

# ISSUE BRIEF: Transportation

**DOMAIN OVERVIEW:** The **Transportation** domain covers the infrastructure, equipment, and services for all means of urban transportation, with a focus on transportation services and policies specifically related to people with disabilities and seniors. Transportation represents a broad range of mobility options, including public and private options, drivers, pedestrians, Paratransit ridership, and bicyclists - all of whom cross paths daily. Relevant programs and policies may include the Vision Zero pedestrian safety efforts, improving and expanding accessible modes of transportation, bike lane design, and bus shelters.

## **SUMMARY:**

Ensuring that public transportation is available for all has been, and continues to be, a priority for San Francisco. The city's transportation system has a direct impact on all other domain areas; an efficient, affordable, and accessible transportation supports the ability of seniors and adults with disabilities to travel to work, attend medical appointments, and participate more broadly in the community. San Francisco has many transportation benefits, including: consistently rated as one of the most walkable US cities; free Muni service for low and moderate-income seniors, people with disabilities and youth; and a transit stop at least every quarter mile in San Francisco. However, the city also faces challenges, such as the hilly geography that can be challenging for seniors and those with disabilities, the need for accessibility upgrades in older transit stations, and, with a highly utilized public transportation system, overcrowding and older vehicles that are not as reliable and may break down.

## **ISSUE BRIEF SECTIONS:**

<b>I.</b>	<b>Age &amp; Disability Friendly Goals.</b>	<b>Pg. 1</b>
<b>II.</b>	<b>Recommendations for San Francisco.</b>	<b>Pg. 3</b>
<b>III.</b>	<b>San Francisco Assets.</b>	<b>Pg. 6</b>
<b>IV.</b>	<b>San Francisco Gaps.</b>	<b>Pg. 10</b>
<b>V.</b>	<b>Appendix A. Age &amp; Disability Friendly Efforts: In Action.</b>	<b>Pg. 12</b>
<b>VI.</b>	<b>Appendix B. Related Research &amp; References.</b>	<b>Pg. 15</b>

**The Age and Disability Friendly Task Force is charged with identifying achievable and tangible policy and program goals that will increase the accessibility and inclusivity of San Francisco.** Members are expected to review the issue brief and draft recommendations. Please come to the meeting prepared to suggest edits, feedback, and recommendations on the topic **transportation**. Ideal recommendations are those that address key populations for this effort: people with disabilities, seniors, caregivers, and people with cognitive impairment.

# I. AGE & DISABILITY FRIENDLY GOALS

Based on the World Health Organization’s recommendations, research, relevant reports, and focus groups, below are goals that we believe contribute to an age- and disability-friendly San Francisco, specifically with regards to **transportation**.

**When reviewing the following goals, please consider:**

- From your experience & expertise, how does San Francisco measure up in the category?
- What are SF’s strengths within this area? Where do we have gaps within this area?
- Are these the right goals? What is missing?

GOALS	DESCRIPTION
<p>Ensure that <b>public transportation<sup>1</sup> is affordable, accessible, &amp; equitable</b> for residents of all ages and abilities.</p>	<p>Ensure that <b>public transportation is available and accessible to all</b> San Franciscans, which includes:</p> <ul style="list-style-type: none"> <li>• Fares are affordable for seniors and people with disabilities;</li> <li>• Public transportation is readily available and reaches key destinations, connecting all areas of the city;</li> <li>• Sufficient specialized transport services are available for those who need it; and</li> <li>• Overall, the transportation system should be:               <ul style="list-style-type: none"> <li>○ safe from crime and riders feel safe using the service;</li> <li>○ clean and reliable; and</li> <li>○ free from overcrowding.</li> </ul> </li> </ul> <p>Incorporate <b>accessibility treatments during the design process</b> and prioritize accessibility when providing all street or transit improvements. Examples may include:</p> <ul style="list-style-type: none"> <li>• Prioritize and implement elevator redundancy in transit stations;</li> <li>• Incorporate wayfinding<sup>2</sup> to, from, and within transit facilities that accommodates people with disabilities including wheelchair users, vision and hearing impairments; and</li> <li>• Ensure that all new vehicles have designated priority seating and are able to accommodate wheelchairs.</li> </ul>

<sup>1</sup> For this discussion, “public transportation” includes publicly funded transportation, pedestrian, and bicycle

<sup>2</sup> Wayfinding is the ways & tools that allow people to navigate a physical space and can include the design of paths of travel and visual or auditory signs.

GOALS	DESCRIPTION
Residents have <b>the information &amp; tools they need to make informed travel choices &amp; decisions.</b>	<p><b>Effective communication and tools are available</b> for seniors &amp; people with disabilities, including:</p> <ul style="list-style-type: none"> <li>• Seniors and people with disabilities have timely and accurate information about system delays, outages, and proposed route changes;</li> <li>• Residents are able to travel reliably throughout the city;</li> <li>• There are opportunities for community members to provide feedback on proposed transit changes or proposals; and</li> <li>• Support available for those learning how to navigate public transit.</li> </ul>
<b>Active transportation<sup>3</sup></b> (bicycling and walking) is <b>encouraged and supported</b> , through policies, design, and programs.	<p>Streets, sidewalks, and other public thoroughfares <b>should be safe and accessible for everyone</b>, which includes:</p> <ul style="list-style-type: none"> <li>• Street and traffic design that prioritizes the pedestrian;</li> <li>• Policies and design that support more walkable neighborhoods; and</li> <li>• Protected bike lanes and other bike safety measures.</li> </ul>
San Francisco <b>Private transportation<sup>4</sup> policies or programs support accessibility and equity.</b>	<p><b>Private transportation represents a broad range of services and modes, including:</b> driving, taxi's, TNC's, bikeshares, carshares and other for profit transportation options.</p> <p>Policies and programs that <b>support choice, independence, and foster innovation</b> with regards to transportation challenges. This may include:</p> <ul style="list-style-type: none"> <li>• <b>Innovative and new technology:</b> should also incorporate the potential impact on existing services or conditions, particularly with regards to people with disabilities and seniors.</li> </ul>

<sup>3</sup> **Active transportation** refers to the means of getting around that are powered by human energy, which is primarily walking and bicycling.

