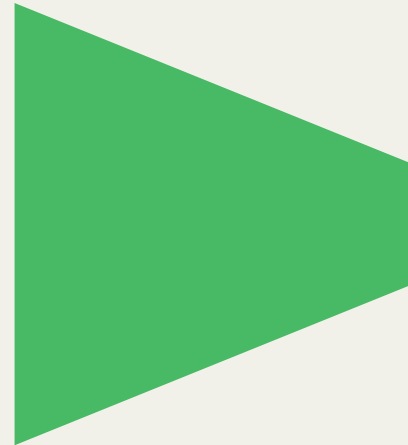
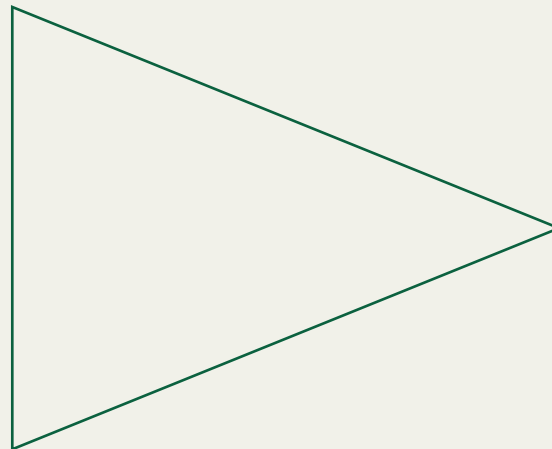
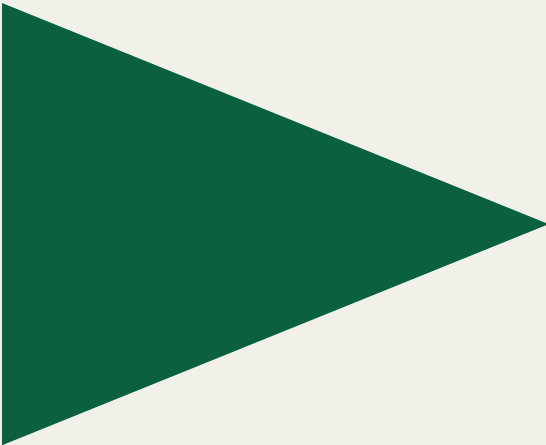


Inclusive Growth and Mobility
*Reduce vehicle miles traveled
and the need for single-occupant
vehicle travel through increased
development in transit-oriented
areas and walkable centers*



Recommendation: Reduce vehicle miles traveled and the need for single-occupant vehicle travel through increased development in transit-oriented areas and walkable centers

Strategy 1

Facilitate transit-oriented and other smart growth development through incentives and requirements.

All municipalities have a role to play in growing in an equitable and environmentally sustainable manner. Concentrating growth around transit stations, downtowns, high frequency bus corridors, and other smart growth areas is a critically important way to grow sustainably. Neighborhoods with housing, jobs, and shopping within walking distance to transit can reduce sprawling development and reliance on driving. These efforts should be coupled with state and local policies that prevent displacement and mitigate the rapid increase in housing costs that can come with transit-oriented development (TOD). Many communities have embraced smart growth development in context-sensitive ways. Much more can be done, however, when local, state, and regional actors take a proactive role in fostering this development.

- ▶ **Action 1.1: Strengthen existing state programs to increase smart growth development.** The Commonwealth already has programs in place to foster smart growth development, most significantly the Chapter 40R Smart Growth Overlay District program. Chapter 40R, codified in 2004, encourages communities to create dense residential or mixed-use smart growth zoning districts, including a modest percentage of affordable housing units, near transit stations, in areas of concentrated development such as existing city and town centers, and in other highly suitable locations. Over the life of the program, more than 50 districts have been created and approximately 3,800 residential units permitted/built.

