

THE RENOVATION OF BOSTON'S SOUTH STATION

1.011 - PROJECT EVALUATION

ALEX FRENCH

WILL FOWLER

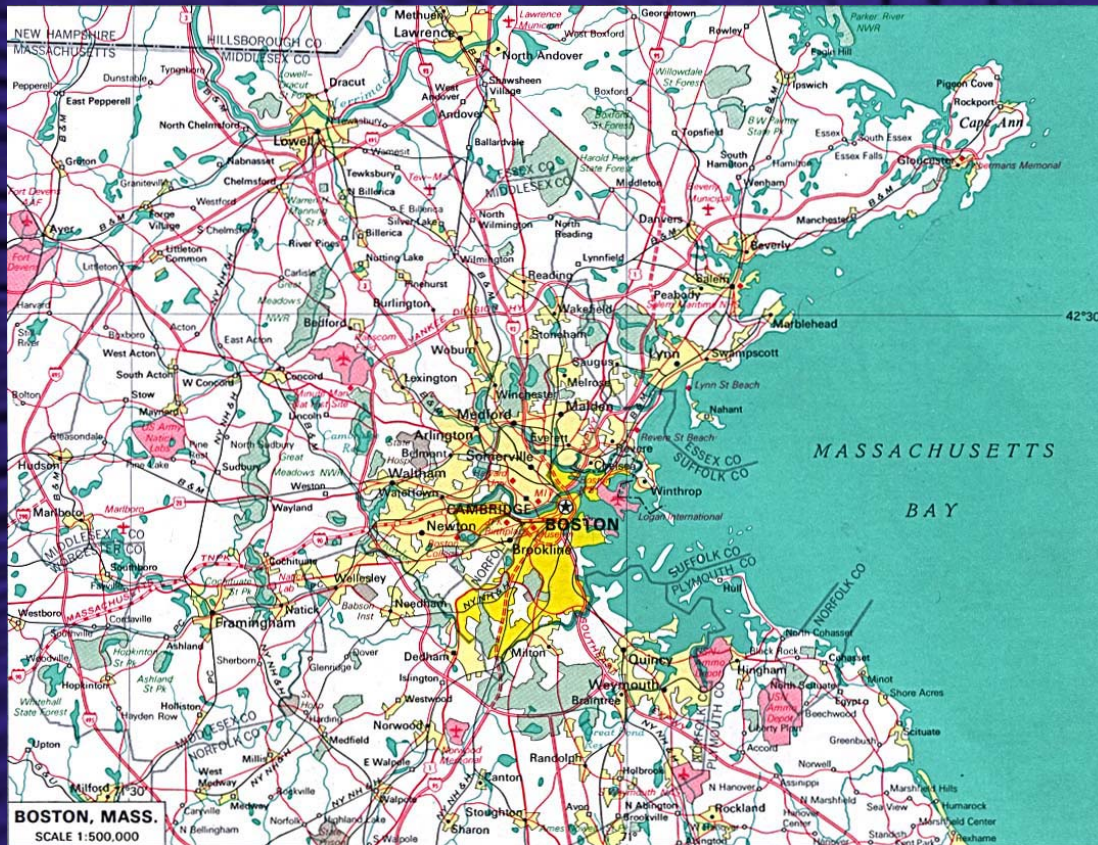
DAY 37

SOUTH STATION

WILL FOWLER

ALEX FRENCH

Located in
downtown Boston
by the Fort Point
Channel



SOUTH STATION

WILL FOWLER

ALEX FRENCH

Overview

- History of the Station
- Renovation of the Station (Costs)
- Effects of the Renovation (Benefits)
- Future Plans
- Conclusion
 - Beneficial Project

SOUTH STATION

WILL FOWLER

ALEX FRENCH

Sources

- On Site
 - Mike Brennan, Codman Real Estate
 - South Station Air Rights Project Update (Jan. 2002)
- State Transportation Library
 - MBTA Ridership and Service Statistics (1988, 1991, 2001)
 - South Station Improvement Project, Final Environmental Impact Statement (1981)
 - Boston South Station Revival (1989)
 - George Sandborne
- Boston Public Library
 - Photo Archives
- MIT
 - Prof. Fredrick Salvucci

SOUTH STATION

WILL FOWLER

ALEX FRENCH

History

- Before South Station
 - Multiple Railroad Stations
 - Need for Centralization
- Funding
 - 5 private companies purchased \$100,000 of stock each
 - \$14.5 million in public bonds at 3.5% interest
- Expenses
 - 35 acres of land: \$9 million
 - City of Boston spent \$2 million relocating roads and utilities
 - \$3.6 million to build headhouse, trainshed and support buildings

SOUTH STATION

WILL FOWLER

ALEX FRENCH

History

- 1904
 - 3,000 cars / day
 - 150 tons of mail / day
- 1920s
 - Busiest rail station in the world
 - Served 27-40 million riders / year
- World War II
 - Served 46 million riders in 1945

SOUTH STATION

WILL FOWLER

ALEX FRENCH

History

- Mid-Century Slump
 - Removal of Train Shed in 1930
 - Ridership plummeted after World War II
 - Airplanes and automobiles
- Post Office took over most of head house by 1960
- Catholic Chapel took over much remaining space
- Commuter rail service reduced
- Lunch counter and restaurant in head house closed.

