Tori Holder: We have a few folks joining the webinar. So let's wait 1 more minute and then we'll get started. I'm glad you're here.

>> Good afternoon, everybody. My name is Tori Hughes Holder. I'm the outreach specialist at Tools for Life. We're excited to have you here for another Wired Wednesday AT Bits & Bytes with Tools for Life and WATAP. I'm going to pass it over to Martha Rust to go through all of the other introductions. Martha?

Martha Rust: Hi, Tori. I want to make sure you pressed record.

Tori Holder: Yes I did.

Martha Rust: Welcome to Wired Wednesday. We're happy to have you here for AT Bits & Bytes. If you have any questions, add them in the chat box. We have teamed up with WATAP, our sister program in Washington state to do these live AT demonstrations to assist people to learn more about assistive technology solutions. If you have questions about what you see today or you want a more one on one demonstration or want to talk about other solutions, give us a call. Our number here in Tools for Life is [Reading from PowerPoint].

Today you are in luck. We have the great Danny Housley who will be going over way finding apps. Danny, I'm going to pass it over to you.

Danny Housley: Good afternoon, everybody. I hope you're doing well. I'm switching over to the other presentation here. Today we're going to talk about wayfinding solutions. This may seem counter intuitive since a lot of people are
working from home, staying at home, and not going out into the community, but we still have to occasionally. You still have to get to some doctor appointments or go to the grocery store on your own. So we wanted to cover some of the options that are out there for a person to find their way to discover a new path or get where they need to get.

Just a quick word of warning is the information contained in this presentation is not meant to replace the advice of a licensed orientation mobility specialist. There are people who do intense training for orientation mobility for a living. These are solutions that a person can try but in no means should it take the place of the advice from someone who has gone through the training. I know that sometimes people can't afford training, so they want to try things out before they get the advice of a professional. So keep that in mind as we go through.

First, I want to define what wayfinding is. One definition that I really like from the universal principles of design is orientation. Orienting yourself in a room or a street on the city or a terminal at the airport. Orienting yourself to determine where you are and then making a route decision. Figuring out how to get from my apartment to the Dunkin donuts up the street. So looking at the different paths that you can take. Whether it's walking, mass transit, ride share or whatever the case may be. After you have found where you are in space and determined where you're going to get, the next part is monitoring the route. So route monitoring is important because you want to make sure you're checking in as you're going along your path that you're on the right track and that you haven't missed a turn. You've identified your landmarks and finally the fourth step is destination recognition. Knowing where you are. So that could be with your technology oh, the building I'm going to has a fountain and I hear a fountain. So I know I'm in the right place. Or it could be
reading the sign. These four steps really wrap up what wayfinding is well.

So, figuring out where you are, where you want to be, and figuring out how to get there.

So the first thing we want to look at are some apps for navigation.

There's a lot of options out there. We're going to cover a few. I'm going to cover highlights.

First, you have your map app. A lot of people have smart phones now. So, every smart phone has a map built-in whether it's Google apps or Apple apps or a third party application.

Using the map app is convenient. It's there and built-in to your phone if that's the one you're using. With Google apps, some of their places have interiors. I was in Boston Logan airport in the fall and I was able to use Google maps in the airport to figure out where I was and how to get to my terminal, so I didn't have to have a person lead me there. I was able to explore on my own which I love to do. I often learn cities by getting lost in them first. That's my preference.

With map apps you can choose a variety of options on how to get from point A to point B. You can get walking, drive, transit directions. It does integrate with hardware. So if you have an Apple watch or Android watch, you can have that -- have the map app on that so you can determine your route and check it as you go.

Some of the biggest options out there for map applications you have Google maps, Apple maps. If you are a driver or even if you are not a driver, WAZE is good. It does use the google maps interface. I've used it when I've been in an uber or lift to check my route and make sure the driver wasn't going off the plan. That has happened one time. I was in an uber that wasn't taking the right direction and I
was able to literally be a back-seat driver to offer advice on not to cover charge me basically.

