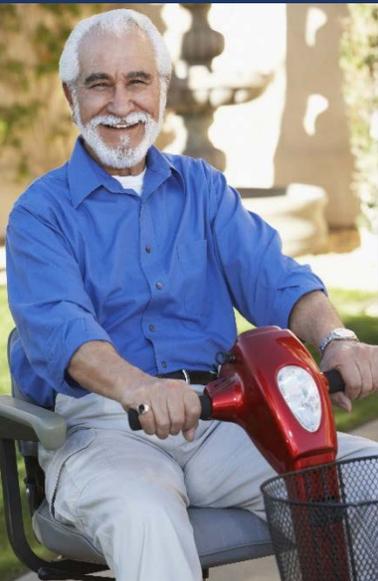


OLDER ADULT TRANSPORTATION & TRAFFIC SAFETY

Santa Clara County

2018



Driving

Walking

Transit



Mobility
Options



Bicycling

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Table of Contents

Introduction	1
Driving	2
Walking	4
Transit	6
Mobility Options	8
Bicycling	10
Recommendations	11
References	14



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Introduction

The World Health Organization and AARP encourage communities to support healthy aging, social inclusion, and an enhanced quality of life through their age-friendly designation. Age-friendly communities are those which have structures and services accessible to and inclusive of older people with varying needs and capacities.¹

Two age-friendly core domain areas—Outdoor Spaces and Buildings, and Transportation—are linked to older adults’ transportation, transit, mobility, and safety. Together they address built environment, available and accessible transportation options, connectivity to travel destinations, and driving conditions.

Transportation allows older adults to maintain independence by connecting them to family, friends, health care, and other services. By 2030, one in four Santa Clara County residents will be over age 60; the fastest growing segment of this population is 85 and older.²

The transportation, transit, and safety needs of the aging population will impact multiple generations. Older adults often turn to their adult children for assistance when they do not have choices that meet their needs. Conversely, they may be

responsible for the care and transportation of the youngest family members. In Santa Clara County, approximately seven percent of children under age 18 live in homes where a grandparent is the householder.³



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The County, municipalities, and many local organizations have taken steps to create age-friendly communities, but opportunities to create seamless transportation services and traffic safety measures to support older adults remain.

Older Adult Transportation and Traffic Safety provides a snapshot of existing transit, mobility, and safety issues in Santa Clara County. It also recommends steps jurisdictions and agencies can take to improve older adult driving, walking, bicycling, transit, and mobility options.

Driving

Overall, older adult drivers are safer than their younger counterparts as they are more likely to wear seat belts, follow speed limits, and not drive intoxicated. They also avoid situations that put them at risk such as driving at night, during rush hour, or on busy highways and intersections.⁴

In 2013, the age-adjusted rate of parties involved in motor vehicle collisions in Santa Clara County was 679.7 per 100,000 people and 466.4 per 100,000 people among adults 65 and older.⁵

Statistics show crash rates per mile driven are highest for drivers 16 to 19 years old though they do steadily increase after age 70.⁴

Older adult driver crash rates per mile driven are lower than that of teen drivers, but older adult drivers are more likely to be seriously injured or killed in a collision due to age-related vulnerabilities.⁴

The effects of aging can impact one's driving skills and abilities. Factors that

may contribute to unsafe driving are vision changes, cognitive decline, range of motion limitations, stroke, other health-related conditions, and medication side-effects.

The California Department of Motor Vehicles (DMV) requires drivers 70 years of age and older at the time their

driver license expires to appear in person and pass knowledge and vision tests to renew their license. Upon successful completion of the tests, a driver will follow the regular five-year renewal cycle.

A reexamination including a driving skill assessment can be requested earlier when prompted by a physician, emergency personnel, peace officer, family member, license renewal application, or driving record history. An anonymous request for reexamination can also be submitted to the DMV. After the reexamination, the DMV Hearing Officer will determine what action, if any, would be best—license restriction, probation, suspension, or revocation. A driver has the right to challenge the decision.⁶

On average, older adults outlive their ability to drive safely by ten years for women and seven years for men.

On average, older adults outlive their ability to drive safely by ten years for women and seven years for men. Older adult drivers are reluctant to give up their keys when their driving ability declines out of fear of losing their autonomy.⁷ Whether drivers choose to stop driving or it is done out of necessity, giving up the keys can be difficult and emotional.

