



CITY OF SOMERVILLE, MASSACHUSETTS
KATJANA BALLANTYNE
MAYOR

Date: July 29, 2022
To: General Manager Steve Poftak, MBTA
From: Mayor Katjana Ballantyne, City of Somerville
Re: MBTA Bus Network Redesign – Initial Planning Scenario

Dear General Manager Poftak,

Thank you for the opportunity to comment on the MBTA’s initial proposal for Bus Network Redesign. As you know, the City of Somerville has worked tirelessly to improve MBTA bus service to support our residents, our workers, and region’s economic, equity and climate priorities. Since 2017, the City and the MBTA have partnered to achieve the following outcomes:

- Delivered eleven (11) dedicated bus lane facilities on local streets
- Installed five (5) transit priority systems at traffic signals
- Constructed seven (7) “in-lane” bus stops and six (6) “floating” bus stops on City-owned streets
- Consolidated and relocated bus stops to improve efficiency and safety of MBTA bus operations
- Rehabilitated more than twelve (12) miles of sidewalk, prioritizing bus corridors and adjacent streets to create safe, accessible routes to transit
- Implemented a land use strategy that has added more than 1,000 new homes and more than 1,000 new jobs in Somerville’s dense, transit-served neighborhoods
- Mandated that new development projects provide free transit passes to workers and residents

These policies, projects and programs reflect our community’s vision of safe, equitable and sustainable transportation. Our City is committed to eliminating carbon emissions from transportation sources. Somerville’s bus priority investments are helping advance our climate action agenda, and we believe that a comprehensive redesign of the MBTA bus network has the potential to work in harmony with our local efforts to improve reliability, access and competitiveness with driving.

Summary of Comments

The City of Somerville supports a comprehensive overhaul of the MBTA bus network that is rooted in the principles of authentic stakeholder engagement, transparent use of data, prioritization of transit-critical populations, provision of high-frequency all-day service, rapid expansion of on-street bus infrastructure, and overall growth in bus service. **The City acknowledges that the status quo does not adequately serve our community or the wider region. Transformative investments in mass transit are urgently needed, and a system-wide bus network redesign is a crucial element of that investment framework.**

The City is optimistic about the following concepts proposed in the MBTA's initial planning scenario for Bus Network Redesign:

- A systemwide emphasis on all-day, night and weekend service that will better serve diverse populations and trip types rather than traditional 9-5 weekday commuting
- "T39" high-frequency service linking Porter Square/Union Square to Forest Hills via Longwood Medical Area
- "T96" high-frequency service linking Malden to Porter Square via Medford Square and Davis Square
- "T101" high-frequency service linking Malden to Kendall Square via Medford Square, South Medford, Winter Hill, East Somerville, Charlestown and Lechmere
- "T109" high-frequency service linking Harvard Square to Everett via Union Square and East Somerville
- Reconfigured "Route 90" service linking Chelsea to Clarendon Hill via Everett, Wellington, Assembly, East Somerville, Central Hill and Davis Square
- New service linking Somerville's Mystic Avenue neighborhood to Davis Square via a one-seat bus trip
- New service linking Burlington and Woburn to Davis Square via a one-seat bus trip

The City's concerns with the initial planning scenario include:

- Service reductions affecting Somerville's Clarendon Hill neighborhood
- Service gaps affecting Somerville's Winter Hill neighborhood
- Service reductions along Highland Avenue
- Service gaps in Somerville's Hillside/Boston Avenue/Capen Court neighborhood
- Insufficient inter-modal connections between bus routes and Green Line Extension light rail service
- Apparent service reductions on streets where the City has delivered bus lanes and other transit-supportive infrastructure
- Insufficient inter-modal connections where the City has planned, permitted and constructed high-density transit-oriented redevelopment

Public Process

Throughout the Bus Network Redesign process, the City has been actively engaged with the MBTA, with our neighboring municipalities, and with regional activists and advocates. We applaud the MBTA for its courage in undertaking a comprehensive overhaul of its bus network. We appreciate the hard work of the MBTA project team to engage the public in a meaningful way. In Somerville, MBTA outreach has included:

- "Open House" events at transit stations
- Tabling at public events
- Briefings for City Council
- Discussions with the City's Pedestrian & Transit Advisory Committee
- Systemwide public meetings

Stakeholder engagement in Somerville has clearly identified several key themes that our community wishes to see reflected in the Bus Network Redesign:

