

ROUTE TO OUR FUTURE

TRANSIT SOLUTIONS FOR EQUITY,
SUSTAINABILITY, AND ECONOMIC
GROWTH IN THE COMMONWEALTH

**PUBLIC TRANSIT
PUBLIC GOOD**

Riders, Workers, and Communities
UNITED FOR TRANSIT JUSTICE



GREEN JUSTICE COALITION

www.PublicTransitPublicGood.org

Public Transit—Public Good, a campaign of the Green Justice Coalition, is a statewide partnership of transit workers and riders working for a sustainable funding structure for transit throughout the state; fully functional, affordable and accessible transit service in each of our regions; and public transportation that increases equity across race, class, region, and citizenship status.

Public Transit—Public Good members:

Alternatives for Community and Environment/T Riders Union
Amalgamated Transit Union Local 1547
Amalgamated Transit Union Local 22
Bus Riders United of Southeastern Massachusetts
 Amalgamated Transit Union Local 174
 Amalgamated Transit Union Local 1037
 Community Economic Development Corporation of Southeastern MA
 Coalition Against Poverty/Coalition for Social Justice
 Greater Southeastern Massachusetts Labor Council
 Massachusetts Senior Action Council
 University of Massachusetts Dartmouth Labor Center
Carmen's Union—ATU Local 589
Community Labor United (convener)
Greater Boston Labor Council
Greater Four Corners Action Coalition
Massachusetts Communities Action Network
Massachusetts Senior Action Council
On the Move
United for Transit Equity—Pioneer Valley
 Alliance to Develop Power
 Amalgamated Transit Union Local 448
 Massachusetts Senior Action Council
 Student Labor Action Project
 Western Massachusetts Jobs with Justice

We would like to thank the foundations that support Community Labor United and the Public Transit—Public Good campaign:

Discount Foundation	Ford Foundation
Hyams Foundation	Herman & Frieda L. Miller Foundation
New Prospect Foundation	Solidago Foundation
Unitarian Universalist Veatch Program at Shelter Rock	

**ROUTE TO OUR FUTURE:
TRANSIT SOLUTIONS FOR EQUITY, SUSTAINABILITY,
AND ECONOMIC GROWTH IN THE COMMONWEALTH**

By Connie M. Razza, Jessie Partridge, and Jeremy Thompson^a

November 2012

Table of Contents

A TRANSIT SOLUTIONS PROPOSAL BY PUBLIC TRANSIT–PUBLIC GOOD: RIDERS, WORKERS, AND COMMUNITIES UNITED FOR TRANSIT JUSTICE

EXECUTIVE SUMMARY	1
INTRODUCTION	3
GETTING BACK ON TRACK: RECLAIMING OUR TRANSIT LEADERSHIP IN A TIME OF CRISIS	3
VITALITY, SUSTAINABILITY, EQUITY: A SINGLE DESTINATION FOR OUR TRANSIT FUTURE	6
PUBLIC TRANSIT, PUBLIC GOOD: THE PRINCIPLES UNDERLYING OUR SOLUTIONS	8
CREATE EQUITY.	8
STRENGTHEN LOCAL COMMUNITIES AND ECONOMIES.	10
ENSURE RELIABILITY AND ACCESSIBILITY.	10
FIX IT: FAIR DECISION-MAKING PROCESSES	12
THE CHALLENGE	12
<i>RTAs often inadequately serve the current needs of riders, communities, commerce, and industry.</i>	12
<i>Transit riders and workers have been unrepresented in transit decision-making roles.</i>	14
<i>Coordination is lacking between key transit authorities and agencies.</i>	16
OUR SOLUTIONS	18
<i>Use community-led service analyses to improve transit service.</i>	18
<i>Give public transit riders and workers a voice and a vote on transit boards and MPOs.</i>	19
<i>Create a more integrated transit system statewide.</i>	19
FUND IT: ADEQUATE FUNDING AND DEBT RELIEF FOR TRANSIT AUTHORITIES	21
THE CHALLENGE	21
<i>Public transit in Massachusetts is woefully underfunded.</i>	21
<i>State transit funding is unstable.</i>	21
<i>RTAs are inequitably funded.</i>	22
OUR SOLUTIONS	22
<i>Create more stability and transparency in state funding of regional transit services.</i>	22
<i>Move the Big Dig Debt.</i>	22
<i>Generate new revenue to reliably relieve MBTA Big-Dig debt and to adequately fund RTAs.</i>	23
<i>Establish a Massachusetts Community Infrastructure Bank to plan for the future.</i>	24
<i>Invest in our communities.</i>	25
MAKE IT FAIR: AN EQUITABLE FARE STRUCTURE FOR THE COMMONWEALTH	26
THE CHALLENGE	26
<i>Irregular and big fare increases disproportionately harm low-income, transit-dependent riders.</i>	26
OUR SOLUTIONS	27
<i>Create and implement fair fare structure policies.</i>	27
<i>Create the expectation and opportunity for the private sector to contribute to public transit.</i>	28
<i>Ensure that transit investments strengthen the communities in which they are located.</i>	29
CONCLUSION	30

EXECUTIVE SUMMARY

The Massachusetts Bay Transportation Authority (MBTA) is one of the nation's most prominent, longest running transit systems. The state's regional transit authorities (RTAs) serve urban and rural areas throughout the state. The administration and the Massachusetts Department of Transportation (MassDOT) are laying the groundwork necessary to realize a transformative vision for rail infrastructure and service that will simplify travel and stimulate the economy from border to border.

As the state prepares for an "adult conversation" on transportation, the Public Transit–Public Good campaign highlights transit as a mode vital to our state's and our regions' economic growth and our environmental stewardship goals.

Public transit is a lifeline for people who depend on it and an economical option for people with cars. It can drive our state's economy and help us meet our environmental goals. But, our public transportation system is currently challenged in meeting the needs of riders.

- ◆ Riders and workers have neither a voice nor a vote on the bodies that make decisions concerning our transit system.
- ◆ The funding structure is inadequate. RTAs lack the funding necessary to create the robust transit systems that would best serve their communities. The MBTA is burdened by debt it did not incur, limiting its ability to meet its service and maintenance needs.
- ◆ The fare structure is inequitable.

In June 2012, the two largest transit authorities in the state were considering proposals for dramatic fare hikes and service cuts. As legislators considered the measures that would temporarily relieve the most immediate crisis, the Public Transit–Public Good campaign announced its vision for the state's transit system and called on the state to "Fix it! Fund it! Make it fair!"

This report focuses on transit funding and transit reform that can grow our state's economy, cut our carbon emissions, ensure accessibility, and increase racial, economic, and regional equity across the state. Key principles grounding the solutions we offer are to:

- ◆ Create Equity;
- ◆ Strengthen Local Communities and Economies; and
- ◆ Ensure Reliability

We recommend:

- ◆ Involving community members in the process of making transit decisions. We propose community-led comprehensive service assessments, as well as representation on decision-making boards. We also need greater coordination among transit authorities and between transit authorities and MassDOT. (These proposals are in Fix It: Fair Decision-Making Processes.)

"Transit that works for working families drives our economy. Public transit takes residents to jobs and carries workers home. It moves students toward their dreams and drives customers to services and stores. Our investment in public transit creates good jobs, generates economic activity, promotes the environmental health of our Commonwealth, and makes opportunities more accessible to people throughout our region. Here is a plan for a sustainable public transit contribution to our economy, our environment, and our neighborhoods."

*Rich Rogers
Executive Secretary-Treasurer,
Greater Boston Labor Council*



- ◆ Addressing the funding dilemma. We advocate that the state generate new, dedicated funds through a statewide transit payroll tax that will offset the MBTA's Big Dig Debt and enable expansion in the RTAs. We also recommend that a Massachusetts Community Infrastructure Bank be created to help control costs of financing future capital investment projects. We support efforts to create a more progressive tax structure that will raise more money for the services we all rely upon. (Find these proposals in our Fund It: Adequate Funding and Debt Relief for Transit Authorities section.)
- ◆ Creating a more equitable fare structure. We propose a way to ensure that fares remain affordable for riders and a path for the private sector to contribute to the public transit service that benefits it. (See Make It Fair: An Equitable Fare Structure for the Commonwealth.)

Public transit can help address historic inequalities among races, classes, and regions. Transit gives people a pathway to a better life by increasing access to opportunity and resources. It also gives our Commonwealth a pathway to a sustainable, prosperous future.

INTRODUCTION

Getting Back on Track: Reclaiming Our Transit Leadership in a Time of Crisis

An investment in public transit and the infrastructure that supports it – and the residents using it – will grow our state economy, slash our greenhouse gas emissions, and increase access to work, educational, civic, and social opportunities across race, class, and region.

Public transit helps us:

- ◆ **Drive our economy.** Whether by choice or necessity, one in every eight Massachusetts households has no access to a car. Forty-eight percent of Massachusetts college students with jobs are reported to rely on transit to get to and from work (Dutzik, et al. 2011, 9). Transit enables all Massachusetts residents to have full lives; to learn, work, and play; to access community resources and services; and to connect with family, friends, and community activities.
- ◆ **Grow sustainably.** With 9% of Massachusetts' workers currently using public transit to get to work (U.S. Census Bureau 2011), policies that encourage transit use could significantly increase the state's capacity to grow our economy, while reducing carbon emissions and traffic congestion. Public transit helps expand growth capacity even where traffic congestion is extreme. For instance, in the past decade, commercial and institutional space in Kendall Square (in Cambridge) has expanded 4.6 million square feet, but Cambridge's aggressive Parking and Transportation Demand Management Ordinance of 1998 has helped *reduce* automobile traffic on major roads in Kendall Square (Moskowitz 2012).
- ◆ **Create a healthier future.** Tripling the share of Massachusetts travel by transit, bike, and foot will improve the health of state residents and is crucial to the Commonwealth's ambitious goal of reducing greenhouse gas emissions by 25% by 2020 (MassDOT 2012). In Massachusetts, the transportation sector is the largest emitter of greenhouse gases – responsible for about 40% of all emissions in the state (Massachusetts Department of Environmental Protection 2012). According to recent research from Yale University, tiny particles of air pollution contain more hazardous ingredients in non-white and low-income communities than in affluent white ones. The greater the concentration of Hispanics, Asians, African Americans or poor residents in an area, the more likely that potentially dangerous compounds are in the mix of fine particles they breathe (Katz 2012). The state cannot have real progress on reducing our global warming emissions without real changes to our transportation patterns.

Public transit is a lifeline. Young people rely on transit to get to school, jobs, and other activities. People who cannot drive – whether because

The transportation sector is responsible for about 40% of all emissions in Massachusetts.



Using public transit instead of an automobile can save a family thousands of dollars a year.

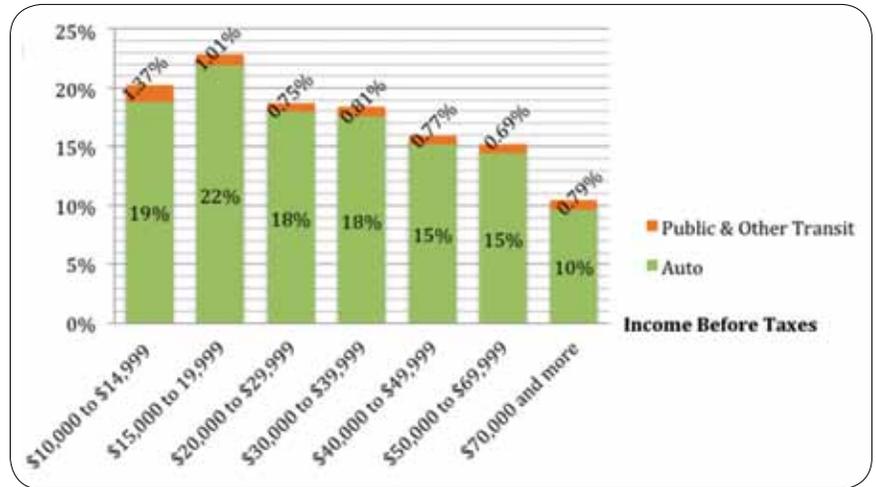
“Even though I can afford to drive, I take public transit to work in Boston because I believe in the environmental benefits of trains over cars. I also feel personal benefits -- though I am getting a bit burnt out on the skyrocketing prices of the train commute and the broken down equipment. I get to relax, read, nap, eat breakfast, and check email on the train rather than the stress of having to pay constant attention in stop-and-go traffic.”

