

CHAPTER

6

Implementation

6.1 INTRODUCTION

Green Connections is a long term planning project which sets high ambitions for 115 miles of our streets. The plan puts forward a goal of implementing the network over a twenty year period.

Green Connections will not create a new program, rather, it calls for coordinating existing initiatives such as traffic calming and stormwater management, with the goal of creating a cohesive network of improved neighborhood walking and bicycling routes. The scale of the network creates opportunities to coordinate with city projects and private development. Additionally, community members and neighborhood groups will play an important role in the Network's development. This chapter summarizes the various ways the city implements greening and streetscape improvements, highlights opportunities to form neighborhood and city partnerships to fund and implement these improvements, and discusses funding and prioritization criteria for projects.

6.2 BUILDING A GREEN CONNECTION

The City anticipates a twenty-year time horizon to fully implement the Green Connections Network. Implementation is driven by factors such as funding availability and community support for improvements. This section discusses the evolution of a typical street into a Green Connection, and the evolution of these streets into a complete Green Connection Network.

Ongoing strategic planning will be required to fully realize the network. Implementation of much of the network will be achieved organically through coordination with ongoing streetscape improvements, new development projects, and community-initiated improvements. In some cases a Green Connection project will be accomplished through a comprehensive streetscape redesign. For example a redesign of Folsom street in SOMA will include sidewalk improvements, bicycle improvements, and significant plantings. Completing the Folsom Street Green Connections project, or other major streetscape projects, will require multiple years of planning and significant capital resources. These time- and resource-intensive projects will complete significant, core portions of the network. Green Connections projects at this scale are more likely to meet the multiple goals (public health, sustainability, and livability) of Green Connections within the scope of a single project.

However, more often, streets on the network will receive smaller improvements over time. For example a particular segment could at first receive wayfinding signage, and later the SMFTA might install some minor traffic calming devices, which could be followed by community members installing additional plantings along the route. While coordination of projects generally yields greater efficiency, over a twenty year timeframe it is reasonable to anticipate that some streets will realize the full Green Connections vision through incremental enhancements. As illustrated by several projects initiated over the past few years, such as those in the Pavements to Parks program, smaller interventions often serve as catalysts for more significant improvements to a street.

Prioritization Considerations

There are a number of considerations that can influence which segments of the network are prioritized for earlier implementation over the twenty year life of the plan. Implementing agencies will integrate the criteria discussed below with criteria for their existing specific programs. For example the SFPUC will also consider stormwater management priority areas within the network, and may choose to prioritize improvement to a portion of the network based on their specific

goals. This section discusses considerations for prioritizing improvements to specific segments of the network over time.

CONSIDERATION: CONNECTIVITY - CLOSE GAPS IN THE NETWORK.

To best enhance the usability and accessibility of the network, connectivity should be an important consideration.

Intersections, such as those that are difficult to traverse or that have high traffic volumes, or “hotspots,” are critical barriers in the network that should be improved. Ensuring that all streetscape users, regardless of ability, can comfortably cross arterials will make the network more usable for everyone, and ensure the network’s ability to accommodate vulnerable populations like children, seniors and people with disabilities. Arterial crossings should prioritize the needs of vulnerable users and should be considered a high priority for early implementation projects along the network. The planning process for Green Connections identified a preliminary list of key hotspots for early investment.

Projects can link improved and well-functioning portions of the network to increase the overall reach of the network. While many users will

generally utilize the Green Connections Network for short trips to their neighborhood parks, some users will benefit from a network that safely links them to a wider portion of the City. Strategic early implementation projects can result in a core piece of the entire network that links parks across the City.

CONSIDERATION: CONNECTIONS TO PARKS

Improvements to portions of the network directly adjacent to a park have the benefit of serving the largest number of park users and should be prioritized. These areas also have a greater ability to enhance urban ecology, serving as habitat corridors or patches supporting habitat found in parks.

CONSIDERATION: GEOGRAPHIC EQUITY

All areas of the City should have access to the Green Connections network; accordingly early implementation of the network should service multiple neighborhoods, especially areas currently most deficient in access to parks or open space.

CONSIDERATION: BENEFIT SENIORS AND CHILDREN

Green Connections includes the goal of benefitting vulnerable populations, particularly seniors and children. Although each segment of the network will benefit these users to some degree, the City should consider prioritizing locations near schools and seniors centers, especially those in close

proximity to a park. Schools and senior centers also provide an opportunity for education and community building programs. These communities could steward specific portions of the Green Connection network that are adjacent to their spaces, resulting in excellent additions to the Green Connections network, such as sidewalk gardens, artwork, and educational installations about target species and habitat.

CONSIDERATION: EQUITABLE STANDARDS ACROSS THE NETWORK

Many portions of the Green Connections network were selected because they already exhibit at least some of the characteristics of a Green Connection. For example streets with low traffic volumes, slower traffic, and ample greening were included in the network whenever possible. However some portions of the network do not perform well relative to some or all of these metrics. The City should improve conditions in underperforming portions of the network. For instance, a portion of the network with lower than average street tree coverage should be prioritized for greening. Likewise, a portion of the network with higher than average traffic speeds or volumes should be prioritized for traffic calming, as appropriate.

CONSIDERATION: COMMUNITY PARTNERSHIP

The City should prioritize implementation of Green Connections improvements in areas where the community members request and advocate for

improvements. Building on community support results in projects that are used with higher frequency, and projects that reflect local needs and opportunities.

In cases where community members complete streetscape plantings and implement other placemaking elements, the City should prioritize complementary traffic calming and related improvements, as appropriate. When city funding is not available for improvements requested by the community, the City should work with community members to identify funding and other resources to realize community-led projects.

CONSIDERATION: LEVEL OF INTERVENTION

The level of intervention should be determined based on factors such as existing conditions, the role of the street within the larger city system, and funding. See sidebar on page 51 for more information.

6.3 IMPLEMENTING GREEN CONNECTIONS: PROJECTS DELIVERED BY THE CITY

Many of the types of improvements identified in this plan are consistent with ongoing work completed by various city agencies. Much of the network will be built through coordination of ongoing streetscape projects as well as new projects identified as a result of this planning process. Improvements that include traffic calming, bicycle amenities and pedestrian safety measures will be delivered by various city agencies. The City agencies should work to coordinate ongoing and future projects when they work on the Green Connections network.

The City's streetscape projects are generally built by the Department of Public Works (DPW), the San Francisco Municipal Transportation Agency (SFMTA) and the San Francisco Public Utilities Commission (SFPUC). Because many Green Connections will involve both a greening component and a streetscape component, it is important that agencies reach out to one another early on. The Planning Department works closely with these agencies to ensure that the ideas, plans and designs that are generated through Department-led community planning efforts can be realized on the ground. This section discusses the roles of these agencies in developing the Green Connections network.

