

RETURN

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OF THE 7:55

Rebirth of the Commuter Train

Next time you fly over a city, look below and take note of the railroad lines radiating from the center like spokes of a wheel. You are looking at the setting for the newest answer to some of our urban transportation problems: the commuter train. After years of decline and deterioration, the commuter train is making a comeback in many cities.

Typically, a commuter train is a heavy railroad diesel locomotive pulling or pushing a series of high-capacity commuter coaches on standard railroad tracks. It is not monorail, maglev, or high tech, nor is it light rail. The cars may be of a traditional single-level design, or one of several different multilevel configurations. The doors may be placed at the ends, centers, or quarter points of the cars. Passengers are offered comfortable seats, interior lighting and high-quality heating and air conditioning, and modern public address systems. The new commuter cars are designed to attract, not "haul," passengers, thereby inviting travelers to leave their automobiles in the parking lot and take the train to town.

Some new commuter trains share tracks used by long-distance passenger and freight trains. The freight service may range from a few cars to long heavy-tonnage through freight trains.

How and why did this commuter train revival come about?

Lines to Center of City

Look again at those spokes leading to the center of the city. Not as wide as a six-lane Interstate highway, they have great capacity to move people to and from the city center if used creatively. Planners and engineers

have eyed these routes for years, but not for commuter trains.

In a few cases, portions of the right-of-way have been used to construct rapid transit lines. More recently some light-rail systems have combined the use of existing

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railroad right-of-way with streets. However, the commuter train was considered by many experts to be kept confined to the existing systems in a few major older cities.

Decline of Commuter Service

As the American public fell in love with the automobile, large sums were spent on highway expansion. Commuter rail service declined along with other public transit. Railroad management, realizing how great a financial drain the commuter lines were to their systems, sought to reduce or eliminate this expense, encouraging passengers to desert the trains. As the years went by, first a few trains were discontinued, then a few more. Fares were raised and passenger volume declined. Finally whole lines disappeared.

Despite this trend, public officials slowly realized that transportation included transit as well as highways and that commuter trains could again be part of the solution to passenger transport needs.

While the reduction of commuter rail systems in the United States was under way, Canada was trying a different ap-

proach. A commuter service called GO Transit was started that serviced stations east and west of Toronto along the shore of Lake Ontario that had never before seen a commuter train. The new trains operated over existing railroad tracks along with passenger and freight trains.

As new equipment was purchased and reconstruction of the commuter rail infrastructure was slowly achieved in major U.S. cities, GO Transit increased its service in Canada and added bus service. Today almost all downtown radial corridors leading to Toronto have some commuter service.

The situation in the United States was complicated by the fact that until relatively recently, each of the lines leading to the central business district (CBD) of U.S. cities was owned by a different railroad. Each railroad competed fiercely with the others for a portion of the business.

Problems Become Opportunities

Many of the causes for the decline of commuter train service no longer exist. In contrast to the past, when commuter service was considered to be unprofitable, many railroad companies now welcome this use of their tracks as a way to obtain needed revenue. A railroad company may now be willing to allow a local authority to run commuter trains over its tracks, or may even operate the trains.

If there is no passenger service, all maintenance expenses must be supported by freight service. However, in many cases, freight service is undertaken at night and a rush-hour passenger service using the line for only a few hours each morning and evening can be easily accommodated. Thus, heavy maintenance costs can be shared.

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Canadian GO Transit train arrives at Burlington Station at official opening of extended all-day service.

DYE/ONTARIO MINISTRY OF TRANSPORTATION

the need for fare-collection personnel on the train.

New Railroad Construction for Commuter Trains

Today new lines are being started where commuter trains never ran before. Following are some examples of this service.