*Katie Giddings
Beverly resident
& Commuter Rail rider
Board Member of Salem Alliance
for the Environment (SAFE),
part of Clean Water Action
Alliance of MA*

of disability, citizenship status, or lack of access to a car – depend on transit to get them to work, doctors’ appointments, shopping, and social engagements. Residents who want to protect the environment or avoid traffic-induced stress, turn to transit to help them achieve those goals. We need to preserve the affordability and accessibility of public transit.

In the current economic slump, transit is helping residents reduce their transportation costs and is helping businesses keep workers and

Figure 1. Transportation Costs as Percentage of Income for US Households with Income over \$10,000.



Source: US Bureau of Labor Statistics, “Table 1202. Income Before Taxes: Annual Means, Standard Errors, and Coefficient of Variation,” *Consumer Expenditure Survey, 2011* (September 2012).

customers. According to the American Automobile Association, it costs, on average, \$8946 to own, operate, and maintain a personal vehicle (AAA 2012). That burden is heavier for low- and middle-income Americans. Families making \$20,000 or less spend, on average, more than 20% of their total incomes on transportation costs. Using public transit instead of a personal automobile can save a family thousands of dollars a year (Fig. 1).

This hard economy is an opportunity for our state’s transit systems to win more car drivers over to bus, subway, or rail. Already 9% of all Massachusetts workers (285,464 people) rely on transit to get to their jobs – two-thirds of those transit commuters live outside of Boston (U.S. Census Bureau 2011). But that still leaves great potential growth for our transit systems. At the peak of the economic crisis – between 2008 and 2009 – the Massachusetts Bay Commuter Rail (MBCR) saw an increase of 8000 boardings, resulting in net growth of 15% over 1999 (MBTA July 2010, 4-2). Since the recession eased, the Massachusetts Bay Transportation Authority (MBTA) has also experienced record ridership (Commonwealth of Massachusetts 2012).

To take full advantage of this opportunity, the rider experience must be good enough to keep discretionary riders¹ on public transportation long after the economic squeeze relaxes. If delays are frequent, needed

¹“Discretionary riders” are people who have the choice to use an automobile for their trip (Litman 2012, 4).

route-runs infrequent, or overcrowding the norm, people will reason that the tax on their time, the threat to their livelihoods, and the cost of their comfort are too high. Those discretionary riders will go back to driving. Pollution and congestion will increase, resulting in higher rates of pollution-related ailments, traffic accidents, and avoidable deaths (James, et al. March 2012).

Our transit system is in crisis. In the years since the Great Recession began, MBTA ridership has grown substantially, setting record after record^b, demonstrating the system's ability to reach the points of origin and destination of a significant number of car-users. However, the symptoms of a long-underfunded maintenance program also surfaced during this time. The T's record year of 2011 was marred with several small breakdowns and the two dramatic underground failures. The Red Line breakdowns stranded hundreds of passengers for more than 2 hours (Nelson and Moskowitz 2011).

In the rest of the state, despite significant ridership gains in some RTAs,^c overall RTA ridership actually declined by 8.7% between 2001 and 2010. This pattern suggests that the systems' designs do not sufficiently meet current residential, employment, or civic patterns and needs (MassDOT July 2012, 4-20).

In preparation for fiscal year 2013, the MBTA and the Pioneer Valley Transit Authority (PVTA) both made proposals for fare increases and service reductions that would have adversely impacted many of the most transit-dependent populations in their service areas and might have pushed discretionary riders back into their cars. The Metropolitan Area Planning Council (MAPC) estimated that the original MBTA proposal would result in as many as 49,000 riders becoming drivers, increasing traffic congestion, preventable accidents, and negative health effects from air pollutants and lack of physical activity (James, et al. March 2012).

The Commonwealth's emergency stopgap funding package helped mitigate the impact, though it failed to address the most extreme fare increases for people who depend on paratransit² in the MBTA. The lesson is clear. Our inadequate funding structure is undermining transit authorities' ability to serve the needs of transit-dependent people, to convert car drivers to regular riders, to help drive economic growth, and to contribute optimally to state goals for carbon-emission reduction. RTAs have been flat funded by both state and federal government in recent years (MassDOT July 2012) and state revenue sources for the MBTA have failed to meet expectations (D'Alessandro, et al. 2009).

Transit funding is part of a larger funding picture. Between 1977 and 2009, Massachusetts cut taxes more than any other state in the country. As a result, today Massachusetts has \$3 billion less each year than in the late 1990s with which to fund transportation and other necessary services (Wise and Berger 2010).

²"Paratransit" or "demand-response" service is the part of the public transit system that provides rides to people who cannot use the fixed-route service for all or part of their trips due to mobility or other limitations. Riders are required to have points of origin and departure within a certain distance of a fixed service line. "Fixed-route" service is the part of the transit system that runs on fixed routes and at set times (e.g., bus and subway).

Our inadequate funding structure is undermining transit authorities' ability to serve the needs of transit-dependent people, to convert car drivers to regular riders, to drive economic growth, and to contribute optimally to state goals to reduce carbon emissions.

Fare hikes and service cuts are not good solutions to these budget shortfalls. They not only unfairly tax low-income, transit-dependent riders; they also threaten to push many potential riders back into their cars, as the systems ask them to pay more for less service. They needlessly impede the state's economic development, equitable access to opportunity, and progress toward the goal to significantly reduce greenhouse gas emissions.

Vitality, Sustainability, Equity: A Single Destination for Our Transit Future

A robust public transit system is key to the economic, social, and environmental health of Massachusetts. When riders can rely on public transportation to get them to and from their jobs, schools, families, churches, and markets safely, affordably, and on time, the transit system will create more equitable communities and encourage economic vitality while reducing carbon emissions, increasing health-promoting behaviors, and improving the livability of the state.

Our Commonwealth needs a transit system that:

- ◆ Effectively serves educational, employment, health, commercial, and social needs of residents and regions, with particular attention to historically underserved populations, such as those in state-designated environmental justice (EJ) communities and Gateway Cities;^d
- ◆ Seamlessly links our regions together;
- ◆ Equitably draws from a varied and progressive revenue stream to invest in and expand operations, infrastructure, maintenance, and facilities; and
- ◆ Reliably and affordably serves all riders, with particular attention to system-wide accessibility for individuals with disabilities, youth, seniors, and low-income people.

This 21st-century transit system must be part of a broader transportation complex that will include well-maintained roads and bridges; safe, accessible walkways and bike routes; freight rail; and water and air ports. Public transit is a key part of that mix because it marries economic growth and sustainability.

With sufficient resources from the Commonwealth, the federal government, and private entities that benefit from transit, we could have the infrastructure, system, and incentives to triple transit ridership in the coming decade, generating enormous economic activity. According to a study of the economic impacts of national public transit capital and operations investment (Weisbrod and Reno), each \$1 billion of mixed funding generates:

- ◆ 17,450 direct jobs and 18,658 indirect or induced jobs (28);
- ◆ \$488 million in new federal, state, and local tax income (31);
- ◆ \$3.6 billion in business sales and \$1.6 billion in labor income (31);
- ◆ 172 billion new trips over the lifetime of new assets (42).

And, every public transit passenger-mile traveled results in 3 to 4 fewer automobile vehicle miles traveled (49).

Every public transit passenger-mile traveled results in 3 to 4 fewer automobile vehicle miles traveled.

Transit gets workers to jobs and job training opportunities, students to school and training programs, residents to community resources and services, customers to shopping, civic and social activities. Transit reduces air pollution and its related illnesses, increases physical activity, and enables people without cars to access necessary health services. Transit can aid civic engagement, strengthen community cohesion, and increase equitable access to opportunities across race, economic class, disability status, citizenship status, and region. Public transit is a public good. An investment in transit is an investment in our future.

PUBLIC TRANSIT, PUBLIC GOOD: THE PRINCIPLES UNDERLYING OUR SOLUTIONS

Transit riders and workers have joined forces in the statewide Public Transit–Public Good campaign. Our core tenet is that public transit is a lifeline for our communities. To protect and cultivate our communities, Massachusetts needs to enact legislative, budgetary, and policy changes that achieve public transit’s full potential.

Through a member-driven process, our coalition has distilled guiding principles that will help the Commonwealth build the robust transit system of the 21st century. Members used these principles to develop a number of policy proposals for the conversation about transit reform. Our principles are to:

Create Equity.

Transit can help bridge the chasms that separate Massachusetts residents: economic class, race, disability status, and access to opportunities. Our first lens for examining any solution to our transit crisis is its ability to produce a more equitable state.

Economic inequality is rising in Massachusetts. The income gap between our high- and low-wage earners is wider in Massachusetts than in the country as a whole (Fig. 2) and that gap is widening faster. Massachusetts’ lowest 20% of wage earners today make about what they did in 1979, while the wages of the top 20% have risen substantially more quickly than for top earners nation-wide (Massachusetts Budget and Policy Center 2012).

Figure 2. Divide between High- and Low-Wage Earners Greater in MA than in US Generally (1997-2011)



Source: Massachusetts Budget and Policy Center, Wage and Inequality in Massachusetts: A Labor Day Report (August 31, 2012); Economic Policy Institute analysis of Census Population Survey.



These disparities affect the ability of young and old households to make ends meet. At \$16,800, the median income of elders in Massachusetts was found to meet only 62% of the cost of basic needs (Wider Opportunities for Women 2012).

These income disparities have implications geographically. As income inequality rises, so does income segregation (Watson 2009, 26) and social isolation (Waterhouse 2012).^c

Figure 3. The Cycle of Shrinking Access to Opportunities and How Transit Can Reverse the Cycle



This economic segregation is layered with racial segregation. One recent analysis of neighborhood racial patterns in the country's largest 100 metro areas shows that whites in both Boston and Worcester are extremely isolated from other racial groups within their neighborhoods (Frey).

Another study of Massachusetts found, "The degree of racial isolation in low-opportunity areas in the Commonwealth is one of the highest rates of 'opportunity segregation' found in an opportunity mapping analysis conducted by the ... Institute" (Reece and Gambhir 2009, 2). Isolation by race and by national origin (particularly for African- and Latin American-born residents) appeared to be more determinative than class in heightening isolation into low-opportunity neighborhoods in Massachusetts (15). The spatial sorting of Massachusetts by class and race dramatically affects individuals' access to opportunities – for good jobs, quality education, a health-promoting environment, and adequate public services and private amenities.

A robust transit system that is affordable and accessible can directly diminish the effects of economic and racial segregation in the Commonwealth only if decisions about transit include riders and workers and are made with equity goals in mind. Routes can be drawn to bring riders from low-opportunity areas to jobs and schools. Affordability and accessibility standards can be developed with the goal of increasing ridership and access for all. Capital investments in transit can be made in areas in order to bring opportunities to incumbent residents of low-opportunities areas. Policies and programs can be developed with the goal of bringing different groups of residents into contact.

"The degree of racial isolation in low-opportunity areas in the Commonwealth is one of the highest rates of 'opportunity segregation'"

*Kirwan Institute for the Study of Race and Ethnicity
Ohio State University*

“The key to sustained economic growth in Massachusetts is our public transportation system. Investments in public transportation will put people to work, provided opportunities to increase the education and skills of our workforce and grow our economy.”

*Don Gillis
Executive Director
Massachusetts WIB*

Strengthen Local Communities and Economies.

As the state and municipalities prepare for the capital projects and service improvements that will be the foundation for the Commonwealth’s transit system of the 21st century, those expenditures should encourage new investments in communities while preserving the affordability of neighborhoods and accessibility of the system for incumbent residents.

Our communities are diverse, with residents who (among other distinctions) commute to work before 5 am, after 7 pm, and on weekends; care for parents and children outside work hours; or are non-traditional students. Just as a robust transit system needs to be able to respond to these and other scheduling needs, it also needs to be able to respond with fairly priced paratransit service to the needs of people unable to use fixed-route service because of disabilities.

