BostonBRT Initiative Review







AUTHORS

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Introduction

The Barr Foundation's BostonBRT initiative was convened in 2013 as part of Barr's climate program. Acknowledging that any serious efforts to address climate change must advance solutions for mobility, BostonBRT sought to determine technical feasibility of Bus Rapid Transit (BRT) in the Boston Region, and, in the event that BRT was feasible, to advance a conversation within the Greater Boston community to build regional support for BRT. Feasibility was determined and detailed in the June 2015 report Better Rapid Transit for Greater Boston (ITDP).

With feasibility determined, Barr developed three specific goals for the initiative:

- Develop corridor support for advancing BRT;
- Gain political support for an alternatives analysis on one or more BRT corridors; and
- 3 Have BRT included in the State budget, Capital Improvement Plan, and Transportation Improvement Program.

BostonBRT employed a number of strategies to advance these goals, deploying in excess of \$6 million in direct funding support and financing their own outreach, technical, and convening activities. Barr has funded and worked collaboratively with a diverse array of stakeholders.

While these goals have not been met yet, Barr's efforts have contributed to an important dialogue in a rapidly changing landscape. To better understand their contributions, Barr commissioned Weinberger & Associates to review spending to date and to make a determination as to the initiative's impact. The review consisted of:

- A series of stakeholder interviews with NGOs, including the Chamber of Commerce and advocates,
 Barr consultants, and government/agency representatives;
- An analysis of social media outputs and reactions;
- · An internet-based assessment of earned media relative to national trends in BRT earned media; and
- An assessment of grant-making outcomes and products.

Though the initiative's goals are inclusion in formal planning documents, Barr's work and the work Barr has funded to date can be characterized as necessary precursors to bringing BRT explicitly into plans and thus meeting the ultimate goals. The assessment performed by Weinberger & Associates in 2018 and described here is qualitative; without having met the specific, objective goals of the initiative, the brief was to measure Barr's progress and to assess the appropriate role for the Barr Foundation as BRT implementation continues. A robust, quantitative assessment of progress toward a goal without intermediate stages or benchmarks is elusive. Likewise, developing a stochastic or deterministic model of the effects of any specific activity toward the goal is, in most cases, impossible. Here we endeavor to measure changing sentiment—a challenge that

does not lend itself to specific measurable standards, but is understood intuitively as critical for gaining the political support required to meet the initiative goals. Much of the assessment, therefore, relies on professional judgement and intuition developed from working on other projects wherein supporting constituencies are built.

Following this introduction, the document describes the transportation and climate crises facing Boston and the Boston region, essentially looking closely at the impetus for



the BostonBRT initiative. We then look at the planning context for BRT projects, contrasting the US experience with apparent "overnight" successes abroad. We discuss Barr grantmaking to date and then the achievements of the BostonBRT initiative. We highlight some apparent challenges to BRT implementation in the Boston Region and then point out some potential paths forward. The concluding section summarizes our analysis and provides recommendations for moving forward.

Why BostonBRT?

The City of Boston faces significant transportation challenges that limit its ability to compete successfully in the global economy while also realizing sustainability goals. Like many US cities, Boston has fallen behind, both in upkeep of existing transportation services, and with meeting the demands of a growing population and developing region. The MBTA has a debt burden in excess of \$8 billion and suffers a similar deficit in terms of unfunded work required to bring the system to a "state of good repair." Several Boston-area transit hubs are already over capacity at peak times, and the existing options continue to fail to meet basic needs. Other vulnerabilities in

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the system include ongoing weather impacts and reliance on a rigid hub-and-spoke system.

Without improvements, Boston's transportation system will strain to keep up with current, much less future demand. As a result, more people will face limited access to transit and, therefore, opportunity. More cars on the road will increase both gridlock and greenhouse gas emissions.

Recognizing that a network of Gold Standard BRT corridors would provide additional mobility in Greater Boston by filling gaps and complementing the existing transit system, and improve the city's resiliency and flexibility in the face of harsh weather and other unpredictable conditions, Barr developed the BostonBRT initiative. As the mode's highest level of performance, Gold Standard BRT would cut travel times and greatly

Photo: Citizen at CambridgeBRT and WatertownBRT Pilot. Photo credit: BostonBRT

improve rider experience. BRT is also relatively quick to build and, on average, seven times more affordable than rail, while delivering comparable results.

