

APPENDICES

APPENDIX A: POLICIES

VEHICLE TRIP REDUCTION ORDINANCE (TEXT INCLUDED IN APPENDIX)

https://www.municode.com/library/ma/cambridge/codes/code_of_ordinances?nodeId=TIT10VETR_CH10.17VETRREOR

PARKING AND TRANSPORTATION DEMAND MANAGEMENT PLAN (TEXT INCLUDED IN APPENDIX)

https://www.municode.com/library/ma/cambridge/codes/code_of_ordinances?nodeId=TIT10VETR_CH10.18PATRDEMPLPASPRES

GROWTH POLICY

http://www.cambridgema.gov/~media/Files/CDD/Planning/GrowthPolicy/growth_policy_2007.pdf

CLIMATE PROTECTION PLAN

http://www.cambridgema.gov/~media/Files/CDD/Climate/climateplans/climate_plan.pdf

ZONING ORDINANCE

http://www.cambridgema.gov/~media/Files/CDD/ZoningDevel/Ordinance/zo_article19_1363.ashx

10.17.230 Sunset clause.

Chapter 10.17

VEHICLE TRIP REDUCTION
ORDINANCE

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10.17.010 Time period of chapter.

Sections 10.17.040 through 10.17.180 of this chapter shall take effect sixty days after final approval by the City Council. The remaining provisions shall not take effect until, and shall at that time supersede and replace Chapter 10.16, sixty days after final approval by the U.S. Environmental Protection Agency ("U.S. EPA") of a SIP amendment for Massachusetts which (i) contains a program of transportation control measures that are imposed equally on all communities in the Commonwealth such as an employer-based vehicle trip reduction program; and (ii) revokes any provisions of 40 C.F.R. Section 52.1135 that are applicable to Cambridge. (Ord. 1139 (part), 1992)

10.17.020 Findings.

The City of Cambridge finds and determines that:

A. High levels of vehicle traffic and congestion add to air pollution, noise, and inconvenience and erode the quality of the living and working environment.

B. An increasing number of automobile registrations and jobs in the City has resulted in growth of traffic in and around Cambridge.

C. While the City has pursued programs to mitigate these conditions, new measures must be implemented by the City and the Commonwealth involving the participation of all sectors of the community on a local and regional bases to make more efficient use of mass transit, bicycling, walking, and other alternatives to trips by single-occupancy vehicles.

D. The Clean Air Act amendments of 1990 call for the attainment of compliance with the National Ambient Air Quality Standard for Ozone within the Commonwealth by 1999.

E. Attainment of the Ozone

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Standard will require increased control of vehicle-related air pollution ("transportation control measures") throughout the Commonwealth, as well as the Nation.

F. Throughtrips and other traffic over which Cambridge has no control contribute significantly to the degradation of air quality in the region. The degradation of air quality, particularly ozone, is a regional problem which requires global and regional solutions.

G. A large portion of vehicle traffic on Cambridge streets is attributable to trips that neither originate nor end in Cambridge ("throughtrips"). The City of Cambridge has virtually no control over these throughtrips. Accordingly, it is imperative that DEP amend the SIP to include transportation control measures applicable equally to all communities in the Commonwealth, including an employer-based vehicle trip reduction program, to achieve reductions in the number of vehicle trips and vehicle miles travelled throughout the region.

H. Increasing the use of commuting alternatives and reducing the number of trips by single-occupancy vehicles is beneficial for the City and the Commonwealth in reducing vehicle miles travelled, traffic and associated air pollution, fuel use, noise, and congestion.

I. Programs offered through City Departments, employers, institutions, owners of multiple-tenant buildings and complexes and other organizations to encourage the use of mass transit, bicycling, walking, and other alternatives to commuting by single-occupancy vehicles are effective and should be expanded on a citywide and regional basis.

J. The approach which includes, where consistent with employers' needs, adoption and enforcement of driving disincentives, particularly those applicable to the regular work-day commuter, and best suited to accommodate the diverse needs

and capabilities of the governmental, business and institutional communities in the City, and recommended for adoption by DEP for state-wide application is a flexible approach which establishes performance goals and permits government and private employers, institutions, and automobile owners to select from among a variety of measures designed to contribute toward reaching the goals.

K. The vehicle trip reduction program recommended for adoption by DEP on a state-wide basis should give credit to those employers which have already made substantial progress in encouraging the use of mass transit, bicycling, walking, and alternative means of commuting and in providing such alternatives.

L. Measures to discourage, and provide alternatives to, vehicle trips and trips by single-occupancy vehicles made by residents of and visitors to Cambridge are also necessary to further the goals of the Clean Air Act.

M. Some of the measures contained in this chapter will achieve immediate reductions in vehicle miles travelled; others are designed to collect information and otherwise lay the foundation for future actions to reduce vehicle miles travelled and improve air quality. To maximize air quality benefits, some types of transportation control measures must be adopted and applied on a regional basis. (Ord. 1139 (part), 1992)

10.17.030 Definitions.

A. "City" means the City of Cambridge, Massachusetts.

B. "Clean fuel" means any fuel or power source used in a vehicle that complies with the applicable standards for clean fuel vehicles contained in Sections 241-245 of the Clean Air Act, 42 U.S.C. §§ 7581--7595.

C. "Clean-fuel vehicle" means

a vehicle in a class or category of vehicles which has been certified to meet the applicable clean-fuel vehicle standards as defined by and pursuant to the federal Clean Air Act Amendments of 1990.

D. "Fleet" means ten or more vehicles which are (i) owned, leased, controlled or operated by a single person or entity; or (ii) parked at the same location, excluding vehicles held for lease or rental to the general public, vehicles held for sale by dealers, vehicles used for law enforcement or emergency purposes.

E. "Ozone standard" means the National Ambient Air Quality Standard for Ozone established pursuant to Section 109 of the Clean Air Act, 42 U.S.C. § 7409.

F. "Region" means those communities east of, or through which Route 128 passes.

G. "Selected employers" means those employers in Cambridge who voluntarily agree to participate in the pilot survey of employee commuting characteristics set forth in Section 10.17.130.

H. "Throughtrips" means vehicle traffic on City of Cambridge streets attributable to trips that neither originate nor end in the City of Cambridge.

I. "Transportation control measures" are transportation control strategies aimed at reducing transportation related emissions of pollutants and controlling the growth of future vehicle trips and vehicle miles travelled.

J. "VMT" is an abbreviation for vehicle miles travelled.

K. "AER" is an abbreviation for automobile efficiency rate, a rate determined as set forth in Section 10.17.130(D).

L. "Base AER" is a term for the automobile efficiency rate for the City of Cambridge, more fully described in Section 10.17.130(E). (Ord. 1139 (part), 1992)

10.17.040 Expanded commuter mobility program.

In addition to continuing activities currently in progress, the Commuter Mobility Coordinator shall develop and submit to the Assistant City Manager for Community Development and the City Manager a schedule for implementing additional programs including, but not limited to:

A. A bicycle commuter program, in conjunction with the Traffic and Parking Department and the Bicycle Advisory Committee involving consultation with Cambridge residents and businesses;

B. A program to assist employers in establishing bicycle commuting incentives;

C. A feasibility study of the potential use of an in-City paratransit system of jitney services or shuttles to transit locations, areas of major employment, and major commercial/retail destinations; and

D. A program for publicizing successes achieved by businesses and institutions in decreasing the number of single-occupancy vehicle commuters to their establishments;

E. An education program, including newspaper articles, cable television programs, and public meetings, to inform residents and employees of the need for, and the benefits to be realized from, changes in commuting behavior;

F. The beginning of a commuter ride-share program;

G. A program to encourage businesses to offer discounts on T passes.

The City will provide adequate resources to enhance the ability of the commuter mobility program to work to reduce the vehicle miles travelled in Cambridge. (Ord. 1139 (part), 1992)

10.17.050 Bicycle and pedestrian mobility

10.17.050

program.

The position of Bicycle and Pedestrian Coordinator is created within the Traffic and Parking Department. The City Manager shall, within one month of the effective date of this provision, designate the Bicycle and Pedestrian Coordinator. The Bicycle and Pedestrian Coordinator shall devote at least fifty percent of his/her time to carrying out the tasks required by this provision. The Bicycle and Pedestrian Coordinator shall, in conjunction with the Commuter Mobility Coordinator and the City's existing Bicycle Advisory Committee, (i) design and implement a program to encourage greater use of bicycles as alternatives to single-occupancy vehicles within the city and, (ii) focus the attention of the City on the needs of pedestrians. The program will include, but is not limited to:

- A. Development of a Cambridge Bicycle Master Plan;
- B. Development of a Cambridge Pedestrian Master Plan;
- C. Development and evaluation of recommendations for a regional network of bicycle paths and bicycle priority streets favoring both bicycles and pedestrians;
- D. Consultation with Cambridge residents, businesses, institutions and property owners;
- E. Funding of bicycle amenities and storage facilities;
- F. Funding for pedestrian amenities; and
- G. Provision of bicycles for use by City police and Traffic and Parking Department.

The program shall be funded at an initial level of twenty-five thousand dollars annually; these funds shall be in addition to, and not utilized for, the salary of the Bicycle and Pedestrian Coordinator. (Ord. 1139 (part), 1992)

10.17.060 Restrictions on visitor passes.

A. Official City Visitor Passes. The Citywide visitor passes that have been distributed to authorized individuals will be invalid thirty days after the effective date of the ordinance codified in this provision. The Traffic and Parking Department is authorized to issue stickers to individuals or organizations or who would be authorized to receive a Citywide visitor pass. A list of all recipients of Citywide visitor passes shall be maintained by the Traffic and Parking Department and shall be made available for public inspection upon request. In order to be effective, a sticker must be affixed to a vehicle and must display the vehicle registration number and an expiration date. These stickers shall be easily distinguishable from the stickers issued to City residents. No Official City Visitor Sticker shall be issued that is valid for a time period longer than one year. The names of individuals and organizations shall be available to the public upon request. The list shall be updated by the Department at least quarterly.

B. Residential Visitor Passes. Beginning on the January first following the effective date of this provision, each residential visitor pass issued by the Traffic and Parking Department shall be designed to display a calendar for the year during which it is valid. To be valid on a given date, the pass must be displayed in the windshield and the date of use must be circled. (Ord. 1146, 1992; Ord. 1139 (part), 1992)

10.17.070 Fees for residential parking stickers.

The fees for residential parking stickers shall be eight dollars per permit per household. (Ord. 1147, 1992)

10.17.080 Study of zoning revisions.

The Cambridge Planning Board

(the "Board") shall consider revising the required parking space ratios specified in the City Zoning Ordinance and shall evaluate the effectiveness of such revisions in reducing VMT and traffic congestion and encouraging the increased use of commuting alternatives other than by single-occupant vehicles. The Planning Board shall evaluate the need to reduce the allowed densities to achieve the goal of reduced vehicle miles travelled and shall also consider eliminating the exclusion of parking in the calculation of gross floor area. The Board shall also consider the economic impact of such revisions. Consideration shall be given, without limitation, to such potential revisions as reduction of minimum and maximum parking requirements, special provisions for carpools and vanpools, and encouragement of mixed-use developments.

The Board shall invite testimony from residents, businesses, institutions, and property owners and shall publicly report its recommendations within one year of the effective date of this provision. (Ord. 1139 (part), 1992)

10.17.090 Improved coordination with MBTA.

The City Manager shall initiate meetings with the General Manager of the MBTA to map out a strategy for close cooperation between the City and the MBTA on increasing public transportation services to and within the City. The management of the MBTA will be asked to work to improve existing services and to look into ways in which the MBTA can be of assistance to the City in exploring possible development of a local para-transit system. There shall be a goal of establishing a working joint committee to implement the needed improvements.

The Commuter Mobility Staff shall undertake a survey of residents and commuters to identify barriers to use of the

MBTA. The Commuter Mobility Staff shall also conduct widely-advertised public forums in neighborhoods throughout the City. Based on the survey and the results of the public meetings, the Commuter Mobility Staff will make recommendations for improving MBTA service. The recommendations will be available to the public for comment. The Commuter Mobility Staff will request that the MBTA hold one or more public meetings to discuss the recommendations.

The Department of Traffic and Parking and the Commuter Mobility staff shall work with MBTA to (i) improve public transportation schedules and routes; (ii) to improve bus stop signage; and (iii) to review placement of bus stops. The Cambridge Traffic and Parking Department shall also cooperate with the MBTA in an attempt to have the MBTA, at the sites selected by Cambridge, erect bus stop signs that are used in other cities and towns.

Meetings with representatives of the MBTA should also focus on conversion of buses to clean fuels. (Ord. 1139 (part), 1992)

10.17.100 Regulation of idling buses, trucks, and taxis and automobiles.

The Police Department shall promptly review and improve its enforcement of the statutory prohibitions against idling by busses, trucks and taxis and automobiles set forth at G.L., ch. 90, § 16A. Within two months of the effective date of the ordinance codified in this provision, the Commissioner of the Police Department shall report to the City Manager on the Department's implementation of this provision. (Ord. 1139 (part), 1992)

10.17.110 Taxicab improvements.

The License Commission, through the Taxicab Advisory Committee shall consult with the taxicab industry, residents,

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and commercial establishments in the City and prepare recommendations:

A. To make taxicabs more accessible for use by multiple passengers with different destinations. The object of this recommendation shall be to decrease single-occupant use of taxicabs by providing monetary incentives for the taxicab drivers and reducing the cost for passengers; and

B. About the potential role of taxicabs in a paratransit system for the City; and

C. About conversion of taxi fleets to clean fuels;

D. for new or relocated taxi stands; and

E. For policies or actions that would encourage Cambridge residents to use taxicabs that are licensed in Cambridge instead of taxicabs from other cities. (Ord. 1139 (part), 1992)

10.17.120 Alewife Station and Garage.

The Assistant City Manager for Community Development or his designee shall consult with Alewife neighborhood groups, employers, and other interested persons concerning the demand for (i) a commuter rail station at Alewife, (ii) an expansion of the Alewife garage, and (iii) shuttle bus or van service between Alewife Station and nearby employment sites and stores. The Assistant City Manager shall report his findings to the City Council within one year of the effective date of this provision. (Ord. 1139 (part), 1992)

10.17.130 Pilot survey of commuting characteristics of City employees and employees of selected employers.

A. The City, in consultation with the Selected Employer Steering Committee, shall develop an Employer Survey Kit which may include an Employee Survey Form, administration plan, and Automobile Efficiency Rate

("AER") (defined below) calculation sheet, designed to elicit commuting data from all City employees and employees of Selected Employers which will permit the calculation of an actual AER for each Selected Employer and City Department and will also provide the statistical basis for determining such other characteristics of commuting patterns as may be useful in designing measures to achieve the goals of the Clean Air Act. The Employer Survey Kit shall be prepared and distributed to City Departments and Selected Employers within six months of the effective date of the ordinance codified in this provision. Each City Department and Selected Employer shall distribute copies of the Employee Survey Form to, and as a goal shall endeavor to collect completed forms from, seventy-five per cent of its employees. Each City Department and Selected Employer shall, no later than three (3) months from the date the Employer Survey Kit is distributed, submit to the Assistant City Manager for Community Development all completed Employee Survey Forms, provided that, any Selected Employer may instead submit a report of the results of the employee survey on a standard AER calculation sheet, signed and certified as to its accuracy by an officer of the Company. A Selected Employer that does not submit the Employee Survey Forms shall retain such forms for a minimum of three years. These forms shall be made available to the Assistant City Manager for Community Development or his designee, upon request.