Toronto, Canada

A double track railroad was opened in December 1988 from Pickering, the then eastern terminus of the GO Transit Lakeshore line, to Whitby, in Ontario. Built solely for commuter passenger service, the line is equipped with new welded rail, clean ballast, and has modern stations and parking facilities at Ajax and Whitby. In May 1992, GO Transit instituted a seven-days-a-week hourly service to three stations at the western end of the Lakeshore Line. Plans are now under way for further expansion and improvement of commuter service.

West Palm Beach to Miami, Florida

Another system, Tri-County Commuter Rail, is now serving 15 stations along the Atlantic coast from West Palm Beach to Miami in Florida. Initial operating expenses were supported by three counties and the Federal Highway Administration. FHWA was involved because of the reconstruction of I-95, which runs parallel to TriRail.

Only three years passed from the inception of the Tri-County Rail organization to the inauguration of train service. Three car trains of double-deck cars now make 20 trips a day carrying 11,000 passengers. This passenger volume has been reached despite the distance of the Miami commuter terminal from the center of the city. Parking lots had to be enlarged and arrangements made for passengers to transfer to other transit modes at both ends of the line.

Trains are dispatched from a freight railroad headquarters at the opposite end of the state by a railroad whose primary function is freight service. Adapting to the requirements of commuter service has necessitated some adjustment on the part of the railroad. Plans are under way to

extend the service to the north and to the south, which will bring it closer to the Miami Airport.

Philadelphia to Atlantic City

Potential passenger travel to the casinos led NJ Transit and Amtrak to rebuild a line that previously ran between Philadelphia and Atlantic City, New Jersey. Amtrak now operates the through long-distance service trains and NJ Transit handles local commuter service.

The commuter service stations have high-level platforms, automatic ticket vending machines and ticket validation equip-

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ment, and large parking lots. Eleven trains a day run each way every day of the week and are augmented by bus lines to help commuters complete their journeys. NJ Transit plans to extend train service directly into Philadelphia's 30th Street Station to permit connections to Amtrak trains.

East of New Haven, Connecticut

In May 1990 a new commuter service began operation from New Haven to Old Saybrook, Connecticut. This line, operated by the Connecticut Department of Transportation, should not be confused with the extensive service operated from New Haven to the Grand Central Station terminal in New York City by the New York Metropolitan Transportation Authority. At the end of the first year, service to and from Old Saybrook was accommodating 1,000 passengers a day.

Fredericksburg, Virginia, to Washington, D.C.

In April 1992, a 58-mile line was inaugurated between Fredericksburg, Virginia, and

New Systems and Practice

Many differences exist between the old and new railroad systems. In the past, stations had low-level platforms with high-platform cars and manually operated doors requiring considerable physical effort at each station on local commuter runs. On one railroad the commuter assignments were known as "hoppers," because the trainmen hopped on and off the trains, slamming doors, calling out stations, and walking through the cars collecting fares.

In today's systems, the floor height of commuter cars is the same as the station platform. Doors are controlled automatically and remotely by one person, who may also be operating the train. Announcements are made on a public address system or may be recorded. Emergency messages are handled by the train operator or delivered by radio directly from central control.

Compared with today's systems, the old fare structure, because of its complicated nature, required a larger number of people to be assigned to collect the revenue. Fare structures, which were based on those used in long-distance service, have been replaced on many commuter lines by modern wide-band fare zones. This allows not only more efficient fare collection but also coordination with transit fares in the region, resulting in dramatic increases in productivity. More recently the proof-of-payment system is used, which eliminates

Washington, D.C., one of two lines of the Virginia Railway Express. A fleet of 10 remanufactured diesel locomotives and 38 single-level push-pull coaches provide service. The trains operate over Norfolk Southern; Richmond, Fredericksburg & Potomac; and Conrail lines into the Union Station terminal in Washington, D.C.

The insurance question involving operation over Conrail tracks, which eventually required congressional action, was one of the complex issues that delayed early initiation of service.

A second route, the 25-mile line between Washington, D.C., and Manassas, Virginia, began operation in June 1992. Amtrak is operating the service for the Northern Virginia Transportation Commission and the Potomac and Rappahannock Transportation Commission.

