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### MARKET OCTAVIA

TOOLKIT

# Li

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The Market Octavia Living Alleys Program is a collaborative effort led by the San Francisco Planning Department, the San Francisco Municipal Transportation Agency, and San Francisco Public Works. The project was funded by a Community-Based Transportation Planning grant from the California Department of Transportation (Caltrans). The project team would also like to thank Professor Antje Steinmuller and her CCA architecture studio for collaboration with the project.

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A living alley is a street that is activated, pedestrianized, and greened to support environmentally sustainable functions, with an emphasis on community and social activation. LIVING ALLEYS TOOLKIT

# INTRODUCTION



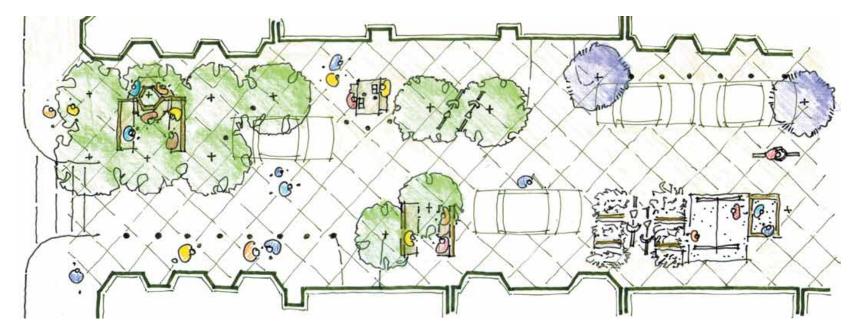
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## Vision

The 2008 Market Octavia Area Plan balances housing and transportation choices with neighborhood livability by enhancing the physical and social fabric that gives people access to basic needs and encourages interaction with one another. The Plan builds on the strengths of the physical context and the cohesiveness of the community. While some of the work laid out in the Plan has been implemented or is under construction, parts of the vision have yet to be completed. "Living alleys" were one of the anticipated public improvements in the Plan area, which will be funded in part by impact fees from new development and created in partnership with public and private support.

This toolkit is a resource for community members and designers to develop and implement living alleys. The toolkit includes 20 design tools and well as example prototypes, to give community members a range of options and inspiration for creating living alleys in the Market Octavia Plan Area, though much of this information is applicable to alleys throughout San Francisco. In addition to the design tools, constraints and opportunities are discussed so project designers and residents can understand the full breadth of the project.

Implementation of living alleys will rely on public private partnerships, partly because the City has limited appetite to accept maintenance and liability for non-standard streets, and partly to ensure that improved alleys are tended by the people who are vested in their creation.



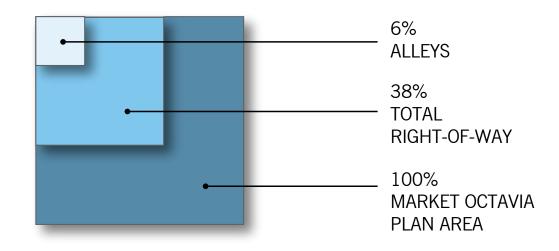
Conceptual living alley design from the 2008 Market Octavia Area Plan

### Context

Major regional transportation corridors grid the Market Octavia Plan area, carrying over 100,000 vehicle trips daily. Interspersed between these are the small and guiet alleys that occupy about 6% of the total area of the Market Octavia Plan – a significant spatial resource in a dense urban area. The Market Octavia Plan identified the relative slow pace of alleys as places for open space and calm pedestrian environments to counterbalance the bustling traffic on the surrounding arterial streets. Fronting these are a mix of "back of house" uses and housing, along with some commercial uses. The Market Octavia Plan called for the development of prototypes and a process for residents to participate in the design and implementation of improvements to their alleys. Dubbed "living alleys", these improvements create shared, mutlipurpose public spaces.

The main goal of living alleys is to create safe and active public places for people especially where there are narrow sidewalks or little open space. In doing so, they add vitality to the street and to the block. Living alleys are also part of a pedestrian and bicycle network. Living alleys improve pedestrian safety by designing streets as places first and roads second by creating expectations that reinforce slower speeds and more careful driving behavior. Living alleys should engender active uses like walking and bicycling, and community activities but they should also embody sustainable best practices, such as stormwater management. A living alley is a street that is activated, safe for pedestrians and greened to support environmentally sustainable functions.

Most of the alleys identified in the Market Octavia Plan are the smallest parts of the street network, but they differ. Some are fronted by quiet, small-scale residential buildings, while others have a mix of lively commercial uses, and still others are dominated by garages. The amount of garage and service functions varies and can inhibit the long term adaptability of these alleys to become active, livable places. Some alleys, due to their location between arterials, function as traffic shortcuts. These conditions should be considered when contemplating whether and how to make improvements.



### **Project Overview**

#### The Market Octavia Living Alleys

Program includes a design and implementation toolkit to facilitate the creation of Living Alleys. The toolkit builds on elements of other programs such as the Better Streets Plan, the Parklet Program, Green Connections and the City's Public Works Sidewalk Landscape Program to create a network of active, safe, and walkable alleys. But living alleys go further by claiming and rebalancing entire streets for both bike and pedestrian-priority zones, and by providing a range of public open spaces.

Accomplishing these goals requires changing expectations. Trade-offs are inevitable. Alleys cannot maintain their current amount of parking, traffic, and back-of-house service functions, and simultaneously provide usable open space and a comfortable pedestrian realm. A living alley is a holistic transformation of the use and function of the alley.

### Goals

Although the concept of living streets has been in practice for well over thirty years in Northern Europe, adapting it to an urban American context presents a set of issues such as accessibility. The core goals and values of living alleys in San Francisco emerged from a series of community workshops. These core goals are:

#### GREEN

A street with opportunities for landscaping to soften the environment and invite social gatherings.

#### SHARED

A calm street that balances the priorities of pedestrians and bicyclists with automobiles.

#### VIBRANT

A street that supports the activities of neighbors, community, and businesses. This includes passive and active space for recreation, actively programmed uses such as temporary events, or daily commerce, and spontaneous activities.

#### CLEAN & SAFE

A street that is cared and tended for, well-lighted and maintained.

Achievement of these will create places where people feel welcomed, comfortable, and safe.

The City anticipates about \$2,000,000 in Market Octavia Plan impact fees to implement Living Alleys. Funding will be distributed through a Community Challenge Grant, and will prioritize projects that leverage other funding and efforts to allow the city to realize an extend a living alley network.

Implementation will be driven by priorities, funding, and community support for improvements. Implementation of much of the network will be achieved organically through communityinitiated improvements in coordination with ongoing streetscape work delivered by the City and new development projects.

Many living alleys may start with small improvements that grow over time. For example, community members could first install string lighting, landscaping, and seating in an alley, and later install traffic calming features. Enhanced road alterations and paving could follow. Over a ten year time frame, a living alley network could emerge from incremental enhancements by public private partnerships. Coordination of private efforts with public project are generally more efficient and encouraged.

### Implementation Priorities

A number of criteria influence which alleys are prioritized for implementation. This section details criteria for prioritizing improvements.

#### COMMUNITY SUPPORTED, NEIGHBORHOOD-LED PROJECTS

A living alley project designed and led by community members will best serve the people who use it daily. When the community take the initiative to improve public spaces, everyone benefits – participants help ensure that projects 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. This investment fosters a public ownership that ensures that places are well used and maintained.

With this in mind, the Market Octavia Living Alleys Program envisions neighborhood-led projects will be the primary implementation approach. This toolkit is designed to enable local residents, business owners, and other community members to actively lead in building the network in close collaboration with the City. The approach is similar to other programs designed to leverage the creativity and initiative of individuals in the development of the City's public spaces. For instance, property owners can create sidewalk gardens in front of their homes, replacing swaths of concrete with landscaped areas that enliven their streets and reduce stormwater runoff through the Public Utilities Commission's Watershed Stewardship program and the Sidewalk Garden Project.

In cases where community members plan and implement streetscape improvements and other place-making elements, the Market Octavia Living Alleys Program encourages the City to prioritize complementary traffic calming and related improvements.





#### CONTINUITY: CREATE A NETWORK TO CONNECT ALLEYS, OPEN SPACES, AND BIKE ROUTES

In addition to creating great local places, the Market Octavia Living Alleys Program aims to improve connections between alleys. This will create an alternate pedestrian network to the bustling arterial streets. To best enhance usability and accessibility, connectivity should be an important consideration. Connecting to parks, community gardens, and school yards, and other public open spaces should be prioritized.

A challenge is the current physical separation between alley segments. The isolation that contributes to their quiet charm also means they stop and start, interrupted by busy major streets.

Where an alley intersects a larger street it may be possible to connect alleys with crossing treatments. Depending on various factors, crossings may vary from painted zebra crossings to signalization devices. A living alleys network could be used for short neighborhood trips, as well as a network that safely links to a wider portion of the City.

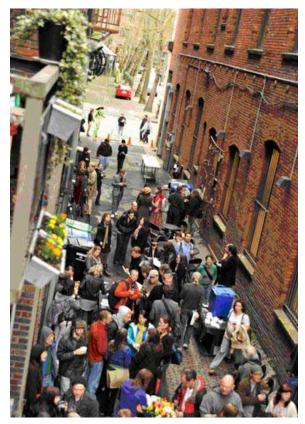
#### **BENEFIT SENIORS AND CHILDREN**

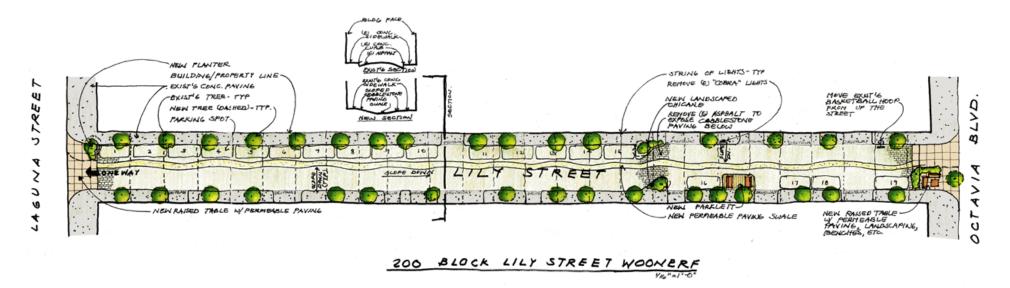
Living alleys that provide open space adjacent to schools and senior centers for the benefit of seniors and children should be prioritized. Schools and senior centers also provide an opportunity for education and community building programs. They could steward specific portions of the living alley network adjacent to their spaces, resulting in excellent additions to the living alley network, such as sidewalk gardens, artwork, and educational installations about species and habitat.











A resident's conceptual sketch of Lily Alley in San Francisco

# A living alley is a narrow, pedestrian-oriented street that is designed to focus on livability, instead of parking and traffic. Typically, this means creating a street primarily for pedestrians and bicyclists, as well as space for social uses. It can be considered an

"urban living room".

LIVING ALLEYS TOOLKIT

# WHAT IS A LIVING ALLEY?



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## What is a Living Alley?

A **living alley** is a street designed as a place for people. It can be considered an "Urban Living Room". Its design can reconfigure the geometry and surfacing of the street, or simply add low cost amenities for residents while maintaining the traditional curbed right-of-way. Whatever approach, living alleys prioritize the entire public right-ofway for pedestrians and bicyclists with alternative but clear physical boundaries. A living alley also has areas of exclusive pedestrian use and areas where vehicles are allowed to share space with pedestrians and bicyclists.









### **Case Studies**

The Market Octavia Living Alleys Program relies on resident-initiated design and implementation of alley improvements.

This program drew inspiration from successful alley programs throughout North America and the world. The descriptions and photos here present just a few notable examples. In some instances, the team looked within our own backyard, as San Francisco has many reclaimed alleys.





Jack Kerouac Alley, San Francisco

### JACK KEROUAC ALLEY

#### SAN FRANCISCO, CA

Jack Kerouac Alley is a short, 18 foot wide, one-way alley in San Francisco's Chinatown that connects Grant Avenue and Columbus Avenue. Before the alley was revitalized, it was a common place for illegal dumping and as a short cut for vehicles. The Chinatown Community Development Center and businesses fronting spearheaded the alley revitalization effort. Completed in 2007, hard costs were approximately \$350,000.

The redesign of the alley created a pedestrian only right-of-way with unit pavers, pedestrian scale lighting, and bronze cast plaques inscribed with Eastern and Western poetry. The City also negotiated a "Quit Claim" with property owners, which forfeit vehicular access to their property in exchange for making the right-of-way pedestrian only.

FOR MORE INFO:

#### SF Public Works: Chinatown Alleyway Master Plan Improvements

http://sfdpw.org/index.aspx?page=55

### LINDEN ALLEY

SAN FRANCISCO, CA

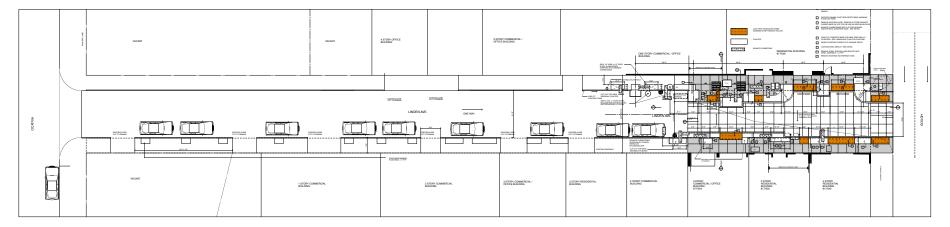
In a neighborhood with few parks and gridded with high-volume traffic corridors, the conversion of this portion of Linden Alley in Hayes Valley into a pedestrian-friendly, "green" street creates an intimate social setting for people to linger and relax. The raised and narrowed curbless roadbed slows traffic and puts people on the same footing as cars. Paved with single surface concrete, the widened pedestrian areas are separated and defined from the vehicle lane by plants and granite curbstone seating. A coffee shop and several stores brings people and life to the alley. The surrounding property owners pool together \$5,000 annually for maintenance costs.

FOR MORE INFO:

#### **Winslow Architecture**

http://www.winslowarchitecture.com/urban\_design/02/





#### **ANNIE ALLEY**

SAN FRANCISCO, CA

The Yerba Buena Community Benefit District's (YBCBD) Yerba Buena Street Life Plan created a vision and road map for the next generation of public spaces in the Yerba Buena district. The plan, which took two years to develop through a community process, identified the alleys as "special streets" and that some alleys could be redesigned as shared streets or pedestrian only plazas that could ultimately serve as new, much needed, public open spaces for this dense neighborhood.

Annie Alley, a narrow alley that connects Market and Mission Streets between Third and New Montgomery Streets, is the first of the alleys in the Street Life Plan to be closed to cars. The project creates an active and comfortable plaza, encourages pedestrian and bicycle connectivity and brings people and events to this overlooked alley.

The YBCBD collaborated with the San Francisco Planning Department's Pavement to Parks program, which is testing the plaza concept by temporarily closing the alley to cars. The alley hosts on-going weekly programming, such as picnics, film screenings and dance and music performances. CMG Landscape Architecture designed the space to include trellises with hanging plants, benches, and cafe tables. The temporary improvements were completed in 2014. Maintenance and stewardship are provided by the YBCBD.

The cost of capital and construction for the temporary improvements was roughly \$128,000 and the cost of design was roughly \$60,000.





Source: CMG Landscape Architecture

FOR MORE INFO:

San Francisco Pavement to Parks www.pavementtoparks.org

Yerba Buena Community Benefits District www.ybcbd.org



Mint Plaza, San Francisco



Temescal Alley, Oakland



Bell Street Park, Seattle

Image by Nate Cormier, SvR Design Company

#### MINT PLAZA

#### SAN FRANCISCO, CA

Completed in 2009, Mint Plaza is in the South of Market neighborhood in the former Jessie Street public right-of-way. The catalyst for the project was an adjacent development, which physically improved the right-of-way and donated the finished improvements to the City of San Francisco. Mint Plaza is now maintained by a nonprofit organization, Friends of Mint Plaza (FoMP).

Mint Plaza was designed to be a public plaza in an area that was in need of open space. The design is simple and encourages a variety of uses. It features an open center, free of permanent fixtures, but with bright orange, movable chairs. The plaza restricts vehicle traffic, which encourages safe pedestrian and bicycle use. A café and integrated bench seating line the edges of the plaza. The plaza includes a stormwater management system that captures runoff in two rain gardens.

A community benefit district was created to assess property owners and fund events and maintenance operations.

FOR MORE INFO:

Friends of Mint Plaza

#### **TEMESCAL ALLEY**

#### OAKLAND, CA

Temescal Alley and Alley 49 are in the Temescal neighborhood in North Oakland, just east of Telegraph Avenue at 49th Street. The alley formerly served as horse stables for historic horse drawn trolleys, but today contains eighteen small retail shops and artisan workspaces. The alley has been transformed into what some call a "miniature village" and has an organic and easygoing feeling about it. The right-of-way is a shared street free of curbs and contains planters and moveable chairs and benches.

FOR MORE INFO:

Temescal Alleys www.temescalalleys.com

#### **BELL STREET PARK**

#### SEATTLE, WA

Located in the Belltown neighborhood of Seattle, Bell Street Park transformed a typical street into a vibrant, safe and green public space. The "street park" idea was a result of community activism and interdepartmental collaboration. The goal was to provide additional public open space in an underserved urban neighborhood. The project was funded through a park levy.

The shared street design balances the need for outdoor living space for diverse users with vehicular access for cars, buses, emergency vehicles and on-street parking. A curbless meandering roadway is bounded by pedestrian zones with generous spaces for vegetation, cafe seating, public art and more. The resulting shared space accommodates the neighborhood's daily rhythms and accommodates special events such as art markets, popup playgrounds, and salsa dancing. The City of Seattle and a friends group are working together to program and activate Bell Street Park.

FOR MORE INFO:

**SvR Design: Bell Street Alley** http://www.svrdesign.com/bellstreetpark

### **Best Practices**

This toolkit is informed, in part, by the best practices of cities that have successfully implemented similar projects. While each city tailors projects to fit city and state policies and the specific needs of the community, many of the core values and strategies for alley improvements are shared.

#### CHICAGO, ILLINOIS

Chicago's Green Alley Program, established in 2006, promotes sustainable practices, such as stormwater management, heat reduction, material recycling, and energy conservation. Their handbook analyzes and provides detailed illustrations of the outcomes of different sustainable design approaches. It also provides cost estimates for more individualized strategies that can be implemented in different alley types. Projects are funded by the Chicago Department of Transportation and individual Alderman (similar to San Francisco Supervisors) funds.

FOR MORE INFO:

## City of Chicago: The Chicago Green Alley Handbook

http://www.cityofchicago.org/content/dam/city/depts/cdot/ Green Alley Handbook 2010.pdf



The Los Angeles Green Alley Program (also referred to as Green Streets and Green Alleys Program) is closely related to the Green Streets Guidelines proposed by Los Angeles' Board of Public Works to support watershed health, neighborhood safety, and pollution reduction, amongst other objectives. Their handbook develops a matrix of green street Best Management Practices (BMPs) that concisely explains the application, costs, effectiveness, and challenges of different green infrastructure strategies.

