MEETING NOTES
Monday, November 13, 2018
4:30 p.m. – 6:00 p.m.

Members Present: Marian Anderson, Ali Caley, Chuck Green, Amy Gross, Marjorie Ledell, Temple Lentz, Linda O'Leary, Donna Roberge, Larry Smith

Members Absent: None

1. Welcome and Call to Order
Temple Lentz opened the meeting.

Approval of Agenda
The agenda was approved unanimously by the commission with two additional agenda items.

Approval of October 22, 2018 Meeting Minutes
The October 22, 2018 meeting minutes were unanimously approved by the commission.

Public Health Advisory Council Update
Amy has continued to talk monthly with David Hudson who manages the Healthy Communities Programs for Clark County Public Health to continue establishing a working relationship. Next year, we can cross-pollinate our work with the Commission on Aging's focus on healthy communities.

Recognition of Council Chair Marc Boldt
Temple Lentz presented Council Chair Marc Boldt with a certificate of appreciation for his time and effort with the Commission on Aging. Chair Boldt thanked the commission for their work.

2. Presentation: Impacts of Emerging Technologies on Cities
Advances in emerging technologies – such as autonomous vehicles (AVs), e-commerce, and the sharing economy – are having profound effects not only on how we live, move, and spend our time in cities, but also on urban form and development itself. These new technologies are changing how people and goods move, and this has implications for the layout of communities and the places we spend our time.

Becky Steckler, Program Manager for Urbanism Next at the University of Oregon, discussed emerging technologies and how the impacts on our communities will change how people young and old move around.

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Emerging Technologies
- When the first automobiles were being produced, it was hard to imagine the impact they would have, such as the development of suburbs, strip malls, and traffic. As new opportunities with technology and autonomous vehicles occurs, it's hard to imagine what impacts they will have.
- The speed at which new technology is adopted has been quite fast in recent years. For instance it took about 10 years for cell phones to be adopted in roughly 90% of US households. As technologies become affordable and provide a key service, they are adopted widely and quickly.
- Uber started testing vehicles in August 2016. The first autonomous freight delivery took place in October 2016. In November 2017 the first pilot project began involving autonomous vehicles with no driver. In May 2018 Waymo announced they would begin offering commercial service at the end of 2018. They have ordered 82,000 autonomous vehicles to launch this offering.
- We have heard about autonomous vehicle accidents and fatalities. We hear that lots of people are terrified about getting into an autonomous vehicle. We also hear that after a few trips, people are getting used to the new technology.
- One reason companies are promoting autonomous vehicles is because there are a lot of car injuries and crashes, most of which are caused by human error. The new technology is designed to address these issues.
- We are in a phase of experimentation now. We are experimenting with Uber, Lyft, Zipcar, e-scooters, etc. We can rent a piece of the transportation system.

Mobility as a Service
- Car companies and technology companies have invested in this new autonomous vehicle technology, ranging from autonomous vehicles to terrestrial drones.
- Car companies are investing and figuring out how to broaden their business model and survive. Ford, for instance, is investing $4 billion in mobility as a service, involving technology, microtransit, bikeshare, escooter, etc.
- A fleet of vehicles could be owned by a company and rented out instead of each of us individually owning our own vehicle.
- Companies may want to own a fleet of vehicles to help manage computer updates and have some control of the geography where they are used. To address potential cybersecurity issues, the cars constantly need updated software and it could be helpful to own the vehicles and manage the computer updates.
- The vehicles could be used for individual rides or pooled rides. It is concerning when we think of the possibility of cars on the road with nobody in them. That could lead to a lot of empty vehicle miles. The implications could be challenging.

E-Commerce
- You may have noted an uptick in UPS, FedEx and US Postal Service deliveries in your neighborhood. These deliveries have been increasing over the last few years exponentially. More people are now shopping online for Black Friday than in brick and mortar stores.
- This is largely tied to the aggressive expansion of Amazon that captures at least 50% of the e-commerce market. But we're seeing an uptick in e-commerce from other players too. For instance, Kroger is now piloting grocery delivery.
- In Washington D.C. I saw a terrestrial drone the size of a cardboard box making food deliveries.