B. The Selected Employer Steering Committee shall:

1. Participate with the City in the design of the pilot survey;

2. Assist in educating and encouraging participation of the selected employer group;

3. Review with the City the results of the pilot survey; and

4. Participate in the design of

any City-wide employer based vehicle trip reduction program.

C. Each City Department and Selected Employer shall cooperate with the Assistant City Manager for Community Development and the Commuter Mobility Staff in providing information about plans and programs being utilized to encourage commuter travel modes other than by single occupancy vehicles. At such time as the City implements or enforces an employer-based vehicle trip reduction program on a city-wide basis, each City Department and Selected Employer which has cooperated with the Community Development Department and the Commuter Mobility Staff and which has complied with paragraph "A" hereof shall be entitled to use the AER reflected in its initial Employer Survey Response as its baseline AER regardless of the extent of improvements in its AER produced as a result of its cooperation with the Community Development Department or its own commuter mobility initiatives.

D. The Assistant City Manager for Community Development shall make arrangements with the Commuter Mobility Staff to coordinate: (i) participation of the Selected Employers; (ii) preparation and distribution of the Employer Survey Kits; (iii) calculation of the base AER; (iv) review and tabulation of the pilot employer survey responses; (v) recalculation of the base AER based on review and analysis of the pilot employer survey responses. The Assistant City Manager for Community Development shall have the authority to engage the services of technical consultants to assist with these tasks.

E. The phrase Automobile Efficiency Rate ("AER") shall mean the figure calculated by dividing the number of employees who report to a worksite within the City of Cambridge between six a.m. and ten a.m. (inclusive Monday through Friday to achieve a five consecutive weekday

average) by the number of vehicles used by those employees to reach the worksite during those hours. Bicycles, public transit vehicles, and approved clean-fuel vehicles shall be excluded from the vehicles counted. Motorcycles and light trucks shall be included in the vehicles counted.

F. The City shall define and make calculations of a base AER for the City of Cambridge as a whole. Such base AER shall initially be derived from the 1990 Census modal share data and travel statistics, the results of the pilot survey of selected employers, and such other data as may be relevant. Subsequently, the City may develop other AERs for categories such as geographical areas of the City, employer types, employer sizes, and the like, as may be determined through the consultative process provided for in Section 10.17.140. The City may also, through the same consultative process, periodically recalculate the base AER or such other AERs to reflect additional data or changes in data as become available.

G. The term "carpool" shall mean a private motor vehicle occupied by two to six employees travelling together for at least seventy-five percent of their commute trip distances.

H. The term "commute alternatives" shall mean carpooling, vanpooling, private bus service, use of public transit, bicycling and/or walking.

I. The term "employee" shall mean any person hired by a public or private employer, including part-time and seasonal employees, who reports to work at least two days a week during five or more months of the year.

J. The term "worksite" shall mean a building or grouping of buildings which are located within the City of Cambridge and are on physically contiguous parcels of land or on parcels separated solely by private or public roadways or rights-of-ways and which are owned, operated, or leased by the same

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Employer. (Ord. 1139 (part), 1992)

10.17.140 Consultation with employers and residents about employer vehicle trip reduction program.

The Assistant City Manager for Community Development or his designee shall consult with Cambridge businesses, institutions, City departments, the Selected Employer Steering Committee, and residents to evaluate recommendations for a regional employer-based vehicle trip reduction program. During this consultation process, issues to be considered shall include:

A. Whether different areas of the City should be subject to different AER goals, depending on their proximity to public transit;

B. What the annual rate of improvement in the AER goal should be;

C. which, if any of the vehicle trip reduction plan elements identified in Section 10.17.170 should be required to be implemented by all employers in the City;

D. The definition of base AER and the potential appropriateness and definition of AERs for categories such as geographical areas of the city, employer types, employer sizes, and the like;

E. Ways to recognize the uniqueness of employers and their differing needs for employee mobility;

F. Appropriate AER or other references to be used in setting goals for Cambridge employers within a regional vehicle trip reduction program;

G. Whether employers should be required to achieve a base or other AER goal within a specified time period or whether penalties should only be imposed for an employer's failure to implement its plan;

H. Identification and development of mechanisms for transferring and/or sharing use of parking spaces as demand for parking spaces

decreases at a given worksite;

I. Evaluation of potential impacts on employment and economic impacts on affected employers and on the City of any proposed measures; and

J. Whether any categories of employers should be exempt. (Ord. 1139 (part), 1992)

10.17.150 Use of fees.

One hundred percent of the funds raised through the sale of residential parking stickers shall be used for implementing the tasks and programs specified in this chapter. (Ord. 1139 (part), 1992)

10.17.160 Recommendations for a SIP amendment applicable to all communities in the Commonwealth.

In order to ensure that the vehicle trip reduction measures in the ordinance codified in this chapter achieve their intended effect of reducing vehicle miles traveled and enhancing air quality in the Commonwealth, the City shall include in its submittal to the Metropolitan Planning Organization ("MPO") and DEP recommendations for an amendment to the State Implementation Plan under the federal Clean Air Act applicable equally to all communities in the Commonwealth. These recommendations shall include, but not be limited to:

A. A proposal for an employer-based vehicle trip reduction program;

B. A proposal for measures applicable to new development projects to mitigate the traffic impacts of such projects and reduce vehicle miles travelled to and from such projects;

C. A proposal for revising state taxing policies concerning employer-paid transportation and parking subsidies;

D. A proposal for evaluating

the utility of imposing fees on single-occupant commuter vehicles and/or commuter parking;

E. A proposal for achieving appropriate convenient public transportation from the west and north to Cambridge, including but not limited to support of a circumferential transit system;

F. Preventing the diversion of traffic oriented toward Cambridge to other areas with more limited transit availability;

G. Assuring that Cambridge is not placed at a competitive disadvantage within the region or the Commonwealth;

H. Reducing the growth in volume of throughtrips on Cambridge roadways which is outside the control of the City; and

I. Improved and extended use of water taxis.

Notwithstanding the foregoing, the City in its submittal shall note the absence of consensus about the vehicle trip reduction ordinance as originally proposed. The City shall engage in a further consultation process as outlined in Section 10.17.140. The City shall continue to update the State concerning that process. (Ord. 1139 (part), 1992)

10.17.170 Municipal vehicle trip reduction plans.

Based on its review of the employee survey forms collected pursuant to Section 10.17.130, the Commuter Mobility Staff shall prepare a vehicle trip reduction plan for implementation by City Departments. The plan shall contain a program of measures identical to the program developed after consultation as set forth in Section 10.17.140 which shall be designed to reduce vehicle trips and vehicle miles travelled by municipal employees and thereby improve the City's AER, as computed on the annual AER calculation sheets. The plan may include a variety of measures including, but not limited to:

A. Dissemination and periodic updating of information on all available transit service to and from the worksite;

B. Advertising, promoting and making available for purchase on the worksite any pass program offered by transit authorities;

C. Recommendations to individual employees of employee-specific travel options to reduce VMT;

D. Incentives and assistance for bicycle commuting including secure parking facilities, shower/changing facilities, and education and training programs;

E. Coordinating, facilitating and providing subsidies for employer-sponsored rideshare programs;

F. Preferential parking for carpools and vanpools;

G. Transportation allowances;

H. Expanding opportunities for alternative work schedules including four-day weeks and flexible schedules to facilitate ridesharing;

I. Elimination or reduction of parking subsidies for single-occupant vehicles;

J. Shuttle service to transit stops; and/or

K. Elimination of employee parking spaces.

After consultation with the Assistant City Manager for Community Development and the City Manager about the plan, the Commuter Mobility Staff shall promptly distribute it to City Departments for implementation. The Commuter Mobility Staff shall assist City Departments with implementation of the plan. (Ord. 1139 (part), 1992)

10.17.180 Expansion of local employment opportunities.

To demonstrate and further its commitment to increase the number of Cambridge residents employed by

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Cambridge businesses and reduce vehicle miles associated with work commutes, the annual budget for expansion of local employment opportunities shall be increased to two hundred thirty thousand dollars. That budget shall be applied as follows:

A. To continue and expand the Cambridge Employment Program within the Community Development Department;

B. To sponsor an annual job fair to inform residents of local employment opportunities;

C. To sponsor and coordinate educational partnerships between Cambridge employees and schools in Cambridge; and

D. To develop a Local Employment Opportunity Plan.

These functions shall be coordinated and carried out by the Community Development Department in conjunction with the Department of Human Services and under the supervision of the Assistant City Manager for Community Development. The Local Employment Opportunity Plan shall be developed within one year of the effective date of the ordinance codified in this provision

[THE FOLLOWING SECTIONS, 10.17.190 THROUGH 10.17.220, ONLY TAKE EFFECT AFTER STATE AND FEDERAL ACTION TO ADOPT A REGIONAL OR STATE-WIDE PROGRAM]

10.17.190 Further expansion of commuter mobility program.

The Assistant City Manager for Community Development, in consultation with the City Manager, shall have authority to hire additional staff to implement the tasks and programs specified in this Chapter. Within three months of the effective date of this provision, at least one additional Commuter Mobility Staff

member shall be hired. The Commuter Mobility Coordinator shall develop and promptly implement additional programs including but not limited to:

A. A program encouraging the use and sharing of computer ride-sharing information between and among businesses and institutions in the City;

B. A program to encourage commercial and retail businesses to offer discounts to patrons with MBTA transit passes; and

C. Implementation of an in-city paratransit system, to the extent funds are available, to supplement MBTA services.

The Commuter Mobility Coordinator shall develop and recommend additional programs, including but not limited to, a residential trip reduction program for apartment and condominium complexes of fifty or more units. (Ord. 1139 (part), 1992)

10.17.200 Restrictions on parking supply.

A. Expansion of Parking Regulation. Within six months of the effective date of the ordinance codified in this provision, the Traffic and Parking Department shall submit to the City Manager an updated written inventory of all on-street parking spaces specifying the restrictions applicable to each such parking space. As to any space which has not been restricted or removed from the supply of on-street spaces pursuant to Section 10.16.071 of this title, the Traffic and Parking Department shall prepare a recommendation for restriction of each such space to discourage its use for long-term commuter parking. These restrictions may include, without limitation an absolute prohibition against parking, installation of parking meters, imposition of time restrictions, and/or restrictions for use by residents with permits. The Director of Traffic and Parking shall make the

recommendations available for public review and shall schedule one or more public meetings, as appropriate, for public discussion of the recommendations. Within one month after the public meetings, the Traffic and Parking Department shall submit its revised recommendation to the City Manager. After consultation with the City Manager, the Traffic and Parking Department shall promptly implement the recommendations.

B. Municipal Parking Rates. The rates for daily and monthly parking at all City-owned off-street parking facilities shall be increased by twenty-five percent over current rates, to be effective within sixty days of the effective date of this provision.

C. Exclusive Residential Parking Near MBTA Stations. The Traffic and Parking Department, in consultation with neighborhood groups, residents, commercial establishments, and the City Manager, shall prepare a proposal for establishing exclusive residential parking zones on primarily residential streets located near MBTA stations. The object of the proposal shall be to limit residential parking on targeted streets close to MBTA stations to residents of those neighborhoods by means of appropriate signage and special resident stickers. The Traffic and Parking Department shall convene a public meeting on its proposal within four months of the effective date of this provision. Within one month after such public meeting, and after consultation with the City Manager, the Director of Traffic and Parking shall cause the proposal to be implemented. (Ord. 1139 (part), 1992)

10.17.210 Promotion of clean fuels.

The Department of Public Works shall study, promote, encourage, and identify incentives for the use of clean fuel in fleets of vehicles operating within the City. The study shall include an evaluation

of the use of such fuels as methanol, compressed natural gas, and reformulated gasoline based on characteristics of fleets in Cambridge and implementation costs. The study shall also identify reasonably available incentives which could be offered by the City, such as tax credits, to encourage use of clean fuel in fleets of vehicles. The sum of fifteen thousand dollars shall be appropriated for this program. (Ord. 1139 (part), 1992)

10.17.220 Development of traffic policy.

The Assistant City Manager for Community Development and the Director of the Traffic and Parking Department, or their designees, shall within one year of the effective date of this provision, conduct a study of major highways, city through streets, streets with schools, different types of residential streets, and streets at the borders of the City. Based on that study, they shall prepare a written recommendation of:

A. Appropriate speeds and volumes for Cambridge streets; and

B. Means of encouraging travel and traffic patterns that reduce VMTs.

This written recommendation shall be submitted to the City Council for review and appropriate action. (Ord. 1139 (part), 1992)

10.17.230 Sunset clause.

The provisions of this chapter shall cease to be effective ninety days after the date the Department of Environmental Protection or the U.S. Environmental Protection Agency adopts a final rule or regulation that imposes transportation control measures including parking supply management measures in Cambridge which do not have an equal impact on the Region. The purpose of this sunset clause is to give the City the opportunity to decide whether to continue to implement the numerous

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provisions of this chapter in the event that the final rule or regulation puts the City at a competitive disadvantage in the region. (Ord. 1139 (part), 1992)

Chapter 10.18

PARKING AND TRANSPORTATION DEMAND MANAGEMENT PLANNING; PARKING SPACE REGISTRATION

Sections:

- 10.18.010 Purpose.
- 10.18.020 Definitions.
- 10.18.030 PTDM Planning Officer.
- 10.18.040 Registration of All Parking Spaces.
- 10.18.050 Parking and Transportation Demand Management Plans.
- 10.18.060 Reduction in Minimum Parking and Maximum Distance Requirements.
- 10.18.070 Requirements Applicable to Small Projects.
- 10.18.080 Enforcement.
- 10.18.090 Evaluation.

Section 10.18.010 Purpose.

(a) It is the purpose of this Chapter to regulate and control atmospheric pollution from motor vehicles by formalizing parking and transportation demand management planning, programs, and coordination which have been ongoing for a number of years. This Chapter will reduce vehicle trips and traffic congestion within the City, thereby promoting public health, safety, and welfare and protecting the environment. This Chapter requires parking and transportation demand management (PTDM) plans for commercial parking facilities and other types of non-residential parking facilities over a specified size as set forth in

10.18.050 and 10.18.070. This Chapter also establishes a process whereby City officials will be able to track the number, use and location of off-street parking spaces in the City.

(b) A Parking and Transportation Demand Management Planning Officer will be designated by the City Manager with the responsibility for reviewing, conditioning, approving and/or denying PTDM plans. Any project subject to the requirements of this Chapter shall not be qualified to receive a permit from the Planning Board, a commercial parking permit from the Commercial Parking Control Committee, a special permit or variance from the Board of Zoning Appeal, a building permit from the Commissioner of Inspectional Services, a certificate of occupancy from the Commissioner of Inspectional Services, or an operating license from the License Commission absent written approval of its PTDM plan from the PTDM Planning Officer or evidence of registration of its parking spaces with the Department of Traffic, Parking, and Transportation. (1211, Added, 11/16/1998)

Section 10.18.020 Definitions.