<sup>4</sup> **Private transportation** includes taxis, transit network companies (TNC's), self-driving, bikeshares, carshares, and other for profit transportation

## II. DRAFT RECOMMENDATIONS.

Below are some possible recommendations to support the age- and disability-friendliness of San Francisco, specifically with regards to **transportation**. These recommendations were informed by the Tech Council, focus groups, the DAAS Needs Assessment, and gaps identified by partner organizations. These are only meant as a starting point and the role of the task force is to develop the final recommendations, either based on these draft ideas or to address gaps not currently covered here.

GOALS	RECOMMENDATIONS
<p>Ensure that <b>public<sup>5</sup> transportation is affordable, accessible, and equitable</b> for residents of all ages and abilities.</p>	<p>Support efforts to <b>improve the accessibility and safety of public transit</b>, including:</p> <ul style="list-style-type: none"> <li>• Increase seating options at public transit stops, such as prioritizing bus shelters near senior centers, transfer locations, or other programs specifically utilized by seniors and people with disabilities;</li> <li>• Assess and support travel training programs for young adults with disabilities, particularly curriculum that also incorporates all aspects of public transportation;</li> <li>• Provide redundant elevators in all Muni Metro underground stations, or more than one elevator in each station, for every possible elevator trip (such as the platform, mezzanine, and sidewalk elevators); and</li> <li>• Funding should prioritize a ‘state of good repair’ which ensures that transit systems are maintained to provide efficient, reliable, and safe service:             <ul style="list-style-type: none"> <li>• Example: may include replacing Muni and paratransit vehicles at the end of their “useful lives”.</li> </ul> </li> </ul> <p>Incorporate <b>accessibility treatments during the design process</b> and prioritize when providing all street or transit improvements. Specific projects may include:</p> <ul style="list-style-type: none"> <li>• New design concepts, services, policies, and infrastructure should include an assessment of impact on current services, particularly for people with disabilities and seniors;</li> <li>• Continue to improve and implement the City’s <a href="#">Guidelines for Accessible Building Blocks for Bicycle Facilities document</a> which provides guidelines for separated bikeways to improve connectivity and safety, while also ensuring that the public realm is accessible for people with disabilities; and</li> <li>• Assess the feasibility of a system wide policy or approach that identifies “best practices for intersections” that engages both the experiences of residents as well as transportation needs in prioritizing intersection safety treatments.</li> </ul>

<sup>5</sup> For this discussion, “public modes” includes publicly funded transportation, pedestrian, and bicycle

<p>Residents have <b>the information &amp; tools they need to make informed travel choices.</b></p>	<p>Prioritize <b>effective communication and updates with regards to system changes, delays, and proposals:</b></p> <ul style="list-style-type: none"> <li>• Ensure that when elevators/escalators are out of service, <ul style="list-style-type: none"> <li>▪ That information is up to date and shared widely, and</li> <li>▪ That the next closest station is operating, offering an alternate option for those who need it.</li> </ul> </li> <li>• Assess and support outreach and communication practices, so that they best reflect San Francisco’s diverse communities, including materials in multiple languages and accessible format.</li> </ul> <p><b>Transportation info can be available in a variety of accessible ways:</b></p> <ul style="list-style-type: none"> <li>• Utilizing and building capacity with existing transportation tools such as the Next Bus application, Paratransit at the DAAS Benefits and Resource Hub, and existing travel training programs.</li> </ul>
<p><b>Active transportation<sup>6</sup></b> (bicycling and walking) is <b>encouraged and supported</b>, through policies, design, and programs.</p>	<p><b>Pedestrians are prioritized through policies and improvements that focus on street calming measures and address critical safety issues.</b> Specific actions may include:</p> <ul style="list-style-type: none"> <li>• Increase crosswalk time at key intersections, including high-injury corners, within specific distance of senior and accessible housing, day programs, and senior centers;</li> <li>• Install leading pedestrian intervals<sup>7</sup> (which gives pedestrians a 3-7 second head start over cars when entering intersections); and</li> <li>• Law enforcement of pedestrian right of way laws, particularly with regards to “hot spots” where there is increased pedestrian injury or fatalities.</li> </ul>

<sup>6</sup> **Active transportation** refers to the means of getting around that are powered by human energy, which is primarily walking and bicycling.

<sup>7</sup> For an example and more info, see here: <https://www.youtube.com/watch?v=3Srpnpz9cek>

<p>San Francisco <b>Private transportation<sup>8</sup> policies or programs should ensure accessibility and equity.</b></p>	<p>Recommend <b>policies and practices that encourage transparency while also allowing innovation:</b></p> <ul style="list-style-type: none"> <li>• Support local efforts that require the California Public Utilities Commission to share accessibility data and the number of rides with regards to the transportation network companies (TNC's).</li> </ul> <p>Address <b>the impact of transportation network companies (TNC's) on seniors &amp; people with disabilities through policy or practice.</b> For example,</p> <ul style="list-style-type: none"> <li>• Recognize the priorities of Vision Zero of ending traffic deaths in SF, assess the feasibility of limiting the number of TNC<sup>9</sup>'s operating each day;</li> </ul> <p>Ensure that <b>private transportation options are equitable and accessible</b>, such as:</p> <ul style="list-style-type: none"> <li>• For on-demand transportation (such as taxi's, carshares, and TNC's) that will not offer accessible accommodations, consider the feasibility of charging a fee that would go towards increasing the capacity of Paratransit or other accessible transportation services; and</li> <li>• Explore ways to increase accessible taxi vans through incentives, such as providing maintenance subsidies, subsidizing accessible vehicles, or providing a per trip subsidy, with the goal of bringing the costs of ramp taxis to be the same as sedan taxis.</li> </ul>
---	--

