

Thumbnail History of Boston

Urban Transportation Planning MIT Course 1.252j/11.540j Fall 2016

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History of Boston Transportation and Analysis of Historical Developments



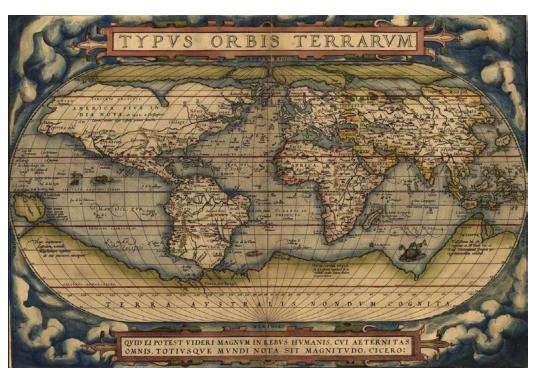


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Pre 1620

- Glaciers
- Rivers
- Codfish
- Basques
- China (1421)
- Columbus (1492)
- Spice, Food, Tobacco
- Slaves

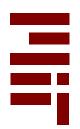


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1630

- Charles River
- Mosquitoes
- Drinking Water
- People (Religious Minority)
- The Bible



Unusual Commitment to Education

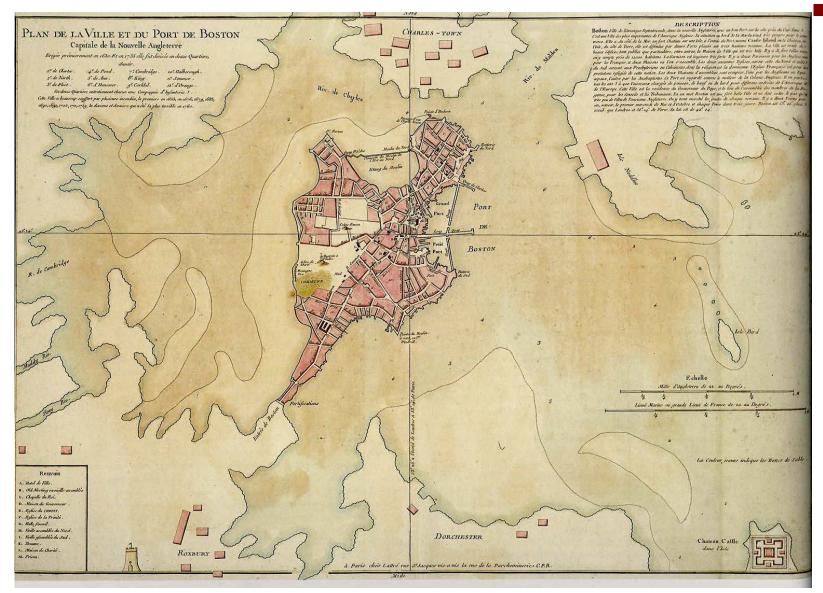
1635: Latin School

• 1636: Harvard

• 1800s: Horace Mann

• 1865: MIT

1635-1776



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1635-1776

- Trade
- Fishing
- Ship Building
- Bad Soil
- Cattle
- Smuggling
- Tax Evasion
- Relations with "Indians"
- Military Relations with England, French, & Indians



1776 --> War of 1812 --> 1830s

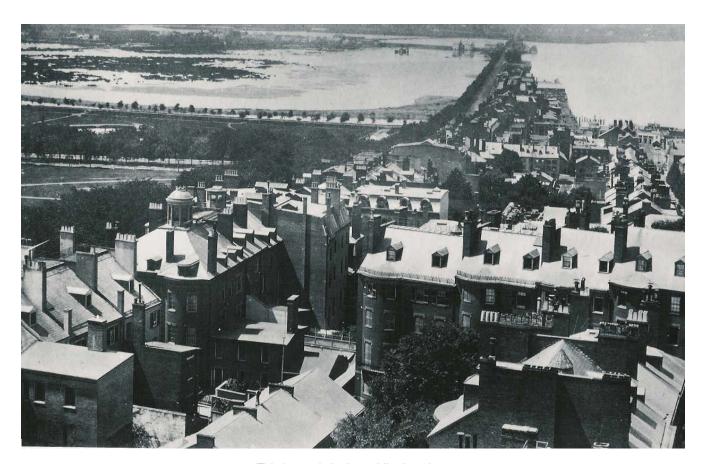
- Trade
- Ship Building
- Slave Trade
- Ice
- Clipper Ships
- Filling of Mill Pond
- Canals