"Commercial Parking Space" means a parking space available for use by the general public at any time for a fee. The term shall not include (i) parking spaces which are owned or operated by a commercial entity whose primary business is other than the operation of parking facilities, for the exclusive use of its lessees, employees, patrons, customers, clients, patients, guests or residents but which are not available for use by the general public; (ii) parking spaces restricted for the use of the residents of a specific residential building or group of buildings; (iii) spaces located on public streets; or

10.18.020

(iv) spaces located at a park-and-ride facility operated in conjunction with the Massachusetts Bay Transportation Authority.

"Commercial Parking Facility" means a parking facility owned or operated by a commercial entity whose primary business is the operation of a parking facility and at which there are at least five (5) Commercial Parking Spaces.

"Commercial Parking Permit" means a (i) permit issued under chapter 10.16 of the Cambridge Municipal Code, authorizing the use of a designated number of parking spaces at a specified location as Commercial Parking Spaces; (ii) a permit or approval issued prior to the effective date of this Chapter pursuant to the Procedures, Criteria, and Memorandum of Agreement dated November 15, 1984; (iii) a Controlled Parking Facility Permit that expressly authorizes use of the parking facility for Commercial Parking Spaces; or (iv) a letter from the Director confirming the number of spaces at a specified location that were in existence and being used as Commercial Parking Spaces as of October 15, 1973.

"Controlled Parking Facility Permit" (CPFP) means a permit issued by the Director prior to the effective date of this Chapter, which authorized the construction or operation of a parking space or the construction, operation, or modification of a parking facility.

"Determination of Exclusion" means a determination made by the Director that a parking facility or a parking space did not require a controlled parking facility permit.

"Director" means Director of the Cambridge Department of Traffic, Parking, and Transportation.

"Effective Date" means November 16, 1998, the original date of final adoption of

this Chapter of the Cambridge Municipal Code.

"Existing Parking Facility" shall mean a parking facility for which (i) a certificate of occupancy was issued by the Commissioner of Inspectional Services; (ii) an operating license was issued by the License Commission; or (iii) the Director issued a letter confirming the number of spaces at that location which spaces were in existence and being used as commercial parking spaces as of October 15, 1973 (a "Director's Letter").

"New Project" means a project to construct or operate parking spaces within a new facility or an existing parking facility which will cause such facility to have a net increase in the number of spaces for which a certificate of occupancy, operating license, variance, special permit, or Director's Letter has not been issued as of the effective date of this Chapter and which is not a park-and-ride facility operated in conjunction with the Massachusetts Bay Transportation Authority.

"Parking Facility" means any lot, garage, building or structure or combination or portion thereof, on or in which motor vehicles are parked, except any such facility used in association with or by a municipal police or fire station, and in the case of university or college campuses, the stock of parking spaces maintained within the City by the university or college which supports university or college activities within the City.

"Person" means and includes a corporation, firm, partnership, association, executor, administrator, guardian, trustee, agent, organization, any state, regional or political subdivision, agency, department, authority or board, and any other group acting as a unit, as well as a natural person.

"Planning Officer" means the City official responsible for PTDM plan reviews.

"PTDM" means Parking and Transportation Demand Management.

"Small Project" means a project to construct or operate five (5) to nineteen (19) non-commercial, non-residential parking spaces within a new facility or an existing parking facility which will cause such Facility to have a net increase in the number of spaces for which a certificate of occupancy, operating license, variance, special permit, or Director's Letter has not been issued as of the effective date of this Chapter. To qualify as a Small Project, the total number of non-commercial, non-residential parking spaces at the parking facility must remain at or below nineteen (19).

(1252, Amended, 09/24/2001; 1211, Added, 11/16/1998)

Section 10.18.030 PTDM Planning Officer.

Within thirty (30) days of the effective date of this Chapter, the City Manager shall designate a Parking and Transportation Demand Management Planning Officer who shall have responsibility for reviewing, conditioning, approving, and/or denying PTDM plans and who shall report to the City Manager. Said officer shall be a Cambridge resident within six months of employment in this position. Prior to rendering his/her determination(s), the Planning Officer shall consult with the PTDM plan applicant, the Director and the Assistant City Manager for Community Development.

(1211, Added, 11/16/1998)

Section 10.18.040 Registration of All Parking Spaces.

(a) No person shall build, expand, or reconfigure a parking facility for non-residential parking spaces resulting in a net

increase in the number of parking spaces or a change in the use of such spaces based on the categories of use listed below at paragraphs b(v) and (vi), without first submitting a parking registration form to, and obtaining acceptance from, the Director.

(b) The registration form shall be prepared by the Director and shall be available at the offices of the Department of Traffic, Parking and Transportation. The form will require the following information:

(i) name and address of parking facility owner;

(ii) name and address of parking facility operator;

(iii) address of parking facility;

(iv) total number of existing parking spaces;

(v) number of existing parking spaces in each of the following categories:

- residential
- commercial
- non-commercial
- customer
- employee
- patient
- student
- client
- guest

(vi) number of parking spaces proposed to be added to the parking facility in each of the following categories:

- residential
- commercial
- non-commercial
- customer
- employee
- patient
- student
- client
- guest

10.18.050

(vii) identification of any existing parking permits for the parking facility; and

(viii) explanation of any enforcement actions against the parking facility.

(c) The Director shall accept or return a registration form to the registrant with a request for additional information within thirty (30) days after the form was filed.

(d) The License Commission shall not issue a license and the Commissioner of Inspectional Services shall not issue a building permit or certificate of occupancy for a parking facility subject to this section without evidence (i) that the registration form has been accepted by the Director; and (ii) if required, that the facility has a PTDM Plan approved by the Planning Officer. (1252, Amended, 09/24/2001; 1211, Added, 11/16/1998)

**Section 10.18.050 Parking and
Transportation
Demand
Management
Plans.**

(a) No person shall build, expand, or operate a parking facility subject to the Parking and Transportation Demand Management (PTDM) Plan requirements of this Chapter absent a PTDM Plan approved by the Planning Officer.

(b) The PTDM requirements of this Chapter shall apply to each of the following:

(i) any commercial parking facility for which a certificate of occupancy or operating license, variance or special permit was not obtained prior to the effective date of this chapter;

(ii) an existing commercial parking facility at which the number of parking spaces is increased after the effective date of this chapter;

(iii) any parking facility at which the use of existing or permitted parking spaces is changed to commercial use after the effective date of this chapter;

(iv) any new project to build or create by change of use twenty or more non-residential parking spaces; and

(v) any new project to expand an existing parking facility resulting in a total number of non-residential parking spaces of twenty (20) or more.

(c) The PTDM Plan shall be designed to minimize the amount of parking demand associated with the project and reduce single-occupant vehicle trips in and around Cambridge. The PTDM Plan shall be based on the following facts, projections and commitments:

(i) Facts and Projections:

- nature of development and property use;

- proximity of project to public transit and other non-Single-Occupant Vehicle facilities;

- availability of and accessibility to offsite parking spaces which could serve the project;

- number of employees and their likely place of origin; and

- type and number of patrons/users of proposed parking supply and their likely place of origin.

- number of vehicle trips expected to be generated by the project and description of measures to reduce associated traffic impacts on Cambridge streets; and

- other factors published by the Planning Officer.

(ii) Commitments:

- commitment to work with the Cambridge Office of Work Force Development;

- commitment to implement vehicle trip reduction measures including some or all of the following:

subsidized MBTA passes and other incentives; shuttle services; ride-sharing services; bicycle and pedestrian facilities; flexible working hours; preferential parking for Low Emission Vehicles/Zero Emission Vehicles/bicycles/carpools/vanpools (Note: this list is not meant to preclude implementation of other types of vehicle trip reduction measures). This commitment must be accompanied by a detailed description of the measures proposed to be implemented; and

commitment to establish and make reasonable efforts to achieve a specified, numeric reduction (or percent reduction) in single-occupant vehicle trips in and around Cambridge. The percent reduction will be based on PTDM practices successfully implemented in reasonably comparable environments and as identified in professional and academic literature and based on analysis of existing trip reduction measures in Cambridge.

Each PTDM Plan shall identify the total number of existing and proposed parking spaces at the facility and specify how many existing and proposed spaces fall within each of the following categories (explain how many spaces are used for multiple purposes):

- residential
- commercial
- non-commercial
- customer
- employee
- patient
- student
- client
- guest

Where the parking facility includes or proposes a combination of commercial and non-commercial parking spaces, the Plan shall specify how the parking facility will prevent commercial use of the non-commercial parking spaces.

Each PTDM Plan shall contain the following certification signed by an authorized corporate officer:

"I hereby certify that a commercial parking permit has been obtained for each space being used for commercial parking. None of the other existing or proposed parking spaces at this parking facility have been or will be available as commercial parking spaces until a commercial parking permit therefor has been obtained."

(d) The Planning Officer shall review, condition, approve and/or deny the PTDM Plan based on the above-listed facts, projections, and commitments. The Planning Officer shall issue his/her decision in writing within 60 days of receipt of the proposed PTDM Plan. The required time limit for action by the Planning Officer may be extended by written agreement between the proponent and the Planning Officer. Failure by the Planning Officer to take final action within said sixty (60) days or extended time, if applicable, shall be deemed to be approval of the proposed PTDM plan. If the project proponent elects to make a request pursuant to 10.18.060, the decision of the Planning Officer shall be expanded to include a recommendation about whether off-site parking should be allowed at distances greater than those allowed in the Zoning Ordinance and/or whether fewer parking spaces than the minimum required in the Zoning Ordinance should be allowed. Decisions of the Planning Officer may be appealed by the project proponent to a review

10.18.050

committee composed of the City Manager, or his designee, and two other City staff members designated by the City Manager none of whom may have participated in the initial review of the Plan.

(e) The Planning Officer shall also make available sample PTDM plans which a project proponent may adapt for their project, such to approval by the Planning Officer.

(f) No permit, commercial parking permit, special permit, variance, building permit, certificate of occupancy, or operating license shall be issued for any project subject to 10.18.050 by the Planning Board, Commercial Parking Control Committee, Board of Zoning Appeal, Commissioner of Inspectional Services, or License Commission absent a written decision indicating approval from the Planning Officer of the project proponent's PTDM Plan. Any such permit or license shall be consistent with, and may incorporate as a condition, the decision of the Planning Officer and shall include written notice of the requirements of 10.18.050 (g) and (h), below. Nothing in this ordinance shall be construed to limit the power of the Planning Board or Board of Zoning Appeal to grant variances from or special permits under the provisions of the Zoning Ordinance. No project proponent shall be required by the Planning Officer to seek such relief under the Cambridge Zoning Ordinance.

(g) Approvals issued by the Planning Officer shall be automatically transferrable by and among private parties, provided that the proposed new owner (the "Transferee") shall continue to operate under the existing PTDM Plan and shall submit to the Planning Officer within thirty (30) days of the title transfer a certification that the existing PTDM plan will remain in effect. The certi-

fication shall be submitted on a form issued by the Planning Officer and shall certify that such Transferee commits to implement the existing PTDM plan, as approved; and acknowledges that failure to implement the plan is subject to the enforcement provisions of this Chapter. Where such certification is submitted, the approved plan shall remain in effect as to the Transferee. The Transferee may elect instead to and consult with the Planning Officer within thirty (30) days of title transfer regarding appropriate revisions to the existing plan. Based on such consultation, the Planning Officer may require information from the Transferee concerning proposed changes in use of the parking facility and associated buildings and the relevant facts and projections regarding the proposed changes. Within thirty (30) days of receipt of such information, the Planning Officer may issue a written approval of the revised plan and obligations to the Transferee, or the Planning Officer may require submittal of a new PTDM Plan from the Transferee for review, condition, approval and/or denial. Until such time as a new or revised plan has been approved, the existing PTDM plan shall remain in effect.

(h) Each PTDM Plan approval issued by the Planning Officer shall contain, at a minimum, the following conditions:

(i) The parking facility owner and operator each commit to implement all elements of the PTDM Plan, as approved, including annual reporting requirements, and to maintain records describing implementation of the Plan;

(ii) The City shall have the right to inspect the parking facility and audit PTDM implementation records; and

(iii) The parking facility owner and operator each commit to notify and consult

with the Planning Officer thirty (30) days prior to any change in ownership, use or operation of the facility.

(1252, Amended, 09/24/2001; 1211, Added, 11/16/1998)

**Section 10.18.060 Reduction in
Minimum Parking
and Maximum
Distance
Requirements.**

(a) A project proponent may elect to request that the Planning Officer include as an element of its PTDM Plan a plan for fewer parking spaces that the minimum set forth in the Zoning Ordinance. Upon the written request of the project proponent, based on an evaluation of the facts, projections, and commitments listed at 10.18.050 (c), the Planning Officer may make a written recommendation about the maximum number of parking spaces for the project. This recommendation shall remain subject to review and approval by the Planning Board or Board of Zoning Appeal as appropriate.

(b) A project proponent may elect to request that the Planning Officer include as an element of its PTDM Plan a plan for utilizing off-site parking spaces that are farther from the project site than the maximum distance requirements set forth in the Zoning Ordinance. Upon the written request of the project proponent, based on an evaluation of the facts, projections, and commitments listed at 10.18.050 (c), the Planning Officer may make a written recommendation about how many parking spaces serving the project may be appropriately located at an off-site location and at what distance from the project site. This recommendation shall remain subject to review and approval by the

Planning Board or Board of Zoning Appeal as appropriate.

(1211, Added, 11/16/1998)

**Section 10.18.070 Requirements
Applicable to
Small Projects.**

The owner or operator of each Small Project shall implement at least three (3) PTDM measures and maintain records of such implementation. A list of acceptable types of measures may be obtained from the Traffic, Parking and Transportation Department, the Inspectional Services Department, the Community Development Department, or the License Commission. The Planning Officer shall create and periodically update this list, which shall include: T-pass subsidies; bicycle parking; changing facilities; carpools/vanpools; financial incentives not to drive alone; or other similar measures.

(1252, Amended, 09/24/2001; 1121, Added, 11/16/1998)

Section 10.18.080 Enforcement.

(a) The Director shall enforce the provisions of this Chapter. If the Director has reason to believe that any provision of this Chapter is being violated, the Director shall investigate the possible violation. If after investigation the Director determines that any provision of this Chapter is being violated, s/he shall provide a first written notice of violation to the person charged with the violation, or the duly authorized representative thereof, of the determination of violation and shall order that the violation cease within thirty (30) days of the issuance of the first written notice. If the violation is not cured within the thirty (30) days after issuance of the determination of violation, the Director may proceed to assess the fines es-

10.18.090

established in this chapter as well as any other remedies available to the city. In addition to all other remedies, if the violation has not ceased within thirty (30) days after the first written notice, then the Director may order shutdown of the parking facility. Second or subsequent written notices to a facility for the same violation shall be immediately effective and shall not provide the thirty (30) day opportunity to cure contained in the first written notice. A determination and order of the Director may be appealed to the City Manager by the person charged with the violation within thirty (30) days of issuance of the Director's determination and order.

