

## 12 PARKING & MOBILITY

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**DISCUSSION DRAFT**

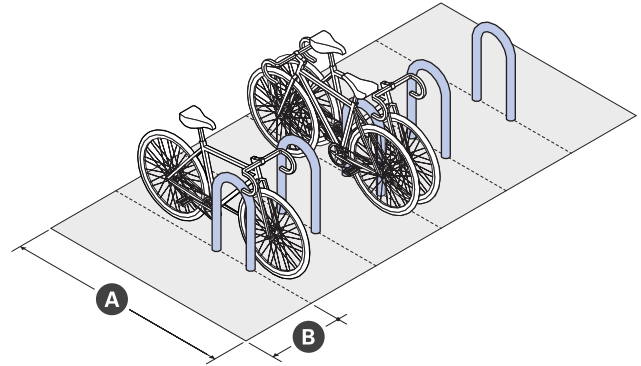


## 12.1 PARKING DESIGN

### 1. Standards for all Bicycle Parking

- a. General
  - i. All bicycle parking must be designed and constructed in accordance the provisions of this section and with the City of Somerville's Bicycle Parking Guide. Additionally, the latest version of the Association of Pedestrian and Bicycle Professionals Bicycle Parking Guidelines may be referenced for guidance.
  - ii. Bicycle parking must be provided at no cost or fee to customers, visitors, employees, tenants, and residents.
- b. Size & Layout
  - i. Each bicycle parking space must be two (2) feet by six (6) feet in size or the minimum required by the manufacturer of a bicycle rack or locker, whichever is more.
- c. Access
  - i. Areas designed for bicycle parking spaces must have a hard, stabilized surface.
  - ii. Bicycle parking spaces must have at least one (1) access aisle at least five (5) feet wide to allow room for maneuvering. This access aisle must be kept free from obstructions.
  - iii. Bicycle parking spaces must be accessible without moving another bicycle or lifting or carrying a bicycle over any steps or stairs.
  - iv. Outdoor access routes must be appropriately lighted to allow for safe nighttime use.
- d. Weather Protection
  - i. When provided, weather protection must be permanent, designed to protect bicycles from rainfall, and provide no less than seven (7) feet of clearance above ground level.
- e. Bicycle Racks
  - i. All bike racks must:
    - a). Be a fixed-in-place stand that is securely anchored to the ground;
    - b). Provide support to the bicycle frame, allowing it to stand upright without the use of a kick-stand, and prevent the bicycle from falling over;
    - c). Be configured to provide two points of contact to allow locking of the frame and at least one wheel with a user-provided locking device;
    - d). Be constructed of materials that resist cutting, rusting, bending, or deformation; and
    - e). Be arranged in rows (with bicycles parked side-by-side) or in alignment (with bicycles parked end-to-end).
- f. Bicycle Lockers
  - i. All bicycle lockers must:
    - a). Be securely anchored to the ground;

FIGURE 10.7.1 Bicycle Parking Spaces



- b). Be configured to provide support to the bicycle, allowing it to stand upright without the use of a kick-stand, and
    - c). Be secured by means of a lockable door or, alternatively, configured internally to allow locking of the frame and at least one wheel with a user-provided locking device.
  - g. Signage
    - i. If required bicycle parking is not visible from the street or principal entrance(s), a sign must be posted at the principal entrance(s) indicating the location of the parking. The D4-3 sign from the Manual on Uniform Traffic Control Devices (MUTCD) is recommended (see Figure 7.1).
2. Short-Term Bicycle Parking
  - a. Short-term bicycle parking may be provided in any combination of bicycle racks and/or bicycle lockers. Racks that are double height or require hanging of a bicycle are prohibited for short-term bicycle parking.
  - b. Short-term bicycle parking must be provided outside of a principal building and within fifty (50) feet of the principal entrance of the use served by the parking.
  - c. Short-term bicycle parking must be at the same grade as the abutting sidewalk or at a location that can be reached by an accessible route from the sidewalk that is a minimum of five (5) feet wide, with no steps and a six percent (6%) slope or less.
  - d. Bike racks may be installed within the furnishing zone of a sidewalk of an abutting public thoroughfare provided that an encroachment permit is granted by the Board of Aldermen. A rack may also consist of a hoop affixed to a parking meter, with approval from the Director of Traffic and Parking.