SOUTH STATION

WILL FOWLER

ALEX FRENCH

History

- 1959 – Old Colony Railroad ended service
- 1961 – New Haven Railroad went bankrupt
- 1964 – Post Office took over several tracks on south side of yard
- 1965 – South Station sold to Boston Redevelopment Authority for \$6.95M
- 1970s – Demolition of southern section begun
 - Stone and Webster Building
- 1975 – Headhouse listed on National Register of Historic Places
- 1978 – MBTA bought South Station for \$10M

SOUTH STATION

WILL FOWLER

ALEX FRENCH

Condition of South Station

- Deteriorated buildings and tracks
- Outdated signals and switches
- Security problems

SOUTH STATION

WILL FOWLER

ALEX FRENCH

Six Alternative Plans

- Alternative 1 – No build
- Alternative 2 – Maintenance
- Alternative 3 – Rehabilitation of the headhouse and track area
- Alternative 4 – 3, plus addition of 500 car air-rights parking
- Alternative 5 – 3 & 4, plus air-rights bus terminal and 800 car parking
- Alternative 6 – 3, 4, & 5, plus air-rights hotel/office/light industry development and expansion of parking to 2,000 cars

SOUTH STATION

WILL FOWLER

ALEX FRENCH

Plan of Action

- Phase I
 - Renovate headhouse, update track work, add parking, add bus terminal, add foundations to support office tower
 - To be completed by 1985
- Phase II
 - Office tower
 - 12-14 stories, 400,000 square feet, \$40 million
 - Hotel tower
 - 25 stories, 100,000 square feet, \$60 million
 - Low Rise Development
 - 2 stories, 250,000 square feet, \$20 million
 - To be completed by 1990

SOUTH STATION

WILL FOWLER

ALEX FRENCH

Anticipated Benefits

- Ridership Increases
 - Amtrak:
 - 1975: 537,000 passengers / yr
 - 1990: 923,000 passengers / yr (projected)
 - Commuter Rail
 - 1975: 2,774,000 passengers / yr
 - 1990: 3,824,000 passengers / yr (projected)
- Air rights development
 - valuable real estate for offices and parking

SOUTH STATION

WILL FOWLER

ALEX FRENCH

Anticipated Benefits

- MBTA's deal:
 - MBTA purchased property
 - Equity Office Properties develops commercial space inside headhouse
 - Equity runs facility and rents space to vendors
 - MBTA and Equity split profits evenly
 - Bus terminal is similar
 - Greyhound, Peter Pan, Trailways, etc. rent space
 - MBTA splits rental profits with operating company (Codman Real Estate)

SOUTH STATION

WILL FOWLER

ALEX FRENCH

Anticipated Benefits

Service	Passengers / yr	Gross Estimated Spendings	Total
Intercity Rail	3,023,000	\$2	\$6,046,000
Commuter Rail	2,800,000	\$0.50	\$1,400,000
Intercity Bus	3,376,000	\$1	\$3,023,000
Office Rental	221,000 sqft	\$29.00	\$6,409,000

Profits divided evenly between Equity Office and MBTA, so total yearly revenue for MBTA = \$8,439,000

