CLARK COUNTY COMMISSION on AGING

Commission on Aging

2018 ANNUAL REPORT

TRANSPORTATION FOCUS | RECOMMENDATIONS

Commission on Aging Mission

As community ambassadors, the Commission on Aging provides leadership, advocacy, community awareness and partnerships to initiate change toward an all-age-friendly, livable community.

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FROM THE CHAIR

Dear community members,

Thank you for helping make this year's focus on transportation a success. Your attendance, questions, and comments at our public meetings were invaluable. Your passion and commitment to finding solutions that make Clark County more age-friendly have been crucial elements of our process.

We took what we learned from you and our speakers over the last year, and developed the findings and recommendations in this report to the Clark County Council. These recommendations will help our council and all of the jurisdictions within Clark County make informed, age-friendly decisions about transportation.

Our report details our year-long focus on transportation. We thank our speakers and look forward to continuing our partnership with them, especially at our joint summit with C-TRAN and the Southwest Washington Regional Transportation Council in February of 2019.

Looking ahead, we remain steadfast in our charge to educate, raise awareness and advocate through focus areas outlined in the Aging Readiness Plan. They are supportive services, transportation, housing, healthy communities, and community engagement. Nearly 90 percent of people age 50 and older want to live in their own home as they age, and these focus areas are crucial to ensure that desire is within reach for each of us.

Next year's focus will be on healthy communities. We will seek help identifying speakers with the expertise to inform us as well as listen and respond to you.

We are grateful to Clark County for creating the Commission on Aging in 2012 as a forum to address important issues. Our goal then and now is to achieve an "all-age friendly, livable community." We continue to count on you to reach that goal.

Thank you,
Temple Lentz
Chair

Who we are

AGING READINESS PLAN

In 2010, knowing more than 10,000 people nationwide turn 65 each day, the then- Board of County Commissioners appointed a 24-member panel to assess the county's capacity to serve its older residents. The Aging Readiness Task Force developed the Aging Readiness Plan, which identified five focus areas: housing, transportation, supportive services, healthy communities and community engagement. The plan includes perspectives about how to effectively cultivate and protect what residents say they want most – the ability to age in the home and community where they live.

COMMISSION ON AGING

The Commission on Aging was established on May 20, 2012, and is tasked with leading and managing the implementation of the Aging Readiness Plan and fostering countywide awareness, dialogue and insight into challenges and opportunities for residents of all ages, incomes and abilities. The commission is supported by volunteer members appointed by the Clark County Council. Commission members provide leadership, education, advocacy and community awareness and serve as community ambassadors.

CLARK COUNTY COMMISSION on AGING

2018 members
Marian Anderson, Past Vice-Chair
Ali Caley, Vice-Chair
Chuck Green
Amy Gross
Chuck Frayer
Pat Janik
Marjorie Ledell, Past Chair
Temple Lentz, Chair
Linda O'Leary
Donna Roberge
Larry Smith

2018 Focus on transportation

THE COMMISSION ON AGING DEDICATED ITS SIXTH YEAR TO THE ISSUE OF TRANSPORTATION, ESPECIALLY FOR OUR RESIDENTS 65 AND OLDER. AT EACH MEETING, A LOCAL EXPERT PROVIDED INSIGHTS ON A SPECIFIC ASPECT OF TRANSPORTATION.

THE PRESENTATIONS WERE TO:

Educate commission members and the public

Direct questions to the expert to gain further information

Seek comments and questions from the public

Identify ways to shape policy

The commission will conclude its 2018 focus on transportation by co-hosting a transportation summit with the Southwest Washington Regional Transportation Council (RTC) and C-TRAN on February 21, 2019.

Findings and recommendations

MAJOR FINDINGS

Through meetings about major transportation issues, the commission gathered facts and public comments that comprise findings and recommendations for the community, including the county and city/town councis.

Clark County's 2017 population was 471,000, with 73,515 people age 65 and older and 8,017 age 85 and older. Like the rest of the nation, our community is aging. For the period 2017 through 2040, the number of Clark County residents 65 and older is estimated to increase by 194 percent, while the 85 and older population will increase by 365 percent (Washington State Office of Financial Management, 2017). An American Association of Retired Persons, AARP, survey shows that 87 percent of people want to age in their homes and communities for as long as possible. To do this successfully, older adults need to keep their independence and be able to make trips to the grocery store, the doctor's office, a friend's home, etc., all of which are typically reached by car.

More than 3.5 million Americans – more than half of the non-driving population 65 and over – stay at home on any given day, often because they lack access to transportation. The lack of available transportation results in 15 percent fewer trips to the doctor and 65 percent fewer trips for social, family, and religious activities (Bailey, 2004).

In 2016, an estimated 35.9 percent of Clark County's 65 and older population which is 12.6 percent of the county's total population, had a disability (US Census Bureau, 2016). People with disabilities are more likely to rely on public, private, and non-profit services to meet their transportation needs due to a higher likelihood of being unable to provide their own transportation. With an increasing older population, the percentage of people in the county with a disability is also likely to increase within the next few decades.

One of the biggest challenges in ensuring that older adults can continue to live independent and active lives is that many live in communities that lack access to public transit and are dependent on automobile travel. Without alternatives to driving, older adults face isolation that could dramatically reduce quality of life.

Clem Onojeghuo

1 **Driving may be the only way for older adults who live in areas with limited transportation options to remain independent. Ensuring that older adults drive safely is an important community goal.**

More than 80 percent of Clark County residents 16 and older carry a driver's license, including 17,000 that are 65 and older. Many residents live in areas with few alternatives to driving and will likely experience a decreased quality of life once they can no longer drive. Each person's motor skills, perceptual and cognitive abilities factor into whether or not they can drive safely. As these functions typically decline with age, so does the ability to drive safely. Ultimately, the time may come when driving a car is no longer an option. It is not possible, however, to predict at what age this may happen, as we will all age in different ways and at different rates. Driver refresher classes and adaptive equipment may help with older adult driving safety. Third-party driver evaluations and self-evaluation modules are also available to help older drivers assess their driving ability over time. While it is highly recommended to make a transition plan before you stop driving, planning for all transportation needs can be confusing and complicated.

2 **National data show that the second most important travel mode for older people, behind car travel, is walking (Rosenbloom, 2009). However, most of our communities have been**

built primarily for cars and lack the connectivity and safe walking environment to support walking or walking to transit as an alternative to driving. Nationally, 50 percent of older non-drivers stay home on a given day because they lack transportation options, and, in rural and suburban communities this figure is at 61 percent (Rosenbloom, 2009). Walking or biking on streets designed for cars can be a scary prospect for people of all ages but especially for older adults who may have physical or cognitive limitations. Making streets safe and comfortable for users of various transportation modes requires thoughtful planning and design benefiting the health of residents, providing access to services, and boosting local economies. In a national poll by the AARP, 40 percent of respondents cited living in neighborhoods with inadequate sidewalks, 50 percent had no safe pedestrian crossings including ADA ramps on main roads close to their homes, and 55 percent had no access to bikes lanes or paths (Lynott, 2009).

