

Transportation Demand Management Point System Fact Sheets

SEPTEMBER 2021



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ABBREVIATIONS

AMI Annual Median Income

CAPCOA California Air Pollution Control Officers Association

BTD Boston Transportation Department

EV Electric Vehicle

FTE Full-Time Employee

GHG Greenhouse Gas

LMA Longwood Medical Area

PNF Project Notification Form

SOV Single Occupancy Vehicle

TAPA Transportation Access Plan Agreement

TCRP Transit Cooperative Research Program

TDM Transportation Demand Management

TMA Transportation Management Association

VMT Vehicle Miles Travelled

VTPI Victoria Transport Policy Institute

INTRODUCTION

The transportation demand management (TDM) point system applies to all new developments over 50,000 square feet and subject to the large development review process, also known as the Article 80 process.

The TDM point system will allow developers to choose strategies that have been proven to have an impact on reducing drive alone rates. The tool will help new developments minimize the amount of parking they build. In turn, this will help reduce the amount of traffic and congestion generated by new developments.

TARGET TDM POINTS

Target points are based on BTD’s mobility scores, a system that scores parcels on their proximity to multimodal options and walkability. High scores indicate that parcels are in transit rich, walkable areas. Low scores indicate that parcels are located in areas with limited sustainable transportation options, have less access to grocery stores, and are not walkable.

Due to their proximity to a variety of sustainable transportation options, developments in high scoring parcels are allowed lower maximum parking ratios than developments in low scoring areas. It also means developments in high scoring areas have more opportunities to leverage TDM in order to support lower parking ratios. Therefore, parcels with higher mobility scores will have higher TDM target points and vice versa.

MOBILITY SCORE	TARGET POINTS
0-25	70
26-50	70
51-70	80
71-90	90
90-100	100

The table above shows mobility scores and their corresponding target points.

For more information on mobility scores, please visit boston.gov/max-parking-ratios.

SELECTING STRATEGIES

The strategies selected for this point system can be divided into three categories:

- Baseline
- Impact
- Elective

BASELINE STRATEGIES

Baseline strategies are required for all Article 80 development projects subject to a TAPA, unless achievement of a particular measure is not possible. Points assigned to baseline measures can be applied to the overall point target for a project.

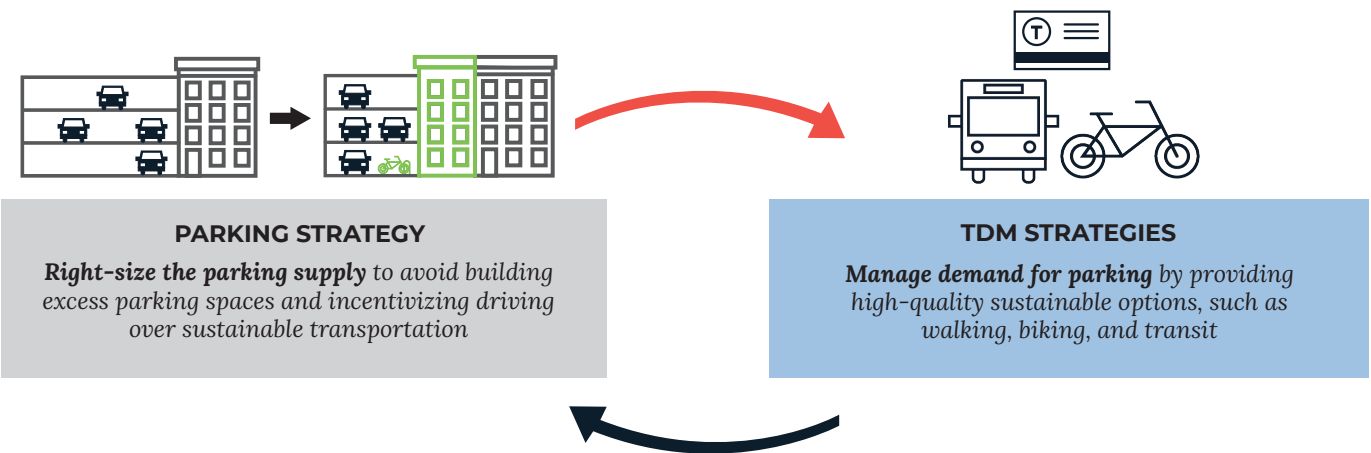


Figure 1: TDM plans and right-sizing parking supply feed into each other.

IMPACT

Developers must select at least one of three impact strategies. Impact strategies have the highest impact on achieving mode shift and reducing drive alone behavior. The three impact strategies are:

- Transit (MBTA) subsidies
- Parking reduction
- Parking pricing

ELECTIVE

After selecting baseline strategies and at least one impact strategy, developers may select as many strategies as needed to achieve the total target TDM points.

At least one elective strategy each must be bicycle-related and single occupancy vehicle reduction-related, unless the selected impact strategy satisfies this requirement.

The research behind the strategies and corresponding points is detailed in a companion document called *Transportation Demand Management Point System Technical Justification*.