SOUTH STATION

WILL FOWLER

ALEX FRENCH

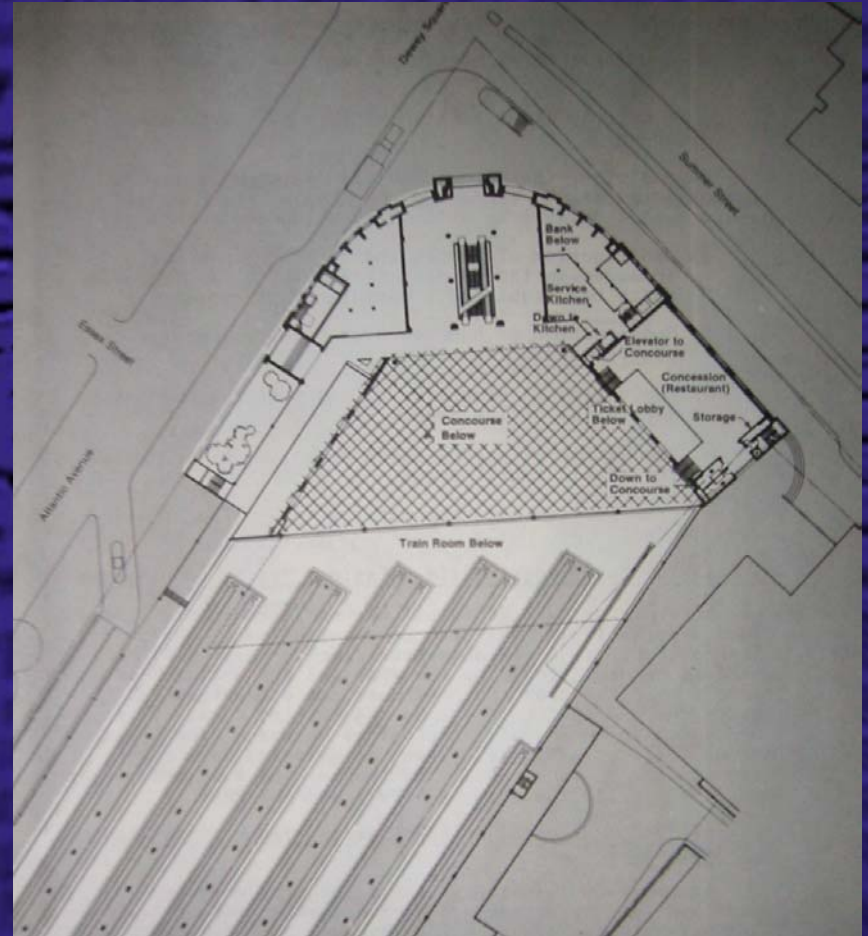
Results of Renovation

- Phase 1a
 - Headhouse and railyard were rebuilt
 - Foundations installed for development of air rights
 - Completed by 1989, 4 years behind schedule
- Phase 1b
 - Bus terminal and parking garage
 - Completed by 1995, 9 years behind schedule

SOUTH STATION

WILL FOWLER

ALEX FRENCH



SOUTH STATION

WILL FOWLER

ALEX FRENCH



SOUTH STATION

WILL FOWLER

ALEX FRENCH

Actual Benefits

- Ridership Increases

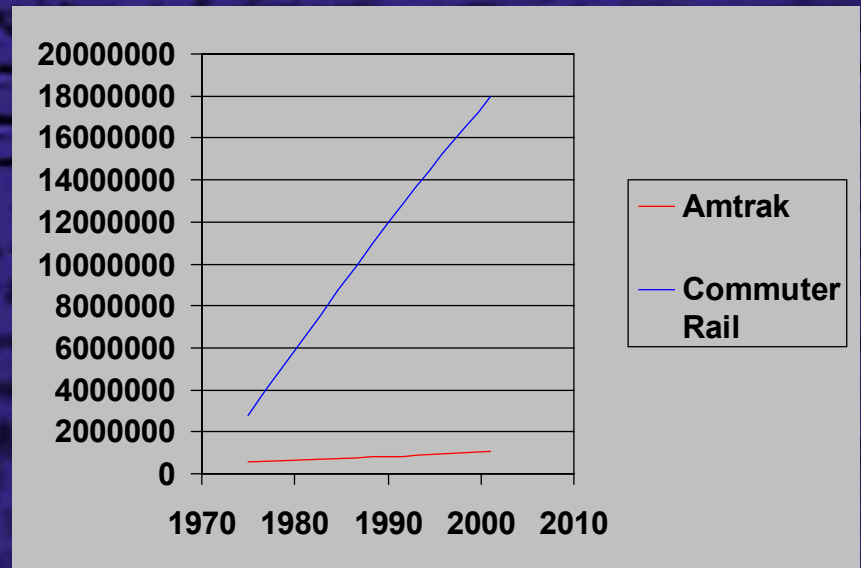
- Amtrak:

- 1975: 537,000 passengers / yr
 - 1990: 839,000 passengers / yr
 - 2001: 1,060,000 passengers / yr

- Commuter Rail

- 1975: 2,774,000 passengers / yr
 - 1990: 12,000,000 passengers / yr
 - 2001: 18,000,000 passengers / yr

