

New Bedford-Woods Hole Freight Study

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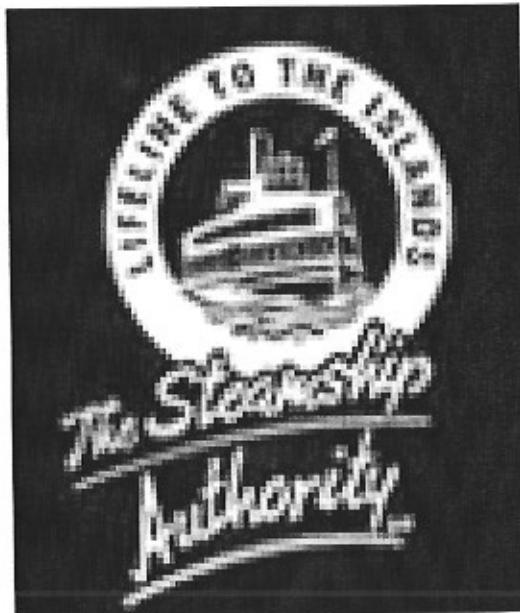
Matthew Brakebill

Project Overview and Major Points

- Study Objective
- Port of New Bedford history
- Woods Hole/Steamship Authority
- Voyage Problems
- New Bedford vs. Woods Hole
- Case Study Freetown Stop and Shop Distribution
- Environmental Impacts of Trade Routes
- Conclusion and Analysis

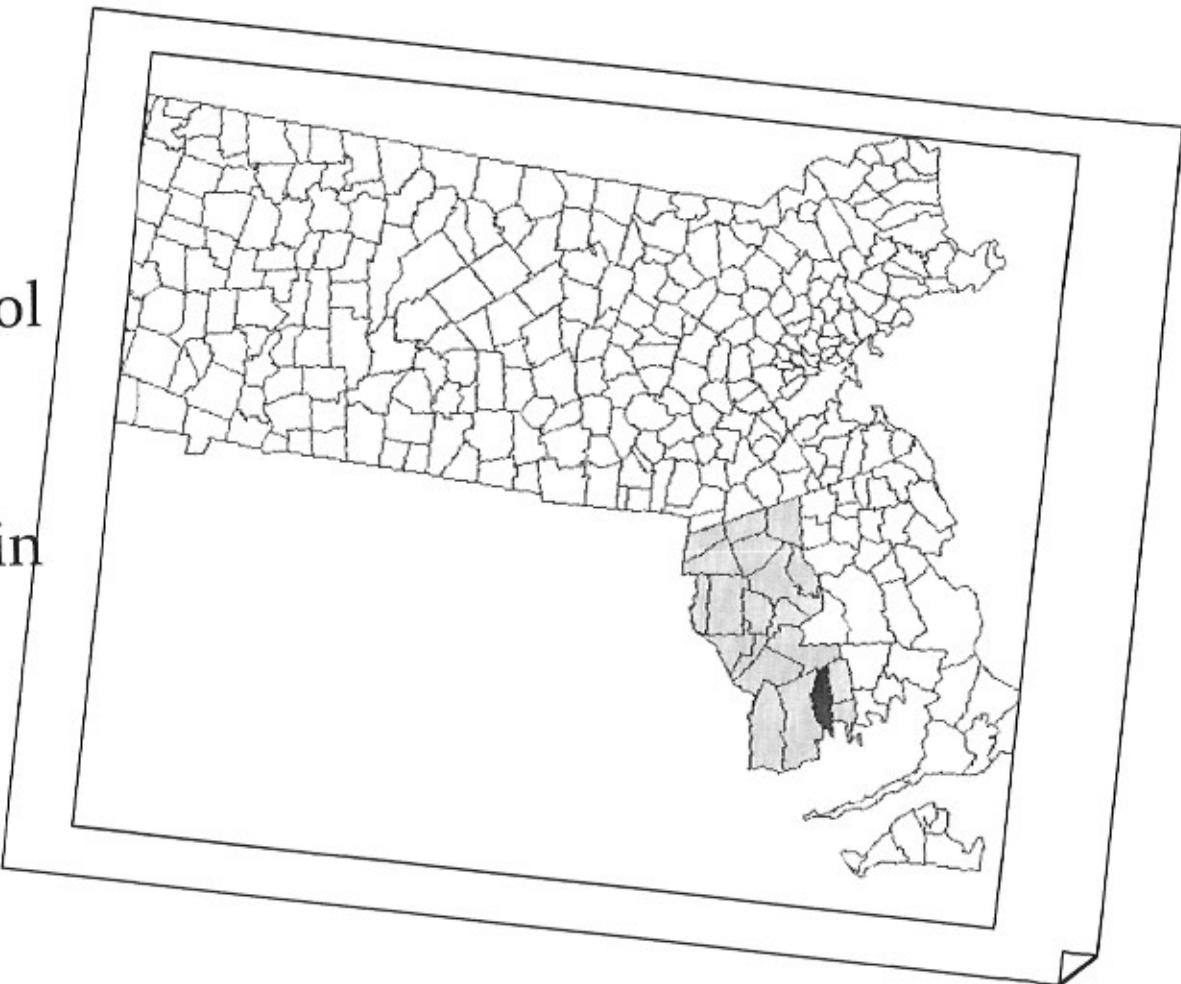
Project Objective:

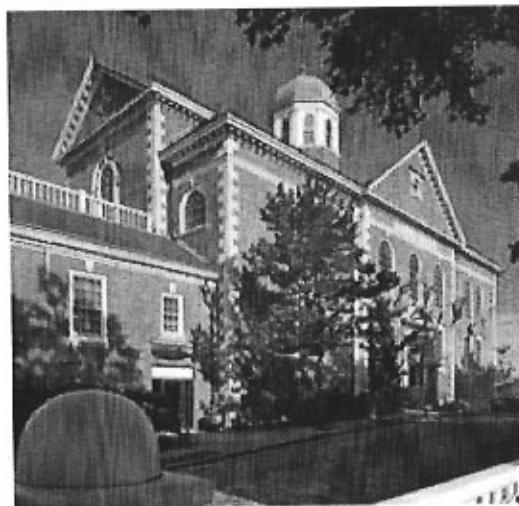
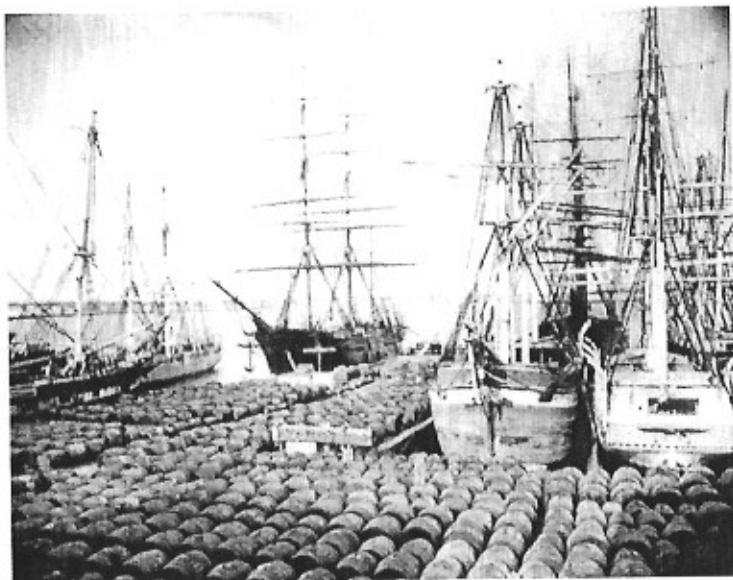
- 1.) Cost/Benefit analysis of diverting freight from Woods Hole to New Bedford with Martha's Vineyard as a destination.
- 2.) Evaluate impacts on the route as well as the ports themselves



City of New Bedford

- Located in Bristol County Massachusetts
- 7th Largest City in Massachusetts
- “The Whaling City”





New Bedford's Economy

- Fishing and Manufacturing
- Healthcare services
- Titleist
- Southcoast Hospitals Group
- Riverside Manufacturing
- Growth in Tourism



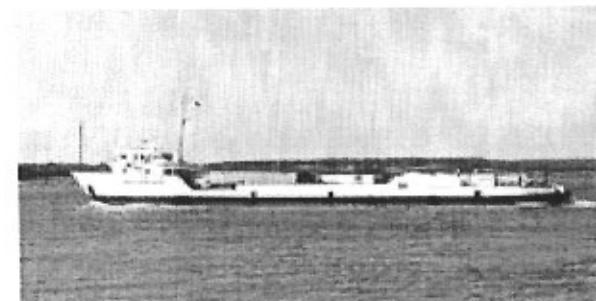
The Steamship Authority



- Woods Hole
- Regulatory Operations
- Passenger Liners and Ferry Services
- Short Sea Freight Operations
- “Lifeline to the Islands”

