

Improving Senior Mobility in Colorado

**Research Prepared for the
Strategic Action Planning Group on Aging**

September 2016

Introduction

Senior mobility is more than just getting to the doctor's office. Transportation is an essential ingredient for healthy, vibrant aging.

But, many Colorado seniors struggle to get from Point A to Point B every day, detracting from their quality of life.

Nationally, seniors who don't drive make 15 percent fewer trips to the doctor, 59 percent fewer trips to stores or restaurants and 65 percent fewer trips to visit friends and family, compared with drivers of the same age.¹

In Colorado, more than half (52 percent) of seniors and adults with disabilities depend on family, friends, aides or volunteers for some of their transportation needs. More than one of 10 (16 percent) are completely dependent upon others for all of their trips. Just under half (47 percent) have trouble finding transportation when they need it.² And more than one of four (26 percent) Coloradans over 55 said it is at least somewhat problematic to find safe and affordable transportation. This percentage increases to 42 percent among those age 85 and older.³

The Colorado Health Institute (CHI) explored how Colorado's current transportation options support quality of life and mobility for seniors age 50 and older. Our research delved into the strengths and gaps of today's transportation options and identified potential recommendations for the Strategic Action Planning Group on Aging (SAPGA) to promote changes to meet future needs. This report highlights efforts by Colorado's public and private sectors to promote older adult mobility and enhance the state's transportation system.

The SAPGA may be uniquely positioned to bring older adult concerns and priorities into these other efforts, leveraging existing activities to support Colorado's aging populations.

Key Findings

Most of Colorado's seniors are still behind the wheel. The state's 2015 Strategic Highway Safety Plan has identified strategies to support aging drivers, and Colorado has resources available for older adults that encourage and promote safe driving. Still, older adults, and especially those with cognitive or physical limitations, are at greater risk of driving-related injuries or death.

Limited financing for public and specialized transportation is an ongoing barrier to making these services more widely available. Regulations and funding-related restrictions limit the ability of transportation providers and senior organizations to serve their communities efficiently. Creating efficient, effective transportation options requires close collaboration among various actors: state and local transportation entities, aging and human services agencies and public health partners. The SAPGA can support efforts at the state level to improve coordination across funding agencies and partner with Regional and Local Coordinating Councils working to expand access to and awareness of services.

Colorado communities are increasingly adopting policies and other strategies that promote safe, accessible active transportation options such as walking or bicycling. Integrating an aging perspective

into such efforts has potential for yielding sustainable and systemic changes in these communities to support senior mobility. The SAPGA can help disseminate some of these strategies and practices to communities across Colorado.

Identifying the Needs

A transportation network that supports seniors' mobility will, to some extent, need to be tailored to unique local needs.

Counties across the state will see varied increases in their populations of older adults. There is no one-size-fits-all approach. Understanding the magnitude of the age shift at the community level will inform local as well as statewide planning efforts.

Much of the Front Range, the Interstate 70 corridor and the northwest corner will experience sizeable increases in their older adult population between 2015 and 2030. The expected upswing in Eagle County is the most dramatic, at 66 percent. On the flip side, the proportion of the 65-plus population is expected to decrease by more than 20 percent in Hinsdale County. Eight other counties, all very rural, will also see decreases.⁴

Colorado's existing transportation network also varies from region to region. Older adults living in rural communities are more likely to drive themselves than those living in urban areas. While metro areas have public transportation options, but they may not always be accessible to seniors.

Rural and frontier communities have fewer transportation options to meet existing needs, let alone the anticipated growth in demand. Low population in these communities presents challenges to developing sustainable transportation services.

Map 1 highlights the magnitude of the demographic shift and county-level transit needs. Counties in the darkest shade of blue will have the largest growth in its 65+ population, according to data from the Colorado Demography Office. Percentage increases in the older adult population are projected to be greatest in northwest Colorado, Front Range counties and southwest La Plata County.

Counties with red and yellow dots were identified by the Colorado Department of Transportation's Statewide Transit Plan as having the highest existing transit needs. These areas have disproportionately high percentages of transit-dependent residents compared with the rest of the state. These residents include adults over 65, individuals with disabilities and low income people.

Communities in the darkest shade of blue that have a red dot are those where the age wave and transit needs coalesce. Older adults in these counties and elsewhere have a lot to gain from transportation improvements — and a lot on the line if no changes are made.

Adults ages 60-70 who drive can benefit from continued assessments and safe driving supports. While still able to get around by themselves, these adults may also benefit from programs that introduce them to public transportation, which they may rely on when they give up their car keys. Now is the time to connect adults in need of services with transportation options available to them through the Older Americans Act. Developing a mobility plan that includes alternative transportation options and realigning daily activities and routines now can yield long-term benefits.

Adults over age 70 may be facing a driving retirement. These adults, their families and caregivers need to be able to easily access information on available transportation services and supports.

Senior Transportation in Colorado: Overview, Gaps and Opportunities

Older Adult Drivers

Overview

Most Colorado seniors get around by driving. A Colorado Department of Transportation (CDOT) survey of older adults and adults with disabilities found that 78 percent of rural and 65 percent of urban respondents drove themselves in 2014. Just over half of all respondents, 56 percent, drove themselves three or more times a week in a typical month.⁵

Older adults are satisfied with car travel. Nearly three-quarters of seniors (73 percent) describe the ease of car travel in Colorado as “good” or “excellent.”⁶ A car gives seniors a sense of independence, which they may feel may slip away as they age.⁷

Older adults tend to drive safely. Seniors are more likely than younger adults to wear a seat belt, take shorter trips and limit their driving, especially during bad weather and at night.⁸ That said, adults ages 65-84 are overrepresented in the percentage of vehicle crashes involving death or serious injury.⁹

The automotive industry is adapting its vehicles in ways that make driving a little easier for older drivers. Features like keyless entry and push-button ignition help drivers with arthritis. Crash avoidance technologies like lane departure and collision warnings and electronic stability control to correct for over- or under-steering provide a safety net for drivers, particularly those with slower reflexes. These advances in auto safety are built with all motorists in mind, but provide special benefits to older drivers.¹⁰

Gaps

Colorado’s 2015 Strategic Highway Safety Plan identified aging drivers as one of its eight key “emphasis areas” to guide the state’s traffic investments, policies, programs and decisions from 2015-2019.