Barr recognized that BRT may be the region's best choice for addressing these concerns.

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Unfortunately, the bar for calling bus improvements "BRT" is low and many systems that incorporate only one or two BRT elements (all-door boarding, level boarding, off-board fare collection, or signal prioritization) have been billed as BRT. These incremental bus improvements, cloaked as BRT, confuse the public, tarnishing BRT with the same stigma that bus service often carries in relation to rail. Boston's Silver Line is a case in point. The bus line features BRT elements in some sections, demonstrably improving rider satisfaction, but has not delivered on the full promise of Bus Rapid Transit. The discrete modifications may have led many Bostonians to equate BRT with "somewhat enhanced bus service." One can trace lingering effects of this confusion to failure of the planned 28x BRT line in Boston. Community members rejected the service due to a controversial rollout and sentiment that it would stick residents with inferior service.

Barr has been deliberate in its consistent approach to promoting an understanding of Gold Standard BRT, partly to underscore that BRT could be much more than the Silver Line, and partly because global experience shows that the speed and reliability of a Gold Standard BRT network offers the greatest positive impact on the public transportation landscape and, in turn, climate mitigation. Experience also shows that lesser standards have led to increased rider dissatisfaction and diminishing support for future projects.¹

BRT Planning Context

Why Bus Rapid Transit?

Done right, buses can provide extremely cost-effective transport with better sustainability outcomes than many other transport strategies. Bus rapid transit (BRT) is designed to provide service characteristics typically associated with subway or light rail at a fraction of the cost. BRT is relatively inexpensive to build, can be very efficient, and, to the extent it draws passengers from less efficient modes can play a critical role in sustainable mobility plans. To achieve the highest level of effectiveness and cost efficiency, a BRT system must deliver on the promise of subway service characteristics.² This is referred to as the Gold Standard.³

¹ Weinstock, Annie; Walter Hook; Michael Replogle; Ramon Cruz. Recapturing Global Leadership in Bus Rapid Transit: a survey of select US cities. ITDP 2011 https://3gozaa3xxbpb499ejp30lxc8-wpengine.netdna-ssl.com/wp-content/uploads/2014/07/20110526ITDP_USBRT_Report-LR.pdf

² Ibio

³ The Bus Rapid Transit Standard ITDP (updated 2016) https://www.itdp.org/2016/06/21/the-brt-standard/

International experience

Bus Rapid Transit emerged as a viable transit mode as early as 1974, when the City of Curitiba, Brazil launched its first project of transit-only lanes with level boarding and other enhanced services and amenities. Following this launch, several other Brazilian cities made bus improvements under the banner of BRT, most of which fell short of the offerings and cost effectiveness of the Curitiba project.⁴ The lesser systems diminished the "BRT" brand, creating obstacles to further BRT implementation.



It took 25 years from the Curitiba success for the next true, and successful, BRT system to launch. When Bogota launched Phase 1 of Transmilenio, the first modern network of BRT, Bus Rapid Transit was resuscitated as a game-changing transportation system. Though the Federal Transit Administration introduced funding for Bus Rapid Transit in the 1990s, it was the success of Transmilenio, opened in 2000, that catalyzed interest in BRT among planners and politicians in the US. As Curitiba had, Transmilenio was able to deliver rail-like speed and reliability at a fraction of the cost and time required to complete a rail project.

From its first appearance in planning documents in 1997 to opening the first line in 2000, Transmilenio became a poster-child for rapid, efficient implementation of BRT. Rarely recognized keys to the rapid implementation include the fact that the first line was "opened" on a pre-existing busway. Also, a 1993 law dissolved the existing governance structure wherein executive authority was shared between the Mayor and the City Council. Under the new law, mayoral executive authority is limited only by federal law.⁵ Though mayors are restricted to single consecutive terms, their executive authority is absolute (within bounds of the law). The strong mayoral platform allowed Enrique Peñalosa, the mayor most credited with Transmilenio's success, to coopt existing plans for a short metro and road improvements into his vision for improving the city's mobility via a BRT system. The system as it is known today was completed in 2012.

Ahmedabad, India also had a very quick timeline, going from discussion to plan to implementation in five years. Ahmedabad was helped by pre-existing interest at the national level, with about 35% of the first phase funded by the national government. Not every international example was as quick or successful, and Chennai, also in India, may be the example most instructive to the Boston case. According to one source, there has been an active BRT discussion among the decision-making class in Chennai since 2010. There was a prefeasibility study conducted by ITDP in 2011. Discussion notwithstanding, there are no local champions and little hope that BRT will be included in plans or implemented there in the foreseeable future.

