is the busiest season, with spring coming in at a close second at 28%.

While it can be challenging to estimate the loss of business due to the shutdown, of the businesses surveyed, over half believe that they will lose between 25%-75% of their business while the L train is closed.

How to prepare for the shutdown

Marketing Williamsburg and Greenpoint business districts

The impact on local businesses will largely be due to barriers to transit that visitors from outside of the neighborhood will face. The City and State should work with local business associations to create a marketing campaign similar to “Shop Second Avenue” campaign during the construction of the Second Ave. Subway. The purpose of the campaign should be to (1) brand the benefits of shopping in the neighborhood, (2) market the travel alternatives and routes for any potential customers, and (3) flag the upcoming improved service.

Multi-modal transit options

Because customers to Williamsburg and Greenpoint come from all over, businesses have indicated the need for additional train service along adjacent subway lines, the expansion of ferry service with more regular and publicized schedules, buses that use a dedicated bus lane over the Williamsburg Bridge, and encouraging discounts on ride-sharing.

Partnerships

With Chambers of Commerce and local business improvement districts (BIDs), the City and State have resources to help identify challenges and promote solutions in advance of 2019. Partnerships between the City and these organizations of business owners will allow for informed decisions on mitigations and alternatives to ensure customers and employees can continue to travel to Williamsburg and Greenpoint during the shutdown.

Providing the Best Travel Alternatives

A series of transit alternatives were developed to serve displaced L train riders using the work trip analysis and by completing several surveys of physical constraints of infrastructure along the corridor. The solutions are organized around the three analysis zones at Lorimer Street-Metropolitan Ave, Myrtle-Wyckoff Avenues, and Broadway Junction. All modal options were considered, including treatments for cyclists and pedestrians. While solutions are primarily focused on ensuring that commuters remain able to access their jobs during the closure, consideration was also given for non-work or recreational trips.

The MTA and NYC Department of Transportation shouldn’t wait until the day or even weeks before the closure to implement these alternatives. Many of the alternatives, especially new bus service, should be in place several months prior to closure so that riders have time to become familiar with their new commutes and lessen the disruption when Manhattan L service is halted.

Prepare adjacent subway lines for higher ridership

Improve subway station access in Brooklyn before the L closure. Prior to the closure, the MTA should reopen shuttered staircases and entrances at the Lorimer Street-Metropolitan Ave (L/G), convert HEET turnstiles to higher capacity turnstiles and make the station ADA accessible. Additionally station entrances along the J/M/Z line should be opened at Hewes Street, Flushing Avenue, Kosciusko Street and Gates Avenue stations will improve street access in anticipation of the higher ridership volumes along the J/M/Z line. The agency should provide free “out-of-system” street transfers between Broadway (G) and the Hewes St and Lorimer St (J/M) stations and between the Livonia Ave. (L train) and Junius St. (3 train), reopening any closed entrances at these stations as well.

Increase service on G, A/C and J/M/Z subway lines as alternative to the L.

The length of the G train will likely need to be extended from four cars to either six or eight car trainsets, and service frequency increased. The MTA should evaluate whether there are viable options to improve the frequency of A/C at Broadway Junction in conjunction with LIRR Atlantic Branch policy changes (see below). JMZ service also should be increased, with most of the new service apportioned to the M, which directly serves the city’s major job center in midtown Manhattan. The JMZ line can serve up to 6 additional trains an hour than it does currently. Peak hour service is less than the full line capacity, 21 trains versus 25, including the five Z trains that run during rush hours only in the peak travel directions along a third track between the Marcy and Flushing Avenue stops. This additional capacity could be apportioned to the M and the third track creates an opportunity for an off-peak skip-stop M service between Marcy Avenue, Flushing and Myrtle-Wyckoff of at least five trains an hour. Increasing service on the M could require coordination with the F on the 6th Avenue line and evaluation of track capacity along the Queens segments of the M, where it shares track with the R line, or terminating some service at 21st Street Queensbridge via the 63rd Street tunnel. Additionally, station entrances at Hewes Street, Flushing Avenue, Kosciusko Street and Gates Avenue should be reopened to ease platform crowding.

Commuter rail fare policy changes and upgrades at select stations to free up subway capacity.

The commuter rail system parallels several busy subway lines in Brooklyn and Queens—in particular the LIRR Port Washington Branch parallels the 7 train and the LIRR Atlantic Branch parallels the A/C trains. The MTA should consider these two commuter rail lines as alternate means of transporting displaced L train riders or should consider these two lines in order to free up capacity on other subway lines that will become overburdened as a result of the closure. RPA recommends looking at adjusting existing fare policy and some minor station improvements (improved lighting, signage and installation of ticket vending machines) on the Atlantic and Port Washington branches.
Atlantic Branch (and the A train): L train riders bound for Downtown Brooklyn living south of Broadway Junction could take the L train to Atlantic Avenue and transfer with no additional fare on the LIRR. A train customers at Broadway Junction who work in Downtown Brooklyn could also use this alternative, freeing up A train capacity for L train riders destined for Manhattan. The five to six-minute travel times savings to Downtown Brooklyn combined with an equalized fare would make this an attractive option for riders. The MTA should also explore this fare policy change for the LIRR Nostrand Avenue station as well to divert additional A train riders in order to further relieve crowding. The LIRR Atlantic Branches have significant untapped capacity whereas the A train does not. The MTA would find it difficult, if not impossible, to add more service in the peak without displacing other services; this approach provides another alternative.

Port Washington Branch (and 7 train): an alternative for some L train riders bound for midtown will be to take the G train to Court Square and transfer the 7 to midtown. However, the 7’s peak load point is in Woodside, further east of this station. To help reduce crowding on the 7 in order to make some more room for L riders transferring at Court Square, the MTA should explore equalizing fares at the LIRR’s Flushing and Woodside stations.