#### FOR MORE INFO:

## National Association of City Transportation Officials

http://nacto.org/docs/usdg/ green streets and green alleys la.pdf



Source: Chicago Department of Transportation, 2014

#### Profile w/description



Source: City of Los Angeles, Rainwater Harvesting Program

#### AUSTIN, TEXAS

The Public Interest Design summer course at the University of Texas developed an informative toolkit ("An Action Guide to Greening Austin's Alleys") that contains ideas, resources, and directions for improving Austin's alleys. This toolkit is designed for residents, government officials, and designers to establish a collaborative process amongst these stakeholders. The toolkit proposes strategies and conceptual models, and introduces related design projects done by local students that can be tied to alley improvements, such as mobile food stands, outdoor sheds, and neighborhood place making.

#### FOR MORE INFO:

#### The Center for Sustainable Development and The Public Interest Design Studio

http://www.soa.utexas.edu/files/csd/CSD\_PID\_2011\_ AdvocacyBook.pdf



Source: University of Austin, Public Interest Design Studio

#### PORTLAND, OREGON

Portland's "Alley Allies" toolkit is a step-bystep guide for alley improvements specifically geared toward local residents. The toolkit proposes accessible strategies that can be implemented on a neighborhood level.

#### FOR MORE INFO:

#### Mill Street Planning

http://dsdauphin.wordpress.com/2013/12/25/alley-allies/



Example of a Portland Pedway



Source: Mill Street Community Planning

#### SEATTLE, WASHINGTON

The Alley Network Project is a partnership of community institutions, nonprofits, and community groups organized to transform Pioneer Square's alleys into "one of its unrivaled assets." The project supports community involvement to help make alleys great pedestrian spaces. The Alley Network Project has leveraged funds from government, private foundations and local business to host alley activities and events and community design projects. Their inspiring website includes practical information on best practices for alley activation and how-to guides for alley events.

FOR MORE INFO:

Alley Network Project



Seattle, Washington

"The air was soft, the stars so fine, the promise of every cobbled alley so great I thought I was in a dream."

JACK KEROUAC On the Road LIVING ALLEYS TOOLKIT

# DESIGNING A LIVING ALLEY



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### **Design Considerations**

We identify the following six design considerations that should be addressed in any alley improvement project. Please refer to these considerations as you begin your living alley design.

#### HYDRAULICS

The capacity of the public right-of-way to transmit surface water and storm runoff without flooding adjoining or downstream properties is a fundamental consideration in determining the feasibility of Living Alleys. This requirement may significantly impact the cross-section profile of an alley, construction and maintenance costs. At a minimum, SFPUC and SF Public Works hydraulic engineering staff must be consulted to find options and review proposals for hydraulic design.

Hydraulic engineering deals with the conveyance of waste and storm water through the City drainage system. In San Francisco, all streets are part of an interconnected drainage system, which includes combined sewers that collect storm and sanitary flow. The street conveyance system is intended to reduce the chances of hazards and damage from flooding. The primary parts of the systems are catch basins and storm water sewers, which are designed to accommodate a 5-year storm (3 hours of rain at 3.1 inches per hour), and the streets themselves, which are designed to convey water to a drainage inlet, and to carry flow from a 100-year storm event (3 hour storm with a peak intensity of 4.6 inches per hour). Generally, streets are required to convey up to the 100-year storm, but not all city streets can. (Some streets are in a depression area and have little conveyance capacity). These are special locations, the majority of streets in the city should follow the 100-year overland flow conveyance criteria.

The hydraulics of a street is analyzed at two scales. The first is the local drainage of the street itself and from the adjacent properties, and second, from cumulative flows within the system (overland flows) because streets receive flows from streets up-stream.

Green infrastructure, such as permeable paving, and rain gardens, etc., are elegant solutions to stormwater management, but to be effective they depend on several conditions. Their efficacy depends on the soil type and percolation capacity, the depth of the existing water table, and potential for ground water to contribute to liquefaction, or basement infiltration. Green infrastructure has a benefit in collecting stormwater runoff. The benefits are quantifiable when assessed on long term scale (usually applying yearly rainfall time series data). They can augment the stormwater system if they are limited to relatively local and small amounts of stormwater; or have large amounts of open space dedicated. They also require higher levels and frequency of maintenance.

Any time the geometry of a street is altered -- a sidewalk widened, a road tabled, or road way landscaped -- the hydraulics are altered and must be analyzed for its impact on the system. The level of impact may determine type and cost and feasibility of hydraulic treatment.



Rain garden (bioretention planter)

Single-surface alleys present stormwater opportunities and challenges. Tabling an alley may divert or trap water flows depending on the location of the street and location of tabled portion. If the design diverts overland flow and transforms the alley into a localized collector, drainage solutions may be easier and more cost effective. A tabled solution that traps water will require the installation of new catch basins and a manhole, which are costly.

Tabling an alley may take some of the 100 year storm capacity out of the alley and may present a challenge or render it infeasible. Tabling an alley may cause a reduction in overland flow conveyance capacity and would be assessed under the 100-year storm event. The design can be altered or mitigation developed to offset reduction in capacity if such case arises. It may be also be possible that single surface alleys can be designed to carry the equivalent amount of water.



Water diverted from storm drains into a rain garden

#### HYDRAULICS PARAMETERS

- 1. Determine the drainage profile of the alley. Is it primarily local or will the alley receive cumulative flows from other streets?
- 2. Assess the existing sewer system components; are they adequately sized and located, or will new catch basins, manholes, and sewers be required?
- 3. Assess the capacity of the street to accommodate a 100 year storm.
- 4. Analyze how much do impervious features contribute to the stormwater management. What is the scale and how much will they cost?



Permeable paving on Cass Farms Green Alley, Detroit Source: http://alleysofseattle.com/tag/green-alleys/

- 5. Trench drains are not generally acceptable as an alternate means of conveying water. The potential for them to become clogged and back up is dependent on the maintenance of the responsible party.
- 6. It is SFPUC policy to maintain responsibility of side sewer laterals from the curb line to the main (however Public Works code states that it is property owners responsibility from house to main). It will be important to identify the original curb line in single surface streets.

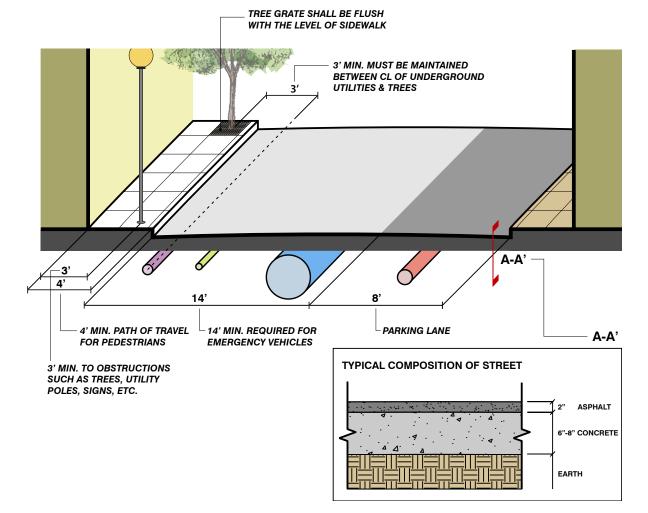
# ROAD COMPOSITION & UNDERGROUND UTILITIES

Assessment of underground utilities that may be at the end of their life cycle is critical. Deteriorated underground structures that require excavation to repair will quickly undo what took years to plan and construct. The SFPUC can help scope the subsurface conditions early in the design review process.

Location of underground utility lines may determine design. For example, trees must be located at least three feet away from underground gas and water lines.

Permeable paving is also dependent on the composition of the existing roadway and the underlying soils. In some cases the existing road may have a 6"-8" thick concrete base, which is costly to remove if permeable paving is envisioned. Also, in places with a high water table, permeable paving may not improve stormwater management.

ADA/Accessibility considerations will include the possible re-grading and resurfacing of the roadway to make pedestrian areas accessible to persons with disabilities. For example the crossslope (crown) of the roadway must be reduced to be 2% or less and the surface made smooth and non-accessible manhole covers replaced with accessible covers.



#### **EMERGENCY VEHICLE ACCESS**

Emergency services are concerned with minimizing response time to an emergency and maintaining access to buildings as close as possible. Since emergency vehicle access has a high impact on feasibility of alley improvements, projects should be reviewed early by the Fire Department for any issues that could impact the design. Any new obstructions or change to the road geometry that decreases the response time and access for emergency vehicles is of critical importance.

The SF Fire Department reviews street improvements on a case-by-case basis, assessing a variety of factors such as:

- 1. The ability for emergency vehicles, as well as conventional large vehicles, to turn into an alley. Chicanes and turning radii should be designed to allow a SU30 to clear.
- The existing effective travel lane width of many alleys in the Market Octavia area is around 14' feet. To maintain access for emergency vehicles, this width generally should not be reduced. Specific zones may be reduced if a lesser width will not affect operations and access.
- 3. Access to building access points, standpipes, and fire-hydrants.



Source: Jirka Matousei

- 4. Street area to operate equipment and deploy outriggers. Accommodation of ladder trucks to deploy outriggers may require some areas with a clear width of 18 feet.
- 5. Street width to building heights for ladder access. Existing overhead utilities or proposed overhead structures may impede ladder operations.
- 6. Other frontages to access the buildings.

For emergency responders, low mountable obstacles such as planters and traffic-calming features like speed tables and humps will not delay response time. However, transitions to and from street tables should be gradual to prevent damage to fire trucks. This is also a consideration to prevent abrupt vertical jolts for people with spinal injuries. Pavement loads should also be designed for standard fire truck weights.

There may also be other emergency service operational considerations that affect design. Some of the design tools presented here should accommodate the typical needs of emergency vehicles, while some may require more involved collaboration with the Fire Department to develop designs. With an eye toward these concerns, a carefully designed shared street with no curbs and elimination of obstructions like parked cars could actually improve fire access.

#### ACCESSIBILITY

Living alleys aim to increase pedestrian comfort and safety by giving more space to people and less to cars. On small alleys, the removal of barriers like curbs between pedestrians and cars, to create a "shared street" can feel more pedestrian friendly. However, providing universal accessibility for all people, regardless of ability, may mean reinforcing conventional barriers and way-finding cues to serve people who are blind or have low vision. Designing and regulating around this paradox is one of the most difficult tasks. Therefore, a clear understanding of the principles involved and agreement on the means of achieving a shared space within this context is paramount.

The California Building Code (CBC) includes minimum accessibility criteria, as does the 2010 ADA Standards for Accessible Design. At its heart, however, accessibility is a civil right defined in several areas of federal and state statues including the Americans with Disabilities Act (ADA) and the California Civil Code (Unruh Civil Rights Act). Integrating people with disabilities into the life of the community is a right affirmed in these statutes. The design and maintenance of living alleys is required and is an opportunity to make these areas work for all members of the neighborhood, including the young and the elderly.

A mid-alley crossing between a school and playground on Hickory Street, San Francisco

#### ACCESSIBILITY DESIGN PARAMETERS

While not comprehensive, here are some basic accessibility considerations:

- » Accessible pedestrian paths of travel should typically not be less than 5 to 6 feet in clear width, and in no case may be less than 4 feet wide. The maximum cross slope along a path of travel should be 2%.
- » Sidewalk entries should have level landings (no greater than 2% slope) and be approximately 4'x4' minimum.
- » Surfaces for pedestrian use must be firm, stable and slip-resistant. Joints and surface level offsets must be small enough to not create an accessibility barrier. Surface roughness

should be limited in order to avoid possibly harmful whole body vibrations and discomfort.

- A boundary area that is clearly detectable to persons with disabilities shall be provided between areas where vehicles are allowed to travel and pedestrian only areas and accessible paths of travel that are required along the length of each side of an alley typically. These pedestrian accessible routes shall connect with individual accessible entrances and exits along the block and with the accessible sidewalk network of the city where the living alley intersects with a street.
- » Seating and table areas shall incorporate areas for wheelchair users and for persons who need armrests and backrests.



#### **PARKING AND TRAFFIC**

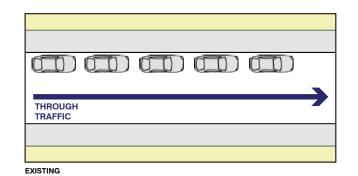
Typically, the alleys in the Market Octavia Plan area have a parking lane on one side of the street. The ability for cars and trucks to turn into and out of the alley needs to be maintained, as does existing garage access. These will determine what and where design features can be located.

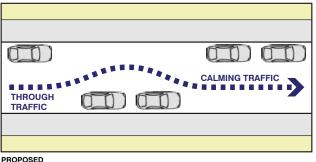
Parking configuration can be used to calm traffic. In alleys wide enough for only a single parking lane it may be possible to alternate the sides of parking lanes to create a chicane, which is a change of the road geometry that requires drivers reduce speed to negotiate the lateral displacement in the vehicle path.

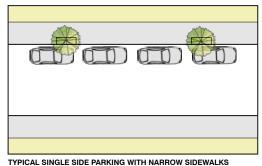
Living alleys can also replace space for street parking with space for people, activities, and landscaping. Removing street parking in exchange for a public amenity requires community support.

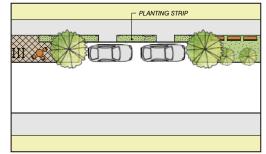
Furthermore, maintaining vehicular maneuverability and emergency vehicle access may determine the design and location of traffic calming features. Access and maneuverability of large trucks, such as trash and recycling pick up, should also be considered in the design.

Incorporating parking and passenger loading areas that are accessible to persons with disabilities may be required.









PROPOSED



SUGGESTIONS FOR INTEGRATING LANDSCAPE & IMPROVEMENTS/SIDEWALK WIDENING IN PARKING LANE

#### **STREET CROSSINGS**

To help create a network of living alleys that is safe, visible, and convenient to use, connectivity across what might be challenging crossings is key. This section summarizes considerations for connecting across streets.

The San Francisco Municipal Transportation Agency (SFMTA) provides guidelines for design and installation of marked crosswalks within San Francisco. Crosswalks exist at all non-alley intersections that meet at approximately right angles, whether marked or unmarked, except where pedestrian crossing is specifically prohibited. Marked crosswalks alert drivers to expect crossing pedestrians and to direct pedestrians to safe crossing locations. At mid-block locations and at alley intersections<sup>1</sup>, crosswalks only exist where marked. In this case, it is the crosswalk markings that legally establish the crosswalk.

Creating a successful network of living alleys depends on connecting them across arterials streets.

SFMTA will need to determine whether a crosswalk should be marked.

#### **CROSSING PARAMETERS**

- » Determine if the site is an alley or a street as defined by SFMTA
- » Vehicular speeds from both directions on street perpendicular to alley
- » Vehicular volume and density
- » Vehicular turning movements
- » Pedestrian volumes
- » Roadway width
- » Day and night visibility by both pedestrians and motorists
- » Directing pedestrians in an identifiable direction is desirable to clarify pedestrian routes for sighted or sight impaired pedestrians
- » Discouragement of pedestrian use of undesirable routes
- » Consistency with markings at adjacent intersections or within the same intersection

Specifically for marking crosswalks at mid-block or alley intersections, crosswalks should only be established if the following conditions apply:

» There is sufficient demand at the midblock or alley location; AND

More than 40 people are expected during the peak hour of pedestrian demand OR,

Significant pedestrian trip generators (such as a school, park, or commercial building) are on both sides of the street between controlled intersections.

- » The location is more than 300 feet from a controlled crossing location; AND
- Adequate stopping sight distance exists between approaching motorists and pedestrians starting to cross the street at the proposed crosswalk; AND
- » The location has adequate street lighting to illuminate the proposed crosswalk; AND
- » Safety considerations arising from roadway configuration, vehicle volumes, or vehicle speeds do not preclude establishing a crosswalk<sup>2</sup>.

SFMTA Crosswalk Guidelines elaborate more on when to mark crosswalks at mid-block or alley locations as they pertain to roadway configuration, vehicle volume and vehicle speeds.

<sup>1.</sup> Per the California Vehicle Code, alleys are general minor street that are 25 feet or narrower in width.

The above guidelines are desired practice, subject to engineering judgment on a case-bycase basis. They are not meant to supplant the California Manual on Uniform Traffic Control Devices (CA MUTCD), which should also be consulted when installing marked crosswalks.

If adding crosswalks is not feasible, living alley designs can explore ways to make improvements that will help people get to the nearest marked crosswalk. Some improvements include sidewalk extensions, sidewalk amenities, signal timing upgrade, and day lighting.

From initial SFMTA analysis, mid-block crossings at major arterials like Gough and Franklin would need to be justified by pedestrian demand and most likely require installing signals due to their high volume of traffic. These are capital intensive (\$250,000), and would need to meet several other criteria for SFMTA to implement. Although the alleys in the Market Octavia Plan Area do not currently generate foot traffic to justify this investment, a possible scenario over the next several years as living alleys develop may look like this:

#### PHASE 1

A building owner converts an alley fronting back-of-house function (e.g. garage) to an active use like a retail store or restaurant that attracts more pedestrian traffic. Another building owner see the commercial success and decides to follow suit. Depending on the popularity of the new uses, i.e. restaurants, it may only take a few new businesses to change the character and use of the alley.

#### PHASE 2

The commercial success of the alley may inspire building or store owners to invest in extensive and high-quality physical alley improvements. If there are similar destinations on the next alley block, then a case may be made for a mid-block crossing.

#### PHASE 3

Community members request an SFMTA study to determine if a mid-block crossing is warranted.



Linden Alley Street Fair, San Francisco



Alley in Copenhagen

### MID-BLOCK ALLEY CROSSING PREFERENCES IN THE MARKET OCTAVIA NEIGHBORHOOD

The map on the following page illustrates the community preferences for potential mid-block crossings from a living alley public workshop in October 2013. Participants were asked to mark intersections for crosswalk prioritization based on their experiences of the area.

To establish a living alley network linking Linden Alley from Buchanan to Franklin Streets should be prioritized based on several factors:

- 1) The community preferences expressed midblock crossings at Gough and Franklin.
- 2) It is one of longest continuous alleys in the Market Octavia Plan area.
- 3) It transects a mix of uses from residential to commercial and institutional.
- 4) It connects two public parks.
- 5) It is relatively flat for multiple uses including bike, walking, and other uses.
- It has existing alley improvements on the 300 block.

#### OTHER CONSIDERATIONS

In San Francisco, any installation of marked crosswalks should be accompanied by an evaluation of accessibility across the crosswalk. This could lead to additional costs for the project sponsor including, but not limited to the need for ADA compliant curb ramps.

If an alley intersection marked crosswalk is not feasible, designers should look at strengthening the network by using other existing nearby controlled crossings.







Mid-Block Alley Crossing Preferences in the Market Octavia Neighborhood

## **Toolkit Goals**

The Living Alleys Toolkit focuses on four goals identified by stakeholders during a series of community workshops from July to November 2013. Community groups can choose to focus on one goal or incorporate all four goals into their living alley designs.

Each goal is presented with a set of design tools. Design tools are interventions or strategies to transform an alley into a living alley. Each tool requires varying levels of public involvement, from individual alley residents to entire neighborhoods and City agencies. Understanding the various costs, key players, and outcomes will guide communities in determining which tools will best accomplish their vision. While every design tool is associated with a single goal, many design tools support other goals as well. Thus, a single design tool can support multiple goals simultaneously. On some pages of the design tools there is a 'policy section' that aim to guide decisions and achieve desired outcomes.