Photo: Belo Horizonte MOVE BRT, Brazil. Photo credit: BostonBRT

⁴ Weinstock et al. ibid.

Devlin, Matthew. Conjuring and consolidating a turnaround: Governance in Bogotá 1992-2003. Innovations for Successful Societies, Princeton University https://successfulsocieties.princeton.edu/sites/successfulsocieties/files/Policy Note ID108.pdf

Domestic Experience

Implementation has lagged in the United States. There are BRT systems in Las Vegas, NV; Cleveland, OH; Los Angeles, CA; Eugene, OR, Hartford, CT; and Pittsburgh, PA. New York City runs a subset of buses that could be called BRT lite, under the banner Select Bus Service. Cleveland's system has the highest ranking in the United States, achieving ITDP's Silver designation. Albuquerque has designed and built a system that ITDP judged Gold Standard, but its opening was delayed 18 months from January 2017 due to poorly functioning vehicles. It is vaguely due to open in 2019, but as of November 2018 an additional 18-month delay is anticipated, thus contradicting the 2019 target. With the ironic exception of the Albuquerque project, no US city has built Gold Standard BRT.



Once endorsed, BRT construction can be swift and operations flexible. Unfortunately, it can take years if not decades from concept to plan to delivery. San Francisco's Countywide Transportation Plan, for example, called for a BRT network in 2004, with signature projects on Van Ness Avenue and Geary Boulevard. Van Ness construction began 12 years later in October 2016, with completion of the two-mile project expected late in 2019; Geary obtained environmental clearance for the four-mile corridor in spring 2018, breaking ground in fall 2018. Cleveland's Euclid Avenue HealthLine is praised both for revitalizing a "faded urban corridor" and being one of the few medal-worthy BRT

lines.⁶ It, too, had a similar overall timeline—it was 10 years from selection as the preferred alternative for the Euclid corridor to the start of construction in 2005. It was not until 2008 that the HealthLine began operations. Finally, Connecticut's CTfastrak began operations in 2015 after 15 years of planning and three in construction.

While tempting to apply international examples to a US environment, varying country contexts will feature different regulatory environments, with different types of champions leading the way, inevitably facing a host of context-specific challenges. The United States' political/planning environment is complex and not particularly conducive to adopting and implementing systems like BRT. Typically, transit is operated by a transit agency but runs on streets owned by cities or states, thus inter-agency coordination is critical. Transportation planning is done regionally, requiring multi-jurisdictional cooperation. This is sometimes hard to achieve, especially for projects like BRT routes that are geographically concentrated. Favorable public sentiment and strong political leadership are prerequisites to adoption in a formal plan. But competition for scarce resources, usually in a context where bus riders are far outnumbered by auto-users, favors improvements for the larger, auto-user population. BRT implementation in the United States requires strong inter-agency, inter-jurisdictional, and intra-regional cooperation.

Photo: Cleveland's Euclid Avenue HealthLine. Photo credit: BostonBRT

⁶ Derringer, Nancy. In Cleveland, they built it, and riders came, along with a whole lot more in Bridge Magazine. Ann Arbor, MI. February 23, 2016. https://www.bridgemi.com/public-sector/cleveland-they-built-it-and-riders-came-along-whole-lot-more

Malouf, Dan. The US has only 5 true BRT systems, and none are "gold" in Greater Greater Washington. Washington, DC. January 17, 2013. https://ggwash.org/view/29962/the-us-has-only-5-true-brt-systems-and-none-are-gold

The foregoing highlights the potentially lengthy process of bringing BRT from plan to implementation. The Barr effort is now focused on bringing BRT to the planning phase. We illustrate the timelines and complex relationships simply to emphasize that successful transportation innovation can require consistent efforts over a long period.

