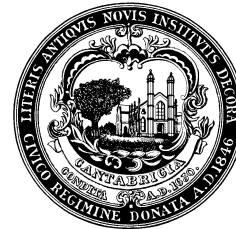


Commission for Persons with Disabilities

51 Inman Street · Cambridge, MA · 02139-1732

617-349-4692 voice · 617-492-0235 TTY · 617-349-4766 fax



Philibert Kongtcheu
Chair

Gary Dmytryk
Secretary

Loring Brinckerhoff
Avril de Pagter
Mary Devlin
Jerry Friedman
Stelios Gragoudas
Valerie Hammond
Nicole Horton-Stimpson
Jackie Jones
Daniel Stubbs

Rachel Tanenhaus
Executive Director/
ADA Coordinator

Kate Thurman
Project Coordinator

**The next meeting of the Cambridge Commission for Persons with Disabilities
will be held online via Zoom on Thursday, December 9, 2021 at 5:30 PM**

PLEASE MAKE EVERY EFFORT TO JOIN BY 5:30 PM

AGENDA

Please keep your microphone muted when you are not speaking

- | | | |
|---|---------|-----------------------------------|
| 1. Introductions
<i>If needed, alternates named</i> | 2 min. | |
| 2. Announcements | 2 min. | CCPD staff / Board |
| 3. Approval of September &
October Minutes
<i>See page 26 of this agenda packet for minutes</i> | 4 min. | CCPD Board |
| 4. Update on Quick Build
Bike Lanes & Disability Parking
<i>See page 4 of this agenda packet for presentation</i> | 45 min. | Brooke McKenna &
Andreas Wolfe |
| 5. Public Works Update | 10 min. | Jerry Friedman |
| 6. Chair's Report | 15 min. | Phil Kongtcheu |
| 7. Old Business | 3 min. | CCPD staff / Board |
| 8. New Business | 3 min. | CCPD staff / Board |
| 9. Public Input
<i>See pages 2&3 of this agenda packet for instructions on providing public comment</i> | 3 min. | general public |

CART/closed captioning will be provided for this meeting

Captions can be turned on within the Zoom platform. Additionally, you may stream CART in a separate URL at <http://bit.ly/CCPDCART>
(captions will not appear until the meeting has started)

The City of Cambridge Commission for Persons with Disabilities, does not discriminate, including on the basis of disability. The Commission for Persons with Disabilities will provide auxiliary aids and services, written materials in alternative formats, and reasonable modifications in policies and procedures to persons with disabilities upon request.

The next CCPD meeting will be held online on Thursday, January 13

Members of the public: See instructions on following pages on how to watch the CCPD meeting and provide public comment via Zoom

Instructions on How to Join the December 9, 2021 CCPD Meeting as a Member of the Public

Join Online:

Registration is required in order to view the meeting or to participate in public comment. Register online at https://cambridgema.zoom.us/webinar/register/WN_0knH4PwASxmN0hicREtUg

After registering, you will receive a confirmation email containing information about joining the webinar. For more information regarding Zoom technology visit: <https://www.cambridgema.gov/Departments/citycouncil/zoomonlinemeetinginstructions>

Join by Phone:

If you do not have access to the internet, you may also call into the meeting using a phone by dialing any of the following numbers and entering the Webinar ID (registration is not required). For higher quality, dial a number based on your current location:

+1 301 715 8592
+1 312 626 6799
+1 929 436 2866
+1 253 215 8782
+1 346 248 7799
+1 669 900 6833

When prompted, enter the webinar ID: **869 8156 2026**

NOTE: your microphone will be automatically muted until you are called on to speak during the public comment period of the meeting. See instructions on the following page for how to “raise your hand” in order to indicate that you would like to provide public comment.

Instructions for Providing Public Comment During CCPD Meetings via Zoom

Anyone wishing to address the Cambridge Commission for Persons with Disabilities (CCPD) during the Public Comment section of the agenda may indicate that by "raising their hand" virtually within the Zoom platform. The host (CCPD staff) will call on members of the public to speak in the order in which their hands were raised. Please note that while you may raise your hand at any point during the meeting, you will not be called on to speak until the Public Comment period of the meeting.

To raise your hand:

- On a Mac or PC:
 - Click "raise hand" in the webinar control panel
 - Alternatively, you may use the keyboard shortcut to raise and lower your hand:
 - Windows: press "Alt+Y"
 - Mac: press "Option+Y"
 - When you are called on by the host to speak, you will be prompted to unmute your microphone (you must unmute yourself, as the host does not have the ability to unmute individuals).
 - After you have spoken or once your 3 minutes are up, your microphone will be muted by the host

- If you are calling in by phone:
 - Press *9 to raise and lower your hand
 - When you are called on to speak during the public comment period, you will need to press *6 to unmute yourself (press it again to mute yourself)
 - Note: your phone number will be visible to only the host of the meeting (CCPD staff). Because your name will not be displayed, we will call on you when it's your turn to comment by using the last four (4) numbers of your phone number to identify you. For example, "The person calling in from the number ending in ####, you may now provide public comment."
 - After you have spoken or once your 3 minutes are up, your microphone will be muted by the host

Once they have the floor, members of the public are asked to identify themselves, and each speaker is limited to not more than three (3) minutes. Although the public comments should, whenever possible, address one or more items on the agenda for that particular meeting, if time permits, the Chair may allow a speaker to comment on matters that may not directly address an item on the agenda, but do concern the Commission.

Thank you for your patience as we work together to make virtual meetings accessible for everyone!