#### THE DESIGN TOOLS INCLUDE:



FURNISHINGS



LIGHTING



LANDSCAPING



PEDESTRIAN-ORIENTED DESIGN

**介**• ACTIVE USES

#### GOAL 1 LANDSCAPING FOR A SUSTAINABLE ENVIRONMENT

### **GREEN ALLEY**



GOAL 3 ACTIVATING PUBLIC SPACES AND LOCAL BUSINESSES

**VIBRANT ALLEY** 



#### GOAL 2 IMPROVEMENTS FOR SAFE PEDESTRIAN ACTIVITIES

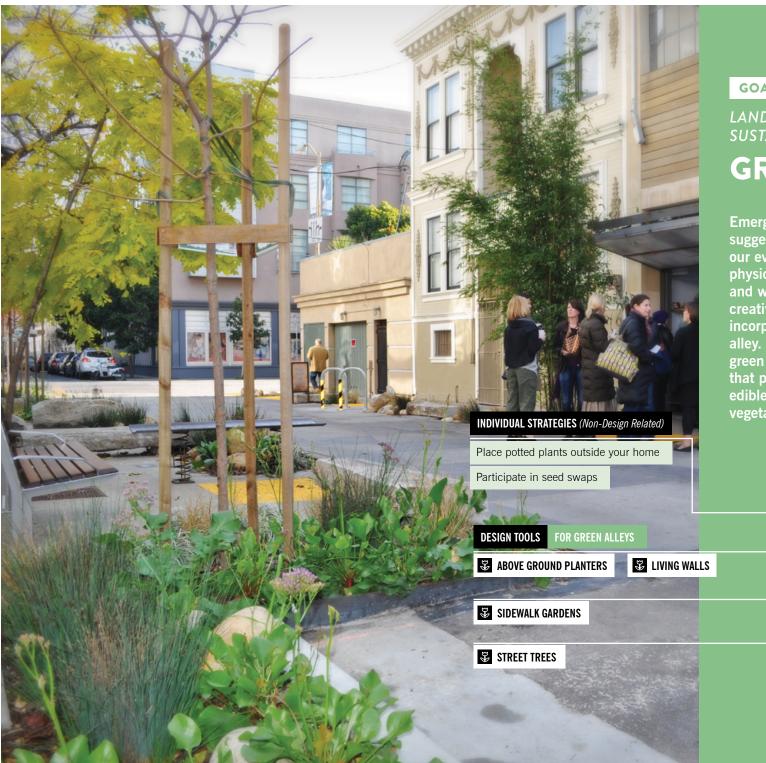
SHARED ALLEY



GOAL 4 MAINTENANCE AND MANAGEMENT

### **CLEAN & SAFE ALLEY**





### GOAL 1

LANDSCAPING FOR A SUSTAINABLE ENVIRONMENT **GREEN ALLEY** 

31

Emerging research and intuition suggest the importance of nature in our everyday lives to enhance our physical and psychological health and well-being. There are many creative and productive ways to incorporate flora and fauna within an alley. Green Alley strategies promote green infrastructure and activities that promote diverse vegetation, from edible produce to habitat-friendly vegetation and trees.

NEIGHBORHOOD & COMMUNITY

# Sidewalk Gardens

Alley Goals: GREEN CLEAN & SAFE

Cost: \$1,000 - \$8,000

Involvement:

A sidewalk garden is a relative low-cost and easy way to start a transformation. Gardens add habitat and biodiversity in urban areas, and can provide attractive green space for people to use and enjoy. They can be used to define and provide comfortable seating areas.

Sidewalk gardens, especially when used in single surface alleys with only local stormwater surcharge, may be effective stormwater management tools. Sidewalk gardens reduce runoff volumes by collecting and slowing down storm water. Allowing storm water to infiltrate into the soil increases the capacity of sewer systems during periods of heavy rainfall.

If soil infiltration is not possible, rain gardens may instead collect runoff in temporary pools that are then slowly released into the sewer system. Aesthetically, rain gardens are also designed as landscape features that works well with other streetscape elements and vegetation. Rain gardens can be engineered to improve the water quality by removing or reducing pollutants before the water enters the sewer system and discharges into the ocean or bay.

Planters can also be integrated into curb extensions, chicanes, and extra wide sidewalks, sitting below the ground as a container for street trees.



# Sidewalk Gardens

#### LOCATION CRITERIA

Planting strips and sidewalk gardens are suitable for many alleys. Planting strips can be located in sidewalks, parking lane planters, and sidewalk extensions. They are most appropriate where there is not frequent pedestrian traffic between parked cars and the sidewalk or where a pedestrian path can be provided between the sidewalk and parked cars.

This simple and inexpensive addition to the streetscape adds aesthetic, habitat, and ecological value to the city's rights-of-way.

#### DESIGN GUIDELINES

- » Design sidewalk gardens to define seating areas and integrate seating. Most alleys have limited sidewalk widths of 7 feet or less, but usually they can accommodate planting strips. On narrow sidewalks, the landscaping or "furnishing zone", is 2 feet or less.
- » Planting strips must maintain the minimum clear sidewalk width ("throughway zone") adjacent to the planting strip for the street type per Better Streets Plan Section 4.2. Per ADA regulations, in no case may this be less than 4 feet in width.

- » Where parking occurs, a 2 foot wide curb side edge strip must be provided to access cars from the sidewalk.
- » Plantings should not interfere with visibility at street intersections.

Most plants are acceptable for sidewalk landscaping; however, ivy and other invasive groundcovers should be avoided as they can provide protective cover for pests. Tall, dense bushes and hedges should also be used sparingly as they can limit visibility and accessibility. Drought-tolerant species should be explored.

Where sidewalk width allows, planting adjacent to the buildings should be considered. Planting strips less than 3 feet may be adequate for narrow plants or vines adjacent to building facades. Property line planting strips that do not include trees may be as narrow as 6 to 12 inches. These can as cut-outs in the sidewalk for vine plantings, or can be used for planter boxes or other containers.

Shallow-rooted landscaping such as groundcovers, grasses and small shrubs should be used to minimize the risk of root damage to building foundations if planting next to a building.

#### POLICY RECOMMENDATION

Living alleys can be beautiful and attractive places planted with vegetation appropriate to the street, microclimate, and context of the built environment. Living alleys can also enable and encourage community members to take ownership in the look and feel of the street.

#### RESOURCES

#### SF Public Works Sidewalk Landscape Permit

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

### SF Better Street Plan: Sidewalk Landscaping

http://www.sfbetterstreets.org/find-project-types/greening-and-stormwater-management/greening-overview/ sidewalk-landscaping/

#### **SF Plant Finder**

www.sfplantfinder.org

### **Above Ground Planters**

Alley Goals: GREEN CLEAN & SAFE

Cost: **\$ \$ \$** 

Involvement: 🗕 + 🛉



Above ground planters on Lily Street, San Francisco

Planters are containers that hold different types of plants, and can be integrated with the streetscape in multiple ways. Free-standing planter boxes and pots on an alley sidewalk can be spaced out to separate pedestrians and cars. Planter boxes can also accommodate seating. Hanging planters can provide greenery overhead, and are typically fixed to walls or light poles to decorate these utilitarian street features.

Shrubs or trees in planters can increase comfort levels within an alley by providing passive shading and cooling throughout the day. They also increase safety and privacy by screening pedestrian activities and physically separating pedestrians from cars and bicycles. Raised planters that are designed with seating can also provide places` for people to stop, rest, and socialize in the alley. Finally, planters can be tied into urban community agriculture within an alley, providing a space to grow fruits and vegetables. There is an increase in maintenance needs with planters, so a dedicated maintenance plan with adequate water should be provided.

# **Above Ground Planters**

#### LOCATION CRITERIA

Above ground planters are appropriate where existing sidewalk space or soil conditions do not allow for planting in the ground, such as where major utilities or basements are beneath the sidewalk.

#### DESIGN GUIDELINES

- Arrange planter boxes to provide a buffer between the roadway and sidewalks, and to create quiet and comfortable seating areas.
   Planters should be designed to incorporate seating.
- » Container plantings should follow the same spacing requirements for sidewalk landscaping discussed earlier in this section.
- » Hanging baskets can be used, but are generally discouraged unless a dedicated maintenance plan is in place.
- » Plantings should not interfere with visibility at street intersection.



Alley in Pasadena, California

### Trees

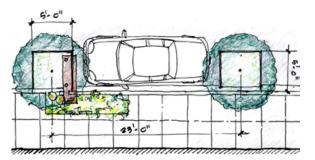
Street trees promote positive outcomes for air quality, stormwater runoff, and urban habitat creation. For pedestrians, street trees promote a safer and more pleasant pedestrian experience by slowing down vehicular traffic and providing natural shade and cooling. Street trees can also be tied into an alley's overall identity if the design of tree guards/grates reflect the area's history, culture, and values.

Planting trees in the parking lane has several advantages. They can be used to claim and define space typically given to parking, and visually narrow the street. Locating tree wells in the street space can increase the storm water capacity and allow more usable sidewalk space. Parking spaces may be located between trees, but may also be used as placeholders for future sidewalk extensions. Trees can also help mark an alley entrance.

Alley Goals: GREEN

Trees can also become a prominent aesthetic feature depending on the choice of foliage, color, and seasonality (deciduous vs. evergreen). Based on streetscape conditions and the location of existing utilities, trees can be planted in above ground planters or inside tree basins. Street trees are typically outfitted with grates and guards to protect them from pedestrian traffic and provide a decorative element to the space. The City has approved a variety of tree species that work well on streetscapes. Depending on the alley, a specific type of tree may work better in terms of microclimate, maintenance, and enhancing the alley's overall character.

Involvement: 🛉





Cost: \$500 - \$5,000

#### LOCATION CRITERIA

Street trees are typically planted in tree basins (sidewalk cut outs) within sidewalks. Where planting strips of sufficient width occur between sidewalks and streets, it is not necessary to create independent tree basins for trees. Ground-cover landscaping should be included in planting basins larger than standard size. In limited circumstances, trees may also be planted in above ground planters.

When adding trees to an existing streetscape, movable site furnishings (chairs/benches) should be relocated to allow for street tree planting in an appropriate spacing. If unmovable sidewalk elements interfere with a planting sequence, site the tree a few feet in either direction to accommodate obstacles. When designing a new or renovating an existing street, locate or relocate utilities and other elements where feasible to attain regular tree spacing. Also remember that trees are required to be 5 feet from fire hydrants.

#### DESIGN GUIDELINES

Minimum size requirements for trees to be planted are as follows:

» Caliper (trunk diameter) of trees to be planted should be a minimum of 2 inches at 8 feet of height.

- » Preferred tree size at planting is a 24-inch box; 15 gallon specimens and smaller caliper sizes are allowed for volunteer efforts and property owner initiated planting.
- » In narrow alleys, trees species should be selected to allow light and not be too dense.
- » Trees should be regularly spaced and contribute to buffering the roadway from the sidewalk. Tree basins should be aligned so that the edges abutting the path of travel form a straight line along the block.
- » Street lighting should also be coordinated with tree selection, placement, and pruning, so that tree canopies do not sit directly below street lighting. Or, pedestrian-scale lighting consistent with the approved SFPUC street lighting catalog that uplights the tree canopy could be used.
- » On narrow sidewalks, trees should have flush mounted grates that maintains a minimum of 4 feet path of travel.
- » On narrow sidewalks locate trees to not interfere with building projections, such as canopies or balconies.
- » New trees should not interfere with visibility at street intersection.
- » Trees should be selected and maintained to provide a minimum vertical clearance of 80 inches above pedestrian areas.

#### POLICY RECOMMENDATION

Street trees are the most important element of the street environment. They should always be included in the design of complete streets.

Appropriate tree species selection and location and design of the planting site ensure the healthy growth and longevity of trees, enhances streetscape character, and maximizes the City and property owner's investment.

#### RESOURCES

### SF Public Works Street Tree Planting Permitting Process

http://www.sfdpw.org/index aspx?page=649

#### SF Public Works Guidelines for Planting Trees

http://www.sfdpw.org/Modules/ShowDocument. aspx?documentid=622

#### SF Urban Forest Plan (Phase 1: Street Trees)

http://www.sf-planning.org/ftp/files/plans-and-programs/planning-for-the-city/urban-forest-plan/Urban\_Forest\_Plan\_Final-092314WEB.pdfGuidelinesForPruningYoungStreetTrees.pdf

#### **SF Plant Finder**

www.sfplantfinder.org

# Living Walls

Alley Goals: GREEN

Cost: **\$ \$ \$** 

Involvement: 🛉

Living walls make good use of underutilized wall surfaces, and can help green an alley where growing plants on the ground or adding trees may be difficult.

Living walls are vertical gardens in which plants are attached to a structural support system, and then mounted to an exterior wall. The support system includes the necessary water and nutrient systems for plants to grow. Support systems range in function, cost, and water requirements, and include hydroponic fiber mat systems or loose-soil systems. While many living walls are manufactured, relatively low-maintenance and small-scale living walls can be handmade.

Living walls, like other forms of vegetation, provide natural passive cooling, which is an energysaving alternative to air conditioning systems. A living wall composed of drought-tolerant plants, such as succulents, can also reduce water and maintenance costs typically associated with landscape maintenance. Living walls can double as public art or prominent centerpieces in an alley, and can thus become a design feature that draws people into the alley.



# Living Walls

#### LOCATION CRITERIA

Living walls can be placed on both residential and commercial buildings on a variety of support systems. Individuals or groups are encouraged to speak with a living wall specialist who will be able to discuss requirements and design a solution suitable for a living wall within an alley.

Living walls require adequate maintenance. The first few months are critical for establishments, and it is essential to get the irrigation and any other maintenance timing right.

#### DESIGN GUIDELINES

- » Ensure that there is accessible and adequate space for a living wall. Site planning should also consider structural issues, leakage, and potential damage to waterproofing. Projects should not impede access to fire or emergency vehicles.
- » Living walls should also consider the sunlight, evaporation, and water needs of the plant species.
- » If the person proposing the living wall is not the property owner, permission and a maintenance agreement should be prepared.



#### POLICY RECOMMENDATION

Due to limited space for sidewalk landscaping, green walls and vertical gardens can provide landscaping for living alleys.

Encourage new buildings that front alleys to incorporate elements of a living wall when feasible.

#### RESOURCES

### Green Roofs for Healthy Cities

http://www.greenscreen.com/Resources/ download\_it/IntroductionGreenWalls.pdf IMPROVEMENTS FOR SAFE PEDESTRIAN ACTIVITIES

# SHARED ALLEY

Alleys can be a shared place for drivers, cyclists, pedestrians, business owners, residents, etc. Shared Alley strategies promote investment in infrastructure and activities that encourage a mix of uses and activities.

 INDIVIDUAL STRATEGIES (Non-Design Related)

 Walk and bicycle more often

 Supervise children playing in the alley

FOR SHARED ALLEYS

👬 SIDEWALK EXTENSIONS 🚪 👬 MID-BLOCK CROSSING 🚪

秋 CHICANES 🛛 秋 SHARED ALLEYS 🛛 💏 LIVING ZONES

RAISED CROSSWALK

DESIGN TOOLS

🚰 BOLLARDS

NEIGHBORHOOD & COMMUNITY

Source: Streets Alive

259 WJV

### Bollards

FURNISHINGS

Alley Goals: SHARED CLEAN & SAFE

Cost: \$4,000 - \$7,000 (stainless steel retractable)

Involvement: 🛉

Bollards are vertical posts that act as barriers or diverters to control vehicle movement. They can be fixed or removable, as appropriate, to allow some vehicles and prohibit others. Bollards can be used to physically separate and protect space for people from traffic and parked cars. In some locations gates may fulfill a similar function of creating a protected area, but allowing access for necessary and occasional vehicles. Limiting auto traffic, while allowing access for emergency and service vehicles (trash and recycling, etc.) and local residents access is critical for the creation of living alleys.

Bollards may also be equipped with lighting and signage, or be specially designed to double as temporary table supports.

Bollards improve pedestrian safety and comfort of alleys by preventing or redirecting vehicles, allowing for play activities and on-street furnishings.



Bollards to control cars from alley, Seattle



Bollards to separate cars from bikeway

#### LOCATION CRITERIA

Bollards should be used at sidewalk locations to prevent vehicles from damaging sidewalk furnishings, trees or plantings. Removable bollards could also be placed at entrances to alleys or at defined zones that are closed to vehicles.

#### DESIGN GUIDELINES

Accessibility considerations for pedestrian areas include placing bollards outside of pedestrian circulation paths and providing bollards that are a not less than 42 inches tall. Bollards should be placed 18 inches from the curb. If there is no parking in the bollard placement area, the bollard may be installed immediately adjacent to the back of the curb. Standard bollard spacing is approximately 10 feet on center, but may be reduced where there is a need to block vehicular traffic, in which 5 feet maybe necessary. Spacing should also vary to sync with the rhythm of lighting fixtures, trees, and landscaping. If removable bollards are used, they should appear sturdy and look permanent.

#### POLICY RECOMMENDATION

Bollards in alleys should be designed to add visual interest to streetscapes and help define pedestrian space.

#### RESOURCES

#### SF Better Streets Plan: Bollards

http://www.sfbetterstreets. org/find-project-types/ streetscape-elements/ street-furniture-overview/ bollards/

#### SF Public Works: Sidewalk Pipe Barrier Permit

http://www.sfdpw.org/ Modules/ShowDocument. aspx?documentid=125

# Chicanes

PEDESTRIAN-ORIENTED

Alley Goals: SHARED

GREEN VIBRANT

Involvement: 🛉 🛉 + 🚣

Chicanes are an alternating series of curb-extensions that curve the road and reduce automobile speed. For narrower alleys, chicanes may not be feasible due to the required clearance for emergency vehicles. As an extension of the curb, a chicane may reduce available parking spaces. Chicanes create new pedestrian space, which can be filled with seating, landscaping, and stormwater management elements.

Chicanes improve pedestrian safety in alleys by encouraging automobiles to slow down. Chicanes also provide added space for other amenities ranging from street furniture to landscaping, which increases the usability and comfort of an alley for a variety of users.



Cost: **\$\$\$** 





### Chicanes

#### LOCATION CRITERIA

Chicanes can easily work on alleys with parking on only one side. Chicanes can be created by alternating parking from side to side.

Chicanes must maintain required clearance for emergency vehicle access, which is typically 14 feet on a one-way street and 20 feet on a two-way street.

#### DESIGN GUIDELINES

- » Chicanes can be designed to have a more gradual transition which would result in an "S" shaped right of way.
- » Chicanes should be placed away from the entrances and exits of an alley and not near driveways.
- » A chicane design should incorporate signage and striping to alert drivers of a bend in the roadway.



#### POLICY RECOMMENDATION

Chicanes calm traffic, and can create welcoming space for people. Landscaping, special materials, and furnishings (such as benches or bicycle parking) should be explored to make chicanes a visual and distinct space.

Because chicanes are intended to slow traffic, designs must consider transit and emergency vehicles.

#### RESOURCES

#### **SF Better Streets Plan: Chicanes**

http://www.sfbetterstreets.org/find-project-types/pedestrian-safety-and-traffic-calming/traffic-calming-overview/ chicanes/

#### NACTO Urban Street Design Guide

http://nacto.org/usdg/street-design-elements/ curb-extensions/chicane/

#### SFMTA Traffic Calming Program

http://www.sfmta.com/node/77946

### Sidewalk Extensions

PEDESTRIAN-ORIENTED

Alley Goals: SHARED

SHARED GREEN

Cost: \$15,000 - \$20,000

Involvement:

#### Sidewalk extensions, also known as bulb-outs, extend a portion of the sidewalk into the roadway, simultaneously narrowing the roadway and widening pedestrian space. They force approaching vehicles to slow down as they turn into it. They also reduce the distance it takes for pedestrians to cross from one corner to another. This may result in a reduction of available

parking spaces. Sidewalk extensions typically include new seating, landscaping, and stormwater management in the new pedestrian space they create.