Top: A sidewalk that does not connect to other sidewalks. Bottom: This new development includes a pedestrian path between streets. However, there is no wheelchair ramp at the sidewalk connection, making access to the path more challenging for people who use a wheelchair.

3 Accessible and affordable public transit options offer older adults the opportunity to remain independent and active in their community. However, not all Clark County neighborhoods are served by, or easily connected to, public transit (C-TRAN).
Most people are not willing, or capable, to walk more than .25 mile to a bus stop (Transportation Research Board, 2013). However, the layout of many of the county's neighborhoods make accessing a nearby transit stop a long trek due to indirect pedestrian routes. Sidewalks, which are critical for connecting to transit, follow the street that was designed for vehicle safety, not pedestrian accessibility. Many neighborhoods also lack sidewalks or pedestrian pathways, and many older adults in the urban areas in Clark County live in these neighborhoods.

4 The Human Services Council (HSC) Reserve-a-Ride Program links people with disabilities, elderly, low-income, and those unable to use transit with community transportation providers. However, due to limited funding, HSC and local transportation providers can only meet the most urgent needs for life-sustaining medical appointments.
Increased resources, such as additional volunteer drivers and vehicles, are needed to expand the services community transportation can provide. Taxis, Lyft, Uber, and non-profit providers could help meet the high demand for older adult transportation services. However, collaboration with these private providers to safely and effectively work with vulnerable populations will be key to making such partnerships possible.

5 The concept of universal Mobility as a Service brings all means of travel such as car share, public transit, paratransit, community transportation, bike share, etc., together into a single unified platform that individuals can subscribe to and is accessible by people of all abilities.
Combining options from different public and private transportation providers into a single service could disrupt the transportation system that we now know.

Mobility, or "the ability to move around effectively and safely in the environment", is a key component of healthy aging.

Hutcheson, 2015

A street that has a sidewalk on only one side is less pedestrian-friendly and accessible than sidewalks on both sides.

Vehicle ownership may be replaced with a subscription to a menu of transportation options. Mobility as a Service may also include services such as grocery and meal deliveries. The advent of this disruptive technology will not only change the way we travel, but also impact land use, urban design, and real estate, equity, health, and the economy. There is an opportunity to create universal Mobility as a Service. This would mean designing a system that fully includes people with barriers to mobility such as older adults, those with disabilities, and those who live in rural areas. If you build it for those with barriers, it will also serve those who do not have barriers.

6 Clark County, like many other U.S. counties, developed under a land use pattern of segregated uses, housing subdivisions, shopping centers, office parks, etc., that is auto-oriented and provides limited access to alternative transportation modes. The distance between residential and commercial areas, combined with the absence of well-connected sidewalk networks, discourages the use of most modes of transportation other than the automobile and prohibits the opportunity for efficient public transportation.
There are a variety of planning tools that have been used in other communities to retrofit existing neighborhoods and thoughtfully approach new development to provide additional mobility options in the future.

Left: A neighborhood pedestrian connection. Right: Chuck's Produce on Highway 99 has a public entrance easily accessible from the sidewalk and the C-TRAN stop.

RECOMMENDATIONS

1 Promote pedestrian and bicycle supportive development by ensuring new urban development is walkable, accessible to all users, and allows easy access to transit, services and recreation.

Review and consider amending transportation related development codes for urban areas to improve connectivity in future development.

Examples of possible amendments to code:

- Encourage connections within and between neighborhoods by establishing block lengths be no more than 500 feet.
- Establish a design preference for neighborhoods that prioritize universal travel circulation within and between neighborhoods. For example, minimize the development of dead-end streets and require subdivisions to have multiple pedestrian connections to adjacent collectors, principal arterials, and minor arterials.
- Prioritize sidewalks when considering road modifications.
- Reduce situations where sidewalks are built on only one side of the street, such as revising the private road sidewalk standard. It is preferred and safer to have sidewalks on both sides of the street.
- For safer pedestrian and transit rider access, require new commercial, medical, public, and recreational buildings to have a public entrance close to the street.

The street side public access needs to be designed in a way so that people do not have to walk around the building, through loading zones and parking aisles, to get to the nearest public entrance.

2 Improve existing neighborhood walkability and allow easier, accessible pedestrian connections to parks, schools, transit stops, retail centers, medical, and public facilities.

Find ways to retrofit existing neighborhoods regarding sidewalks, ADA ramps, trails and bikeways.

Examples of possible improvements:

- Set an ambitious and measurable goal of miles or percentage of sidewalk and ADA ramp gaps that will be filled per year or by a certain year.
- Utilize the priority sidewalk project list in the Clark County Bicycle and Pedestrian Plan and direct the county manager to assign staff to work with neighborhoods to coordinate sidewalk projects.
- Identify and fund small retrofit projects that make critical bicycle and pedestrian connections, such as developing a small pedestrian easement to create a pathway connection from a cul-de-sac to a major road that provides access to transit, public facilities and other services, or improve connection to the existing trail system for all users, such as improving safety and access where the Burnt Bridge Creek Trail crosses Hazel Dell Avenue.

- Include the Commission on Aging and the Bike and Pedestrian Committee as part of the annual Transportation Improvement Plan, TIP, outreach process to provide input into proposed capital projects.
- Look for opportunities to creatively implement multimodal infrastructure in the urban areas that could accommodate pedestrians, bikers, people in wheelchairs, golf carts/neighborhood electric vehicles, etc. Possibilities include shared use paths, side paths, protected bike lanes, protected neighborhood electric vehicle/golf cart lanes, bike boulevards, and pedestrian-oriented streets.
- Utilize neighborhood level planning as a way to creatively plan how to retrofit existing neighborhoods to improve connection and access to nearby amenities through pedestrian and bicycle infrastructure improvements. For example, the Van Mall Neighborhood Action Plan has a mobility management section that includes specific walkways and sidewalks that could be developed to better connect residential areas with the nearby commercial services.
- Develop a coordinated approach with C-TRAN in long-range and current planning efforts to address connections to transit.

3 Seek diverse and creative approaches to fund programs that establish safe and complete pedestrian and bicycle networks.

As our older population dramatically increases, it is critical that we ensure the infrastructure is in place when it will be needed. Increase and prioritize funding resources dedicated to building pedestrian and bicycle facilities that connect to services, but also capitalize on partnerships, in-kind matches, and other non-traditional opportunities to implement respective visions, goals and objectives.

