

After the ADA passed. And it really blew my mind as a young planner, because I just hadn't really thought about these issues before, and we had a really good trainer. And it just really helped me to think through the built environment in a whole different way. So I'm really glad you're doing this now for a new generation of planners and I want to see what else I can learn from this.

In terms of what we're going to do now on the speakers, we'll talk for about 20 minutes. And meanwhile, guests can write questions in the chat via Zoom or you can ask them directly if you're in the room once the speakers are done.

I'll ask the first question, and then I'll take the Zoom questions first-- not necessarily all of them depending on time. And then the questions in the room will be answered second. So looking forward to all that. With that, I'm going to hand it off to Commissioner McCosh to begin the presentation. Thanks so much.

Thank you, professor and Shannon and all your colleagues at MIT. To begin, I'd like to start off with a visual description of myself. I am a middle-aged woman wearing glasses with the background of City Hall. And although you can't see it on screen, I use a power wheelchair. So the work we do is very near and dear to my heart.

So I'm really excited to be here today to talk about disability in municipal government. Patricia and I were thrilled when we heard from Shannon to hear about her efforts to get a disability lens into planning. Hopefully our lecture today will be the first step in making this a permanent program. So can we pull up my slide deck?

Great, thank you. And if we can scroll down to our mission. The fifth slide. We'll talk a little bit about our office. So our mission is to increase accessibility and inclusion to create opportunities for people with disabilities in all aspects of the city by facilitating full and equal participation.

This includes reducing architectural, communication, procedural, and attitudinal barriers in City Hall, as well as facilitating access to civic activities, public rights of way, housing, education, employment, transportation, recreation, and more. So this is a really big lift, and if you go to the next slide, you'll see why.

So my office only has seven staff, and our role really is to not only ensure compliance with Title II of the ADA, but to create ideal conditions so that people with disabilities have an equitable experience in all the city has to offer.

So our seven staff work tirelessly on the following areas. Title II ADA compliance, architectural access review, delivering programs and services, providing information and referral, doing outreach and engagement, and working with our advisory board, which is a board made up of 13 Boston residents from different neighborhoods representing different ethnicities and disabilities and different life perspectives.

So we hold a public meeting once a month, and we hope some of you may attend in the future. And we'll go to the next slide.

So, how do we accomplish all that we have to accomplish with only seven staff? We'll go to the next slide, too. So, my commission focuses on creating systemic access throughout the city of Boston as a local government entity by collaborating with other city departments to ensure that all the work they do is not only ADA-compliant, but inclusive of people with disabilities.

I say we're kind of like the link that bridges other departments to get to that inclusion because we know, 30-plus years after the ADA, everybody really knows about access, but they don't really take it to the next level without our intervention, so that's what we focus on.

We also work closely with other municipal agencies. The T, MassDOT, and other private developers and other people who are in the space, Public Rights of Way of the city. So I'm going to talk about three things that are relevant to your planning lens. Your work in planning. Public Right of Way Boston, The Public Realm, and Buildings and Facilities. So we'll go to the next slide.

So Public Rights of Way and the Public Realm in Boston, one thing we know is that people with disabilities, their main mode of transit is sidewalks. So we pay a lot of attention to the public rights of way. First of all, we serve on the Boston Public Improvement Commission.

Luckily last year we were appointed an official seat. So this board is made up of five city commissioners from Public Works, Transportation, Inspectional Services, Boston Water and Sewer, the Office of Property Management, and the Disabilities Commission. They oversee and approve all work in the public right of way. This includes sidewalks, streets, and intersections.

We also work closely with the Boston Public Works Department. They construct all the street and intersections and curb ramps in the city. And then we work with the transportation department. They analyze and develop interventions for roadways and intersections, they adapt the road use for things like bus lanes, bike lanes, safe streets, and shared streets.

Our external transportation partners include the MBTA The RIDE, which is the MBTA paratransit program, MassDOT, ride-shares, and taxi companies.

So, I want to talk a little bit about some of the tools we've implemented. First we started with a policy. We gave a lot of input on the city adopting the national framework called Complete Streets. So complete streets aims to ensure that our streets are green, smart, and safe for users of all abilities. It provides guidance on design of sidewalks and intersections for optimal safety and accessibility.