The plan identifies several ways to improve safety: education for seniors, family members and caregivers about the effect of aging on driving ability; licensing policies and practices for older drivers; improved infrastructure, signage and roadway markings; and support for navigating alternative transportation options, including public and volunteer transportation.¹¹

Potential Recommendations

These recommendations align with research on older adult drivers and Colorado's Strategic Highway Safety Plan action plans.

- **Help seniors and their families access tools and training to drive safely.**

Colorado offers several opportunities for older adults to sharpen their driving skills and be as safe as possible in their cars. Although evidence is limited on their effectiveness, these educational resources provide older adults with helpful tips and strategies for smart driving. These tools may also highlight limitations or early warning signs that may be less apparent to an older adult or family members. The SAPGA could explore opportunities for promoting, subsidizing or incentivizing these fee-based services, which often rely on word-of-mouth marketing and a financial commitment from the individual.

The AARP Driver Safety Course in Colorado — available in-person and online — coaches drivers over 55 on how to reduce traffic violations, crashes and injuries. It provides updates on traffic laws and offers tips to compensate for age-related changes that affect driving ability. The course “gets older adults thinking about their driving again,” according to an instructor. It stresses the importance of monitoring one's own driving skills. Participants are eligible for reductions in automobile insurance premiums every three years upon completing the course. The instructor indicated that the discount is a reason that up to half of participants take or retake the course. Some insurance companies also promote the course among members. In-person courses are offered statewide.¹²

AAA Travel offers a 15-question self-rating tool, “Drivers 65 Plus: Check Your Performance,” to gauge a person's own driving performance and identify strengths and weaknesses. It also has an interactive online driving evaluation to assess a range of mobility, visual and cognitive tasks.¹³

A program called CarFit helps older drivers adjust their vehicles to address their physical needs. This might include repositioning seats, mirrors and the steering wheel. The program, developed in partnership with AAA Travel, AARP and the American Occupational Therapy Association, enhances driver safety and improves comfort and confidence behind the wheel. Over a third (37 percent) of CarFit participants had at least one “critical safety issue” addressed through the program, such as seated too close to the steering wheel or not having adequate lines of sight.¹⁴

Some occupational therapists specialize in driving assessments. The assessments evaluate driving skills and abilities or may identify underlying medical issues that might compromise one's driving abilities. These fee-based services are not reimbursable by Medicare or Medicaid. The SAPGA could explore the feasibility of adding this unique approach to preventive care as a Medicaid benefit.

- **Educate seniors and families on how to plan for a “driving retirement”**

Seniors and their families can plan for when an older driver should hand over the keys. There are tools and programs available to help smooth these discussions that the SAPGA could promote.

Colorado's "Guide for Aging Drivers and Their Families," funded by the Colorado Department of Transportation, Drive Smart Colorado and AAA Travel, summarizes relevant Colorado laws and licensing requirements, offers safety tips and links to transportation resources and self-assessment tools.¹⁵ Another program, "We Need To Talk: Family Conversations with Older Drivers," includes prompts and suggestions for initiating discussions, identifies warning signs and provides sample worksheets to help families develop a transportation plan.¹⁶

Transportation plans, sometimes also referred to as mobility action plans, are meant to keep older adults on the go in and around the community when they stop driving. A typical plan includes all activities or events in an older adult's schedule, identifies the current methods for getting to these places and finds alternatives such as carpooling, sharing rides or changing times or locations. Some senior organizations and local coordinating committees (referenced later in the report) provide "mobility management" services for older adults and individuals with disabilities to help identify available transportation services.

- **Study other states' policies that strengthen driver's license renewal requirements.**

Older adults may experience physical and cognitive changes that limit their ability to drive safely, but onset of these changes vary considerably. Shorter renewal periods, in-person renewal and vision testing for older drivers have the potential for improving safety and reducing collisions. The state's Strategic Highway Safety Plan calls for reviewing licensing best practices across the country.

A study by the National Highway Transportation Safety Administration found that states that required road-testing for drivers 75 and older have lower rates of older adult licensed drivers, especially among the 85+ population. The study also found that older adult drivers do not believe they are treated unfairly or that special licensing procedures are ineffective.¹⁷

In Colorado, all drivers renew their licenses every five years and vision screening is required at renewal time. Unlike nineteen other states, Colorado does not have shorter renewal periods for older drivers.¹⁸

Colorado has some requirements for drivers age 65 and over. Older drivers may renew their license by mail every other renewal cycle or they must visit a Division of Motor Vehicles office. Online renewal is not allowed.

Colorado may require a driver to take a vision and written exam and driving road test if a doctor, law enforcement agency, court representative or immediate family member calls the Department of Revenue to request one or sends a letter requesting a re-examination. Colorado does not require physicians to report any limitations.¹⁹

Colorado driver's license applicants are also asked whether they have a physical, mental or emotional condition that interferes with their abilities to operate a vehicle. If the applicant answers "yes," he or she must obtain a clearance from a medical or behavioral health provider to obtain a license.

Public and Specialized Transportation

Overview

Colorado public transportation options include buses and light rail with fixed schedules and paratransit services (Access-a-Ride/Dial-A-Ride), which provide door-to-door service for individuals with disabilities who are unable to use the fixed-route system.

Colorado has over 55 urban and rural public transit and rail providers. Bus service is the most common option, with various providers offering intercity, regional, interregional and local services.²⁰

Over one-third of adults over 65 have an Activity of Daily Living/Instrumental Activity of Daily Living (ADL/IADL) limitation that prevents them from using public transportation.²¹ Many specialized transportation services augment the public transportation system to support and promote older adults' mobility.

