

Alley Imagination

BUILDING COMMUNITY RESILIENCE INTO
LINEAR NEIGHBORHOOD SPACES IN
TACOMA

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ABSTRACT

As cities continue to implement transit oriented development policies, the recognition of the corresponding risk of gentrification and displacement have led to an interest in making the process more equitable and resilient. Incorporating equity and resilience into transit oriented development could be addressed through an abundant yet overlooked asset- alleyways. The original intention of transit oriented development, to support environmentally sustainable practices through densification and increased transit ridership are being compromised by the displacement of transit dependent and low income communities of color (Puget Sound Sage, 2015). Revisiting the role of the alley in the contemporary city, we can imagine new roles for these currently overlooked spaces. Incorporating affordable infill housing and green space in proximity to high frequency transit has multiple ecological and social benefits that contribute to community resilience. Referencing historic African American residential life along alleyways, spatial analysis, residential survey data, alley behavioral observation, and a design case study in Tacoma; this paper explores the potential to build a better understanding of the perceptions and possibilities of alley focused transit oriented development that is equitable and resilient.

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INTRODUCTION

As cities continue to implement transit oriented development policies, the recognition of corresponding risk of gentrification and displacement have led to an interest in making the process more equitable and resilient. Incorporating equity and resilience into transit oriented development could be addressed through an abundant yet overlooked asset- alleyways. Linear and discrete, residential alleyways have a long history in the foundation of circulation, culture and public life of cities (Beasley, 1997; Martin, 2002; Clay, 1978). In the 1970s Grady Clay advocated for planners to look not toward the suburban land outside of the city for new development, but towards the alleys (1978). A study of African American life in the alleys of Georgetown, Washington DC showed that there is a strong social component to life in the alley, and despite the poor physical condition of the buildings, residents valued the tight knight community that had developed (Borchert, 1980). In contemporary planning there have been few formal studies on alleys, with those done in cities such as Los Angeles, California and Austin, Texas, that have looked at expanding the role that

alleys can play in cities, particularly those with little access to green space (Wolch, 2010) or increased need for affordable housing in response to gentrification (M. Torrado, personal communication, January 21, 2020). The City of Tacoma has 191 miles of alleyways, many directly adjacent to the future bus rapid transit line, which can be reimagined into spaces of social interaction and green linear connections.

The purpose of this study will be to better understand the potential for the City of Tacoma to reimagine the use of alleys as conduits for green connections, social spaces, and affordable infill housing to design equitable transit-oriented development through the lens of community resilience. Utilizing a mixed method approach of spatial analysis of alleyways in the City, behavioral observation of how alleys are being used, survey data to capture the resident perceptions of alley safety, interest in green space and increased cottage housing along the alley. This research will culminate in a design case study of two sites within 1/2 mile radius of the bus rapid transit line.



Fig. 1 Linden Alley, SF California. Photo: San Francisco Living Alleys

METHODS

Building from a foundation of literature, case study analysis and data collection, the work will be grounded in existing scholarship and knowledge, with the understanding that the practice and research around transit oriented development and alley greening programs continues to grow and expand. The literature draws from the historical context of transit oriented development to the present day work of community based planning. Interviews with practitioners in the field and internet based research informed the alleyway precedents section. Utilizing a mixed method approach to better understand the potential use of residential alleyways as spaces for social and ecological reformation through my study sites in Tacoma, I drew from historical data of residential alley dwelling life, spatial analysis of alley distribution in Tacoma, behavioral observation of alleys through an alley audit, a survey of residents residing along the alley, and a design case study of two sites within a ½ mile radius of the bus rapid transit line.

The historic documentation of African American alley life is referenced in studies from Washington D.C, Galveston Texas, and Louisville Kentucky. These in-depth studies of residential alley life highlighted that historically the life of alleyways were rich social networks. The social lives that were a result of alley facing housing provided a basis for the inquiry into how housing design and orientation could be translated to the

present day, as a migration to cities is again producing housing pressures with limited land available.

The site study of two nodes along the future bus rapid transit line pulls data primarily from the Pierce Transit Initial Conditions report on the half mile radius of the corridor, an alley audit, and survey data collected by the author. The two alleys were chosen for the case study for being within a half mile of a planned bus rapid transit stop along Pacific Avenue South and their mix of land uses and lack of park space within walking distance.

The survey was conducted on three separate occasions in the late afternoon. Both paper and online surveys were available, to ensure that those with less access to technology would be able to participate. The limitations of the survey are the absence of any outside funding for printing, materials and postage, time constraints, limited human capacity to go door to door and social distancing restrictions necessitated by COVID 19. All these limitations played a role in the reduced number of surveys that were distributed. Other limitations in the research include a lack of research into the hydrology of the site areas other than the location of watersheds in Tacoma. The specific hydrology of the alleys in the site area was not investigated.

LITERATURE REVIEW

TRANSIT ORIENTED DEVELOPMENT

The complexities and ramifications of transportation projects such as gentrification, residential and cultural vulnerability, and economic change reverberate from the neighborhood to regional level. Historically, large scale transportation projects such as highway construction have dissected and disrupted neighborhoods, causing large scale displacement and loss of the social and cultural fabric of communities of color. (Sandoval, 2018). Currently we see cities, spaces of previous disinvestment, experiencing a resurgence of transportation investment, and a corresponding modern-day urban renewal in the form of gentrification. Municipalities, cities and transit agencies look to implement Transit Oriented Development strategies (TOD) to build upon and compliment transit infrastructure, designing an intensity of development around stations, creating walkable environments with a mixture of residential and commercial uses.

What accompanies, and often proceeds transit development is an increase of land values in proximity to the station. In the Seattle metropolitan area, a recent study was conducted that found BTODs (Bus rapid transit oriented development) generate higher prices if located close to a transit center. Sales of single family homes located within 0.5 mile of the transit center on average are sold for 3 to 5 percent more than similar properties located outside of mile from the transit center (Shen, Lin, 2017). Studies conducted in Atlanta, Georgia and Eugene, Oregon provide similar results. In Atlanta, it was found that land values for properties within 1/3 of a mile from the proposed Beltline project increased by 33% more than comparable properties further from the project before construction had even begun. (Immergluck, 2009). Low income and communities of color are the most housing cost burdened in the country (Bates, 2017), and as a result they are at a high risk of displacement as transportation investments are being built in cities nationwide.

Equitable TOD (ETOD) has emerged as a strategy to address displacement through the provision of affordable housing, ensuring a broader sector of the population is able to live in proximity to transit. But with a few exceptions, such as the Community Cornerstones program in South Seattle, and the BART Fruitvale station in Oakland, California, most equitable transit oriented development plans provide for affordable housing but do not adequately address the more far reaching and interconnected needs of communities to stay in place with the threat of displacement and continue to grow as a healthy, connected community. There is opportunity to think differently about how planning for equitable transit oriented development is approached.

COMMUNITY RESILIENCE

Resilience theory as it relates to planning has been evolving since the 1970s, with the work of C S Hollings' 1973 publication on ecological resilience. He broadened the conversation on resilience, questioning the notion of a single state of equilibrium, and recognized that systems continue to change overtime, and never return to the original state after a disturbance. The theories of resilience continued to expand into new disciplines, and the social-ecological system theory brought together the two tenets of social systems and the natural environment.

"In broader context, resilience is about ecosystems and people together as integrated social-ecological systems in which social systems and ecosystems are recognized as coupled, interdependent, and coevolving" (Berkes, Folke, 1998, Folke 2006, cited in Berkes, Ross, 2012 p.7).

The psychology of development and mental health viewed resilience as a way to identify and develop community strengths, and building resilience through agency and self-organization. (Berkes, Ross, 2012 p.14).

