San Diego Complete Streets Toolkit for Older Adults

COUNTY OF SAN DIEGO
HEALTH AND HUMAN SERVICES AGENCY

LIVE WELL SAN DIEGO

The *San Diego Complete Streets Toolkit for Older Adults* was created by members of the Age Well San Diego Transportation & Community Connections Team in partnership with the County of San Diego, Health and Human Services Agency, Aging & Independence Services.

March 2024

San Diego
Complete Streets Toolkit
For Older Adults

“Complete Streets is a movement to promote inclusive roadway design that meets the needs of all users, including people of all ages and abilities riding bikes, waiting for the bus, or simply walking to get from one place to another.

CALBIKE
California Bicycle Coalition

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FORWARD

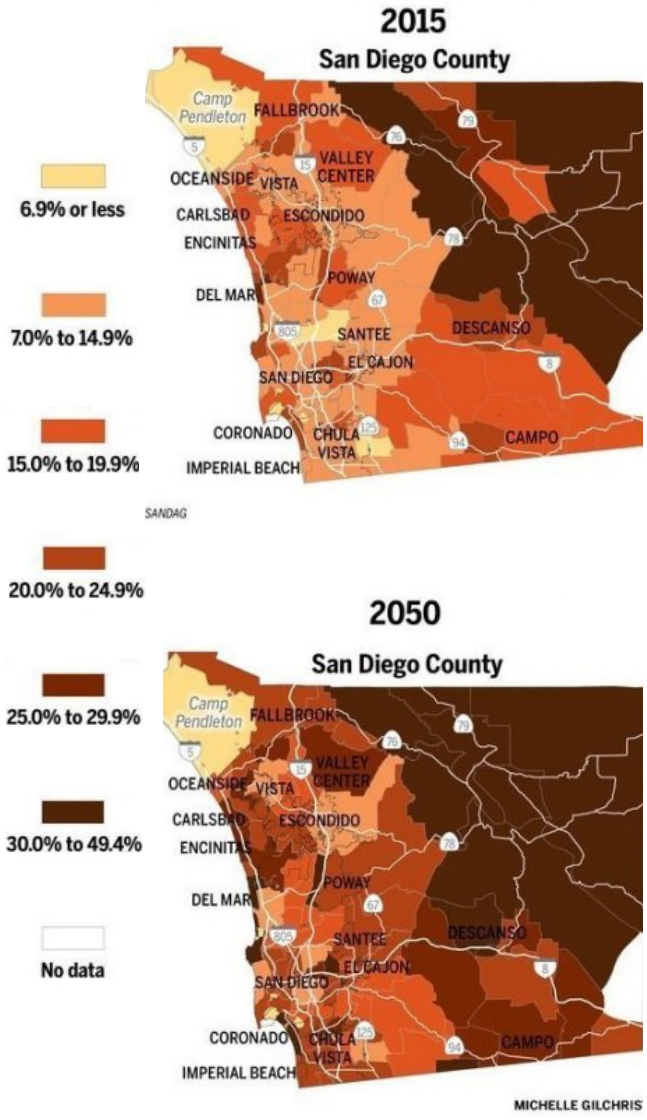
Our hope is that this toolkit may help to fill a gap and provide engaged citizens, city and regional planners, designers, and policy-makers with new ideas, strategies, and thoughts on how they can improve their communities for everyone who lives there. Although walkability and Complete Streets are often associated with dense urban centers, we believe that rural communities can also use the concepts to their advantage.

While some municipalities may be constrained more rigidly to the Manual on Uniform Traffic Controlled Devices (MUTCD) than others, having access to a one-stop toolkit should prove useful in making small changes when the opportunity arises. In addition to increased safety and community engagement, properly planning for a multimodal aging population in your community can help to protect your municipality from liability issues associated with poorly designed and maintained infrastructure.

Whether you are looking to create broad sweeping changes to the way people move or simply trying to start a conversation, we hope that there is something in this toolkit for you and your community.

Part 1:
Introduction

Percentage of population 65 years of age or older by ZIP Code



The Need for Age-Friendly Complete Streets

Complete Streets are a transportation policy and design approach that requires streets to be planned for all users and **modes of transportation**. People of all ages benefit from policies and programs that increase walkability and improve transportation options. Complete Streets are foundational to age-friendly communities because they protect our most vulnerable populations, including children, persons with disabilities, and older adults, who experience the highest levels of pedestrian collisions and fatalities. As a larger portion of our population enters old age, streetscapes that provide safe, accessible, and diverse modes of transportation become essential to maintain a healthy community.

Complete Streets also support health equity for diverse populations. Providing pathways to commute and move about without the need for automobiles (and their high costs) empowers lower socioeconomic populations to better access work, healthy food, and services. For older adults, access to effective and safe transportation allows for autonomy, even if driving is no longer an option. This guide outlines strategies to create thoughtfully designed streetscapes that can promote physical activity, socialization, and engagement with community resources and events.

The population of people 65+ is going to make up 1/5 of U.S. residents by 2040

- In 2021, 14.1% of San Diegans were 65+.[1]
- By 2050, 20% of San Diegans, around 800,000 people, will be aged 65+.[2]
- Older adults are much more likely to die in pedestrian crashes than their younger counterparts.[3]

What does it Mean?

Mode of Transportation: Method or way of transport or travelling.

Purpose of this Toolkit

Use this as a Resource

Address the gap in Complete Streets toolkits

Despite acknowledging that Complete Streets need to accommodate "all ages," most toolkits do not make specific recommendations for older adults.

Provide guidance for policymakers, planners, and designers

Offering specific information on implementation, design concepts, and costs, this toolkit can inform decision makers within San Diego County and across the U.S.

Promote age-friendly transportation policies

Age-friendly policies benefit all users equitably, including vulnerable groups and underinvested and underserved communities.

Complete Streets in San Diego

In 2018, Smart Growth America assessed 60 Complete Streets policies across the U.S. and reported an average score of 39/100 (See Appendix 1). An assessment of the 18 Complete Streets policies in San Diego County reported an average score of 25/100. Most municipalities and policies had a vision for their Complete Streets, but several key features resulted in the low average:

- Lack of standalone policies
- Missing elements of design, such as land use and context sensitivity
- Implementation challenges

Our region has the opportunity to positively affect residents' lives with more thorough Complete Streets policies.

"Complete Streets Plus" is the idea that our streets can provide more than safe routes for transit. They can be welcoming places to socialize, be active, and engage with community events and resources.

San Diego County

Local Transit Challenges

Urban Sprawl

San Diego is known for its comfortable year-round weather, but urban sprawl reduces use of active, public, and alternative transportation.

Car Dependence

On average. only 3% of San Diegans walk, 3% use transit, and 1% commute by bicycling.[4] Reducing car dependence is a challenge for our county as we plan how to best move the growing population.[5]

Topography

San Diego's hilly topography impacts active transportation, especially for individuals with specific mobility needs.