Health First Colorado, Colorado's Medicaid program, includes non-emergent medical transportation (NEMT) for some Medicaid enrollees with no other means of transportation. These services include transportation to and from Medicaid covered non-emergency medical appointments or services. NEMT is not available for all Medicaid enrollees, and many of the excluded groups include older adults.²² The Colorado legislature passed a bill in 2016 to make it easier for new transportation companies to become NEMT providers.

Area Agencies on Aging (AAAs) typically contract with local transportation companies to provide rides to or from medical or personal appointments, worship services, grocery stores, social and recreational activities, or community services. AAA transportation services, funded by federal Older Americans Act and state and local dollars, are only available to adults 60 and older. Seniors' Resource Center is one specialized transportation provider serving the Denver metro and Evergreen/mountain communities.

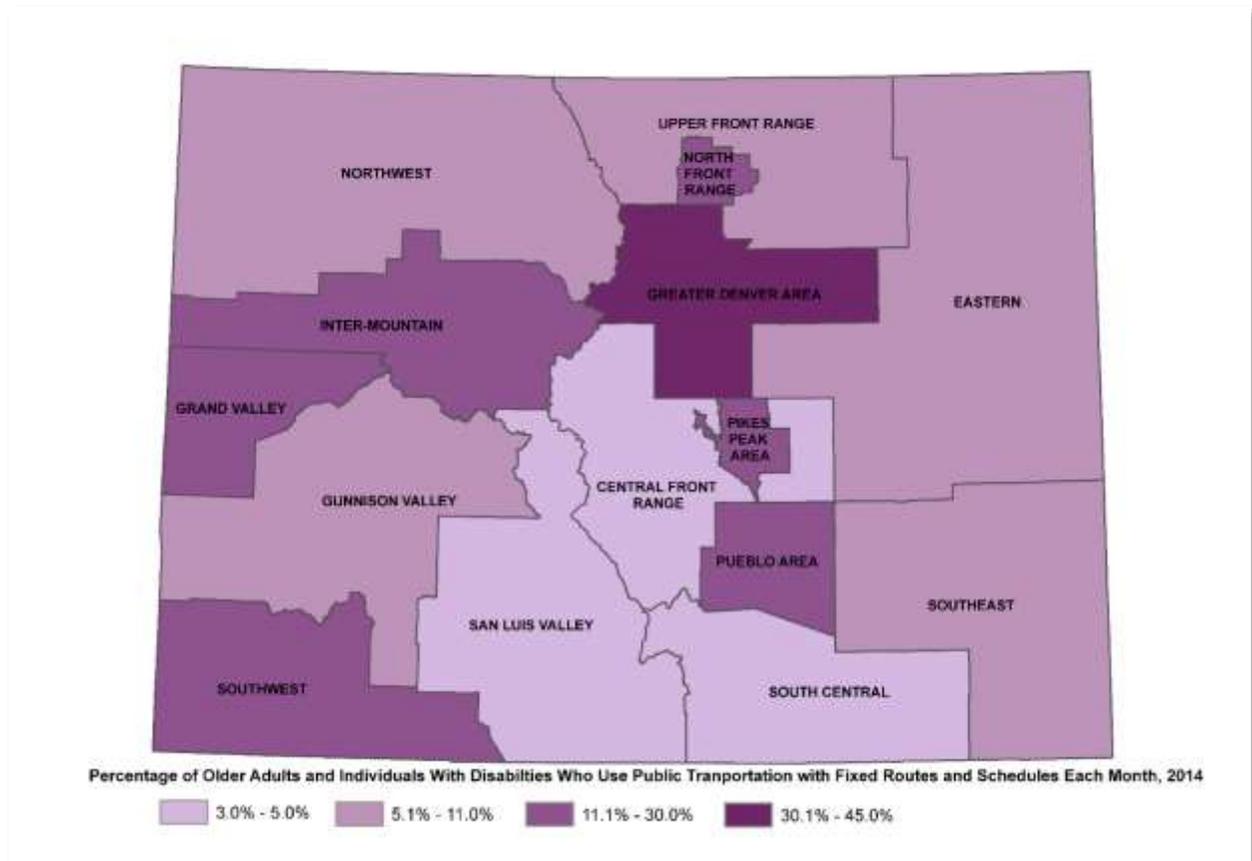
One of 10 seniors and adults with disabilities use volunteer driver programs.²³ Many are run by faith-based or nonprofit organizations. Some receive funding from AAAs for ongoing operating expenses or one-time support for purchasing a vehicle. Rides are usually free or very-low cost. Some programs place restrictions on the types of errands or reasons for rides. Some volunteer driver programs in Colorado include Douglas County's Neighbor Network, Boulder County's Faith in Action and Senior Alternatives in Transportation (SAINT) in Larimer County. Volunteers of America runs the Retired Senior Volunteer Program (RSVP), which matches adults over 55 with volunteer opportunities, including transportation.

Gaps

Public and specialized transportation is not keeping up with seniors' needs. More than half (52 percent) of seniors and adults with disabilities depend on families, friends or volunteers for transportation; just under a third (31 percent) use public transportation at least once a month; and 16 percent use paratransit services, according to a survey by CDOT.

Use varies by region. Map 2 shows the percentage of older adults and individuals with disabilities who use public transportation on a monthly basis. Five percent or fewer seniors and adults with disabilities living the San Luis Valley and Colorado’s south central counties reported using public transportation, compared with 45 percent in the greater Denver area.

Map 2. Regional Variation in Use of Public Transportation.



