



VISUALIZING RESIDUAL SPACES IN A NEW LIGHT

A Study for Creating & Designing an Urban Public Space
Under a Downtown San José Freeway

Caitlin C. Campbell
December 2013

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**A Study for Creating & Designing
an Urban Public Space
Under a Downtown San José Freeway**



**A Planning Report
Presented to
The Faculty of the Department of
Urban and Regional Planning**

San José State University

**In Partial Fulfillment
Of the Requirements for the Degree
Master of Urban Planning**

By

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December 2013**

**San José State University
Urban and Regional Planning Department**



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Acknowledgements

I would like to express my sincere thanks to all of the people who have supported me throughout this project and my time at San José State University. I dedicate this report and my degree to you because without you this would not have been possible.

Thank you to all of the planning and design professionals who took time out of their busy schedules to share with me their experience, knowledge and visions for their design projects. In addition, I would like to thank the residents of downtown San José and Spartan-Keyes for sharing your time and knowledge about your community. I thoroughly enjoyed speaking with all of you.

I am eternally grateful for my parents and family who supported and encouraged me during the difficult times. You are my personal cheerleaders and I am very fortunate to have you in my life.

To my advisor Asha Weinstein Agrawal, thank you so much for your words of encouragement, advice, and patience throughout the entire 298 process.

Lastly, I would like to thank the Urban and Regional Planning department and faculty for your guidance, knowledge and support over the past 2 1/2 years.



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NOTE: All images in this report were taken or created by the author unless otherwise indicated.



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“Generally speaking, lost spaces are the undesirable urban areas that are in need of redesign — anti spaces, making no positive contribution to the surroundings or users. They are ill-defined, without measurable boundaries, and fail to connect elements in a coherent way.”

– Roger Trancik in *Finding Spaces*

Chapter 1

Introduction to the Research



1.1 Purpose of the Report

The purpose of this report is to provide city planners and community members with examples of design recommendations for transforming residual spaces into successful urban public spaces. More specifically, this report is designed to research spatial design elements and characteristics that are appropriate for transforming the residual space found under freeways, and will focus specifically upon the City of San José's 2nd & 3rd Street/I-280 freeway underpass as a study area. This report shows how residual spaces, in particularly freeway underpasses, can be viable opportunities for enhancing and improving the aesthetic, social and wellbeing of the surrounding communities. Despite the focus on freeway underpasses, the report's findings and design considerations can be easily applied to other residual spaces, communities and cities.


1.2 Relevance for Studying Residual Spaces

What Are Residual Spaces?

Residual spaces are found within every city. These are the spaces that are perceived as “lost spaces”¹ — gaps between buildings, awkward corners, insignificant strips of land, or even undesired areas beneath transit overpasses. More often than not, these lost spaces are left abandoned and unmaintained, and thus they greatly degrade the overall look and appeal of neighborhoods.

In the past, society has viewed residual spaces with negative feelings and attitudes. Today, cities all over the world are slowly starting to realize the potential these spaces possess in providing small-scale public space opportunities for surrounding residents and communities. A select few of these spaces will be observed and analyzed later on in the report and will serve as precedent studies for the conceptual design of the 2nd & 3rd Street/I-280 freeway underpass.

1. Roger Trancik, *Finding Lost Spaces* (New York: Van Nostrand Reinhold, 1986), 3.



Currently there are four different types of residual spaces that are catching the attention of designers, planners and residents. These types of spaces are parking spaces, alleyways, median strips and underpasses.

The transformation of parking spaces into small urban public spaces, cleverly named Parklets, has provided city planners with a creative way to reclaim streets for pedestrian use.² These Parklets allow for people to sit, gather and interact with others in spaces that extend out safely into the parallel parking spots located in front of selected businesses.

Alleyways are residual spaces primarily used as connection corridors. They are generally paved with non-permeable surfaces, such as asphalt or concrete, and have little to no vegetation. Recent trends within certain cities are changing the look and vibe of alleyways through the use of art installations, vegetation and artistic lighting. These simple additions are transforming alleys into eco-friendly, vibrant and intimate public spaces.

Median strips are paved or vegetated strips of land that divide opposing lanes of vehicular traffic. Although the narrow size of these spaces limits the number of options for redesign, communities and artists are creatively utilizing median strips to enhance the look and appeal of their neighborhoods and streetscape.

Finally, freeway underpasses, which are the main focus of this report, are pedestrian and vehicular corridors that pass

2. Pavement to Parks, "Parklets," <http://sfpavementtoparks.sfplanning.org/parklets.html> (accessed May 17, 2013).

underneath a freeway. These corridors, which usually contain underutilized parcels of land, are perceived as cold, dark, scary and ugly concrete fortresses. Freeway underpasses have received quite a lot of attention within numerous design and landscape journals and magazines, yet very few have actually been redesigned. This report is intended to help increase the number of transformed underpasses.

1.3 Relevance for Choosing the City of San José

The City of San José was chosen to be the example city for this report for several reasons. First, San José has the largest population of people in the entire Bay Area. As more and more people move to the South Bay, San José planning staff will eventually have to look for creative ways to provide adequate public open space for the growing population when the availability of land decreases. Second, San José has always lived in the shadow of San Francisco. Many new innovative design solutions and ideas have been applied and tested within the northern city; it is only fitting to give San José a chance to help spark a new design and planning trend. Finally, the idea of transforming freeway underpasses within the City of San José is not a new concept, as in the past there were a few public art and lighting installations implemented under freeway underpasses. Unfortunately, these installations were all temporary. There are approximately twelve different underpasses that connect communities to downtown San José, and a redesign of these spaces into artsy, pedestrian friendly, and community enhancing spaces could possibly create a unique "claim to fame" for the city.

Brief Overview of Study Area

The study area for this report is approximately 1,304 square feet in size, and is located directly underneath the bridge span of the Interstate 280 Freeway south of downtown San José. It is bordered by downtown San José's residential and

office space to the north, 3rd Street to the east, Spartan-Keys neighborhood's residential and office space to the south, and 2nd Street to the west. (See FIGURE 1.1 below.)



FIGURE 1.1 Context map of the study area

Source: Author's modification of Google aerial photo

1.4 Focus of Research

Freeway underpasses are the main focus for this report because the redesign for this specific type of residual space has proven to be the most controversial. The two main questions explored within the research are:

- What are the most appropriate design elements to use for redesigning freeway underpasses as urban public spaces that will improve the quality of life for the surrounding communities?
- What would a conceptual design for the City of San José's 2nd & 3rd Street/I-280 underpass look like?

1.5 Scope of Report

The remainder of the report contains five more chapters. *Chapter 2* provides a comprehensive review of design related literature and introduces the basic language of design. This chapter will serve as a guide for how to properly analyze the design of selected precedent studies in *Chapter 3*. This chapter will also provide insight into the key qualities and design elements that should be incorporated into the design, or redesign, of residual spaces.

Chapter 3 analyzes and observes ten precedent studies of existing transformed residual spaces found in cities throughout the United States and Canada. The case studies are supported by interviews with project designers, planners, or key stakeholders, and will discuss recurring

themes, concepts and designs, challenges during the design development stages, and lessons learned.

Chapter 4 presents an in-depth analysis and site overview of the report's study area: San José's 2nd & 3rd Street / I-280 freeway underpass.

Chapter 5 presents a discussion of findings in response to the research questions and interviews with residents living near the study area. This chapter will also discuss design considerations for successful urban public spaces and include conceptual design recommendations for San José's 2nd & 3rd Street / I-280 freeway underpass.

Finally, *Chapter 6* provides recommended steps for seeing a redesign of the freeway underpass come to fruition.



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“We must consider not just the city as a thing in itself,
but the city being perceived by its inhabitants.”

– Kevin Lynch in *The Image of the City*

Chapter 2

Design Guidelines for Creating Successful Urban Public Spaces

This chapter introduces and highlights the key common qualities, and elements found within successful urban public spaces. Understanding basic design concepts used to define and form a space can help establish a structure for analyzing a space and distinguishing good from bad design. This understanding provides insight into how different elements and characteristics of design can be utilized and combined to create beautiful, functional and successful spaces.

2.1 Defining Public Space

Public spaces are outdoor environments that provide a sense of reprieve from everyday life in an urban setting. Public spaces are vital to the life of cities because they serve as venues for social interaction, strengthen the character and identity of communities, and enhance the quality of life for surrounding residents. The quality and success of public spaces are determined by how functional and attractive

the overall design is to users.³ These spaces are streets, sidewalks, squares, plazas, and other forms of public spaces that are accessible and open to everyone.⁴

2.2 Design Qualities, Characteristics & Elements

William H. Whyte and Clare Cooper Marcus are considered the most influential researchers in the studies of human behavior and urban design. Whyte's research observing human behavior within New York City's urban plazas provided a strong foundation for the development of countless studies. Armed with time-lapsed cameras and an army of research assistants, Whyte observed and recorded pedestrian behavior within many different urban settings. In addition, the work

3. William H. Whyte, *The Social Life of Public Spaces* (New York: Project for Public Spaces, 1980), 52.

4. Clare Cooper Marcus and Carolyn Francis, *People Places: Design Guidelines for Urban Public Space* (New York: International Thomson Publishing Inc., 1998) 22-25.

conducted by Marcus established a deeper knowledge and understanding into how different urban public spaces functioned, as well as the important role users played in determining the success of a space.

The following section presents a list of design criteria for creating successful urban public spaces according to the findings of Whyte, Marcus and other researchers. The design criteria are broken up into five themes: Sociability, Features & Amenities, Microclimate, Linkages & Accessibility and Safety & Comfort. It is important to mention that the following themes are organized in a way to give emphasis, and a better understanding, on the important qualities and elements related to each theme. However, there will be some overlap of material as all of the themes are interrelated with one another.

2.2.1. Sociability

Activities

The design of a space generally indicates the type of activities or activity that will occur. Designs that accommodate a multitude of activities provide an opportunity for different types of users to socialize with one another within a shared space.⁵ On the other hand, spaces designed with a single purpose encourage users with similar interests to gather and socialize within a common ground.⁶ Playgrounds are

5. Vicky Cattell et al., "Mingling, Observing, and Lingering: Everyday Public Spaces and their Implications for Well-Being and Social Relations," *Health and Places* 14, no. 3 (2008): 557.

6. Aleksandra Ka'zmierzak, "The Contribution of Local Parks to Neighborhood Social Ties," *Landscape and Urban Planning*, 109 (2013): 42.

excellent for promoting social interaction because they not only provide opportunities for children to meet, socialize and form friendships with other children outside of school, but also can spur the development of friendships among the parents as well.⁷

The implementation of flexible spaces within a design also provides ample opportunities for social interaction to occur. When a design is undefined, users are allowed the freedom to create their own sense of place through the use of interactive art, moveable chairs, and other various seating elements.⁸

Orientation and Placement of Seating Elements

A variety in orientation of seating elements is very important within a design in fostering different types of uses. People like the option to view different elements such as fountains, vegetation, and distant views, or activities such as sports, or people.⁹

The placement of seating is also very important. Seating elements can be placed into groups to accommodate those who come to a space to socialize and interact with others. Seating can also accommodate those who want to be alone within a

7. Mary P. Corcoran, Jane Gray, and Michel Peillon, "Making Space for Sociability: How Children Animate the Public Realm in Suburbia," *Nature and Culture* 4, no. 1 (2009): 41.

8. Jacqueline Groth, and Eric Corijn, "Reclaiming Urbanity: Indeterminate Spaces, Informal Actors and Urban Agenda Setting," *Urban Studies* 42, no. 3 (2005): 522.

9. Marcus and Francis, 43.

space by placing seating near activities but not within direct eye contact of other people.¹⁰

Triangulation

Triangulation is described as “the process by which some external stimulus provides a linkage between people and prompts strangers to talk to one another as if they knew each other.”¹¹ The stimulus can be physical objects like art, vegetation, signage or it can be a scene like a sunset or a city skyline.

2.2.2 Features & Amenities

Sitting Space

The most popular plazas incorporate a variety of seating spaces within the overall design.¹² People tend to gravitate towards different features that are initially not designed for seating. Labeled as “integral seating,” the elements that significantly influence this type of behavior are identified as seat walls, ledges and stairs.¹³

People also tend to gravitate towards seating spaces located near the entrances and the periphery of public spaces. These elements are generally near the heaviest flows of pedestrian traffic and provide users with a space for people watching.¹⁴

.....
10. Ibid.
11. Whyte, 94.
12. Ibid., 28.
13. Ibid.
14. Ibid., 32.

The use of moveable chairs provide users with the option to either sit in solitude, congregate with other users, and sit in the sun or shade. When painted and/or grouped together, moveable chairs can also act as decorative elements and focal points within a space.¹⁵

Vegetation

The relationship between the use of vegetation and size of the plaza is very important. The number of trees within a design needs not to overpower a space and their locations need to be associated with the placement of seating spaces.¹⁶ Seating spaces located underneath or near shading trees provides a sense of enclosure and protection to users.

A variety in planting type, size, color and height offer visual interest to the users within a space.¹⁷ People tend to draw to spaces that are designed to visually attract their attention from the surrounding built environment.

Water

The use of water features within a design can provide visual appeal, pleasing sounds, and offer opportunities for playful interaction.¹⁸ Examples of water features are fountains, waterfalls, ponds and streams.

.....
15. Ibid.
16. Ibid., 46.
17. Marcus and Francis, 45.
18. Whyte, 48.





Public Art

Public art within a design can play many different roles. Art can set the tone and mood of a space, create sensory experiences, stimulate the imagination and also foster causal conversation.¹⁹

Food

The presence of food elements, such as food vendors and carts, are the number one influence for attracting people within a space.²⁰

Signage and Wayfinding

Signage plays an important role in a space as they can serve many different purposes. Signs can alert visitors upon entering a space, provide information and direction, communicate park rules, and encourage learning experiences.²¹

2.2.3 Microclimate

Sunlight

The most popular plazas are places that receive the greatest amount of sun exposure. In his studies, Whyte observed how the hottest and muggiest of days influenced the most usage of the plazas.²² The sun's movement across the sky and the surrounding height and location of existing and proposed structures

.....
19. Marcus and Francis, 48-51.

20. Whyte, 52.

21. Marcus and Francis, 54.

22. Whyte, 42.

should be taken into consideration in order to allow as much sun exposure as possible.²³

The provision and presence of shade should also be considered within a design to provide relief from the sun during hot summer days. Shade can be achieved through the planting of trees, addition of shade structures, or by nearby buildings blocking the sun.²⁴

Wind

Preference is usually given to spaces that are protected from high volumes of wind and where fresh air circulates freely.²⁵ Public spaces directly adjacent to tall buildings witness the wind tunnel effect during mildly windy to very windy days. These types of conditions are generally not favorable among the majority of users and, on days where temperatures are low and sun exposure limited, can further deter people from entering the space.

2.2.4 Accessibility & Linkages

Accessible to All

A space is deemed accessible if it is designed to accommodate a variety of individuals. In other words, a space is considered accessible if the design considers wheel chairs, children, the elderly, pregnant

.....
23. Marcus and Francis, 32.

24. Ibid.

25. Whyte, 45.



women, mothers with strollers, and the blind.²⁶ Spaces that do not cater to a variety of users run the risk of experiencing little to no usage, which leaves a space looking barren and vacant.

Designs that encourage and provide a sense of direction are the easiest to navigate to and through the space. Spaces that do not have clear and defined entrances may experience very limited amounts of user activity within.²⁷

Public Transportation

A space is accessible if it is physically connected to the landscape through one or multiple modes of transportation. (e.g. walking, bicycling, cars or buses.) The greater the number of transportation options available, the greater the variety and level of usage a space will receive. When a space is physically connected with the landscape, it provides the freedom for individuals to choose how they would like to visit a site, and does not limit where they can or cannot go.²⁸

Street

Streets were identified as being the most advantageous to the success of a space because they directly link and connect users to and from surrounding land uses.²⁹ High levels of pedestrian activity are heavily influenced by the presence of adequately sized and well-maintained sidewalks, way-finding signage, landscape and lighting.³⁰

2.2.5 Comfort & Safety

The “Undesirables”

According to Whyte, the measures taken to combat undesirables within a space leave the overall design unattractive and uncomfortable for target audiences. The undesirables refer to winos, derelicts, homeless, drug users and gangs.³¹

In his book, Whyte stated “the best way to handle the problem of undesirables is to make a place attractive to everyone else.”³² In making a place attractive, Whyte said a place needs to be accessible and viewed as accessible by a variety of users.³³

26. Ayse Nilay Evcil, “Raising Awareness About Accessibility,” *Social and Behavioral Sciences* 47 (2012): 492.

27. Steffan Nijuis, “Visual Research in Landscape Architecture,” In *Exploring the Visual Landscape: Advances in Physiognomic Landscape Research in the Netherlands*, Research in Urbanism Series 2, edited by Steffen Nijuis, Ron Van Lammeren and Frank Van Der Hoeven (Amsterdam: Delft University Press, 2011), 113.

28. Joseph C.Y. Lau and Catherine C.H. Chiu, “Accessibility Of Low-Income Workers In Hong Kong,” *Cities* 20, no. 3 (2003): 200.

29. Whyte, 57.

30. Nil Pasaogullari and Naciye Doratli, “Measuring Accessibility and Utilization of Public Spaces in Famagusta,” *Cities* 21, no. 3 (2004): 231.

31. Whyte, 57.

32. *Ibid.*, 63.