Businesses and nonprofits, as well as riders, depend on public transit. The public investment in transit strengthens our businesses, hospitals, and schools. The enterprises that benefit from public transit should contribute to transit equity and sustainability by:

- ◆ Contributing to the transit system that serves them, as some schools in the Commonwealth (notably, the Five Colleges in the Pioneer Valley) already do.
- ◆ Ensuring that their jobs – which the public supports through its investment in transit and other services – are family-sustaining jobs.

Transit workers have a right to good jobs with good compensation and safe conditions. They are our neighbors and family members. Their good jobs help build our communities.

Ensure Reliability and Accessibility.

To achieve the many goals and roles of our transit system, it needs to be reliable in many ways.

Funding needs to be reliable, transparent, and adequate. Transit administrators will better be able to plan the service that best meets current needs if they can depend upon adequate funding into the future.

The system needs to run when and where it is planned to run. Headways (the time between buses) need to be realistic, not optimistic – accounting for traffic and providing enough service for all the riders at peak times.

Service needs to be planned where and when riders need it. In many Massachusetts cities, it can take four times longer to get to work by public transit than by car (see the “Fix It” section of this document). Riders should not be subject to a steep “time tax” when they need or choose to use public transit.

Public transit must be accessible and usable for people with disabilities. In recent years, our public transit authorities have made upgrades to increase accessibility and usability. However, people with limited

mobility still contend with significant challenges in the transit system. Elevators are often out of service. Lifts do not work. Buses don't kneel. There is work left to do to increase the accessibility of fixed-route service so that all who should be able to use buses and rail can.

Paratransit is a necessary complement to fixed-route service, ensuring accessibility of the transit system to people with limited mobility. It is neither a separate service nor a human service, but an integral public transportation service. As such, it should be affordable enough to promote ridership growth, as other modes of transit do.

In 2010, the 15 regional transit authorities together provided nearly 25 million unlinked bus and demand-response trips; the MBTA provided 336,456,082 bus, subway, and demand-response trips; and the Massachusetts Bay Commuter Rail (MBCR) provided 36,930,089 trips.

FIX IT: FAIR DECISION-MAKING PROCESSES

The Challenge

In 2010, the 15 regional transit authorities together provided nearly 25 million unlinked bus and demand-response trips (Federal Transit Administration 2011); the MBTA provided 336,456,082 bus, subway, and demand-response trips; and the Massachusetts Bay Commuter Rail (MBCR) provided 36,930,089 trips (MBTA July 2010). For the 12% of Massachusetts households without access to a vehicle, public transit is vital to their ability to carry out many daily activities. Yet, regional transit authorities often struggle to meet the current needs of riders, communities, commerce, and industry, and to take advantage of the shift of riders from private modes of transportation.

In addition, our public transit entities – the RTAs, the MBTA, and commuter rail – are poorly integrated. As the state transit system grows, coordination among the different regions and modes will be even more vital than it is today. For instance, in order to most effectively leverage the visionary investment the state is making in rail, travelers need to be able to rely on their regional transit authorities' ability to get them to and from the train station.

Throughout the state, decisions about transit service, fares, and capital investments are made without the institutional voice of riders and workers. The expertise of these groups would help ensure that determinations about the transit systems would meet the current demands and needs in the region.

RTAs often inadequately serve the current needs of riders, communities, commerce, and industry.

Despite the impact of the Great Recession, overall RTA ridership has not grown. RTA ridership actually declined by 8.7% in the last decade. During that period, only 4 of the state's 15 RTAs conducted comprehensive service evaluations during that period (MassDOT July 2012). Clearly, the information available about service performance and needs is insufficient.

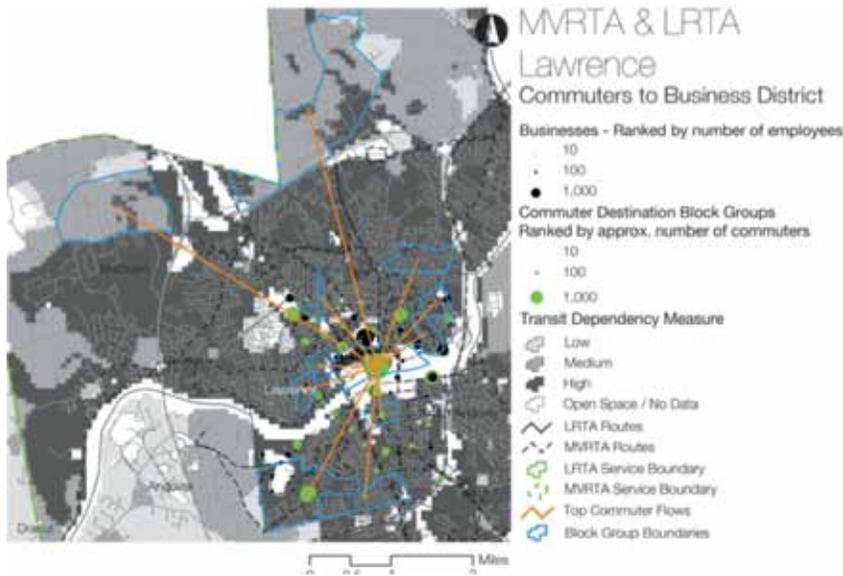
In order to begin an evaluation of RTA performance in each region, we mapped transit, demographic and commuter flow data for 6 of the 15 Massachusetts RTAs.^f

Our trip planning analysis shows that among the RTAs we studied, it takes an average of 4.8 times longer to commute by bus than by car. From typical residential departure points to a job-dense area in Lawrence, we found that bus travel for the top 5 commuter flows³ takes, on average, nearly 4 times longer than car trips (Fig. 4, Table 1). In some regions, such as the Indian Orchard area of Springfield, MA (Fig. 5, Table 2), a trip to work takes as much as 6 times longer by bus than by car. Travel times are longest for commuter destinations located outside the central transit hub of the region.

³ "Commuter flows" are the travel patterns between one's residence and workplace.



Figure 4. MVRTA & LRTA: Top Commuter Points of Departure to Job-Dense Destinations in Lawrence



It takes an average of 4.8 times longer to commute by bus than by car.

Source: American Community Survey Census 2000 Transportation Planning Package; Census 2010; MassGIS; MVPC; NMC0G; Reference USA. Cartographer: Jessie Partridge (June 2012)

Table 1. Time from Top Commuter Points of Departure to Job-Dense Destinations in Lawrence, by Car and Bus

Rank	Origin Address	TDM*	Car (min)	Bus (min)	Walking† (miles)	Transfers	First Bus	Last Bus
1	Zanni Ave., Lawrence	H	7	20	0.4	0	5:20 AM	7:20 PM
2	Pleasant Ter., Lawrence	H	7	26	0.9	0	8:18 AM	6:18 PM
3	James St., Lawrence	H	8	32	1	0	4:55 AM	6:55 PM
4	Worcester St., Methuen	H/M	11	41	1.3	0	4:55 AM	6:55 PM
5	Morton St., Lawrence	H	2	8	0.4	NA	NA	NA

* The TDM is transit dependency measure score (High, Medium, Low, or a combination).

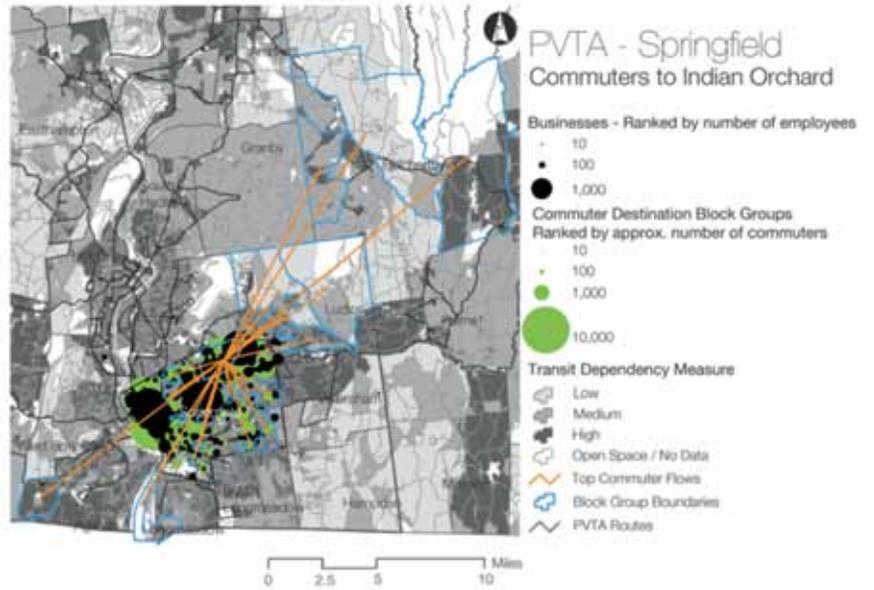
† This column represents the walking distance required by the bus trip.

Our analysis further shows that in many regions, commuters who live in a major city within the region tend to commute within their home city and the surrounding towns. In Worcester (Fig. 6), nearly 80% of residents commute to jobs within Worcester Regional Transit Authority (WRTA) service territory, yet only 60% of those jobs are within walking distance of a WRTA route.

In other regions though, especially those close to Boston, many commuters travel to destinations outside of their region. In Brockton (Fig. 7), for example, nearly 50% of residents commute to jobs within Brockton Area Transit (BAT) service area, but an additional 38% of Brockton residents commute north to jobs in the MBTA service territory. For residents of Brockton, it may be just as important to evaluate bus connections to the MBTA and Massachusetts Bay Commuter Rail (MBCR) as it is to evaluate bus routes within BAT service area.

Nearly 80% of Worcester residents commute to jobs within WRTA service territory, yet only 60% of those jobs are within walking distance of a WRTA route.

Figure 5. PVTA: Top Commuter Points of Departure to Job-Dense Destinations in Indian Orchard (Springfield)



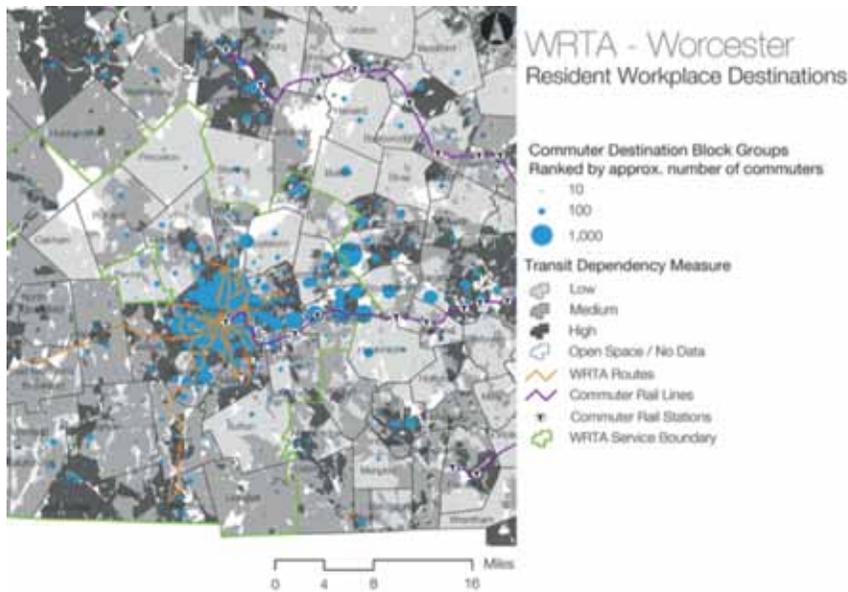
Source: American Community Survey Census 2000 Transportation Planning Package; Census 2010; MassGIS; MVPC; NMC0G; Reference USA. Cartographer: Jessie Partridge (June 2012)

Table 2. Time from Top Commuter Points of Departure to Job-Dense Destinations in Indian Orchard, by Car and Bus