(b) In addition to other remedies available to the City, any person who builds or modifies a parking facility without complying with the provisions of this Chapter shall be subject to a fine of up to \$10.00 per day per parking space for every day that such parking space was operated without a registration accepted by the Director or without a PTDM Plan approval issued by the Planning Officer or in non-compliance with an approved PTDM Plan. On a determination, after investigation, by the Director that this Chapter is being violated, and the exhaustion of any appeal to the City Manager in accordance with (a) above, the Director shall take steps to enforce this chapter by causing complaint to be made before the district court and/or by applying for an injunction in the superior court.

(c) In addition to other remedies available to the City, a determination that a facility is operating in violation of the provisions of this Chapter shall be ground for revocation by the Director of the facility's parking permit or other form of approval.

(d) The Planning Officer shall have independent authority to inspect a parking fa-

cility and audit its records to determine whether it is in compliance with its PTDM Plan. The Planning Officer shall issue a finding of non-compliance in writing and provide copies to the parking facility owner and operator and to the Director.

(1211, Added, 11/16/1998)

Section 10.18.090 Evaluation.

The PTDM Planning Officer shall prepare a report annually on the status and effectiveness of the implementation of this Ordinance.

(1300, Amended, 09/11/2006; 1252, Amended, 09/24/2001; 1211, Added, 11/16/1998)

APPENDIX B: CAMBRIDGE COMMUNITY SURVEY SUMMARY

Cambridge Bicycle Survey Summary

October, 2014

This is an overview of the key results from a survey administered as part of the Cambridge Bicycle Network Plan public outreach.

Conclusion: Although most people who responded to the on-line survey about bicycling in Cambridge ride frequently and extensively, they report that they are not comfortable on many streets and would like to see more protected bicycle facilities and bicycle-friendly street designs.

Survey Background

As part of creating a new Bicycle Master Plan for Cambridge, an on-line survey was administered during June, 2014. The survey was open to anyone, and although outreach about the survey was sent broadly throughout the community, most of the survey participants were regular cyclists, and thus not representative of the population of Cambridge, or of greater Boston. 733 responses were received.

The survey was designed to determine what kind of bicycle facilities are most comfortable for users and what will enable parents and guardians to feel that their kids can bike safely in the City. Survey questions focused on:

- Bicycling habits
- Comfort with bicycling on different streets and various bicycle facility types
- Children's bicycling habits and parents/guardians' comfort allowing children to ride on different streets/facility types



Who Responded to the Survey?

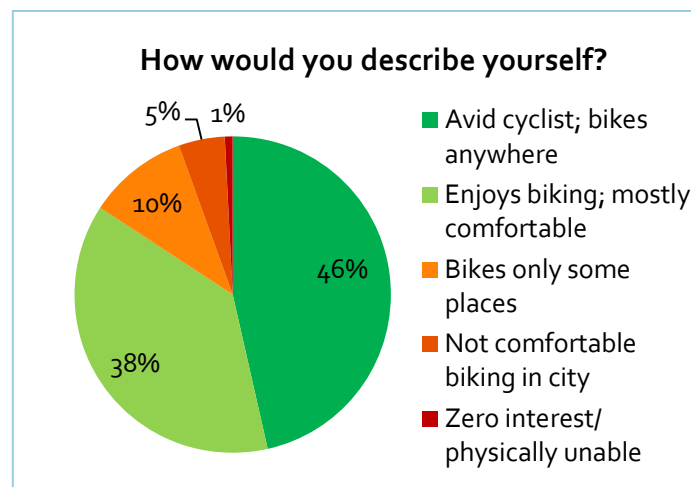
- The majority of respondents (53%) were female
- The majority of respondents were between 25-44 years old. Only 7% were in the 18-24 year old population; this would seem an underrepresentation of the student/young adult population who live and bicycle in Cambridge. This may be because the survey was administered in June, when area schools are out for the summer, although approximately 12% identified themselves as full or part-time students



- Approximately half the respondents are Cambridge residents, with another 35% living in the abutting communities
- 89% identified themselves as white/Caucasian, not representative of the general population in Cambridge
- 28% of respondents have children under age 18 at home

Bicycling Habits of Respondents

- The plurality of respondents consider themselves avid cyclists who bike everywhere, followed closely by people who are enthusiastic cyclists who prefer to ride on main streets with bike lanes or on minor streets with traffic calming/ low traffic speeds/ residential streets. About 15% limit their riding to off-road paths or out of the city.
- The vast majority of respondents ride several days a week outside of winter
- The majority of respondents ride at least sometimes during the winter and almost a quarter continue to ride daily.

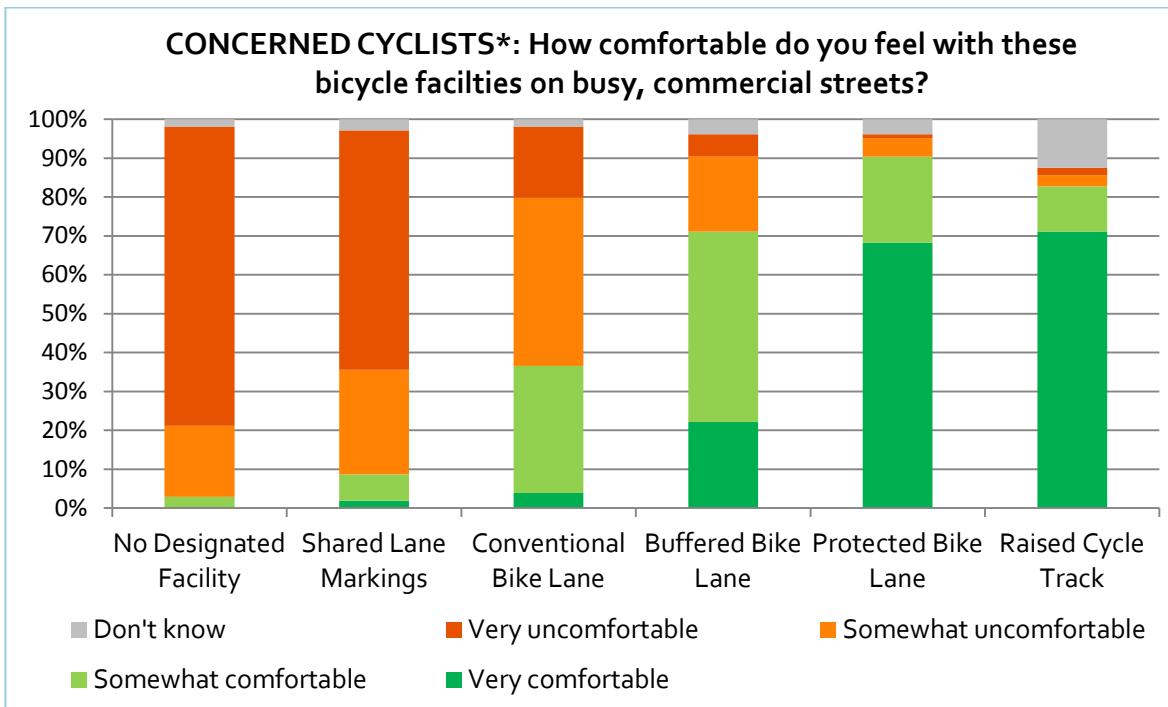
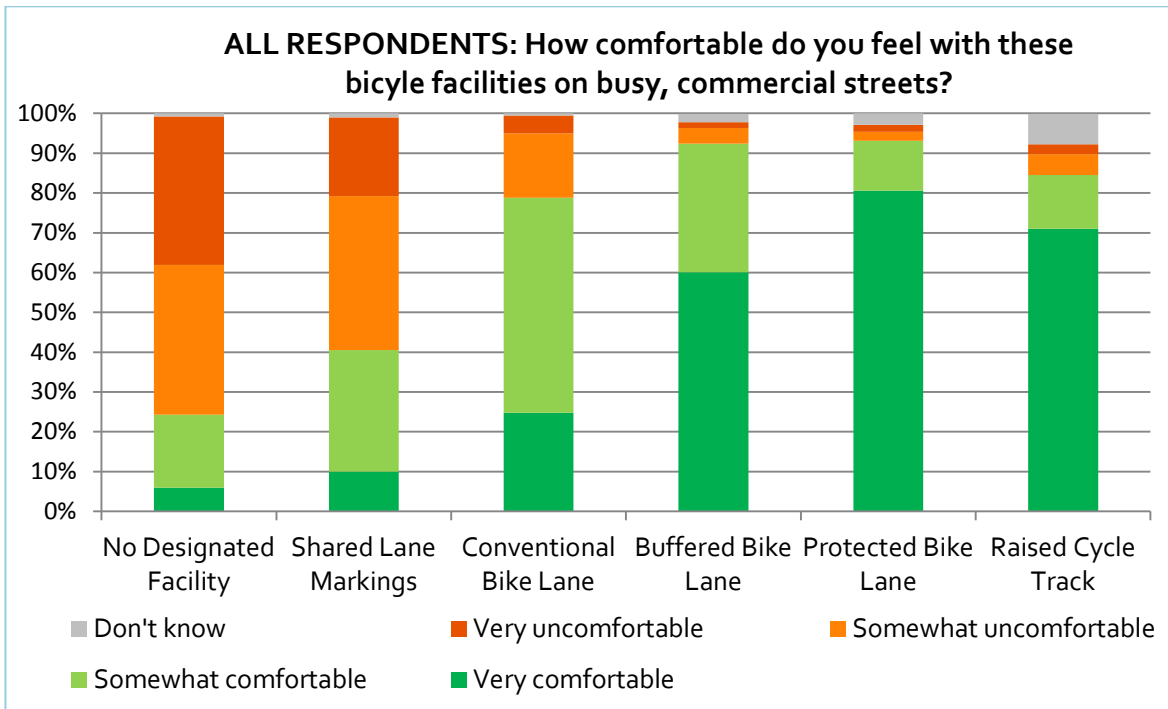


Bicyclist Comfort Levels

Cyclists were asked about their comfort levels cycling on a variety of accommodations. People were asked about their comfort levels on busy commercial streets and on non-commercial streets and sample photographs were shown for each condition.

People were also asked a separate series of questions about bicycling with children, including similar questions about comfort levels on various road types and bicycle accommodations.

Bicycling Comfort on Busy, Commercial Streets



*Concerned cyclists are defined as survey respondents who reported that they bike only some places or are not comfortable biking in the city.

Photos of Bicycle Facilities on Busy, Commercial Streets

Street with Shared Lane Markings



Street with Shared Lane Markings



Conventional Bike Lane



Conventional Bike Lane



Buffered Bike Lane



Buffered Bike Lane



Protected Bike Lane



Protected Bike Lane



Raised Cycle Track



Raised Cycle Track



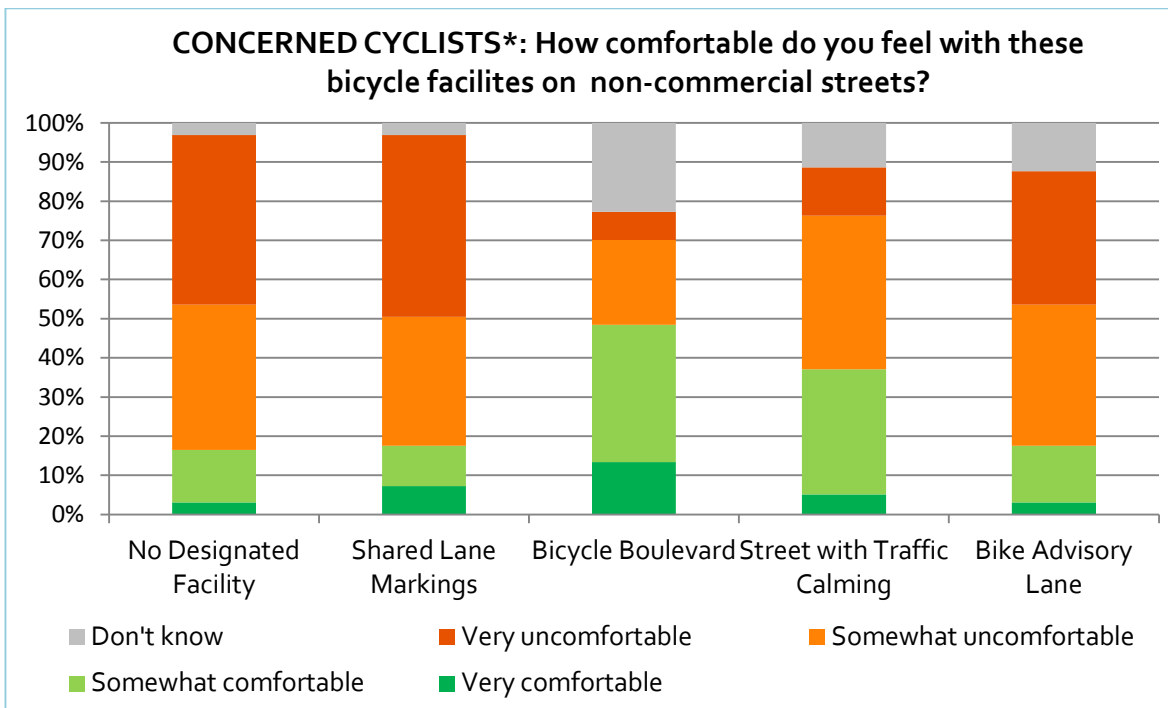
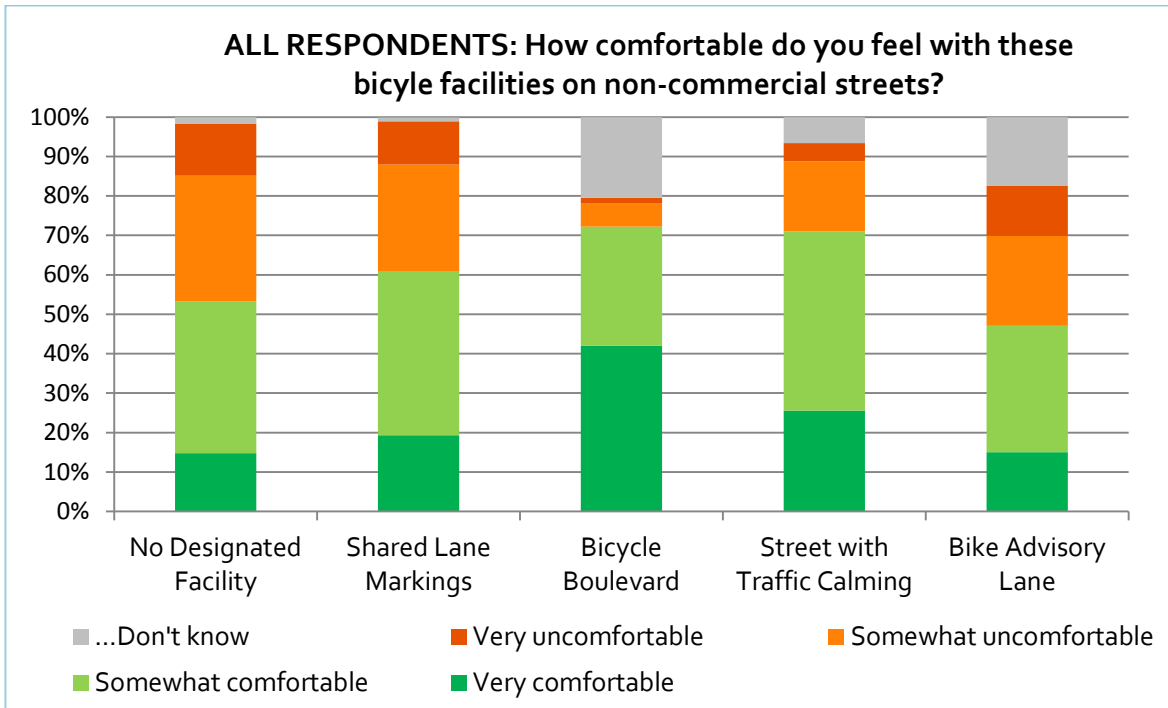
No designated facility



No designated facility



Bicycling Comfort on Non-Commercial Streets



*Concerned cyclists are defined as survey respondents who reported that they bike only some places or are not comfortable biking in the city.