33. *Ibid.*



Safety & Crime

How users perceive their surroundings greatly affects how they act or interact within the built environment. The feeling of comfort or discomfort within a space is one of the main factors that either encourages or deters people from entering a space. Levels of comfort vary from person to person but the design of a space needs to cater to the perception of the target audience. The target audience might also include women, elderly, minorities and the disabled. These groups of people all share the common fear of encountering negative attention in urban public spaces that lack diversity in the types of users.³⁴

The feeling of security and safety is the main factor that influences a space's level of comfort. The majority of users choose to visit a space on the basis of physical and social safety factors.³⁵ Examples of physical factors are identified as adequate crosswalks, lighting, well-maintained sidewalks and pathways and manicured vegetation.³⁶

Well-maintained vegetation can influence high levels of comfort for users. The majority of people prefer

vegetation within space so as to not block view corridors or provide hiding places for others to lurk behind.³⁷

The fear of crime and other unwanted attention or activities in urban public spaces proved to be the major social factor affecting people's level of comfort. The simple addition of lighting can reduce crime and increase levels of comfort at night.³⁸

34. Don T. Luymes and Ken Tamminga, "Integrating Public Safety and Use Into Planning Urban Greenways," *Landscape and Urban Planning* 33, no. 1 (1995): 397.

35. Tawfiq M. Abu-Gazzeh, "Reclaiming Public Space: The Ecology of Neighborhood Open Spaces in the Town of Abu-Nuseir, Jordan," *Landscape and Urban Planning* 36, no. 3 (1996): 201.

36. Rianne Van Melik, Irina Van Aalst, and Jan Van Weesep, "Fear and Fantasy in the Public Domain: The Development of Secured and Themed Urban Space," *Journal of Urban Design* 12, no. 1 (2007): 25.

37. Aminzadeh Behnaz and Dokhi Afshar, "Urban Parks and Addiction," *Journal of Urban Design* 9, no. 1 (2004): 75.

38. Marion Roberts, "Planning, Urban Design and the Night-Time City: Still at the Margins?" *Criminology and Criminal Justice* 9, no. 4 (2009): 495.



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“The time may soon come when planners, designers, developers, and others will recognize and act on the simple notion that the spaces between buildings are as important to the life of urban man as the buildings themselves.”

– Serge Chermayeff and Christopher Alexander in
Imaging the City from Community and Privacy



Chapter 3



Studies of Existing Residual Space Transformations

3.1 Selection Process

Because there are very few existing redesigned underpasses, the selection of precedent studies was expanded to include all four residual spaces receiving the most attention to date: parking spaces, alleyways, median strips and underpasses. The range in space types allowed for the study to analyze and observe how different sizes and urban settings could play a part within a space's overall design.

The location of spaces was also expanded to include the entire United States and Canada. (See FIGURE 3.1) This decision allowed for the study to analyze how different cities were utilizing their residual spaces, and gave insight into each city's design and planning processes.

A total of ten transformed spaces were selected based upon articles published within planning and design magazines, as well as recommendations from design professionals. The

selected studies represent a range in residual space type, geographic location, characteristics and amenities. Five of these precedent studies were chosen based upon their location within the San Francisco Bay Area. The locality of spaces allowed for personal observations to be conducted and provided firsthand accounts into how design can transform a space. (TABLE 3.1, on the following page, provides a list of studies observed.)

3.2 Methodology for Analyzing Each Space

An observation and analysis tool was created to observe the spatial design of the selected residual spaces. The observation process was designed to assess each space's surrounding context, characteristics, and design elements used within the design. For all ten cases, data from the observations was recorded by hand on printed sheets of the observation tool and then entered into a Microsoft Excel spreadsheet for comparison.



TABLE 3.1: Summary of residual spaces studied

NAME	APPROX SIZE IN SF*	CITY	TYPE
1. Jane Warner Plaza / Castro Commons	9,100 SF	San Francisco, California	Parklet
2. Farley's East Café	216 SF	Oakland, California	Parklet
3. Parallel Park	216 SF	Vancouver, Canada	Parklet
4. Mission Bay Park Sport Courts	109,000 SF	San Francisco, California	Freeway Underpass
5. Fremont Troll	4,600 SF (size of entire underpass)	Seattle, Washington	Freeway Underpass
6. Underpass Park	108,900 SF	Toronto, Canada	Freeway Underpass
7. Quesada Gardens	9,400 SF	San Francisco, California	Median Strip
8. New York Avenue Sculpture Project	21,400 SF	Washington D.C	Median Strip
9. Main Street Alley	Alley: 10,800 SF Plaza: 6,900 SF	San Mateo, California	Alley
10. Nord Alley	5,600 SF	Seattle, Washington	Alley

* SF = Square Feet

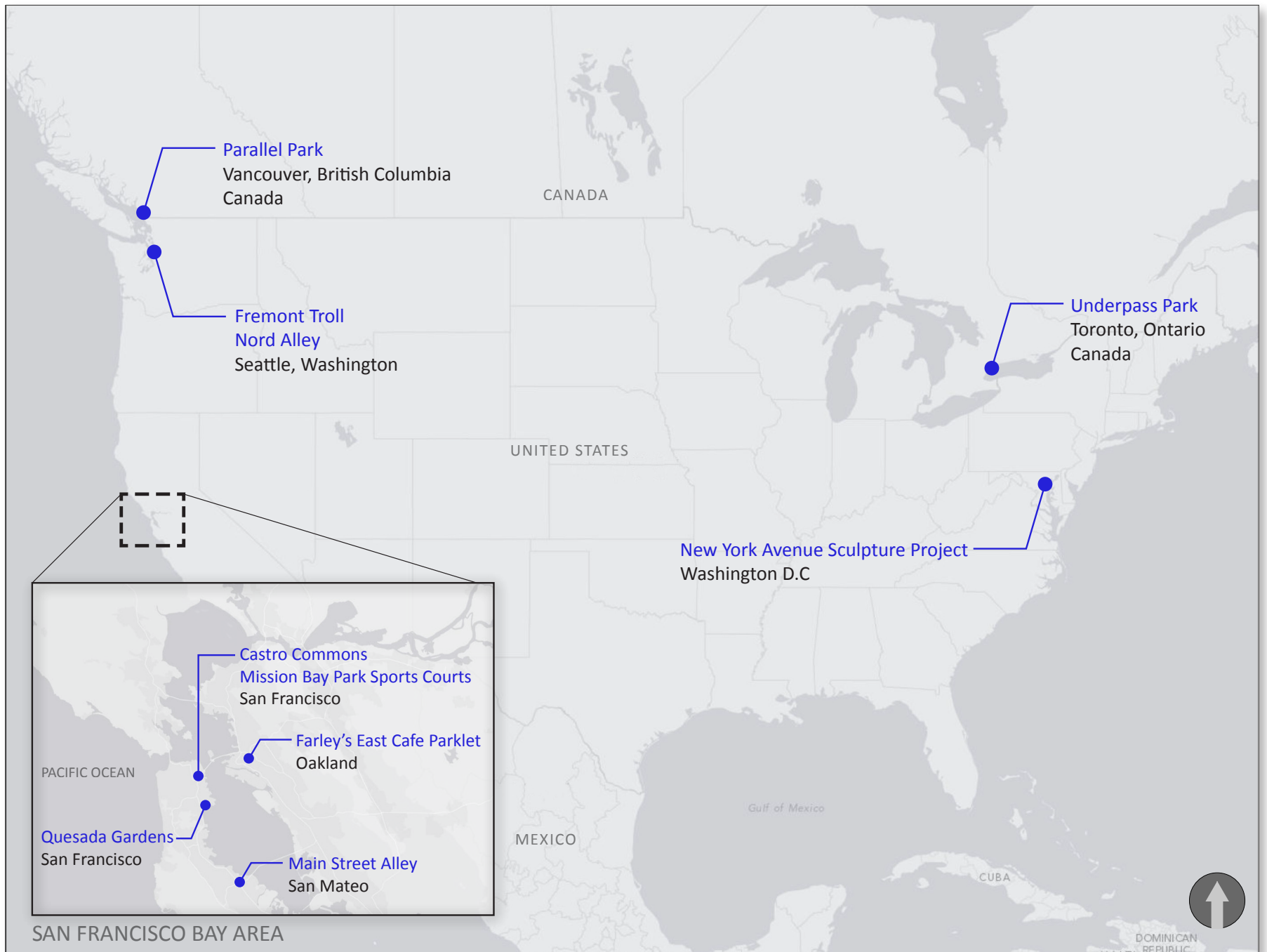


FIGURE 3.1 Location of residual space studies

Source: Author's modification of ESRI Delorme Navteq BaseMap.



Field visits were conducted at each of the five spaces located within the San Francisco Bay Area. Each site was visited on a weekday as well as a Saturday, from 12 to 1 pm in July, August and September of 2013. To ensure each site was observed and documented under the best circumstances, site visits were only conducted during perfect to fair weather conditions.

Observations of the remaining five non-local case studies were heavily reliant upon Google maps, Google earth images and pictures from articles in planning and design magazines.

A total of nine interviews were conducted with the designer, main planning official or key stakeholder for nine precedent studies. Appendix C presents the list of people interviewed for this study. (It was not possible to find anyone to interview about the tenth study.) These interviews lasted from fifteen to thirty minutes and were conducted either in person, over the phone, or via email. Appendix B presents the questionnaire used for the interviews.

3.3 Residual Space Observation and Analysis Tool

The design of the Residual Space Observation and Analysis Tool was adapted from the Environmental Assessment of Public Recreation Spaces (EAPRS). Designed and developed in 2005, EAPRS was created to assess parks and playgrounds by measuring more than 16 different features typically found in large park settings.³⁹ These features included pathways,

39. Brian E. Saelens, et al., "Measuring Physical Environments of Parks and Playgrounds: EAPRS Instrument Development and Inter-Rater Reliability," *Journal of Physical Activity and Health* 3, no. 1 (2006): S190-S207.

water areas, landscaping, play structures, athletic fields, informational signage, and bike racks.

The EAPRS instrument was tailored to the needs of the study by eliminating all unnecessary information that was not applicable to the goal of this research. Whyte and Marcus' research, described in Chapter 2, also served as guides for identifying elements and characteristics within a design. The additional characteristics and design elements include identifying entrances, sitting spaces, tables, vegetation, water elements, public art and the amount of sun exposure a space receives.

The full instrument is provided in Appendix A.

3.4 Observation & Analysis of Studies

The following section describes the findings from the observation and analysis of each transformed residual space, as well as information shared during interviews with key stakeholders. The studies are categorized according to residual space type and describe the main goals for each design, the reasoning behind the types of design elements used, and the challenges that arose during the planning or design processes.



3.4.1 Parklets

Jane Warner Plaza / Castro Commons

Introduction

The Castro Commons is a plaza/parklet located at the intersection of Market Street, Castro Street, and 17th Street in San Francisco. The idea for the parklet was greatly attributed to the success of Park(ing) Day, an annual event first established in 2005 where parking spaces were converted into public spaces for the day.⁴⁰ Through a collaborative effort by the Castro/ Upper Market Community Benefits District, Public Architecture, and the San Francisco Planning Department, the Castro Commons plaza became the first pilot project to be established in May of 2009.

The parklet quickly became a huge success and spearheaded the construction of numerous other parklets throughout the City of San Francisco. By request of the Castro community, the Castro Commons was redesigned in 2010 by Boor Bridges Architecture to become a permanent public open space for the neighborhood and the City. It is the design of this second phase that will be focused upon and discussed in more detail for this report.

In 2011, the plaza was renamed Jane Warner Plaza to memorialize a beloved police officer and active member of the community.

.....
40. Catriona Stuart, "(Park)ing Day – September 21, 2006," *Places* 18, no. 3 (Fall 2006), 76-77.

**Address:**

Intersection at 17th and Castro Street
San Francisco, California

Main Designers:

Phase 1 - Public Architecture
Phase 2 - Boor Bridges Architecture

Opened:

Phase 1- May 2009
Phase 2 – June 2010



Goal of the Design

According to Andrea Aiello, the Executive Director of the Castro/Upper Market Community Benefit District, the intersection at Castro, 17th and Market Streets was once very dangerous. The size of the intersection created a lot of problems for pedestrians because no one ever felt safe walking from one side of the street to the other. The shape of the intersection was also confusing for motorists because it was unclear which traffic light directed what street.

The main idea and goal behind the parklet was to alleviate some of the problems associated with the intersection. A portion of 17th Street was closed to provide adequate space for the parklet.



FIGURE 3.2 Concrete planter bed and moveable chairs in Jane Warner Plaza /Castro Commons

Planning Process and Design Development

With heavy backing from former Mayor Gavin Newsom and the district supervisor, the Castro Commons became one of three pilot projects in 2009 under the “Pavement to Parks” program. These projects were permitted as temporary spaces and were reviewed after two months and again after six months of installation, so as to test their practicality and reception from surrounding residents and business owners. At first, the idea to close a portion of the intersection received a lot of opposition from neighborhood residents and nearby business owners because they were afraid of limiting traffic flow in and around the neighborhood. However the space quickly became a huge success and improved the overall curb appeal of the district.

With the success of the pilot projects, a parklet permit process was established within the City. As of January 2013, there are 38 parklets in neighborhoods and business districts all over San Francisco.

The first phase of the design was funded primarily by the city under the “Pavement to Parks” program. For the second phase, the Castro/Upper Market Benefit District wrote a grant that funded most of the improvements including new tables, chairs, and a new selection of plants that were more appropriate for the site. The City paid for improvements to the paving of the site.

During each phase of the parklet’s design, the Castro/Upper Market Benefit District worked very closely with the city to ensure that the districts concerns and interests were heard.

Design Elements

The design of Jane Warner Plaza/ Castro Commons is very basic and simple. The plaza’s loose triangle shaped boundary, defined by the intersection of the three surrounding streets, provides pedestrians with a unique space to sit and relax while still being part of the vibrant scene of the neighborhood. Raised concrete planter beds (FIGURE 3.2) and a moveable metal trailer hitch (FIGURE 3.3) that supports a variety of decorative potted plants define the edges of the space.

There are a number of contrasting elements used successfully within the space. The stark, clean lines of the concrete planters are softened by the use of flowering lush greenery.



FIGURE 3.3 Metal trailer hitch used as a raised planter bed and barrier from cars on Castro Street

In describing her favorite part of the site, Andrea Aiello said “the industrial look of the concrete planters and with the use of greenery positively adds to the urban environment of the space.”

Movement is constant throughout the plaza. Pedestrians access the site through three entrances that directly align with the existing pedestrian pathways along Market, Castro and 17th Streets. The tracks from the historic F-Line cable car run through the middle of the space and provide a unique, artistic element to the overall design (see FIGURE 3.4). The use of color on the ground surface and the bordering white line that outlines the tracks, create a visual barrier and alerts visitors as to where the appropriate and safe places to experience the space are.



FIGURE 3.4 Historic F-Line cuts through Jane Warner Plaza/Castro Commons

The color scheme of the plaza is very subdued save for one element. The moveable table and chairs positioned on both sides of the cable car tracks are painted a bright cherry red. The intense color immediately grabs the attention of visitors upon entering the site, and invites people to sit back and relax. The flexibility in the placement of the table and chairs provide visitors with a choice to either sit in solitude or within a group, which inadvertently is rather artistic.

Maintenance of the site is the responsibility of the Castro/Upper Market Benefit District. Every night, the moveable tables and chairs are stacked and chained together by volunteers to prevent theft. Every morning, the cleaning crews unlock the tables and chairs and spread them throughout the plaza.



Challenges

One challenge with designing the plaza/parklet, which remains an issue even today, was the presence of the F-Line tracks running through the middle of the site. The existing location for the platform breaks up the space and limits the amount of activities that can occur within. Safety was also a primary concern associated with the presence and active use of the F-Line tracks. Currently, the city is working on adding more ADA compliant warning signs around the space to increase public knowledge of the dangers within the site. These elements are part of the Castro Street Design Project and will be implemented in early 2014. New elements will also include new pavement, electricity, and upgraded barricades near the F-Line platform.

According to Andrea Aiello, the presence of homeless has also been an issue since the opening of the parklet. Throughout the day and night, homeless stake their claim to a chair and table with their shopping cart of belongings in tow. Their presence within the parklet significantly impacts the look and feel of the parklet.

Farley's East Café

Introduction

Inspired by the success of parklets across the bay in San Francisco, the City of Oakland created its own pilot program to test the viability of parklets within the city. In September of 2012, the first of three pilot parklets was unveiled in front of Farley's East Café on Grand Avenue.⁴¹

The Café is located in the Lake Merit District and is surrounded by commercial, retail and office space.

Goal of the Design

After the success of the company's first parklet in San Francisco, Chris Hillyard and his wife Amy approached the City of Oakland to see if they could create a parklet in front of Farley's East Café. Using the same design ideas from their parklet in San Francisco, Chris explained that the main goal of the design was "to create a public space that looked and felt like a mini park." The addition of the bike rack is the only design feature that differs between the two parklets.

According to Chris, the parklet's usage has never faltered since its unveiling in 2012. The public and businesses along Grand Street were in support of the project from the start, and expressed their excitement prior to the opening.

.....
41. The City of Oakland, California, "Parklet Program," <http://www2.oaklandnet.com/Government/o/PBN/OurOrganization/PlanningZoning/parklets/index.html> (accessed September 20, 2013).