The Commonwealth should build upon this success by improving the program to increase utilization of this program and the quality of development. This can be done through either modifications to the existing regulation, law, or, if necessary, through creation of an updated program to supersede the existing Chapter 40R program. Improvements to both the process and requirements of the program are needed to reduce the cost and bureaucracy involved in establishing these districts. First, Chapter 40R should clarify that its mission is not only to produce housing but also to

facilitate smart growth principles such as increasing walkability, reducing greenhouse gas emissions from transportation, and fostering a sense of place. Second, consideration should be given as to how to create true neighborhoods, since many existing districts are created for specific projects on single parcels. For example, creating a “40R lite” program could allow housing through a special permit, as opposed to only by-right. Providing this additional level of control could make communities more comfortable with creating larger districts, ultimately facilitating greater housing production. Under this program, it would be critical to establish clear criteria for the condition of a special permit, so that it is not purely discretionary. Payments to the municipality under this 40R lite program should only be for actual production of housing, rather than an incentive payment for adopting the zoning. Consideration should also be given to whether the affordability requirements should be different than those under the traditional 40R program.

Finally, increasing funding available to municipalities would further incentivize communities to adopt 40R. Increased funding should include payments associated with 40R itself, as well as for 40S, a companion program to account for increased costs associated with impacts on schools. The 40S program has been sparsely used and may require increased communication with communities, as the impact on school is an oft-cited reason for reluctance to allow additional housing.

Other state programs can also be strengthened by adding additional criteria to ensure state funding goes to sites most appropriate for smart growth development. For example, criteria for MassWorks funding decisions should focus on sites and projects that most strongly advance smart growth and equity goals. Further changes to 40R are recommended in **“Accelerate the production of diverse housing types throughout the region, particularly deed-restricted Affordable Housing, with a focus on transit-oriented, climate resilient and other smart growth locations.”**

- ▶ **Action 1.2: Incentivize higher density residential development through improvements in transit service.** The Massachusetts Bay Transportation Authority (MBTA) is continuously balancing the need to improve and expand service against the realities of allocating its limited resources. To incentivize smart growth development, transit service improvements should be dependent on embracing those strategies. With 141 commuter rail stations, 131 rapid transit stations, and numerous express bus service stops, the MBTA has considerable leverage to effect change. It has an opportunity to link its current Rail Vision initiative (which seeks to transform the commuter rail system over the long term to better support the region’s mobility and economic development), as well as its subway station areas and even some bus routes with smart growth development. This initiative would build upon the recently adopted Housing Choice policy, which requires MBTA communities to have at least one district that allows multifamily development by right. To be eligible for improvements, each community should have to allow for smart growth development in all transit-oriented and adjacent areas within a community. This requirement should allow for

mixed-use and multifamily development in context-sensitive ways, with a range of appropriate levels of density to distinguish dense, urban areas from suburban and rural areas (such as allowing multifamily and mixed-use development in urban areas and lower density townhomes and small starter homes elsewhere). Consideration should also be given to whether improvements, such as prioritization of station capital improvements, are tied to zoning versus actual built development.

- ▶ **Action 1.3: Empower an existing state or regional actor to participate directly in equitable, transit-oriented development by purchasing and disposing of land near transit to facilitate the production of affordable mixed-use and multifamily development.** The Commonwealth should empower an existing state or quasi-state agency to act as a land bank to actively seek out new opportunities to purchase land around transit stations and dispose of it to increase the supply of housing, especially affordable housing. This program’s explicit mission would be to facilitate housing production, rather than maximizing revenue. It would seek to purchase underutilized land through voluntary purchases at market rates. It would then solicit proposals to develop the land at subsidized prices to maximize development of affordable housing. While the percentage of affordable housing constructed would be based on market conditions, the Commonwealth should consider designating a minimum percentage of affordable housing that all sites developed through this program would be required. Once the appropriate entity to administer the program is determined, a sustainable funding source for land acquisition must be identified.

