



Transportation Finance Recommendations

October 2019



Introduction

Transportation, the backbone of a thriving economy, is crucial to every aspect of life in Massachusetts, connecting workers to jobs, businesses to markets, students to schools, and residents and visitors to cultural and recreational resources. A reliable, affordable, and well-connected transportation network is particularly essential to advancing the region's equity goals: such a network would improve the lives of lower-income populations by enhancing access to good jobs, schools, and services.¹

While a vital feature of the built environment, the transportation sector is the largest source of greenhouse gas emissions in Massachusetts. Furthermore, staggering levels of traffic congestion and unreliability of public transit services have taken a toll on commuters in the Commonwealth. To fully realize the benefits of a well-functioning transportation system, these burdens must be addressed.

Reforms implemented over the past decade have improved the management of our transportation system and, in limited instances, made the system more efficient and reliable – although we have a long way to go. Furthermore, action is still needed to put transportation on a sound financial footing, so we can build and maintain the 21st century system that will enable us to meet our economic, environmental, and equity goals.

The Metropolitan Area Planning Council (MAPC), the regional planning agency serving the people who live and work in the 101 cities and towns in Metro Boston, has prepared the following recommendations to address transportation finance. These ideas are intended as a “menu” of options. Multiple “menu” items will likely be needed to address our local, regional, and statewide transportation priorities. We believe that all options should be on the table, and we stand ready to work with the Baker Administration and both branches of the Legislature to implement policies that will address our state's transportation funding needs.

¹ MAPC defines “equity” as the condition of fair and just inclusion into a society. Equity will exist when those who have been most marginalized have equal access to opportunities, power, participation, and resources and all have avenues to safe, healthy, productive, and fulfilling lives. It requires restructuring deeply entrenched systems of privilege and oppression that have led to the uneven distribution of benefits and burdens over multiple generations.

Principles

The following principles serve to guide MAPC’s approach to investing in transportation:

- While we support more revenue for the transportation system, we also believe that transportation taxes and fees should be aligned with climate, land use, and equity goals. Pricing solutions should not disproportionately burden low-income populations, and investments should prioritize mode shift away from single-occupancy vehicles and support transit oriented development.
- We need a combination of small, medium, and large revenue-raising mechanisms at the local, regional, state, and federal levels, with support from the private sector.
- Cities and towns should play a larger role in both influencing travel behavior and advancing transportation infrastructure projects, and therefore should be given more tools to price transportation-related externalities and raise revenue locally.
- New transportation revenues must cover both operating and capital shortfalls.

Recommendations

Recommendations to provide local funding options to cities and towns	2
Recommendations to encourage smart growth and mode shift	5
Recommendations to raise broad-based revenue for transportation improvements	8

Recommendations to provide local funding to cities and towns

-1- **Municipalities or regions should be allowed to raise funds via ballot initiative for specific projects or lists of projects.**

Single municipalities or regional groups of municipalities should be able to hold votes to raise funds for specific projects or lists of projects, through increases in the property tax, sales tax, parking fees, excise tax, real estate transfer tax, or other sources. This is a major source of revenue for transportation infrastructure in most other areas in the country, but it is not currently available in Massachusetts. In fact, in the 2018 election cycle alone there were 184 ballot measures in 26 different states from every region of the United States. Voters approved new funding for transportation in 87% of these ballot campaigns, totaling nearly \$41 billion in

funding.² Although enabling such initiatives would not raise revenues immediately, it could be a very important source of income over the long term, and it would give local voters a bigger stake in meeting their own transportation needs.

-2- Allow cities and towns to tax private parking facilities to generate additional revenue for transportation needs.