Address:

33 Grand Avenue
Oakland, California

Main Designers:

Chris & Amy Hillyard, and Robert Nebalon

Opened:

September 2012

Planning Process and Design Development

Since the parklet program was in its infant stage, the City of Oakland did not have a standard process established. Having had already gone through the process before, the Hillyards were asked by the city to explain the steps they took in launching Farley's parklet in San Francisco.

The one requirement Oakland requested was for the Hillyards to hire a licensed architect to assist in the design and structure of the parklet. The architect they chose was Robert Nebalon, a local architect from Berkeley who also designed the interior layout for Farley's East Café.

After a yearlong process with the city, Farley's East Café parklet opened in September of 2012. The overall cost of the project, including architect fees and permits, was approximately \$22,000. There were a few different sources



FIGURE 3.5 Farley's East Café Parklet

Source: Farley's East, "The Parklet in action on a sunny day..," <http://www.facebook.com/photo.php?fbid=10152133510880360> (accessed October 1, 2013).



FIGURE 3.6 Wooden bar table and red moveable stools at Farley's East Café

that helped fund the parklet. Through the use of a kickstarter campaign, a website that provides a funding platform for creative projects; the local public contributed a little over \$5,000 to the cause. The project was also awarded a \$5,000 grant from Lake Merit's Business Improvement District, the agency that utilizes tax fees from local businesses to pay for improvements in the designated area.

Design Elements

Farley's East Café parklet takes up the length of two parallel parking spaces on one of the main thoroughfares in downtown Oakland. With the intention of creating a

mini park along the sidewalk, fake turf is used to cover the parklet's deck. The edges of the parklet are defined by a black metal fence, vertical bike rack and black square metal containers used as planter boxes (See FIGURE 3.5).

The parklet has a single entrance that is open to the sidewalk and offers a variety of options for people to experience the space. On one side, a long wooden bench serves as a banquette for two small red circular metal tables. The wooden bench is made from recycled wood and is unique in style because of its rough-hewn edges. A long wooden table, made from the same material as the bench, is located on the



other side of the space and offers a communal seating area for visitors. This table is positioned at a bar table height and is surrounded by tall metal stools (see FIGURE 3.6).

The space possesses a combination of moveable and stationary elements. The wooden bench, wooden table and planter beds are all stationary, while the red circular tables, red chairs and stools are able to move around the space as needed. The color red acts as an accent color in the space and attracts the attention of people passing by on the sidewalk.

The parklet receives a lot of sun during the day, especially in the afternoon. Visitors tend to gravitate towards the spaces with the most sun exposure. However, there were instances where the sun's heat was too overbearing which resulted in people moving to shadier seats near the café's storefront or inside.

Challenges

The biggest challenge was the yearlong permit process with the city. Chris Hillyard explained that he was very happy to participate in the pilot program but said, "they had to be very patient with the city because there wasn't a process to follow. There was a lot of waiting around."

There was another issue that arose after the parklet was already launched. While the city was figuring out how to establish a parklet program, there was an oversight in the parklet's design complying to American Disabilities Act (ADA) standards. The parklet is lifted a couple of inches above the

curb and is therefore not accessible to people in wheelchairs. Chris explained that the challenge now is to figure out how to build a ramp to the parklet with the very limited amount of room available. Losing the bike rack may be the only solution for the parklet's design to comply with ADA standards.

Parallel Park

Introduction

Parallel Park was one of two “guinea pig” projects for Vancouver’s parklet pilot program. The parklet is located on 14th Avenue at Main Street in Vancouver’s Mount Pleasant Neighborhood, and is conveniently situated near a JJ Bean’s Coffee Roaster and a Starbucks.

Goal of the Design

In December of 2010, the city of Vancouver issued a Call for Proposals for the designing of a parklet under the program “Summer Spaces,” which later became known as “VIVA Vancouver.” Travis Martin, a local Landscape Designer, received the final approval for his proposal of a simple modular design. Although initially envisioned to be mobile and move from business to business, the design was created to provide a lounge-type setting that expanded the social space of the sidewalk out into the street.

In an interview with Travis, he explained how he “saw this pilot program as a test drive for expanding public spaces. It was an opportunity to potentially show how we can take back spaces that are unnecessarily large and create a public plaza space by using some of the road.”

Planning Process and Design Development

Since Parallel Park was part of the pilot program, the city did not have a set of criteria to follow during the design or planning process save for the site selection process. Selecting

Address:

14th Avenue at Main Street
Vancouver, British Columbia
Canada

Main Designers:

Travis Martin, Landscape Designer
Happy Valley Woodwork

Opened:

September 2011



appropriate sites for the pilot projects were crucial to test the effectiveness of the parklet program in Vancouver. When speaking with Travis about the location for Parallel Park, he explained that 14th Street was selected because it was already a popular place for social activity. The location was also chosen because of the expansive width of the adjacent sidewalk, appeal of the vegetation along the street, and proximity to the very popular coffee shop JJ Beans.

The entire project, from design to completion took approximately eight months. During that time, the designer met with members of Vancouver’s Planning and Engineering team as well as various other professionals he selected to help guide the process along. The project cost approximately \$18,000 dollars to complete and was funded entirely by the

city. After a year trial period, the city sought funding from the nearby coffee shop to keep the parklet there for another three years. This funding would cover maintenance costs as well as loss of revenue previously collected from the two meters that used to be in the parklet's spaces.

The success of Parallel Park and Picnurbia, the other pilot project for the program, spearheaded Vancouver's parklet permit and application process. In June of 2013, VIVA Vancouver launched their Parklet Pilot Program Guide.

Design Elements

Parallel Park extends the length of two parking spaces along 14th Avenue. The design of the space is very modular and is created entirely out of high quality clear cedar from Dick's Lumber, a local lumberyard in Vancouver. The use of red within the design creates a pop of color that contrasts with the natural look of the wood. According to the designer, red was chosen as the accent color because it was "popular, vibrant and warm."

The parklet offers several options for seating. The entire backwall provides a series of alternative bench heights to sit and relax. The lowest sections were designed to mimic a beach chair and provide visitors with a comfy space to lounge. The square benches located in the middle of the space were initially designed to be moveable and allow visitors the option to move freely around the space (see FIGURE 3.7). However, due to liability concerns, the city was hesitant to allow moveable elements within the space. In response to



FIGURE 3.7 Parallel Park's modular design

Source: Inhabitat.com, "Awesome modular public lounge...," <http://inhabitat.com/awesome-modular-public-lounge-takes-over-vancouver-s-parking-spaces/parallel-park-in-vancouver-2-2/> (accessed October 1, 2013).

these concerns, the "moveable" benches were permanently positioned at various distances away from the back seatwall to allow different levels of social activities to occur.

At both ends of the parklet, angled seatwalls offer another place for users to lean up against. These angled seatwalls define the edge of the parklet and extend out onto the adjacent sidewalk. The other side of the angled seatwalls provides cyclists with ample space to store their bicycles when visiting the parklet (see FIGURE 3.8 on the following page).



FIGURE 3.8 Parallel Park's angeled seatwall and bike rack

Source: Inhabitat.com, "Parallel Park in Vancouver," <http://assets.inhabitat.com/wp-content/blogs.dir/1/files/2011/09/Parallel-Park-in-Vancouver-6.jpg> (accessed October 1, 2013).

Challenges

As the first of two pilot projects, Parallel Park set the bar on how the City of Vancouver should run the program and conduct permit processes for future parklets. Without a set of guidelines to follow, Travis explained that the program was very loose and lacked a set timeline for deadlines. He also explained that he had to enlist outside help to guide him through the design and implementation process when the city didn't have the time or staff to provide assistance.

Proof of professional liability insurance was a requirement by the city that Travis found out late in the planning and design

process. This insurance was fairly costly, approximately \$3,000, and permitted him to continue working on the project design.

Another challenge Travis encountered arose after the parklet was installed. The initial intent to stain the wood proved to be cumbersome when the stain refused to dry and was later removed.



3.4.2 Freeway Underpass

Mission Bay Park Sports Courts

Introduction

The Mission Bay Sports Courts are located at the terminus of the China Basin Water channel and is within walking distance of the new high-rise residential developments on Berry Street. The sports courts were designed underneath the 280 freeway and are part of the Mission Bay Open Space program.

Goal of the Design

From the mid 19th Century to early 20th century, the area known as Mission Bay used to be home to numerous shipyards, canneries, warehouses and a sugar refinery.⁴² When the economy changed in the late 20th century, Mission Bay experienced a loss in industries and most of the land appeared to look run down and vacant. The Master Plan, proposed in the late 1990s, focused upon revitalizing approximately 300 acres of land with new high-rise residential and mixed use developments and a series of parks.⁴³ The Mission Bay Project was and still is the largest urban development since the construction of Golden Gate Park in the 1860s.⁴⁴

Planning Process and Design Development

Planning for the Mission Bay Project has been twenty years in the making. The team responsible for the revitalization of

42. Mission Bay Parks, "History of the Bay," Mission Bay Parks, <http://missionbayparks.com/history.php> (accessed October 20, 2013).

43. Ibid.

44. Ibid.



Address:

401 Berry Street
San Francisco, California

Main Designers:

Marta Fry Landscape Architecture

Opened:

2004



the area included the former San Francisco Redevelopment Agency, Mission Bay Development Group (formerly ProLogis), the California Department of Toxic Substances Control and the Environmental Protection Agency (EPA).⁴⁵

Prior to any construction, the site had to be decontaminated because of the asbestos, lead and other chemicals found in the soil from shipping and other industrial uses that used to thrive in the area. Fortunately, the contamination of the soil was at such a low level that the project was able to receive a brownfield grant through the California Department of Toxic Substances Control and the EPA.⁴⁶

The project was split into two different phases. Phase one, completed in 2004, consists of the Mission Bay Sports

45. Bill Picture, "Earth Friendly Redevelopment in Mission Bay," San Francisco Bay Crossings, <http://www.baycrossings.com/dispnews.php?id=2656> (accessed November 1, 2013).

46. Ibid.



FIGURE 3.9 Basketball courts at the Mission Bay Park Sport Courts

Courts, high-rise residential units and parkland. Phase two, which includes a new hospital complex for the University of California at San Francisco (UCSF), is currently under construction and scheduled to open in 2014.

All of the Mission Bay Project's parkland and open space systems were funded through a combination of special taxes paid by UCSF and other Mission Bay private property owners under Mello-Roos community Facilities District No. 5.⁴⁷

47. Fred Blackwell, "Information Memorandum: Intention to Issue a Request for Qualifications for Open Space Management Services for the Mission Bay Open Space System; Mission Bay North and South Redevelopment Areas," San Francisco Redevelopment Agency, http://www.sfredevelopment.org/ftp/uploadedfiles/meetings/supporting/2009/MB_Parks_RFQ_Info_Memo.pdf (accessed October 31, 2013).

Design Elements

There are three different types of sports courts included within the design of the space: basketball (both half and full courts), sand volleyball and tennis. The basketball courts (FIGURE 3.9) and sand volleyball court are located directly underneath the freeway overpass, while the tennis courts are located on the opposite side of the park's maintenance facility.

There are three entrances to the sports courts. One entrance is from the linear esplanade (pedestrian pathway usually by a river) that runs along the China Basin Water Channel. The other two entrances provide access from Berry Street near the park's maintenance facility to the west of the park, and along the southwestern border of the high-rise residential developments.

The space provides a variety of seating spaces. Ornate benches are located along the periphery of the space and line the edges of the basketball courts and sand volleyball court. Picnic tables are also provided within the site and offer the option of clustered seating or solitary seating.

The ground plane of the space is designed to draw the users' eye to the middle of the space. Different hues of blue for the paving and the colorful landscape features weave in and out in a wave-like pattern that starts from the entrance near the linear esplanade and meanders through to the other side of the courts.



FIGURE 3.10 Colorful Bioswale

Nighttime and security lighting is provided within the space so that the courts can be used at night under safe conditions. The lights are attached to the support columns of the freeway and are located closer to the ground so as to not emit too much light upon the residential developments nearby. A bioswale (landscape that collects water runoff) was designed along the western edge of the space. The bioswale provides a sea of color and interest to the site and, along with a sign that introduces the intent of the design, educates users on the different storm water management methods practiced within the city (see Figure 3.10).

A mural, located along the wall of the park's maintenance facility, depicts a pixelated scene of waves. The mural acts as



FIGURE 3.11 Wave mural at Mission Bay Park

an accent piece to the site, through its size, use of color and design (see FIGURE 3.11).

Challenges

Throughout the planning and design process, the entire Mission Bay Project experienced many challenges along the way. Some of these challenges included determining the best strategy for designing parkland that would meet the needs of residents and businesses while still protecting the environment, and overcoming perceptions of the industrial history of the site.⁴⁸

48. "Mission Bay Park Case Study," MGM Management Group, <http://mjmmg.com/mission-bay-park-case-study/> (accessed November 1, 2013).

The Fremont Troll

Introduction

The Fremont Troll is an artistic sculpture located under the Aurora Bridge in the Fremont Neighborhood of Seattle. The underpass is located at the terminus of a T-intersection and is surrounded by a residential community. Since the unveiling of the sculpture in 1990, the Fremont Troll has not only become an icon for the community but a tourist destination spot as well.

Goal of the Design

The area under the Aurora Bridge was a hot spot for illegal dumping, drug dealers and other unwanted activity. Upon viewing the space for the first time, Steve Badanes, a University of Washington architectural professor and co-designer of the troll, explained how the “dank, dark and grungy look of the underpass reminded him of the folktale *Billy Goat’s Gruff*.” The image of the Troll stuck with him and the rest is history.

According to the artist, the enemies of trolls are pollution and development. So the troll was created as a statement against gentrification and the dominating nature of development.

In speaking with Steve Badanes about the success of the Troll, he exclaimed “I love this design because it takes an area that isn’t particularly viewed upon as a public space and transforms it into a public space that receives a lot of attention and attraction.”

Address:

3405 Troll Avenue North
Seattle, Washington

Main Designers:

Steve Badanes, Will Martin,
Donna Walter, and Ross Whitehead

Opened:

1990



The Fremont troll created a sense of identity for the Fremont community. Every year on Halloween, residents celebrate Trollaween in honor of their neighborhood icon.⁴⁹

The road leading to the Fremont Troll under the Aurora Bridge, was renamed Troll Avenue in honor of the sculpture in 2005 (see FIGURE 3.12).

Planning Process and Design Development

In 1989, the Fremont Arts Council held a national design competition for artists to create an art piece that would help rid underpass of crime. Steve Badanes and a team of three other local artists submitted the design proposal for the Troll. Four finalists were chosen by the Fremont Arts Council and awarded

49. Fremont Arts Council, “Trollaween 2012,” <http://fremontartscouncil.org/trollaween-2012/> (accessed September 1, 2013).



FIGURE 3.12 Troll Avenue N Street named in honor of the Fremont Troll
Source: Sue Ellis, "The Fremont Troll, Seattle," Flickr Website, http://www.flickr.com/photos/sue_ellis/50210957/in/set-1089869/ (accessed October 1, 2013).

money to construct a model replica of their designs for public review at the Fremont Street Fair. Even though they were not chosen as finalists, the Council invited Steve and his team to create and submit a model of their design. Their design, receiving a positive and overwhelming response from the community, won the competition.

The design took approximately seven weeks to complete. Support from the Seattle Neighborhoods Matching Funds, Fremont Public Association and donations made by members of the surrounding community all contributed to the funding of the project.



FIGURE 3.13 The Fremont Troll
Source: Sue Ellis, "The Fremont Troll, Seattle," Flickr Website, http://www.flickr.com/photos/sue_ellis/50210957/in/set-1089869/ (accessed October 1, 2013).

In describing the overwhelming support from the surrounding community, Mr. Badanes explained, "My favorite part about the design was how it became a cultural icon for the city. The neighbors supported the transformation process and design the entire time. Kids would take trips to the underpass and contribute a quarter or a dime to help fund the project."

The Fremont Arts Council, who also holds the copyright for the Troll, currently maintains the space.

Design Elements

The Fremont Troll was created from rebar, wire and ferroconcrete (a concrete mixture known for its strength and durability). Although the intent behind the design was to create a sculptural art piece under the bridge, the 18-foot high Troll is also used as a playground for kids to climb on, sit on, and explore.

The Troll's stringy hair covers half of his face as he climbs his way out from underneath the bridge. The Troll holds a Volkswagen beetle in his left hand, suggesting he had reached up and grabbed the car off of the Aurora Bridge above. (see FIGURE 3.13 on the previous page).

The VW also once held a time capsule where students from neighboring schools placed objects into it. Unfortunately, the car was subject to vandalism and was covered with concrete to prevent future destruction to the car.

A single light attached to the underside of the bridge, provides lighting for the troll at night.

Challenges

In conversation with Steve Badanes, he noted that he wished he had researched anti-graffiti finishes when building the Troll. He mentioned how it “would have saved a lot of repairs, many of which have added more cement slurry to the Troll. Overtime, the number of repairs that have been done to the Troll have reduced the crispness of the Troll’s original form, making it appear lumpy.”

Underpass Park

Introduction

Underpass Park is a 2.5-acre park located under the Richmond/Adelaide and Eastern Avenue overpasses in Toronto, Canada. This park is the first park ever built under a freeway in the City of Toronto.