- As a result of our changing shopping behavior, lots of brick and mortar stores are closing, more so now than during the great recession. This is not solely because of e-commerce, but it is a piece.
- We are starting to see a lot of redevelopment opportunities, such as in locations where shopping malls used to exist and have now closed.
- We are seeing an increased interest in "experiential retail." There is interest in going out to dinner, the farmer's market, and maybe doing some shopping. We are now looking for entertainment when we go out.
- The industrial land system is changing too. Amazon, for instance, is looking for close-in delivery locations and there has been a big uptick in interest for warehouses on industrial land. As a result, e-commerce has doubled its distribution network since 2012.

Parking
- Parking can be a very emotional topic and it has a big impact on city form and development. I recommend the book: *The High Cost of Free Parking by Donald Shoup.*
- Cars are parked about 95% of the time. When you are not driving your own vehicle, it is parked.
- If we start traveling in cars we don't own, then the need and demand for parking starts to go down. At the same time, the demand for the curb goes up as we will see an increase in pick-up and drop-offs.
- The impacts of this change could look different, depending on where you live.
- In dense urban cores, such as downtown Portland, there are not that many surface parking lots. However, in suburbia, there tends to be a lot more surface parking.
- Local jurisdictions will need to figure out what to do with their parking regulations.
- Consulting firm, Arup, has published on the topic of peak parking, where in the future we move to mobility as a service and the demand for parking starts to drop. They anticipate we will need 10-15% of the parking that we have now. This shift means we could repurpose the parking structures that we have now. Arup recommends to its clients to build as little parking as you can get away with and thinking about redevelopment in the design of the parking that is built.
- All of these changes have implications for how they impact our downtowns, and could provide big opportunities for housing.

Street Design
- What does street design look like when we have autonomous vehicles?
- AVs are very exact where they go and start wearing ruts into the pavement.
- If AVs are so much safer, that could help with the safety of bikers and pedestrians.
- Depending on how streets are redesigned, street capacity could dramatically change. If we could redevelop parking lots and put more people closer together, that could change things.
- NACTO published an image on street capacity in an autonomous future – noting the potential capacity of different transportation modes. Today, streets can typically carry 12,000 people per hour. We could get more capacity out of an existing roadway potentially in the future.
- However, if we don't get this right, we could end up with long line of cars picking up and dropping off people everywhere. Getting policies and curb management right is important.

Role of Transit

- Transit could be negatively impacted by autonomous vehicles, depending on how mobility as a service is rolled out and regulated.
  - AVs used through mobility as a service are expected to be cheaper than owning our own cars.
  - What does it mean for equity? If there are not accessible vehicles then the AVs are not available to people of all abilities. Public transit is designed to help people of all abilities.
  - Consulting firm Fehr and Peers anticipates total vehicle miles traveled increases and transit ridership decreases
  - Transit agencies would have to cut service or readjust their financial model if ridership drops.

What can you do in your vehicle if you are not driving?
- Watch TV, work, etc.
- If you wanted to live in a rural or suburban location, you may not mind traveling farther.
- We could see an increase in demand for rural or suburban living. Will this increase pressures on sprawl?
- If we spread further out, there will be public service impacts and environmental impacts, i.e. one of the challenges with the recent CA wildfires is the high number of people living closer to wild lands. The coverage for public services gets more challenging the more spread out we are.
- Property values could also vary based on changes in demands.

First Order Impacts
- Parking demand decreases
- Congestion and vehicle miles traveled increases
- Walking, biking, and transit decrease
- Street/curb space challenge
- Delivery up
- Trends in retail (Uber eats example, where driver delivers 1 cupcake)

Second Order Impacts
- Impacts of electric autonomous vehicles
  - Great for environment
  - Not great for road maintenance. In an Urbanism Next study, they found that the transportation revenue could drop 10-25% for Portland, Tigard, and Tualatin. This is a result of a reduction in parking fines, gas tax, and registration fees.
  - We really need to think about how to pay for road maintenance.
- Ways could replace funding
  - Empty seat tax
  - Fleet parking fees
  - Use of curb access
  - GPS and data fees
  - Mobile business tax

