Transportation Reform: Progress To Date

• MassDOT Scorecard: $124.9 million in savings (Dec. 2010)
  – $9.5 million in snow removal savings
  – $2.7 million saved by bringing services in-house
  – $30 million anticipated health care savings (shifting T employees to GIC)

• Transportation Finance Commission recommendations
  – 12 of 22 completed
  – Another 8 in progress

• Transportation Advisory Committee established to monitor progress on reform
  – Finance
  – Communications
  – Best Practices
The Regional Congestion Picture

INRIX Congestion Scorecard: Metro Boston 8th worst commute

Travel Time Tax (time wasted waiting) up since 2006 in Boston metro area; average for top 100 metros down 12.8% since 2006.


Regional issue with impacts for Boston/Cambridge, and vice versa.

Source: INRIX National Congestion Scorecard 2010 Annual Report
Where would we be without the T?

<table>
<thead>
<tr>
<th>Public Transportation Service</th>
<th>2009</th>
<th>2008</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Passenger-miles of travel (million)</td>
<td>1,810</td>
<td>1,881</td>
<td>1,765</td>
</tr>
<tr>
<td>Unlinked Passenger Trips (million)</td>
<td>364</td>
<td>378</td>
<td>364</td>
</tr>
<tr>
<td>Added Congestion if Public Transportation Service were Discontinued</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Increase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delay (1000 hours)</td>
<td>32,885</td>
<td>35,805</td>
<td>38,064</td>
</tr>
<tr>
<td>Delay per Peak Auto Commuter (hours)</td>
<td>8</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Congestion Cost ($million)</td>
<td>745</td>
<td>832</td>
<td>830</td>
</tr>
</tbody>
</table>

*Texas Transportation Institute Urban Mobility Report 2010*
Transportation Investment and the Massachusetts Economy

Our Transportation Future: White Paper, July 2010

Direct, indirect and induced economic benefits of transportation investment.

$1 billion spent on highway and transit capital projects $14,000 total jobs created (EDRG)

Investing in transportation makes all sectors of the economy operate more efficiently.
Transportation Investment and the Medical, Academic and Life Sciences Cluster

Enhance access and mobility:
• Within clusters
• To and from clusters

Boston/Cambridge:
• Compact geography
• High “bump rate”
• “Meds and eds”
• Logan Airport
• Challenge: Traffic
• Solution: Transit

Transit Needs: Replacing Rolling Stock

• Orange Line: 120 cars built in 1979-1981 need to be replaced
• Red Line: 74 cars built in 1969 need to be replaced
• New vehicles are needed on the Mattapan High Speed Line to replace the cars built in the 1940s
• More than half of the MBTA’s 82 commuter rail locomotives date to the 1970s and nearly all are at or past the manufacturer's recommended lifespan of 25 years

Slide Courtesy:
Dukakis Center for Urban & Regional Policy
Northeastern University
$4.6 Billion in Projects Not Funded in MBTA Capital Investment Program

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Cost (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement New Red Line Vehicles (to replace existing Fleet #1)</td>
<td>$369,358,215</td>
</tr>
<tr>
<td>Procurement New Orange Line Vehicles (to replace existing Fleet #12)</td>
<td>$660,464,470</td>
</tr>
<tr>
<td>No. 8 Upgrades - Breda Car Reliability Improvement</td>
<td>$28,250,000</td>
</tr>
<tr>
<td>Overhaul - Type No. 7 Cars- 3700 Series (20)</td>
<td>$48,653,894</td>
</tr>
<tr>
<td>Replacement of Type No. 8 Cars</td>
<td>$210,000,000</td>
</tr>
<tr>
<td>Replacement of Type No. 7 Cars</td>
<td>$455,000,000</td>
</tr>
<tr>
<td>Replacement of # 2 Car</td>
<td>$281,000,000</td>
</tr>
<tr>
<td>#3 Red Line Overhaul</td>
<td>$215,000,000</td>
</tr>
<tr>
<td>20 - New Locomotives (Opt. 2)</td>
<td>$115,762,798</td>
</tr>
<tr>
<td>75 - New Bi-Level Coaches (Opt.2)</td>
<td>$214,613,412</td>
</tr>
<tr>
<td>33 - Bi-Level Kawasaki Car Overhaul</td>
<td>$32,828,406</td>
</tr>
<tr>
<td>480 - New Buses</td>
<td>$333,800,054</td>
</tr>
<tr>
<td>Electric Trolley &amp; Dual Mode Bus Replacement</td>
<td>$128,000,000</td>
</tr>
<tr>
<td>Bus Fleet Rehab. Phase II</td>
<td>$128,000,000</td>
</tr>
<tr>
<td>Arborway Bus Maintenance Facility (1)</td>
<td>$224,438,888</td>
</tr>
<tr>
<td>Dorchester Avenue Bridge</td>
<td>$12,850,000</td>
</tr>
<tr>
<td>Clayton &amp; LaGrange Street Bridges</td>
<td>$28,000,000</td>
</tr>
<tr>
<td>Commuter Rail Positive Train Control (PTC)</td>
<td>$506,870,500</td>
</tr>
<tr>
<td>Other projects</td>
<td>$529,634,830</td>
</tr>
</tbody>
</table>