TAPA PROCESS

Large developments over 50,000 square feet that are subject to the Article 80 and TAPA processes must complete the TDM point system tool. Once strategies are selected, they should be attached to the Project Notification Form (PNF). All selected strategies are subject to BTDA approval.

Once strategies are approved, they can be attached to the final TAPA form. Figure 2 illustrates the process for incorporating TDM into the development review process.

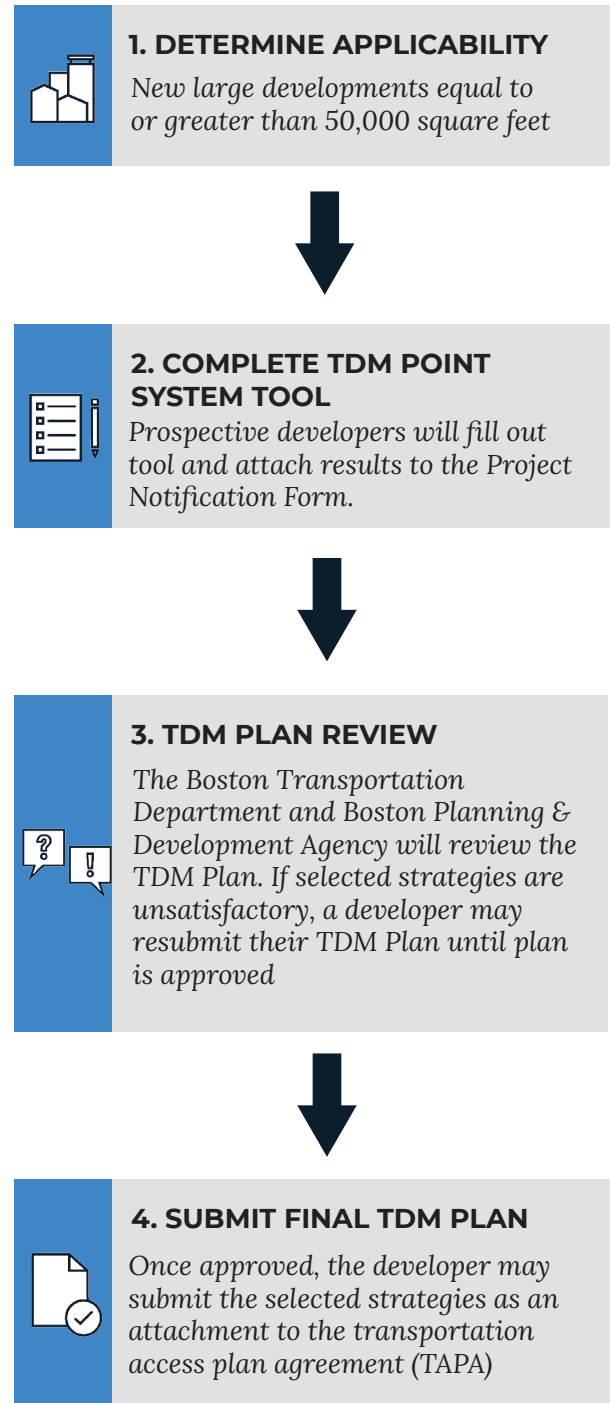


Figure 2: Process for completing and submitting a TDM plan as part of the large project development review.

DEFINITIONS AND KEY

FOR FACT SHEETS

DEFINITION

Strategy definition

POINTS TOWARD TARGET

Point total or point total range and options

LAND USE APPLICABILITY

Land uses for which strategy applies.

UPFRONT COSTS

Cost to enact the strategy during the construction phase typically for equipment and installation.



None



Little (<\$1,000)



Moderate (<10,000)



Significant (<\$100,000)



Major (>\$100,000)

ONGOING COSTS

Annual cost to maintain the strategy such as labor costs and upkeep.



None



Little (<\$1,000)



Moderate (<10,000)



Significant (<\$100,000)



Major (>\$100,000)

DIFFICULTY

Difficulty in implementation based on labor, time, and costs involved. Easy, intermediate, or hard



Easy



Intermediate



Hard

SUBMISSION REQUIREMENTS

Requirements which the project must demonstrate to be issued a TAPA

MONITORING

Ongoing monitoring requirements to be shared with BTd

REDUCTION IMPACT

Vehicle miles travelled (VMT) reduction impacts cited by research, presented as a general range of values



BASELINE STRATEGY



IMPACT STRATEGY



ELECTIVE STRATEGY

TRANSPORTATION DEMAND MANAGEMENT STRATEGIES

MENU OF OPTIONS

A list of all available strategies within the TDM point system are listed. Many of these strategies contain multiple options which are detailed in the fact sheets on the following pages.