Separated Bike Lanes, Bus Lanes and Accessible Parking

Mass Ave Dudley St to Alewife Brook Pkwy



CITY OF CAMBRIDGE

TRAFFIC, PARKING, + TRANSPORTATION

Andreas Wolfe

Street Design Project Manager

awolfe@cambridgema.gov

617-349-9162

Cycling Safety Ordinance

- **2019:** Cambridge City Council Passed the *Cycling Safety Ordinance*: Requires the construction of separated bike lanes when streets are being reconstructed as a part of the City's Five-Year Plan for Streets and Sidewalks and they have been designated for "Greater Separation" in the Bicycle Network Vision
- **2020:** Cambridge City Council Passed Amendments to the *Cycling Safety Ordinance*: The amendments set ambitious requirements for the installation of approximately 25 miles of separated bike lanes within the next five to seven years
 - The location of these facilities will be informed by both the Cambridge Bicycle Network Vision and specific requirements in the Ordinance



Cycling Safety Ordinance

- In general, the amendments to the Ordinance require the installation of separated bike lanes on:
 - All of Massachusetts Ave;
 - Broadway from Quincy St to Hampshire St;
 - Cambridge St from Oak St to Second St;
 - Hampshire St from Amory Street to Broadway;
 - Garden St, eastbound from Huron Ave to Berkeley St, and westbound from Mason St to Huron Ave; and
 - 11.6 miles of separated bike lanes in other locations that are a part of Bike Network Vision



Timeline

The ordinance sets an installation deadline of April 30, 2022 for us to install separated bike lanes on Mass Ave at the following locations:

- Alewife Brook Pkwy to Dudley St **(complete)**
- Beech St to Roseland St
- Waterhouse St to Cambridge St **(complete)**
- Plympton St to Bow St **(complete)**
- Small portions between Sidney St to Memorial Dr



Accessible Parking and the Cycling Safety Ordinance

The Cycling Safety Ordinance treats accessible parking different than other types of parking

Specifically:

- Bicycle lane separation is not required at accessible parking spaces
- The ordinance includes provisions for accessible loading curbside

[Cycling Safety Ordinance Information](#)



Project Area



Project Details



Quick-Build vs. Construction

What is a Quick-Build Project?

- Quick-build projects allow us to make safety improvements more rapidly
- Our quick-build toolbox includes:
 - Pavement marking changes
 - Installation of flex posts
 - Changes to signage
 - Some modifications to signal timing

Why a quick-build project?

- Only a Quick-Build project would be installed in time to meet our Spring 2022 deadline
- Quick-Build projects can be installed significantly faster than typical construction projects
- Capital Construction projects must be programmed into the City's 5-year Sidewalk and Street Reconstruction Plan for funding and coordination with utilities



Bus Lanes

Inbound

- 10 p.m. to 9 a.m.: Buses only
- 9 a.m. to 10 p.m.: Loading Zone

Outbound

- Lane is in effect during all hours



Transit Benefits

More Reliable Trips

- More reliable trips allow riders to plan with more accuracy
- Drivers can serve more passengers with fewer buses, allowing the MBTA to add service

Faster Trips

- Where we're proposing a dedicated bus lane, we expect travel times to improve



Transit Accessibility

Changes to improve transit accessibility were made as part of this project

This includes:

- Relocation of a previously inaccessible bus stop (Shea Rd)
- Lengthening of existing bus stops to more easily accommodate level boarding
- Maintaining curbside boarding (I.e., no bike lane at bus stops)



Separated Bike Lanes

Separated Bike Lane Safety Benefits

- Dedicated space for biking
- Vertical separation between people on bikes and people in cars
- Shorter crossing distances for people walking

Separated Bike Lane Other Benefits

- Increased comfort for people biking
- Increased comfort for people driving as they know where to expect people biking



Accessible Parking

- Four new spaces are being added
 - Three directly on Mass Ave
 - One on Cameron Ave



Accessible Parking - continued

Cameron Ave



Mass Ave at Clarendon
Playground



Mass Ave at Fast
Phil's Haircuts



Project Benefits

- Improved safety and comfort for people walking and biking
- Improved access to the area by bus, bike and for people with aided-mobility

In addition to meeting the requirements of the Cycling Safety Ordinance, this project meets the goals of numerous other city goals and policies, including:

1. 1992 Cambridge Vehicle Trip Reduction Ordinance
2. 1993/2007 Cambridge Growth Policy
3. 2016 Complete Streets Policy
4. 2016 Vision Zero Policy
5. Envision Cambridge



Project Installation Timeline

September 14th: 1st community meeting

October 28th: 2nd community Meeting

November 8th: Project implementation began

November 12th:

- Installation of bike lanes
- New roadway markings

November 16th to Early December:

- Bus lane painting
- Side-Street Parking changes
- Accessible parking sign changes

Work related to painting the bus lanes red was required to take place during the day due to weather conditions



Implementation Impacts

During this time, there were numerous temporary project impacts

Specifically:

- Accessible parking spaces were painted before signage was installed
- Closure of the loading zone and bus lanes in both direction to allow for installation of red markings
- Additional traffic delays associated with roadway painting and striping



Public Engagement



Project Engagement Approach

The project team asked for public feedback in a variety of formats:

- Two public meetings, one month apart
- Community Office Hours
- Direct Engagement with business owners
- Comment by email and by phone
- Email blasts

More information is available on our project webpage

[Cambridgema.gov/mass-ave-dudley-alewife](https://www.cambridgema.gov/mass-ave-dudley-alewife)



Accessible Parking Program in Cambridge

- Residents may request an accessible parking space outside their home
- In commercial areas, we attempt install on-street accessible parking close to high demand areas
- No existing spaces were removed or altered as a part of this project



Accessible Parking and Future Projects

- We are re-examining our procedures for implementing accessible parking on streets where separated bike lanes are installed
- Future projects will include additional engagement with the Cambridge Commission for Persons with Disabilities (CCPD) and other stakeholders
- Projects will ensure we are adding accessible parking where it is needed
- Existing spaces will be retained or relocated



Questions?