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### Parking Design

- i. Any required short-term bicycle parking provided in a structure or under cover must be:
  - a). Provided at ground level;
  - b). Provided free of charge;
  - c). Clearly marked as bicycle parking;
  - d). Separated from vehicle parking by a physical barrier to minimize the possibility of parked bicycles being hit by a vehicle; and
  - e). Co-located in relative proximity to the nearest vehicular parking spaces.

### 3. Long-Term Bicycle Parking

- a. Long-term bicycle parking may be provided through any combination of racks or lockers.
- b. Long-term bicycle parking must be provided in a well-lit, secure location within the same building as the use the parking is intended to serve or within an accessory structure located within two-hundred (200) feet of the principal entrance of the building.
- c. To provide security, long-term bicycle parking must either be:
  - i. In a locked room;
  - ii. In an area that is enclosed by a fence with a locked gate. The fence must be either 8 feet high, or be floor-to-ceiling;
  - iii. Within view of an attendant or security guard;
  - iv. In an area that is monitored by a security camera; or
  - v. In an area that is visible from employee work areas.
- d. All required long-term bicycle parking spaces must be designed to provide continuous shelter from the elements.
- e. Long-term bicycle parking serving multiple uses may be combined into a single area or accessory structure.
- f. Where long-term bicycle parking is located adjacent to motor vehicle parking or loading facilities, a physical barrier must be provided to prevent potential damage to bicycles by other vehicles.
- g. When twenty (20) or more long term bicycle parking spaces are provided, a minimum of five percent (5%) of the spaces must be three (3) feet by eight (8) feet in size to accommodate tandem bicycles or bicycles with trailers.
- h. No more than twenty five (25%) of long term bicycle parking space may be provided as racks that require bicycles to be hung or lifted off the ground or floor.

### 4. Alternative Compliance

- a. The provisions of §6.2.1 through §6.2.3 may be modified by Special Permit to accommodate alternative technologies and methods for providing bicycle parking.
  - i. In its discretion to approve or deny a Special Permit to modify the provisions of §6.7.13.C Bicycle Parking, the Planning Board shall consider the

FIGURE 2.4.1 MUTCD Figure D4-3



following:

- a). The review considerations for all Special Permits as specified in Section 5.1 Special Permits.
- b). The ability of alternative technologies and methods of bicycle parking to provide equal or greater benefits to bicycle users.

### 5. Standards for all Motor Vehicle Parking

- a. Approval by the City Engineer Required
  - i. All curb cuts, driveways, parking spaces, and parking lots must comply with the applicable provisions of Chapter 11, Article II, Sec. 11-33 Driveway Construction of The Code of Ordinances, City of Somerville, Massachusetts.
- b. Permitted Types
  - i. Off-street parking may be provided as surface parking space(s), above-ground structured parking, or underground structured parking. Zoning districts include restrictions on the type of off-street parking that is permitted in each district.
- c. Parking Setbacks
  - i. All off-street parking, excluding underground structured parking, must be located at or behind the required parking setback as indicated for each building type.
  - ii. Parking is never permitted within a private frontage.
- d. Access
  - i. All off-street parking must have direct access to a public thoroughfare from an alley, driveway, maneuvering aisle, or permanent access easement.
  - ii. If an improved alley with a right-of-way of at least

eighteen (18) feet is provided, all off-street parking must be accessed from the alley.