Some ideas include:

- Set aside pedestrian/bicycle project funding in the Transportation Improvement Program, separate from the standard scoring approach, so that more multi-modal facilities are built.
- When considering transportation projects, prioritize those that provide accessible, multi-modal improvements that would benefit aging residents. Shift project prioritization weighting to increase the weight of multimodal criteria.
- Update sidewalk ranking criteria to consider destination access a higher priority (more than a 25 percent weight).
- Increase the sidewalk program fund and request that staff use every available tool and creative funding resources to accomplish more sidewalk, trail and bike

BELOW Left: The pedestrian connection between a cul-de-sac and main street provides easier access to public transportation stops (green circles) and services. Right: The City of Ridgefield has established a golf cart zone, where low-speed electric vehicles are allowed that provides an alternate way to get around.
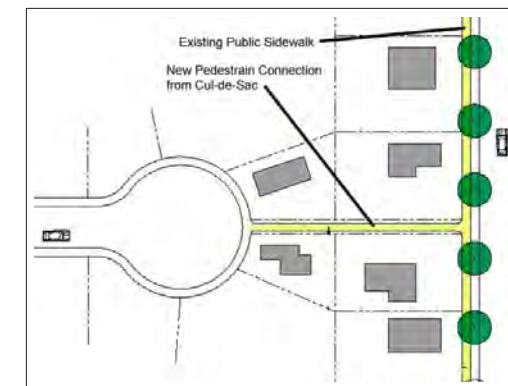
lane improvements with less money by using volunteer labor, grants, local improvement districts, capital improvement funds and alternative materials such as porous pavement.

- Develop a sidewalk maintenance program to enhance the sidewalk network and ensure the program does not place an unfair burden on disadvantaged property owners. Such a program could provide a way to address obstacles in pathways and sidewalks, such as uprooted sidewalks and vehicles blocking sidewalk access, that prevent access by wheelchair and other mobility devices.
- Work with cities and the Regional Transportation Council, RTC, to gain federal, state and local funding for priority pedestrian mobility projects. Federal funding sources include the Transportation Alternatives Program.

4 **Improve coordinated transportation services throughout the county through adoption of proactive policies regarding new technologies and promotion of mobility as a service.**

Being on the forefront of this effort could greatly benefit those with barriers to mobility, such as aging adults, persons with disabilities, and individuals with economic disadvantages. Proactively adopt inclusive transportation policies and regulations that address emerging mobility technologies such as driverless vehicles and mobility on demand services, also referred to as Mobility as a Service.

Approaches to consider include:
- Plan for and incorporate these universal mobility policies into long range transportation plans such as the RTC's Regional Transportation Plan and Human Services Transportation Plan, the next county and cities' comprehensive plans, due in 2024, and other pertinent long-range transportation plans within each jurisdiction.
- Use the AARP Universal Mobility as a Service Framework in design of these policies, emphasizing elements such as equity, independence at all life stages, design of the system so that it can be fully accessible to people of all abilities, etc.

5 **While we plan for future new technology and mobility services, the immediate needs addressed in the 2018 Human Services Transportation Plan identify mobility services that are critical now and need support.**

Those include, but are not limited to:

- Continued investment by C-TRAN and the HSC in a mobility manager to coordinate and advocate for individual transportation solutions for those with disabilities, low-income, and elderly populations and increase awareness of transportation services.
- Expand the travel training program to help new riders become comfortable using the fixed route transit system.

A complete street in an urban area, designed for drivers, bikers and pedestrians.

BELOW: A parked car blocking the sidewalk restricts access to the sidewalk. Right: Residents enjoy a clear, easily accessible sidewalk.

- Support the development of a comprehensive volunteer and driver training program to meet many of the unmet transportation needs in the coming years.
- Expand transit facilities and amenities to provide a more comfortable experience for riders.
- Create a Community Vanpool program to provide a flexible transportation option to employment, education and recreational opportunities.

6 **Ensure that urban land use and zoning codes are implementing the future vision of the community.**

Implementing community design principles provides the creation of more livable communities that provide a mix of housing, transportation, and services in an accessible pedestrian environment. Promote development in urban areas that incorporates diverse uses designed in a manner that provide a sense of community, supports the human

scale, and allows for multi-modal transportation options. Approaches to consider include:
- Utilize neighborhood level planning where each neighborhood develops a shared future vision of how to create a more complete urban neighborhood, by bringing services within walking distance of residential areas.
- Amend urban zoning codes and maps as needed to accommodate changing circumstances. Look for opportunities to redevelop or change land use to add amenities and create complete neighborhoods. As mobility and shopping patterns shift with emerging technology, monitor impacts such as: parking utilization, curb demand, retail and industrial property demand, and social interactions.

Highlights from the transportation series

TRANSPORTATION ISSUES FOR AGING IN PLACE

Alan DeLaTorre Ph.D., Research Associate
### Portland State University Institute on Aging

As residents in our communities age it is imperative to provide enabling and inclusive environments that enhance mobility for those across the life course. Mobility options for older adults include cars, pedestrian/multi-use facilities, public transit, ADA paratransit services, and community transit services. Specific challenges and opportunities should be considered pertaining to transportation options, safety, community planning, and emerging technology.

1 | The demand for rural transit is substantial and growing. Most rural areas are not served by public transportation services. As medical needs are met, there is an increase in recreational requests. (DeGood et al., 2011)

2 | A 2003 study found that 79% percent of older adults aged 65 and older live in car-dependent suburban and rural communities. Aging in place in suburban communities will exacerbate an already problematic mismatch between future demand for transportation options and existing transit services. Higher densities allow for more transportation options. (DeGood et al., 2001)

3 | Walkable communities reduce the risk of chronic disease and improve public health and quality of life. Universal design can create inclusive environments, products, and services that are: safer, accessible, attractive, and desirable for everyone; easily

repurposed; capable of reducing falls and related health-expenses; and minimal in cost in new construction. (Neal and DeLaTorre, 2016)

4 | The American Planning Association has called for communities to create housing options that are affordable, accessible, close to services (including transit), and located within existing communities. The metric most commonly utilized to quantify close proximity is a quarter-mile distance (0.25 mi.), as it is assumed to be adequate distance for planning for access to services by frailer individuals or people with disabilities (Maroko et al., 2009; Ulmer and Hoel, 2003).

5 | The Housing and Transportation Index sets a combined housing and transportation costs benchmark at no more than 45% percent of household income.

The Geographic Distribution of Americans Age 65 and Older

CENTRAL CITY 21%

SUBURBAN 56%

RURAL 23%
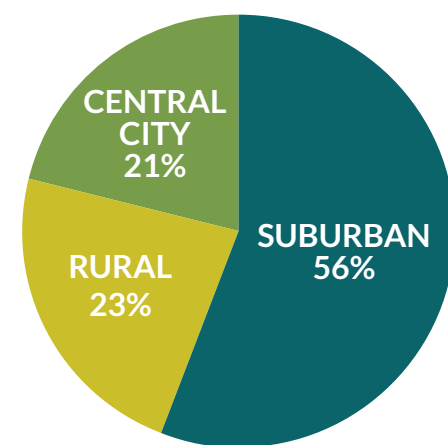
This stretch of Highway 99 includes road lanes, a bike lane, sidewalks and bus stops near commercial services.

