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REGIONAL TRANSPORTATION ADVISORY COUNCIL

Summary of May 13, 2009 Meeting

This meeting was held in Conference Room 4 of the State Transportation Building at 10 Park Plaza, Boston, MA.

The meeting was called to order at 3:15 PM.

1. Introductions

2. **Briefing on the Department of Conservation and Recreation's Parkway & Bridge Program** – *Jack Murray & Jonathan Geller, DCR*

The Department of Conservation and Recreation (DCR) briefed members on the broad extent of their operations, which include parks, buildings, waterways, parkways and bridges, recreational facilities, and other assets. DCR typically has a $5-6 million maintenance budget, but that has doubled as a result of the Accelerated Bridge Program (ABP). The ABP provided Massachusetts $3 billion toward its bridges and DCR was a major recipient of the funds since it operates close to 300 bridges in the Commonwealth. DCR identified 50 bridges that were structurally deficient and set the goal to program $150 million for bridges in Federal Fiscal Year 2009. DCR has advertised $130 million so far this year and are set to meet their goal.

Current bridges set for construction are the BU Bridge, Cheney Bridge, Magazine Beach Pedestrian Bridge, Mystic Valley Parkway, Neponset River Bridge, Cambridge Pedestrian Bridge, and Lech Walesa and Patten's Cove. The location of these bridges pose challenges to construction, but DCR has proactively tried to mitigate impacts by: sequencing projects with the cooperation of the Executive Office of Transportation (EOT) and MassHighway, conducting risk management analyses, engaging in community involvement, maintaining bicycle and pedestrian access, providing universal access, and avoiding environmental impacts. By taking these precautions, DCR hopes to minimize traffic congestion during construction, while still providing access to all modes of transportation.

DCR is in the process of re-evaluating bicycle and pedestrian access on its numerous bridges not involved in the ABP to enhance access and requires construction vehicles to be equipped with efficient noise suppression devices to mitigate noise pollution to nearby neighbors during construction.

Additional DCR construction projects currently underway include: Storrow Drive/Soldiers Field Road Improvements ($4 million), Nonantum Road ($5.5 million), Memorial Drive Phase II ($6-8 million), Nahant Causeway Reconstruction and Improvements ($8-12 million), Charles River Dam, and bicycle and pedestrian facilities in Watertown, Nowattock, and Cape Cod.

Potential DCR Waterway Stimulus projects through the ARRA Ferry Boat Discretionary Program include: DCR Fall River State Pier South Pier Expansion ($10.6 million), DCR Georges

Island pier and float system project ($10 million), DCR New Bedford State Pier Rehabilitation of Buildings 1&2 ($2.4 million), DCR Quincy Squantum Point Park ferry terminal and ferry pier Project ($20 million), DCR Hull Point Allerton Seawall Blvd reconstruction of the granite block seawall ($6 million), and statewide dredging needs in the Commonwealth ($19 million).

Member Questions:

What is DCR constructing on Mystic Valley Parkway? (Jeff Levine, Brookline)
That project's goal is to enhance bicycle and pedestrian access by widening sidewalks to 10 feet and moving sidewalls out by 5 feet. DCR expects project to go to bid in the Summer or early Fall of 2009. (J. Geller)

Related to the BU Bridge, what is DCR doing in collaboration with the Boston Transportation Department (BTD) and the Mass Turnpike to address the egress of automobile traffic on the Boston side (Commonwealth Avenue)? (John McQueen, WalkBoston)
The consultants have several alternatives for the BU intersection. The preferred alternative is an intersection design that came out of the Urban Ring design. The designs are still in the early stage, but there should be a presentation to the public in the next couple months with a more concrete design. (J. Geller)

What is going to happen to DCR roads and bridges after the consolidation of Massachusetts's transportation agencies? (Marvin Miller, American Council of Engineering Companies)
Discussions between the Patrick Administration and the legislature have transpired. The Governor's and House's proposal has MassHighway taking over DCR's roads and bridges, but the Senate's proposal has MassHighway taking over all of DCR's operations. DCR supports the governor's proposal. DCR has met weekly with MassHighway since March 2009 in order to prepare for the possible transition. DCR has $110 million programmed for the ABP in 2010 and does not want lose momentum with the ABP. Whatever the legislative decision, DCR will manage contracts until bridge construction is complete. (J. Murray)

If MassHighway obtains the roads and bridges, what will be the boundaries and parameters between DCR parkways and MassHighway roads and bridges? (Malek Al-Khatib, Boston Society of Civil Engineers)
The legislation did not contemplate these questions of what is the definition of "curb-to-curb" or "parkway." These are maintenance and operational issues that will need to be worked out. DCR is confident that these issues can be worked out through an Interagency Service Agreement (ISA) that allows an agency to transfer money to another agency. (J. Murray)

Can DCR access the Seaport Bond Bill for funding and does DCR coordinate with the Seaport Advisory Council? (Frank Demasi, Wellesley)
DCR has a division of waterways with an annual budget of $2 million primarily dedicated to repair and maintenance, while the Seaport Advisory Council provides recommendations to the governor's administration on seaport projects with a budget of $10 million a year. These funds are insufficient to accommodate DCR's project needs.

3. Briefing on Draft TIP Amendment 3 – *Hayes Morrison, MPO Staff*

H. Morrison notified members that the Boston Region MPO would vote tomorrow on Amendment 3 to the 2009 Element and briefed them on the proposed changes, which involve incorporating several earmarks and revising funding and funding categories for various transit projects, especially those included on its list for funding under the American Recovery and Reinvestment Act (ARRA).

Referencing the meeting handout on the TIP, she explained that the Houghton Street Bridge over Assabet River in Hudson will be removed from 2009 bridge element and moved to the 2010 TIP and the Route 53 Bridge in Hanover has a cost adjustment. The Commonwealth requested that an $11 million earmark for improvements to the Boston-Worcester line be added to the TIP. Omnibus legislation earmarks for the Beverly parking garage and Wonderland Station transit improvements were added. In the Section 5309 (Carryover Earmarked Funds), $1 million was taken out of the Bridge and Tunnel Program and $1 million was added for Positive Train Control. The Positive Train Control project was originally funded with ARRA funding, but will now be funded with Section 5309 monies. The $38 million for Commuter Rail rolling stock will not be ready for purchase in Federal Fiscal Year 2009, so $30 million will be used for bus procurement and the approximately $7 million will remain for Commuter Rail rolling stock in 2010 when vehicles are ready.

H. Morrison summarized the additional funding changes:
- Some money was taken out of systemwide track and right-of-way (ROW) improvements
- Grade crossing and signal improvements along the Fitchburg and Haverhill lines was split between 5307 and 5309 funding
- More money was allocated to the double track initiative on the Fitchburg and Haverhill lines
- The station upgrade program was reduced from $197 to $176 million for 2009 TIP and the remaining ARRA funding will be programmed for 2010 TIP when more projects are available

Member Questions:

What is the reason for these changes to the TIP? (L. Wiener)
The MBTA is revising its approach to using its ARRA funding and the Commonwealth's decision to utilize its earmark. (H. Morrison)

Who will take the money that the MBTA does not use? (M. Al-Khatib)
Half of the available funds are "use it or lose it." The MBTA has programmed more than half of the $320 million it was allocated, so they will not lose any money in phase one of ARRA. (H. Morrison)

A member asked for clarification about the changes on the Boston-Worcester line and how they relate to the other rail line improvements.
We only received a little bit of information about the procurement of ROW for CSX. (H. Morrison)

Does the input of earmarks take away from the available funds for the Boston Region MPO? (J. Levine)

Earmarks do not come out of the Boston Region MPO's federally apportioned pot of target funding. However, the state is providing a 20% match in the case of this earmark. (H. Morrison)

A motion to endorse the Draft TIP Amendment 3 was made by M. Miller and seconded by Dick Canale, MAGIC. The motion was approved unanimously.

A motion to allow the Chair to vote on minor changes to Draft TIP Amendments without the approval of the Advisory Council was made by D. Canale and seconded by Marcy Crowley, Wayland. The motion passed unanimously.

Members had the following questions and comments:

Could you clarify or give examples as to what is a minor change? (Kurt Mullen, Needham)
H. Morrison briefed members on TIP amendments and adjustments. Changes to funding category and funding level are typical examples of TIP amendments.

Pam Wolfe, MPO Staff, explained that this policy is consistent with what the Advisory Council has done in the past and it allows the Chair to represent the Council when minor changes are proposed at the table.

M. Miller stated that members voted in the Chair and should have confidence in him to represent the views of the Advisory Council and seek help with major changes or decisions.

4. **Approval of the Draft Meeting Minutes of April 8, 2009**

A motion to approve the Draft Meeting Minutes of April 8, 2009 with changes recommended by M. Miller to page 4 was made by D. Canale and seconded by Sue McQuaid, Neponset Valley Chamber of Commerce. The motion passed unanimously.

5. **Committee Reports**

Transportation Finance Ad Hoc: Members acknowledged the efforts of the Transportation Finance Ad Hoc Committee to develop and distribute a letter to legislators and heads of agencies. The Council agreed to discuss additional ways to follow up on this timely issue at the next meeting.

Program: D. Canale updated members on the tentative schedule for the upcoming Advisory Council meetings, which includes the Program for Mass Transportation (PMT) in June, Secretary Aloisi when he is available, and Federal Reauthorization. The Advisory Council will also try to schedule a field trip to Alewife this summer. The next Program Subcommittee meeting will be on September 9 at 2pm.

John Businger, National Corridors Initiative, noted that reauthorization-lobbying efforts were underway during Secretary Cohen's tenure, but is unsure where they stand with Secretary Aloisi.
I will contact Representataive Capuano's aide and the Executive Office of Transportation and Public Works (EOT) to see who is still involved and available to brief the Council. (D. Canale)

Thank you to Marcy Crowley for revising a new draft of the bylaws. I will read over them and pass them along to the Membership Committee, who can decide how to address inactive members of the Advisory Council. (M. Al-Khatib)

Membership: L. Wiener briefed members on the results of the outreach to members with low attendance. Several such members recommended starting meetings earlier and occasionally have meetings outside of downtown Boston.

UPWP: Steve Olanoff, Westwood, notified members that more funds have been allocated to the Walkable Community Workshop program. The Transportation Planning and Programming Committee plans to discuss studies for the FFY 2010 UPWP at next month's meeting.

6. Member Announcements

M. Miller announced that the Boston Society of Civil Engineers Section (BSCES) Transportation Group will host its 2009 Bertram Berger Seminar on climate change and transportation tomorrow, May 14 at 8:30am. There is still some space for walk-ins, but they are encouraged to arrive at 8am. There is a dynamic panel of presenters including, Secretary Aloisi and Commissioner Paiewonski.

Secretary Aloisi reissued a letter to Congressmen Ted Kennedy and Steve Lynch, requesting $6 million in funding for the North-South Rail Link. This amount does not compare to the $6 billion and $9 billion that New York and New Jersey are asking for, respectively. (J. Businger)

The Freight Committee would like to propose three freight studies for the current UPWP. The first study would be to advance the recommendations of the Statewide Freight and Rail Plan scheduled to be completed in June 2009. The second study would be a truck-to-rail diversion study to better utilize existing branch lines, minimize the impacts on infrastructure, and balance the use of freight modes. The third study would be a short line railroad study to enhance the multimodal transportation of freight. (Please see the attached summary.) (F. Demasi)

I will put the three studies forward at the next UPWP meeting under the Council's approval. (S. Olanoff)

A motion to allow S. Olanoff to propose and advocate on behalf of the Advisory Council for the freight studies in the UPWP was made by F. Demasi and seconded by M. Miller. The motion passed unanimously.