Goal of the Design

As the adjacent parcels North and South of the underpasses were being developed, the City of Toronto became interested in creating this area into a more positive space. Waterfront Toronto, a temporary corporation created to transform Toronto's waterfront, led the effort to revitalize the underpass in a series of phases. In an interview with James Roche, Director of Parks, Design and Construction for Waterfront Toronto, he explained the overall goal for the design was to "create an urban park that would connect adjacent neighborhoods together."

There are three zones to the park. The first zone is identified as the 'active zone' and includes a skateboard area and a basketball court. According to Mr. Roche, this area of the park is consistently used. The second zone, which is in the middle of the park, is the playground zone (see FIGURE 3.14 on the following page). This area offers artistic playground structures for kids to play on as well as a flexible open space for different types of programming. The flexible space is meant to offer a protected outdoor room for programs like farmer's markets or community events. The third zone, which

Address:

Under the Eastern Avenue and Richmond/Adelaide overpasses, between Cherry Street and Bayview Avenue Toronto, Canada

Main Designers:

Phillip Farevaag Smallerberg and
The Planning Partnership
Paul Raff, Sculpture

Opened:

Phase 1 - End of 2011
Phase 2 - October 2013

is currently still under construction, is meant to be more passive. This zone will feature a lot that can potentially serve as a community garden, and will offer passive seating as well.

Planning Process and Design Development

During the planning and design processes, there were numerous public presentations conducted to welcome comments from the public. Stakeholder groups in West Donlands, the area north of the site, were also consulted on a regular basis. Monthly meetings were also held with the parks department and transportation department of Toronto to receive feedback and direction.



FIGURE 3.14 Underpass Park with decorative play structures in the
Source: Waterfront Toronto, http://www.waterfront.ca/image_galleries/underpass_park/?13447#13432 (accessed October 1, 2013).

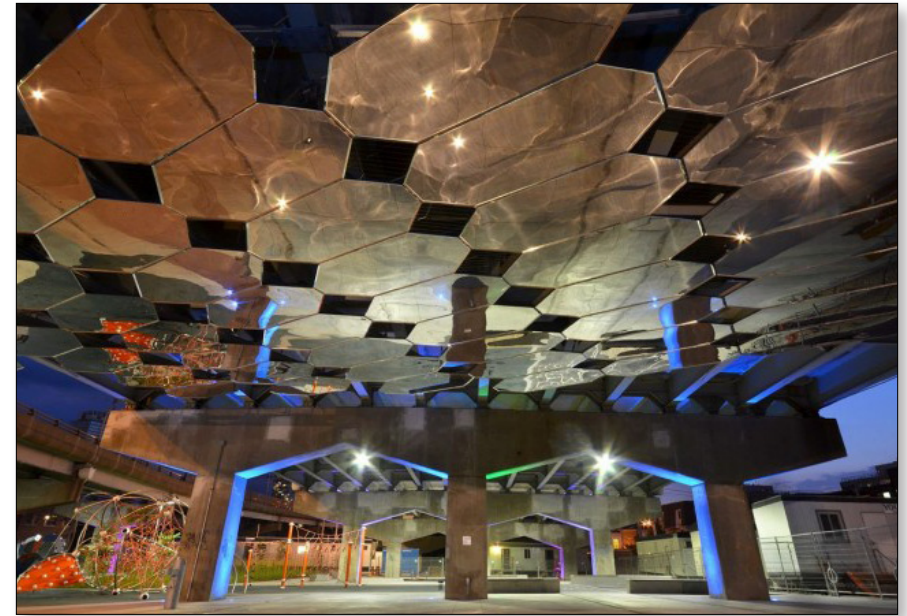


FIGURE 3.15 Decorative lighting and sculpture in Underpass
Source: Waterfront Toronto, http://www.waterfront.ca/image_galleries/underpass_park/?13447#13443 (accessed October 1, 2013).

From design to completion, Underpass Park took approximately three years to create. Once the park was completed, the City of Toronto took over the management and maintenance of the space.

Toronto Waterfront receives funding for projects from three levels of government: the Federal Government of Canada, the Province of Ontario, and the City of Toronto.

Design Elements

The park is divided into three different zones, described above, that are separated by intersecting roadways. Within

each zone, the support columns of the freeway above create a series of rooms where different activities occur. For example, the skate park and basketball court are located in the same area or zone of the park, but they are separated from one another by a string of columns.

The support columns also provided designers with a surface to play with lighting in the park. LED lights displaying the entire color wheel are projected off of the industrial grey surface of the columns, and create a colorful and artful atmosphere at night (see FIGURE 3.15). The lighting within the park is James Roche's favorite element in the design



because “you are drawing attention to the fact that you just redefined this existing infrastructure. What was previously this highway structure, now becomes a structure that organizes a new social space.”

There are many different entrances to the park. River and St. Lawrence Street, the two roads that intersect the middle of the park, provide street access to each zone of the park and offers street parking as well.

The design offers different options for visitors to sit and relax within the space. Near the children’s playground, picnic benches are available for families to enjoy lunch or snacks. Benches found throughout the entire park provide another option for seating. These benches are artistic in appearance because they are long, narrow wooden benches that are designed to follow the wave like pattern of the ground plane.

In the middle section of the park, near the playground, is an art installation that hangs from the underside of the freeway overhead. The art piece entitled *Mirage* by local artist Paul Raff, includes 57 reflective stainless steel panels that are suspended overhead to attract and reflect light within the park (see FIGURE 3.15).

There are areas in the park that are not directly underneath the overpass and receive sun at certain times of the day. Designers took advantage of these areas by creating low maintenance planting beds to soften the industrial look of the park.

Challenges

As Mr. Roche explains, the main challenge in creating and constructing Underpass Park were the complications that arose while transforming a former commercial and industrial space. Previously the site was home to an auto body shop and a stockpile of cars for movies. The site had to be cleaned of debris, oil and grease and all of the industrial elements had to be completely removed. The ground was excavated to a minimum of two meters (approximately 6 ½ feet), then filled in with new top soil. During this process, the columns had to be protected to prevent any structural damage to the freeways above.

After the design was complete, pigeons quickly became a problem within the site. As a result, pigeon netting was added above the picnic and seating areas to keep these areas as clean as possible.

3.4.3 Median Strip

Quesada Gardens

Introduction

In 2002, the Quesada Gardens Initiative was started when two residents decided to improve the look and appeal of their neighborhood by planting within the median of Quesada Avenue (*Figure 11*). Since then, Quesada Avenue has witnessed a major facelift with the addition of two murals, and the creation of several public gathering spaces that include four teaching and learning gardens, one edible “kitchen” garden, and the Founders Memorial Vista Garden.⁵⁰

Goal of the Design

According to Jeffrey Betcher, local resident and co-founder for the Quesada Gardens Initiative, there was never really an overall design for the median strip. Many of the plants were donated by people and were planted wherever they were dropped. The chaos of the median, Jeffrey explained, “is really one of the charming aspects to me personally, to be able to look at the median and know how it evolved organically.”

Despite the lack of structured design, the intent behind the initial efforts of Karl Page and Annette Smith, the main founders of Quesada Gardens, was to provide a sense of beauty within a neighborhood that was ground zero for the drug trade. Since the neighborhood was a hotspot for crime, residents pretty much lived in isolation from one another

50. Quesada Gardens Initiative, “Projects,” <http://quesadagardens.org/history.php> (accessed April 20, 2013).

Address:
Quesada Avenue
San Francisco, California

Main Designers:
Residents of Bayview /
Hunter's Point neighborhood

Opened:
2002

and the neighborhood lacked a sense of community. “The program became a catalyst for people to cross the barriers that typically divide them and meet and begin organizing. It created a safe place to begin that meeting because there was a visible sign that there were people here that cared,” Jeffrey said.

Planning Process and Design Development

When Quesada Gardens expanded with the establishment of more gardens and murals throughout the neighborhood, the residents had to apply for permits and insurance with the City of San Francisco. There was some push back from the city at first because it wasn’t a typical situation for residents to take initiative and engage in their community. However, after the economic downturn in 2008, Jeffrey explained it became more common for people to want to improve their communities.

Jeffrey explained, “one of the achievements that Quesada Gardens Initiative will leave behind is that we made it easier for other organizations to overcome some barriers with the city.”

The city pays for water for the median strip. Quesada Garden is tapped into the city’s water main so that the residents don’t have to worry about watering the plants every day. Other gardens receive water by in-kind contributions from the city’s Public Utilities Commission or through donations.

Design Elements

Quesada Gardens is approximately 650 feet long and varies in widths as it extends the length of Quesada Avenue. Within the median strip, there are a series of different gardens that are the result of different residents contributing over the years (see FIGURE 3.16). There is a vegetable patch that is pretty large in size and also fruit trees and a selection of herbs. A founder’s memorial garden is located at the top of the hill, which was the first real professional input the entire project received. The memorial pays tribute to Karl Page and Annette Smith, as well as the residents who were part of the project from the very beginning.

There are also two different murals located in the community. One of the murals, named the “Bayview Is Mural,” is located on the wall at the end of the cul-de-sac on Quesada Avenue. This space also acts as a community gathering space during different events hosted within the community (see Figure 3.17).



FIGURE 3.16 The Quesada Gardens median strip

Source: fantastic_7@sbcglobal.net, "Quesada Gardens," Flickr website, <http://www.flickr.com/photos/bdolphins/633534380/sizes/o/in/photostream/> (accessed October 1, 2013).



FIGURE 3.17 The "Bayview Is Mural" on Quesada Avenue

Source: Rebuilding San Francisco Together, "Quesada Mural," Flickr website, <http://www.flickr.com/photosrebuildingtogether/f/4289273242/in/photostream/> (accessed October 1, 2013).



Challenges

The biggest challenge for this project was to figure out how to empower residents living within a very scary and dangerous neighborhood. However, success was achieved when a sense of community was created once the gardens were established. The garden changed residents' perception of their neighborhood and established a sense of community and trust among the residents. The program also provided more eyes on the street and decreased crime related activities on Quesada Avenue.

National Museum of Women in the Arts' New York Avenue Sculpture Project

Introduction

According to Stephanie Midon, Curatorial Assistant for the National Museum of Women in the Arts, the New York Avenue Sculpture Project is the only public art project in Washington D.C. that features different contemporary art pieces by different female artists. The sculptures are displayed within the portion of the New York Avenue median strip that is located directly in front of and adjacent to the National Museum of Women in the Arts in Washington D.C.

Goal of the Design

The goal of the project is to install art out into the street with the intent of adding to the curb appeal of the neighborhood and further strengthen the arts and cultural district of the city. The project will be enjoyed in four different phases, stretched over a five year span, and will portray different artists work in the medians on New York Avenue NW between 13th to 9th Streets. According to Stephanie, each median will display different work from different artists and will rotate the artwork every one to three years.

Planning Process and Design Development

The New York Sculpture Project is the result of a collaborative effort between the National Museum of Women in the Art, the Downtown DC Business Improvement District (BID), and the DC Office of Planning.⁵¹

51. National Museum of Women in the Arts, "New York Avenue Sculpture Project," National Musuem of Women in the Arts, <http://www.nmwa.org/exhibitions/new-york-ave-sculpture-project> (accessed October 20, 2013).



Address:


New York Avenue NW
Washington D.C

Main Designers:

Artists change depending
upon the installation

Opened:

April 2010



The DC Commission on the Arts and Humanities provides funding for the New York Avenue Sculpture Project. Each installation are also funded by different benefactors. The current installation in funded by Medda Gudelsky; the Homer and Martha Gudelsky Foundation; Lois Lehrman Grass; and the DC Commission on the Arts and Humanities.

A committee selects the artists to showcase their sculptures in the medians. The committee members include a range of arts, civic, government, and neighborhood organizations in the Washington D.C. area.

Design Elements

The first artist to have her work displayed was the late French artist Niki de Saint Phalle. Her four sculptures, meant to represent and celebrate women, children, heroes, diversity



FIGURE 3.18 Niki de Saint Phalle's "Three Graces" sculptures

Source: Wendy Ellertson, "Three Graces," Wendy's Wonderings and Wanderings, http://wendyellertson.blogspot.com/2010/09/niki-de-saint-phalle-sculpture-project_16.html (accessed October 20, 2013).

and love, were 9 to 15 feet high mosaic sculptures that were on display between April and November of 2010 and then again from March to October of 2011 (see FIGURE 3.18). The fiberglass material she chose for her sculptures could not withstand temperatures below freezing and therefore had to be taken down during the winter months.

The second and most current artist to display her work within the median is Chakaia Booker. Her work is on view from March 8, 2012 to March 9 2014 (see Figure 3.19). Working almost exclusively with recycled truck, car and bicycle tires as a medium, Chakaia Booker's "large-scale expressive works



FIGURE 3.19 Chakaia Booker's "Take Out" sculpture

Source: Lee Stalworth, "Take Out," National Museum of Women in the Art, <http://www.nmwa.org/exhibitions/new-york-ave-sculpture-project> (accessed October 20, 2013).

fuse ecological concerns with explorations of racial and economic difference, globalization, and gender."⁵²

All sculptures are installed on concrete pads that are centered within the vegetated median. Spotlights surround each concrete pad and illuminate the sculptures at night.

Challenges

None were shared.

.....
52. Ibid.



3.4.4 Alleyways

Main Street Alley/ Plaza

Introduction

Main Street alley is a pedestrian thoroughfare located in downtown San Mateo. Main Street extends two blocks between 1st Avenue and 3rd Avenue and is divided into two segments by 2nd Avenue. Along the alley are storefronts, back patios of restaurants, and a parking garage. At the entrance to downtown San Mateo's Century 12 Cinema, Main Street alley intersects with a plaza that provides direct access to the theater from South B Street.

Goal of the Design

According to Ron Munekawa, Chief Planner for the City of San Mateo, Main Street was formally a driveway in a parking garage that extended the entire two blocks, between 1st Avenue and 3rd Avenue. The driveway used to service cars looking to park in the garage as well as delivery trucks dropping off or picking up products to the restaurants or stores that had access to the alley. The parking garage, built in the 70s, was viewed as a barrier and eventually was abandoned by the city until it was picked up again by Century Theaters to be revitalized in late 1990s.

Today, Main Street offers pedestrians a pleasant, aesthetic experience as a mid-block thoroughfare. The alleyway was designed to provide access to both pedestrians and service vehicles as well as provide a direct connection to the train station from downtown.



Address:
Between A and C Streets
Downtown San Mateo, California

Main Designers:
Freedman Tung & Bottomley

Opened:
End of 1990s to early 2000s



The ornate gates at each entrance were installed to deter public vehicles from entering but still allow secured access for deliveries to the restaurants and stores that line Main Street (see FIGURE 3.20 on the following page) Yet, according to Ron Munekawa, Main Street isn't used as much for loading as it was in the past. In fact the loading for the commercial uses have now moved to the bigger streets of downtown San Mateo.

The opening, or plaza, in front of the theater used to be a ramp that provided access to the second floor of the parking garage. After the parking garage was torn down, a plaza was created to gain free visibility of the cinema since the entrance to the theater was set back and tucked away from South B Street.



FIGURE 3.20 Main Street Alley entrance gate

Choosing a name for the alley wasn't a difficult task for the City of San Mateo. According to historic maps of the city, the alleyway was once a street named 'Main Street' in the early 1900s.

Planning Process and Design Development

Near the end of the 1990s and early 2000s, the City of San Mateo decided to transform and revitalize their struggling downtown. The city's Economic Development Division looked

into multiple different options for transforming this particular area of downtown and decided a movie theater was the most suitable alternative. The city prepared a Request for Proposal (RFP) and received multiple offers from different movie theaters. Eventually, Century Cinema was chosen.

The project was divided into two different stages. Stage one included a proposal for a Transit Center Plan with a new downtown train station. Design charettes were held to figure out how to best redevelop the area if the parking garage went away. Ron explains, "as a result of the design charrette, the city decided to move the existing train station, which was just a kiosk, to where the platform is located to day." The land was already owned by the Joint Powers Board, which consists of the City of San Mateo, Santa Clara and San Francisco County.

The second stage consisted of designing the new downtown with a cinema, new retail space and an underground parking lot. During the design and planning stage, the city held numerous Planning Commission meetings, neighborhood meetings and public workshops.

For funding, the first thing the city did was get a clean air grant that secured funding for the design process and construction of the new downtown train station. The redevelopment agency and parking district also funded the transformation of the space.

Improvements to Main Street were funded through the Livable Streets Program and administered by the City County Association of Governments (C/CAG) and the Metropolitan

Transportation Commission (MTC). In addition, a housing project proposed near the new transit center helped pay for infrastructure improvements along 3rd Avenue, 2nd Avenue, and Main Street.

The City of San Mateo and Century Theaters maintain Main Street Alley and the plaza in front of the theater.

Design Elements

There are a total of four entrances to the segmented alley: one on 1st Avenue, two on 2nd Avenue and one on 3rd Avenue. Two metal gates and a raised metal archway with the words 'Main Street' identify each of these four entrances (see FIGURE 3.20). The plaza, which intersects with Main Street from South B Street, provides a fifth entrance to the alley.

Although Main Street does not offer any seating elements within the design, there is clear indication that the alley was designed with the pedestrian in mind. The metal gates, located at every entrance, act as barriers for non-service vehicles from entering the space. If a car were to enter the site, small green bollards line one side of the alley to provide a separate pathway for pedestrians to safely walk through. There are two different types of lighting elements present within the alley. Wall fixtures line the wall of the cinema and parking garage and string lights secured to the tops of buildings create a playful and inviting atmosphere.