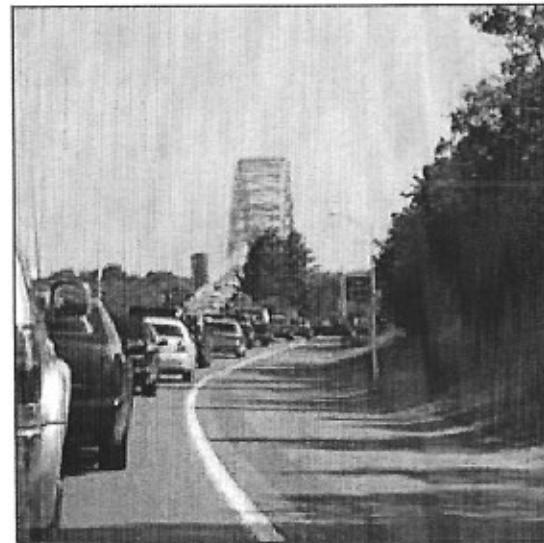
Steamship Authority Fleet

- Operates 9 vessels from freight to passenger lines
 - IYANOUGH
 - ISLAND HOME
 - MARTHA'S VINEYARD
 - EAGLE
 - NANTUCKET
 - GOVERNOR
 - KATAMA
 - GAY HEAD
 - SANKATY



The Freight Voyage Problems

- Longer Road Route
- Trucking Issues
- Traffic Variables
 - Bourne/Sagamore Bridges
- Cape Entry limited to only two venues



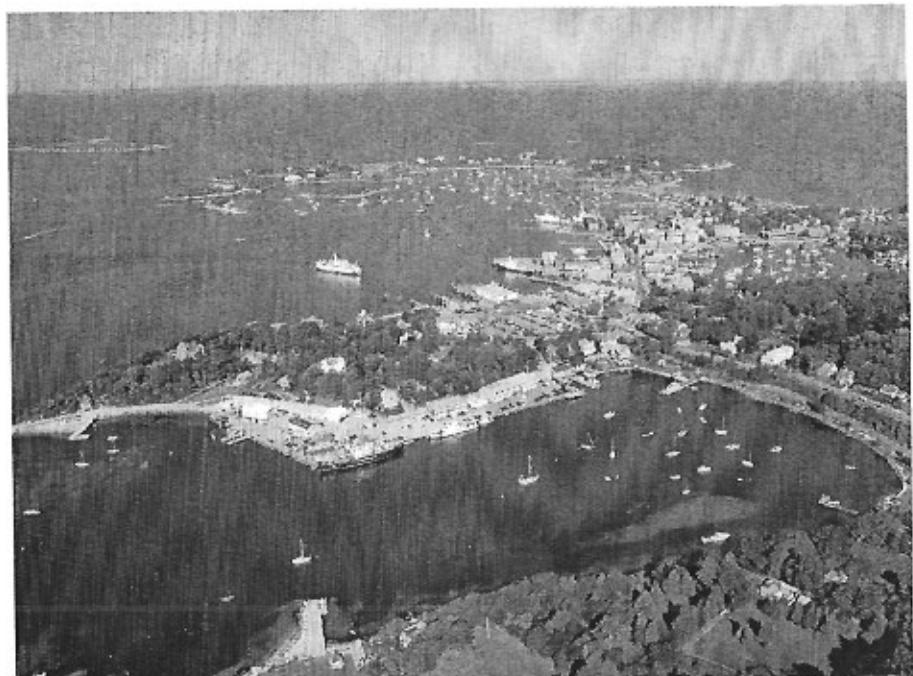
Traffic Issues

- Congestion towards downtown Falmouth heading towards Woods Hole
- Automobile Accidents
- Trucking accidents



Port Issues with Woods Hole

- Woods Hole small port compared to New Bedford
- Limited operations
- Expansion and growth limited geographically
- Entry routes





New Bedford is the Answer to
these problems!!!!