<sup>8</sup> **Private transportation** includes taxis, transit network companies (TNC's), self-driving, bikeshares, carshares, and other for profit transportation

<sup>9</sup> TNC = transportation network companies, or a company that uses an online-enabled platform to connect passengers with drivers using personal, non-commercial vehicles. Examples include: Lyft, Uber, etc. For more information, see here: <http://www.sfcta.org/tncstoday>

### III. SAN FRANCISCO ASSETS

Below are assets within the areas of **transportation**, which we believe supports the age- and disability-friendliness of San Francisco. This is not an exhaustive list and we welcome suggestions from task force members to be included in final report.

ASSETS	EXAMPLES
<p>Programs, policies, and funding that <b>support a robust and diverse public transportation system.</b></p>	<p><b>Grant opportunities include:</b></p> <ul style="list-style-type: none"> <li>• <b>Federal Section 5310<sup>10</sup>:</b> Grant funding that is available to community based organizations and public agencies, specifically for enhanced mobility for seniors and individuals with disabilities.</li> </ul> <p><b>Muni bus and rail services and programs</b></p> <ul style="list-style-type: none"> <li>• <b>Free Muni for low-income seniors and persons with disabilities:</b> Free access to Muni services for low to middle income seniors and people with disabilities.</li> <li>• <b>NextBus:</b> real time transit information for consumers, either via website or a phone application</li> <li>• <b>Senior &amp; disabled discount fares:</b> Seniors and people with disabilities that do not qualify for Free Muni still qualify for a 50% discount on Muni cash fares.</li> </ul> <p><b>SF Paratransit<sup>11</sup> services and programs</b></p> <p>SF Paratransit provides van and taxi services to people with disabilities, unable to independently use public transit due to a disability or a disabling health condition, in accordance with the ADA. There are <b>three primary services</b> offered to ADA-eligible SF Paratransit customers:</p> <ul style="list-style-type: none"> <li>• <b>SF Access Van Service<sup>12</sup>:</b> Pre-scheduled, door-to-door, shared-ride Americans with Disabilities Act (ADA)-mandated van services;</li> <li>• <b>Paratransit Taxi Service<sup>13</sup>:</b> curb-to-curb taxi service subsidized for ADA-eligible persons up to a maximum monthly allotment. All SF taxis required to participate;</li> <li>• <b>Group Van Service<sup>14</sup>:</b> Pre-scheduled van service providing door-to-door transportation to groups of ADA-eligible customers attending specific agency programs such as Adult Day Health Care, senior centers, or work sites.</li> </ul>

<sup>10</sup> “the purpose of assisting private nonprofit groups in meeting the transportation needs of older adults and seniors with disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meeting those needs...the program aims to improve mobility for seniors and individuals with disabilities by removing barriers to transportation service and expanding transportation mobility options.”

<sup>11</sup> **Clients served:** In FY16 SF Paratransit provided approximately 800,000 trips to approximately 14,000 registered customers

<sup>12</sup> (FY16 ridership: approximately 230K)

<sup>13</sup> (FY16 ridership: approximately 290K, including 14K ramp taxi trips)

<sup>14</sup> (FY16 ridership: approximately 200K)

ASSETS	EXAMPLES
	<p><b>SF Paratransit services for seniors and persons with disabilities who do not meet the ADA eligibility criteria</b>, include:</p> <ul style="list-style-type: none"> <li>• <b>Paratransit Plus<sup>15</sup></b>: limited value taxi debit card safety net for non ADA eligible persons who need extra assistance;</li> <li>• <b>Shop-a-Round<sup>16</sup></b>: door-to-door prescheduled, shared ride van service to grocery stores;</li> <li>• <b>Van Gogh Shuttle</b>: provides group van transport to cultural and social events;</li> <li>• <b>Peer Escort Program</b>: volunteers (peer escorts) ride specific Group Van routes and provide additional assistance to Group Van riders who attend adult day health care programs and have difficulties riding paratransit independently due to cognitive disabilities. A partnership with SFMTA and Felton, Inc.</li> <li>• <b>Helping Wheels Funds</b>: fare assistance to riders with special or urgent needs;</li> <li>• <b>Stair Assists</b>: Provided to customers who live in non-accessible housing when other options don't exist;</li> <li>• <b>Travel training (one-on-one or group orientations)</b>: To help seniors and people with disabilities feel confident using the Muni bus and rail services;</li> <li>• <b>Mobility Management<sup>17</sup></b>: A new initiative housed within SF Paratransit with the goal of helping seniors and people with disabilities find the best, most efficient transportation services to meet their travel needs for each of their individual trips.</li> </ul>
<p>Policies and programs that <b>prioritize active transportation.</b></p>	<p><b>San Francisco is a very walkable city</b>, thanks to the policies, programs, and advocacy work of many that encourage safe and walkable neighborhoods, including:</p> <ul style="list-style-type: none"> <li>• <b>Vision Zero<sup>18</sup></b>: a citywide policy and program to eliminate traffic deaths and severe injuries by, including the “Safe Streets for Seniors and People with Disabilities” grant and advocacy program. <i>(for more on Vision Zero, see pg. 17)</i></li> </ul>

<sup>15</sup> about 175 individuals in program, generally older and more frail (80+), selected on age and mobility function

<sup>16</sup> FY16 provided approximately 8K trips to approximately 1K registered riders

<sup>17</sup> As part of this effort, SFMTA will be developing a transportation information & referral infrastructure to help seniors & PWDs get customized travel planning assistance and information about all of their transportation options – providing info on both services offered by SFMTA (Muni and paratransit) and services offered by other agencies, organizations and private companies.