San Francisco Municipal Transportation Agency (SFMTA). The SFMTA is responsible for implementing transportation improvements, including Muni operations, bike and pedestrian programs, and traffic control operations. Many Green Connections projects will be coordinated with planned and funded SFMTA projects related to traffic calming, school area safety, and bicycle and pedestrian improvements.

SFMTA will deliver all of the traffic calming measures on the Green Connections network, ideally in coordination with ongoing and future work. The SFMTA implements traffic calming measures through holistic streetscape projects such as the recently implemented Valencia Street improvements or the Cesar Chavez Street Design, or through more focused efforts, sometimes based on requests from residents.

The SFMTA may develop a traffic calming program that targets arterial streets. This program could include improvements to "hotspot" intersections where arterials intersect with the Green Connections Network. SFMTA should prioritize improvements to these intersections.

Looking to the next phase of bike projects, the SFMTA released the Bike Strategy in 2013 which outlines goals, objectives and targets for

bicycling for the next five years. The Bike Strategy emphasizes the importance of connectivity and comfort for increasing the bike mode share in San Francisco. The Green Connections network shares the ambition of improving connectivity. Future SFMTA bicycle projects, will include enhancements to a significant portion of the Green Connections Network, especially those portions that are on the existing bicycle network.

The SFMTA's Capital Improvement Program (CIP) details scope, schedule, budget and funding source for planned projects over a rolling 5 year period. Currently the Sustainable Streets Division's CIP are informed by the SFMTA Strategic Plan, the Bicycle Strategy, the Pedestrian Strategy, and the Traffic Calming Program. The Green Connections Plan and related projects will be included in future SFMTA CIPs.

Starting with the 2015-2019 CIP, the SFMTA will set aside funding that is specifically intended to be used for prioritizing, planning, and implementing changes along the Green Connections network to make walking and bicycling safer and more comfortable. Where appropriate, the SFMTA should coordinate with SFPUC, DPW or community members to expand projects to include ecology and placemaking components.

Department of Public Works (DPW). Paving projects largely drive the location and schedule for capital improvements along City streets. Coordinating pedestrian and bicycle projects with repaving projects presents an opportunity to leverage multiple funding sources and deliver projects more efficiently. Coordinating construction can result in time and budget savings, as well as minimize the disruption of neighborhoods.

When a street is slated for repaving, DPW generally reviews potential opportunities to coordinate repavings with enhancement projects. Community support, the development of a conceptual design, the level of environmental review and funding availability are considerations in determining if additional improvements could be incorporated into the repaving project. When a Green Connection project is slated for repaving, DPW should consider opportunities to incorporate greening, traffic calming and/or placemaking. Follow the paving funds, or related Green Connections funds should support enhancements to repaving projects along Green Connections.

San Francisco Public Utilities Commission (SFPUC). The SFPUC implements water and sewer capital projects across the City. Capital projects that involve curb work or work within the intersection can provide coordination opportunities to build a section of the Green Connections network. The scope of these projects varies based on the need and purpose of the project. For example,

sewer replacement and repair projects generally involve digging a small trench in the middle of the street. For these projects, coordination opportunities may be more limited because the scope of the project is already defined. However, larger projects, such as the replacement of a sewer line, could offer synergies and opportunities to coordinate.

Water projects are a good example of coordination opportunities, as they often include a few blocks and/or the intersection. For these projects, the Planning Department could help to identify projects early so there is an opportunity to develop a design, get community feedback and help to seek additional funding in advance of developing a construction schedule. A coordinated project can help the City to meet multiple objectives through one coordinated effort, and can also help to minimize neighborhood disruption.

The Sewer System Improvement Program (SSIP) is a 20-year program to upgrade sewer infrastructure across the City. The program includes upgrades to grey infrastructure, including pipelines, pump stations and treatment facilities. The program also includes green infrastructure projects, such as rain gardens, bioswales, and permeable paving, aimed at minimizing stormwater impacts on the sewer.

The SFPUC has identified eight green infrastructure projects as part of the first phase of the SSIP. For these projects, the SFPUC is leading a community planning effort to develop a new streetscape

design that helps also to minimize stormwater impacts on the sewer system. Many of these projects are comprehensive streetscape designs that could include green infrastructure as well as traffic calming elements in line with the goals and vision for Green Connections.

For more information:
<http://sfwater.org/index.aspx?page=614>

Department of Public Health (DPH). The primary goal of the Green Connections project – to increase access to parks, open space and the waterfront by re-envisioning City streets as “green connectors” – is closely tied to the San Francisco Department of Public Health’s (SFPDH) priorities of increasing physical activity, reducing pedestrian injuries, and increasing access to active public spaces. There are several initiatives and projects that could be leveraged to further these overlapping goals and support implementation of the Green Connections network.

In December 2012, SFPDH released the San Francisco Community Health Improvement Plan (CHIP). Development of the CHIP resulted from a 14-month long community health assessment and outreach process, which engaged more than 160 community residents and health system partners to identify key health priorities for the city. For each key health priority, SFPDH and its partners identified goals, objectives, and related implementation measures. As SFPDH transitions into implementation of the CHIP, there are several

health priorities and objectives that would mutually benefit SFDPH and the Planning Department in support of implementing the Green Connections network.

For more information:
https://www.sfdph.org/dph/files/chip/CHIP_FullReport_UPDATED04052013.pdf

Another opportunity for collaboration between SFDPH and the Planning Department in the context of the Green Connections network is the Safe Routes to School Program (SR2S). The goals of SR2S match very well with the goals of Green Connections. Safe Routes to School event days, such as Walk and Bike to School Day, could be ideal opportunities to engage community members and strengthen neighborhood support for Green Connection routes in strategic areas of the City.

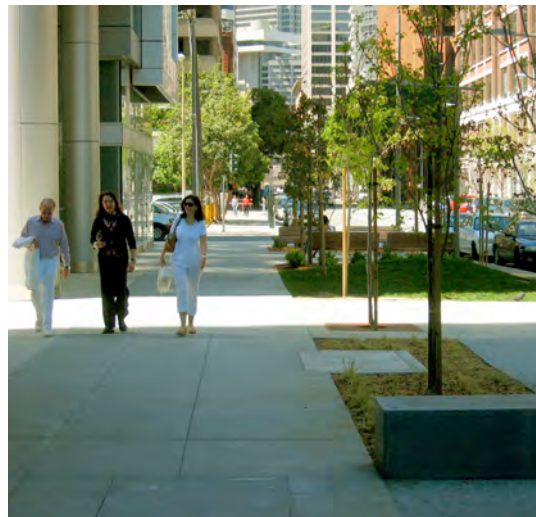
For more information:
<http://sfsaferoutestoschool.org/>

6.4 IMPLEMENTING GREEN CONNECTIONS: COORDINATING WITH PRIVATE DEVELOPMENT

Much of the City recently benefited from a long range planning process, which aims to coordinate development with the necessary infrastructure. These area plans identify opportunities to implement Green Connection routes. In addition, some of these plans have established a new fee on new development, also called an “impact fee”, to fund new infrastructure. Revenue from these fees should support Green Connections projects in some plan areas.