The only seating elements available within this space are located in the plaza. Four wooden benches line both sides of



FIGURE 3.21 Mural in the plaza by Main Street Alley

the space and are oriented to face each other. A living wall of ivy and potted plants are located on one side of the plaza, while a mural depicting an early 1900s scene of downtown San Mateo is located on the opposite side (see FIGURE 3.21).

Challenges

The project received a lot of opposition from nearby business owners. During the time the project was first underway, downtown San Mateo was really struggling to attract visitors. The business owners were scared that the disappearance of the parking garage meant that they would lose their limited number of customers. Eventually a lawsuit arose because of their concerns; however, a court judge dismissed the case and the project was able to proceed as planned.

Nord Alley

Introduction

Nord Alley is part of a group of alleys in Seattle that receive design facelifts on almost a daily basis. With help from the International Sustainable Institute (ISI), a non-profit agency focused towards bringing sustainability projects to the Puget Sound area, Pioneer Square residents are looking at their neighborhood alleys in a new way. Since the first alley activation event in 2008, ISI has spent a lot of time and effort in boosting social activity within the public spaces found in Seattle's historic district of Pioneer Square. From these efforts, the Alley Network Program launched in 2010 and has helped spearhead countless other public events within four main alleys of the district. These alleys are Nord Alley, Firehouse Alley, Kings Cross Alley and Pioneer Passage Alley.

Goal of the Design

The overall goal of the Alley Network Program is to reclaim the alleys of Pioneer Square for pedestrians by drawing off the creative energy of the surrounding neighborhood and residents.

Planning Process and Design Development

In February 2012, Nord Alley was designated by the Director of Transportation as a Festival Street, or "a public place that has been designated for recurring temporary closure to vehicular traffic use for the purpose of pedestrian-oriented

Address:

Between First Avenue South and Occidental Avenue South in the Pioneer Square Historic District
Seattle, Washington

Main Designers:

Designs are inspired from neighbors, businesses, community groups and the Seattle Public Space Public Life study

Events Started:

2008

special activities."⁵³ By receiving this designation, the International Sustainable Institute is able to obtain annual festival permits to close Nord Alley on a daily basis. Nord Alley was the first of two alleys to receive this designation in Seattle.

The events held within the alleys receive an overwhelming backing from nearby residents, businesses, organizations and institutions. University of Washington Students dedicate hundreds of hours in creating designs for events, where funds awarded by the City of Seattle Neighborhood Matching Funds and Historic South Downtown provide money for installation.

53. Seattle.gov, Department of Transportation, "SDOT Blog: A Festival What?," <http://sdotblog.seattle.gov/2012/03/08/a-festival-what/> (accessed September 30, 2013)



FIGURE 3.22 Nord Alley

Source: Alley Network Project, "Nord Alley First Thursday Art Walk," <http://alleyenetworkproject.com/sample-page/> (accessed October 1, 2013).



FIGURE 3.23 Nord Alley at Night

Source: Alleenetworkproject, "MLR_9214-8Daylgt_WB," Flickr website, <http://www.flickr.com/photos/67269485@N03/10043221154/> (accessed October 1, 2013).

The Alley Corridor Project, which launched in 2013, focuses upon creating new cost-effective designs to provide new surfaces and lighting to the alleys in Pioneer Square.

Design Elements

Since there are many different events that are held within Nord Alley, the number and types of design elements within

the alley changes depending upon the event. According to Liz Stenning, Project Manager for ISI, Nord Alley does have a few permanent features. These features include a glass and metal sculpture, overhead lighting, a vegetative wall and steel panels attached to the building walls to support temporary art installations (see FIGURE 3.22 and FIGURE 3.23).



Nord Alley is considered an adaptable space for different uses during business hours and after hours. Although Nord Alley is used as a gathering space for events, the alley remains open for service vehicles to access the backsides of businesses.

Challenges

The main challenge in activating Nord Alley for social use was changing residents' perception of the alley. Residents associated the alley as a service alley and it took a while for residents to see Nord Alley as anything other than that.

3.5 Summary of Findings

Observations and interviews with key designing and planning officials revealed the following key findings:

- **Site selection**

The site selection process proved to be very important to the success of an urban public space. All of the sites were selected for redesign because they were either within close proximity to popular areas of social activity, adjacent to a residential community, or along major thoroughfares.

Some of the sites were also identified as areas of concern when the main focus or reason for the space redesign was to eliminate crime, or to alleviate the presence of trash. Other designs were focused upon softening the industrial look of a space.

- **Community support**

Involving the community into the planning and processes of redesign provides opportunities for all voices to be heard. The design becomes a collaborative effort and provides invested parties with a sense of ownership of the space.

The success of the events within Nord Alley is also attributed to the backing and support from the residents and nearby businesses. What was once a long narrow pedestrian corridor is now an important and vital amenity to the thriving cultural and social scene of Seattle's historic district.

- **Interactive and flexible elements**

The availability of moveable seating elements within a space enables visitors to move around the space freely. These elements encourage users to experience a space according to their preferences. The use of moveable elements can also seemingly add to the spaciousness of sites that are very limited in size because movement within the space is not confined or restricted.

Flexible spaces within a design provide the foundation for a variety of events and activities to occur within. These spaces are designed fairly simply and evoke the imagination of those using the space.

- **Seating spaces**

Spaces that provide a variety of seating options can maximize opportunities for users to socialize within the space. The use of benches, chairs, and/or seatwalls allows people to choose where to sit depending upon their preference for comfort, location or simply based upon convenience.

The location of seating spaces was another important factor in influencing different social behaviors. For example, seating spaces located along the periphery of sites provided opportunities for people to people



watch. Seating spaces that were located near the middle of sites were chosen last and primarily used by people who visited sites for a short amount of time.

Clustered seating, or seats that were placed into tight configurations, significantly encouraged social activities. Seating spaces set far away from the main social areas of a site provided people with a sense of reprieve from their everyday busy lifestyles.

- **Vegetation**

Vegetation can be used to help screen visitors from activities occurring outside a space's boundaries. The use of tall trees or planter beds along the periphery of sites can help define the edges of a space.

Vegetation can also be used to soften harsh landscapes by adding a natural element to a design.

Planting programs like community gardens or demonstration gardens provide opportunities for neighbors to engage with one another in a shared activity.

- **Artistic elements**

The use of color within a space as an accent piece can add vibrancy to a design and direct focus to a particular element or groups of elements.

The provision of moveable seating and other moveable elements, such as art objects with movement, can also provide an artistic feel to the site because they encourage users to rearrange a site depending upon their preference. These elements are interactive and actively engage the users within a space.

Art can also be used to help create and establish an identity for a particular space and for the surrounding communities.

Lighting is another element that can be used artistically within a space. Lighting enhances the look of a space at night and can be used to specifically highlight certain elements or characteristics of a space.

- **Lighting & safety**

The addition of lighting changes the overall character of a space at night. Lighting can be used in an artistic way to highlight a particular element within a space or can be used to simply keep unwanted activities from occurring.

A use of color in lighting elements changes the mood of the space at night. It promotes a sense of playfulness or urgency depending upon the color used.



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“It is difficult to design a space that will not attract people.
What is remarkable is how often this has been accomplished.”

– William H. Whyte in *The Social Life of Small Urban Spaces*



Chapter 4

Site Analysis of San José's 2nd & 3rd Street/I-280 Underpass

The purpose of this chapter is to research and analyze the study area for the report. The 2nd & 3rd Street / I-280 underpass was chosen as the study's focus because its size, proximity to a large neighborhood, and unique character all contributed to the feeling that a redesign was viable. This process not only provides context for the site but also identifies the site's assets and opportunities, as well as any limitations and constraints and complications the site may possess. The findings from this process will be used to help create a conceptual design in Chapter 5.

Analysis of the study area was conducted through in-person field observations and the use of Google maps and Google Earth images. A base map was created with data provided by Google Earth.

In addition to the site analysis process, interviews were conducted with nearby residents in order to gain insight into the needs and desires of the surrounding communities. A list of needs was identified as a result of these interviews.

This list serves as a guide in identifying appropriate design elements to incorporate into the final conceptual design.

The following sections of this Chapter present the findings from the site analysis. The analysis describes the existing conditions in relation to the surrounding neighborhoods, and provides a detailed investigation into the opportunities and constraints of the site. In addition, findings from interviews with nearby residents are listed at the end of this chapter.

4.1 Existing Conditions: Context in Relation to the Surrounding Neighborhoods

Surrounding Structures

The study area is bordered to the north and south by mainly residences, and small businesses. Most of the adjacent buildings are old, classic Victorians. All of the buildings are either one or two stories high and are located more than ten-

feet away from the site's boundary line (which is created by the edge of the freeway deck above).

There are a few notable buildings located near the site (see FIGURE 4.1):

- The Citadel art studios at the corner of South 5th Street and Market in the Spartan-Keyes Community. The artists who work in these studios nearby may want to display their art in the underpass.
- The Bill Wilson Drop-In Center, located next door to the underpass on 693 South Second Street, may help the surrounding neighborhoods take ownership of the space. The Drop-In Center serves youths between the ages of 17 and 25 by providing food, clothing, and access to computers, phones and laundry services.
- Notre Dame High School, located on South 2nd Street, is an all girls catholic college preparatory high school. There are approximately 630 students that are enrolled in the school. The underpass may serve as an after school hang out, a place to display art or provide a safer route to school for students who walk or bike to class.
- San José State University, located between South 4th Street and South 10th Street, is San José's local state college. Students generally live in the surrounding neighborhoods, if not living on campus, and use different forms of transportation to get to campus. Occasionally, students park underneath the underpass on either South 2nd or South 3rd Street and walk to campus. San José students will benefit from a redesign on this site because

it can provide a safer route to school, and a space to hang out in before and after class.

Surrounding Communities and Landmarks

This site has the potential to attract multiple individuals and families because of its location between two communities (see FIGURE 4.1).

Directly north of the study area is downtown San José. Downtown San José is the main business hub for the City of San José and is home to many museums, big tech corporations, new and old residential neighborhoods and the main campus of San José State University.

The Spartan-Keyes community is located south of the study area. Spartan-Keyes is predominantly a bedroom community but is also home to a few small businesses located on South First Street and Keyes Street. San José State's South Campus facilities and athletic fields are located south of Spartan-Keyes across Keyes Street.

Circulation and Parking

South 2nd Street is a three-lane vehicular traffic thoroughfare. It is a one-way street that directs traffic from downtown San José to Spartan-Keyes at the posted speed limit of 30 miles per hour. Parallel parking is available on both sides of the street.

There is a metered parking lot located directly across South Second Street. This 113 space parking lot is owned by the City of San José and is open 24 hours.

There are sidewalks located on both sides of South Second Street, but very few pedestrians are seen walking along this section underneath the freeway overpass.

Third Street is a one-way street that directs traffic towards downtown San José. Parallel parking is also available on both sides of the street.

South Third Street, which borders the eastern side of the site, is also a three-lane vehicular traffic thoroughfare. South



FIGURE 4.1 Context map of study area showcasing notable buildings nearby and surrounding neighborhoods
Source: Author's modification of Google aerial photo

4.2 Site Constraints

This following map (see FIGURE 4.2) and section highlights the existing elements or conditions that reduce the functionality and aesthetics of the site.

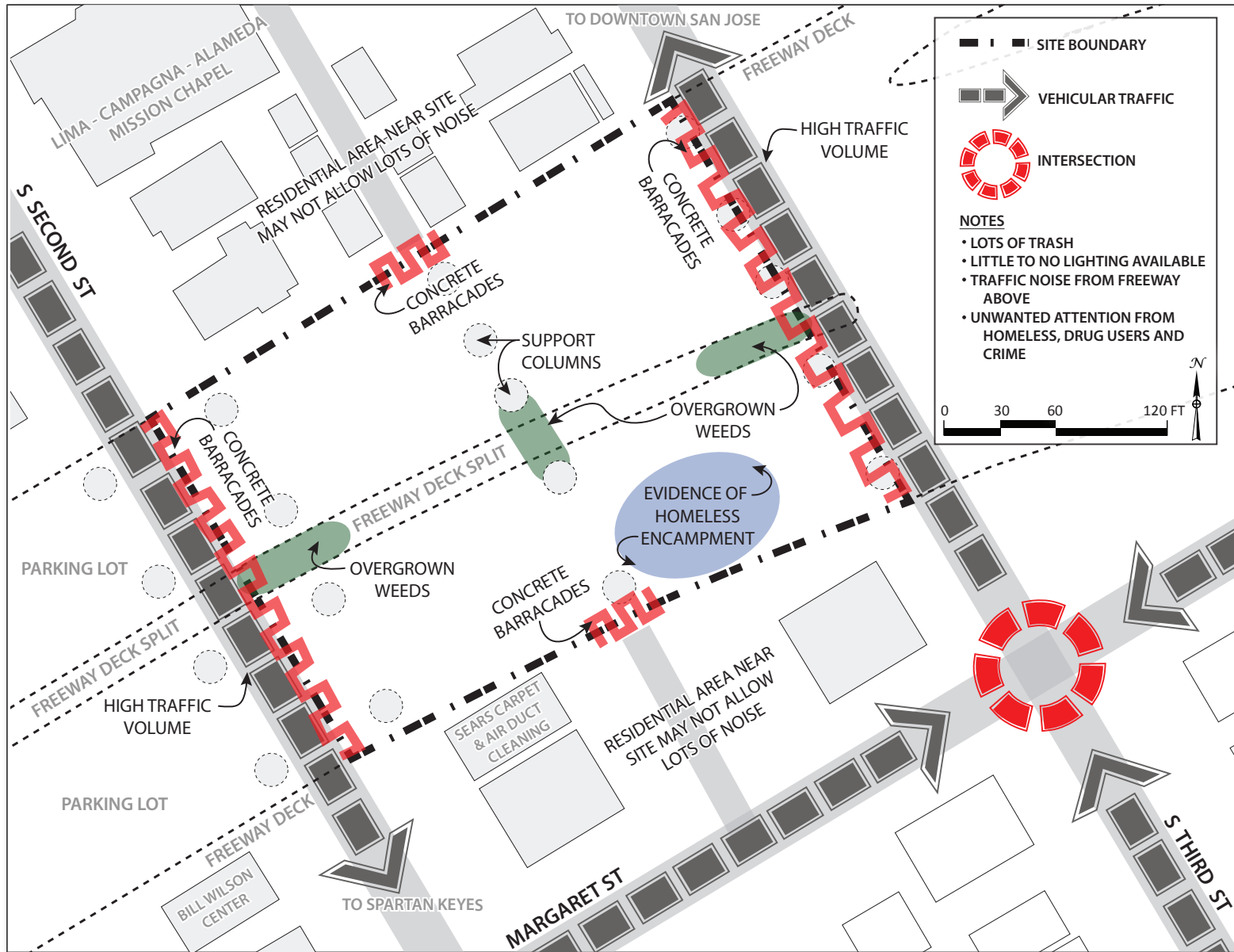


FIGURE 4.2 Constraints map for the study area



FIGURE 4.3 View of the barricaded third access point into the site from Margaret Street

Site Location

The study area is located underneath the Interstate 280 Freeway. Freeways are generally perceived as cold and ugly concrete barriers, which may discourage people from visiting the site.

Barricades

White concrete barricades block all three entrances to the site (see FIGURE 4.3). The presence of the barricades deters people from entering the site and significantly contributes to its desolate appearance.

Pollution from the Freeway Above

Traffic pollutants generated from cars and trucks are very harmful to human health. Unfortunately, the site is highly susceptible to traffic pollutants because it is located very near a high volume traffic freeway and is bordered by two main vehicular thoroughfares.

According to the California Department of Public Health, the most common traffic pollutants generated by cars and trucks are identified as Diesel Particulate Matter (PM), Nitrogen Oxides (NO_x), Carbon Monoxide (CO) and Volatile Organic Compounds (VOCs). Diesel Particulate Matter is predominantly created by diesel trucks and can increase the risk of asthma, heart disease and even death. Nitrogen Oxide is created when gas is emitted from tail pipes and can increase the risk of lung inflammation and also asthma. Carbon Monoxide increases the risk of heart problems, headaches, nausea, decreased mental alertness and even death. Volatile Organic Compounds are characterized of formaldehyde, acetaldehyde, acrolein, 1,3-butadiene, and benzene, which are all chemicals that are known to cause cancer.⁵⁴

There are certain factors that are known to increase the levels of pollutants in the atmosphere. When temperatures increase during hot, summer nights, the pollutants stay stagnant within the atmosphere. The direction and pressure of wind can pose a problem for areas that are downwind from major

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54. California Department of Public Health, "Air Contaminants: Traffic Pollutants," http://www.ehib.org/page.jsp?page_key=89#traffic_what (accessed May 25, 2013).

freeways and highways sources. Finally, peak commute hours in the morning and afternoon emit an excessive amount of emissions into the air due to the increased number of cars on the road.⁵⁵

People who live near high volume freeways, such as Interstate 280, are exposed to higher levels of traffic related pollutants compared to people that live farther away. The same fact may apply to underneath freeways as well. If visitors routinely visit the site on a daily basis, they may be subjected to high levels of traffic related pollutants even though the site is located underneath the freeway.