Draft

Cambridge Commission for Persons with Disabilities

Minutes for Thursday, September 9, 2021

Online via Zoom

Meeting was called to order at 5:30 pm

Present:

Members: Loring Brinckerhoff, Mary Devlin, Gary Dmytryk, Jerry Friedman, Stelios Gragoudas, Valerie Hammond, Nicole Horton-Stimpson, Phil Kongtcheu, and Dan Stubbs

Absent: Avril de Pagter and Jackie Jones

Staff: Rachel Tanenhaus and Kate Thurman

Minutes:

A motion to approve the July meeting minutes was seconded and passed unanimously.

Presentation on Self Determination & Youth Leadership:

- Stel Gragoudas reported on the importance of self-determination and leadership in the lives of youth with disabilities. See attached presentation “Self Determination and Youth Leadership” by Stelios Gragoudas, Ed.D.
- Mary suggested adding mentoring youth with disabilities to CCPD’s retreat agenda and scope.

Executive Director’s Report:

- Rachel Tanenhaus gave an overview of the work that CCPD staff has done in the last fiscal year (July, 2020-June, 2021). Highlights include:
 - Conducting trainings for City staff on topics such as making documents accessible
 - Working on accessible communication policies & implementation throughout the City
 - Providing technical assistance to City staff, as well as Cambridge non-profits and businesses
 - Sitting on the Language Justice working group, contributing to the development of new language justice and language access policies
 - Using ADA capital funds to add accessible elements to existing City playground
 - Assisting in the design of the new universally designed playground at Danehy Park
 - Providing information and referral to individuals in need of services, etc.
 - Working with the Community Development Department on the Storefront Improvement and Retail Interior Accessibility Programs
 - Providing technical assistance in the development of The Hive, a new makerspace at the main library
 - Participating in the Cambridge Equity and Inclusion Initiative
 - Ensuring accessibility in the redesign and construction of River Street and Carl Barron Plaza in Central Square
 - Conducting multiple site visits; e.g., public housing buildings, polling places, restaurants, businesses
 - Working with Library staff on the development of accessible Liberation Libraries, which are little free libraries with books for all ages on racial equity

Public Works Update:

- Jerry Friedman reported that construction season is very busy
- The City’s miscellaneous sidewalk repair contractor is continuing to do small sidewalk repairs around the City
- DPW continues with the design of and public outreach on the River St. and Carl Barron Plaza reconstruction projects

- Inman Square reconstruction continues

Chair's Report:

- Phil raised some concerns about the way he feels he has been treated by CCPD staff and board members. After other Commission members shared their responses and concerns, the meeting was adjourned.

Meeting adjourned at 7:16 PM.

Respectfully submitted,
Kate Thurman



Self Determination and Youth Leadership

STELIOS GRAGOUDAS ED.D

Disability Rights Movement

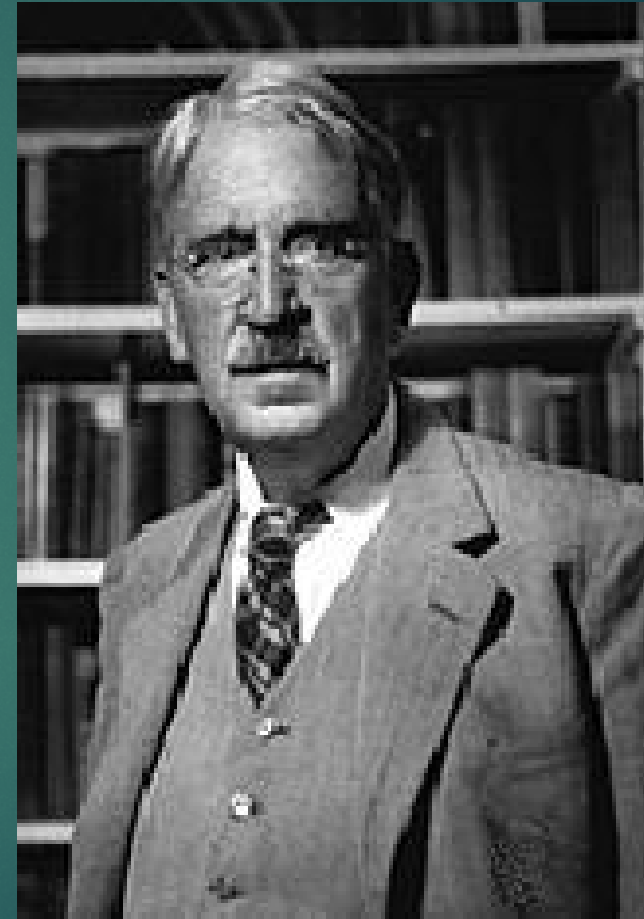
- ▶ Out of institutions
- ▶ Opportunity to engage into society
- ▶ Civil Rights
- ▶ Access to healthcare
- ▶ Manage their own Supports
- ▶ Independent Living



Self- Determination in education

- The 20th century philosopher, John Dewey said,
 - “Self-determination gives students a voice regarding what they learn, how they learn, what they think and what they dream. Self-determined students are empowered to make a difference in their world.”

<http://www.selfdeterminationak.org/index.html>



Self-determination

- Since the mid -1980's, the Office of Special Education Programs has made a substantial investment in the development of methods, materials, and strategies to promote self-determination and to achieve students' active involvement in their own transition planning.



What is self-determination?

- Wehmeyer (1992) defined self-determined behavior as “the attitudes and abilities necessary to act as the primary causal agent in one's life and to make choices and decisions regarding one's quality of life, free from undue external influences or interference”



Misperceptions of Self-Determination

- ▶ Wehmeyer (2003) writes that there are three common misperceptions about self-determination and the education of students with disabilities



Misperceptions of Self-Determination

- ▶ Self-determination implies the independence performance of behaviors



Misperceptions of Self-Determination

- ▶ Self-determination is solely about making choices



Self- Determination Is Not Something You Do...

- ▶ Self-determination is not something you do. It's not about a way to plan or direct services.
- ▶ Instead, it is about enabling people to make things happen in their own lives.



Causal agent

A causal agent is someone who...