S. Olanoff announced that the MPO Election would be held on June 9, 2009. The Town of Westwood is seeking election to the town seat and he would be the designee for Westwood.

7. Presentation: "Transportation & the Mass Economy" - *Walter Bonin, Marlborough & Freight Committee Chair*

W. Bonin briefed members on the current fiscal problems facing Massachusetts and suggested that freight rail can address the main issues by increasing economic development and reducing expenses. He said that freight rail could increase economic development by taking trucks off the road and increasing highway capacity. By removing large trucks from the highway, distribution could become more efficient at providing goods at lower costs and might also help the state attract industries that require rail service.

In addition, he said that freight rail might also reduce the expenses of distribution. Freight rail can reduce the damage to roads and bridges, caused by heavy trucks. Freight rail can reduce fuel expenses by using approximately 50 million gallons less fuel a year. Freight rail development can be inexpensive due to the many underutilized assets and infrastructure already in place. Freight rail could also serve as a way to improve air quality and can save on cost of goods.

W. Bonin said that the state needs an effective strategy to increase the use of freight rail, and moving freight rail to the suburbs may only impact the fastest growing regions. Currently, there is a lack of awareness of rail freight opportunities, which hampers the development of public-private partnerships. More capacity is necessary to accommodate both passenger and freight needs and also to compete economically with other states.

The Freight Committee proposes three freight studies to help increase the utilization of freight rail in Massachusetts. The first study hopes to implement the recommendations of the Statewide Freight and Rail Plan. The second, The Freight Diversion Study, aims to increase the distribution of freight by rail. The third, The Short Line Feasibility Study, proposes to examine the feasibility of short lines in Massachusetts that may provide alternatives to traditional long haul freight movement.

Members had the following questions and comments:

As an architect, I was involved in the construction of numerous truck warehouse distribution centers and I remain skeptical of the amount of truck freight that can realistically be transferred to rail since most of the goods in those warehouses were for "just in time" delivery and traveled less than 100 miles to their destination. Rail is efficient, but it takes time. Is there enough volume of goods to justify an increase the amount of rail lines? (Schuyler Larabee, Boston Society of Architects)
Rail currently transports heating oil, gasoline, and food processing into the suburbs. Paul Newman's salad dressing plant in Marlborough transports 8 loads of material a day by rail. By increasing the freight rail capacity, the state can attract more industries and make more business opportunities available to promote economic development. (W. Bonin)

What are some of the new industries that Massachusetts can attract? (J. McQueen)
Massachusetts needs the proper rail infrastructure to attract new industries. (W. Bonin)

We cannot expand the highway system, but must develop strategies to better utilize the existing rail system. (Chan Rogers, SWAP)

While Massachusetts transports 4-7% of its freight by rail, the national state average is roughly 20-30%. Massachusetts has allowed the freight railroad system to deteriorate and therefore, it is not performing. In order to increase the utilization of freight, we need to work with the freight companies. (Rick Arena, Americans for Public Transportation)

Though service was supposed to improve after Norfolk Southern took over ConRail ten years ago, service has actually declined. Massachusetts is different than other states in that it has a strong policy toward passenger transportation, which has the potential danger to produce many commuter rail stations and park and ride lots. Freight rail will benefit from public policy that does not discourage existing freight traffic and maintains volume through a free market basis. (Richard Flynn, Metro Northeast Logistic Systems)

Though many consumer goods are transported long distances in containers on rail cars, distribution centers have moved westward and required the use of trucks in the short haul. Land use policy is necessary to increasing the distribution of goods by freight rail because land is expensive in the urban core and suburban planning boards seek higher property values over industrial use. It remains a challenge to integrate the rail system since a variety of separate agencies operate on the rail lines without coordination. (F. Demasi)

EOT seems to advocate for the relocation of Beacon Yard to Worcester. How do we establish rail centers near the urban core? Can we identify half a dozen sites that are feasible for short haul distribution? (J. McQueen)

Ports are necessary to locate rail centers around, but port areas have high property values, so it is not economically feasible for individual entities such as Massport to retain port properties when they could be sold for greater revenues. Therefore, the state needs to subsidize the land in the port area and rail access to the port needs to be provided to eliminate truck congestion at the ports. Worcester or Ayers may be the new freight distribution site, which makes me concerned that the important freight issues will not be properly addressed in the Statewide Freight and Rail Plan. (F. Demasi)

I understand that there will still be some rail access at Beacon Yard and the alternatives for Beacon Park are not included in the Statewide Freight and Rail Plan. It is important to ask direct questions of EOT officials to get a better understanding of the long-range freight vision for Massachusetts. (R. Flynn)

The Short Line Railroads should be the top priority of the studies because short lines seem to be the most likely to be advanced and implemented. (J. McQueen)

8. Adjourn
The meeting adjourned at 5:15 pm.

Attachments:
1. Draft Meeting Minutes, April 8, 2009
2. Committee Reports

1. Attendance List for May 13, 2009

Agencies
Richard Canale, Minuteman Advisory Group on Interlocal Coordination
Brian Kane, MBTA Advisory Board
Jeff Levine, Inner Core
Jack Murray & Jonathan Geller, Department of Conservation and Recreation
Leon Papadopoulos, MassRides
Chan Rogers, Southwest Advisory Planning Committee

Cities and Towns
Walter Bonin, Marlborough
Tony Centore, Medfield
Marcy Crowley, Wayland
Frank DeMasi, Wellesley
Tom Kadzis, Boston
Kurt Mullen, Needham
Steve Olanoff, Westwood
Jeff Rosenblum, Cambridge
Jon Squibb, Revere
Laura Wiener, Arlington

Citizens Groups
Malek Al-Khatib, Boston Society of Civil Engineers
Richard Arena, Association of Public Transportation
John Businger, National Corridors Initiative
John Kane, Access Advisory Committee to the MBTA
Sue McQuaid, Neponset Valley Chamber of Commerce
John McQueen, *Walk*Boston
Marvin Miller, American Council of Engineering Companies
Douglas Prentiss, American Planning Association – Mass. Chapter
Elliot Rothman & Schuyler Larabee – Boston Society of Architects
Tom Yardley, Medical Academic and Scientific Community Organization

Guests and Visitors
Jake Green, MetroWest/495 TMA
Ed Lowney
Marilyn MacNab, Boston resident
Alison Felix, MAPC
Richard Flynn, Northeast Logistic Systems
Tom Letimoulie, Cambridge resident
Kyle Ladikki, Framingham

MPO Staff
Hayes Morrison Sean Pfalzer Pam Wolfe

Transportation and the Mass. Economy

State facing years of fiscal woes, analysts say

Key initiatives may be at risk

By Matt Viser
GLOBE STAFF

It took less than a year for the national recession to wreak havoc on state government, but the aftershocks on state budgets will reverberate far longer, making it likely that Massachusetts will be grappling with deep budget cuts and debates about tax increases for years to come, state officials and economists said yesterday.

The problems are expected to be so widespread, the solutions so elusive, that the state may have to rethink the size of its commitment to big-ticket programs such as its landmark healthcare coverage plan, aid to cities and towns, and education funding, the specialists said at an emergency budget hearing convened yesterday by members of the state Senate.

Several economic specialists

BUDGET, Page A8

How to fix?

- Economic development
- Reduce expenses
- Raise taxes/fees

The Role of Freight Rail

- Economic development
  - Rail freight displaces 12,000 trucks/day
  - Increase autos by 30,000/day or 12,000 buses
  - Increased highway capacity allows more development
  - More efficient distribution
  - Attract new industries needing rail service

Expense Reduction

- Significant reduction in road & bridge damage
- 50 million gallons of fuel saved/year
- Shared development of passenger and freight capacity
- Much underutilized assets in place
- Less expensive way to improve air quality
- State saves on costs of goods and reduced inventory

Concerns

- State strategy? Move rail freight to suburbs.
  - Impacts fastest growing regions
- Lack of awareness of rail freight opportunities
- State/railroad relations antagonistic
- Lack of public/private partnerships
- Conflict between passenger and freight needs
- Answer is more capacity!

Freight Study UPWP Proposals

- Freight Rail Study “Implementation”
- Rail freight diversion
- Short line rail study

ADVANTAGES OF FREIGHT RAIL

Presented to the Regional Transportation Advisory Council (RTAC)
By Walter Bonin/Frank DeMasi (RTAC) Freight Committee May 09

Role of the Executive Office of Transportation and Public Works (EOTPW)

The Executive Office of Transportation and Public Works is the principle architect of transportation planning and development in the Commonwealth.

Chapter 6A of the General Laws describes the scope of EOT's mandate and establishes EOT's role with respect to MassHighway, the MBTA, Massport, the Turnpike Authority, Regional Transportation Authorities (RTAs), and other agencies.

Chapter 161C provides a broad and unambiguous statement of legislative intent with respect to rail transportation and EOT's role in carrying out that intent.

The Executive Office [of Transportation and Public Works} shall take such steps as may be necessary to provide for:

The development, promotion, preservation, and improvement of an adequate, safe, efficient and convenient rail system for the movement of passengers and freight in the Commonwealth.

***In carrying out the purposes of this Chapter, the Executive Office shall seek to encourage and develop rail services which promote and maintain the economic well-being of the citizens of the Commonwealth, and which preserve the environment and the Commonwealth's natural resources.*"**

Environmental Advantages of Rail

Every railcar trip removes approx three truck trips from congested highways

Railroads can move a ton of freight 3 times as far as 3 trucks on a gallon of fuel

Per ton-mile, railroads emit 1/10th the hydrocarbons and diesel particulates as trucks, and 1/3 the oxides of nitrogen and carbon

Rail energy intensity, is 444 Btu/ton mile, and 3,337 Btu/ton mile for trucks

Freight rail efficiency has improved 72% since 1980, saving 2.8 billion fewer gallons of fuel in 2003

A single intermodal train can take 280 trucks off our highways

Studies have estimated cost of highway traffic congestion in the US is $69.5 Billion, representing a cost of 3.5 billion hours of extra travel time and 5.7 billion gallons of fuel wasted sitting in traffic

Infrastructure Impacts of Trucks

Hidden Externality costs of long haul trucking are:

- **Pavement wear/tear**
- **Congestion costs**
- **Accident costs**
- **Excess user costs**
- **Air Quality**
- **Noise impacts**
- **Health/environment impacts**
- **A truck weighing a legal 80,000 lbs. GVW is more then twice as likely to be involved in a fatal crash than a truck weighing about 50,000 lbs. GVW. (University of Michigan Transportation Research Institute, 1988).**

Pavement damage is caused almost entirely by heavy trucks, not by passenger cars. One legal 80,000 lbs. GVW tractor-trailer truck does as much damage to road pavement as 9,600 cars. (Highway Research Board, NAS, 1962).

