

ISSUE BRIEF: Outdoor Spaces & Buildings

DOMAIN OVERVIEW: The **Outdoor Spaces & Building** domain covers all outdoor spaces such as parks and plazas, as well as the paths of travel that connect our spaces, such as sidewalks. This domain also includes public buildings such as libraries and community centers, and private businesses such as small business districts, malls, and theaters. Relevant policies include efforts to increase green space, installing parklets, ensuring equitable access to parks, as well as efforts to improve the accessibility of our small businesses.

SUMMARY: San Francisco's parks and outdoor spaces are a tremendous resource: ranked third by the Park Score¹, there are 220 parks within San Francisco, which is about 20% of the city area. Additionally, all residents are within a 10min (or half mile)² walk from a park, which received many rave reviews from focus groups conducted. Green spaces are critical assets for ensuring an age and disability friendly city, as research has shown that parks, particularly access to greenery, has a positive health impact on people, from reducing blood pressure and stress levels, to preventing depression and mitigating isolation related health outcomes. Sidewalks and all paths of travel are an important and often overlooked aspect of public space, as they connect residents to available services, businesses, and parks. Streets make up about 25% of San Francisco's land area, and while pedestrian safety has become a citywide priority, seniors and people with disabilities are disproportionately impacted by collisions and fatalities. Finally, ensuring accessibility of San Francisco's businesses is equally important for an age and disability friendly city. While the Americans with Disabilities Act (ADA) require a minimum level of accessibility for all public and private³ buildings, many of our small businesses and neighborhood merchant corridors would still benefit from an accessible front entrance.

ISSUE BRIEF SECTIONS:

I.	Age & Disability Friendly Goals.	Pg. 1
II.	Recommendations for San Francisco.	Pg. 3
III.	San Francisco Assets.	Pg. 5
IV.	San Francisco Gaps.	Pg. 9
V.	Appendix A. Age & Disability Friendly Efforts: In Action.	Pg. 11
VI.	Appendix B. Related Research & References.	Pg. 14

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 **outdoor spaces & buildings**. Ideal recommendations are those that address key populations for this effort: people with disabilities, seniors, caregivers, and people with cognitive impairment.

¹ <http://parkscore.tpl.org/city.php?city=San%20Francisco#sm.00000ra9rt4yn1e15stt1hw62dz8w>

² <http://www.sfchronicle.com/bayarea/article/SF-1st-city-in-nation-with-a-park-10-minute-walk-11150987.php>

³ Referring to those specifically referred to as "public accommodation" businesses, as outlined by the ADA, including all retail, commercial, etc.

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 **outdoor spaces & buildings**.

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>A diversity of accessible & clean outdoor public spaces.</p>	<p>There are a diversity of parks and open spaces available for San Francisco residents, including:</p> <ul style="list-style-type: none"> • Areas, sections or parks that encourage socialization, events, and other group activities; • Additionally, there are tranquil spaces that allow for quiet or contemplative activities; • A range of park sizes and locations that allow increased proximity, particularly for residents living in dense areas of the city, such as pocket parks⁴ or parklets⁵; and • Park renovations should intentionally incorporate intergenerational design, which will allow for increased use and ensure inclusive design considerations. <p>All parks and open spaces should be accessible and inclusive⁶:</p> <ul style="list-style-type: none"> • Accessible design should be creative, thoughtful, and incorporated from concept when developing a new park or renovating an existing park; • All park hardscaping should be accessible and inclusive, including ramps, handrails, smooth sidewalks and pavement, clear signs, and well placed lighting; • There should be age and disability friendly amenities such as accessible bathrooms, handicap parking, plenty of benches with arms, and public transit stops nearby; and • Clear and specific information for consumers should be available, allowing them to utilize public spaces.

⁴ **Pocket park definition:** a small public park, generally on small, irregular pieces of land such as vacant lots, rooftops or otherwise unused spaces.

⁵ **Parklet definition:** a small public green space or seating area either alongside a sidewalk or in a former parking space.

