Good evening. I want to start by talking about why accessible trails are important. Most of us have a general sense that we feel better after we've been out in nature, and research that supports that. Specifically, time spent in natural settings has been found to contribute to improved attention, lower stress, better mood, reduced risk of psychiatric disorders and even increased empathy and cooperation.

Experimental research has demonstrated that just a few moments of green can perk up a tired brain. In one example, Australian researchers asked students to engage in a dull, attention-draining task in which they pressed a computer key when certain numbers flashed on a screen. Students who looked out at a flowering green roof for 40 seconds midway through the task made significantly fewer mistakes than students who paused for 40 seconds to gaze at a concrete rooftop (Lee, K.E., et al., *Journal of Environmental Psychology*, Vol. 42, No. 1, 2015).

Researchers at the University of Washington have found that contact with nature is associated with increases in happiness, subjective well-being, positive affect, positive social interactions, decreases in mental stress, and a sense of meaning and purpose in life. (*Science Advances*, Vol. 5, No. 7, 2019).

Time spent in nature is particularly important for children. Researchers in Denmark used satellite data to assess nine hundred thousand resident's exposure to green spaces from birth to age 10, which they compared with individual mental health outcomes. Children born between 1985 and 2003 who lived in neighborhoods with more green space had a reduced risk of many psychiatric disorders later in life, including depression, mood disorders, schizophrenia, eating disorders and substance use disorder. For those with the lowest levels of green space exposure during childhood, the risk of developing mental illness was 55% higher than for those who grew up with abundant green space (Engemann, K., et al., *PNAS*, Vol. 116, No. 11, 2019).

Improvements in physical health from being outside are associated with lowered blood pressure, strengthened immune systems, and improved sleep. For all these reasons, it is clear that our elected officials and parks departments need to focus on making the out of doors accessible to everyone.

So how can access to parks be made more equitable for people with disabilities?

The state gets high marks for building accessible bathrooms, though not always for maintaining them. Over time, for example, the dirt around the concrete pad on which the bathroom rests can get worn away, leaving what can become almost a step up to access the bathroom. If portable toilets are used and there's only going to be one, it should be one of the larger, wheelchair accessible ones (cartoon). This cartoon shows a man shoveling snow off steps that are next to a ramp. A wheelchair user asks him to shovel the ramp, to which he replies, "All these other kids are waiting to use the stairs. When I get through shoveling them off, then I will clear the ramp for you." The wheelchair user responds, "But if you shovel the ramp, we can all get in." The caption below the cartoon says, "Clearing the path for people with special needs clears the path for everyone."

Accessible parking spaces also are important. I suspect there are people who get to a trailhead, see a space reserved for people with disability placards or plates, and think it's the most ridiculous thing they've ever seen. "If someone's going to go hiking," I can imagine them saying, "why do they need a special parking space?" I can tell you a couple reasons. One is that if you have a van with a wheelchair ramp, you need space to extend that ramp and to be able to get off the ramp at ground level. Another is that vehicles with a wheelchair lift can require extra space at the side for loading or, in my case, a space that is relatively level.

Trail surface is an important consideration. Pavement, supplemented by boardwalks in wetland areas, is probably the most universally accessible surface, though other surfaces can work with adequate maintenance. Wheels roll well on pavement, wheels of all sorts and sizes—wheels on wheelchairs, on walkers, on strollers, on bicycles, and on tricycles. People using guide dogs or white canes can easily detect the edge of a trail that is paved or otherwise well defined.

A trail of compressed 3/8" aggregate can work well, too, provided it has been compressed thoroughly, and dirt trails constructed that way also can work well. The Larry Scott Trail south of Port Townsend is a rare, shining example. More often, with rain, they become full of mud puddles waiting to ensnare anything with wheels. They also became places that most wheelchair users avoid, for fear of creating further damage to the trail. Sand is horrible, and loose gravel scarcely better. Deep gravel also can snap a cane being used by someone who is blind, as can poorly maintained boardwalks if the cane gets stuck between slats.

I appreciate the newest member of our committee, Kris Colcock, reminding me that Braille needs to be part of signage. A raised line drawing of a trail can aid spatial awareness. For example, if a trail is a loop, a simple line drawing depicting that is helpful. Bathrooms should be identified by braille and large print, especially if they are separated by gender. Basically any print signage should be accessible with Braille that is weatherproof.

All that said, I'd like to show you some pictures from the trip I took to central Washington this summer in an attempt to hike more of the Palouse to Cascades Rail Trail. I think it formerly has been known as the Iron Horse Trail or the John Wayne Trail. I spent a week hiking most of the westernmost part of the trail before Covid hit, so this year, I made Ellensburg my base to see how much more of it I could cover. Boy was that a mistake.