Community resilience is the most recent iteration of the evolution of resilience theory. The term draws

on both the psychological resilience, considering an individual's capacity to deal with adversity or change and disaster resilience, examining how systems respond to disasters (McKoy, et. al 2019). In social-ecological systems, memory in the system can help restart cycles, disturbance events, drivers of change, and the significance of windows of opportunity during which innovative changes can be made in the system (Scheffer 2009, Chapin et al. 2009, cited in Burkes, Ross, 2012 p. 15)

Through further critique of resilience theory, the concept of resilience as a theory needs to go beyond both engineering and ecology frameworks, to incorporate a what and for whom aspect to ensure that the needs of those most vulnerable are being met (Vale, 2014). There is the question of power, who has it, and how it is utilized, "In the social justice context we cannot consider resilience without paying attention to issues of justice and fairness in terms of both the procedures for decision making and distribution of burdens and benefits" (Davoudi, 2012 p. 306). This power dynamic is evident specifically in the context of the city as a socio-environmental system, Vale writes in the Politics of Resilient Cities : whose resilience and whose city, "underlying nearly all socio-environmental systems is a struggle for control over what the next state will be - and a corresponding struggle over who will control it" (Vale 2014 p. 193). While there is significant discussion in the literature on resilience theory, there has been less evidence of its transition as a planning tool. Keith Shaw sees resilience as a change to the status quo, a paradigm shift to planning's liberal assumptions. To avoid overly planning for resilience, there is the need for improvisation and imagination (2012), "resilience as a process rather than a result" (Berkes, Ross, 2012 p. 11). Urban resilience can be useful in framing "more gradual transformations" (Vale 2014 p. 192) to predicted or predictable changes in cities. Community resilience takes into consideration the people involved, their agency to effect change, and the value of the elements of their culture that must be preserved for a system to demonstrate resilience (McKoy, et al. 2019). This framing differentiates community resilience from other theories of urban resilience, and where the intersection of community resilience and equitable transit oriented development can become beneficial, by placing the agency of the

community, and their cultural preservation as central to planning and development. Urban planning has long struggled with how to effectively engage with communities beyond the most basic stage of informing the public of the planning process, with little opportunity for residents to shape the process or outcomes (Arnstein, 1969, Sandoval, 2015). Sherry Arnstein sees citizen participation as a categorical term for citizen power. Participation without a redistribution of power can be a frustrating and disempowering process. This participation or citizen power is the strategy by which the "have-nots join in determining how information is shared, goals and policies are set, tax resources are allocated... in short it is the means by which they induce significant social reform which enables them to share in the benefits of the affluent society" (Arnstein, 1969 p.216).

As a response to the need to address the power dynamics in play in urban planning and community engagement, new forms have emerged to validate sources of local knowledge and utilize that knowledge to guide policy and planning. Practitioners and scholars have been working to develop new tools for community engagement that are participatory and inclusionary in nature, specifically for those communities that have been historically and currently marginalized in the public process (Sandoval, Rongerude, 2015). Pulling from community narratives allows for the translation of stories into pathways for implementation. Tools such as neighborhood indicators allow residents to define challenges facing their communities, recognizing that "defining problems is power" (Bryson, Crosby, 1992, cited in Sandoval, Rongerude, 2015). A project in Oakland California, Residents took part in all aspects of indicator work, such as residents conducting outreach and brainstorming indicators. The traditional workshop format was transformed in response to the need to work with an undocumented members of the Latino community in rural Oregon. The workshops were a participation -by-play approach that is family friendly and non intimidating. This method, developed by James Rojas, utilizes recycled objects to represent buildings, parks and other neighborhood elements. This model works as a catalyst for conversations and stories about the participants' lived experiences. This allows for these stories to be

translated into planning and policy, facilitating local knowledge as valid sources of knowledge (Sandoval, Rongerude, 2015). Processes such as these work to empower residents to see themselves reflected in the work, and have their experiences validated. Community resilience represents a tangible framing for the interconnected elements that comprise cities. Ensuring that resilience is about 'improving the life circumstances of the most physically and socio economically vulnerable residents' (Vale, 2014 p. 196) questions of power and process are imperative in ensuring that planning and policy bring about both equitable and resilient outcomes.

GREEN INFRASTRUCTURE: PUBLIC & ECOSYSTEM HEALTH

As cities continue to grow in population, there is increasing interest in the role of green infrastructure and its ability to provide a range of ecosystem functions to improve the quality of public health for residents. Health is defined by the World Health Organization (1948) as being in a state of complete physical, mental and social well-being. The term well-being is wide reaching, touching upon biological, sociological, economical, environmental, cultural and political factors (Tzoulas et al, 2007).

The concept of Green Infrastructure has emerged as a planning approach that unites multiple disciplines. Green Infrastructure can be composed of natural and semi-natural networks of multifunctional ecological systems. These spaces occur at several spatial scales, from the local to regional, across the urban landscape. Urban green space is found in a variety of types in the public and private realm; such as parks and reserves, riparian areas, greenways and trails, community gardens, sports fields, street trees and less commonly recognized spaces such as green walls, green alleyways and cemeteries (Roy, Byrne, Pickering, 2012). Ecosystem services, while a more recent concept, have been increasingly utilized by cities to valorize benefits of green infrastructure that are difficult to measure (Czechowski et al, 2014). Ecosystem services span from biological and physical, to recreational and cultural. Some non-material benefits that are obtained from human contact to ecosystems contribute to human health in urban areas. Through ecosystem services, exposure to these spaces can provide

mental and physical health for residents, in addition to greater ecosystem health through stormwater filtration, wildlife habitat, heat island reduction and groundwater recharge (Wolch et al, 2010). Urban green space has been found to contribute to mental and physical health through stress reduction, increased social interaction, opportunities for physical activity and reduced air pollution (Braubach et al, 2017). Equitable access to green space is imperative for all residents to have access to the health benefits. In neighborhoods with little access to green space, studies have shown that those tend to have the most benefits to increased urban green space (Braubach et al, 2017) providing the opportunity for reducing health disparities. It is through the multi layered benefits that urban greening provides that contribute to the overall health of urban areas.



Fig. 2 High Point development Seattle, Washington. The High Point development is the redevelopment of WWII public housing into a mixed income development with innovative area wide green stormwater management. Image: Mithun, Juan Hernandez

HISTORY OF ALLEYWAYS IN THE UNITED STATES

Linear and discrete, residential alleyways have a long history in the foundation of circulation and public life of cities. At times referred to as back-alleys, alleys have been found in Greek, Egyptian and Indonesian developments. Over time they found their way to Europe in bastides, and later to the United States. These pre WWII networks often consisted of both streets and corresponding alleyways for trash collection (Martin, 2002).

Typologies and evolving uses of alleys in the United States span time periods and geographic areas. Areas such as Galveston Texas, saw large scale residential growth from 1871 to 1885 (Beasley, 1997), Louisville, Kentucky and the Georgetown district of Washington D.C also grew in this period (Clay, 1978; Borchert, 1977). Along with that growth was an increase in alley residences. Cheaper housing than the larger structures facing the street, these 'rear' houses provided much needed housing, but represented a lower social status. These residential and commercial spaces functioned in a space outside of rules and regulations, where alley businesses sat next to small homes (Beasley, 1997).

The Alley as a residential social and cultural landscape

A small number of researchers have documented the social and cultural contributions that alleys have provided thought history in the United States. Alleyways in the United States were housing for those of lower social class and considered less desirable in society, a type of de facto segregation of space in cities. In Washington DC alley housing began primarily as slave and servant quarters. In "1865 65 percent of Washington alley residents were white", but during and following the Civil War the number of African Americans increased' (Clay, 1978). In "1897 there were 333 alleys in the District of Columbia, more than three quarters of the inhabitants were black" (Clay, 1978). Beginning in the post civil war era in major cities, these densely populated alleys of African American and low income immigrants evolved into separate communities. The cultivation of these spaces evolved as a distinct social space; filled with children playing, hanging out and singing. Walking through an alley one would smell scents from various kitchens, with peddlers, fruit carts and junk collectors using the alleys rather than the front street (Beasley, 1997).

The housing along residential alleyways have been sites of socialization, small businesses and opportunities for housing African Americans in cities such as Washington D.C, Louisville Kentucky, and Galveston Texas. (Beasley, 2007; Borchert, 1977; Clay, 1978). Often the only housing choice for African American migrants, and recently arrived European immigrants (Beasley, 2007), alley oriented housing cultivated a parallel community with a social and cultural ecosystem all its own. Alleys can be pathways between destinations (schools, parks, churches, and neighboring houses) and, until recently, have been the domain of foot traffic, reflecting their historic foundation. Residential back alleys are thus complex cultural landscapes, existing on both the exterior and interior of the neighborhood (Martin, 2002, p. 146).

Over time alleyways shifted uses, becoming primarily for vehicle and trash storage, and less of an epicenter for social life and commerce. Over the years there has been a renewed interest in residential alleys as spaces that can bring life to cities. In the 1970s Grady Clay (1978) advocated for planners to look not toward the suburban land outside of the city for new development, but towards the alleys. To see the alley as a space that is already near existing amenities such as schools, shops and utilities. These spaces can provide housing for a variety of groups, creating new life along forgotten spaces. More recently cities such as San Francisco, Los Angeles and Seattle have redeveloped alleys to support increased pedestrian use to support local businesses, create lively public and cultural spaces, and safe neighborhood gathering spaces and corridors.