Older adults cite many reasons for not using public transportation. According to the CDOT survey, more than two-thirds of seniors and adults with disabilities felt that there was a lack of public transportation services in 2014. Distance to a bus stop or bad weather may discourage transit use by all ages, but particularly seniors. The cost of fares is a barrier for older adults. Some also cite personal safety concerns as a reason for passing up public transportation.²⁴

As for specialized transportation, it relies heavily on the existing inventory of resources — vans, buses, cars, and drivers. Many communities struggle to find drivers who meet the physical requirements associated with specialized transportation such as being able to lift walkers or load wheelchairs. Low wages can deter applicants and make it difficult to retain drivers. And building or expanding a transportation fleet requires considerable capital investments.

According to one AAA director, transportation funding “closes doors for certain things.” Funding sources for specialized transportation frequently restrict how the service can be used and who can use it, hindering efficiency and collaboration among providers. Funding may also be limited for use within specific county boundaries.

For example, Health First NEMT is only available to Medicaid enrollees traveling to medical appointments, while Older Americans Act-funded rides are available to individuals 60 and older for a wide range of activities.

Because of funding silos, some riders have to piece together different service options, requiring multiple vehicle transfers. Others fall through the cracks. A 55-year-old Medicaid enrollee who has a doctor’s appointment and needs to stop at the grocery store cannot make both stops through NEMT. Her 67-year-old roommate qualifies for an AAA-supported van ride to the grocery store, but the 55-year-old cannot take an empty seat because she’s not age-eligible for the service. Or a senior living in one county seeking to travel to another for an appointment or visit may need to switch rides at the county line.

These siloes result in transportation providers working well below capacity or traveling long distances to pick up clients on routes covered by other transportation providers. Companies cannot efficiently deploy their drivers in a silo system. And funding restrictions can make obtaining new vehicles a challenge when they can only be used for specific purposes or locations.

Volunteer driver programs not funded by state or federal resources may avoid red tape, but obstacles remain. Liability issues may be daunting to small organizations or networks. Volunteer programs also must make sizeable financial investments to screen and train volunteers, coordinate drivers with client needs, reimburse volunteer vehicle owners for mileage and buy and maintain vehicles.

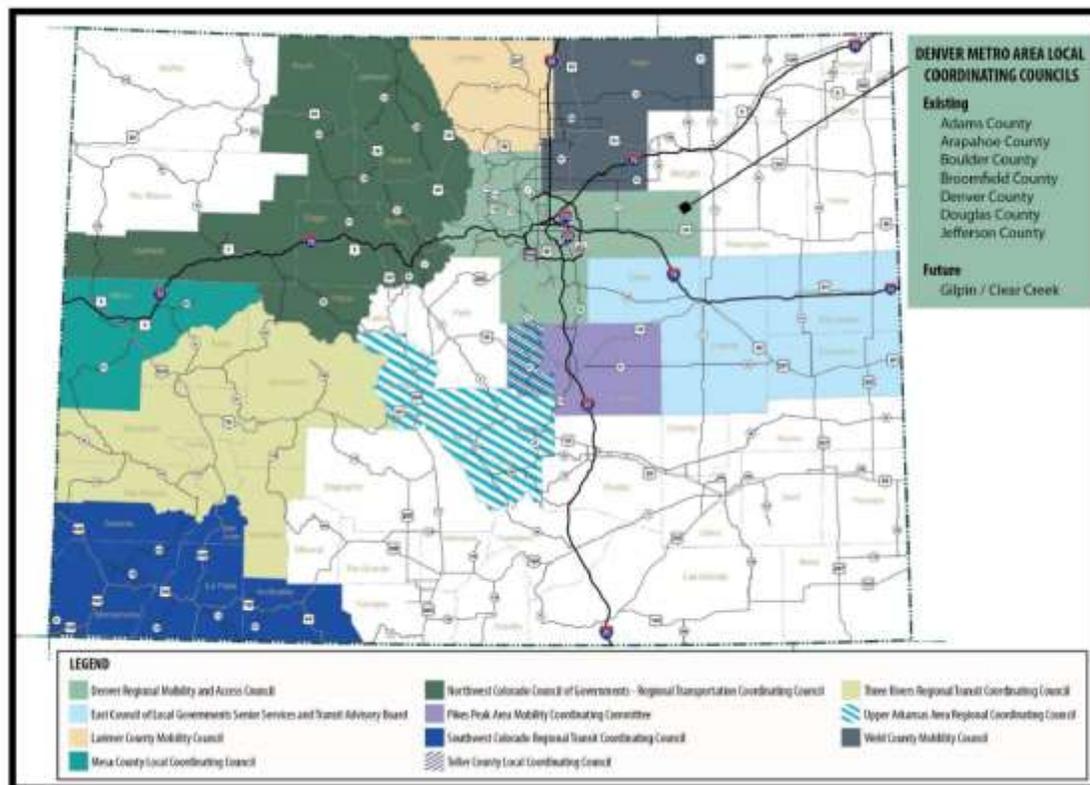
Potential Recommendations

- **Improve senior access to public and specialized transportation by partnering with regional and local councils.**

Colorado’s 11 Regional and Local Coordinating Councils (RLCCs) can be strategic partners for the SAPGA. The councils aim to improve collaboration among local human service organizations and interested stakeholders. Councils typically identify through an assessment process the types of transportation services needed and strategies for providing them in their communities. CDOT provides resources for local communities looking to start a council or expand an existing one. Map 3 shows the existing councils.

Map 3. Colorado's Regional and Local Coordinating Councils.

Figure 4-16 Colorado Regional and Local Coordinating Councils



Many regions with the highest current and anticipated transit needs already have a RLCC (See map on page 2.) But there are no regional councils in five parts of the state — the northwest, northeast, southeast, San Luis Valley and central region of Park and Lake counties. Areas in these regions have high transit needs or large growth in the older adult population. Developing RLCCs in these regions would address some of their current and future transit needs.