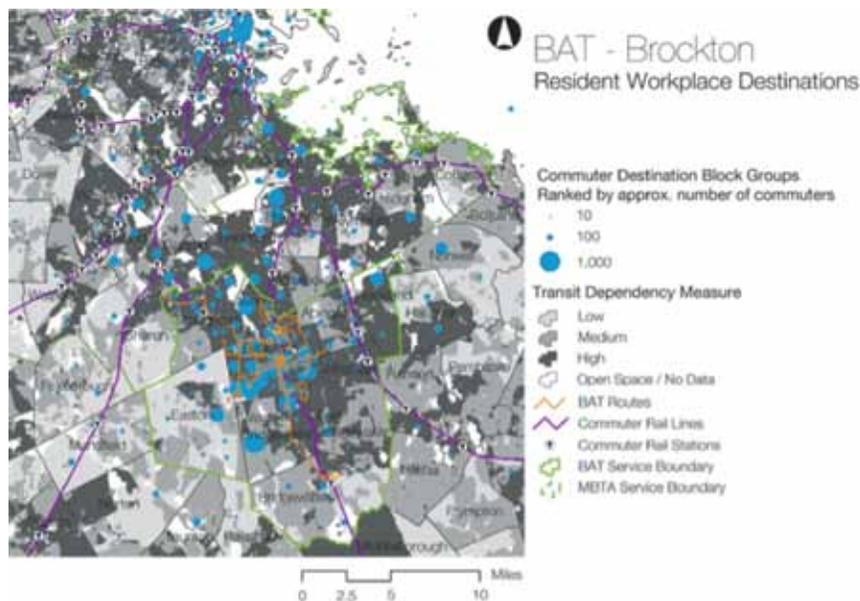
Rank	Origin Address	TDM*	Car (min)	Bus (min)	Walking† (miles) (incl 3.7 mi taxi)	Transfers	First Bus	Last Bus
1	Reservoir Rd, Ludlow	M/L	16	40	3.2	0	6:11 AM	9:30 PM
2	Americo St, Ludlow	H/M	15	117	1.7	0	6:54 AM	3:49 PM
3	East Akard St, Ludlow	H/M	12	50	—	1	5:28 AM	8:19 PM
4	Ramblewood Dr, Springfield	H	6	36	—	0	5:09 AM	9:15 PM

* The TDM is transit dependency measure score (High, Medium, Low, or a combination).
 † This column represents the walking distance required by the bus trip.

Our analysis highlights the need for local and regional-level service evaluation.

Figure 6. WRTA: Worcester Residents' Common Workplace Destinations

Source: American Community Survey Census 2000 Transportation Planning Package; Census 2010; MassGIS; MVPC; NMCOG; Reference USA. Cartographer: Jessie Partridge (June 2012)

Figure 7. BAT: Brockton Residents' Common Workplace Destinations

Source: American Community Survey Census 2000 Transportation Planning Package; Census 2010; MassGIS; MVPC; NMCOG; Reference USA. Cartographer: Jessie Partridge (June 2012)

Transit riders and workers have been unrepresented in transit decision-making roles.

The Commonwealth's general laws constitute the MBTA Board of Directors and the Advisory Boards for both the RTAs and the MBTA.

The MBTA Board of Directors, which is the same as the MassDOT Board of Directors, is composed of experts in fields of transportation finance, transportation planning, public policy, and civil engineering. The Secretary of Transportation also has a voting seat on the Board of Directors.



United for Transit Equity/Public Transit–Public Good members meet with Chicopee city officials regarding the Pioneer Valley Transit Authority.

Currently, these Advisory Boards comprise city managers, mayors, and chairs of the board of selectmen (or their designee) for each town or city paying an assessment to the transit authorities. Each town or city has at least one vote with additional votes based on the share of local assessments the municipality contributes to the RTA (General Laws of the Commonwealth of Massachusetts). The RTA Advisory Boards are also each supposed to have one representative of the population of commuters with a disability to serve as a non-voting member for a 1-year term. (There is no such requirement for the MBTA Advisory Board.)

Metropolitan Planning Organizations (MPOs) are federally mandated to make certain regional decisions about the allocation of federal transportation dollars. The precise composition and operation of the MPOs falls to the state and the organizations themselves to determine. Often MPOs comprise municipal leaders and agency heads. In some of these cases, decisions follow a “one person, one vote” model, giving disproportionate weight to smaller municipalities and agencies.

Transit riders and workers are on the front line of public safety in the transit system. We know well what works – or does not work – about the system more broadly. Although some RTA Advisory Boards have been responsive to our concerns, without the voice and vote of riders and workers in making decisions, our expertise is usually lost to the boards tasked with overseeing and guiding the transit authorities.

Coordination is lacking between key transit authorities and agencies.

Coordination is lacking among the RTAs, between the RTAs and the MBTA, between the RTAs and the Commuter Rail, and between MassDOT and the transit authorities. The RTAs fall under the jurisdiction of the Massachusetts Department of Transportation; however, they currently operate fairly autonomously. This autonomy offers the RTAs the flexibility to address local and regional needs, but also inhibits coordination that could dramatically improve the experience of the rider, increase planning efficiencies, strengthen cross-regional integration, enable better access to available federal funds, and save taxpayer money (MassDOT July 2012, 4-129 - 4-130, 4-138 - 4-142).

Rider Experience and Access to Opportunity. By design, each RTA covers unique territory; however, riders often need or want to make trips between transit regions. Jobs, services, and shopping might be in another transit region. Travel between regions is, with few exceptions, complicated and expensive because the connections between RTAs (known as, “interlining”) are spotty and, when present, may result in another fare. For instance, to get to Brockton from Fall River, a public transit user has to go all the way to Boston (Figure 8. Google Map Transit Trip Planner -- Fall River to Brockton), turning a half-hour trip into one that will take more than 3 hours (Fall River, MA to Brockton, MA: Transit Map). Often, riders wanting to go to a destination in another region must rely on private transportation.

The Massachusetts Bay Commuter Rail touches several RTAs and, with expansion on the horizon, will likely touch several more in due course.

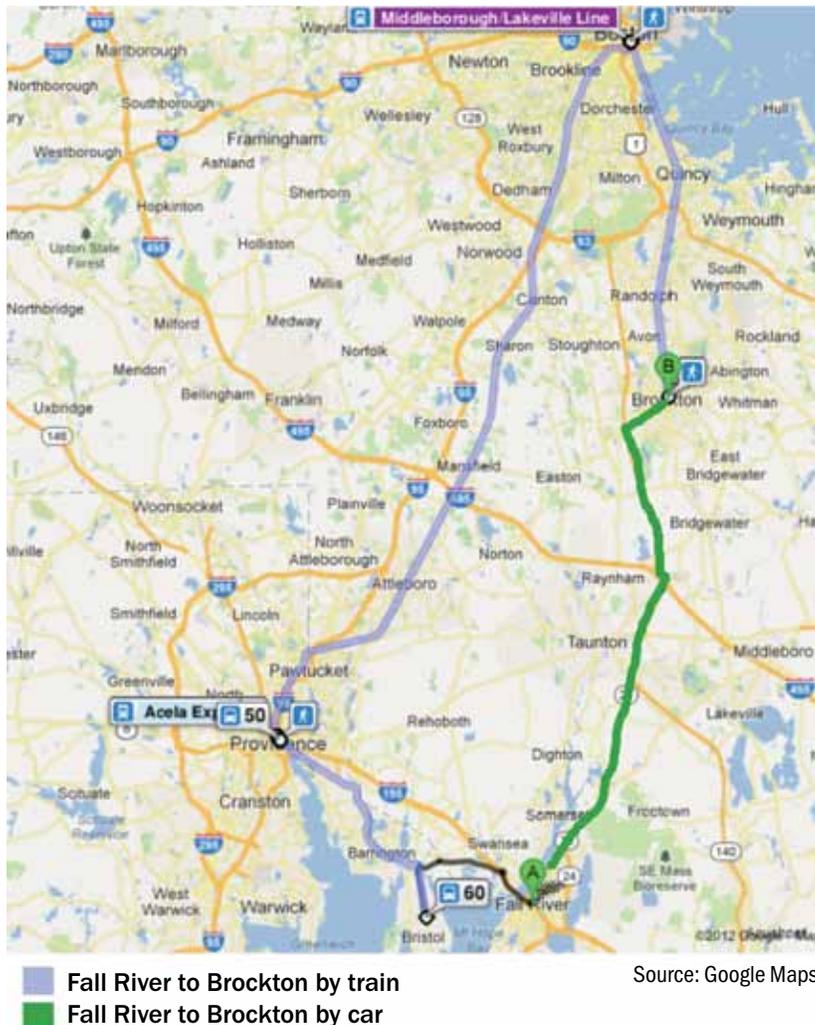
Coordination between the MBCR and RTAs is crucial for the service to move as many would-be drivers as possible to and from their destinations. However, that coordination to date is inconsistent (MassDOT July 2012, 4-129 and 4-141) and RTA service, which often ends in early evening, is often not equipped to meet the nighttime needs of commuters returning home, to say nothing of second- or swing-shift workers.

Planning Efficiencies. Currently, RTAs plan capital investments at the regional level. Often RTAs pursue capital projects without regard to the statewide goals and initiatives of the Massachusetts Department of Transportation. In part because of the lack of coordination between MassDOT and the RTAs on long-term capital planning, regional transit investments may be missing out on project funding from the federal government (MassDOT July 2012, 4-124).

Economies of Scale. Currently, each RTA procures most goods and services independently. Joining forces with other RTAs, the MBTA, or divisions of the Department of Transportation could reduce the costs associated with pension, insurance, vehicle purchase, and maintenance.

To get to Brockton from Fall River, a public transit user will spend more than 3 hours. The car trip takes 30 minutes.

Figure 8. Google Map Transit Trip Planner – Fall River to Brockton



OUR SOLUTIONS

Use community-led service analyses to improve transit service.

Periodic service evaluations are critical to understand the needs of the current ridership and to uncover gaps in service and opportunities for more efficient operation. Transit advocates from around the state agree that transit systems need to be assessed at the local level in order to pinpoint where needs are going unmet and where service can be improved. The Massachusetts Department of Transportation also recommends that each RTA conduct a Comprehensive Service Analysis (CSA) to evaluate current and short-term market demand, and to develop alternative service scenarios for more effective operation.



Bus Riders United/Public Transit–Public Good members participate in SRTA Advisory Board meeting.

To prioritize and reflect the interests of transit riders, community representatives should lead the CSA process in consultation with regional planning commissions and planning consultants. A community-led process would ensure that, through intensive discussion and collaboration, the community will be fully engaged and committed to planned changes and adjustments, as well as taking renewed pride and ownership in their public transit system. The more excitement and real engagement the process generates about public transit, the more likely the system will be able to attract discretionary riders who would otherwise travel by personal vehicle.

The benefits of a more robust and efficient public transit system are many. The needs of transit riders to conduct their daily business are a priority, but the benefits to the community at large are extensive as well. More riders walking to bus and subway stops or commuter rail stations will increase physical activity and decrease the symptomatic ailments of inactivity. An updated and streamlined transit system will attract more discretionary riders, taking cars off the road and reducing accidents.

Furthermore, robust public transit positions the state to effectively leverage its investment in visionary rail projects throughout the Commonwealth. With better connections to alternative modes of transportation, such as commuter rail, Amtrak, and intercity bus service, more commuters will have a real choice to use those services. The return on these investments will be realized in the health status of the state's residents, the reduction in greenhouse gas emissions, as well as the financial benefits of increased ridership and decreased maintenance costs for roads and bridges.

A thorough comprehensive service analysis will include a comprehensive market analysis, a performance analysis of existing service, the development and evaluation of alternative service scenarios, and the development of recommendations to better align services with local and regional demand. In most cases, the process could take as much as a year.

The approximate cost of this kind of analysis is \$10,000 per route, or about \$5 million for all the RTAs and the MBTA (excluding the MBCR). Additional funding could be allocated to study the MBCR and intercity bus connections across the state. This small investment will help ensure that our long-term investment in transit will be effective and efficient.

Give public transit riders and workers a voice and a vote on transit boards and MPOs.

The best way to ensure that transit authorities make policies in the interest of the communities served is to include riders and workers in making the decisions.