<sup>18</sup> <http://visionzerosf.org/>

ASSETS	EXAMPLES
	<ul style="list-style-type: none"> <li>● <b>A range of organizations, including:</b> <ul style="list-style-type: none"> <li>○ <b>Bicycle Coalition</b><sup>19</sup> has safety and education courses, including: Driver education, urban bicycling safety, community bike builds, and a “Bike Politely” program.</li> <li>○ <b>Walk SF</b><sup>20</sup> a pedestrian advocacy organization that advocates for a more livable, walkable San Francisco.</li> </ul> </li> </ul>
<p>There are a variety of <b>community based efforts and advisory bodies that focus in improving transportation services</b> for seniors &amp; people with disabilities.</p>	<p>There are <b>a variety of policy and/or advocacy committees</b> that seniors and people with disabilities can engage with, including:</p> <ul style="list-style-type: none"> <li>● The Paratransit Coordinating Council/ (PCC)<sup>21</sup>;</li> <li>● The Multimodal Accessibility Advisory Committee (MAAC);</li> <li>● The Pedestrian Safety Advisory Committee<sup>22</sup>;</li> <li>● The Bicycle Advisory Safety Committee;</li> <li>● The Citizens Advisory Committee, with MTA<sup>23</sup>; and</li> <li>● The Senior &amp; Disability Workgroup of Vision Zero Coalition</li> <li>● SFMTA’s Van Ness Improvement Project<sup>24</sup> hosts monthly “Meet the Expert”, where they cover a variety of topics.</li> </ul> <p>Additionally, there are <b>examples of community based transportation solutions</b>, including:</p> <ul style="list-style-type: none"> <li>● The Villages (NEXT Village, SF Village, and Golden Gate Village) offer volunteer ride-share for members.</li> </ul>
<p>There are <b>innovative or supportive private transportation options</b>.</p>	<p>For those who can afford it, there are <b>for profit transportation services available</b>:</p> <ul style="list-style-type: none"> <li>● <b>Silver Ride</b>: for profit rider service for seniors and adults with disabilities; and</li> <li>● <b>TNC partnerships with senior service providers</b>: examples include Lyft’s partnership with GreatCall<sup>25</sup> and Uber’s partnership with 24hr<sup>26</sup>. However, most TNC’s do not offer accessible vehicles, therefore these programs are not available to people using wheelchairs.</li> </ul> <p>Recognition that <b>58% of San Francisco senior households have a</b></p>

<sup>19</sup> <http://www.sfbike.org/our-work/>

<sup>20</sup> <http://walksf.org/>

<sup>21</sup> <https://www.sfmta.com/about-sfmta/organization/committees/multimodal-accessibility-advisory-committee-maac>

<sup>22</sup> <https://www.sfmta.com/about-sfmta/organization/committees/pedestrian-safety-advisory-committee-psac>

<sup>23</sup> <https://www.sfmta.com/about-sfmta/organization/committees/citizens-advisory-council-cac>

<sup>24</sup> <https://www.sfmta.com/projects-planning/projects/van-ness-improvement-project>

<sup>25</sup> <https://www.greatcall.com/newsroom/press-releases/2016/greatcall-and-lyft-solve-transportation-issues-for-seniors-using-personal-operators>

<sup>26</sup> <http://homehealthcarenews.com/2016/08/24hr-homecare-expands-partnership-with-uber/>

ASSETS	EXAMPLES
	<p><b>vehicle</b>, there are some resources to help ensure they are able to do so safely, including:</p> <ul style="list-style-type: none"> <li>• <b>Senior Driver, DMV resources:</b> “Senior Guide for Safe Driving<sup>27</sup>”;</li> <li>• <b>AAA Evaluate Your Driving Ability<sup>28</sup>:</b> a voluntary, self-rating tool to evaluate ones driving abilities, as well as tips; and</li> <li>• <b>The Safe Driver: driver Rehabilitation Services<sup>29</sup>:</b> a for-profit company that provides a complete clinical assessment (visual, perceptual, cognitive, physical and behavioral) as it relates to safe and independent driving, conducted by a licensed Occupational Therapist/Driver Rehabilitation Specialist.</li> </ul>

---

<sup>27</sup> [https://www.dmv.ca.gov/portal/dmv/detail/about/senior/senior\\_top](https://www.dmv.ca.gov/portal/dmv/detail/about/senior/senior_top)

<sup>28</sup> <http://seniordriving.aaa.com/evaluate-your-driving-ability/>

<sup>29</sup> <http://www.thesafedriver.com/>

## IV. SAN FRANCISCO GAPS

Below are identified gaps within the area of **transportation**. This is not an exhaustive list and we welcome suggestions from the task force members to be included in the final report.

GAPS	EXAMPLES
<p>There are a number of <b>challenges associated with public transportation.</b></p>	<p>There are <b>accessibility issues</b>, including:</p> <ul style="list-style-type: none"> <li>• The CalTrains 22<sup>nd</sup> St Station and many Muni Metro light rail stops are not accessible;</li> <li>• Overcrowding means that buses pass up people with disabilities or that those who need a seat are not able to get one; and</li> <li>• As buses can only accommodate 2 wheelchairs, during peak travel hours, people using wheelchairs or other mobility devices may not be able to board a crowded bus.</li> </ul> <p>There are <b>challenges specific to Paratransit</b>, including:</p> <ul style="list-style-type: none"> <li>• Paratransit operations facility is currently located in Brisbane, which is associated with increased travel to and from pick-ups;</li> <li>• Difficult to find long term space for operations and maintenance facilities, due to current real estate pressure;</li> <li>• Increased traffic congestion in the city has resulted in decreased on time performance of paratransit service;</li> <li>• The Increased vehicle demands means that vehicles often operate beyond the 5 year “useful life”, therefore vans tend to be older and prone to breaking down; and</li> <li>• It’s a challenge to keep and retain Paratransit drivers.</li> </ul>
<p><b>Challenges unique to private transportation services.</b></p>	<p>There are <b>challenges unique to private transportation</b>, including:</p> <ul style="list-style-type: none"> <li>• Transportation network companies (ie Lyft, Uber, etc.) are currently under no obligations<sup>30</sup> to serve or provide accessible rides for people with disabilities (i.e. wheelchair accessible vehicles, etc.); and</li> <li>• Silver Ride and the TNC’s are cost prohibitive for many living on a fixed income;</li> <li>• Local carshare programs no longer have accessible vehicles; and</li> </ul>

<sup>30</sup> Current lawsuit pending regarding refusing to allow service animals may change this.