Sidewalk extensions at intersections improve pedestrian safety by improving their sight lines and their exposure to vehicular traffic, providing waiting



space, and reducing vehicle speed. Sidewalk extensions add space for other amenities, ranging from street furniture to landscaping, which increases the usability and comfort of an alley. They can also prevent alley users from illegally parking at the corners of the street.

#### LOCATION CRITERIA

VIBRANT

Sidewalk extensions can be considered for alleys with high pedestrian volumes and/or high traffic volumes and speeds. The can also be used where alleys intersect with busier throughways. Sidewalk extensions should not be used on streets without a parking lane.

#### DESIGN GUIDELINES

» Bulb-outs should be designed to maximize pedestrian space and minimize crossing distances as much as feasible, while allowing vehicle turning movements.

#### POLICY RECOMMENDATIC

Sidewalk extensions should provide community space, while balancing traffic calming goals and vehicle/bike/ pedestrian needs.

#### RESOURCES

#### SF Better Street Plan: Curb Extensions (Bulb-outs)

http://www.sfbetterstreets.org/ find-project-types/pedestriansafety-and-traffic-calming/ traffic-calming-overview/ curb-extensions/

#### NACTO Urban Street Design Guide

http://nacto.org/usdg/ street-design-elements/ curb-extensions/

### **Raised Crosswalks**

PEDESTRIAN-ORIENTED	Alley Goals: SHARED	Cost: \$15,000 - \$30,0000	Involvement:
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Raised crosswalks continue a sidewalk across a road, creating a level pedestrian path from one end of the sidewalk to the other, while at the same time signaling to motorists to slow down and take greater care as they enter or leave an alley.

Raised crosswalks can mark the entry to an alley and distinguish the space from the surrounding streets. Raised crosswalks may increase accessibility and safety for all pedestrians. Since raised crosswalks are more noticeable to drivers due to change of elevation and use of different paving or markings, they also encourage drivers to exercise greater caution when passing through a pedestrian zone.



#### LOCATION CRITERIA

Raised crosswalks can be placed at the alley entry or mid-block. Because raised crosswalks can block or divert natural overland water flows, hydraulic conditions may impact their feasibility.

#### DESIGN GUIDELINES

Design raised crosswalks as extensions of the sidewalk with the same material, color, and scoring lines. Narrow the effective width of the crossing if possible, often done by eliminating the parking lane. Designs should include trees and planting. Minimum widths and turning radii should be maintained to allow access for cars and emergency and service vehicles. Where allowed, raised crosswalk profiles must comply with Public Works criteria for vehicle clearances, accessibility, and hydraulic design.

#### POLICY RECOMMENDATION

As important pedestrian safety components raised crosswalks should be a Public Works standard improvement for universal access, where feasible.

#### RESOURCES

#### SF Better Streets Plan: Raised Crosswalks

http://www.sfbetterstreets. org/find-project-types/ pedestrian-safety-and-trafficcalming/traffic-calming-overview/ raised-crosswalks/

# **Mid-Block Crossings**

PEDESTRIAN-ORIENTED

Alley Goals: SHARED

VIBRANT Cost:

Cost: \$300,000 - \$400,000

Involvement: 📥

Living alleys can connect to other alleys to create an alternate pedestrian network to the bustling main streets. A challenge is the current physical separation between alley segments. The isolation that contributes to their quiet charm also makes them disconnected. They stop and start, interrupted by busy major streets.

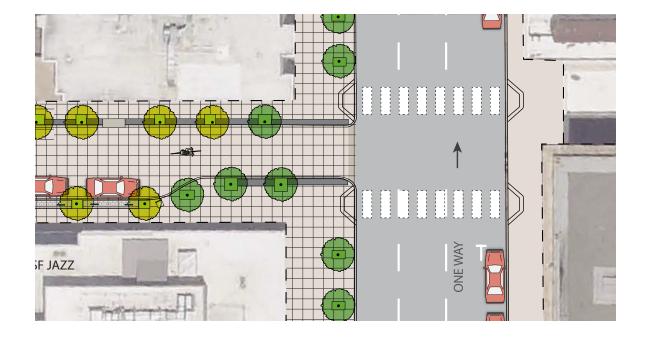
Where an alley intersects a larger street it may be possible to connect to the next alley block with mid-block crossings. Mid-block crossings may vary from painted zebra crossings to signalization devices.



# **Mid-Block Crossings**

#### DESIGN GUIDELINES

- » Mid-block crossings should be enhanced with signage, striping, signalization, or other special treatments such as flashing beacons, special paving materials,or raised crossings. Mid-block crossings should be constructed in combination with mid-block curb extensions and, if possible, include pedestrian lighting oriented toward the crossing.
- » Crossings should be at least as wide as the sidewalk, but may be wider in locations with high pedestrian demand or on narrow sidewalks. Crosswalks should be no less than 10 feet in width. Crosswalks must be outfitted with curb ramps and tactile warning strips per accessibility (ADA) guidelines.



#### POLICY RECOMMENDATION

Where a living alley occupies most of a block, or results in increased public use, SFMTA should prioritize and coordinate the design and implementation of mid-block crossings where feasible.

Living alleys should be designed for safe pedestrian circulation. When feasible and desired, mid-block crossings should support this goal.

#### RESOURCES

#### SF Better Streets Plan: Crosswalks

http://www.sfbetterstreets.org/find-project-types/ pedestrian-safety-and-traffic-calming/crosswalks/

#### **SFMTA Livable Streets**

http://www.sfmta.com/about-sfmta/organization/ divisions-and-units/livable-streets

# **Shared Alleys**

PEDESTRIAN-ORIENTED

Alley Goals: SHARED

Cost: **\$\$** 

Involvement:

Shared alleys prioritize the entire right-of-way for pedestrians and bicyclists by providing alternative but clear physical boundaries between accessible areas of exclusive pedestrian use and those where vehicles are allowed to share space with pedestrians and bicyclists. Shared alleys permit limited vehicle use but unify the street space with single-surface paving, landscaping, and amenities, such as seating, combined with traffic calming measures to promote very slow driving speeds that signal to drivers that autos are welcome but not prioritized. Street parking is either prohibited or selectively removed and converted into public social spaces.

Shared alleys are conceived to prioritize pedestrian, but are hybrids that rely heavily on design to accommodate people, slow traffic speed, and signal the intended pedestrian focus of the street. Signage and the design of the street reinforce pedestrian priorities. There are currently no accepted standards for shared alleys or streets that have legal standing.

Primary tools for creating Shared alleys are: Paving; Trees; Raised Crosswalks; Seating; Public Art; Sidewalk Gardens; Bike Racks; and Lighting.



Hotaling Street shared alley, San Francisco

### **Shared Alleys**

#### LOCATION CRITERIA

Mixed-use alleys are best suited for shared alley designs where there are sufficient active uses, like restaurants and shops with many lively storefronts that draw and serve many people on foot. They are best on alleys that primarily serve limited local access and have low traffic volumes, with slopes of 5% or less.

#### DESIGN GUIDELINES

- » Shared alleys should encourage social interaction. Designs should incorporate seating areas. All features shall maintain the minimum required width for emergency and service vehicle access. All existing effective road widths, with a minimum of 14 feet, should be maintained at all times for emergency vehicle access.
- » Shared alleys are intensive improvements that modify existing sidewalks, curbs, and road lines to create a unified level surface in the public right-of-way that prioritizes pedestrians and bicyclists. They provide alternative but clear physical boundaries between accessible areas of exclusive pedestrian use and those

where vehicles are allowed to share space with pedestrians and bicyclists.

- » Designs should include: special paving, trees and planting, seating and tables, lighting, and art, all orchestrated to create a calm, special, pedestrian oriented place.
- » Through-access would allow cars and full access for emergency and service vehicles (street sweeping, trash and recycling collection).
- » The typical road widths are 21 feet with a parking lane. Removal of some street parking is expected to accommodate other amenities. The entrances of shared alleys should signal to motorists that they are entering a shared alley, but should maintain existing turning radii to accommodate emergency vehicle access. Signage indicating a shared alley should reinforce the design intent.
- » The detailed design of a shared alley must clearly demarcate roadway and pedestrian zones using barriers, color and texture contrast, and detectable tactile warnings.

#### POLICY RECOMMENDATION

Shared alleys should emphasize their pedestrian scale and calm traffic. Design should allow for a generous pedestrian realm and create pockets of usable open space especially in neighborhoods with little open space.

#### RESOURCES

NACTO Urban Street Design Guide http://nacto.org/usdg/streets/residential-shared-street/ AND

http://nacto.org/usdg/streets/commercial-shared-street/

### SF Better Streets Plan: Shared Public Ways

http://www.sfbetterstreets.org/design-guidelines/ street-types/shared-public-ways/

# Paving

PEDESTRIAN-ORIENTED

Alley Goals: SHARED VIBRANT

Cost: \$25,000 - \$60,000

Involvement: 📥

If a living alley is an urban living room, then paving is the floor. Paving materials alone can enhance the overall aesthetics and intentions of the design. While standard street and sidewalk paving consists of asphalt or concrete, other materials may be used to separate spaces, make circulation and navigation more intuitive to promote pedestrian comfort and safety, and create a strong sense of place. Paving can also be a decorative feature to attract visitors into the space, and allow opportunities for street and sidewalk art.

Materials range from textured/colored concrete to brick, stone, or concrete pavers. A permit is required in order to replace standard paving with special paving materials so that it complies with acceptable performance standards. Paving can be used consistently across an entire roadway, or may be used to demarcate specific spaces within the alley.

Permeable paving is different from standard pedestrian paving in both function and aesthetics. Permeable paving on pedestrian and vehicle rights-of-way are made of several layers of porous material to allow for passage of water and air into the soil below. The underlying subgrade of permeable paving on roadways must be engineered to take heavier vehicle loads and still allow water to percolate through. Because of the necessity for different types of layering that extend below the surface, permeable paving requires much more intensive installation and maintenance costs to clean than other paving systems.





### Paving

Permeable paving reduces overall stormwater runoff volumes, which improves water quality and prevents the overflow of stormwater. Used in combination with other types of paving, permeable paving can differentiate between pedestrian and vehicular rights-ofway, which can increase pedestrian safety and driver caution. Refer to SFPUC's *Green Stormwater Infrastructure Typical Details* for more information on permeable pavement.

#### DESIGN GUIDELINES

- » Use paving on shared streets to identify and designate functions such as pedestrian and auto zones, and parking spaces; to define sitting and play spaces and planting areas.
- » Public Works and SFPUC have paver and permeable paving guidelines. Accessible routes must be firm, stable, slip-resistant and be smooth, having a low degree of roughness
- » Use paving to provide human-scale and texture; differentiate paving to provide visual and tactile cues to drivers to slow down, e.g. cobble stone or other textured rumble strips.



- » The design of a shared street must provide clearly demarcate the roadway from pedestrian spaces using barriers, color and texture contrast, such as detectable tactile warnings.
- » Unit pavers and permeable paving systems must account for differential settlement that may cause unevenness or create cracks that become tripping hazards, preventing an acceptable level of universal accessibility.

#### POLICY RECOMMENDATION

Living alleys can use special paving to communicate the location of pedestrian spaces, define the edges for parking, playing and sitting, and also highlight the edges of planting areas.

Where a living alley is a pedestrian only space, paving can be used to define and highlight spaces within the public right-ofway and break down the space into a more pedestrian scale.

#### RESOURCES

### SF Better Streets Plan: Special Sidewalk Paving / Permeable Paving

http://www.sfbetterstreets.org/find-project-types/ streetscape-elements/sidewalk\_paving/

http://www.sfbetterstreets.org/find-project-types/greeningand-stormwater-management/stormwater-overview/ permeable-paving/

#### SF Public Works Sidewalk Surface Permit

http://sfdpw.org/index.aspx?page=164.

#### SFPUC Green Stormwater Infrastructure

http://sfwater.org/modules/showdocument.aspx?documentid=6009

### GOAL 3

**ACTIVATING PUBLIC SPACES &** LOCAL BUSINESSES **VIBRANT ALLEY** 

Alleys can be a space where people want to stay and enjoy the amenities and environment, not just simply pass through. Vibrant Alley strategies promote investment in infrastructure and activities that encourage an attractive, diverse mix of commercial and social activities at all times of day. Several studies indicate that more pedestrian traffic generates more retail revenue.



# Signage/Wayfinding

FURNISHINGS

Per

Since living alleys are new and unconventional, people need to understand what is expected. Drivers need to know they are entering a non-through-street, or a local traffic only street, or that they are expected to drive slowly and deferentially to pedestrians. Signage helps communicate these expectations.

In addition, wayfinding signage helps visitors identify and locate businesses, amenities, and other destinations in the area. Signage not only can inform and orient, but help draw people to the uniqueness of the alley. A signage program can reinforce a unique sense of identity, and overall image, especially when it incorporates historical or cultural information.



Consider multilingual text, or internationally recognizable graphic iconography. Signage need not be restricted to physical but may also include electronic media. Where an alley design attempts to implement an innovative or ecological component use signage as an educational opportunity. Consider local business, graphic artists, and artisans when designing a comprehensive signage program.

#### LOCATION CRITERIA

Street signage should identify living alleys that are designed to improve the pedestrian/bicycle realm. Locate signage at alley entries to define the transition from street to alley.



#### DESIGN GUIDELINES

Alley Goals:

 In some cases consistency is desired and in others eclectic signs of different sizes, colors and materials can add 'energy' to a space. Determine which is appropriate. Signs should not block accessible paths of travel, nor should there be impediments to reading the signage for people of all abilities.

Cost: **\$ \$ \$** 

- » Street signage should not be obstructed by other streetscape elements. However, elements such as street trees or light poles should not be moved to accommodate new signage; rather, signs should be placed around existing features and around the ideal locations of plantings, lighting, and site furnishings.
- » Streetscape signage in living alleys can mark edges or entry points or contribute to an overall image of the living alley pedestrian network.
- » Consider signage that explains a relevant design features or historical significance of the alley.

### POLICY

Involvement: Q + •

Adopt signage for shared alleys similar to European standards that designate the speed limit and pedestrian priority.

#### RESOURCES

#### SF Better Streets Plan: Signage

http://www.sfbetterstreets. org/find-project-types/ streetscape-elements/ street-furniture-overview/ signage/

# **Public Art**

FURNISHINGS

Public art adds interest and delight to a pedestrian's experience. Public art promotes foot traffic. Public art can be a catalyst for a community effort to transform an alley. It attracts visitors and brings neighbors together with a visible symbol that shows care for a place. Public art can tell a local story of an area's historic, cultural, and social values. Public art can also be interactive, and functional. It can be placed on private property (with owner's permission), such as murals on fences or walls; or on public property, such as sculpture installations in the right of way, or on the pavement. Public art can be either temporary or permanent. A few cans of paint and a willing group of volunteers can be a quick and inexpensive way to add color and visual interest. Sculptures, murals, and installations commissioned by local artists can define the floor, wall, or ceiling planes and change the alley's character.

Art can foster awareness of local talent and forge community partnerships between residents, businesses, local artists, and organizations throughout the process, from conceptual planning to installation. Regardless of artistic ability, anyone can join a local public art project. Public art can also be linked to lower crime since people are less likely to vandalize surfaces where murals are present, and community members who contributed to making public art have greater investment in keeping these murals protected.



Alley Goals: VIBRANT

**CLEAN & SAFE** 

Cost: **\$ \$ \$** 

Involvement:

### **Public Art**

#### LOCATION CRITERIA

Public art in alleys should be visible to pedestrians. A piece of art can act as a focal point in the alley, or present a "surprise" further inside an alley, which can reward the passerby with visual interest.

#### DESIGN GUIDELINES

- » Public art should be accessible to persons with disabilities and should be placed in a way that does not compromise the clear path of travel.
- » Public art and murals should be considered during the planning and design of alley improvements to integrate art with other streetscape elements.



#### POLICY RECOMMENDATION

The San Francisco Arts Commission should develop a funding program specifically for art associated with community initiated living alley improvements, in partnership with local public artists.

#### RESOURCES

San Francisco Public Art Map www.sfpublicart.com

SF Mural Arts www.sfmuralarts.com

San Francisco Arts Commission www.sfartscommission.org

Umbrellas create a luminous and colorful ceiling along a promenade in Águeda Portugal

# **Light Strings**

Light strings are hanging lights connected to one another by a single electric wire. Light strings can provide a "ceiling" to alleys and define space creating a human scaled experience. Light strings are particularly effective in alleys due to their narrower width, where these fixtures easily hang from one wall to the other. Since they are a temporary alternative to light poles and fixed light, they are cheaper, easier to install/remove, and can be easily turned off when necessary.

A well-lit alley can increase the overall safety for residents and visitors alike, and light strings can be installed quickly and inexpensively without extensive help from City agencies. For alleys with high building heights, light strings hung in regular intervals can promote a sense of enclosure, intimacy, and privacy for people in the alleys and residents in upper stories of the building.

#### LOCATION CRITERIA

Light strings are feasible with the cooperation of property owners who can provide a power source. Lights are typically attached to buildings using bolts. At the date of printing, the City cannot provide a power source for light strings.

Alley Goals:

#### **DESIGN GUIDELINES**

**CLEAN & SAFE** 

» Consider low level illumination or downlighting to minimize disturbance to upper story residents. Lights should be at least 15 feet above street level to avoid conflicts with vehicles.

#### RESOURCES

#### Pioneer Square Alley Lighting Evolution Guidance

Involvement: <u>Q</u> + •

http://isiseattle.org/ files/2013/06/140212-ISI-Lighting-Evolution-Guidance-Hand-Out-Final.ndi





Cost: **\$ \$** 

### **Temporary Closures for Street Events**

パ・ACTIVE USES

Alley Goals:

SHARED

Cost: **\$ \$** 

Involvement:

Any type of short-term event that closes an alley to car and brings people together is a great way to inject life into an alley, explore the potential to change how a community uses the space and make use of benches, chairs, and tables there. Movie screenings, concerts and block parties are small-scale gatherings that do not require a significant amount of legwork. Over time, temporary closures for events can become a key part of the alley's overall identity. Event planners should check with City agencies and residents regarding restrictions on noise, traffic, and

permitted hours to hold events, and should also consider how temporary closures may impact employees and residents on the alley.

Bringing communities together generates camaraderie, excitement, and new ideas about how their living spaces can be better improved. Temporary events provide new opportunities for fundraising and commerce. Finally, temporary closures ensure periods of total user safety from vehicular traffic.

#### RESOURCES

SF Beautiful: How-to: Event Permitting

#### SF Better Streets Plan: Block Parties and Street Fairs

http://www.sfbetterstreets.org/find-project-types/

#### SFMTA Street Closure



### Seating

**FURNISHINGS** 

People love to sit, people-watch, eat, and socialize with others. Providing seating in an alley, especially when paired with other active uses, is one of the most functional and qualitative improvements that can be made. An alley is lively when people sit and spend time there. Casual seating can be custom built in and around planters, and made from found materials or it may be bought from standard manufacturers. Seating may be used as a barrier to separate pedestrian zones from vehicular zones on shared streets. Movable chairs can provide flexibility and choice. Seating increases the alley's accessibility for users who cannot stand for prolonged periods of time. Benches and seats can also add color and form based on their shape, color, and how they are arranged. Seating can be provided at a range of different heights, locations and orientations.