MassDOT/MBTA Board of Directors. We recommend that at least one member of the MassDOT/MBTA Board of Directors be required by statute to be a regular rider of public transportation and that at least one member of that Board be a working member of a labor union under the Department of Transportation.

Transit Authority Advisory Boards. We recommend that rider and worker seats be added to boards with votes in proportion to the amount of revenue generated by transportation services. At least one of these riders should be a user of paratransit.

To strengthen the functioning of advisory boards, we suggest that MassDOT provide biennial trainings to help orient all advisory board members to their rights and responsibilities, and to the resources available to support them in this role.

Metropolitan Planning Organizations. We recommend that Metropolitan Planning Organizations (MPOs) in Massachusetts be structured to have proportional representation based on population by area, that the majority of MPOs be composed of representatives of communities (e.g., municipal elected officials) rather than by state agencies, and that some portion of representatives must be regular users of public transportation.

Federal law requires MPOs to make certain regional decisions about the allocation of federal transportation dollars. However, the precise composition and operation of MPOs falls to the state and the MPOs themselves to determine.

Create a more integrated transit system statewide.

Increasing the coordination between transit authorities, commuter rail, and MassDOT would improve the rider experience, increase planning and purchasing efficiencies, and catalyze the implementation of best practices.

Working together, authorities and MassDOT could identify opportunities for effective cross-RTA service to get passengers from where they are in one transit region to where they need to be in another. Also, transit authorities could collaborate on workforce training and learn from each others' best practices in areas like marketing.

Beyond Boston reported that MassDOT could better support transit authorities. The state department could help set standards for and enforcing high-quality agreements with operators and other contractors; compile similar purchasing needs among the transit authorities to achieve economies of scale; and oversee capital investments to align

The best way to ensure that transit authorities make policies in the interest of the communities served is to include riders and workers in making the decisions.

them with regional and statewide goals and leverage as much federal money as possible.

Finally, we urge the legislature to either set or empower the Department of Transportation to set specific, measurable performance objectives for the transit agencies to achieve outcomes that forward the state's principles of equity, community and economic development, and reliability. Performance on these metrics should factor into the ability of authorities to access innovation funds for pilot projects to try new programs to reach goals borne of the comprehensive service analyses.

FUND IT: ADEQUATE FUNDING AND DEBT RELIEF FOR TRANSIT AUTHORITIES

The Challenge

The state's structure for funding public transit is broken.

The transit system is in dire need of equitable, stable, dedicated funding. The MBTA is crushed under the weight of debt, particularly debt related to environmental mitigation for the Big Dig highway project. RTAs, too, are forced to borrow money from banks to pay for all expenses before being reimbursed at the end of the year, a nonsensical practice that creates uncertainty and decreases the funds available for actual transit service.

Public transit in Massachusetts is woefully underfunded.

In Boston, the modern MBTA was “born broke,” saddled with billions in debt and given a revenue stream that would quickly prove insufficient to match the agency's rapidly increasing debt service costs.* This crushing debt load has prevented the T from maintaining its system in a state of good repair; forced it to cancel and postpone much-needed (and long-promised) expansion projects; and led to drastic fare increases and service cuts that disproportionately hurt its most vulnerable riders. Costing about more than \$120 million per year, Big Dig debt service costs twice as much the MBTA would have saved when it proposed to eliminate more than 100 bus routes last year (MBTA 2012, 20).

The 15 regional transit authorities face insufficient funds in the face of increasing expenses (MassDOT July 2012, ES-1). Both state and federal government have flat-funded the RTAs over the past several years, leading to service cuts. In all, the RTAs use over \$32 million in federal dollars meant for capital investment to pay operating expenses, resulting in fewer resources for capital needs (MassDOT July 2012, 4-111).

Transit funding is part of a larger funding picture, of course. Between 1977 and 2009, Massachusetts cut taxes more than any other state in the country. As a result, today Massachusetts has \$3 billion less each year than in the late 1990s with which to provide various needed services – transit, education, public safety, and our social safety net (Wise and Berger 2010).

State transit funding is unstable.

Ever since the implementation of forward funding for the MBTA, none of its revenues except the farebox has met expectations. The debt burden weighs on the MBTA so heavily because the revenues that were expected to grow have instead decreased.

The RTAs lack a state budget line item or a clear and transparent mechanism for allocating state funds to different regional transit services. Furthermore, Massachusetts funds the RTAs in arrears, which the *Beyond Boston* report concludes “increases uncertainty – if state funding is reduced, then spending reductions must occur after funds have already been spent” (4-112). Although interest rates are near historic lows, RTAs must add the cost of those interest payments to the

Costing about more than \$120 million per year, Big Dig debt service costs twice as much the MBTA would have saved when it proposed to eliminate more than 100 bus routes last year.

“If we have fewer buses running, people are more likely to miss their connections. If they miss their connections, they'll be late to work. If they're late to work, they'll lose their jobs. If they lose their jobs, well, it will hurt our economy even more.”

*Michael Haughton
Bus Driver, Member
of ATU Local 448
(Springfield)*



operational expenses that they must borrow money to cover until they receive their state contract assistance.

RTAs are inequitably funded.

In addition to being insufficiently funded, the RTAs are also *inequitably* funded. RTAs get state contract assistance based on historical funding levels rather than on current service levels, needs or performance, an inequitable practice that hinders innovation and the development of new services (MassDOT July 2012, 4-111 - 4-112).

OUR SOLUTIONS

The Public Transit–Public Good campaign is dedicated to certain principles regarding solutions to the transit-funding crisis:

Stable and Diverse. As no one revenue source can answer the whole funding shortfall, a diverse and well-balanced set of revenues can promote stability of funds through economic downturns.

Additional. New funding should add to – not replace – the existing baselines for transit systems.

Progressive. Revenues should not unduly burden low- and moderate-income people.

Create more stability and transparency in state funding of regional transit services.

The legislature should create a dedicated line item for the RTAs in the state budget. Such a line item is more transparent than leaving the disbursement of funding to RTAs as an administrative function of the Department of Transportation. A forward-funded line item for RTAs will carry a one-time charge of about \$75 million over the RTA baseline (since both the past and the coming years must be funded), but will enable RTA managers to plan for the future service needs of their regions and allow riders to actively engage in decisions that shape their regional transit services.

Funding should be based on a formula that includes current service levels, asset repair and replacement needs, and the viability of plans to fulfill the operational and capital needs outlined in community-directed comprehensive service analyses. In addition to this regular funding, MassDOT should create an “innovation fund” to improve transit service in low-income and historically underserved communities, particularly state-designated Environmental Justice communities and Gateway Cities.

Move the Big Dig Debt.

The MBTA needs relief from the Big Dig debt immediately, freeing up much-needed funds to pay for repairs and expansion, and to avoid harmful fare hikes and service cuts. This relief could mean transferring the debt off of the MBTA’s books entirely or creating a new revenue source dedicated to the MBTA to offset Big Dig debt service costs.

The recommendation to move the Big Dig debt off the MBTA’s books is hardly new. The Transportation Finance Commission (TFC), whose 2007 findings and recommendations began to lay the groundwork

“I started working at the MBTA in 1994 as a part time bus operator. I know the hardships of many of the working people who rely on MBTA service to get them where they’re going. It’s frustrating to know that the MBTA is burdened by debt that was taken on during big dig mitigation. The Boston Carmen’s Union has worked with the MBTA Administration and the State Legislature to cut labor costs in a fair way. Riders have anted up at the fair-box. But, in order for the MBTA to get on track, the legislature, locally and federally, must act to fund MA Transit.”

*John Lee
President & Business Agent
Boston Carmen’s Union, ATU
Local 589*

for transportation finance reform, called for the state to assume the T's Big Dig debt. "That debt," the TFC wrote, "is rightly the responsibility of the Commonwealth, not the MBTA" (Massachusetts Transportation Finance Commission 2007, 17). Shortly after the TFC's recommendations came out, the Massachusetts Public Interest Research Group (MassPIRG), echoed them (Larson and Bourassa 2007, 8).

The Metropolitan Area Planning Council, Greater Boston's regional planning agency, makes the same recommendation (Metropolitan Area Planning Council Executive Committee 2011, 6). The MBTA Advisory Board, which represents the 175 cities and towns served by the MBTA, calls for a "legislative solution" that includes "debt relief" (MBTA Advisory Board 2012, 2). Even Secretary of Transportation Richard Davey, in two separate interviews, called the proposal to transfer the Big Dig debt back to the state "a fine idea" (Davey 2012 and Salsberg 2012).

The recommendation that "the Commonwealth" assume the Big Dig's debt does not mean that the state simply transfer \$1.7 billion to its own books. The Massachusetts Port Authority, or Massport, has benefitted enormously from the Big Dig. Besides car commuters, the Big Dig primarily benefits Logan Airport passengers and South Boston's seaport (Salvucci, Should Massport Help the T?). Massport owns and manages Logan Airport, and it owns, manages or leases 285 acres of land in South Boston, including the Seaport Boston World Trade Center and Hotel, the John Hancock/Manulife Financial headquarters, and a number of parking facilities (Massport). From fiscal years 2008 through 2012, Massport's rental and parking revenues in South Boston came to over \$55 million. Not surprisingly, given the construction boom in the area (now called the "Innovation District"), and the attendant increase in property values, over one-quarter of this revenue – \$14.3 million – was earned in 2012 alone. This represents a 50% increase from 2008 (Turner 2012).

So it is not a stretch to say that single biggest beneficiary of the Big Dig is Massport. We recommend that Massport share in the responsibility of taking on some of the T's Big Dig debt. Fred Salvucci, the architect of the Big Dig, has made this same recommendation (Salvucci, Massport should help solve T mess).

Generate new revenue to reliably relieve MBTA Big-Dig debt and to adequately fund RTAs.

A modest statewide payroll tax, dedicated to public transit and paid by employers on the portion of each worker's earnings above a certain threshold would achieve this goal. The annual revenue from the proposed payroll tax would be sufficient to offset the MBTA's Big Dig debt service costs *and* to provide the RTAs with tens of millions in additional funds.

An example of how the transit payroll tax could work follows. If all employers paid 0.75% of the portion of each worker's earnings over \$100,000, we estimate it would yield revenues of over \$190 million.^b Approximately \$130 million would come from employers within the MBTA's service area; this money would go to the MBTA to offset the cost of the annual service costs for the Big Dig debt. The remaining \$60 million – about 80% of the RTAs' current state contract assistance –

If all employers paid 0.75% of the portion of each worker's earnings over \$100,000, we estimate it would yield revenues over \$190 million, sufficient to offset the MBTA's Big Dig debt service costs and to provide the RTAs with tens of millions in additional funds.

would be allocated to the RTAs.^j The revenue generated by the transit payroll tax would be in addition to the current budgets for both MBTA and the RTAs.

Most of the RTA allocation would be made in proportion to the RTAs' most recent ridership numbers, asset repair and replacement needs, and the viability of plans to fulfill the operation and capital needs outlined in community-directed CSAs. The RTAs could use this money to pay for service expansion. Additionally, the Commonwealth could use a portion of the revenues to fund “innovation” grants, tied to implementing programs and policies flowing from the comprehensive service analyses. As further inducement to increasing public transit in and around its Gateway Cities, the Commonwealth could provide income tax credits to employers who purchase transit passes for their employees.



Public Transit-Public Good members from across the state stand together at the Statehouse

We are proposing that the tax be assessed only on earnings of \$100,000 or higher, which would entirely exempt almost 90% of workers.^j In addition to shielding lower-earning workers from the effects of the transit payroll tax, this threshold ensures that our largest employers would pay most of the tax.^k Lastly, the \$100,000 threshold concentrates the tax in a handful of the top-paying industries in Massachusetts: financial and professional services, medicine, biotech, and pharmaceuticals.^l

Other regions of the country use payroll taxes to fund transit. Oregon has two major “transit districts” – one serving Greater Portland, another serving the Eugene area (home of the University of Oregon) – that have relied on an employer payroll tax as their primary non-fare source of revenue for over four decades. The tax is levied on employers for wages paid in certain ZIP codes within each transit district (Oregon Department of Revenue).