Ownership of the Site

The site is owned by the California Department of Transportation, also known as Caltrans. Prior to any activity occurring on Caltrans property, an encroachment permit needs to be submitted to the agency. According to Section 660 of the California Streets and Highway Code, an encroachment is defined as “any tower, pole, pole line, pipe, pipeline, fence, billboard, stand or building, or any structure, object of any kind or character not particularly mentioned in the section, or special event, which is in, under, or over any portion of the State highway rights of way.”⁵⁶

55. Toronto Public Health, *Air Pollution Burden of Illness from Traffic in Toronto – Problems and Solutions*, (Toronto, Canada, 2007), 7-22.

56. California Department of Transportation. Encroachment Permit Application Guide. August 2013. http://www.dot.ca.gov/hq/traffops/developserv/permits/pdf/publications/E.P_Application_Guide_Booklet.pdf. (accessed July 20, 2013).



FIGURE 4.4 View of existing streetscape off of South 2nd Street

Limited Pedestrian Activity

Currently there is very limited pedestrian activity within or near the site. South 2nd Street and South 3rd Street primarily cater to vehicular traffic and possess little to no pedestrian friendly elements underneath the freeway.

Challenges with Improving the Streetscape

Both South 2nd Street and South 3rd Street do not provide any vegetated buffers to separate pedestrians from vehicular traffic, and the conditions are similar under the freeway.



FIGURE 4.5 Evidence of homeless activity within the site

The sidewalks are roughly four feet wide and may not be big enough to support the addition of a vegetated buffer (see FIGURE 4.4). Little to no sun exposure also may limit the types of plants for a planting palette.

Noise

Noise from passing cars, on both South 2nd and South 3rd Streets, bounce off of the freeway deck above, the support columns, and the support wall across South 3rd Street. The street traffic on South 2nd Street and South 3rd Street is constant but is never too packed with cars. However, noise

levels from the freeway are constant and can be very loud during peak hours.

The site is located within close proximity to residential buildings and any additional noise emitted from the site may negatively affect these residences. These residences may influence the design of the site and limit when and how long the site is open for visitors. Nighttime use of the site may cause problems for these residents.

Lack of Lighting

The site receives very limited natural light. The gap in the freeway deck above allows natural light to filter down onto only select parts of the site. As the sun moves, different portions of the site are exposed to the sun.

There are three streetlights located on both South 2nd Street and South 3rd Street that are within close proximity to the site, however they do not project any light underneath the freeway deck.

The site currently does not have any lighting fixtures present for nighttime use.

Unwanted Users, Activities and Crime

According to a few residents living in Spartan-Keyes, this site is located in an area where crime, drugs and prostitution are very high. The site currently is home to a few temporary homeless encampments (see FIGURE 4.5). There is an abundance of trash along the boundaries of the site and there



Support Columns

Fourteen columns are located within the site's boundary. The columns are approximately 7 feet in diameter and provide support for the freeway deck above. The locations of the columns breakup the ground plane and may limit the types of usage and activities within the space (see FIGURE 4.6).

FIGURE 4.6 Support columns may limit the types of activities within the site

are also two mattresses located on the premises near the middle of the site. A few needles and a pair of shoes were found near the barricades blocking the alleyway that connects Margaret Street to the site. If the site is cleaned up, will these unwanted activities desist?

The site may also be subjected to vandalism and gang related activities due its location. The site is located in an area that receives very limited surveillance and is large enough to provide for people and activities to go unnoticed from passing cars. Any design elements placed within the site may be vandalized and or removed completely.

4.3 Site Opportunities

The following map (see FIGURE 4.7) and section highlights the elements or conditions that offer a positive characteristic to the site.

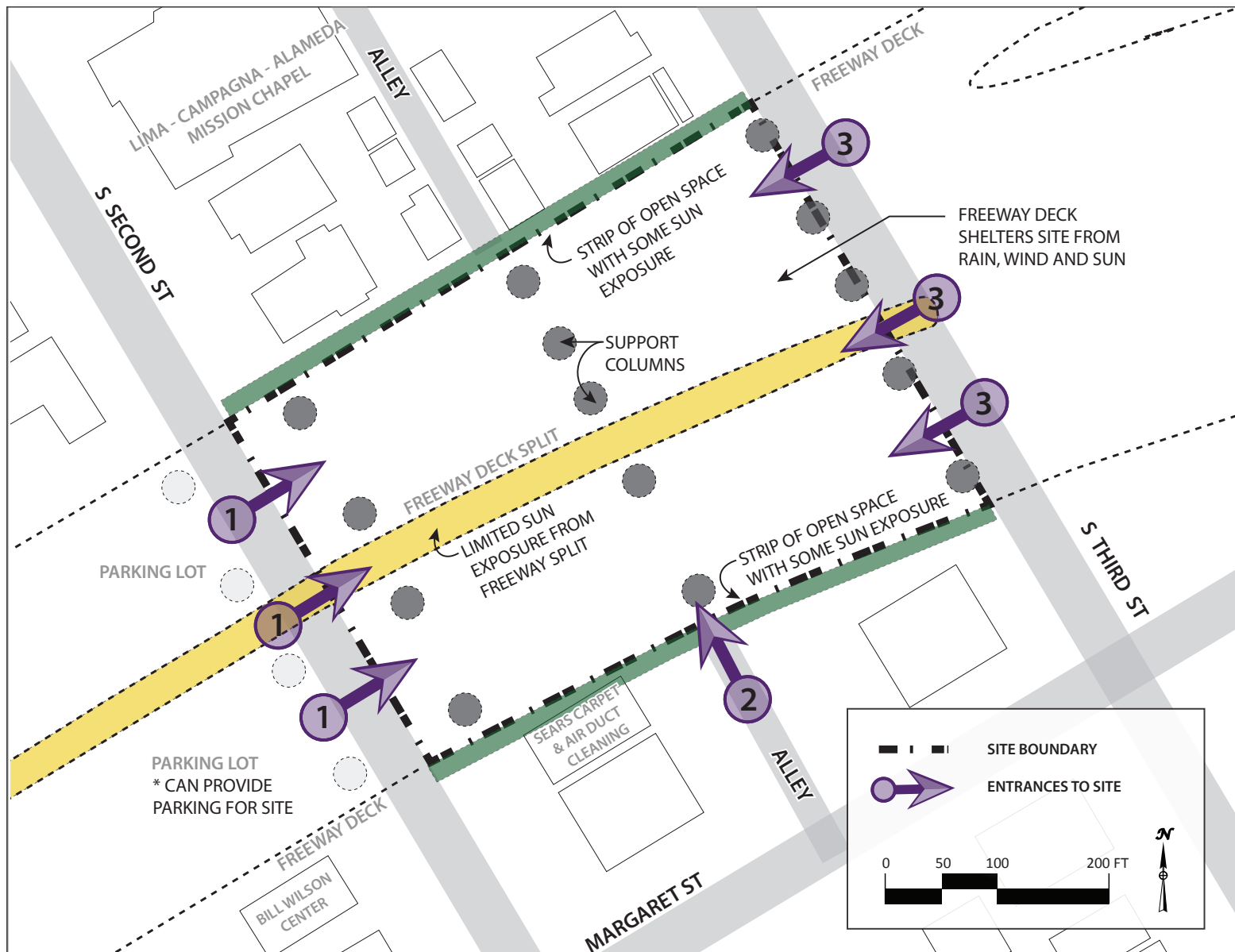


FIGURE 4.7 Opportunities map for the study area

Topography

The entire site is flat and provides ample space for a multitude of design opportunities to occur within the space.

Clear and Defined Entrances

There are three entrances to the site. The first entrance is located on South 2nd Street and the second is off of South 3rd Street. These entrances are very wide and are clearly visible. The third entrance (*identified as entrance 2 in FIGURE 4.7*) is from a very short alleyway that is located off of Margaret Street in the Spartan-Keyes neighborhood. This access point is more intimate than the other two, because of its small size, and has the potential to be the main access point for the Spartan-Keyes residents.

Gap in the Freeway Deck

The approximate 20-foot wide gap in the freeway deck above exposes parts of the site to natural sunlight (see FIGURE 4.8). The gap in the freeway allows for more creativity with the conceptual design of the site and makes this particular residual space unique and different from other spaces found under freeways.

Sheltered from Elements

The freeway deck above, which is approximately 20 feet above the ground, shelters the site from the rain, wind, and provides shade on hot summer days.



FIGURE 4.8 Gap in the freeway deck above the study area

Noise Already Present

The noise from the freeway above and the streets that border the site are loud enough and may suppress any noise emitted from within the space.

Existing Open Space Adjacent to Buildings

There are two small strips of semi-vegetated land that exist between the site and the adjacent buildings. Both of the strips are roughly ten feet wide and run the entire length of the site between South 2nd Street and South 3rd Street (see FIGURE 4.9). These spaces are not directly underneath the freeway deck and receive partial shade throughout the day.



FIGURE 4.9 Strip of open space located on the southern end of the study area

Existing Structural Elements

The location of the fourteen support columns creates different spaces, or rooms, within the site. When facing into the site from South 2nd Street, the columns are positioned into four rows, evenly spaced from one another, and form straight lines towards South 3rd Street on the other side. The columns also provide a sense of enclosure and intimacy.

The concrete support wall, located on the other side of South 3rd Street from the site, adds to the industrial look of the space. The concrete wall follows the angle of the hillside to provide structural support for the bridge (see FIGURE 4.10).



FIGURE 4.10 Concrete support wall opposite from site on South 3rd Street

Half of the wall is decorated with brown concrete pavers and the other half consists of vertical concrete slabs.

4.4 Summary of Findings from the Site Analysis

The following list summarizes the constraints and opportunities identified from the site analysis:

Constraints

- *Location*
The study area is underneath a freeway. The city and surrounding residents may need persuasion in visualizing the underpass as an urban public park.
- *Barriers*
Existing concrete barricades, located at every entrance, are unwelcoming and deter people from entering the site.
- *Exposed to Vehicle Pollution*
The site is susceptible to traffic pollutants from the freeway above and South 2nd and 3rd Streets.
- *Ownership of the Site*
There might be issues related to liability and oversight/maintenance of the park.
- *Limited Pedestrian Activity*
There is very little pedestrian activity due to the lack of aesthetic amenities in and immediately adjacent to the site.
- *Streetscape Improvement Challenges*
The sidewalk provides very limited space to incorporate a vegetative buffer between pedestrians and vehicles on South 2nd and 3rd Streets.

Limited sun exposure provides a challenge in the selection of plants.

- *Noise*
The level of activity from the freeway above and the street traffic from 2nd and 3rd Street emit constant noise onto the site.
- *Lighting*
The site receives very little natural light due to the deck of the freeway above.

The gap in the freeway allows light to filter down but only for a short amount of time during the day.

The existing lights attached to the underside of the freeway emit a yellow/orange glow that is not bright enough to provide a sense of safety within the site at night.
- *Crime*
The site is a hotspot for prostitution, drugs and temporary homeless shelters.
- *Limited Space*
The presence of the support columns breaks up the site and may limit the size of certain proposed activities.



Opportunities

- *Topography*
The site is relatively flat.
- *Visible Entrances*
There are three potential entrances to the site located on South Second Street, South Third Street and the alleyway off of Margaret Street.
- *Some Sun Exposure*
The gap in the freeway allows natural light to filter down to select areas within the site.
- *Shelter*
The freeway deck provides shelter below from the wind and rain and hot summer days.
- *Noise Exists*
Noise from the freeway and bordering busy streets potentially could drown any noise emitted from within the site.
- *Existing Structure Elements*
The placement of columns can serve as architectural boundaries between different types of activities.

The support wall on the other side of South 3rd Street provides another structural element that can be used to highlight or emphasize the underpass.

Key Constraints and Opportunities Highlighted

The observed constraints negatively impact the site in many different ways. For example, the existing concrete barriers, lack of vegetation and limited pedestrian activity within or near the site make the underpass appear abandoned, and neglected. In addition, the presence of homeless, trash and other negative activities adds to the negative energy that surrounds the space.

Despite all of the site's negative aspects, there are several positive aspects that express the potential the site possesses for a successful redesign. The space is relatively open on all sides and has the opportunity to be accessed by three entrances. These entrances are all clearly visible from the street and provide easy and immediate access into the site. In addition to providing shelter during the rainy season, the freeway deck splits into two above the site and allows for select areas below to receive limited sun exposure. This unique feature may make it possible for vegetation to be planted within the site.

4.5 Interviews with Nearby Residents

Eight residents were interviewed in order to become familiar with the people who would benefit the most from a redesign of the project site. Six of the residents lived or worked in the Spartan-Keyes neighborhood, while the remaining two lived in downtown San José. The Spartan-Keyes residents were selected based upon their affiliation and participation with the Spartan-Keyes' Neighborhood Action Center located off Keyes Street. The downtown San José residents, both of whom approached the author while on a site visit, were selected because they either biked through or walked under the underpass on a weekly basis.

The questions asked during each interview were directed towards understanding four main topics. The topics include the residents' opinions and thoughts about the available park space in their neighborhoods, the types of features and elements they use or enjoy in parks, their perception of the 2nd & 3rd Street/I-280 underpass, and what they would like to see occur within the underpass if a redesign were to happen. Appendix B presents a list of interview questions asked during each interview, and Appendix C presents the list of residents interviewed for this section.

The following section presents the findings from the interviews and highlights where the resident's concerns overlap with the author's observations made in the previous section. Two of the interviewed residents wished to remain anonymous for this report and are represented as Resident #1 and Resident #2.

4.5.1 Opinion on Available Park Space in Neighborhood

Residents were asked to give their opinion and thoughts upon the availability of open space in their neighborhood. All six of the Spartan-Keyes residents agreed with one another that their neighborhood lacked adequate park space; however, they all shared that the neighborhood doesn't have a lot of available land for a new park because of its industrial history.

According to the residents, Bestor Art Park, located on South 6th Street, is the only park in the Spartan-Keyes neighborhood (see FIGURE 4.11). San José State's South Campus is also located in the Spartan-Keyes neighborhood but isn't open for public use. Bestor Art Park includes a playground, a large lawn area, a community garden, and a basketball court. Judy Roberto, a resident of Spartan-Keyes, shared her thoughts about Bestor Art Park:

The small basketball court at Bestor Art park is always in use and always overused. There are a lot of kids waiting and no one really has enough time to play. The community garden is awesome but it is also way too small. More people would love to do some gardening, but we do not have any more room in the park to expand the existing community garden.

After further investigation into Bestor Art Park, the park was found to be in a location that was not ideal for the entire community. The park is located near the western border of the community, which makes it hard for kids living on the other side of the community to visit. The park is also separated from the eastern and southern areas of Spartan-



FIGURE 4.11 Map showing the location of Bestor Art Park in Spartan-Keyes

Source: Author's modification of Google aerial photo

Keyes by three major roadways: Keyes Street, South 7th Street and South 10th Street. Without the use of a car, kids living in eastern and southern areas of the neighborhood are forced to walk across these major roadways to reach the park (See FIGURE 4.11).

The residents also shared with the author the types of spaces they believe are missing within their neighborhood. Carol Valentine, a long-time Spartan-Keyes resident, expressed her opinion about the lack of kid friendly amenities in the neighborhood:

We don't have good places for kids to do free outside activities. We need a place, like a skateboard park. My

grandsons live in two different cities and in those cities they have skateboard parks that are constantly used by the kids. They don't have problems with the homeless because they are so well used. They are used for different activities and keeps the kids out of trouble. Skateparks are a good healthy outlet.

Resident #1 from downtown San José also provided his insight in the lack of park space that surrounded the Bill Wilson Drop-In Center. He stated:

There aren't really fun places to play or hang out in around here. In downtown there are a couple of parks but there isn't really anything on the other side of the freeway (referring to the Spartan-Keyes community). There also isn't really any place for teens to hang out in unless you want to hang out on San José State's campus, Cesar Chavez Park or Saint James Park.

Two residents brought up possible solutions for increasing open space in the Spartan-Keyes community. Rita Torres, who has lived in Spartan-Keyes for 32 years, expressed her interest in transforming the underutilized alleyways found throughout the neighborhood. She stated:

Our neighborhood is very chopped up by the major roadways, so one new park won't really accommodate the entire neighborhood. The alleyways, for example, will provide the adjacent houses with a totally different type of park like space than what will be on the other side of the neighborhood. I just think it's foolish not to take advantage of the some of the spaces we do have.

Richard Stewart, who has lived in Spartan-Keyes for 20 years, also shared his views on utilizing small available spaces in the community as gardens or parks. He explained:

I think of open space now as roof top gardens and people's balconies. I think it's the way to go especially when you live in a dense area. We are not in the core of the city, but we are in the frame of the core and I would like to see our community go more into that direction.

I once suggested that we put a park under the Interstate 280 Freeway, between South 2nd Street and South 3rd Street, because I have seen it done in other cities. I've seen different types of sport courts under freeways like basketball courts and tennis courts. The city was looking into it at one time but the idea fell through because of money.

4.5.2 Preferred Elements & Features

The residents were asked to list the types of design features and elements they used and enjoyed in parks and public spaces. A majority of the residents said they preferred public spaces that provided different options for seating such as benches and tables. Paul Gonzales, a former Spartan-Keyes resident and current employee for the Spartan-Keyes Neighborhood Action Center (NAC) mentioned:

I like a combination of different seating spaces. I believe that seating should not just be in one common area, but rather provided in different spots throughout a space. A variety in locations will allow people to sit in the sun, shade, by the street or on a hillside. I like options.