	Strategy Type	Strategy	Points towards TDM Target
BASELINE	Programming	TMA Membership*	5
	Programming	On-Site TDM Coordinator*	
	Programming	Marketing*	
	Programming	Annual Events*	
	Programming	Real-Time Transit Information*	
	Programming	Emergency Ride Home* [†]	
	Transit	Participation in MBTA Perq Program*	15
	Vehicle	Unbundled, Market-Rate Parking*	15
	Bicycle	Bicycle Parking/Bike Share Provision*	5
IMPACT	Transit	Transit Subsidy	15 - 35
	Vehicle	Parking Reduction	15 - 30
	Vehicle	Parking Pricing	5 - 30
ELECTIVE	Bicycle	Bike Share Membership Subsidy	5-8
	Bicycle	E-Bike/E-Cargo Bike Program	5
	Bicycle	Additional Bike Parking Spaces	2-5
	Bicycle	Multimodal Transportation Subsidy	10
	Vehicle	Parking Cashout [†]	10
	Vehicle	Carpool Program w/ Preferential Spaces	5-10
	Vehicle	Car Share Membership/Subsidy	2-4
	Vehicle	Car Share Parking	3-6
	Transit	Shuttle Service	5-10
	Transit	Bus Stop Improvements	2-4
	Development	Mixed-Use Development	5-20
	Development	Bundled Transportation Options (GoHubs!)	4

*Required for all developments unless strategy is not applicable.

[†]Applicable only to non-residential uses.



TMA MEMBERSHIP

BASELINE STRATEGY

5* Points

DEFINITION

Property owner joins and participates in the local Transportation Management Association (TMA), if available, or if one is formed during the life of the access plan agreement

POINTS TOWARDS TARGET

5

*In combination with other programming baseline strategies unless TMA does not exist in neighborhood

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$\$

ONGOING COST

\$\$\$\$

DIFFICULTY LEVEL

★ ★ ★

SUBMISSION REQUIREMENTS

Demonstrate proof of membership in the local TMA

MONITORING

Every Year - Confirm membership status

REDUCTION IMPACT

Anticipated VMT reduction of approximately 5 percent. Research shows 4-5 percent trip reduction impact difference between programs with little support and those with coordination services.



ON-SITE TDM COORDINATOR

BASELINE STRATEGY

5* Points

DEFINITION

Property owner provides part- or full-time dedicated staff to coordinate TDM services

POINTS TOWARDS TARGET

5

*In combination with other programming baseline strategies

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$\$

ONGOING COST

\$\$\$\$

DIFFICULTY LEVEL



SUBMISSION REQUIREMENTS

Demonstrate at least 0.25 full-time employee (FTE) staff commitment to coordinate TDM services. Developments larger than 200,000 square feet must demonstrate at least 1 FTE staff commitment

MONITORING

Every Year - Identify staff member, contact information and number of hours spent on TDM coordination weekly

REDUCTION IMPACT

Anticipated VMT reduction of approximately 5 percent. Research shows 4-5 percent trip reduction impact difference between programs with little support and those with coordination services.



MARKETING, EVENTS, & REAL-TIME TRANSIT INFORMATION

BASELINE STRATEGY

5* Points

DEFINITION

Property owner distributes annual marketing materials promoting multimodal travel options and benefits, conducts at least two annual events promoting multimodal travel, and provides real-time transit information in building lobbies per BTD review.

POINTS TOWARDS TARGET

5

*In combination with other programming baseline strategies

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$\$

ONGOING COST

\$\$\$\$

DIFFICULTY LEVEL



SUBMISSION REQUIREMENTS

Distribute marketing materials detailing transportation-related benefits, promotions, and local transportation options, including MBTA stops, bike share locations, car share locations, and TDM options available to tenants or employees at beginning of tenant agreement and on an annual basis.

Conduct at least two events annually promoting multimodal travel, such as a Bike to Work Day or step count competition.

Display real-time transit information in building lobbies, per BTD review.

MONITORING

Every Year - Share marketing materials and confirmation of events and presence of real-time information source

REDUCTION IMPACT

Anticipated VMT reduction of approximately 5 percent. More effective when grouped with other programming strategies.



EMERGENCY RIDE HOME

BASELINE STRATEGY

5* Points

DEFINITION

Property owner or employer provides ride services, such as reimbursement of taxi or rideshare trips, outside of peak travel periods, for tenants/employees who use sustainable transportation options

POINTS TOWARDS TARGET

5

**In combination with other programming baseline strategies*

LAND USE APPLICABILITY

Non-residential

UPFRONT COST

\$\$\$\$

ONGOING COST

\$\$\$\$

DIFFICULTY LEVEL



MONITORING

Every Year - Report Usage

REDUCTION IMPACT

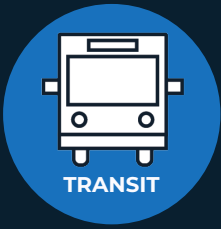
Inconclusive. Programs can see low utilization but be considered successful given peace of mind provided for multimodal users.

SUBMISSION REQUIREMENTS

Provide a minimum of three emergency ride home trips or reimbursement of taxi or rideshare costs for employees/tenants who have commuted to work by bus, train, carpool, vanpool, bike, or on foot.