Each of Colorado's 15 transportation planning regions defined by CDOT has written regional transit plans that address changes affecting transportation.²⁵ The plans also identified needs for expanding or adding new specialized transportation services, outlined in Table 1 below.²⁶

Table 1. Transportation Needs Identified in Colorado’s 2015 Regional Transit Plans

Regional Transit Plans	Human Services Transportation Needs
Central Front Range	Expand Starpoint, Golden Shuttle service.
	Expand/enhance services region-wide, especially in Park and Custer counties
Eastern	Expand services to the Front Range
	Increase hours, frequency of services.
Gunnison Valley	Additional or new services in Gunnison, Hinsdale and Ouray counties.
Intermountain	Expand/enhance service in very rural areas such as Garfield County
Northwest	Expand Routt County Council on Aging services
San Luis Valley	Create a regional volunteer driver program
South Central	Establish new paratransit service in Trinidad
Southeast	Expand RSVP program
	Provide services from state line to Pueblo.
Southwest	Subside service in San Juan County

	Provide additional options for veterans.
	Maintain services in Archuleta County
Upper Front Range	Maintain and expand Via Mobility services

- **Endorse existing efforts to integrate and coordinate transportation services and funding sources.**

Colorado’s 2015 Statewide Transit Plan establishes “a framework for creating an integrated statewide transit system that meets the mobility needs of Coloradans, while minimizing duplication of services and leveraging limited funds.”²⁷ It also identifies recommendations for supporting or expanding efforts to strengthen transit – critical for meeting current and future needs.

The plan contains recommendations to improve coordination of specialized transportation. CDOT is reconvening a State Coordinating Council and seeking the participation of all state agencies that fund transportation. The council can facilitate cross-agency communication and yield creative strategies and opportunities for aligning funding streams.

Colorado can look to Florida for guidance. The Sunshine State created a Transportation Disadvantaged Program,²⁸ which is a coordinated statewide effort to meet transportation needs of older adults, people with disabilities, low-income Floridians and/or at-risk children. Florida’s Commission for the Transportation Disadvantaged sets statewide transportation policies and priorities. It centralizes state and federal transportation resources and aligns funding with needs. Policies and priorities are implemented by local coordinating boards and providers.

- **Expand awareness of best practices for using existing funding sources.**

The State Unit on Aging has held trainings for Area Agencies on Aging on how to meet seniors’ transportation needs, improve efficiency and expand access to services. The RLCC in northwest Colorado has created a person-centered transportation network in its rural region that weaves together federal, state and local resources. Mountain Ride Transportation Resource Center, part of the Northwest Colorado Council of Governments, was consistently cited as a leader by key informants interviewed for this research for using multiple funding streams to meet seniors’ needs. They have also centralized their NEMT billing practices to improve efficiency.

Another example is Via Mobility Services and Boulder County Connect, transportation providers that use centralized trip scheduling. Their electronic system allows each organization to see all the trips that need to be provided and determine which organization can most efficiently meet the need.

- **Inform older adults about transportation options.**

The 2014 CDOT survey found that about two-thirds (69 percent) of older adults and people with disabilities in Colorado felt developing easily accessible and understandable transportation information and referral services was very important for the state's transit plan.²⁹

Efforts are already underway for the SAPGA to support. The Denver Regional Mobility and Access Council (DRMAC) serves as a one-stop-shop for transportation options in the Denver metro area. Its "Getting There Guide" in English and Spanish and print or electronic versions details available transportation services in the region. DRMAC also has an online portal, "TransitOptions," that uses answer to a series of question to identify the best transportation choice. Individuals can also call a transportation resource specialist at DRMAC's Transportation Information and Assistance Center for "one call, one ride" service.³⁰ (This aligns with the Physical Community Committee's Objective 1c.)

Linking these programs to other centralized resources such as Colorado 2-1-1 or the state's No Wrong Door pilot sites can further their reach and use.

Travel training programs provide individual training to help older adults get acquainted with local transportation systems. There are few travel training programs offered in Colorado; however, Via Mobility in Boulder offers a program considered among the "best in the nation" by two key informants interviewed for this research.

Some transportation providers feel these programs may be underutilized by organizations that serve or work with older adults. The SAPGA and senior organizations could explore opportunities for further utilizing these resources.

Ride-Sharing Solutions

Overview

Ride-sharing companies like Uber and Lyft provide on-demand, door-to-door transportation to wherever a customer needs to go. Riders used smartphone apps to request service.

Uber and Lyft conduct local and national background screenings, which may include a review of the National Sex Offender Registry, and motor vehicle registration and driving records checks. Drivers with both companies work as independent contractors, similar to drivers with many taxi companies.

Both companies operate in Colorado. Uber offers rides in Boulder, Colorado Springs, the Denver area, Fort Collins and select mountain communities. Lyft operates in Aurora, Boulder, Centennial, Colorado Springs, Denver and Fountain.

Typical ride-sharing programs do not require drivers to offer special access or support for riders needing extra assistance getting in and out of the car or those who have walkers, scooters or wheelchairs. Neither company offers programs exclusively for older adults or individuals with disabilities in Colorado but they have piloted programs elsewhere.

Uber worked with the City of Gainesville, Florida, ElderCare of Alachua County and the local Chamber of Commerce to launch "Freedom in Motion," which offers subsidized rides to seniors and free technology tutorials.³¹ Seniors who enroll in the program are eligible for rides that cost between \$0-\$5, depending on income. The city provided funding for the program and ensured that local ordinances allowed for ride-sharing. ElderCare administered the program, enrolling seniors, providing technical training and ensuring quality and customer service standards.³² Following a successful pilot period, the program was extended to all seniors in Gainesville.³³

Uber also offers uberASSIST for riders needing an extra hand. Drivers are trained to help passengers get in and out of the vehicle and load up scooters, wheelchairs and walkers. The service costs the same as a regular Uber ride.³⁴ uberASSIST is currently available in select markets, excluding Colorado.

In January 2016, Lyft announced a partnership with the National MedTrans Network to provide New York City seniors with rides to non-emergency medical appointments using a third-party web application called Concierge.