And it aims to create ideal disability access rather than just to meet the bare minimum code. And that's what we really do in all our work and that's our messaging, because we know, as planners, we don't strive to meet just the minimum code for anything, whether it's LEED or public space. You just want to go above and beyond what is required.

Another policy that we worked on is the Sidewalk Reconstruction Policy. This requires that anyone who installs a new sidewalk or does reconstruction of a sidewalk has to have a smooth path of travel at least five feet wide. Eight feet is required on certain street types.

The standard material we use is concrete. Brick can only be installed if it's replaced in kind. And we require yellow tactile warning pads on curb ramps, with the exception of a few historic districts which can use red tactile warnings.

A big issue that's come to light over the last few years is outdoor dining. This has had an incredible impact on the public rights of way as you may well know. So prior to COVID, Boston had a small permanent outdoor dining program on public rights of way and it had a very rigorous process to ensure safety, accessibility, and to maintain the access to the sidewalks.

But the city implemented a temporary program in the summer of 2020 which is now starting its third year. Because the restaurants couldn't all achieve complete access, my office worked on getting a blanket variance which allowed restaurants to use a temporary portable ramp to get people from the sidewalk down to the street.

This is approved through this year, the variance, so we know that next year we're going to have to work on better access to outdoor dining because Mayor Wu wants to create a permanent outdoor dining program that's very comprehensive.

So now I will talk a little bit about building some facilities. So we collaborate with the Department of Public Facilities and the Office of Property Management. They plan design and construct all renovations in the city. And this is a lot of property when you think about it. It's City Hall, City Hall Plaza. We actually own Faneuil Hall. It's all libraries, it's public schools, it's community centers, and-- we'll get back to the slide. I think if we go back-- yep. Oh, up one more. Great.

So this is all the property that is municipal property. So this all has to be ADA-compliant under ADA Title II, but again, we push for ideal access. One quick example I'll give is the city was redoing a library branch, and Patricia and her staff looked at the plans. And it had-- the design was for a front door with steps and a ramp to the side.

But through Patricia giving feedback and working with the Property Management Public Facilities Department, they were able to design an integrated entrance that let everybody enter together. And we also work with the Boston Planning and Development Agency in the form of BRA. My staff provides design review and approves medium to large developments in Boston. They attend all the planning meetings and give input on each stage from pre-file to final design.

And we implemented a tool a few years ago called The Accessibility Checklist, and I'll get to that in a moment. All the city departments that we work closely with are the Mayor's Office of Housing, formerly the Department of Neighborhood Development, Boston Parks and Rec, and the Boston Housing Authority.

So we'll go to the next slide. And here are some policies and tools we've implemented to help with the built environment in Boston. So the accessibility checklist was something that we had approved by the BPDA board. And it's a simple tool that makes developers think about accessibility at the beginning of their projects rather than to scramble at the end and try to weave access into an already existing plan.

So it ensures the project's not only meet the requirements, but that they go a step further. And the questions we ask are things like, what are the sidewalks look like? What do the curb ramps look like? How are you connected to transit? Where is the accessible parking? Things like that.

So our office also loves checklists and self-assessments. We have a Meetings and Events Checklist. We're just in the process of updating it. But once it's finalized, I can share it with everybody. We give this to city departments upon request to let them know if they're holding a meeting in City Hall or on a site outside of City Hall that they should take certain steps to ensure accessibility.

We also partner with other agencies who have large groups of organizations under their umbrella, things like the Boston Arts Commission, they work with all different grant recipients who have funding for arts work. And we've done a simplified ADA accessibility checklist to ensure that their programs are all accessible.

And we always emphasize that we had to be supportive partners not the ADA Police. And then recently, we've started working a little bit on Title III. If we get a complaint from someone in the public that a restaurant or business isn't accessible, our office sends a friendly gentle reminder about the responsibilities to create and maintain access under ADA Title III. And now I'll turn it over to Patricia.

Thank you, commissioner. Hello, everyone. My name is Patricia Mendez, she/her/hers. Short dark hair, and I'm wearing glasses. Thank you very much, Shannon and Natasha, for this awesome opportunity to be here with students. I studied architecture school, I went to the BAC in Boston right across the massive bridge. And I attended a bunch of MIT lectures in my years in the city, so it's really a privilege and an honor to be here today.