In some instances, private development projects may fulfill the requirements of applicable development fees through an in-kind agreement. In this scenario, the private developer would build the improvements rather than contribute fees.

A mechanism to fund landscaping and greening along Green Connections, is through the street tree requirements outlined in Planning Code Section 138.1. The specific requirements vary depending on the type and scale of a project, however, new and replacement trees could be prioritized along Green Connections.



Rincon Hill: Spear Street Living Street

The Rincon Hill Plan calls for the creation of ‘living streets’ along Spear, Main, and Beale Streets, involving widening one sidewalk from 10 to 30 feet and incorporating landscaping, seating areas, and other public amenities to create linear parks along the sidewalk.

The adjacent development at 300 Spear Street was required to construct the first block of the living street on Spear Street between Folsom and Harrison Streets. Additional blocks are expected to be constructed by other private developments as part of their conditions of approval.

6.5 IMPLEMENTING GREEN CONNECTIONS: NEIGHBORHOOD-LED PROJECTS

Across San Francisco, dedicated residents and neighborhood groups have collaborated with city agencies to organize street cleanup and beautification events, create community gardens, advocate for streetscape and traffic safety improvements, and initiate other projects that make our neighborhoods healthier and more livable. When community members take the initiative to improve our public spaces, everyone benefits – participants can help ensure that projects that meet local needs and preferences, neighbors get to know one another, and over time residents may develop a greater sense of pride in their neighborhood, paving the way for additional community-building ideas and projects.

Building on the success of these grassroots efforts, Green Connections envisions a third implementation approach, Neighborhood-Led Projects, designed to enable local residents, business owners, and other community stakeholders to take a more active role in building out the network in close collaboration with the City. The concept builds on a number of recent programs designed to leverage the creativity and initiative of individuals in the development of the City's public spaces. For instance, property owners have created sidewalk gardens in front of their homes, replacing swaths of barren concrete with landscaped areas that enliven their streets and reduce stormwater runoff.

Residents have organized to create and upgrade over 100 new open spaces around the city through the San Francisco Department of Public Works' Streets Park Program, which allows residents and community groups to build gardens on underutilized DPW land, such as medians, utility right-of-ways, and other unused parcels. The sidebar (right) describes other inspiring examples where community members have organized to contribute creative, attractive, and well-used spaces to our urban landscape.

This section describes the process of how community members can become active participants in shaping and developing Green Connections routes, and the accompanying Community Resource List (page 109) provides examples of programs, grants, and other resources available to help. For additional information on permitting, funding, street design elements, and other how-to info, visit the Better Streets website at www.sfbetterstreets.org.

Getting Started

Most successful neighborhood-led projects start as a single, compelling idea by an individual or small group of neighbors, which eventually catches on and gains the support of the broader community. Getting these ideas off the ground can require years of organizing, fund-raising, and planning, not to mention countless hours of volunteer sweat equity. Although specific needs will vary according to the project, most will need the following:

- » City Approvals
- » Neighborhood Support
- » Resources
- » Maintenance & Stewardship



City Approvals: Multiple City agencies have jurisdiction over elements of the streetscape. The types of requirements, permits, and fees that apply to your project depend on the type of improvements you wish to see. For instance, the process to develop a sidewalk garden solely in front of your own home is relatively simple, requiring a Sidewalk Landscaping Permit from SFDPW. If a project idea involves

multiple properties or changes to other areas of the right-of-way (such as roadways, utilities, and lighting), there may be a more extensive process of approvals – these types of projects tend to be initiated by organized groups, such as neighborhood associations or Community Benefit Districts, rather than by individual residents. The Better Streets website (www.sfbetterstreets.org) details the approvals process for a range of streetscape improvements.



Neighborhood Support: To the extent possible, project sponsors should aim to get approval from all stakeholders who might be impacted by the project – for instance, a neighborhood that is interested in developing a play street will want to make sure all property owners and residents on affected blocks have an opportunity to provide feedback. Hosting or attending community events – presenting

at neighborhood associations, holding a block party or street cleanup event – can build goodwill, allow people to voice their ideas and concerns, and encourage longer-term stewardship of the project. Gaining community support can be critical to attract resources. For instance, some grants and programs are only available to nonprofit organizations, neighborhood associations, and other legally incorporated groups. Your district supervisor could also be a great source of support, providing information on funding and other resources, as well as connections to other community members and organizations likely interested in the project.



Resources: Funding is likely to be the main barrier to implementing great ideas, but there are many programs and resources that could provide support. The City has programs and grants geared towards supporting community groups that beautify and strengthen their communities, while local businesses, philanthropic organizations, and individuals

could provide funding, in-kind donations, and other support. The Green Connections Community Resource List profiles just a few of these resources, listed below.



Maintenance & Stewardship Plan: Project sponsors should consider maintenance and other ongoing needs early on in the process so that they can be incorporated into the project's design. For instance, a landscaping project could incorporate hardy, drought-tolerant plants that require little irrigation, and seating and other street furniture could

be designed with durability and ease of cleaning in mind. Ideally, this plan will also designate which individuals or groups will assume responsibility for the project, particularly for larger, more complex projects. A community benefit district (CBD) or other local neighborhood association could adopt a project, overseeing maintenance and handling other issues that arise. Alternatively, a group of enthusiastic residents could agree to take on stewardship, creating a more informal volunteer group that hosts regular cleanup and community-building events. Whatever structure is chosen, it is important to think realistically about what the ongoing needs of the project are, and what level of resources and commitment are needed from those responsible for maintenance.

Quesada Gardens



The [Quesada Gardens Initiative](#) started over a decade ago, when a couple of long-time Bayview Hunters Point residents had the idea to plant flowers and food in the public median along Quesada Avenue, a street then known as a magnet for crime and drug dealing. From this simple action, the initiative has grown to encompass many community-building opportunities, including a thriving network of backyard and community gardens, educational programs, public artwork, and community events. Over the years, the program has enlisted the support of thousands of volunteers and has been able to secure City, private, and philanthropic resources.

Guerrero Street



Neighbors on [Guerrero Street](#) were concerned about heavy traffic and fast speeds, and partnered with the neighborhood association, San Jose/Guerrero Coalition To Save Our Streets, to advocate for traffic calming solutions that would reduce traffic safety hazards while beautifying the street. The group successfully persuaded the City to pass legislation calling for a street redesign, which included reducing traffic from 6 lanes to 4 lanes, lowering speed limits, adding bike lanes, and greening the median with low-maintenance plants (which neighbors helped implement by raising funds and organizing planting days).