Fig. 3 Alley facing housing in Galveston Texas. Previously slave and servant quarters, later housing for low income residents. Image: Ellen Beasley



Fig. 4 Alley residents, Washington, DC, 1940's. Much of African American social life was found in the alleys during this time. Many alley homes were poorly built, an opportunistic attempt by land owners to take advantage of the large influx of African Americans migrating from the South with few housing options.

Image: 1943, Esther Bubley. Farm Security Administration Collection, Library of Congress

ALLEY IMAGINATION

FRAMEWORK FOR DESIGN, PLANNING + IMPLEMENTATION

The Alley Imagination framework comprises 6 guiding principles for use by communities and practitioners for alley redevelopment at several scales, adapted to fit the specific needs of the project and community involved. Developed from both literature on green infrastructure, community resilience, and historic African American alley dwelling communities, the framework is intended to guide the community planning process and design of alley communities. In the context of equitable and resilient transit oriented development looks to multiple interconnected principles that work to support communities to remain in place and benefit from transportation improvements.

SAFE + CLEAN

Maintenance and continued caretaking of alleys to ensure a safe and enjoyable experience all times of the day

When alleys are designed for uses beyond storing garbage and parking cars, the use and perception of the space can be seen differently. Generating support from neighborhood residents early in the process can allow for sustained community support of the space.

COMMUNITY CENTERED

Leading with lasting community engagement and community ownership of process

Neighborhood level development should be led by those with local knowledge. Planning can address historic power dynamics with a process that is restorative and led with an equity lens. A participatory planning that goes beyond informing and leads to local knowledge informing the planning and design.

REMEMBERING

Planning and design in respect to the cultural and environmental history of place

Looking at the intangible heritage of place as well as the built structures that comprise the combined memory of place. Planning from a space of remembering is the understanding that displacement is not simply a physical removal from a place. It also encompasses the historical social and cultural uses of space, such as spaces for play, providing intergenerational housing for family members and small businesses.

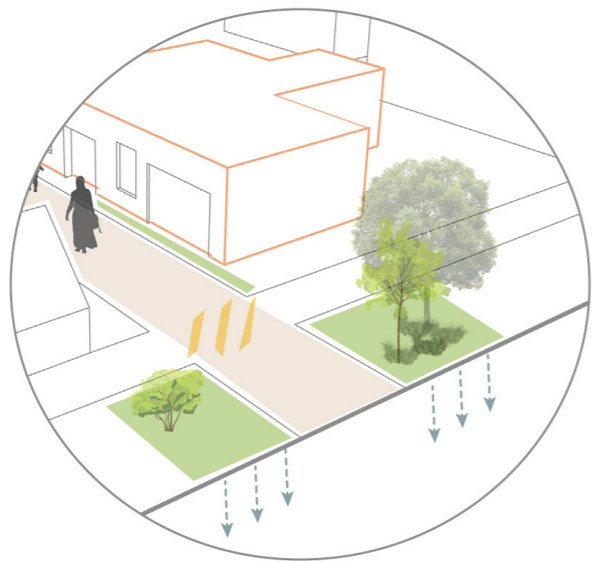


HOUSING

Housing Preservation and creation: permanently affordable rental and home ownership for all ages and stages of life. Employ green building standards for energy efficiency

Alley oriented housing supports street level interaction and enables the development of small scale housing in proximity to transportation. Housing along the alley can be transformed from existing garage space or new construction of an attached or detached Accessory Dwelling Unit (ADU or DADU) or townhome. There is also the opportunity to prioritize the preservation of naturally occurring affordable housing, family sized housing and the conservation and conversion of historic homes to accommodate housing in a growing city while recognizing the cultural and environmental value in preserving historic structures.

An aspect that is often absent from housing affordability is utility use and sustainable design. Building housing along the alleyway that meets green building standards provides affordability in utilities and addresses the increasing issues of climate change.



GREEN

Adequate greenspace for habitat, gathering and growing food

Green alleys can bring needed green space into park poor neighborhoods. These spaces can support communities vulnerable to displacement through neighborhood gathering spaces and providing opportunities for growing food through space for urban agriculture.



CONNECTED + SHARED

Create and strengthen non motorized connections for mobility within the area and to adjoining areas and shared spaces for gathering and play

The ability for transit to be accessible and to better support those that do not own a personal vehicle, as well as make these trips more possible through well developed and connected infrastructure. Alleys can provide neighborhood level passageways that are safe and inviting for pedestrians and cyclists of all ages and stages. Recognizing the need for existing services and emergency vehicles to retain access, the alley design reflects this shared space of vehicles and pedestrians, while ensuring that pedestrian safety is centered through traffic calming properties.

ALLEY PRECEDENTS

Around the United States and globally, municipalities, nonprofit organizations and residents are looking toward alleyways for the environmental benefits of green infrastructure and increasing public health and equity. Precedent projects that embody the multifaceted benefits of redevelopment of alleyways were chosen for their qualities that reflect the framework of Alley Imagination : Planning and Design for community resilience. All case studies were evaluated through the lens of the six guiding principles of being Green, Connected + Shared, Community Centered, Clean + Safe, Housing and Remembering. Although some had a combination of principles, most had at least one.

Avalon Green Alleys Network

Los Angeles, CA
Population | 3,792,621

**GREEN | CONNECTED + SHARED
COMMUNITY CENTERED**

The Avalon Green Alleys Network is a Green Stormwater Infrastructure project that is born from a partnership between the Trust for Public Land and the City of Los Angeles Bureau of Sanitation. Located in an ethnically diverse South Los Angeles neighborhood with a mix of housing, schools and commercial spaces, the project looks to combine the ecological benefits of green stormwater infrastructure with public health and community benefits such as open space, safe walking and biking passageways, alley lighting and spaces closed to vehicle traffic.

Green Stormwater management is integral in this project as a tool to address stormwater runoff and alley flooding. The Avalon green alley is part of a larger Los Angeles Green Alley Master Plan. The plan identified areas that had the highest potential for capturing and cleaning stormwater runoff, while creating open space and social connections. The alley network formed interconnected open space networks to improve stormwater management and



neighborhood quality of life. Some of the decision making involved in what alley networks to work with were if residents used the alleys frequently to get places, and alleys that connected to other streets or neighborhood destinations such as parks, schools and stores.

The project has a foundation of strong community engagement, with a multi-pronged outreach of focus groups and surveys of the neighbors living along the alleys. One key element in the success of the community outreach was the early connections forged with the neighboring high school and surrounding neighborhood. Survey distribution was done by high school students hired and trained to conduct the survey. Students conducted the face to face survey with people out in the neighborhood, going to grocery stores and farmers markets. The survey was conducted in both English and Spanish, providing insight into where the City and the Trust for Public Land would prioritize projects. Connecting with the Parent Teacher Association at a high school adjacent to the alley lead to the organization of Equipo Verde (fig.7), an environmental justice neighborhood group. Trained in the science of watersheds, connecting watershed

health with personal experience, the group became strong supporters of making changes to the alleys (E. Alduenda, personal communication, May 28th, 2020). The organization continues to maintain the alleyways and hosts tree plantings.

The renovated alleyways provided safer walking and bicycle pathways, murals in the alley, fruit trees, lighting and rain gardens closed to vehicle traffic. While the alley project has created a host of benefits for residents, it also works to preserve aquatic habitats, and recharge groundwater.

(opposite page) Fig. 5 The Avalon Green Alley demonstration project, The Trust for Public Land and The Los Angeles Sanitation department collaborated on developing green alleys to add open space and filter stormwater in a South Park neighborhood. Image: Los Angeles Bureau of Sanitation

(above) Fig. 6 Equipo Verde, a community organization that from the inception of the project has provided leadership in the neighborhood with cleanups and tree planting in the alley. Image: Trust for Public Land

Alley Flat Initiative

Austin, TX

Population | 950,715

GREEN | HOUSING | COMMUNITY CENTERED

Created in 2005, the Alley Flat Initiative is a collaborative outcome from the University of Texas, Austin, the Austin Community Development Design Center, Guadalupe Community Development Association, and the Center for Sustainable Development. The 'Alley Flats' are small homes built behind an existing home along the underutilized alleyways of Austin. The initiative begins with the goal of addressing the gap between architectural services that were provided for affordable housing that incorporated green design and sustainable elements. The initiative looked towards how design can address multiple needs such as increasing affordable housing in the City through infill along existing infrastructure and building more sustainable and energy efficient structures.

