

Massachusetts Bay Transit Authority Commuter Rail

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MBTA Commuter Rail

Background

MBTA Service Area

MBTA Components

Commuter Rail

Regional Planning

Sustainable





MBTA Background

1631 – Ferry service

1793 – Stagecoach

1820 – Omni bus

1856 – Horsecars

1889 – Streetcars

1912 – Elevated articulated streetcar & subaqueous tunnel

1922 – Motor bus

1936 – Trackless electric bus

1947 – MBTA created



MBTA Background

Developers & Speculators

West End Street Railway

Bay State Street Railway

Eastern Massachusetts Street
Railway

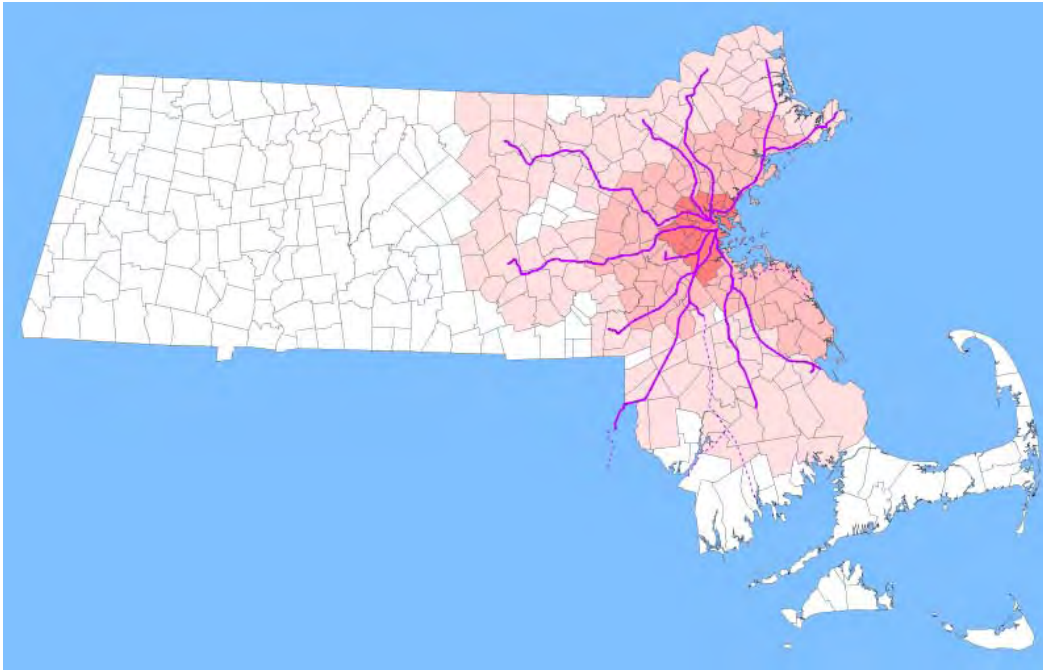
Middlesex & Boston Street
Railway

Boston Elevated Railway

Metropolitan Transit Authority

Massachusetts Bay
Transportation Authority





MBTA Today

Serves 175 towns & cities in and around Boston

3,244 square mile service area – nearly 1/3 of state

4,667,555 people in service area (2000 census)

Funding sources:

36% Fare Box

Assessment to communities

State and federal monies

Operates in deficit



T RAPID TRANSIT AND KEY BUS ROUTES



MBTA System & Collateral

- 927 diesel and CNG buses
- 32 dual mode buses
- 28 electric trolley buses
- 408 heavy rail vehicles
- 200 light rail vehicles
- 10 PCC streetcars
- 83 commuter rail locomotives
- 410 commuter rail coaches
- 298 MBTA owned vans/sedans
- 235 contractor-supplied vans/sedans

