**Massachusetts Commission for the Blind**

**Town Hall**

**Friday, July 10, 2020**

**9:00 a.m.**

CARLA KATH: All right, we're going to resume recording. And it is nine o'clock, so if we could let everyone in from the waiting room, we'll go ahead with that. So, let everyone get settled and then we will get started.

Good morning. Thank you all for joining our MCB Virtual Town Hall. This is our July edition, the third town hall that we have attempted for all of you during the COVID‑19 pandemic, and we're so happy you could join us today. I am Carla Kath, the director of communications for the Massachusetts Commission for the Blind. And just a couple of ground rules as we get started this morning: Please mute and please keep your video off for the duration of the presentation. If you do have questions during the event, which you likely will, this is all about assistive technology, please submit your questions via the chat. We have set up a colleague who is named "Questions" today. If you search through the participants, you will see "Questions" and that is where you can submit them in the chat. You can also send your questions to MCBinfo@mass.gov. That's MCBinfo@mass.gov. We will do our best to answer as many questions as possible at the end of the presentation. Otherwise we will follow up with you after the event and try to get your questions answered. But we are so thankful all of you could join us today. With that, let's go ahead and throw it over to our Commissioner and get started.

COMR. D'ARCANGELO: Carla, thank you so much. Thank you all for joining. Welcome to our Virtual Town Hall. Since COVID‑19 we've been trying to stay in touch with our consumers as best we can, and one of the ways we found out that's effective are these Zoom meetings. We've had a couple of successful town halls, and so wanted to do it again because we've gotten such a great response. So, thank you all for joining, and thanks to my team for putting together such a robust demonstration here. You are in for a treat. The Assistive Technology Unit at MCB is, I would stack it up against any in the country. And I'm on these nationwide calls and really the comparison and contrasts to what we do as compared to other states, we are very well ahead in many ways, and a lot of that goes to the credit of our Assistive Technology Unit, particularly our director of the Assistive Technology Unit Mr. Alexander Pooler. Before I throw it to them, though, I want to once again thank you all for joining. We're here to serve you during these challenging times. I hope you're staying safe, and if there's anything we can do, please contact MCB. We're there to serve you. Again, you're in for a treat here today. A special shout out to Tyler Littlefield. Tyler, thank you so much. You've put together such a useful website for COVID‑19 reporting and statistics that's accessible for screen readers. Thank you so much. I'll give you a thumb's up there and an applause there. We really appreciate you doing that. Once again, I'm very pleased that you're joining us. Please let us know how MCB can work for you. At this point I'm going to turn it over to our wonderful director of the Assistive Technology Unit Mr. Alexander Pooler. Alexander, take it away.

(No response)

COMR. D'ARCANGELO: Is Alexander on mute?

CARLA KATH: Alexander, we can't hear you.

ALEXANDER POOLER: Can you hear me now?

COMR. D'ARCANGELO: We can hear you now. Take it away.

ALEXANDER POOLER: I'll try this again here. Good morning, everyone. Again, thank you very much, David, for the warm introduction. I appreciate the kind words for our unit. I'm Director of Assistive Technology here at the Massachusetts Commission for the Blind. It is a privilege for us knowing you're sharing your morning with us. It is earlier than we've had for some of the previous town halls, but I appreciate that we have an opportunity to share about what our unit does and what our responses have been and things we've learned since COVID has happened upon us. We're excited about this opportunity, and we hope we can have some good information to share with you. But before we get into too much more about our overall unit, we are going to have a brief introduction, overview from Richard Flint, the head of our AT Consumer Training Unit. We're going to have an interview that David alluded to earlier on with one of our consumers that will be conducted by Assistant Director Evan Silver we'll find fascinating and inspiring, and I hope you do as well. After that we're going to offer a recap of our Smart Speaker Pilot Program that wrapped up in late 2019. We're going to hear from some of our assistive technology specialists Margaret Gaffney in the New Bedford office will do a presentation how do I ask my smart device for information about COVID. The Springfield/Western Mass Region I William Hersh will do a presentation on guidelines for remote evaluations. Brendan Finn, Region II will do a presentation on experiences using remote login tools during COVID. James Verrill, Region III, North Shore area, will do a presentation on challenges of maintaining good ergonomic practices in alternative work spaces. There's a lot of information we'll go over today. While some of your instincts will be to try to remember everything we're going over, it is not necessary. I'll ask you to take a different approach. You don't need to memorize everything we discuss. What I want you to take away from the presentation MCB is your go‑to resource when it comes to your assistive technology needs. If you're a stakeholder or consumer on the call today and we discuss something that piques your interest, you don't need to memorize it. You can come back to us later, and we can continue the conversation either later today or in the future and talk more about that. If there's something we don't discuss but you have other AT questions, we want you to come back later and have that conversation with us. You can e‑mail us at the MCBinfo@Mass.gov. That's probably being displayed on the screen. Without further delay I would like to introduce Richard Flint and he'll discuss our training unit.

RICHARD FLINT: I'm Richard Flint, and I'm with the Consumer Training Unit. Our Consumer Training Unit has three focus areas, and that's assessment services, training services, and Helpdesk services. The focus today is the Helpdesk services. I want to make sure everybody has the contact and phone number for the Helpdesk, a telephone number 617‑626‑7401, or you can e‑mail me at Richard.Flint@Mass.gov. Richard.flint@mass.gov.

So, about the Helpdesk, most people think of the Helpdesk as only troubleshooting problems that you come across. And that's the focus of the Helpdesk. But it's also training in different areas that maybe you don't usually use. For example, say you're very good with Word but you do not typically put Table of Contents in your document and struggling to do so. You can call the Helpdesk and you can get assistance in doing that. There's also the fact that you can call for technology advice. You may see some technology out there that you think will be very useful to you or someone in your family or friends and maybe you're thinking about pursuing it for them or thinking about pursuing it for yourself. It is always best to get a second opinion before spending money, investing time and effort in learning a new technology. And we can assist you in talking through, okay, what tasks are you trying to accomplish, what are your skill sets, and really evaluate that and determine is the device or, you know, hardware/software you're thinking about getting really the best device for you. Especially for somebody purchasing for other people. I see it quite often that somebody thinks, like, let's just take an example that somebody purchasing an iPhone for somebody, and that would be a great gift, it would be a great tool, however, if they have barriers that they would not be able to fully utilize that device, it may actually cause more aggravation than help. Say you had severe tremors, neuropathy, or memory issues in how to use a device, it would just cause more aggravation. You really need to look at many different areas before selecting technology.