- Acts with authority to make or cause things to happen
- Acts with the intention of accomplishing a specific goal and
- Acts to cause or create change





Areas that Impact Self-Determination

Goal Setting

- Deciding on a specific goal
- Setting a time to reach the goal
- Setting a specific time to reach the goal
- Determining the benefits of reaching the goal

Problem-solving

- Defining the problem
- Determining options
- Evaluating and selecting an option
- Developing a plan of action
- Evaluating the process

Self-observation:
Examine surroundings and performance

Self- evaluation:
Evaluate performance

Self-reinforcement:
Self-administration of consequences

Self-knowledge:
Knowing one's abilities and taking them into account

Choice-making

- Defining the issue
- Determining options
- Evaluating options
- Selecting an option

Self-advocacy
Speaking up for what an individual believes in

Youth Development

- Knowledge of civil rights
- Public speaking
- Effective communication

Decision-making

- Stating the decision
- Listing choices that are available
- Identifying the consequences
- Selecting best choice

Internal Locus of Control

The concept that the individual believes that he or she is in control of what happens in their lives, without any influence from external factors.

Adapted from: Wehmeyer, M., L., & Field, S. (2007) *Self-determination: Instructional and Assessment Strategies*. Thousand Oaks, CA: Corwin Press.



Fostering Youth Participation In (IEP) Planning Meetings



- ▶ In order to foster youth participation in planning meetings:
 - ▶ Youth need to be instructed on, and have opportunities for, active participation.
 - ▶ Youth must learn to use self-determination skills.
 - ▶ Administrators must support their participation.

Preparing Youth To Participate In (IEP Meeting) Transition Planning

- ▶ For students to fully participate in their transition planning, they need to be able to exercise skills, such as
 - ▶ Self-determination
 - ▶ Self Advocacy
 - ▶ Communication
 - ▶ Non-Verbal Communication
 - ▶ Negotiation and Compromise
 - ▶ Exercising Rights and Responsibilities



Preparing Youth To Participate In (IEP Meeting) Transition Planning



- To fully participate students must be aware of:
 - Their preferences, interests and goals for the future.
 - Their strengths and how they match their interests and goals.
 - The type of assistance they will need to reach their goals.

YOUTH LEADERSHIP

YOUTH LEADERSHIP

- ▶ Larson (2000) suggested that today's youth are not leaders in their own lives. Instead of participating in activities that will promote their leadership behavior, they seem to be bored and unexcited about their lives and their future.

YOUTH LEADERSHIP for students with disabilities

- ▶ Promoting leadership ability for students with disabilities involves more than developing self-determination skills.
- ▶ It also includes developing a sense of power that they can use not only to empower themselves, but other people with disabilities as well, referred to as the disability community (Johnson, 1999).



Youth Leadership Forum

- ▶ During this five-day event, youth with disabilities are invited to participate in various discussions and activities that highlight the value of people with disabilities to take a leadership role in their own lives as well as in the disability community.
- ▶ The forum develops a sense of pride about having a disability.
- ▶ Delegates are familiarized with the disability rights movement and the federal laws that came out of that movement to protect the civil rights of people with disabilities



Draft

Cambridge Commission for Persons with Disabilities

Minutes for Thursday, October 14, 2021

Online via Zoom

Meeting was called to order at 5:30 pm

Present:

Members: Loring Brinckerhoff, Avril de Pagter, Mary Devlin, Gary Dmytryk, Jerry Friedman, Stelios Gragoudas, Valerie Hammond, Nicole Horton-Stimpson, and Dan Stubbs

Absent: Jackie Jones and Phil Kongtcheu

Staff: Rachel Tanenhaus and Kate Thurman

Presentation: Transportation and Parking for People with Disabilities:

- Stephanie Groll, the City's Parking and Transportation Demand Management Planning Officer, said that the City is considering updating parking rules. She came to the meeting seeking input on how parking and lack thereof affect people with disabilities. On the one hand, the City has policies to encourage walking, biking, and using public transit, but on the other, the City understands that some people will need to continue using cars.
- The City is evaluating all parking policies; Stephanie is not involved in any one particular street redesign.
- In wanting to learn how people's life experiences affect their relationships with parking, Stephanie posed two questions to members:
 - What do you need in order to get around in your day?
 - How is parking a part of that?
- Summary of the discussion:
 - There is a need for more charging stations for electric cars
 - The communication between drivers and cyclists is toxic; at public meetings about proposals, people yell over each other. This needs to be addressed.
 - We need to support people who rely on cars and accessible parking due to their disability
 - There was only one community meeting about the quick build bike lane project on North Massachusetts Ave; input from marginalized communities needs to be captured and considered
 - Many residents didn't know about the quick build project on N. Mass Ave until it was implemented, so they didn't have an opportunity to provide feedback
 - The proponents of the quick build bike lane projects are primarily younger people; older residents did not have much of a voice
 - There was a request that the raw number of existing designated disability parking spots not be reduced even when other parking is removed
 - It was noted that it can be difficult to keep the designated disability parking spaces in front of 51 Inman clear because there's only one space for loading, so trucks will often pull into them
 - Disability parking spaces need to remain curbside to make them accessible
 - What is the policy around carpool spots, such as the one on Inman next to 344 Broadway?
 - Be sure to keep intersectionality in mind. Some areas of the City have more accessible parking than others

Public Works Update:

- TJ Shea and Brian McLane of DPW gave the annual City of Cambridge Winter Operations presentation (see attached). Key points included the following:
 - There were 2 parking bans last year; one in mid-December and one in February

- Bike lanes are challenging because when plows go down the streets, the snow gets moved into the bike lanes. DPW uses smaller equipment to then clear the bike lanes.
- The City has a bike ordinance that is requiring the construction of about 5 miles of bike lanes per year for the next five or six years.
- Last winter, DPW received almost 800 complaints for snow violations. Around 180 citations were issued and about 50% of those were paid within six months.
- DPW plows the accessible parking spaces abutting City property (about 150-200 spaces total), but does not have the capacity to clear residential and other disability parking spots.
- The City has been making its own brine (a mixture of salt and water) a few years ago and now has a brine farm at Danahy Park. They pretreat streets by spraying brine on them before snowstorms. The brine solution allows them to treat streets 2 days before the expected storm, as it sticks well to the street. Using brine has resulted in a dramatic reduction of the amount of salt being put in the environment
- They urged residents to use See, Click, Fix to report incidents such as un-shoveled sidewalks and bike lanes