Since 2009, the New York Metropolitan Transportation Authority, the nation’s largest mass transit agency, has also relied on an employer payroll tax, though not as heavily as the Oregon transit districts. The Metropolitan Commuter Transportation Mobility Tax of 0.34% applies to employers in 12 counties in and around New York City, and its revenues go exclusively to the MTA.^m

Establish a Massachusetts Community Infrastructure Bank to plan for the future.

One option for long-term funding of public transit that has captured much attention recently is a state infrastructure bank (SIB). Currently 34 states have SIBs with different shapes and sizes (National Conference of State Legislatures 2011). Some SIBs rely on federal funding, which can be used to finance transportation projects exclusively (Federal Highway Administration 2012). Others are solely state-funded, which allows for the financing of non-transportation projects (Christman and Riordan 2011, 7). Some states maintain separate SIB accounts for federal and state capitalization, which allows for more flexibility in the choice of projects to finance.

Although this report focuses on public transit, we put forward the idea of a SIB here to begin a broader conversation about the role a SIB could play in funding infrastructure improvements of *all* kinds across the Commonwealth. Public transit is crucial to the growth and well-being of Massachusetts, but so too are modern and efficient water, waste management, recycling, energy, utility, and telecommunications systems, as well as public buildings, parks, and ports. To finance these and other projects such as these and more, we are proposing that the Massachusetts establish the state-financed Massachusetts Community Infrastructure Bank.

One key advantage of a SIB is that, as a public lending institution, it can be required to make loans that meet a bevy of non-financial criteria that are critical to the well being of the Commonwealth, including local sourcing of labor (and materials); employment and training in low-income communities; job quality and wage standards; preferences for export-oriented industries; and sustainability. One excellent example of such a program is California's Infrastructure State Revolving Fund (ISRF) Program, which uses a 200-point scoring system to determine project eligibility. Points are awarded on the basis of, among other things, project impact (e.g., job creation and retention); economic need (e.g., local unemployment and poverty rates); and land use (e.g., urban infill and the preservation of open space) (California Infrastructure and Economic Development Bank 2008, 11-16).

This is not a brand new idea in Massachusetts. Proposed legislation in 1984, would have created a state infrastructure bank that financed state and local infrastructure projects with proceeds from bond sales (Commonwealth of Massachusetts 1984).

Some have called for a state infrastructure bank that relies heavily on investment from Wall Street (McMorrow 2012). While it may be tempting to look to multinational banks as the most viable source of investment capital for public infrastructure – as Chicago has for its new “Infrastructure Trust” (The Economist 2012) – the Massachusetts Community Infrastructure Bank presents a real opportunity to work with partners who would be motivated to see government empowered to do good – like pension funds and local credit unions and community banks.

Invest in our communities.

The Campaign for Our Communities is a coalition of community organizations, faith groups, and labor unions working to pass tax reform legislation that would raise significant new tax revenue while holding down increases for low- and middle-income individuals and families. This revenue is needed to invest in the things that make Massachusetts a great place to live, work, and raise a family, including transportation and other infrastructure; public education and libraries; police and fire protection; environmental protection, parks, and playgrounds; and the safety net to protect our most vulnerable residents.

Greater investments in transit and in our other community priorities support each other, creating a virtuous cycle that improves access to opportunities and resources, quality of life, and equity.

Public transit is crucial to the growth and well-being of Massachusetts, but so too are modern and efficient water, waste management, recycling, energy, utility, and telecommunications systems, as well as public buildings, parks, and ports.

“I took the Haverhill line from 1997 to 2007. But, when the schedule changed – my train left 10 minutes later – my arrival time was just a bit too late in the morning. Fare increases (my monthly pass went from \$120 to \$240 in that time) actually made it cheaper to drive, even when gas was at its \$4 high. My whole commute took at least 3 1/2 hours, twice what my drive time was on an average day. So, now I drive. I can cover parent duty more often and can spend time with my wife before she leaves on the nights she works.”

*Richard Smyth
Bradford resident
Member, Unitarian
Universalists’ Green
Sanctuary (Haverhill)*

MAKE IT FAIR: AN EQUITABLE FARE STRUCTURE FOR THE COMMONWEALTH

The Challenge

Irregular and big fare increases disproportionately harm low-income, transit-dependent riders.

In July, the MBTA raised base fares 20% and paratransit fares by as much as 150%. Despite the base fare increases, overall MBTA ridership is up. Ridership for August 2012 increased 1.2% over August 2011, with what appears to be a standard seasonal dip since June 2012 (MBTA Oct 2012). In August, a Boston price-optimization startup famously made headlines saying that the stability of ridership numbers after the fare hike demonstrated “that the fare hike was well within the acceptable range of Bostonians’ willingness to pay. In fact, the MBTA could have raised prices even more if they want to with pretty much the same result” (Campbell 2012).

This analysis ignores two important facts. First, if transit authorities push their fare levels to the limit, riders who *need* public transit will have to forgo other needs in order to pay such fares or limit their access to community opportunities and resources by cutting needed trips. Second, discretionary riders may choose other forms of transportation.

A look at the effects of the 2012 MBTA paratransit fare increases – which were 100%-150% (to \$4 and \$5 each way), compared to 20% for fares on fixed-route services – shows what happens when public transit crosses the threshold to unaffordability. Paratransit – THE RIDE in the MBTA region – serves customers who cannot to use fixed-route service due to a disability. A large percentage of demand-response riders are on limited fixed incomes. In the last five years, The RIDE has seen a seasonal dip in July ranging from 4.2% to 8.0%. This year the dip from June to July was 17.2%, more than double the next highest year. Moreover, paratransit ridership has been lower than the previous year only two times in the past five years. But after the July 1 fare hikes, paratransit ridership dropped significantly compared to 2011: down 11.3% in July, 13.8% in August, and 15.2% in September (MBTA Oct 2012).

These numbers do not convey the human cost of the fare increase. Many riders must rely on paratransit to get them to critical medical care. Against her doctor’s orders, Patricia Carone has halved her needed medical appointments because she has no room in her fixed budget to pay more for THE RIDE. Others are limiting grocery runs to once a month, creating a kind of food insecurity among riders (MacDonald 2012).

Like many retirees, Ruth (“Kiki”) and Irving (“Inky”) Chaiton, (82 and 87) live on a limited fixed income after raising their family and retiring from a lifetime of work. In the last few years Inky has survived two bouts with cancer and still struggles with other serious health conditions. Kiki has also struggled with health conditions in addition to supporting her husband through his difficult treatment. Like many in their situation, Kiki and Inky do not want to burden their children and have turned to THE RIDE to help get them to their medical appointment and other activities.



Kiki explains, “What are you going to do? Between me and him, everyday it’s a doctor’s appointment. So, what are you going to do? My daughter would have to miss work to come take us and she can’t do that – not all the time.”

When she talks about the sacrifices she has had to make in order to afford the increased paratransit fares, it becomes evident that the loss is not only Kiki’s. It is her community’s, as well. For the past 13 years, Kiki has volunteered every week at a local nursing home, regularly spending time with residents in the final stages of their lives. Kiki was a ray of sunshine for many, each week coming with a big smile and her bubbling personality. She took the extra time with each resident to learn what might bring them a moment of joy. For example, Kiki realized that one resident who was uncommunicative was watching her closely so she took time with the woman and realized the woman was actually watching her broach. Kiki took off her broach and handed it to the woman who immediately gave a small smile as she handled the jewelry. Each week after that, Kiki would make sure to have a special piece of jewelry to share with this woman who always showed a little glimmer in her eye for these visits.

Kiki needed THE RIDE to get to the nursing home but with the new fares she is no longer able to afford it. Kiki explains, “I miss volunteering. I miss being with them every week. But what are you going to do? Our prescriptions have gone up. The RIDE has gone up. I love volunteering but I had no choice but to give it up. I had no choice”

Many people simply do not have the budget to weather hefty fares without sacrificing vital needs. A 2010 Urban Land Institute study of central to eastern Massachusetts – bounded by Providence, RI on the south, Dover, NH on the northeast, and Worcester on the west – found that the costs associated with housing average 54% of median income, the story is far from uniform. Some areas face an “extreme housing and transportation cost burden” – in Lawrence the combined cost reaches 74% of median income – due to (a) significantly lower median incomes than in the region as a whole, (b) low- to moderate-income bedroom communities that have neither low-cost housing nor proximity to jobs and adequate transit, or (c) higher-income areas with extreme housing and transportation costs (ULI Terwilliger Center for Housing 2010, 16-17).

OUR SOLUTIONS

Create and implement fair fare structure policies.

The fare structure for all transit services should ensure that low-income, transit-dependent riders are able to afford the services, while maintaining the system’s attractiveness to discretionary riders.

Base Fares. We suggest that the cap for base fares for users of fixed-route and demand-response service should be pegged to an external index of income (e.g., average median income by region or a multiple of the federal poverty line).

Reduced Fares for all transit services. Transit authorities throughout the Commonwealth currently offer reduced fares of 50% the base fare for

“I miss volunteering. I miss being with them every week. But what are you going to do? Our prescriptions have gone up. The RIDE has gone up. I love volunteering but I had no choice but to give it up. I had no choice.”

*Ruth “KIKI” Chaiton
Lynn resident
Member, Massachusetts Senior
Action Council*

Nine of the sixteen transit regions have student populations exceeding 10,000, suggesting that university-based UPass programs could generate significant revenue.

senior, disabled, and youth or student riders. We propose that reduced fares be extended to low-income riders regardless of age and mode (fixed route, paratransit, and commuter rail). Riders could be pre-qualified for the reduced fare if they already qualify for another governmental program for low-income residents, such as SNAP food stamps, Supplemental Security Income, Low-Income Home Energy Assistance Program (LIHEAP), Section 8 housing vouchers (even if they are wait listed), MassHealth, Commonwealth Care (Plans 1 and 2), Child Care Assistance (CCA), cash assistance, or the Circuit-Breaker programs.

Youth Pass. Transit authorities across the state should adopt a Youth Pass that would entitle riders between the ages of 12 and 22 to reduced fares. This would extend the current youth and student fares so that older students pursuing high-school diplomas, equivalent degrees, or job training opportunities would qualify, as well as those young people who are just starting out in the labor force and are more likely to be making low wages (Youthway on the MBTA 2011).

Create the expectation and opportunity for the private sector to contribute to public transit.

The public investment in transit advantages the private sector. It carries employees, clients, and vendors and it attracts prospects. But many of the largest enterprises in the private sector do not have a direct opportunity to contribute their fair share to public transit because of their tax-exempt status (e.g., non-profit schools or hospitals) or the volume of traffic they generate (e.g., large development projects or venues).

Universal Access Pass (UPass) Programs. Universal Access Pass (UPass) Programs are partnerships between transit agencies and, typically, universities and colleges, which tend to have large potential transit-riding populations. Nine of the sixteen transit regions (including the MBTA) have student populations exceeding 10,000, suggesting that university-based UPass programs could generate significant revenue. Three RTAs already have arrangements with one or more college or university in which the institution pays the authority some or all of the cost of service to its sites in exchange for free rides for students, faculty, and staff. The MBTA, FRTA, and MART sell reduced-fare passes to students through their institutions.

Several models of UPass Programs exist, reflecting the overall system design and the population the system serves. Some programs (as in Rhode Island) negotiate pay-per-ride contracts with each institution based on trips recorded through a Smart Card or magnetic swipe school ID. Other programs (such as in Pittsburgh) negotiate “a flat fee [per institution] that funds transit use for all students and employees” (MassDOT July 2012, 4-98)

Recognizing that different systems could achieve the greatest benefit from different models, we strongly prefer a flat-fee program that offers a discount on full fare for all people affiliated with the institution. Such a program design helps ensure that institutions are contributing to infrastructure that helps make them competitive, attractive, and effective.

We further encourage transit systems to engage non-educational employers to participate in their UPass programs. Hospitals, large corporations, and consortia of smaller non-profits and businesses could equally benefit from participation, encourage significant numbers of new discretionary transit users, and contribute to the effort to reduce greenhouse gas emissions in the Commonwealth.