New rapid bus services with dedicated preferential treatments and auto-free zones

Create new rapid bus services to connect Brooklyn residents to Manhattan job centers.

New bus services could originate in Brooklyn at the Lorimer Street-Metropolitan Ave station, where there is space for staging transfers from subway (L and G) or local/feeder buses to one of four SBS routes. The buses would then proceed over the Williamsburg Bridge on a dedicated bus lane that would connect to a new bus treatments on Delancey to Allen Street where they would turn either north or south onto the existing 1st and 2nd Avenue SBS corridors. Four proposed SBS routings are:

Midtown East (Existing Corridor): The busway would connect to the 1st Avenue and 2nd Avenue SBS at Allen Street in Manhattan and would run northbound to 125th Street or an earlier terminus north of 72nd Street.

Midtown Central (New Corridor): The busway would connect to the 1st Avenue and 2nd Avenue SBS at Allen Street in Manhattan and would run northbound to 14th Street and run along the Transitway until 6th Avenue and then run northbound until Central Park South and back down 5th Avenue. This would be an entirely new SBS service.

Union Street crosswalk at Lorimer Street-Metropolitan Avenue Station

Midtown West (New Corridor): The busway would connect to the 1st Avenue and 2nd Avenue SBS at Allen Street in Manhattan and would run northbound to 14th Street and run along the Transitway until 8th Avenue and then run northbound until Columbus Circle or 57th Street and back down 7th Avenue. This would be an entirely new SBS service.

Lower Manhattan (Existing Corridor): The busway would connect to the 1st Avenue and 2nd Avenue SBS at Allen Street in Manhattan and run southbound to South Ferry.

Create a dedicated busway over the Williamsburg Bridge and HOV3+ restrictions.

There should be a dedicated bus lane in each direction and/or restrictions during rush hour that allow only vehicles with three or more passengers (HOV3+) on the bridge during rush hours. HOV restrictions should also be explored at the other East River crossings. Bus routes should not just terminate at the base of the bridge; buses should be given designated lanes into Brooklyn and Manhattan so service level is not diluted.
Figure 3: Map of Service Improvements and L Train Alternatives

- **Express Bus**
  - Midtown West: 8th & 9th Ave
  - Midtown: 5th & 6th Ave
  - Midtown East: 1st & 2nd Ave

- **Tail-end Tracks**

- **14th Street Transitway**

- **Williamsburg Bridge and Delancey St dedicated bus lanes**

- **Service Terminates at Bedford Ave**

- **Ferry Opportunities**

- **Increased Service**
  - 8 cars per train

- **Free Subway Transfer & Equal Fare**
  - at Woodside and Flushing Main Street to reduce crowding on the 7 Line and to accommodate transfers from the G at Court Street

- **Reid Canarsie Tubes**

- **LIRR Atlantic Terminal**
Summary

Prepare adjacent subway lines for higher ridership
- Increase service on $\text{G}$, $\text{A}$, $\text{C}$ and $\text{J}$, $\text{M}$, $\text{Z}$ subway lines as alternatives to the $\text{L}$.
- Commuter rail fare policy changes and upgrades at select stations to free up subway capacity.

New rapid bus services with dedicated preferential treatments and auto-free zones
- Create new rapid bus services to connect Brooklyn residents to Manhattan job centers.
  - $\text{G}$, $\text{A}$, $\text{C}$, $\text{J}$, $\text{M}$, $\text{Z}$
  - Midtown East (Existing Corridor)
  - Midtown Central (New Corridor)
  - Midtown West (New Corridor)
  - Lower Manhattan (Existing Corridor)

Create a dedicated busway over the Williamsburg Bridge and HOV3+ restrictions.

Prioritize the movement of transit and people cross-town with a 14th Street Transitway closed to private vehicles.

Pilot new technology and street treatments to speed buses citywide.

Improving existing local bus routes in Brooklyn.

Transform streets in Brooklyn to better connect people and cyclists to transit
- Alleviate sidewalk crowding by limiting private automobile access to crowded streets.
- Improve pedestrian and bike connections to existing subway services and streets in North Brooklyn (i.e. sections of Bedford Avenue and Grand Street).

Improve ferry service and reduce fares to serve Williamsburg residents
- More frequent ferry service
- Free transfer between ferries and other modes of transit
- Explore extending ferry service to the Hudson River.

Additional recommendations:
- Increase service on $\text{G}$, $\text{A}$, $\text{C}$ and $\text{J}$, $\text{M}$, $\text{Z}$ subway lines as alternatives to the $\text{L}$.
- Commuter rail fare policy changes and upgrades at select stations to free up subway capacity.
- Create new rapid bus services to connect Brooklyn residents to Manhattan job centers.
  - $\text{G}$, $\text{A}$, $\text{C}$, $\text{J}$, $\text{M}$, $\text{Z}$
  - Midtown East (Existing Corridor)
  - Midtown Central (New Corridor)
  - Midtown West (New Corridor)
  - Lower Manhattan (Existing Corridor)
- Create a dedicated busway over the Williamsburg Bridge and HOV3+ restrictions.
- Prioritize the movement of transit and people cross-town with a 14th Street Transitway closed to private vehicles.
- Pilot new technology and street treatments to speed buses citywide.
- Improving existing local bus routes in Brooklyn.
- Alleviate sidewalk crowding by limiting private automobile access to crowded streets.
- Improve pedestrian and bike connections to existing subway services and streets in North Brooklyn (i.e. sections of Bedford Avenue and Grand Street).
- More frequent ferry service
- Free transfer between ferries and other modes of transit
- Explore extending ferry service to the Hudson River.
Transform Delancey Street in Manhattan to create preference for transit, people and cyclists, employing complete streets design with sufficient space for transit, dedicated spaces for cyclists, and inviting sidewalks for walking can improve traffic safety. Delancey Street is a hotspot for traffic fatalities and injuries. Fully building out protected bicycle infrastructure, adding pedestrian crossing islands, and restricting left turns at key intersections would reduce traffic fatalities and injuries. Using national best practices outlined by National Association of City Transportation Officials and endorsed by the Federal Highway Administration, Delancey Street should be redesigned to accommodate quicker bus travel as well as improving safety for people riding bikes and walking along these streets. The median would be maintained from the base of the Williamsburg Bridge to Allen Street and a protected bicycle path would run the length of the median on both sides, similar to Allen Street’s current design. Sidewalks would be expanded on the southern side of Delancey, where they are too narrow for pedestrian traffic. A dedicated bus-only lane would run along the right sides of the street with queue jumps for SBS services at local bus stops. Right-turn restrictions would be appropriate at low volume streets and turning bays would need to be installed at major avenues.