Source: MBTA
The Green Line Bottleneck

The needs assessment concluded that:

• “The Green Line (West Corridor) fails the load standard on the B, C, and D Branches.”
• “The Green Line Central Subway is currently operating at capacity, constraining the ability of the system to meet growth in demand for service.”
• “By 2030 ridership demand on the Green Line’s surface branches, as well as in the Central Subway, is projected to exceed capacity if two-car trains are still in use”
The South Station Bottleneck

• 111-year-old South Station is New England’s busiest rail station
• Used by 48,000 commuter rail passengers and 3,600 Amtrak passengers each day
• During morning and afternoon peaks, trains arrive or depart every 60-90 seconds on South Station’s 13 platform tracks
• The needs assessment concluded that “Track capacity at South Station limits service expansion.”
• MassDOT received $32.5 million from the Federal Railroad Administration for planning and environmental review of a South Station expansion that would add 7-11 new platforms

Slide Courtesy:
Dukakis Center for Urban & Regional Policy
Northeastern University
Transit Needs: Projected Growth

• “Higher transit demand resulting from the implementation of the MetroFuture land use plan will require investments to increase capacity.”

• “A number of planned major development projects would rely heavily on transit, would increase transit ridership and possibly demand for additional service.”

• “The Fenway/Longwood Medical and Academic Area is . . . a growing center for employment in the Boston region. Congestion of the transportation system in this area constrains growth and economic development potential.”

Slide Courtesy:
Dukakis Center for Urban & Regional Policy
Northeastern University
Transit Expansion Nationwide

CONSTRUCTION ON NEW TRANSIT CONTINUES FROM COAST TO COAST

2011
We’ve Managed to Operate and Expand Our Transit System, but...

What will the map look like 40 years from now?
How safe and reliable will the service be?
How will we pay for it?
A Better City Forum: Fixing Transit Finance

Michael J. Widmer, President
Massachusetts Taxpayers Foundation
April 25, 2011
MBTA Facing an Exploding Structural Gap Between Revenues & Expenses

MBTA Projections (includes $160 million of new sales tax revenues in 2010 and after)
One-Time Revenues, Restructuring of Debt Close 2011 and 2012 Gaps

• Fiscal 2011
  – Restructure debt ~ $68 million

• Fiscal 2012
  – Restructure debt ~ $33 million
  – Lease North Station Parking Garage - $45 million
  – Issue bonds securitized by parking garage revenues to pay down $35 million of debt annually from FY 12 - 17
Huge and Growing Deficits Beyond FY 2012

MBTA Projections

<table>
<thead>
<tr>
<th>Year</th>
<th>Deficit (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>-156.4</td>
</tr>
<tr>
<td>2014</td>
<td>-188.1</td>
</tr>
<tr>
<td>2015</td>
<td>-230.9</td>
</tr>
<tr>
<td>2016</td>
<td>-308.2</td>
</tr>
</tbody>
</table>
Revenues from Transportation, Local Assessments, and Sales Taxes Growing at ~ 2 Percent Annually from 2011 - 2016

MBTA Projections
$160 Million In New Sales Tax Revenues Puts MBTA Ahead of Original Finance Plan