Executive Director's Report:

- Rachel reported on the MA Architectural Access Board (MAAB) variance process. MAAB is the state body that writes and enforces the state accessibility codes. MAAB regulations are building codes, whereas the Americans with Disabilities Act (ADA) is a civil rights law. Key points included the following:
 - Compliance with MAAB regulations is triggered in existing facilities when a certain amount of renovation is done.
 - Variances are issued based on technical infeasibility or excessive cost without substantial benefit to people with disabilities
 - CCPD staff sometimes write letters of testimony, either in support or opposition of variance applications.
- Rachel noted that the November CCPD meeting falls on Veterans' Day, so it cannot be held on that date. Loring made a motion to skip the November meeting, which was seconded and passed unanimously.

Chair's Report:

- Phil was not present, so there was no Chair's report

Meeting adjourned at 6:54 PM.

Respectfully submitted,
Kate Thurman



City of Cambridge Winter Operations

Agenda

- ▶ Historic data
- ▶ Storm Coordination
- ▶ Safety/Accessibility
 - Parking bans
 - Public Safety/School Accessibility
 - Public Transportation
 - Pedestrian Operations
 - Bike Lanes
 - Snow Hauling
- ▶ Challenges
- ▶ Outreach
- ▶ Questions



Historical Data

Year	Snowfall (inches)	Salt Tons	Number of Parking Bans
2000	25		
2001	46		
2002	15		
2003	68	6027	
2004	35	4744	
*2005	87	8004	
2006	40	5180	
2007	17	3162	
2008	51	8623	
2009	66	10,000	6
2010	36	5,140	2
*2011	81	7,889	3
2012	9	1,774	0
*2013	63	5,197	1
2014	59	9,075	4
*2015	110	9,081	4
2016	27	4,756	2
2017	45	7,241	3
*2018	67	6,500	2
2019	41	5,500	2
2020	22	6,500	0
2021	45	5,400	2
AVERAGE	48	6,305	2.4



* Indicates a year where we have had at least one blizzard



Storm Coordination

- ▶ Public Works
- ▶ City Managers Office
- ▶ Traffic Parking & Transportation
- ▶ Police
- ▶ School Department
- ▶ Human Services
- ▶ Water
- ▶ Fire/Emergency Management
- ▶ Electrical
- ▶ Inspectional Services
- ▶ Emergency Communications

Parking Ban

- Notification
- Tow Truck Supervision/Coordination
- Follow up
- Lifting the Ban



Snow Emergency Parking Locations



Access to Public Transportation

Pedestrian Operations

- ▶ 23 miles of City-Cleared Sidewalks/ Curb Ramps
- ▶ Abutting schools, public buildings, public open space
- ▶ City-owned parking lots and garages
- ▶ Residential exemption program