Prioritize the movement of transit and people crosstown with a 14th Street Transitway closed to private vehicles.

The 14th Street corridor should be reserved exclusively for pedestrians, cyclists and two dedicated bus lanes. No private automobiles would be permitted. The revamped corridor could span from river to river or be a shorter segment that would eliminate through-movements for automobiles and trucks, creating additional space for people and bikes at 14th Street’s busiest activity nodes (i.e. 6th Avenue Subway/PATH and Union Square subway complexes, both high-ridership transit hubs with busy sidewalks). Trucks would be allowed to make deliveries in this area overnight, and loading zones would be provided on adjacent avenues north and south of the intersections during the day, displacing on-street parking during the daytime. Outside the new bus, pedestrian and bike corridor, vehicle traffic on 14th Street would be rerouted. Physically separated dedicated bus lanes would allow buses to travel in both directions for the entire length of 14th Street.

The following are the key elements of the 14th Street Transitway:

- **Utilize off-board payment systems for buses and implement bus bulbs where possible.** Both of these strategies speed buses. Transit agencies across the United States, including Chicago, Los Angeles, Seattle, and San Francisco, have employed contactless fare payment for buses and all-door boarding in downtown districts, speeding up boarding. In both Seattle and Los Angeles, bus bulbs and islands have fare payment machines on their rapid bus routes to refill tap cards. In Los Angeles, San Francisco, and London, off-board fare payment is available at downtown bus stops. Fare payment should happen before riders board. Bus bulbs bring the sidewalk into the street, also easing the boarding process and allowing faster movement of buses.

- **Widen sidewalks where they are constrained and remove unnecessary street furniture.**

- **Create truck delivery windows at night to accommodate freight.** Allow deliveries during the day only along adjacent avenues.

- **Implement a traffic mitigation plan for neighboring streets.** A transportation plan should be developed for the surrounding streets to reduce traffic congestion and other unintended consequences of the 14th Street Transitway on surrounding residential streets.

- **Pilot new technology and street treatments to speed buses citywide.** The need to move hundreds of thousands of commuters efficiently every day during the shutdown poses a unique opportunity to pilot technologies to speed up bus service—technologies that, if successful, should be expanded citywide. The City has learned a number of lessons from its Select Bus Service initiative, which has increased speeds by as much as 35% according to NYCDOT.

Among the new technologies we encourage the MTA and NYCDOT to pilot during the shutdown are:

- **All-door boarding:** on Select Bus Service routes, the use of off-board fare payment has sped up the boarding process considerably. The MTA should allow all-door boarding on all buses serving riders displaced by the L train shutdown, either by deploying off-board fare collection machines or piloting tap-and-go technologies that allow riders to board a bus at any door using their smartphones, MetroCards, or bank-issued credit or debit cards. In order to ensure maximum efficiency, electronic proof of payment should be built into the system so riders do not have to wait for a ticket to print or a driver to hand them a receipt.

- **Physically-separated dedicated bus and bike lanes in each direction.** Physically-separated dedicated bus and bike lanes would allow buses and bicycles to travel in both directions for the entire length of 14th Street without being slowed down by traffic.
Street design: bus lanes speed up buses by providing a dedicated lane, separating buses from mixed traffic. When used in conjunction with bus bulbs that extend the sidewalk out to the bus lane at bus stops, bus lanes also allow passengers to more easily board and disembark. A combination of bus lanes and bus bulbs should be installed by NYCDOT to allow for more efficient service, eliminating the need for buses to pull over to take on passengers or weave in and out of vehicular traffic. In addition, the NYCDOT should consider stop distance to ensure that customers have stops within walking distance, but spaced adequately to prevent unnecessary slowdown of buses.

Transit signal priority: transit signal priority (TSP) adjusts traffic signals to allow buses to cross intersections and speeds up buses by 10-15%. By 2019, every intersection with a bus route and every bus should have equipment in place to utilize transit signal priority. While the installation of TSP at intersections is NYCDOT responsibility, much of this work is completed; the MTA has not, however, installed corresponding technology on its buses. We should speed TSP deployment; for buses replacing the L train, TSP will make a significant difference in travel times for riders and should be in use at every intersection where shuttle buses will run.

Bus shelter improvements: hundreds of thousands of displaced riders will rely on rapid bus transit during the shutdown every day—and those riders will expect adequate shelter while waiting for buses, especially in inclement weather. It is important that the DOT design shelters to accommodate large numbers of riders and protect those riders from weather conditions. In addition, installing countdown clocks and easy-to-understand maps will guarantee more reliable service and help both commuters and tourists understand alternative transit during the shutdown.

Fix bus bunching: the MTA should speed up mobile deployment of its internal BusTrek system, built on GPS tracking technology, to its ground-level dispatchers in order to actively manage bus spacing using headway-based metrics to ensure that bunching is substantially reduced and service frequency is more balanced along the length of the routes.