The Initiative works with both private homeowners and the local community development corporation, with 17 units completed thus far, half with the community development corporation. Marla Torrado, a planner who has been involved in the initiative, said the intention is that by building accessory dwelling units on existing land within gentrifying neighborhoods, that it could function as a tool for anti displacement, supporting families that own land and would be able to rent out the space for additional income (M. Torrado, personal communication, January 21, 2020).

Addressing the need for affordable housing, The Alley Flat Initiative provides reduced professional design services and waived permit fees if the units are in the S.M.A.R.T Housing Program areas. The SMART Housing Program is a part of Austin Neighborhood

Housing and Community Development Office and stands for Safe, Mixed Income, Accessible, Reasonably Priced, and Transit Oriented. These areas are identified for new housing on vacant land to utilize existing infrastructure in proximity to high frequency transit. The commitments to being involved in the program are green building requirements and maintaining affordability for 5 years. These units are for those earning 65% of MFI income or below and rent can be no more than 30% of household income (Austin Community Design Center, 2017). The intention of the program, to increase affordable housing stock, has been successful, providing affordable rental housing.



Fig. 7 Open house to show homes that are part of the Alley Flat Initiative. Image: Alley Flat Initiative



Alley Commons

Pittsburg, Pennsylvania

Population | 301,000

GREEN | REMEMBERING | HOUSING CONNECTED + SHARED | COMMUNITY CENTERED

As part of an Upper Lawrenceville community plan (EvoLEEA, 2013), Alley Commons works to embrace the industrial history and existing community, building on physical and cultural assets to grow into an affordable place to live, work and recreate. Emerging from a community engagement process, the Alley Commons is a part of a larger strategy, identifying the neighborhood's alleys as well as alley oriented housing as a foundation to build from. Five elements define the alley commons: Transport, Safety, Materials and Systems, Infrastructure and ownership, and Housing types. The alley commons are envisioned as pedestrian focused, with multiple transportation options, and ecologically supportive materials and design such as passive housing and permeable pavement (EvoLEEA, 2013 pp. 23-25). The alley is viewed as a collective space, with an emphasis on public space

and amenities. Rain gardens, open space, and gardens for food production and compost are identified for shared gardening. The existing alley housing was constructed during the industrial height of Lawrenceville, with owners seeing opportunity in building small scale housing along the alley. These homes are now attractive to those looking for smaller scale or affordable housing in the area.

Fig. 8 Rendering of an alley commons as part of a neighborhood visioning plan for the 10th ward in Pittsburgh Pennsylvania. Source: Evolve EA, 2013

Ruelle Vertes
Montreal, Quebec Canada
Population | 1.7 million

**GREEN | COMMUNITY CENTERED
CONNECTED + SHARED**



Fig. 9 A group of neighbors in the Rosemont La Petite Patrie district have created a green alleyway that is also edible, with the intention of growing food for the neighborhood and those in need. Source: Imagination magazine

Ruelle Vertes, or green alley, is a program started in 2013 as a citywide neighborhood based program under the Eco Quartier, with projects in 11 of the 19 boroughs in Montreal. The concept began as an architectural student project in 1968, with the hope to upgrade and beautify alleys. The student work was met with resistance from residents that were faced with more pressing social and economic issues (Williams, 2017). Eco Quartier was created in 1995 by the City of Montreal as an Ecodistrict concept that works with neighborhoods around the city to improve the quality of life and reduce environmental impact. The goals of Ruelle Vertes are to increase biodiversity,

promote social interaction across classes, support healthy districts through places to gather and space for children to play, support the sharing economy, reduce greenhouse gas emissions and increase permeable surfaces for water management.

Currently there are a total of 346 green alleys throughout the City, with more underway. The process to transform a traditional alleyway into a green alley is highly localized. For an alley project to gain approval, there needs to be a 51 percent majority of neighbors along the alley that agree. Once there is an organized group of neighbors interested in the planning and maintaining of the space they are able to apply for supportive funds of \$5,000 from the Eco Quartier to help with installation (Eco Quartier, 2019).

While most of the projects focus on reducing the urban heat island effect, capturing runoff and increasing plant biodiversity, there are social benefits as well. As a car free space, there are opportunities for a children's play space (fig.11), neighborhood gatherings or a pleasant place for people to take a walk. In response to Montreal's cold winters, there are also "white alleys" for sledding and ice skating.

One neighbor whose family has lived along the alley for generations emphasized that alleys make people more social by their nature. "It's like sharing their backyards- still a private feeling but public as well, like a shared secret" (Freehill-Maye, 2016). And while the use and the work of the alley transformation was primarily local, they collectively have become tourist attractions, with numerous news stories on the alleys that in turn bolstered their popularity and subsequent spread across the city.



Fig. 10 A young boy in an alley in Montreal that is transformed into a play space for children. The City of Montreal recognizes that spaces for young children to play are needed. Image: Pierre-Etienne Lassard

ALLEYWAYS IN TACOMA

The City of Tacoma is alley rich. There are 2,316 alleyways throughout the city, equating to 191 miles. In comparison, the City of Portland has 76 miles of alleys while Los Angeles has over 900 miles. As the City continues to grow in population, spaces such as alleyways have the potential to play a key role in the redevelopment of neighborhoods to retain a human scale and cultivate social interaction, environmental resilience and pedestrian connections. The City of Seattle legalized backyard cottages in 2009 as an infill strategy to increase housing units and affordable housing options. A 2015 study of backyard cottages conducted in conjunction with the University of Washington and Seattle's Department of Planning and Development found that of 155 cottages, 59 of them were constructed along alleyways (Buker, G., Moudon, A., 2015, p.8).



Fig. 11 Alley facing backyard cottage in Seattle's Maple Leaf neighborhood. Photo: Dan Abramson