- e. Circulation
  - i. Parking lots and structures must be designed so that vehicles enter or exit onto a public thoroughfare in a forward direction rather than backing out into the roadway.
  - ii. Ingress and egress from individual parking spaces must be from a drive aisle or driveway.
  - iii. Vehicles are not permitted to enter or exit parking spaces directly from a public thoroughfare except as follows:
    - a). Parking lots with six (6) or less parking spaces may be designed to permit motor vehicles to enter or exit a parking space directly from a rear alley by special permit.
    - b). In its discretion to approve or deny a special permit authorizing parking spaces that are directly accessible from a rear alley, the review board shall consider the following:
      - i). Adequate alley width and surface material to accommodate vehicular turning movements.
      - ii). Location of alley intersections in relation to the safety of pedestrians, bicyclists, and motor vehicles.
      - iii). Sight lines needed by the driver of any vehicle entering or exiting the site.
- f. Parking Space & Drive Aisle Dimensions
  - i. All parking spaces and drive aisles must comply with the minimum dimensional standards shown in Table 7.4, with the following exceptions:
    - a). Motorcycle and scooter parking stalls must measure at least four feet in width and eight feet in depth.
    - b). Mechanical access parking is exempt from parking stall and drive aisle dimensional requirements.
    - c). When twenty (20) or more spaces are required, up to twenty percent (20%) of those spaces may be designed as parking for compact cars with the minimum stall length reduced to sixteen (16) feet and minimum stall width reduced to seven and one half (7.5) feet. Compact spaces must be clearly identified with a pavement marking and signage.
    - d). When the side of a parking space abuts a wall or other obstruction that is taller than six (6) inches, the width of the parking space must be increased by one foot.
- g. Accessibility
  - i. All parking spaces, lots, and structures must comply with relevant State and Federal regulations for parking designed for persons with disabilities,

including 521 CMR 300.

- h. Lighting
  - i. All off-street parking must be provided with adequate light for use at night in accordance with the provisions of §6.H. Outdoor Lighting.
- i. Signage
  - i. All traffic control signs must be installed in accordance with the Manual of Uniform Traffic Control Devices (MUTCD).

## 6. Parking Lots

- a. Access
  - i. Pedestrian access from parking lots must lead directly to a public sidewalk (i.e., not directly into a building).
- b. Design & Construction
  - i. No surface parking lot may have a grade in excess of ten percent (10%).
  - ii. Individual parking spaces must be delineated with paint or similar method and maintained in clear, visible condition to identify the parking spaces from drive aisles and other circulation features.
  - iii. Wheel stops, bumper guards, or other alternatives must be installed to prevent vehicles from damaging or encroaching upon any sidewalk, landscaping, fence, wall, or structure and must be properly anchored and secured into the ground.
  - iv. Parking lots abutting, within fifty (50) feet, or visible from the right-of-way of a public thoroughfare, except alleys, must be effectively screened by a perimeter wall or fence.
    - a). Perimeter walls and fences must be no more than four (4) feet in height measured from the surface of the lot, no less than fifty percent (50%) opaque, and designed to allow surveillance over and beyond the wall or fence by pedestrians approaching or passing the parking lot.
- c. Capacity
  - i. Unless otherwise specified, the actual parking of motor vehicles in excess of the number of parking spaces delineated in a parking lot is prohibited.