Projected 3% growth in sales tax revenues in Financial Plan

Actual sales tax revenues

MBTA projections for 2011 - 2016
# Expenses Growing Twice as Fast as Revenues

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages and Taxes</td>
<td>428.6</td>
<td>427.8</td>
<td>441.0</td>
<td>449.3</td>
<td>458.3</td>
<td>467.5</td>
<td>476.9</td>
<td>1.9%</td>
</tr>
<tr>
<td>Employee Benefits</td>
<td>182.6</td>
<td>184.9</td>
<td>206.4</td>
<td>197.7</td>
<td>202.7</td>
<td>213.9</td>
<td>226.6</td>
<td>4.0%</td>
</tr>
<tr>
<td>Materials</td>
<td>177.8</td>
<td>187.4</td>
<td>203.8</td>
<td>222.3</td>
<td>242.8</td>
<td>265.6</td>
<td>290.7</td>
<td>10.6%</td>
</tr>
<tr>
<td>Insurance</td>
<td>15.5</td>
<td>15.4</td>
<td>15.4</td>
<td>15.8</td>
<td>16.2</td>
<td>16.6</td>
<td>17.0</td>
<td>1.6%</td>
</tr>
<tr>
<td>Commuter Rail</td>
<td>276.9</td>
<td>300.5</td>
<td>318.0</td>
<td>331.6</td>
<td>330.5</td>
<td>339.3</td>
<td>348.4</td>
<td>4.3%</td>
</tr>
<tr>
<td>The Ride</td>
<td>91.2</td>
<td>95.7</td>
<td>110.7</td>
<td>116.3</td>
<td>128.7</td>
<td>145.3</td>
<td>159.6</td>
<td>12.5%</td>
</tr>
<tr>
<td>Debt Service</td>
<td>438.9</td>
<td>477.8</td>
<td>405.1</td>
<td>457.4</td>
<td>477.0</td>
<td>485.1</td>
<td>527.4</td>
<td>3.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,611.5</strong></td>
<td><strong>1,689.5</strong></td>
<td><strong>1,700.4</strong></td>
<td><strong>1,790.3</strong></td>
<td><strong>1,856.2</strong></td>
<td><strong>1,933.3</strong></td>
<td><strong>2,046.6</strong></td>
<td><strong>4.5%</strong></td>
</tr>
</tbody>
</table>

* MBTA Projections
The MBTA Carries the Largest Debt Burden in the Nation

The MBTA has the highest transportation authority debt burden in the country; will spend ~ 28 percent of its FY 11 budget on debt service

<table>
<thead>
<tr>
<th></th>
<th>Total P&amp;I Debt</th>
<th>Operating Budget</th>
<th>Debt as % of Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston / MBTA</td>
<td>8,600</td>
<td>1,700</td>
<td>506%</td>
</tr>
<tr>
<td>New York / MTA</td>
<td>37,161</td>
<td>9,886</td>
<td>376%</td>
</tr>
<tr>
<td>Chicago / CTA*</td>
<td>1,234</td>
<td>1,285</td>
<td>96%</td>
</tr>
<tr>
<td>Los Angeles / MTA</td>
<td>4,370</td>
<td>3,826</td>
<td>114%</td>
</tr>
<tr>
<td>WMATA (DC)</td>
<td>671</td>
<td>1,357</td>
<td>49%</td>
</tr>
</tbody>
</table>

* Excludes $4.8 billion in pension and OPEB bonds
However, Because of a Series of Debt Restructurings, the MBTA Paid $515 Million Less in Debt Service Than Forecast by the Finance Plan

Source: D’Alessandro Report
The MBTA’s Debt Trap – A Vicious Cycle

• Forward Funding finance plan expected principal debt to peak at $4.6 billion in 2005 - by FY 10, MBTA had $5.5 billion in debt

• “Much of the current debt has been refinanced at a lower cost over the past ten years, but those savings opportunities no longer exist.” MBTA 2011 Operating Budget Proposal to the Board of Directors

• Delaying debt payments to balance operating budgets has increased total debt and interest costs, exacerbating the T’s debt burden
  – Restructuring debt in FY 11 and 12 transfers more than $100 million in principal payments to future operating budgets
  – Securitizing parking revenues reduces principal payments by $265 million from FY 12 – 16 and shifts $350 million in debt to FY 2022 – 2041 along with ~$400 million in additional interest payments
Reform Before Revenue
next steps for RTAs

How regional transit authorities are adapting to current fiscal conditions – and what must be done to ensure future transportation needs are met
Why is public transit important?