The Municipal Modernization Act of 2016 enabled cities and towns to manage parking demand by modifying the rate charged for publicly provided on- and off-street parking. It also authorized municipalities to create Parking Benefit Districts—specific geographies in which parking revenue raised is reinvested back into the district for transportation-related improvements.³

To provide municipalities with another option for generating local revenue for transportation, the Commonwealth should allow cities and towns to tax publicly available private parking facilities and use the revenue to support transportation infrastructure improvements. Currently, only Boston, Springfield, and Worcester are able to tax parking facilities built in conjunction with or as part of a project authorized by the Convention Center Financing Act, and those taxes are limited to \$2 per vehicle per day. Several major U.S. cities, including New York City, Los Angeles, Chicago, San Francisco, and Philadelphia, have implemented parking taxes. Generally, the tax rates range from 10-25%, but each municipality should be able to select a rate that is appropriate for their own local market and needs.

Most of these cities apply the fee to any parking facilities where users are already charged to park their vehicles, and the tax rate is incorporated into the total amount the user must pay to park. Some cities include exemptions for certain uses, such as off-street residential parking, parking provided by tax-exempt organizations, and parking at coin-operated parking meters. These taxes have the potential to generate sizable amounts of revenue. Chicago, for example, raised \$135.4 million in parking tax revenue in 2017.⁴

To limit the number of excess parking spaces constructed in the first place, a parking construction tax could be explored. The structure of such a tax could be similar to how cities and towns already levy storm-water utility fees, which are based on the square footage of impervious surface constructed. In addition to surface area, other metrics to consider when designing a parking construction tax include number of parking spaces, forecasted auto trip generation, and proximity to transit.

2 <https://www.enotrans.org/press-releases/voters-approved-40-9-billion-for-transportation-in-2018-eno-analysis/>

3 In 2019, Representative Jay Livingstone filed H.1958 “An Act to reduce atmospheric pollution,” which would allow Massachusetts cities and towns to impose a surcharge on commercial parking spaces and/or a cap on the number of such spaces available. All funds derived from this surcharge must be used for the purposes of air pollution abatement and improvements in transportation infrastructure.

4 https://www.chicago.gov/content/dam/city/depts/obm/supp_info/2019Budget/2018AnnualFinancialAnalysis_CityofChicago.pdf.

-3- Cities and towns should continue to take advantage of existing value capture tools, and should be developed to expand the utility of value capture in the Commonwealth.

As with the regional ballot initiatives mentioned above, value capture mechanisms are commonly used in much of the country. Municipalities should continue to pursue the Infrastructure Investment Incentive (I-Cubed) program as well as District Improvement Financing (DIF), two of the most commonly utilized value capture tools in Massachusetts. Municipalities should not be overly burdened by contribution requirements, but a modest local match may be reasonable, especially if significant new revenues derived from development around the project are likely to be available.

To explore the topic further, in January 2017 the urban economics consulting firm Strategic Economics completed the report “Expanding the Use of Value Capture for Transportation and TOD in Massachusetts.”⁵ The report, commissioned by MAPC, the City of Somerville, the Barr Foundation, and A Better City, documented how existing value capture tools in Massachusetts have been utilized, identified what barriers to further implementation exist, and recommended strategies for enhancing value capture options in the Commonwealth.

One of the main takeaways of this report is that while some projects have made use of existing value capture tools, particularly I-Cubed and DIF, the tools are of limited utility when considering projects that span multiple jurisdictions, or even those spanning multiple properties. Two proposed tools that expand the use of value capture in the Commonwealth are special assessment districts and Supplemental Infrastructure Financing for Transportation (SIFT).

MAPC is actively pursuing the report’s recommendation to allow the creation of Special Assessment Districts, which are specific jurisdictions where property owners vote to levy an additional tax or assessment on themselves in order to generate revenue for infrastructure improvements that would serve the district. Toward this end, MAPC drafted legislation that would amend Chapter 23L, or the Local Infrastructure Development Program (LIDP).⁶ LIDP functions similarly to a Special Assessment District, but it has never been utilized, in part because it requires 100% property owner approval. To enhance the utility of the program, the proposed revisions include the reduction of the property owner approval threshold to 51%. Two new sections were also added regarding amending or abolishing existing districts.