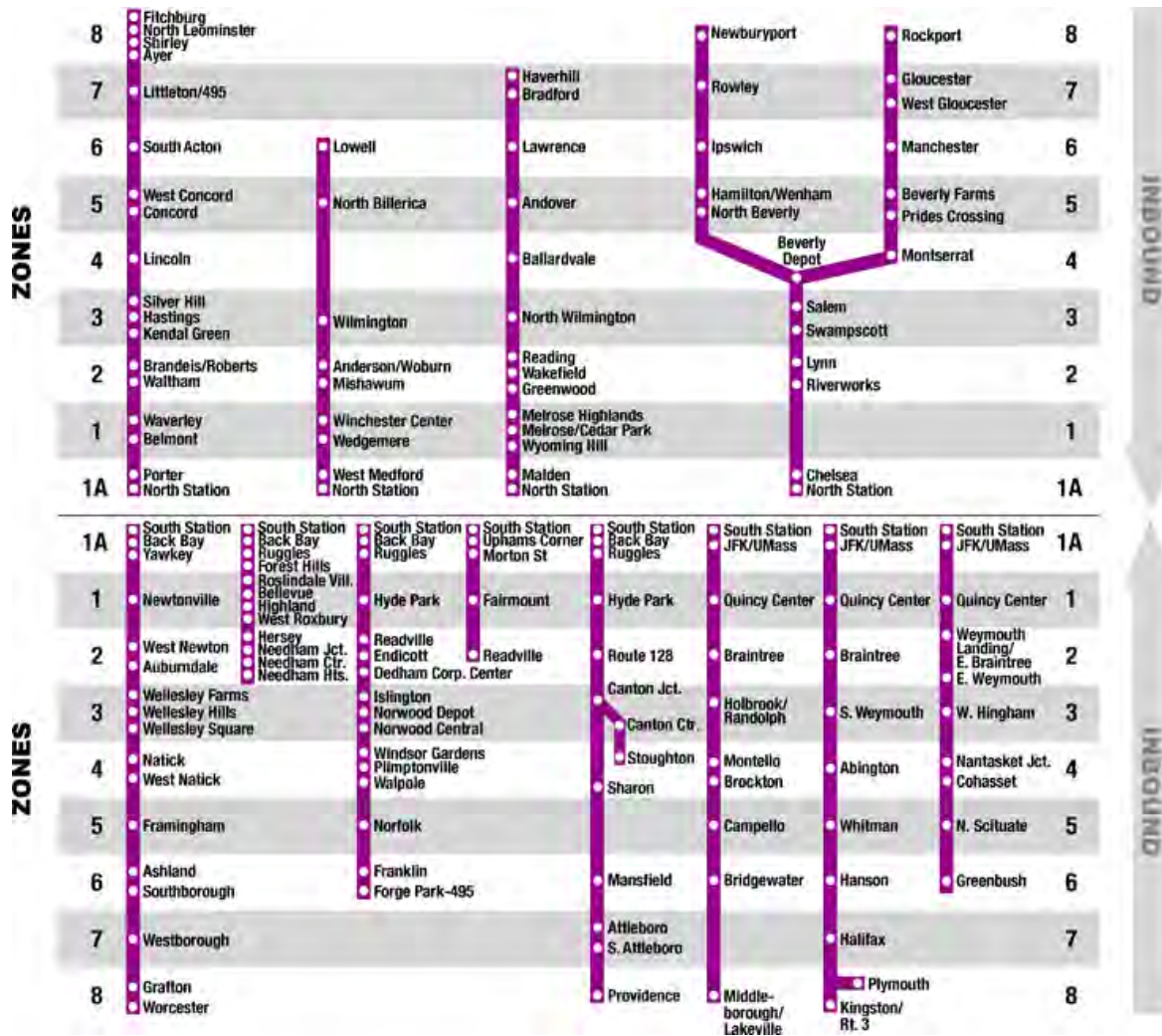
MBTA Commuter Rail

5th largest commuter line in United States

145,300 average weekday trips out of 1,235,700 total unlinked trips for the entire system (12%)