⁶ for seniors and people with a range of disabilities, including dementia (see recommendations in Appendix, pg. 17)

GOALS	DESCRIPTION
<p>Buildings, both public & private, should be accessible and inclusive.</p>	<p>All public buildings, as well as private businesses (that are considered public accommodations) need to be accessible for seniors and people with disabilities, including:</p> <ul style="list-style-type: none"> • Accessibility should be incorporated within the concept and design process when constructing new buildings; • Improvements should be made in a timely manner for existing businesses, while ensuring that the costs aren't prohibitive for small business owners; • As identified in the building code, maintaining elevators, ramps, escalators, handrails, and ensuring that signs are clear; and • Within public buildings, ensure that any programming offered also includes age and disability friendly programming (including accessibility, topics of interest, and support available when needed); and • Clean, conveniently located, and accessible public restrooms with clear signage.
<p>Public right of ways, such as sidewalks, should be accessible & inclusive.</p>	<p>Recognizing that residents need to be able to access parks and buildings, all public pathways should be accessible, safe, and pedestrian friendly, including:</p> <ul style="list-style-type: none"> • Sidewalks should be prioritized for pedestrians, including: safe from tripping hazards, have curb cuts, offer shade and greenery with street trees, and pedestrian crossings should allow sufficient time to cross, with both visual and audio signals; • There should be a network of safe pedestrian pathways to and from public spaces and buildings, and • Whenever possible, bicycle paths and pedestrian pathways should be separated.

II. DRAFT RECOMMENDATIONS.

Below are some possible recommendations to support the age- and disability-friendliness of San Francisco, specifically with regards to **outdoor spaces & buildings**. These recommendations were informed by focus groups, research, city departments, community members and groups, and best practices.

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>A diversity of accessible & clean outdoor public spaces.</p>	<p>Assess and identify opportunities to increase access for underserved populations to green space, including:</p> <ul style="list-style-type: none"> • Providing opportunities for residents that live in assisted living or residential care facilities, either through city partnerships or providing program outreach to facilities; and • Identifying opportunities within existing parks to incorporate aging and disability friendly best practices such as dementia friendly spaces. <p>Supporting and expanding age and disability friendly programming and events within existing public spaces, such as:</p> <ul style="list-style-type: none"> • Expanding sports and exercise opportunities for people with disabilities; • Supporting and expanding a variety of Rec and Park programs for young adults with developmental disabilities; and • Ensure programs and event best practices exist that are supportive of people with cognitive impairment and caregivers.
<p>Buildings, both public & private, should be accessible & inclusive.</p>	<p>Support existing efforts to ensure that small businesses are able to implement accessible modifications, including an accessible front entrance. Actions may include:</p> <ul style="list-style-type: none"> • Supporting the Accessible Business Entrance Program; and • Support efforts that support small business owners in being proactive about developing accessible solutions that are also financially sustainable.

GOALS	RECOMMENDATIONS
<p>Public right of ways, such as sidewalks, should be accessible & inclusive.</p>	<p>Identifying, developing and advocating for best practices to ensure that sidewalks are age and disability friendly, such as:</p> <ul style="list-style-type: none"> • Benches and seating options should be designed, installed, and available at key areas, such as transit locations, near public buildings, along commercial corridors, etc.; and • Sidewalks should be smooth, include accessible design (such as curb cuts), and be free of tripping hazards

III. SAN FRANCISCO ASSETS

Below are assets within the areas of **outdoor spaces & buildings**, 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 exist that allow residents to improve their neighborhoods.</p>	<p>Organizations, efforts, and streamlined policy processes encourage homeowners and business owners to green their neighborhoods, including:</p> <ul style="list-style-type: none"> ● Plant SF⁷: A streamlined process that allows homeowners in need of sidewalk repair to instead install a “permeable landscape” (see pg. 15) ● Front Yard Ambassadors program⁸: a program specifically for Sunset district residents, helps neighbors implement permeable sidewalks; and ● Friends of the Urban Forest⁹: installs city trees and project manages sidewalk gardens (including facilitating the permitting process). <p>Community members can engage in decision making or advocate for various improvements through efforts such as:</p> <ul style="list-style-type: none"> ● Park, Recreation and Open Space Advisory Committee: composed of community members from each district, advocates on behalf of residents; and ● Specific requests or complaints, such as needed curb ramps, graffiti or street cleaning, can be requested by contacting 311. <p>A range of community gardens are available for residents who don’t have access to yards, including:</p> <ul style="list-style-type: none"> ● Over 38 gardens managed and facilitated by Parks and Rec on city owned land; and ● Multiple educational and demonstration gardens, including an urban farm, Alemany Farm.
<p>There is a diverse range of parks & open spaces throughout the city.</p>	<p>San Francisco has an incredible park system, ranging from micro parks (or “parklets”) in dense urban areas to the rolling hills of McLaren Park in the Excelsior district, that offer residents a range of assets, including:</p>