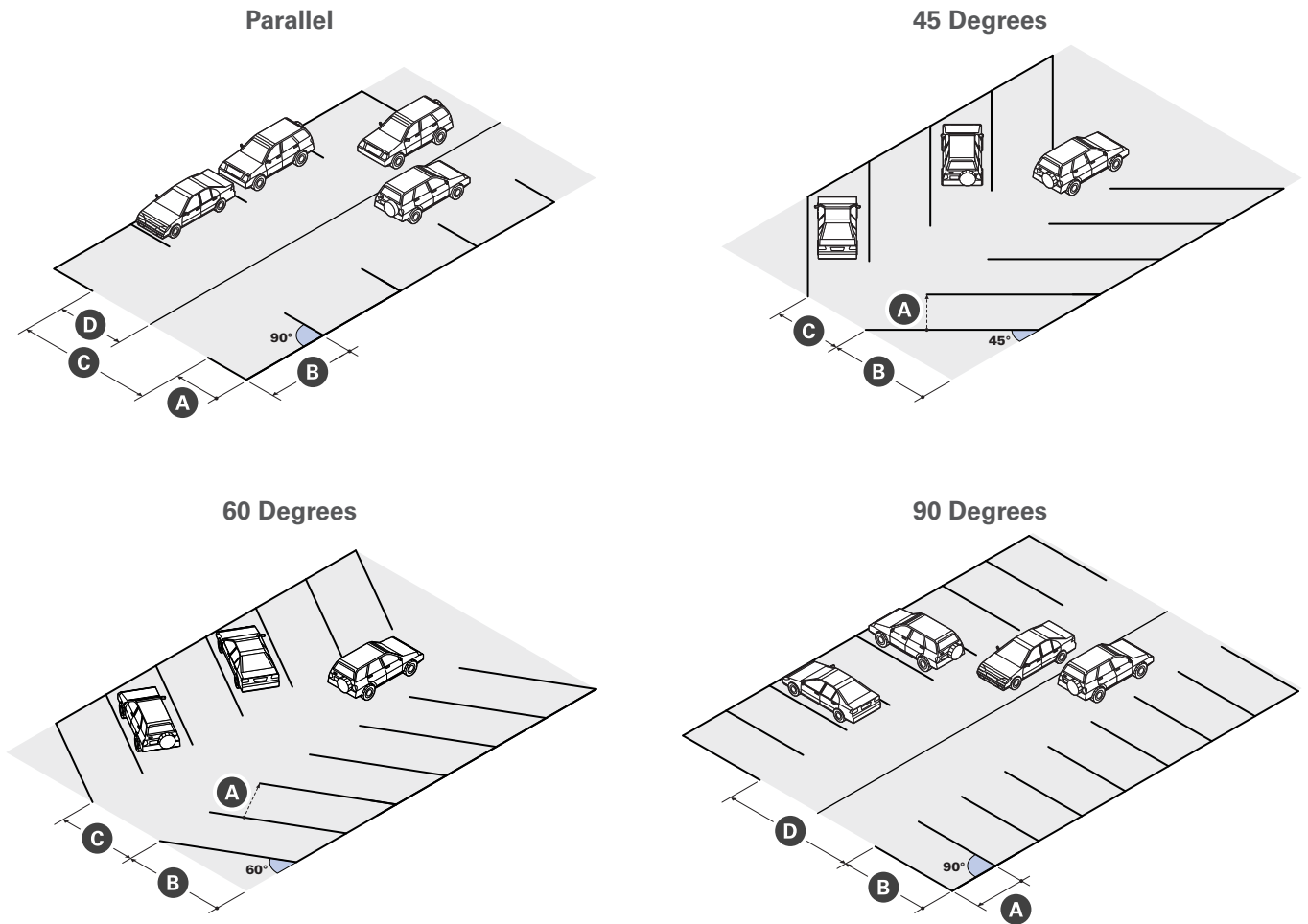
## 7. Parking Structures

- a. Access
  - i. Pedestrian access to structured parking must lead directly to a public sidewalk (i.e., not directly into a building), except underground levels which may be exited by pedestrians directly into a building.
- b. Design & Construction
  - i. Unless setback by space designed for occupancy by non-parking uses, the facade of any story of a building occupied by motor vehicle parking must be designed as follows:

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## Parking Design

**TABLE 7.5** Parking Space & Drive Aisle Dimensions



	Parallel	45 Degrees	60 Degrees	90 Degrees
<b>A</b> Stall Width (min)	8 ft	N/A	N/A	8 ft
<b>B</b> Stall Length (min)	16 ft	18 ft	18 ft	16 ft
<b>C</b> Drive Aisle, 1 Way (min)	12 ft	12 ft	12 ft	N/A
<b>D</b> Drive Aisle, 2 Way (min)	20 ft	N/A	N/A	20 ft
<b>E</b> Vertical Clearance	7 ft 6 in	7 ft 6 in	7 ft 6 in	7 ft 6 in

- a). Fenestration and facade openings must be vertically and horizontally aligned and all floors fronting on the facade must be level (not inclined).
- b). The facade must include fenestration designed to appear as windows for between twenty percent (20%) and fifty percent (50%) of the wall area of each floor.
- c). Windows must be back-lit during evening

- hours and internal light sources must be concealed from view from public sidewalks.
- d). The facade area masking the floors occupied by motor vehicle parking must be seamlessly integrated into the architectural design of the building's facade.