I'm going to talk a little bit about architectural access, some of my personal experience, and then our greatest hits, which is the items that we talk over and over again every week-- almost every day. And those are sidewalks, curb ramps, monumental stairs, and wheelchair lift.

And there is more, too, but I want just to keep it limited to a short time that we have today. But of course, I'm happy to elaborate during the question period and in the future.

So my first exposure to a disability issues was at the BAC when one of my instructors was the instructor for construction law, and he was a person who was blind and had a guide dog. So that was impactful to me because he was a person with disability and a role model, somebody who was a professional, somebody that I looked up to, and he was living his best life.

But during architecture school, I didn't really have a lot of exposure to disability issues. In my personal experience, when I traveled with my 90-year-old grandma to Disney World-- this was in the '90s, but I was already an architect. So that trip was very educational and eye-opening in terms of architectural access, in terms of navigating with a wheelchair in public spaces, through the airport, and through the actual park.

And then another impactful experience came later on in my life when I had my second child and I had to navigate the city with two kids in a double stroller. So that was very educational, too, and eye-opening, of course.

Other than that, my real knowledge about architectural access came in this job. I've been with the city and with Commissioner McCosh for the last six years talking about architectural access every day. All right. So the first slide, I brought some pictures to talk about smooth sidewalks.

So smooth sidewalks, think about as on the left, we have an example of some concrete pavers that have failed and are moving. And so when you see materials like that that are not smooth, think about people with visual disabilities that might find this kind of material unsafe and pretty scary.

And people with mobility disabilities are also going to find these kind of materials as real barriers to navigate. And they're dangerous because small wheels can get stuck in between the pavers. And these kind of materials, like the pavers and the bricks, they have so many joints that when you navigate through them with the wheelchair, it gives you actual pain.

So think about that when you see or you have any influence about materials choice. So I'm talking about obviously about the picture on the left.

The picture on the right is a good example, and that is in Congress Street, Downtown Boston, where the sidewalk has a beautiful, smooth path of standard concrete. And this kind of surface, standard concrete, is useful for persons who use a wheelchair or use a cane or use a walker or crutches. And also for people with visual disabilities. Could be our blind constituents or our constituents that live with low vision.

The reason why we love this configuration of smooth concrete, it's also because it provides a visual guide. So think about people with low vision. Winters in Boston are long, nights in Bostons are long and dark. So when we offer our cities and our sidewalks, when we offer this smooth path of concrete, we are helping constituents with all abilities to use our sidewalks.

In terms of equity, when we have smooth surfaces to walk on for all of pedestrians, we are looking at our sidewalks as an important mode of free transportation. Nobody needs to pay anything to transverse safely our sidewalks.

So think about low-income population, think about people with disabilities, think about our older adults. So everybody feels safe, everybody feels like they can freely use our-- this mode of transportation which is pedestrian transportation. Next slide.

OK, I took this picture of one of my early walks. This is an example of good intentions of a developer that wants to add nice interest to the sidewalks, but it backfired because it introduces two types of materials that really don't work well together.

So in Boston and in many cold places of the world, when winter comes, materials would shrink and expand with the heat. And that causes movement. So this movement causes, like the picture on the left, of these beautiful concrete paver that simply just pop up. And they become a real obstacle.

To a person with a wheelchair or a regular pedestrian or a cane-user or a person with prosthetic limbs, this is a real obstacle or a real danger. So avoid that if you can.

Also, for people with disabilities, these bands that go perpendicular to the way that the people are traveling, they can be confused and think that these are steps or think that these are puddles. So we try to avoid these kind of configurations and try to just keep it smooth and continuous and safe. Great. All right, next step. Next slide, sorry. OK.

This is a good example of materials to avoid. The one on the left is a beautiful park with flowers and seeds. Very lovely. The problem is that it's not accessible, so that is an issue. And not accessible because as you can see, the material are pebbles. So the pebbles look nice, but they come disheveled and they're really unusable for a person using a wheelchair or somebody with crutches or a walker.