⁷ <http://www.plantsf.org/>

⁸ <http://sfbos.org/supervisor-tang-front-yard-ambassadors-program>

⁹ <https://www.fuf.net/>

ASSETS	EXAMPLES
	<ul style="list-style-type: none"> ● Accessible Rec and Park facilities, including: public pools have swimming chair lifts, an accessible golf cart, 2 out of 6 golf courses are fully accessible, and all centers and programs offer accessibility options; ● Parklets¹⁰ Program: piloted in 2010, these small public spaces are often installed along commercial corridors, include seating and public art; ● Golden Gate National Recreation Areas¹¹: which includes both public spaces and parks, such as Crissy Fields, the Presidio, Fort Funston, the Cliff house, Alcatraz and others are managed by the National Park Service; ● Temporary Street Plazas: conversion of a street to a pedestrian only space. Typically proposed and sponsored by neighborhood organizations, associations, or nonprofits to create a sense of community; ● Urban Forestry (DPW) and Friends of the Urban Forest: efforts to increase the urban canopy; and ● SF is the first city where all residents are a 10min walk from a park (or a half mile)¹². <p>Specific parks that were designed and developed primarily with seniors and/or people with disabilities in mind, including:</p> <ul style="list-style-type: none"> ● The SF Botanical Gardens Garden of Fragrance¹³ was designed for people with disabilities, particularly visually impaired, that allows a full experience through smell and touch; ● Please Touch Community Garden¹⁴, specifically designed to be accessible for all in an adjacent lot next to Lighthouse for the Blind; and ● The proposed “senior playground and fitness center” within District 1: is in the works to be developed in the coming years.

¹⁰ Technically referred to as “Temporary Sidewalk Extensions”, guidelines here: http://pavementtoparks.org/wp-content/uploads/2015/12/SF_P2P_Parklet_Manual_2.2_FULL1.pdf

¹¹ <https://www.nps.gov/goga/index.htm>

¹² <http://www.sfchronicle.com/bayarea/article/SF-1st-city-in-nation-with-a-park-10-minute-walk-11150987.php>

¹³ <http://www.atlasobscura.com/places/garden-of-fragrance>

¹⁴ <https://communityofgardens.si.edu/items/show/12147>

ASSETS	EXAMPLES
<p>Policies exist to ensure livable streets, buildings, & communities.</p>	<p>A range of city programs exist to keep the city clean, including:</p> <ul style="list-style-type: none"> ● Adopt a Street (Dept of Public Works): groups or individuals adopt an area and take responsibility for keeping the street, sidewalk, and storm drain clean; ● Community Corridors (DPW): employs under- or unemployed people to maintain sidewalks along commercial corridors; ● Community Clean Team (DPW): volunteer program that focuses on neighborhood beautification such as landscaping, graffiti removal, and litter cleanup; ● Spruce Up by Sun Up (DPW): is an inspection program where DPW inspectors set out before dawn to look for and address issues such as inadequate garbage service, graffiti or blight; and ● 2012 Clean and Safe Neighborhood Parks Bond (Recreation and Parks): a voter approved bond that designated an additional \$195 million for neighborhood park repairs and construction. <p>Programs and policies are in place to ensure a minimum level of accessibility for buildings, both public and private. Specifics include:</p> <ul style="list-style-type: none"> ● The ADA, Title III¹⁵: prohibits discrimination on the basis of disability in the activities of places of public accommodations, or businesses that are generally open to the public, and commercial facilities (see pg. 17); and ● The Accessible Business Entrance Program¹⁶: an ordinance passed by the Board of Supervisors, the program is a collaborative effort to provide technical guidance that will assist small business owners with meeting accessibility regulations of the State of California. <p>That efforts exist to address equity and access, including:</p> <ul style="list-style-type: none"> ● Park Prescription¹⁷: facilitates access to parks through a medical “prescription” and support as a means for ensuring that underserved are able to access parks and public green spaces;