Pennsylvania St. Garden



In 2008, a few neighbors in Potrero Hill saw potential in a large, trash-strewn lot adjacent to a highway off-ramp, and with the help of many volunteers gradually transformed it into the thriving [Pennsylvania Street Garden](#), which provides walking paths, hundreds of species of native and drought-tolerant plants, seating, and a dog park. In order to obtain permission to use the space, residents worked closely with Caltrans, the SFDPH Street Parks program, and the San Francisco Parks Alliance, and the garden has been such a success that neighbors have started gardens in three other public sites nearby.

Shotwell Street



Neighbors on [Shotwell Street](#) in the Mission District have taken it upon themselves to green their street, one patch of sidewalk at a time. In 2004, a local resident decided she wanted to tear up a portion of sidewalk in front her home to build a garden, she realized that she would first need to learn to navigate the city approvals and permitting process. She ultimately succeeded in creating a beautiful garden in front of her home, inspiring many of her neighbors to follow suit and spawning a local organization, PlantSF, which provides information to other interested sidewalk gardeners around the city. In response to growing interest in sidewalk landscaping, SFDPW has streamlined its permitting process to encourage other gardeners to develop projects (see more information on Sidewalk Landscaping Permits in the Community Resource List, on page 109).

Visitacion Valley Greenway
















Over a period of 16 years, community members worked tirelessly to advocate for and build the [Visitacion Valley Greenway](#), six gardens on formerly vacant SFPUC right of way, that form a ribbon of green space across the neighborhood. Each garden has a different theme—a landscaped plaza, herb garden, community garden, agricultural plot, native garden, and children's garden—and incorporates public artwork, recycled materials, and elements such as seating and outdoor classrooms. The project has been embraced by the community: for instance Greenway founders worked with the City to integrate park design features into the redesign of Leland Avenue, the commercial street adjacent to one of the gardens; and local youth development organizations and schools regularly hold outdoor classes and gardening activities at the site. Among the many partners and supporters of the project are SFPUC, SF Recreation & Parks Department, the Trust for Public Land, and funders SF Beautiful, SF Parks Alliance, and the Community Challenge Grant.

Building community from the ground up: Neighborhoods develop vibrant public spaces

San Francisco has numerous examples of neighborhood-led projects, resulting both from City-sponsored programs as well as efforts that have sprouted up outside of existing programs.

Green Connections Community Resource List

The Community Resource List provides a snapshot of programs, grants, and other resources available to help community members in designing and implementing Green Connections. For additional information on permitting, funding, street design elements, and other how-to info, visit the Better Streets website at: www.sfbetterstreets.org

-  Active Transportation
-  Beautification
-  Commercial Corridors
-  Maintenance
-  Park Improvements
-  Public Art
-  Public Education
-  School Gardens
-  Stormwater Management
-  Street Trees
-  Streetscape Improvements
-  Urban Greening
-  Youth

Adopt-A-Street Program

Agency: San Francisco Department of Public Works (SFPDW)

Type: 

Description: The Adopt-A-Street Program is a partnership between the City and its merchants and residents, and is meant to create a cleaner, more pleasant street environment. Groups or individuals agree to adopt an area and take responsibility for keeping the street, sidewalk, and storm drain clean. In return, DPW provides free street cleaning supplies, and litter and compostable leaf bag pickup.

<http://www.sfdpw.org/index.aspx?page=1229>

Adopt-A-Tree Fund

Agency: San Francisco Department of Public Works (SFPDW)

Type:   

Description: The Adopt-A-Tree Fund was established to facilitate monetary donations to enhance and fund the urban forest. In addition to donations, the Adopt-A-Tree Fund includes administrative fees, permit fees, fines, and in-lieu fees (which developers pay when that remove or destroy street trees). Funds can pay for the planting and maintenance of trees under the jurisdiction of the Department of Public Works.

<http://www.sfdpw.org/index.aspx?page=645>

Community Benefits Districts / Business Improvement Districts

Agency: Various / San Francisco Office of Economic & Workforce Development (OEWD)

Type:   

Description: Community Benefit Districts (CBDs) strive to improve overall quality of life in targeted commercial districts and mixed-use neighborhoods through a partnership between the City and local communities. Property owners must vote to establish a CBD, a special assessment district that levies funds for community improvements, administered by a nonprofit organization created for this purpose. Many CBDs work on streetscape improvements and other projects meant to increase safety, economic development, and community cohesion.

<http://www.oewd.org/Neighborhood-Revitalization-Community-Benefit-Districts.aspx>

Community Challenge Grant Program

Agency: San Francisco Office of the City Administrator

Type:   

Description: The Community Challenge Grant Program (CCG), formerly known as the Neighborhood Beautification Fund, provides matching grants to local residents, businesses, nonprofits and other community groups to make physical improvements to their neighborhoods. The CCG focuses on projects that directly engage residents and businesses in working together to create green spaces, gathering places, public art, and other neighborhood amenities. The program is an important tool for enabling communities to take the lead in conducting small-scale improvements in their own communities.

<http://sfgsa.org/index.aspx?page=4264>

Community Opportunity Fund

Agency: San Francisco Recreation & Park Department (RPD)

Type:  

Description: The San Francisco Recreation & Parks Department (RPD) created the Community Opportunity Fund as part of the 2008 Clean and Safe Neighborhood Parks General Obligation Bond, to provide an opportunity for residents, neighborhood groups, and park advocates to initiate capital improvements in their parks. Projects must be located on land owned by RPD, and typically they leverage public funds with matching private gifts and volunteer sweat equity. Relevant past projects include pathway improvements in Panhandle Park, wayfinding signs around the McLaren Jerry Garcia Amphitheater, and a community garden along Geneva Avenue.

<http://sfrecpark.org/park-improvements/2008-clean-safe-bond/community-opportunity-fund/>

Invest in Neighborhoods – Economic Development Grants

Agency: San Francisco Office of Economic & Workforce Development (OEWD)

Type:  

Description: Invest in Neighborhoods is an initiative to provide focused, customized assistance to meet the specific needs of San Francisco's neighborhood commercial corridors. It includes grant opportunities for neighborhood groups and nonprofit organizations for projects that strengthen and revitalize neighborhood commercial districts.

<http://oewd.org/IIN.aspx>

Neighborhood Tree Planting

Organization: Friends of the Urban Forest

Type:  

Description: The Neighborhood Tree Planting program makes it easy and affordable for San Franciscans to get new street trees in their neighborhood, providing support with tree selection, city permits, planting, and maintenance. To be eligible, a group of property owners in a neighborhood must organize to request a tree planting event, meant to be a community gathering involving neighbors, Friends of the Urban Forest staff, and volunteers.