So if you're providing a public space with pebbles, think about where you're going to place the benches. For example here, in the left photo, you see on the top of the picture the chairs. So those chairs are not in an accessible route. So this is a situation to avoid. So I'm not going to tell you where that is in Boston.

Oh, thank you for laughing. I can't see anybody, so I heard you laugh. So the-- don't change the slide. The picture on the right, I also took this very recently. And I wanted to show you this photo because this is a combination of two materials. You have this smooth concrete on the left and then this shiny Terrazzo material on the right. And everything is shiny because it's wet.

So the thing about an accessible route is that it needs to be accessible even when it's wet. So the minute it rains in Boston or it ices, these materials become inaccessible. So in the future, keep an eye on materials that are too sleek, that the minute they get wet, become inaccessible. And I'm talking about granite, I'm talking about Terrazzo, I'm talking about fancy materials. So that's why we stick with concrete.

All right. I'm going to move on because I know we have questions. OK, thank you. OK. These are the social stairs, also known as monumental stairs or bleacher seating. It's pretty popular, but we call them the antisocial stairs because they're not really accessible, they're not really inclusive.

The example on the left is in Downtown Crossing. This is the head house for the Red Line. The one on the right is a project under construction, is Winthrop Center. And I've read that an MIT professor collaborated in this large, large development.

OK. So when this project came to us, they had the stairs, like the ones on the left. And when-- well, right now the actual project is like they're rendering on the right. So the difference is that the rendering on the right has an integrated sloped walkway that you can use to go from the top of the photo, which is Winthrop's Square.

And then if you're in a wheelchair, you can transverse this walkway, which is a gentle slope, and use zigzag through the big steps, and then you can access the large civic space which is a huge feature of this development. So we're pretty excited about that.

And when we see in the city the proposals for monumental stairs, meaning the one into left, we are concerned because for people with low vision or people who are blind, these spaces are completely unusable. They're dangerous, they're scary, and they're not inclusive.

Same for people with mobility disabilities. Yes, you can provide a little cutout in the front to call it wheelchair seating. However, the person that uses a wheelchair is never going to be taking part of the conversations or the socialization in the rest of the stairs. So pretty much we don't like that, and we are always encouraging to use the design on the right, which is a sloped walkway integrated with the stairs.

Thank you. OK. I'm going to wrap it up pretty soon. These are the curb ramps. We talk about curb ramps pretty much every day. The picture on the left is the APEX configuration. And the APEX configuration is problematic because it's a ramp that directs people towards the center of the intersection instead of directing the people towards the opposite side of the street.

This is for people who might be using wheelchair or people who might be relying on a white cane or a guide dog. The picture on the right is an example of the perpendicular design of curb ramp. It's also called directional design which allows the user just to go straight across in a safer manner. Next slide, please.

So this is a plan view. And on the top-right of an example of the APEX design configuration, the one that we don't like, and on the left labeled 213 and three that's an example of perpendicular or directional design. And as I was saying in the prior slide, and we could talk about this more, we prefer-- well, not just we, the whole Federal Highway Administration prefers the configuration that is perpendicular.

And I'm going to wrap it up there because we are having question-and-answer-- oh no, there's one more. Let's go one more. Thank you. OK, so commissioner wanted me to add this slide to talk about wheelchair lifts and elevators. So wheelchair lift, I didn't even want to talk about wheelchair lift, but my boss made me.

The first photo on the left is an inclined lift, and we have this apparatus here in City Hall. It's problematic in so many ways. It is legal, like code that allows this to be installed. However, it's a problem because people don't know how to use it.

It's so complicated to use that people assume that it's just broken. And when do use it, it's clunky. It deploys down, you go in, and then you travel in a diagonal all the way up. Super slow and just really-- it's undesirable.

So I talk about this product only because it's still legal, but it really should be limited to last-case scenarios, especially for retrofitting existing buildings when there's no other choice. All right, the middle picture is a vertical lift. Still, not a great product, but it is part of what is legal and accessible.

And the reason what it's not a great product, it's because you have to know how to use it. You push the button and then you have to continue to press a button to go all the way up.