Beth Conyers

People in the U.S. who live in transit-friendly communities pay less for transportation (9 percent of household budget) compared with those in car-dependent settings (25 percent). The average housing and transportation cost percent of income for Clark County is 52 percent, though this number varies throughout the county (Center for Neighborhood Technology, 2010).

6 | Complete streets are streets for everyone, no matter who they are or how they travel. Complete streets policies ensure that the entire right-of-way is planned, designed, constructed, operated and maintained to provide safe access for all users.

7 | Potential challenges for older drivers include stiff joints and muscles, vision changes, hearing changes, cognitive impairment, slower reaction time and reflexes, and medications. (US Department of Health & Human Services, National Institute on Aging)

8 | Interest in technology is increasing among older adults, including phone apps, using the internet, and overall comfort with emerging technologies. According to Veciana-Suarez (2016), 25 percent of Americans aged 55 and older are providers in the sharing economy. Uber reported 1 in 4 drivers are aged 50 and older. In a 2015 study, 70 percent of Baby Boomers said they would be willing to test drive an autonomous vehicle, 31 percent noted a willingness to purchase a self-driving car, and 38 percent said that if their health prevented them from driving they would consider purchasing one (Olshevski, 2015).

SENIOR DRIVERS AND SAFETY

Tom Wilson Driver Safety Instructor
AARP

The physical and cognitive limitations that occur as we age can make driving a car unsafe or even impossible.

JUDGING YOUR DRIVING

Statements About Your Own Driving	Never	Sometimes	Most of the Time	My Score
I notice that other drivers seem to be honking at me.	0	1	2	
I find space in traffic hard to judge.	0	1	2	
I find that cars suddenly appear from nowhere.	0	1	2	
I find drivers are stopping suddenly in front of me.	0	1	2	
I fail to notice red lights and traffic signs.	0	1	2	
I have trouble looking over my shoulder to back up or change lanes.	0	1	2	
I have trouble remembering to look left and right to check for traffic at intersections.	0	1	2	
I have trouble driving through intersections.	0	1	2	
I get nervous making left turns against oncoming traffic.	0	1	2	
I lack confidence that I am able to drive in heavy traffic.	0	1	2	
I lack confidence that I am able to drive at high speeds.	0	1	2	
I feel overwhelmed by too many road signs, signals, pavement markings, pedestrians, and other vehicles.	0	1	2	
I have trouble moving my foot from the gas pedal to the brake pedal or turning the steering wheel.	0	1	2	
I get lost on roads that should be familiar to me.	0	1	2	
I feel nervous, agitated, or irritated while driving.	0	1	2	
I need someone else to tell me how to drive.	0	1	2	
I have had several close calls or a near crash in the last 3 years.	0	1	2	
I worry that I might make a mistake and will get hurt.	0	1	2	
I worry that I might make a mistake and someone else will get hurt.	0	1	2	
My doctor advised me to limit or stop driving because of my health.	0	1	2	
I have had police warnings or moving violations in the last 3 years.	0	1	2	
I have had fender benders in the last 3 years.	0	1	2	
Total Score (check your score on the next page)				

Check your total score. If your total score is:

0-5	Do not be concerned at this time.
6-16	Do self-assessments on a regular basis.
17-26	Consider a formal assessment of your driving.
27 and above	Look for other means of travel for most or all of your trips.

Wilson presentation, July 2018.

But driving can be the only way to remain independent for many older adults who live in areas with limited transportation options.

1 | In Clark County, the 65 and older population represents 17 percent of all licensed drivers. (Washington State Department of Licensing, 2018). About 14 percent of Clark County residents are 65 and older (US Census Bureau, 2016).

2 | It is a misconception that older drivers are bad drivers. Older drivers in their mid-to-late-80s have lower crash rates per mile driven than those in their early 20s (AAA Foundation for Traffic Safety, 2012).

3 | The aging process is different for everyone. There is no correlation between chronological age and driving ability. There is no test to predict at what age someone should no longer drive.

4 | Cessation of driving can contribute to social isolation, depression, and other health-related issues (Marottoli et al. 1997, 2000).

5 | Reasons to reduce driving include physical capabilities, cognitive capabilities, poor driving skills, undesirable behaviors such as distracted driving or driving too fast or slow for the road conditions, and external advice – doctors or pharmacists may make recommendations based on medication side effects, or friends and family may not want to ride with you anymore.

6 | Self-evaluations are a tool where you can answer a series of questions every 6 or 9 months to judge your own driving. One challenge with this exercise is that people in denial about their driving don't score very accurately on self-assessment. Formal driving evaluations are offered by occupational therapists and driving skills evaluators. Driver refresher classes can improve driver safety.

7 | Talking with loved ones about their driving skills or the possibility of stopping driving can be very challenging. There are several online resources that can provide support for this important conversation.

PUBLIC TRANSIT

Shawn Donaghy Chief Operating Officer C-TRAN

The ability to travel whenever we want is a freedom that most of us enjoy. When driving is no longer an option, older adults need alternative ways to get around, to maintain independence, and continue daily routines. Accessible and affordable public transit options offer older adults the opportunity to remain active in their community.

1 | Riding public transit is older adults' third most frequent mode of transportation choice, behind driving and walking (US Department of Transportation Federal Highway Administration, 2017).

2 | Research has shown that in order to increase older adults' transit ridership, providers must:
   a. Increase safety and security in all parts of the system
   b. Provide better information both before and during travel
   c. Expand the hours of service and provide additional routes
   d. Make service more reliable
   e. Enhance driver training

3 | Clark County's public transit agency, C-TRAN, provides the following services:

a. C-TRAN's fixed route network service area includes the city of Vancouver and its urban growth boundary, and the city limits only of Battle Ground, Camas, La Center, Ridgefield, Washougal, and the Town of Yacolt.

b. The commuter service provides rides primarily in and out of Portland.

c. The connector service takes place in Ridgefield, La Center, Camas and some in Battle Ground. This is essentially a dial-a-ride service and needs to be better integrated into the system.

d. The C-VAN service is a door-to-door paratransit service for those with disabilities. C-VAN operates inside the Vancouver Urban Growth Boundary and within .75 mile of a C-TRAN fixed route to the cities of Battle Ground, Camas and Washougal. C-VAN does not provide service to Ridgefield, La Center, Yacolt or unincorporated Clark County outside the Vancouver Urban Growth Boundary. In 2017, the cost of fixed route service was $6.77, while the cost of C-VAN was $49.12. (Southwest Washington Regional Transportation Council, 2018).

e. The shopping shuttle route connects senior centers to major commercial districts. C-TRAN has received feedback that they need to expand the shuttle service and have it run more frequently. They currently run the shuttle on the first and third Tuesdays of the month.

f. The travel training program is designed to help older adults and people with disabilities learn to use the fixed-route bus system. Riders can meet with a travel trainer to learn how to plan a trip; pay the fare; read and understand schedules; recognize bus numbers, stops and landmarks; and transfer to another bus or transit system.

g. The travel ambassadors program allows riders to give back to the community and help grow public transportation in the region by assisting C-TRAN with public outreach, community events, and helping others learn to use the fixed-route bus system.