Services must be provided outside of peak travel periods for transit, enabling use for unexpected emergencies or unscheduled overtime.

Reimbursement must be made no more than one month following submission of receipt.



PARTICIPATION IN MBTA PERQ PROGRAM

BASELINE STRATEGY

15 Points

DEFINITION

Property owner or employer facilitates transit pass purchases (with pre-tax benefits, if applicable) through participation in MBTA's Perq Program

POINTS TOWARDS TARGET

15

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$\$

ONGOING COST

\$\$\$\$

DIFFICULTY LEVEL



SUBMISSION REQUIREMENTS

Demonstrate Perq participation

MONITORING

Every Year - Confirm participation

REDUCTION IMPACT

Inconclusive research on VMT reduction impact of pre-tax transit benefits.

Employer-initiated programs are more likely to attract new transit riders than programs requiring more action of employees themselves.



UNBUNDLED, MARKET RATE PARKING

BASELINE STRATEGY

15 Points

DEFINITION

Property owner provides tenants the option to lease or purchase building space without inclusion of a market rate price for on-site parking. Parking may be leased or purchased by tenants separately at a market rate.

POINTS TOWARDS TARGET

15

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$\$

ONGOING COST

\$\$\$\$

DIFFICULTY LEVEL



SUBMISSION REQUIREMENTS

Document monthly market rate parking price which reflects the capital and maintenance cost of parking provision.

Demonstrate monthly market rate parking price is consistent with market rate parking prices found within one mile of the project site.

Demonstrate examples of lease agreements with and without bundling of market rate parking price.

MONITORING

Every Year - Report usage of bundled and unbundled options

Every 3 Years - Evaluate market rate charge

REDUCTION IMPACT

Anticipated VMT reduction of 10 to 15 percent.

Reduction in VMT estimated at 2.6 to 13 percent, based on available research, with up to a 36 percent reduction in VMT found in high-quality transit areas.



BICYCLE PARKING / BIKE SHARE PROVISION

BASELINE STRATEGY

5 Points

DEFINITION

Developer complies with [BTD Bike Parking Guidelines](#), including provision of short- and long-term parking spaces, showers and changing facilities, monetary contribution to Boston's bike share system (Bluebikes), space for a bike share station, and provision of an on-site repair station.

POINTS TOWARDS TARGET

5

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$\$

ONGOING COST

\$\$\$\$

DIFFICULTY LEVEL



SUBMISSION REQUIREMENTS

Demonstrate compliance with [BTD Bike Parking Guidelines](#) prior to building occupancy.

Developers have the option of providing an interior on-site repair station or hosting quarterly on-site bicycle repair clinics. At minimum the repair station must include:

- A bike repair stand;
- Two identical tire levers;
- Two screwdrivers: one flat head and one phillips;
- Double sided wrenches at the following sizes: 8, 9, 10, 11, 15, 32 mm;
- Allen wrenches with the following standard sizes: 2.5, 3, 5, 6, 8mm; and
- A pump that works with Schrader and Presta valves.

On-site bicycle repair clinics must be conducted by trained bicycle mechanics offering free tune-ups to building tenants.

SUBMISSION REQUIREMENTS

A state of good repair for both indoor and outdoor bike parking spaces, required every three years as part of ongoing project site monitoring, can be demonstrated by adhering BTD's Bike Parking Guidelines. A fully-stocked on-site repair station must also be demonstrated as part of monitoring if provided.

Developers and successors will be responsible for maintenance of outdoor bike corrals or bike parking spaces, including keeping them clear of trash, debris, and snow.

MONITORING

Every 3 Years - Demonstrate state of good repair

REDUCTION IMPACT

Anticipated VMT reduction of 0 to 5 percent. Success dependent on provision of additional bicycle-related strategies.



TRANSIT SUBSIDY

IMPACT STRATEGY

15–35 Points

DEFINITION

Property owner/manager or employer provides a subsidy for monthly MBTA transit passes

POINTS TOWARDS TARGET

Property owner may choose ONE of the following options, plus additional points:

OPTION 1

15 Subsidy of no less than 25% of transit pass cost

OPTION 2

20 Subsidy of no less than 50% of transit pass cost

OPTION 3

25 Subsidy of no less than 75% of transit pass cost

OPTION 4

30 Subsidy of no less than 100% of transit pass cost

ADDITIONAL POINTS

+5 When a subsidy of no less than 50% is coupled with a Platinum-level Bluebikes membership

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$

ONGOING COST

\$\$\$\$

DIFFICULTY LEVEL

★★★

SUBMISSION REQUIREMENTS

Provide subsidy for monthly MBTA transit passes at a 25, 50, 75, or 100 percent level.

Subsidies must be provided based on the home or work location of the user.

Subsidies can be enabled through participation in the MBTA Perq program by deducting less than the full cost of passes from employees' paychecks.

For non-residential users, subsidies must be provided for the life of the TAPA. For residential users, subsidies are reflected over the first year of resident tenancy, per unit.

