

Take the Bus



It's Rapid Transit

By Judy Newman

In more and more of the nation's urban areas, riding the bus no longer requires meandering from one end of a city to the other, stopping to pick up passengers every couple of blocks and fighting heavy rush hour traffic.

From Puyallup, Wash. to Chicago to Bergen County, N.J., communities around the country are floating plans to include Bus Rapid Transit in their transportation systems.

Supporters say it's a quick, efficient way to get people where they're going and costs less than any sort of rail line.

"My guess would be that every medium- to large-size city in the United States is considering Bus Rapid Transit," said Dennis Hinebaugh, director of the National Bus Rapid Transit Institute in Tampa, Fla.

Opponents say Bus Rapid Transit doesn't measure up to light rail when it comes to long-term labor costs, fuel use or economic development. "You can't make a bus into a train and that's what's been promoted," said Dave Dobbs, publisher of LightRailNow.org, based in Austin, Texas.

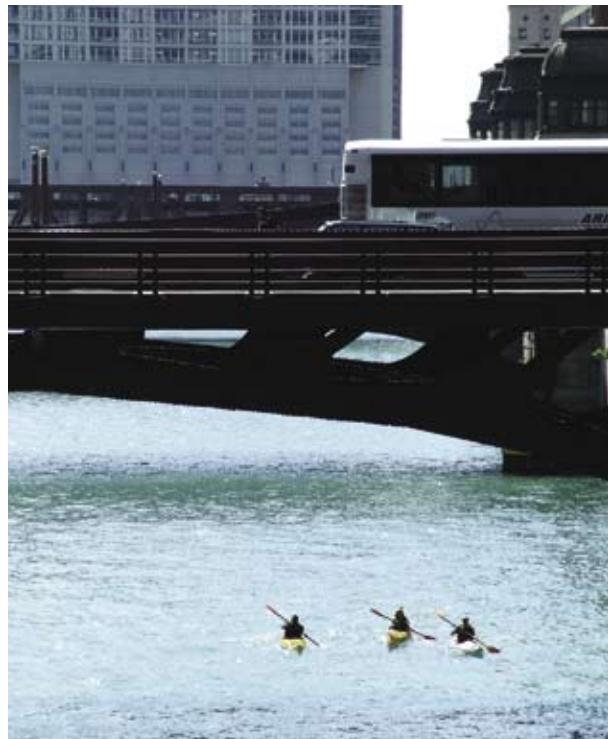
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Strictly defined, Bus Rapid Transit, or BRT, has seven characteristics, said Hinebaugh, also of the University of South Florida's Center for Urban Transportation Research:

- Dedicated lanes on streets or highways
- Stations that go beyond bus shelters, with benches, lighting, ticket vending machines and information on arrival time for the next buses
- Specialized, articulated buses that carry more passengers than regular buses
- Improved fare collection systems
- Advanced technology that allows a BRT vehicle to change upcoming traffic signals and to provide real-time travel information to passengers



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- Improved service such as faster trips and better reliability
- Branding and marketing, including special signs, distinctive logos and colors for the buses and stations

Most of the 25 metropolitan areas across the United States with Bus Rapid Transit don't incorporate all seven features. Cities as varied in size as Los Angeles; Hartford, Conn.; Charlotte, N.C.; and Eugene, Ore., operate BRT programs and each conforms to the needs of the area.

Some systems are doing little more than calling a bus route BRT, while others meet several qualifications, such as running on a dedicated lane during peak traffic times and being able to affect traffic signals.

An elaborate BRT system can cost \$300 million to \$400 million. But even small changes that might cost as little as \$1 to \$2 million, such as upgrading bus shelters and running a bus that stops at every other stop, can make a difference, Hinebaugh said. "Take the best route on your system and make it more rapid," he said.

Dobbs, though, said that's one of the problems he has with Bus Rapid Transit. "Nobody knows what it is. It's mostly a public relations term," he said.



Courtesy of DART



In the past five to 10 years, communities around the United States have engaged in earnest discussions to adopt BRT systems.



Defining a BRT

Early versions of Bus Rapid Transit date back several decades, but only in the past five to 10 years have communities around the United States engaged in earnest discussions to adopt that type of system, Hinebaugh said, and most have been implemented just in the past three years.

One model of a BRT system is the TransMilenio in Bogotá, Colombia, launched in late 2000. According to a World Bank report, by early 2004, TransMilenio was running as many as 280 buses an hour in each direction and providing up to 900,000 passenger trips on an average weekday, or about 16 percent of the public transportation trips. At the same time, by 2002, air pollution on TransMilenio corridors decreased 40 percent in the system's first year of operation, according to TransMilenio.

In the United States, Cleveland's Euclid Corridor Transportation Project is the newest full-scale BRT. Launched in fall 2008, the BRT, called the HealthLine System, uses 63-foot, hybrid diesel-electric, articulated buses that can hold as many as 111 passengers (seated and standing) and have two interior bicycle racks. The seven-mile route, through one of Cleveland's oldest areas, uses special median bus lanes and is being adorned with \$1.2 million worth of public art.

Cleveland's Euclid Corridor Transportation project.

Photos by Lorie A. Beabes





The Emerald Express in Eugene, Ore.

It's so new (that) I think people will have to grow into it and learn that it (BRT) is there, it's easy and it's accessible.

"It's so new [that] I think people will have to grow into it and learn that it's there, it's easy and it's accessible," said Dianna Hosta-Stickney, chairwoman of the Cleveland Area Board of REALTORS®.

The corridor links downtown Cleveland to major hospitals and Case Western Reserve University, all of which are big area employment centers, as well as to cultural attractions. "I think it's going to be remarkable," Hosta-Stickney said.