Environment and Congestion Mitigation – Air Quality

	EMISSIONS FACTORS (Grams per Vehicle Mile)		EMISSIONS FACTORS (Grains per Revenue Ton-Mile)	
	RAIL	TRUCK	RAIL	TRUCK
Carbon Monoxide (CO)	2.99	3.15	0.030	0.157
Nitrogen Oxides (NOx)	20.24	20.60	0.202	1.030
Volatile Organic Compounds (VOC)	1.10	2.74	0.011	0.137
Particulate Matter (PM)	0.70	1.24	0.007	0.062
Assumes 100 tons per car by rail and 20 tons by tractor-trailer distance of 750 miles.				

- **The American Trucking Association (ATA) estimates trucking spent a record $135B on diesel fuel in 2008, $22B more than 2007**
- **Global Insight, Inc, forecasts shortage of long haul truck drivers @ 111K by 2014**
- **ATA estimates cost of driver turnover is $10K/1,000 drivers at 120% turnover = $12M/year**
- **Texas Transportation Institute estimates highway congestion cost trucking $168B/year**

EXTERNALITY COSTS OF LONG DISTANCE FREIGHT

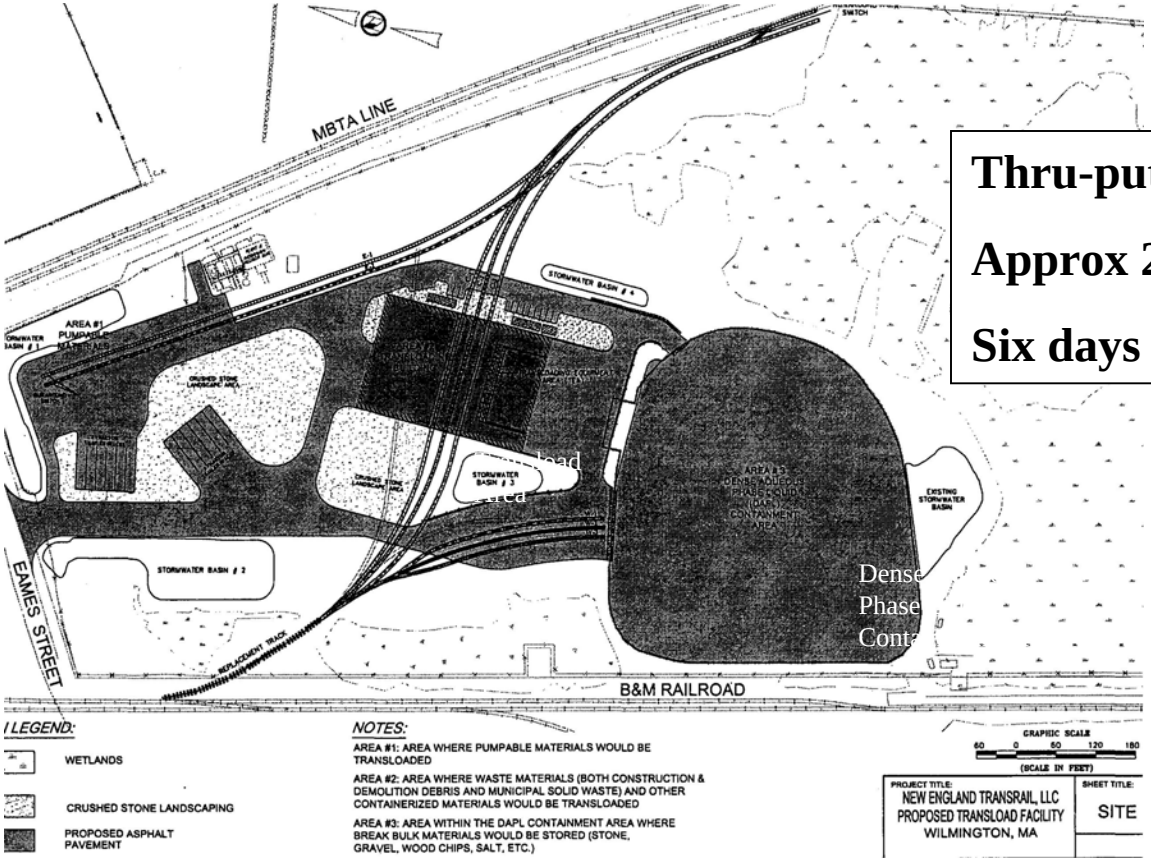
A transload facility moving 2,500 tons per day, six days per week, 52 weeks per year, 750 miles, generates Externality Costs (Million $'s/year) @ $4.9 M for rail - $89.3 M for truck (87% More)

100 TONS PER RAIL CAR, 20 TONS PER TRACTOR-TRAILER

	RAIL FREIGHT	TRACTOR-TRAILER
Pavement Wear & Tear	$0	$18,954,000
Excess User Costs	$0	$8,950,500
Congestion Costs	$0	$7,020,000
Air Pollution	$1,193,400	$6,318,000
Noise Impacts	$2,667,600	$11,337,300
Accident Costs	$1,067,040	$36,679,500
TOTAL COST (Both Dir)	$4,928,040	$89,259,300
COST PER TON	$6.32	$114.44

	Gallons of Diesel Fuel Per Year		
	Tractor-Trailer	Rail	Saving
Fuel Use at 100 tons rail/20 tons truck	9,915,254	2,854,800	7,060,454
Fuel Use at 64 tons rail/8.9 tons truck	22,033,898	4,453,488	17,580,410

New England Transrail LLC proposed Transload Facility –Wilmington/Woburn MA



Thru-put projected at

Approx 25 Carloads per day

Six days per week

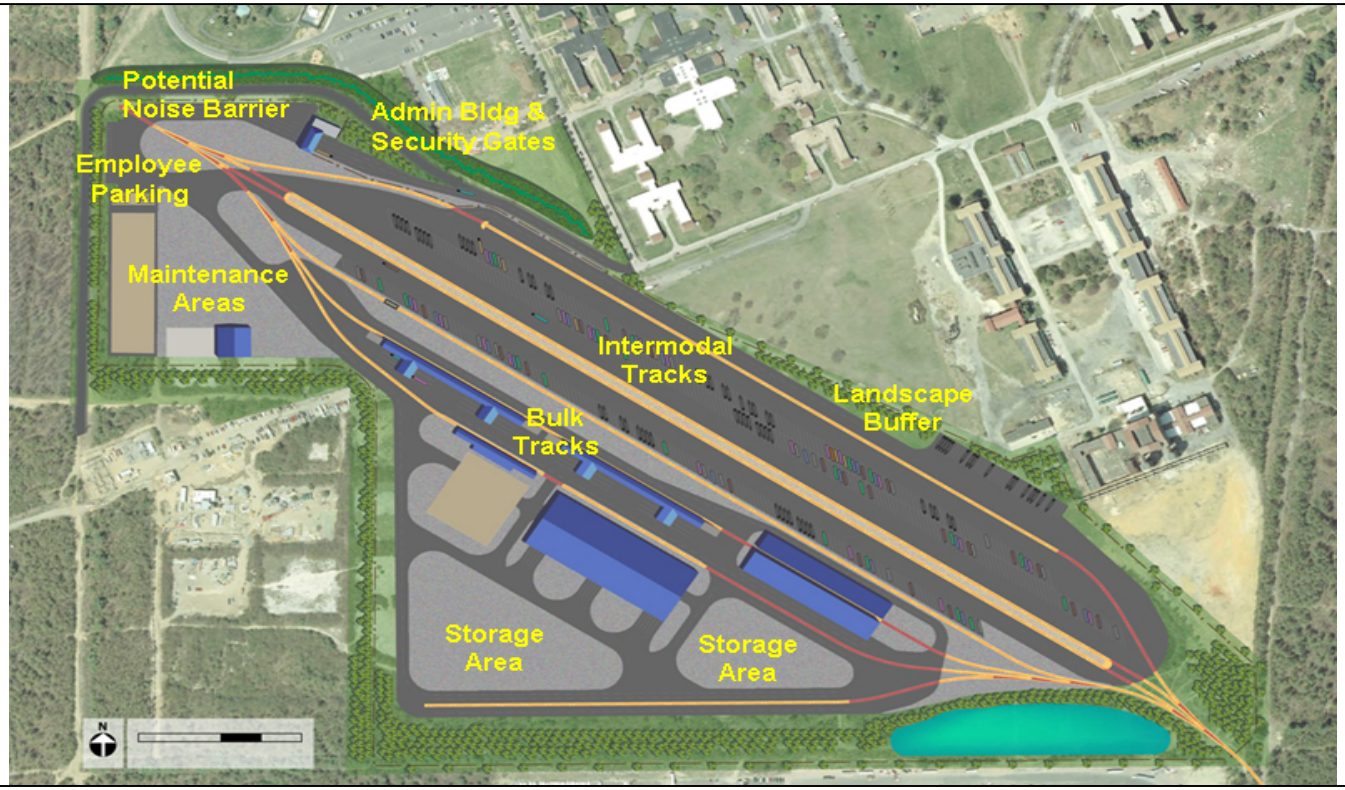
The rail facility proposed would handle approximately 25 rail cars a day, off loading highways by over approximately 180 interstate truck trips each day. Estimates made of the opportunity costs of removing these trucks would save approximately $6 million a year in costs to the state.

Local communities require mitigation of the impact of such operations in their area, however the regional benefit is great, Jobs for locals, tax revenue resulting from economic development, and improvement in the region's air quality.

Freight Villages: Defined FHWA Data Source

- Cluster of freight-related business
- In a secure perimeter
- Single management
- Master planned
- Near cities
- High quality settings
- Support services

Long Island NY Proposed Freight Village Template



THE LAYOUT OF A FREIGHT VILLAGE:

Warehouse, both bonded and non-bonded with 4000 m2 of storage and cross docking facilities. Backed by our Land Logistics division, we also provide distribution services.

Container Freight Station providing stuffing and unstuffing of containers and cargo consolidation service.

Container Depot for storage of empty and laden containers with cleaning, maintenance and repair services.

Intermodal terminal for interchangeability of transportation modes from rail to road and with direct connectivity to both.

A Transload Area with Team Tracks for independent enterprises to receive/ship bulk commodities or construction materials/finished goods.