MONITORING

Every Year - Report usage

Every 3 Years - Evaluate subsidy level

The MBTA may track participating developments and employers and may post participating companies on the MBTA website.

REDUCTION IMPACT

Anticipated VMT reduction of over 20 percent.

One research source estimated a reduction in commuter VMT of 0.3 to 20 percent, based on available research. However, a 9 to 64 percent trip reduction was found with transit subsidies, depending on the level of subsidy, in regional central business districts.

Controlling for other factors, vehicle trips can also be reduced by 7 percent in TDM programs featuring financial incentives for transit, with estimates of up to 30 percent in areas with good transit and restricted parking.



PARKING REDUCTION

IMPACT STRATEGY

15–30 Points

DEFINITION

Developer provides on-site parking at a rate below the maximum allowed by BTD's Maximum Parking Ratios Guidelines

POINTS TOWARDS TARGET

Property owner may choose ONE of the following options:

OPTION 1

15 Parking provision of at least 25% less parking than the maximum

OPTION 2

20 Parking provision of at least 50% less parking than the maximum

OPTION 3

25 Parking provision of at least 75% less parking than the maximum

OPTION 4

30 No net new parking

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$\$

ONGOING COST

\$\$\$\$

DIFFICULTY LEVEL



SUBMISSION REQUIREMENTS

Demonstrate compliance with Parking Ratios Guidelines prior to building occupancy. Applies to net new parking.

MONITORING

None

REDUCTION IMPACT

Anticipated VMT reduction of 10 to 15 percent, or more.

Reduction in commuter VMT estimated at 5 to 12.5 percent based on available research. Higher VMT reductions are more likely where alternative transportation options are available. Up to a 50 percent VMT reduction for residential land uses has also been cited.



PARKING PRICING

IMPACT STRATEGY

5-30 Points

DEFINITION

Property owner charges market-rate pricing for use of on-site parking at an hourly, daily, weekly, or monthly rate

POINTS TOWARDS TARGET

Property owner may choose ONE of the following options, plus additional points:

OPTION 1

5 Parking pricing with parking provision of no more than 25% of allotted parking maximum

OPTION 2

10 Parking pricing with parking provision of no more than 50% of allotted parking maximum

OPTION 3

15 Parking pricing with parking provision of no more than 75% of allotted parking maximum

OPTION 4

20 Parking pricing with parking provision of no more than 100% of allotted parking maximum

ADDITIONAL POINTS

+5 Weekly-only pricing

ADDITIONAL POINTS

+10 Hourly or daily-only pricing

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$\$

ONGOING COST

\$\$\$\$

DIFFICULTY LEVEL



SUBMISSION REQUIREMENTS

Document on-street and off-street parking facility rates within one mile of the project site, which may include municipal parking.

Define parking charge, which may not be lower than the lowest identified on- or off-street parking charge.

For commercial projects, [employees making less than 70% AMI](#) cannot be charged more than the identified market-rate. For residential projects, income-restricted tenants cannot be charged more than the identified market-rate.

SUBMISSION REQUIREMENTS

Define whether the charge will be collected on an hourly, daily, weekly, or monthly basis.

Charges must be applied at the individual level; employers cannot pay on behalf of employees.

MONITORING

Every Year - Report usage

Every 3 Years - Evaluate parking pricing

REDUCTION IMPACT

Anticipated VMT reduction of 15 to 20 percent.

Reduction in commuter VMT estimated at 0.1 to 19.7 percent based on available research, assuming price is at or above market rate.

Higher estimates are more likely for higher charges in urban locations. A 12 to 47 percent trip reduction was found with parking fees, depending on the level of charge, in regional central business districts.



BIKE SHARE MEMBERSHIP SUBSIDY

ELECTIVE STRATEGY

5-8 Points

DEFINITION

Property owner or employer provides discounted bike share memberships as part of the Bluebikes Corporate Program

POINTS TOWARDS TARGET

Property owner may choose ONE of the following options, plus additional points:

OPTION 1

5 Bronze-level bike share memberships

OPTION 2

6 Silver-level bike share memberships

OPTION 3

7 Gold-level bike share memberships

OPTION 4

8 Platinum-level bike share memberships

ADDITIONAL POINTS

+5 When platinum-level bike share memberships are combined with a subsidy of no less than 50% of transit pass costs

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$\$

ONGOING COST

\$\$\$\$

DIFFICULTY LEVEL

★ ★ ★

SUBMISSION REQUIREMENTS

Provide subsidy for bike share memberships as part of the [Bluebikes Corporate Program](#) at a bronze, silver, gold, or platinum level. For non-residential users, subsidy will be for life of the TAPA. For residential users, subsidy will be per unit for the first year of resident tenancy.

MONITORING

Every Year - Report usage
Every 3 Years - Evaluate subsidy level

BTD may collaborate with Bluebikes to monitor participation.

REDUCTION IMPACT

Anticipated VMT reduction of 0 to 2 percent. Available estimate of VMT reduction of 0.023 miles per day per member.



