

BRT To A “T” • Delivering Bus Rapid Transit Projects Successfully

By Hill International, Inc. Vice President
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Bus rapid transit (BRT) promises fast, reliable, cost-effective, and safe transit services at a relatively low cost to build, compared to other types of transit services. However, to achieve these outcomes, owners and agencies need to understand that BRT is not a transit silver bullet: procurement, design, and construction risk can hamper any project, and for BRT projects, which are high-profile and complex by nature, these risks can compound to result in overruns, delays, and a lack of community support.

Thankfully, as BRT projects become more common across the U.S. and around the world, there is a growing library of BRT best practices and lessons learned available to help avoid the most common risks and realize BRT systems that fulfill your mission and meet your community's specific transit needs.

In this brief article, I'm happy to share some general guidelines to help you deliver your BRT project successfully.



Pictured is Pittsburgh (PA) Regional Transit's Wilksburg Park and Ride Station, to be used in association with the area's new BRT project. (Photo courtesy of Hill International)

Higher Early Investment Equals Higher Long-Term Performance

According to the Institute for Transportation Development & Policy (ITDP), the data clearly shows where agencies get the most bang for their BRT dollars. Upfront funding, whether from local, state, or federal sources, for planning, design, and ongoing maintenance and operation delivers BRT systems that see higher use, offer greater access, and increase cost-effectiveness. The lesson is clear for operators from Guangzhou to Pittsburgh: maximize your available funding before embarking on your BRT project to drive success.

BRT Operates Best As Part Of Your Transit Suite

BRT is a premium transit service that delivers reliability, speed, and safety. However, BRT works best as a complement to other transit services. As explained by the American Public Transportation Association (APTA), enhancing connectivity between BRT and fixed-route bus service can improve the travel experience by reducing travel times and increasing overall accessibility. Use BRT to connect with your existing system, not replace it.

Consider A TOD Approach

BRT exists to serve ridership by driving equitable and sustainable growth safely and with a minimum impact on the environment. In dense areas, these goals dovetail perfectly with Transit Oriented Development (TOD). If possible for your system, consider adopting the TOD principles outlined by the Federal Transit Administration. Adopting these principles



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can increase available funding, provide a design baseline, and at the same time promote the high-density, transit-oriented lifestyle BRT is ideally suited to support.

Find The Right Delivery Partners— And The Right Delivery Method

No matter the demand for BRT in your community, choosing the right design team, contractor, and project manager can make the difference between a successful project and ongoing delays and disappointments. Just as important, selecting the right delivery method for your BRT can either speed design and construction or create unanticipated obstacles. For example, does your agency have the capacity and comfort to use the design-build or other alternative delivery methods? Or would you prefer the known risks of design-bid-build? An experienced project management partner—one who knows your agency, your community, and the goals of your system—is key to pulling in on time and within budget.

An example of a BRT project that's off to a strong start is Pittsburgh Regional Transit's PRTX: The University Line. Representing PRT's first BRT project in more than 20 years, the University Line will implement a fast, comfortable, and cost-effective bus-based transit system via dedicated lanes and frequent operations, providing a vital east-west connection between downtown Pittsburgh, Uptown, and Oakland, with service improvements extending to the city's dense East End neighborhoods.

Embodying several of the best practices noted above, the University Line is partially funded by federal funds through Capital Investment Grants, the American Rescue Plan Act, and the Congestion Mitigation and Air Quality Improvement Act, and connects with the wider PRT system and utilizes the CM-Multiple Primes delivery method. Although in its early stage, the University Line was nearly a decade in planning, and continues to enjoy strong public support.

There are many other successful BRT projects either underway or recently completed in the U.S., along with numerous information-sharing organizations such as APTA and ITDP, and funding from multiple sources available to make your BRT project a success. I encourage you to connect today with partners who can help to find the solutions that will make your BRT system all it can be.

Hill International, Inc. Vice President Therese E. Shearer, PE, has more than 35 years of experience in project and construction management, contract administration, civil engineering, and construction inspections. Her projects include transit systems, tunnels, roads and highways, and parking facilities. As Project Manager and Resident Engineer, Therese has contributed to notable projects for Pittsburgh Regional Transit (PRT), formerly known as Port Authority of Allegheny County (PAAC). She has also participated in several award-winning transit system projects. She is currently supporting the University Line BRT project in Pittsburgh, PA.

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