Transportation Misconceptions Regarding Older Adults

Older Adult Transportation Patterns And Preferences Are Often Misunderstood

"Older adults don't want to use a bicycle"

From 1995 to 2009, bicycling in people ages 60-79 quadrupled in the U.S.[6]

"Most older adults can't drive anymore"

70% of people ages 65+ commute to work alone by car in San Diego County.[7]

"Biking around the county is too difficult for older adults"

E-bikes can help older adults through difficult topography, like hills.

"Older adults won't walk places"

Older adults walk more for exercise and transportation in neighborhoods that are activity-friendly.[8,9]

Part 2:
Infrastructure Best Practices

Pedestrian Access

An age-friendly street has features that make pedestrians of all ages feel safe and welcome. This section is dedicated to policies and infrastructure developments that improve the pedestrian experience.

Sidewalks
Address trip hazards and fix uneven pavement and areas prone to flooding that impact mobility for vulnerable populations.
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Micromobility
Promote safety with e-bikes and e-scooters while maintaining accessible transit options.
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Wayfinding
Provide directions and routes for pedestrians with clear signage.
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Crosswalks
Facilitate pedestrian crossings by extending crossing times.
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Pedestrian Lighting
Increase visibility and safety with pedestrian-level street lighting.
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Transit Access
Help transit riders of all ages with benches, shade, and wayfinding.
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Sidewalks

Background

Uneven and cracked sidewalks create trip hazards for older adults as well as parents with strollers. Special emphasis should be placed on rural communities that may not be fully American Disability Association (ADA) compliant where older adults may have difficulty navigating.

Local Example

The City of San Diego, (as with most U.S. cities) requires that residents pay to fix sidewalks adjacent to their properties. Despite a cost sharing model, the expense to property owners can delay and deter important repairs. Many local jurisdictions have apps that allows citizens to report infrastructure issues like sidewalks and request repairs. The City of Vista uses the ACCESS VISTA app, which provides Vista residents with another way to obtain information and to report issues in real time.[10]

Older Adult Considerations

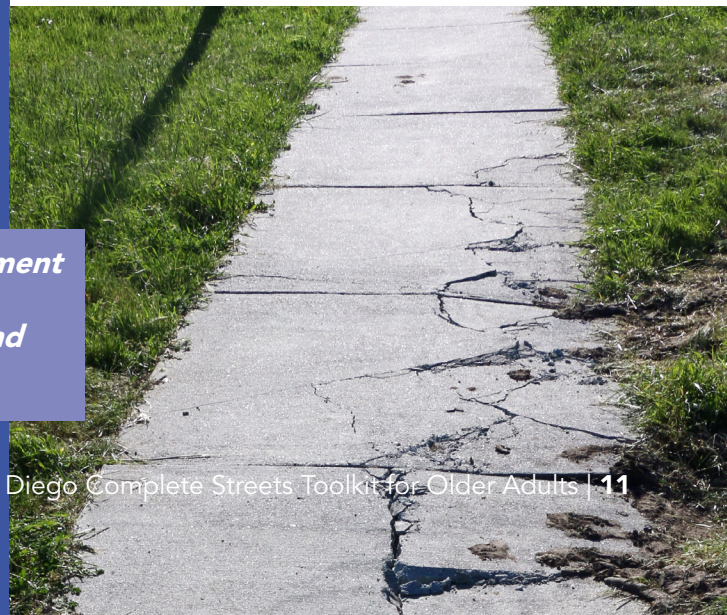
Well kept sidewalks without trip and flood hazards make a difference for all pedestrians, especially those with specific mobility needs and impaired vision. Risk of falling is a serious concern for older adults, and impassable sidewalks can increase fall risk and deter older adults from walking in their communities.

Implementation

Broad scoping sidewalk repairs for large jurisdictions can cost upwards of $100 million, posing significant monetary challenges to municipalities.[11] Injuries that result from poor sidewalk maintenance can also cost communities large sums of money if those repairs are delayed. Underutilization of the cost-sharing programs offered by cities can contribute to a backlog of problem areas. Despite the large upfront costs for municipalities to improve their sidewalks, some jurisdictions have levied taxes. In the short term, using bright paint to clearly mark problem areas can prevent accidental falls for older adults.

"Sidewalks play a vital role in community life. As conduits for pedestrian movement and access, they enhance connectivity and promote walking. As public spaces, sidewalks are the front steps to a community, activating streets both socially and economically."

- AARP Livability Fact Sheet - Sidewalks



Micromobility

Background

Micromobility devices, such as e-scooters or bicycles, can assist commuters in their trips by connecting housing to transit areas (the "**first-last mile**" of transit). Public scooters and bicycles can be useful tools in first-last mile mobility, but they can also clutter sidewalks, impede pedestrians, and result in crashes and injury. There are an estimated 20 injuries per 100,000 trips on e-scooters, including traumatic brain injury.[12] Local policies and regulations can foster safe and effective use of micromobility transportation.

Local Example

The City of San Diego has 300 parking spots for micromobility devices off of sidewalks. The City imposed regulations on operational permits, fleet sizes, and speed limits. A map of the current "Scooter Corrals" exists on the City of San Diego website.[13] Increasingly, jurisdictions are instituting new regulations on e-scooter companies to balance the potential risks and benefits that can be gained by allowing them to operate in our communities.

Older Adult Considerations

Cluttered sidewalks can reduce mobility by shrinking the usable space and prevent pedestrians using wheelchairs or walkers from navigating effectively. People who use the scooters incorrectly (by riding carelessly or on sidewalks) can create a hazard to our most vulnerable pedestrians. With appropriate rider training and regulations, these devices could prove extremely useful for first-last mile trips for youth and older adults who would like to utilize transit but do not have bus or train access within walking distance of their homes.

Implementation

Creating partnerships with companies could help make micromobility devices a powerful tool for reducing congestion and increasing mode share. Most companies understand the need for regulation to ensure the safety and longevity of their business. Restricting use to bike lanes could reduce pedestrian collision rates. Requiring helmets and working with service providers to ensure that each device comes with an attached helmet could decrease incidence of traumatic brain injury. To fund enforcement, some municipalities have enacted fines on riders and permit fees for companies.

What does it Mean?

First-Last Mile: The first mile is the first leg of the trip from the starting point, often the home or workplace, to the transportation station. The last mile is the final leg of the trip from the transportation station to the final destination.

Wayfinding Signage

Background

Pedestrian **wayfinding** signage is a useful tool for orienting tourists and residents towards essential resources or community spaces. Increased signage promotes a pedestrian culture by validating the pedestrians' choice to walk and making their trip easier.[14]

Local Example

- The City of Encinitas allocated $15,000 for neighborhood wayfinding signs that have clear images and wording while maintaining the aesthetic values of the city.[15]
- In late 2018, San Ysidro installed wayfinding signs for pedestrians and bicyclists in both English and Spanish at the border region.[16]

Older Adult Considerations

Consistent wayfinding signage in mixed use areas can assist pedestrians, bicyclists, and transit users. Specific design principles can also assist older adults who are living with dementia:[17]

- Distinctiveness: Signs should be a different color and shape than the surrounding buildings.
- Consistency: Signs should be the same color and shape so that users can easily find the next one on their path.
- Simplicity: Signs should have a minimal amount of information to avoid confusing the users.
- Isolation: Avoid placing wayfinding signs near other advertisements or decorations in users' line of sight.
- Reassurance: Use additional signage to reaffirm that users are on the correct path during long straightaways.

