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New Jersey Association of Railroad Passengers
P.O. Box 68 Chatham, NJ 07928-0068 www.nj-arp.org

Bus Rapid Transit - Not for New Jersey

The **New Jersey Association of Railroad Passengers (NJ-ARP)** has consistently questioned the construction of Bus Rapid Transit (BRT) systems within the state and continues to do so. Study after study has now clearly confirmed what NJ-ARP repeatedly has reported for more than a decade - busways do not attract large ridership, cost more to construct and operate and, where they do operate, have not produced the financial results their promoters have promised. It's a lose-lose-lose situation. New Jersey does not need to replicate the failures of other cities and regions.

BRT Fails to Attract Riders

Statistics show that busways attract only 33 percent of projected ridership, but rail lines exceed initial estimates by 22 percent. Notwithstanding, the Federal Transit Administration (FTA), in concert with the highway and motor bus industry, has continued to advocate for BRT. In order to justify continued expansion of BRT, supporters have used rail planning models to predict bus patronage. Even though busway supporters have sponsored trips to places such as Curitiba, Brazil, to view what in their minds is a successful application of BRT technology, nowhere in North America has this mode of public transport attracted such rail passenger boardings.

BRT Costs More to Build

BRT systems also cost more to construct than many light rail lines, but less than subways or totally aerial lines unless the busways are also in subway or on aerial structures. In those circumstances, they will cost more than LRT facilities. The new 14-mile Orange Line BRT north of Los Angeles cost $350 million or $25 million a mile. The line is neither equipped with block signals to prevent rear end collisions nor crossing gates. At the same time, new light rail lines in Denver, Portland, Salt Lake City and St. Louis, with signals and crossing gates, were constructed at an average cost of $23 million a mile. New busways in Boston, Ottawa and Pittsburgh cost more than $50 million a mile. When one considers that light rail cars have a 40-year life compared with 15 years for buses, LRT is much less costly as well as more attractive and safer.

BRT is Not as Productive as Light Rail Transit

A study by the General Accounting Office (GAO) revealed that light rail vehicle was 15.5 percent less costly to operate than bus, all other factors being equal. Low floor light rail cars have a larger capacity than low floor buses of comparable length. The average capacity of a 40-foot low floor bus is only 37 seated passengers due to space that is taken up by the wheel wells which intrude on interior space that otherwise could be used for fare paying riders.

While an articulated two-section low floor bus contains more seats, it will still have less capacity than a low floor light rail car. Unlike BRT, a light rail line can increase line capacity by adding more cars to a train, resulting in an increase in operator productivity. The only way to increase the capacity of BRT is to add more buses, each of which will require another driver resulting in higher operating costs.

BRT a Failure - Four Cities' Experience

Detroit was one of the first cities to adopt BRT was Detroit. Until the mid-1950s, Detroit had a fleet of modern PCC streetcars which operated swiftly on busy trunk lines on wide avenues leading from downtown to the suburbs. The streetcars were abandoned and plans were announced for a 60-mile-an-hour BRT replacement system to be placed on the John Lodge and Edsel Ford freeways. Bus stops were incorporated in the freeways with pull-off lanes, but vehicular congestion became so intense during the rush hours traffic that bus drivers were instructed to avoid the freeways in favor of the less-congested local streets. Since then, all express bus service in Detroit has been discontinued and that city now has the lowest transit ridership per capita and the highest cost per passenger mile of any major American transit system. A similar BRT service was provided in St. Louis; however, ridership declined over the years and it too was eventually discontinued.

Pittsburgh announced plans in 1963 for the construction of a busway to the eastern suburbs. Projected initially to carry 80,000 weekday passengers, the latest figures show that it is only attracting 28,000 weekday riders. Total bus ridership on the Pittsburgh transit system declined by 26 percent despite the construction of busways. When the light rail line serving the South Hills area of Pittsburgh was shut down for reconstruction, extra bus service was provided on the nearby South Busway. The 8,000 weekday LRT passengers declined significantly to a mere 1,500 on the busway. The South Busway anticipated 32,000 weekday passengers, but it never achieved those lofty figures. During the second energy crisis of 1980, it attracted as many as 20,000, but that fell 25 percent to 14,500, which is less than the number of bus riders that was carried in the corridor before the busway was built. The newest BRT line in Pittsburgh is the West busway. Initial cost estimates were $325 million, but when a $515 million bid was received, a shorter busway was constructed. Originally planned to carry 50,000 weekday passengers, only 7,500 daily riders are using the new line.