System split into two operational units with connections through local transport

8 zones for fares between \$1.70 to \$7.75



Regional Planning & Growth

Boston Region Metropolitan Planning Organization (MPO)

Program for Mass Transportation (PMT)

Capital Investment Program (CIP)

Transportation Improvement Plan (TIP)

Journey to 2030

A COMPARISON OF THE FIVE LEAST POPULATED COMMUNITIES AND THE FIVE MOST POPULATED COMMUNITIES IN THE MPO REGION

	POPULATION	HOUSEHOLDS	POP. / HH	SQUARE MILES	POP. / SQ. MI.
ESSEX	3,267	1,313	2.49	14.28	229
NAHANT	3,632	1,629	2.20	1.06	3,426
BOLTON	4,148	1,424	2.91	20.12	206
SHERBORN	4,200	1,423	2.95	16.10	260
WENHAM	4,440	1,285	2.70	8.12	547
BOSTON					
BOSTON	589,141	239,528	2.31	49.40	11,926
CAMBRIDGE	101,355	42,615	2.03	7.16	14,156
LYNN	89,050	33,511	2.62	11.45	7,777
QUINCY	88,025	38,883	2.22	16.70	5,271
NEWTON	83,829	31,201	2.51	18.19	4,609
BOSTON REGION MPO					
BOSTON REGION MPO	3,071,600	1,197,397	2.47	1,405	2,182

Source: U.S. census, 2000

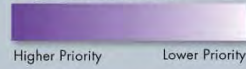
POPULATION AND EMPLOYMENT GROWTH IN THE MPO REGION

AREA	EMPLOYMENT			POPULATION		
	1970	2000	CHANGE	1970	2000	CHANGE
INSIDE ROUTE 128	830,450	1,131,900	+36%	1,852,500	1,740,600	-6%
OUTSIDE ROUTE 128	365,900	701,350	+92%	1,181,250	1,331,000	+15%
REGIONWIDE	1,196,350	1,833,250	+53%	3,013,750	3,071,600	+2%

Source: U.S. censuses, 1970 and 2000, and CTPS Employment Database

MetroFuture Growth and Preservation Areas

Targeted Growth Areas



Metropolitan Core

- Job growth built around medical and educational institutions, and other major industries
- Improved schools, safety, parks attract families and retirees
- Build on role as the "hub" of the regional transportation network

Regional Hubs

- Rebirth of industrial cities and downtowns
- Focused growth in major suburban economic centers
- Best prospects for new transit outside of Metro Core

