## BUS RAPID TRANSIT: A CAPITAL IDEA A VIEW OF BRT IN STATE CAPITALS — SPRING 2015



Prepared by:

Bill Thoms Affiliated Staff

UGPTI Staff Paper No. 181 July 2015

# **Disclaimer** "The contents of this report reflect the views of the author, who is responsible for the facts and accuracy of the information presented. This document is disseminated in the interest of information exchange. The Upper Great Plains Transportation Institute and North Dakota State University assume no liability for the contents or use thereof." North Dakota State University does not discriminate on the basis of age, color, disability, gender expression/identity, genetic information, marital status, national origin, public assistance status, sex, sexual orientation, status as a U.S. veteran, race or religion. Direct inquiries to the Vice President for Equity, Diversity and Global Outreach, 205 Old Main, (701) 231-7708.

### BUS RAPID TRANSIT: A CAPITAL IDEA A view of BRT in State Capitals — Spring 2015

State capitals usually have a concentration of government offices and their employees in city centers. A result is a shortage of places for commuters to park. Heavy rail transit, such as has been used in Washington, DC, Los Angeles, and Atlanta is inordinately expensive to construct and operate. Light rail has often been proposed as an alternative. Light rail, a modern adaptation of the trolley car, shares space with automotive traffic but travels on its own right of way in congested areas. That, too, is expensive to construct, but it is projected that the vehicles are comfortable enough to ride to draw people to downtown areas. (See Craghead and Kelly, "America's Streetcar Renaissance," *Trains*, Dec. 1012, p. 8).

Bus rapid transit is a way to combine the economy of a bus with the advantage of an exclusive right of way. The preeminent example of bus rapid transit on our continent is the in the Canadian capital of Ottawa. The "Transitway" is a highway reserved for bus travel, with transit stations along the way. The system originated was when the Canadian railways abandoned their downtown passenger station in favor of one located quite a distance out of town. OC Transpo, the local bus operator, took over the former railroad right of way for use as an exclusive bus highway. The Transitway has since expanded to serve the entire city, with the buses using downtown streets for shoppers or government workers, but using the busway outside the central business district. Most Ottawa buses use the Transitway for part of their journey, making rush hour much more palatable for their passengers.

There is a problem with "BRT creep," by which transit authorities try to economize by cutting back on the inherent advantages of the busway. This "creep" occurs when service is run along express lanes of a highway instead of on its own right of way, or when carpools are allowed to share the busway, or when stops rather than stations are built along the route. After enough of these compromises, the express buses are no faster than ordinary traffic.

#### DENVER, COLORADO

In June 2014, the Beaux Arts Denver Union Station (DUS) reopened for commerce. It is now the center of redevelopment for the Lower Downtown (LODO) area and includes a hotel, cafe and stores. Amtrak moved back that month, after stopping out in the rail yards for a few years. Denver and St. Paul now share the honors of being the largest passenger stations serving only one Amtrak train in each direction. The rails and platforms also serve Denver's light rail routes and an electrified commuter line, using heavy rail equipment, is under construction to link DUS with the Denver International Airport.

The re-opening of DUS included the opening of a new underground bus terminal, serving most of the downtown bus lines in the Mile High City as well as intercity bus routes operated in connection with Amtrak trains. These are called "Amtrak Thruway." Most

intercity bus routes, however, depart from Greyhound's terminal a few blocks away. (See Johnston and Thoms, "When the Big Station is Empty," *Trains*, September 2012, p. 6.)

Denver plans one Bus Rapid Transit line, scheduled to open in 2016. Called "The Flatiron Flyer," the express buses will leave DUS for the university town of Boulder. Not an exclusive right of way, the Flyers will use express lanes on U.S. 36 with bus exit lanes and also use of the shoulders for picking up passengers. It is envisioned that high occupancy vehicles may also use these express lanes.

#### ST. PAUL, MINNESOTA

At the same time that Denver re-opened its Union Station, the St. Paul Union Depot (SPUD) opened its doors to the traveling public for the first time since Amtrak bypassed the Minnesota capital in favor of Minneapolis in 1971. This time, it was Minneapolis that was spurned. St. Paul is the only stop in the Twin Cities, and sees only one train a day in each direction, a far cry from the glory days of railroading. A light rail line connects the two cities and opened in June 2014.