¹⁵ https://www.ada.gov/ada_title_III.htm

¹⁶ <http://sfdbi.org/businessentrance>

¹⁷ <http://www.parkrx.org/>

ASSETS	EXAMPLES
	<ul style="list-style-type: none"> ● Curb Ramp Program, DPW¹⁸: aims to provide accessible path of travel for all public sidewalks throughout San Francisco; and ● Programs to improve safety such as community-oriented policing and Project SAFE. <p>There are a range of related policies that guide and ensure improved streets for all users (often called “complete streets”), particularly pedestrians and public transit, including:</p> <ul style="list-style-type: none"> ○ Better Streets¹⁹ Policy: adopted in 2006, ensures that streets are for all types of transportation, particularly walking and transit and requires City agencies to coordinate the planning, design, and use of the public rights-of-way; ○ Better Streets Plan: adopted in December 2010, provides a comprehensive set of guidelines for design of pedestrian realm and how streets can be used as public space; and ○ Complete Streets Policy: within Public Works code, requires the city to include pedestrian, bicycle, and streetscape improvements as part of any planning or construction within the public right-of-way.

¹⁸ <http://sfpublicworks.org/curbrampprogram>

¹⁹ “Better Streets are designed and built to strike a balance between all users regardless of physical abilities or mode of travel. A Better Street attends to the needs of people first, considering pedestrians, bicyclists, transit, street trees, stormwater management, utilities, and livability as well as vehicular circulation and parking.”#

IV. SAN FRANCISCO GAPS

Below are identified gaps within the area of **outdoor spaces & buildings**. 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>Potential challenges with park access for seniors & people with disabilities.</p>	<p>Access and use of public parks and park programming may not be equitable among seniors and people with disabilities, including:</p> <ul style="list-style-type: none"> • Seniors and people with disabilities were less likely to report usage of parks and rec programs in the last year (may be lack of information); and • Available accessibility information is not specific enough for organizations or individuals to identify whether their needs will be met.
<p>Challenges exist in accessing public spaces & buildings.</p>	<p>Either current conditions or design may limit the ability of seniors or people with disabilities from accessing and utilizing public spaces, including:</p> <ul style="list-style-type: none"> • Conditions of sidewalks, streets, and pavements can be challenging, including cracks, lack of curb cuts, lack of sidewalks near green spaces, steep streets and crowded commercial districts that don't allow for a wide enough travel path; • Ensuring that parks and public spaces also include quiet spaces for those who prefer or are hard of hearing, such as a bench away from a playground; and • Safety concerns related to the lack of streetlights or not feeling welcomed in public parks (such as current park occupants), lack of seating/accessibility, or lack of available restrooms. <p>While local commercial corridors were greatly appreciated, challenges were identified with accessing individual businesses, including:</p> <ul style="list-style-type: none"> • Concerns that retail stores would benefit from being more age and disability friendly, with regards to service, accessibility, and assistance when needed; • Some neighborhoods are considered food deserts, or areas that

	<p>lack fresh food and grocery stores; and</p> <ul style="list-style-type: none"> • Many small businesses do not have accessible front entrances.
<p>Limited opportunities or lack of awareness about available opportunities.</p>	<p>A need exists for a range of programs and events for both people with disabilities as well as seniors, with an emphasis on supporting or expanding the following:</p> <ul style="list-style-type: none"> • Lack of exercise opportunities for people with disabilities; and • Focus group participants wanted more organized outdoor activities, such as picnics and intergenerational events.