BostonBRT Grantmaking to Date

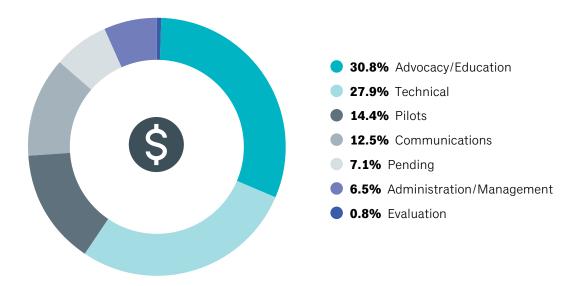
Driven by its climate mission and recognition that efforts to address climate change must address mobility, Barr Foundation aims to solidify and promote the value proposition offered by Gold Standard BRT. Under the BostonBRT banner, the initiative comprises a variety of strategies to ignite public discussion and generate support for Gold Standard BRT. The foundation has underwritten nearly \$6.4 million dollars of activity to engage diverse stakeholders and the public to champion BRT in the Greater Boston region. Barr funds have supported BRT pilot projects and a variety of NGOs—notably Livable Streets Transportation Alliance of Boston, ITDP, MIT, and the Marion Institute, which has in turn funded other BRT-related activities.

Funded activities include learning trips to Mexico City to experience BRT, a digital photo and video competition to identify beauty on bus commutes, a station design competition to visualize that potential, providing funding to community organizations to promote awareness at the local level, and more. Over the past five years, the combination of these activities has elevated the conversation in Greater Boston, as reflected in MassDOT's Focus40 strategic plan, to include Bus Rapid Transit as one of the potential future transportation modes in Massachusetts.

Barr began the BostonBRT campaign in 2012 by providing a \$500,000 grant to ITDP, primarily to assess BRT feasibility. ITDP worked with the BostonBRT Study Group to produce the 2015 report <u>Better Rapid Transit for Greater Boston</u>, which identified 12 technically feasible corridors with potential for Gold Standard BRT. They winnowed the list to the five most promising, considering potential impact on existing transit, congestion, service to historically underserved communities, direct trip connections, and support for planned development. The five corridors have served, to some extent, as a frame around which BRT discussions in the region have revolved.

Grants supported a variety of activities and organizations, from community-based organizations like Greater Four Corners Action Coalition, to advocacy groups like Livable Streets Alliance, to data and engagement innovations from MIT, and much more. In 2016 and 2017, Barr funded the Marion Institute, which in turn funded Cambridge/Watertown, Arlington, Everett, and the MBTA as they implemented various pilot projects.

Allocation of Barr Funding, 2012-2018



Beginning in 2015, Barr has also funded consultants to provide transportation technical expertise, branding expertise, and public relations/media management to capture and broadcast the BRT value proposition. Contractors have been funded both directly and through the Marion Institute. Almost half of funding was spent on technical work (28% studies and technical assistance, 14% on pilot projects), followed by over 43% on communications and outreach, as shown in the above chart.

Achievements of the Barr Initiative

BostonBRT's tangible accomplishments include completion of the ITDP technical report that identified feasible BRT options on 12 corridors in the Greater Boston area, pilot projects that tested multiple elements of BRT

launched in four locations, community-wide outreach events, and development of interactive planning tools by the MIT Mobility Futures Collaborative and Changing Places, MIT Media Lab. Collectively, these activities contributed to moving the public and political dialogue about bus service from a forgotten, second-hand investment to an integral transit mode that deserves substantial improvement.

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Captivating public relations and communications strategies to signal positive vibes about bus service—like the Beauty and the Bus campaign, the Flower Bomb, and periodic social media updates—engaged the public throughout the process. A coordinated social media campaign was launched in 2016, and accumulated over 3,000 followers across multiple platforms, Facebook being the most popular (~1,900 followers) and Twitter being the most active. Beauty and the Bus and the Flower Bomb communicated the idea that traveling by

bus, even waiting for the bus, could be a pleasant, fun, and exciting experience. Through these strategies, Barr reached a number of people who now appreciate discrete components of BRT.

It is not clear whether or how these efforts can be correlated with attitudinal shift—i.e., whether the targeted public has a greater willingness to embrace adoption of, or support benefits of, a set of BRT improvements that would comprise a Gold Standard. It is even unclear who the intended audience should be. For example, part of a grant to the Greater Four Corners Action Coalition was provided to allow for public outreach in the form of neighborhood-oriented workshops. One-hundred residents participated in these workshops. While the 100

Key Achievements of the BostonBRT Initiative



- Expanding depth and coverage for outreach activities
- Learning trips for business and civic leaders to see Mexico City's MetroBus
- Establishing BRT feasibility identifying
 5 priority corridors in Greater Boston
- Coordinating agency in-reach and collaboration through working groups
- Technical assistance to public agencies, through staff positions, procurement assistance, consultant support

participants surely became more knowledgeable about BRT and some may have become part of a pro-BRT constituency, it is far from clear that this is an effective way to develop a supporting coalition. This statement by no means implies that the grant was not valuable. It is probable that the greatest value in the workshop was gained as the community leaders at GFCAC, in preparing to lead the workshops, became more engaged and supportive of the issue. That knowledge and interest may have then carried through in other work. Individual support is amplified when it comes through a recognized civic organization, and through the neighborhood workshop, organizational support is likely to have been solidified.