Site-specific Transit Mitigation Fees. We recommend the implementation of mandatory mitigation fees to offset added transit costs associated with high-volume for-profit developments and attractions surpassing certain thresholds. In the case of new development, the fee would be negotiated based on the findings of an environmental impact study. For existing sites and attractions, the fee would be assessed based on the historic route information.

The fee structure could be modeled on one of the UPass models. For instance, a development could cover the cost of new transit routes serving the site or could buy discounted passes for all of the attendees of a major event. While the fee structure would be negotiated, a floor and set of guidelines should be legislated.

Ensure that transit investments strengthen the communities in which they are located.

The Patrick-Murray administration is laying the foundation to expand the reach of commuter rail service. This expansion will connect residents to opportunities in other regions, but it also will spark the creation of new opportunities at home, as the permanent infrastructure investment attracts other development. Those opportunities should be available to long-time residents as well as newcomers. Rail expansion should be coupled with:

Municipal development policies that protect against the displacement of long-time residents. New transit projects often spark higher-end housing and commercial development, which can price existing residents out of their neighborhoods. We support policies that will enable residents to stay in their neighborhoods. They invested in those neighborhoods before the windfall and public policy should protect that investment. We urge municipal leaders to enact policies that ensure mixed uses, including mixed-income housing on site. The initial cost of “affordable” housing units should be based on the incomes in the area before the development was undertaken.

Local hiring. As construction on rail expansion projects gets underway, the work should be made available to local residents and should meet standards regarding family-sustaining wages and project labor agreements. Pre-apprenticeship and other training opportunities could be timed to prepare local residents for these opportunities.

Developers of and businesses occupying transit-oriented developments around this expansion should commit to standards that include local hiring, family-sustaining wages, full-time employment (where possible), and the right to choose union representation.

“ Public transit is an important issue to working families across the Commonwealth. Having come from a Railroad union I know how hard our members work to make our transit system run. Working men and women and their families depend on our public transit system, to get to work, to school, to doctors. Our public transportation system is the engine that drives our economy. Labor stands with our neighbors in calling on the state to create a first class, equitable system that strengthens our communities and moves our economy forward.”

Steven A. Tolman
President
Massachusetts AFL-CIO

CONCLUSION

The way to solve the state’s long-term transportation crisis is by doing what public transit does best – bringing people together across economic, racial, and regional divides. The Public Transit-Public Good campaign has done this.

Now, we offer these proposals as a sample of the kinds of solution package that will put the Commonwealth on a path to a more expansive and effective transit system. Investment in public transit drives our economy, protects our environment, and strengthens our communities.

Our members applaud the leadership that the Governor, his administration, and our legislature have shown on this issue. We look forward to working together to enact a package of legislative, budgetary, and policy changes to our transit system that will fix it, fund it, and make it fair.



NOTES

^aConnie M. Razza is Research and Policy Director at Community Labor United. Jessie Partridge and Jeremy Thompson are policy consultants. Jessie holds a Master of Arts in Urban and Environmental Policy and Planning from Tufts University. Jeremy is the Principal of Economic Justice Research Hub, LLC.

^bSee for instance Commonwealth of Massachusetts 2012, AP 2012, Annear 2012, and Moore 2012.

^cSee particularly, the RTAs serving Cape Cod, Martha's Vineyard, and the Merrimack Valley. In addition, despite losses in the early part of the decade, both the Pioneer Valley and the Southeastern RTAs have seen improvements since 2006 (MassDOT July 2012, 2-16, 2-32, 2-37, 2-54, 2-60).

^dState-designated Environmental Justice (EJ) Populations are neighborhoods that meet one or more of the following criteria:

- Median annual household income at or below 65% of the statewide median income;
- 25% or more of the residents are members of minority groups;
- 25% or more of the residents are foreign born; or
- 25% or more of the residents are lacking English-language proficiency (Massachusetts Executive Office of Energy and Environmental Affairs, 5).

Gateway Cities are former industrial mill cities that have populations between 35,000 and 250,000, average household income below the state average, and average educational attainment rates below the state average (Massachusetts Department of Housing and Economic Development 2012).

^eA study of the impact of income inequality on income segregation in Massachusetts has found that Greater Boston, which has had a much steeper increase in income inequality, has experienced about the same rate of increased income segregation as other – less disparate – regions of the state and a much lower rate in income segregation than other similarly disparate and similarly sized cities across the country (Forman and Koch, *Communities & Banking* 2012, 25).

^fOur analysis included the development of a transit dependency indicator that maps levels of potential transit dependency based on a combination of demographic data from the 2010 Census and 2006-2010 American Community Survey, including Population Density, Income, Race, Age, and Households Without Access to a Vehicle. We used commuter flow data from the Census 2000 Transportation Planning Package to map travel patterns of the workplace destinations of residents in a particular city and origins of workers commuting to that city. Finally, we looked more closely at the top commuter destination block groups within a city, found the top employers in those block groups using data from Reference USA, and did a trip planning analysis for the top 10-15 commuter flows into that block group using Google Maps to compare travel time in a car versus using public transit.

^gFor a detailed discussion of the T's debt, see Kane, *Born Broke* (2009).

^hAnalysis of the 2006-2010 ACS Public Use Microdata Sample (ACS PUMS).

ⁱOne way of assessing the shortfall in RTA operations budgets is to look at the amount of federal capital money RTAs flex to operational uses (that is, roughly \$32 million). However, this amount reflects the needs for systems that have shrunken over time to allay the impacts of frozen budgets. We suggest significantly increasing the amount to regional transit authorities in order to enable those RTAs to improve service .

^jAnalysis of the 2010 ACS PUMS.

^kAbout two-thirds of private sector workers earning \$100,000 or more work for firms with 500-plus employees, and over half work for firms with 1,000-plus employees (similar shares of aggregate statewide earnings above \$100,000 come from these largest employers). Analysis of Current Population Survey, 2012 March Supplement.

^lAnalysis of the 2006-2010 ACS Public Use Microdata Sample (ACS PUMS).

^mIn August 2012, New York State's lowest court ruled the tax unconstitutional because it applies only to certain counties. The ruling does not immediately prevent the tax from being collected, and the MTA will appeal (Reuters).

BIBLIOGRAPHY

- AAA. "Your Driving Costs, 2012." AAA. April 2012. <http://newsroom.aaa.com/wp-content/uploads/2012/04/YourDrivingCosts2012.pdf>.
- Annear, Steve. "Another Month, Another MBTA Record-Breaker: T Ridership Increases." *BostInno*. June 28, 2012. <http://bostinno.com/2012/06/28/another-month-another-mbta-record-breaker-t-ridership-increases/>.
- AP. "MBTA says ridership set record for February." *WHDH Channel 7*. March 29, 2012. <http://www1.whdh.com/news/articles/local/boston/12007072394087/mbta-says-ridership-set-record-for-february/>.
- Bureau of Labor Statics. *Table 1202. Income before taxes: annual means, standard errors and coefficient of variation, Consumer Expenditure Survey, 2011*. Table, Washington, DC: Bureau of Labor Statistics, September 2012.
- Bureau of Labor Statics. "Occupational Employment Statistics, Massachusetts, May 2011." *Bureau of Labor Statistics*. May 2011. <http://data.bls.gov/oes/datatype.do>.
- California Infrastructure and Economic Development Bank. "Criteria, Priorities, and Guidelines for the Infrastructure State Revolving Fund Program." January 29, 2008. http://www.ibank.ca.gov/res/docs/pdfs/01-29-08_BoardApprovedCriteria.pdf.
- Campbell, Patrick. "A Lesson in Price Communication: Pricing Data Supports the #MBTA Fare Hike, But Not the #MBTA." *Price Intelligently blog*. August 24, 2012. <http://blog.priceintelligently.com/blog/bid/154764/A-Lesson-in-Price-Communication-Pricing-Data-Supports-the-MBTA-Fare-Hike-But-Not-the-MBTA>.
- Christman, Anastasia, and Christine Riordan. "State Infrastructure Banks: Old Idea Yields New Opportunities for Job Creation." *National Employment Law Project*. December 2011. http://www.nelp.org/page/-/Job_Creation/State_Infrastructure_Banks.pdf?nocdn=1.
- Commonwealth of Massachusetts. "MBTA Ridership; 2011 Sets Records." *Commonwealth Conversations: Transportation*. Commonwealth of Massachusetts. February 1, 2012. <http://transportation.blog.state.ma.us/blog/2012/02/mbta-ridership-2011-sets-records.html>.
- Commonwealth of Massachusetts. "House Bill 6140." 1984.
- D'Alessandro, David F., Paul D. Romary, Lisa J. Scannell, and Bryan Woliner. "MBTA Review." *MBTA Review*. November 1, 2009. <http://www.mbtareview.com>.
- Davey, Richard, interview by Bob Seay. *MBTA Chief Mulls Your Ideas*. WGBH. Boston. May 3, 2012.
- Disability Funders Network. "Disability Stats and Facts." <http://www.disabilityfunders.org/disability-stats-and-facts>.
- Dutzik, Tony, Jordan Schneider, Rob Kerth, Elizabeth Weyant, and Micaela Preskill. "Common Connections: The Importance of Public Transportation for College Students and Seniors in Massachusetts." *Massachusetts Public Interest Research Group*. Fall 2011. <http://masspirg.org.live.pubintnetdev.org/sites/pirg/files/reports/Common-Connections-Student-Senior-report.pdf>.
- Fall River, MA to Brockton, MA: Transit Map*. maps.google.com.
- Federal Highway Administration. "State Infrastructure Banks (SIBs)." January 19, 2012. http://www.fhwa.dot.gov/ipd/pdfs/fact_sheets/2_tfi_sibs_1_19_12.pdf.
- Federal Transit Administration. "Public Transportation's Role in Responding to Climate Change." *Federal Transit Administration - U. S. Department of Transportation*. January 2010. <http://www.fta.dot.gov/documents/PublicTransportationsRoleInRespondingToClimateChange2010.pdf>.
- Federal Transit Administration. *Transit Profiles: National Transit Database, 2010 Report Year*. Washington, DC: Federal Transit Administration, 2011.
- Forman, Benjamin, and Caroline Koch. "Communities & Banking." *Geographic Segregation: The Role of Income Inequality*. Federal Reserve Bank of Boston. Fall 2012. <http://www.bostonfed.org/commdev/c&b/2012/fall/geographic-segregation-role-of-income-inequality.pdf>.
- Forman, Benjamin, Daniel Darcy, and James Emilio. "Moving Forward with Funding: New Strategies to Support Transportation and Balanced Regional Economic Growth." *MassINC*. October 2011. <http://www.massinc.org/Research/Moving-Forward-with-Funding.aspx>.
- Frey, William H. "New Racial Segregation Measures for States and Large Metropolitan Areas: Analysis of the 2005-2009 American Community Survey." *University of Michigan Population Studies Center*. Brookings Institution and University of Michigan Social Science Data Analysis Network. <http://www.psc.isr.umich.edu/dis/census/seggregation.html>.
- "General Laws of the Commonwealth of Massachusetts." *Part I, Title XXII, Chapter 161B, Section 5*.
- "General Laws of the Commonwealth of Massachusetts." *Part I, Title XXII, Chapter 161A, Section 7A*.
- James, Peter, Jonathan Buonocore, Jonathan Levy, and Marian Arcaya. *A Healthy T for a Healthy Region: A Health Impact Assessment of Proposed MBTA Service Cuts and Fare Increases*. Boston, MA: Metropolitan Area Planning Council, March 2012.
- Kane, Brian. "Born Broke: How the MBTA found itself with too much debt, the corrosive effects of this debt, and a comparison of the T's deficit to its peers." MBTA Advisory Board, Boston, MA, 2009.
- Kansas City Area Transportation Authority. "January 2011 Meeting." *Kansas City Area Transportation Authority*. January 2011. <http://www.kcata.org/images/uploads/CSABoard0111.pdf>.
- . "July 2010 Meeting." *Kansas City Area Transportation Authority*. July 2010. <http://www.kcata.org/images/uploads/CSAJuly2010.pdf>.
- . "KCATA Comprehensive Service Assessment: Market Analysis." *Kansas City Area Transportation Authority*. Nelson Nygaard and HDR. February 17, 2011. <http://www.kcata.org/images/uploads/CSAMarketAnalysis.pdf>.
- Katz, Cheryl. "Unequal Exposures: People in poor, non-white neighborhoods breathe more hazardous particles," *Environmental Health News: Pollution, Poverty, People of Color*. November 1, 2012. <http://www.environmentalhealthnews.org/ehs/news/2012/unequal-exposures>.
- Larson, John, and Eric Bourassa. "Derailed by Debt." *Massachusetts Public Interest Research Group (MassPIRG) Education Fund*. October 16, 2007. <http://www.masspirg.org/sites/pirg/files/reports/MASSPIRG-MBTA-Funding-1.3.pdf>.
- Litman, Todd. "Transit Price Elasticities and Cross-Elasticities." *Victoria Transport Policy Institute*. May 25, 2012. <http://www.vtpi.org/tranelas.pdf>.
- MacDonald, G. Jeffrey. "Doubling of MBTA shuttle fares strains disabled users." *Boston Globe*. August 2, 2012. <http://www.bostonglobe.com/metro/regionals/north/2012/08/01/doubling-the-ride-fare-strains-users/r3ChpbTdgUvajQaYtzqTL/story.html?camp=newsletter>.
- Massachusetts Budget and Policy Center. "Massachusetts Ranks 25th in Taxes in FY 2010." *Massachusetts Budget and Policy Center*. September 26, 2012. http://www.massbudget.org/report_window.php?loc=tax_rank_2010.html.
- . "Taxes in Massachusetts." *Massachusetts Budget and Policy Center*. <http://www.massbudget.org/multimedia.php?ref=vbdSttULZPQ>.
- . "Wages and Inequality in Massachusetts: A Labor Day Report." *Massachusetts Budget and Policy Center*. August 31, 2012. http://www.massbudget.org/report_window.php?loc=labor_day_2012.html.
- Massachusetts Department of Environmental Protection. "Summary of Massachusetts GHG Emissions - 7/30/2012." July 30, 2012. http://www.mass.gov/dep/air/climate/gwsa_docs.htm#inventory.
- Massachusetts Department of Housing and Economic Development. "Housing Development Incentive Program: Regulatory Requirements." July 2012. <http://www.mass.gov/hed/docs/dhcd/hdip/hdip-regulatoryrequirements.pdf>.
- Massachusetts Executive Office of Energy and Environmental Affairs. "Environmental Justice Policy of the Executive Office of Environmental Affairs." <http://www.mass.gov/eea/docs/eea/ej/ej-policy-english.pdf>.
- Massachusetts Transportation Finance Commission. "Transportation Finance in Massachusetts: Volume 2; Building a Sustainable Transportation