The Ellensburg area of the old railroad bed has become two tracks for bicycles, spread too far apart for a wheelchair. This picture shows the two relatively smooth tracks and the rough surface between then. This means that one side of the chair, or stroller, or walker, is on a fairly smooth surface, and the other side is on very rough gravel. The gravel has been packed down enough that I wasn't likely to get stuck, but it was *not* a pleasant ride. This is a picture of one of the smooth tracks, with large gravel on either side and cows grazing in the distance. For me, because I mostly still have the full use of my hands, it was just uncomfortable. For friends who have less use of their hands, it would have meant being unable to keep their hand on the joystick controller to steer their chairs, which can be dangerous.

Then there were the gates. This picture shows a metal swing gate across the trail with a dirt track around one end, the first one I came to. I understand the wish to exclude vehicles such as 4-wheelers, but I really wish people would do it in a way that allows wheelchair to pass. Just for the record, users of wheelchairs, including power wheelchairs, are considered pedestrians under Washington state RCWs. I managed to get around this gate, though it was a bit more than optimally exciting.

I met a couple of bikers from Seattle at the second gate, and they offered to try to help me get my chair around it. I have the advantage of being able to walk a short distance if I have something to hang onto, though many wheelchair users do not. What you may not be able to see from this picture of the dirt path around one end of the gate is that there are several large rocks sticking up, on which my chair probably would have high centered. This part of the trail is sparsely traveled, especially during the middle of the week, so I had no confidence that I would have help on my return trip. I turned around, did some of the trail in the other direction until I ran into another gate, and notified my niece, with whom I had filed a hike plan, that I was giving up for the day. The next day, I went to explore the Beverly bridge across the Columbia River, hoping I

could be one of the first wheelchair to cross it, since it opened this summer. Alas, there was deep gravel on the approach from both directions.

The following day, I decided to try a different section of the rail trail that didn't look too bad from the street. Unfortunately, after a short distance, it was just like the other section. I'm pretty stubborn, though, so I continued along until I came to another gate. This picture shows a narrow dirt path around one end of the gate with a drop off on the far side. There are fences and mountains in the distance.

I gave up on the rail trail and went to check out a park that one of the online trail guides recommended. Here, I encountered dirt trails that were not well constructed. This picture shows a rough dirt and gravel trail over 4 culverts with a variety of shrubbery in the distance and water on one side, and this is a picture of the rough dirt and gravel trail curving off into the distance with shrubs on one side. At one point, I got stuck. I was close to I-90, so highway noise would have covered any attempts I made to call for help. However, this was one of those times when it was better to be lucky than good (as sailors sometimes say). There was a disc golf course adjacent to the trail. I hadn't seen any golfers, but just as I was beginning to get concerned about how I was going to extricate myself, two appeared. With their help, I was able to get the chair back to a firmer part of the trail. This picture shows the bridge I encountered, where the dirt trail had worn away, leaving a lip of between 1 and 3" up to the wooden bridge deck. I wasn't sure my chair would be able to get up onto the bridge; fortunately, it did.

Though this trail was far from ideal, it did give me the chance to see two deer just across a small stream from me, only one of whom was willing to pose for a picture. This picture shows the deer, with the stream in the foreground, grass where the deer is standing, and trees in the background. The next day, I drove to Yakima, where I rode the Yakima Greenway, which is a good, mostly paved, trail, part of which followed

the Yakima River. This is a picture of a sign describing an unpaved side trail called the Human Spirit Nature Trail and signs forbidding camping and vehicles.

Then I drove to Wenatchee and took then 10-mile paved Apple Capital loop Trail and hit the jackpot. Half of the loop is on the west side of the Wenatchee River, and the other half is on the east side. This picture shows a well-packed gravel trail with grass separating the trail from the river. There are a tree and a picnic table in the grassy area, and more trees on the other side of the river. This snapshot has a well-packed gravel trail with a hill on one side separated from the trail by a low wall of large rocks on one side and a board and wire fence on the other. The river is on the other side of the fence. And this is the view from one of the bridges crossing the river, showing the river below, the shore with shrubbery on one side, and low mountains in the distance. If you time it right, you can finish up at the farmers market and have really tasty chicken tacos. This trail was so good that I made the hour-long drive again the next day to do the northern extension of the trail.

In conclusion, I would like to point out that pavement, in addition to promoting accessibility, also can protect fragile environments by keeping people on the trail. A good example of this is the Paradise area on Mt. Tahoma (or, as it's better known, Mt. Rainier), where paved trails protect the fragile Alpine meadows. This last picture shows 8 people in a variety of wheelchairs lined up along the trail in the Paradise area, with the snow-covered top of Mt. Tahoma in the background