APPENDIX A. OTHER AGE & DISABILITY FRIENDLY EFFORTS

A. BEST PRACTICES.

Parks & Outdoor Spaces

- **Portland, OR: Memory Garden²⁰**: a sensory garden where plants and paving are planned intentional to support the reduced capacity of people with dementia, including paving with reduced glare, sidewalk edges are differently colored and raised curbs. Additionally, there is only one entrance/exit, with a winding loop to prevent wandering off and extra-large bathrooms, that allows caregivers or family members to assist if needed.
- **“Project Play” playgrounds, Roseville, CA**: an effort to create 3 fully-inclusive, universally accessible playgrounds in Roseville. See article in local paper about the effort [HERE²¹](#).
 - **Additionally**, there are 3 playgrounds in San Francisco that are include accessible or inclusive design elements. See entire list of inclusive CA playgrounds [HERE²²](#).
- **Philadelphia, PA**: has developed a checklist for age-friendly parks (not yet publicly available).
- **Seattle, WA – Trailblazer App²³**: an app run by Seattle Parks and Recreation that is meant to get people out on the trails and report any problems. Came about after a hackathon, where volunteer developers used trail data. Clicking on a trail, you can immediately find out any obstacles it may have, like stairs or gravel and it allows you to report issues like a tree down.
- **NYC, ParentPatrol²⁴**: an app that users can “report drunks, drug users, and unsavory adults hanging around parks and playgrounds” to the City police and parks dept. Potentially includes additional challenges and/or discrimination.
- **City of Virginia Beach, VA²⁵**: offers a Virginia Beach Events app that includes City public meetings, park and recreation events, and more
- **Japan, Shinrin-Yoku²⁶**: or “forest bathing” is the practice of taking a short, leisurely visit to a forest for health benefits. A means of mobile meditation, shinrin-yoku has been recognized and encouraged by the Japanese government since 1982, as a way to improve quality of life.
- **Singapore’s HortPark²⁷**: a therapeutic park for older adults, specifically for those who are post-stroke and/or have dementia. Colorful design includes shade, plants that can be touched, smelled and seen, walkways that accommodate wheelchairs, and seating for caregivers.

Streets

²⁰ <https://www.asla.org/Portland/site.aspx?id=43611>

²¹ <http://roseville.ca.us/civicax/filebank/blobdload.aspx?blobid=11800>

²² <http://www.accessibleplayground.net/united-states/california/>

²³ <http://www.wta.org/our-work/about/trailblazer-mobile-app>

²⁴ <http://www.nydailynews.com/news/politics/new-app-lets-users-report-shady-activity-nyc-parks-nypd-article-1.2855924>

²⁵ <https://www.vbgov.com/mobile-apps/Pages/default.aspx>

²⁶ <http://www.latimes.com/health/mentalhealth/la-he-forest-20150221-story.html>

²⁷ <https://www.citylab.com/solutions/2016/11/garden-hort-park-singapore-elderly/506303/>

- **Seattle, WA, Access Map²⁸**: an online tool that will allow Seattle pedestrians to enter addresses and generate customized walking directions. Users can request maps that include only routes with sidewalks with sloped “curb cuts” that allow strollers and wheelchairs to easily pass, and that bypass construction sites and exclude the steepest streets. The Access Map also includes walking paths through parks and green spaces.
- **Berkeley, CA²⁹**: has installed permeable concrete on specific streets as a demonstration project, which has many benefits including absorbing rainwater rather than sending to storm drain, improving better heat dispersal, and requiring less maintenance than traditional asphalt streets.

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

Table 1: Honolulu, HI. Age Friendly DC: Strategic Plan (2014-2017)³⁰

Domain: Outdoor Spaces and Buildings	
<p>Vision: We envision an outdoor environment that is clean, well designed and well maintained. There are many trees to offer shade, paths for walking and spaces to rest that can be used by people of all ages. Sidewalks are wide and include street trees and lighting. Public restrooms are available, clean and safe. Buildings are accessible, even to people with limited mobility. People of all ages and abilities are able to move about with ease, enjoy Honolulu’s sunshine and natural beauty, and share the Aloha spirit with one another.</p>	
GOAL	RECOMMENDATIONS
<p>Outdoor spaces free of criminal activity and vandalism.</p>	<ul style="list-style-type: none"> ● Implement Crime Prevention Through Environmental Design (CPTED) in outdoor spaces ● Increase Honolulu Police Department monitoring ● Foster community pride: create a community ambassador program staffed by volunteers
<p>Accessible spaces that accommodate persons with a range of disabilities.</p>	<ul style="list-style-type: none"> ● Maximize wayfinding for persons of all abilities: create standardized signage ● Maximize accessibility for all at public beaches and parks: modify walkways ● Specialized accessibility features in parks are available: create dementia-friendly spaces within parks, implement beach wheelchair programs, create universally designed spaces for people with mobility issues, and develop public relations campaign to publicize accessible parks
<p>Outdoor spaces with services and</p>	<ul style="list-style-type: none"> ● Services and amenities are available and accessible: create software

²⁸ <https://accessmap.io/>

²⁹ <http://www.berkeleyside.com/2014/08/08/berkeley-installs-first-permeable-pavers-downtown/>