	<ul style="list-style-type: none"> <li>• Negative health outcomes associated with mobility challenges. For example, losing one’s license or ability to drive can be devastating and lead to isolation and depression, particularly if that individual is not familiar with public or alternative transportation options.</li> </ul>
<p>There are a number of <b>challenges associated with active transportation.</b></p>	<p>There are a range of <b>specific issues faced by pedestrians and bicyclists</b>, including:</p> <ul style="list-style-type: none"> <li>• Not enough time to cross intersections, not enough accessible countdown signals, and inadequate or blocked curb ramps;</li> <li>• Wayfinding, or the ways people navigate from place to place, needs to be more inaccessible, intuitive, and maintained;</li> <li>• Hills are a challenge: electric wheelchairs tend to wear out faster and need repairs and they can be difficult for people walking to/from their homes if live on a steep hill, etc.;</li> <li>• Bus stop consolidation presents a challenge for San Franciscan’s with limited mobility;</li> <li>• There aren’t enough protected bike lanes;</li> <li>• Participants were concerned about bicycle riders and dangerous practices, including riding on the sidewalk or going through crosswalks when pedestrians have the right of way;</li> <li>• Pedestrian crash data does not capture if the person had a disability;</li> <li>• Seniors are disproportionately affected by traffic violence (see Vision Zero, pg. 17).</li> </ul>

# APPENDIX A. OTHER AGE & DISABILITY FRIENDLY EFFORTS

## BEST PRACTICES.

**Language:** do not refer to traffic fatalities as “accidents”, as that assumes they are unpredictable and not preventable, which they are. Instead, refer to them as “crashes, injuries, or fatalities”. See [HERE](#) and [HERE](#). (Vision Zero SF)

### United States:

- **MN** expands bike lane network with eye on disability access, [HERE](#)
- **Marin Transit:** “Call a Ride Sausalito Seniors” (CARSS), free rides for seniors 60+; creating peer networks and volunteer ride shares/tasks
- **Honolulu, HI:** in high traffic/high crash areas, bulb-outs and narrower streets to slow down traffic
- **Napa’s Ambassador program:** peer escort for people unsure how to navigate transit
- **Contra Costa County:** donates used vehicles to nonprofits for trips (MTC focus group). The goal is for SF’s MTA to do the same, once MTA is able to upgrade current vehicles.
- **Philadelphia** uses “missing doctors appts” for seniors as a measure for reliable transportation.
- **Oregon:** insurance companies give discounts to Oregon seniors who graduate from the AARP 55 Alive/Mature 2-day driving class and repeat it at intervals.
- **Spokane, WA:** look up Care Cars, free services assists low-income seniors who can’t use public transportation.
- **Austin, TX:** Drive a Senior program, see here: <https://driveasenior.org/need-a-ride/#>
- **NYC Age Friendly:**
  - **Accessible Dispatch:** with Taxi & Limousine Commission, compensates drivers for travel to pick up location and passengers pay only metered fare. Also, all drivers of accessible taxicabs are required to participate in the program, completing over 18,000 trips since launch.<sup>31</sup>
  - **Market Ride:** uses school buses during off hours to take seniors from senior centers to supermarkets and farmers’ markets, recreational facilities, Broadway shows, etc.
  - **Misc:** nearly doubled bike network, Safe Routes/Safe Streets, created new plazas, Times Square became pedestrian only, “installed over 4,500 muni-meters to increase curbside parking capacity”, installed cameras on buses<sup>32</sup>

---

<sup>31</sup> “Mayor Bloomberg and agency partners unveil update on Age-Friendly NYC initiatives,” 2013

<sup>32</sup> Pelham, 2016

**International:**

- **Transvision – the Netherlands:** a Dutch multimodal transportation system that **helps seniors get from point A to B** (can be across county lines or across state lines) **using multiple transit means**. See here (requires page translation): <https://www.transvision.nl/nl/>
- **Congestion Charge - London, England:** as a **strategy to minimize cars in congested areas** (generally downtowns) and therefore increase pedestrian safety, minimize traffic, improve air quality, and to raise funds for London’s transit system, London charges a fee for vehicles to enter specify “Congestion Charge Zone” in Central London during work day hours and Mondays through Fridays. See here: <https://tfl.gov.uk/modes/driving/congestion-charge>
- **Healthy Streets – London, England:** an initiative focused on making London’s streets healthier, safer, and more welcoming by **getting Londoners to reduce their reliance on driving**. See here: <https://tfl.gov.uk/corporate/about-tfl/how-we-work/planning-for-the-future/healthy-streets>