Another proposal in the Legislature now is the SIFT bill, which would create a new value capture tool that would specifically support regional or state transportation projects. The bill would authorize municipalities and MassDOT to enter into SIFT agreements and share the incremental property tax growth associated with the specified infrastructure improvement within a SIFT district. SIFT would help address the challenge of scaling value capture to the regional level.⁷

5 <https://www.mapc.org/resource-library/expanding-the-use-of-value-capture-for-transportation-and-tod-in-massachusetts/>

6 Senator Adam Hinds & Rep. Christine Barber S.1189 / H.1759 “An Act to improve the local infrastructure development program”

7 Rep. William Straus H.3146 “An Act Relative to Transportation Infrastructure Value Capture.”

-4- Regional mitigation funds should be established to support public transit, bike, and pedestrian improvements.

A regional mitigation fund (RMF) is a mechanism used by regions to levy and pool mitigation payments from multiple developments over time and potentially across municipal boundaries. Private development and mobility are inherently connected: a development's success hinges on access to the site, so transportation systems must be able to accommodate the changes in traffic associated with redevelopment. RMFs pool payments over time and across developments to enable larger-scale adjustments to public transit systems or roadways, accounting for future growth. In California, payments are developed in accordance with the California Mitigation Fee Act, which requires the county entities administering the fees to update them periodically; this ensures they are aligned with future growth projections, project costs, and other factors. In Massachusetts, RMFs could serve as a mitigation requirement triggered by MEPA review or through local permitting processes. Mitigation payments from new development could be used in high priority development areas to ensure expanded bus service and other transit modernization without placing the entire burden of providing increased transit service on the MBTA. More research is needed to speak to the method for establishing a RMF in Massachusetts.

Recommendations to encourage smart growth and mode shift

-5- Transportation Network Company surcharges should be increased.

Transportation Network Companies (TNCs), such as Uber or Lyft, provide door-to-door transportation for ride-hailers throughout the Commonwealth. The bulk of rides occur within Inner Core communities, and MAPC's Fare Choices report (2018) found that TNCs directly contribute to congestion by creating new car-based trips that would have otherwise been taken by transit, biking or walking. Additionally, circling drivers waiting to pick up new riders cause additional wear and tear on infrastructure, increase safety risk for cyclists and pedestrians, and emit pollutants.

Massachusetts currently charges TNCs \$0.20/trip to operate within the Commonwealth; of this fee, 50% is allocated to the municipality where the trips began, 25% to the Commonwealth Transportation Fund, and 25% to the Massachusetts Development Finance Agency to provide financial assistance to the taxicab industry. In 2017 and 2018, Massachusetts collected more than \$12 and \$16 million in TNC fees respectively—figures well below national averages given the volume of trips taken. TNCs are subject to regulatory fees in 21 states and the District of Columbia; in select regions, TNCs are also charged at the municipal level. These fees are charged using one of two mechanisms: a flat price per trip or a percentage of the rider's total fare. The average flat rate is \$0.37/trip and the average percentage surcharge is 4.41%. Were the Commonwealth to adopt rates on par with the national average, total revenue would have increased by \$25 million based on the flat rate per trip.

The number of trips taken using TNCs rose 25% from 2017 to 2018 and will likely increase over time. To mitigate the increasing impact of TNCs, the Commonwealth should subject single occupant trips to a 6.25% fee and a 4.25% fee for shared trips, including a local option for the 14 municipalities within the core MBTA service to levy an additional \$2.25 (the cost of one-way subway fare) during peak service hours. MAPC has drafted legislation, S.2063 “An Act to reduce traffic and encourage shared rides” and H.1039 “An Act to reduce congestion and encourage shared rides,” enumerating these policies. Tying the surcharge to a percentage of trip fare captures vehicle miles traveled and inflation, while dual rates incentivize shared trips, furthering the Commonwealth’s climate goals.

-6- Drivers should be charged a per-mile usage fee and municipalities should receive a portion of that fee.