4 | Many county residents do not live within walking distance of a bus stop. C-TRAN is working on this issue through a mobility-on-demand project to improve access to the fixed-route network. C-TRAN would like to provide real-time rider information in a one-stop shop by phone or mobile app.

5 | C-TRAN wants to be involved in the planning of urban areas so they can address concerns before development happens. The most irresponsible public transit comes in after the fact.

6 | One recent initiative, Hop Fast Pass, successfully launched and interconnected C-TRAN, Tri-Met, and the Portland Streetcar payment systems, through a reloadable card or phone app, C-VAN will be added in 2019.

COMMUNITY TRANSPORTATION

Colleen Kuhn Executive Director Human Services Council (HSC)

Whether transportation is provided by transit, public or non-profit providers, volunteer drivers or neighbors, ensuring access to safe and affordable mobility options for those who do not drive is critical to an individual's ability to live independently. Community transportation services are special demand-responsive services for seniors, people with disabilities, and people with limited income.

1 | Community transportation providers in Clark County include the Human Services Council, Catholic Community Services, and the Area Agency on Aging and Disabilities of Southwest Washington. They assist with transportation needs outside the public transit district. These trips can be private pay by the individual, private pay by insurance, or contracted services.

2 | Although these organizations help tremendously with getting people to medical appointments, they are not able to meet all transportation demand because of limited funding and resources.

3 | Scheduling a ride with a community transportation provider has to be completed at least two working days in advance of a trip, limiting flexibility in travel planning.

4 | Although private transportation companies, such as taxis, Uber and Lyft, can provide supplemental rides, organizations like the Human Services Council that work with vulnerable populations cannot currently use them, because of contractual requirements regarding background checks and vehicle record checking.

5 | The Human Services Council and C-TRAN partner on mobility management. A mobility coordinator works across the county to help individuals address their mobility challenges. In addition to a close partnership with C-TRAN, the Human Service Council also works with the Accessible Transportation Coalition, healthcare providers, community service providers, and private businesses on meeting community transportation needs.

6 | The Human Services Council's one call/one click trip resource center is a website and call center that operates similar to other map/direction applications, but provides community transportation options. There are specific filters for seniors, people with disabilities, individuals on Medicaid, and veterans so that options specific to those categories can be identified.

Human Service Council's one call/one click website that provides multiple community transportation options.

WALKING AND BIKING

Jennifer Dill Ph.D., Professor of Urban Studies and Planning
Portland State University

Walking and biking can contribute to healthy aging by improving mobility, access to services, and physical and mental health. Developing well-connected, attractive bike and pedestrian networks that are safe, convenient, and user-friendly for people of all ages and abilities will help people get where they need to go while also helping the environment and the economy.

1| Walking is the second most important travel mode for older people (approximately 9 percent of all trips) behind driving. Among older adults who do not drive, walking accounts for 1 of 4 trips and its importance increases with age (US Department of Transportation Federal Highway Administration, 2017).

2| Challenges for pedestrians include lack of sidewalks or no system of connected sidewalks; unsafe intersection crossings; cyclists on the sidewalk; obstructed sidewalks; uneven pavements; failure to remove leaves, ice, snow, weeds, and roots; and the perception of crime.

BELOW: A shared use path alongside a road. The wide vegetation strip provides a buffer between cars and pedestrians. ABOVE: A separated sidewalk in an urban area, with a vegetated buffer between the street and sidewalk. The sidewalk also intersects with the Burnt Bridge Creek Trail, a regional multi-use path.

3| Ways to encourage walking and biking for adults include:
- **a.** Wide sidewalks that are well connected to a larger network.
- **b.** Shared use paths that separate walkers and bikers from motor vehicles.
- **c.** Protected or separated on-street bike lanes.
- **d.** Bicycle boulevards on low-traffic streets that use traffic calming devices to reduce the speed and volume of motor vehicles.
- **e.** Safer pedestrian crossings such as ramps at crosswalks, reduced crossing distances, tightening curb radii to slow down cars, and rapid flash beacons.
- **f.** Reducing traffic speeds.
- **g.** Scenery and facilities such as landscaping, artwork, benches, etc.
- **h.** Electric-assist bicycles, tricycles, and scooters that are available and promoted can provide additional alternatives to move around. A Portland State University study on e-bikes found that 28 percent were owned by people aged 55-64 and 19 percent were owned by people 65 and older. In a project at Kaiser in Clackamas County, e-bikes were made available for loan to allow people to try them out and several chose to buy one after testing.

COMMUNITY DESIGN

Gary Pagenstecher AICP, Planner
City of Tigard

Most suburbs are not designed with aging residents in mind. Homes are segregated from other buildings, goods and services, creating an over-dependence on driving. The distances between residential and commercial areas combined with the absence of sidewalks discourage walking as a mode of transportation or physical activity.

The city of Tigard recently developed a vision and strategic plan to improve walkability. The city is implementing its vision in a variety of ways, which include:

1| Re-orienting the Capital Improvement Plan transportation project ranking to prioritize walkability.

2| Conducting a pedestrian system gap analysis to identify existing and missing sidewalks and trails, thereby calculating the total miles of gaps they would need to fill and the costs to do so.

3| Finding ways to establish connector trails to provide pedestrian connectivity. For example, a pedestrian bridge over a creek or connecting two cul-de-sacs with a path.

4| Establishing a $200,000 Lighter, Quicker, Cheaper fund to address small projects without the need to place them on the 6-yr Capital Improvement Project plan.