Improve existing local bus services in Brooklyn. Bus service should be improved throughout many of the affected neighborhoods. In most cases, these improvements would translate into more frequent service during the peak and also through other times of the day. The following is a list of a dozen routes and stops that were highlighted by community members:

- **B12**: where riders from East New York can transfer to the 2/3 or 4/5 in Lefferts Gardens
- **B15**: where riders from East New York can transfer to the J/Z or M at Flushing Ave. in Bedford-Stuyvesant
- **B20**: allowing riders to transfer to the M
- **B24**: from Williamsburg to Greenpoint and the Q39 from Ridgewood to Long Island City
- **B25**: riders indicated that additional bus service from Ridgewood (near the Halsey St. L train station) would increase access to downtown Brooklyn
- **B32**: which allows riders from Williamsburg to transfer to the 7 or E trains in Long Island City.
- **B38**: this would allow riders from Ridgewood and Bushwick to travel to Downtown Brooklyn and transfer to the A/C, N/Q, 2/3, or 4/5
- **B52**: this would allow riders to travel from Bushwick and Ridgewood to Downtown Brooklyn, where riders can transfer
- **B60**: this route runs from Canarsie to Williamsburg, which allows riders along the route to transfer to the J/M/Z or shuttle buses across the Williamsburg Bridge
- **B83**: where riders can transfer to the J/Z or A/C
- **B103**: allowing riders from Canarsie to transfer to the 2/3 or 4/5 in downtown Brooklyn
- **Improved bus connections, safer access, and upgrades to bus waiting areas near the Canarsie / Rockaway Parkway L train stop.**

Transform streets in Brooklyn to better connect people and cyclists to transit

Alleviate sidewalk crowding by limiting private automobile access to crowded streets in North Brooklyn (i.e. sections of Bedford Avenue and Grand Street). There is little space for people to walk along the most popular commercial streets in Brooklyn, Bedford Avenue and Grand Street. Along Bedford Avenue in particular, narrow sidewalks mean there is less than 5 feet of sidewalk space for the 10 million people who exit the Bedford Avenue subway station each year. People flood out of narrow subway staircases to narrower sidewalks along Bedford throughout the day. Bedford Avenue from North 10th Street to the Williamsburg Bridge is bustling with activity from morning to well into the night and needs innovative solutions to sharing the street space. Grand Street and Borinquen Place, which connects Grand Street to the Williamsburg Bridge, has seen a number of bicycle and pedestrian fatalities in recent years. Providing traffic-calmed streets along Bedford Avenue and Grand Street is key to safer travel
for local communities during the L Train shutdown. Streets can and should adapt to changing conditions and needs throughout the day through active curb management strategies.

**On Bedford:** the eight feet of curbside lanes on both sides of Bedford Avenue, currently used for parking 24 hours a day, can transition from early morning delivery access to daytime and evening sidewalk cafes to late night bus services and on-demand vehicle loading zones. Parking can be accommodated overnight until morning deliveries start when the bulk of freight deliveries can be organized for businesses along the corridor. Daytime freight loading zones can be placed at key locations along Bedford; at night these zones can become the main passenger loading points for taxi, Uber and Lyft pick-ups. Along the busiest portions of Bedford Avenue, roughly from Metropolitan Avenue to North 10th Street, private vehicle access would be restricted during the daytime hours. Buses, delivery, and emergency service vehicles would have access during the day and evening when the street opens up to private vehicles at night, beginning around 8 or 9 pm for taxi or on-demand vehicle pick-up/drop-offs and overnight parking. Full closure of the street to auto traffic, with the exception of emergency vehicles, could be programmed for extended periods in the summer months during “Weekend Walks,” an already successful street closure, and other festival events.

**On Grand Street:** the bicycle lanes could be recreated as protected paths. If parallel parking is preserved, the curbside space would be managed similar to the recommendations for Bedford Avenue, with time-based loading zones for deliveries as well as passengers and restrictions on daytime parking. Pedestrian refuges would be installed on the near side of intersections and far side transit waiting islands installed with shelters to allow for in-lane bus stops. Vehicles would travel in both directions, but buses would not have to pull in and out of traffic to load and unload passengers, reducing bus delays. To slow fast-traveling automobiles and trucks using Grand Street as a through route, the roadway would be raised to the sidewalk level along the length of the corridor or at intersections. As part of the corridor’s new street design, signal treatments that preference transit, bicycles and pedestrians should be installed. These signal changes could include transit priority signal phases, pedestrian priority crossings, and bicycle signals with the goal of minimizing vehicle turning movements that place people biking, walking, and using transit at risk.

**Improve pedestrian and bike connections to existing subway services and improved bus services**
along streets connecting to the J/M/Z corridor and the Lorimer Rapid Transit Hub in Williamsburg and Bushwick. Treatments to improve the pedestrian connections would include expansion of WalkNYC wayfinding, curb bulb outs, and intersection crossing improvements like wider crosswalks and longer signal cycles for crossing wide avenues. Bike lanes that connect into the existing bike network and feed into the protected facility along Grand Street leading to the Williamsburg Bridge crossing should be installed. Key east/west corridors for better bike and pedestrian connections include: Metropolitan Avenue, DeKalb Avenue, Gates Avenue, and Cooper Street. North/south connections that could be improved in Bushwick to link into existing and improved bike and transit networks are Bushwick and Knickerbocker Avenues.

Expand CitiBike to Bushwick/Ridgewood: some regular L train riders will opt to bike during the shutdown. Expanding bike sharing to Bushwick and Ridgewood will help many residents get around.

**Improve ferry service and reduce fares to serve Williamsburg residents**

**More frequent ferry service:**
the MTA and the city should determine the best mix of ferry service based on the place of work of residents within walking distance (a third of a mile) of the existing waterfront landings near Bedford station. These service changes should be implemented as the City begins to roll out major improvements to ferry service in 2017.