Implementation

Depending on how expansive the design is, local wayfinding projects have cost anywhere from $15,000 to $1.9 million.[18] Locally, funding for these projects usually comes from grants related to smart growth, often through SANDAG. City improvement funds can also be allocated in this way. Proper wayfinding signage improves not only local transportation demand, but also has been used internationally to support tourism.

What does it Mean?

Wayfinding: The use of signage, color, and other design elements to help people navigate a space.

Crosswalks

Background

Despite the existing standard of estimating walking speeds at 4 feet/second, Federal Highway Administration (FHWA) research suggests walking speeds should be estimated at a maximum of 3 feet/second, with 2.5 feet/second as the preferred speed when intersections allow.[19] Additional considerations include extending the "WALK" phase, providing for more time to enter the intersection, allowing pedestrians to cross in all directions at the same time while traffic is stopped (referred to as a pedestrian scramble), countdown indications for pedestrian signals, and including fixed-time signals (in popular pedestrian areas) with audible signals for the visually impaired.

Local Example

The cities of San Diego, Encinitas, La Mesa, Chula Vista, El Cajon, National City, and Oceanside all utilized Federal Highway Safety Improvement Program funds in 2018 to make changes to improve crosswalk safety.[20] Improvements included implementing leading pedestrian intervals (see page 21), adding pedestrian countdown signals, and installing upgraded signal controllers and more.

Older Adult Considerations

Research has shown that most older adults have a comfortable walking speed closer to 2.2 feet/second, whereas most traffic manuals, including the MUTCD, have a 2.8ft/s recommendation.[19,21] Working to reconcile this difference can improve safety and comfortability for older adults. Extending the "WALK" phase to allow persons with mobility issues enough time to enter the intersection is a necessary supplement to adjusting the walking speed phasing. Infrastructure supplements, including pedestrian countdown signals, high visibility crosswalks, and auditory signals, all benefit older adults, especially those with poor vision or low mobility.

Implementation

Price estimates for the San Diego County projects done in 2018 provide guidance for future upgrades. The cost of installing pedestrian countdown timers in 215 intersections totaled $249,500, while another $1.2 million was spent on broader systemic upgrades (including LED warning signs for lead pedestrian intervals) to 66 intersections. Changing pedestrian crossing times is a relatively low cost, with a few hours of staffing being the primary cost.[22] Similar alterations to intersection design including curb extensions (see page 18) can be used in conjunction with these designs to have a greater effect.

Pedestrian Lighting

Background

Traditional street lighting is designed to improve visibility for drivers, but rarely does it prove sufficient for pedestrians. Design and placement changes are often necessary to improve pedestrian visibility and create the feeling of security that promotes walking. Both overhead and in-pavement lighting can help drivers see pedestrians and make pedestrians feel safe.

Local Example

The largest street lighting project in recent San Diego history was the expansion of 3,000 LED "Smart Lights" in the City of San Diego that help save energy and include monitoring capabilities to provide data on intersection safety.[23]

Older Adult Considerations

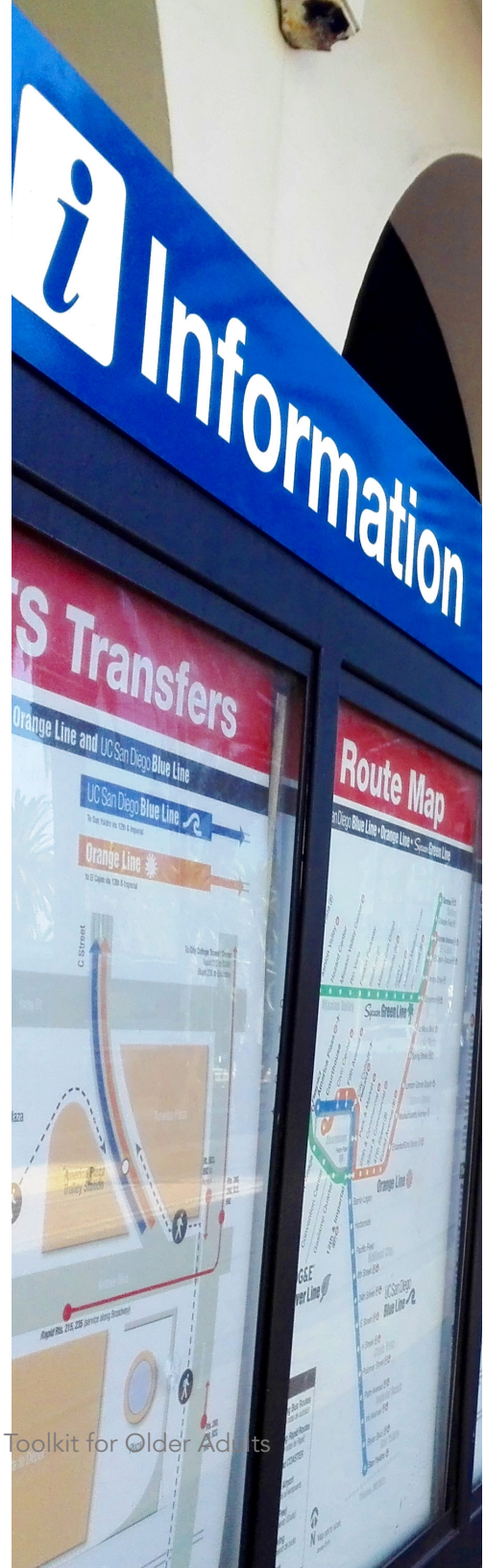
Advocates for pedestrian lighting cite higher levels of perceived safety and increased desire to walk in well-lit areas. Research has shown that street lighting is associated with higher levels of active commuting and poor lighting is perceived as a barrier.[24,25]

Implementation

Improving pedestrian lighting at a grand scale is not an easy task. Public pushback against light pollution and energy usage are important considerations. Employing sensors to activate lighting can help address both of those issues. Streetlights cost on average $4,880 per unit, while in-pavement lighting costs an average of $17,620 per crosswalk according to the FHWA.[26]

"As we age, our eyes become less sensitive to light. A sixty-year-old can require three times as much light as a twenty-year-old. Changes in lighting levels can make it harder to see things clearly, such as curbs, bumps in the pavement, signage, etc. Pedestrian lighting specifically shines light on the sidewalk and important to include in street design along with roadway lighting."

- Seattle.gov & Light Requirements from AAA



Transit Access

Background

Features such as benches, shade, and maps can help make transit usage more appealing, especially for commuters who have specific mobility needs. Current standards often do not meet the needs of our most vulnerable populations.

Local Example

At each bus stop, San Diego Metropolitan Transit System (MTS) determines which features to implement based on the number of daily passenger boardings. They categorize the upgrades as not applicable (-), optional (O), or standard (S).