So, I just want to recap with, you know, my contact information. Again, Richard.Flint@Mass.gov. I guess, Evan, over to you.

EVAN SILVER: All right, thanks. This is Evan Silver. I want to direct you to a prerecorded interview that you're about to listen to. It is with a young professional software developer. His name is Tyler Littlefield. He currently lives in and works for a company here in the Boston area. And Ty relies on the JAWS screen reader and braille to do his job. He has a degree in computer science. We invited him here to talk about this cool new project that he has developed as a kind of, sort of a side gig, side project, and it is called "The accessible COVID‑19 statistics tracker." So, please listen to Tyler discussing his project, and then you'll be hearing me give just a very brief kind of run‑through, a taste of how it works with the JAWS screen reader. And finally, Tyler will tell us a little bit about how he does his job as a visually‑impaired software engineer. Okay. Let's roll the tape.

CARLA KATH: All right. Again, if you have questions or you're having any technical difficulties, please type in the Questions in the chat and we'll go ahead and start this audio. Thank you, Evan.

All right, we're going to start that again, everyone. I apologize for that. Just one moment. We're having just, of course, assistive technology difficulties, braille technical difficulties. We're going to start that again. If everyone could please mute and turn off your video, then we'll be able to hear the audio from our consumer interview. Just one moment. Okay, we're going to try that again. Thank you very much for muting so that we can hear Tyler.

EVAN SILVER: We don't have much time so let's not screw around any longer. Tell me about the accessible COVID‑19 statistics tracker.

TYLER LITTLEFIELD: So, when all of this started there was a lot of data around just ‑‑ someone wouldn't inform me what was going on, and a lot was on graphics, and so it would show a graph and would show a curve. A lot of people would talk about flattening the curve, and show the states, here is where they are. There were some heat maps. By that I mean it would show you a map of just like the US, for example, or a map of the world and based on the severity of cases in certain areas it would just kind of make those areas different colors. But a lot of this did not translate into very accessible data. It did not allow us, as blind people, to be able to parse that data. So, I created some stats and it uses data from world.info and it aggregates the data in three sections. The first is an overall global list of information, global number of tests, global cases, global recovered, things like that. As more data is added that list gets longer by default. And the next piece is a data points on various countries. So, it is a table, and as you go through the table you see different countries. You can sort it by whichever column you would like. But ultimately there's a lot of different data points in that table, and it includes things like the density, population density. Which is kind of what you get from the sheet maps I was talking about earlier. It talks about the tests per country, and how many tests have run, the total number of cases, recovered, deaths, things like that. Further down there's a table you can expand as well that does the same exact thing for the states. So, it covers all states. Oddly enough it covers these ‑‑ I don't know why they're considered their own states, but they are. Essentially this website, it has been popular. Sometimes it goes down and I must wait until it comes back up or get in touch with the people who run it. It's been initially, because I initially did this kind of project to learn the framework, React, a job I was starting at the time.

EVAN SILVER: What is that?

TYLER LITTLEFIELD: It allows you to build applications, single page applications, and other applications, but really a single page application. It's what a lot of companies and developers make to make interactive applications you can run in your browser. Which is kind of how a lot of data's being presented and how a lot of applications are being used currently.

>> Yeah.

TYLER LITTLEFIELD: So, I wanted to learn React and started building this out to help me learn that. Initially I had started just by writing a quick API, quick program for myself that showed it in text, columns, and I could query it for data. I realized it would be cool if other people had access to this, because this solves my problem, but it doesn't solve the problem for anybody else. That's kind of where this comes from. I think to date it has had well over 300,000 visitors if not. I haven't looked in a while. But in the few weeks I looked it was way over 200,000. But it's been really cool for people. It has been really cool to see, to be able to have an impact. So, the interesting thing about that is, there was recently, I was interviewed for a news article, I think it was Vice, and there ‑‑ but there was a news article that basically was talking about the accessibility issues. Because the issues specifically is that if you want to see state‑specific data you have to go to the state's website, and a lot of them in testing ‑‑ I was asked to do testing on, preliminary testing for this reporter, and what she did was run it through Wave, a measure and accessibility, and obviously it doesn't catch everything, but there were ‑‑ in all of, in most of the states, governmental websites that they built to provide data about COVID‑19 and to show statistics, there were accessibility issues. So this kind of takes away not only having to dig through this website to find the data that you're looking for, but it makes it really easy. So if you have family or friends in different states, you look at their state and you can see what's going on around them. Interestingly enough, the people I've shown this has started using it, as opposed to searching for the data. Because it is just easy to view visually as well because it's in a tabular form. And you don't have to look through news articles, click through ads and slides and sort of try to parse graphics, things like this. So, this kind of highlights a cool concept where if you make something accessible by default it tends to improve the usability for everybody across the board. That's kind of cool, in that they've done a lot of research studies about things like that as well. So, this hits multiple markets, multiple groups of people and not specifically blind people, but other people with disabilities as well.

EVAN SILVER: Okay. All right, here we are on the web page. It is called ‑‑

>> Accessible COVID‑19 statistics tracker Microsoft Edge.

EVAN SILVER: I am using JAWS with Microsoft Edge, the latest version. Let's go down.

>> Accessible COVID‑19 statistics tracker heading for many people disabilities much data right pair and note in the graphical format which is impossible to access. It is my hope the site can serve to solve the lack of information by making critical statistics available in the text format that is easy to read and to understand.