<http://www.fuf.net/programs-services/planting/sidewalk-gardens/the-sidewalk-garden-project/>

Pavement to Parks (including the Parklets Program)

Agency: San Francisco Planning Department

Type:    

Description: Pavement to Parks (P2P) is a collaborative effort between the San Francisco Planning Department, SFPD, SFMTA, and the Mayor's Office. The program seeks to temporarily reclaim underutilized rights of way or intersections and inexpensively turn them into new public spaces. The program includes the Parklets Program, which collaborates with community members to reclaim public space in the parking lane in underutilized intersections or streets within the City.

<http://sfpavementtoparks.sfplanning.org>

San Francisco Safe Routes to School Program

Agency: San Francisco Department of Public Health (SFDPH)

Type:   

Description: San Francisco's Safe Routes to School program promotes safe and active walking and bicycling to and from school. Participating schools implement pedestrian/bicyclist safety curriculum and plan outreach events (such as Walk to School Day, Bike to School Day, and Green Teams). Building on these efforts, several schools have worked with SFMTA's School Area Safety Program to implement safety improvements, such as bulb-outs and pedestrian signals around schools.

<http://sf saferoutestoschool.org>

SF Arts Commission Community Grants Program

Agency: San Francisco Arts Commission

Type:  

Description: The San Francisco Arts Commission (SFAC) is a city agency that champions the arts in all aspects of civic life. The Community Grants Program, part of SFAC's Community Arts & Education Program, supports nonprofit, non-arts organizations that use the arts to serve their constituents.

<http://www.sfartscommission.org>

SF Environment Grants

Agency: SF Environment

Type: 

Description: SF Environment periodically issues grants and Requests for Proposals to help the city achieve environmental and other goals. For example, the Environmental Justice Grant Program has funded street trees, energy efficiency, job training, and urban agriculture programs in the Bayview Hunters Point and Potrero Hill neighborhoods.

<http://www.sfenvironment.org/about/grants>

SFPA Action Grants

Agency: San Francisco Parks Alliance

Type:   

Description: The SFPA Action Grants fund volunteer engagement and community actions that will improve and encourage usage of San Francisco parks, recreation centers, and open spaces (including street parks, community gardens and other publicly owned properties). Projects include programming, artwork, events, small capital or beautification projects, and other creative ideas.

<http://sfparksalliance.org/the-alliance/philanthropy/available-funding/sfpa-action-grants>

SFPUC Community Benefits Program

Agency: San Francisco Public Utilities Commission (SFPUC)

Type:  

Description: SFPUC's Community Benefits Program guides the Commission's efforts to be a good neighbor to all whose lives or neighborhoods are directly affected by its water, wastewater, and power operations. Its core funding priorities are education, workforce development, neighborhood revitalization, environmental justice, land use, and arts programs. For example, the program has supported urban agriculture and gardening programs.

<http://www.sfwater.org/index.aspx?page=230>

SFUSD Bond Program – Green Schoolyard Program

Agency: San Francisco Unified School District (SFUSD)

Type:  

Description: The SFUSD Bond Program includes funding for a Green Schoolyard Program, which allows SFUSD schools to design and construct green schoolyards that enhance sustainability, stewardship, and ecoliteracy. Many schools have incorporated native plantings, school gardens, and stormwater gardens and catchment systems, elements that could be a great addition to schools adjacent to Green Connections routes. The nonprofit organization Education Outside works closely with the SFUSD Bond Program and can provide schools with technical assistance on green schoolyard design and curriculum.

<http://sfusd-cboc.com/schoolyards.php>
<http://www.educationoutside.org/sfusd-greening>

See also: <http://www.fuf.net/programs-services/planting/trees-for-schools/>

Sidewalk Gardens Project

Agency/Organization: San Francisco Public Utilities Commission (SFPUC); Friends of the Urban Forest

Type:   

Description: The San Francisco Public Utilities Commission (SFPUC) and Friends of the Urban Forest (FUF) are partnering on the Sidewalk Garden Project. The program will replace concrete sidewalks with thriving gardens that capture stormwater, reducing the burden on our sewer system while beautifying neighborhoods.

<http://www.fuf.net/programs-services/planting/sidewalk-gardens/the-sidewalk-garden-project/>

<http://www.sfwater.org/index.aspx?page=641>

Sidewalk Inspection & Repair Program

Agency: San Francisco Department of Public Works (SFPDW)

Type: 

Description: The Department of Public Works' Sidewalk Inspection and Repair Program makes it easier and less expensive for property owners to comply with City and State codes that require them to keep their sidewalks clean and free of defects. The program accomplishes this by conducting sidewalk inspections, providing information and technical assistance to property owners, and coordinating large-scale sidewalk improvements.

<http://www.sfdpw.org/index.aspx?page=642>

Sidewalk Landscaping Permits

Agency: San Francisco Department of Public Works (SFPDW)

Type:   

Description: Individual property owners can apply for a permit to remove portions of sidewalks directly adjacent to their lot in order to add landscaping, which can make streets more livable and help reduce stormwater runoff. Applicants must submit plans indicating how the project will comply with relevant regulations, such as ADA accessibility and preservation of utility lines. The nonprofit Plant SF provides technical assistance to interested gardeners, and has many photos of finished projects on their website.

<http://www.sfdpw.org/index.aspx?page=1532>

Street Parks Program

Agency/Organization: San Francisco Department of Public Works (SFPDW); San Francisco Parks Alliance

Type:   

Description: Street Parks is a partnership between DPW, the San Francisco Parks Alliance and the residents of San Francisco to develop and create community managed gardens on public rights-of-way owned by DPW, including streets, sidewalks, medians, stairways, traffic circles, and other spaces. The Street Parks program transforms vacant lots into gardens, trash and illegal dumping spots into greenery, and hillsides into parks. Costs for improvements are partially off-set by volunteer participation and support from SFPA and DPW.

<http://sfdpw.org/index.aspx?page=1237>

<http://www.sfparksalliance.org/the-alliance/programs/street-parks>

Street SmARTS Program

Agencies: San Francisco Arts Commission (SFAC); San Francisco Department of Public Works (SFPDW)

Type:  

Description: To reduce the considerable costs associated with graffiti and vandalism, the San Francisco Arts Commission (SFAC) and DPW partnered to create StreetSmARTS, comprised of two programs. The StreetSmARTS mural program connects established urban artists with private property owners to create vibrant works of art that makes the property less likely to be vandalized. The Where Art Lives program places professional artists in public schools to teach youth the difference between public art and graffiti vandalism, culminating in a mural-painting project on school grounds.

<http://www.sfartscommission.org/CAE/category/street-smarts-arts-education/>

Urban Watershed Stewardship Grants

Agency: San Francisco Public Utilities Commission (SFPUC) / San Francisco Office of the City Administrator

Type:  

Description: The Urban Watershed Stewardship Grant (WSG) Program is a partnership between the Community Challenge Grant Program and the San Francisco Public Utilities Commission. The WSG Program was developed specifically for community-based projects that help manage stormwater using ecologically based strategies known as green infrastructure. The WSG Program funds projects that harvest rainwater, remove impervious surfaces, or implement other green infrastructure like bioswales and rain gardens. See the PUC website for a full list of awarded projects.