### 8. Curb Cuts

- a. Restrictions

- i. Unless otherwise specified, one (1) curb cut is permitted per front lot line.
- ii. Curb cuts are prohibited along the principal frontage of any lot abutting a pedestrian street.
- iii. Curb cuts may be no wider than the driveway or vehicular entrance they serve, excluding flares or returned curbs.
- iv. Curb cuts must be located to minimize conflict with pedestrians, bicyclists, and motor vehicles on the thoroughfare they provide access to and from.
- b. Design & Construction
  - i. Curb cuts must be designed in accordance with the provisions of **Article 11 Public Realm**.
  - iii. Loading and unloading activities are not permitted within a public thoroughfare except in a loading zone during permitted hours designated by the Director of Traffic and Parking.

## 9. Driveways & Vehicular Entrances

- a. Design & Construction
  - i. Driveways may be located within required front, side, and rear setback areas, but are prohibited between the facade of a building and any front lot line.
  - ii. Driveways and vehicular entrances to off-street parking with six (6) or less parking spaces must be between eight (8) feet and twelve (12) feet in width.
  - iii. Driveways and vehicular entrances to off-street parking with seven (7) or more parking spaces must be between eighteen (18) and twenty four (24) feet in width at the frontage.
- b. Shared Driveways
  - i. Driveways may provide access in whole or in part on or across an abutting lot(s), provided that an access easement exists between all property owners.
- c. Neighborhood Compatibility
  - i. Loading and unloading activities may not encroach on or interfere with the use of sidewalks, drive aisles, or parking areas, or public thoroughfares. Maneuvering aisles and driveways may serve both required parking and loading bays if they meet the design needs of each activity. Loading facilities requiring vehicles to back in from a public thoroughfare are permitted.
  - ii. Loading and unloading activities for lots abutting the NR or UR districts are limited to the hours of the day between 7:00 a.m. and 10:00 p.m. All loading docks on these lots must be signed to indicate "no idling".

## 10. Flexible use of Accessory Parking

- a. When existing accessory parking spaces are not needed to meet the parking demand of a principal use (such as when the principal use is closed for business), the property owner may make the unused or under-utilized parking spaces available for other uses, including commercial parking, when permitted in the district where the lot is located.

## 11. Loading Facilities

- a. General
  - i. Buildings providing space for uses that regularly receive or distribute large quantities of goods must provide loading facilities as required by the Director of Traffic and Parking. Loading facilities must be of sufficient quantity to adequately serve the intended use(s).
  - ii. The Director of Traffic and Parking may authorize the use of an alley for loading activities in lieu of requiring a separate on-site loading facility.

## **12. PARKING & MOBILITY**

Shared Parking

### **12.2 SHARED PARKING**

#### **1. Reserved**



**12.3 MOBILITY MANAGEMENT**

**1. Purpose**

- a. To improve transportation options available to travelers, promote the use of efficient travel modes, and reduce the need to travel.
- b. To decrease vehicular air pollutant emissions, conserve energy resources, and reduce ambient noise levels by reducing vehicular trips, total vehicle miles traveled, and traffic congestion within the city.
- c. To reduce automobile dependence and the associated costs of owning, operating, and maintaining a motor vehicle.
- d. To decrease costs associated with the construction, repair, maintenance, and improvement of city thoroughfares and parking facilities.
- e. To decrease the cost of traffic enforcement and promote traffic safety.
- f. To reduce the demand for parking facilities and increase the capacity and efficiency of existing transportation infrastructure.
- g. To support a fiscal return on federal, state, and local financial investment made in public transportation infrastructure by increasing ridership of public transportation services.
- h. To incorporate transportation planning considerations into development review.
- i. To encourage the establishment of Mobility Management Associations (MMAs) within the city.

**2. Applicability**

- a. This section is applicable to the following:
  - i. all non-residential development greater than fifty thousand (50,000) gross square feet in total floor area;
  - ii. all non-residential uses, including the City of Somerville, that have a permanent place of business within the city and fifty (50) or more employees or students;
  - iii. all multi-tenant buildings with non-residential uses that in combination have over fifty (50) employees or students in total;
  - iv. all residential development of more than twenty (20) dwelling units;
  - v. any alteration, expansion, reconstruction, extension, or structural change to an existing commercial parking facility that causes an increase in the number of parking spaces; and
  - vi. the change in use of a parking facility from accessory parking to commercial parking.