In terms of vegetation, all of the residents responded that they preferred their public spaces to have vegetation included in the design. Resident #2 gave her opinion on the presence of vegetation:

I like to visit spaces that have a lot of trees, flowers and color. It's soothing to watch plants move in the wind and the movement allows me to retreat away from my hectic work schedule. I also like plants that smell or attract birds and insects. The combination of nice smelling plants and the presence of animals or bugs catch your attention when sitting in or walking through a park.

The provision of small-scale recreation activities was also highly preferred among the majority of residents, especially for those who had kids or grandchildren. Tony May, who has lived in Spartan-Keyes for 41 years, stated:

I like to take my grandson to Bestor Art Park because he likes to play on the playground, but it would be nice to have another park for him to play nearby my house. We don't have very many options for kids to play in our neighborhood, especially where I live.

4.5.3 Perception of the 2nd & 3rd Street/I-280 Underpass

Residents were asked to describe their opinion about the 2nd & 3rd Street/I-280 Underpass. All of the residents knew the location and existing conditions/characteristics of the underpass prior to the interview.

Safety was a common issue discussed by all eight of the residents. The presence of homeless activity and was one of

the primary concerns in regards to the lack of safety within the space. In describing her thoughts on the underpass, Rita Torres discussed how the presence of homeless activity made her feel uneasy. She explained:

I have probably walked under that underpass a half dozen times. It's a very scary place to walk under. Twenty years ago, there were a lot of homeless people parking their cars on the streets under the freeway. They were living in their cars, so I didn't like walking under there. At night, I for sure didn't want to go because it was so isolated and the lighting was horrible. It is still a place that I don't feel comfortable walking down by myself.

In addition to the presence of homeless activity, the residents discussed how the underpass is also an area where crime related activities frequently occur. Rita Torres explained:

There have been several instances where several abandoned cars and drug swaps have occurred under the underpass. I also think this area is a hotspot for gang activity.

The lack of adequate lighting under the freeway was another concern among several of the residents. According to the residents, the available lighting that is around and under the freeway projects an amber colored light that does not give off a lot of light. Rita Torres stated:

The lighting is not really strong. There are some there, but the place sort of looks neglected and feels neglected because the lighting isn't strong.

One resident expressed her concern about the quality of the air created by the freeway above. Judy Roberto explained:

I'm not sure about the health aspects with the freeway but the air is constantly churning in that space. The air within the underpass is impacted by the vehicles that pass by or above the space on a daily basis. I see that as a big concern.

4.5.4 Redesign Ideas for the Underpass

The residents were asked to share their opinion and thoughts upon what they would like to see if a redesign of the underpass were to occur. All of the residents expressed their interest in having the underpass cleaned up and used as something other than a hotspot from crime or homeless activity. Rita Torres explained:

If you neglect a space, negative elements will come in that don't want to have anyone notice them. Other people will stay clear of the space because they don't want to associate or come into contact with these negative elements. The underpass will remain a hotspot for crime, homelessness and other negative activities unless something is changed.

The most common element all of the residents wished to see was the addition of new lighting within the space to act as a crime preventer. Paul Gonzales stated that he wished to see lighting used in an artistic way within the space. He explained:

If lights are used in an artistic way, like displaying some sort of pattern on the blank surfaces of the underpass, then it will bring interest to the underpass and maybe show the surrounding residents that this place is ok to hang out in.

Other elements included the addition of different types of sport amenities. The addition of a skate park was the most common type of space brought up during the interviews. Carol Valentine explained how the skateparks that her grandchildren visit in other cities are good, healthy outlets for teenagers and are heavily used by kids as after school activities. Paul Gonzales also expressed his interest in adding a skate park under the underpass and said:

The skate park would bring a certain element to the underpass and wouldn't be perceived as a total negative feature because it would provide kids with a designated space to skate in.

Several of the residents also expressed their interest in hosting community events or holding farmers markets within the space. According to the residents, the underpass would serve as the perfect shelter during the winter months and would increase awareness of the underpass as a positive and useful element.

The addition of art was another common element among all of the residents. Residents suggested using the columns and the support wall across South 3rd Street as prime spots for artistic elements within the space. Rita Torres brought up Chicano Park in San Diego as a positive example for how murals were used to transform an underpass.

4.5.5 Summary of Findings

From the interviews and observations of the community and the study area, it is evident that the neighborhood is in need of new public spaces. The challenge of finding available land poses a huge problem; however a few of the residents have identified the alleyways in Spartan-Keyes and the underpass as potential spaces for new urban parks.

Shared Elements of Concern

In comparing the observed constraints of the site to the concerns and issues shared by the residents, there were several elements that overlapped. First, the presence of trash and homeless activity proved to be a shared concern with the space. Both are considered negative aspects of the site and greatly impact the appeal and perception of the space.

Second, the lack of lighting also proved to be a shared concern. Without the provision of adequate lighting, the underpass will remain the crime hotspot for the neighborhood.

Third, the issue of health proved to be another concern with one of the residents, and could quite possibly be an underlying concern with many others. The space is within very close proximity to Interstate 280 and two major roadways: South 2nd Street and South 3rd Street. The levels of pollution exposure are unknown but it is definitely a concern to consider in redesign efforts.

Shared Elements of Opportunity

In comparing the observed opportunities of the site to the elements expressed by the residents, there were several observations that overlapped. First, the residents expressed their interest in utilizing the columns and support wall, opposite South 3rd Street, as areas to highlight and emphasize the underpass. These areas have the potential to be used artistically and could help bring positive attention to the site.

Second, the residents identified the freeway deck as a positive element because it provides the space with shelter from rain during the winter months. Several of the residents expressed their interest in holding off-season farmer's markets or community events during the rainy season within the site.

Third, the topic of noise was brought up as a positive characteristic for the site. The existing noise emitted from the freeway above might potentially drown out any additional noise created by activities occurring within the site. This fact may prove to be highly beneficial to the surrounding residences because they would not be significantly impacted if a redesign were to occur within the site.

The following list summarizes the residents' concerns for the existing conditions of the site and provides a wish list of elements and amenities for a new urban public space under the freeway:

Concerns

- Presence of homeless activity
- Very dark
- Lots of trash
- Lacks the sense of safety
- Crime (e.g. drug and gang activity)
- Scary
- Isolated area
- Health aspects related to exposure to pollution

Wish List

- Additional park land in the Spartan-Keyes community
- Sports courts (e.g. tennis, basketball, skateboarding, handball)
- Sitting spaces (benches, tables)
- Public art designed by local artists or community members (e.g. murals, interactive art, lighting)
- Vegetation (e.g. trees, garden)
- Paved surface
- Flexible space for community events (e.g. off-season farmers markets)
- Place for kids to play outside

“In our view, a designer [...] must consider both the larger societal changes and the creation of better, more supportive environments from people’s daily lives. We believe that thoughtful design takes into account existing knowledge and provides a chance for people to express themselves, be effective, and feel empowered.”

– Clare Copper Marcus in *People Places*

Chapter 5



Design Recommendations for Transforming the 2nd & 3rd Street / I-280 Underpass

The conceptual design recommendations provided in this chapter are just a few of the many viable ideas that can be implemented to transform the 2nd and 3rd Street / I-280 underpass in San José. In addition, the conceptual plan and sketches presented in this chapter do not represent a definitive plan and are intended to visually portray what a redesign within this space could look like. The space can be designed in many different ways and certainly can be a neighborhood jewel.

5.1 Development of Program Elements and Design Solutions

A program is defined as the summary of research findings that serve as a checklist for what a design needs to achieve.⁵⁷ The program for the conceptual design of the 2nd & 3rd Street / I-280 underpass was developed after a series of steps

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57. Norman K. Booth, *Basic Elements of Landscape Architectural Design*, (New York: Waveland Press, 1990), 292.

were accomplished. First, a site inventory of the underpass highlighted the key areas of concern and also emphasized where opportunities existed and where redesign efforts should focus. Second, interviews were conducted with residents living in communities nearby with the intention of understanding their attitude and perception of the site and what they would like to see happen there.

Program of Elements and Design Solutions

The findings from the site analysis and interviews were compiled into a table and divided into three themes: Character of Neighborhood, Promote Accessibility & Activities, and Concerns/Safety. These three themes represent the important goals the conceptual design will strive to address. The program on the following page outlines the important goals (defined as elements) and the recommended design solutions for achieving those goals (see TABLE 5.1 on the following page).

TABLE 5.1 Program elements & design solutions

CHARACTER OF NEIGHBORHOOD	
Program Element:	Design Solution:
Dissolve the physical barrier created by the freeway.	Create a smooth transition between downtown San José and Spartan-Keyes communities by improving the shared space at their border. Enhance the space physically, visually, and socially.
Create a sense of place under the freeway.	Utilize the underpass to create a sense of identity for the surrounding neighborhoods through the use of vegetation, art, lighting and color.
Protect surrounding residents from additional noise created within and near the site.	Incorporate buffers between the site and the houses adjacent to the underpass to mitigate noise. Specify hours of usage for any proposed small recreational activities within the space.

PROMOTE ACCESSIBILITY & ACTIVITIES	
Program Element:	Design Solution:
Enhance the accessibility of the site.	Improve the aesthetic quality of the pedestrian environment to encourage and increase pedestrian activity around the site. Clearly define all entrances to the underpass to encourage user activity within the space. Design for everyone.
Design to accommodate a variety of uses.	Utilize the existing columns to create outdoor rooms within the space. The columns can separate activities while still promoting a cohesive design.

CONCERNS/SAFETY	
Program Element:	Design Solution:
Mitigate environmental concerns from pollution	Incorporate low maintenance planting materials into design to offset some dangers from pollution.
Protect pedestrians from cars traveling at high speeds on South 2 nd and South 3 rd Streets.	Warn motorists upon entering the space within signage. Create vegetated buffers along edge of sidewalk and street.
Decrease crime and homeless activity within the space.	Incorporate additional lighting within the design that complies with the City of San José's lighting ordinance to increase eyes on the street.

5.2 Conceptual Design Recommendations for the 2nd & 3rd Street/I-280 Underpass

The following conceptual design (FIGURE 5.1) of recommended design features, elements and characteristics are drawn from the design solutions summarized in the program. These recommendations are also influenced by the themes and findings presented in *Chapter 2*, where the findings are included if deemed appropriate for this particular space.



FIGURE 5.1 Conceptual design for the 2nd & 3rd Street/I-280 underpass

5.2.1 Identity

Naming the site

The underpass currently does not have an interesting name associated to it other than the 2nd & 3rd Street / I-280 underpass, a name created by the author of this report. The provision of a name for this underpass can further attract people to the space and may even create a sense of identity for the space as well. The name can be displayed in a creative way on the support columns, or as a traditional sign attached to the outside edge of the freeway deck above South 2nd and South 3rd Streets.

In trying to come up with a name for the underpass, it is recommended to look towards the surrounding neighborhoods and land uses for inspiration. Some examples of names are presented below:

- The ArtPass (a combination of art and underpass),
- Art Pass Park
- Transition Park

5.2.2 Sociability

Utilize Columns to Create Outdoor Rooms

The columns can be used as guides for designing different outdoor rooms within the space. When lined in a straight row, the columns create the illusion of invisible walls where the spaces between four columns can set invisible boundaries for outdoor rooms. These

rooms can be different sizes and accommodate a variety of activities.

It should be noted that in the Martha Gardens Specific Plan created in 2003, the construction of a skate park was proposed for this specific site.⁵⁸ The city has already identified the site as a potential new urban public space opportunity but still has yet to act on the proposal.

Sport Courts

Small-scale active recreation would be very beneficial because it allows residents to actively engage with the site. A sport court, for example, will foster active use of the space. The proposed basketball half court and skate park will cater to the needs of the younger generations that live near the site and will also provide another space for the teens at the Wilson Center to hang out in. These elements are recommended with the hope that the noise from the freeway above will drown out most of the noise emitted from the courts so that the nearby residents aren't impacted.

This is the only area within the site that should have permeable paving as flooring. The rest of flooring for the site should be composed of decomposed granite.

58. City of San José, *Martha Gardens Specific Plan*, (San José, CA, 2003), 76.

Flexible Space

The provision of flexible space provides the option for many different activities to occur within the space. The flexible space under the underpass can support year round farmers markets, art fairs and other community events.

5.2.3 Amenities

Sitting Spaces

As was evident within the research of the report, moveable objects were important elements in many designs. However, the use of moveable seating elements may not initially work here because of the existing problem with theft within the area. Once the neighborhood has embraced the site, as research has shown, a rising sense of ownership and pride for the site may decrease future crime in the area. Therefore, it is recommended that different types of stationary benches be placed within the space. Benches should be located along the periphery of the space and near the sport courts to offer places for people watching. Benches should also be located in the middle of the site, near the garden, to provide places for reflection and to enjoy the sun when available. The use of bench seats, or benches without backs, is recommended near the garden to provide users with a choice in views.

Vegetation

Vegetation will not only soften the industrial feel of the underpass but will also create a more pleasing and inviting atmosphere within the space. The stretch of land found along the northern and southern peripheries of the site offers, a perfect place for the use of vegetated buffers. The buffers will offer privacy for the neighbors nearby and create a natural edge to the space. However, in order to keep an open feel within the space, it is recommended that the buffers not exceed four feet in height.

The gap within the freeway deck above allows sunlight to filter down to the middle of the site and creates an opportunity for a small garden to be planted there. Since conditions are harsh under this environment, it is recommended that the plants be drought tolerant, and able to thrive under little to no sunlight.

As seen in the conceptual design proposal in FIGURE 5.1, it is recommended that the garden begins at the South 2nd Street entrance and ends midway through the space. The intent is to use the garden to create a series of rooms within the underpass. The linear pattern of the garden directs the viewer's eye to the other side of the site where the locations for the sport courts are proposed. The location of the garden close to the paved surface of the sport courts will act as a catch basin for water runoff.



Water

The addition of a water feature within the design is not recommended because water is not easily accessible for the site.

Public Art

The columns along the border of South 2nd Street and South 3rd Street provide the perfect canvas for murals. Painting the support columns will not only attract the attention of motorists, cyclists and pedestrians passing by the space but can act as an artsy entrance to the space as well. The freeway support wall located on the opposite side of South 3rd Street also offers another opportunity for a mural. Themes for the murals should depict the identities of the surrounding communities and be painted by the local artists in the Martha Gardens district, and members of the community.

Interactive art is described as “a type of installation that allows the audience or spectator to interact with the piece in a way that achieves its desired purpose.”⁵⁹ The use of interactive art within the underpass can create a sense of playfulness within a space that lacks color, vibrancy and life. However, an interactive art piece that needs users to touch in order to achieve its purpose may not work within the harsh environment of the underpass. Perhaps an art piece that moves without the help of viewers might be the better option for a playful element within the conceptual design.

59. “Interactive Art,” Art Interactive.org, <http://www.artinteractive.org/interactive-art/> (accessed October 1, 2013).

For example, the use of a wind sculpture will add to the ambiance of the space as well. The wind sculpture will play off the natural elements within the site and provide a playful and lively element within the space.

The gap in the freeway above provides the perfect place for a sculpture to be seen. During the selective hours of the day, the gap in the freeway deck creates a sort of spotlight effect where natural light filters down to the site. It is suggested that the wind sculpture be placed directly under the gap, and within the proposed garden, so as to act as a focal point of interest within the space.

Food

The proposed flexible space within the conceptual design will be a suitable place for food related events such as farmers markets.

Lighting

The addition of lighting will increase usage within the space at night. The lights should be installed onto every support column and positioned at a height that will not impact the neighboring residences. The lights also need to be directed towards the ground in order to comply with the city’s light ordinance. It is recommended that these additional lights be solar powered and for the solar panels to be attached or adhered to the railings of the freeway deck above to receive adequate sun exposure.

Signage & Wayfinding

The addition of signage within the site will increase awareness of the space within the surrounding communities and city. A welcome sign should be added to the outside edge of the freeway deck above South 2nd Street and South 3rd Street. Signage can also be present within the space in the form of murals. For example, the support columns can display the park rules, or can also display the name of the park.

5.2.4 Microclimate

Shelter from the elements

The freeway deck provides shelter from the sun during the hot summer months, and from the rain during the winter. Wind is still present but is not too big of a factor to deter people from utilizing the site.

5.2.5 Accessibility

Clear and Defined Entrances

The space should be designed to be accessible to all. All entrances should be clearly visible from the street with appropriate signage to welcome visitors. The openings of each entrance should be kept wide in order to maintain the feeling of openness within the space. If elements are used to create an edge around the boundaries of the space, then the entrances should have a minimum width of 10 feet.

ADA Compliance

The space needs to accommodate all different types of people. This includes people in wheel chairs, blind, the elderly and children. Have little to no changes in elevation to limit any challenges for people to easily circulate through the site. If a change in elevation is needed then the design should comply with ADA standards (design standards specified by the American Disabilities Act) by providing ramps and handrails where appropriate.

5.2.6 Comfort & Safety

Alert Cars of Pedestrian Activity

The use of pavers on South Second Street and South Third Street may help increase the safety of the pedestrians and users of the site. These two streets are main thoroughfares to and from downtown San José. Even though the posted speed limit is 30 mph, cars seem to must faster down these streets, especially under when passing through the freeway underpass. The use of different colored paving material for the sections of these two main streets underneath the freeway, can help alert drivers to watch their speed as they pass underneath and can provide a sense of safety for pedestrians as well.