So those are map apps. There's an image on the screen of a smart phone that has an interior map on it.

We're going to move on to the next app. So next is Microsoft soundscape. We may have talked about this in a previous Wired Wednesday but it's a fantastic app. With map app you get turn by turn directions, how far to go, where to turn, announces when you arrive. With Microsoft soundscape it gives you more freedom to explore. I mentioned that I love to get lost and find my way. This is an option that when I do get lost if I need to get back to the bus stop or if I'm trying to find a new place without turn by turn directions. This is available for Android and iOS. It uses spatial audio. I'm going to turn it on so you can hear what it sounds like. To get the full experience, you really need to have head phones on because it does sound like you're surrounded by the audio. They sometimes call it 3D audio. If you're walking along a path, you can have it running in the background and it will announce landmarks and points of interest as you go. I was walking across Georgia Tech campus and it announced statutes that I never knew were there. The names of buildings and intersections will be announced.

Atlanta is not always great about having signs at the intersections. I'm blind so I can't always see the signs. So having those announcements are fantastic.

When you have the head phones on, if it came out of the right ear or left ear that's where I know in space it was. It will also tell you what direction you're facing. It will call out things that are around you. You can set sound beacons. I'm going to run Soundscape right now. I set a beacon to the Dunkin Donuts that's near me.
>> [Synthesized speech].

>> Danny: It told me it's 2.2 miles away. I'm going to turn VoiceOver on.

>> [Synthesized speech]

Danny Housley: It's making a sound right now. I'm going to take my phone and go to the right to see if my Dunkin is to the right. It got quiet and the tone changed. That lets me know I'm not facing the direction of the place I want to go. So I turn back to the left. I'm in the general direction. I'm going to keep turning. You may hear the higher pitched sound. That means I'm facing the direction. I'm going to turn that off, so I am not talking over it.

If you get audio cue as to whether you're facing the right direction. I'm on the second floor apartment right now. I know I need to go downstairs and out the front door and then face the right direction.

It's a cool way of getting [Inaudible]. I've used this in unfamiliar cities to find new things. You also have an around me button which will tell you what's around you literally starting from north, east, south, and west are the order of how it announce things.

You have an ahead of me button. If you hold your phone like a compass, whatever is ahead of you it will announce.

>> [Synthesized speech]

Danny Housley: There's a pike nursery around 500 feet.

>> [Synthesized speech]

Danny Housley: Okay. I'm going to --

>> [Synthesized speech]

Danny Housley: There's no step by step instruction. It lets you have a more free form approach to navigating and I really like that. For people who want a
traditional approach, you can use Lazarillo. Lazarillo is for Android and iOS. It does
do turn by turn navigation. You can customize it depending on your preferences.
You can set favorites.

>> [Synthesized speech]

Danny Housley: You can save your favorites and choose your
transportation method you want to use. You can do environmental call outs. So
similar to soundscape. You can choose the map app you want to use. You can use
the built-in Lazarillo map or Google maps or Apple maps. I have two screen shots up
here of the interface. I have mine set to higher contrast and larger font. You can see
a pin point for where I am. You see things that are around me. Bank of American, a
Georgia's own credit union. I had it set to banking options near me. If I want to
choose one of those locations, it will give me the option to stay within Lazarillo or
send it to Google maps or Apple maps.

Those are the apps that I use and that I know some folks here in Atlanta
that use to great success. Definitely the great thing about those options are they
are free. My favorite price point is free when it comes to apps.

Next we're going to talk about hardware options for navigation.