By 2030, the Commonwealth anticipates that two-thirds of new vehicle sales will be electric. Under this scenario, annual gas tax revenue collected by both state and federal entities will fall by 14% (\$10 billion), as electric vehicles begin to replace the fleet’s less fuel efficient vehicles.⁸

As the motor vehicle fuel tax (gas tax) becomes less effective, charging drivers a vehicle miles traveled (VMT) fee would allow the Commonwealth to begin generating mileage-based revenue. To generate revenue comparable to the current levels, the Commonwealth would need to charge a 1.3 cent per mile VMT fee to offset losses from the gas tax under an entirely electric fleet; in both scenarios, the average Massachusetts driver pays \$153 annually. MAPC believes that municipalities should receive a share of these fees, as they are responsible for maintaining the local roads that bear a significant portion of the state’s vehicular traffic.

The Commonwealth should investigate the feasibility of using a VMT fee to supplement the motor vehicle fuel tax as revenue declines with fleet electrification. One mechanism for implementing this strategy with minimal investment in new technology would be to incorporate the revenue collection at the time of annual vehicle inspection. However, this system does not distinguish between in-state versus out-of-state driving and, thus, has the potential to charge drivers for wear and tear on out-of-state infrastructure. Other states, such as Washington, Oregon, and California, have piloted odometer-based programs, as well as more technologically-involved mechanisms, to capture VMT.

Odometer reading has fewer applications for congestion abatement compared to electronically recorded, location-based VMT capture; odometers can’t price travel based on time of day or location. Were each vehicle equipped with a device recording movement throughout the day, the VMT fee could incorporate varying pricing schemes given the congestion of roadways navigated by the driver. This system is more flexible than an annual odometer reading, but would be more costly to implement and may cause privacy concerns among the public. While research demonstrates that a VMT fee is no more regressive than a traditional fuel tax,⁹ the Commonwealth should conduct a pilot to assess the efficacy, palatability, and equity impacts of transitioning to a VMT-based revenue collection system.

8 <https://www.mass.gov/files/documents/2018/12/14/FOTCVolume2.pdf#page=116>

9 http://www.myorego.org/wp-content/uploads/2017/02/RAND_RGSD295.pdf

-7- Implement congestion pricing.

Congestion pricing is a policy that allows market forces to shift the peak demand of vehicular traffic to more efficiently meet the available supply of roadway capacity. Charging a price for use of a roadway network can not only raise additional revenue for transportation infrastructure, but also encourages users to take alternative routes or utilize alternative modes of transportation, such as transit, walking, or biking.

In the recent report *Congestion in the Commonwealth*, MassDOT evaluated different congestion pricing strategies as well as changes needed to state law to allow for congestion pricing.¹⁰ The report recommends piloting managed toll lanes on Interstate 93 to determine how effective they would be in addressing congestion, as well as understanding equity impacts.

In addition to this pilot, state law should be updated to allow new electronic tolling on currently un-tolled highways and local roads, the ability to use this tolled revenue to fund public transit and other alternatives to auto travel, and the ability for municipalities to implement congestion pricing in coordination with MassDOT.

-8- Expand access to commuter transit benefits.

Nationally, the practice of offering commuter parking benefits—federal income tax deductions for employer-provided parking for commuters—adds 820,000 drivers to the roads annually, collectively driving more than 4.6 billion miles per year.¹¹ In Boston alone, commuter parking benefits cost \$34.7 million per year.¹² The tax deduction also distorts transportation behavior, as providing “free” parking reduces the effectiveness of incentives for alternative modes of transportation, such as transit, walking, biking, and carpooling. In a study of Northeastern metropolitan areas, 62.3% of employees choose to drive when neither parking nor transit benefits are provided; that number rises to nearly 90% when only parking is subsidized and drops to 19% when only transit is subsidized.¹³ Municipalities should require employers to incentivize mode shift by providing commuter transit benefits, such as subsidized MBTA passes, bike-sharing memberships, or carpooling resources. This practice is not only aligned with the Commonwealth’s climate goals and smart growth targets, but could increase revenue for the MBTA.