Older Adult Considerations

Benches and covered shelters at transit stops are especially important for older adults, as well as having access to clean and accessible restrooms in close proximity due to greater need.

Older adults may have more trouble standing for prolonged periods of time, and prolonged sun exposure can have a more adverse effect on health. For individuals living with dementia, providing route maps at stops can help reduce confusion and prevent riders from getting lost or disoriented. Transit providers can train drivers to recognize signs of dementia and respond appropriately.

Implementation

Older adults would benefit from transit policies that make benches, shelters, and route maps standard features at all transit stops. These features are an important foundation for an appealing transit experience and can impact ridership and public perception of transit. In early 2023 MTS officials stated their interest in expanding bus shelters as an incentive to increase riderships. MTS is also interested in providing bus shelters to historically disadvantaged communities that may have lower ridership.[28]

Traffic Calming & Intersection Design

Intersections are the site of the highest number of traffic incidents. Proper design can help reduce injuries and fatalities. Older drivers, bicyclists, and pedestrians all benefit from safely designed intersections. The City of San Diego's Traffic Calming Guidelines document provides more cost benefit analysis to help evaluate potential projects in your community.[29]

Perceived Turn Radii and Curb Extensions

Tighten turns to reduce traffic speeds and increase visibility for older drivers.

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Median Island Refuge

Add traffic calming features, enhance aesthetics, and provide rest areas for pedestrians with reduced mobility.

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Controlled Right Turns

Increase safety and comfort for older drivers by slowing right turns.

Page 20

Leading Pedestrian Interval (LPI)

Provide pedestrians a phase to begin walking before cars can enter the intersection.

Page 21

Safe Biking Infrastructure

Moving towards protected cycle tracks instead of bike routes or unprotected lanes improves the safety and comfort of riders, especially older adults.

Page 22

Perceived Turn Radii and Curb Extensions

Background

Larger turn radii around intersection corners allow drivers to enter intersections at higher speeds which reduces their field of vision and puts pedestrians in danger. By instituting tighter corners in the initial design, or adding curb extensions, these dangers can be alleviated. Although physical corner radii reduction may not be possible on roads with heavy bus or truck traffic, utilizing bike lanes and reducing the perceived width of entry can help reduce drivers' speeds.

Local Example

Several local planning departments, have explicitly mentioned curb extensions in street design manuals, however implementation has not yet been widespread. The awareness of the need for this design countywide is a good sign of the readiness for change.

Older Adult Considerations

Curb extensions provide a better line of sight for older drivers and pedestrians, and tighter turns accommodate drivers with stiff necks to better see potential obstacles. Adding the curb extensions decreases the so-called "area of vulnerability" by providing more pedestrian-only area at intersections. This benefit s older adult pedestrians, who may be vulnerable due to mobility issues, slower reaction time, or impaired vision or hearing.

Implementation

Estimates for retrofitting an entire 4-way intersection are approximately $40,000 to $80,000. Costs for a choker (barriers in the middle of roadway to reduce speeds), are estimated at $9,000 per installation.[29] Due to the cost per intersection, prioritizing high density and dangerous intersections is recommended.

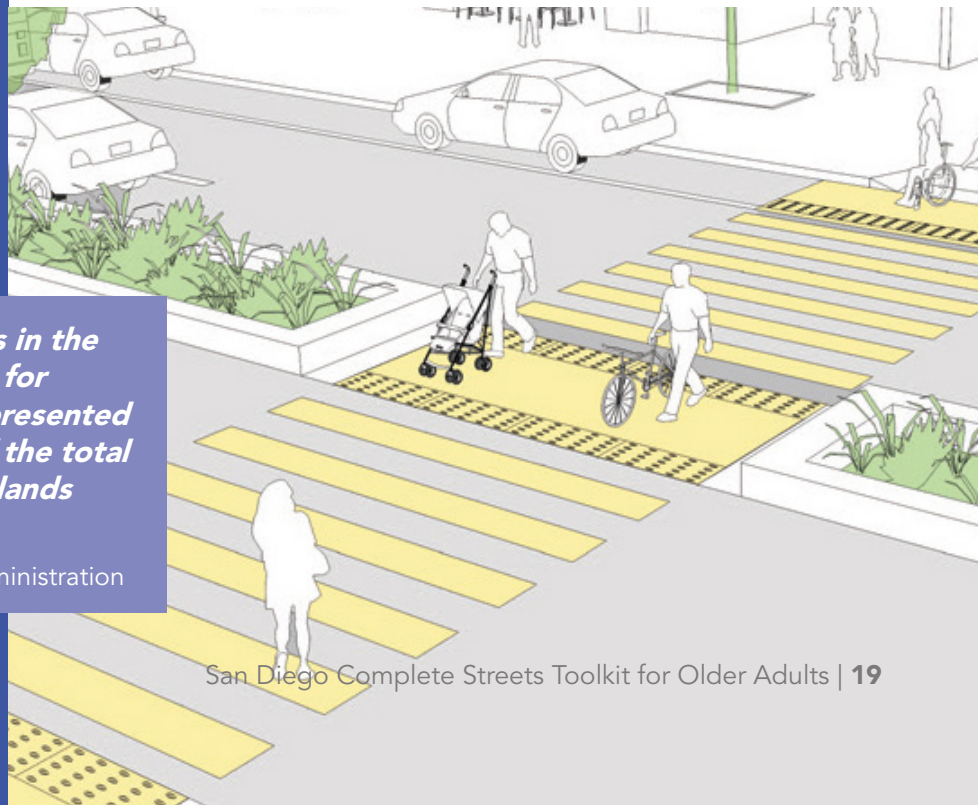
Median Refuge Island

Background
Median refuge islands are breaks in a crosswalk that provide a "safe-haven" for pedestrians during crosswalks with longer distances. Extended noses on the ends of the refuges provide safety and comfort for pedestrians, and can be designed to offer aesthetic appeal to the streetscape.

Local Example
On the UC San Diego Campus, shown in the top right image, a median refuge island provides students and faculty with a place to rest and wait between traffic cycles. This intersection is also equipped with auditory signals and countdown timers.