California

In June 1992, after three years of negotiations, the Southern California Regional Rail Authority reached agreement with the Santa Fe Railway for the purchase of 340 miles of right-of-way and other properties. In October 1992, commuter service started on three lines:

- Moorpark, via the Southern Pacific Coast Line, 47 miles parallel to Simi Valley Freeway;
- Santa Clarita, via the Southern Pacific San Fernando Valley line, 35 miles parallel to the Golden State Freeway (I-5); and
- Pomona, via the former Southern Pacific track, 32 miles parallel to the San Fernando freeway (I-10).

The three initial lines run 17 locomotives and 70 double-deck cars by Metrolink, the name of the new service. Cars have seating for 148, are accessible to passengers with disabilities, and can accommodate bicycles.

In 1993 Metrolink trains will be running from Pomona to San Bernardino, a 24-mile extension parallel to I-10; Riverside via Union Pacific Railroad through San Bernardino, 57 miles parallel to the Pomona Freeway; and Oceanside, Orange County, to San Diego, 87 miles via the Santa Fe Railroad.

There are plans to further expand Metrolink service to Riverside, via Fullerton (63 miles); San Bernardino to Riverside to Irvine (59 miles); Hemet to Riverside (40 miles); and San Bernardino to Redlands (8 miles). When this expansion is complete, the Southern California Regional Rail Authority will serve passengers at 70 stations over a 400-mile network.

Cities Considering Commuter Rail

The number of cities considering commuter rail is growing. These cities include Atlanta, Georgia; Augusta, Maine; Cleveland, Ohio; Dallas, Texas; Denver, Colorado; Houston, Texas; Memphis, Tennessee; Phoenix, Arizona; and Seattle, Washington.

International Rediscovery of Railroad Lines

The rediscovery of railroad lines as a resource for urban transport is not restricted to the United States. One notable example is the launching of the S-Bahn system in Zurich, Switzerland, in 1991. The trains are powered by electric locomotives and operate over 369 kilometers of tracks shared with other passenger and freight trains. A zone fare system has been set up throughout the city region, enabling passengers to buy tickets that can be used for all forms of area transit. It has been observed that more people in the city now own monthly or annual tickets than own sets of car keys.

Cities in other countries, such as Dar es Salaam in Tanzania and Tel Aviv in Israel, have been considering the development of suburban networks using main line rail tracks. In other cities, expansion and improvement of existing systems are taking place. In Madrid, Spain, new cars on one system have electronic information displays, door controls, and a cab radio fitted for driver-only operation. In London, England, planning is under way for a large

commuter network that will include new cars, infrastructure improvements, and a £14 million expenditure to allow expansion of driver-only operation.

Overcoming Obstacles to Commuter Rail Service

The existence of a right-of-way between a rapidly growing suburban area and the CBD does not necessarily facilitate commuter rail service. Many of the same problems that confronted proponents of new railroads in the past are still present. The "not in my back yard" syndrome is one of these: people want commuter service, but not the accompanying responsibilities. Another issue is commuter terminal connections to other sections of the city, which can be accomplished by coordination with local transit services. New commuter rail service must resolve concerns common to all public transport today, such as access for people with disabilities, environmental considerations, and safety.

Obviously, there are many positive aspects to commuter rail service. Overcrowded highways filled with air-polluting automobiles encourage support for environmentally sound, technologically effective, and financially efficient transportation systems. Groups such as those advocating improved transportation for people with disabilities or interested in preserving or restoring historical landmarks are working together to improve the total system.

Importance of Public Transport to Society

The rebirth of commuter rail has resulted from the change of attitude at all levels of government concerning the importance of public transport to the well-being of society. In the United States, this realization has occurred slowly and taken years to be transformed into tangible financial support. Today the potential of the commuter train in this total transportation picture is finally being accorded deserved recognition.