So it's not like an elevator. The ideal, the ideal product is an elevator, the one on the right where you simply roll in, push the button, and it takes you up. And nowadays, the elevator even talk to you. So those are great. And that is my last slide. I think we can go for question and answers. Thank you very much.

[APPLAUSE]

Thank you, Kristen, Natasha, and Patricia, that was really, really interesting. And I think one of the things that it reminds me of is-- I think it was Ezra Glen who told me once, we're doing amazing things with concrete nowadays. It seems like the general default for a lot of these things is to use a simple material that's really works well and is proven. So that was really helpful to hear.

I'm going to kick this off with the first question, and then if people have further questions, if they're on Zoom, you can put them in the chat. If you're there in-person, just hold up your hands and we'll just get going.

So the question that I had is, having been involved in local government, I know that money is tight for capital improvements and everybody's struggling and trying to squeeze the budget as much as possible. So how do you help the project managers in these various departments understand the value of architectural access so it doesn't become an afterthought that at the last minute they say, oh no, we need to meet we need to provide accessibility, but that it's at the beginning of a process and it really works smoothly and is integrated and isn't viewed as something extra?

Right. So you hit the nail on the head. The key is really planning at the beginning of a project, because retrofitting access at the end, first of all, it's not going to create ideal access; and secondly, it's going to cost a lot more money. So that's why we worked on the policies and implemented the tools so that the accessibility checklist makes developers think about access at the beginning.

They get that as part of their initial pre-file package. And Patricia reviews all of them, and then she'll give them feedback about what works, what doesn't work. And like Patricia said, there's a difference between meeting code and accessible. Like the lift that she pointed out is-- it meets code, but it's not really accessible.

Another reason that doesn't work is because people who are ambulatory but not stable or have balance issues, there's no seat on it. So older adults, people with mobility impairments may not be able to use it. Another issue about the budget is that the middle picture Patricia showed, the vertical lift, we got a grant from the Mass Office on Disability to install that. So our office looks at grant opportunities to try to help with those issues. Patricia, anything to add?

Yeah. Thank you, commissioner. Thank you for your question. Yeah, so another point that I like to talk about to developers to encourage them to add the accessibility feature is to remind them that they're adding value to their project because the families that are moving out to units that are accessible are your families that can age in place and stay there forever.

A really interesting point. It makes me think of-- I remember being involved in a project that was actually outdoors that was sort of a retrofit of an old path, but they needed to add a lift to it. And part of the challenge being outdoors is they were trying to figure out how to make sure that the lift didn't become basically something that people played with at night.

So it had a key. And then it raised the question of, well, who has the key? And they said, well, we'll give it to people who need it. Well, that doesn't really work very well. And I'm not sure that ever got used because it just was very impractical solution.

I'm going to turn it over to the room. I don't see questions in the Zoom. I'm happy to circle back to them if there are any, but are there questions in the physical room where I can't see?

Thank you for-- can you hear me?

Yep.

Thank you, commissioner, for your talk, and Patricia. My question is, what are three or four things people could leave planning school learn about disability and [INAUDIBLE]?

I'm sorry, I didn't catch that. Could you repeat it?

Oh, sure. OK. What are three or four things people could leave planning school learn about disability and municipal governance?

Right. So as--

--in this call. Please hang up. Otherwise, press any key on your phone to log in. Thank you.

So as Patricia said, in her architectural classes she learned very little about accessibility. So I really think the main thing that you can do is come away with the lens of accessibility because we know that everybody can use a ramp, but not everybody can use stairs. So why not just build a ramp even if it replaces the stairs? So I would say that disability lens is key. And then I'll ask Patricia for her thoughts.

Yep.

Yeah, that is the main one. So it came to me and now it left my brain. OK, it's back. So when you design for people with disabilities, you are designing for more people because you're making the lives of all the rest of the users-- like people using strollers, pushing luggage, people that might have cognitive disabilities. When you make something accessible, you make it easier to use. So it brings your design-- it makes for better designs.

Yeah, it makes-- and it seems like it almost-- as you incorporate it into how you frame an entire project, it becomes part of the new aesthetic. And just as traditionally there were certain styles like-- brick used to be very popular. Well now we have a new aesthetic that's more inclusive, and that's an exciting opportunity in a lot of ways. How do you make the entrance to a building that doesn't have a bunch of stairs that is attractive and everyone wants to use? So that people want to use the ramp, they don't want to use the stairs. I think that's an interesting opportunity for designers.