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1830s - 1870

- Erie Canal, Emergence of New York Port
- Filling South End, Back Bay
- Rail
- Bicycles
- War with Mexico
- Mills, Cloth: Waltham, Lowell
- Civil War
- Commuter Rail
- Street Cars
- Immigration (1848 Potato Famine)

1830s - 1870





Immigration: In America the streets are paved in gold





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1870 - 1900

- Sprague & Siemens
- Streetcar Networking
- Electric Power
- 1894 First Auto in Hemisphere
- 1897 First Subway in Hemisphere

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FENS

- Streetcar Suburbs & Downtown
- Olmstead, Sewer, Water, Park Acquisition



1900-1945

- Completion of core subway system
- 1914 World War I
- 1920's; Model T, Auto Explosion, Zoning
- 1930's; Depression
- 1940's; World War II
- Subways and the Survival of Rail Transit

1945 - 1965 Postwar



- Oil, Autos, Highways, Suburbs
- Tobin Bridge, Storrow Drive, "Parkways"
- 1956 Interstate Highways
- 1957 Conversion of Riverside Line to LRV: Extension of Blue Line to Revere
- 1959 Southeast Expressway opens; Old Colony Rail closes
- Construction of Mass Pike, Jets come to airports, expansion of Airports

1945 - 1965 Postwar

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- 1964 Expansion of MBTA
 - Orderly process for capital and operation subsidy
 - Orange Line tunnel under river
 - Red Line extension to Quincy
 - Destruction of parts of commuter rail system. Examples:
 - North Station and South Station cut in half
 - Old colony disrupted by Red Line
 - Bedford branch
 - Woburn
 - Budd cars
- Transit and urban density
- Prudential, British properties, John Hancock
- Back Bay and Downtown

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1965-1970

- 1960s Reaction to highways
- Boston Transportation Planning Review
- Enhance the City as the Priority
 - Stop Destructive Highways
 - Promote and Improve Transit
 - Control Parking
 - Promote Environmentally Benign Highways: The Big Dig
 - Environmental constraints on Logan growth
- Economy, Equity, Environment
- Clean Air Act, National Environmental Policy Act (NEPA), EPA (1970)

1970 - present





- Post-Office Square by the Friends of Post Office Square
- Park rededicated in 1997 as the Norman B.
 Leventhal Park at Post Office Square

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1970 - present



1973 Interstate Transfer, Operating Subsidy (Federal)

1974 Reorganize MBTA

1968 - 1990 Diversification of highway construction industry

1978, 1982 Binding Arbitration Reform, management rights at MBTA

1991-present
 Revise Mass Pike, MBTA
 Continued commuter rail expansion

- » Pacheco Law
- » Silver Line
- » South Station bus terminal phase B

Where Next?



- Green Line Extension
- Silver Line missing link
- Blue Line (Blue to Red, Blue line to Lynn)
- Grand Junction Connection to North Station, OMU/EMU; West Station
- Inter city rail to Logan
- North to South Station rail
- Stuart Street
- Urban Ring
- Better bus service, transfers

Where Next?



- South Coast Rail
- Inman Route Amtrack
- Red Sox; Medical Complex; South Boston Waterfront District; Cambridge - Somerville
- Suburban sprawl
- Jack Spratt and his wife
- I-90, I-93



How to pay for it all?

- Federal context
- Local taxes
- Economic stimulus
- Austerity

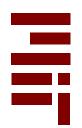


Summary

- Land use
- Accessibility
- Economic Activity
- Equity
- Environment

- Sustainability
- Evaluation of what to do
- Effectiveness
- Financing mechanisms
- Efficiency

Which is the Chicken? Which is the Egg?



- Four-step process begins with current distribution of land use
- But land use redistributes based on transportation
- EIR of land use as a policy tool with unintended consequences
- Tax code; location-efficient mortgage; university transit passes; employer requirement
- Elderly and disabled services, youth market, poverty
- Accessibility as a right:
 - Access to facilities
 - Access to Society
- Accessibility vs. mobility:
 - Individual or institutions at the center?
- "Value-capture" Henry George
 - Different rules for highways and transit

Leadership



- Sprague
- Jenney
- Volpe
- Sargent
- Kennedy
- O'Neill
- Altshuler
- Dukakis
- Kiley



19-Step Process

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