Prospects for bus improvements, if not for BRT, have improved in the years since Barr began the BostonBRT campaign. Most of the stakeholder interviews revealed that participants believed BRT features were important to improving bus service and there was general consensus that bus service should be improved. However, in our interviews, we found that Gold Standard was not embraced by the stakeholders to the degree that Barr has embraced it. This observation suggests there is more work to be done in communicating the idea and benefit of BRT.

Implementation of the Barr-funded pilot projects demonstrated that several of the discrete BRT features were viable and beneficial to bus riders. These projects, in addition to demonstrating operating characteristics, created opportunities for essential cooperation across agencies, among municipalities, and between municipalities and the state—specifically working with MassDOT and the Department of Conservation and Recreation. These cooperation models will be essential for more complex, cross-jurisdictional BRT routes. They also required cooperation between municipalities that manage the streets and the MBTA, which manages

bus service. Together, these demonstrated a dedication to bus enhancement at a local level. These achievements chart a path for stronger agreements among the many agencies that must cooperate to deliver the high-quality bus service that Greater Boston travelers deserve.

Barr's BostonBRT initiative has achieved several important "wins" that might be less apparent than the technical work of ITDP and the consultant teams working on Go Boston, who received outreach support from Barr. Barr's activities also advanced the timeline of the dialogue, in particular by implementing pilots soon after BRT's feasibility was confirmed. Few cities have succeeded in launching concrete projects, even in very short segments, shortly after completing a citywide rather than corridor-based feasibility study. Along with these visible achievements, the BostonBRT initiative also facilitated of the following, directly or indirectly:

- The work of the BRT Study Group fostered and deepened coordination among disparate stakeholders and led to the creation of additional bus working groups.
- The Better Bus Project, affirmed by Go Boston 2030, is the first route/service analysis for Greater Boston in ~10 years, and is part of a multi-phase comprehensive operations analysis.
- The pilot projects led to cross-municipal and municipal-state agency coordination, codified in Memorandums of Understanding that documented responsibilities of each of the parties.
- BRT was included in Focus40, albeit largely in longer-range plans and projects, e.g. "We're Planning: Next Priorities for 2040." BRT planning is also briefly mentioned in "We're Doing: Commitments for 2023."8

Though the original goals set for the BostonBRT campaign remain partially unmet, the effort has resulted in substantial progress. Barr efforts served as the impetus or financial support for a range of activities, from outreach on standard/ongoing studies, to direct technical or staff assistance to public agencies like the City's Transportation Department. Moving from 12 feasible corridors to five priority corridors is also meaningful, in that it helps to focus efforts rather than disperse them. The pilot projects further confirmed the feasibility of and desire for discrete BRT elements and, perhaps most importantly, established new models for cooperation among municipalities to create more effective projects, and for collaboration with MBTA to create

Original BostonBRT Goals:



Goal 1: Develop corridor support for advancing BRT

Partially met: support for incremental bus and BRT lite, not Gold Standard

Goal 2: Gain political support for an AA on one or more BRT Corridors

Unmet: typical timeline 5-10 years (min)

Goal 3: BRT included in State budget, CIP, and TIP

Unmet: typical timeline 5-10 years (min)

⁸ https://www.mbtafocus40.com/focus40theplan/

better partnerships/stronger interactions. They also demonstrate a commitment to bus enhancement in general, and an interest in BRT, to state and federal officials. The next phase of work must go beyond, by focusing efforts on a key corridor, in order to demonstrate the promise of BRT and government's ability to deliver on that promise for current and future residents.