#### LOCATION CRITERIA

Seating should be located in both sunny and shady spots. Seating usually works best when located at edges of activities, that allow people a sense of refuge, but with a view of the things going on around them. Seating should be located a comfortable distance from pedestrian, automobile, and bicycle traffic or seating can be arranged to accommodate groups of people, and some to provide for solitary enjoyment. When locating seating imagine where and with whom people might want to sit and rest, eat, or people watch.

#### DESIGN GUIDELINES

- Seating can be placed on curb extensions or where sidewalks extend into the parking lane.
   In general, seating should follow the guidelines in the Better Streets Plan.
- Consider car overhangs and door swings in seating placement.
- » Seating should accommodate people of all abilities. Accessible seating requires the seat level at 16 -18 inches

#### RESOURCES

#### SF Better Streets Plan: Benches and Seating

http://www.sfbetterstreets.org/ find-project-types/streetscape-elements/street-furniture-overview/ benches-and-seating/

#### **Project for Public Space**

ttp://www.pps.org/reference/ novable-seating/

high, with area for a user to transfer from a wheelchair to a bench with armrests and backrests.

» Provide accessible seating with backrests and armrests. Seating and table areas shall incorporate areas for wheelchair users. Seats with open areas below the front edge allow placing feet directly under one's center of gravity when standing or sitting down.



Alley Goals: VIBRANT

Cost: \$5,000 - \$8,000 (benches)

Involvement: <u>Q</u> + •

### **Bicycle Racks**

FURNISHINGS

Alley Goals:

Bicycle racks in alleys can provide a

safer space away from more traffic-heavy

corridors for residents and visitors to store

their bicycles. Bicycle racks on alleys can

also help bicyclists who find that street

sidewalks hold limited bicycle parking.

Bicycle racks can increase the acces-

sibility of alleys and nearby businesses

for people with limited access to public

parking also deters bicyclists from locking

their bicycles to trees, benches, or on the

use, enjoyment, and maintenance of these

sidewalk, which can interfere with the

transportation or cars. Formal bicycle

Cost: \$3,000 - \$4,000

Involvement: 👤 + 🛉

#### LOCATION CRITERIA

DESIGN GUIDELINES

» Please reference the San

Francisco Better Streets

Plan and the SFMTA Bicycle Parking Standards for more detailed design guidance.

» Bicycle rack design, location

and orientation of bicycle protrusions must be carefully coordinated with the accessible pedestrian route.

SHARED

Narrow sidewalks in alleys have a limited ability to accommodate bicycle racks without interfering with the pedestrian path of travel. Bike racks are best located in furnishing zones of curb extensions, or parking lanes and near active commercial frontages, or destinations such as schools, transit stops, or public spaces and amenities.

Bicycle parking in alleys complements the inherent flexibility of bicycles as a mode of travel and should be incorporated in living alley designs when feasible.

#### RESOURCES

#### SFMTA Bicycle Parking: Standards, Guidelines, Recommendations

#### SF Better Streets Plan: **Bicvcle Racks**

Bicycle parking plays a key role in supporting a bicycle network. Bicycle racks provide spaces for bicyclists to safely lock and store their bikes while working or shopping. Depending on design, a single rack can accommodate 1-2 bicycles while a bike corral can hold as many as 12. Other bike rack designs can be mounted to a wall so that bicycles can be stored vertically, leaving additional ground space for pedestrian and vehicular activity. Bicycle racks should be spaced and distributed evenly across an alley to promote easier access.

landscape features.



### **Active Frontages**

ACTIVE USES

Alley Goals: VIBRANT

SHARED

CLEAN & SAFE

Cost: **\$ \$** \$

Involvement: 🛉





Many alleys are lined with garages that inhibit an active street life. Imagine an alley lined with shops and restaurants filled with people instead of garage doors. More people on the street and less cars entering garages translates into increased pedestrian activity, safety and less crime. Enhancing an alley design in conjunction with converting garages to vibrant commercial uses should be seen as a strategy for economic development.

Since parking is not required in the Market Octavia Area Plan, and commercial uses are allowed on the ground floors along alleys east of Octavia boulevard, and at corner locations throughout the plan area, converting garages into commercial spaces may be the perfect fit for small businesses, and an ideal opportunity to activate alleys. The size of garage spaces and location can attract a diverse mix of specialized or start-up businesses priced out by the main streets. They are also adaptable – more apt to support temporary "pop-up" retail – where a store can easily move in and out, and be converted back into a garage. If there are multiple garages in a row, some spaces can be combined together to create larger retail spaces.

Active uses at the ground floor may inspire enhanced public amenities on the street such as tables and chairs, and landscaping that support a quality pedestrian experience.

New businesses should verify that the proposed use is allowed by the SF Planning Code. Check with San Francisco Department of Building Inspection or a licensed design professional to determine feasibility in a particular structure.

### **Active Frontages**

#### LOCATION CRITERIA

Areas where zoning allows ground floor commercial. Please refer to Map titled, "Permitted Areas for Commercial Uses" located in the appendix. Please verify zoning and possible required neighborhood notification procedures with the SF Planning Information Center.

#### DESIGN GUIDELINES

Accessibility will be a prime concern. Sidewalks in front of many garages have cross slopes that exceed the 2% standard and level landings at store entries are required.

#### POLICY RECOMMENDATION

Encourage active ground floor land uses and activities. Minimize new garage additions or entrances along alleys (when feasible).

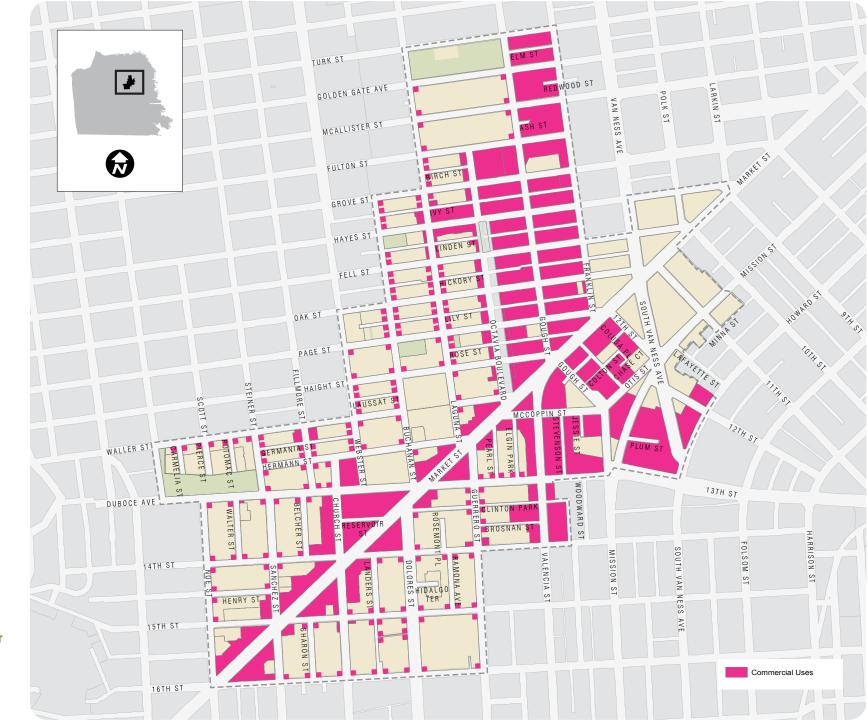


#### RESOURCES

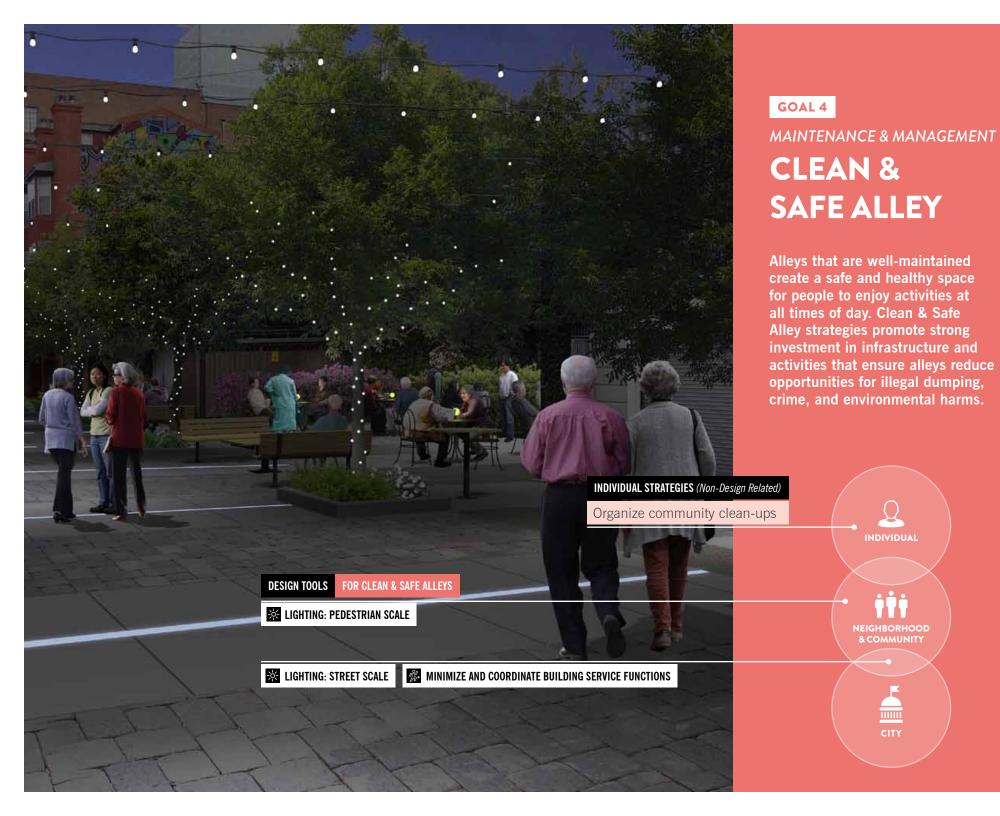
SF Planning Department: Public Information Counter http://www.sf-planning.org/index.aspx?page=2744#pic

SF Planning: Property Information Map http://propertymap.stplanning.org

**SF Planning: Permit How-To Guides** http://www.sf-planning.org/index.aspx?page=2767



Permitted Areas for Ground Floor Commercial Uses in Market Octavia Plan Area



#### 

# Lighting

LIGHTING

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Many alleys can feel dark and neglected or unsafe at night. Most streets have standard overhead lighting that is oriented for general illumination, but does little to create an ambience specific to the space and scaled for the pedestrian. Thoughtfully and purposefully designed, lighting can create and comfortable and welcoming ambience at night. Lighting can define space and contributes greatly to the perception of safety. The SF Public Utilities Commission supplies electricity to standard pre-approved street lighting fixtures. Alternate locations and possibilities to consider are: lighting trees; overhead light strings; installing lights on building walls, which may be motion activated; lighted signage; solar photo-voltaic paving lights (photo); and pedestrian lights on the sidewalk.

Lighting fixtures may be designed to double as bollards or bike racks.

**Pedestrian-scale lighting** provides lighting lower to the ground than street-level lighting since it is oriented for aiding pedestrians' visual clarity. Pedestrian-scale lighting does not sufficiently light streets enough to replace street lighting, but alleys are favorable places for this type of lighting since they are narrower, allowing for a number of ways in which pedestrian-scale lighting can be installed.

VIBRANT

Pedestrian-scale lighting improves walkability and safety for pedestrians, and can provide exposure to businesses by lighting up signage and other features. Since pedestrian-scale lighting is placed lower to the ground and does not need to be as bright as street lighting/light poles, it can make alleys a more intimate and warm. They are functional at night yet can be visually appealing during the day. **Street-scale lighting** or overhead lighting, provides lighting to improve the visual clarity and safety for pedestrians, bicyclists, and drivers alike. Light poles provide a vertical element where street enhancements like signage and planters can be mounted. Depending on how they are designed, they are both functional at night and visually appealing during the day.

Cost: \$2,000 - \$20,000

There are typically higher installation, maintenance, and electricity usage costs associated with this type of lighting since fixtures will need





Involvement: 🛉 🛉 🛉 + 🚣

Alley Goals: CLEAN & SAFE

# Lighting





to be coordinated with utility equipment above and below ground. Light poles should be spaced consistently and factor in other vertical elements that may affect the lighting, such as trees. Street lighting may also affect the amount of light entering surrounding properties, which could be detrimental to residents and other building users.

#### LOCATION CRITERIA

Street lighting should be located on sidewalks within the furnishing zone. If pedestrian scale lighting is desired in an alley, it should align with the street lighting poles. Pedestrian scale lighting should be considered in areas with high nighttime pedestrian activity.

#### DESIGN GUIDELINES

- » Location and spacing and light distribution for streetscapes and alleys are included in the SF Better Street Plan. On alleys, special consideration should be given to location and light levels due to the narrow street width and tree canopy.
- » Design and select lighting with special consideration to define the entrances of alleys.

#### POLICY RECOMMENDATION

Pedestrian street lighting should be adopted into the SFPUC standard fixture palette to help define a unique nighttime environment as well as increase safety and visibility for living alleys.

#### RESOURCES

### SF Better Streets Plan: Street Lighting

http://www.sfbetterstreets.org/findproject-types/streetscape-elements/ street-lighting/

#### SFPUC Street Light Catalogue

ttp://sfwater.org/index.aspx?page=712

### Minimize and Coordinate Building Service Functions

劣• ACTIVE USES

Alley Goals: CLEAN & SAFE VIBRANT SHARED Cost: \$ \$ \$

Involvement: 🛉

Building frontages should maximize active uses and provide space and aesthetic enhancements into an alley. Building service functions, including garage access, loading, trash, utility, and mechanical rooms, detract from the quality of public life, can be a hazard to human health/safety, and do not promote active and diverse uses throughout the day. If service functions can be minimized and relocated away from pedestrian activity, it opens up space for people to use the alley safely and comfortably without interference of vehicles, service equipment, etc.

Minimizing service functions on building frontages allows for commercial and social activities, increasing community vibrancy and commercial vitality while making these spaces more visually attractive. Reducing service functions also protects alley users from services seen in alleys that pose potential safety or health hazards, especially those dealing with automobiles and garbage disposal.



# Minimize and Coordinate Building Service Functions



# DESIGN GUIDELINES

- » New construction should combine garage, loading, and trash access functions behind a single opening where feasible.
- » Transformers should be located in sub sidewalk vault, where feasible.
- » Consider the location of garage access to limit their frontages.

# POLICY RECOMMENDATION

The size and location of garage access and service functions in new development should consider potential impacts for future living alleys.

# RESOURCES

# SF Planning Department: Public Information Counter

http://www.sf-planning.org/index.
aspx?page=2744#pic

# SF Planning: Permit How-To Guides

http://www.sf-planning.org/index.
aspx?page=2767



# Prototypes

This section illustrates the application of some of the tools in the toolkit. Two prototypes were created as part of the initial planning for this program. These two prototypes are 'shared streets' and 'living zones'. Shared streets prioritize the entire right-of-way for pedestrians and bicyclists by removing the distinction and exclusivity between pedestrian and auto zones. Living zones create public spaces in alleys for active recreational uses and passive social uses by temporarily closing them to through traffic. To understand which prototype would be suitable for an alley, it is important to acknowledge the existing physical and social character of the alley. While all the alleys in the Market Octavia Area Plan are unique, the two general types are Residential and Commercial/Mixed Use. Understanding their characteristics will inform which prototype is more suitable.

# **RESIDENTIAL ALLEY**

A residential living alley supports the activities and needs of those who live nearby. Existing residential alleys are typically lined with rows of garages and residential entrances. Spaces for neighbors to gather, socialize, and plant in front of their homes are often shared with vehicular rights-of-way without any form of traffic calming. Design elements, such as "living zones" or a shared street design (see following pages) in a residential living alley should promote a variety of protected and active uses that encourage neighbors to use the alleys as a front porch. Residential living alleys can include smaller design interventions that residents initiate themselves, such as adding plants, artwork, or additional lighting in front of their home; in this way, residents define the character and identity of their alley.

# COMMERCIAL / MIXED USE ALLEY

A commercial living alley draws a mix of visitors, employees and residents to restaurants, cafes, and retailers that either face the alley or are located nearby. Many businesses operating late into the night support a variety of nighttime activities (dining, clubbing, concerts, etc.) in the alley. Outside normal business hours, employees use the alley to park their vehicles, handle deliveries, or dispose trash in the early morning and late night.

Commercial alleys often contain service functions that are necessary for day-to-day retail and food operations, like loading docks. Design should not only increase safety of these alleys for all users during both peak and off-hours, but also complement the different types of activities that may spill into the alley as a result of nearby commerce. Commercial living alleys should balance livability and functionality.





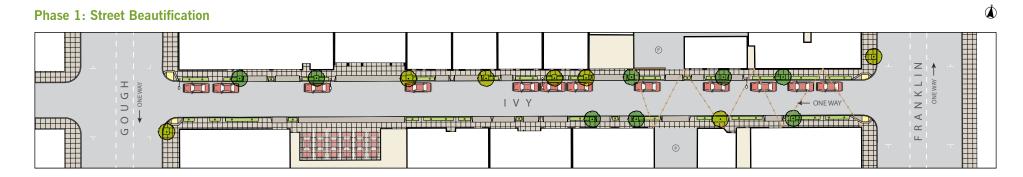
# SHARED STREET PROTOTYPE

# 200 Block of Ivy Street

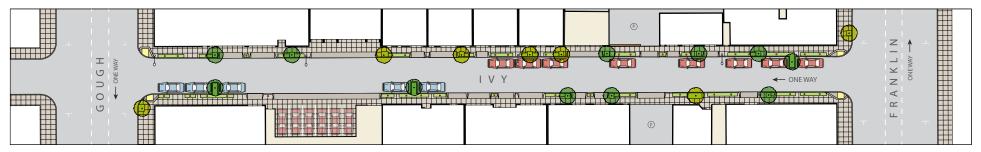
Residents of the 200 block of Ivy Street in the Market Octavia Area Plan are designing the block as a prototype for the living alleys program with the support of the Planning Department's City Design Group. To support commercial activity from nearby cafes, restaurants, and businesses in the area, the following were included in a conceptual design. The design could be developed in phases with landscaping, traffic calming, activating underutilized space, and later shared street design. The different phases are depicted in the following plans.