- High-frequency bus service that reduces stress and travel time risk
- All-day service frequency that prioritizes mid-day, evening, night and weekend service
- Reliable, useful services in neighborhoods with above-average concentrations of youth, seniors, people of color and low/moderate income residents
- Seamless connections from bus services to rail transit
- North-south bus connections that link local and regional job/service/cultural centers
- Increased bus service where the City has built bus lanes and other transit infrastructure

Somerville residents, businesspersons, advocates and elected officials have been incredibly active in the official MBTA public process. Although the MBTA has received more than 15,000 public comments in spring/summer 2022, many stakeholders have indicated concerns that public awareness of this planning process remains insufficient. **The City respectfully requests that the MBTA provide another meaningful round of stakeholder consultation in fall 2022 after publishing its second draft Bus Network Redesign planning scenario, and ultimately prepare a third and final draft plan during winter 2022/2023 prior to seeing formal approvals and beginning full-scale implementation of the plan.**

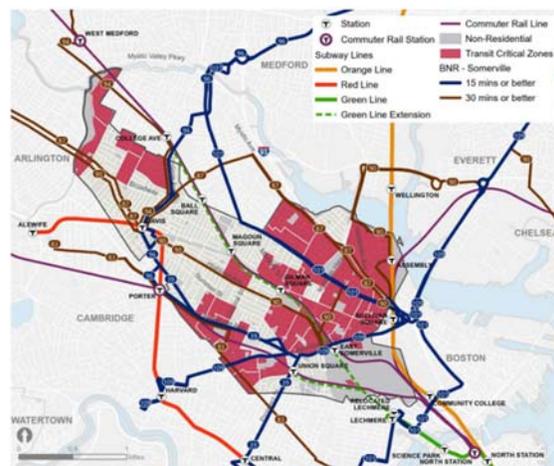
Planning Assumptions: Transit-Critical Populations and Equity Framework

The MBTA’s principles for Bus Network Redesign place a strong and appropriate emphasis on providing improved service for “transit-critical populations”, defined as low-income people, people of color, seniors and people with disabilities. **The City applauds this prioritization, and is committed to ensuring that Somerville’s transit-critical populations are provided with better bus service in a redesigned network compared to the status quo.**

The City uses a variety of data sources to guide its work in serving equity populations. Federal census data are typically used as one key data source to understand geographic distribution of low-income people, people of color, senior, youth, and zero-car households. A map of transit-critical populations is provided below, overlaid with existing bus routes and with the initial planning scenario for Bus Network Redesign. **The City is concerned about decreasing service levels for numerous concentrations of transit-critical populations in Somerville, including Clarendon Hill, Hillside/Boston Avenue, Mystic Avenue and Central Hill.**



Existing



Initial MBTA Planning Scenario

Planning Assumptions: Service Types and Levels

Compared with the status quo, the initial Bus Network Redesign proposal allocates more resources to fewer bus routes systemwide in order to achieve high-frequency service on many corridors. Under the MBTA’s current proposal, roughly 50% of projected operations occur on “high frequency corridors”. Extensive research has demonstrated that frequency and reliability are the most important predictors of ridership and rider satisfaction. **The City supports the MBTA’s proposal to emphasize high-frequency service on as many routes as possible.**

Compared with the status quo, the initial Bus Network Redesign proposal allocates more resources to night, weekend and mid-day service. This model has important equity benefits, as many riders including seniors, youth, essential workers and low-income people may not depend as heavily on 9am-5pm peak travel times as higher-income people may. **The City supports the MBTA’s proposal to emphasize night, weekend, and mid-day service as an organizing principle of Bus Network Redesign.**

The City of Somerville is committed to detailed analysis of the proposed service changes in our community in order to communicate trade-offs with our stakeholders. The MBTA has generated preliminary estimates that suggest the Bus Network Redesign initial scenario would provide a roughly 40% increase in bus service for routes that serve Somerville. The City has examined the assumptions involved in this calculation, and we respectfully disagree with the MBTA’s conclusion. The City estimates that weekly bus trips would increase by 1% and revenue vehicle miles would decrease by 1%.

