8-2014

Commuter Rail

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Repository Citation

Brock, Timothy J. and Souleyrette, Reginald R., "Commuter Rail" (2014). *Civil Engineering Faculty Publications*. 2.  
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Commuter Rail

Planners view commuter rail as a means of managing urban sprawl, stimulating economic development, and reducing the environmental impacts of transportation. Commuter rail systems, which use shared rights-of-way to connect suburban hubs with downtown urban centers, have a large impact on the way people and freight move through many of the larger urbanized areas in the United States. Currently, there are 24 commuter rail systems operating in 29 major U.S. metropolitan areas.

Commuter rail, sometimes called regional rail or suburban rail, is uniquely situated between standard passenger rail and intra-urban rail transit. Commuter rail systems operate frequent and regular services that are scheduled around traditional peak commuting hours. These services are designed to move commuters within the greater metropolitan area and establish a connection between suburban communities and the city center, although a few systems connect adjacent metro areas (such as Dallas-Ft. Worth or Washington, D.C.-Baltimore). Commuter rail systems operate on shared track infrastructure with freight rail carriers and Amtrak passenger rail. These shared corridors usually range between 30 and 200 miles of track, although the very largest systems in the country have up to several hundred miles of track.

Commuter rail systems can be classified using a "legacy" or "new start" dichotomy. There are nine legacy rail systems and 17 new start systems operating in the United States. Legacy systems were previously operated as private commuter rail services but were acquired by public transit agencies after World War II. New start systems are more recently developed commuter rail services established by public transit agencies after 1980.

New start commuter rail systems have been established by public transit agencies using startup funding from Federal Transit Administration (FTA) grants designed for establishing new fixed guideway transit systems—including commuter rail. While municipal transit authorities acquired legacy systems as a turnkey operation, complete with right-of-way and rolling stock, new start systems have had to negotiate the terms of establishing new shared corridors with freight rail carriers that own the track infrastructure. Some new start commuter rail systems subcontract the day-to-day operations to private companies, such as Herzog Transit Services or Veolia Transportation, but these systems are still under the governance of local public transit agencies.

Based on an urban area's existing infrastructure and previous commuter services, there are three scenarios for establishing new start systems. The
most common scenario is commuter rail being established from the ground up in areas that have recently begun to rapidly urbanize. These systems are designed and built in cities with no previous history of commuter rail service.

The second scenario is the re-establishment of long-dormant commuter lines that were not acquired by public transit agencies after their discontinuance. Some large urban centers had commuter services operating prior to 1950 but whose services were abandoned for several decades before the creation of the current commuter rail service.

The third scenario is the modification of existing passenger rail service to provide commuter rail services. These new start systems expand the capacity of existing Amtrak passenger rail services, allowing a set of commuter express trains to run hourly during peak commuting hours.

Regardless of the start-up scenario, the biggest challenge in planning a new start commuter rail system is the acquisition of a rail corridor from the private freight carrier that owns the track infrastructure. There are three strategies of corridor right-of-way acquisition: (1) purchasing the track infrastructure outright, (2) purchasing an easement along the freight carrier corridor, or (3) leasing a specific number of daily commuter trips on the corridor. While the initial investment is greater, purchasing track infrastructure allows public transit agencies to control the dispatching of commuter and freight trains. This allows commuter rail systems to better control scheduling and ensure higher on-time rates.

Recent increases in commuter rail trips indicate that commuter rail service will continue to grow nationally as more new start commuter rail systems are being established in cities and as ridership grows on legacy systems. Between 1997 and 2007, commuter rail added 100 million additional riders—a 28 percent increase in national ridership. This is the first sustained increase in rail ridership since 1945. Long-term rail ridership had been in a state of decline since World War II, as personal automobile ownership became more commonplace.

In 1962, President John F. Kennedy delivered a special message to Congress calling for planning efforts and capital assistance for U.S. urban mass transit. Departing from the interstate highway-focused planning convention of the time, the Kennedy administration also asked Congress to conduct a comprehensive study of U.S. intercity transit policy and rights-of-way to facilitate the creation of a national multimodal transit system. This resulted in an effort to address the problem of deteriorating commuter rail service by establishing the Urban Mass Transit Administration (UMTA). As a predecessor to the Federal Transit Administration, the UMTA began providing capital grants for metropolitan areas with a comprehensive transit plan.

The Rail Passenger Service Act of 1970 enabled the federal government to relieve freight rail lines of their common carriage responsibilities, allowing these companies to end their intercity passenger services. When these passenger rail carriers relinquished their passenger services to Amtrak, many commuter rail services were discontinued. Conrail began privately operating some of these

Drivers and bicycle riders wait for a Massachusetts Bay Transportation Authority Commuter Rail train to pass in Concord, Massachusetts, in 2010. Between 1997 and 2007, U.S. national commuter rail ridership increased 28 percent.
commuter systems until the early 1980s, when the company was on the verge of bankruptcy. As part of the Northeast Rail Service Act of 1981 (NERSA), Conrail was released from its commuter rail carrier obligations, which allowed the five Conrail regional commuter rail systems to be purchased by state and municipal public transit agencies in 1983 and 1984.

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See Also: Commuter Rail Systems; Consolidated Rail Corporation; Federal Transit Administration; Rail Corridor Congestion; Rail Transit Planning, U.S.

Further Readings