New Bedford Advantages

- Highway Access
 - Route 6
 - Route 18
 - Interstate 195
 - Interstate 495
 - Route 24
- All provide access ways into the city of New Bedford



Port Security

- New Bedford Dredging projects
- Police and Fire stations in South End of New Bedford
- New Bedford-Fairhaven Hurricane Barrier



New Bedford-Fairhaven Hurricane Barrier

- Built 1960's: 9,100 ft. and 20 ft. above median sea level
- Extends the entire length of the mouth of New Bedford Harbor
- Continues into Fort Phoenix Fairhaven
- Provides protection to berthed vessels in dangerous weather
- Hurricane Katrina and Hurricane Gustav

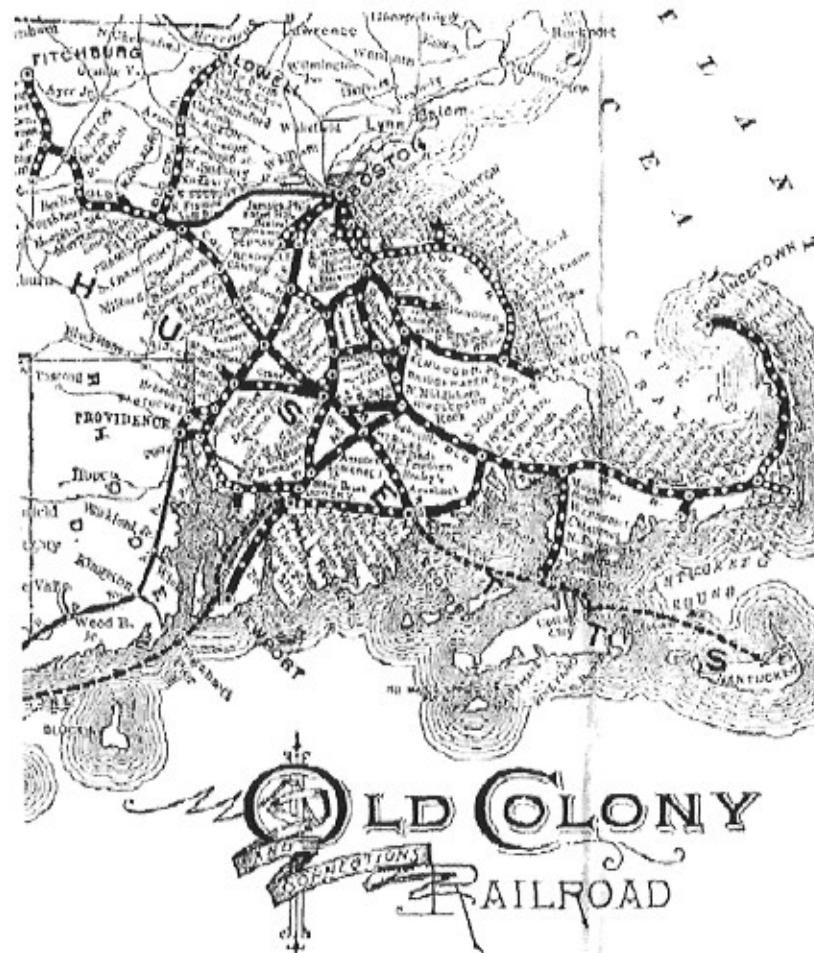


New Bedford-Fairhaven Hurricane Barrier Cont'd.



Intermodalism

- CSX Rail projects in New England
- Use of New Bedford Railroads
- Tracks parallel to Route 18 near Union Street Pier
- www.massfreightandrailplan.com



Intermodalism Cont'd.

- New Bedford Airport
 - 3 miles from central business district of New Bedford
- Operation Center for Cape Air company
- Taking steps to expand to service larger aircraft
- Air Cargo Facility proposal



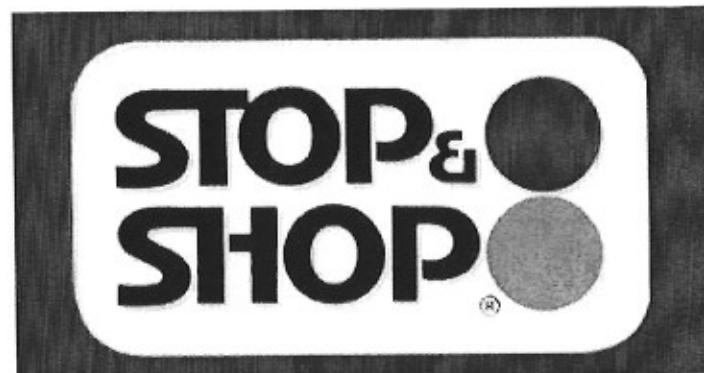
Aerials Only Gallery (508) 295-5531 ©
11-9749 New Bedford New Bedford Airport