In a continuing effort to keep seniors driving for as long as they can do so safely, the California Department of Motor Vehicles created a Senior Ombudsman Program. The Ombudsman Program represents the interest of public safety for all Californians, with a special interest in addressing the concerns of senior drivers.

Senior Guide for Safe Driving is a resource from the DMV that provides information on age-related changes which impact driving, a self-assessment questionnaire, and information on the licensing processes. *Safe Driving for a Lifetime We Need to Talk* offers tips on how to talk with an older adult about modifying driving and driving cessation.

It is important for older adults to monitor their health by getting regular eye exams and health check-ups. Attending driver refresher classes such as those offered by AARP and the California Highway Patrol, or meeting with a driver rehabilitation specialist (a person trained to assess a driver's abilities), can be useful. Other opportunities to improve safety include Carfit check-ups that

improve a driver's physical "fit" to his/her vehicle.

There are programs, policies, and engineering design measures that jurisdictions can implement to support older drivers. Examples can be found in the Recommendations section.



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Walking

Many seniors walk for health or leisure while others walk for transportation. The Santa Clara County Livable Communities Survey found after driving themselves, walking was the second most frequently used mode of transportation for 65-84 year olds for shopping, visiting the doctor, running errands, or going to other places.

There are several factors that contribute to older adult pedestrian safety such as the built environment, unsafe behavior, and the effects of aging.

The built design of our communities—with shops and services often separated from residential areas, and wide streets with fast traffic speeds—can make walking challenging in many parts of Santa Clara County.

The effects of aging can also impact pedestrian safety. For example, declines in physical strength, agility, balance, depth perception, and coordination can contribute to difficulties negotiating curbs and uneven surfaces leading to a

greater risk for falls. Additionally, a shorter stride and slower gait impact walking speed and the need for additional time to cross streets.

The age-adjusted rate of pedestrians ages 65 and older involved in collisions in Santa Clara County is higher than the rate of people of all ages combined. In 2013, the age-adjusted rate among

seniors ages 65 and older was 39.1 per 100,000 people compared to the overall rate of 27.6 per 100,000 people.⁵

The rate of pedestrian-involved deaths increases with age and is highest among ages 85 and older. The

findings are consistent with those of the Centers for Disease Control and Prevention which found that the risk of pedestrian death increases slowly through the lifespan and peaks with people over age 75.⁸

When it comes to pedestrian safety, tackling the complicated interplay between the built environment and human behavior can lead to a better understanding of collision factors and

Santa Clara County seniors age 75 and older have the highest pedestrian fatality rate compared to all other age groups.

help decision-makers prioritize both infrastructure and education/outreach investments in transportation safety.

Global Age-Friendly Cities: A Guide provides suggestions for improving the built environment and landscape to increase pedestrian access and safety.

Its suggestions complement Complete Streets policies that aim to make roadways safer for users of all ages and abilities. Several examples are contained in the Recommendations section.



Transit

The Santa Clara Valley Transportation Authority (VTA) estimates that there were 2.5 million bus and light rail boardings by adults 65 and older during Fiscal Year 2016.⁹ The number of boardings exemplifies the importance of public transit services for older adults.

This is further supported by the results from the 2016 Santa Clara County Livable Communities Survey that found 87% of those age 65 and over consider accessible and convenient public transportation extremely or very important.

Travel by fixed route public transit has become easier with improvements to vehicle accessibility like kneeling busses, ramps and automated stop announcements.

Although accessibility has improved, there are still many barriers to using transit. For example, first and last mile concerns such as distance to and from transit, lack of places to rest along the route, incomplete sidewalks, unsafe

pedestrian crossings, and limited availability of alternate modes of transportation from public transit to a final destination.

The 2015 Santa Clara County Area Agency on Aging Area Plan shows twenty percent of the respondents age 60 and over did not feel comfortable using

public transportation for the following reasons: a transit stop is not near their residence, lack of knowledge on how to use public transportation, transit does not go where it is needed, fear for their safety, difficulty trip planning, it is too slow, and it is too expensive.¹⁰

Other challenges that may prevent older adults from using transit are age-related mobility limitations, language barriers, and the absence of benches and shelters at transit stops.¹¹

VTA has several resources for older adults. Its Daycation and Train the Trainer Academy provide group transit orientation and familiarization training

In Santa Clara County, 87% of those age 65 and over consider accessible and convenient public transportation extremely or very important.

for older adults and service providers to assist them on how to use bus and light rail services.