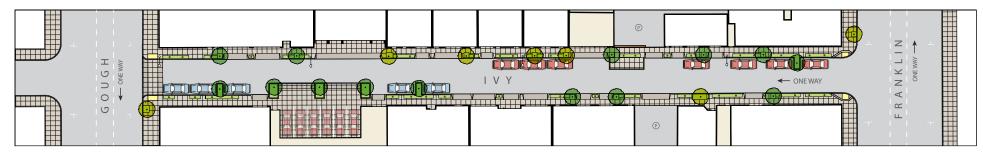
- » A segment of the alley could be made level (curbless)
- » Fixed furnishings, such as bicycle racks and planters
- » Temporary furnishings like chairs and tables that can be set up and put away by the sponsoring organization
- » Planters and additional street trees
- » Traffic calming features such as raised crosswalks
- » Murals (with building owners consent)
- » Potential micro-retail from converted ground floor garages

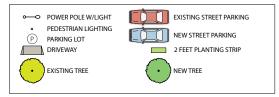


# Phase 2: Vehicle Flow Shift



# Phase 3: Open Spaces / Bulb-Outs / Raised Crosswalk



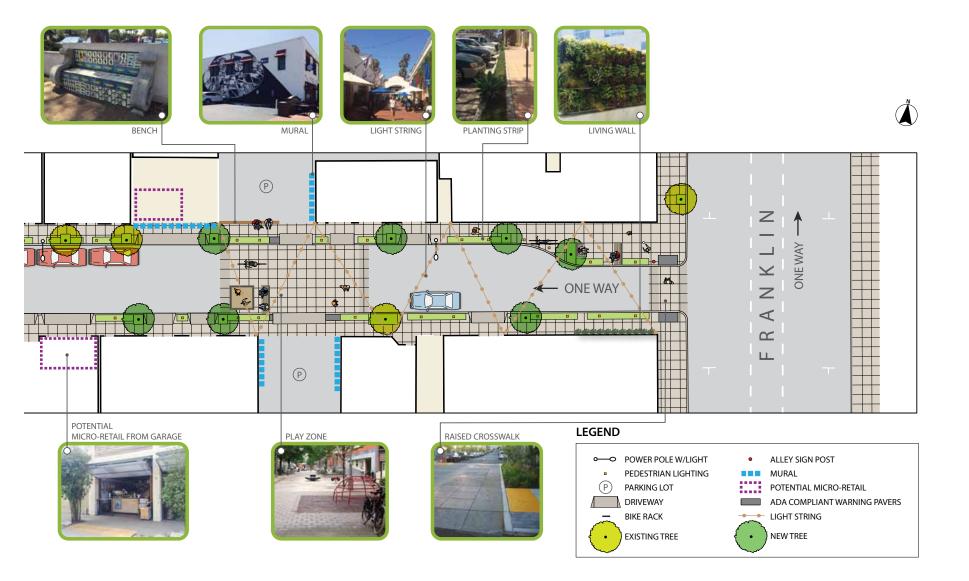


SHARED STREET PROTOTYPE

# 200 BLOCK OF IVY STREET

Phase 4: Single-Surfaced Living Alley

MOVABLE CHAIR/TABLE BIKE NCK PEDESTRUM LIGHTING PEDESTRUM LIGHT



SHARED STREET PROTOTYPE

200 BLOCK OF IVY STREET

Existing Condition on 200 Block of Ivy Street



**Phase 1: Street Beautification** Depicted with planting strips.



# Phase 4: Shared Street Treatment in Day Time

Design includes curbless street, special paving, raised planters with trees, bicycle parking, activation of underutilized space, and some parking removal. Overhead lighting remains.

**Phase 4: Shared Street Treatment in Evening** Alley incorporates string lighting and in-paving light.

# PROTOTYPE

# Living Zones

The Living Alley's prototypes are relatively easy and cost-effective to implement and enable local residents to participate in alley design.

Living zones create public spaces in alleys for active recreational uses (such as a basketball courts, hop scotch, and other unstructured play activities), and social uses such as sitting, by temporarily closing them to through traffic. Living zones typically include intense traffic calming to promote very slow driving speeds, or may even curtail through-traffic to allow people to use the alley comfortably, by spontaneously furnishing the street with tables and chairs, planters, play structures, basketball hoops, sandboxes, etc.



Living zones are best located in the middle portion of residential alleys with no parking access, and dead-end alleys. Living zones should be sited on alleys with very low traffic volumes, with slopes of 5% or less. They can also be sited next to community centers and schools. Active land uses, such as residences with doors and windows, should front living zones.

Designs should incorporate seating areas where adults can sit and supervise children at play. All existing effective road widths, with a minimum of 14 feet, would need to be maintained at all times for emergency vehicle access. Throughaccess would be designed to restrict cars but would be accessible for emergency and service vehicles (street sweeping, trash and recycling collection) through movable gates, or removable bollards. Signage at the alley entrance would discourage through traffic.



Potential Living Zones in the Market Octavia Neighborhood Living zones may be designed with low-cost materials such as paint, movable planters, play structures, and seating. It is envisioned that the existing sidewalks, curbs, and road could remain unchanged, but more intensive treatments may involve modifying curb lines or adding speed tables, which would require an encroachment permit from SF Public Works.

Living zones require alleys to be two-way streets for local traffic. Although most alleys in the Market Octavia area function as one-ways streets, there are several examples of two-way streets, because they are deadends, in the case of Lily, or engineered other reasons, as the case of Stevenson. The block of Lily that dead-ends is 35 feet wide and 185 feet long. In these cases cars are able to turn around, and service and fire access is accommodated.

Sponsors of living zones would apply for SFMTA's Temporary Street Closure permit which would involve an ISCOTT (Interdepartmental Staff Committee on Traffic and Transportation) hearing and any other relevant permits pending review.

# DESIGN CONSIDERATIONS

- » On-street parking spaces may be removed to accommodate three-point turns and two-way vehicle passing.
- » "Local access only" signs at alley entrances would discourage non-local traffic.
- » Entry points to alleys with living zones should be heavily traffic calmed to slow traffic entering the alley, but should maintain existing turning radii to accommodate emergency vehicle access.
- » SFFD would review the length of a block for fire access.
- » Considerations should be given if converting one-way alleys to two-way segments if turn arounds are needed by vehicles.
- » Consider doing a mid-alley closure vs. full alley closure, or consider starting out with timed closures.
- » The detailed design of a street with a living zone must consider ADA accessibility with ramps and detectable warnings, and pavement surfacing to eliminate cracks that could be tripping hazards.

PLEASE ALSO REFER TO PLAY STREETS IN:

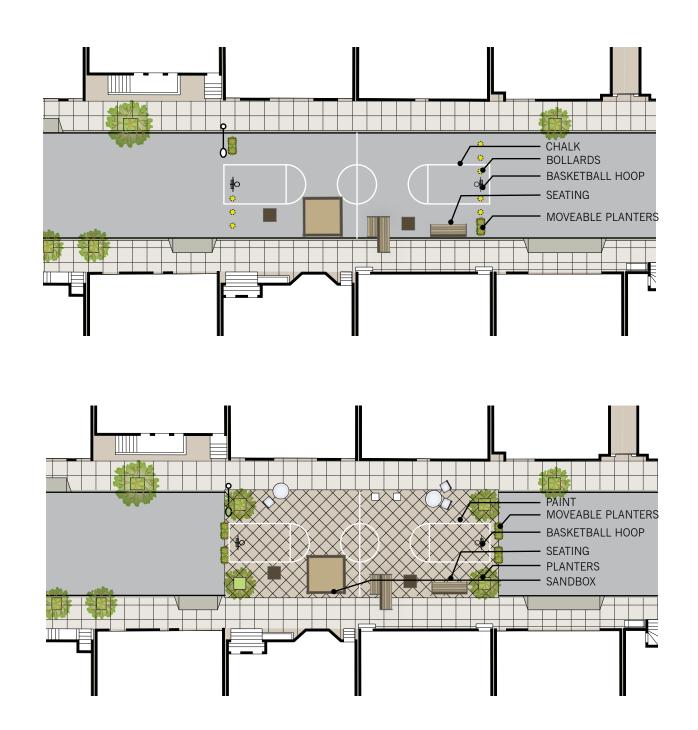
# **The Green Connections Final Report**

http://www.sf-planning.org/ftp/files/Citywide/green\_connections/GC\_Final\_ Report-CH5\_Design\_Toolkit.pdf. PROTOTYPE

LIVING ZONES

Living Zone: Low Cost Intervention

Designed with bollards, chalk, moveable planters and furnishings.



# Living Zone: Higher Cost Intervention

Designed with moveable planters and furnishings, and temporary surface paint.



LIVING ZONES



# Living Zone: Existing Condition

Located in mid-area of a block with no garage entrances.



# Living Zone: Low Cost Intervention

Designed with moveable bollards, planters and furnishings. Chalk may be used to outline a basketball court.





# Living Zone: Mid-Cost Intervention

Similar furnishings as the low cost intervention, but now with raised planters with trees in parking lane and a speed table.

# Living Zone: Higher Cost Intervention

Same features as the low and mid-cost interventions, but now with permanent paint to mark the area as a "living zone".

# MIXED USE ALLEY CASE STUDY

# **Octavia Boulevard Access Lanes**





Source: Steve Boland

While not eligible for living alley funding, the access lanes of Octavia Boulevard function similarly to alleys in that they carry secondary traffic, and provide slower, calmer lanes that cater to pedestrians and bicycles. Their success depends on their design, adjacent uses, control of traffic, and the types of streets that intersect them. In Hayes Valley, existing alleys intersect the boulevard's lanes providing an ideal condition for a calm, pedestrian and bike friendly alley network to emerge amidst the busy arterial streets.

Octavia Boulevard is the only northsouth part of the alley network that connects to the east-west alleys. Additionally, its connection to an existing open space and bike routes along its relatively protected length make it an important link in the network.

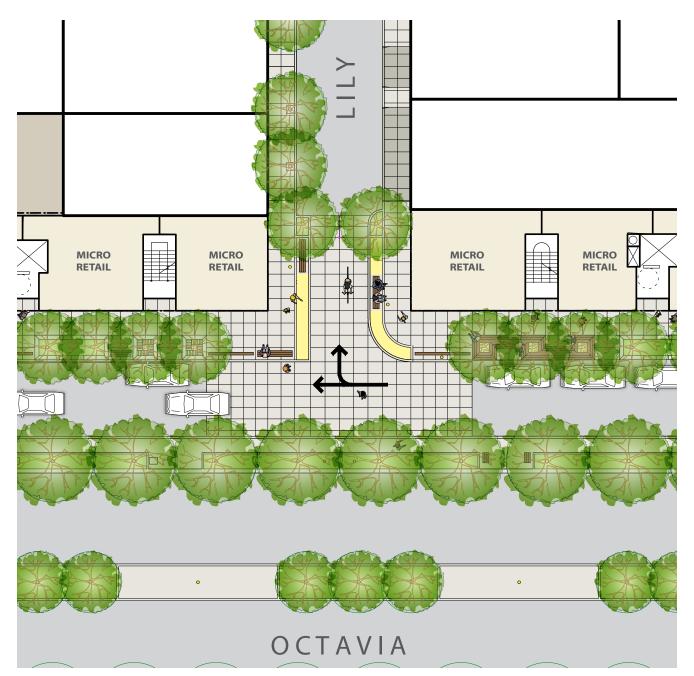
The functionality of Octavia's access lanes could be enhanced by design refinements that improve conditions for pedestrians and bicyclists and signal their function as such. These access lanes were originally designed as single surface lanes and intended to function like local access roads. Often they are used as short cuts by through-going traffic. Their widths were determined by emergency vehicle access, while the medians were undersized and unrelated to the sidewalks to be useful to pedestrians. There may be opportunities to further narrow the street width of the access lane or otherwise improve the pedestrian and bicycle experience while still accommodating appropriate emergency vehicle access, thereby enhancing the overall quality of the alley network.

The concept as the frontage roads will be explored further with SFMTA's Octavia Boulevard Enhancement Project.

FOR MORE INFO:

# **Octavia Boulevard Enhancement Project**

http://www.sfmta.com/projects-planning/projects/ octavia-boulevard-enhancement-project



Proposal for Alley Intersection at Octavia Boulevard Access Lanes "It is my belief, Watson, founded upon my experience, that the lowest and vilest alleys in London do not present a more dreadful record of sin than does the smiling and beautiful countryside."

ARTHUR CONAN DOYLE Sherlock Holmes: The Complete Novels and Stories, Volume I LIVING ALLEYS TOOLKIT

# **IMPLEMENTATION & RESOURCES**

4.1	COMMUNITY ORGANIZER CHECKLIST	p. 86
4.2	ORGANIZING	p. 88
4.3	RESEARCH	p. 88
4.4	ESTIMATING COSTS & FUNDRAISING	p. 92
4.5	FUNDING SOURCES	p. 94
4.6	PUBLIC / PRIVATE PARTNERSHIPS	p. 96
4.7	PERMIT PROCESS & RESPONSIBILITIES	p. 100

# IMPLEMENTATION & RESOURCES

This chapter explains how to get started and what it will take to complete a living alley: from community organizing, to understanding the potential costs and sources of funding, to partnerships, and finally the approval processes and associated fees.

We also outline the possibilities and benefits of coordinating with the work plans of City Departments.

# **Community Organizer Checklist**

THS

BEGIN	2-4 MON1

- » Using the Living Alley D.I.Y. survey forms, walk and map the existing physical conditions, and document the activities in your alley.
- » Using imagination and examples from the toolkit, list and visualize all the possible ways to enhance the alley.
- » Organize a get-together in the alley and ask interested neighbors to imagine possible improvements.
- » Use the toolkit to understand the design constraints, and palette of tools.
- » Discuss with your neighbors what are the most important goals.
- » Sketch 2-3 plans that include these ideas.

# DESIGN 3-6 MONTHS

- Meet with SF Public Works, Hydraulics, Fire Department or issues with high impact on feasibility
- » Temporary project could showcase design by using temporary paint and potted plants. Great way to kickstart the project, get people excited, and see the potential.
- » Use the toolkit to estimate the costs and identify funding sources
- » Review preferred design
- » Hire an architect, landscape architect, civil engineer,

# PERMIT

- 14 MONTHS
- Conduct a comprehensive and coordinated design review of parameters that will affect final design
- » See permit process diagram in toolkit

# BUILD

# 4-6 MONTHS

» Coordinate with other city work, volunteers, donors etc

# LIVE

» Spend time in your alley!

# LIVING ALLEY COMMUNITY ORGANIZER CHECKLIST

	LEY COMMUNITY ORGANIZER CHECKLIST	YE	AR	ON	E										YE	AR	TWC	)									_   YE	EAR	THR	EE		
		1	2	3	4	5	6	7	8	(	9 1	LO	11	12	13	14	15	16	17	18	19	20	21	22	23	24	4 25	26	27	28	29	30
Ņ.	Analyze existing conditions																															
-4 ×	Visualize opportunities																															
BEGIN 2-4 MONTHS	Organize and discuss with neighbors																															
THS	Understand parameters and possibilities																															
	Discuss priorities and values																															
	Design conceptual options (think about phasing)																															
3 <b>□</b>	Review with City for feasibility																															
-6 ×	Test idea with temporary installation*																															
DESIGN 3-6 MONTHS	Develop preferred design option																															
THS	Develop cost, budget, and funding plan																															
	Apply for Community Challenge Grant																															
	Organize and meet with neighbors																															
	Develop and refine design: hire professionals**																															
	Fundraise																															
14	Develop funding and maintenance entity																															
PERMIT	Pre-application design review of living alley																															
R M	Revise plans as needed																															
SF	Submit drawings for permit																															
	Attend public hearings																															
	Sign maintenance and liability agreements																															
4	Interview contractors																															
BUILD 4-6 MONTHS	Review and evaluate bids																															
Ô -	Select contractor																															
Н	Organize others involved in construction																															
	Coordinate staging during construction																															
	Construction																															
-	Plan a ribbon cutting party!																															
LIVE	Enjoy your new urban living room!																															
m	Take care of your living alley!																															

# Organizing

Since living alleys are intended to be created by and for the community, the extent of community involvement will likely determine the success of implementation and its useful life long after it's construction. Organizing a community to undertake all aspects of the project from design to implementation to maintenance requires time and enthusiasm. Full consensus is not required, but widespread and passionate support will likely make design and fundraising easier, and facilitate the permit approvals process. A core group of committed individuals who genuinely listen to and incorporate the values and goals of the neighborhood are often the people who carry projects from inception to completion.

The first step to a successful project is to discuss priorities and values with neighbors thru open dialogue and active listening and establish a set of mutually agreed goals before a single drawing is made. This toolkit provides a starting point and common understanding of the design possibilities. There will probably be multiple ideas of how to achieve the shared goals; try to capture these with three loose design sketches and continue to discuss the advantages and disadvantages of each approach until arriving at an agreement.

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 considerable time and effort organizing, fundraising, 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:

# PLAN ACTIVITIES TO GET TO KNOW EACH OTHER

There are many inclusive and inexpensive ways for residents to learn more about one another. Getting a sense of your neighbors' interests and talents can be a great way of understanding how each person can contribute to making their alley a better place to live, work, and play.

### CREATE A COMMUNITY INFORMATION BOARD

A community information board allows residents and non-residents to leave event and job postings that keep people informed of current events and new opportunities in the area. They are quick and relatively inexpensive to install, and are a simple and active design element that can draw a lot of interaction between alley users.

### DONATE YOUR TALENTS AND TIME

The creation of a living alley requires people with diverse skill sets, from event planning to craftsmanship. In addition, alleys require time commitments all throughout the day, from evening community workshops to morning site clean-ups. Everyone has something unique to contribute!

### PLAN A FUNDRAISER

Fundraisers can provide the necessary funds to implement a small-scale project, like a furniture installation or an infrastructure repair. Volunteers can use their time and talents to provide goods, keep track of money, publicize fundraising events, and make promotional materials. Local businesses can also help out by sponsoring fundraisers or donating goods.

### FORM LOCAL PARTNERSHIPS

Local partnerships with community resources are a great way of connecting an alley with the larger community and getting them involved in developing ideas that make good use of their talents and expertise. A local arts organization can provide volunteers to do a mural installation, or students from a local university can use the alley as a site for small and large scale design projects. Here is a list of community resources available to you that might be able to aid in the design, implementation or development of your living alley project.

Studio for Urban Projects SEED fund Grants www.studioforurbanproject.org

Friends of the Urban Forest www.fuf.net

**CCCBD Community Lighting Grants** sfciviccenter.org

Hayes Valley Neighborhood Association (HVNA) www.hayesvalleysf.org

Civic Center CBD www.sfciviccenter.org

American Community Gardening Association (ACGA)

www.communitygarden.org

San Francisco Urban Agriculture Alliance (SFUAA)

www.sfuaa.org

# CommunityGrows

www.communitygrows.org

# 49 Farms

www.49farms.org



# Research

Included in the Living Alleys Design Toolkit is a set of survey instruments called the "Living Alleys D.I.Y Survey" (refer to Appendix A.1), which will allow you and your community to assess the conditions and needs of vour allev, jot down key observations, and begin sketching out initial concepts and visions. Once all the different measurements, physical conditions, movement, and activities have been accounted for, you can then use the attached Alley Plan Template to diagram the current conditions of your alley and further develop your design ideas and concepts. We have physically mapped a random selection of alleys that may be downloaded from our website.

# PHYSICAL CONDITION MAPPING

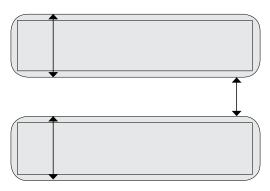
This instrument looks at the traffic conditions, aesthetics, and user perceptions of the alley and the surrounding context. This tool will allow you to critically assess the assets and challenges that are present in the current infrastructure, which will affect decisions of what you will need to add or change in order to create a more suitable environment for different alley activities.

Bring a measuring tape with you for this instrument. Begin by looking at the surrounding conditions of your alley, and noting the different densities, land uses, traffic conditions, and street elements. Then, with your measuring tape, record and dimension the lengths of different road, lot, and furniture elements that are present in the alley. As a more subjective measurement of alley conditions, you will also rank your overall alley experience on a scale of 1-5.

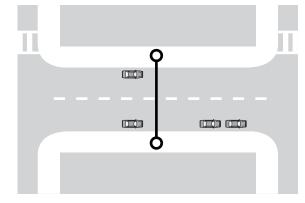
# SCREENLINE COUNTS

This instrument looks at traffic volumes generated by pedestrians, bicyclists, vehicles using the alley. This tool will help you determine which modes of travel are currently most prominent and/or suitable in the alley, and will inform decisions regarding how these spaces will be shared amongst different types of people moving through the space.