³⁰ <https://agefriendly.dc.gov/publication/age-friendly-dc-strategic-plan-2014-2017>

Domain: Outdoor Spaces and Buildings	
<p>Vision: We envision an outdoor environment that is clean, well designed and well maintained. There are many trees to offer shade, paths for walking and spaces to rest that can be used by people of all ages. Sidewalks are wide and include street trees and lighting. Public restrooms are available, clean and safe. Buildings are accessible, even to people with limited mobility. People of all ages and abilities are able to move about with ease, enjoy Honolulu’s sunshine and natural beauty, and share the Aloha spirit with one another.</p>	
GOAL	RECOMMENDATIONS
amenities nearby.	application that identifies services and amenities in public parks, develop a range of amenities in public parks, install automated external defibrillators (AED’s) in public parks
Clean and attractive outdoor spaces.	<ul style="list-style-type: none"> • Increase trees and other greenery • Increase and maintain public restrooms: increase number of restrooms in underserved areas, implement service agreements with vendors, use ozone generators in public restrooms to clean and minimize odors • Improve waste stations: use combination waste/recycle/compost stations in place of regular trash cans
Multigenerational/multi-use spaces	<ul style="list-style-type: none"> • Promote outdoor fitness and health: create multigenerational fitness and play areas for use by all ages, create maps and signs that incorporate distance information to promote fitness • Use creativity in developing gardens and parklets: expand Honolulu’s community recreational gardening program, develop parklets to encourage and support street life, walking and biking, develop healing gardens adjacent to health care facilities

Table 2: New York City, New York. Age Friendly NYC (2009)³¹

Safe & Age-Friendly Public Spaces	
Issue	Initiative
Many bus stops lack seats or shelters.	Increase seating in bus shelters.
Unexpected delays in transit and poor weather can make access to restroom facilities difficult for older adults.	Install public restrooms at key locations citywide.
There are few places to sit and some sidewalks are crowded and have various obstacles.	Create new, pedestrian friendly public spaces while calming traffic.

³¹ http://www.nyc.gov/html/dfta/downloads/pdf/age_friendly/agefriendlynyc.pdf

Pedestrian safety is a concern for older adults.	Redesign street intersections at key locations citywide to improve safety for older New Yorkers.
Some older adults feel that certain parks are at times too crowded and their programs geared to the younger population.	Identify age-friendly parks and encourage older adults to utilize them.

Table 3: Age-Friendly Manchester work plan, 2016-2017³²

Age Friendly Neighborhoods	Goal: To create age-friendly neighborhoods that enable older people to be involved in their local area.
To support older people to deliver and participate in community projects and activities.	<ul style="list-style-type: none"> • Develop neighborhood age-friendly plans. • Support the coordination of existing age-friendly locality networks. • Support new community led locality networks. • Support the naturally occurring retirement community project. • Pilot local age-friendly culture projects. • Develop age-friendly design, including research, promoting age-friendly design principles and developing resources.

APPENDIX B. RELATED RESEARCH & REFERENCES

Pleasant, vibrant & clean environment:

“Outdoor activities happen in 3 ways: necessary activities, optional activities and social activities - when an outdoor area is of poor quality, only strictly necessary activities occur. When areas are of high quality, necessary activities take place with same frequency but tend to take longer, as physical conditions are better...in streets and city spaces of poor quality, only the bare minimum of activity takes place. People hurry home. In a good environment, a completely different, broad spectrum of human activities is possible”³³

- **The popularity of the “20 minute neighborhood” idea:** where residents can walk or bike to all essential activities, including shopping, recreation, etc. (excluding work) within 20 minutes.

³² http://www.manchester.gov.uk/downloads/download/6371/age-friendly_manchester_afm_work_plan_2016-17

³³ Gehl, *Life Between Buildings*.