Photos of Bicycle Facilities on Non-Commercial Streets

Street with Shared Lane Markings



Street with Shared Lane Markings



Bicycle Boulevard



Bicycle Boulevard



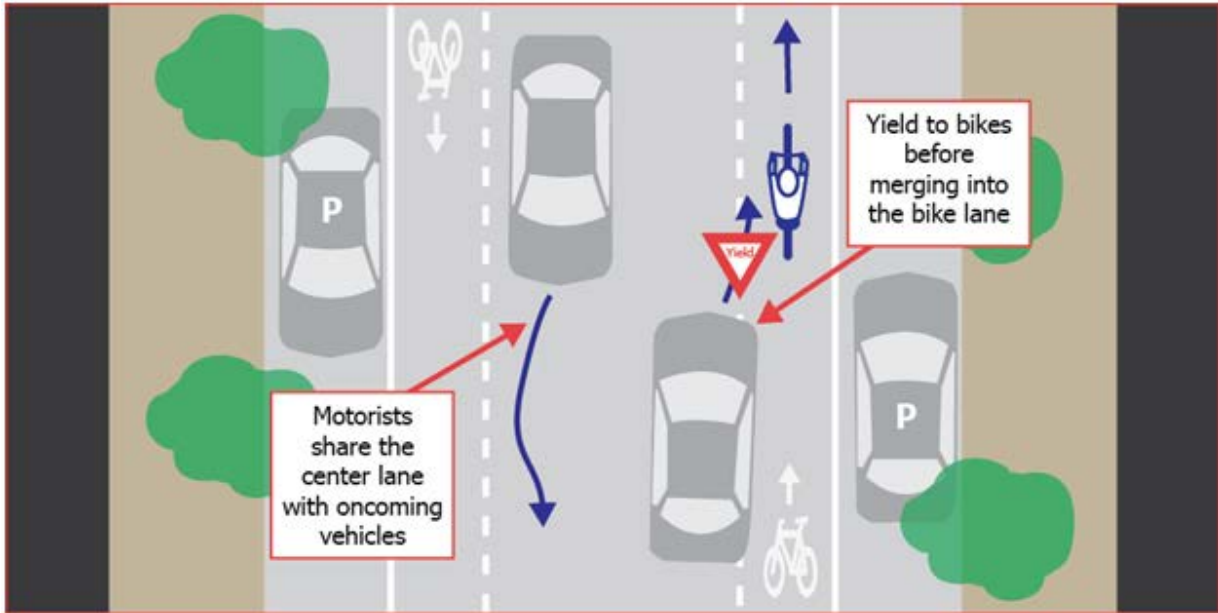
Street with Traffic Calming



Street with Traffic Calming



Bicycle Advisory Lanes



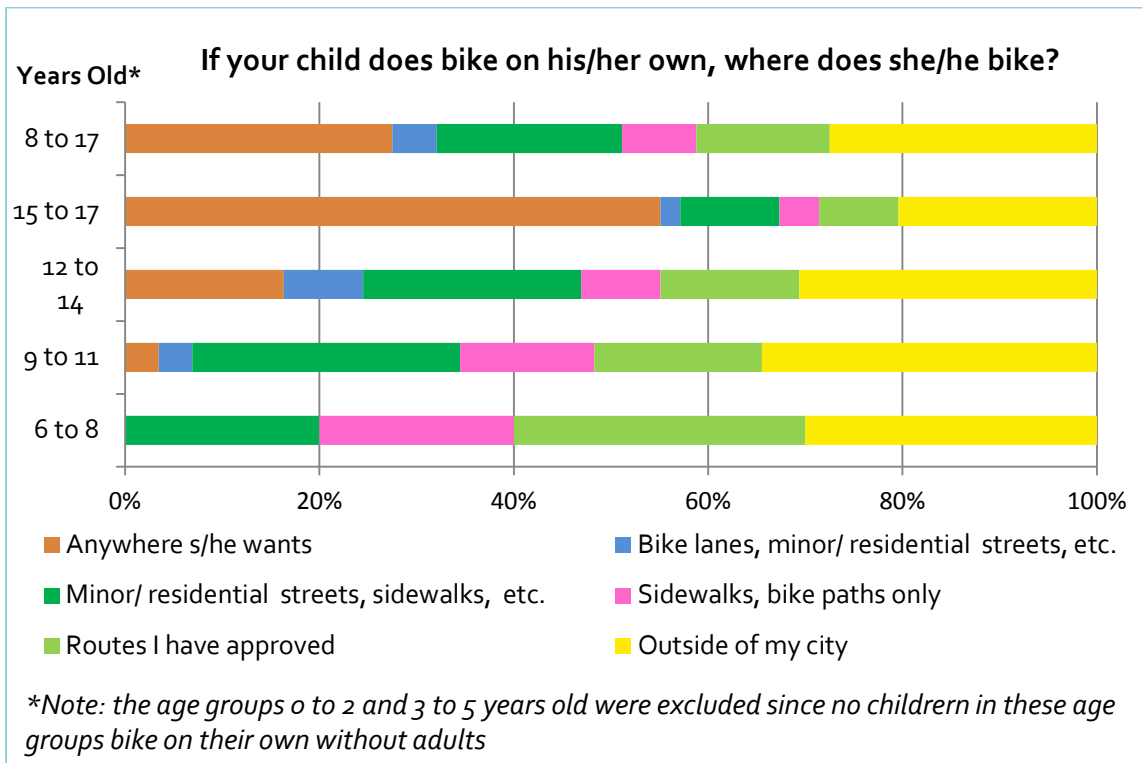
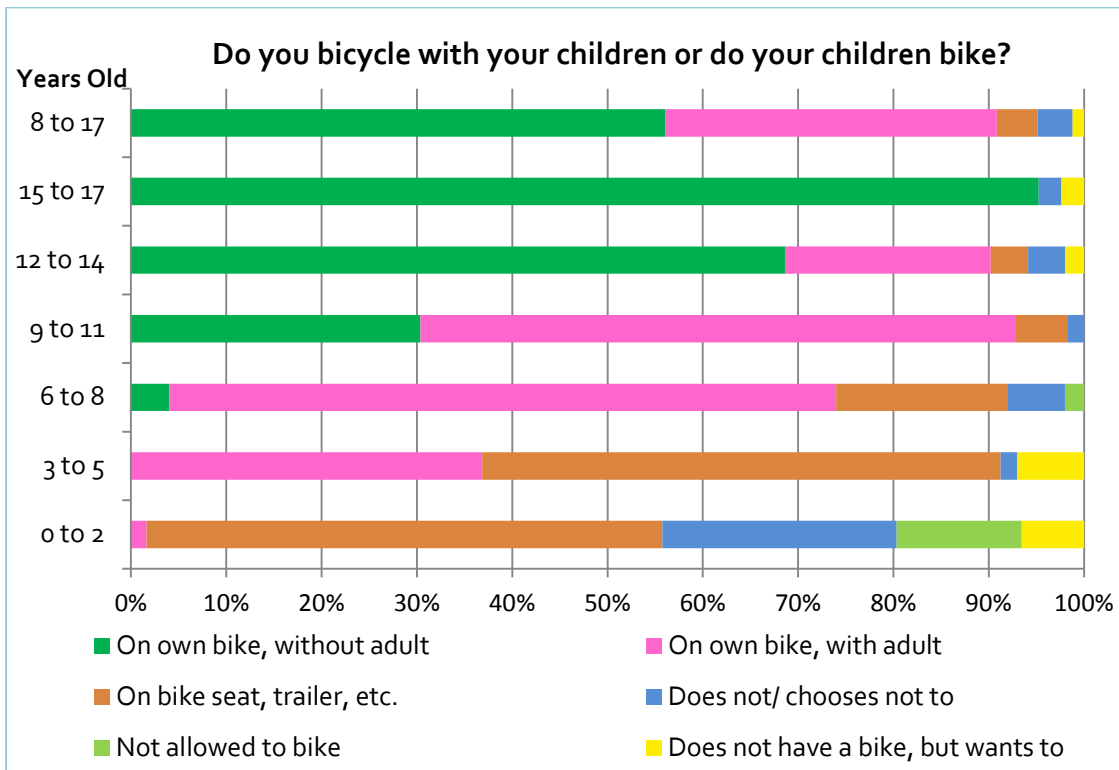
Bicycle Advisory Lanes



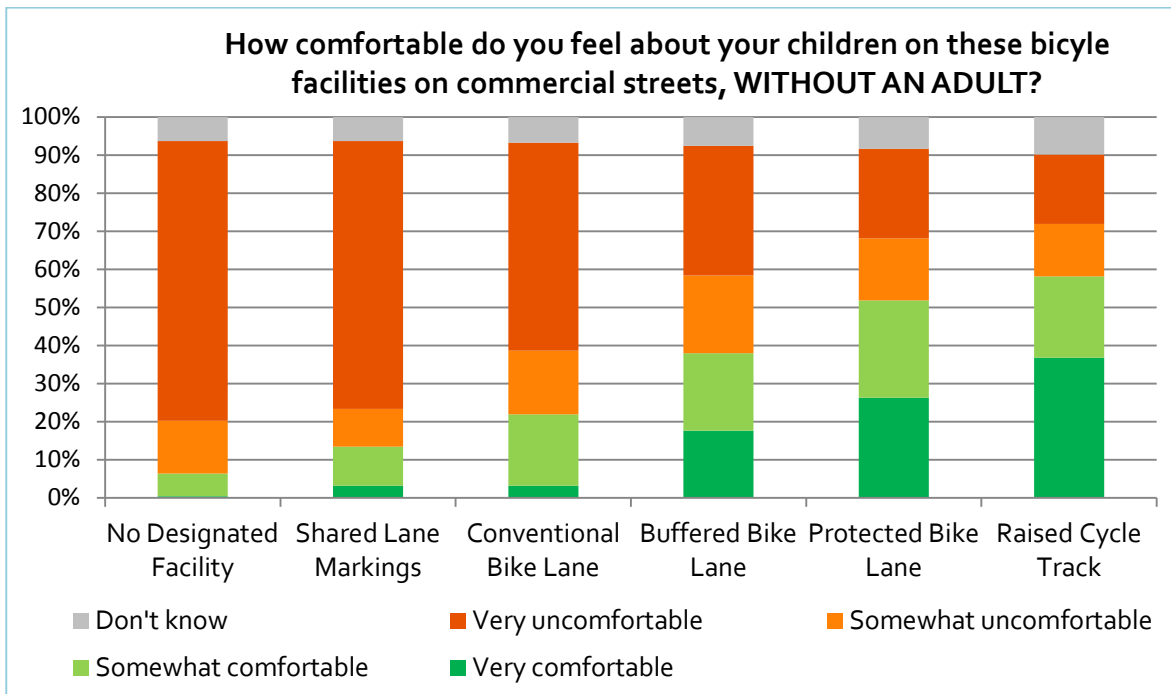
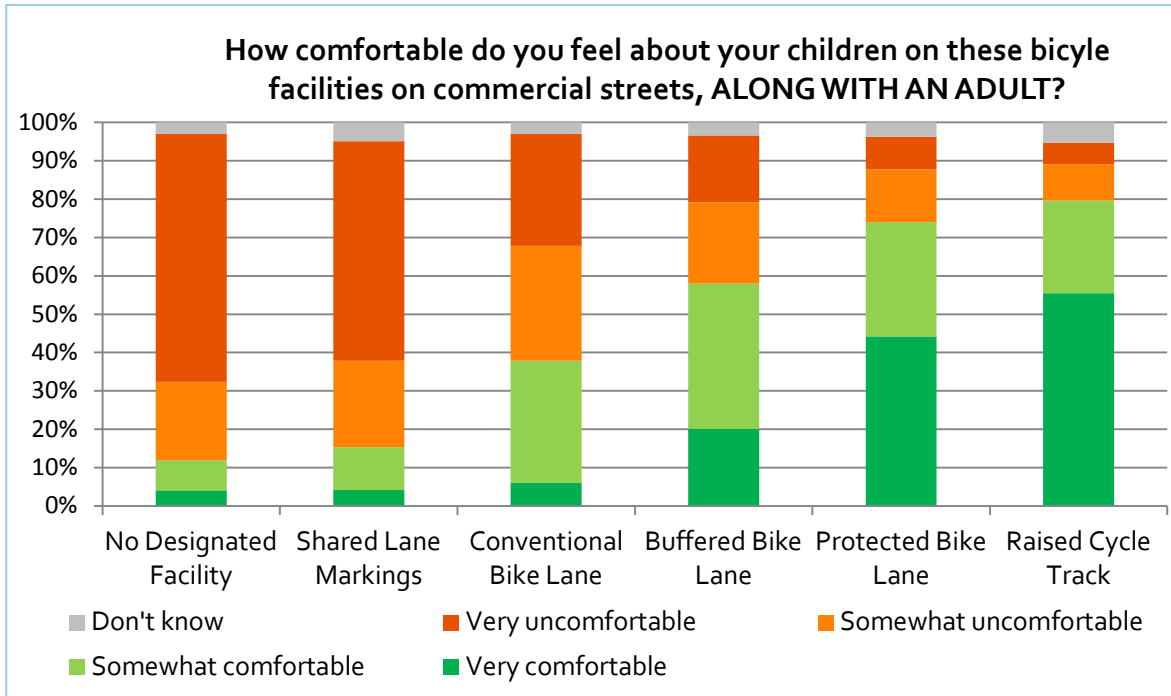
No designated facility



