107 ALLEY REDEVELOPMENT STRATEGIES

Downtown Bellingham, WA

March 15, 2014

WWU Planning Studio 2014
Urban Transition Studio (UTS) Planning Series
Huxley College of the Environment | Urban Planning and Sustainable Development
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Acknowledgements

Our appreciative thanks are extended to our Urban Transitions Studio community partners and supporters:

_Bellingham City Council_
- Cathy Lehman, Chair
- Jack Weiss
- Gene Knutson
- Pinky Vargas
- Terry Bornemann
- Michael Lilliquist
- Roxanne Murphy

_City of Bellingham_
- Darby Cowles, COB Development Specialist
- Lisa Pools, COB Downtown Planner
- Chris Coch, COB Planner
- Chris Comeau, COB Transportation Planner
- Katie Franks, COB Development Specialist

_Sustainable Connections_
- Rose Lathrop, Green Building and SG Manager

And to all the downtown businesses that generously supported our students’ work.
## 107 Alley Redevelopment Strategies

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1. Introduction

Bellingham's Downtown Alley Redevelopment

Downtown Bellingham's central alleys comprise about 3 acres of public-owned land in the heart of our city. The frontage of these public rights of ways exceed 6,000 linear feet abutting private and public owned properties. Alleys provide a valuable serve in supporting our downtown businesses. They also provide tremendous opportunities for improving the public sphere of the downtown community for increasing social capital and fostering the continued expansion of retail businesses, residential mix use housing, and other community and economic benefits.

The 2014 WWU Planning Studio class evaluated development alternatives for improving downtown’s alleys. Students drew from their acquired knowledge of the site, discussions with city planners and city officials, interviews with downtown business owners, review of city goals, policies, and plans, and inspiration from New Urbanism design and planning principles, to develop a range of alley improvement strategies that are intended to help inform the 2014 update to the draft Downtown Plan, currently in public deliberation.

What makes Bellingham’s downtown a unique and vibrant place, despite a series of economic setbacks that began in the late 1980s, is due to several important factors: it’s persistent resiliency; its ability to adapt to changing conditions; its retention of many traditional social, institutional, and economic central-city functions; its human and pedestrian-oriented scale; its central location; its historic character and infrastructural assets; its youthful demographics; and its growing diversity. Coupled with a concerted effort by the City of Bellingham and downtown business interests to foster continued social and economic revival, the downtown has experienced a significant process of economic and social revival during the past two decades. Downtown Bellingham is a great place because, in part, it wasn’t “master planned”, but rather, has experienced a series of development processes over time that has produced a rich mixture of vibrancy and a diverse character. The downtown might be best described as a “cluster of distinct micro district places” that have emerged through the attraction of new investments and pioneering business startups that have contributed to the rehabilitation of these formerly underutilized spaces.

This studio project seeks to supplement many of the important development processes that have occurred over the past decade in our downtown by closely examining improvement opportunities for our long-time underutilized, yet emerging, downtown
alleys. Our students, working in project teams, formulated a series of urban design strategies to help facilitate new ways to think about urban redevelopment of downtown’s alleys in order to meet Bellingham’s goals for vibrant central city development. They have recommended a series of development approaches that can contribute to the downtown’s economic, social, and environmental vibrancy and sustainability.

Our students evaluated current alley conditions as well as city center long-range goals to develop a series of conceptual strategies that emphasize:

- Redevelopment capacity and the opportunities for urban infill
- Potential for business expansion
- Adaptive reuse of underutilized sites
- Mixed use activities promoting public safety and economic vitality
- Promotion of architectural, urban character, and historic properties assets
- Maximization of alley rights of way for public use and increased social capital
- Opportunities for creating public plazas and other public spaces
- Private and public sharing of alley spaces
- Improvements for non-vehicular accessibility and connections
- Strategies for integrating environmental and sustainable design

The array of redevelopment concepts contained in this report constitutes a beginning step for formulating strategies improvements to Bellingham’s core 15 alleys. In a subsequent Planning Studio II class in the spring, students will further consider implementation measures to advance these conceptual development strategies.
The draft 2014 Downtown Plan identifies alleys as an important, yet still largely underutilized, element of the downtown urban landscape. The draft plan recognizes “the scale of the buildings, narrow alley passageways and architecture make downtown alleys visually alluring.” While downtown alley spaces are used primarily for servicing downtown businesses (e.g. garbage and deliveries), they hold tremendous promise for providing spaces that concurrently can promote social capital and the further expansion of business activity. While the draft downtown plan identifies, as a starting point, the consideration of two alleys for improvement (Morse Alley and Commercial Street Alley), this planning study further advocates the comprehensive consideration of all of Bellingham’s 15 central downtown alleys.
2. Alley Development Goals and Policies

The 107 alley redevelopment strategies contained in this student analysis were inspired, in part, by the following draft goals and policies contained in the 2014 Draft Downtown Plan.