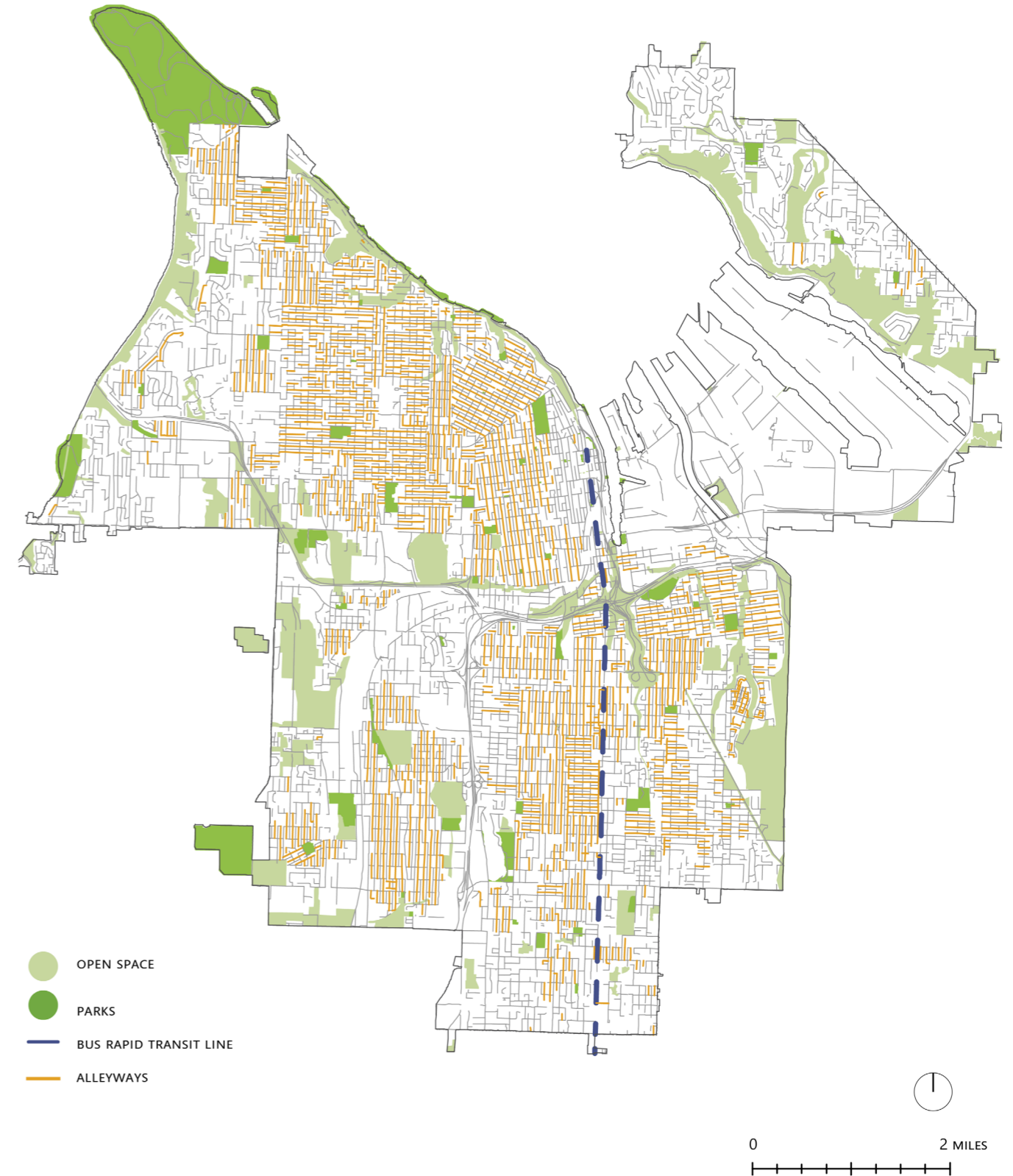


Fig. 12 Map of Thea Foss Watershed in the City of Tacoma Source: City of Tacoma

The City of Tacoma has outlined in its Comprehensive Plan for Design + Development to “Encourage the continued use of alleys for parking access and expand their use as the location of accessory dwelling units and as multi-purpose community space” (City of Tacoma, 2015 p 3-7.). Building off of the success of the Residential Infill Pilot Program, with accessory dwelling units being permitted in R-1 and R-2 residential zones, the City of Tacoma can work to fully support and develop tools and partnerships identified in the Affordable Housing Action Strategy such as a land bank, community land trust and inclusionary zoning to ensure that all segments of the community will be able to live in proximity to high capacity transit. Strolling through the alleyways of Tacoma, there are remnants of historic alley-oriented housing throughout the city. With the newly passed ordinance reducing barriers to building accessory dwelling units in the city, this is an opportunity to think about ways to implement changes to the alley as a space for additional housing, greenspace and as pedestrian corridors knitting the neighborhoods together.

Policies found in the comprehensive plan outline the need to “Integrate natural and green infrastructure, such as street trees, native landscaping, green spaces, green roofs, gardens, and vegetated stormwater management systems, into centers and corridors” (City of Tacoma, 2015 p 3-14). The City of Tacoma has a Green Roads community resolution for City roads and other infrastructure to be models of environmental, economic, and social stewardship. The recently completed green infrastructure street project at East 40th street addresses the multiple benefits of green infrastructure and public and ecosystem health. The road is redesigned with permeable pavement and bioswales to filter stormwater for the First Creek and Lower Puyallup watershed. A road diet was employed to address safety from speeding cars and a multi-use trail for pedestrians and cyclists, supporting safe routes to school efforts in the neighborhood as well. Successful

projects such as this provide a foundation for Tacoma to build upon in advancing more green stormwater projects throughout the City. Although there is no citywide neighborhood planning program, adding green alleys as a subgroup of the Green streets program would be a preliminary step to integrate green alleys into existing policy.

ALLEY AUDIT

An alley audit was conducted in the study areas to gain an understanding of the current conditions of the alleys. The alley audit was based on the work of The University of California Center for Sustainable Cities, who conducted detailed alley audits for alleys in Los Angeles. The audit, SPACES for Alleys (Seymore et al, 2007a, as cited in Wolch, 2010) was modeled after the physical audit instrument Systematic Pedestrian and Cycling Environmental Scan (SPACES), developed as a tool to measure the physical characteristics of the built environment that influence walking and cycling at the neighborhood level.

The audit instrument designed for this research is divided into four parts. The first section looks at alley surroundings such as adjacent land use. The second section looks at the material composition of the alley itself. The third is the observation of the use and condition of the alley, focusing on signs of life. The final section looks at the building type surroundings. The full audit can be found in the appendix.

Alley observations were conducted at various days and times to better capture alley dynamics. The process involved walking the alley from start to finish to make initial observations, and then a second time to make more detailed accounts of the physical condition and land use.



Fig. 13 Alley home in Tacoma’s Hilltop neighborhood

URBAN ECOLOGY + GREEN ALLEYWAYS

As urbanization increases, it has become increasingly apparent that natural processes need to be considered as cities grow. How we design spaces for an urban ecological future requires considering both the impact that human development has on the environment, as well as the role the natural environment has on human health. Green infrastructure and corresponding ecosystem services have the potential to provide multiple benefits to quality of life, public and ecosystem health (Tzoulas et al, 2007). Although seemingly small corridors within the City, alleyways have become the focus of improving human and ecological health at a variety of scales. Cities around North America have recently undertaken green alley projects, primarily with the objective of a more holistic approach to stormwater management with adjacent social benefits. Cities such as Chicago, Detroit, Omaha and Los Angeles have incorporated green alley projects as a way to address stormwater and increase pedestrian use. Increasing green space and pervious surfaces contributes to aquifer recharge and stormwater management, provides space for gathering and growing food, wildlife habitat, and safe, inviting passageways to move through the city as a pedestrian or cyclist.

The City of Tacoma is home to nine watersheds, and the study areas sit within the Thea Foss Waterway watershed (fig. 16) that has been the subject of extensive cleanup as a former Superfund site. Despite the cleanup efforts, the waterway now faces recontamination from stormwater runoff. The Thea Foss Waterway receives direct deposits from the twin 96ers, as they are nicknamed, large scale stormwater pipes that serve 4,900 square miles of drainage basins (Dalton, 2007). Impervious surfaces, such as roads and other infrastructure continues to increase around the Puget Sound, with a rate of increase as high as 4% from 2006 to 2011. This increase is negatively impacting the local watersheds and resulting in loss of salmon habitat. (Northwest Indian Fisheries Commission, 2016, p. 8) As impervious surface increases in a watershed, pollutants in stormwater runoff find their way to waterbodies. Stream temperatures increase and biodiversity decreases, reducing the number of insect and fish species in local aquatic systems. Contaminated runoff poses significant threats to freshwater, estuarine, and marine species, including the Pacific Northwest's salmon and steelhead runs. (State of our Watersheds, 2016 p.17). Increased pervious surfaces through the City's alleyways could provide outlets for stormwater infiltration as density increases along the transportation corridor.