A Transload Facility to handle Construction and Demolition Debris and Solid Municipal Waste

Adequate Green Space and Buffers/Fencing and earthen burme to provide soft edges to surrounding abutters

Direct Cost to Move Freight

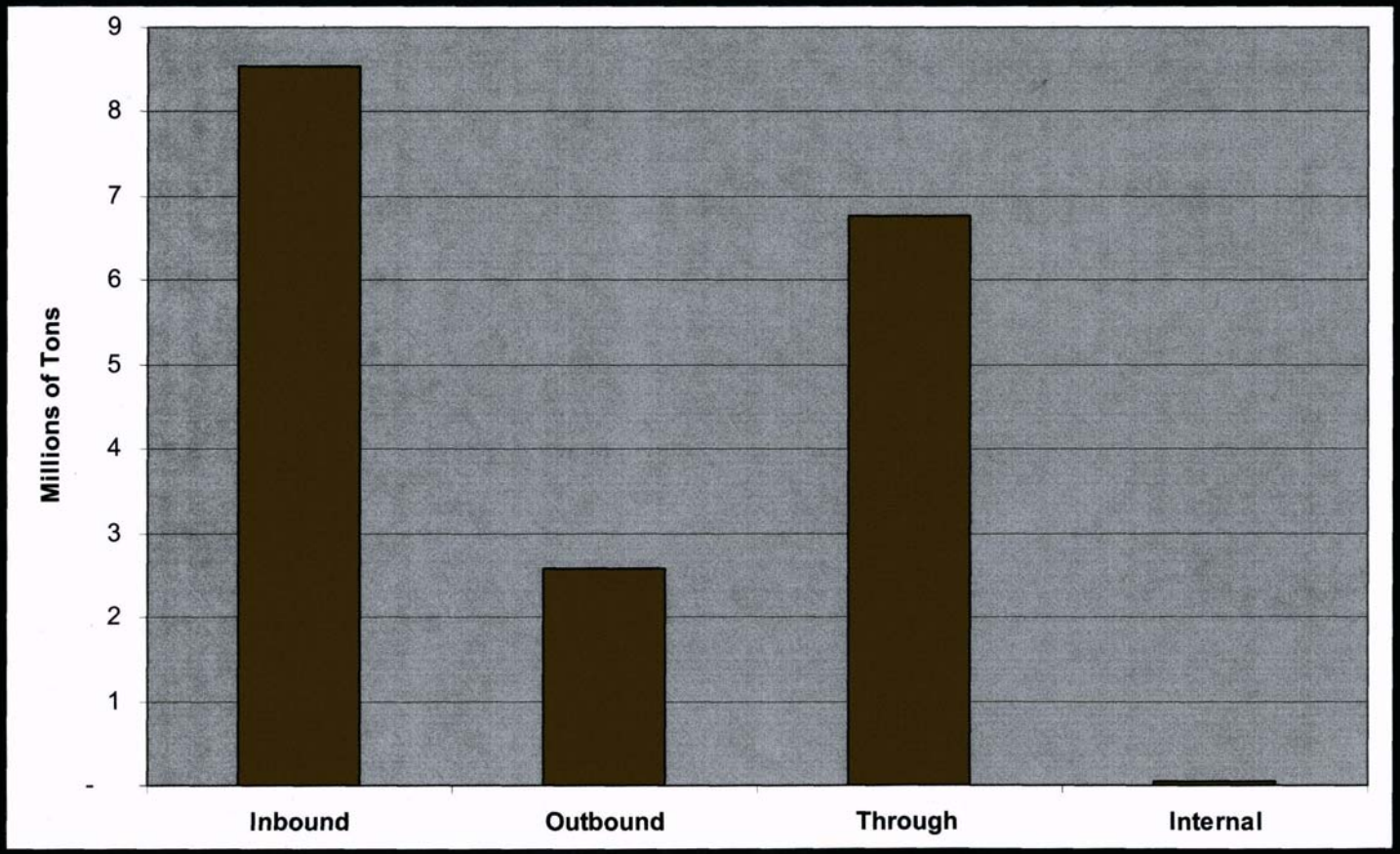
There is a savings of approximately 67% to 83% for using railroad services for moving freight long distances

The cost to move freight by rail a distance of 750 miles ranges between $2,000 and $4,000 per rail car depending on the commodity moved

At 100 tons per rail car, this works out to between *$20 and $40 per ton by rail*

This compares to approximately $2,400 for a tractor-trailer truck moving 20 tons of freight 750 miles and returning empty, for a cost of *$120 per ton by truck*

Shipping Patterns of MA Rail Freight Flows



EOT Freight & Rail Plan

Source: 2007 Global Insight TRANSEARCH database

Over 18 million tons of freight were moved by rail in - out - and through Massachusetts in 2007
Over 265 million tons of freight were moved by truck

Railroads: A component of remedy for Infrastructure, Environmental, Economic Development Deficiencies

Estimated Benefits of Rail Freight *(FHWA Freight Analysis Framework):*

If the current volume of rail freight carried in and through Massachusetts were diverted to trucks, over 1 million additional truck trips would be needed each year.

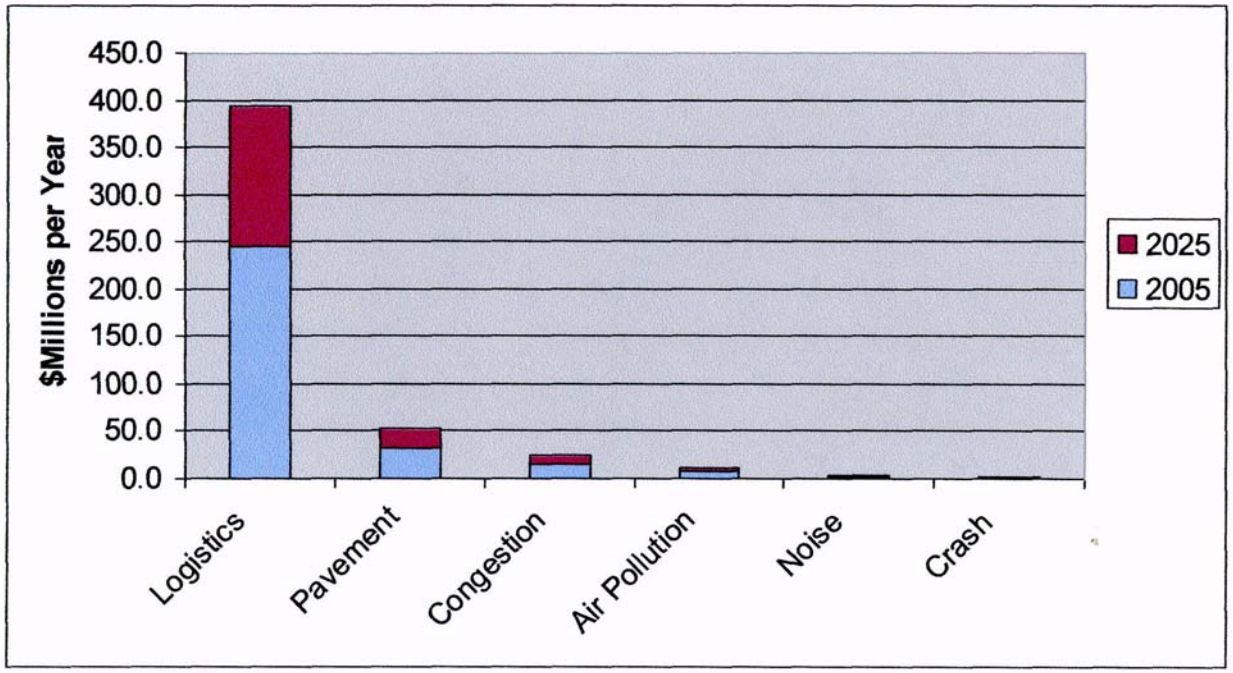
Added pavement wear and tear avoided would be $32 million/yr, congestion costs to commuters would amount to $15 million/yr, Costs related to emissions, noise, and traffic accidents would be $10 million/yr.

Logistics cost savings of the existing customer base, using rail are estimated at $250 million per year.

A truck weighing a legal 80,000 lbs. GVW is more then twice as likely to be involved in a fatal crash than a truck weighing about 50,000 lbs. GVW. (University of Michigan Transportation Research Institute, 1988).

Pavement damage is caused almost entirely by heavy trucks, not by passenger cars. One legal 80,000 lbs. GVW tractor-trailer truck does as much damage to road pavement as 9,600 cars. (Highway Research Board, NAS, 1962).

Estimated Benefits of Rail Freight



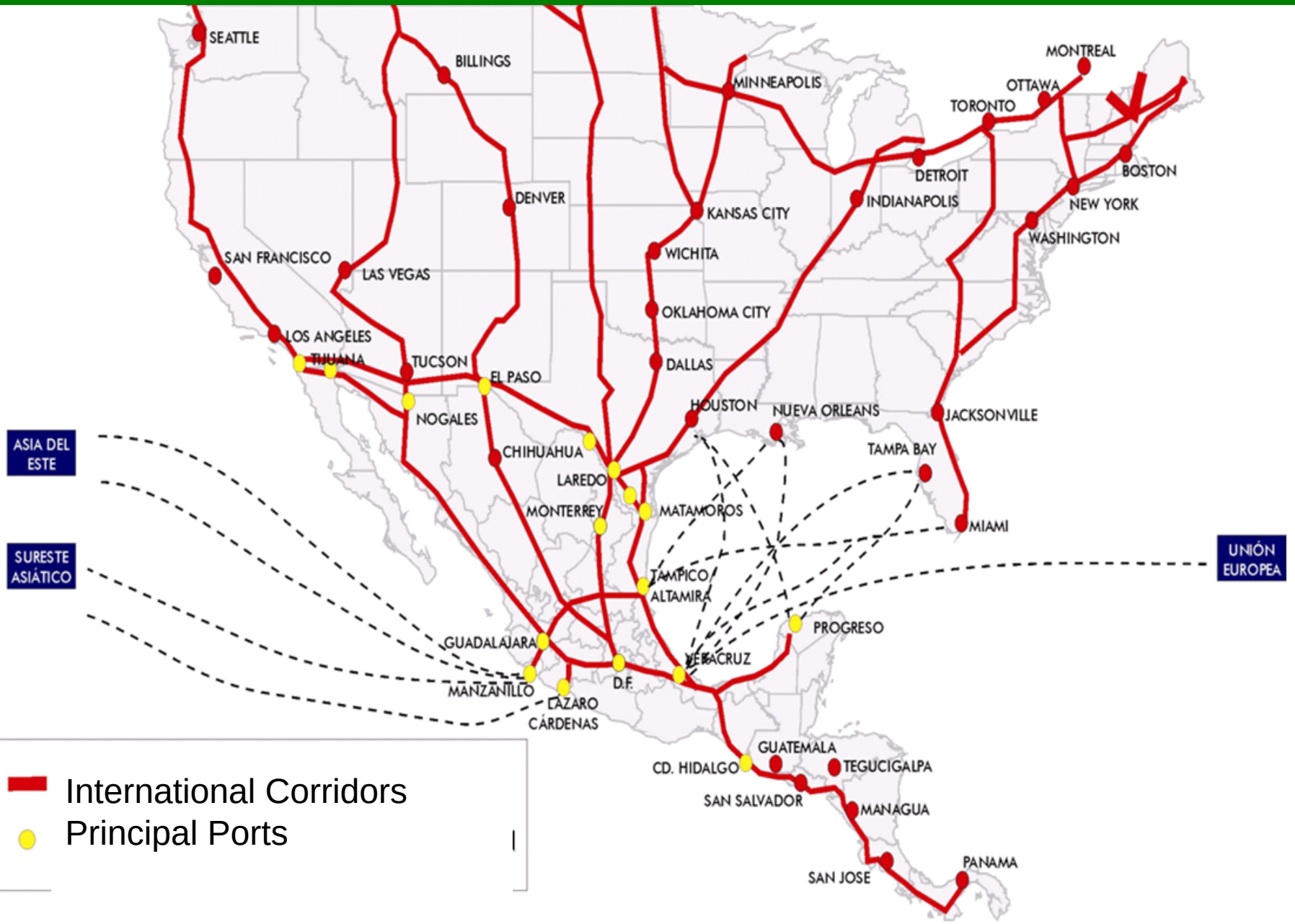
Source: Analysis based upon forecasts from FHWA Freight Analysis Framework and social costs from the Highway Cost Allocation Study; logistics benefits are assumed to be $0.02 per ton-mile.