- o Electricity fees
- o Charging stations
- o Advertisement tax
- o Road usage charge pilot projects
  - – Road usage charge (vehicle miles traveled)
  - – Pilots may may inform a new approach to pay for infrastructure
- Pricing mobility as a service
  - o There is an opportunity to price the use of a system and our ability to move around. Behavioral economics into play with examples we have seen so far
  - o Whim, in Helsinki is a mobility a subscription service where you can choose a pricing package. For instance, you could pay per ride, or pay for an unlimited package based on a monthly fee, or an urban package with unlimited bikeshare and public transit rides for a lower monthly fee, and a specific price per taxi ride or car rental. Americans spend roughly $800/month on transportation. The Whim pricing is comparable to what we already pay.
  - o In LA application, they are discussing, if there is a bad air quality day, how do you make less polluting options more attractive?
- How do you communicate all of your transportation options?
  - o Go Denver App is one application where you can decide what modes you're interested in. You can type in here is where I am and here's where I want to go. You can then see how much time the trip will take, how much it will cost, and how many calories you will burn. The idea is to empower people to make decisions that are best for them.

Conclusion
- AVs are not transportation issues. E-commerce is not a retail issue. Secondary impacts include:
  - o Land use
    - – Retail/commercial/office/industrial
    - – Housing
    - – Parks and open space
  - o Urban design
    - – Metropolitan footprint
    - – Street design
    - – Transit-oriented development
    - – Density
    - – Place/identity
    - – Parking (urban form)
  - o Transportation
    - – Walking
    - – Biking
    - – Parking
    - – Vehicles
    - – Transit
  - o Real estate

- Land value
- Project feasibility
- Buzz/vitality
- Quality
- There are also equity, health, environment, economy and governance implications.
  - For instance, Portland, Seattle, and Vancouver, BC are looking at the impact autonomous vehicles will have on their climate action plans.
  - 4 million people drive as a profession. The economy will be impacted by autonomous vehicles.
  - The retail sector will be impacted by e-commerce, which provides many jobs in many communities
- Counties and cities that think ahead, stay ahead. Local jurisdictions are taking the lead with the new technology.
- Think about the type of community you want to live in and make sure the technology is designed to meet your needs.

Questions and comments from COA members with speaker's responses:
- **Smith**: with AVs and the ability to hack into the technology, does that come up in the research? **Steckler**: I am on the Oregon AV Task Force and am on a subcommittee looking at cybersecurity. It's a concern and another reason why the fleet model is more likely to come to be. There are also implications for vehicles that are able to "talk" to each other and other infrastructure. Jurisdictions already have trouble keeping up with infrastructure updates. At the state level, legislatures are working on recommendations, i.e. requirements for the types of security. Given the data breaches we have seen, it's a concern. **Smith**: there is a need to update technology continuously, because it will otherwise be compromised. **Steckler**: it is important for governments to be thinking about that. We are seeing really different attitudes in different places, i.e. there are states where they have passed legislation so that local jurisdictions can't tax or regulate AVs. There are other states not doing that. The impacts will be at the local level.
- **Ledell**: is most of the innovation in the private sector? Is there much going on with public-private partnerships? **Steckler**: Most of the technology development is on the private sector side. There are several partnerships as jurisdictions experiment with what can happen. For instance, the City of Portland ran a scooter pilot for 4-months. They had specific regulations for that limited timeframe. They are now studying the pilot and coming up with recommendations for longer-term regulations of e-scooters. I imagine a similar approach will be taken with dockless bike shares and Uber and Lyft regulations. Portland transportation planners are finding more alignment in different mobility options than they thought they would. The GoDenver example was a public-private partnership. Many transit agencies are looking at how to do on-demand service in less dense areas, i.e. autonomous shuttle services. The suburbs are going to feel this soon. First will see it in really urban locations, but eventually we will see implications for more rural areas as well. In Oregon, we are thinking of economies of scale and the importance of protecting farmland and supportive companies and businesses. What happens if 40% of Portland people stop owning cars, what happens to maintenance and repair businesses? And how will it impact areas further out?
- **O'Leary**: in our community, transportation is paid by a variety of services. Have any communities put everything on one platform? Is that what we're moving toward? **Steckler**: we need to rethink our entire form of transportation. This is both an opportunity and a challenge. It's hard work to figure out what everyone can live with and still makes sense.