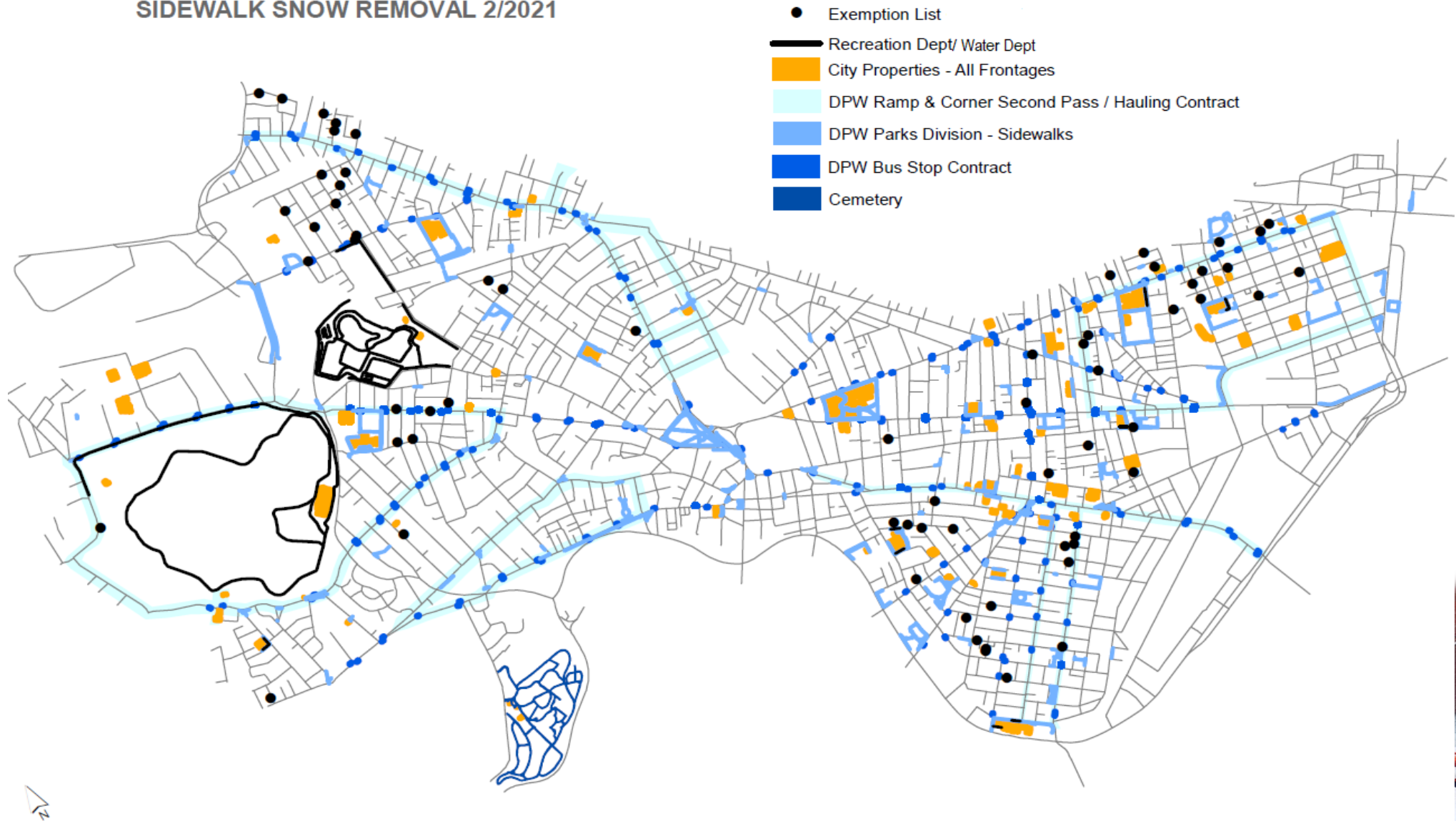


Bus Stops/Ramps

- ▶ Cambridge Street
- ▶ Massachusetts Avenue
- ▶ Concord Avenue
- ▶ Mount Auburn Street
- ▶ Western Avenue
- ▶ River Street
- ▶ Huron Avenue
- ▶ Rindge Avenue
- ▶ Broadway
- ▶ Prospect Street
- ▶ Pearl Street
- ▶ Brookline Street
- ▶ Green Street
- ▶ Granite Street
- ▶ Aberdeen Ave
- ▶ Magazine Street
- ▶ Putnam Ave - Western to Brookline
- ▶ Bigelow Street
- ▶ Inman Street
- ▶ Webster Street
- ▶ Windsor Street
- ▶ Garden Street
- ▶ Main Street
- ▶ Kirkland Street
- ▶ Quincy Street
- ▶ Columbia Street
- ▶ Hampshire Street



SIDEWALK SNOW REMOVAL 2/2021



School/Public Safety Access



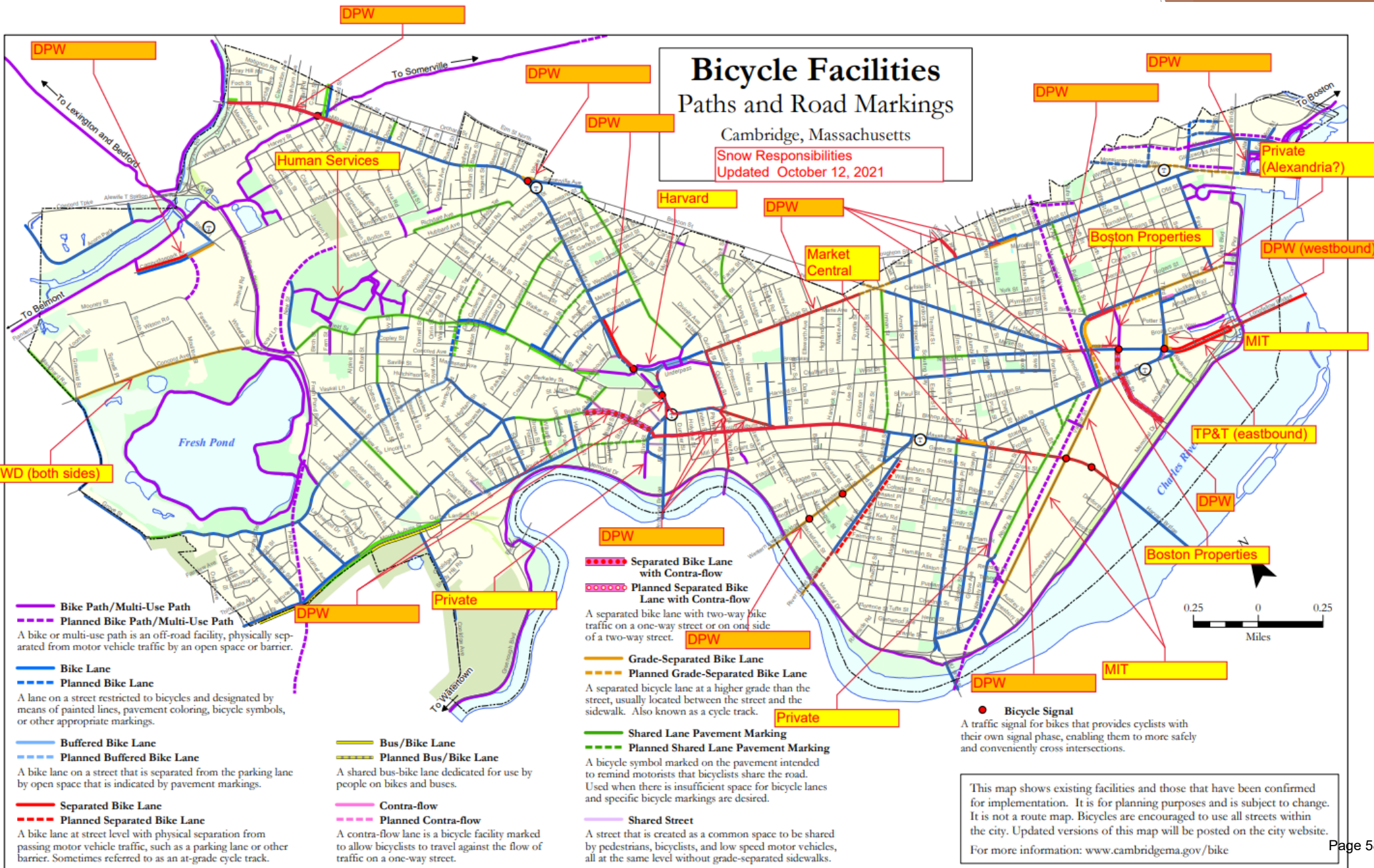
Protected and Raised Bike Lanes

- ▶ Challenges
- ▶ Timing
- ▶ Messaging
- ▶ Responsibility



Bicycle Facilities Paths and Road Markings

Cambridge, Massachusetts
Snow Responsibilities
Updated October 12, 2021



— 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.