**Free transfer between ferries and other modes of transit:**
the MTA (with a partial city subsidy) should establish a free transfer between the ferry and buses in Manhattan.

**Explore extending ferry service to the Hudson River:**
with interest in expanding ferry service to the Hudson from companies on the west side of Manhattan, the City and State should evaluate the possibility of public-private partnerships to finance additional service and stops at Liberty Terminal, Pier 40, Pier 57, and/or Pier 76.

**Late night ferry service:**
Additional late night ferry service on Thursdays through Saturdays to support local businesses.
In 2019, the MTA will close the L train tunnel connecting Manhattan and Brooklyn for a year and a half. Transit officials would be making a big mistake if they squander this rare moment to make major upgrades to one of the city’s busiest subway lines.

New York City subway riders have become uncomfortably accustomed to announcements of weekend track work, the extensive repairs to stations and tunnels that disrupt travel from Friday night through Sunday. But as painful as the service changes can be, they are essential to keeping the system running and upgrading to more modern infrastructure.

It would be much easier if the MTA could carry out this work in longer stretches, rather than in short windows while trains are running. A few years ago, the MTA launched its Fastrack maintenance program, where a portion of a line is closed completely during consecutive nights for necessary work. The approach is more efficient and safer, and the MTA continues to use Fastrack.

The MTA will have unimpeded access to over three route miles of track and five stations for 18 months. During this time there will be no trains and no riders to contend with, which is unheard of for a subway that runs 24/7. The agency might also be in a position to repurpose funding that it might be unable to commit in the proposed 2015-2019 Capital Program due to the delay in its approval.

The agency demonstrated that it can deliver a rebuild of this magnitude when it completed work on the Montague tubes in less than 14 months. The L train shutdown is an opportunity to go even further by dramatically transforming the station environments, preparing the L for future growth, and at the same time repairing the damaged tubes. If successful, it could create an example of how to capitalize on long-term closures elsewhere in the system as an efficient means to upgrade the subway—a critical proof-of-concept as much of the system approaches 100 years old.

The improvements detailed below will benefit all L train riders. In particular, riders from Canarsie and Broadway Junction will benefit from the increased service and the better transfers to lines along the 14th Street corridor. All these improvements might not be completed during the 18 month period, with some likely continuing after the tunnels are repaired and service is restored. However, the service outage would give the MTA a well needed head start and allow them to complete some of the most disruptive (front of house) work while the stations are idle. RPA has estimated that these additional investments will cost between $880 million to $1.14 billion; these figures include the procurement of new rolling stock and other upgrades that could be spread over several capital plans. The MTA will need to complete a more detailed analysis of the costs if it pursues this course of action, but it is anticipated that this work should be able to be completed at a considerable discount due to 24/7 work windows that will be available during the shutdown.
Capital improvements at five stations

All stations should be rehabilitated and brought to a state of good repair. Platform doors should also be installed at all five stations. In contrast to the universal signage that exists today, wayfinding should be redesigned to direct riders to best alternative and help separate traffic flows. The more modern and high-end treatments that the MTA plans to debut as part of New York Governor Andrew Cuomo’s 30 station rehabilitation program should be implemented at all of these five stations as well.

First Avenue
- **Accessibility and Surface:** new ADA-compliant entrance on Avenue A (Planned and Funded by MTA).

Third Avenue
- **Accessibility and Surface:** making this station ADA-accessible could be accomplished by adding an elevator to the surface at existing fare control or on 2nd Avenue (the latter would more equally distribute ADA access along the corridor).

Union Square
- **Platforms:** widen island platform and/or declutter through reconfiguring vertical circulation points. Remove storage areas under stairs to create more platform capacity.
- **Circulation:** the MTA must address the center-of-platform vertical circulation element to NQR (direct platform-to-platform transfer); lower stairs act as barriers that impede circulation and need to be reconfigured.

Sixth Avenue
- **Accessibility and Surface:** make entrance and station ADA accessible.
- **Platforms:** remove oddly-positioned equipment room off western end of platform and add elevator to mezzanine.
- **Circulation:** improve corridor to 7th Avenue IRT station. Widen stairs from platform to PATH/IND transfer.

Eighth Avenue
- **Operations:** rebuild terminal, which includes extending the tracks (tail-end for storage and turning trains) to 10th Avenue (study potential connections to the 7 train’s Chelsea Station) and installing higher-speed double crossover (or diamond) switches on at both ends of the terminal. This will allow trains to enter the station at higher speeds, instead of today’s crawling speeds. It will also improve turning trains’ speed, which currently limits upper-end capacity to 28 trains per hour, and allow for train storage at 8th Avenue to enable faster recovery from service disruptions.
- **Circulation:** reconfigure transfer to the 8th Avenue station/IND line – with direct connections to southern end of 8th Avenue IND platforms. New vertical circulation should also provide ADA access to the L train platform. Widen existing vertical circulation elements in terminal wherever possible.
- **Accessibility and Surface:** evaluate options for new western ADA entrance to the street (between 8th and 9th Avenues with possible future extension to the 7 train).

These improvements will make service more reliable, convenient, and faster for riders today, while also unlocking additional capacity for the future. The subway system will always need more improvements than there will be resources to do the work, leading policy-makers to prioritize work based on ridership levels and other factors. Investing the roughly $1 billion needed to do the work RPA recommends is based not just on current demand on the L train, but also on the potential for the areas served by the L train in Brooklyn and Queens to grow and add more housing in the coming years. The need for New York City to be able to house its growing population is clear, but unless we make infrastructure improvements to accommodate that growth, the crowded stations and delayed trains that riders dread today will become only more common in the future.