Suburban Centers

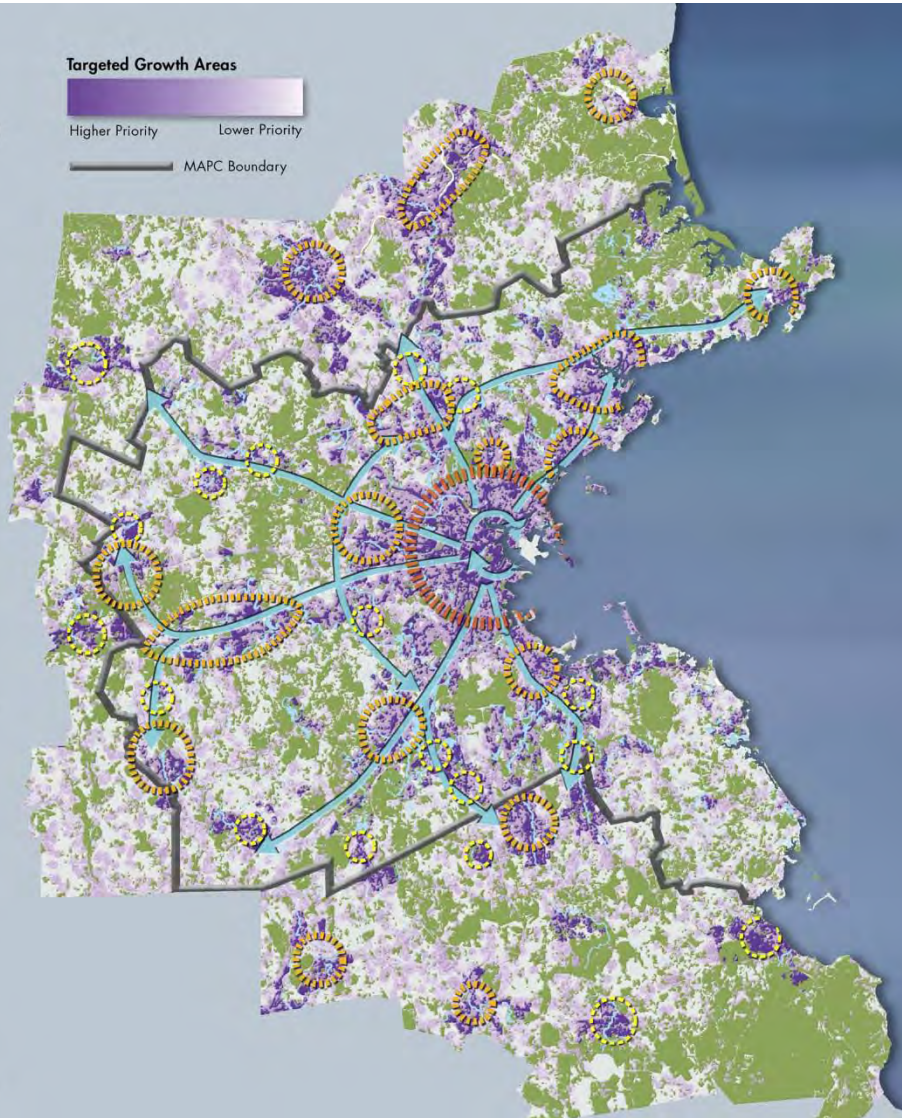
- Maximize potential of major town centers and existing transit
- Mixed-use growth expands housing choice and tax revenue
- New local bus connections and bike/pedestrian paths

Priority Conservation Areas

- Areas with significant natural, scenic, agricultural, and recreational values

Transportation Corridors

- Multi-modal investments to support growth
- New transit allows people to circulate around MetroCore, as well as "in and out."



Note: The study area for the MetroFuture project (164 cities and towns) is somewhat larger than the MAPC region to account for trends that do not recognize regional boundaries and to ensure compatibility with the Regional Transportation Plan being developed concurrently by the Boston Region Metropolitan Planning Organization.

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Journey to 2030

Metropolitan Area Planning Council (MAPC)

MetroFuture



Commuter Rail Growth Plans

Urban Ring

North-South Commuter Rail Line Link

Upgrade fleet

48 new diesel electric passenger locomotives

75 new bi-level commuter rail coaches





Sustainable

CharlieCard expansion

Bike Cages

Summer Bike Trains to
South Shore and Cape Ann
beaches

Free WiFi on Commuter
Rail Lines

Mobile MBTA.com





Resources

- ▶ American Public Transportation Association, www.apta.com.
- ▶ Boston Region Metropolitan Planning Organization, www.bostonmpo.org.
- ▶ Help Fill the MBTA's Deficit Hole, <http://ibert.org/mbta/help.php>
- ▶ Massachusetts Bay Transportation Authority, www.mbta.com.
- ▶ MetroFuture, www.metrofuture.org
- ▶ Metropolitan Area Planning Council, www.mapc.org.
- ▶ Motive Power, 9/9/2009
- ▶ North America. Railway Age, 00338826, Mar2008, Vol. 209, Issue 3
- ▶ The Urban Ring, www.theurbanring.com
- ▶ Wikipedia, North-South Rail Link, http://en.wikipedia.org/wiki/North-South_Rail_Link