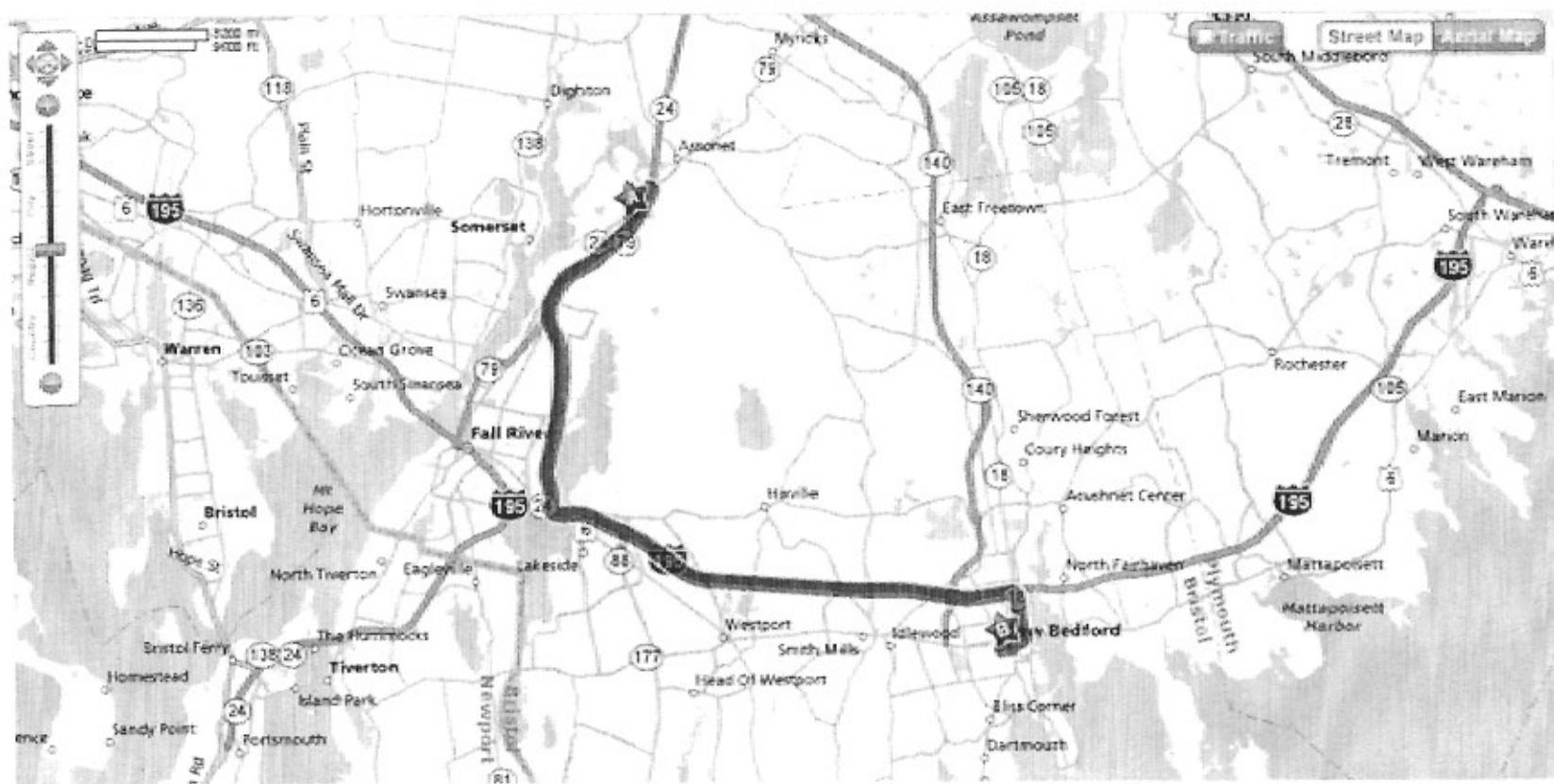
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Model Case study