In addition to these improvements, the MTA will need to invest in more rolling stock, power (substations) and yard capacity. However, these investments can happen incrementally as demand for service increases.

Timing and funding

As officials have noted, it would be hard to accomplish all this work in 18 months. But that is not a reason not to start. The 18-month outage will give the agency an enormous head start and allow for the most disruptive work to be done while service is idle. That could mean huge cost savings.

Identifying the funding for major capital work is always a challenge, but there are several places where the MTA might shift current uncommitted dollars or dedicate future funding for these improvements. Given the unusual opportunity of a full tunnel closure, the MTA should consider using funds allocated for other upgrades in the 2015-2019 capital plan that are not as critical and are unlikely to be started on (procurement completed and funds committed) in the plan’s time horizon. The MTA also should allot funds for this project in the first year of the 2020-2024 capital plan. Finally, the agency could pursue additional federal funds from the same core capacity improvement program it is using to improve the First Avenue and Bedford Avenue stations.
Procurement and design

The shutdown of the L train tunnel starts in two and a half years. To many, this may sound like a lot of time to prepare for major renovations. But in the world of slow government procurement, it is more like a New York minute: a very short period for designing the entire project, dealing with any regulatory issues that will arise, and then bidding it out for construction. Officials would be rightly concerned that it is not enough time to plan for major work.

While a conventional procurement would likely take two or more years to complete, assuming few regulatory hurdles, there is another option available that would speed things up. Called design-build, it would cut the process almost in half. In design-build, project design and construction are bundled into a single procurement, with both tasks awarded to the same bidder. The benefits of design-build go beyond shorting the procurement process; using a single team allows for greater creativity in project design and construction staging.

The unprecedented access to the five stations in Manhattan presents contractors with a unique opportunity, giving them a blank canvas and unshackling designers and construction crews from normal operating constraints. This is the perfect environment for design-build. Governor Andrew Cuomo has been a big advocate of design-build. There can hardly be a better place to put it into use than in the L train tunnel closure.
While repairing the L train remains an urgent necessity, never before has an MTA project generated such concern among riders, elected officials, businesses, and other constituencies who will be affected by the shutdown. In order to ensure that stakeholders’ needs are taken into account during all phases of the L train shutdown, it is critical that the MTA and DOT build an inclusive process that involves riders from across the route.

The MTA has already conducted a number of community meetings across the line to engage with stakeholders and has committed to future engagement to educate riders in advance of the shutdown about transit alternatives. In addition, the MTA led a meaningful and inclusive process of rider engagement before choosing between the three-year or eighteen-month shutdown options. The MTA and DOT should continue that approach as they design the alternative modes of transit that will be available to riders during the shutdown—both to solicit input and to educate riders when decisions are made.

Most importantly, it is recommended that the Governor of New York, Mayor of New York City and the MTA follow through on the request made on July 26, 2016 by 33 elected officials to convene an inter-agency working group. This group would solicit input from and regularly update elected officials from the City, State, and Federal level, riders, businesses, and key local stakeholders along the line. Such a working group will ensure that local needs are met and that local education and outreach can be conducted before the shutdown occurs.

In addition to convening a working group, it is crucial that the MTA and DOT continue to meet with stakeholders along the entire length of the L train—not just North Brooklyn and Manhattan—as it prepares transit alternatives. The coalition is pleased that both agencies have met with local residents and key stakeholders along the eastern stretch of the L train, and we encourage the agency to continue its substantive engagement in communities in Canarsie, East New York, and other locations farther out from the Canarsie tunnel. Continuing to do so will result in an inclusive process that takes the needs of riders into account and makes the forthcoming service disruptions as manageable as possible.
Community Profiles

The following four community profiles were developed from a survey conducted by the Riders Alliance and an extensive community outreach effort. Each profile provides an overview of the geographic area, the current state of transit and the proposed transit solutions.
Community Profiles

Manhattan

8th Avenue
1st Avenue

The neighborhoods around 14th Street in Manhattan are a destination for New Yorkers and tourists worldwide. From the East Village and Union Square to the Chelsea Market and the High Line, the entire length of 14th Street is a vital thoroughfare for tens of thousands of people every single day. Aside from cultural institutions, 14th Street is also a hub for jobs, schools, hospitals, and essential city services.

State of Transit
Above and beyond the tens of thousands of New Yorkers who commute in from the boroughs, the L train plays a significant role as a cross-town shuttle for 50,000 riders and is a connection point to 14 of the city’s subway lines. Union Square serves as a major hub for the 4/5/6 and the N/Q/R, while the F/M meet the L at 6th Ave. Farther west, the A/C/E and 1/2/3 lines connect to vibrant neighborhoods and centers of employment on Manhattan’s west side.

Similarly, the M14 bus is a major connector to a number of other bus lines and carries an average of 32,868 riders every weekday. The M14 is the eighth-busiest bus in the entire bus system, but--due in part to heavy vehicle traffic along 14th Street--is often slow and overcrowded. The existing challenge of operating a high-capacity bus on a major thoroughfare will only be compounded by the L train closure. Implementing new transit options aboveground to replace the loss of the L train and increase the efficiency of the M14 will require a bold vision for buses--one that should lead to permanent public transit improvements along 14th Street.

Transit Solutions
Riders will need a reliable, fast-moving replacement for the crosstown subway shuttle. Potential solutions include closing the street to private traffic, a dedicated bus lane, and ferry service. Our recommendations, developed from surveys of over 2,000 riders and meetings with local elected officials, businesses, and community groups, are noted below.

◆ The 14th Street Transitway provides a vision for aboveground transitway that would increase preference for transit, cyclists and pedestrians by closing part or all of 14th Street. Transportation Alternatives has also proposed a solution that would close the entire corridor creating a Peopleway that would include building:
  • New bus lanes with bus bulbs and high-end shelters to maximize bus efficiency
  • Protected bike lanes, and
  • Wider sidewalks for greater pedestrian access.