¹⁰ <https://www.mass.gov/service-details/congestion-in-the-commonwealth-2019>

¹¹ transitcenter.org/wp-content/uploads/2014/11/SubsidizingCongestion-FINAL.pdf

¹² TransitCenter. (2017) Who Pays for Parking? How Federal Tax Subsidies Jam More Cars into Congested Cities, and How Cities Can Reclaim their Streets.

¹³ Andrea Hamre. (2017) “Determinants of commuter mode choice across five Northeast corridor metropolitan regions.”

Recommendations to raise broad-based revenue for transportation improvements

-9- Vehicle registration fees, fares for the MBTA and RTAs, and tolls, should be subject to predictable and modest increases.

State law was amended in 2016 to prohibit fare increases above 7% over a two-year period. This action supports the integration of regular, relatively small increases to fund MBTA operations. In July 2019, fares increased an average of 6%, following a similar increase in 2016. RTAs face less frequent but higher magnitude fare increases; over the last four years, nine of the 15 RTAs have raised fares, whereas three haven't increased prices in over a decade. The shift to electronic collection systems, such as All Electronic Tolling (AET) or the MBTA's Automated Fare Collection 2.0 (2021), offers a more flexible, comprehensive framework for implementing fare/fee schemes that incorporate recurring increases without creating additional administrative challenges. These systems can normalize modest increases to support enhanced, sustainable levels of service.

Although modest and predictable increases in MBTA fares are reasonable, the fact that similar roadway fees remain untouched is unfair and discriminatory. After all, the Commonwealth oversees and maintains our major roadways and even contributes to local road maintenance through Chapter 90 funds, just as it oversees and maintains the T. In the future, rising MBTA fares should be tied to analogous road-associated fee increases (such as the gas tax, tolls, and fees on Uber and Lyft trips) to ensure that all users contribute to funding the Commonwealth's transportation resources. (Note: The equitable distribution of tolls is also a fairness issue, as described below in #10.)

Similarly, vehicle registration fees should be raised and indexed to inflation. In 2014, registration, inspection, and road testing fees increased by \$10, \$6, and \$15 respectively, increasing revenue by over \$55 million annually. Massachusetts' vehicle registration fee of \$60 for two years is \$16.84 less than the average of other states that charge a flat rate fee.¹⁴ Increasing the registration fee by \$10, \$15, or \$20 would generate an additional \$11.5, \$17.25, and \$23 million in revenue annually for the Commonwealth, as these fees are uniform throughout the state.

-10- All-Electronic Tolling should be expanded to other limited access highways.

Now that MassDOT has successfully implemented All Electronic Tolling (AET) on the Mass Pike in 2016, this tolling technology should be introduced on other limited access highways in Massachusetts. Not only would it address an inequality for East/West commuters on I-90, but it would also generate significant user-based revenue that could be used to benefit people who live and work throughout the state. As the Commonwealth's fleet continues to electrify over time, AET could be a mechanism for supplementing the gas tax revenue losses; with established AET systems, the cost of collecting tolls is often comparable or less than the administrative costs of collecting the gas tax.¹⁵

¹⁴ http://www.ncsl.org/Portals/1/Documents/transportation/Motor_Vehicle_Registration_Fees_18014.pdf

¹⁵ https://reason.org/wp-content/uploads/files/dispelling_toll_and_gas_tax_collection_myths.pdf

The Commonwealth should also amend current law that requires toll revenue to be spent exclusively on the roadway or facility being tolled. Adjusting this policy would make administering and maintaining the roadway far more efficient, especially if tolls are being collected on multiple roadways. Furthermore, adding flexibility to use toll revenue for transit, bicycle, or pedestrian infrastructure would also enable the Commonwealth to take steps that would alleviate congestion on the roadways by shifting some drivers to other modes.

In advance of this recommendation, the Commonwealth would need to petition the Federal High Administration for approval. Governor Baker and Mayor Walsh have been vocal in advocating for more federal transportation dollars. As such, Governor Baker should join with other governors to seek an easing of federal limitations on tolling increases.

-11- The gas tax should be raised periodically and the sales tax should be applied to motor vehicle fuel sales.