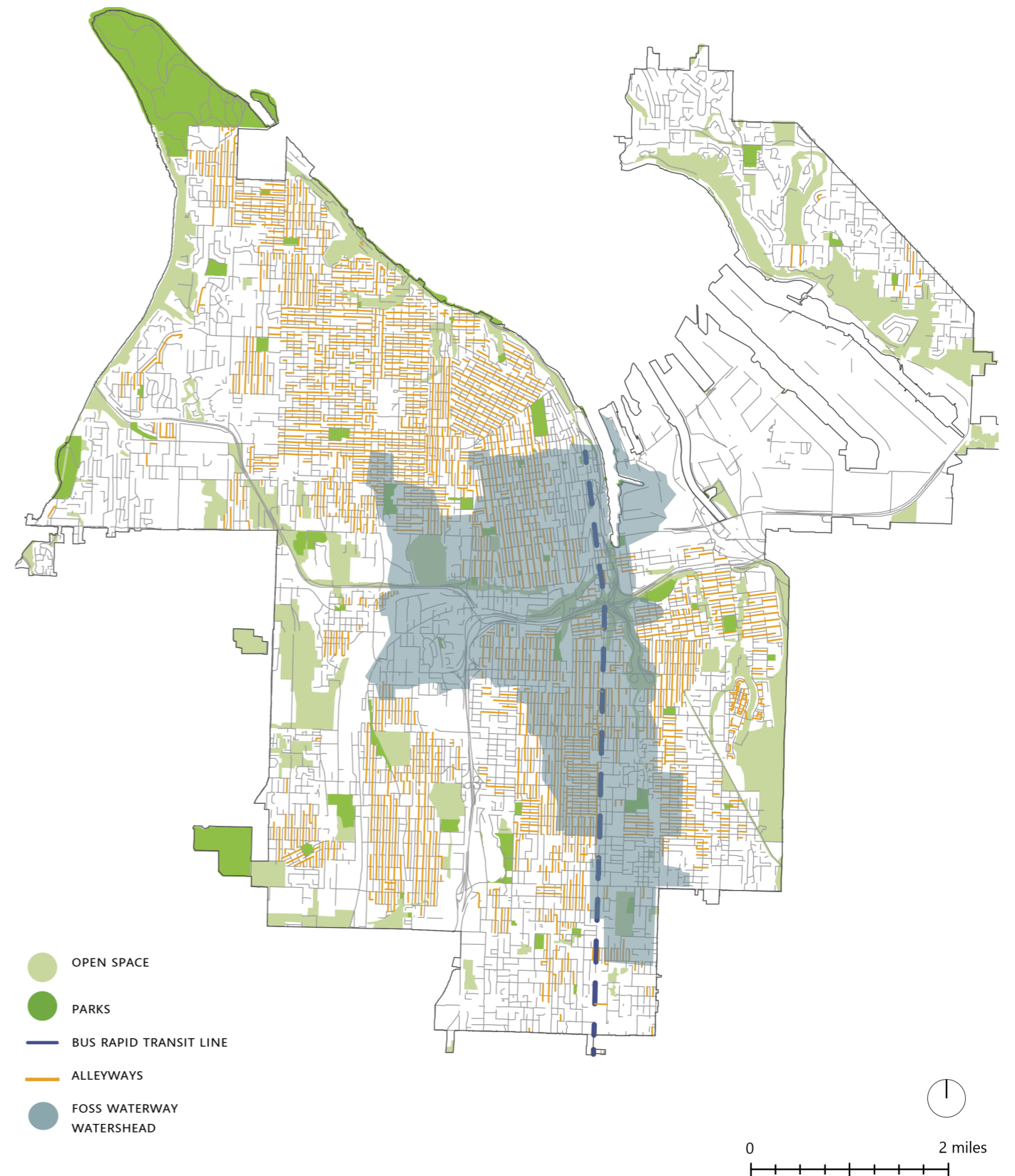
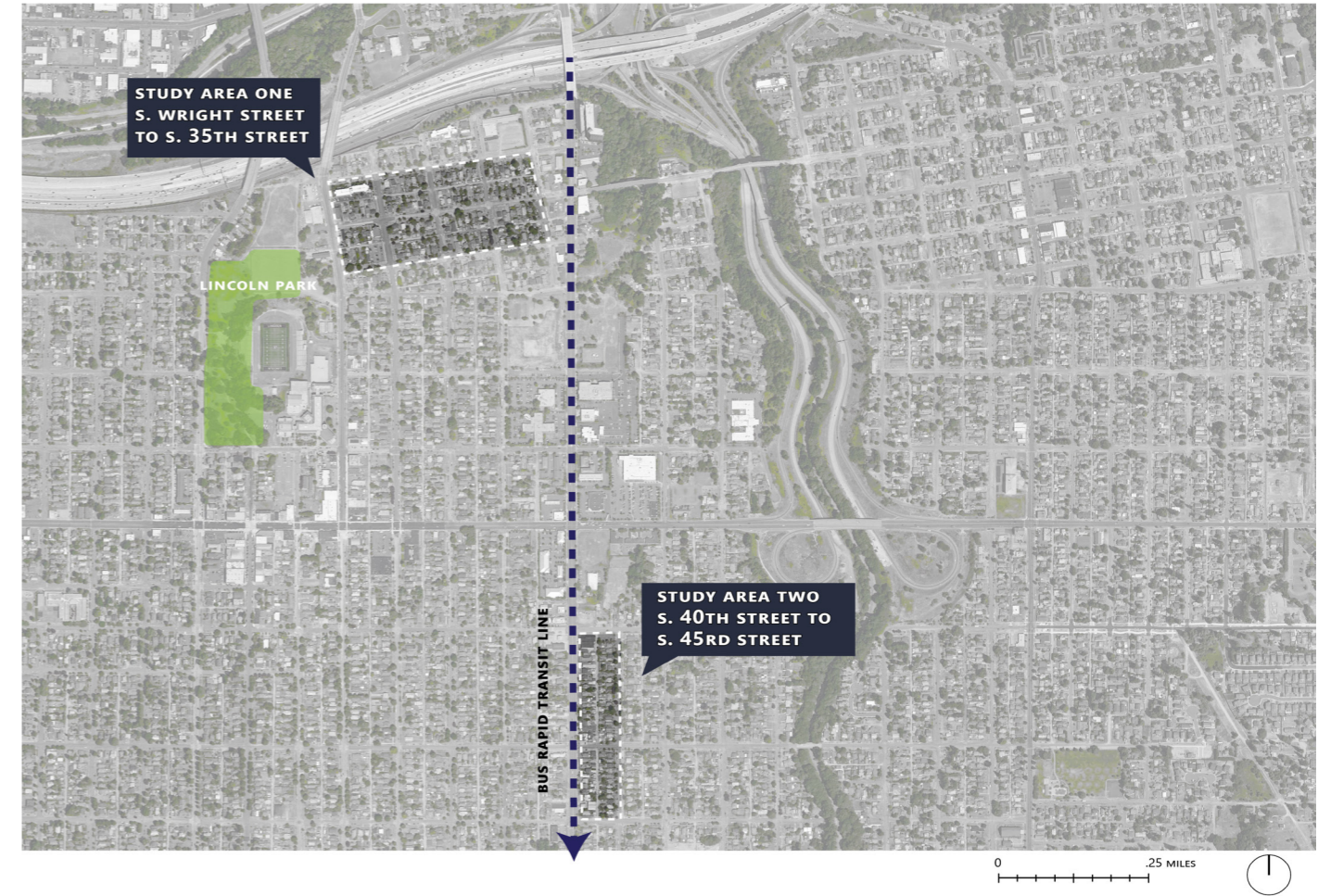


Fig. 14 Map of Alleys, parks, and green space in Tacoma Source: Esri City of Tacoma streets GIS data



Fig. 15 Map of study area sites



To better understand the physical and social site specific conditions of alleyways in Tacoma, I conducted a case study of two study areas in a high capacity transportation corridor. The study areas are situated along two nodes of the upcoming bus rapid transit line running north to south on Pacific Avenue, from Downtown Tacoma to the city of Spanaway in Pierce County. Slated to be completed in 2023, the 14 mile route passes through a number of distinct neighborhoods, each with their own social, economic and physical characteristics that will define how the area will be developed in the future. Utilizing Data from the City of Tacoma Equity Index, a tool developed to guide decisions informed by data, and an Existing and Future Conditions report by Pierce Transit, I examine the site areas and how their current uses can be integrated with Alley Imagination guiding principles to build community resilience. An Existing and Future Conditions report produced in 2017 by Pierce Transit outlined the demographics and development potential for segments of the bus rapid transit line. The half mile radius around the bus rapid

transit line has twice the percentage of non vehicle households than the rest of the County, with 11 percent for the corridor and 5.8 percent for the County.

The Trust for Public Land is a nonprofit organization that works to preserve and create parks and public spaces around the country. Their most recent movement is a park within a 10 minute walk for all people. This initiative has led to the creation of ParkServ, an online mapping tool that compiles data on parks in cities around the country and ranks areas based on park need. Areas are identified as having very high, high, or moderate need of park access outside of the ten minute walk shed. Both study areas are in areas identified as having very high need of park access, not being within a ten minute walk to a park. Barriers to park access include distance, a high speed major arterial road with few marked crossings or stop lights, and a general lack of public investment in parkland in the area.