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The Focus40 Plan, MBTA's 25-year investment plan, takes a step in that direction, but BostonBRT stakeholders must push for more. Only one of the commitments for 2023, the "Better Bus Project Phase 2: Bus Network Redesign Process and Bus Rapid Transit Planning," mentions BRT as part of "more comprehensive changes to the bus network based on the redesign effort, including build-out of more comprehensive Bus Rapid Transit service." Though there are numerous transit action plans and a discussion of a priority bus network/corridors, this "initial implementation" is the only BRT commitment through 2023 noted in Focus40. In fact, apart from the Silver Line, only "Bus Rapid Transit to Everett" appears in the "we're planning" section. Other than Everett Mayor Carlo DeMaria, who has been unequivocal in his support for BRT in Everett, no champion for full-featured or Gold Standard BRT in the Boston region has emerged. Barr and its partners seem to be best positioned to carry this effort forward.

Challenges to Boston BRT Implementation

While Boston's BRT initiatives, and Barr's investments in them, have provided technical support and pushed major bus enhancement to the fore, stakeholder discussions, social media analysis, and placement in the latter portion of planning documents show that Gold Standard BRT does not hold priority position in Boston. In fact, an analysis of tweets from the BostonBRT account shows that "bus" has overtaken BRT as the more

frequently tweeted transit service. The campaign's success in growing acceptance of "bus" suggests that there is a long way to go to ensure greater public understanding of the additional performance that BRT can provide as a suite of enhancements. The implicit rejection of Gold Standard BRT in favor of bus improvements or "BRT lite" could cause future backlash similar to the one that caused the 28x to fail, and amplify the notion that rail service is given to favored communities and bus reserved for the rest.

Neither the pilot projects nor the marketing campaign have clarified the quantum improvement that Gold Standard BRT can deliver; instead they have advanced an incremental approach to bus improvement that has led to limited improvements and greater support for bus improvements expressed by the stakeholders.

⁹ Page 46. https://www.mbtafocus40.com/focus40theplan/

Neither the pilot projects nor the marketing campaign have clarified the quantum improvement that Gold Standard BRT can deliver; instead they have advanced an incremental approach to bus improvement that has led to limited improvements and greater support for bus improvements expressed by the stakeholders. Most stakeholders see BRT as a high level of investment in bus and bus travel; they do not yet appreciate Gold Standard as sufficiently better to justify the additional effort/investment. Our interpretation of this collective sentiment is that stakeholders were taking a practical tack, embracing the "possible" or the "likely" over the ideal. Unfortunately, it seems possible that the stakeholders, unable to see a path to achieving Gold Standard BRT, discount its value. While increased support for bus improvements is encouraging, the current pace seems unlikely to sustain interest. For example, something with substantial dwell time benefits like all-door boarding, as demonstrated on

Key Issues Identified



- No clear BRT champion has emerged with access, dedication, and funding like Barr.
- Poor quality of existing bus service causes stakeholders to focus on basic, systemwide bus improvements rather than major capital investments (or both).
- Political winds have also shifted to a fix-itfirst approach to bus improvements.
- Site visits to Mexico City & other BRT projects were helpful in demonstrating BRT's potential, but did not translate to Boston's priority corridors.
- Messaging and pilot projects have created a buzz for discrete enhancements, but neither have demonstrated the promise of a full package of BRT features.

Boston's Silver Line in Spring 2017, will not be completed systemwide until 2020. Continued support, or pressure, from the public will facilitate ongoing implementation of such enhancements, but strategic champions are also necessary.

Because BRT is flexible, incremental implementation might be a viable approach to achieving full-featured BRT. The danger is that it takes longer to realize the full range of benefits and it is, therefore, harder to develop and sustain grassroots support, without which political support is also unlikely. The appeal is that it does allow modest benefit with each phase of enhancement along the way.

Despite universal acknowledgment that implementation is not an issue of technical feasibility, but of public/political will, only one stakeholder expressed a clear opinion that the critical step would be to choose a specific corridor that includes a portion in Boston, and concentrate all possible resources to developing the political constituency in that corridor. In 2017, the BRT Advisory Committee nearly unanimously outlined the corridor focus as the most critical step to moving forward with BRT in Greater Boston. The BRT projects most likely to proceed to implementation with any immediacy are not in Boston, but in Everett, Watertown, and Cambridge. Unfortunately, these are not the corridors with the most severe speed and delay issues (as shown in the GoBoston priority network). As BRT investments proceed, we would encourage building on existing investments/features to show the cumulative benefits of bundling, targeting areas with substantial speed and delay issues within the priority bus network, and funding a significant segment of a corridor (at least x stations or y miles).