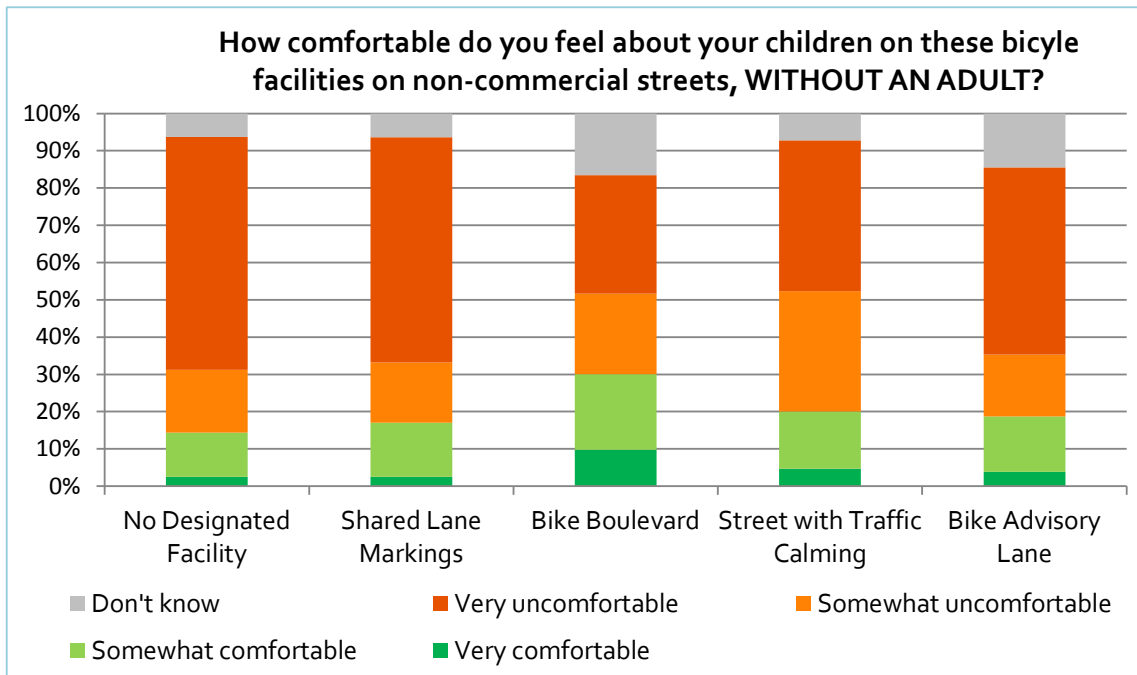
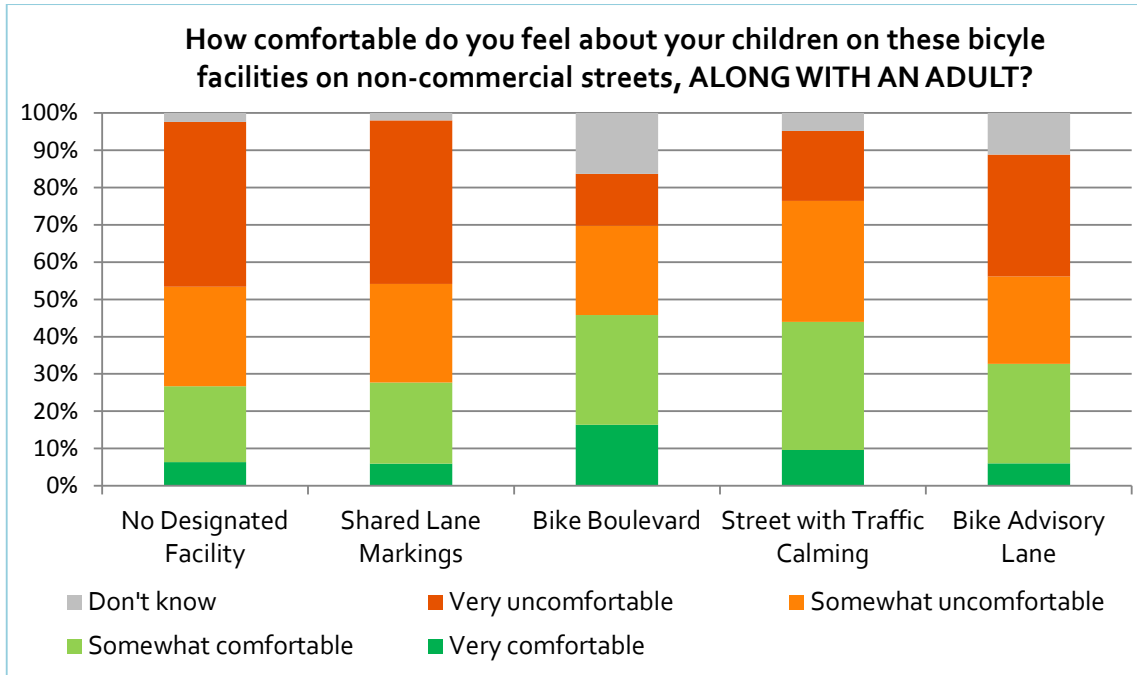
Questions about Bicycling with Children



Bicycling Comfort on Busy, Commercial Streets - Children

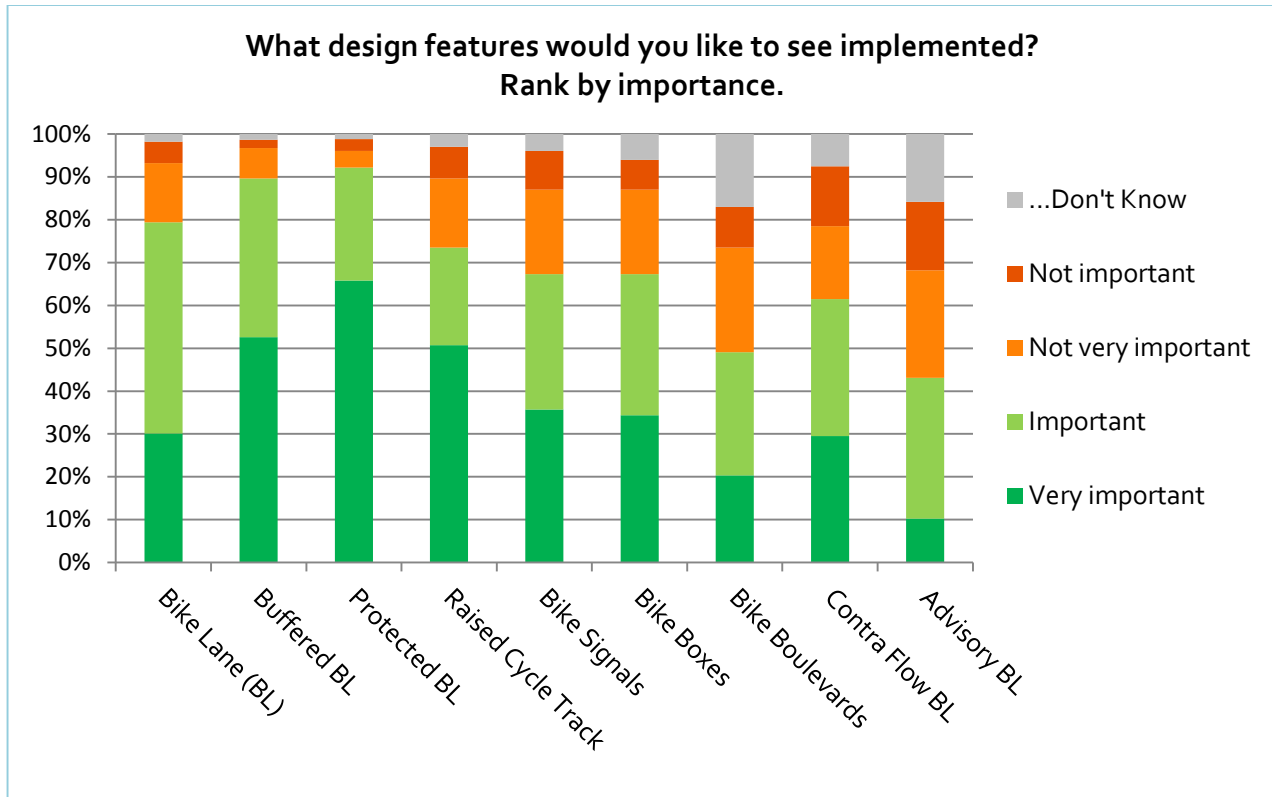


Bicycling Comfort on Non-Commercial Streets - Children



Preferred Bicycle Facilities

Survey respondents were asked to rate the importance of various bicycle facility options that they would like to see implemented in Cambridge.



Photos of Bicycle Design Features

Conventional Bike Lane



Buffered Bike Lane



Protected Bike Lane



Raised Cycle Track



Bicycle Traffic Signals



Bike Boxes



Bicycle Boulevard



Dave Parisi

Bicycle Boulevard



Payson Chiang

Contra-Flow Bike Lanes

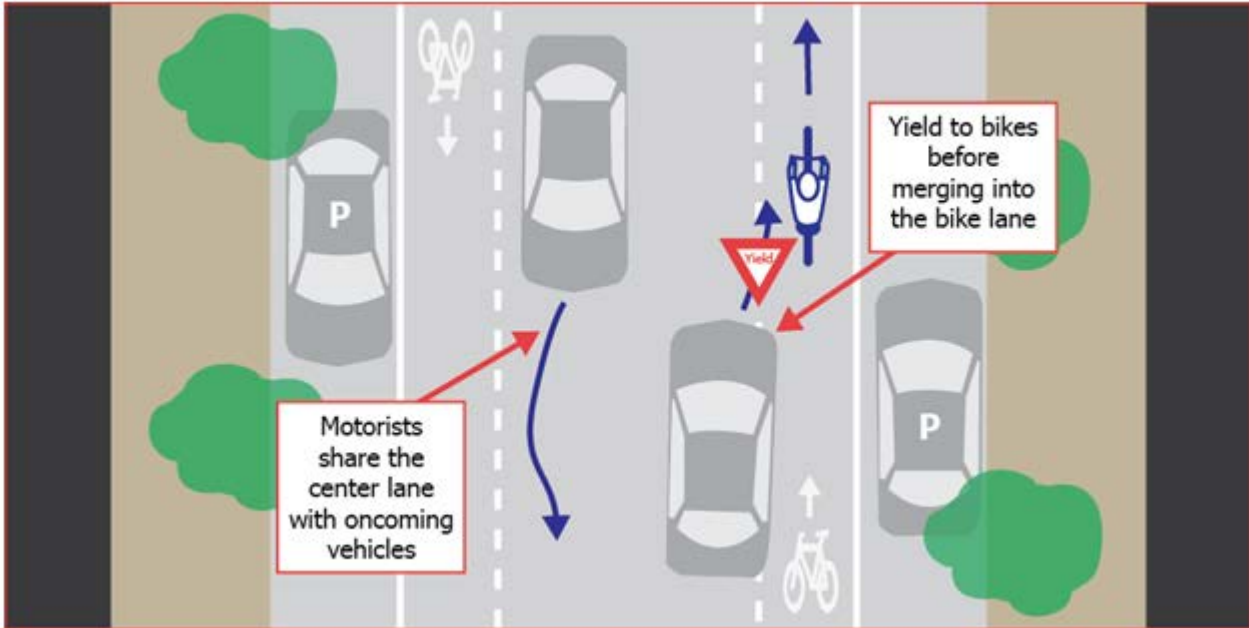


Cambridge, MA

Bicycle Advisory Lanes



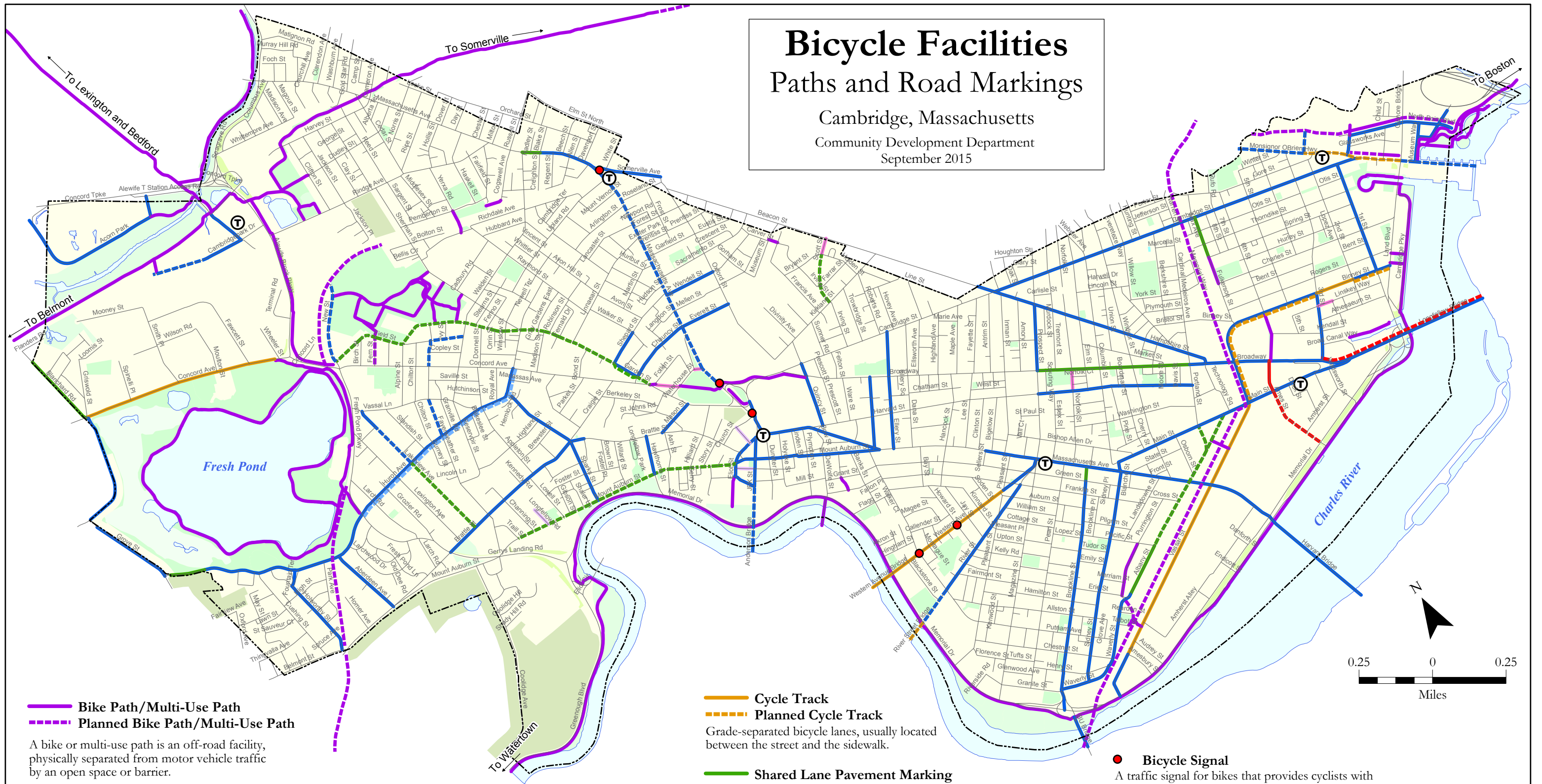
Bicycle Advisory Lanes



APPENDIX C: EXISTING BICYCLE FACILITIES MAP

Bicycle Facilities Paths and Road Markings

Cambridge, Massachusetts
Community Development Department
September 2015



— Bike Path/Multi-Use Path
- - - - - Planned Bike Path/Multi-Use Path

A bike or multi-use path is an off-road facility, physically separated from motor vehicle traffic by an open space or barrier.