Vegetation Buffers Along Street

The implementation of low maintenance vegetation buffers along South Second Street and South Third Street may also help increase a sense of safety near the



site. Even though the parallel parking spaces on these two main thoroughfares separate the sidewalk from vehicular traffic, studies have shown that pedestrians prefer vegetation because they help catch the attention of drivers.⁶⁰

Lighting

The addition of lighting within the space is highly recommended to detract unwanted activities from occurring in the future. Lighting will ensure that the site is visible from the street at all times.

5.3 Supporting Perspectives for Design Recommendations

Conceptual Design for South 2nd Street Entrance and Streetscape

The proposed enhancements to the entrance off of South 2nd Street are examples of what the site could look like if a redesign were to occur (see FIGURE 5.2). The smaller photo in the top right corner, portrays the existing site conditions for the same perspective.

The proposed open space in the foreground is designed to serve as a flexible space for different kinds of events. The ground is covered in decomposed granite, which is a very durable paving alternative to concrete, and is permeable to help decrease the amount of water runoff created from the site.

The support columns serve a dual purpose. They are used as blank canvases for murals and act as welcome signs for visitors as they enter and visit the space. the background. The proposed half basketball court and small skate park will provide residents with an opportunity to actively engage with the space.

The smaller photo in the top right corner, portrays the existing site conditions for the same perspective.

60. Ioannis Kaparias et al., "Analyzing the Perceptions of Pedestrians and Drivers to Shared Space," *Transportation Research Part F: Traffic Psychology and Behaviour* 15, no. 3 (2012): 306.



Before



FIGURE 5.2 Conceptual design for South 2nd Street entrance looking towards Spartan-Keyes neighborhood



Before



FIGURE 5.3 View of transformed underpass from South 2nd Street looking towards South 3rd Street



Conceptual Design for Garden and Recreation Elements

The gap in the freeway deck above gives the space a very unique quality (see FIGURE 5.3). The underpass is able to receive limited amounts of sun exposure during certain parts of the day. This space proves to be the most suitable place for a drought tolerant and low maintenance garden. The proposed wind sculpture will provide the space with an artistic and playful element when it moves from the force of the wind.

Additional artistic elements are proposed throughout the space. The silhouettes of basketball players and skateboarders create an artistic way to alert visitors the types of activities the space supports. Also, the mural on the back support wall represents the skyline of the city of San José that artistically connects downtown San José with Spartan-Keyes.

Two different types of recreational activities can be seen in the background. The proposed half basketball court and small skate park will provide residents with an opportunity to actively engage with the space.

The smaller photo in the top right corner, portrays the existing site conditions for the same perspective.



“In great cities, spaces as well as places are designed and built: walking, witnessing, being in public, are as much part of the design and purpose as is being inside to eat, sleep, make shoes or love or music. The word citizen has to do with cities, and the ideal city is organized around citizenship -- around participation in public life.”

– Rebecca Solnit in *Wanderlust: A History of Walking*



Chapter 6



Conclusion & Recommended Steps for Redesign Implementation


6.1 Discussion of Findings

The findings from the research in *Chapter 3* show that a redesign of a residual space is indeed possible. Landscape designers, artists, non-profit organizations, café owners, city staff and residents all contributed to the successful transformation of four different types of residual spaces. These transformations have not only enhanced the surrounding communities and cities, but have also served as a catalyst and inspiration for other communities and cities to re-examine their residual spaces and incorporate them back into the urban fabric.

Throughout the research and studies for this report, there were a couple key findings that are worth noting because they proved to be very effective in the transformation of each space. The following section discusses the importance of community support, how size did not deter a redesign of a

space, and the use of artistic elements to emphasis, highlight or express meaning within a design.

Community support is very important to the success of a redesign. The transformation of a derelict underpass into the Fremont Troll, a trash infested median into Quesada Gardens, and a vacant alley into Nord Alley are prime examples of how a community's dedication and motivation can significantly change the look and appeal of a neighborhood. With the support of the surrounding community, the Fremont Troll became a cultural icon. For Quesada Gardens, the simple action of planting random plants into the median sparked the creation of a neighborhood grassroots organization dedicated towards increasing trust, enhancing relationships and improving the neighborhood. The transformation of Nord Alley into an entertainment corridor was the result of nearby residents and business owners looking to increase public space within their neighborhood.



The size of a space does not determine whether a redesign can occur or not. Farley’s East Café and Parallel Park are both 216 square feet in size, which is the length of two parking spaces. They both are very successful small urban public spaces that showcase how a pedestrian walkway can be extended into fun, vibrant, and active settings. Quesada Gardens, Nord Alley and Main Street Alley are examples of successful transformations that occurred within a linear setting. Nord Alley and Main Street Alley were designed minimally to provide emphasis on their role as a pedestrian thoroughfare. The median strip garden of Quesada Gardens exemplifies how a linear planting bed can be transformed through the use of plants that vary in height, color, and size.

Artistic elements within a design can be used to express a message, change moods, stimulate the imagination and foster casual interaction. All ten case studies incorporated an artistic element or elements into their designs. Jane Warner Plaza/ Castro Commons and parklet in front of Farley’s East Café used the color red as an accent color to emphasize the moveable tables and chairs. Parallel Park also utilized the color red to create contrast against the clear cedar wood that used to create the entire parklet. Mission Bay Sports Courts used colorful paving that formed wave like patterns to draw people into the space. The Fremont Troll and New York Avenue Sculptures were the artistic element within each space and were designed to express a message and meaning to the public. Underpass Park incorporated the use of a sculpture and colorful LED lighting to emphasis the existing industrial nature of the underpass. Finally, Quesada Gardens, Nord Alley and the plaza near Main Street Alley utilized wall space to showcase murals or hanging art installations.

6.2 Implementation & Design Phases

In an era where city officials and urban planners are looking for creative ways to revitalize city centers, the successful transformation of the ten case studies observed for this report provide enough evidence that a successful redesign of residual spaces are possible. The 2nd & 3rd Street/I-280 underpass is a space that has the potential to join the list of successfully transformed residual spaces. The underpass borders two communities, is large in size, receives partial sun in select areas, and is easily accessible by walking, biking or driving.

The City of San José already showed interest in revitalizing this particular underpass in the past in the Martha Gardens Specific Plan in 2003. Hopefully, this report can spark interest into the underpass again. The following section discusses some recommended steps the city can take to begin transforming the site. Instead of redesigning the entire underpass all at once, it is recommended to look at this process as a phased pilot project. The redesign of the space should be in phases so as to attract attention and hopefully excitement for the project by nearby residents, and should only include the use of elements that can easily be removed.

6.1.1 Phase 1: Inform the public of intentions

Holding community meetings with surrounding neighborhoods will alert the residents of the redesign intentions for the underpass and start conversations between the neighborhoods. Design charettes need to also

be included within the community meetings in order to adequately collaborate a redesign between city staff and the community. During these meetings, city staff need to identify the concerns of the public with the space and express interest in understanding what the nearby residents would like to in a new urban park. The concerns and wish list provided in this report are just the tip of the iceberg and are very likely to expand as more residents become involved in the process.

It is also recommended that the youth in the surrounding neighborhoods get involved in the planning process of this site since they are most likely to use the site more frequently than others. Some of the meetings should be held at nearby schools in order to create awareness of the redesign efforts for the underpass.

Funding for a redesign of the space should start during Phase 1, or least different and options should be considered. Funding for the project may be available through different grants from the city, county, or state. A kick-starter campaign, which proved to be successful for the construction of Farley's East Café's parklet, should also be considered as an option to get the neighboring communities involved.

6.1.2 Phase 2: Replace negative activities and elements with light and art

Phase 2 should start off by installing lights to discourage illegal activity from occurring on the site. The lights will allow the site to be visible to the public and will also draw attention to the site at night. These lights should be solar powered

and be in sync with the streetlights that surround the site. It is recommended that the installation of lights to be the only permanent addition to the site for the pilot project.

The barricades that surround the site on South 2nd Street, South 3rd Street and the neighborhood alley that opens up on to Martha Street need to be removed. By removing these negative elements, the site will appear open, inviting and welcoming for individuals to explore.

Next, incorporating an artistic element will increase awareness of the site and bring life to the space. The nearby artist community in Spartan-Keyes can use the space as their medium for expressing their feelings, sense of identity, etc. The columns bordering the space, near South 2nd Street and South 3rd Street, will serve as the perfect blank canvas. The support wall, across South Third Street, will be the prime place for a community mural. Urge local residents to decide what the design criteria and theme should be for the mural. The mural can be created by local children, the artist community, or other commissioned artists working pro-bono.

6.1.3 Phase 3: Promote active use of the space

Once attention is increased towards the site, the city can look into removing all weeds, debris and trash from the premises. Following the conceptual design example presented in the report, the ground floor should be leveled completely and covered in decomposed granite, a small granular material that is compact and durable. The decomposed granite will make the space look cleaner and more inviting to visitors. The

space should serve as a place for an art fair, a place to hear local music, a farmers market, or a place for Spartan-Keyes community meetings.

Permeable concrete paving should be installed near South 3rd Street to support small recreational activities like basketball and skateboarding. The incorporation of these two activities into the space will attract the youth in the area and provide a dedicated space for play. The concrete pavers need to be able to withstand and support constant use by visitors playing ball and skating. The skateboard elements need to be anchored down to the pavers so that visitors don't easily remove them.

Trash cans need to also be added during this phase to limit the amount of trash that ends up on the ground.

6.1.4 Phase 4: Incorporate additional amenities to the space

As awareness of the site increases, and depending upon the success of the art elements and sports courts, the city should add park-like elements (e.g. vegetation, benches, and a wind sculpture) to the design.

Per the recommendations in *Chapter 5*, the addition of any planting material should be drought tolerant and able to thrive under harsh conditions. Vegetation can be added directly under the gap in the freeway deck above and along the small strip of land the northern and southern end of the site.

The incorporation of benches will encourage visitors to sit and enjoy the space. Per the recommendations in *Chapter 5*,

benches should be placed near the vegetation garden in the center of the site and near the sports courts. The city should look into providing a variety of bench styles (i.e backless bench and standard bench with backrest) to encourage different types of social activities.

The addition of a wind sculpture at this phase would be ideal. Wind sculptures are moveable elements and may be susceptible to vandalism if the space does not receive enough pedestrian traffic. Although a wind sculpture would provide the site with a playful and lively element, the space and activity within the space needs to be assessed prior to the installation of such a delicate piece of art.

The 2nd & 3rd Street / I-280 underpass is a vacant piece of land that separates downtown San José from the Spartan-Keyes community. It is a space that is perceived as unsafe by surrounding residents because it attracts a lot of negative attention and energy.

Despite all of the negative aspects of the space, the underpass possesses many positive aspects that would support a new public space. San José has an opportunity to create a unique name for itself by redesigning neglected and underutilized underpasses into unique and innovative public spaces for surrounding communities. The 2nd & 3rd Street/I-280 underpass will serve as the perfect candidate to start such a redesign effort in San José.



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Appendix A: Residual Space Observation & Analysis Tool

(Adapted from the EAPRS Tool)

OBSERVATION LOGISTICS

(Fill in the date and time for the sites observed in person)

Date:	
Start Time:	
End Time:	
Local or Non-Local Site?	
Address <i>(Include City)</i>	
Date Opened to the Public?	

SITE & SURROUNDING CHARACTERISTICS

(Include the source consulted in observing non-local sites)

Type of Residual Space: <i>(e.g. Parking space, Alley, Median Strip, or Underpass)</i>	
Surrounding Land Use(s): - Residential? - Commercial? - Mixed Use? - Open Space?	
Volume of Vehicular Traffic: - High? - Medium? - Low?	
# of Traffic Lanes?	

CHARACTERISTICS & DESIGN ELEMENTS EVIDENT IN THE SITE

(Fill in the date and time for the sites observed in person)

Number of Entrances <i>(How many? Describe where they are in the space.)</i>	
Sitting Spaces <i>Describe:</i> - How many? - Material? - Clustered vs Solitary? - Location?	
Tables <i>Describe:</i> - How many? - Material? - Clustered vs Solitary? - Location?	
Vegetation - Trees? - Shrubs? - Flowers? - Use? <i>(e.g. Ambiance, Screening, etc)</i>	
Sun Exposure <i>Does the space receive sun?</i> -High? -Medium? -Low?	



Water Elements <i>(If none present, write NONE)</i> - What is it? - Location?	
Lighting <i>(If none present, write NONE)</i> - What type? <i>(e.g. lamp post, motion detector, decorative lights)</i> - Location?	
Public Art <i>What type and describe:</i> - Mural? - Sculpture? - Interactive? - Other?	
Trash Receptacles	
Small-Scale Recreational Uses - What type? - Describe	

EVIDENCE OF DESIGN PRINCIPLES USED: <i>Identify the following (Include the source consulted in observing non-local sites)</i>	
Center, Nodes: - Spatial circulation - Is there a focal point where elements flow to?	
Strong Sense of Place: - Are the edges defined? - Are the entrances identifiable?	
Themes & Variations - Do the colors and textures blend with the surrounding landscape or stand out? - Is there a repetition of colors, textures?	
Accents / Design Statements - Do the elements used within the space fit the space? - Do they stand out? Blend in?	
Promotes Social Interaction - Night lighting? - Position of benches?	
Emphasis on Pedestrian - Describe the sidewalks conditions. - Are elements in and around the site at human scale?	



Appendix B: Interview Questionnaires

Interview Questions for Planning & Design Professionals

The following questions were asked during my interviews with key stakeholders who were instrumental in the transformation of a residual space. Please describe what the main goals for the site were during the design stage?

1. Was the idea to transform the space inspired through case studies? Was the design?
2. Were there design elements required for [insert type of residual space here]? If yes, by whom and what were they?
3. What is your favorite part about the design or project? Why?
4. Would you change anything in the design to make the space better?
5. Did you come across any problems or challenges during any stage in the design or implementation process? (Examples may include: funding, attaining a permit, city officials, Caltrans.)
6. Was the public involved in the development process?
7. How is this space maintained? Who is in charge of the maintenance for it?
8. Can you refer me to anyone else who was instrumental to the planning and/or design process of this project?
9. Is there anything else you would like to add that is beneficial to my study focus?



Interview Questions for Residents Living Near the Underpass

The following questions were asked during my interviews with residents living in the Spartan-Keyes Community and downtown San José.

1. How long have you lived in [neighborhood name]?
2. Do you feel that there is adequate available open space/ public space for residents living in your community?
 - a. (If yes) Which spaces do you usually spend your time in?
 - b. (If no) What do you think is missing in your neighborhood public spaces?
3. What types of features do you use or enjoy in parks?
 - a. Benches, picnic tables, shade shelters, seating areas
 - b. Paved pathways
 - c. Dog park
 - d. Vegetation, planter beds (if on hardscape)
 - e. Children's playlots
 - f. Small-scale recreation
 - g. Other – what else?
4. Have you ever walked under the 2nd or 3rd Street/I-280 underpass?
 - a. (If yes) On a scale of 1 and 5, where 1 represents uncomfortable and five represents very comfortable, how would you describe your experience through the area? Please explain.
 - b. (If no) Is there a reason why you have never walked under the 2nd or 3rd Street/I-280 underpass? Please explain.
5. Can you identify any issues/problems in the area around that underpass that you are aware of during the day? At night?
6. In other cities, vacant lots under freeways have been redesigned in public places for the communities that surround them. If an urban park were to be created under the 2nd & 3rd Street underpass, do you think you would use the space?
 - a. (If yes) What would you like to see there?
 - b. (If no) Why do you think you would be against a park under a freeway?
7. Is there anything else you would like to add or include in the interview?
8. Can you refer me to another community member who would be interested in participating in this research? Perhaps someone who lives close to this underpass, or who walks/rides their bike underneath on a daily or weekly basis?



Appendix C: Interview List

Planning & Design Professionals

Aiello, Andrea. (October 11, 2013). Executive Director, Castro/Upper Market Community Benefits District

Badanes, Steven. (September 9, 2013). University of Washington Architecture Professor and Co-Designer of the Fremont Troll.

Betcher, Jeffrey. (October 2, 2013). Co-Founder and Organizer for the Quesada Gardens Initiative.

Hillyard, Chris. (September 27, 2013). Owner, Farley's East Café.

Martin, Travis. (October 5, 2013). Landscape Designer, van der Zalm + Associates.

Midon, Stephanie. (October 29, 2013). Curatorial Assistant, National Museum of Women in the Arts.

Munekawa, Ron. (October 25, 2013). Chief of Planning, City of San Mateo.

Roche, James. (September 19, 2013). Director of Parks, Construction and Design, Waterfront Toronto.

Stenning, Liz. (September 25, 2013). Project Manager, International Sustainable Institute.



Residents

Anonymous Resident #1. (August 21, 2013). Resident of downtown San José.

Anonymous Resident #2. (August 28, 2013). Resident of downtown San José.

Gutierrez, Paul. (September 6, 2013). Employee at Spartan-Keyes Neighborhood Action Center.

May, Tony. (September 6, 2013). Resident of Spartan-Keyes.

Roberto, Judy. (September 20, 2013). Resident of Spartan-Keyes.

Stewart, Richard. (September 6, 2013). Resident of Spartan-Keyes.

Torres, Rita. (September 13, 2013). Resident of Spartan-Keyes

Valentine, Carol. (September 6, 2013). Resident of Spartan-Keyes.