— Buffered Bike Lane
- - - 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.

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

— Bus/Bike Lane
- - - Planned Bus/Bike Lane
 A shared bus-bike lane dedicated for use by people on bikes and buses.

— Contra-flow
- - - Planned 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.

— DPW
— Separated Bike Lane with Contra-flow
— Planned Separated Bike Lane with Contra-flow
 A separated bike lane with two-way bike traffic on a one-way street or on one side of a two-way street.

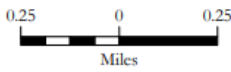
— DPW
— Grade-Separated Bike Lane
- - - Planned Grade-Separated Bike Lane
 A separated bicycle lane at a higher grade than the street, usually located between the street and the sidewalk. Also known as a cycle track.

— 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 shows existing facilities and those that have been confirmed for implementation. It 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: www.cambridgema.gov/bike



Bike Facilities and Snow Removal

- ▶ The number of bike facilities are increasing every year
- ▶ Each has different needs in terms of snow removal
- ▶ In some cases, these facilities are part of “quick build” projects and present challenges in terms of maintenance during snow season
- ▶ Snow removal in bike facilities is a shared responsibility between
 - ▶ DPW
 - ▶ DHSP
 - ▶ TP&T
 - ▶ Private Developments
 - ▶ Universities

Snow Hauling



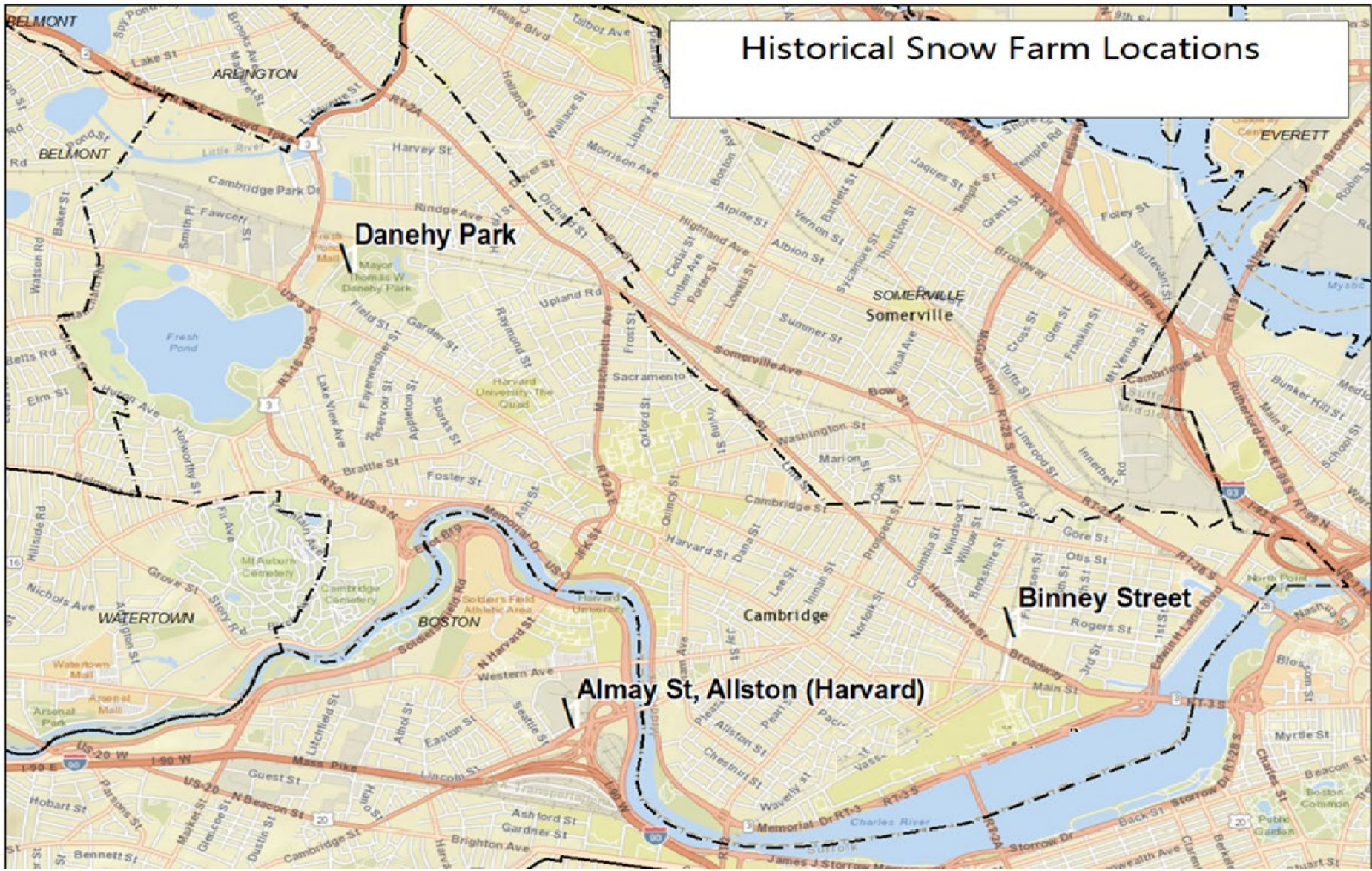
BEFORE



AFTER



Historical Snow Farm Locations



Specialty Equipment -Sidewalk/Bikelanes

- Holder sidewalk tractor
- Wacker Neuson sidewalk tractor
- Multihog tractor
- Bobcat skid steer



Ticketing/Fines

Snow Season	# of Complaints Received
2016-2017	1068
2017-2018	933
2018-2019	591
2019-2020	695
2020-2021	757
Total:	4044