— Bike Lane
- - - - - Planned Bike Lane

A lane on a street restricted to bicycles and designated by means of painted lines, pavement coloring, bicycle symbols, or other appropriate markings.

- - - - - Planned Buffered Bike Lane

A bike lane on a street that is separated from the parking lane by open space that is indicated by pavement markings.

— Protected Bike Lane
- - - - - Planned Protected Bike Lane

A bike lane at street level with physical protection from passing motor vehicle traffic, such as a parking lane or other barrier. Sometimes referred to as an at-grade cycle track.

— Contra-flow

A contra-flow lane is a bicycle facility marked to allow bicyclists to travel against the flow of traffic on a one-way street.

— Cycle Track
- - - - - Planned Cycle Track

Grade-separated bicycle lanes, usually located between the street and the sidewalk.

— Shared Lane Pavement Marking
- - - - - Planned Shared Lane Pavement Marking

A bicycle symbol marked on the pavement intended to remind motorists that bicyclists share the road. Used when there is insufficient space for bicycle lanes and specific bicycle markings are desired.

— Shared Street

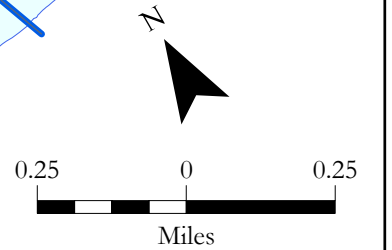
A street that is created as a common space to be shared by pedestrians, bicyclists, and low speed motor vehicles, all at the same level without grade-separated sidewalks.

● Bicycle Signal

A traffic signal for bikes that provides cyclists with their own signal phase, enabling them to more safely and conveniently cross intersections.

This map is for planning purposes and is subject to change. It is not a route map. Bicycles are encouraged to use all streets within the city. Updated versions of this map will be posted on the city website.

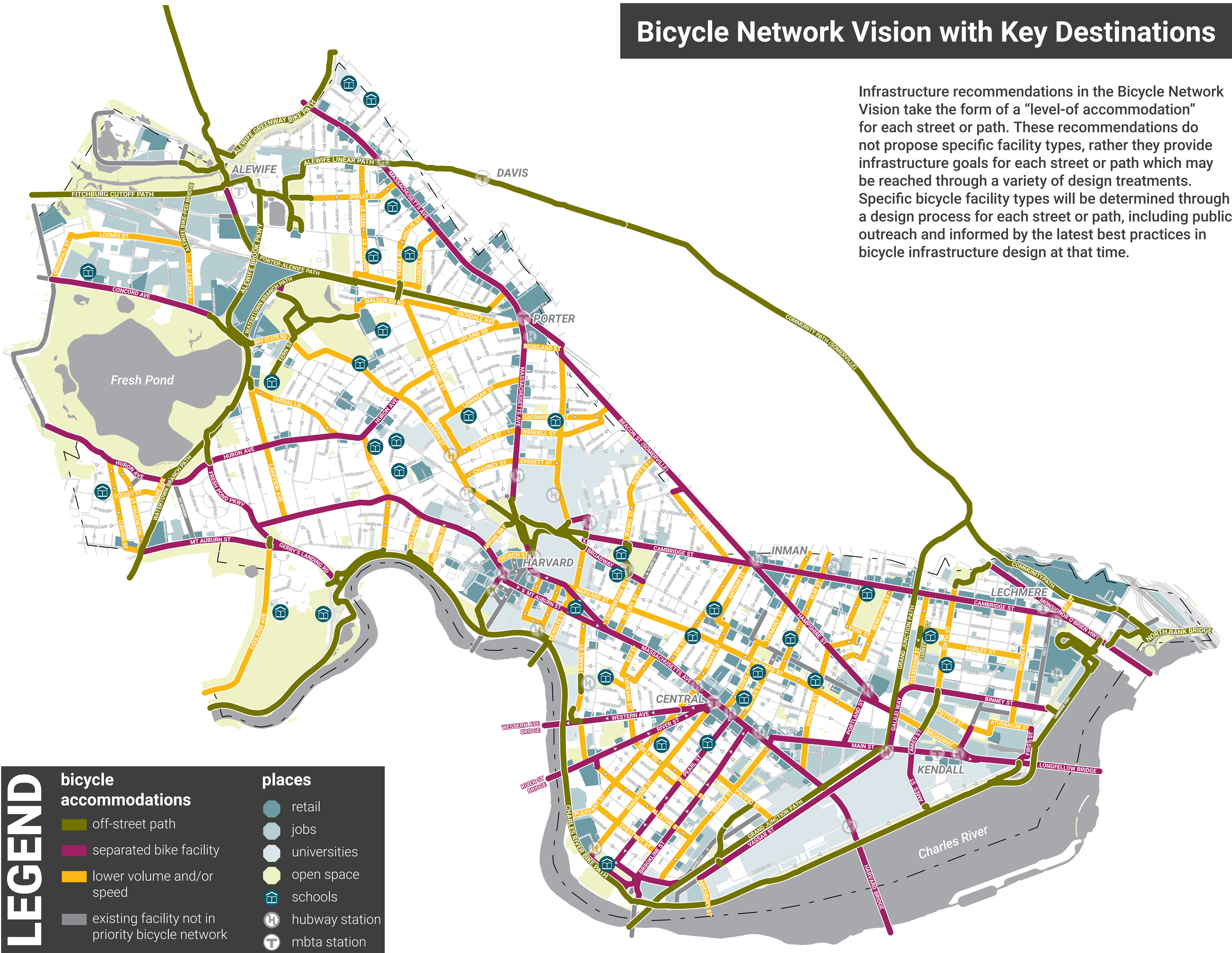
For more information on city bike programs, go to:
www.cambridgema.gov/home/CDD/Transportation/gettingaroundcambridge/bybike.aspx



APPENDIX D: BICYCLE NETWORK VISION MAP

Bicycle Network Vision with Key Destinations

Infrastructure recommendations in the Bicycle Network Vision take the form of a “level-of accommodation” for each street or path. These recommendations do not propose specific facility types, rather they provide infrastructure goals for each street or path which may be reached through a variety of design treatments. Specific bicycle facility types will be determined through a design process for each street or path, including public outreach and informed by the latest best practices in bicycle infrastructure design at that time.



LEGEND

bicycle accommodations	places
off-street path	retail
separated bike facility	jobs
lower volume and/or speed	universities
existing facility not in priority bicycle network	open space
	schools
	hubway station
	mbta station

APPENDIX E: BICYCLE LEVEL OF COMFORT CRITERIA

In addition to the level of traffic stress factors based on the Mineta Institute Study*, the Cambridge Bicycle Level of Comfort Analysis includes the additional factors below to account for context specific traffic stress.

Mixed Traffic Stress

BLC	1	2	3	4	5
ADT	<2k	2K - 4K	4K - 6K	6K - 15K	15K+, 4+ travel lanes total, no on-street parking, speed ≥ 30mph

Operating Space Stress

BLC	1	2	3	4	5
ADT	no effect	<2K	2K - 4K	no effect	no effect

Applies to streets with the following conditions:

Parking: Both sides

Travel Lanes: One

Direction: One-way

Bike Facility: Mixed Traffic

Bus Frequency Stress

BLC	1	2	3	4	5
Bus Frequency	no effect	no effect	Bus frequency greater than citywide average (7 Buses per hour)	Bus frequency greater than citywide average (7 Buses per hour) AND bus stop within 100 ft. of road segment	no effect

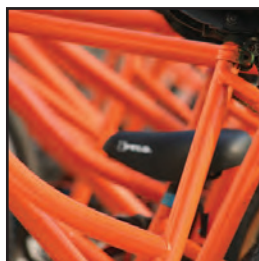
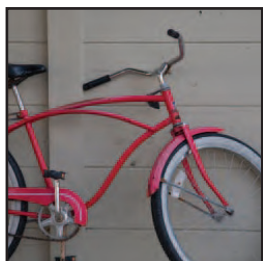
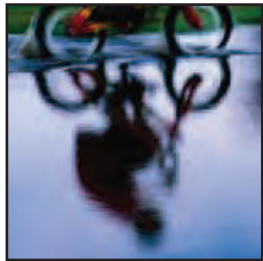
*Mekuria, M., Furth, P., and Nixon, H., Low-stress bicycling and network connectivity, Mineta Transportation Institute (2012).

APPENDIX F: BICYCLE PARKING GUIDE



City of Cambridge

Bicycle Parking Guide



WHY IS BICYCLE PARKING IMPORTANT?

The City of Cambridge promotes bicycling as a healthy, environmentally friendly way of getting around. Cambridge is well suited for bicycling and more people are using their bikes every day for commuting, shopping, and general transportation. Enhancing and promoting sustainable transportation is a cornerstone of Cambridge's policies.

Providing bicycle parking encourages people to use their bicycles as transportation. People are more likely to use a bicycle if they are confident that they will find convenient and secure parking at their destination.

Providing a designated area for bicycle parking gives a more orderly appearance to a building and prevents cyclists

from locking their bikes to unacceptable fixtures, such as trees, benches, or railings. However, if a bicycle rack appears insecure, does not fit bicycles well, or is in the wrong location, cyclists will not use it. Ensure that your bicycle racks are approved and well used by following these guidelines.



photo by Jessica Zdeb

DEVELOPMENT REQUIREMENTS AND ZONING ORDINANCE

Locations and types of bicycle parking must be shown in building site plans at a 1:10 scale and be approved by the Traffic, Parking, and Transportation Department and the Community Development Department. Zoning requirements are found in Article 6.100 of the Zoning Ordinance. This brochure provides an overview of the requirements with some details and graphics for clarification, but it should not be construed as the full set of legal requirements. Please refer to the full text of the zoning ordinance here:

www.cambridgema.gov/CDD/zoninganddevelopment/

WHAT IS A BICYCLE PARKING SPACE?

A bike parking space is an area within which one intact bicycle may be easily and conveniently accessed and securely stored and removed in an upright position with both wheels resting on a stable surface, without requiring the movement of other parked bicycles, vehicles, or their objects to access the space.

HOW MUCH BICYCLE PARKING IS REQUIRED BY ZONING?

The tables below summarize the zoning requirements for some typical land uses. For more detail, review Section 6.100 of the Zoning Ordinance. When calculating the required number of long-term or short-term bicycle parking spaces for a particular use, round up to the nearest whole number.

Residential Use Type	Minimum Required Bicycle Parking (see pg. 7 for more details)	
	Long-Term	Short-Term
Single-family dwellings Two-family dwellings Rectories, parsonages	No minimum	No minimum
Townhouse dwellings Multifamily dwellings	1.00 space per unit for the first 20 units in a building; 1.05 spaces per unit for additional units	0.10 space per unit on a lot (for lots with 4 or more units)
Elderly oriented congregate housing	0.50 space per unit	0.05 space per unit
Lodging houses, convents, monasteries, dormitories, fraternities, sororities	0.50 space per bed	0.05 space per bed
Hotels, motels Tourist houses	0.02 space per sleeping room	0.05 space per sleeping room

Note:

Where four or fewer long-term bicycle parking spaces are required, they may be provided in a covered outdoor location rather than an enclosed structure.



photo by Greg Raisman

HOW MUCH BICYCLE PARKING IS REQUIRED BY ZONING?

Non-Residential Use Type	Required Bicycle Parking (minimum spaces per 1,000 sq. ft. of floor area)	
	Long-Term	Short-Term
General or professional offices Arts/crafts studios	0.30	0.06
Technical offices, research labs	0.22	0.06
Banks, financial offices (ground floor)	0.30	0.50
Retail stores, consumer service	0.10	0.60
Food and convenience stores Entertainment, recreation	0.10	1.00
Restaurants, bars	0.20	1.00
Theaters, gathering halls	0.08	1.00
Industrial (manufacturing, storage) Auto repair, auto sales	0.08	0.06
Churches	0.08	0.50
Medical offices	0.30	0.50
Medical clinics	0.20	0.50
Hospitals	0.20	0.10
College or university academic or administrative facilities	0.20	0.40
College or university student activity facilities	0.20	1.00
Primary, secondary or other schools Other uses	<i>see zoning</i>	

Note:

Up to four required long-term bicycle parking spaces (or up to 20% of the required number, whichever is greater) may be provided as short-term bicycle parking spaces.

WHEN ARE YOU REQUIRED TO PROVIDE BICYCLE PARKING?

Constructing a new building:

Unless the building is a single-family or two-family detached dwelling, bicycle parking is required. Bicycle parking is still allowed and encouraged for single-family and two-family homes.

Expanding an existing building or converting it to a new use:

The zoning provides a set of rules to determine when bicycle parking is required. Here is a simplified way to figure out if the requirements will apply; for more detail, review Section 6.100 of the Zoning Ordinance.

1. Calculate the sum of total long-term and short-term bicycle parking spaces required (under current zoning) for the EXISTING or PRIOR USE on the site: _____
2. Calculate the sum of long-term and short-term bicycle parking spaces required (under current zoning) for the NEW or PROPOSED USE on the site: _____
3. If the number in Calculation 2 is greater than the number in Calculation 1 by at least 15% and at least two (2) spaces, then short-term and long-term bicycle parking is required for the *entire building* (not just for the increase).

PUBLIC CONTRIBUTION FOR SHORT-TERM BICYCLE PARKING

Private developers and property owners may not install racks in the public right-of-way without formal permission from the city. If you have a lot on which short-term parking cannot be provided due to site constraints (e.g. an existing building with zero lot lines is being reused), you must get approval from the city to make a contribution towards parking on public property in lieu of on-site bicycle parking. For more information please e-mail bikerack@cambridgema.gov.



SITING BICYCLE PARKING

Bicycle parking must be designed for convenient daily use, not simply for storage of bicycles. Location is an extremely important factor in the usefulness of a bicycle rack. The rack must be located in a safe and accessible place with adequate space to maneuver a bicycle in and out.

Safe locations are:

- In full view, maximizing visibility and minimizing vandalism, near pedestrian traffic, windows, and/or well-lit areas.
- Under cover, to protect bicycles from inclement weather.
- Far enough away from the street or parking spaces so that bicycles will not be damaged by cars, setback if possible.
- Not obstructing pedestrian traffic.



photo by John Luton

Accessible locations have these characteristics:

- They are between the road/path that cyclists use and the entrance of the building.
- The primary access route is at least 5 feet wide.
- The primary access route does not have a slope greater than 5% (8% if level landing is provided every 30 feet of linear distance).
- Access may be provided by an elevator with interior dimensions of 80" x 54".
- Close to the main entrance that cyclists use for the building. For short-term parking within 25' is ideal but no more than 50' is required.