**3. Voluntary Participation**

- a. Uses and property owners not subject to the provisions of this Section are encouraged to implement mobility

management programs and services voluntarily.

**4. Mobility Management Plan**

- a. Purpose
  - i. Mobility management plans must be consistent with and contribute to the achievement of the comprehensive master plan of the City of Somerville in accordance with the purpose of this section.
- b. Submittal
  - i. A mobility management plan is required for any use or property owner subject to the standards of this Section.
  - ii. Applications for development review are not considered complete until the Director of Transportation & Infrastructure has approved the proposed mobility management plan.
  - iii. The cost associated with drafting a mobility management plan, annual updates, and all monitoring and reporting is borne by the business or property owner.
- c. Procedure
  - i. Prior to the approval of any design & site plan or special permit and prior to the issuance of any zoning compliance certificate, building permit, certificate of occupancy, business license, or other permit, the Director of Transportation & Infrastructure must approve a proposed mobility management plan.
  - ii. Mobility management plans must be updated on an annual basis and submitted for approval to the Director of Transportation & Infrastructure to validate continued compliance with the provisions of this section.
- d. Information Required
  - i. The Planning Board shall establish standards for Mobility Management Plans based on the recommendations of the Director of Transportation & Infrastructure.
  - ii. A proposed mobility management plan must demonstrate compliance to the standards of this Section and to the Planning Boards' standards for mobility management plans.
  - iii. For the first two years of occupancy or operations, a mobility management plan must identify existing site based parking conditions, travel behavior of employees or residents, proposed mobility management programs & services, an implementation schedule, and establish metrics and methods for performance review.
  - iv. After two years of occupancy or operations, a mobility management plan must also identify objective targets to reduce parking demand, single-occupant vehicle trips, vehicle miles traveled,

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### Mobility Management

or automobile vehicle trips associated with development, based on the performance review of previous years, and propose additional mobility management programs & services to achieve those objectives.

- v. Annual updates to mobility management plans must include a statistically valid survey of employees and/or residents is required to ascertain the level of success of implemented programs, services, incentives, and other measures in accordance with the purpose of this section.

#### 5. Compliance

- a. The Review Board shall require compliance to the provisions of this Section and to an approved Mobility Management Plan as a condition of Design & Site Plan Review or Special Permit approval.
- b. A mobility management plan may be updated in accordance with the standards of this Section.

#### 6. Mobility Management Associations

- a. Mobility Management Associations are organizations formed to help individual uses and property owners collectively implement and administer the programs and/or services required by this Section.
- b. A representative from an approved Mobility Management Association may jointly represent uses and/or property owners subject to the provisions of this Section in place of a required on-site transportation coordinator.

#### 7. Required Programs & Services

- a. The following programs and services are required for all non-residential uses:
  - i. Annual Mobility Education Meeting
  - ii. Distributed Information
  - iii. Guaranteed Ride Home Program
  - iv. On-Site Transportation Coordinator
  - v. Posted Information
  - vi. Preferential Parking Locations for Carpool/Vanpool
  - vii. Qualified Transportation Fringe Benefits
- b. The following programs and services are required for all residential uses:
  - i. Distributed Information
  - ii. Posted Information
  - iii. Unbundled Parking
- c. The following programs and services are required for any lot or structure providing public parking:
  - i. Posted Information
- d. Mobility management plan may voluntarily include additional programs and services.
  - i. Programs and services not identified in this section may be included in a Mobility Management Plan with the approval of the Director of Transportation

& Infrastructure.