Historically, the motor fuel tax has been the most effective way to finance our transportation system. The federal gas tax has been stagnant at 18.4 cents per gallon since 1993, over which time it has lost 64% of its purchasing power. In 2013, the statewide gas tax was raised from 21 to 24 cents per gallon and updated to account for inflation, increasing revenue from \$652 million in 2013 to \$733 million in 2014. Unfortunately, voters repealed the section of the law that indexed the tax amount to the annual rate of growth in inflation, and the value of the 3 cent increase has already begun to erode.

If the Commonwealth applied the state sales tax to motor fuel – along with or even in lieu of a gas tax increase—the tax would increase with inflation without requiring future legislative action because it is a percentage rather than a fixed amount. Ten states have “double taxed” gasoline using both excise and sales mechanisms. Massachusetts has the 24th lowest gas tax among the states and is just below the national average of 28.6 cents per gallon.¹⁶ Subjecting gasoline to the 6.125% sales tax in the Commonwealth would have resulted in an additional \$481 million in revenue during FY2018.

-12- Strategically invest revenue generated through participation in the Transportation Climate Initiative to reduce greenhouse gas emissions in the transportation sector.

In December 2018, Governor Baker announced Massachusetts would join eight other states and Washington D.C. in the Georgetown Climate Center’s Transportation Climate Initiative (TCI). This will entail undergoing a regional effort to cap, reduce, and charge a fee for carbon emissions from the combustion of transportation fuels, with proceeds invested into programs to enhance low-carbon transportation options and more resilient transportation infrastructure.

Similar in structure to the Regional Greenhouse Gas Initiative (RGGI), which reduced carbon emissions in the electric sector through carbon trading, TCI would have participating states and D.C. charge an additional fee on motor vehicle fuel at the wholesale level. If TCI were modeled on the same pricing scheme as RGGI (\$4.5/ton), the Commission on the Future of Transportation estimates it would cost the average driver \$2/month and generate

16 <https://www.eia.gov/tools/faqs/faq.php?id=10&t=10>

approximately \$150 million in revenue for Massachusetts. These funds should be invested strategically to ensure they are reducing emissions effectively while enhancing low carbon transportation opportunities and increasing climate resiliency across the Commonwealth.

-13- If there is a broad-based tax increase, devote a sufficient portion toward transportation.

Since an effective transportation system is essential to economic development and quality of life for all Commonwealth residents, whether or not they are direct users of each mode, revenue from non-transportation sources should contribute to building and maintaining the transportation system that Massachusetts needs. A portion of the sales tax already funds transportation, since one penny of the sales tax is dedicated to the MBTA. Similarly, if additional measures are taken to increase the income tax (e.g., the “fair share” or so-called “millionaires’ tax”) or other broad-based, statewide taxes, it would be important to dedicate a portion of those funds to transportation.

-14- Increase MBTA assessments paid by cities and towns, in conjunction with providing more local funding options for, and oversight from, municipalities.

About 10% of the MBTA’s operating budget comes from the Local Assistance Fund, which is funded by contributions from 175 cities and towns. Contributions are based on each municipality’s weighted percentage of the MBTA service area’s total population and are automatically indexed to inflation each July. Weights are determined by definitions as set by the General Laws, which are loosely based on service levels, and these weights should be reexamined to ensure fairness. The City of Boston is responsible for just over half of the total fund; however, some cities without a rail line, such as Watertown, pay fees higher than those with subway service, such as Quincy. This formula should be amended to more directly account for population density, average weekday ridership, and the number of stations operating within each locality.

While municipalities benefit greatly from MBTA service, which helps facilitate growth and additional property tax revenue, Proposition 2 ½ caps municipal budgets, preventing cities and towns from contributing more funding to the MBTA without diminishing other services. Municipalities should be given the tools to raise local revenue (see items #1-5) in tandem with increased assessments.

The MBTA Advisory Board, which represents the 175 cities and towns receiving MBTA service, should also have its authority to approve the MBTA annual operating budget restored to ensure additional municipal oversight.