The city of Centennial, where about a third of residents are over age 50, partnered with Lyft in August 2016 to offer free rides to and from the Dry Creek Light Rail Station to residents within a specified service area. The city's Senior Commission and Innovation Team hosted free trainings on how to use ride-sharing apps and other transportation options.³⁵ Because Lyft drivers in the pilot cannot accommodate wheelchairs or other mobility devices, the city partnered with Via Mobility to provide accessible vehicles and trained drivers for residents needing them.³⁶

Gaps

A 2015 survey of older adults in Denver found that only three percent currently use Uber or Lyft, though 45 percent said they would be willing to try these services and 22 percent said they would not.³⁷ Some reluctant seniors cite privacy concerns related to sharing payment and other personal information through an electronic app and the cost of frequent trips.

Ride-sharing services are emerging as a new option to supplement existing transportation services. However, these businesses don't operate in much of the state, limiting their potential impact. Several regions identified as having high transit needs and a growing senior population do not have any ride-sharing programs.

Colorado transportation providers and senior organizations suggest that some communities are open to considering ridesharing as a strategy for meeting seniors' growing transportation needs. However, there is limited activity with either company with regard to serving older adults or individuals with disabilities and many communities are opting to invest time and energy in other transportation services.

Potential Recommendations

- **Promote ride-sharing to seniors.**

While today's seniors may be disinclined to use these services, the next wave of older adults may be more open to ride-sharing. Asking senior centers and providers to include ride-sharing app usage as part of a travel-training curriculum would promote this transportation option.

- **Identify non-traditional partners to encourage senior-specific ride-sharing services.**
Colorado College in Colorado Springs has had discussion with aging organizations about starting uberASSIST in the community, using student drivers who need a flexible work schedule and extra income. Colleges and universities may be ideal partners for aging organizations seeking to create a ride-sharing solution through an existing company. The University of Florida, located in Gainesville, was an early supporter of bringing Uber and Freedom in Motion to the community, according to former mayor Ed Braddy.
- **Expand use of transportation vouchers for ride-sharing.**
Older adults may not be using ride-sharing due to cost, not technology. Some AAAs already issue vouchers to older adults for taxi rides and may want to consider subsidizing ride-sharing. Learnings from the program in Centennial can provide important insights in this area. The SAPGA could work with ride-sharing companies, or interested communities, to launch subsidized pilot programs.

Walking and Biking

Overview

Walking is the third most common form of transportation for Colorado's older adults and people with disabilities, after driving themselves or getting a ride from a family, friend or neighbor. In 2014, 57 percent of urban and 48 percent of rural older adults and people with disabilities walked as form of transportation. A smaller percentage (20 percent) used a bicycle.

Well-marked intersections, adequate time for crossing streets and benches for resting are just a few strategies for creating a pedestrian and bicycle-friendly community.

Gaps

Seniors have a large stake in promoting safe, active transportation. From 2005-2013, older adults made up 12 percent of Colorado's population but 18 percent of its pedestrian fatalities and 12 percent of its bike fatalities.³⁸

Colorado's communities may not be designed to promote safe walking and biking. According to Walk Score, which measures pedestrian friendliness on a scale from 0-100, the average score among Colorado's 41 largest cities is 34. Walk Score's scale puts Colorado in the "Car-Dependent" category, with most errands requiring a vehicle.

However, the statewide score hides regional variations. Walk Score ranks three cities as "Somewhat Walkable" — Englewood with a score of 61, Denver with 60 and Boulder at 58. Colorado Springs, Colorado's second most populous city, scores 35. The least walkable scored cities are Castle Rock and Clifton (outside Grand Junction) with scores of 13, Erie at 10 and Pueblo West with a score of seven.³⁹

Not surprisingly, scores are related to walking or cycling as a form of transportation. Just 39 percent of seniors and people with disabilities in Pueblo, which has a Walk Score of 37, said they walked compared with 60 percent in the greater Denver area and 66 percent in northwest Colorado. Only six percent in

south-central Colorado biked, compared with one of four (25 percent) in the northwest, Gunnison and Grand valleys.

Only three Colorado communities — Colorado Springs, Denver and Larimer County — have joined AARP’s Livable Communities campaign. The campaign “supports the efforts of neighborhoods, towns and cities to become great places for people of all ages” through safe, walkable streets; age-friendly housing and transportation options. Participation signals that the community’s leaders are committed to making their city a “great place for people of all ages.” AARP offers a toolkit of resources for Livable Communities participants to use for developing age-friendly action plans.⁴⁰

Potential Recommendations

- **Support efforts to implement Colorado’s Statewide Bicycle and Pedestrian Plan.**
One of the plan’s goals is to build new bike paths and sidewalks in areas with significant senior, minority and low-income populations.

The SAPGA can provide unique insights on where needs are greatest and ensure bicycle and pedestrian advocates are partnering with older adults and senior organizations.

- **Promote seniors' interests in places already working to create livable communities for all residents.**

Efforts are underway across Colorado to build communities that make walking, biking and access to transportation convenient, safe and affordable for all residents. The SAPGA can encourage local partners, cities and organizations already making walking, biking and access to transportation convenient, safe and affordable to assess for and include the needs of current and future seniors.

One strategy is to urge more cities to join AARP’s Livable Communities campaign. Another is by supporting the use of other aging-specific planning tools such as the Boomer Bond.

The Denver Regional Council of Governments (DRCOG) developed the Boomer Bond to provide rural and urban municipalities with strategies to support healthy and independent aging. An assessment helps local partners evaluate how well their community’s resources, programs and physical design serve older residents. The initiative also highlights best practices and promotes regional cooperation to create age-friendly physical and social environments that help older adults stay in their homes.⁴¹

The SAPGA could collaborate with LiveWell Colorado and the Colorado Municipal League, who are already partnering on a campaign that provides training and technical assistance for municipalities to adopt policies that improve access to healthy eating and active living. Outreach to these organizations might yield opportunities for incorporating senior concerns.