EVAN SILVER: Okay. That's exactly what this does. So, we can look at, for example ‑‑

>> Global stats to ‑‑

EVAN SILVER: Global stats. Country stats.

>> Breakdown of states in the United States have ‑‑

EVAN SILVER: And that's breakdown of states, which is what I want to look at.

>> COVID‑19 statistics tracker‑Microsoft Edge ‑‑

EVAN SILVER: Okay. Here we are on this page. And what's great about this, it makes ‑‑ it puts all the data that is often displayed graphically, in what Tyler referred to as a heat map, puts it in a nice table we can navigate very easily, and JAWS renders it very understandably, in using very basic JAWS commands. So, I'm going to move to the tables.

>> By sorting the table by the values on the column press...

I can move down the column by using the JAWS commands to move through columns and rows. I move down with Alt down.

(Computer generated voice)

Okay, there's Massachusetts. Let's see what today's stats are for right now.

(Computer generated voice)

Okay, that's the number of cases.

>> Active cases 8,968, column 3.

EVAN SILVER: Active.

(Computer generated voice).

EVAN SILVER: Okay. So, some of the data where it was 0, I think it's just because it's too early in the day for that data to be reported. But if we want to pick one of these columns and compare them to some of the other states, let's find out.

>> Deaths, 8,000 deaths today. Cases reported today, 0. 0 active cases.

EVAN SILVER: Let's look at active cases. That's Massachusetts. I'm going to go up and see another state.

>> Illinois, 23,358. New Jersey, 90,150. Florida ‑‑ (computer generated voice).

EVAN SILVER: Okay, and there you have it. Let's move on, I want to talk about yourself because I think you have an interesting story. So, you have a degree in computer science from Wentworth in Boston. Correct?

TYLER LITTLEFIELD: Yes.

EVAN SILVER: And ‑‑ so your first job out of college, after getting your degree in computer science, was at Freedom Scientific. Can you just kind of tell us just very quickly like what ‑‑ you know, about that, about what you did at Freedom Scientific and what they do, for those who don't know?

TYLER LITTLEFIELD: So, Freedom Scientific makes software and hardware. I was in the software side of the company, and their kind of big sales are Zoom, which is a magnification program in spec, which it builds off of JAWS, which is a screen reader to test web accessibility, and JAWS as I mentioned is a screen reader. I was specifically working on JAWS, and I did a lot of different things, but kind of the, one of the more cool things is working on it to make it better in certain instances. Also bringing a lot of different support to Kindle. So, Amazon worked with us while I was there to kind of help find issues in their Kindle desktop application accessibility‑wise that we could ‑‑ that would allow JAWS to work with it better specifically. So, one of the, a couple of the more important things I did there, I was working table supports to books. If you're reading a book you can navigate tables just as in safari, for example, or Firefox. And also to bring support to Kindle as well. It allows you to, if the book is marked up properly, to see equations and drill down into those. JAWS actually has that support natively. If you read something with the PDF, for example, you can also use that same support.

EVAN SILVER: Okay. And then so you worked there for a few years, and now this year you've taken a new position here in Boston, or at a Massachusetts company called Curriculum Associates.

TYLER LITTLEFIELD: Yes.

EVAN SILVER: Tell us very briefly what you're doing at this company now.

TYLER LITTLEFIELD: Yeah. Curriculum Associates is an education company. They do a lot of e‑learning. Basically, allowing students, teachers to be able to gauge like where you are. There's also like a lot of lesson plans and learning through their platform. So, I specifically work on the Proganz project, for younger kids, and I think it is up to five or six years old or so. But most what I've been doing is performance and security related, making the website run faster, making sure it is secure. Making sure user data is safe, things like that. I've always kind of worked a lot in the backend, and you can see that from CV stats. It is a plain website. And it is intentional. Because it is easier to read. But also, you know ‑‑ I found that we're doing backend work, which is how you load the data and render it, and making it load and render faster is kind of where my strength is.

EVAN SILVER: Okay. And tell us what tools you use as a blind software engineer. What assistive technology and what esoteric technology are you using for that.

TYLER LITTLEFIELD: I typically use JAWS. I've been using JAWS since I was six or so. So, it was cool for me to be able to work on the source code with JAWS and how it ran and how it worked, to contribute to it, since I've been using it so long. I use two different editors, and I do a lot of work on Linux‑based systems, or BSD is where I spend a lot of my time, and that's always through the shell. And then I use a real display, which the Commission got me while I was in school. Not really for coding so much because I grew up with, my mother was kind of a single mother, working and going to school at the same time, so we got our computer on the grant, and so there was no way I was getting braille display, but reading, math. I do a lot of math‑based stuff. And I used to use a Mac, and I don't have one anymore, but it was cool for building out like iOS apps, testing them, doing things like that.

EVAN SILVER: Okay. What tools do you use in your daily life? Just outside of work.

TYLER LITTLEFIELD: I use my phone a lot. We're really, lucky. I remember when I was young, I used to walk around with a rolling backpack of stuff, like when we traveled. We lived in Phoenix and my family was in Colorado, and it's like a six‑hour drive. When we would move, we would go somewhere, I had to pack the braille books, braille light, talking dictionary, and the big talking players, and everything has condensed itself down on to my phone. You'll see, I have a ton ‑‑ like that, it's pretty much how I accomplish most of my tasks, and how I get everything done that's not on the computer.

EVAN SILVER: Okay. What skills or qualities do you think contribute to your professional success for the visually‑impaired professional?