5| Redeveloping the Tigard Triangle from an area of big box stores and parking lots to an active, urban, multimodal, and mixed-use district that prioritizes pedestrians and supports equitable development. They are achieving this goal through mixed use zoning, form-based codes, street improvements, and not requiring parking minimums.
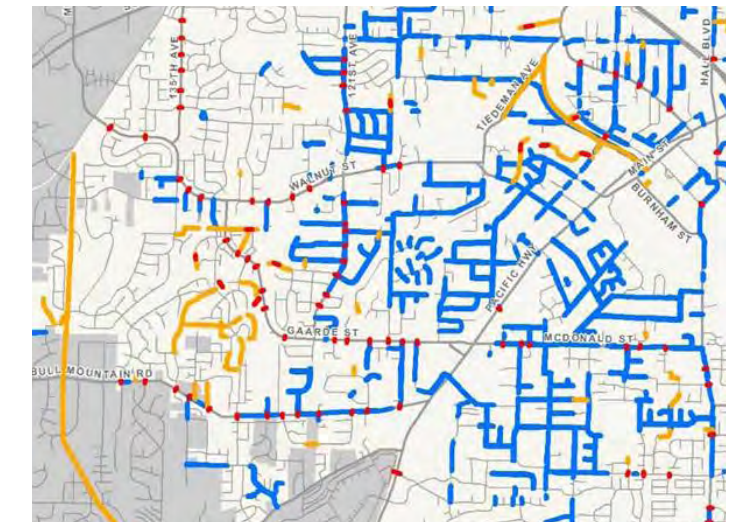

Upper right: A map of Tigard highlighting pedestrian gaps. Blue indicates sidewalk gap, yellow shows trail gaps, and red shows crossing gap. Lower left: A dead-end with overgrown vegetation between two neighborhoods. Right: A pedestrian connection between two dead-end streets.

PLANNING FOR MOBILITY NEEDS

Matt Herman AICP, Transportation Planner
Clark County Community Planning

Finding effective ways to meet the transportation needs of the increasing numbers of older residents will be critical for our local governments. Planning can help improve the mobility options for seniors who want to remain independent as long as possible within their communities.

1 | Land development has evolved over time. Historic urban development was designed for pedestrians, streets were often in a grid and there was uniform street width. You can still see this type of grid today in the county's historic downtowns such as in Battle Ground, Camas, La Center, Ridgefield, Vancouver, and Washougal.
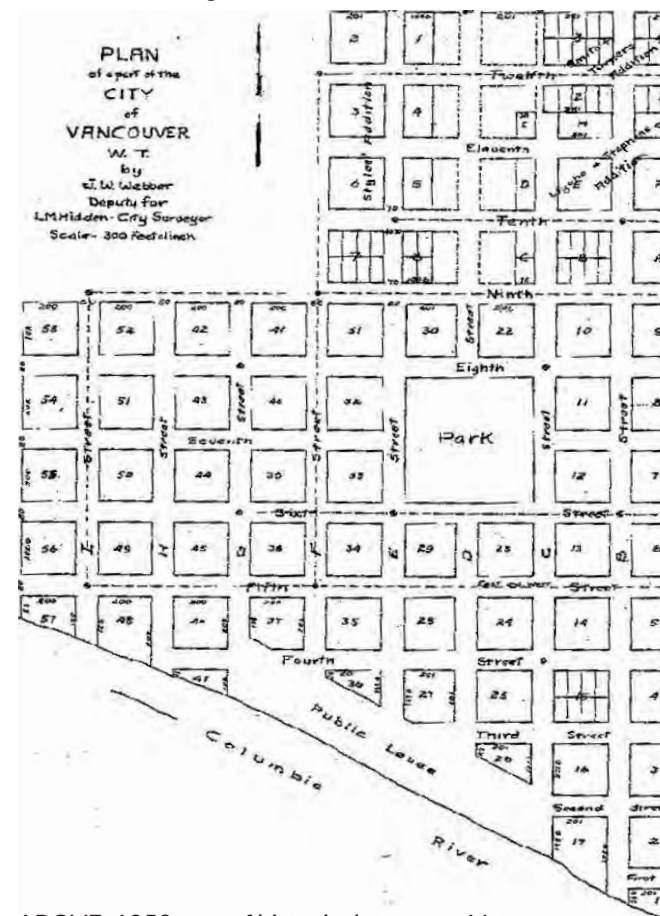
ABOVE: 1852 map of historic downtown Vancouver. Note the grid street pattern and uniform street width. OPPOSITE PAGE: In contrast to the traditional grid pattern, walkable neighborhood, the suburban model is characterized by loopy roads, cul-de-sacs, and indirect routes for both cars and pedestrians to access nearby services, transit stops, and major roads.

2 | Suburban residential development began after World War II when consumer preference, federally subsidized mortgage loans, large-scale production building, and the interstate highway system drove the creation of suburbs.

3 | This change in development patterns over time and the impact on pedestrian connectivity can be illustrated in two county subdivisions.

    a. The 1968 Truman Neighborhood subdivision includes a grid development pattern, and is located further from the city's downtown area and core services. It was designed for the automobile and the streets have no sidewalks. Nearby Truman Elementary school was built after the residential development, and there were no sidewalks for the students to walk on between home and school. Today, there are still no sidewalks on the local streets, but federal funding was used to build sidewalks on 44th Street between the neighborhood and the school.

    b. Ridge Creek subdivision near Salmon Creek was platted in 1989 and instead of the grid network, a cul-de-sac design was built. Cul-de-sacs help maximize land for residential development but disrupt street connectivity. The subdivision was built with sidewalks on both sides of the street, as that was a code requirement at the time. When built, there were no services in the immediate area of the development. Later, Chinook Elementary, Alki Middle and Skyview High Schools were built. Today, many kids in this neighborhood do not have an easy or direct pedestrian connection to school and either get a car ride or have a longer walk than necessary. Due to the design of the neighborhood, kids who walk need to take a serpentine route to get to school.

4 | In Clark County, sidewalks are required on both sides of all public streets in urban areas and within rural centers while private road standards require sidewalks only on one side of the street.

5 | There are two sidewalk types, attached and detached. Attached sidewalks are adjacent to the street. Detached sidewalks have a vegetated strip between the road and sidewalk, providing a bigger buffer from car traffic.

NWDrones.net

6 | Access to transit is impacted by development patterns. The catchment area can be analyzed around public transit stops to forecast potential users of the transit system. A .25 mile catchment area is used to forecast potential users of the system. A neighborhood with a well-connected grid pattern provides accessibility to more homes than a less-connected suburban neighborhood. In some suburban neighborhoods within the county, homes may be very close to a bus stop, but it would take more than .25 mile to walk to the stop due to the location of roads and sidewalks.

7 | The Washington State Transportation Improvement Board (TIB) provides transportation funding, but will only fund sidewalks that are 5 feet wide. Jurisdictions in Washington that want to build sidewalks larger than the state TIB funds allow, need to come up with additional funding sources.

8 | Clark County transportation improvements are prioritized based on the following criteria: safety; future need; congestion relief; multimodal; route connectivity; public and outside agency support; economic development; leverage of non-county funding; and environmental impacts. The criteria are listed in order of weight, with safety being the most heavily weighted.

9 | The county has a sidewalk program which currently has an annual budget of $200,000. Sidewalk projects are ranked using the following criteria, with more weight given to items at the top of the list: safety and comfort; destination access; health outcomes/quality of life/ADA; and implementation.

MOBILITY AS A SERVICE

Kevin Chambers Independent Consultant
Full Path Transit Technology

The convergence of smartphone ubiquity, fast approaching self-driving cars, and an economy marked by the dominance of technology titans adds up to a rapidly transforming transportation landscape that defies easy prediction.