In addition to the above, as the MBTA continuously evaluates its needs and budget, it often seeks development of the land it owns around many of its transit stations. The MBTA should implement its previously adopted TOD policy, whereby it sells land to maximize revenue, but also to help achieve the region’s goals of increasing transit ridership, to increase the supply of deed-restricted affordable housing.¹

Best/emerging practice: Best/emerging practice: Metro Portland’s MPO (Metro) operates a program in which it buys sites around transit stations and then issues requests for proposals (RFPs) to developers to build highly affordable multifamily housing on those parcels. To accomplish this, the MPO swaps a portion of its federal transportation funds with Portland’s transit agency in order to have unrestricted funding for the purposes of land acquisition and development. Metro developed a series of investment criteria to assess which projects are best suited to advance the region’s TOD goals and meet regional needs. The program also invests in “urban living infrastructure” such as grocery stores and other amenities, and provides technical assistance to communities and developers.²

1 MBTA Transit-Oriented Development Policy and Guideline. July 2017. <https://www.mbtarealty.com/wp-content/uploads/pdf/MassDOT-and-MBTA-TOD-Policy-20170619.pdf>.

2 Metro. Transit-Oriented Development Program. <https://www.oregonmetro.gov/tools-partners/grants-and-resources/transit-oriented-development-program>.

Strategy 2

Ensure site design, land use program, and development characteristics prioritize walkability and affordability.

In addition to facilitating increased smart growth, development must occur in ways that best meet the needs of communities and the region. Too often, transit-oriented developments in our region are designed as “islands” cut off from the rest of the community, catering only to a wealthier demographic and resulting in banal development. The following policy actions can help ensure that developments prioritize multimodal travel, ensure that those most reliant on transit have access, and contribute to a neighborhood’s sense of place.

► **Action 2.1: The Commonwealth should support municipalities to update parking policies that both accurately reflect the demand for parking and encourage a reduction or elimination of parking in transit-rich areas.**

Although developers do significant research to identify appropriate parking for a new development’s location and occupants, local zoning often mandates more parking than is required. Excess parking has dire consequences because it increases housing costs, limits buildable and open space, and encourages car ownership, which can exacerbate congestion and increase greenhouse gas emissions. In areas that are accessible to frequent and reliable transit, excess parking means fewer people use the available transit, while congestion, pollution, and greenhouse gas emissions rise.

Although today’s transportation landscape offers more options than ever before, municipal parking regulations often go decades without being updated. Requirements are often uniform across an entire municipality and are rarely informed by changing market data. Almost none of these regulations account for the ways that parking needs may differ depending on development type, location, cost, or access to transit. Parking supply that is more in line with demand can lower development costs, enable more affordable housing, free up land for open space, and promote sustainable transportation.

MAPC’s research shows that parking is overbuilt throughout the region in both urban and suburban communities. Communities that adopt a more data-driven approach to decision-making are better able to respond to changing demographics, unique building characteristics, new transportation technologies, and evolving commuting practices.

The Commonwealth should further incentivize local parking reforms by creating mechanisms that allow municipalities to become eligible for certain grant funding opportunities if they make appropriate policy changes. These might include reducing or eliminating parking requirements entirely, especially in transit-rich locations, or requiring parking to be unbundled from housing costs. Municipalities that enable more opportunities for shared parking in their zoning bylaws and ordinances should also receive funding priority. This not only includes allowing residents to park in municipal off-street lots overnight, but also allowing other property owners to make their parking spaces available for rent

by residents. The state’s Housing Choice program already does this by recognizing municipalities that have reduced their parking requirements in the last five years, with no more than one parking space per unit required at multifamily sites. Similar state-level incentives for other grant programs could spur additional zoning changes to better regulate parking.

- ▶ **Action 2.2: Codify site design principles into regulations to prioritize walkability and connectivity to the surrounding neighborhood.** High quality urban design and public realm characteristics enhance an area’s walkability and sense of place and can positively impact economic development. While there is no one-size-fits-all design, municipalities can apply several principles and characteristics that do the job. These include orienting buildings to public ways, allowing a mix of uses, locating parking to the rear and sides of buildings, ensuring driveways and new roadways do not encourage high-speed vehicular travel, safe pedestrian crossings, sidewalks throughout the site, bicycle facilities, a high percentage of windows for ground-floor commercial uses, and high quality open spaces accessible to the public.