E-BIKE/E-CARGO BIKE PROGRAM

ELECTIVE STRATEGY

5 Points

DEFINITION

Property owner provides on-site e-bikes and/or e-cargo bikes for use by project tenants. This strategy is more appropriate for use at project sites with challenging topography.

POINTS TOWARDS TARGET

5

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$

ONGOING COST

\$\$\$

DIFFICULTY LEVEL

★ ★ ★

SUBMISSION REQUIREMENTS

E-bikes and/or e-cargo bikes must be made available to all building residents and tenants. Either type of bike may be provided; at least three e-bikes or at least one e-cargo bike can be provided to meet the submission requirement; specific e-bike and e-cargo bike purchases subject to review by BTB.

Bicycles must be in working order with pedal assist/electric assist; if broken, repair or replacement of the bicycle must take place within one month following the report of the issue.

Space for developer-provided e-bike/e-cargo bikes cannot count towards bike parking provision.

Charging mechanism must be in place.

Refer to [BTB's Bike Parking Guidelines](#) or the BTB website for more information on e-bikes and e-cargo bikes.

MONITORING

Every Year - Report usage

Every 3 Years - Demonstrate state of good repair

REDUCTION IMPACT

Anticipated VMT reduction of 0 to 5 percent. Research shows every 1 percent increase in e-bike mode share leads to a 0.66 percent decrease in VMT.



ADDITIONAL BIKE PARKING SPACES

ELECTIVE STRATEGY

2-5 Points

DEFINITION

Developer provides additional short- or long-term bike parking spaces above the minimum rates in BTD's Bike Parking Guidelines

POINTS TOWARDS TARGET

Property owner may choose ONE of the following options:

OPTION 1

2 Bike parking provision of no less than 125% of requirement

OPTION 2

3 Bike parking provision of no less than 150% of requirement

OPTION 3

4 Bike parking provision of no less than 175% of requirement

OPTION 4

5 Bike parking provision of no less than 200% of requirement

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$

ONGOING COST

\$\$\$

DIFFICULTY LEVEL

★ ★ ★

SUBMISSION REQUIREMENTS

Demonstrate compliance with [BTD Bike Parking Guidelines](#) prior to building occupancy.

A state of good repair for both indoor and outdoor bike parking spaces, required every three years as part of ongoing project site monitoring, can be demonstrated by adhering to BTD's Bike Parking Guidelines.

For indoor bike parking, all additional bike parking must be on the first floor.

Developers and successors will be responsible for maintenance of bike parking spaces, including keeping them clear of trash, debris, and snow.

SUBMISSION REQUIREMENTS

If a development is near or adjacent to an MBTA transit station or key bus stop, the project proponent may, with MBTA approval, install the additional bike parking spaces at MBTA property. The project proponent must receive MBTA approval of the installation before BTB will consider whether the installation qualifies for points.

MONITORING

Every 3 Years - Demonstrate state of good repair

REDUCTION IMPACT

Anticipated VMT reduction of 3 to 5 percent. Success depends on provision of additional bicycle-related strategies.



MULTIMODAL TRANSPORTATION SUBSIDY

ELECTIVE STRATEGY

10 Points

DEFINITION

Property owner or employer provides a monthly subsidy for multimodal travel expenses, such as bicycle maintenance

POINTS TOWARDS TARGET

10

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$

ONGOING COST

\$\$\$

DIFFICULTY LEVEL



SUBMISSION REQUIREMENTS

Provide subsidy for monthly multimodal travel expenses at a rate equivalent to 25 percent of a monthly [MBTA Link Pass](#) cost.

Eligible expenses include: purchase of a bicycle, e-bike, kick scooter, or kick e-scooter; bicycle maintenance; clothing and gear, including footwear; safety devices and equipment; mileage reimbursement for carpooling and vanpooling; reimbursement for travel on RTA and other non-MBTA transit services; and other expenses as raised by a user.

Subsidy should be provided as a pre-tax benefit.

MONITORING

Every year - Report usage

Every 3 years - Evaluate subsidy level

REDUCTION IMPACT

Anticipated VMT reduction of 10 to 15 percent. Mode-neutral subsidies show strong experience in VMT reduction, whereas bicycle-centric subsidies trend lower.



PARKING CASH OUT

ELECTIVE STRATEGY

10 Points

DEFINITION

Property owner or employer provides monthly payment for users to forgo on-site parking when parking is made available for free or at a subsidized rate. Payment is equivalent to the monthly market cost of the space.

POINTS TOWARDS TARGET

10

LAND USE APPLICABILITY

Non-residential

UPFRONT COST

\$\$\$

ONGOING COST

\$\$\$\$

DIFFICULTY LEVEL



SUBMISSION REQUIREMENTS

Document monthly market rate parking price which reflects the capital and maintenance cost of parking provision.

Demonstrate monthly market rate parking price is consistent with market rate parking prices found on site or within one mile of the project site.