(above) Fig. 16 Map of study areas. Source: Google Earth

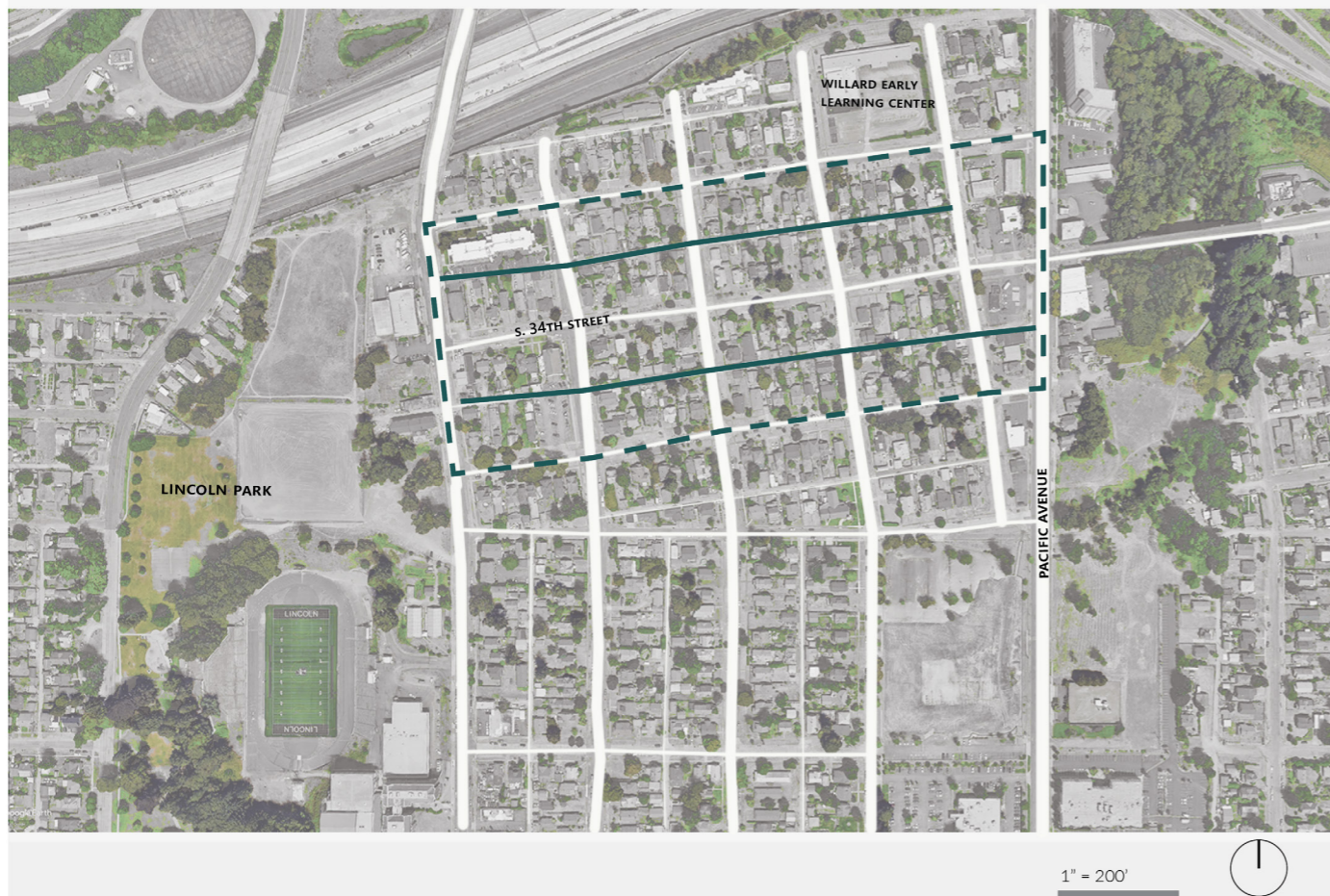


Fig. 17 Map of study area in the South End of Tacoma Source: Google Earth

The Dome Top neighborhood study area sits within a half mile of 34th and Pacific avenue, which has been identified as a future bus rapid transit (BRT) stop. The two alleys in the study travel East to West, parallel to S. 34th street, and perpendicular to Pacific Avenue. Land uses in the area are characterized primarily by single family and duplex housing, with commercial spaces and large parking lots along Pacific Avenue. Garages are the primary use along the alley, interspaced with small cottages. Although there is some trash, the alley does not experience dumping, although residents shared concerns about drug use and those experiencing homelessness in the alleys.

In the Pierce transit Initial and Future Conditions Report, the area has been identified as having a moderate level of development potential, owing to being part of a mixed use center with more intensive zoning and the presence of a number of vacant parcels. The percentage of households without a vehicle is 13.6 percent, which is higher than the county average (2017 p.7). This leads to concerns about accessibility for transit dependent populations with the potential for displacement. The City of Tacoma has developed an Equity Index for neighborhoods in Tacoma and the South End neighborhood, which the Dome Top sits within, has been identified as a space of lower opportunity. With rates of housing cost burden at 35% for homeowners and 55% for renters, this puts a significant amount of the population at risk of housing instability. The poverty rate is at 43%, highlighting the need for new development to take into consideration the current constraints of residents in the area (City of Tacoma, 2018).

There is a lack of neighborhood based connections to parks and green space, as well as spaces for gathering within safe walking distance. The role of alleyways could be part of a larger neighborhood scale plan of providing green stormwater infrastructure, additional open space, and creating connections within and to other neighborhoods. By orienting infill housing towards the alleyways, there is the potential to create a stronger residential presence along the alleyway that will further facilitate neighborhood level socialization of the space and increase safety. The opportunity is there to expand upon the existing alley oriented housing to build an alley oriented neighborhood with the alley being the social spine, and connect the residents to Lincoln Park, the BRT stop and commercial spaces.



Fig. 18 A bike and pedestrian bridge once connected the neighborhood to Lincoln Park, over what was once a ravine that was filled in during the construction of I-5. Source: Metro Parks Tacoma





Fig. 19 Images of alley conditions in the Dome Top neighborhood of Tacoma. The alleys are a mix of gravel and paved, with some trash and a few alley oriented homes.



Fig. 20 An unofficial entrance to Lincoln Park. This site area has been identified as without access to a park within a 10 minute walk by the Trust for Public Land. Green alleyways could play a role in providing increased greenspace and connecting the residents

40th and Pacific Avenue site area

The second case study area is in the East side neighborhood, between S. 40th and S. 45th and Pacific Avenue, within a half mile of a planned BRT stop. It is differentiated from the previous study area by its close proximity to the commercial corridor of Pacific Avenue, running parallel to the major arterial. The land use, while still defined by residential uses, are both single family, multifamily and small neighborhood supported businesses along Pacific Avenue. This study area has what appears to be more intensive alley usage by people, such as a basketball hoop and evidence of a car being repaired. Results from the resident survey also found that children use the alley for play. The physical condition of the alley has some graffiti along the alley and some dumping near a vacant house. The area has a few signs against the upcoming BRT, although the feeling is not representative of the area.

The Equity Index for the City of Tacoma found that the area is very low in opportunity, with a poverty rate of 47% and a high level of housing cost burden at 37% for owners and 49% for renters. The Pierce Transit document found that the percentage of households without a car for the area around 40th and Pacific, is 12.5 percent, which is twice the county average (2017 p.7). Projected development potential of the corridor

was divided into segments to examine the specific market conditions of each area. The segments were then given a ranking of 1-5, with 1 being limited market support for new development and 5 being strong market support. The case study area has been identified as having a low development potential through a market based assessment of defining neighborhoods, due to lack of vacant land and predominance of single family zoning (Pierce Transit, 2017 p.7). That could change with potential rezoning of the area for transit oriented development.

The area is currently constrained by high speed traffic and traffic volumes on Pacific Avenue, also known as State Route 7, but there is much potential to work with the site area to create public green space within walking distance and integrate additional small scale infill housing. This site area is within the Thea Foss watershed, and greening significant portions of the alleys could contribute to stormwater management. There is opportunity as alley oriented homes are already present, the housing options and density could be increased with additional alley housing, supporting residents through housing family members or additional income.



Fig. 21 Map of Study area in the East side of Tacoma. Source: Google Earth





Fig. 22 Images of alley between S. 40th and S.45th street, illustrating various conditions and uses in the alley such as dumping, small amounts of trash and graffiti. A few cottage homes line the alley between S. 40th and S. 45th, many of which are oriented to the alley.



Fig. 23 Standing water in potholes along the alley between S. 43rd and S. 45th street

ALLEY FUTURES

DESIGN CONCEPTS

SURVEY

Residents living on both sides of the alleys for the case study were presented with a survey that explores the neighborhood on a more personal, micro level through questions that address perceptions of safety, housing, greening, and sociability in relation to the alley. The survey is presented in four parts. The first part is aimed to gain a better understanding of how residents and businesses use the alley socially, and what their perception of safety in the alley is. The second part addresses housing, greening and ecological opportunities of the alley. Third part is a series of demographic questions. The fourth part is a space to think about the future and allow respondents to provide their own commentary on anything related to the survey.