Locate the middle of the block. You will stand on one side of the block with your back facing the wall and imagine an invisible line (screenline) that extends from your body to halfway across the street. You will tally all pedestrians, bicyclists, and cars that cross that screenline in either direction, as well as tally any additional attributes you observe. After 15 minutes have passed, you will repeat this instrument again on the other side of the block.



Physical Condition Mapping



Screenline Counts

# STATIONARY ACTIVITY SCANS

This instrument looks at different types of stationary activities that alley users are doing, as well as the demographics of those users. This tool will help you determine which activities and behaviors are currently most common in your alley, and whether or not people are spending prolonged periods of time in the alley rather than just passing through.

Start out on one end of the block and walk the length of 2-3 storefronts and stop. Record each stationary person that is immediately in your field of vision. Each row in this instrument will correspond to a single person, and you will mark down all the different attributes that they are displaying (gender, age, posture, activity, etc.). Each bike you observe will be recorded on the right-hand column. Once you record all activities immediately in your field of vision, repeat the process until you arrive at the other end of the block.

# 

# ALLEY PLAN TEMPLATE

This template can be used to summarize your findings from the three survey instruments into a single, measured diagram that shows the correct dimensions and placement of street furnishings, lighting, and infrastructure. Different proposals, annotations, and ideas from the living alleys Toolkit can then be layered on top of the alley plan template as a way of envisioning how an alley can be transformed to meet community needs and wants. A 50 x 22 square grid is provided on the template, with each square corresponding to 10 feet x 10 feet. Using the measurements from the "Physical Condition Mapping" instrument, draw out the streets, sidewalks, and building footprints to scale as a first layer of information. Include the locations and measurements of existing infrastructure and furnishings (curb cuts, lighting, planters, etc.) as a second layer of information. You can then reproduce this finished measured diagram of existing conditions and distribute to residents to provide a fairly accurate template for drawing in new ideas and designs for the alley.



Stationary Activity Scans

# **Estimating Costs and Fundraising**

Because living alley improvements can be complex and expensive endeavors they will usually rely on multiple sources of funding to design, construct, and maintain. There may be different sources for each of the categories of costs outlined below. The design toolkit is intended to reduce some initial design costs, but cannot substitute for the complete technical and professional services that are necessary.

Understanding the time and costs associated with creating a living alley and developing a funding plan are critical to implementation of a design. We have tried to generalize some of the costs and when they are incurred to help inform that process. We attempt to list some scenarios and strategies to fundraise and to leverage those funds.

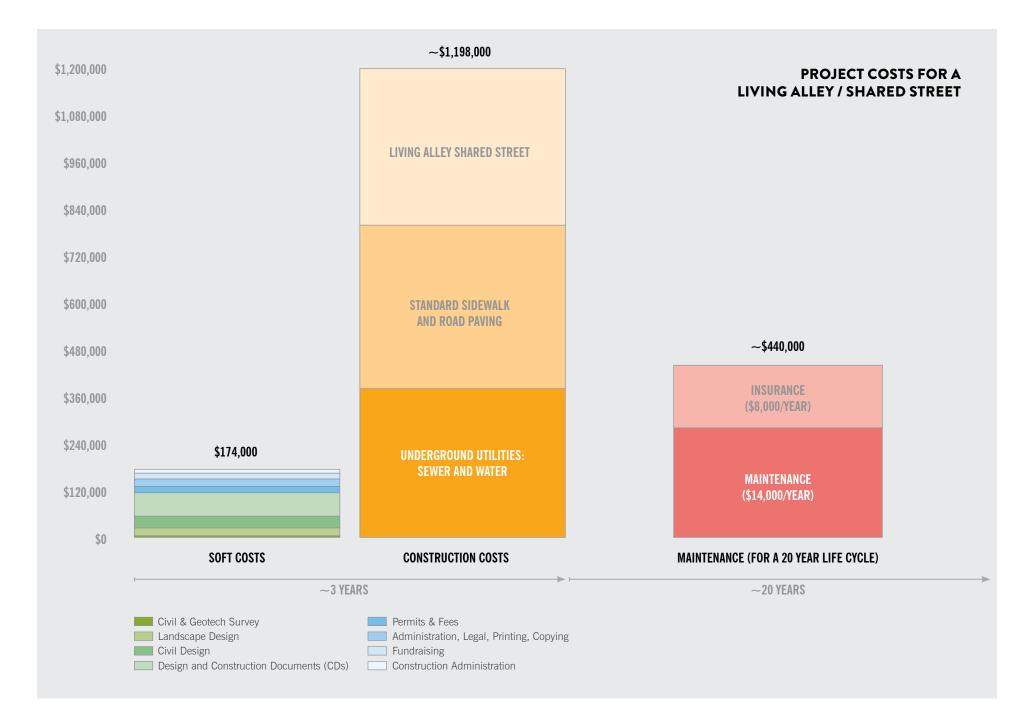
The length of time from an initial idea to a built improvement can take years. Initial costs, typically called "soft costs", are up-front costs for services and fees required to develop a design and fundraise before construction can begin. These first dollars are not only the hardest to come by, they also the riskiest, since there is always a chance that the project, for whatever reason, does not get built. **Soft costs** include professional services such as surveys, design, engineering, as well as permit fees, fundraising costs, and other related administrative costs. Soft costs for community projects might be sponsored by a grant, or project champion, or provided pro-bono, or some combination of the above.

**Hard costs** are for actual materials and construction and will represent the largest expenditure in the shortest time frame spent on the project. We include some general costs associated with out tools. (see Appendix A.2 for sample estimation of typical hard costs)

The project will need to budget for **on-going maintenance costs**. Although these come after the project is complete, in a sense, they are the most important part to keep the beauty and usefulness of a project intact and alive. Although relatively small, they add up over the long lifetime of a living alley and are best shared by as many people as possible.

Predicting exact costs is difficult since a variety of site specific factors can affect costs. Also, construction costs fluctuate with market trends of supply and demand, and with inflation.





# **Funding Sources**

### MARKET OCTAVIA IMPACT FEES

A primary and reliable source for hard costs and some soft costs will come from impact fees. The City, through the Market Octavia impact fees, will have about \$2,000,000 allocated for living alleys. The City hopes to leverage those funds with other funding sources in order to build as many high quality improvements as possible. Administered through the Community Challenge Grant, (CCG) based on competitive merits, large projects are eligible for up to \$250,000. While not enough for all costs, when combined with other contributions it will start to form the core of a large-scale living alley improvement. The CCG grant will also have medium and small categories tailored to intermediate projects. It is envisioned that the small grant would enable a living zone type improvement.

### **SPONSORSHIPS**

Institutions, businesses, and product manufacturers are sometimes willing to donate or contribute, at a greatly reduced cost, materials or services to a public serving nonprofit effort. Identify businesses that might support your cause. They may be willing to provide products in exchange for the good press of your project.

# FISCAL SPONSOR

A nonprofit fiscal sponsor (501.c3) can funnel grants and charitable donations. If so, this further incentivizes giving with the advantage of allowing contributions to be tax deductible.

### IN-KIND SERVICES

Many people or organizations offer services that can be valuable and used in lieu of monetary contributions. For example, neighborhood organizations, schools, or gardening clubs may have work programs to plant, garden, and clean public green spaces. There may be designers who offer pro-bono services to worthy public community projects. Friends of the Urban Forest organizes planting events that involve neighbors and residents in planting new trees. In-kind contributions at the scale living alleys are most useful for on-going maintenance. The scale and duration of maintenance activities are the kinds of things individuals or small organizations can do.

### STRATEGIC FUNDRAISING

Typically, but not always, private funding comes from people who will benefit from the work. Identify your base of support: people in the neighborhood, those closest to the cause and impacted or inspired by the project, and look for ways to expand your network. Write a story of why this is personally important, describe the project either in story or visually and describe what impact it will have. Identify a specific "ask" to funders so they can identify with something tangible what they are responsible for. For example, "we are looking to fill the gap with a pledge of \$1,500 for benches." Remember to thank all your supporters.

# COORDINATING AND PARTNERING WITH PRIVATE DEVELOPMENT

New development that faces an alley has in many cases an obligation and opportunity to enhance the streetscape. These obligation can activate an alley.

In the Market Octavia Plan area, a fee on new development, called an "impact fee," was introduced to fund new infrastructure to meet the needs of new residents and employees. The City establishes fee amounts based on the demand for the infrastructure.

### COMMUNITY BENEFIT DISTRICTS

In some instances, private development projects may have the option of meeting applicable development fees through an in-kind agreement. This agreement outlines the types of public improvements that would be paid for by a private development project. Once the terms are established, the in-kind agreement goes before the Planning Commission for approval.

Establishing relationships between private developers and community groups may be mutually beneficial. Developers may have the capacity to design and construct an improvement, but not have the desire for carrying the long-term maintenance and liability. It may be possible for a community based organization to partner with private developers to leverage mutual efforts. For example, community members and developers could coordinate design and construction to include an extended or enhanced portion of the alley in exchange for the community organization to cover the on-going maintenance and liability. A Community Benefit District is a tool to raise and distribute funding for improvements and maintenance of public amenities and programs. Property owners agree to contribute capital and maintenance funding through a special assessment on their property tax. Once the geographic boundaries of the district are determined, the estimated amount and purpose of the funding is established, and a simple weighted majority of owners is obtained, a Community Benefit District can be legislated. Establishing a CBD is a significant undertaking. It demands a strong commitment of time, money, and energy to initiate. It also demands large scale buy-in from property owners and community stakeholders about the needs of the district. A community benefit district entails a level of governance to prioritize which projects get what and when. There are several ways of pro-rating the assessed costs.

For capital costs, a CBD can bond against future revenues.

### FOR MORE INFO:

# San Francisco Office of Economic and Workforce Development Community Benefit District

Crezia.Tano@sfgov.org

http://www.oewd.org/Form-a-CBD.aspx

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

http://www.oewd.org/media/docs/CBD%20docs/BID%20 Technical%20Assistance%20Matching%20Grant.pdf

# Public / Private Partnerships

Because living alley improvements can be expensive endeavors they will usually rely on multiple sources of funding to design, construct and maintain. Public private partnerships are essential for both the creation and on-going maintenance of living alleys. Implementation of living alleys will rely on public private partnerships, in part because of the reluctance of the City to accept maintenance and liability for non-standard street designs, and in part due to limited public capital for infrastructure. The positive aspect of this policy is that it may also help ensure that improved alleys do not suffer neglect from the "tragedy of the commons" if people are vested in the creation and maintenance.

The City, through the Market Octavia development impact fees, has \$2,000,000 allocated for living alleys. Through private public partnerships we hope to leverage those funds to develop as many high quality improvements as possible.

Developing a partnership entity that is effective at raising funds could be a considerable expenditure of effort, but once established could sustain and expand many living alleys. Deliberate thought should be put into determining which partnerships would work best.

Some of the components of potential living alley network are consistent with ongoing work of various City agencies. It is fair to assume that many of the improvements, particularly around traffic calming, bicycle amenities and improved pedestrian safety may be built in coordination with various City agencies.

The City's streetscape projects are generally built by San Francisco Public Works (SFPW), the San Francisco Municipal Transportation Agency (SFMTA) and the San Francisco Public Utilities Commission (SFPUC). Because many living alleys will involve both a greening component and a streetscape component, it is important to reach out to these agencies early on. The Planning Department works closely with these agencies to ensure that the ideas, plans, and designs that are generated through community-led planning efforts can be realized on the ground. Additionally the Planning Department can provide urban design support for living alley projects. This section discusses potential partnerships for project delivery by different agencies.

Market Octavia Living Alleys Community Workshop #1 in 2013



# PARTNERING WITH THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION (SFPUC)



The San Francisco Public Utilities Commission (SFPUC) implements and maintains the water and sewer system throughout the City. The Sewer

System Improvement Program (SSIP) is a 20-year program to upgrade sewer infrastructure across the City. The program includes infrastructure upgrades, including pipelines, pump stations, and treatment facilities. When sewer and water mains are replaced, the street is usually repaved. This is can be an opportunity to implement additional living alley improvements. Finally, the program also includes green infrastructure projects, such as rain gardens, bioswales, and permeable paving, aimed at minimizing stormwater impacts on the sewer system.

Where the opportunities exist, streetscape designs could include green infrastructure that detains local storm water flows with low impact design features, and also serves other goals for living alleys, such as traffic calming and greening. The SFPUC has two funding opportunities that fit the typical scale of a living alley project. The first is the **Watershed Stewardship Program**, which offers grants for streetscape improvements that help to minimize stormwater impacts on the sewer system.

### FOR MORE INFO:

# **Urban Watershed Stewardship Grants**

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

The second opportunity is the **Sidewalk Garden Project** in partnership with Friends of the Urban Forest (FUF) to replace concrete sidewalks with thriving gardens to capture stormwater and reduce the burden on our sewer system while beautifying San Francisco neighborhoods and protecting the environment.

### FOR MORE INFO:

# The Sidewalk Garden Project

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

AND

http://www.fuf.net/programs-services/planting/sidewalk-gardens/ the-sidewalk-garden-project/ The SFPUC has created an opportunity map that indicates streets that may be potential candidates for low impact design treatments that considers soils, slope, streetscape factors, and location in drainage area. Consult the **SFPUC Green Stormwater Infrastructure** website for design details.

# FOR MORE INFO:

# **Green Stormwater Infrastructure**

http://sfwater.org/modules/showdocument.aspx?documentid=6009

Additionally, SFPUC may provide technical review of stormwater related engineering to a community led project

Depending on the extent of a living alley project, the underground sewer should be scoped to determine its condition, and if needed, be repaired or replaced before street improvements begin.

### FOR MORE INFO:

# **Green Infrastructure Projects**

http://sfwater.org/index.aspx?page=614

# PARTNERING WITH THE SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY (SFMTA)



The SFMTA is responsible for implementing all surface transportation improvements across the City, including Muni operations, bike and pedestrian programs, taxi policies, parking programs, and traffic control

operations. Per the SFMTA Strategic Plan, the agency's overarching goals are to improve safety and provide transportation options for residents and visitors. There are opportunities to coordinate capital improvements along the living alley network through new, planned, and funded projects related to traffic calming, school area safety, and bicycle and pedestrian improvements.

The City's Bike Plan was adopted in 2009, and many of the plan's projects have been built, increasing the amount of bike facilities across the city. 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 Strategy emphasizes the importance of connectivity and comfort for increasing the bike mode share in San Francisco. This goal is consistent with living alley network, which aims to improve routes and connectivity. The SFMTA implements traffic calming measures along city blocks and at intersections. These measures include treatments such as corner bulb-outs, chicanes, speed tables, and special crosswalk markings. Residents can also request traffic calming on their street, which would provide additional opportunities to reduce speeds on corridors either in coordination with other projects or as an independent projects prioritized based on need.

The majority of the SFMTA's bicycle, pedestrian, school area safety, and traffic calming projects are implemented by the Sustainable Streets Division. Planned projects are included in the Division's 5 year Capital Improvement Program (CIP), which documents the expected scope, schedule, budget, and funding source for each project. Revised every two years and approved by the SFMTA Board of Directors, the CIP is the most comprehensive source for reviewing projects in the pipeline. The Projects in the CIP are also influenced by the SFMTA Strategic Plan, the Bicycle Strategy, the Pedestrian Strategy, and the Traffic Calming Program.

The following CIP areas each include projects that provide opportunities to coordinate with the living alley network:

- » The SFMTA 2013-2018 Bicycle Strategy sets new directions and policy targets to make bicycling a part of everyday life in San Francisco. As part of the strategy, the SFMTA is assessing the bicycle network in terms of user comfort and prioritizing key routes. This will identify the areas of greatest need for improvement, which will then feed into the development of the capital program.
- » The Pedestrian Strategy is a multipronged approach to reducing severe and fatal pedestrian collisions by 50% by 2021. The city is upgrading it's streets to slow drivers and make pedestrians more visible, in part by fixing almost 70 miles of the City's high injury corridors and dozens of intersections identified in WalkFirst. The strategy also includes increasing education, outreach, and targeted police enforcement.

Efforts by the SFMTA are most likely to address physical changes to San Francisco's streets. Some of these features such as traffic islands or bulb-outs can be designed with space for greening; however the actual greening would require a sidewalk landscaping permit from San Francisco Public Works.

# PARTNERING WITH SAN FRANCISCO PUBLIC WORKS (FORMERLY DEPARTMENT OF PUBLIC WORKS)



Paving projects largely drive the location and schedule for capital improvements along City streets. Prior to repaving is an opportunity to implement additional pedestrian and

bicycle improvements. Coordinating design and construction can result in time and budget savings, as well as minimize the disruption of neighborhoods. This idea has been formalized through the Streets Capital Group, which coordinates streetscape improvements among City agencies. The goal of this effort is to identify repaving projects that will begin in the next two or three years, and identify opportunities to include additional improvements. Community support, the development of a conceptual design, the level of environmental review, and funding availability are key considerations in determining if a repaying project could incorporate additional improvements.

Public Works reviews improvement plans and issues permits for all work in the public right-of-way through its Bureau of Street Use and Mapping. To find out about scheduled work, Public Works has an accessible list on 'ENVISTA". FOR MORE INFO:

# **Envista**

http://www.sfdpw.org/index.aspx?page=1718

Public Works also cleans and maintains the roads. When a non-standard street improvement is constructed, the City requires the maintenance responsibility shifted to the sponsor, or other third party.

# PARTNERING WITH DEPARTMENT OF HEALTH (SFDPH)



The primary goals of the Living Alleys Program– to increase access to open space and create a pedes-

trian network – is closely aligned with the San Francisco Department of Public Health's (SFDPH) 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 living alleys.

In December 2012, SFDPH released the San Francisco Community Health Improvement Plan (CHIP). 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, SFDPH and its partners identified goals, objectives, and related implementation measures. As SFDPH begins implementing of the CHIP, there are several health priorities and objectives that would mutually benefit SFDPH and the Planning Department in support of implementing living alleys.

FOR THE FULL CHIP REPORT, GO TO:

**SF Community Health Improvement Plan (CHIP)** https://www.sfdph.org/dph/files/chip/CHIP\_FullReport\_ UPDATED04052013.pdf

# Permit Process and Responsibilities

# PERMITS

Public Works is the primary permitting department for work associated with streets and alleys. Permits and fees originate from this agency. Here is a list of the current permit types and the associated fees.

# SIDEWALK LANDSCAPING

Permits are required for installing planting strips or boxes within the sidewalk right-of-way. For landscape improvements within an existing sidewalk, Public Works has a cost-effective and streamlined process. The website is informative and easy to understand.

# PERMIT FEES:

- » \$245 for an individual
- » \$211 for 2-4 neighboring properties
- » \$182 for 5+ neighboring properties (most likely for the alley proposals)

# FOR MORE INFO:

# Sidewalk Landscaping Permit Application and Approval Process

PUBLIC WORKS

http://sfdpw.org/index.aspx?page=1350

# STREET TREE PLANTING PERMIT

Required for any new proposed tree (separate from Sidewalk Landscaping Permit).

# PERMIT FEES:

There are no fees associated with a tree planting permit at the time of publishing this document. Please check with Public Works for most current information.

FOR MORE INFO:

Street Tree Planting Permitting Process

http://www.sfdpw.org/index.aspx?page=649

PUBLIC WORKS

# MINOR SIDEWALK

Generally required when adding improvements to the sidewalk, but not within the roadway (chairs, lighting, benches, etc.)