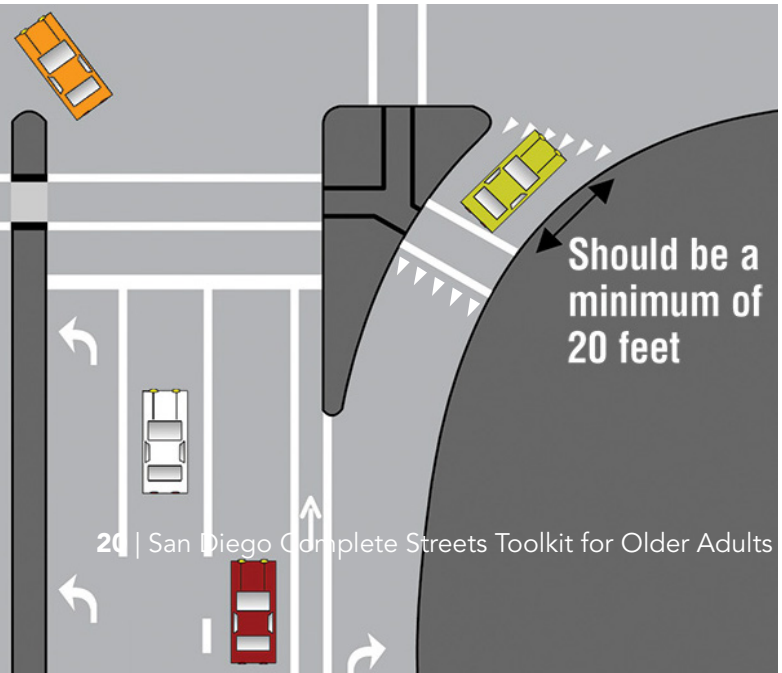
Older Adult Considerations
Long crossing distances, even with appropriately timed signals (see page 14) can be difficult for older adults to navigate. Fatigue and confusion present issues in crosswalks greater than three lanes (30 to 36 feet).[30] Providing areas to rest, ideally including seating, can make crossing intersections a safe and approachable endeavor.

Implementation
Intersections with four lanes or more should include these refuges to facilitate crossing by older adults. Estimated costs for median island refuges are around $13,500, or $10/ft^2. These costs vary greatly depending on the design and type of crossing (drainage, utility locations, etc.).[29]



"Older adults are over represented among pedestrian fatalities in the U.S., prompting designers and planners to improve crosswalks for vulnerable pedestrians. In 2018, people 65 years and older represented 18% of U.S. pedestrian fatalities, while only making up 16% of the total U.S. population. Countermeasures such as pedestrian refuge islands support safer crossings for people of all ages."

- Federal Highway Administration & National Highway Traffic Safety Administration



Controlled Right Turns

Background

Controlled right turns are intersections where the right turn is cut out separately to increase flow at heavily trafficked right turns. These intersections can be especially dangerous for pedestrians due to higher speeds and less restrictive signaling. Certain design features can make these crossings less problematic when the lane is a necessary portion of the road, such as: raised islands with accessibility features, providing one vehicle length in front of the crosswalk, sharpening the turn angle, and narrowing the right lane.[31]

Local Example

This intersection in the top left image is an example of a well designed controlled right turn that includes **pedestrian and bicyclist facilities**. The diagram offers another model including a buffer zone that give pedestrian a clear path.

Older Adult Considerations

As with the corner radii and curb extension (see page 18), the design recommendations for controlling right turns also serve to improve visibility for drivers and pedestrians of all ages. Designing a buffer zone, as pictured, between cars yielding pedestrian crossings supports older pedestrians and drivers by creating a place to yield that is not directly in a crosswalk.[32]

Implementation

According to FHWA, reconstructing controlled right turns can cost between $50,000 to $200,000 depending on the current state.[33] Placement of these intersections should be focused on areas with high pedestrian traffic and lower large vehicle (buses and trucks) volume to promote high mobility. Whenever possible, intersections with controlled right turns should be replaced with a standard design that is easier to navigate. This roadway redesign can be used as placemaking opportunities, micromobility parking, or parklets for pedestrians.

What does it Mean?

Pedestrian and Bicyclist Facilities: Pedestrian facilities include walkways, sidewalks, paths, and trails that are to be exclusively used by pedestrians and also enhance safety and comfort. Bicycle facilities support and enhance the safety of bicyclists, primarily along roadways and intersections.

Leading Pedestrian Interval (LPI)

Background

Thirty-seven percent of pedestrian collisions are caused by turning vehicles, and 20% of car intersection crashes are the result of turning. Leading pedestrian intervals give pedestrians a three-to-seven second head start to cross the road before cars are given the green light, and can reduce pedestrian-vehicle collisions by 60%.[34] Another proposed solution is to prohibit Right-Turn-On-Red (RTOR) at more dangerous intersections to reduce the potential for pedestrian collisions.

Local Example

SANDAG and the City of Chula Vista have passed Vision Zero resolutions and the cities of San Diego and La Mesa have become Vision Zero cities. This means they have set clear goals for reaching zero traffic fatalities, their mayors have publicly and officially committed to Vision Zero, they have adopted the Vision Zero plan, and key city departments are engaged in the process.[35]

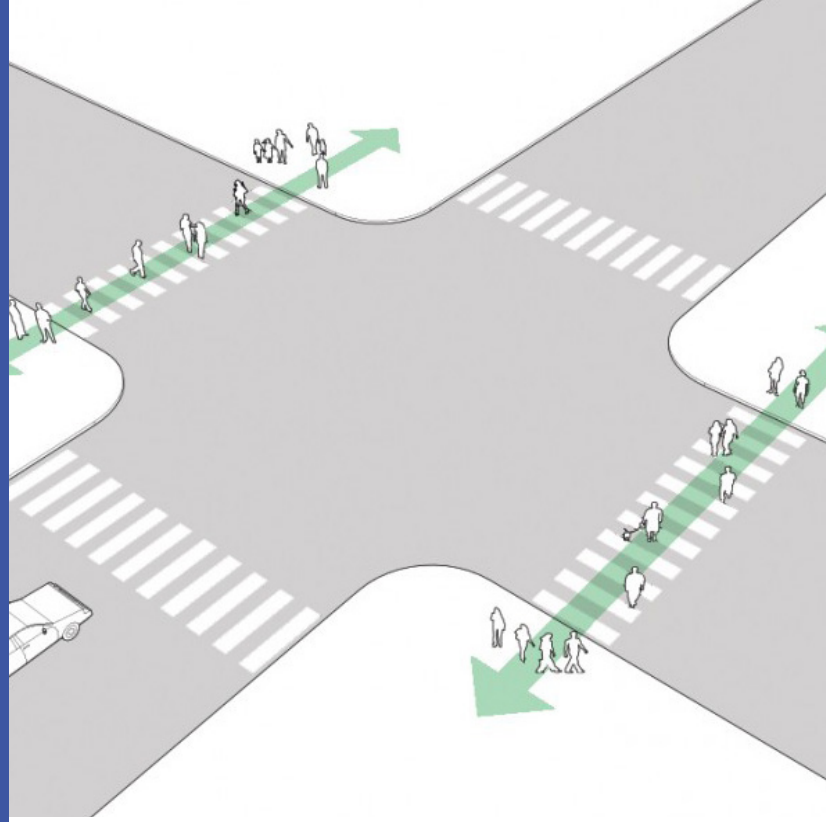
This work has resulted in multiple local municipalities adopting safer pedestrian infrastructure, including lead pedestrian intervals at key intersections.

Older Adult Considerations

Older pedestrians have a higher likelihood of dying if they are struck by a vehicle (44.6%) compared to younger pedestrians (10.4%).[3] Decreased vision, neck mobility, and reaction time also make turning maneuvers more difficult for older adult drivers. Leading pedestrian intervals can also make intersections safer for other vulnerable populations such as children.