Weather-protected bicycle parking is desirable where bikes are parked for long periods.



SHORT-TERM AND LONG-TERM PARKING

Some aspects of bicycle parking are different depending on whether it will serve people who are storing bicycles all day long or overnight, or people who are making short trips to and from the site.

Long-Term:

Long-term Bicycle Parking must be located in an enclosed, limited-access area designed to protect bicycles from precipitation and from theft. It may be provided in the following types of facilities:

- Enclosed spaces in a building, such as bicycle rooms or garages.
- Bicycle sheds, covered bicycle cages, or other fully covered and enclosed structures within 200 feet of the main building entrance.
- Bicycle lockers, or fixed-in-place containers wherein single bicycles may be securely stored and protected.
- Weather-protected bicycle parking spaces that are monitored at all times by an attendant or other security system.



photo by Mark Horowitz

Short-Term:

Short-term bicycle parking must be located in a publicly accessible space within 50 feet of pedestrian entrances. Short-term bicycle parking is intended primarily to serve visitors, such as retail patrons making trips of up to a few hours; however, it may serve other bicycle users as needed.

PARKING GARAGES

Bicycle parking in parking garages must be either on the same level as the entrance to the garage from the street or accessible via automobile ramps designed to serve bicyclists (with slope of less than 5% or less than 8% with a landing every 30 feet), or near an elevator that is sufficiently large to accommodate bicycles. Bicycle racks inside parking garages must still meet the security standards of short-term racks or lockers. Where long-term bicycle parking is next to automobile parking or loading, a physical barrier, such as bollards, must be provided.



photo by Norman Cox

ACCEPTABLE BICYCLE RACKS

There are a variety of designs for bicycle racks produced by many manufacturers. Bike racks can be purchased as single units, with a capacity of locking 2 bikes (one on each side), or as multiple units attached together, with a larger capacity. However, not all manufactured bicycle racks meet Cambridge's standards.



Features of an acceptable bicycle rack:

- Installed on a permanent foundation (e.g., concrete pad) to ensure stability.
- Securely anchored into or on the foundation with tamper-proof nuts if surface mounted.
- Support for an upright bicycle by its frame horizontally in **two (2)** or more places.
- Keeps both bike wheels on the ground.
- Design that prevents the bicycle from tipping over.
- Ability to support a variety of bicycle sizes and frame shapes.
- Space to secure the frame and one or both wheels to the rack with a cable, chain, or u-lock.
- Diameter of locking pole is no more than 1.5 inches.
- Galvanized or stainless steel racks are recommended (and required for racks on public property) because they hold up best.



photo by Greg Raisman



Acceptable racks, like the “Inverted U,” “Swerve,” and “Post and Ring” racks, have two-point support and fit a variety of bicycle types. Custom designs and “artistic” racks can also be used, provided they meet the performance criteria for bicycle racks.

UNACCEPTABLE BICYCLE RACKS

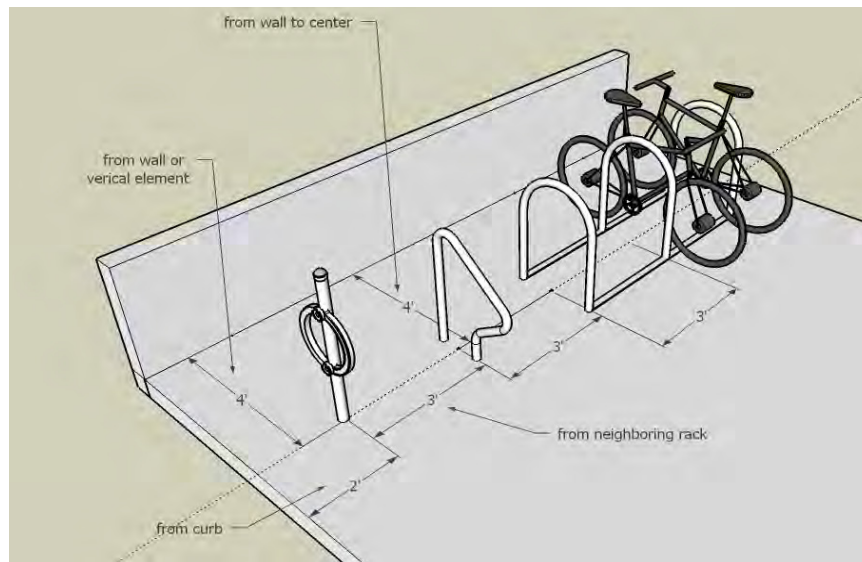
Bicycle racks must *NOT*:

- Support the bicycle at only one point.
- Allow the bicycle to fall, which can damage the bike and block pedestrian right-of-way.
- Have sharp edges, that can be hazardous to the visually impaired.
- Support the bicycle by one wheel.
- Connect to each other with a bar on top (that can block handlebars and baskets).
- Suspend any part of the bike in the air or require that the bicycle be lifted to get it into position.

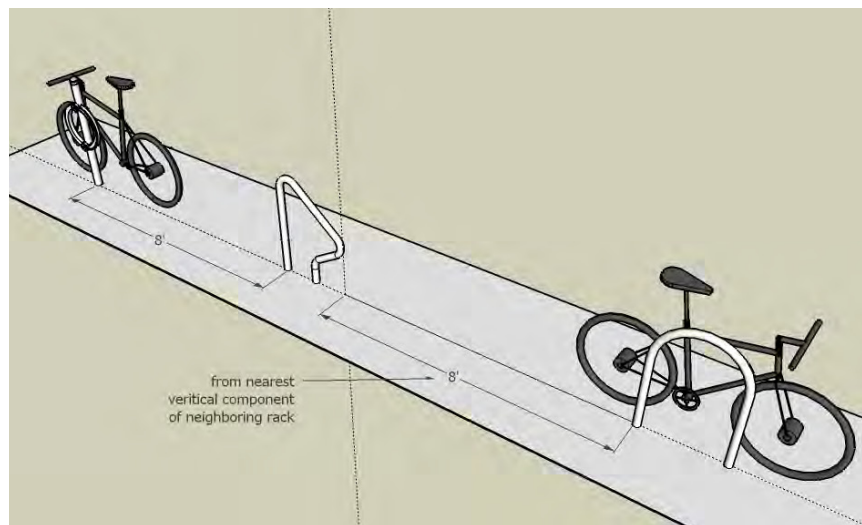


LAYOUT DIMENSIONS

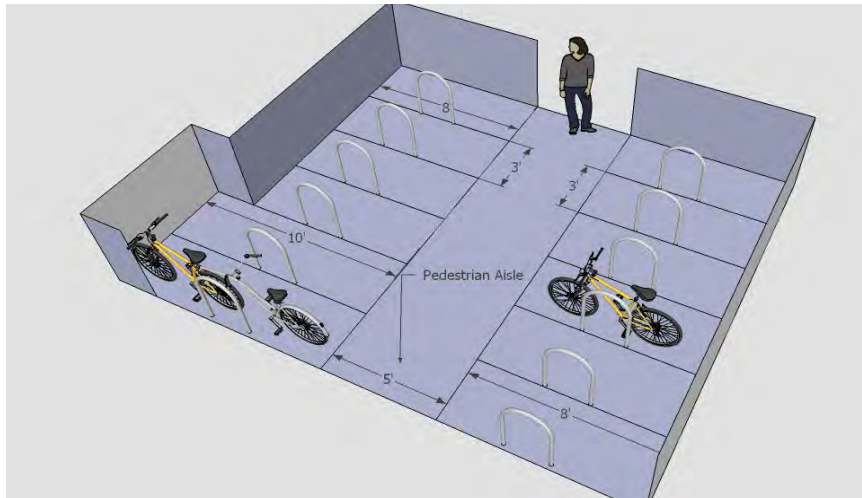
Proper layout of bicycle racks is essential to ensure that they will safely and conveniently accommodate the intended number of bicycles. Layout must follow these minimum dimensions:



Racks aligned side by side



Racks aligned end to end



Enclosed rack area with 20 or more racks, with pedestrian aisle and at least 5% of spaces providing an additional 2 feet of space for tandems and trailers.

Distance to other Racks:

- Rack units aligned parallel to each other (side by side) must be at least 3 feet apart. This includes racks that are sold as multiple rack units attached together.
- Rack units aligned end to end must be at least 8 feet apart.

Distance from Wall:

- Rack units placed perpendicular to a wall must be at least 4 feet from the wall to the center of the rack.
- Rack units parallel to a wall must be at least 3 feet from the rack to the wall.

Distance from a Curb:

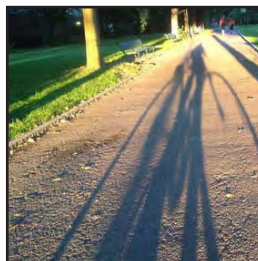
- Rack units placed perpendicular to the curb must be at least 4 feet from the curb to the center of the rack.
- Rack units placed parallel to the curb must be at least 2 feet from the curb to the rack.

Distance from a Pedestrian Aisle:

- Rack units perpendicular to a pedestrian aisle must be at least 4 feet from the center of the rack to the edge of the aisle, and have at least a 5 feet wide aisle.
- Where 20 or more bicycle parking spaces are required, at least 5% of the spaces must be 10 feet long instead of 8 feet to allow space for tandems and trailers.

Other Distances:

- Racks should be at least 14 feet from curbside fire hydrants and 6 feet from wall fire hydrants.



City of Cambridge

Community Development Department
Environmental and Transportation Planning
344 Broadway, Cambridge, MA 02139

Voice: 617 349-4600 • Fax: 617 349-4669 • TTY: 617 349-4621

Web: www.cambridgema.gov/bikeparking

Fall 2013

APPENDIX G: WIKIMAP ACTION ITEMS

What are WikiMap Action Items?

As a direct result of your comments on the Spring 2014 online WikiMap, on paper maps at numerous public input sessions, through the online survey, and at the June Open House, we were able to identify a variety of suggested improvements throughout the city on which action could be taken. The table and map below identify many of your great ideas, indicating the status of investigation or implementation. Many improvements are being evaluated or planned for next year, while others have already been implemented!



City-wide

- 5
- 19

ID	CATEGORY	LOCATION	STATUS	DESCRIPTION
1	Signs, Markings	Mass Ave and Cambridge St	Will Be Looked At	Signage to aid in merge coming out of tunnel from Mass Ave onto Cambridge St
2	Signs, Markings	Main St and Columbia St	Done	Bike Box on Main St at Columbia St to facilitate turns toward Mass Ave
3	Signs, Markings	Norfolk St	Done	Add double yellow line of Norfolk St contra-flow lane
4	Signs, Markings	Waterhouse St Contra-flow	Will Be Looked At	Better signage for Waterhouse St contra-flow lane
5	Construction, Paving	Multiple	Sent to Public Works	Reported potholes and poor pavement conditions
6	Construction, Paving	Fort Washington Park	Will Be Done	Pave access path to the at-grade railroad crossing
7	Construction, Paving	Vassar St and Pacific St	Identify Funding and Who will Implement	Provide a pedestrian and bicycle crossing on Vassar St at the Pacific St railroad crossing to connect with eastbound Vassar St cycle track
8	Construction, Paving	Webster Ave and Lincoln St	Will Be Done	Remove the intersection pavers at the intersection of Webster Ave and Lincoln St
9	Signals	Trowbridge St at Harvard St	*	Add bike detection at Trowbridge St at Harvard St
10	Signals	Huron Ave and Garden St	*	Bike detection at Huron Ave and Garden St
11	Bike Parking, Fix-its	Alewife T Station	Will Be Looked At	Bicycle Fix-It Station at Alewife T
12	Bike Parking, Fix-its	Tobin School	Added to 2015 List	Bike Parking needed: Tobin School
13	Bike Parking, Fix-its	Graham and Parks	Added to 2015 List	Bike Parking needed: Graham and Parks
14	Bike Parking, Fix-its	Mass Ave and Western Ave/River St	Added to 2015 List	Bike Parking needed: Mass Ave at Western Ave/River St
15	Bike Parking, Fix-its	Broadway at Portland St	Added to 2015 List	Bike Parking needed: Broadway at Portland St
16	Bike Parking, Fix-its	Main Library	Added to 2015 List	Bike Parking needed: Main Library
17	Bike Parking, Fix-its	Galleria	Done	Bike Parking needed: Galleria
18	Bike Parking, Fix-its	Mass Ave and Cedar St	Will Be Looked At	Bike Parking needed: Mass Ave and Cedar St
19	Hubway	Multiple	Will Be Looked At	All Hubway suggestions recorded for consideration
20	Longer Term Potential	Bolton St and Walden Square Rd	Determining Public Easements	Pave an existing gravel path between Bolton St and Walden Square Rd
21	Longer Term Potential	Inman Square	Major Planning Study Underway	Several comments about signal improvements at Inman Square
22	Longer Term Potential	Ames St	Planning Stages	Remove the existing curb extensions on Ames Street to continue the cycle track to the south
23	Longer Term Potential	Mass Ave and Western Ave	Planning Stages	Intersection improvements on Mass Ave to connect bicyclists to the Western Avenue cycle track
24	Longer Term Potential	Alewife Linear Park and Mass Ave	Evaluation	Add signage and /or bike boxes at Alewife Linear Park and Mass Ave indicating how to transition from path to road
25	Longer Term Potential	Russell Field	Done by others?	Improvements to paths around and through Russell Field
26	Need More Evaluation	Linear Path at Westley Ave	Evaluation	Provide connection to Linear Path at the end of Westley Ave
27	Need More Evaluation	Alewife T Station Access Road	Evaluation	Convert wide sidewalk to cycle track and pedestrian path on Alewife T Station Access Road
28	Need More Evaluation	Linear Path, Mass Ave, Cedar St	Planning Stages	Provide direction on how bicyclist's should cross at the intersection of Linear Path/Mass Ave/Cedar Street
29	Need More Evaluation	Mass Ave and Putnam St	Evaluation	Bicyclists traveling westbound on Mass Ave would like to be able to turn left onto Putnam St
30	Need More Evaluation	Sidney St, Mass Ave, Main St	Evaluation	Allow bicyclists traveling northbound on Sidney St to cross Mass Ave onto Main St
31	Need More Evaluation	Webster Ave and Hampshire St	Evaluation	Improve visibility for turns from Webster Ave to Hampshire St
32	Need More Evaluation	Mass Ave and Somerville Ave	Evaluation	Improved signal timing at Mass Ave and Somerville Ave
33	Need More Evaluation	Galileo and Broadway	Evaluation	Bike box for left turns from Galileo (N Bound) to Broadway
34	Not Anticipated to Advance	Grove St and Huron Ave	Outside Limits**	Add intersection treatment for bicyclists turning left from Grove St to Huron Ave
35	Not Anticipated to Advance	Minuteman Path and Discovery Park Path	Outside Limits**	Add crosswalk and curb ramp from Minuteman path to Discovery Park path, It appears this part of the path may be in Arlington

*All loops are intended to function for bicycles. Reported loops will be checked for sensitivity. Some bicycles will not be detected because of their material (carbon fiber bikes, for example)

**Outside Limits = not in the City limits and/or not under City control