There are a number of cities that are using to guide development and neighborhood resources, including:

- o <http://www.livablecities.org/articles/distance-destinations-density>
- o <https://www.eugene-or.gov/1221/What-Is-The-20-Minute-Neighborhood-Asses>

Importance of green spaces:

Impact on mental/physical health:

- Streets and sidewalks make up 25% of SF's land area³⁴;
- Physical activity (or lack thereof) is a risk factor for depression;³⁵
- "Mixed land use, street connectivity, and residential density are the built environment attributes more consistently related to total physical activity. These attributes are measured in various ways relying on such sources zoning data, mapping data, and self-report surveys, and the compiled data are managed using GIS technology...older adults residing in neighborhoods with mixed land use typically engage in more total physical activity than do those in single-use neighborhoods. Having destinations within 1 km or 0.5mile has been related to more total physical activity."³⁶
- In a nationwide study in Holland, **the greener the neighborhood the lower the prevalence of sixteen medical conditions**, including joint pain, depression, anxiety, headaches, and even coronary heart disease and diabetes.
- In Tokyo, nearby **parks and tree-lined streets were associated with longer survival** among elderly residents³⁷;
- **Elders were less likely than other age groups to visit a park**. Also, **older females tend to use parks less**, thus implying that older females may face additional challenges in accessing or utilizing parks.³⁸

Green spaces & Creation of:

- **Permeable Landscaping:** also called pervious pavement, is generally a sidewalk or streetscape design that allows water and air to penetrate the soil and may include plants, trees, rocks or other materials. Permeable landscaping has many benefits for both neighborhoods and the city at large, including:
 - reducing city warming (by absorbing heat rather than reflecting it)
 - beautifying a neighborhood
 - reducing storm sewer loads
 - creating habitats for birds, butterflies, and other wildlife
 - increasing property values
 - increases oxygen production, and more.

34

http://pavementtoparks.org/wp-content/uploads//2015/12/SF_P2P_Parklet_Manual_2.2_FULL1.pdf

³⁵ Dannenberg, Frumkin, and Jackson, *Making Healthy Places*.

³⁶ Dannenberg, Frumkin, and Jackson, *Making Healthy Places*.

³⁷ Dannenberg, Frumkin, and Jackson, *Making Healthy Places*.

³⁸ Loukaitou-Sideris, Levy-Storms, and Brozen, "Placemaking for an Aging Population: Guidelines for Senior-Friendly Parks."

This is especially important in San Francisco, which has a **combined sewer system**, meaning that rainwater mixes with wastewater and is collectively sent to treatment plants.

More on the benefits of permeable sidewalk can be found here:

[https://caseagrant.ucsd.edu/sites/default/files/GS6 Permeable Paving.pdf](https://caseagrant.ucsd.edu/sites/default/files/GS6%20Permeable%20Paving.pdf)

Impermeable landscape as opposed to permeable is when a sidewalk or streetscape is covered by impermeable sources (pavement, sidewalks, buildings, etc.) and water must be diverted by way of treatment plants to major waterways (ocean and bay). Images below highlight the differences.



Image 1: Permeable Landscape example. multiple permeable landscaping installations, courtesy of Friends of the Urban Forest (FUF).



Image 2: Impermeable landscape example. A back alley with zero permeable surface - all rain water must be diverted and no soil is exposed.

See also a video of extensive permeable landscaping along Shotwell Street in the Mission District, including a permeable driveway: <https://www.youtube.com/watch?v=NvvvpXM6tb8>

- **Parklets:** are small “pocket” parks, generally next to sidewalks or in former parking spaces. They are funded and maintained by neighboring businesses, residents, and community organizations, but they are publically available and open to all. For example, parklets cannot have advertisements, logos, or other branding.

The goals of SF Parklets include:

- Reimagine potential of city streets
- Encourage non-motorized transportation
- Encourage pedestrian safety and activity
- Foster neighborhood interaction
- Support local businesses

Accessible requirements include³⁹ accessible path of travel, accessible entry, accessible deck surface, wheelchair turning space, wheelchair resting place, companion seating, equivalent facilities, terraced or multi-level parklets, specific requirements regarding ramps, steps, and stairs. (pgs. 45-46)

Dementia Friendly Considerations: Open Spaces & Public Buildings:

Parks, buildings, and open spaces should be dementia friendly:

- Signs should be clear in bold typeface with good color contrast between text and background; contrast between the sign and the surface it's mounted to; be fixed to the doors they refer to, not adjacent surfaces; be at eye level and well lit; indicate locations of bathrooms and exits; be placed at key decision points someone trying to navigate premises for the first time; and ensure that glass doors are clearly marked.
- Entrances should be well lit, utilizing natural light as much as possible – avoid bright light and deep shadows
- Flooring: avoid highly reflective and slippery floor surfaces, and ensure that all changes in floor be flush.
- Seating is provided in larger premises, especially where individuals are waiting. Make sure seating looks like seating, rather than abstract shapes.⁴⁰

Sidewalks:

How big should sidewalks be? The minimum width to be compliant with the ADA is 36" in width but California and San Francisco require 48" (or 4ft) and widening to 5 ft at least every 200ft.