Since the HealthLine System began running last October, ridership is up nearly 40 percent, said project officer Danielle Willis.

A Burgeoning Success

It didn't take long for people in the Eugene and Springfield, Ore., areas to take to their Bus Rapid Transit system. The Emerald Express, or EmX, debuted in January 2007 — after 12 years of community discussion and planning — replacing what had been a regular bus line.



Before the EmX, the route drew 2,700 boardings per day; now, it averages 6,000 boardings a day, said Andy Vobora, director of service planning, accessibility and marketing for the Lane Transit District, which runs the service.

"Our projection was a 40 percent increase in ridership over a 20-year period. So we're pleased with that," he said. So far, the service has been free, but fares will begin this summer.

The EmX's four-mile route connects downtown Eugene with downtown Springfield and uses the same type of elongated buses that Cleveland's system has adopted. It also has median bus lanes separated from traffic, median transit stations and signal priority.

"We tried to create, probably, the most extensive BRT system around, in terms of amenities. We were trying to emulate light rail," Vobora said.

EmX stations are one-third to one-half a mile apart, which means there are fewer stops than with a regular bus. "People have to walk a little farther," he said, which may be more difficult for older or disabled passengers, but few have voiced any concerns, Vobora added.

One benefit is faster travel time. The regular bus traversed the route in 22 minutes while the EmX takes 16 minutes or less. Skeptics may ask if it was worth spending \$24 million to create the four-mile EmX stretch just to save six minutes, Vobora said. His reply: "Even that is pretty significant in terms of operational cost savings." Fewer buses are needed to provide the same service, he

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said. And the real impact will be felt when a 7.5-mile, \$41 million extension opens in 2010.

Eugene's EmX quickly drew recognition from around the United States. The BRT system received an Honorable Mention from the 2008 Sustainable Transport Awards, sponsored by the Institute for Transportation and Development Policy in New York. Eugene was the



Courtesy of Dallas Area Rapid Transit



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only United States city nominated for the awards, whose top honors went to London and Paris.

Boston's Silver Line also has been popular with passengers. Skirting Boston's waterfront and extending to Logan Airport, the Silver Line opened in 2005 and has become the busiest of the 185 bus routes operated by the Massachusetts Bay Transportation Authority (MBTA), said Joe Pesaturo, director of communications. On a typical weekday, the Silver Line has 14,200 boardings compared to 800 to 13,000 a day on the other bus routes.

The Silver Line is just one part of a massive transit system in the Boston area that also includes light rail and subways. When planning was underway, some people thought the Silver Line should be a light rail, or trolley, system but the cost would have been substantially higher, Pesaturo said.

"And trolleys still compete with traffic," he said. "All it takes is one car, one accident and trolleys have to come to a stop." A bus can veer around a crash scene and keep going, he added.



Photo by Joe D. Pesaturo

Traffic congestion is definitely an issue in the Boston area where the streets are former cow paths and were never laid out in a grid formation like most other big cities, said Gregory Vasil, chief executive officer of the Greater Boston Real Estate Board.

"Our members were seeing ... a number of people that were looking for homes very close to public transportation nodes — commuter rail, subway or bus routes. Traffic is a nightmare, and people would rather take public transportation than drive," Vasil said.

Even in the car-loving Los Angeles area, more people are starting to turn to mass transit, whether it's BRT or rail, said Alan A. "Scotty" Herd, president of the Beverly Hills/Greater Los Angeles Association of REALTORS®.



Photo by Joe D. Pesaturo



Courtesy of DART

"As traffic slows down, people take the alternative and find that they can work on a train or a bus," Herd said.

"I don't see crowds running to catch the bus, but I know a number of people who have switched and enjoy it," he said. "I've talked to, probably in the last year, five to 10 friends who enjoy riding public transportation because they can spread out their papers on the seat next to them, put a laptop in their lap and get 40 minutes of work out of a one-hour ride."

BRT Vs. Light Rail

A study by the California Center for Innovative Transportation showed the Orange Line has reduced traffic congestion on United States Highway 101, which runs parallel to the BRT, by 14 percent, according to a report by the National Bus Rapid Transit Institute in the MassTransitMag.com online magazine.

Dobbs, of LightRailNow.org, said he thinks the Orange Line probably could have been converted to light rail for a relatively small cost "and would carry even more people than it does today."

Dobbs said about 50 United States cities either have light rail lines or are considering building them. He said France is building an electric-powered light rail system in every city of 100,000 or more.



Courtesy of Dallas Area Rapid Transit

More people are starting to turn to mass transit.

"Operational costs of light rail, over time, are much lower than a bus," Dobbs said. He said a study by LightRailNow.org shows energy consumption on a per-passenger-mile basis is lower with light rail than with cars or buses.

Dobbs also contends that Bus Rapid Transit does little to encourage economic development along its routes because bus routes are less permanent than rail lines and can be changed.

"A bus tends to be an afterthought. Buses are followers whereas trains and rails are leaders," he said. "A bus stop can go anywhere it wants to go tomorrow."

Bus Rapid Transit is not only affordable, you can also provide the same level of service and demand as rail.

Space constraints can also pose problems for BRT, where downtown streets in big cities may be narrow, said Aimee Gauthier, communications director for the Institute for Transportation Development Policy.

"What we want is for [communities] to implement a good quality, customer-oriented mass transit system. Most cities can't afford to pay for light rail or heavy rail. But Bus Rapid Transit is not only affordable, you can also provide the same level of service and demand as rail," Gauthier said. ●

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Courtesy of Dallas Area Rapid Transit



Photo by Joe D. Pesaturo



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