1 million+ additional truck trips needed to handle freight moved by rail each year
Moved by highway, added pavement damage would = $32 million/yr
Congestion cost to commuters = $15 million/yr
Costs related to emissions, noise, traffic accidents = $10 million/yr
Costs in above figure = $58 million/reflect social benefits realized in MA

Data from: ***Massachusetts Rail Trends and Opportunities*** - Prepared for EOTPW By Asset Performance Management, Inc

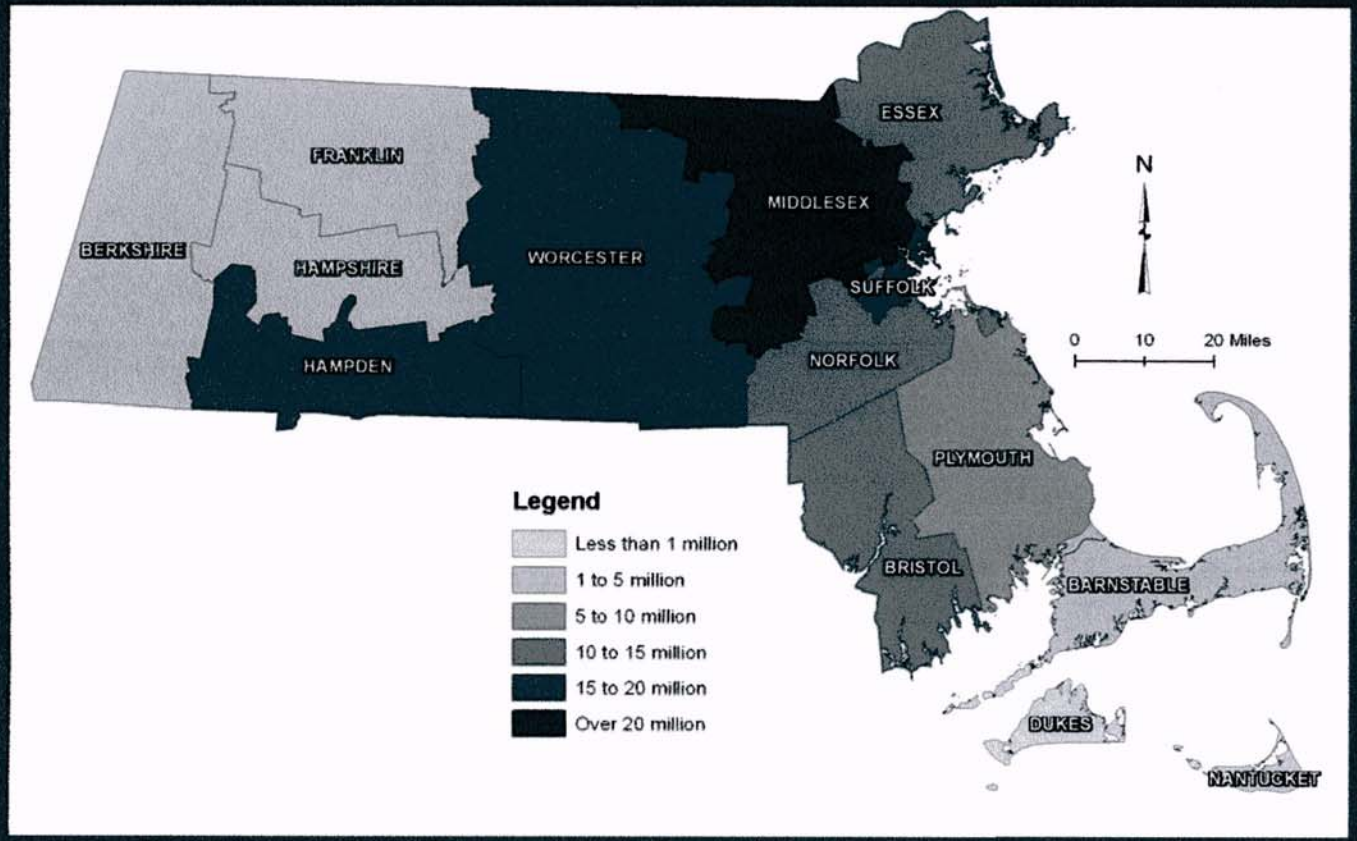
The Regional & National Perspectives

PRINCIPAL STRATEGIC CORRIDORS

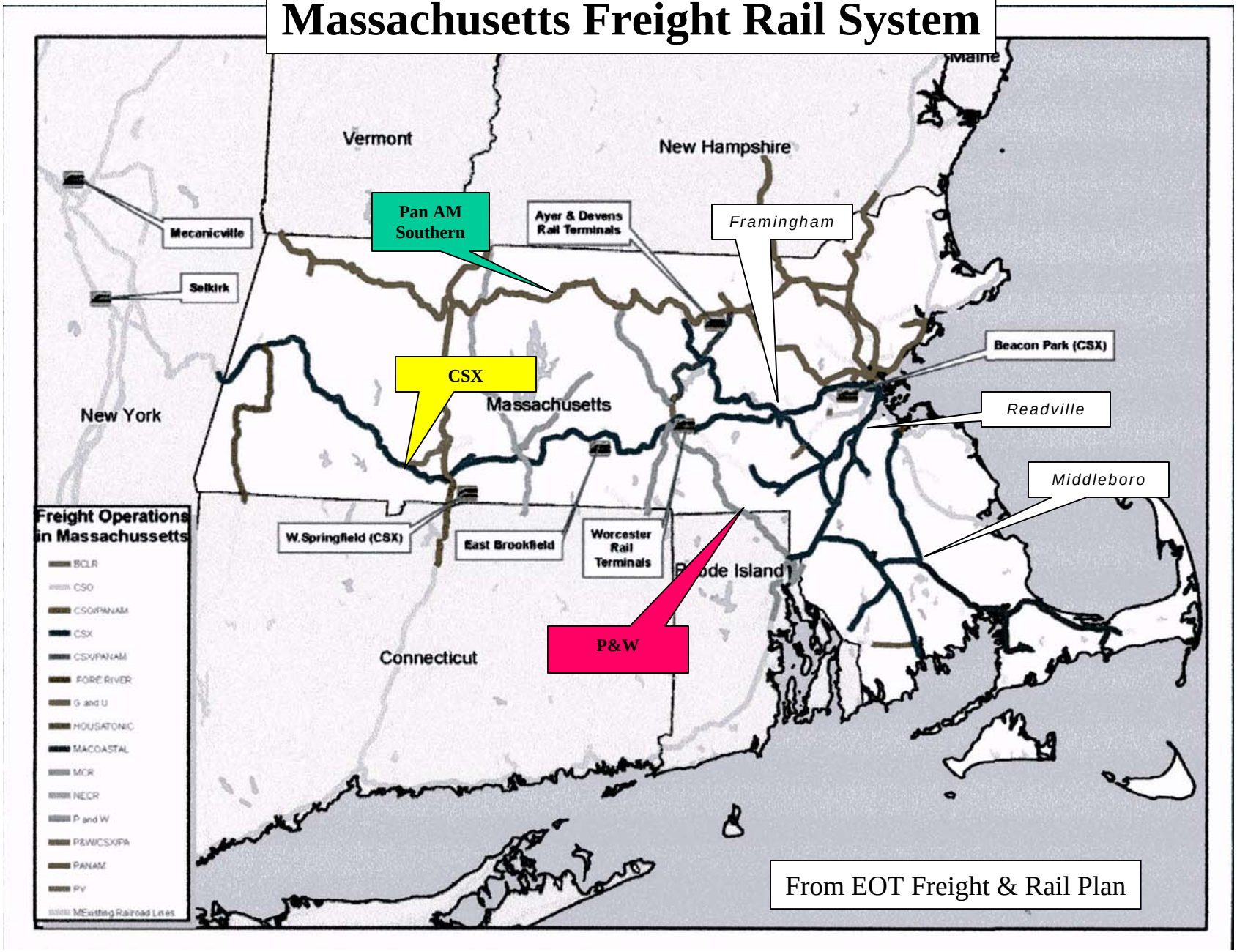


Development of Strategic Corridors

Freight by Destination County in MA



Massachusetts Freight Rail System

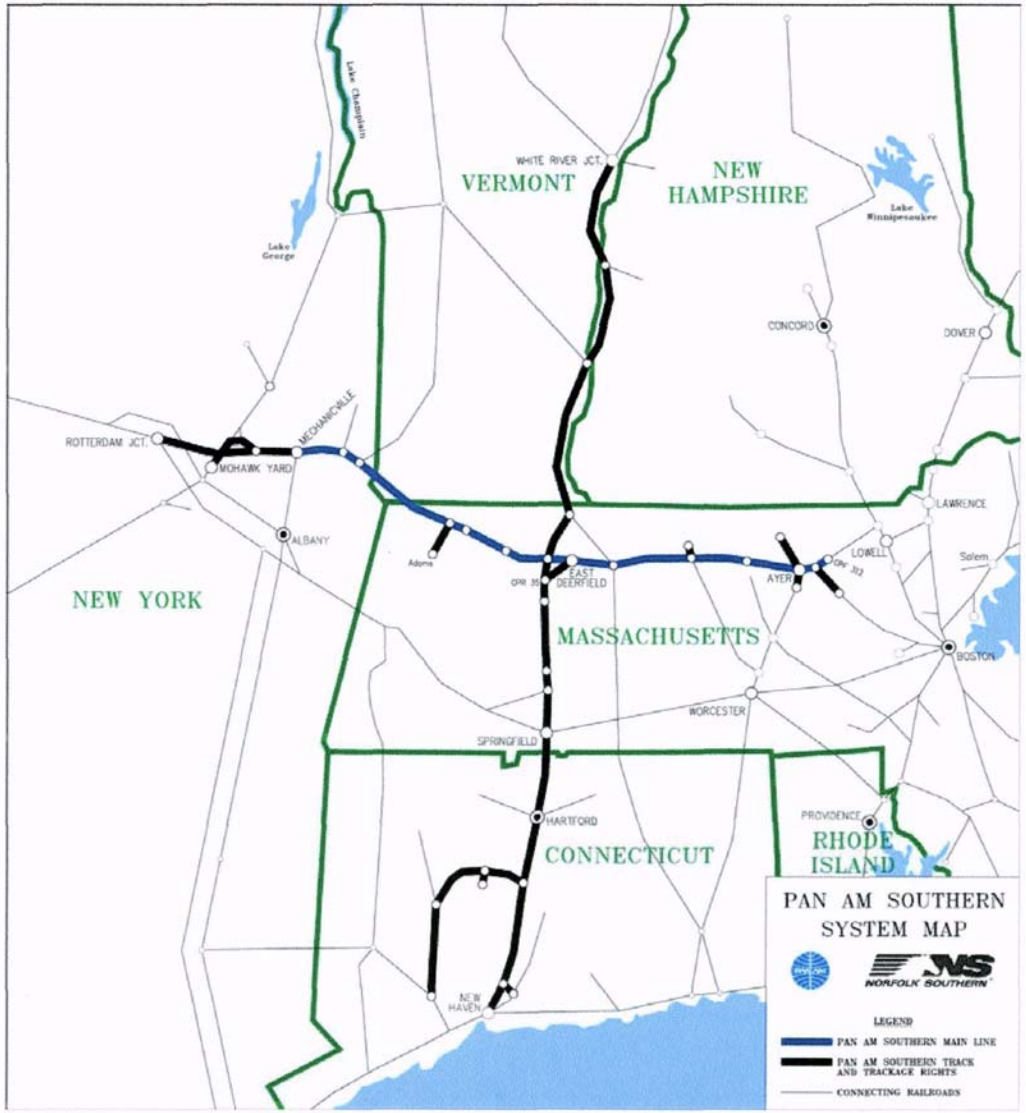


Pan Am Southern (PAS) will operate:

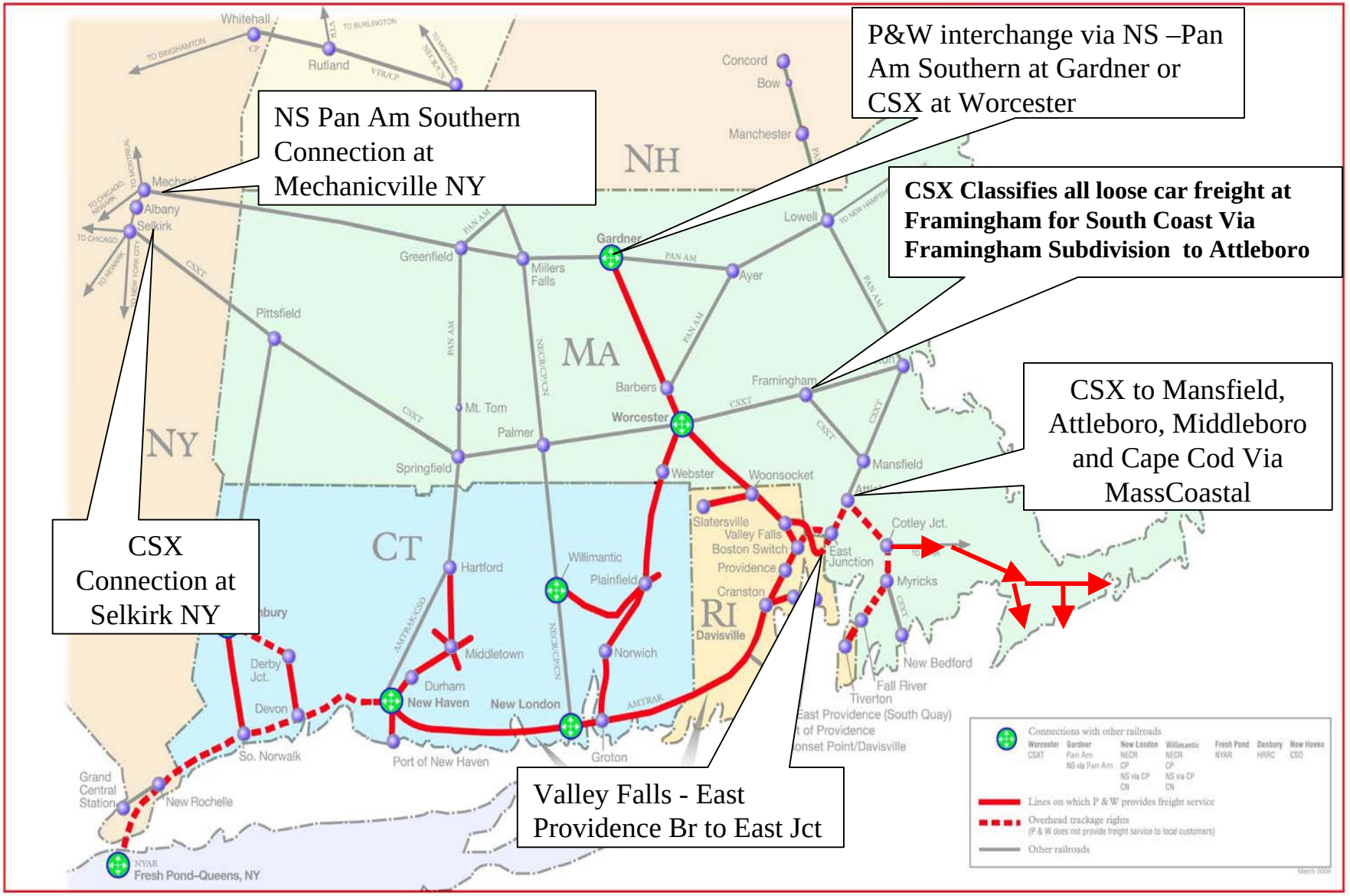
- Between Rotterdam Jct., NY and Ayer, MA

- Between White River Jct., VT and New Haven/Derby, CT.

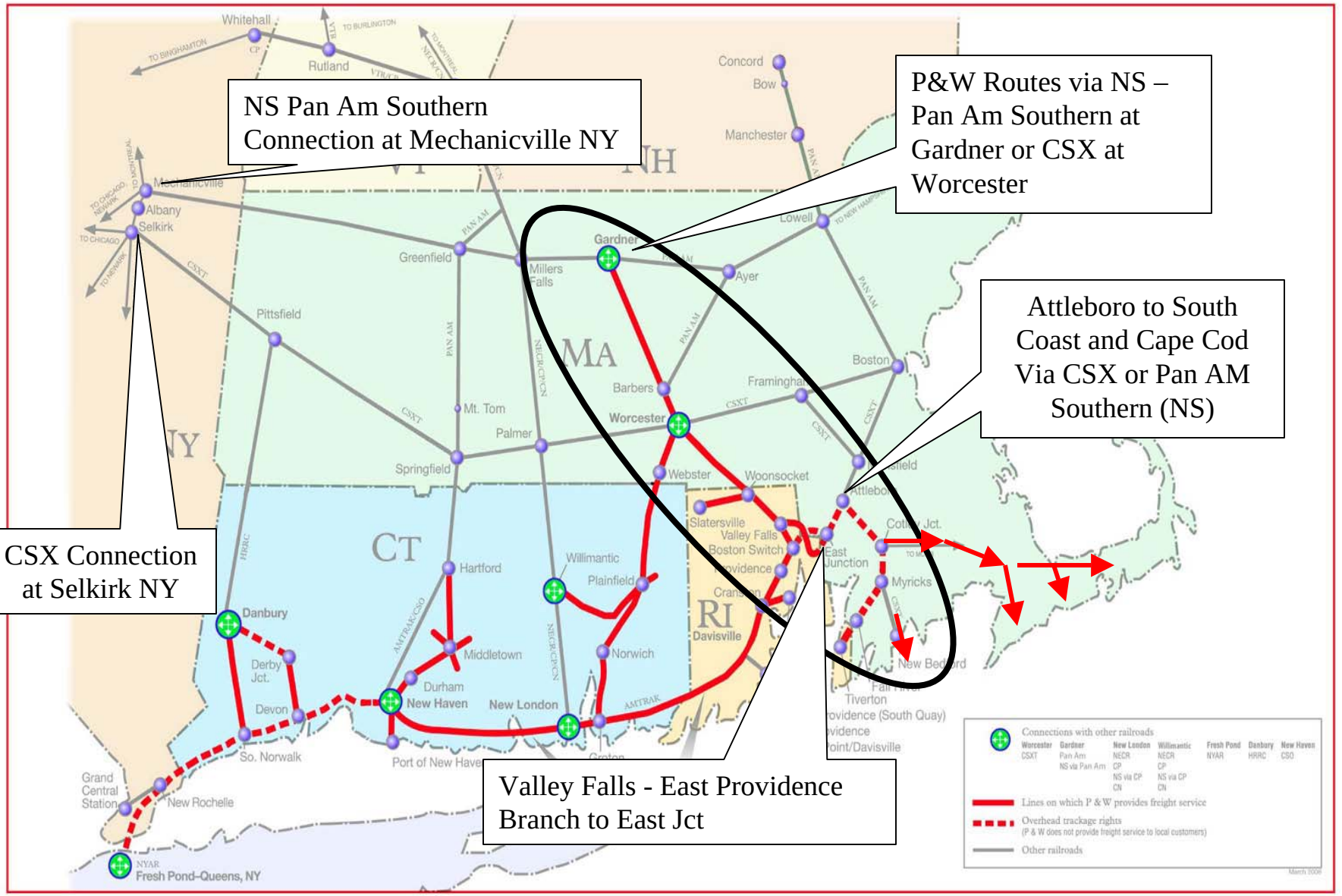
The main line – denoted in blue – is “The Patriot Corridor”



Existing CSX South Coast Rail Freight Service Via Selkirk, Framingham, Mansfield, Attleboro, Fall River, New Bedford, Middleboro, Cape Cod



Proposed Alternate Rail Freight Service Via P&W interchange at Worcester - CSX or Gardner - Pan Am Southern (NS)



Massachusettes Short Line Railroads

Our 11 regional and short line railroads are fully engaged at their own expense to bring sustainable business into our region for the economic benefit of all.

The American Short Line and Regional Railroad Association statistics for 2004 show that Short Line railroads operating in Massachusetts

- **Handled 109,000 railcars**
- **Removed 247,000 trucks off our congested/stressed roads and bridges**
- **Avoided an estimated $19,000,000 in pavement damage**

In 2004 these railroads spent $16,883,238 on Capital and Maintenance expenditures to provide reliable service to over 100 in-state customers.

Their marketing efforts in 2004 brought 11 new facilities on line creating 268 new jobs in the Commonwealth.

Their safety record is one of the best in the nation.

Massachusetts, unlike most of the surrounding states that our short lines compete with to retain and add new customers, *has no programs to assist in the development of freight rail infrastructure or provide support for siding installations for the companies they attempt to locate here*

Intermodal/Short Line Freight Rail Operations to Gateway Cities/Ports

It is suggested that the CSX Boston Cluster, the Fitchburg, Franklin, Fairmount, and CSX South Coast Branch Lines be operated as a "third party" Terminal Railroad, or one or more Short Line Railroads concurrent with MBTA, over state owned ROW as shared assets.

EOT ownership of CSX Freight Lines emanating from Worcester and Framingham would allow a contracted Terminal Rail operation to serve the ports of New Bedford, Fall River, and Boston. MBTA owns the Fitchburg line with direct rail connections from Ayer to Moran Terminal.

Interchange with Norfolk Southern(NS)/Pan Am at Ayer would provide connections to our Gateway Cities/Ports (Salem/Gloucester) and to the North American Rail System and Canada and Mexico

Terminal rail/Short Line operations contracted out by EOT would free CSX and NS/Pan Am from the high cost of terminal operations while providing the Commonwealth with an independent, publicly owned, controlled, and efficient, modern intermodal rail distribution system.