**A. EXAMPLES OF OTHER CITY’S AGE & DISABILITY FRIENDLY PLANS:**

**Table 1: Washington, DC. Age Friendly DC: Strategic Plan (2014-2017)<sup>33</sup>**

Domain 2: Transportation	
GOAL	RECOMMENDATIONS
<p><b>2.1. Ensure that all modes of transportation are safe, affordable, and accessible for residents of all ages and abilities, particularly older adults.</b></p>	<ul style="list-style-type: none"> <li>• Improve transparency of reports for, and prioritization of, service requests for repairs of sidewalks, curb cuts, and street lights.</li> <li>• Use safe, aesthetically pleasing materials for sidewalk construction that minimize falls and accidents.</li> <li>• Establish workgroup to identify strategies to increase the number of older riders using bicycles.</li> <li>• Require that replacement of missing street/traffic signage is easily readable, well-lit at night, and addresses access and function needs.</li> <li>• Increase seating options at public transit stops.</li> </ul>
<p><b>2.2. Provide residents with the information and tools they need to make informed travel choices.</b></p>	<ul style="list-style-type: none"> <li>• Create an integrated, one-call, one-click system for older adults and those with disabilities to access and schedule transportation options, including accessible options.</li> <li>• Develop an available on-demand, cross training for direct service staff to ensure they have up-to-date information about current accessible transportation options and the one-call, one-click system.</li> <li>• Increase offerings of bicycle safety curriculum at schools, libraries, senior wellness centers, and recreation centers.</li> <li>• Develop and implement a range of transportation training to introduce and familiarize older adults with all travel options to ensure</li> </ul>

<sup>33</sup> <https://agefriendly.dc.gov/publication/age-friendly-dc-strategic-plan-2014-2017>

Domain 2: Transportation	
GOAL	RECOMMENDATIONS
	<p>they can make informed, appropriate, cost-effective and efficient choices.</p> <ul style="list-style-type: none"> <li>Integrate eligibility determination for transportation options in the DC Access System.</li> </ul>

**Table 2: New York City, New York. Age Friendly NYC (2009)<sup>34</sup>**

Accessible & Affordable Transportation	
Issue	Initiative
Half of New Yorkers regularly use mass transit, but not all subway stations are accessible. <b>Older adults desire information regarding the status of elevators in subway stations before making a trip.</b>	<p><b>Improve elevator and escalator service and enhance accessibility of subway stations, including:</b></p> <ul style="list-style-type: none"> <li>Improve the accessibility of stations such as ramps, handrails, Metrocard vending machines, and other amenities.</li> <li>Increase the reliability of station elevators and escalators with daily inspections and electric monitors that alert personnel if stops working.</li> <li>Develop a subscription program for customers to receive email advisory for disruptions of elevators and/or escalators at specific stations.</li> </ul>
Some older adults have <b>reliability and efficiency concerns regarding Access-A-Ride.</b>	<p>Improve efficiency of Access-A-Rise by <b>equipping vehicles with GPS devices and implementing phone notification system.</b></p>
Many <b>taxis are not wheelchair accessible</b> or easy to get in and out of.	<p><b>Match accessible taxis with users who need them, including:</b></p> <ul style="list-style-type: none"> <li>Developing a pilot program which rider can call 311 and one of the City's 240 wheelchair accessible yellow cabs is dispatched;</li> <li>Training for drivers on how to assist wheelchair and scooter users;</li> <li>A goal to strive for in the future is assuring that all taxis purchased for use in the City are wheelchair accessible.</li> </ul>
There are large sections of the City <b>not well-served by bus or subway routes.</b>	<p><b>Develop taxi voucher program</b> for older New Yorkers who are unable to use public transportation, which will focus on mobility-impaired individuals, low-income, and those unable to access the City's subway or bus network.</p>

<sup>34</sup> [http://www.nyc.gov/html/dfta/downloads/pdf/age\\_friendly/agefriendlynyc.pdf](http://www.nyc.gov/html/dfta/downloads/pdf/age_friendly/agefriendlynyc.pdf)

## APPENDIX B. RELATED RESEARCH & REFERENCES

### San Francisco Transportation Demographics (based on the DAAS Needs Assessment<sup>35</sup>):

- **SF households are less likely to own cars** than statewide population – nearly a third of San Franciscans don't own a car<sup>36</sup>.
- As adults age, they are also less likely to drive (58% of households 65 years or older versus 73% of households headed by an adult under 65 years old);
- **Seniors tend to report positive experiences with public transportation**, citing the reliability of Muni, range of routes, and respectful behavior from drivers and other riders.
- **People with disabilities** (under 60 years old) **tend to have more negative views regarding public transportation**, and in focus groups cited: lack of respect and accommodation from drivers and riders, being passed by buses while waiting at stops, difficulty moving through crowded buses or obtaining seats from non-disabled riders.

### How are people traveling in San Francisco?

**Table 1. Weekday Intra-SF Person Trips by Mode:** on an average weekday, trips by people with destinations that begin and end in San Francisco.

Mode	Number of Person Trips	Percentage
Drive	1,099,000	34%
Public Transit	512,000	16%
Bike	103,000	3%
Walk	1,193,000	37%
Taxi	24,000	1%
TNC	283,000	9%
<b>TOTAL</b>	<b>3,214,000</b>	<b>100%</b>

Source: TNC data; SF-CHAMP travel model, SFMTA<sup>37</sup>

### Safety Related.

- **Falls:** It's estimated that 37,000 injuries requiring emergency medical care occur annually as older adult's **board and exit vehicles**. Public transportation fall risks directly related to transit

<sup>35</sup> San Francisco Human Services Agency Planning Unit, "Assessment of the Needs of San Francisco Seniors and Adults with Disabilities. Part 2: Analysis of Needs and Services."

<sup>36</sup> Mayor's Pedestrian Safety Task Force, "San Francisco Pedestrian Strategy."