We talked about the software and the things on your phone. The first
hardware that I like to mention is the white cane. It could be ridged meaning it
doesn't fold up which is the preference of a lot of folks in the national federation of
the blind. I like my cane to fold up. You have a variety of materials that it can be
made from. I prefer aluminum even though it's heavier because aluminum won't
snap. It will just bend. A lot of people like graphite because it's light. You have a
variety of tips. These are important for finding obstacles in your way, identifying
materials that you're walking on whether it's concrete. There's an image here of a
cane finding tactile markers on a sidewalk. So the type of tip makes a big difference. The type of tip on the cane in this picture is a roller marshmallow tip. It actually rotates as you move your cane. That’s for the type of method that you use. You can do constant contact which is my preferred method where the cane never leaves the grand. So if there’s a gap or hole or something in the way, I’m going to find it.

There’s the Hoover method where you tap back and forth. Often for that you use a pencil tip or something that doesn’t move like the roller ball tip. That’s for detecting obstacles, curbs, for truncated domes that you might notice on train platforms.

Sometimes the canes are reflective and not white. If you know someone who does need a white cane, you can get a free white cane from the national federation of the blind if you visit their website and fill out a form. I believe you are allowed 2 a year. For people that might be on fixed incomes that’s a good option for them. The white cane has been popular since the early 20th century. Versions of the cane have been used for many years before that. It wasn’t until after World War II that you saw the methods that we use now for using that white cane.

A fancier version is the WeWALK cane. This is a cane handle that you can use on iOS or Android. It has a telescoping white cane that attaches to it. You can detect obstacles. The handle has a speaker in it and has a -- it uses ultra-sonic waves to detect obstacles from the waste up. There are some wearables that do the same thing, but this is integrated into the cane. This handle has technology that allows you to identify things from the waste up. It could be a low hanging branch or sign or something that you’ll bonk your head along the sidewalk. You can do navigation with this cane. It has GPS built-in and transit integrations with different apps. This retails for $599. It’s in its first iteration. It’s still a pretty new product. I’ve had a chance to try it out. It’s interesting. I personally don’t like the handle, the way
you hold it. It gets uncomfortable if you like to walk around a lot for long periods.

The next is the victor trek. This is a tried and true solution for people who are blind. This device the victor reader is a popular device. This retails for $699. With it you can do step by step navigation. You can pull up your nearest address and it will announce intersections. You can voice tag landmarks and it can also hold media. So a lot of people will use this as their primary voice recorder, their books from MLS on it, you can load music on to it. It's a nice compact device that you can use for navigation, as well as for entertainment. Again, this is something -- the victor reader had been out for years and I have people to this day that your smart phone can do a lot of these things but they like the interface of the victor and how compact it is and like having a dedicated device. It's up to individual preference but that is a very good device and it's something that you see frequently in the blind community.

And I am happy now -- we covered hardware solutions, software solutions, what wayfinding is and I'm happy to answer any questions that you may have. It could be about the interface or how it interacts with VoiceOver or any questions you have I'm happy to address right now. This is your chance.

Tori Holder: Right now it doesn't look like we have any questions just yet, but we still have about 6 minutes before everything ends at 3 o'clock. So get your questions in and we'll be happy to read those.

While waiting for questions to come in, I would like to go ahead and put up some information about getting in touch with us. Danny, thank you for covering wayfinding apps and different solutions. That was very helpful. If you would like more information about what you've seen today or anything like that, please give us a call. Tools for Life our number is 1-800-497-8665 or the WATAP 1-800-214-8731. If you have any questions, you're welcome to get in touch with us.
Danny Housley: Thank you all for attending. Feel free to reach out to us if you do have any questions. We do have a longer version of this that we'll be doing in the future that goes more in-depth. Please fill out the post demo survey and thank you again.

Tori Holder: We have someone with their hand up. Can you type in your question, George? We don't have microphone privileges for participants. I have posted the demonstration link in the chat. So once everything is completed, you are welcome to click on that link and give us your feedback. The good, bad, ugly and what you would like to see, as well as what you have taken from this demonstration. Without further ado, I think we'll conclude our AT Bits & Bytes live demonstration for today. Thank you for joining us. We'll be back in 2 weeks with another Wired Wednesday that will be led by our own Ciera.