Absolutely. Well said, Jeff.

I see a question in the chat. Given the emphasis on more organic designs and materials, and at times, even introducing elements of the unexpected or risk in design, how do you envision the future of disability planning adapting to include or address those approaches?

This is probably more of Patricia's world, but one thing I have noticed is that new designs are coming in to be climate-resilient. And because of that, they're putting a building infrastructure on the ground level. So the entrances are being built up.

So we want to make sure that the entrances, if they're not on street level, are accessible and we encourage people to use the slope walkway instead of a ramp because sloped walkways are more gradual, they don't require handrails. And it is definitely a new trend that we're seeing and we're trying to get in front of it. Patricia, any thoughts on that?

Yeah. I'm also involved with LEED design. So the latest version of LEED, which is an environmental design, basically. The newest trends with LEED, they're also including now clean air, they're including less waste, local materials.

So I think that that is a direction that accessibility intersects environmental design in that way. I don't know if I answered your question, but your question was kind of general. Did I answer the question?

Ezra?

Sorry. Can you hear me?

Yeah.



I'm rearranging my office at the moment. Yeah, that's what it is. I mean, I guess I was thinking more about some of the-- especially like if you look at playground design, for example, there's been quite a lot where people are taking all kinds of risks and doing unusual things that are sometimes untested.

At the same time, we don't want to throw out too much that's unexpected or confusing. And so how do we balance those and create environments that work for everyone and yet still provide something new when designers want to do that? I guess that was the question.

I'm so glad you asked about playgrounds, because it is a complex issue. You have to provide surfaces that are safe, accessible, but also the play component of sensory like sand or wood chips. So we think about that a lot and we talk about that a lot. Right now, the City of Boston is building playgrounds with surfaces that are the poured rubber.

And in the Architectural Access Board, we are allowing now for materials that are a combination of rubber open grate material that allows for some of the woodchips to fill in the gaps. And those gaps in between the rubber grate can also be sand. So this is a new approach that is still being piloted, but it is definitely a complex conversation that is definitely in our minds.

Thanks.

And we had a question in the chat. You mentioned, commissioner, a slope walkway versus a ramp. Could the two of you clarify the difference between the two for us?

Yes. A ramp is a little bit steeper than slope walkway. A ramp is 7-- 8.3% slope, and it requires handrails. The slope walkway, it's very shallow, it's only less than 5% slope, and it does not require handrails. Great question.

It is a good question. And ramps also have those rough spots, I think. You have to have a level of spot. You probably maybe don't have to do that as much with the slope walkway, I would think.

Correct. This slope walkway can go forever. And the ramp has a limit of 30 feet. And then you need a level landing.

Great. And I hear there's a question in the room. So I will hand it back to the room.

Hi. Can you hear me?

Yeah.

Yes? OK, great. Thank you both for being here. This is a really interesting. I was curious if you could share a little bit more about collaborating and working across different city agencies, and like any tactical tips to make sure successful design is prioritized, and I can imagine there's like--

You mentioned resilience buildings, like maybe there's coalitions there you can build, but then I could imagine maybe like historical preservation, that can be a little complicated conversation with old buildings and retrofitting. And curious how you approach collaborating building coalitions and tactically making sure that all kind of groups are prioritized and finding where there's shared opportunities.

Right, so I can take that one. So I always like to say that Boston has a lot of innate challenges. We're an old city, we're a historic city, we're a vertical city, we're a winter city, and we're a crowded city. Boston, in fact, is less than 50 square miles in size, and there are over 600,000 residents. So we have to build out, so that is a challenge in itself.

But the things that we have going for us are political will, we have great minds in engineering and planning, like you all here today, and we have great disability advocates who keep us on our toes. So I would say that years ago, there was probably more pushback than we get today, but today, the different departments in the city are really not only willing to work with us, but they embrace working with us.