# PERMIT FEES:

- » **\$1,067.80** for a new application
- » There is no annual assessment fee because the improvements would be for the public.
- » \$151.58 existing conditions or submittal with Street Improvement Permit

# FOR MORE INFO:

Minor Sidewalk Encroachment Permit

http://www.sfdpw.org/index.aspx?page=1189



PUBLIC WORKS

# MAJOR ENCROACHMENT PERMIT

Required for any improvements within the roadway area. Changing the geometry of the roadway (for example altering the curb lines) or removing on street parking spaces requires a legislative process and inter-departmental review by SFMTA, Public Works, and the Planning Department.

Improvements must be approved by the Board of Supervisors (General Plan Referral)

# PERMIT FEES:

- » \$4,146.14 for a new application (General Plan Referral Fees not included)
- » A yearly assessment fee of \$3.21/S.F. may be charged if a commercial enterprise uses the improvement exclusively. If the improvements are for public use, there would be no fee.
- **» \$191.50** for site inspection before and after installation.

# FOR MORE INFO:

# **Major Encroachment Permits**

http://www.sfdpw.org/index.aspx?page=1192

Also see Major Street Encroachment Permit Single Surface Street process diagram on the following page.



PUBLIC WORKS

# STREET IMPROVEMENT PERMIT

Usually tied to building projects, not likely for the alley improvement project unless associated with an issued building permit.

PERMIT FEES:

- » \$1,197.58 minimum submittal fee (with Building Permit Application), additional plan review/inspection may be paid upon issuance.
- » \$642.92 minimum (Notice to Repair)
- » There would be no annual assessment fee if the improvements are for the public.

# FOR MORE INFO:

# Street Improvement Permit http://www.sfdpw.org/index.aspx?page = 1190



# TEMPORARY STREET CLOSURE

If you or your organization would like to close an alley for a neighborhood block party, street fair, or for a proposed living zone, you must formally apply to the Interdepartmental Staff Committee on Traffic and Transportation (ISCOTT).

# PERMIT FEES:

- » \$177.00 if submitted 60+ days before the event,
- » **\$236.00** is submitted 30-60 days before the event.

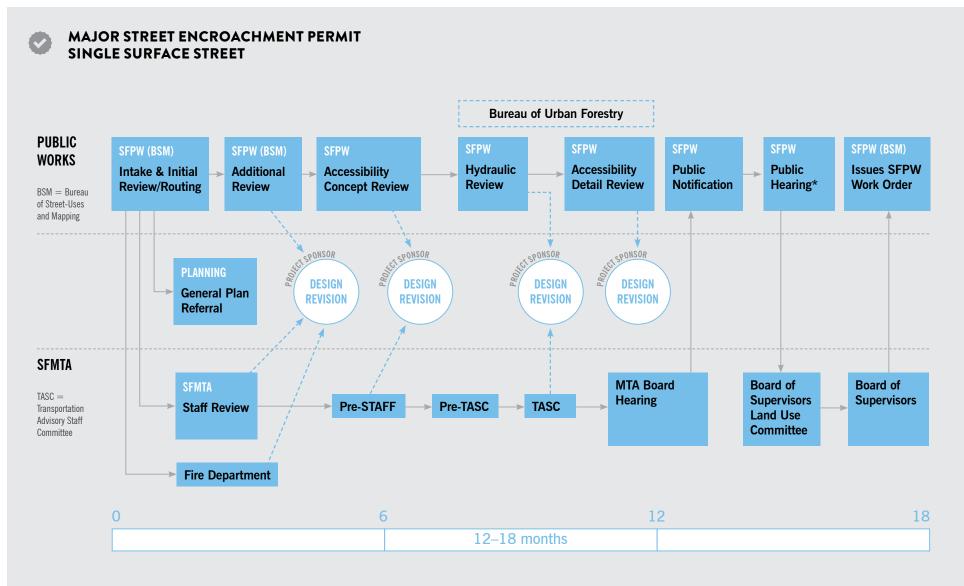
### FOR MORE INFO:

# Apply for a Temporary Street Closure -Special Events

http://www.sfmta.com/services/streets-sidewalks/ apply-street-closure







The Major Street Encroachment Permit covers:

- » Removal of parking
- » Alter/expand sidewalks
- » Repave with single surface
- » Plant trees, add furnishings

# INSURANCE

The sponsor will be required to provide evidence of at least \$2M in liability insurance, naming the City and County of San Francisco as additional insured. Most businesses already carry this insurance; please check with your provider. This can be held and maintained by any entity. It is not necessary for unanimous inclusion, or equal representation; that is, owners may opt out, as long as some entity holds a policy that covers the area of the improvement.

# MAINTENANCE

If your living alley design requires a major street encroachment, the necessary permit from San Francisco Public Works, please be aware that this will deviate from the acceptable street standards of their Department. As such, the City will require that the project sponsor provide maintenance responsibility. Even the calmest streets can take a lot of wear and tear from various sources: cars and trucks; people and dogs; graffiti; utility repairmen; wind, rain, and time.

Street maintenance encompasses various time cycles: daily; weekly; monthly; and yearly. The following is a partial list of maintenance expectations to account for.



### DAILY

» Pick up of litter, dog waste

# WEEKLY

- » Graffiti abatement
- » Watering
- » Street sweeping of litter and other detritus (In cases where a curbless street is created, the city abrogates its street-sweeping responsibilities.)

# MONTHLY

- » Replanting
- » Weeding
- » Repair or replacement of features

# YEARLY

- » Mulching
- » Tree-pruning and / or re-staking
- » Steam cleaning
- » Repair or replacement of paving, lighting, and other features.

From time to time sewer and water laterals may need to be replaced. When that occurs, repaving to match is the responsibility of the sponsor.

Public utilities also may install, relocate and retrench their lines. They are only obligated to replace with a city approved standard material such as asphalt or concrete.

# MAINTENANCE DESIGN CONSIDERATIONS

- » Durable long lasting materials.
- » Modular components may help. For example, patching unit pavers may be easier than patching concrete.
- » Plant material selected with drought tolerance in mind
- » What is the cycle and cost of maintenance for green infrastructure?
- » Stock standard and replaceable materials.
- » SFPUC is responsible for side sewer laterals from the curb line to the main. Delineation of the original curb line will be important to identify these in single surface streets.

The sponsor of a living alley will also be required to sign a maintenance agreement to keep the alley clean and free of graffiti on a daily basis, and to keep all plants in good health. This responsibility can be assumed by any person or entity and is not restricted to the adjacent property owners. A means of ensuring this is to create a plan and an agreement at the inception of the project that asks neighboring property owners to subscribe to a monthly maintenance fee, which may also cover the added insurance cost. Community Grows is a neighborhood based non-profit that provides environmental education to local youth (5-19). Fostering a green workforce to *http://www.communitygrows.org.* 

# **EXPECTED ENVIRONMENTAL IMPACTS**

Once the community and decision makers are on board with a proposed diversion project, the project must go through environmental review. What level of environmental clearance will be needed depending on the expected impact of a diversionary measure.

# ENVIRONMENTAL REVIEW THRESHOLDS FOR TOOLKIT TREATMENTS

The following are environmental review thresholds for road closures (e.g. block-end plazas) and diversionary devices (e.g. intersection islands, super bulbs and diverters) in San Francisco.

- 1. The road to be closed or diverted has fewer than 300 vehicles per either direction during the peak hour.
- 2. There is at least one parallel adjacent street that can accept the diverted traffic, and that

parallel street meets both of the following conditions:

- There is no transit route, or if there is a transit route, transit operates in a transit-only lane;
- » The street has acceptable traffic operations during the peak hour

If the above conditions are met, additional environmental review would not be required because roads that meet these conditions, if closed/diverted, would be unlikely to result in significant impacts.

If these conditions are not met, then a proposed road closure and/or diversion would need to undergo additional environmental review.



# APPENDIX



A.1 DIY S	SURVEY KIT	p. 106
A.2 SF P	UBLIC WORKS COST ESTIMATES	p. 110

		<b>NTIONS</b>	••
VING ALLEY	.Y. SURVEY	I PHYSICAL CONDITIONS	
5	<u> </u>	#1	

ALLEY NAME

# ALLEY CONDITION

WIDTH/CLEARANCE	TOTAL BOW WIDTH:	d d
		- t
	SIDEWALK WIDTH:ft /ft CLEAR PATH ON SIDEWALK:ft	τ τ
LENGTH LOT/FRONTAGE	AVERAGE LENGTH:ft	ц.
ENTRIES	TOTAL NUMBER:	±
	D BELOW GROUND	÷
CURB CUTS	TOTAL NUMBER:	
	AVERAGE WIDTH:ft	f
GROUND FLOOR	NUMBER AVG. DEPTH	
	D SETBACK: ft	£
	DPLANTING:	£
	D PARKING:	£
	D BLANK WALL:	
STREET ELEMENTS	NUMBER (AVG. DIMENSION)	
	D STREET TREE:	1
	D PLANTER:	1
	DLIGHTING: (TYPE:	$\cap$
		I
	D SEATING:	I
		1
	DOTHER:	1
STREET PARKING SPACES	TOTAL NUMBER:	,

GRADE BASED ON YOUR PERSONAL IMPRESSIONS DURING THE SURVEY AND EXPLAIN WHY ALLEY EXPERIENCE

	BAD	GOOD	NOTES
CONNECTIVITY	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	$\bigcirc$	
ACCESSIBILITY			
SAFETY			
AESTHETIC			
SUSTAINABILITY			

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ON CONSTRUCTION

4 (NORTH/EAST) CROSS STREET 4 (SOUTH/WEST) CROSS STREET

BLOCK(S)

**DWEEKEND D** WEEKDAY DATE & TIME

OBSERVE YOUR ALLEY AND ITS SURROUNDING NEIGHBORHOOD NEIGHBORHOOD CONTEXT

LARGE

DENSITY ESTIMATE W/ AVG. BUILDING STORIES

MEDIUM

LOW \_

8 10+			Ξ	OL		□ RESTAURANT/CAFE					
9			KEY DESTINATIONS ON ALLEY	□ SCHOOL	□ SHOP	□ REST/		TRAFFIC CHARACTERISTICS	ES:	VES:	
4			INDINS	□ TRANSIT STOP		SPACE		HARACTE	# OF TRAVEL LANES:	# OF PARKING LANES:	
2	LAND USE	OTHER LAND USE NOTES:	DESTIN	TRANS	<b>J</b> OFFICE	☐ OPEN SPACE	□ OTHER:	FIC CF	OF TRA	OF PAR	
• 0	LAN	OTHER	KΕΥ			Ľ		TRAF	#	#	

LOCATION OF PARKING LANES:

DIRECTION OF TRAVEL: TRAFFIC VOLUME:

OTHER

□ VACANT LOT □ PARKING LOT

NOTES

DRAW & WRITE YOUR FINDINGS FREELY (SEPARATE SECTION FOR SCALED PLAN DRAWING) ALLEY DIAGRAM

MEASURE AND COUNT THE FOLLOWING PHYSICAL CONDITIONS OF THE ALLEY

Y. SURVEY	SCREENLINE COUNT
<b>).I.Y</b> .	<b>‡2 SCI</b>
	URV

. . . . . .

D.I.Y. SURVEY	DEDESTRIANS			SUBTOTAL	TOTAL
#2 SCREENLINE COUNT					1
		MALE	FEMALE	• <b>()</b>	
ALLEY NAME					
	нтя	TSA			•
BLOCK(S) (soluth/west) cross street (soluth/west) cross street	DIRECTION OF TRAVEL*	√∃/			
<del>↓</del>	HIUC	NEST HTUC			
DATE DWEEKDAY DWEEKEND	DS	~			11
	15 YEARS OLD AND UNDER				<u>≤</u> 15
	OVER 65 YEARS OLD				65+
	ON SIDEWALK				•
	RUNNING/ JOGGING				str
(FOR EXACTLY IS MINS) 1 SHEET = 15 MINUTE INTERVAL 4 SHEETS = 1 HOUR	WHEELCHAIR/ SPECIAL NEEDS				45
SAMPLE STREET BLOCK					
	CYCLISTS			SUBTOTAL	TOTAL
		MALE	FEMALE	•#•	
	NORTH DIRECTION	/EA3			î Î
	*	/MEST			î Î
SCREENLINE: COUNT PEDESTRIANS AND BIKES CROSSING THIS LINE	15 YEARS OLD AND UNDER				<u>≤</u> 15
STAND FOR 15 MINUTES AT SOMEWHERE IN THE MIDDLE OF THE BLOCK	OVER 65 YEARS OLD				65+
NOTES					
	VEHICLES				TOTAL
	-	CAR	TRUCK/BUS		
	DIRECTION DIRECTION	\EA57			

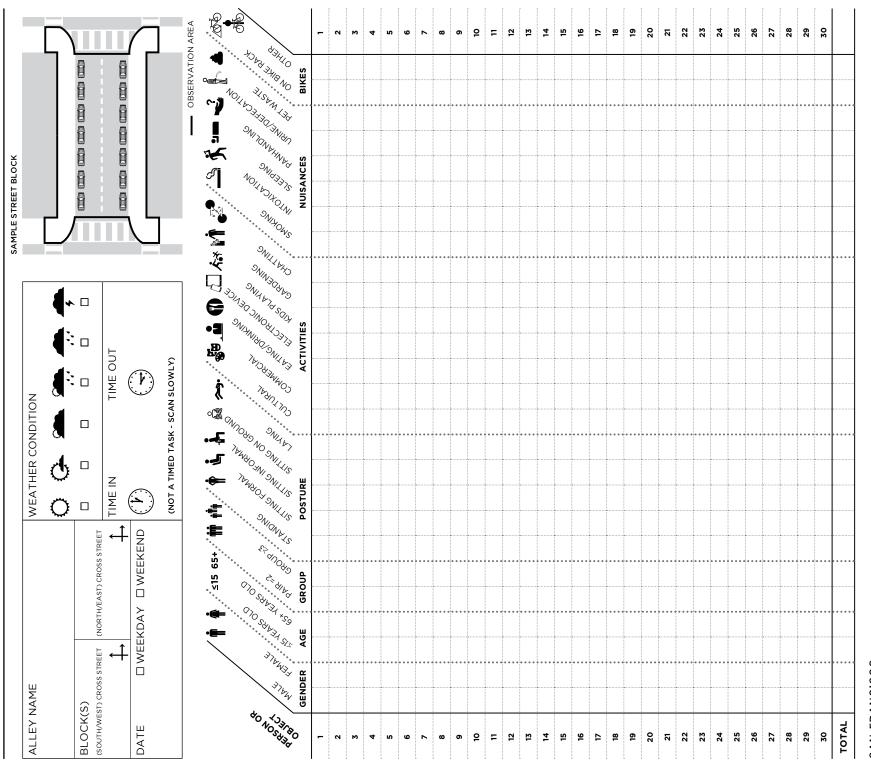
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. . .

\*MUST ADD UP TO 100% OF SAMPLE OF TRAVEL\*

/WEST SOUTH

# LIVING ALLEY D.I.Y. SURVEY #3 STAIONARY ACTIVITY SCAN



SAN FRANCISCO PLANNING DEPARTMENT

AL	LEY	NAME								INST	RUC	τιοι	١S			ł	(EY	ICON	NS									 	7	EXA	AMP	LE					
																	$\bigcirc$			anop	y (12ft	wide	e)														
BI		(5)																Er	ntries																		
	BLOCK(S) (SOUTH/WEST) CROSS STREET (NORTH/EAST) CROSS STREET								Signage     Curb Cuts																												
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# LIVING ALLEY PROJECT

CONCEPTUAL CONSTRUCTION COST ESTIMATE - FOR INFORMATIONAL USE ONLY

Compiled By: SF Public Works 1/25/2015

Bid Ite	em Description	Estimated Quantity	Unit*	Unit Price	Cost Range Per Unit	Comment
ITEN	NIZED COSTS					
1.	Parking Lane Tree Planting (6'X6')					Cast-in-place concrete curbs/walls
1a.	At grade with 6" curb edge	4	EA	\$2,000	\$2,000-5,000	15 Gallon trees without automatic irrigation; cost includes soil prep, backfill, mulch, and tree.
1b.	Raised Planter with 16" wall edge	4	EA	\$5,700	\$4,000-8,000	Fronting homeowners responsible for watering and maintenance
2.	Sidewalk trees (all flush conditions)					15 Gallon trees without automatic irrigation; cost includes soil prep, backfill, mulch, and tree.
2a.	In existing tree pockets	8	EA	\$800	\$500-1,000	Fronting homeowners responsible for watering and maintenance
2b.	In new 3'X3' tree pockets	6	EA	\$1,400	\$1,000-2,000	
3.	Removable bollards	4	EA	\$6,000	\$4,000-7,000	Stainless steel retractable bollard with lock and key; cost includes concrete footing.
4.	Raised crosswalks (both with and without drainage inlets & manholes)					Cast-in-place standard city sidewalk concrete with truncated domes; cost of driveway curb cuts included.
4a.	Without drainage	2	EA	\$18,000	\$15,000-20,000	
4b.	With drainage considerations	2	EA	\$28,500	\$25,000-30,000	Most likely, raised crosswalk installations will require drainage work.
5.	Sidewalk extensions \$/if (bulb-outs that extend into parking lane)	1	EA	\$18,000	\$15,000-20,000	Cast-in-place standard city sidewalk concrete with new standard curbs. Extensions assumed to be 100 SF per bulb-out. Incidental drainage work factored into the cost. Loss of on-street parking requires SFMTA legislation. Street legislation cost (SFMTA) not included.
6.	Sidewalk planters (6'X6')					5 Gallon shrubs and 1 Gallon ground cover; cost includes soil prep, backfill and mulch. Cost does not include automatic irrigation.
6a.	Flush with sidewalk planters; no curb/wall edges.	4	EA	\$1,600	1,000-2,000	Fronting homeowners responsible for watering and maintenance.
6b.	Raised planters with 16" wall edge	4	EA	\$7,000	6,000-8,000	

Bid It	em Description	Estimated Quantity	Unit*	Unit Price	Cost Range Per Unit	Comment
7	Pedestrian Lighting					Cost does not include new electrical panel/source; assumes exist- ing panel/source is adequate. If considering new electrical panels, pull boxes, etc, add \$15,000 to unit cost.
7a.	Existing poles remain; only fixtures are removed and replaced with new.	4	EA	\$3,000	2,000-4,000	Cost also does not include new footing; assumes existing footings are adequate.
7b.	Existing poles remain in location but they are removed and replaced with new poles and new fixtures.	4	EA	\$19,400	15,000-20,000	
8.	Seating benches	2	LS	\$7,000	5,000-8,000	Standard wood bench with metal frame; 6' long with three arm- rests; surface mount.
9.	Special Paving (colored concrete and unit pavers over engineered base)					Assumes entire roadway to be repaved per "Single Surface Living Alley" Concept.
9a.	Integrally colored concrete paving 8" depth on base rock	3,500	SF	\$25	25-40	
9b.	Unit pavers (Patricia's Green - Octavia Blvd. type pavers) over 8" depth concrete base	3,500	SF	\$50	30-60	
10.	Bike parking	4	EA	\$3,200	3,000-4,000	Assumes SFMTA standard bike racks surface mounted.
11.	Signalized mid-block crossings with curb ramps at each side	1	LS	\$375,000	300,000-400,000	Cost includes 2 signals, traffic striping, electrical work, signage, and truncated domes. Cost does not include street legislation (SFMTA). Per electrical engineer, electrical work includes vehicle and pedestrian signals, push buttons, controllers, pull boxes, conduit wiring and luminaires.

Note: all costs are installed cost: material plus labor. Demolition costs are also factored in the cost where applicable. Permit and code compliance costs are not included as they may vary case by case.