Snow Season	# of Citations Issued
2016-2017	546
2017-2018	166
2018-2019	210
2019-2020	326
2020-2021	180
Total:	1428

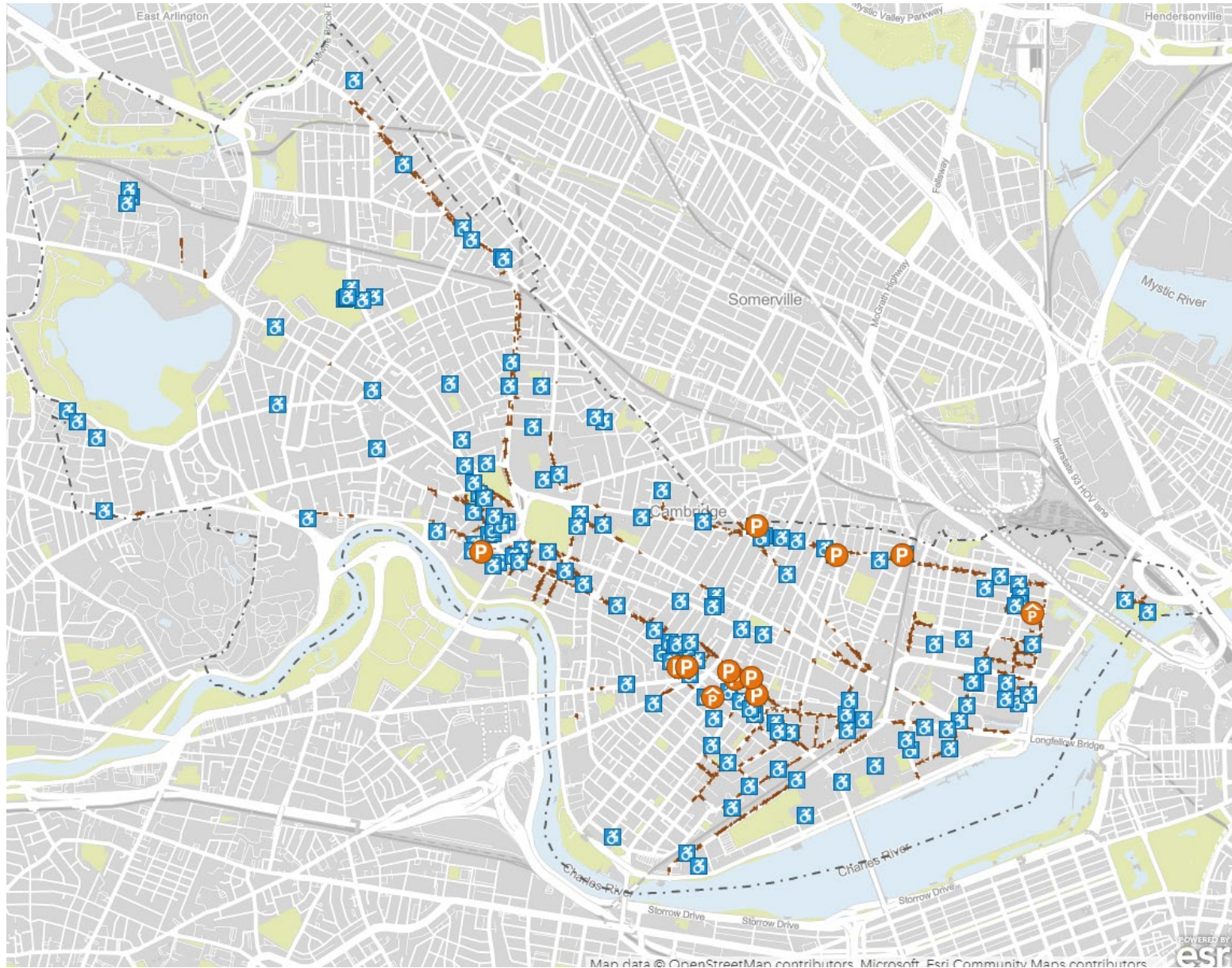
Payments made on tickets within 6 months of issuance over the past 4 years, is approximately 50%

Challenges

- Continuity of Services
- Dead Ends
- One-way Streets
- Accessible Parking
- Space savers



Accessible Parking Spots





The newest tool in our toolbox....Brine It's not just for Turkeys!

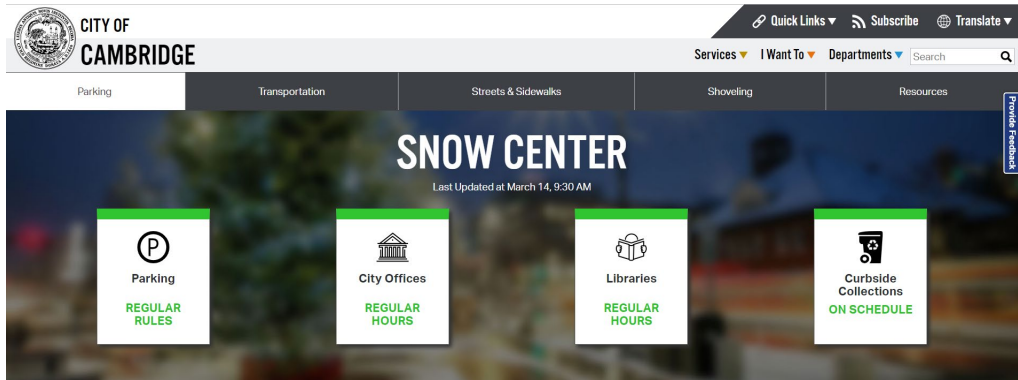
Brine Farm



Truck application



The brine solution is applied in liquid form to the roadway before anticipated snow or ice and prevents snow and ice from bonding with the street surfaces. Unlike granular salts which can bounce off roadways or get stuck on top of snow and ice, brine begins working immediately once it comes into contact with precipitation.





Questions?