<http://www.sfwater.org/index.aspx?page=104>

Other Resources & Technical Assistance

Architecture for Humanity – San Francisco Chapter

Description: Pro-bono design services

<http://sanfrancisco.architectureforhumanity.org>

Better Streets Plan Website

Description: A guide to making street improvements in San Francisco

<http://www.sfbetterstreets.org>

<http://www.sfbetterstreets.org/learn-the-process/funding-and-technical-resources>

Build a Better Block

Description: Training and ideas for implementing temporary streetscape improvements

<http://betterblock.org>

Citidex

Description: Online database of San Francisco neighborhood & merchant associations

<http://citidex.sfgov.org>

Foundation Center – San Francisco

Description: Information on applying for foundation grants, with an online grant database (accessible free of charge at their office)

<http://foundationcenter.org/sanfrancisco/>

Garden for the Environment

Description: Gardening resource & demonstration garden featuring native plants and edibles

<http://www.gardenfortheenvironment.org>

Intersection Repair

Description: Ideas for developing community-led interventions to beautify neighborhood streets and intersections

<http://cityrepair.org/how-to/placemaking/intersectionrepair/>

IOBY (In Our Backyard)

Description: A crowdfunding site focused on citizen-led projects to improve their neighborhood

<http://ioby.org>

Kickstarter

Description: A crowdfunding site that helps people with innovative ideas publicize and raise funds to get them off the ground

<http://www.kickstarter.com>

Nature in the City

Description: Resources, support, and information on how to conserve and restore San Francisco's ecological heritage

<http://natureinthecity.org>

Neighborhood Empowerment Network

Description: A collaborative effort of community groups, nonprofit organizations, the City, and other stakeholders to build community resiliency in San Francisco neighborhoods

<http://empowersf.org>

PlantSF

Description: Information and support to promote permeable, native, and drought tolerant landscaping on city streets

<http://www.plantsf.org/howto.html>

Public Architecture 1% Program

Description: Pro-bono design services

http://publicarchitecture.org/The_1.htm

SF Beautiful

Description: Develops projects to create, enhance, and maintain San Francisco's public spaces

<http://sfbeautiful.org>

San Francisco Parks Alliance

Description: Information and opportunities to protect, sustain, and enrich San Francisco's parks, recreation, and green open spaces

<http://www.sfparksalliance.org>

Walk SF

Description: Information and resources on how to improve pedestrian safety and make the experience of walking more enjoyable

<http://walksf.org>

6.6 FUNDING FOR GREEN CONNECTIONS PROJECTS

Most of the Green Connections projects will be publicly funded. Some projects could be funded by impact fees generated from private development projects, as discussed in the previous section. Some of the projects could also be funded through community resources, including those listed in the previous section.

Public funding for Green Connections projects could come from Federal, State or Local sources. Examples of local funds includes the recently passed Road Repaving & Street Safety Bond, (Prop B) which funds streetscape improvements across the City. Prop AA (vehicle license fee) and Prop K (sales tax) are other local funding sources for streetscape and transportation improvements.

In addition, federal, state, and regional grant opportunities are available to City agencies could fund improvements along Green Connections Network. City agencies often apply for these grants to fund projects that have been identified in community plans.

The City's capital plan recommends projects based on the availability of funding from various sources and the relative priority of each project. Programs that serve the general public (such as streets and fire stations) rely primarily on funding from the City's General Fund and debt financing programs.

City implemented Green Connections projects could be implemented in coordination with projects funded or planned improvements; or they could become new projects.

Estimated program cost inform implementation strategies. Understanding the costs of fully implementing the Green Connections network would require an understanding of the existing conditions of the streets on the network. Also a clear understanding of the context specific application of the Green Connections toolkit would help inform estimations of the total network costs. Given that neither the existing conditions or proposed level of intervention have been fully developed, this section discusses implementation costs first in terms of new stand alone costs or program items, and then in terms of coordination with ongoing, planned, and future capital projects.

Green Connections Program Costs

In order to implement the entire network over the 20 year life of the plan, funding for core components of the project should be identified and secured. Rough cost estimations have been developed to help articulate funding needs outside of already programmed traffic calming, stormwater management, bicycle planning and pedestrian safety dollars. Funding for these key

Green Connections programs should be secured to implement core components of the plan that may not be part of an existing capital plan. This section is summarized in the table to the right.

Wayfinding and Signage. Wayfinding and signage is a significant component of the Green Connections program. A wayfinding system that is coordinated with citywide wayfinding systems and uniquely identifies the Green Connections Network will both facilitate use of the network and build community momentum around implementation. A comprehensive wayfinding program is an early implementation priority.

Based on SFMTA's cost estimate for replacing the City bicycle signage program planning and installation of a comprehensive wayfinding program would cost roughly \$575,000. Should the City coordinate design and installation of signage with the bicycle signage there would be considerable opportunity for cost sharing, as much of the Green Connections network overlaps with the bicycle network.

Green Connections Project Coordination Fund. As will be discussed in more detail below, city agencies have multiple funded, planned, or future work on the Green Connections Network. The current scope of these projects would not

achieve the intent of the plan, however they do offer opportunities to coordinate and deliver the network more efficiently. Accordingly a project coordination fund could support coordination with paving, sewer work or other ongoing infrastructure work. Given that an estimated 24 miles of the network may offer potential coordination opportunities and the average costs per mile for basic streetscape improvements per SFDPW is \$1.5 Million, a dedicated \$36 Million dollar fund, or \$1.8 Million annually would ensure efficient delivery 20% of the network.

Showcase Level Projects. To maximize network coverage, many early implementation projects will likely be built to a Light Intervention standard. However the City should seek to accomplish a minimum of 3 showcase level projects every five years, or at least 12 demonstration level projects over the 20 year period. This goal is based on the City's current ability to deliver projects at this scale; the SFMTA's current 5 year CIP (Capital Improvement Program) includes three projects that could potentially qualify as showcase projects on the Green Connections Network.

While these more significant projects are likely to have synergies with ongoing transportation or stormwater management infrastructure projects, the City could establish a stand alone fund to ensure that showcase projects are implemented along the network. Since three projects are already in process, completion of the demonstration level projects would require \$81 Million over the life of the plan.

Green Connections - Upcoming Projects

The Green Connections plan sets a high ambition for improvements to 115 miles of streets. The network is built on much of the planning the city has generated over the past several years. Accordingly the City is in the process of implementing a number of capital improvements on the Green Connections network that will result in light, moderate and showcase level improvements to parts of the network. The Map of Upcoming Projects on the following page describes 14 miles of funded improvements scheduled for implementation over the next 5 years. These projects will be implemented by various agencies through traffic calming, school safety, stormwater management, streetscape enhancement, and bicycle programs. Accordingly the projects meet some or all of the Green Connections program objectives.