Freight Rail Yards and Terminals in Massachusetts

Location	Operator	Facility Type	Estimated Size [1]	Interchanging Railroad[2]
Interchange/Switching				
First St., South Boston	CSX	Switching	N/A	
Prescott St., Readville	CSX	Switching	15-20 acres	
Nevins Yard, Framingham	CSX	Switching	8.5 acres	
North Yard, Framingham	CSX	Switching	14 acres	
CP Yard, Framingham	CSX	Switching	N/A	
Walpole	CSX	Switching	3.5 acres	
Westborough	CSX	Switching	20 acres	
Palmer	CSX	Switching	8 acres	NECR, MCER
Palmer	NECR	Switching	4 acres	MCER, CSX
Springfield Yard No. 3	PAR	Switching	N/A	
Pittsfield	CSX	Interchange/Switching	48 acres	HRRC
Pittsfield	Housatonic	Switching	25 acres	
East Deerfield[3]	PAR	Switching	181 acres	
Grossman Dr., Braintree	CSX	Switching	6 acres	
Middleborough	CSX	Switching	3 acres	
Fall River	CSX	Switching	3 acres	
New Bedford	CSX	Switching	40+ acres	
Lowell	PAR	Switching	N/A	
Lawrence	PAR	Switching	N/A	
Salem	PAR	Switching	N/A	
Inactive				
Garden St., Worcester	PAR	Inactive	9 acres	
Pittsfield	PAR	Inactive	11 acres	
Willow Road, Ayer[4]	PAR	Inactive	40 acres	

Notes:
1. Acreage estimates are based upon municipal assessor's data or other unconfirmed sources.
2. "N/A" indicates information either "Not Applicable" or "Not Available".
3. East Deerfield Yard includes 64 acres owned by EOT.

Data from: ***Massachusetts Rail Trends and Opportunities*** - Prepared for EOTPW By Asset Performance Management, Inc

Top Ten Truck Commodities with an Origin or Destination in MA

Commodity - Total O&D	Truck Tons	% Share
Secondary Traffic	50.87	21%
Petroleum Or Coal Products	39.52	16%
Nonmetallic Minerals	38.26	15%
Clay, Concrete, Glass Or Stone	35.13	14%
Food Or Kindred Products	24.25	10%
Chemicals Or Allied Products	20.17	8%
Primary Metal Products	7.00	3%
Pulp, Paper Or Allied Products	5.01	2%
Lumber Or Wood Products	4.76	2%
Fabricated Metal Products	4.59	2%
Total	247.50	93%

Freight & Rail Plan

Top Ten Rail Commodities with an Origin or Destination in MA

Commodity - Total O&D	Rail Tons	% Share
Misc Mixed Shipments	2.15	19%
Chemicals Or Allied Products	1.44	13%
Food Or Kindred Products	1.33	12%
Pulp, Paper Or Allie Products	1.21	11%
Farm Products	0.87	8%
Waste Or Scrap Materials	0.82	7%
Transportation Equipment	0.71	6%
Nonmetallic Minerals	0.64	6%
Or Stone	0.58	5%
Lumber Or Wood Products	0.53	5%
Total	11.23	

Freight & Rail Plan

Note: Though there are 1.3 million tons of coal traveling on MA rail, 1.1 million are through and thereby not reflected

Opportunities for Diverting Freight from Truck to Rail				
Commodity	**Truck Tons**	**Truck% Share**	**Rail Tons**	**Rail % Share**
Non-Metallic Minerals	**38.26**	**15%**	**.64**	**6%**
Food/kindred prod	**24.25**	**10%**	**1.33**	**12%**
Chemicals/Allied Prod	**20.17**	**8%**	**1.44**	**13%**
Pulp Paper/Allied Prod	**5.01**	**2%**	**1.21**	**11%**

From EOT Freight & Rail Plan

Data Needs for Truck-to-Rail Modal Diversion Modeling*

Definition of Market

- **Origin/destination pairs**
- **Types of commodities**
- **Size of shipment load**

Market

- **Commodity flow data for defined market area**
- **Conversion factors for tons to units calculation (Vehicle Inventory/Use Survey)**

Service Sensitivities

- **Stated-preference survey results for defined market**
- **Consist of data intensive surveys with shippers/receivers that meet market definition**

Alternative Levels of Service

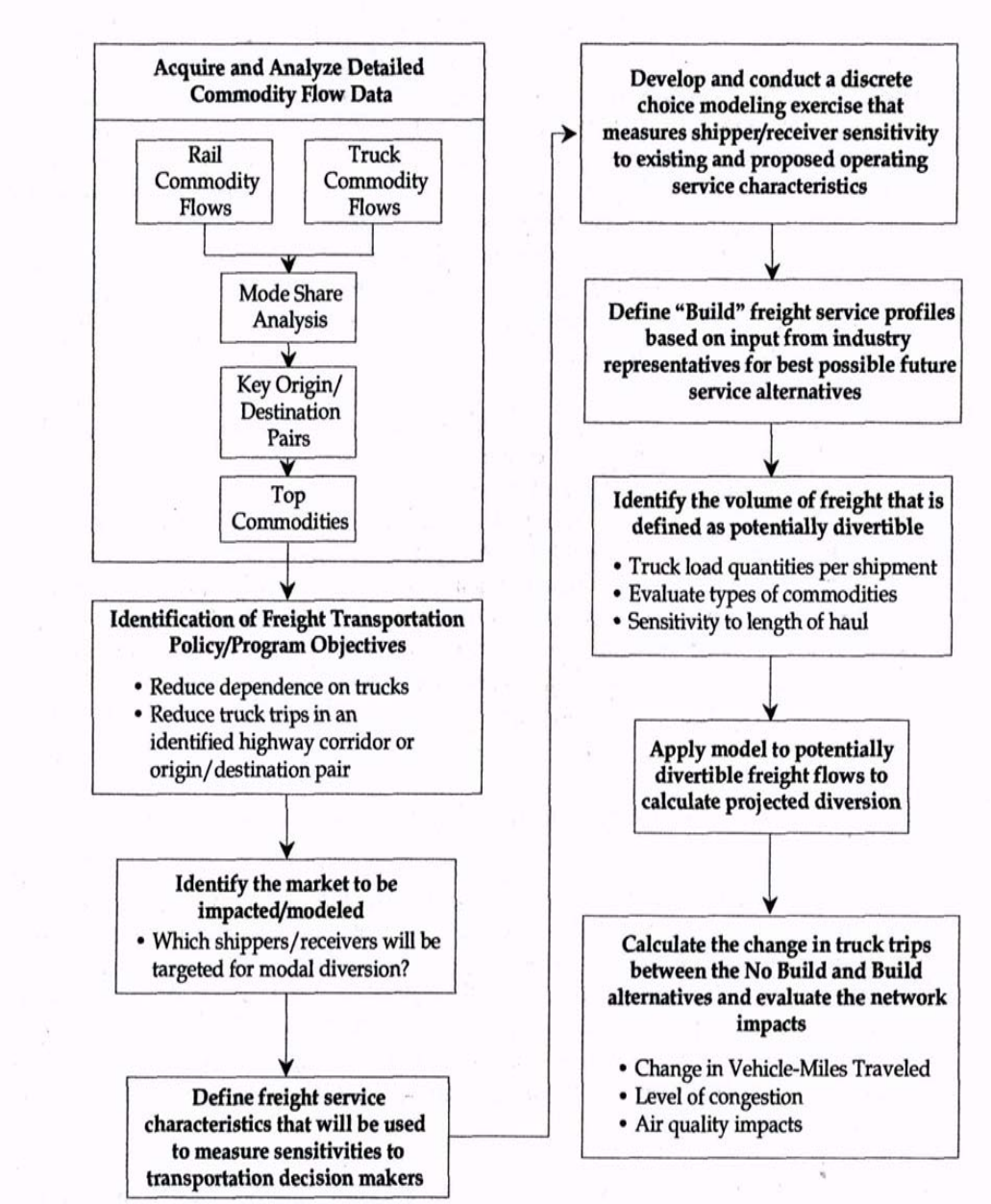
- **Level of service matrices for each defined alternative**
- **Development of new/future service alternatives should be based on private sector expertise, ideally from the transportation service providers**
- **Future alternatives should be based on desired goals/ objectives of transportation policy**

Impacts

- **Truck trip tables for each alternative to model highway impacts and other secondary impacts such as air quality**

Adapted from Cambridge Systematics Inc. "Vermont Statewide Freight Study

TRUCK TO RAIL DIVERSION IMPACT MODEL - Development & Application *



Adapted from Cambridge Systematics Inc. "Vermont Statewide Freight Study

Massachusetts needs a Port Inland Distribution Network

The Port of New York and New Jersey developed Port Inland Distribution Network (PIDN). Should be emulated in Commonwealth by EOT/MassPort/MassHighway by developing short haul intermodal lanes

Hub-and-spoke system designed to move containers by barge to water accessible ports, Bridgeport, Ct, Camden, NJ (rail service being considered): Providence, RI, and Boston, MA. New Bedford /Fall River should also be included.

Rail connections access terminals in New York, New Jersey and Pennsylvania in addition to existing rail service between the Port of New York and New Jersey and Worcester and Ayer MA.

Massachusetts North Shore freight terminals lack adequate rail connections. Boston and South Coast port rail connections need to be improved via Framingham and Attleboro.

Inland terminals are located at/near centers of marine customer service/distribution activities in l3-states. 82% container market in 13-state area found in 50-mile radius of these clusters!

Benefits of a Massachusetts Port Inland Distribution Network

Improves Container Handling

Reduces dwell time

- lowers empty container repositioning costs
- Improves container turnaround times
- Increases equipment utilization
- Enhances response time with an empty container depot and chassis pool

Creates Sustainable Environmental Benefits

Reduces traffic congestion on the hub port, highways, and major service routes.

- Lowers total truck vehicle miles traveled and fuel consumption
- Improves air quality

Expands logistics and warehousing Opportunities

- Expands use of water and rail network to meet customer needs
- Reduces inland distribution costs by means of economies of scale and enhanced logistics control
- Creates value added warehousing and distribution opportunities at feeder ports – especially for “heavy” containerized freight

Builds new partnerships

Expands use of barge and rail in port distribution

- Helps truckers better use limited manpower to meet growing drayage needs
- Creates more efficient use of trucks and lower turnaround times at new feeder ports, and focused drayage opportunities

Rail Freight Infrastructure Needs

- **Double stack/Vertical Clearances**
- **Passing tracks**
- **Modern yard/terminals**
- **19th to 21st century design**
- **curvature and track condition Improvements**
- **Weight capacity compliant 286,000# –pound cars**

Conclusion – Legislative Action

Legislation proposed as House Bill 3355 is needed to create A Transportation Infrastructure Fund to provide financial assistance for a *Rail Capacity Improvement and Freight Diversion Program* by enabling the Commonwealth to partner with railroads, through the collaboration of MassHighway, EOTPW, MBTA, MassPort, the Executive Office of Housing and Economic Development, and private stakeholders including industry, warehousing, and logistics providers

This legislation would reduce significantly the adverse impacts of transportation of the majority of freight by highway:

- **Reduce traffic congestion on major arterials and interstate highways by increasing rail capacity for diverting both passengers and freight**
- **Increase the competitive advantage of trade for the region, create jobs, and foster economic development opportunities to retain and attract industry**

Creation of public private partnerships to invest in expanding rail capacity, and modernize branch rail lines, would reduce the significant burden Truck Freight imposes on the Commonwealth's infrastructure and environment.