In addition, VTA will be opening a mobility training center where individuals can be introduced to public transit in a controlled environment. The center will have mock bus and light rail features, ticket vending, and a bus stop.

The complementary Americans with Disabilities Act (ADA) Paratransit

service functions as a “safety net” ensuring transportation is available for those whose disabilities prevent them from using fixed route public transit. The ADA Paratransit service provides a level of service that is comparable to that which is provided by the fixed route system.¹²

See Recommendations for suggestions on reducing older adults’ barriers to transit.



Photo credit: Valley Transportation Authority

Mobility Options

Driving an automobile or accessing public transit services is not a viable transportation option for many older adults and people with disabilities.

Results from the 2016 Santa Clara County Livable Communities Survey underscore the importance of having various mobility options available.

Ninety percent of the survey's respondents indicated special transportation services for people with disabilities and older adults is extremely or very important. As respondents' ages increased so did their opinion of the importance of specialized services.

The following are Santa Clara County's alternative mobility options that complement traditional transportation.

Specialized services, like American Cancer Society-Road to Recovery, are intended for older adults or those with disabilities who cannot use public transit.

Volunteer driver programs arranged by community based organizations are Heart

of the Valley, Avenidas, and city programs such as Morgan Hill's Volunteer Ride pilot.

Private-pay options are comprised of traditional taxi and ridesharing services like Uber, Lyft, and GoGo Grandparent. Plus, other services such as Affordable Senior Care, Boundless Care, Delivered

by Grace, Just Go, Ken Transportation, Road Runners, Silver Ride, and UBF Transport Services.

Community shuttles include City of Palo Alto Shuttle Bus, Mountain View Community Services, Speedy Shuttle in Morgan Hill and Gilroy, Reaching Your Destination Easily (RYDE) for West Valley

residents, and Stanford

University Marguerite Shuttle.

Supplemental services offer other means to support older adults. An example is the Senior Nutrition Mobility Management Program. It provides monthly bus passes or gas cards to help older adults' access transportation to attend daily lunches at nutrition sites within Santa Clara County.

It costs an average of \$7,500 a year to own and operate a motor vehicle; cost savings from giving up a vehicle can be applied to using other forms of transportation.

Using alternative options can be challenging despite the variety of services available. For example, services are restricted to specific geographic areas and do not provide comprehensive coverage, hours of operation are limited, language and culture may create barriers, and lack of familiarity with computer and mobile phone applications can hinder accessing services.

Additionally, an insufficient number of trained volunteer drivers limits the breadth of services provided.

Older adults are often concerned about the expense of using alternative options.

Costs for individual rides vary by service and range from no cost to \$45 an hour. It costs an average of \$7,500 a year (based on 10,000 miles) to own and operate a vehicle.¹³ The cost savings from giving up a vehicle can be applied towards other forms of transportation which may be safer alternatives than driving.

See the Recommendations section for strategies which policy makers and community leaders can implement to support mobility options for older adults.



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Bicycling

Regardless of why older adults are bicycling—transportation, exercise, or recreation—one thing is clear, bike rates among older adults are soaring. From 1995 to 2009, the rise in biking among people ages 60-79 accounted for 37 percent of the total nationwide increase in bike trips.¹⁴



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Possibly contributing to the growth are the many bicycle options now available, including recumbent bikes, electric bikes, various types of tricycles that can

accommodate individual needs and lifestyles, and bike sharing systems that increase access to bikes for short trips.

Compared to other age groups, older adult riders are more likely to wear their helmets. County data shows less than half (47%) of all bicyclists treated at local trauma centers were wearing a helmet at the time of their crash compared to 66 percent of bicyclists 65 years and over.¹⁵

Older adults also have the lowest rate of bicycle-related injuries among those

treated at local trauma centers compared to all other age groups.¹⁵

Despite the growth in older adult bicyclists, there are challenges posed by infrastructure that deter people from riding. For example, many bicyclists prefer to ride in protected bike lanes as they provide a barrier between motor vehicles and cyclists. Limited access to protected bikeways with good connectivity makes it difficult to ride comfortably.