It is no coincidence that the City has already secured funding for improvements to 12% of the Green Connections network. The network build on existing city plans and programs - known projects were an input in the development of the network. Also the City has long been implementing improvements to the public realm consistent with the goals of Green Connections. Accordingly traffic calming and bicycle safety projects are likely to overlap with the network.

Enhancing Ongoing Funded Projects on the Network

While funding is identified for some level of improvement moving 12% of the network towards the goals of Green Connections over the next five years, many funded infrastructure projects scheduled along the network are not scoped to meet the program objectives. Examples of these types of projects include street repaving, safe routes to school, water projects or replacement of sewers. These projects would require additional funding for traffic calming, greening, or stormwater management elements to achieve some or all of the Green Connections project goals.

In order to take full advantage of potential opportunities to realize the Green Connections vision, the City should consider establishing a flexible source of funding that could support complementary Green Connections components. For example, an SFMTA sponsored traffic calming project or an SFPUC sewer replacement project is sometimes funded by a source that cannot fund extensive greening. A Green Connections matching source could fill this gap and facilitate the delivery of a complete project. Ideally this source would also be able to fund transportation project like traffic calming and safety projects as well as greening and placemaking components of a project.

Upcoming Projects

This map highlights upcoming projects that overlap with the Green Connections network that are scheduled for implementation over the next 5 years. These projects vary in scale, some of the projects have design components that meet the goals of a Green Connections, such as the Wiggle or Mansell, and some projects need additional funding to fully meet the goals such as Safe Routes to School projects and neighborhood traffic calming projects.

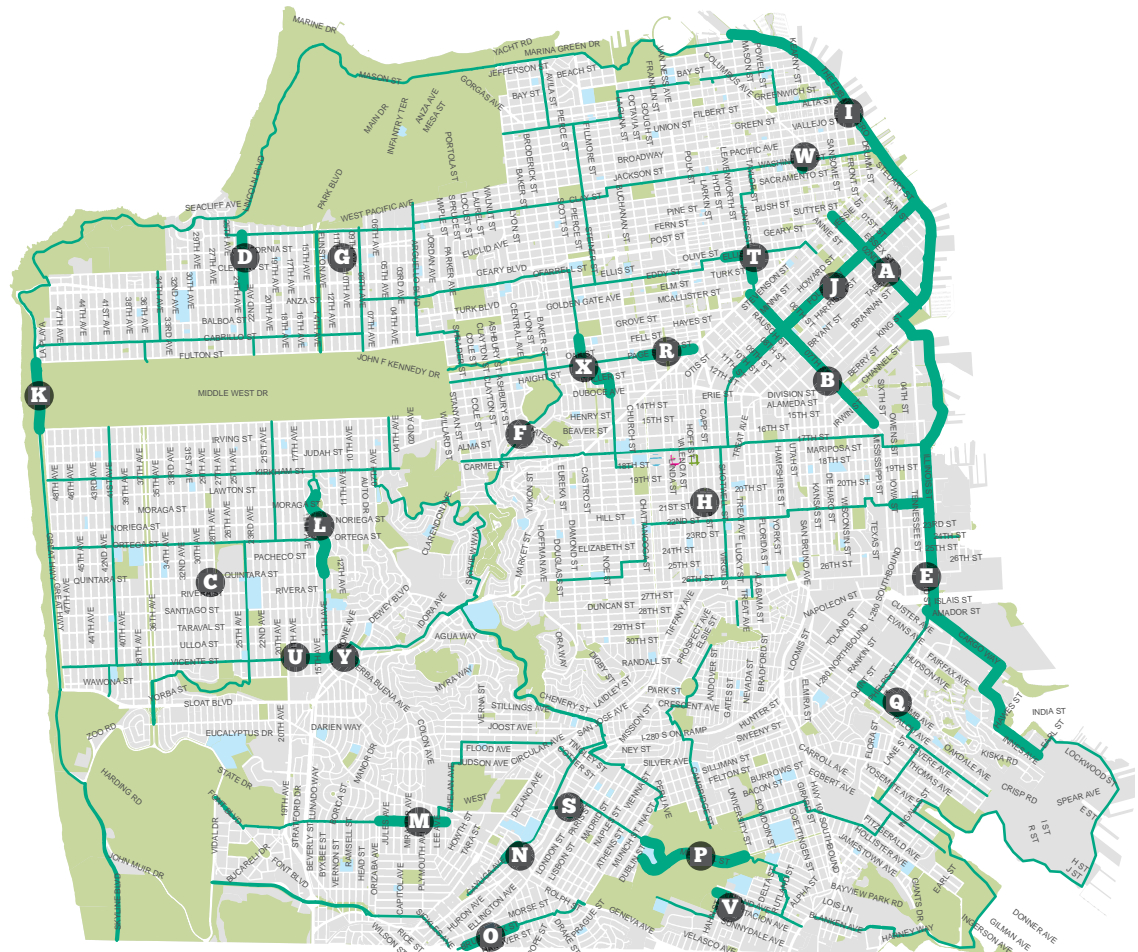
15 miles of funded improvements scheduled for implementation over the next 5 years.

- A** 2ND STREET IMPROVEMENT PROJECT
2nd St., from Market St. to King St.
- B** 7TH STREET EN TRIPS
7th Street, from Market St. to 16th St.
- C** 28TH AVE CROSSWALK ENHANCEMENTS
28th Ave and to be determined cross-streets
- D** ALAMO ELEMENTARY (SR25)
23rd Ave, from Geary Blvd to Lake St.
- E** BLUE GREENWAY
Various locations along the southeastern waterfront
- F** BUENA VISTA/17TH/ROOSEVELT TRAFFIC CALMING
Buena Vista/17th/Roosevelt
- G** CENTRAL RICHMOND TRAFFIC CALMING
Lake St. at 17th, 21st and 24th Avenues; Cabrillo Street at 14th Ave
- H** CESAR CHAVEZ (SR25)
Area around South Van Ness and 22nd St.
- I** EMBARCADERO ENHANCEMENT
Embarcadero, from Fort Mason to Mariposa St.
- J** FOLSOM STREETScape IMPROVEMENTS
Folsom St., from Embarcadero St. to 12th St.
- K** GREAT HIGHWAY STREETScape IMPROVEMENT PROJECT
Great Highway, Lincoln to Fulton
- L** GREEN HAIRSTREAK CORRIDOR
14th Ave/15th Ave, from Moraga St. to Quintara St.
- M** HOLLOWAY BUFFERED BIKE LANE
Holloway Ave., from Varela to Font Blvd.
- N** JAMES DENNEN MIDDLE SCHOOL (SR25)
Cayuga Ave, from Niagara and Navajo
- O** LONGFELLOW ELEMENTARY SCHOOL (SR25)
Brunswick St between Oliver and Guttenberg
- P** MANSELL CORRIDOR IMPROVEMENT PROJECT
Mansell St. from University St. to Dublin St.
- Q** OAKDALE AVENUE GREEN CONNECTION
Oakdale Ave. from Lane St/ to Quint St.
- R** PAGE STREET GREEN CONNECTION
Page St, from Buchanan St. to Market St.
- S** PERSIA TRIANGLE: PAVEMENT TO PARKS
Heart of the Excelsior at Persia, Mission and Ocean Ave.
- T** SAFE PASSAGE ENHANCEMENTS
Jones St. and Ellis St., exact location to be determined
- U** VICENTE STREETScape ENHANCEMENTS
Vicente St. from, 14th Ave to 19th Ave
- V** VISITACION VALLEY GREEN NODES
Exact locations to be determined
- W** WASHINGTON STREET PORTSMOUTH SQUARE ENHANCEMENT
Washington St. from, Kearny St. to Walter U Lum Place
- X** WIGGLE NEIGHBORHOOD GREEN CORRIDOR
Various locations along the Wiggle
- Y** WEST PORTAL TRAFFIC CALMING PROJECT
14th Ave, from Vicente to Ulloa