MONITORING

Every year - Report usage

Every 3 years - Evaluate market rate charge

REDUCTION IMPACT

Anticipated VMT reduction of 5 to 10 percent reduction.

Reduction in commuter VMT estimated at 0.6 to 7.7 percent based on available research, with higher estimates in large metropolitan, high transit-use areas.

Other research sources have estimated a 12 percent potential reduction in VMT as well as a 26 percent reduction in parking demand in areas with good public transit



CARPOOL PROGRAM WITH PREFERENTIAL SPACES

ELECTIVE STRATEGY

5-10 Points

DEFINITION

Property owner or employer provides carpool matching services with preferential and (if parking pricing exists) discounted parking close to building entrances

POINTS TOWARDS TARGET

5

ADDITIONAL POINTS

+5

For an institution, medical campus, or other development of more than 200,000 square feet, or if carpool parking is priced at a discount of at least 50% of the normal rate

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$

ONGOING COST

\$\$\$

DIFFICULTY LEVEL



SUBMISSION REQUIREMENTS

Provide car matching as a service for tenants and employees, either through the on-site transportation coordinator or TMA.

Car matching services must allow users to identify and track availability of rides to/from home and work destinations, such as through a website or app.

Signage and pavement markings must designate the parking space(s), with vehicles identified by hangtags. Active enforcement must be practiced.

MONITORING

Every year - Report usage

REDUCTION IMPACT

Anticipated VMT reduction of 5 to 10 percent. Estimates are higher with support from TMAs and in urban areas



CAR SHARE MEMBERSHIP/ SUBSIDY

ELECTIVE STRATEGY

2-4 Points

DEFINITION

Property owner or employer provides carpool matching services with preferential and (if parking pricing exists) discounted parking close to building entrances

POINTS TOWARDS TARGET

Property owner may choose ONE of the following options:

OPTION 1

2

Subsidy of no less than 50% of car share membership cost

OPTION 2

4

Full subsidy of car share membership cost

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$

ONGOING COST

\$\$\$

DIFFICULTY LEVEL



SUBMISSION REQUIREMENTS

Provide a 50% or 100% annual subsidy for car share memberships through a service that has vehicle availability within one-half mile.

MONITORING

Every year - Report usage

Every 3 years - Evaluate subsidy level

REDUCTION IMPACT

Anticipated VMT reduction of 0 to 5 percent. The size and age of citywide car share reductions are linked with higher VMT reduction, suggesting higher estimates in Boston.



CAR SHARE PARKING

ELECTIVE STRATEGY

3-6 Points

DEFINITION

Developer provides a minimum of one car share vehicle(s) that is accessible 24 hours a day, seven days a week.

POINTS TOWARDS TARGET

Property owner may choose ONE of the following options:

OPTION 1

3 Car share parking

OPTION 2

4 EV car share parking

OPTION 3

5 Publicly-accessible car share parking

OPTION 4

6 Publicly-accessible EV car share parking

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$\$

ONGOING COST

\$\$\$\$

DIFFICULTY LEVEL



SUBMISSION REQUIREMENTS

Provide a minimum of one car-share vehicle accessible 24 hours a day, seven days a week. The car-share vehicle can be privately managed or be provided by a third-party car share operator.

If a third-party car share operator is chosen, the parking space and infrastructure necessary to operate the car share service must be provided.

The car-share vehicle(s) must have its own designated parking space identified through signage and pavement markings.

If an EV car share, EV charging infrastructure must be accessible on the property, and if not dedicated to the car share vehicle, a plan of how the car share vehicle will be able to access the EV charging infrastructure must be provided.

SUBMISSION REQUIREMENTS

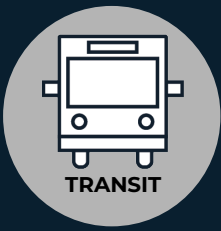
Developers must provide documentation that a car share company will be operating the space. Documentation may include a signed contract with a car share operator or, if privately managed, a sales invoice for car share vehicle and operating policies and procedures that indicate how users will have 24-hour access to the vehicles.

MONITORING

Every Year - Report usage

REDUCTION IMPACT

Anticipated VMT reduction of 0 to 5 percent. The size and age of citywide car share reductions are linked with higher VMT reduction, suggesting higher estimates in Boston.



SHUTTLE SERVICE

ELECTIVE STRATEGY

5-10 Points

DEFINITION

Property owner provides a shuttle service to connect project users with nearby transit stations or activity centers

POINTS TOWARDS TARGET

Property owner may choose ONE of the following options:

OPTION 1

5 Service operates during peak periods only

OPTION 2

10 Service operates both during and outside of peak periods

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$

ONGOING COST

\$\$\$\$

DIFFICULTY LEVEL

★★★

SUBMISSION REQUIREMENTS

Shuttle service schedule must, at a minimum, coincide with increased activity at the nearby transit station or activity center, such as the arrival or departure of a bus or train.

At least three morning and evening peak period (7-9A and 4-6P) services must be provided.