Implementation

The costs of changing signal timings are low and can be finished within a few hours. Non-electronic signs that prohibit RTOR cost approximately $100 each.[36] While instituting lagging left-turn phases can be implemented with minimal negative impacts, RTOR prohibition can be more difficult to implement without disrupting traffic patterns, and therefore pedestrian traffic volumes should be considered prohibiting RTOR.



Safe Biking Infrastructure

Background

Bicycle lanes, particularly those that are protected and separated from car traffic, improve safety for all users of the road. Protected thoroughfares for bicyclists often referred to as cycle tracks, benefit riders, pedestrians, and even motorists, by reducing the number of hazards that drivers must avoid.[37]

Local Example

SANDAG and the City of San Diego implemented 9.3 miles of two-way protected bicycle tracks as part of their Regional Bike Plan. Other separated bike facilities exist along major thru-ways such as SR-56 and Kearny Villa Road.[38]

Older Adult Considerations

Safety is a common concern among older adults, bicyclists, and potential bicyclists, and unprotected bike lanes or bike routes (roadways without designated bicycle areas) are unsafe for even avid riders. Separated biking thoroughfares are safer for older pedestrians, riders, and motorists. Research suggests that these separated cycle tracks are the preferred infrastructure for older bicyclists/potential bicyclists.[39]

Implementation

The proposed costs for the bicycle tracks of the Downtown Mobility Plan were originally $10.5 million, but design changes and additional public works considerations have raised the total estimate to $25 million.[40] Interim design changes such as adding bollards to existing bike lanes (see lower left image) can help improve safety while larger scale plans are being designed.

"One of the things we've found with bike infrastructure is that it makes streets safer for everyone, not just bicyclists," explains Barbara McCann, director of Safety, Energy & Environment for the U.S. Department of Transportation (USDOT). ***"It reduces the frequency of crashes. It calms traffic, which makes streets less chaotic and safer for everyone."***

Part 3:
Policy Best Practices

Land Use & Right of Way

Community design has profound effects on our lifestyles and habits. Neighborhoods that are designed for moving people, rather than exclusively for moving vehicles, promote active transportation and promote social engagement. Increasing urban density, where appropriate, reducing suburban isolation, and enhancing neighborhood aesthetics improves quality of life and enhances active transportation.

Urban Density Considerations

Prioritize pedestrians when considering how people will access goods and services.

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Street Connectivity

Utilize cul-de-sac exits and other pedestrian right-of-way tools to reduce suburban isolation.

Page 26

Neighborhood Aesthetics

Create microlevel pedestrian landscapes that encourages multimodal commuting and active leisure time.

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Urban Density Considerations

Background

Increasing density (where appropriate and permitted) provides residents closer access to resources and social opportunities. Increasing density in urban centers complements increasing multimodal transportation, especially around large transit hubs, because it reduces the need for personal vehicles and the number of trips required via freeways. In more rural settings, the use of the village model can have similar beneficial effects, without urbanizing the community. A village connects older adults to the community, programming, and expertise they need to continue living lives of purpose and promise.[41]

Local Example

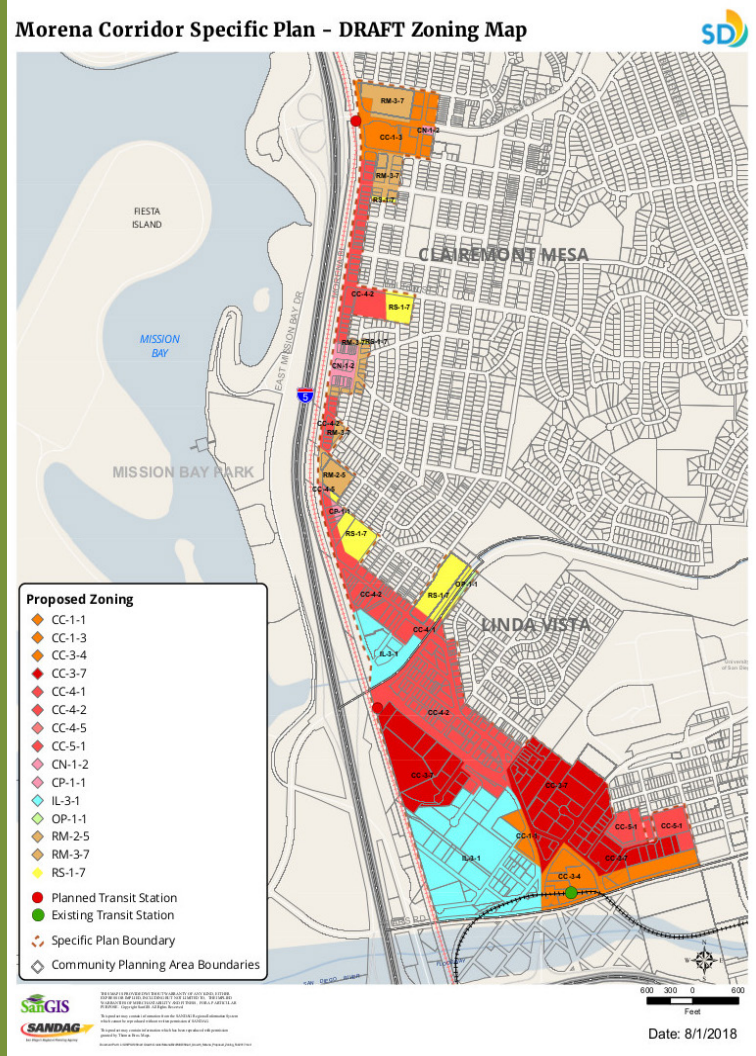
Development of the new trolley line passing through Linda Vista includes plans that increase density, affordable housing, pedestrian areas, and bicycling paths, as well as new plazas.[42] These plans emphasize development for housing near jobs and transportation. The move towards dense, transit-oriented communities was supported by the City of San Diego City Council, as evidenced by their approval to build mid-rise housing near the UTC trolley extension.

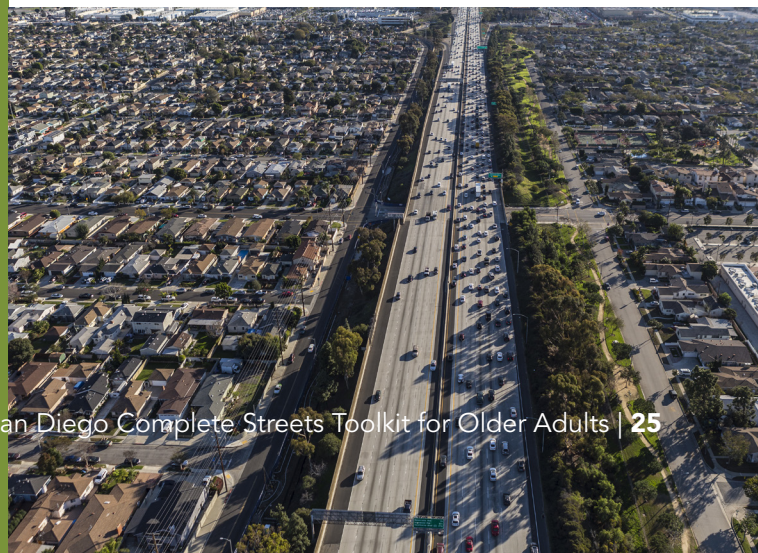
Older Adult Considerations

Increased urban density can allow for shorter travel distances to necessary resources, which is especially helpful for older adults who may have difficulty walking long distances or cannot drive. Despite an interest to live closer to the urban center where amenities are in close proximity, many older adults are living in low-density suburban areas, and these adults may lack easy access to important services and be more likely to face isolation.[43]

Implementation

Successful implementation of smart growth policies that increase density and relax building height restrictions requires commitment to engaging community members, listening to concerns, and providing education regarding the benefits of creating vibrant, diverse, and transit-rich communities (see page 26). Local jurisdictions can assist by revisiting zoning laws to allow for more mixed-use developments and increasing the number of building units allowed on a parcel. Other solutions may include density bonuses for developers, reducing parking requirements, redeveloping underutilized properties, and infilling vacant lots or parking lots.