LEGEND

Green Connections Project Goals

- Public health: Increase active transportation to parks
- Sustainability: Enhance urban ecology
- Livability: Support neighborhood stewardship and placemaking



Projected Costs

Need:

Basic Signage and Wayfinding

Calculation:

- 115 Miles
- \$500,000 Sign design, fabrication, and installation ⁽¹⁾
- \$75,000 Sign Planning and Graphic Design

Projected Average Annual Costs:

Most likely the City would install the wayfinding and signage as one program rather than over a 20 year period.

Projected Total Costs (20 Years):

\$0.575 Million

Need:

Project Coordination Supplemental Fund

The fund will allow the City to include basic Green Connections streetscape elements to ongoing projects on the network that do not have funds to meet the program goals.

Calculation:

- Estimated 24 miles of potential project coordination (20% of the network)
- Estimated \$1.5M per mile to enhance on going projects and add minimum level Green Connections interventions.

Projected Average Annual Costs:

\$1.8 Million

Projected Total Costs (20 Years):

\$36 Million

Need:

Showcase Projects

The City should aim to install a minimum of 12 showcase projects over the life of the plan. These major projects will have higher costs than an average Green Connection project. They may be part of other planned improvements and therefore not entirely "new" funding needs.

Calculation:

- 12 demonstration level projects over 20 years
- Averaging 5 blocks
- Averaging \$1.8 Million per block ⁽²⁾
- Average \$9 Million per project

Projected Average Annual Costs:

\$5.5 Million

Projected Total Costs (20 Years):

\$110 Million ⁽³⁾

Footnotes:

1. Based on SFMTA's estimate for the bicycle signage program of roughly 8 signs per mile \$500 per sign for design, fabrication, and installation.
2. Based on DPW's average costs for Full Complete Street Enhancements
3. Note that several projects in the City's existing CIP may fulfill some of this funding goal.

In order to understand and better plan for these potential coordination opportunities - analysis should be completed on potential and future paving, sewer and water, and other infrastructure projects on the Green Connections network. Currently the City's database of planned projects indicates that some infrastructure work is planned on roughly 6 miles or 5% of the network over the next five years. Assuming the city continues to make similar improvements at the same rate, potential coordination opportunities are likely to occur on 20% of the network over the 20 year plan period.



Coordination with Planned Projects

Many segments of the Green Connections network have been identified in an area plan or community plan for streetscape and transportation improvements in line with the Green Connections project. Generally, planned projects call for specific streetscape improvements, and have some level of community support, and/or initial design and

cost estimates, but may need additional funding. While planned projects are not necessarily fully funded, generally they are accounted for in the City's 10-year capital plan as an emerging need. An example of this type of project might include the streetscape improvements identified through the Eastern Neighborhoods community planning process. Currently longer term planning projects have been identified for 10% of the Green Connections network.

Additional planned projects will be identified over time through the City's various programs and planning, including SFMTA's traffic calming program, pedestrian safety program, bicycle planning, and San Francisco Recreation and Parks Department's ongoing trails program.

New Opportunities

Much of the Green Connections network does not overlap with funded or planned improvements. Full implementation of the network would require additional resources to implement improvements on these segments of the network. The first step would include community engagement and a conceptual design process.

Implementing improvements on these segments will require additional resources, not specifically

contemplated in the current capital plans. However many ongoing programs will likely fund improvements to the network. For example the SFMTA has committed a portion of funds from the Capital Improvements Program (CIP) towards Green Connections projects, and the Pedestrian Strategy includes a goal to complete and implement the Green Connections project. Additionally, the SFPUC considers coordination with any proposed city project when prioritizing Green Infrastructure projects, and gives particular weight to coordination with the Green Connections project. Finally, the draft Urban Forest Plan calls for ongoing coordination with the Green Connections project during the project implementation phase. In addition to these commitments from various implementing agencies, the City, including the Planning Department, should consider to pursue funding for planning and construction of Green Connections along the network.

Project planners estimate that roughly 60% of the network would successfully meet project goals with only a light intervention. Also, some segments of the network require little investment to meet the goals of the Green Connections project. For example, streets that are fairly traffic calmed and have ample greening, may only require signage.

6.7 STEWARDSHIP AND MAINTENANCE

Fronting property owners in San Francisco are generally responsible for maintaining sidewalks and all sidewalk elements in front of their property, such as trees, landscaping, special sidewalk paving, or streetscape furnishings. In general, the City is responsible for maintaining roadway features, including asphalt paving and medians and islands. Property owners and community groups may seek permits to make street or sidewalk improvements, in which case they will be held responsible for the maintenance of the improvements.

In some cases, sidewalk improvements will be made across an entire block or corridor by a community or business organization, such as a Community Benefit District, a new building project, or will be part of a City initiative. In these cases, there will typically be an agreement between the sponsoring organization and the City as part of a City permit, which will spell out the details of who is responsible to maintain any unique streetscape features.

Often it is easier to find funding for project capital and building costs rather than for maintenance. Additional resources for maintenance could include corporate volunteer days, conservation corps members, and youth employment and job training programs.

When working on Green Connections projects, planners should consider a maintenance strategy for the street early on and should work with community stakeholders in this process. Community stewardship of streetscape elements plays a key role in keeping up the appearance and safety of the neighborhood, and can result in a greater sense of neighborhood pride. Additionally, having a maintenance plan and preliminary cost estimate for maintenance can often make project proposals stronger when applying for funding.

For more information:

www.sfbetterstreets.org/learn-the-process/maintenance