Notably, the Transit/People Way proposal closes 14th Street to nearly all other vehicular traffic. If implemented, this proposal could double the transit capacity of 14th Street.

◆ Station improvements at 8th Ave.: While the MTA plans to improve stations at First Ave. in Manhattan and Bedford Ave. in Brooklyn, it should use this opportunity to make improvements at the other shuttered stations along 14th Street, including rebuilding the terminal at 8th Avenue.

◆ Ferry Service: As the City begins to roll out major improvements to ferry service in 2017, the program should add a landing on 14th Street. With interest in expanding ferry service to the Hudson from companies on the west side of Manhattan, the City and State should evaluate the possibility of public-private partnerships to finance additional service and stops at Liberty Terminal, Pier 40, Pier 57, and/or Pier 76.

Special thanks to the offices of Congresswoman Carolyn Maloney and Senator Daniel Squadron and the Meatpacking District BID and Transportation Alternatives for their contributions to this portion of this proposal.
Williamsburg and Greenpoint have become major residential and economic hubs, not to mention nightlife destinations for New Yorkers from beyond the neighborhood. The Bedford Avenue station has seen annual ridership increase 373% since 1995. In order to ensure that influx of new residents, consumers, and tourists are able to travel conveniently in and out of Williamsburg and Greenpoint, the MTA and DOT should roll out a wide array of transit alternatives.

State of Transit
The L train intersects with the important north-south G train at the Lorimer Street, where riders transfer to or from the G in the Lorimer Street-Metropolitan Ave station complex. For riders traveling to or from Greenpoint, this is a vital juncture that allows access to Manhattan and the rest of the subway system.

Meanwhile, ridership on the J/M/Z trains has grown considerably as residents move to South Williamsburg; at the Marcy Ave. station, trains saw an increase of 24% in recent years. Anticipating that many L train riders will be redirected to this route, we should prepare to address this through additional train and bus service.

It should be noted that there are almost 20,000 workers in the East Williamsburg/Maspeth Industrial Business Zone (IBZ)--the majority of whom rely on public transit, including heavy bus ridership. Unless we provide meaningful new options for riders traveling to this area, these workers will have to contend with increased ridership from L train commuters during the closure.

Transit Solutions
The L train is essential to this neighborhood: over 90% of Williamsburg and Greenpoint riders surveyed regularly travel to Manhattan. Our recommendations, developed from surveys of over 2,000 riders and meetings with local elected officials, businesses, and community groups, are noted below.

- **Select Bus Service/Bus Rapid Transit:** buses will serve as the primary replacement for the subway and will need to move hundreds of thousands of riders daily. The only way to do this efficiently will be to run true bus rapid transit between the boroughs.

- **Dedicated bus lanes:** to effectively run rapid bus services, riders will need dedicated bus lanes, especially leading up to and across the East River.

- **Fix bus bunching:** We outline solutions that can be implemented to improve buses like the B60 (see: Piloting New Technology to Speed Buses Citywide section).

- **Additional bus service:**
  - B24: from Williamsburg to Greenpoint, the bus lanes along Marcy Avenue and Rodney Street proposed for the new SBS services to Manhattan will improve overall performance of this route.
  - B32, which allows limited mobility riders from Williamsburg to connect to ferry services, the J/M/Z at Marcy Avenue, and 7 or E trains in Long Island City.

- **Increased subway service:** additional J/M/Z and G service will be critical to help move displaced L train riders who divert to these nearby lines.

- **Free transfer (Broadway, G and Hewes and Lorimer Streets J/M):** L train riders who transfer to the G train at Lorimer Street-Metropolitan Ave. will be redirected to the J/M/train, where they’ll need a free transfer to the G at Broadway. Opening closed station entrances and staircases at these stations will accommodate the free street transfers between subway lines.

- **Improve access to stations:** Additional upgrades to stations, like elevators and wider platforms that would facilitate greater access for disabled and elderly riders.

- **Additional Ferry Terminals and Service:** for residents along the waterfront, the establishment of a new ferry landing at or about 14th St. will help move residents while reducing the load on buses traveling between Williamsburg and Manhattan.

- **Encouraging tourist travel to Williamsburg and Greenpoint:** in order to ensure the local economy continues to thrive during the shutdown, a partnership between the City, MTA, and local business groups should develop, implement, and market additional transit services for tourists and weekend visitors.

Special thanks to the offices of Congresswoman Carolyn Maloney, Senator Daniel Squadron, Assemblymember Joseph Lentol, and Council Member Stephen Levin for their contributions to the Transit Solutions portion of this proposal.
Bushwick resident are predominantly people of color; 65% of the population identifies as Hispanic. Almost 80% of workers from the neighborhood are employed in the service or material sectors. Over half of all workers commute by public transit, and a large segment of those who depend on local subways like the L train already commute over an hour to get to work.

With the expansion of new real estate in the neighborhood, local leaders, including council members Antonio Reynoso and Rafael Espinal, and community groups like Make the Road and Ridgewood Bushwick Senior Citizens Council are in the process of determining their own Bushwick Community Plan in advance of the City’s imminent rezoning of the area. Public transportation is a cornerstone of that community plan and should be understood in the context of a changing environment.

State of Transit
There is important intersection of train lines in Bushwick at the Myrtle-Wyckoff station: the L train intersects the M train, which is being repaired in advance of the shutdown to handle increased ridership. Additionally, residents at either end of this segment can transfer to other trains, either at Broadway Junction or by walking from Morgan Ave to the Flushing Ave stop on the J/M.