And we do that, like I said, in a systemic way, by implementing the tools that we've created. And in my slide deck, if it's shared after the presentation today, I put links to all of our tools. So I would encourage you to go look at the accessibility checklist and look at the different departments because I really can say that they are really good collaborators and we don't really get a lot of pushback today. So if we can ensure that everything they do is accessible, then we've done our job.

And I think you mentioned earlier, sometimes you're able to bring some money to the table through a grant or something like that. And I know as a former public official, that was always really wonderful when that would happen because it could be a real win-win.

Yeah. We've gotten a few grants in the last few years, so we're excited about that.

That's great. Do we have a-- we have time for maybe one or two more questions. Are there any in the room that I can't see?

Yeah. I'll just talk about where MIT, a lot of us are interested in research and innovation. I'm just wondering, what are a few things that we can be looking into over the next three to five years that would help to make your jobs much easier? What kind of research is needed at this moment to improve what it is that you guys do?

So I would say if you're not familiar with this organization, there's a great organization in Boston that works on universal design. And they always keep up with the latest trends because we know they're changing. And I wonder if Andrea could put the link in the chat to the-- not the Institute for Community Inclusion.

Human-Centered Design--

Yes, the Institute for Human-Centered Design. They are right in Downtown Boston, and they work worldwide on accessible and inclusive design, really universal design. So I would encourage you to visit their website. And if anyone is looking for more information, you can certainly reach out to us, reach out to them.

But it is really the way to design for the future because we know Baby Boomers are aging, and soon we'll have the most number of residents in the country will be over age 60. So it is definitely a trend to look at moving forward, is universal design. Patricia?

Yeah. Well thank you for that question. You know what I would love to do to research on? It's on cost. Because the pushback that we sometimes get is like, oh, it's too expensive to make it accessible. And we don't really buy that, because when you design from the beginning and you are thinking about strategies from the beginning, it doesn't become an afterthought. But there's no really a research that saying, OK, if you make it accessible, you are spending the same amount of money or maybe a little bit more. But I haven't found research on that.

And I'll second at the Center for Human-Centered Design. I definitely use their resources many times in the past. It's a great organization. And I think I'm going to hand it back now I think we are almost out of time. So I want to hand it back and let Natasha and Shannon close us out. So thanks very much. I really enjoyed this.

Thank you, Professor Levine. We do have one final quick question on our side, so we'll try to squeeze that out before we close out.

Yeah. I was wondering if COVID changed anything around discussion of tactile surfaces.

COVID changed so much. . It's even difficult to summarize in just a few minutes, but one thing that it really pointed out is that-- not so much related to planning, but people with disabilities are able to participate more in meetings and events because everything switched to virtual. People with disabilities for years had requested an accommodation to work from home, and it was roundly denied because businesses didn't think that it would be successful.

But we've seen during COVID that it was extremely successful. So we hope that's a barrier that is broken down for good. And moving forward, that will be one of the things that will be able to be implemented for equity for people with disabilities.

As far as the built environment, like I mentioned, outdoor dining has a host of challenges because it takes place in the public right of way. So we need to ensure that the spaces outside have accessible paths of travel within the space between tables, that they account for the change in level from the sidewalk to the street, and they just don't crowd out the sidewalk too much so people can still use the sidewalk. Patricia, any thoughts?

You said it well.

All right. Well thank you, Commissioner McCosh, Director Mendez, Professor Levine for helping us open our eyes to an introduction to disability in municipal government today. And thank you for all the links as well. We'll certainly share out the slide deck and the recording. And yes, well, you have an eager group of students here, so you'll hear from us again.

And for anyone on Zoom, and our speakers are invited as well, next week we'll have Professor Michael Stein from the Harvard Law School Disability Project join us, and he'll be speaking on disability and international development. So same Zoom link, same room. Lunch included if you can join us. And yes, thank you again.

Thank you, Shannon. And I would just wish you luck in making this a permanent program at MIT, because it really is needed and we would be excited to hear that, and we plan to attend the rest of your workshops.

Thank you.

For sure. Thank you very much and we'll see you next week. And I'll attend. I'm excited about it. I might get the free lunch.

[LAUGHTER]

Thank you, everyone.

Thank you.

[SIDE CONVERSATION]

Bye, Shannon. See you next week.