Potential Paths Forward

Part of the evaluation explored a variety of scenarios that might facilitate the goal of implementing Gold Standard BRT in Greater Boston, with a focus on reducing climate change impacts as the underlying goal. These scenarios range from immediate departure from BostonBRT to expanding Barr's role in transit advocacy. To assess the efficacy of these options, we again utilized data from stakeholder interviews, traditional and social media analysis, and knowledge or context of comparable national and international BRT projects. A matrix of these scenarios is included below:

Scenario	Timeline	Barr Level of Effort	Level of Investment	Effectiveness	Challenges/Obstacles	BRT in Boston? (goals met?)	Likely outcomes
Exit	6 months	Close out existing grants	\$	Very low	Ongoing branding (does this erode the brand/investment?) Credibility with some partners (agencies, advocacy groups)	Unlikely	Bus improvements continue but more slowly No BRT in Boston or the region
Focus on the Message	2-3 years	Same as current	\$\$	Low	Ensuring lasting benefits/sustainability Connecting efforts to climate change mission	Possible (long lead)	Ad-hoc bus improvement continues More BRT elements maybe even reach a standard like NYC's Select Bus
Cultivate a Champion	2-3 years	FTE	\$\$	Medium	Difficulty of finding a willing champion Champion might not be ready when Barr is ready to exit Champion might need ongoing support for months or years Barr might be seen as puppeteer	Possible (shorter lead)	Ad-hoc bus improvement continues More BRT elements maybe even reach a standard like NYC's Select Bus BRT efforts continue (torch passed)
Gold Standard in Boston	3-5 years	At least 2 FTE (BRT person on Barr staff)	\$\$\$	High	Barr could be seen as puppeteer Could take longer than 5 years Investing in full-featured BRT takes political and public will, plus timing	Probable	Exemplar corridor Recognition of BRT value and potential follow-on corridors
Expand BRT to Barr Mission	Ongoing	High	\$\$\$\$	High	Requires strategic workplan to craft meaningful investment Will take time to determine where best to invest time/funding Activities might seem diffuse to staff, partners until recommendations emerge	Yes	1. Overall better transit in Boston and region including BRT 2. Stronger, broader ties to Barr mission 3. Reduce climate change impacts from transportation 4. Increase awareness of the bigger picture—create space for a bigger conversation and related paradigm shift

Conclusions

The achievements and issues presented above and the conclusions presented in this section are the result of an extensive look at Barr's funded activities and resulting reports; earned media and social media generated by Barr and Barr's representatives, along with community responses; and a series of stakeholder interviews. What this evaluation achieves is to "take the pulse of" changing public sentiment by examining the accumulated anecdotal evidence. We contextualized the expected timeline in terms of contrasting and analogous BRT planning efforts.

As part of our evaluation, we considered a set of scenarios that would best facilitate the goal of implementing Gold Standard BRT in Boston. Before analyzing these scenarios in detail, we first considered potential outcomes if Barr were to discontinue advocacy and funding for BRT. Based on discussions with stakeholders, at the moment, Barr seems to be uniquely positioned in terms of understanding of the issues and their role in the region as the only champion of Gold Standard BRT. Another suggested candidate is ITDP. While ITDP is a champion for Gold Standard BRT across the



world, they do not have the long-standing local relationships or a historical stake in the region to be as effective. ITDP could certainly be relied upon to work with Barr in developing effective local champions. Stakeholders have expressed interest in addressing state-of-good-repair issues and systemwide transit enhancements, but BRT has not been sufficiently tied to that movement. As such, Barr's departure would likely result in a severe slow down or complete stoppage of progress toward Gold Standard BRT, an investment that is both feasible and warranted in Greater Boston, and Boston in particular.

The following efforts should be pursued to meet the goal of high-quality BRT, and therefore high-quality transit. Since no other champion has emerged with dedication to the Gold Standard as well as access to or respect of public and private stakeholders that Barr seems to have, Barr is well-positioned to support these strategies:

Redirect the messaging plan. The current public relations plan is exciting and engaging, while public agencies tend to focus on passenger information and basic project details. Both the outreach activities and social media campaigns have created and sustained a buzz about bus service and BRT. Going forward, messaging campaigns should focus on connecting that excitement to the benefits from bundled features that BRT offers. Campaigns or messages should be crafted around pilot projects in Boston, similar projects around the region or country,

Photo credit: BostonBRT

and support for local agency efforts that show advancement toward BRT, so long as campaigns are tied to functional benefits. In addition, messaging coordination should be incorporated into the pilot group meetings, Better Bus meetings, and alongside project activities.