Street Connectivity

Background

As an important complement to increased density, street connectivity emphasizes the directness of links between streets, thus making it easier for people to get from place to place. In practice, this manifests as high numbers of intersections, and very few dead-ends or cul-de-sacs.

Local Example

The San Diego region has numerous suburban neighborhoods that require residents to drive for transportation due both to their distance from urban centers, and the minimal connectivity between streets. This overhead view of an outdoor shopping center exemplifies a space that has been designed for cars, could better serve the adjacent residents by including pedestrian pathways to enter the shopping area. Residents with homes directly adjacent to the shopping center (encircled in green) have no access into the shopping area unless they go outside of their neighborhood (entrances indicated by orange marks). Pedestrian pathways could connect the neighborhood to the shopping center so that residents would have better access and would be more likely to walk.

Older Adult Considerations

High street connectivity increases mobility for older adults, giving them better access to neighborhood resources, more opportunities for social engagement, and increased physical activity.

Implementation

Improving street connectivity can be difficult where existing infrastructure and street layout provide obstacles. Adding pedestrian and bicycle paths that cut through to arterial streets can provide direct routes without having to drastically change the streetscape. Costs for paths vary depending on distances and desired materials.

Neighborhood Aesthetics

Background

Neighborhood aesthetics are features that make the surface-level environment more welcoming for pedestrians and active transport. Research shows that residents walk more in neighborhoods that have trees, artwork, and interesting storefronts. Accompanying benefits include increased property values and economic activity for local businesses. Aesthetic promotion is a "Complete Streets Plus" policy that makes multimodal transport more enjoyable.

Local Example

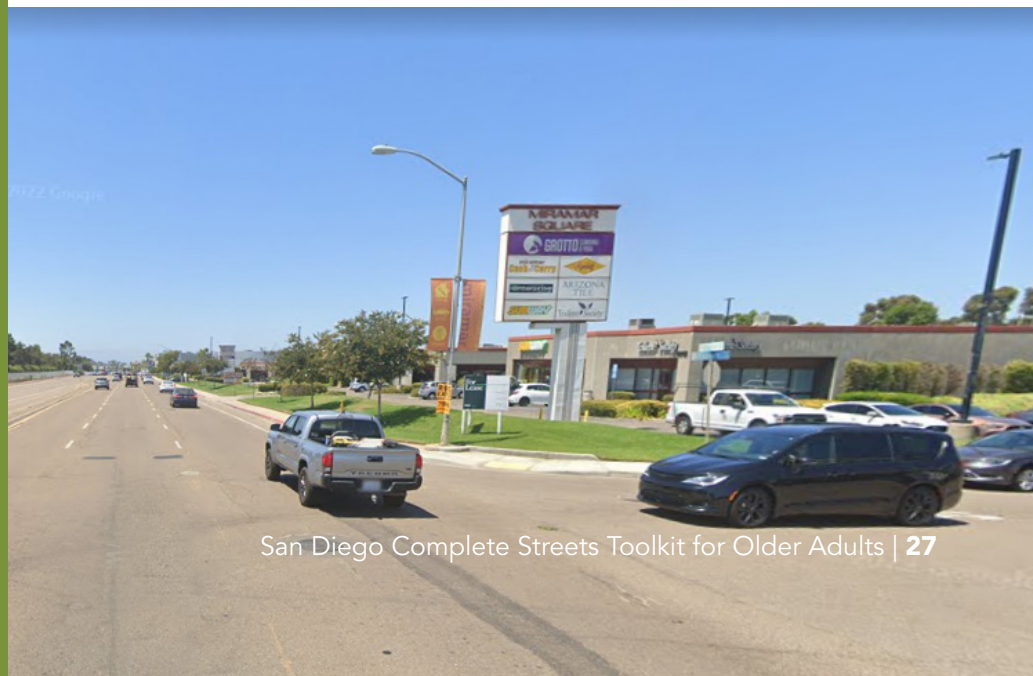
Areas like the Gaslamp Quarter and North Park (see top right photo) are popular for pedestrian activities at least partially due to the aesthetic environment and number of things to do. In contrast, the bottom right photo shows an area with a comparable amount of restaurants, but the area is less walkable due to the number of parking lots, wide streets, and a lack of crosswalks.

Older Adult Considerations

Greenery and other neighborhood aesthetics improve walkability and can create a sense of community. People of all ages are more likely to walk in places that feel safe and aesthetically pleasing. Buffers that separate pedestrians from vehicles, such as trees or shrubs, can increase perceived safety and add to the streetscape. Sitting areas improve the aesthetics while also making it possible for older adults to take breaks.

Implementation

Street trees and benches cost an average of $430 and $1,550, respectively.[26] Additional aesthetic value can be added by implementing or supporting placemaking policies that encourage businesses to transform unused urban areas into gathering places.



Potential Programs & Practices

Outside of infrastructure improvements or design changes, programs that help to promote active transportation, or serve to educate older adults on how to utilize existing resources, can be extremely important. Looking at some existing local examples, in conjunction with programs seen in other communities, can provide insight on interventions that could benefit the aging population.

Intergenerational Safe Routes to School

Include older adults as community volunteers and leaders in youth wellness programs.

Page 29

Safe Routes for Seniors

Conduct programs, such as walk audits, to help inform infrastructure repair and design.

Page 30

Education and Community Engagement

Increase efforts to educate community members on infrastructure and policy changes and engage them in the community-building process.

Page 31

Intergenerational Safe Routes to School

Background

Safe Routes to School (SRTS) programs are focused on increasing children's physical activity by encouraging non-automobile commutes to school. SRTS programs often vary in specific implementation, but there are five specific elements included in all programs based on: 1) education on safe riding or walking; 2) encouragement through local organizations and volunteers; 3) enforcement via extra patrol officers; 4) engineering design changes; 5) and evaluation of the program to promote optimization.

Local Example

Circulate San Diego has implemented numerous SRTS programs around San Diego County.[44] The Chula Vista Elementary School District SRTS master plan increases intergenerational activities, and recruitment of existing walking groups to guide the students proved an effective strategy to promote active transportation to schools.[45] The City of La Mesa won an award for their engagement of older adults, local nonprofits, and law enforcement into their SRTS program, providing an exemplary model for the rest of the county.