TYLER LITTLEFIELD: The two I have to say is adaptability and networking. Adaptability primarily because you may not have the technical skills to accomplish everything but finding other ways to get something done. One of the hardest things of being a blind employee pretty much anywhere, regardless what a lot of people say is, is that you must not be a burden on other people. And in the cases that you are, how do you find the ways to say, you know, I can't do this, and if you can help me with this, then I will help you take up the slack and do this other task. Just being able to really think about things, solve problems, and work through things. A lot of people get lucky in college and have a good disability services office, but you don't get that in the workforce. And networking is incredibly important. It goes even as far, when I was in school some of the people oddly enough that were most helpful to me were the food services people, the people in the cafeteria, and there was a lot of construction going on in my senior year and they would find me and say, hey, this pathway you take to your building is blocked off, or you might want to go this way, and they would always look out for me. I think making as many connections as possible, making the meaningful connections and caring about people and communicating with them is always going to get you a long way. And that's ‑‑ that pretty much applies everywhere, working, during school, and pretty much everywhere.

EVAN SILVER: Okay. All right. This is Evan back live with you now. Thank you once again to Tyler for joining us today. Thank you all for listening to this. So, let's kick it back over to Alexander Pooler.

ALEXANDER POOLER: All right. We don't have much time so let's ‑‑ thank you, Evan. I appreciate that. Once again thank you very much for Tyler. It's a great interview there. I wanted to tell a project MCB had last year involving Smart Speakers. Back in 2018 MCB was granted an earmark for additional assistive technology funding for our SR population. The earmark happened to coincide with the on‑boarding of the new Commissioner who challenged our unit to look at technology integration and modernization a little differently. He really wanted us to focus on ways to better leverage consumer technology that's already in the marketplace. So, we kind of passed around ideas what's out there that we can engage with that is different that we haven't done before. What we wanted to do is figure out a way to better help our consumers manage their daily life essential skills, and we decided to look at Smart Speaker technology. While multiple devices were considered, we chose to use the Amazon Echo, as it met a lot of criteria and provided the best opportunity to improve our SR consumers independence. The project was conceived in two phases. Phase I dealt with teaching and managing basic yet essential daily life skills. Phase II managing more advanced daily skills. MCB took a team approach, which included assistance from additional units, the rehabilitation Case Managers, rehabilitation teachers, and technology unit. When we decided on the technology, we wanted to look at it and figure out, what are the things we want some of our consumers to be able to do with this technology, and we boiled it down to a list of 20 different tasks we wanted to be able to have our consumers do. Some of the tasks included setting up simple things like reminders, alarms and timers, lists, how to manage a calendar, how to have direct device‑device communication and messages and e‑mails. We didn't want to go into anything that was going to be too overly complicated at this point. We really wanted to focus on simple, easy to learn, easy to teach tasks. What we wanted more than anything else from this project was a device that was going to improve the overall well‑being of our consumers. We didn't want to teach anything that was focused too difficult and causing frustration for the consumers but find those things that would improve the quality of life for them. The products had great amount of success when we started working with the consumers. We got a lot of feedback from the consumers. Some of the feedback was constructive, about things we could improve upon, but a lot of feedback was positive. This is different from the other projects we've done at MCB in the past where we may have a specific metric we're trying to reach in terms of success. We simply wanted to know from the consumers who were part of the pilot project were you happy, was your life improved, and do you feel there was improved by this. And for consumers who just wanted to maybe have an easier way to access their music, or play games, or ‑‑ I have one consumer we worked with that was very acutely aware and wanted to know at all times what the traffic was like in and around Boston. It was important for them to have quick, easy access to that information. So, some of the take‑aways we had from the project we learned from the consumers, there are certain things that, you know, the project ‑‑ the technology itself isn't quite perfect on. There are some security concerns we were working to ameliorate with the consumers. But we found the negative did not outweigh the positives for the consumers that we played the devices with. This was a very small project. We have a great number of people that we serve. This project only served about 20 individuals. But as a pilot project it was meant and designed to see if there was going to be some additional resources we could possibly apply to this in the future that's going to help other consumers, and if there was a need and desire to have this from our consumers, and I think we answered definitively, yes, this is something a lot of our consumers had a lot of interest in, the ability to have simple voice commands that puts a wealth of information in an easily accessible format. So, what's the future of this project? The first project we just did with a small group. Prior to COVID we were planning a larger, more robust rollout of the devices for our consumers. We wanted to start working on creating more sophisticated tasks, routines, and start looking at how add‑on products would work with Smart Speakers. And things like smart plugs. You may have a plug you can have a simple voice command for that will turn on and off lights or other devices. This could include using other smart devices to integrate with the Smart Speaker, climate control, security system. Those are much more complicated tasks, but it is things we at least want to have a better understanding of how they work to see as any possibility we can work with our consumers with in the future. Like all technology, the needs of the technology and user needs of the technology does change constantly. COVID provided opportunity to really reinforce that. So much so the next speaker will talk about how she leverages a Smart Speaker to access current information she's looking for as it directly relates to COVID. Margaret, why don't you talk about your experience with Smart Speakers and accessing information about COVID.

MARGARET GAFFNEY: Okay. Thank you, Alexander. Am I being heard?

ALEXANDER POOLER: Loud and clear.

MARGARET GAFFNEY: During the past few months one of the most discussed topics on TV, radio and home has been COVID‑19. Because a lot of this material presented, especially on TV, has been inaccessible to me, I turned to my smart devices, such as the lovely A lady. I can hear COVID data in Massachusetts and even down to my County. For example, I can ask Echo: How many cases of COVID‑19 in Massachusetts today?

>> According to Reuters, July 9th, 2020 there have been 110,897 cases confirmed of the virus in Massachusetts. Additionally, 8,268 deaths confirmed due to the novel coronavirus in Massachusetts.

MARGARET GAFFNEY: I can also bring it down to my County. Echo: How many cases of COVID‑19 in Bristol County today?

>> According to Reuters, as of July 10th, 2020 there have been 8,399 cases confirmed of the coronavirus in Bristol County, Massachusetts. Additionally, there have been 594 deaths confirmed due to the novel coronavirus in Bristol County, peace.

MARGARET GAFFNEY: I can also ask her about symptoms by saying: Echo, what are the symptoms of COVID?

>> According to the CDC, symptoms of COVID‑19 include fever, cough, shortness of breath, chills, repeated shaking with chills, muscle pain, headache, sore throat and loss of taste or smell. These symptoms typically appear within 2 to 14 days of exposure. I can help you determine your risk for coronavirus. Just say "What is my risk of getting the coronavirus?"