Combining transit with riding can also be challenging. A bicyclist may need to ascend several stairs while carrying a bike to access a transit vehicle, and using bike racks on buses and light rail cars often require bikes to be lifted several feet. Although it can be difficult to combine bicycling with transit, bicycling has the potential to reduce the barriers to reaching transit providing these obstacles can be overcome.

The League of American Bicyclists supports communities that choose to make bicycling an attractive and practical transportation and recreation option. Its guidance on enforcement, education, engineering, evaluation, and encouragement strategies, several of which are included in the following section.

Recommendations

The following suggestions are provided to improve older adult driver safety and prioritize alternative and active transportation. The recommendations can be adopted by the County, cities, and local agencies, and can complement existing efforts to establish Complete Streets policies, Vision Zero initiatives, and Age-Friendly designations.

Driving

- Establish Senior Safety Zones around senior facilities by reducing vehicular speeds and posting appropriate 25 mph speed limit signage.
- Expand the availability of driving refresher courses and CarFit programs, and offer affordable driver rehabilitation specialist services.
- Encourage older adults to get regular health check-ups and eye exams, and provide resources to help plan ahead for driving cessation.
- Utilize professional resources like *The Handbook for Designing Roadways for the Aging Population (2014)* to enhance design, operation, and engineering treatments that increase older adult driver safety.

Walking

- Maintain sidewalks to improve safety, and ensure proper sidewalk width to accommodate wheelchairs or other mobility devices.
- Increase benches and shade along walking routes and provide good street lighting.
- Encourage diverse stakeholders to conduct walking assessments in areas with high senior pedestrian volumes to identify hazards and challenges, positive aspects for replication, opportunities for education, and infrastructure improvements.
- Incorporate design guidelines to accommodate older pedestrians (i.e., ADA-compliant devices and Universal Design considerations, extended pedestrian countdown signals, refuge islands, updated Senior Safety Zone signage,¹⁶ raised crosswalks, accessible curb ramps level with the road, etc.).
- Enforce traffic laws that affect pedestrian safety, such as drivers failing to yield to people walking in marked or unmarked crosswalks and when they exceed speed limits in reduced speed Senior Safety Zones.

Transit

- Offer affordable public transportation with frequent transit vehicles during the day, plus night, weekend, and holiday service.
- Provide adequate lighting and increase seating and shelters at transit stops.
- Offer support services in multiple languages.
- Maintain clean transit vehicles to increase safety and promote utilization of services.
- Provide hands-on training on bus, light rail, and train systems.
- Offer adequate and easy-to-use bicycle accommodations on transit vehicles and at stations.
- Reduce first- and last-mile to transit barriers by reviewing VTA's *Pedestrian Access to Transit Plan* (2017) to evaluate walking to transit stops.

Mobility Options

- Offer a variety of supplemental transportation options when public transit is limited or cannot service individuals with special needs.
- Establish a centralized mobility management agency to link older adults with the transit option that best meets their needs.

- Offer training for older adults on computer and mobile applications to increase accessibility.
- Support volunteer driver programs to keep mobility services affordable by increasing volunteerism and driver training.
- Create a dedicated funding source for older adult transportation to ensure sustainability.

Bicycling

- Develop a city-specific bicycle plan to establish a framework and goals for improvements that will enhance the bicycling environment.
- Post high-visibility wayfinding signs displaying times/distances to important destinations.
- Provide adequate, secure bike parking at locations where people shop, work, and enjoy leisure time.¹⁷
- Offer alternative bicycle programs with a variety of easily accessible bike styles to accommodate riders with different abilities.
- Provide bicycling education and riding opportunities for older adults.
- Increase the availability of protected bikeways and their connections to destination areas.

Meeting the current and future transportation and safety needs of older adults will require creative, long-term commitment and resources from policymakers, diverse community organizations, and local stakeholders. Their investment will assist the growing

population of older adults to maintain their mobility and a high quality of life. Additionally, it will support jurisdictions in their desire to become age-friendly which benefits the health and well-being of all residents.



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