Broken down by weekday and weekend service, the City finds that weekday service is proposed to decrease 8% in terms of the number of bus trips (a decrease of 10% in terms of revenue vehicle miles). Weekend service is proposed to increase 44% for total bus trips (an increase of 38% for revenue vehicle miles). **The City requests that the MBTA publish the full data for daily and weekly service for review and comparison, including pre-pandemic service levels, 2022 service levels, and service levels proposed in the initial Bus Network Redesign planning scenario.**

Planning Assumptions: Data Sources

The MBTA planning process has utilized cellular telephone location data to evaluate trip-making region-wide, regardless of travel mode. This type of data source can help identify key “origin-destination” pairs that residents, workers and visitors use in metropolitan Boston. The MBTA described a planning assumption that cellphone data would be used to create a bus network that is competitive with driving and can contribute to shifting trips from automobile to public transit. The MBTA-published “priority corridors” map used for Bus Network Redesign is shown below:



In and around Somerville, several links are illustrated in this map. These include:

- Clarendon Hill to Union Square
- Clarendon Hill to Medford Square
- Ball Square to North Station via Winter Hill, Sullivan Square and City Square
- Wellington to Central Square via Union Square
- Sullivan Square to Kendall Square via Lechmere

The City of Somerville recognizes the importance of these simplified origin-destination pairs in the regional context. Our understanding is that none of them receive one-seat service in the initial Bus Network Redesign scenario. **The City is concerned that the MBTA's preliminary planning scenario for Bus Network Redesign seems to reduce service levels between these origin-destination pairs, replacing existing one-seat bus connections with two-seat or even three-seat bus trips.**

Planning Constraints

The City understands the constraints facing the MBTA. When Bus Network Redesign was launched in 2018, the project team worked under an assumption of level-service funding allocations, meaning that no individual route or service could be strengthened without diminishing a different route or service. In 2020, the MBTA board approved a request by MBTA staff to increase the bus system's operation budget by 25% over five years, meaning that the fully-implemented Bus Network Redesign would offer roughly 25% more bus service regionwide compared with the status quo. **The City applauds the MBTA's proposed service level increases regionwide, yet we note that a world-class bus transit system requires even greater investment. We are committed to continued advocacy at the state level to generate new and sustainable funding sources that permit continued growth of a safe, reliable MBTA bus system.**

The City also understands that any final Bus Network Redesign plan would be phased in over a five-year period. Given the MBTA's depleted staffing levels, inadequate garage facilities and insufficient bus fleets, even a windfall of new funding cannot immediately translate to the overall service levels demanded by riders, employers, municipalities and the public at large. Given the likelihood that workforce shortages will continue to constrain MBTA bus operations in the 2023-2027 implementation period, the City is concerned that planned services levels may not be achievable in the near-term. **As a result, we encourage the MBTA to publish a realistic phasing plan for Bus Network Redesign implementation and seek meaningful public comment on this phasing plan prior to seeking any formal final approvals.**

City of Somerville Priorities

The City of Somerville respectfully requests that the initial Bus Network Redesign proposal be refined to address the following priorities:

- Improve connectivity for Somerville's Clarendon Hill neighborhood
- Connect Somerville's Winter Hill neighborhood to additional local and regional destinations
- Increase bus connections to Green Line light rail service in Somerville
- Establish high-frequency bus service along Highland Avenue
- Increase bus service in the Hillside/Boston Avenue/Capen Court neighborhood
- Preserve and expand service levels where the City has delivered on-street bus infrastructure
- Preserve and expand service levels where the City has planned and permitted high-density redevelopment

Priority: Improve connectivity for Somerville's Clarendon Hill neighborhood

Somerville's Clarendon Hill neighborhood currently includes more than 750 units of low- and moderate-income housing, with another 80 units of affordable housing starting construction in late 2022.

On a typical pre-pandemic weekday, the MBTA provided roughly 260 total bus trips serving Clarendon Hill (roughly 130 daily trips in each direction comprised of Route 87, Route 88 and Route 89 services).

The MBTA's initial proposal is to replace existing Route 87, 88 and 89 services with a new Route 87 and a new Route 90. Neither is designated as a high-frequency route. The City estimates that a typical weekday would feature roughly 184 total bus trips from Clarendon Hill. **It appears that the initial MBTA proposal would reduce Clarendon Hill bus service trips by 29% on an average weekday and increase trips by 19% on an average weekend. The City of Somerville strongly objects to such profound weekday service reductions in a major environmental justice neighborhood.**

The negative impacts of the initial MBTA proposal for Clarendon Hill include reductions in access to key services for low-income riders. Existing Route 87 provides a one-seat bus ride to a several essential retail destinations in Somerville's Union Square neighborhood, including a bargain-price, full-service grocery store. Existing Route 88 provides a 20-minute headway service to Somerville High School. Existing Route 89 provides a direct link to the bus and rail hub of Sullivan Square, where many Clarendon Hill residents may transfer to reach final destinations around the region.