<sup>37</sup> San Francisco County Transportation Authority, "TNC's Today: A Profile of San Francisco Transportation Network Company Activity."

include: steps, frequent or sudden stops or starts, slippery surfaces, crowded vehicles, personal items in the aisle, dark interiors.<sup>38</sup>

- **Speeding increases crash risk** both in terms of likelihood of being involved in a crash and in terms of severity of injuries sustained by those involved.
  - A National Transportation Safety Board study<sup>39</sup> found that speed was linked to 112,580 highway crash fatalities (2005-2014). As a comparison, nearly the same number, 112,948, died in alcohol-related crashes during the same period.
  - Unlike drinking and driving, speeding has few negative social consequences.
  - In response, some cities have campaigns specifically geared at slowing drivers down (specifically 20mph), through a combination of social engineering, education, and enforcement. Examples include:
    - **20 is Plenty for Us (international and US cities):** <http://www.20splenty.org/>

**Vision Zero (VZ):** a traffic safety policy aimed at eliminating traffic deaths by 2024, VZ began in Sweden and has since been implemented in many international and national cities, including San Francisco, New York, and Boston.

**Background: San Francisco VZ:** local adoption and implementation is thanks to the hard work and commitment of a number of advocates and organizations grassroots efforts, including Walk SF and Senior and Disability Action Network. Adopted as a policy in 2014, VZ aims to build better and safer streets, educate the public on traffic safety, enforce traffic laws, and adopt policy changes that save lives. The effort is a partnership among many city agencies, such as public health, MTA, police department, and more, as well as a number of community based organizations and elected officials.

**VZ is data driven**, prioritizing high-injury corridors for implementing safer street improvements – **more than 70% of severe and fatal traffic injuries occur on just 12% of city streets.** See the high injury map here:

<http://sfgov.maps.arcgis.com/apps/webappviewer/index.html?id=fa37f1274b4446f1bddd7bdf9e708ff>

- Each year, 700 people in San Francisco are hit each year, with 20 pedestrians dying;
- While seniors (60 yrs and older) are 20% of the San Francisco population, they were 43% of the traffic fatalities in 2016 (based on Vision Zero End of Year 2016 Report<sup>40</sup>).

## Access.

---

<sup>38</sup> National Center on Senior Transportation, n.d.

<sup>39</sup> <https://www.nts.gov/news/press-releases/Pages/PR20170725b.aspx>

<sup>40</sup> [http://visionzerosf.org/wp-content/uploads/2017/03/Vision-Zero-2016-End-of-Year-Traffic-Fatalities\\_FINAL.pdf](http://visionzerosf.org/wp-content/uploads/2017/03/Vision-Zero-2016-End-of-Year-Traffic-Fatalities_FINAL.pdf)

- **People with disabilities (34%) were much more likely than people without disabilities (16%) to experience inadequate transportation.** (2010 study by Kessler Foundation/National Organization)
- **Mobility is critical to well-being.**<sup>41</sup>
- Transportation services were number #1 request among SF Village participants (216 in 2015).
- A 2002 national study conducted by the US Bureau of Transportation Statistic found that 6 million people with disabilities have difficulties obtaining the transportation they need<sup>42</sup>.
- ADA requires bus stop announcements;
- **Transportation problems are closely linked to income;** rising income, even controlling for age, physical disability, and health status and transportation problems drop drastically<sup>43</sup>.

## Funding.

- Currently and historically, **the United States has focused its resources on travel by automobile,** including freeways and highways, and as a results, all other modes are neglected in comparison, with many cities struggling to reclaim space for pedestrians, bicyclists and rapid public transit.
  - Drivers only pay about half of the cost of maintaining highways through the gas tax, and the rest of maintenance costs are subsidized.
  - **Myth:** that mass transit is the most subsidized mobility option. **Reality:** the car is<sup>44</sup>.

## Design.

- SF is **one of the leading cities in the world in accessible street design** (Walk SF).
- Households on **streets with higher traffic volume interact less with their neighbors** than those on less congested streets do.<sup>45</sup>
- Various agencies and **research suggests that 3 feet/second is a more appropriate crosswalk speed,** as compared to the 4 ft/sec that is typical. Based on one study, seniors, people with disabilities and children (hand assisted by adults) all have similar crosswalk speed, an average of 3.81 feet per second. Additionally, people walking in groups also tend to take longer. Therefore, the commonly used 4 ft/sec walking speed for crosswalks was not enough time for seniors and/or people with disabilities, with a recommendation for a variety of speeds depending on the location of the crosswalk<sup>46</sup>.

## Modes of Transportation.

---

<sup>41</sup> Coughlin and Lacombe, "Ten Myths About Transportation for the Elderly."

<sup>42</sup> "The Current State of Transportation for People with Disabilities in the United States."

<sup>43</sup> <https://www.ncbi.nlm.nih.gov/books/NBK11420/>

<sup>44</sup> Humes, *Door to Door: The Magnificent, Maddening, Mysterious World of Transportation.*

<sup>45</sup> Dannenberg, Frumkin, and Jackson, *Making Healthy Places*

<sup>46</sup> Gates et al., "Recommended Walking Speeds for Pedestrian Clearance Timing Based on Pedestrian Characteristics."

**Transportation Network Companies (TNC's):** or a company that uses an online-enabled platform to connect passengers with drivers using personal, non-commercial vehicles. Examples include: Lyft, Uber, etc. the SF County Transportation Authority (CTA) recently release a great report, which can be found **HERE:** <http://www.sfcta.org/tncstoday>

**Oversight:** currently the California Public Utilities Commission (CPUC) regulates TNC's and requires data reporting by TNC's but will not share that data with local jurisdictions or the public.

**Requirements and oversight is significantly different for TNC's vs. taxis.** For example, TNC's have a significantly lower barrier of entry for drivers, whereas taxis are much more regulated, such as: there is a limit on the number of taxi vehicles that can serve SF, are subject to price controls, taxis must provide access to all areas of the city, must provide services to people with disabilities, have greater insurance requirements and drivers are subject to driver background checks and vehicle inspections. In contrast, TNC's have no vehicle limit, no price controls, no geographic service area requirements, no ("minimal") disabled access requirements, limited driver backgrounds, and few vehicle inspections or driver training requirements.