Los Angeles constructed a $500-million BRT system along the Harbor Freeway between San Pedro and downtown Los Angeles. Before it was built, the California Department of Transportation (CDOT) predicted that it would carry as many as 74,000 daily passengers; however, eight years after the line opened, ridership stands at just 3,000 passengers a day. The eight stations on the line are largely deserted and have become havens for vagrants. The station at Carson Boulevard serves an average of 20 people a day. Competition from the nearby LRT Blue Line route is believed to be a factor in the low Harbor Freeway busway ridership. That rail service carries more than 70,000 riders each day. Surveys revealed that many of them would rather be on a smooth running train than a freeway bus.

Ottawa constructed a large network of busways for the Canadian capital. As the system expanded, the ridership actually declined. This was reversed when diesel light rail cars (DLRT) began operating on a rail line that feeds the busway. The success of the diesel rail service convinced the City Council to approve the construction of a 59-mile electric light rail system. The new light rail service is expected to provide a higher quality service than the busway, relieve the downtown congestion caused by hundreds of buses from the BRT clogging the streets, and provide for expected population growth.

BRT Safety Inferior to Light Rail Transit

The safety record of light rail transit is far superior to busways. Pittsburgh's three busways have no grade crossings. Nevertheless, at least seven people have been killed on them. One was a bus driver who did not slow down quickly enough in the snow. Another accident killed four people including another driver when two buses collided head on. A busway in Miami, Fla., has grade crossings like a rail line and has had so many accidents at these crossings that buses are now forced to slow down as they approach each vehicular crossing. Consequently, in November 2002, voters approved the replacement of these buses with an LRT system. A new busway in suburbs north of Hollywood, Calif., also has many grade crossings which have produced so many accidents that speed restrictions have been imposed on the buses using the BRT line. The downside is that the slower speeds reduce the attractiveness of the line to passengers.

BRT is Affected by Adverse Weather

Buses also do not perform as well as rail cars in inclement weather. Boston has had to remove the articulated buses on its Silver Line BRT because they fishtail dangerously in the snow. In the most recent snowstorm in February 2006, NJ Transit shut down its entire intrastate and interstate bus system, but the light rail lines in Newark and Jersey City continued to operate. As already mentioned, snow was the major factor in a fatal BRT crash in Pittsburgh.

Summary

In summary, a Bus Rapid Transit system does not provide any positive benefits over Light Rail Transit because:

- Buses are slower.
- Buses carry fewer passengers.
- BRT systems fail to meet ridership projections.
- Busway capacity expansion can only be provided by additional vehicles with additional drivers.
- Bus-only roadways are usually more expensive to build than rail rights-of-way.
- Buses on reserved roadways have inferior safety records to rail lines on rights-of-way.
- Buses are not dependable in snow.

Conclusion - BRT is Not Suitable for New Jersey

While the initial perception remains that Bus Rapid Transit systems are attractive for use between densely populated urban and less densely inhabited suburban areas; evidence collected has proved conclusively that claims for its effectiveness have been greatly overestimated. The admitted ability of independently guided buses to collect and distribute passengers from suburban and rural areas has been largely offset by the preference of the riders for fixed rail transit systems. Again and again, passengers have voted with their feet, and when they have, Light Rail Transit has been their overwhelming choice - not Bus Rapid Transit.

Here in our state, whether it is the electrically powered Hudson Bergen light rail line, the

Newark City Subway, or the unique Diesel Light Rail River Line, New Jerseyans have voted for their candidate - Light Rail Transit!

These files were created by Bob Scheurle.