The City respectfully requests that the MBTA prepare a modified draft proposal that addresses these shortcomings and maintains overall service levels for the Clarendon Hill neighborhood.

Possible solutions could include:

- Extending proposed "T39" high-frequency service from its draft terminus at Porter Square to Clarendon Hill via Davis Square, potentially splitting the T39 service in half to reflect appropriate and manageable route lengths to maintain headways
- Converting proposed "Route 90" medium-frequency service to a high-frequency service
- Provide a reconfigured version of existing Route 89 service from Clarendon to Sullivan, and continue it to Haymarket via City Square in Charlestown

Priority: Connect Somerville's Winter Hill neighborhood to additional local and regional destinations

Somerville's Winter Hill neighborhood currently includes more than 700 units of low- and moderate-income housing, with another 150 units of affordable housing in permitting.

On a typical pre-pandemic weekday, the MBTA provided roughly 133 inbound bus trips along Broadway in Winter Hill to Sullivan Square and roughly 133 outbound trips to Davis Square, Medford/Malden and Clarendon Hill.

The MBTA's initial Bus Network Redesign proposal includes reconfiguring and strengthening Route 101 service into a high-frequency service, but eliminating Route 89 bus service. The City estimates that a typical weekday would feature roughly 119 daily inbound bus trips on the new "T101" service along Broadway in Winter Hill and the same number outbound. One-seat trips to Malden, Medford Square, East Somerville, Sullivan Square, City Square, Lechmere and Kendall Square would be available in this scenario. Destinations such as Ball Square, Davis Square and Clarendon Hill would require transfers onto "medium frequency" routes, increasing travel times and reducing reliability for many trips.

The MBTA's initial Bus Network Redesign proposal includes reconfiguring and strengthening Route 101 service into a "T101" high-frequency service from Malden to Kendall Square via Medford Square, Winter

Hill, Sullivan Square, City Square and Lechmere. This route is described as offering 15-minute or better service on weekdays, evenings and weekends. **The City is supportive of this planning concept, although we are concerned that without on-street bus priority infrastructure in other portions of the route, the MBTA is unlikely to be able to deliver the high-frequency service envisioned.**

The initial Bus Network Redesign proposal includes elimination of Route 89 bus service. As a result, combined service on Broadway in Winter Hill would be reduced from roughly 133 daily weekday trips in each direction to roughly 119 trips in each direction (a decrease of 11%). **The City opposes this reduction in bus transit along Broadway.**

We note that existing Route 89 and Route 101 bus service benefit from the City's bold investments in the ½ mile, bi-directional, all-day bus lane on Broadway between Main Street and McGrath Highway. This facility was installed in 2019, and the City also partnered with the MBTA to install "transit signal priority" traffic signal equipment at three intersections along this corridor. Following these investments, weekday bus ridership on this corridor increased by more than 1,000 daily riders (an increase of roughly 35%). **The City respectfully requests that the MBTA honor its own stated goals of coupling service investments with on-street transit infrastructure investments, and ensure that the Broadway corridor in Winter Hill receives a net increase in bus service under any final Bus Network Redesign plan.**

The City respectfully requests that the MBTA prepare a modified draft proposal that addresses these shortcomings and maintains key connections for the Winter Hill neighborhood. Possible solutions could include:

- Provide a reconfigured version of existing Route 89 service from Clarendon to Sullivan, and continue it to Haymarket via City Square in Charlestown
- Provide a Davis Square to Winter Hill bus service, potentially taking elements of the "T101" high-frequency service concept that runs from Winter Hill to Kendall Square via Sullivan Square, Charlestown and Lechmere
- Reconfigure bus service on Mystic Avenue to connect South Medford and Winter Hill/Ten Hills to Union Square, possibly via dedicated bus lanes on the future McGrath Boulevard

Priority: Increase bus connections to Green Line light rail service in Somerville

The MBTA's planning framework includes assumptions that many existing bus riders can substitute bus trips with subway or light rail transit trips. The City acknowledges that for certain trip types and certain transit riders this mode substitution is a realistic option; for many other riders it may not be realistic. The initial planning scenario for Bus Network Redesign seems to rely heavily on shifting existing Somerville bus riders to the Green Line Extension (GLX). The GLX includes five new stations in Somerville. Only two of these stations would be directly served by MBTA buses in the initial planning scenario. Existing intermodal connections are eliminated for Ball Square and Gilman Square. Green Line-to-bus transfers would require approximately ¼-mile walking connections.