Because these lines converge with or near the L train, many current L train riders will transfer to those nearby routes during the shutdown. For example, the Bushwick Avenue-Aberdeen Street stop saw an 11.5% increase in ridership. We expect many Manhattan-bound riders near that stop to be redirected to either the J at Broadway Junction or Chauncey Street and the A/C at Broadway Junction.

Transit Solutions
Our recommendations, developed from surveys of over 2,000 riders and meetings with local elected officials, businesses, and community groups, are noted below. In our survey data, 65% of riders surveyed at stations east of Bushwick indicated that they frequently take the L train to travel to Manhattan. A number of respondents indicated that they’ll be less likely to travel to the East and West Villages of Manhattan because of the shutdown. In order to meet the needs of those and other riders, we recommend the following:

► Additional bus service: along a number of routes that connect Bushwick and Ridgewood residents to subway stations, including:

• Q39: Connecting riders from Ridgewood to Long Island City.

• B26: Riders indicated that additional bus service from Ridgewood (near the Halsey St. L train station) would increase access to downtown Brooklyn.

• B38: This would provide more direct access for riders from Ridgewood and Bushwick to travel to Downtown Brooklyn and transfer to the A/C, N/Q, 2/3, or 4/5.

• B52: This would provide more direct access for riders to travel from Bushwick and Ridgewood to Downtown Brooklyn, where riders can transfer.

• B60: This route runs from Canarsie to Williamsburg, which allows riders along the route to transfer to the J/M/Z or shuttle buses across the Williamsburg Bridge.

► Fix bus bunching: We outline solutions that can be implemented to improve buses like the B60 (see: Piloting New Technology to Speed Buses Citywide section).

► M train upgrades: Many Bushwick and Ridgewood residents rely on the M train. While it will undergo repairs in the advance of the 2019 L train shutdown, local riders remind us that frequent and reliable service during the shutdown will be critical to manage to additional capacity.

► CitiBike Expansion: Some regular L train riders will opt to bike during the shutdown. Expanding bike sharing to Bushwick and Ridgewood will help many residents get around.

Special thanks to members of Make the Road and the office of Council Member Antonio Reynoso, for their contributions to the Transit Solutions portion of this proposal.
More than in many other neighborhoods surveyed, riders in East New York, Brownsville, and Canarsie face long commutes and significant economic barriers. According to U.S. Census Data, Brownsville residents face the highest barriers, with 37% of residents living in poverty. That poverty is concentrated in communities of color: over two-thirds of residents of East New York, Brownsville, and Canarsie identify as black.

Economic vitality is strongly correlated with access to transportation, and East New York, Brownsville, and Canarsie are examples of that. Three-quarters of a million New Yorkers travel over an hour to work, with two-thirds earning less than $35,000 a year. The impacts of transit are felt unevenly by different New York communities: black New Yorkers have commutes that are 25% longer than their white counterparts, while the trips of Hispanic riders are 12% longer.

State of Transit
The L train intersects with five other subway lines in these neighborhoods, providing access to critical jobs centers in downtown Brooklyn and Manhattan, as well as other economic opportunities for local residents. Many residents of Brownsville, East New York, and Canarsie travel outside of their neighborhoods for work, largely depending on the J/Z and A/C lines at Broadway Junction and the 3 at Junius St. Currently, riders who transfer between the L and the 3 lack an out-of-station transfer in Brownsville/East New York, though that will change when the L train shutdown begins.

A study by the Center for an Urban Future ranked both Brownsville/Ocean Hill and Flatlands/Canarsie in the top ten neighborhoods in New York City with the longest commutes to work, and in the top three in Brooklyn, with an average one-way commute of 48 minutes.

Buses will serve as partial replacements for residents who relied on the L, but buses in these neighborhoods are often slow and unreliable. One of the slowest buses in the area is the B60, which takes 9,753 riders/day from Brownsville to Downtown Brooklyn. That bus travels at a snail’s pace—6 MPH—with 11% of the buses bunching. The bus has become so unreliable that it has seen a 24.1% decrease in ridership since 2010.

Transit Solutions
The recommendations, developed from surveys of over 2,000 riders and meetings with local elected officials, businesses, and community groups, are noted below.

- **Free transfer (Livonia Ave. - Junius St.) before 2019:** while the MTA plans to create an new in-system free transfer for riders between the Livonia Ave. (L train) and Junius St. (3 train) stations in 2019, a free street (out-of-system) transfer should be implemented before 2019.

- **Additional A/C train service in the off-peak:** many L train riders east of Bushwick will be redirected to Broadway Junction; frequency of A/C train service should be increased, with special consideration for non-rush hour commutes, as many workers in the service industry do not necessarily commute during rush hours. In our surveys, many riders in these neighborhoods indicated the need for more frequent A/C train service.

- **Express bus service to Manhattan and additional bus service on existing lines, including:**
  - B20: allowing riders to transfer to the M.
  - B83: where riders can transfer to the J/Z or A/C
  - B60: allows riders from Canarsie to transfer to shuttle buses crossing the Williamsburg Bridge.
  - B12: where riders from East New York can transfer to the 2/3 or 4/5 in Lefferts Gardens.
  - B15: where riders from East New York can transfer to the J/Z or M at Flushing Ave. in Bedford-Stuyvesant.
  - B103: allowing riders from Canarsie to transfer to the 2/3 or 4/5 in downtown Brooklyn.

- **Fix bus bunching:** Suggested solutions that can be implemented to improve buses like the B60 (see: Piloting New Technology to Speed Buses Citywide section).

- **Improve access to stations:** Additional upgrades to stations, like elevators and wider platforms that would facilitate greater access for disabled and elderly riders.

Special thanks to the offices of: Senator Roxanne Persaud’s office, Assemblymember Latrice Walker, the Brownsville Partnership, and Council Member Inez Barron for their contributions to the Transit Solutions portion of this proposal.