1 | Transportation industry trends indicate that vehicles will be connected, shared, electrified, automated and include FAVES (fleets of autonomous vehicles that are electric and shared). Fleets is a key term because we often think of individual vehicles per person. Imagine electric, automated minibuses in your neighborhood.

2 | Right now, more items are being provided as a service throughout the economy. For instance, we can now pay to have our groceries delivered to us and a company can pay for a call center service to handle its phone calls. The service industry is impacting the transportation sector also and is known as mobility as a service, mobility on demand, or transportation as a service.

3 | The goal of Universal Mobility as a Service is to provide a comprehensive package of transportation services that can replace personal vehicle ownership. Users sign up for an account instead of owning a car. In order for it to be successful, it needs to easily help people find and book transportation options with the following functions:

   a. It helps you make a decision about which option to choose (i.e. price information)

   b. It is easy to book a trip

   c. It is easy to switch between modes (for instance, you could use an Uber/Lyft/taxi, then a transit bus and then walk)

   d. It is easy to pay for all transportation options through a single instrument

4 | There is an opportunity to create universal Mobility as a Service. This would mean designing a system that fully includes people with barriers to mobility such as older adults, those with disabilities, and those who live in rural areas. If you build it for those with barriers, it will also serve those who do not have barriers.

5 | The key takeaway regarding mobility as a service is that the public sector needs to be at the table for these conversations early and often. Age-friendly, universal Mobility as a Service is a possibility, but is not guaranteed.
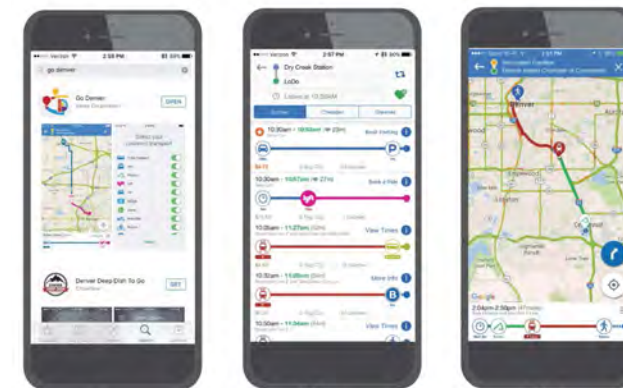
ABOVE: Electric, driverless mini-bus. BELOW: DenverGo phone application, a mobility platform where multiple public and private transportation options are integrated into a single application. Time, price and calories burned are some of the metrics shown with each travel option.

EMERGING TECHNOLOGIES

Becky Steckler Program Manager
Urbanism Next, University of Oregon

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, 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. When cars were first being introduced, it was hard to imagine the impact they would have on our development patterns with the creation of suburbs, strip malls, and traffic. As new technology occurs with the introduction of autonomous vehicles, it is hard to imagine what impacts it will have.

1 | A fleet of vehicles could be owned by a company and rented out instead of each of us individually owning our own vehicle. Vehicles could be used for individual rides or pooled rides. Cars on the road with nobody in them could lead to a lot of empty vehicle miles. The implications could be challenging.

2 | Parking has a big impact on city form and development. Cars are parked about 95 percent of the time. If we start traveling in cars we do not 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. In dense urban cores, 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. All of these changes have implications for how they impact our downtowns, and could provide big opportunities for housing and green space.

3 | What does street design look like when we have autonomous vehicles? Depending on how streets are redesigned, street capacity could dramatically change. Today, streets can typically carry 12,000 people per hour. In the future, we could potentially get more capacity out of an existing roadway. However, if we do not get this right, we could end up with long lines of cars picking up and dropping off people everywhere. Getting street design policies and curb management right is important.

4 | Transit could be negatively impacted by autonomous vehicles, depending on how mobility as a service is implemented and regulated. AVs used through Mobility as a Service are expected to be cheaper than owning our own cars. If AVs are not accessible, then they will not be available to people with certain mobility challenges, while pubic transit provides accessible options. If people choose AVs over transit, transit agencies would have to cut service or readjust their financial model.

A woman enjoys a ride in a driverless vehicle.

5 | More people may choose to live in a rural or suburban location if traveling farther in an AV allows them to watch television, do work, etc. while traveling. We could see an increase in the demand for rural or suburban living. This could increase pressures on sprawl. If we spread further out, there will be public service and environmental impacts. The coverage for public services gets more challenging the more we spread out.

6 | Home deliveries have been exponentially increasing over the last few years. Amazon is a major reason, but other players are involved, such as grocery delivery. As a result of our changing shopping behavior, lots of brick and mortar stores are closing. This could create redevelopment opportunities, such as vacant shopping malls. The industrial land system is changing too. Amazon is looking for close-in distribution 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.

7 | We really need to think about how to pay for road maintenance if traditional sources such as gas taxes and parking fines dry up. Ways to replace funding include: empty seat tax, fleet parking fees, use of curb access, GPS and data fees, mobile business tax, electricity fees, charging stations, advertisement tax, and a road usage charge (vehicle miles traveled).

8 | Pricing mobility as a service is an idea that empowers people to make decisions that are best for them. Whim, in Helsinki, Finland, is a mobility 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.
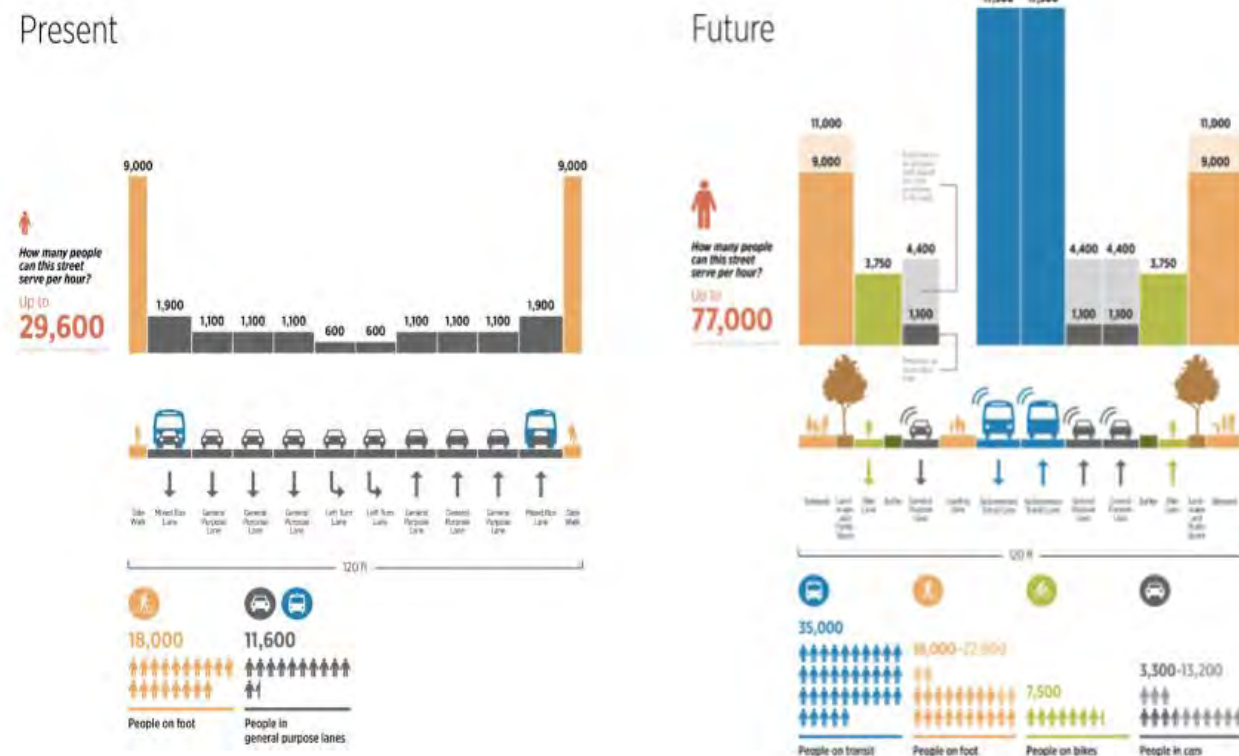
Present and future street capacity. Source: Perkins + Will, January 2018.