MARGARET GAFFNEY: As she's explained I could also get more specific information by asking: Echo, what is my risk of getting COVID‑19?

>> If you're concerned about COVID‑19 I can ask you a few questions based on CDC guidelines to help you understand your risk and decide about seeking medical care. Do you have a few minutes for this?

MARGARET GAFFNEY: Yes.

>> Before we get started, if you have a medical emergency call 9‑1‑1 now. This is not intended to be a substitute for professional medical attention and shouldn't be used for children under two years old. Do you want to continue?

MARGARET GAFFNEY: Yes.

>> First of all, do you feel sick?

MARGARET GAFFNEY: No.

>> Do you live with someone who has or believed to have COVID‑19?

MARGARET GAFFNEY: No.

>> In the last 14 days have you had close contact within about 6 feet with someone who has or believed to have COVID‑19?

MARGARET GAFFNEY: No.

>> Finally, in the last 14 days have you traveled internationally or been to an area with a high rate of COVID‑19 spread?

MARGARET GAFFNEY: No.

>> Since you don't feel sick and had no clear exposure to COVID‑19 CDC guidelines indicate it is less likely you have the virus. And remember, if you must be out in public areas where it is difficult to maintain 6 feet of distance from others, the CDC recommends wearing a cloth face covering. I can also share a few tips how to prevent the spread of the virus. Would you like to hear them?

MARGARET GAFFNEY: No.

>> Okay. Stay safe.

MARGARET GAFFNEY: For those that have an iPhone, Siri can be asked these same questions and respond with similar results. When you ask Google how many cases of COVID in Massachusetts, Google will respond with showing a very detailed website from which you can choose data or graphics. When you ask Google about the symptoms of COVID a screen is shown with a bulleted list showing symptoms and a button that you can click to take a self‑assessment. Bixby is not recommended because when tried she brought back out‑of‑date information. There is also a COVID‑19 app on the App Store, in the App Store for the iPhone and iPad. This app is very accessible with voiceover, and it works ‑‑ let's see, sorry. It provides screening tools and links to the Massachusetts.gov COVID website. It uses your location to determine your state and linked to your state website. All these smart tools that I have used can also be used by any of our consumers and their families. So, I hope today that this presentation has helped you understand and learn and work a little more with COVID. Now I'll turn it over to my colleague, Bill Hersh.

WILLIAM HERSH: Thank you, Margaret. Welcome, everybody. I decided to present this topic to clarify what a functional low‑vision evaluation is, and to help you better prepare for the evaluation and to understand what to expect. So, the functional visual evaluations I do, these are not clinical eye exams, nor are they clinical low‑vision exams. The purpose of the functional low‑vision exams that I do is to discover if there are low‑vision devices, techniques or strategies that may help enhance your ability to use your remaining vision, to achieve your goals in settings where you use your vision. For example, your home, school, on a job site. Examples of some goals might be reading labels, mail, seeing the white board at school. Reading a menu at a restaurant. Or using a computer, tablet or your phone. The functional low‑vision exam is a low‑vision service. So not every consumer will benefit from it. The remote evaluation is not a replacement for a face‑to‑face evaluation. The goal is to learn enough about how you use your remaining vision to be able to recommend low‑vision devices and strategies that will improve your efficiency and make it possible for you to achieve your goals. Sometimes that path is very clear, and from the data that I get and the experience that I have I'm able to find tools and strategies that work for you and no follow‑up will be needed. Other times it's not so clear, and in those instances, I'll try to get you a tool that will hold you over until we can schedule those face‑to‑face meetings. The way I do remote evaluations, I use teleconferencing software. Typically, that's going to be Zoom. I'll review any reports that are available to me that I have access to through our internal system. I'll take an oral history from you, and then I will go into the evaluation, screen‑sharing some charts. Distance and acuity charts. And looking for central field, contrast sensitivity. Color wheel. And a reading chart. It is also helpful for there to be a helper available, and that helper could be a family member or a close friend. After we complete the evaluation, I review the results, and then present those results in a report to your case manager. What you should have available is a reasonably fast Wi‑Fi connection, a computer with a microphone and a camera. It could be a tablet. In fact, I've done evaluations with phones, but it is much less than optimal and can lead to an incomplete evaluation. If you don't have the technology or the experience with the technology, sometimes a family member or a friend can help. The helper that will be there performs the role that I would perform if I were there face to face, doing things like confrontation, testing of peripheral field, measuring reading distances and target sizes. Also, you should have any devices you currently use, a tape measure, and preferably be in an indoor environment and at a table. But you can expect ‑‑ what you can expect is the following. I'll be looking at two different monitors. So, I have a large monitor in my home office where I'll be taking my notes. To the side of that I have a laptop where I'll be Zooming or teleconferencing with you. So, it will be very often the case I'll be looking at a monitor and not at you. I'll be asking questions. I'll pause at times to take notes. On average the evaluation will take about one and a half hours. Communication is synchronous. It means we can talk at the same time. Please wait for me to finish talking before responding to questions and be sure to take a pause when you complete a thought, so I have a chance to ask you questions. When the evaluation is complete, like I said, I'll report back to your case manager, and if tools are recommended either for trial purposes or for permanent use, we contact you to determine if we can deliver them to you in a contact‑less way. The types of devices might be evaluated for would be optical magnifiers. Those are hand‑held lighted magnifiers. Portable video magnifiers, the smaller ones. Desktop video magnifiers. Magnification software. Settings for native software, and that would be software that comes with your system. The effectiveness of tools that you're currently using. What we might be able to provide you would be portable video magnifiers, digital magnifiers, hand‑held LED magnifiers and software. If you're scheduled for a functional low‑vision evaluation and you'd like to have a copy of these guidelines, let your case manager know and I will e‑mail a copy to you. And with that, I think we'll go over to Brendan.