- **Roberge**: one photo showed a walking mall alongside cars. If we have a lot fewer cars, will we see an increase in walking malls? **Steckler**: I hope so. It depends where communities invest. The Phoenix area will be interesting to watch. There are not many regulations in that area, there are really wide roads, and pretty good weather.
- **Caley:** a lot of the technology is not focused on mobility for all ages and abilities. Do you know of some that are? **Steckler**: pilot projects run by the transit agencies themselves are making choices where they use their own drivers, in unions, with ADA compliant vehicles. One complaint we hear about Uber and Lyft is if you have some mobility challenges, they can be hard to use. Even taxis have trouble accommodating passengers with various abilities. It is not just making a system that works for folks with wheelchairs, but also those who need a car seat.
- **Green**: I am concerned about our social fabric. I see discussion about bringing stuff to you, that Fed Meyer delivers to you, you can put your kids in an AV to go to school. What happens with the loss of social interaction? **Steckler**: I have not seen any research on this yet. When I was watching a terrestrial drone deliver a burrito, it made me think about what will happen when several of these are traveling down the sidewalk, and you won't have to leave your house if don't want to. It makes me think that designing cities and streetscape for human interaction becomes increasingly more important. For example: when I walk my kids to school, I interact with other parents, which means I bump into these same people elsewhere in the neighborhood too and we have gotten to know each other. We are seeing a lot of brewpub-oriented development, because that is another way to get people to interact. The built environment becomes really important.
- **Gross**: You said something about Ford investing in mini buses, what are those? **Steckler**: mini buses are typically 16-passenger vehicles. For instance, Google charters these mini buses to take employees to their campuses. They are more flexible than the typical, large transit bus.

Questions and comments from the audience with speaker's responses:
- **Comment**: what is the impact of the new electric autonomous vehicle technology on those with disabilities, seniors, and safety? **Steckler**: there is potential to increase in access. If you were blind and dependent on others, an AV could expand your opportunities. There was a study out of UC Davis that gave families unlimited chauffer service to see how peoples' behavior would change. They looked at millenials, families with kids, and seniors. In this study, they saw an increase in total vehicles travelled by seniors at night, and an overall willingness to travel further than they otherwise would. On one side, we like that stuff can be delivered to us. On the other side, we see opportunity. Depending on when the technology hits and the baby boom generation, autonomous vehicles could be a huge opportunity. As for electric vehicle and safety concerns – autonomous vehicle software didn't register the dangers or the drivers didn't take over driving when they were supposed to. When we look at the safety records of Uber and Waymo, they calculate the number of miles before a person needs to intervene. Uber couldn't go more than 5 mi before an intervention. For Waymo, interventions were happening after 5000 miles of driving. The federal government does not currently regulate miles before an intervention for autonomous vehicles, but could develop regulations to address this safety concern.

3. **New Business, Updates and Announcements:**
- CoA annual report – the group discussed final changes to their annual findings and recommendations.
    - Green: requested to add social interactions and impacts in the last bullet in the last recommendation.

- - Ledell: there were some good citations and images in the presentation. Like the statistic on our car sitting 95% of the time.
  - O'Leary: I liked the impacts on the community slide when new technology comes to an area.
  - Green: made a motion to move forward with the draft as discussed.
  - Smith: acknowledged staff for good work on the findings and recommendations.
  - The commission unanimously approved the findings and recommendations for their annual report including their discussed revisions.
- Chair elections - the chair of COA will be resigning position as chair effective January 1. Caley will continue as vice chair but is not able to take on the chair role.
  - Ledell nominated Linda O'Leary for the chair role. Green seconded the motion. There was no discussion.
  - The commission unanimously agreed to elect Linda O'Leary as the chair
  - Vote: unanimous
- December meeting – the commission unanimously voted to cancel their December meeting.
- Next meeting: Jan 15. This will be a joint meeting with the county council to discuss their recommendations.

4. **Public Comment**
   There was no public comment.

5. **Adjournment**
   The meeting adjourned at 5:39 pm.

The Clark County Commission on Aging provides leadership and creates community engagement in addressing the needs and opportunities of aging.