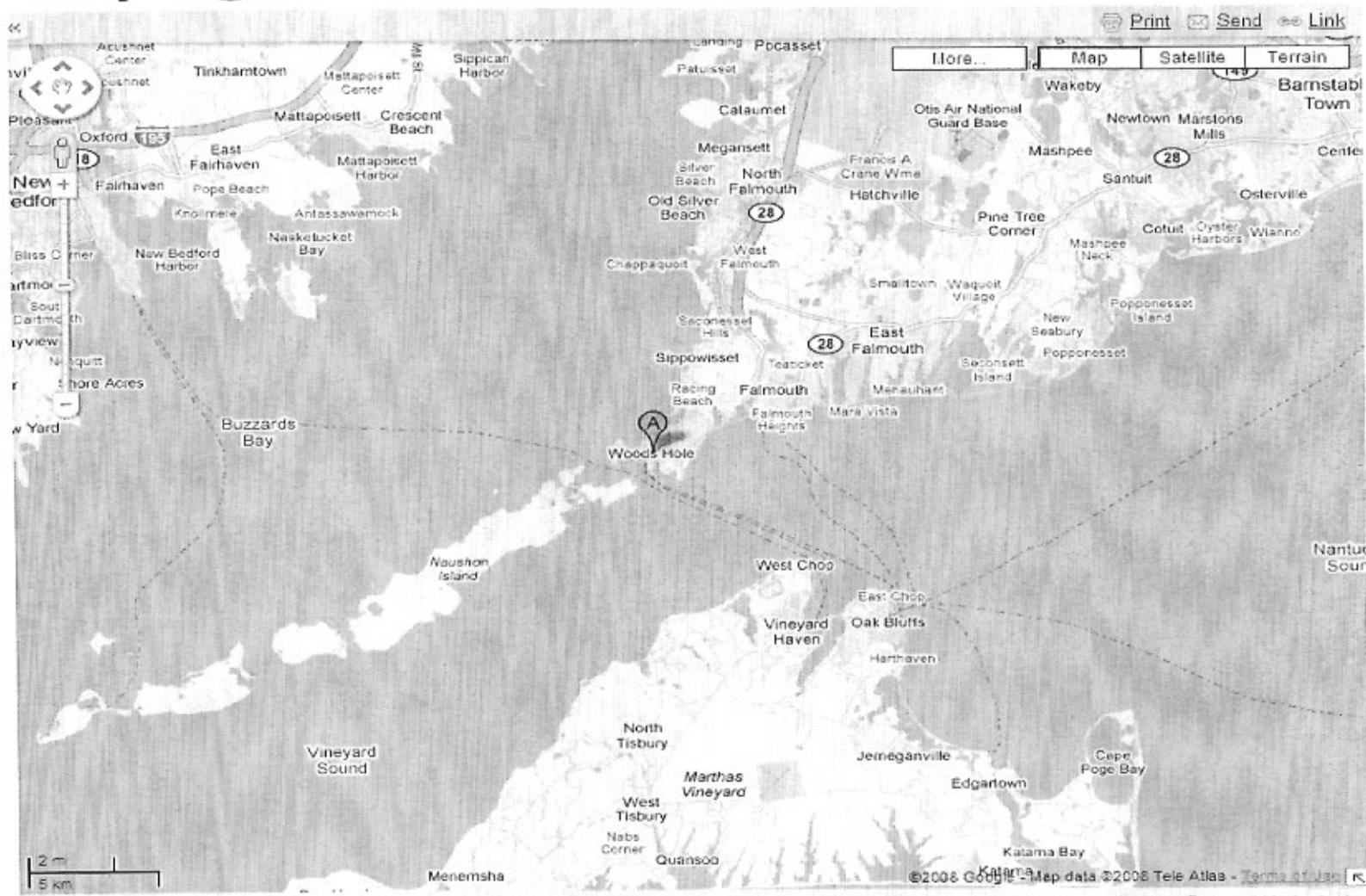
- Stop and Shop
Distribution Center,
Freetown Massachusetts
- Freight Voyages
 - 1.) Freetown to New Bedford to
Vineyard Haven
 - 2.) Freetown to Woods Hole to
Vineyard Haven