One hundred and twenty local governments have adopted and/or implemented policies and strategies to increase safe, equitable access to physical activity through the built environment. The Colorado Department of Public Health and Environment has set a target of

170 local governments by 2020 in its health improvement plan.⁴² The SAPGA could support these local efforts with funding or information.

Reimagining Mobility

Technologies reflected in futuristic sci-fi films are now entering the market.

Driverless cars, also known as self-driving cars or autonomous vehicles, could facilitate mobility across the life stages. But they are especially promising for seniors.

Adults 50 and older are likely to be among the early adopters of driverless cars. In a recent Bloomberg Technology article, Joseph Coughlin, the director of the Age Lab at the Massachusetts Institute of Technology, reflected on this:

*"For the first time in history, older people are going to be the lifestyle leaders of a new technology... Younger people may have had smartphones in their hands first, but it's the 50-plus consumers who will be first with smart cars."*⁴³

Both the public and private sector are working to make these cars operational. The U.S. Department of Transportation (USDOT) recently launched the Automated Vehicle Research program to accelerate the cars' development and deployment.⁴⁴ USDOT also released in September 2016 its first guidelines on self-driving cars. While not official regulations, the new guidelines lay out detailed safety expectations and the role of state regulations.⁴⁵ Colorado does not have specific regulations regarding autonomous vehicles.

Tech companies and car manufacturers are also developing and testing personal automated vehicles. Google has become notable for its work in this area. Ford has targeted 2021 as the year it will deliver self-driving cars to be used in ride-sharing programs.⁴⁶ Uber recently launched a pilot program testing self-driving cars in Pittsburgh.⁴⁷

In Europe, research and development activities such as CityMobil2 have been testing automated transit vehicles in cities. The city of Bristol, England, is working on the "Flourish Project" to develop a driverless infrastructure for elderly citizens and others. They will first test a "driverless vehicle simulator" with seniors.⁴⁸

While 70 percent of drivers ages 50-69 say they would test-drive an automated car, 39 percent said they'd still purchase a regular car even if an automated car were the same price.⁴⁹ If this technology is to live up to its hype, consumer attitudes will need to shift.

Opportunities for the SAPGA

This research yielded the following opportunities as having potential for improving mobility among older adults in Colorado.

Older Adult Drivers
1. Collaborate with the Colorado Department of Transportation on implementing the aging driver elements of its Strategic Highway Safety Plan.
2. Help seniors and their families access tools and training to drive safely.
3. Educate seniors and families on how to plan for a "driving retirement".
4. Study other states' policies that strengthen driver's license renewal requirements.

Public and Specialized Transportation
1. Partner with regional and local coordinating councils to implement locally-identified solutions.
2. Endorse existing efforts to integrate and coordinate transportation services and funding sources.
3. Expand awareness of best practices for using existing transportation funding sources.
4. Inform older adults about public transportation options and discounts.

Ride-Sharing Solutions
1. Promote ride-sharing to older adults.
2. Identify non-traditional partners to encourage senior-specific ride-sharing services.
3. Expand use of transportation vouchers for ride-sharing.

Walking and Biking

1. Support efforts to implement Colorado's Statewide Bicycle and Pedestrian Plan.
2. Promote seniors' interests in places already working to create livable communities for all residents.

Conclusion

Getting around is a fundamental need of daily life. Mobility becomes increasingly important as one ages and physical, cognitive and financial limitations make the simple act of getting from one place to the next a difficult undertaking.

Improving transportation for all residents is a top priority across the state. From highways and ride-sharing, bus routes or bike lanes, many Colorado agencies, organizations and communities are working to develop safe, accessible and affordable mobility options. Some are also considering older adults' needs in their efforts.

This report identifies many of these activities already underway. The SAPGA has opportunities to support and partner with organizations implementing initiatives to ensure the current and future needs of Colorado's aging population are met. The SAPGA can consider these strategies during the development of its recommendations to the Colorado legislature.

The SAPGA can contact Sara Schmitt, director of community health policy, with any questions about this research. She can be reached at schmitts@coloradohealthinstitute.org or 720-382-7081.

¹ Bailey, Linda (2004), "Aging Americans: Stranded without Options" Surface Transportation Policy Project, Washington, D.C

² 2014 Colorado Department of Transportation (CDOT) Statewide Transit Survey of Older Adults and Adults with Disabilities Report of Results.

³ 2010 Colorado Assessment Survey of Older Adults (CASOA), State of Colorado.

⁴ Colorado State Demography Office. Population Estimates and Projections. Accessed July 2016.

⁵ 2014 CDOT Survey.

⁶ 2011 CASOA.

⁷ Peck, Michael. (2010). "Barriers to Using Fixed-Route Public Transit for Older Adults." Mineta Transportation Institute. <http://drmac-co.org/images/PDFs/barriers.pdf>