BRENDAN FINN: Thank you, Bill. Let me switch over. Hi, I'm Brendan Finn, MCB Assistive Technology Specialist in Region II, located in Central Massachusetts. I plan on speaking 5 minutes. Remote computer access is critical to ensure continuity of services to our MCB clients who require this. With remote login over the last five months some of the tasks we've continued to be able to accomplish remotely is assessment of clients' needs. As Bill spoke of, selecting the proper hardware and software tools; and installation, download of Microsoft Office and other e‑mail setups for example. Job task evaluations. Facilitating remote connections for people who are working from home or attending school online. New computer setups. iPhone and iPad setups. And follow‑up assistance for those who may already have these devices. I'm doing a lot, still doing a lot of Alexa setups and tweaks for additional skills the client may request. Router and printer, embosser setups, installing the antivirus, and installing and upgrading assistive technology software, and most importantly, conducting training. Communication is the key here. Things are a little bit more difficult, but I haven't come across anything we can't do yet. The three tools I'm using are JAWS Tandem, Team Viewer, and Click Assist. Team Viewer and Click Assist being the two favorites. JAWS Tandem comes with JAWS. There are two versions included, Tandem Direct and Tandem Center. Tandem Direct are when both computers are on the same network, and team center is computer‑to‑computer access across the network and that's what we're talking about. It's audio, but video can be enabled for sighted users, sighted helpers. The controlling computer, the helping computer, must be at the same version or newer compared to the target version of JAWS. First the controller computer will generate a key and then pass that key to the JAWS user requiring the help. Let's see here. If you're working from, remotely from home we can help. Please contact us. We've logged in successfully to clients' computers working at home, upgraded the computers to JAWS Pro with a terminal service, license of $200 to upgrade from JAWS, and from there logged in remotely. A double hop into their work computer, which is also running JAWS now with the terminal license and remote desktop. Please contact us if you have any needs around that. The other platform, one I really like, is Team Viewer. I've had some problems with it, but it is one of the more stable platforms. It has versatile tools. Unfortunately, they're mostly paid tools for remote connection, remote management, remote monitoring tools for IoT and iOS to computer. You can control it from the iPhone or iPad. But those are paid subscriptions. That's through the pilot and Click Assist. They have a 2-minute demo sometimes we can use quickly. The multi‑platform, which I like, Windows iOS, OS X, Linux, IoT, unfortunately they offer a free noncommercial download for friends and family trying to help one another. The application must be downloaded and installed, configured and installed. So, depending on the client's vision and what assistive technology they already have on their computer, that can be a daunting task. Even if I send an automatic download to their e‑mail or direct them through the website. So, for that reason I connect first with Quick Assist, and then once I'm in I install Team Viewer for our clients and continue. We're able to share files back and forth. For example, if you need talking type or Zoom text, I can transfer it directly from my computer to your computer. Or, sometimes TBI reports you may have on your computer or school reports, eye doctor reports you may want me to see, we can transfer those back and forth as well using Team Viewer. Also, I can hear your computer, not only through the phone, through our connection, but also through the computer. Microsoft Click Assist, that's new to Windows 10. You may not know it exists. It allows you to control another person's computer or receive help. All you need for this is a Microsoft account to initiate the connection and generate a key. To access quickly press the Windows key once, click the Quick Assist. What I like about this, especially for new users, the focus for where you're going to type that key is already set to the field that requires it. So, there's no fumbling around trying to find the right edit box or window even. One drawback is there's no sound. For that we turn up the speakers a little bit and use the client's phone and my phone and I can usually hear JAWS or Zoom Text. Safety, just one final thing I'd like to mention about safety on all this, and unlike JAWS and Team Viewer, which are deliberately, explicitly installed on your computer, you know that it's there, Microsoft Quick Assist is part of the operating system and installed by default. It can present a security risk in the enterprise. As well as an individual's computer if you're not aware of it. Social engineering is a huge threat and has been since the early days of dial‑up. People calling up claiming to be an IT rep or trying to gain information about your network. So, it can happen to everybody. In fact, last week I received a call from someone claiming to be Microsoft and that my computer was going to stop working by the end of the day if I didn't call them back at the number that they claim to be a Microsoft number. Obviously, I didn't. It just goes to show that it is only a matter of time before the scammers learn to exploit these remote tools, these login tools. So please never allow anybody unknown or unsolicited into your computer or talk you into running any of these tools. But if I call, somebody from MCB calls, I'm okay. You're okay. I'm from the government, I'm here to help, and so please let us in. Thank you for listening. If you have any need for AT services, please contact your social worker in the region that you're from for a referral. We'd be happy to help. At this point I'd like to turn it over to Jim in Region III.