Older Adult Considerations

As mentioned in the last section, social engagement improves health outcomes in older adults. The engagement with SRTS programs also supports more regular physical activity and community connection.

Implementation

As learned by the Chula Vista SRTS program, working to recruit older adult volunteers from existing programs is an effective method. Promotion of walking programs in the community is a positive-feedback loop; the more walking programs are supported, the more its members can expand their routes and create lasting healthy habits for children and older adults alike.

"Safe Routes to School supports increased physical activity, helps form healthy habits that can last a lifetime, and decreases the risk of chronic disease and obesity."

- Safe Routes Partnership

Safe Routes for Seniors

Background

Safe Routes for Seniors, much like SRTS, involves older adults walking in their neighborhoods to places they need to go. In these programs, older adults learn to perform walk audits to grade their neighborhoods, so that they can better inform their representatives on how to improve their pedestrian or bicycling experience.

Local Example

The City of La Mesa has adopted nighttime walk audits in its age-friendly "Livable La Mesa" Action Plan.[46] Walk audits like this not only directly benefit the participants with physical activity and social interaction, but the result of these audits can inform infrastructure changes that benefit the whole community.

Older Adult Considerations

Safe Routes for Seniors can increase physical activity and social engagement, as well as provide an avenue for older adults to have a voice on issues in their neighborhoods that they care about.[47] Special considerations for older adults that can be assessed through a Safe Routes for Seniors program can include the availability and access of restrooms due to greater need and benches for taking more frequent breaks.

Implementation

Engaging local community organizations and existing walking programs to offer audits and increase outreach is a good first step to implement these programs. Distributing existing resources and holding educational events on walk audits and what they can do for the community may be useful in boosting older adult engagement.

"A community that serves seniors also serves people of all ages. Safe routes for seniors are safe routes for everyone."

- Los Angeles Walks, Safe Routes for Seniors

Education & Community Engagement

Background

Successful implementation of Complete Streets policies requires engagement and education of community members at each stage of the project – from inception to roll out. As the experts on their neighborhood, community members provide relevant, local data needed to create well-designed projects that meet community needs. Focused outreach is especially important on projects that increase density or decrease parking, where community pushback is expected.

Local Example

In 2016, a group of older adults from La Costa Glen in the City of Carlsbad formed a civic-engagement group focused on making their community more pedestrian-friendly. After identifying an intersection with six traffic lanes and insufficient crossing time, the group approached city transportation officials and successfully advocated for multiple intersection improvements, including increased walking times, visual countdowns, and audible countdowns.

Older Adult Considerations

Older adults, despite popular media portrayal, are not a homogeneous group in what they want from their communities, and regardless of their stance, they constitute a powerful demographic. Evidence shows that older adults are ideal advocates for these types of community improvements because they have a deep attachment to their communities, fostered by years of residence or strong social connections. Their civic impact is heightened by their influence as a powerful voting bloc and ability to draw on valuable life experiences.

Implementation

Engaging local community organizations and existing walking programs to offer audits and increase outreach is a good first step to implement these programs. Distributing existing resources and holding educational events on walk audits and what they can do for the community may be useful in boosting older adult engagement.

Implementation Recommendations

Challenges
The recommendations and design strategies presented in this toolkit represent goals for any municipality to strive for, however many design changes can be costly or politically challenging. Contextualizing this toolkit and its recommendations is an important step for your individual community.

Interim Design
Temporary changes or interim design is a creative way to introduce new ideas into your community. One example could be painting curb extensions or crosswalks with local artists to increase visibility and calm traffic. These temporary tools can help to spread awareness about a potential change to infrastructure without requiring vast amounts of funding to get started.

Keeping the Tools in your Back Pocket
It may take a long time to allocate funding or support for design changes that you want to see in your community, but that does not mean that this toolkit can only gather dust on the shelf in the meantime. Having new plans ready is important for utilization during regularly scheduled maintenance when changes are already taking place. For example when routine roadway resurfacing is done, try and add-on recommendations for superior crosswalk striping or bike lane visibility. Additionally, many of the policies/practices presented in this toolkit can work in complement to create safer intersections, such as curb extensions and longer pedestrian crossing times. Incremental changes can make a big difference in the safety and happiness of community members.

Conclusion

Despite the numerous challenges to making multimodal travel more accessible for all age groups, the San Diego region has many municipalities and non-governmental organizations that are making large strides towards that goal. With estimates that there will be over 900,000 people aged 60+ in San Diego in the next ten years, improving transportation to better suit this population is high priority.[48] Considering the aging population when enacting design or comprehensive transportation policies is beneficial for all users, from infants to centenarians. The resources and information in this toolkit are provided to contribute to those efforts and reinforce the importance of Complete Streets policies and their proper implementation.

Key takeaways from this toolkit:

- Effective Complete Streets policies are transportation solutions for an aging population.
- Infrastructure changes that support individuals with visual, auditory, or mobility impairments make the streets more accessible for everyone.
    - Interim design, such as painted curb extensions, are a useful and affordable tool to move towards safer streets.
    - Use planned or routine maintenance as a potential timing to make small changes.
- Prioritize pedestrians and bicyclists at intersections and in street and neighborhood design to support active transportation and improve safety.
    - Key features include separated and protected bicycling lanes, pedestrian lead intervals, high visibility crosswalks, and pedestrian oriented lighting.
- Use events and programs to engage older adults and assess their needs.
    - Safe Routes to School, walk audits, and active transportation events, like CicloSDias, are just a couple examples of programs in the San Diego region that encourage community members to engage with Complete Street policies and concepts.

Appendix I: Smart Growth America Scoring

The organization Smart Growth America[49] has been at the forefront of Complete Streets Policies in the U.S. and uses a 100-point scale to grade municipalities on their policies. Scores are based on the following 10 elements, scored at 10 points each:

1. **Vision and intent:** Includes an equitable vision for how and why the community wants to complete its streets. Specifies need to create a complete and connected network and specifies at least four modes, two of which must be biking or walking.

2. **Diverse users:** Benefits all users equitably, particularly vulnerable users and the most underinvested and underserved communities.

3. **Commitment in all projects and phases:** Applies to new, retrofit/reconstruction, maintenance, and ongoing projects.

4. **Clear, accountable expectations:** Makes any exceptions specific and sets clear procedures that requires high-level approval and public notice prior to exceptions being granted.

5. **Jurisdiction:** Requires interagency coordination between government departments and partner agencies on Complete Streets.

6. **Design:** Directs use of the latest and best design criteria and guidelines and sets a time frame for their implementation.

7. **Land use and context sensitivity:** Considers the surrounding community's current and expected land use and transportation needs.

8. **Performance measures:** Establishes performance standards that are specific, equitable, and available to the public.

9. **Project selection criteria:** Provides specific criteria to encourage funding prioritization for Complete Streets implementation.

10. **Implementation steps:** Includes specific next steps for implementation of the policy.

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