**Advantages of TNC's** (compared to taxis): easy to reserve a ride and easy to track locations (both for passenger and driver), ease of payment, cheaper fares, shorter wait times, and more availability at all times, due to the larger number of drivers. Based on usage data, it may be that TNC's provide additional options for travelers at times when other modes (public transit, biking or walking) may be less attractive or unsafe.

**Data:**

- SF Treasurer's Office estimates there are **45,000 Uber and Lyft drivers** operating in SF;
- Of that, only 21,000 have complied with requirements to register their business and of those, **only 29% are SF residents** and 10% of drivers live outside the 9 county Bay Area;
- During peak hours (Friday between 7:30-8pm), **over 6,500 TNC's are on the street**, which is over 15 times the number of taxis at these times;
- During a typical weekday, TNC's make **over 170,000 vehicle trips within SF**, 12 times the number of taxis, and **15% of all intra-SF vehicle trips**. At peak hours, it can be as many as 222,000 trips;
- During the weekday, **TNC usage is concentrated during the AM and PM peak periods**, when congestion is greatest; and
- **TNC trips are also concentrated in the most dense and congested neighborhoods** in SF;
- TNC's provide a broader service across the city than taxis, especially on the west side of SF.

### Unanswered questions with regards to TNC's:

- What is the role of government in regulating TNC's;
- To what extent do TNC's contribute to congestion and how do they affect air quality;
- TNC's impact on the performance of public transportation systems;
- To what extent do TNC's serve people with disabilities;
- The impact on the safety of people who use the roads, such as bicyclists, transit riders, and pedestrians; and
- Concerns of TNC's and equity – residents that don't have smart phones, credit cards and are all neighborhoods served equitably?

### Pedestrian:

- **Speed is responsible for 10 times the number of pedestrian injuries in SF as driving under the influence** of drugs or alcohol.
- 68% of pedestrian collisions occur at intersections and 41% of those were due to drivers failing to yield to pedestrians in the crosswalk.
- Increased levels of walking and bicycling help improve business and sales.
- Health Overlap: **1 out of every 5 trauma cases in SF is a pedestrian hit by a car** and SF pays about \$15million/yr in public costs for hospital expenses related to pedestrian crashes.
- **SF** one of the most walkable cities in the country – a walk score of 84, second to NYC.

### Bicycling.

Creating a connected network of safe, low-stress streets for bicycling is crucial to keeping our city moving sustainably and supports the city's Vision Zero goal of eliminating all traffic deaths. According to MTA, there are **92 miles of new bikeway miles planned** and \$112.6million of funding set aside for bikeway projects. Additionally,

- **51% of SF Residents enjoy biking;**
- SF sees an estimated 82,000 bike trips on an average day, which is an increase of 184% since 2006;
- 1/3<sup>rd</sup> of residents can bike but won't in San Francisco, with 7 out of 10 people citing safety concerns as a major impact on their decision to bike;
- **55% don't feel safe riding a bike near traffic**<sup>47</sup>.

For more information, check out MTA's "Pedaling Forward: a Glance at the SFMTA's Bike Program for 2017-2021" here:

<https://www.sfmta.com/sites/default/files/reports/2017/Pedlaing%20Forward%202017.pdf>

---

<sup>47</sup> <https://www.sfmta.com/about-sfmta/blog/pedaling-forward-new-guide-our-vision-bike-friendly-sf>

## Driving.

- Autonomous vehicles can provide significant, life-altering mobility benefits for persons with disabilities, older persons, and others who may not be considered in conventional design programs. <http://clpc.ucsf.edu/news/autonomous-vehicles-hold-enormous-potential-people-disabilities>
- **Facts and Challenges Regarding Loss of Driver's License:**
  - Studies have shown that “older drivers continue to drive as long as possible and resist change to their preferred mode of travel.”<sup>48</sup> One study showed that **most adults outlive their driving ability by 6 to 10 years.**
  - Doctors generally have very little experience in assessing safe driving, yet the DMV requires doctors to sign disability parking permits. Assessing safety is not covered in medical training or residency, and yet often doctors are responsible for deciding whether a patient should be behind the wheel.
  - **Most clinicians receive no focused training on older driver assessment** and are reluctant to have these emotional, difficult discussions.
  - **Driving rehabilitation organizations can assess a person's capacity to continue driving,** based on a person's medical and driving records, as well as an on the road test. However, these tests are voluntary, often cost hundreds of dollars and are not covered by insurance.
  - **According to some measures, seniors are safer drivers than the general population,** including: more likely to use seat belts, less likely to drive at night or after drinking, or in bad weather. Less likely to speed or use cell phones while driving. **However, the leading cause of injury-related death in seniors (ages 65-84) is motor vehicle collisions.** Also, older drivers have more collisions per mile driving than younger drivers.
  - **Losing a license,** particularly if unfamiliar with or limited access to public or alternative transportation options, **can be devastating.** It can increase social isolation, a loss of autonomy and independence, which can lead to depression and anxiety and lead to an increased possibility of ending up in a nursing home<sup>49</sup>.
  - **Premature driving cessation is associated with morbidity and early mortality.**
  - Barriers to prevent conversations (from clinicians perspective) often had to do with patients reluctance or perception that their independence is being taken away, as well as uncertainty about local transportation options or reporting requirements.
  - 70% of physicians said they had counseled patients to stop driving in the past year<sup>50</sup>.

---

<sup>48</sup> Coughlin and Lacombe, “Ten Myths About Transportation for the Elderly.”

<sup>49</sup> Reisman, “Surrendering the Keys: A Doctor Tries to Get an Impaired Elderly Patient to Stop Driving.”

<sup>50</sup> Betz et al., “I Wish We Could Normalize Driving Health: A Qualitative Study of Clinician Discussions with Older Drivers.”