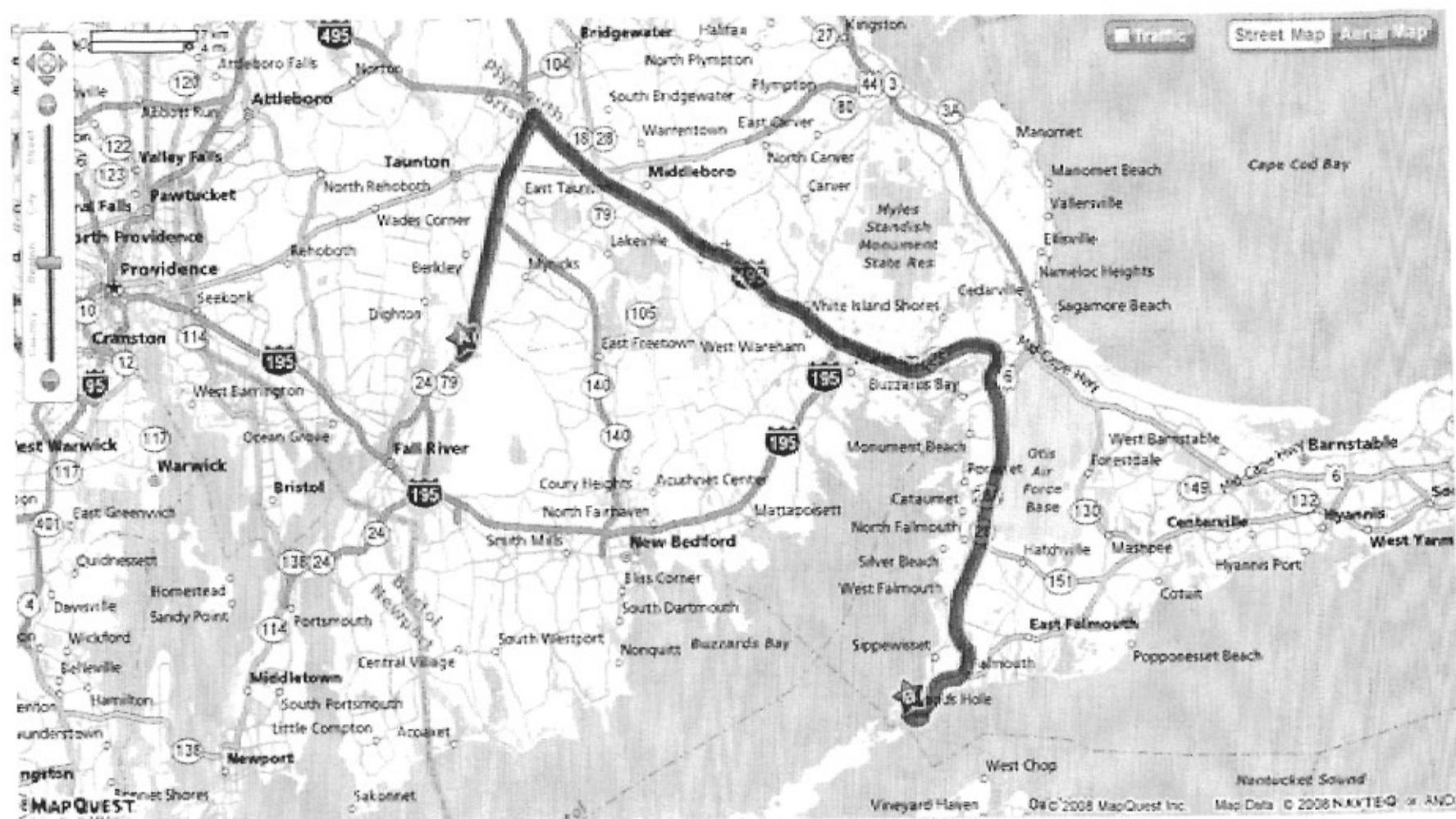
Voyage 1



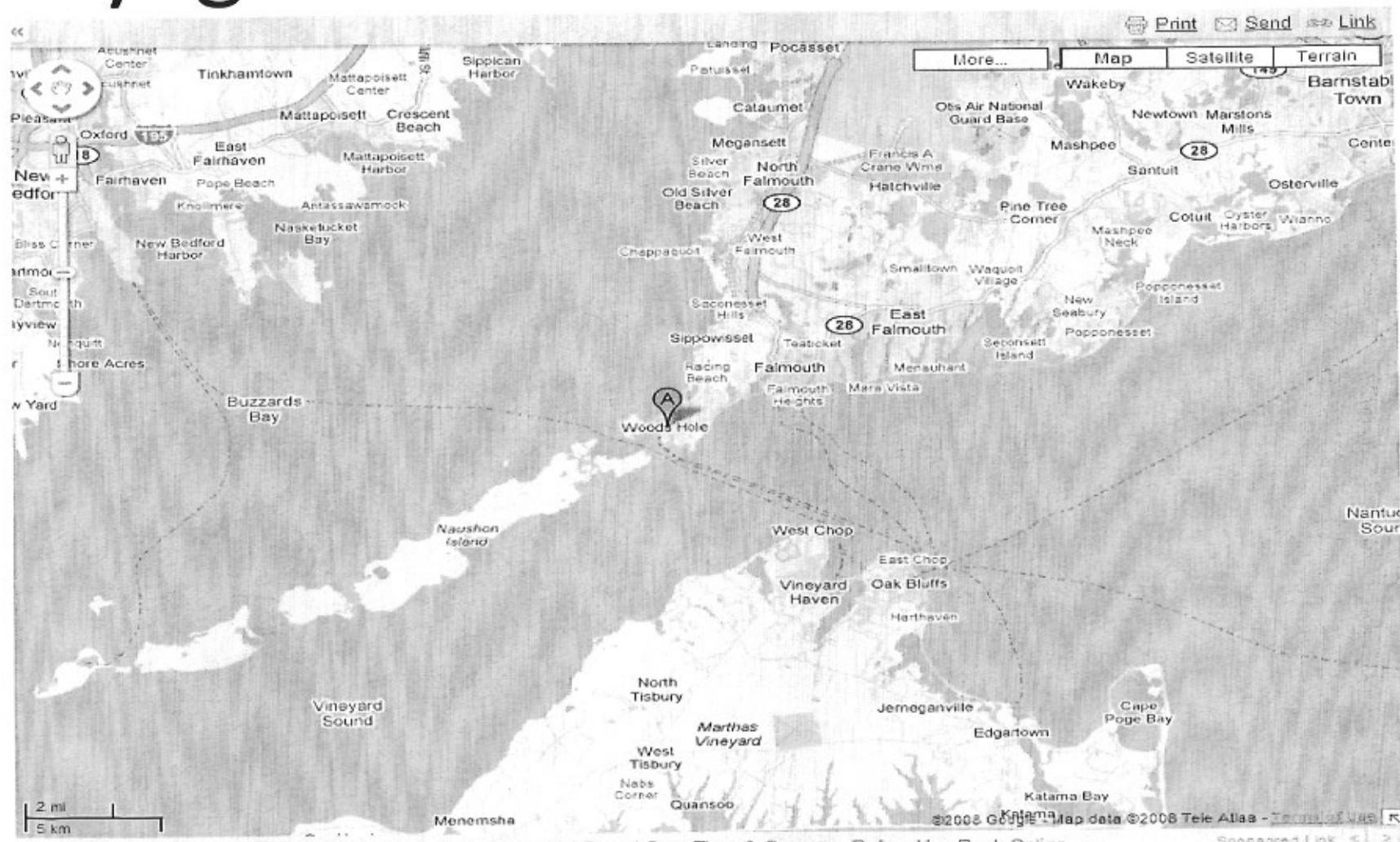
Voyage 1 Nautical Route



Voyage 2



Voyage 2 Nautical Route



[Woods Hole Map](#) - Woods Hole OneTime.com - Find Low Hotel Rates! Save Time & Compare Before You Book Online.

©2008 GOOGIE - Map data ©2008 Tele Atlas - [View Larger Map](#)

Sponsored Link

Voyage Calculuations

	<u>MILES</u> <u>Road</u>	<u>NAUTICAL MILES</u> <u>NB/VH & WH/VH</u>	<u>Conversion</u> <u>NM to Miles</u>	<u>OVERALL MILES</u>
Freetown/NB & NB/VH	21.2 Miles	20 NM	23.0155 Miles	44.2155 Miles
Freetown/WH & WH/VH	59.7 Miles	5.2 NM	5.98405 Miles	65.68405 Miles
	<u>Road</u> <u>Time</u>	<u>Delay</u> <u>Time</u>	<u>Ferry</u> <u>Time</u>	<u>Total Time</u>
Freetown/NB & NB/VH	25 min	0 min	120 min	145 min
Freetown/WH & WH/VH	71 min	45 min	45 min	161 min

Voyage Calculation Cont.'d

18 wheeler Truck

4.5 mpg minimum

\$2.69 per Gallon Diesel

Freetown to New Bedford: 21.2 miles

Total Fuel Cost round trip: **(\$25.34)**

Freetown to Woods Hole: 59.7 miles

Total Fuel Cost round trip: **(\$71.37)**

Environmental Concerns

- Extra Mileage traveled by trucks to Woods Hole and exhaust output
- Noise Pollution and congestion over the Cape Cod bridges
- Woods Hole becoming overcrowded



Conclusions and Analysis

- After studying the two ports and the variables associated with both, we have concluded that the port of New Bedford shows more potential for future business growth, freight diversification, and overall efficiency. Woods Hole is a vital port to Cape Cod and should remain a venue for Cape Cod based business to move their products to Martha's Vineyard and Nantucket. However, freight that is generated north and west of Boston should use the port of New Bedford as an outlet to ship products to the island of Martha's Vineyard.