The City respectfully requests that the MBTA prepare a modified draft proposal that provides a direct intermodal transfer at one or more of these three GLX stations. Possible solutions could include:

- Provide a reconfigured version of existing Route 89 service from Clarendon to Sullivan via Ball Square, and continue it to Haymarket via City Square in Charlestown
- Modify the proposed new "Route 87" or "T96" service to serve Ball Square

- Explore options for north-south bus service linking Mystic Avenue and Union Square via Gilman Square, continuing to Kendall Square in Cambridge

Priority: Establish high-frequency service along Highland Avenue

Somerville's Highland Avenue features many unique land uses, including Somerville High School, City Hall, Central Library, and several early childhood education facilities. Roughly 250 units of low-income and supportive housing are located on Highland Avenue in the Central Hill neighborhood. MBTA Green Line Extension (GLX) service will be located near some portions of Highland Avenue, but steep grades create barriers to access and many Highland Avenue bus riders are unlikely to substitute bus trips for Green Line trips.

On a typical pre-pandemic weekday, the MBTA provided roughly 89 inbound bus trips along Highland Avenue and roughly 89 outbound trips.

The MBTA's initial Bus Network Redesign proposal is to replace existing Route 88 and Route 90 services with a reconfigured, medium-frequency Route 90. The new Route 90 would connect Arlington to Chelsea via Clarendon Hill, Davis Square, Highland Avenue, East Somerville, Sullivan Square, Assembly Square, Wellington Circle and Everett. The City estimates that a typical weekday would feature roughly 46 inbound bus trips from Clarendon Hill and the same number outbound.

It appears that the initial MBTA proposal would reduce Highland Avenue weekday bus service by 48%. Weekend trips appear to be reduced by 14%). The City of Somerville strongly objects to such profound service reductions on such an important cultural corridor.

The negative impacts of the initial MBTA proposal for Highland Avenue include reductions in access to key services and destinations such as the newly-constructed Somerville High School, with its roughly 1,400 students and roughly 250 employees. Our High School, Library and City Hall campus was designed as a transit-oriented public facility, with intentionally constrained motor vehicle access and parking. The City provides free transit passes for students, and is currently investigating options to provide free transit passes to employees. The City believes that by proposing such drastic service reductions to Highland Avenue bus service, the MBTA risks undermining public faith in mass transit and transit-oriented development.

The City supports the MBTA's vision of linking Highland Avenue with Medford, Everett and Chelsea via a one-seat ride on the proposed Route 90 service. We are concerned that service frequencies will be unacceptable low. The long length of the Route 90 service includes many congested streets and intersections that will cause bus delay and decrease reliability. Without on-street bus lanes, signal priority and other treatments, the MBTA is unlikely to be able to deliver the medium-frequency service envisioned. We note that several sections of the proposed route are located on state-controlled roads, which often present challenges to delivering bus lane and other transit priority treatments.

The City respectfully requests that the MBTA prepare a modified draft proposal that addresses these shortcomings and maintains overall service levels for the Highland Avenue corridor. Possible solutions could include:

- Converting proposed "Route 90" medium-frequency service to a high-frequency service
- Terminating the new "Route 90" at Clarendon Hill to reduce route length and improve reliability, provided that equivalent alternate service to Arlington's Turkey Hill neighborhood is provided
- Preparing an aggressive transit-priority strategy to deliver bus lanes on local and state-controlled roadways throughout the proposed Route 90 service corridor

Priority: Increase bus service in the Hillside/Boston Avenue/Capen Court neighborhood

Somerville’s “Hillside” neighborhood centered around Boston Avenue includes large concentrations of transit-critical populations, including the 250-unit “Capen Court” community of senior, assisted living and low-income housing. The neighborhood also includes Tufts University’s main campus on the Somerville/Medford border, which hosts roughly 6,000 undergraduate and graduate students. On a typical pre-pandemic weekday, Boston Avenue in the Hillside neighborhood was served by roughly 78 daily inbound bus trips and roughly the same outbound trips, split between MBTA bus Route 80 and Route 94.