Cities and towns play a big role to ensure these high-quality development and site characteristics occur in smart growth locations. At a minimum, local zoning should be updated to allow and encourage mixed use development, including “vertical mixed-use development” (a mix of uses in the same building) and “horizontal mixed-use development” (a mix of uses across multiple buildings in a parcel). In addition to allowing for a mix of uses, zoning should include the various elements listed above as part of the requirements for site plan approval. Incorporating aspects of form-based code can clearly communicate a municipality’s expectations in a straightforward and non-subjective manner. Alternatively, advisory design guidelines can supplement zoning bylaws/ordinances and be utilized in ways that strongly encourage their incorporation for site plan approval.

On the state level, Chapter 40R currently allows for the option to include design standards. The program should be strengthened by including several high-level requirements that must be applied to all developments within a 40R district unless an applicant can show that an alternative design would better improve walkability, the public realm, or further other smart growth measures. In addition, because mixed-use zoning and design guidelines require a high level of technical expertise and expense, the state should ensure funding for technical assistance grant programs continues.

- ▶ **Action 2.3: Ensure affordability and optimize land use around transit and smart growth locations.** A significant portion of our region’s population relies on public transportation to get around. Therefore, it is critical that transit-oriented development provides housing opportunities across the income spectrum. Without policy interventions, housing around transit tends to be high cost due to its desirability and only accessible to a more affluent demographic. Municipalities, therefore, should ensure all smart growth locations within their communities apply a suite of tools to manage neighborhood change, such as requirements for inclusion of deed-restricted

affordable housing through linkage or inclusionary zoning, as well as other measures. Depending on market conditions, areas around transit should often have a higher affordability requirement than other parts of the community. See “**Ensure adequate protections against displacement for communities and residents of color, low-income communities, and renters**” for a detailed discussion of these issues and policies.

State actors also have a role by including affordability as part of the criteria for evaluating various grant funding. For example, MassWorks contains several elements for scoring applications; inclusion of affordable housing and displacement protections should be an explicit part of the scoring criteria.

Strategy 3

Require new developments to focus their transportation mitigation on producing fewer single-occupant vehicle (SOV) trips.

Development projects, especially larger ones, often require the developer to mitigate the negative impacts, with these efforts are often focused on alleviating the development’s impacts related to increased transportation demand. Traditionally, transportation mitigation focused on impacts associated with increased vehicular traffic and attempts to accommodate these increases, often through roadway widening efforts. In addition, traffic modeling and projections often overstate vehicular impacts on surrounding communities. A better approach to reducing congestion spurred by new development is to focus on reducing SOV trips through the utilization of improved data, combined with stronger transportation demand management techniques and the implementation of Complete Streets strategies.

► **Action 3.1: MassDOT and the Department of Environmental Protection should require developers to use local data to accurately estimate vehicle trip generation to avoid overestimating impacts.** To forecast trip generation as part of local and state permitting, developers most frequently cite models established through the Institute of Transportation Engineers (ITE), which provide vehicular trip estimations based on a development’s size and land use. From a regulatory perspective, ITE is nearly irrefutable because it is peer tested and reviewed. In the words of transportation consultants, “ITE is the gold standard.”³ However, the bulk of ITE’s data is from suburban, automobile-oriented locations across the country with relatively unconstrained parking availability and mostly single land uses (i.e., land zoned for only one type of use).⁴ The models reflect these contexts and are, therefore, ill-suited to urban areas well served by transit and active transportation infrastructure.

As a result, ITE routinely overestimates trips generated by new development in Greater Boston communities by 25-35 percent or more.⁵ This overestimation often results in mitigation focused on wider intersections and other roadway changes that come at the expense of pedestrians and cyclists. Additionally, this overestimation of auto trips exacerbates local

3 MAPC (2019). Roundtable with Transportation Consultants.

4 ITE (2018). Trip Generation Manual: 10th Edition.

5 MAPC (2019). Analysis of Massachusetts Trip Generation Estimates and Observed Counts.

opposition to new development, which can lead to smaller development sites with fewer housing units and less density in areas that are well suited for smart growth.