Advantages of Freight Rail - Additional Information

Please open in Note Pages View for additional narrative

Massachusetts General Law Chapter 161 C, Par. 1

"It is hereby declared:

that rail transportation offers economic and environmental advantages with respect to land use, air and noise pollution, energy efficiency, safety and costs per ton mile of movement to the extent that the preservation, development and maintenance of such services is a public purpose and in the public interest;

that essential rail transportation services for the movement of passengers and freight are threatened by the cessation or significant curtailment because of the deterioration or inadequacy of rail rights-of-way either earlier acquired for a public purpose, or because of the insufficiency of inadequacy of rail facilities and related equipment, and because of the inability of private railroad companies to provide such* services *or facilities without public financial assistance;

that the public convenience and necessity require that . . . adequate and efficient rail services and facilities be provided in the Commonwealth;

that these needs cannot be met without substantial action by the Commonwealth; and

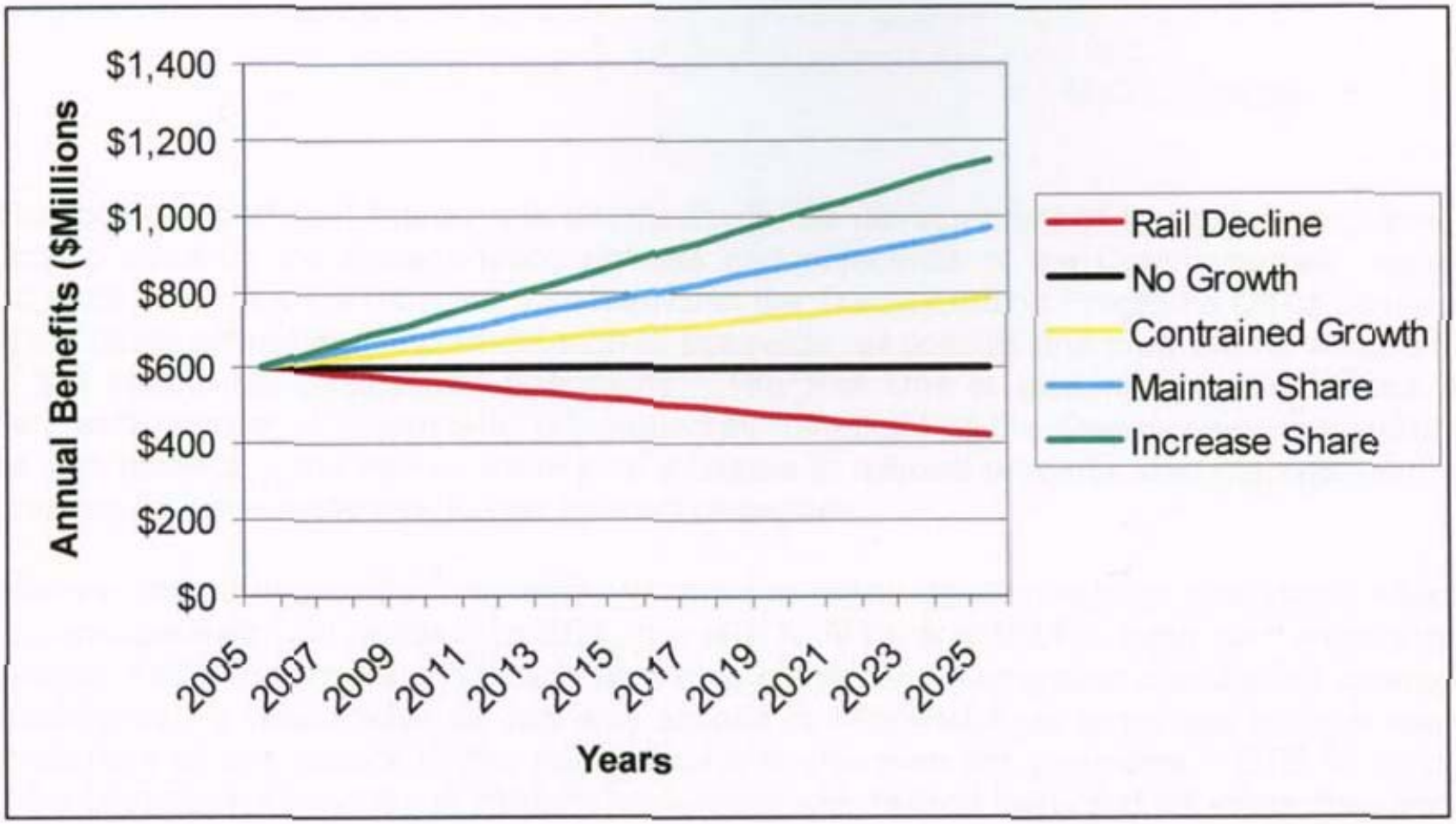
that it is the intent of the General Court to provide for such action through an act which authorizes a public agency to plan for and carry out the steps necessary to acquire, preserve, develop and construct when necessary on lands not formerly owned or used by a railroad, which insures the maintenance and operation of, adequate and efficient rail rights-of-way, related facilities or equipment, and rail services.

Advantages of Freight Rail - Additional Information

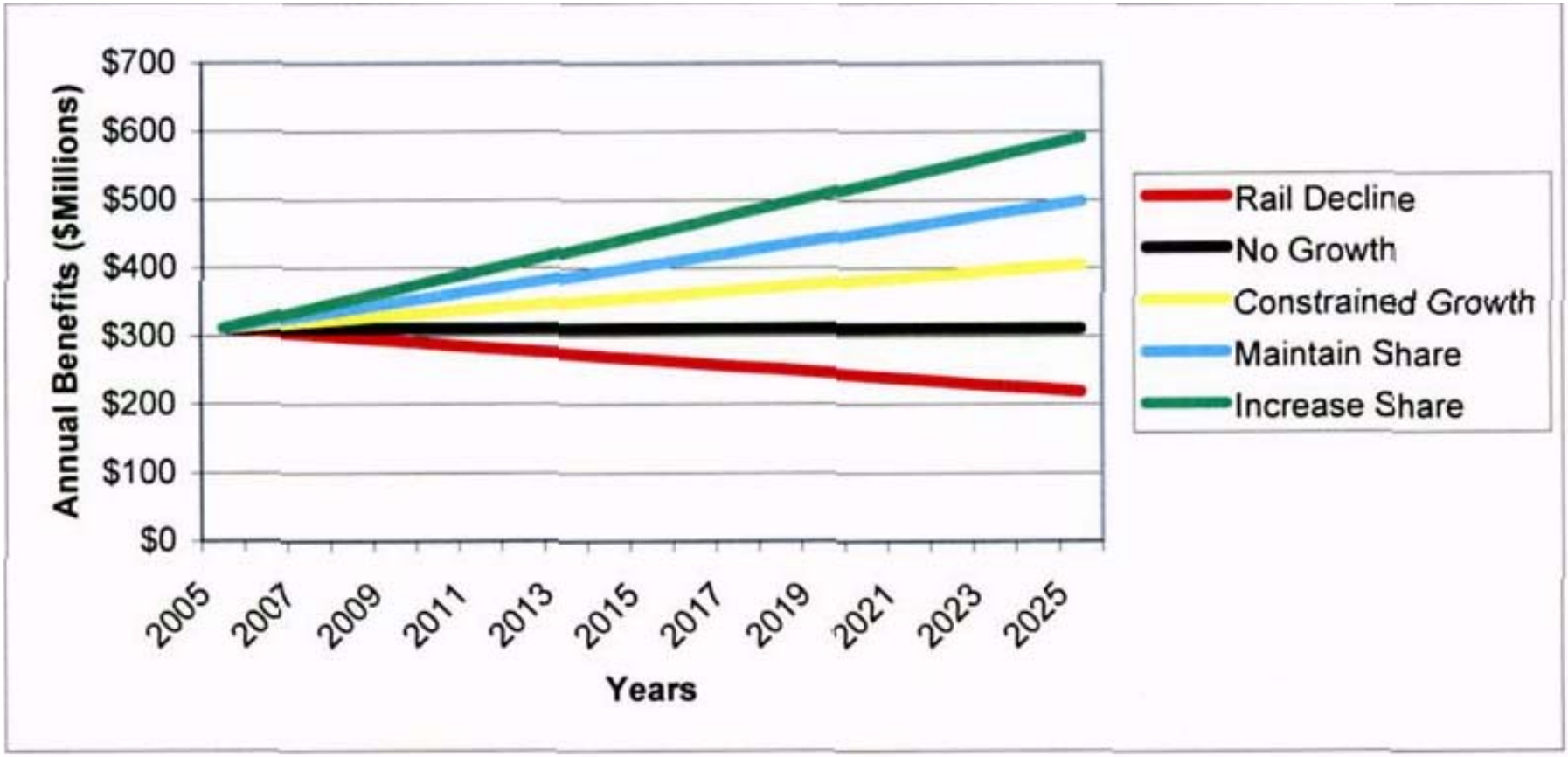
Texas Mobility Report for Boston - Change from 1982 to 1999

- ***Travel Rate Index (TRI) + 145%,*** additional time required to travel at peak periods due to heavy traffic. A Travel Rate Index of 1.2 means that a 10-minute trip at mid-day would take 12 minutes during rush hour.
- ***Travel Time Index (TTI) + 125%,*** additional time required to travel at peak periods due to heavy traffic AND roadway incidents.
- ***Roadway Congestion Index (RCI) + 145%,*** direct comparison of miles traveled with the miles of road available to travel on.
- ***Cost, hours of delay,*** **30 hours** additionally wasted per person per year

Projected Benefits Related to MA Freight Rail Shipments (Including Out-of-State Social Benefits)



Projected Future Benefits from Rail Freight in MA 2005 - 2025



North Atlantic Container Market Shares

Port	2007 TEUs	2007 Rank	Market Share 2007	% Change 2006-2007
Halifax	490,071	22	6%	-7.70%
Montreal	1,363,021	14	16%	5.70%
Boston	220,339	30	3%	10.10%
NY/NJ	5,299,105		62%	4.10%
Philadelphia	253,492	27	3%	2.50%
Wilmington (DE)	284,352	24	3%	8.20%
Baltimore*	610,466	20	7%	-2.80%
TOTALS	8,520,846		100%	

* Baltimore data for Maryland Port Administration (MPA) facilities only

Source: AAPA Survey

Benchmark of Track Maintenance Costs

FRA Track Class	Maximum Speed – Freight (mph)	Maximum Speed – Passenger (mph)	Typical Traffic Volume for a Freight Line (MGT[1]/year)	Estimated Annual Expenditures per Track Mile
Excepted	10	Not allowed	<1 Freight only	$6,000
1	10	15	<5 Freight	$12,000
2	25	30	5-10	$18,000
3	40	60	10-20	$27,000
4	60	80	20-40	$45,000
5	80	90	>40	$45,000 +
6	110	110	Not applicable	$45,000 +

Notes:

1. MGT = Million Gross Tons
2. The table also includes estimates of annual track costs for Track Classes 1-4 that were included in the Pennsylvania State Rail Plan ($2003).[1]