The MBTA’s initial Bus Network Redesign scenario would eliminate existing Route 80 bus service and reconfigure Route 94 as a new medium-frequency service linking Davis Square to Woburn and Burlington via Boston Avenue, West Medford and Winchester. The City estimates that a typical weekday would feature roughly 28 bus trips per direction.

It appears that the initial MBTA proposal would reduce Boston Avenue weekday bus service by 64% and weekend service by 66%. The City of Somerville is concerned that transit critical populations in the Hillside neighborhood face major bus service cuts without realistic and accessible alternatives to access substitute bus or rail services. Possible solutions could include:

- Reconfiguring elements of the new “Route 90” service to link Arlington’s Turkey Hill neighborhood to the Hillside/Boston Avenue neighborhood and other key service areas such as South Medford, Ball Square, Gilman Square or Winter Hill

Priority: Preserve and expand service levels where the City has delivered on-street bus infrastructure

The MBTA’s strategy for Bus Network Redesign strongly emphasizes the need for municipalities and other roadway owners to create dedicated bus lanes, transit signal priority, in-lane bus stops and other transit-supportive infrastructure. The City of Somerville has been a regional leader in providing transit infrastructure, with eleven distinct bus lanes created since 2017. A map of existing and planned bus infrastructure is provided below. **The City is concerned that the MBTA’s initial planning scenario for Bus Network Redesign reduces and eliminates bus service in locations with transit-supportive infrastructure, and we respectfully request that the second draft of the MBTA plan ensure no net loss of service in locations where the City of Somerville has created on-street bus infrastructure.**



The City notes that during an earlier phase of the Bus Network Redesign process, the MBTA proposed a “demonstration project” to enhance service along Somerville’s Broadway/Winter Hill corridor following

the City's installation of a ½ mile long, bi-directional, all-day bus lane. At public board meetings, MBTA staff described a proposal to add bus trips as well as new dispatching staff and dispatching software to manage headways more precisely on this corridor. This proposal was withdrawn once the COVID-19 pandemic began and the MBTA faced a fiscal emergency.

The City believes that collaborative partnerships between municipalities and the MBTA are required for Bus Network Redesign to be successful. Somerville's Climate Action Plan explicitly directs the City to continue expanding on-street bus lanes and other transit-supportive infrastructure. We note that service reductions on streets with existing or planned bus priority have the potential to undermine public support for installation of new bus lanes, particularly if these facilities require difficult trade-offs such as converting curbside motor vehicle parking or general-purpose travel lanes.

Priority: Preserve and expand service levels where the City has planned and permitted high-density transit-oriented development

The City of Somerville's adopted Comprehensive Plan, district development plans and Zoning Ordinance reflect our community's commitment to equitable transit-oriented development. Over the past decade, our land use planning has helped create more than 8,000 new jobs and 2,200 new homes in our four-square mile jurisdiction. Our plans and regulations require that 75% of new trips associated with new development must occur via non-driving travel modes. Motor vehicle parking is intentionally constrained to reduce driving and emphasize public transit use.

The City is concerned that in key growth areas including Assembly Square, Union Square, Boynton Yards, Brickbottom and Twin City the initial planning scenario for Bus Network Redesign does not maintain sufficient bus connections to connect these neighborhoods to key destinations such as East Cambridge and Kendall Square. Possible solutions may include:

- Examining options to retain existing Route 85 bus service and strengthen its value to transit-critical populations by extending it north to Winter Hill/Mystic Avenue
- Exploring opportunities for north-south bus service linking Mystic Avenue and Union Square via McGrath Boulevard, continuing to Lechmere or Kendall Square in Cambridge
- Accelerating MassDOT's current planning and design work for a future MBTA Silver Line extension from Chelsea to Kendall Square via Assembly, McGrath, or Union

Conclusion

The City of Somerville remains a committed, enthusiastic and high-capacity partner for the MBTA. We will continue to deliver on-street bus infrastructure, transit signal priority and safety/accessibility treatments on local streets. We will continue to advance a land use strategy focused on equitable, transit-oriented development. We look forward to continued engagement with the MBTA and all regional stakeholders to ensure that a comprehensive Bus Network Redesign moves forward consistent with public and agency feedback.

Thank you for the opportunity to comment on your initial draft proposal for Bus Network Redesign.

Sincerely,



Katjana Ballantyne, Mayor