Therefore, MassDOT should develop a database derived from the actual post-development trip counts based on similar projects in similar areas to better forecast future trip generation rates, and more accurately account for walking, biking, and public transit trips. This data would more accurately capture actual travel habits within urbanized parts of Massachusetts than do national models. Similar undertakings have occurred in San Francisco, California,⁶ Washington, DC,⁷ and Houston, Texas.⁸ It is feasible to amass information on land use, project size, and trip generation projections and actual counts at the local level because the data already exists; all Massachusetts Environmental Policy Act (MEPA)-reviewed projects must include traffic monitoring commitments. MassDOT is the most appropriate state agency to monitor and maintain the proposed database. In addition, partnering with ITE to build, maintain, and analyze this database would lend projects additional credibility. In the meantime, with support from MAPC and the Central Transportation Planning Staff (CTPS), MassDOT should submit post-development trip count information to ITE for projects as they come online, as this will help to strengthen national estimates.

- ▶ **Action 3.2: The Executive Office of Energy and Environmental Affairs should require new development sites that trigger MEPA to measure their transportation impacts based on vehicle miles traveled (VMT).** Current development review practices characterize transportation impacts using inherently auto-centric level of service (LOS) metrics, which describe vehicular flow and driver delay. Incorporating a more holistic metric that measures the impact of driving will better align transportation impact analysis and mitigation outcomes with the Commonwealth's goals to reduce greenhouse gas emissions, encourage infill development, and improve public health through more active modes of transportation. Measuring transportation impacts using VMT would require communities to consider how to shift transportation from dependence on single-occupancy vehicles to other modes of transportation to reduce VMT.

In Massachusetts, placing less emphasis on LOS would require a shared understanding that reducing VMT is necessary to attain the Commonwealth's Global Warming Solutions Act and Next Generation Roadmap Act goals. The Executive Office of Energy and Environmental Affairs could use its regulatory authority under the Global Warming Solutions Act, or the Legislature could follow California's example by explicitly tying transportation-related greenhouse gas emission goals to new development under MEPA regulations (see below). To supplement this effort, as part of the local permitting process, municipalities should pass ordinances requiring all future developers to characterize and mitigate transportation impacts focused on reducing VMT.

6 https://default.sfplanning.org/publications_reports/TIA_Guidelines_Travel_Demand_Memo.pdf.

7 <https://nelsonnygaard.com/wp-content/uploads/2014/04/2014-01-Urban-Trip-Generation-Final-Report.pdf>

8 https://bigreddog.com/wp-content/uploads/2019/01/BRD_Small-Data-Local-Trip-Generation_Dan-Hennessey.pdf

Best/emerging practice: Prompted by legislation passed in 2013, California adopted final rules in 2019 replacing LOS with VMT to measure impacts during Transportation Impact Analyses under the California Environmental Quality Act (CEQA).⁹ CEQA requires that municipalities establish a threshold at which additional VMT from a project requires environmental mitigation. California defines the threshold using a statewide emissions target. The California Office of Planning and Research has released materials that provide guidance on establishing reasonable thresholds and prescribing mitigation in line with the state’s climate, public health, and transportation goals.¹⁰ California anticipates that replacing LOS with VMT will help advance development that is more transit-oriented, walkable and bikeable, sustainable, and healthier.

► **Action 3.3: The Legislature should allow municipalities to require employers to reduce the VMT by their employees.** Mitigating the transportation impact of growth occurs when new development sites go through local or state permitting processes. Requiring employers and large property owners to fund incentives to reduce auto travel to and from these sites is challenging. Therefore, the Legislature should allow municipalities to require new VMT reduction strategies for existing employers through local ordinance.