Build relationships with comparable cities. Trips to places like Mexico City have been helpful in demonstrating the promise of BRT, but stakeholders felt that project examples were not applicable in Boston with its many curving roads and indirect routes between people's origins and their destinations. Visiting a greater variety of cities will show the flexibility of BRT and examples that feel more relevant to Boston and the Boston area. This will also allow greater engagement in coalition meetings with other US cities and advocates pursuing Gold Standard BRT. Cities in the second wave of implementing BRT, such as Seattle, San Francisco, and the like, would fit these conditions.

Activate non-profit and foundation partners. The quantity and proportion of greenhouse gas emissions and particulate matter attributed to transportation are well-documented, as is Barr's dedication to mitigating climate change. However, most foundation and advocacy organizations focused on the connection between climate change impacts and transit reform target their efforts toward alternative fuels and energy. Barr is one of the few foundations working with public agencies and local advocates to target mode shift and transit system performance as a means to achieve this goal. Additional advocacy and encouragement within foundation circles may help to highlight this avenue and bring more voices to bear.

Build on BRT features with an additional round of pilots. The regional pilot projects were received well, by the public, by local agencies, and by the MBTA, helping to elevate interagency cooperation as well as bus enhancements. The 2018 pilots demonstrated the potential of BRT elements and created a flurry of activity within the region, so much so that municipalities clamor for more. Though some cities are already planning follow on projects, municipalities eagerly await another round of pilots—not only for the seed funding that can be leveraged, but for the supportive environment that the call for projects and its associated working group engenders. An additional round of pilots would expand the reach of these concepts, but should be more closely tied to BRT packaging. Round 2 pilots should build on project elements that demonstrate the package of BRT features. Funding should prioritize projects that include some combination of:

- connecting existing and/or priority corridors together to create longer segments or facilitate better transfers;
- focusing on alleviating speed and delay issues in identified bus priority corridors (or those that can demonstrate they meet similar criteria); or
- layering a minimum of three BRT features.

Layering multiple BRT components in areas of greatest impact would continue the goodwill that was raised with the initial pilots, while also furthering the goal of high-standard, full-featured BRT in Boston.

Cultivate clear champions. BRT implementation requires coordinated, sustained support to achieve the public and political buy-in that leads to success. The greater the tradeoffs for each feature, the more controversial implementation might become. Strong local champions will help move the project forward while continuing to build goodwill, agency support, and community stewardship. Barr should work to identify potential champions and devise support systems to underpin their efforts as BRT advances. This might include continuing to support grassroots and agency relationships, providing additional technical support, and ongoing coordination or messaging activities until champions are ready to take the reins.

Focus on efforts in a single, high-impact corridor. BRT efforts to date have been implemented as discrete elements in segments or at stations. While this has produced improvements, they are read as bus enhancement rather than a BRT project. Concentrating features in a particular corridor will show the benefit of a suite of improvements, while also delivering substantial, cumulative benefits to the route, the riders, the system, and the neighborhoods. More importantly, a single cohesive project in a significant corridor can act as a bellwether, giving credence to BRT, not just as a concept, but as a catalyst.

In short, Barr has moved the discussion substantially. To sustain the momentum, we encourage Barr to continue this initiative, stewarding it to the logical conclusion of creating at least one Gold Standard project in a corridor with the most political promise, i.e. likely to be successful, and yet with substantial speed and delay issues. Otherwise the effort is constrained from delivering on its promise. Rather like using an abandoned freight alignment for a light rail system, it makes little sense to make the transit investment on the basis of a "convenient" location. Similarly, an interested mayor without a transportation problem is not necessarily an ally. While other cities in the region have expressed interest, the most impactful corridors lie in Boston. Though some incremental improvements have been implemented, stakeholder feedback and placement in the "priorities for 2040" suggest that Gold Standard BRT does not yet hold the priority position needed for success in the next five years. BRT takes time to accomplish; without a strategic champion, that time will seem even longer for Boston riders and those who require access to the wealth of activities that Boston offers.