JAMES VERRILL: Thank you. Good morning, everyone. A special thank you to the Assistant Director, the Director, the Commissioner, my co‑workers, and everybody out there for allowing me to participate today. This is a very exciting town hall for me. As was mentioned a little bit, I've chosen to discuss ergonomics today. Ergonomics is an issue and a factor that plays into just about every part of all our lives on some level. As an adaptive technology specialist, we do quite a few things and rely on quite a few tools, some technical and some a little less technical in nature. But ergonomics because it affects, impacts all of us, I think it is a very important and timely topic given the state of our world right now. So, ergonomics is primarily about the way to go about your work in as efficient a manner as possible. And sometimes there are specific standards that are set already within an industry and, you know, an example would be like in a government setting or in a medical environment. Sometimes there are very specific standards for ergonomics, and so it is more about protocols and policies. For me it is more of an evaluation for a specific situation, an individual on a case‑by‑case basis, and about trying to fit a job and a task to the person and not the other way around. A lot of us do everything we can to modify ourselves, to try to make ourselves comfortable when we work with a computer, and maybe we get a little closer to the screen, maybe we turn the volume up a little bit, and so we tend to kind of put the cart in front of the horse by trying to adapt ourselves to the technology. It should be the other way around. Ergonomics is important because it evaluates several factors and variables. Typically, in a structured environment such as a workplace, like many of us work in, these variables have been considered already. They're carefully evaluated, and they're factored into the work space. And, you know, these things can include a lot of very detailed analyses. For me, when I do an evaluation for a consumer in a work space, I typically look at things like the height of the desk and the type of chair they use, any particular supports they might have, the distance to and from the screen and the mouse, how they sit, the positioning that they're in, the lighting inside and outside, sound. There are a lot of variables that aren't always technical in nature that have a huge impact on us. So, for me the real core of ergonomics is about comfort. We're a population of folks that are very used to adaption, we're very good at it. We approach it very strategically. So, ergonomics is something we should all look at very carefully at this time because we're all in a very challenging situation of having to work in modified or alternative work spaces that it is just as important for us to consider ergonomics. So, for example, we evaluate our hardware, our software. But you must take this into your own hands in this time, this challenging time be your own best advocate for evaluating your work space and take some things into mind. And you're always welcome to reach out for feedback and commentary on any level from us to help you with that, but because ergonomics is about comfort and accommodating your specific needs, you really should take some time to evaluate your modified work spaces right now. It is important to do this because maximizing our efficiency and productivity is important but being comfortable doing it and being able to do it with a longevity that helps us to avoid vertigo is important to our visual health. We need to be vigilant. If you find yourself getting closer to the screen, consider that. Because what can begin as a little bit of neck pain, can eventually become a lifetime of back pain. If your lighting isn't appropriate, that can lead to several issues that can really impact and affect your ability to work with any longevity and remain comfortable. So, I encourage everyone to evaluate the spaces they're in and consider the importance of ergonomics and the impact that ergonomics has on your productivity, your efficiency, and your comfort. Thank you for your time today. I'm going to send it back over to Alexander Pooler, our Director of Assistive Technology.

ALEXANDER POOLER: Thank you very much, Jim. Thank you very much to the entire assistive technology team for the great work you do day in and day out. In addition to our staff members we enjoy great amounts of cooperation from the management that empowers us to meet the needs of our consumers during COVID. The Commissioner, and the Deputy Commissioner. And Susan Lavin has been great in helping the unit navigate the COVID environment. Not everyone from the team was able to be present today. I want to acknowledge the invaluable work and contributions they make. Thank you very much everyone for all you do to support our mission, to help our consumers with their assistive technology needs. Now I'm going to hand it back to the Commissioner, David D'Arcangelo. David.

CARLA KATH: Alexander, I believe he's here, but Commissioner, we can't hear you.

COMR. D'ARCANGELO: Yes. Good morning. I'm back. Great job, Alexander. Great job assistive technology team. Let's hear it for them. Some great segments there that had my interest, and so I enjoyed that. I hope all the consumers with us on Zoom right now enjoyed it as well. So, you have great resources here at MCB. Take advantage of them. They're ready to work for you. They've been doing such a great job during these unprecedented challenges that we've been going through. So, again, I personally am thankful for them, the rest of the team, and of course Carla for pulling this together, the director of communications. Our director of training, Samantha. And Kamilia, helping to facilitate and provide assistive technology and interpreters and making sure that we have as much accessibility in this platform as possible. So, I know we want to open it up for any questions and comments. We're here to serve you, and so, Carla, are there any questions to begin?

CARLA KATH: There are quite a few questions, and that is one of the reasons why we picked this topic assistive technology. I think there are always a host of questions that our team responds to and tries to respond to for all our consumers. So, if you do have any questions, keep them coming in the chat. You can find my colleague Samantha using her name "Questions," and you can also send us an e‑mail at mcbinfo@Mass.gov. Let's get started with a few of those. We have some time. Alexander and team, the first question is, about the Smart Speaker devices. And it is: Does it have to be an Echo device? What about Google home?

ALEXANDER POOLER: It does not have to be an Alexa device, Amazon device. When we did the initial evaluation of the devices, we found that the Amazon Echoes best served the needs of our consumers. We have done work with Google home, and if that's a device we want to discuss, I think we can do that. We may not be as knowledgeable as we are about the Amazon Echo device, but really both devices can offer a great ability to make information much more available and accessible to you, and so it is something we can do and we have had other consumers in the past that have gotten the Google home device. The only device we really don't do very much with, and you must forgive me I don't really remember off the top of my head the specific name for it, there is a similar device from Apple. That device we found to be, there were several issues we didn't care for. That's probably the one device we know the least amount. So, if we were to have a conversation about Smart Speaker technology, most will be geared toward the Amazon Echo, but he can have additional conversation about the Google home as well.

CARLA KATH: All right. And there are quite a few questions here regarding JAWS. The first one is, are there any free learning tools or webinars about how to use JAWS and other AT products you would recommend?

MARGARET GAFFNEY: I can take it, Alexander. Yes, there are. The JAWS company Freedom Scientific has been revamping a lot of their training, and they have ‑‑ you can go to freedomscientific.com/training and find several very excellent webinars. Also, when JAWS is installed, under the menu structure of JAWS you can go to Help and the first topic under Help is Training. So that you can hit Enter on that training and then arrow down through the various books that are provided, and then if you do not have one of those books installed, JAWS will prompt you to install it. And it goes through very detailed descriptions and provides you with recorded audio by some of the Freedom Scientific staff through a product that they've developed called FS reader.

>> I would like to add one thing to that. If you're having trouble accessing the webinars, reach out to one of us. We can remote in with you and go to the website and help you to access them. They come in multiple formats and quite good.

MARGARET GAFFNEY: Also, we can help direct you to which ones are the best for you.

CARLA KATH: Thank you. We do have another question. There must be a couple members or friends on of our consumers. The question is: How can I receive remote computer assistance for a family member or a trusted friend?