- Bus Terminal did not open until 1995

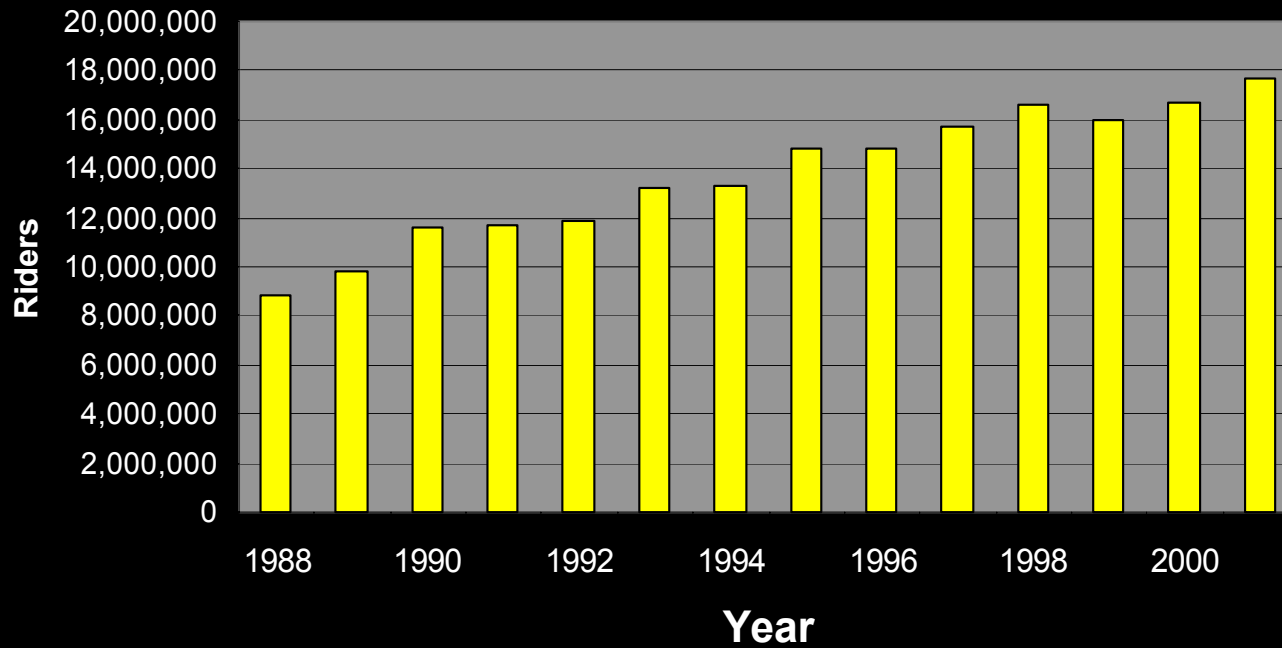


SOUTH STATION

WILL FOWLER

ALEX FRENCH

Actual Southern Commuter Rail
Ridership per Year



SOUTH STATION

WILL FOWLER

ALEX FRENCH

Actual Benefits - 1990

Service	Passengers / yr (2001)	Gross Estimated Spending	Total
Intercity Rail	839,000	\$2	\$1,678,000
Commuter Rail	12,000,000	\$0.50	\$6,000,000
Intercity Bus	0	\$1	\$0
Office Rental	221,000 sqft	\$29.00	\$6,409,000

Profits divided evenly between Equity Office and MBTA, so total yearly revenue for MBTA = \$7,043,500

SOUTH STATION

WILL FOWLER

ALEX FRENCH

Actual Benefits - 2001

Service	Passengers / yr (2001)	Gross Estimated Spending	Total
Intercity Rail	1,060,000	\$2	\$2,120,000
Commuter Rail	18,000,000	\$0.50	\$9,000,000
Intercity Bus	3,000,000	\$1	\$3,000,000
Office Rental	221,000 sqft	\$29.00	\$6,409,000

Profits divided evenly between Equity Office and MBTA, so total yearly revenue for MBTA = \$10,264,500

SOUTH STATION

WILL FOWLER

ALEX FRENCH

Future Development

- Phase II
 - Extend and connect bus terminal
 - Reclaim tracks from Post Office
 - Develop air-rights
 - Current foundations allow 9-12 stories
 - Minor modifications could allow 40+ stories
- Hines Responsibilities
 - Signal and track modifications (\$2.2M)
 - Bus terminal completion (\$6.9M)
 - Other miscellaneous (\$17M)



SOUTH STATION

WILL FOWLER

ALEX FRENCH

Benefits to the City

- City of Boston Linkage Payments
 - \$11.9M to city
- City of Boston Property Taxes
 - Estimated \$9M / yr
- Job creation
 - 2,600 short term construction jobs
 - 600 permanent service jobs
 - Office space for 6,000 permanent office employees, ideally located in Financial District

SOUTH STATION

WILL FOWLER

ALEX FRENCH

Intangible Benefits

- New construction integrates with downtown
- Spurs expansion of bus terminal
- New office and apartment space keeps people downtown

SOUTH STATION

WILL FOWLER

ALEX FRENCH

Summary

- Project was beneficial
- Commuter rail experienced tremendous increase in ridership
- Intercity rail increased slowly
- Bus terminal increases traffic through station, helps bus companies
- Traffic through station makes food court profitable
- Office space provides steady income