#### 8. Standards for Programs & Services

- a. Financial Incentives
  - i. Car-Sharing/Bike-Sharing Memberships: Full or partial employer-funded monthly membership for local car-sharing and/or bike-sharing services.
  - ii. Parking Cash-Out Program: An employer-funded cash payment made available to employees who choose not to use a parking space in an employer subsidized parking lot or facility.
  - iii. Qualified Transportation Fringe Benefits: A "Commuter Tax Benefit" that allows employers to save on payroll related taxes or employees to save on federal income taxes according to Section 132(f) of the Internal Revenue Code through the provision of either Pre-Tax Payroll Deductions for Transit Passes/ Vanpool Costs or Subsidized Transit Passes.
- b. Shared Vehicle Services
  - i. Bikes at Work: Bicycles available on-site during the workday for employee business and personal use.
  - ii. Bike Share Station: Bike sharing vehicles available on-site for public use.
  - iii. Car Share Vehicle(s): On-site parking spaces provided at no cost for car-sharing vehicles.
  - iv. Fleet Vehicle(s): Company fleet vehicle(s) available on-site during the workday for employees that carpool, vanpool, bike, walk, or take transit.
  - v. Guaranteed Ride Home Program: An employer subsidized ride home for employees that carpool, vanpool, bike, walk, or take transit.
    - a). Transportation must be provided to an employee for:
      - i). Emergency situations of the employee or a family member;
      - ii). Illness of the employee or a family member;
      - iii). Unscheduled overtime; and
      - iv). Bicycle damage.
    - ii). Availability of service may be restricted to no less than four (4) times per calendar year.
  - vi. Ride Matching Services: A no cost service to help employees interested in carpooling locate other interested carpoolers with similar schedules, routes, and destinations.
  - vii. Shuttle Services: Smaller buses or vans providing transportation for employees between places of work and/or transit stations.
  - viii. Visitor Commute Support: Full or partially funded daily transit passes or daily memberships for local car-sharing and/or bike-sharing services.
- c. Alternative Schedules
  - i. Flexible Work Hours: Compressed workweeks,

- flexible work hours, and/or staggered work shifts.
  - ii. Teleworking: Policies to permit and encourage employees to work from home or off-site.
- d. Marketing & Education
  - i. Bike Commuting Training: Classes (education and hands-on training) to encourage employee bike commuting offered on-site or through a 3rd party provider.
  - ii. Distributed Information: Printed materials issued annually to all tenants and employees, and to new employees and/or tenants at the time of hire or occupancy, providing the following information:
    - a). Current maps identifying station locations, routes, and schedules for public transit serving the site;
    - b). Bicycle route and facility information, including regional/local bicycle maps;
    - c). A listing of facilities available for carpoolers, vanpoolers, bicyclists, transit riders and pedestrians at the site.
  - iii. On-Site Transportation Coordinator: a person with the responsibility to implement and administer the programs and/or services of an approved Mobility Management Plan and serve as a point of contact to the City of Somerville.
  - iv. Posted Information: A bulletin board, display case, or kiosk located in a building lobby, common area, and/or other conspicuous location displaying the following information:
    - a). Current maps identifying station locations, routes, and schedules for public transit serving the site;
    - b). Bicycle route and facility information, including regional/local bicycle maps;
    - c). A listing of facilities available for carpoolers, vanpoolers, bicyclists, transit riders and pedestrians at the site.
  - v. Transportation Signage: Wayfinding providing directions to and clearly identifying transportation facilities such as transit stations, bus stops, bicycle parking, carpool spaces, etc.
- e. Parking Management
  - i. Charging for Employee Parking: Elimination of existing subsidies for off-site employee parking and charging for on-site employee parking.
  - ii. Demand-Responsive Pricing: Adjustable hourly rates charged for employee or customer parking to manage parking availability.
  - iii. Parking Lease Adjustments: Rental of parking spaces on a monthly rather than yearly basis.
  - iv. Preferential Parking for Carpool/Vanpool: Parking spaces located in a preferential location and reserved for registered carpool and vanpool vehicles.
  - v. Shared Parking: Parking spaces shared by two (2) or more uses when the peak needs of each use occurs at different times.
  - vi. Unbundled Parking: Parking spaces rented, leased, or sold as an option rather than a requirement of the rental, lease, or purchase of a dwelling unit or non-residential floor space.
- f. On-Site Services
  - i. Bicycle Repair Station: On-site bike repair station or room available for residents or employees.
  - ii. Child Care: The caring for and supervision of children available on site for employees.
  - iii. Concierge Services: an employee of an apartment building, hotel or office building providing services to residents or employees.
  - iv. On-Site Transit Pass Sales: Retail sales of public transportation passes.

### 9. Enforcement

- i. In accordance with §10.G.1.c. Fines and Penalties, each employee or resident shall be considered a separate offense for development not in compliance with the provisions of this section.

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Mobility Management