Implementing the Aging Readiness Plan UPDATE

The Commission on Aging has developed several programs to implement the Aging Readiness Plan, including advocacy of Universal Design for homes and raising awareness of issues important to our aging population. In 2016, the commission began to revisit the primary focus areas outlined in the plan: Housing, Supportive Services, Transportation and Healthy Communities.

Group discussion at the 2018 Supportive Services Summit.

SUPPORTIVE SERVICES

In 2017, the commission focused on supportive services to educate and raise awareness about services that exist, or may need to exist, to help Clark County's older adults age in their own home and familiar neighborhoods as long as possible. The commission's recommendations centered on advocacy and promotion of existing services provided in the county; increasing the number of memory care facilities and smaller assisted living communities; and assigning a Clark County Sheriff's deputy to the Elder Justice Center team.

Aging in Place Summit: Supportive Services, Realities and Possibilities

Clark County and the Commission on Aging co-hosted the summit with the Area Agency on Aging and Disabilities of SW Washington and Clark College on March 29, 2018, to bring local leaders together to discuss how to increase

support for the growing number of older people who want to continue living in their Clark County communities. The keynote speaker, Vicki Schmall, a professor emeritus of Oregon State University (OSU) where she worked for nearly 25 years as director of the OSU Program on Gerontology and the Gerontology Specialist in the OSU Extension Service, spoke about aging in place, aging in community, and the challenges of being a family caregiver.

In addition to Dr. Schmall, a panel of local experts discussed needs and opportunities for Clark County residents' ability to successfully age in place. The panelists were:

Susan Engels
Certified Public Manager, Washington Aging and Long Term Support Administration
Julie Burger
Alzheimer's Association National Early-Stage Advisor
Les Burger, M.D.
Retired Commanding General, U.S. Army, Care Partner
Howard Klink
Principal Consultant, Klink Consulting Group

Elder Justice
The Commission recommended that Clark County assign a Sheriff's deputy to the Elder Justice Center team. In 2018 the Clark County Council worked with the Clark County Sheriff's Office and a deputy was assigned to a part-time role on the Elder Justice Center team.

Aging and Suicide
The commission recommended they work with community partners to raise awareness about addressing depression, anxiety and suicide in older adults. Veteran Affairs staff shared the VA Suicide Prevention Program fact and resource sheet on this topic.

HOUSING
In 2016, the Commission on Aging focused on housing and centered their recommendations on encouraging the construction and remodeling of homes and neighborhoods to be places everyone could visit regardless of ability. In 2018, the commission's advocacy work was evident in continued changes in the community regarding increasing aging-in-place opportunities.

2018 NW Natural Parade of Homes
The 2016 Commission on Aging housing recommendations and marketplace ideas included encouraging the

Building Industry Association to showcase a Universal Design home in the Clark County 2018 Parade of Homes. Soaring Eagle Homes built a house named "The Maker" in the 2018 Parade of Homes. The house incorporated Universal Design elements of no-step entry, crank windows, and easily accessible light switches and plugs.

Housing policy and code changes
Since the Commission on Aging's 2016 focus and recommendations on housing, several jurisdictions have been working on ways to encourage development of age-friendly housing. Clark County adopted code language that encourages a wider variety of housing sizes, options and price points by reducing barriers to development of accessory dwelling units and cottage housing and manufactured housing. When commission members visited city councils, there was interest in hearing what other jurisdictions in the county were doing to increase the number of single-story,

barrier free homes, such as Ridgefield's incentive program and Camas' comprehensive plan policy.

Education, awareness and advocacy
Throughout the year, the commission worked to provide education, community awareness and advocacy to move toward an all-age-friendly community. Below are some events and actions the commission members participated with to provide information or advocate on topics related to aging in Clark County.

- **City councils** Commission members presented the 2017 Commission on Aging Annual Report and supportive services recommendations to all city councils to keep them updated on the commission's progress.
- **Human Services Transportation Plan (HSTP) 2018 Update** The commission assisted with outreach for the HSTP plan by providing their regular monthly meeting recorded by Clark Vancouver Television,

be used for a presentation and to solicit input from the public on the update.
- **Aging in Place Summit: Supportive Services** Clark County, Clark College, Area Agency on Aging and Disabilities and the Commission on Aging hosted the summit to bring community leaders together to learn how better shape supportive services to meet the needs of both caretakers and those who need care.
- **Transportation policies** The Commission on Aging wrote a letter of support regarding a county comprehensive plan complete streets policy so that the county is eligible for complete streets grants. The County Council is slated to adopt a complete streets policy as part of the 2018 Annual Reviews and Docket process in early 2019.
- **Proclamations** The commission successfully advocated for the county council to proclaim May as Older Americans Month.

OPPOSITE PAGE: The front door of "The Maker," showcased in the Clark County 2018 Parade of Homes. The doorway has a no-step entry, making it easy to enter for someone on foot, in a wheelchair, or in a stroller. ABOVE: The County Council declares May as Older Americans Month.

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COMMUNITY PLANNING

1300 Franklin Street • PO Box 9810

Vancouver, WA 98666-9810

564.397.2280

comm-aging@clark.wa.gov

www.clark.wa.gov/aging

For other formats, contact the Clark County ADA Office
Voice   564.397.2322   Relay 711 or 800.833.6388
Fax   360.397.6165
Email   ada@clark.wa.gov