- Financing System.” September 17, 2007. http://www.eot.state.ma.us/downloads/tfc/TFC_Recommendations.pdf.
- MassDOT. *Beyond Boston: A Transit Study for the Commonwealth, Final Report*. Boston, MA: Massachusetts Department of Transportation, July 2012.
- . “MassDOT Announces Mode Shift Goal to Triple the Share of Travel in Massachusetts by Bicycling, Transit and Walking.” *MassDOT*. October 9, 2012. <http://www.massdot.state.ma.us/main/tabid/1075/ctl/detail/mid/2937/itemid/223/MassDOT-Announces-Mode-Shift-Goal-to-Triple-the-Share-of-Travel-in-Massachusetts-by-Bicycling-Transit-and-Walking.aspx>.
- Massport. “Planning and Development.” *doing business with massport*. <http://www.massport.com/doing-business/Pages/PlanningandDevelopment.aspx>.
- MBTA Advisory Board. “Review of MassDOT Fare Increase and Service Cut Proposals.” *MBTA Advisory Board*. February 2012. <http://www.mbtaadvisory-board.org/reports/advisory-board-counter-proposal-to-massdot-plan-feb-2012/AdvisoryBoardPlan.pdf>.
- MBTA. *MBTA Average Weekday Unlinked Passenger Trips (Thousands)*. chart, Boston, MA: MBTA, Oct 2012.
- . “MBTA Fare and Service Changes: Join the Discussion.” January 2012. http://www.mbta.com/uploadedfiles/About_the_T/Fare_Proposals_2012/MC12149%20Fare%20Increase%20Booklet_v7.pdf.
- MBTA. *Ridership and Service Statistics, 13th Edition*. Boston, MA: Massachusetts Bay Transportation Authority, July 2010.
- McMorrow, Paul. “A bank for infrastructure: If the state doesn’t have any money for transportation improvements, maybe Wall Street can help.” *Commonwealth: Politics, Ideas & Civic Life in Massachusetts*. October 11, 2012. <http://www.commonwealthmagazine.org/News-and-Features/Features/2012/Fall/005-A-bank-for-infrastructure.aspx>.
- Metropolitan Area Planning Council Executive Committee. “Transportation Finance Recommendations.” *MAPC Smart Growth & Regional Collaborations*. November 16, 2011. http://www.mapc.org/sites/default/files/MAPC_Transportation_Finance_Recommendations.pdf.
- Moore, Galen. “MBTA ridership crosses 400 million, sets record.” *BBJ Morning Buzz*. Boston Business Journal. July 31, 2012. http://www.bizjournals.com/boston/blog/mass_roundup/2012/07/mbta-ridership-record.html.
- Moskowitz, Eric. “Car-free commuting push pays off in Kendall Square.” *Boston Globe*. July 25, 2012. http://articles.boston.com/2012-07-25/metro/32828703_1_kendall-square-bike-racks.
- National Conference of State Legislatures. “State Profiles: Transportation Governance and Finance.” May 2011. <http://www.ncsl.org/documents/transportation/STATE-PROFILES.pdf>.
- Nelson, Laura J., and Eric Moskowitz. “Hundreds stranded below in another T breakdown: Passengers wait hours before walking on tracks.” *The Boston Globe*. July 13, 2011. http://www.boston.com/news/local/massachusetts/articles/2011/07/13/hundreds_stranded_below_in_another_t_breakdown/.
- New York State Department of Taxation and Finance. “Guide to the Metropolitan Commuter Transportation Mobility Tax.” <http://www.tax.ny.gov/pdf/publications/mctmt/pub420.pdf>.
- Oregon Department of Revenue. “Transit Payroll Taxes for Employers.” <http://www.oregon.gov/DOR/BUS/Pages/IC-211-503.aspx>.
- Reece, Jason, and Samir Gambhir. *The Geography of Opportunity: Building Communities of Opportunity in Massachusetts*. Kirwan Institute for the Study of Race and Ethnicity, The Ohio State University, Massachusetts Legal Services Programs, 2009.
- Reuters. “New York’s MTA payroll tax unconstitutional: judge.” <http://www.reuters.com/article/2012/08/23/us-usa-newyork-mta-tax-idUSBRE87M03820120823>.
- Salsberg, Bob. “Debt from Big Dig hampers Mass. transportation.” *boston.com*. April 8, 2012. http://www.boston.com/news/local/massachusetts/articles/2012/04/08/debt_from_big_dig_hampers_mass_transportation/?page=full.
- Salvucci, Fred, interview by Bob Seay. *Should Massport Help the T? WGBH*. April 25, 2012.
- . “Massport should help solve T mess.” *The Boston globe*. May 29, 2012. http://articles.boston.com/2012-05-29/opinion/31879063_1_fare-hikes-state-gas-tax-service-cuts.
- The Economist. “A question of trust: Chicago pioneers a new way of paying for infrastructure.” *The Economist*. May 12, 2012. <http://www.economist.com/node/21554579>.
- Turner, Greg. “Massport reaps Seaport spoils: Rakes in \$14.3M in leasing, parking revenue from sites.” *Boston Herald*. August 22, 2012. http://boston-herald.com/business/real_estate/view/20220822massport_reapsseaport_spoils_rakes_in_143m_in_leasingparking_revenue_from_sites.
- U.S. Census Bureau. “Average Annual Expenditures of All Consumer Units by Metropolitan Areas.” *2012 Statistical Abstract, National Data Book*. June 27, 2012. http://www.census.gov/compendia/statab/cats/income_expenditures_poverty_wealth/_consumer_expenditures.html.
- . “B08141. Means of Transportation to Work by Vehicles Available (2006-2010 American Community Survey 5-Year Estimates).” *American FactFinder*. 2011. http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_10_5YR_B08141&prodType=table.
- . “B25044. Tenure by Vehicles Available (2006-2010 American Community Survey 5-Year Estimates).” *American FactFinder*. 2011. <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>.
- ULI Terwilliger Center for Housing. “The Boston Regional Challenge: Examining the Costs and Impacts of Housing and Transportation on Area Residents, their Neighborhoods and the Environment.” *Urban Land Institute*. April 2010. <http://www.uli.org/report/the-boston-regional-challenge-examining-the-costs-and-impacts-of-housing-and-transportation-on-area-residents-their-neighborhoods-and-the-environment/>.
- United States Census Bureau. “685 - Average Annual Expenditures of All Consumer Units by Metropolitan Areas.” *The 2012 Statistical Abstract: The National Data Book*. October 2010. http://www.census.gov/compendia/statab/cats/income_expenditures_poverty_wealth/consumer_expenditures.html.
- US Census Bureau. “Table S0804. Means of Transportation to Work by Selected Characteristics for Workplace Geography.” *2006-2010 American Community Survey (ACS) 5-Year Estimates*.
- Waterhouse, Gail. “Income for elderly falls short, study finds: Massachusetts seniors face largest gap in US.” *Boston Globe*. March 1, 2012. <http://boston-globe.com/business/2012/03/01/income-for-state-elderly-falls-far-short-living-costs-study-finds/3h4yjAbodsLcHpbPZFfX8J/story.html>.
- Watson, Tara. “National Bureau of Economic Research.” *Inequality and the Measurement of Residential Segregation by Income in American Neighborhoods*. April 2009. http://www.nber.org/papers/w14908.pdf?new_window=1.
- Weisbrod, Glen, and Arlee Reno. “Economic Impact of Public Transportation Investment.” *American Public Transportation Association*. October 2009. http://www.apta.com/resources/reportsandpublications/Documents/economic_impact_of_public_transportation_investment.pdf.
- Wider Opportunities for Women. “Doing Without: Economic Insecurity and Older Americans: A Ranking of Household Income Shortfalls by State.” March 1, 2012. <http://www.wowonline.org/documents/DoingWithoutRankingoftheStates2.22.11.pdf>.
- Wise, Kurt, and Noah Berger. “Understanding Our Tax System: A Primer for Active Citizens.” *Massachusetts Budget and Policy Center*. September 9, 2010. http://www.massbudget.org/report_window.php?loc=Tax_Primer_83110.html.
- Youthway on the MBTA. “OpportunitI: Youth riders, the affordability crisis and the Youth Pass solution.” *Youthway on the MBTA*. June 2011. <http://youthwayonthembta.org/report>.

NOTES

NOTES



COMMUNITY LABOR UNITED (CLU) is a partnership of labor and community organizations that addresses the growing gap between rich and poor. Through strategic research, leadership development, and organizing, CLU drives forward policies that promote equitable and sustainable communities in Greater Boston and throughout Massachusetts.

BOARD OF DIRECTORS

Richard Rogers, Chair
Greater Boston Labor Council

Tom Callahan, Treasurer
MAHA

Naomi Ramos, Clerk
New England United for Justice

Dominic Desiata
City Life/Vida Urbana

Enid Eckstein
1199SEIU

Jovanna Garcia Soto
Chelsea Collaborative

John Laughlin
IUPAT DC35

Lee Matsueda
ACE

Warren Pepicelli
UNITE HERE

Craig Ransom
NE Council of Carpenters

STAFF

Diana Bell
Senior Organizer

Bob Bower
Senior Political Strategist

Soledad Boyd
Senior Communications Organizer

Darlene Lombos
Co-Executive Director

Terry Marshall
Organizer

Mike Prokosch
Administration and Grants Manager

Connie Razza
Policy and Research Director

Jeremy Shenk
Co-Executive Director



COMMUNITY LABOR UNITED
6 Beacon Street, #910
Boston, Massachusetts 02108
(617) 723-2639 ♦ www.massclu.org