The Department of Environmental Protection’s Rideshare Program requires that businesses with 1,000-plus commuters and/or businesses with 250-plus commuters that are subject to the Massachusetts Air Operating Permit Program must provide the following trip reduction incentives: ride matching (carpool and vanpool), preferential carpool and vanpool parking, bicycle incentives, on-site transit pass sales (only employers within one mile of transit), on-site route and schedule information (only employers within one mile of transit) and negotiation with transit providers for additional bus and/or transit services (only employers within one mile of transit).¹¹

A shortcoming of both these requirements is that regulations pertain only to large-scale developments or employers. Therefore, municipalities should be allowed to enact local ordinances to decrease VMT from other local employers. For example, this could include regulations that require businesses with 20 or more employees to offer (1) a pre-tax benefit - a monthly pre-tax deduction, up to \$260/month, to pay for transit or vanpool expenses or parking cash out, (2) an employer-funded monthly subsidy for transit or vanpool expenses equivalent to the price of the MBTA’s monthly Link Pass, or (3) employer-provided transportation – a company-funded bus or van service to and from the workplace. To offset the disproportionate impact on small businesses, the state could offer financial support to promote compliance.

Washington, DC,¹² Seattle, WA,¹³ San Francisco, CA,¹⁴ New York City, NY,¹⁵ and the state of New Jersey¹⁶ have commute trip reduction laws directly tied to statewide air quality management regulations and require businesses with 20 or more employees to comply with more stringent TDM requirements.

9 Vehicle Miles Traveled (VMT) is the amount of automobile travel in a given area over a period of time. VMT is calculated by multiplying the number of vehicle trips that a proposed development will generate by the estimated number of miles driven per trip. In the context of SB 743, VMT is the amount of automobile travel attributable to a project or plan.

10 <http://opr.ca.gov/ceqa/updates/sb-743/>

11 <https://www.abettercity.org/docs/Effective%20TRO%20Final.pdf>

12 Sustainable DC Omnibus Amendment Act of 2014.

13 Seattle Community Benefits Ordinance; Commute Trip Reduction Law (1991).

14 San Francisco Commuter Benefits Ordinance (2008).

15 NYC’s Commuter Benefits Law (2014).

16 S1567: Statewide Commuter Benefits Law.

The City of Santa Monica,¹⁷ Berkeley, and Richmond¹⁸ require compliance from businesses with ten employees or more. Locally, the City of Cambridge's Parking and Transportation Demand Management Ordinance is a strong example because it includes robust staff oversight and enforcement.

- ▶ **Action 3.4: The Legislature should allow a municipality or groups of municipalities, to pool mitigation funding for multiple development sites and across municipal boundaries to support public transit infrastructure and cycling/walking trails.** A regional mitigation fund (RMF) is a mechanism used to levy and pool mitigation payments from multiple developments over time and sometimes 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 vehicular, foot, and bike traffic associated with redevelopment. RMFs pool payments over time and across developments to enable larger-scale improvements 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.¹⁹ In Massachusetts, RMFs could serve as a mitigation requirement triggered by MEPA review or through local permitting processes. Funds should be prioritized for projects that will expand walking, biking, and public transit infrastructure in the Commonwealth. Mitigation payments from new development could then be used in high priority development areas to ensure expanded bus service and other transit modernization without placing the financial burden of providing increased transit service on the MBTA or RTAs. Similarly, RMFs could be used to improve pedestrian and cyclist mobility by expanding trail networks. MAPC can assist in this effort by connecting with municipalities to gauge interest in pursuing this funding mechanism and learning more from states and cities that have successfully harnessed RMFs to recognize the link between private development and transportation accessibility. The Kendall Square Transit Enhancement Program, a partnership between the City of Cambridge, MBTA, MassDOT, and Boston Properties (the developer) to facilitate the approval for one million square feet of development in Kendall Square,²⁰ may serve as a model for this type of approach.

17 Santa Monica Municipal Code, Article 9, Division 6, Chapter 9.53

18 City of Berkeley Commuter Benefit Program Ordinance MC 9.88 (TRACCC); as nestled in California Health and Safety Code Section 40717.

19 https://leginfo.ca.gov/faces/codes_displayText.xhtml?lawCode=GOV&division=1.&title=7.&part=&chapter=5.&article=

20 <https://www.cambridgeredevelopment.org/kendall-transportation>.