Shuttles cannot be redundant of existing MBTA services unless it enhances the service.

All services must be made available for public use. A small fee may be charged for public use of shuttles.

A schedule and routing for service will be required as part of the Article 80 review process. These must be made available on a project website for public consumption.

SUBMISSION REQUIREMENTS

If shuttle services are provided within one mile of the project site, the developer must contact the service provider to evaluate the feasibility of jointly operating service. This includes on-demand shuttle services.

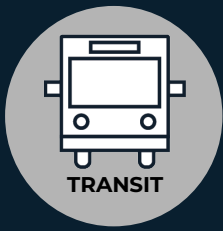
All new shuttle routes must be approved by BTDA and the MBTA. Requirements may be pared back if operated by a TMA.

MONITORING

Every year (and as requested) - Report usage, including ridership figures

REDUCTION IMPACT

Anticipated VMT reduction of 0 to 5 percent. Services operate best when connecting large sites without last-mile connections to transit services.



BUS STOP IMPROVEMENTS

ELECTIVE STRATEGY

2-4 Points

DEFINITION

Developer provides improvements, including accessibility upgrades and installation or upgrade of shelters, for bus stops which serve the project

POINTS TOWARDS TARGET

Property owner may choose ONE of the following options:

OPTION 1

2

Provision of a bench

OPTION 2

4

Provision of a shelter

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$

ONGOING COST

\$\$\$

DIFFICULTY LEVEL



SUBMISSION REQUIREMENTS

Identify all bus stops anticipated to provide access to the project site.

Follow guidelines of the MBTA Bus Stop Planning & Design Guide for all identified stops.

If sidewalk space is available for a bus shelter, this must be provided. An option to provide a bench if sidewalk space is limited is also available.

A state of good repair (including maintenance), required every three years as part of ongoing project site monitoring, can be demonstrated by adhering the MBTA Bus Stop Planning & Design Guide.

MONITORING

Every 3 Years - Demonstrate state of good repair

REDUCTION IMPACT

Inconclusive. Little research is available linking bus stop improvements and VMT reductions.



MIXED-USE DEVELOPMENT

ELECTIVE STRATEGY

5-20 Points

DEFINITION

Developer constructs secondary land uses which can offset trips elsewhere or incorporates a centralized parcel drop-off/receiving stations into any residential component of the project.

POINTS TOWARDS TARGET

Property owner may choose ONE of the following options, plus additional points:

OPTION 1

5 Fitness center component

OPTION 3

15 Child care component

OPTION 2

10 Convenience store or grocery store component

ADDITIONAL POINTS

+5 Centralized parcel drop-off/receiving station

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$\$

ONGOING COST

\$\$\$\$

DIFFICULTY LEVEL



SUBMISSION REQUIREMENTS

With the exception of centralized parcel drop-off/receiving stations, points are not additive. Presence of more than one component will result in provision of highest-scoring component.

Mixed-use components subject to interpretation by BTM during the development review process; additional points may be considered in conversation with BTM.

MONITORING

Every Year - Confirm mixed-use status

REDUCTION IMPACT

Anticipated VMT reduction of 0 to 10 percent. Research is focused on diversity of land uses nearby project sites, suggesting impact of any one project may be limited in a setting such as Boston's.



BUNDLING TRANSPORTATION OPTIONS (GOHUB!)

ELECTIVE STRATEGY

4 Points

DEFINITION

Developer identifies publicly-accessible space around the development to collocate transportation options such as car share, bike share, bike parking, electric vehicle charging, passenger pick-up/drop, bike parking, and e-bike/e-scooter charging stations. This space may be adjacent to a public street that allows for transportation options to be located curbside.

POINTS TOWARDS TARGET

4

LAND USE APPLICABILITY

All

UPFRONT COST

\$\$\$

ONGOING COST

\$\$\$

DIFFICULTY LEVEL

★★★

SUBMISSION REQUIREMENTS

The developer must design and install at the space elements of greening, placemaking, and seating, which could include WiFi, device charging, real time arrival information, community information, and other elements that support the intent of the [GoHubs! Program](#). The developer may locate other TDM strategies they are implementing, such as bike share, bike parking, and others at this location.

Collocated transportation options should be coordinated with BTM during the development review process. If a development is near or adjacent to an MBTA transit station or key bus stop, the project proponent may, with MBTA approval, collocate transportation options on MBTA property.

MONITORING

Every Year - Confirm program status

Every 3 Years - Demonstrate state of good repair

REDUCTION IMPACT

Anticipated VMT reduction of approximately 5 percent. Research shows 4-5 percent trip reduction impact difference due to programmatic support of TDM strategies, of which transportation hubs mimic. The program is currently being piloted by the City and monitored.

ACKNOWLEDGEMENTS

These TDM point system guidelines were developed as part of a larger effort to rethink the Boston Transportation Department's development review guidelines to meet the goals and policy priorities of Go Boston 2030.

To view this report online, go to boston.gov/tdm-point-system.

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