-
- ⁸ Centers for Disease Control and Prevention. Injury Prevention & Control: Motor Vehicle Safety. Older Adult Drivers. http://www.cdc.gov/motorvehiclesafety/older_adult_drivers/. Insurance institute for Highway Safety, Older Drivers. <http://www.iihs.org/iihs/topics/t/older-drivers/qanda#older-drivers>.
- ⁹ Colorado Strategic Highway Safety Plan. <https://www.codot.gov/safety/safety-data-sources-information/safety-plans/colorado-strategic-highway-safety-plan>.
- ¹⁰ Doheny, K. "Smart Car Features Can Help Older Drivers Stay Safe." <http://www.edmunds.com/car-safety/smart-car-features-can-help-older-drivers-stay-safe.html>
- ¹¹ Colorado Strategic Highway Safety Plan. <https://www.codot.gov/safety/safety-data-sources-information/safety-plans/colorado-strategic-highway-safety-plan>
- ¹² AARP Auto Insurance Discounts. "Many States Offer Price Breaks to Motorists Who Complete the AARP Smart Driver Course." http://www.aarp.org/home-garden/transportation/info-05-2010/auto_insurance_discounts.html
- ¹³ AAA Senior Driving. <http://seniordriving.aaa.com/evaluate-your-driving-ability/self-rating-tool>
- ¹⁴ CarFit: Helping Mature Drivers Find Their Safest Fit. <http://www.car-fit.org/>
- ¹⁵ Colorado's Guide for Aging Drivers and Their Families. Drive Smart Colorado. <http://www.drivesmartcolorado.com/wp-content/uploads/2015/11/Older-Driver-Booklet-FINAL-PRINT.pdf>
- ¹⁶ "We Need to Talk: Family Conversations With Older Drivers." The Hartford Center for Mature Market Excellence. https://www.thehartford.com/sites/the_hartford/files/we-need-to-talk-2012.pdf.
- ¹⁷ Thomas III, F. D., Blomberg, R. D., Knodler, M., & Matthew R.E. Romoser, M. R. E. (2013, September). Licensing procedures for older drivers. (Report No. DOT HS 811 833). Washington, DC: National Highway Traffic Safety Administration.
- ¹⁸ Insurance Institute for Highway Safety, Highway Loss Data Institute. License Renewal Procedures. <http://www.iihs.org/iihs/topics/laws/olderdrivers?topicName=older-drivers>.
- ¹⁹ Colorado's Guide for Aging Drivers and Their Families.
- ²⁰ 2015 Colorado Statewide Transit Plan. Colorado Department of Transportation.
- ²¹ Comments from Edward Braddy, former mayor of Gainesville, FL, shared at Live.Ride.Share Denver on May 17, 2016.
- ²² Colorado Department of Health Care Policy and Financing. Non-Emergent Medical Transportation. <https://www.colorado.gov/pacific/hcpf/non-emergent-medical-transportation>
- ²³ 2014 CDOT Survey.
- ²⁴ Peck, M. (2010). Barriers to Using Fixed-Route Public Transit for Older Adults. <http://drmac-co.org/images/PDFs/barriers.pdf>
- ²⁵ Region Transportation Plans (CDOT) <http://coloradotransportationmatters.com/regional-transportation-plans/>
- ²⁶ 2015 Colorado Statewide Transit Plan, Table 7-4 Proposed Human Services Transportation, Page 110.
- ²⁷ 2015 Colorado Statewide Transit Plan.
- ²⁸ Florida Commission for the Transportation Disadvantages. <http://www.dot.state.fl.us/ctd/index.htm>
- ²⁹ 2014 CDOT Survey.
- ³⁰ Denver Regional Mobility & Access Council. Coordination in Action: Information Sharing. <http://drmac-co.org/index.php/programs/information-sharing> Accessed August 3, 2016.
- ³¹ Uber Newsroom. Freedom in Motion: More Options For Senior Mobility. January 29, 2016. <https://newsroom.uber.com/us-florida/freedom-in-motion/>
- ³² Personal Communication with Mayor Ed Braddy, September 1, 2016.
- ³³ Krstic, Z. Uber For Seniors Program To Expand. The Gainesville Sun. January 21, 2016. <http://www.gainesville.com/news/20160121/uber-for-seniors-program-to-expand>
- ³⁴ Uber Newsroom. Introducing uberASSIST. July 14, 2015. <https://newsroom.uber.com/us-california/introducing-uberassist-la/>.
- ³⁵ Bliss, L. "A Denver Suburb Bets Big on Free Lyft Rides to Light Rail." <http://www.citylab.com/commute/2016/08/centennial-lyft-transit-partnership/495080/>
- ³⁶ Via and Go Centennial. August 17, 2016. <https://viacolorado.org/go-centennial/>

³⁷ 2015 United States of Aging Survey, Denver Full Research Findings. <https://www.ncoa.org/news/resources-for-reporters/usoa-survey/denver/>.

³⁸ Bicycling and Walking in the United States. 2016 Benchmarking Report. Alliance for Biking and Walking.

³⁹ Colorado Walk Scores. <https://www.walkscore.com/CO/>. Accessed July 26, 2016.

⁴⁰ AARP Livable Communities. <http://www.aarp.org/livable-communities/about/>

⁴¹ DRCOG Boomer Bond. <https://drcog.org/services-and-resources/boomer-bond>.

⁴² Healthy Colorado: Shaping a State of Health. Colorado's Plan for Improving Public Health and the Environment. 2015-2019. https://www.colorado.gov/pacific/sites/default/files/OPP_2015-CO-State-Plan.pdf.

⁴³ Hull, D. Google Thinks Self-Driving Cars Will Be Great For Stranded Seniors. BloombergBusinessweek. March 2, 2016. <http://www.bloomberg.com/news/articles/2016-03-02/google-thinks-self-driving-cars-will-be-great-for-stranded-seniors>

⁴⁴ National Institute on Disability, Independent Living, and Rehabilitation Research, Proposed Transportation Priority, page 2

⁴⁵ Kang, C. Self Driving Cars Gain Powerful Ally: The Government. September 19, 2016. http://www.nytimes.com/2016/09/20/technology/self-driving-cars-guidelines.html?_r=0

⁴⁶ Ford Motor Company. Ford targets fully autonomous vehicle for ride sharing in 2021. August 16, 2016. <https://media.ford.com/content/fordmedia/fna/us/en/news/2016/08/16/ford-targets-fully-autonomous-vehicle-for-ride-sharing-in-2021.html>

⁴⁷ Uber Newsroom. Pittsburgh, your Self-Driving Uber is arriving now. September 14, 2016. <https://newsroom.uber.com/pittsburgh-self-driving-uber/>

⁴⁸ Ashcroft, E. Bristol Project to Create Driverless Cars For The Elderly. Bristol Post. February 1, 2016. <https://www.2025ad.com/in-the-news/news/driverless-cars-for-seniors/>

⁴⁹ Hull, D. 2016.