>> Alexander, I'll take that. It depends on ‑‑ if I understand the question, you want ‑‑ the user, the friend or family, wants to help someone. It really depends on what they're using, whether it be JAWS or Team Viewer ‑‑ if they're running JAWS or Zoom text rather. I've had problems with Tandem. I've had a few bumps in the road. I gravitate toward Quick Assist. If you're just trying to set up an e‑mail or download something, fix a problem, then Quick Assist is the easiest way. So, on both sides I've ‑‑ I'm going to call the controlling computer yours, the target computer theirs, and both the target and the controlling computer would type in, it will go to the search box, hit the Windows key once, and that will open up the search box and type in the word "Quick Assist" ‑‑ actually when you type in quick, that should be enough. There will be a box that appears up above for the app Quick Assist already built into your Windows 10 computer. You hit Enter. The controlling computer must take an extra step of saying "Assist another." When you do that, you'll have to log in with a Microsoft ID. It is easy to create if you don't have one. Go to ‑‑ do a Google search for Microsoft account. You create an account. You can use your Gmail or Verizon or any other e‑mail and link it to it. You'll use it as the ID credential to log in, putting your password for the Microsoft account. At that point you'll be able to generate a key. It is six numbers. No characters. You're going to pass that over the phone to the person you're trying to help. They've already hit Windows key once, typed in Quick Assist. What I really like about it, the focus is already set to where they need to be. All they must do is type in the six numbers that you provide to them. At that point you say "Continue" and there will be a pop‑up and ‑‑ on the target side they will, the additional step will be "Allow." They must click on allow if using Zoom text, or tab to it if they're a JAWS user. Sometimes I turn on Narrator if it helps. And when they get to that they'll hit Space or Enter. From that point it takes a few more seconds, but then the connection is made. From the time you generate that key, you only have ten minutes to establish this connection, and otherwise that key is no longer valid and will time out. Once you're in, you can do whatever you want. If you want to install more tools, like Team Viewer so you can pass files back and forth or hear their computer, you can pretty much do whatever you want once you're allowed in. I hope that answers your question. And if it didn't, please contact us through MCB and I'd be glad to get involved and help you directly.

CARLA KATH: All right. Thank you. I know that you guys really tried to tailor our device recommendations to our individual consumers and your needs, but there are a couple of questions here about different devices. The first one is: What is the best mobile phone for me? I would like one with buttons. It seems to be a common question.

ALEXANDER POOLER: Margaret?

MARGARET GAFFNEY: I'm sorry. I was doing the muting/un‑muting thing and got confused as to whether I was muted or un‑muted. There is now a phone called "BlindShell" that I just went through a demo of the other day and it works very well. It has buttons. It has a simple mode and a more complicated mode. And you can use it to ‑‑ you know, you can have contacts. You can store your contacts. You can make calls with it. It's not considered a smartphone, but it does have a lot of really good features. I think it might even have like a calendar in it and that type of simple calendar and that type of thing. So, I can ‑‑ I don't have the website for it, but I can probably get it. I don't know where we would put it after the meeting.

CARLA KATH: Yeah. That's a good idea, Margaret. We can put in the answers to some of these questions in our follow‑up from the meeting, in our e‑mail.

MARGARET GAFFNEY: Okay. And so, then I will give the contact website for it.

CARLA KATH: Okay.

MARGARET GAFFNEY: I'll give it to Carla. Whatever that is, it's not me. That other noise.

CARLA KATH: Okay. Okay. Thank you. Thank you. Okay, and then the next question ‑‑ we're going to try to wrap up quickly here, but the next question is: What is the best way to receive AT services in my region? Alexander or Brendan, do you guys want to help us how to get in touch with you in those specific areas?

ALEXANDER POOLER: I can answer that question there. So, the best way for you to get AT services is talk to your case manager. We do have a protocol we have to follow here at the agency. Typically, when it comes to starting the process of getting AT services out to an individual consumer the first start of that is getting a referral from the case manager. So, we always recommend you talk to your case manager first, have a conversation with them, and the case manager will then send over the referral with us and we'll start the process that. It doesn't mean you can't contact us directly if you have general questions. We have questions from consumers to know if there is appropriate technology out there, and we can have that conversation with you. But I can't stress this enough, the best way and the quickest most efficient way to get started to get your services from the assistive technology here at MCB is to have that conversation with your case manager and have your case manager send the referral other to the assistive technology department.

CARLA KATH: All right.

MARGARET GAFFNEY: A quick comment, Alexander? One quick comment? For folks who usually contact me and we discuss a piece of technology that may be of benefit to them, the first thing I tell them is that the next thing, the next step you need to take to follow this procedure, to have this technology in your hands, is to contact your case manager, and if you don't have one, then we'll go back to the region or the director and they will work with setting up your, opening your case and making sure you have all the services that you need.

CARLA KATH: All right. All right, and so I think we are wrapping up here. We want to thank everybody for joining today. I did want to share with you before we go just a couple of other ways to connect with us and to reach out to us. Again, you can reach out via your counselors, but also using 1‑800‑392‑6450. That is our 1‑800 number, and you can connect to all our staff and to all our offices using that direct line. You can also e‑mail us, and like several of you did with your questions, and that's to MCBinfo@Mass.gov. You can also visit our website www.Mass.gov\mcb. In this section you can sign up and opt in for e‑mails from us. We'll be sending out the e‑mail with the audio from this town hall, also with the transcript, the presentation, and the Word presentation for everyone that was able to join us and for everyone who has opted in to receive e‑mails. You can also follow us on social media. We are on Twitter and Instagram. And, on LinkedIn and YouTube. Massachusetts Commission for the Blind. We really want to thank all of you for connecting with us, for taking the time to tune in today to find out more about assistive technology. Our assistive technology team has been so critical to our continuity of remote service during COVID‑19 and we are very thankful for them and for all of you during this time. They have been a life line for our consumers and their families. So, thank you all. We hope you found value in this Town Hall. We will be announcing another Town Hall very soon, and so please, again, connect with us and follow along to find out when that will be and what the topic will be. If you have any ideas, send us an e‑mail at MCBinfo@Mass.gov. Thank you. Have a great day.

MARGARET GAFFNEY: Thank you.

BRENDAN FINN: Thank you.

>> Thank you, everyone.

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