The redevelopment of downtown St. Paul also meant that the abandoned tracks were paved over and the near platforms are now used for intercity and local buses.

Amtrak, Greyhound and Megabus passengers now arrive at SPUD and may transfer to the Metro Transit's Green Line light rail in front of the depot's main entrance. (For the thirsty, there is always Kelly's Depot Grill across the street.) The Green Line takes the traveler to Target Field, where the passenger going further can transfer to the diesel-powered Northstar train to Big Lake (one of the most unimpressive terminals in the American passenger network). From Big Lake the Northstar Link bus takes you to downtown St. Cloud and its university. There are connections, but the many changes of vehicle are enough to dissuade the traveler seeking a one-seat ride throughout the metropolitan area.

Bus Rapid Transit exists elsewhere in the Twin Cities on the Orange Line in the express lanes of I-35W.

#### **BOSTON, MASSACHUSETTS**

Bostonians modestly call their city the Hub of the Universe. With its 18th-century traffic pattern, it is not an easy hub to navigate. Boston maintains two railroad stations, elegantly called North Station and South Station. Until 2013, Amtrak only used South Station, but now runs trains to Maine out of North Station as well. The Maine-bound "Downeasters" are slower than the bus, and the change of stations through downtown Boston traffic dissuades through-travelling Amtrak passengers, who find it more convenient to take the bus to New Hampshire and Vermont.

Not that convenient, however. A multi-level superstructure built over the South Station trainshed is confusing to all but the most assiduous passenger. There is a confusing complex of ramps, stairs, escalators, elevators and flashing signs. Finding your bus

upstairs is not an easy task for one emerging from a ground level Amtrak or commuter train or from a subterranean MBTA subway.

The Massachusetts capital city's one venture to date in bus rapid transit is the newly-opened "Silver Line." It connects South Station with Logan International Airport, operating partly on the surface and party in a subway. Because of problems with underground fumes, Silver Line buses have dual power: overhead lines in the subway and its approaches and diesel on the surface. Boston has experience with trackless trolleys in its Cambridge lines and is one of five cities using trolley buses in city transit. The others are Philadelphia, Dayton, San Francisco and Seattle.

#### HARTFORD, CONNECTICUT

The smallest of the four capitals surveyed also has the purest approach to bus rapid transit. The CTFastrak is an exclusive busway connecting Hartford with the neighboring cities of West Hartford, Newington, and New Britain. It is also the only U.S. bus rapid transit converted from a Class I railroad passenger line.

Union Station in Hartford was originally a four track elevated station operated by the New York, New Haven & Hartford Railroad. Two tracks were devoted to the main line between New Haven and Springfield, MA, with the other two reserved for passenger trains between Waterbury and Hartford, which originally was part of an inland route to Boston. The four tracks continued to Newington Junction, where the Waterbury tracks headed west to New Britain. The Waterbury line was abandoned by 1990, while the New Haven main was reduced to single track by Amtrak.

The Connecticut Department of Transportation decided to pave over the Waterbury line as far as New Britain, 9.6 miles, for use as an exclusive busway. It parallels Amtrak, which plans to double-track its existing line as far as Newington. The CTFastrak runs to a terminal in downtown New Britain and has eleven station stops along the way. Fastrak runs articulated buses with off-coach fare collection. Connecticut DOT employs fare inspectors to board the buses en route and fine freeloaders up to \$75.

The Fastrak runs well and frequently. The only departure from the Bus Rapid Transit model is its operation in downtown Hartford, where it leaves the rapid runway and gets involved with the traffic lights and intersections up from Union Station through city streets to the Old State House, the former hub of transportation in Hartford's prewar streetcar days. Other than this departure, the Nutmeg State is a diamond for passengers seeking relief from commuter traffic. In addition, intercity buses run express between Hartford and New Britain on the busway and then continue to Bristol and Waterbury on the highways, establishing a level of service that was last produced by the New Haven Railroad a half century ago.

Bill Thoms has been interested in transportation since his formative years as a crew caller for the now-defunct New York, New Haven & Hartford RR while attending law school. He has written and lectured extensively in the field of transportation law, with a particular interest in railroad issues.