Who is responsible for the sidewalks? As is the case with most US cities and the majority of California cities, the homeowner is responsible for the sidewalk adjacent to their home and up to the curb, whereas the SF Department of Public Works is responsible for the curb and the street (based on California Streets and Highways Code section 5610).

³⁹ http://pavementtoparks.org/wp-content/uploads//2015/12/SF_P2P_Parklet_Manual_2.2_FULL1.pdf

⁴⁰ Wisconsin Department of Health Services (n.d.)

However, if you have a tree on your sidewalk or there is sidewalk damage due to tree roots, **Proposition E** (approved by the voters in 2016) transferred care of street trees from property owners to the City of San Francisco (starting July 2017). Essentially the city is responsible for maintaining all street trees, and repairing all tree-related sidewalk damage in the public right of way. If a homeowner is still responsible for any sidewalk damage not caused by trees.

The politics of who is responsible for sidewalk repair: many cities struggle with determining who should be responsible for ensuring that sidewalks are safe and accessible. In areas where there is legislation requiring the city, the scope and cost is far beyond the capacity. For example, Los Angeles assessed their sidewalks in 2010 and realized that 4,700 of the city's 11,000 linear miles (about 43%) of sidewalk were in disrepair at an estimated cost of \$1.2-1.5 billion dollars. Similar to other infrastructure costs, many cities do not have sufficient funding streams to address sidewalk maintenance, especially after 30-50 years of deferred maintenance. Likewise, residents often question the fairness and legality of requiring property owners to pay for the repairs of the "public" sidewalk.⁴¹

New York, Philadelphia, and Cincinnati all require that property owners take full responsibility for adjacent sidewalks. Chicago has a "shared cost" model where the property owner pays repair costs per foot of a set amount and the city subsidizes any costs that exceed that amount.

Other options include requiring sidewalk repairs when a house is sold, presumably folding in the costs with the price of the property or when a permit is pulled over a certain amount. Some cities offer a 50/50 shared of costs. Memphis, Tennessee recognized that the sidewalk citations were a disproportionately burdening low to middle income homeowners, with property owners unable to pay for repairs ending up in court. They developed a program that would provide public assistance to property owners who meet specific income guidelines (such as a combined income of \$25,000 or less or fall below the federal poverty line).

Accessibility:

ADA title III⁴² prohibits the discrimination on the basis of disability in the activities of places of public accommodation and requires newly constructed (after xxx) or altered places of public accommodation and commercial facilities to comply with ADA standards. ADA requires businesses to make "reasonable modifications" to their usual ways of doing things when serving people with disabilities. For example, a clothing store must modify a policy of permitting only one person at a time in a dressing room for a person with a disability who is shopping with a companion and needs the companion's assistance to try on clothes.

⁴¹ Hicks, "But It's Your Sidewalk! Sidewalk Repair and Liability."

⁴² https://www.ada.gov/ada_title_III.htm

Who needs to comply with ADA title III?

- Buildings built on or after January 1, 2002
- All public accommodations: which are defined by 12 categories and include restaurants, laundromats, bowling alleys, retail, theaters, bars, amusement parks, health spas, private schools, and more.
- Commercial facilities: such as office buildings, factories, and warehouses.

Who does not need to comply with ADA title III?

- Buildings and businesses owned or operated by a valid religious organization including places of worship.
- Buildings owned and operated by a bona fide “Private Club”
- Buildings that are not a “place of public accommodation”
- State and local government buildings, which are actually covered by Dept. of Justice’s title II regulation.

Common myths/misconceptions about ADA access and buildings:

- **Some buildings are grandfathered in:** Nope! Often, people think that older buildings, historical buildings or other businesses are “grandfathered in”, meaning they are exempt from ADA accessibility, which is wrong. Some historical buildings may claim a “unreasonable hardship” if ensuring accessibility is infeasible, but that is a process multiple parties must agree on.