In conducting the survey in the time of COVID 19, I needed to take precautions when going door to door to distribute the surveys. I kept my distance after I knocked on the door, but I found that people were eager to talk to me about the alley, and many shared concerns about the safety of the alley, trash and other activities that made them not want to walk in the alley, especially with their children.

Like other communities, safety is a consistent point of concern for residents in the alleys surveyed. Illicit activities such as drug use and theft were mentioned. Most activities in the alley revolved around garage access, trash and recycling, and residents mentioned working on cars and children playing there. Residents for the most part were enthusiastic in their response to increasing greenspace in alleys green infrastructure and adding accessory dwelling units (ADU). 9 out of 11 respondents were interested in the alley becoming a green space and 8 out of 11 respondents are interested in green stormwater infrastructure. When asked about accessory dwelling units, 3 said they like the idea, 2 said they like the idea and depends on the size and design, 1 said they did not like the idea, 4 said it depends on the size and design. Although mostly

positive regarding those additions, residents were not sure if they could see the alley become a social space. 4 out of 11 respondents said yes, they did think the alley could become a social space for the neighborhood while 4 responded they were not sure. One respondent expressed concern for people driving slowly to allow children to play and questioned if there was enough space. When asked about alley design preference, the Los Angeles and Detroit examples were the most frequently chosen. The paved aspect of the alley, along with the inclusion of plants, lighting, murals, and permeable pavement were mentioned by respondents when asked what they liked. The need to maintain vehicle access to the alley due to the dual needs of utilities and access to personal garages was reiterated. But what did people like about their alley? A few people appreciated the quiet of the alley, having a safe space for their children to play, and the opportunity to visit with neighbors and dogs.

The survey results illustrate a level of interest in multi beneficial alley projects in the site area, with comments such as “less graffiti, more green”. Although the amount of data collected cannot be used to represent preferences and attitudes of the neighborhood, much less the city as a whole, it exhibits a strong and relatively unified interest in elements of Alley Imagination. Some residents asked if any change would come from them participating in the survey, I told them it was for my degree at the University of Washington, so probably not. I do hope that the results of this survey will spark a level of interest that reflects that of the residents, to see attention brought to the alleys in the City. The City of Tacoma and other potential partners can explore these concepts in the future, and these results can be used to develop outreach and planning to address alley usage, concerns and interest of residents and business owners.

The following design prototypes look at how applying the Alley Imagination Framework to policy and design could shape Tacoma alleys in the future. Residential alleys are found throughout Tacoma between a mix of single family, duplex and low rise multifamily developments. Primarily used for garage access and utilities, they represent a space between buildings that is underutilized but could be redesigned to provide multiple uses. While this discussion and design is focused on residential alleys, The Alley Imagination Framework for planning and design is applicable at other scales. The designs in this document focus on the implementation of the 6 guiding principles in two alleys, as growth and change occurring at the neighborhood and City level.



Fig. 24 Alley Imagination diagram with multiple benefits

RESIDENTIAL ALLEY

Alley between 40th and 43rd street



Fig. 25 Image of alley in Eastside Tacoma neighborhood

Alley between S.34th and Wright street



Fig. 26 Image of alley in South End Tacoma Neighborhood

Alley between 40th and 43rd street



Fig. 28 Imagined alley space in an Eastside neighborhood of Tacoma, applying elements for resilient and equitable alley development in proximity to high capacity transit

Alley between S.34th and Wright street



Fig. 29 Dome Top alley with permeable pavers, pollinator flowers and infill housing added

DISCUSSION + FUTURE EXPLORATIONS

FUTURE EXPLORATIONS

The City of Tacoma, in partnership with local organizations and the community, can look at how to collectively plan and design for the increased utilization of alleyways throughout the City. Building from the research in this document, the City of Tacoma can develop a city wide alley program, referencing the Alley Imagination Framework for planning and design through a community resilience lens.

- **CONNECT WITH AFFORDABLE HOUSING + SUSTAINABILITY POLICY**

Utilize alley planning as key element in planning for affordable missing middle housing and sustainability for the City

- **INTEGRATE WITH CITYWIDE MOBILITY + NEIGHBORHOOD PLANNING**

Integrate alley planning into neighborhood planning and a bicycle and pedestrian master plan for the City.

- **PILOT PROGRAM + TOOL KIT**

Create a pilot program for alley redesign, prioritizing an equitable distribution of projects in areas at risk of gentrification and in need of increased green space.

- **TEMPORARY INTERVENTIONS**

Develop temporary alley improvements with a kit of tools, enabling neighborhoods to employ pop up alley improvements or temporary events

- **BUILD PARTNERSHIPS**

Citizens for a Healthy Bay, Center for Urban Waters, Safe Routes to School, and Puyallup Watershed initiative are all organizations active in Tacoma

DISCUSSION

Residents, community members, and planning and design professionals can collectively think about how urban areas grow and change in proximity to high capacity transportation. By expanding what we imagine can be done in and along alleys, new development can become more socially and ecologically resilient, supporting fine grained infill development, and contributing to a greener and more equitable city. Drawing on historic land use along alleyways and social and cultural uses of space, Alley Imagination is an accessible framework for alleys in Tacoma. Through design and planning that change the social and ecological construction of space, alleys can become the green and accessible backbone of a neighborhood. Transforming alleyways from spaces that feel unsafe into community amenities can improve physical and mental health. Well designed alleys can become safe and clean spaces to walk and bike, expanding the network with other neighborhoods. Social connections between residents can be improved through neighborhood level organizing and increased opportunities for casual visits and a space for gathering. Ecologically, increasing green space along alleyways with plants and flowers can support local biodiversity and ecosystems and reducing impervious surfaces. Through the reduction of impervious surfaces, low impact development and green

infrastructure, local water resources can be protected, along with the social and cultural connections to waterways such as the salmon of the Puyallup River with significance to the Puyallup and other Northwest tribes. Further contributing to community resilience, infill housing can support residents to stay in place as housing prices increase, generating an alley community that is intergenerational and accessible. Current alley programs around the country are often done in partnership with multiple local and national nonprofit organizations. The research and survey findings in this document provides a base for further exploration though government and nonprofit partnerships. The City of Tacoma has many opportunities to build and collaborate with local organizations, such as Citizens for a Healthy Bay, Puyallup Watershed Initiative, The Department of Ecology, and the Center for Urban Waters. Opportunities for future exploration and research include developing urban design guidelines for shared public ways, developing a toolkit to guide alley development, conducting research on alley history in the City of Tacoma and working to change the public perception of alleyways in the City, so residents are able to imagine their alleys in new ways.

APPENDIX

ALLEY AUDIT

The alley audit was based on the work of The University of California Center for Sustainable Cities, who conducted detailed alley audits for alleys in Los Angeles. The audit, SPACES for Alleys (Seymore et al) was modeled after the physical audit instrument Systematic Pedestrian and Cycling Environmental Scan (SPACES), developed as a tool to measure the physical characteristics of the built environment that influence walking and cycling at the neighborhood level.

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Alley observations were conducted at various days and times to better capture alley dynamics. The process involved walking the alley from start to finish to make initial observations, and then a second time to make more detailed accounts of the physical condition and land use.

A. Alley Surroundings

1. What land uses border the alley?
2. What is the dominant land use?
3. How wide is the alley?

B. Substrate

1. What percentage of the alley is covered by impermeable surfaces?
2. Is there a culvert or drainage ditch?

C. Use, Condition and Safety

1. What types of 'signs of life' are observed in the alley?
 - a. Human
 - b. Animal
2. What amount of small litter is found in the alley?
3. What amount of large garbage is found in the alley?
4. What amount of graffiti or street art is found?
5. How aesthetically pleasing is the alley?
6. What level of walkability characterizes the alley?
7. How many municipal lighting fixtures are in the alley?

D. Building type surrounding

1. What type of building structures are along the alley?
 - a. Garage
 - b. Small cottage home
 - c. Carriage house

INTERVIEWS

Marla Torrado

Planning Director, Community Powered Workshop

1/21/2020

Eileen Alduenda

Executive Director, Council for Watershed health

5/28/2020

QUESTIONS for Eileen Alduenda: discussing her organization's role in Green alley projects in the Los Angeles area.

1. With the role of community engagement and participation in various levels of design and planning, have you seen or /been involved in some innovative community organization work in relationship to green alleys?
2. How did the South LA green alley master plan come to be? Was your organization involved? What thoughts do you have for other cities interested in developing similar programs?
3. What are some memorable moments/ accomplishments associated with the green alley program?

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