- Provides mobility and affordable access
- Reduces congestion/improves air quality
- Influences land use patterns
- Facilitates economic growth
Massachusetts Public Transit

- Massachusetts Bay Transportation Authority (MBTA)
  - Commuter Rail
  - Light and Heavy Rail
  - Buses
  - Ferry

- Regional Transit Authorities
  - 15 Individual Authorities
  - 254 Cities and Towns
  - $110 M Operating Budget
  - 29 Million Annual Paratransit and Fixed Route Customers
RTAs have different needs than the MBTA

<table>
<thead>
<tr>
<th>MBTA</th>
<th>RTAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Forward funded</td>
<td>• Retroactively Reimbursed</td>
</tr>
<tr>
<td>• Huge Debt Load</td>
<td>• Revenue Anticipation Notes (RANS)</td>
</tr>
<tr>
<td>• State of Good Repair (SOGR) issues</td>
<td>• Relatively good SOGR</td>
</tr>
<tr>
<td>• High service levels – frequency, span of service</td>
<td>• Relatively poor service levels – limited night and weekend service</td>
</tr>
<tr>
<td>• Many Choice Riders</td>
<td>• Majority captive riders</td>
</tr>
</tbody>
</table>
Reform

- Patrick Administration through Sec Mullan has already implemented meaningful and significant reform
- On going process
- Continue creating efficiencies
- New Study to focus on transit reform and improvements
MassDOT RTA Study

Efficiencies

Interoperability

Performance Measures

Service Standards
RTA Financing 101

- RTAs are only item in the budget retroactively reimbursed
- RTA State Operating Funds (SCA) are projected to be reduced for FY12 by 5% from FY11 levels
- State assistance is at SFY07 levels
- Significant reduction in SCA when accounting for inflation
- Local Communities are assessed for service
- Federal funds are in flux – uncertainty regarding reauthorization and funding levels
Paratransit Services

Door to Door service is critical for Aging in Place

Aging Population = Increased Demand for Services

Paratransit is a huge cost driver for us – 31% of budget is attributable to paratransit services

New Model for Cost Containment
Health and Human Service Partnering

- Shared Customer Base allows us to pool resources
- Reduces burden to both programs – significantly driving down program costs
- HST partnering causes the cost per paratransit trip for CCRTA to decrease from $22.96 to $19.44
- Comparatively MBTA costs have increased 35% in past two years.
Executive Order 530
Establishing a Commission for the Reform of Community, Social Service and Paratransit Transportation Services in the Commonwealth

6 Month Timeframe

Membership
- MBTA
- RTAs
- Human services
- Consumers

Goal: Drive down costs while continuing to provide high quality service to qualifying residents
Getting to work

- RTAs provide a valuable service in that they allow people an affordable way to get to work.
- Wisconsin cut transit funding by 10% making 40,500 jobs in Milwaukee inaccessible by transit.
- 8.7% of people in Massachusetts commute by public transit.
  - National average is 4.7%
  - City of Boston residents 30%
- CCRTA ridership up by 16.3% in past fiscal year.
Economic Impacts of Transit Investment

- For each billion of transit investment over 36,000 jobs are directly created.
- $1 invested in public transportation generates $4 in economic returns
- Congestion cost the US $114.8 Billion annually
- Improved air quality leads to healthier communities
Innovation

- Reduced operating costs through capital investments
- Multimodal approach
  - Coordination
  - Collaboration
  - Communication
- Development patterns - exploring opportunities to create sustainable communities
Same Needs Different solutions

Policies
- What works in the Boston might not work in the Berkshires

Implementation
- Key is finding common ground

Solutions
- Sustainable Transportation
Sustainable Transit Finance in Massachusetts Looking at Options

A Better City
April 25, 2011
Astrid Glynn, TPRG
Transit Finance in Massachusetts

- Statewide mobility choice for sustainable growth
  - Supported by strong state funding (sales tax to MBTA)
  - Chosen by communities (membership in RTAs)
  - Relied on as part of a balanced multimodal system

- Falling behind despite reform and greater efficiencies
  - $570m annually needed to sustain State of Good Repair
  - $2.7b State of Good Repair backlog
  - $616m deficit projected for 2014
  - Federal help uncertain

- Reform as a necessary and first (but not sufficient) condition for success.
Special dedicated taxes include:
- Franchise taxes
- Petroleum business tax
- Mortgage recording tax
- District sales tax
- Increased payroll tax in metro New York counties *
- 50-cent surcharge on taxi rides,*
- $25 charge on motor vehicle registrations,*
- 25% increase to drivers’ licenses / learners’ permits fees*
- 5% increase in the tax on vehicle rentals.*
* added in 2009
Basics – Sustainable Fare Policies

- Regular fares increases as deliberate strategy
  - In some cases regardless of need (Vancouver, BC);
  - MBTA’s Forward Funding Commission urged incremental increases linked to other reforms.

- The 2007 Transportation Finance Commission recommended regular scheduled fare increases.

- Charlie Card: chance to tailor fare structure (off-peak pricing) to maximize revenue, maintain fare equity.
Fare Sampling: MBTA and 15 Other Major Systems

Major Metro Monthly Pass Prices

- $50-$59*
- $60-$69
- $70-$79
- $80-$89
- $100-$109
- $110-$119
Cross-Subsidies: Tolls for Transit?

- **Golden Gate Bridge Transportation Authority:**
  - Bridge tolls subsidize ferries and bus service
  - Policy of toll increases to sustain transit subsidy

- **Pennsylvania Act 44 (proposed, not enacted):**
  - Cross subsidy would have flexed toll revenues from turnpike to transit;
  - Would have added new tolls on I-80; vetoed by FHWA.
  - Revisit in reauthorization?
Local Choices and Participation

- Increasing direct stakeholders - going to the customers
- Common source for New Starts match and expansion –
  - Charlotte, NC: voter referendum approving half cent sales tax increase for transit project
- Sometimes local taxes substitute for state
  - Washington State; local sales taxes provide 70% of transit’s revenue, compared to 3% from state sources.
- APTA: 73% of 2010 transit votes passed at polls
- Massachusetts
  - RTAs structured on local votes to participate
  - A new CPA that would support transit?
Leveraging the Benefits of Transit

- **Parking surcharges: Reaching the non-user who benefits from transit**

- Parking fees or taxes in cities such as Chicago, Miami, Pittsburgh, San Francisco, Los Angeles and New York.

- Locally tailored application – both geography (ex: Manhattan only) and type of parking covered (ex: commercial, not residential)

- Flat fee or percentage of revenue

- Direct relationship to transit availability and modal choice; choosing growth without congestion

- Consistent with City of Boston parking freeze; complementary to zoning controls on parking (ex: Somerville, Cambridge).
Leveraging the Benefits of Transit

- **Reaching major beneficiaries** –
  - Access to Airport, as well as Port passenger terminals, real estate, and parking
- **Key component of urban location** –
  - Expressly recognized in Logan’s ground access planning
  - Transit as local distribution network that connects to the regional aviation system
- **Application of FAA rules becoming more nuanced**
  - reflecting One DOT approach
- **Nexus more feasible with integrated MassDOT**
Other Approaches

- Climate Change revenues:
  - share of Regional Greenhouse Gas Initiative auction proceeds usable by transit (NY)
  - Proposed emission fees based on engine size (VT)
- Highway Access permits – developer contributions to support transit (PA)
- U Pass – partnering with universities to encourage student usage
- Gasoline sales tax (7 states, including VA which has 2% sales tax where transit exists)
- Public Private Partnerships as way to jump start projects
- Infrastructure Banks, TIFIA, RRIF (available and proposed federal loan programs)
Federal support important, but...

- Obama proposal to increase all transportation funding, including one time boost for transit expansion and new emphasis on State of Good Repair (especially for older systems).

HOWEVER

- House FY2012 “Path to Prosperity” would reduce all federal transportation by 30%. Transit particularly vulnerable if Highway Trust Fund is only Federal revenue source.
Conclusions

- Guidelines for structural change:
  - Diverse revenue sources help (spread costs and buffer peaks and valleys)
  - Cross-subsidies logical part of integrated system
  - Look at ways to capture full range of beneficiaries (non-riders as well as riders)
  - Consider mix of geographic bases (state, regional, local goals)

- Keep pushing for Federal support
- Continue the conversation