GOAL 3.1: Downtown Bellingham continues to be the center of Whatcom County job activity.

POLICIES
3.1: Provide the transportation and parking infrastructure and redevelopment incentives that support continued business expansion and relocation to Downtown.
3.2 Develop public-private partnerships to capitalize on the various strengths of the government and business sectors to achieve larger projects.
3.3 Develop targeted strategies to promote redevelopment of Downtown’s long-term vacant spaces.
3.4 Continue to offer incentives to encourage investment in Downtown.
3.5 Continue to identify barriers to Downtown investment and redevelopment, and pursue initiatives to remove these barriers.

GOAL 3.2: Downtown housing accommodates an increasing and diverse residential population.

POLICIES
3.8: Encourage development of a wide range of housing types that are affordable to all income ranges.

GOAL 3.3: Tools and resources, such as LEED-ND, EcoDistricts, Greenroads and other innovations are utilized when appropriate to facilitate sustainable projects.

POLICIES
3.9 Ensure that City development regulations, design standards and permit review processes encourage the use of sustainable tools and resources.
3.10 Promote energy conservation in City of Bellingham facilities and services.

GOAL 3.4: Design and construction of buildings Downtown include sustainable elements that contribute to a healthier, more livable community.

GOAL 3.5: The impacts of untreated stormwater on Whatcom Creek and Bellingham
Bay are reduced through the application of low impact development techniques, such as green stormwater infrastructure.

POLICIES
3.11 Encourage building owners to participate in energy efficiency retrofits and access incentive programs, such as the Community Energy Challenge, to help subsidize these upgrades.
3.12 Whenever possible, projects in the public right-of-way, such as streetscape improvements and stormwater systems, should incorporate bioswales, rain gardens and other green infrastructure elements.

Goal 3.6: Preservation of historical building and landmarks Downtown.

POLICIES
3.13 Consider creating incentives such as the following to encourage the preservation and rehabilitation of historic buildings
3.15 Encourage businesses to use signage designed, sized and located primarily for pedestrians and compatible with the character of Downtown.
3.17 The City should, whenever possible, uncover, preserve and restore historic landscape features such as rail tracks, brick streets, granite curbs, glass sidewalk prisms, and other small-scale features that tell the story of Downtown's layered history.

HS-GOAL 3.8: Downtown is a safe and welcoming place for all ages and walks of life.

POLICIES
3.23 Strengthen partnerships with local business networks, human service providers, and mental health agencies to address behavioral and safety issues Downtown.
3.24 Continue to maintain a clean, pleasant Downtown streetscape that includes hanging flower baskets, landscaped flower beds, street trees, and potted plants
3.25 Encourage property owners to activate dead spaces and blank walls by adding exterior windows, removing tinting from windows, and improving the space in front of their buildings.
3.26 Partner with Downtown business owners, property owners and organizations to provide services to maintain and improve the cleanliness and environmental health of Downtown.
3.27 Support initiatives to create a Business Improvement District to enhance vitality and provide services such as facilitating commerce, cleaning streets, providing security, making capital improvements and marketing the area.

GOAL 4.1: The Commercial Core area is economically healthy, unique and attractive, offering a full range of employment, housing, retail, cultural and recreational opportunities.
POLICIES
4.1 Downtown zoning and development regulations encourage and allow a full range of high quality mixed-use development options that include ground floor retail, a mix of housing types, offices and entertainment.
4.3 Improve the quality of the pedestrian experience throughout the Commercial Core.
4.8 Encourage preservation and adaptive reuse of historic buildings and historic single family residences as infill occurs.

GOAL 4.4: The historic character of the neighborhood is maintained while appropriate and compatible infill development occurs.

POLICIES
4.9 Encourage the design of alterations and additions to be compatible with existing historic features.

GOAL 5.1: Downtown’s concentration of art galleries, live music, theatres, museums, the Central Library and other creative and cultural destinations is cultivated, expanded and promoted.

POLICIES
5.1: Maintain a healthy mixed-use environment that respects the needs of both residents and late night venues, as outlined in the City's Entertainment District ordinance.
5.3: Incorporate art wherever possible into the Downtown streetscape, including the small triangular spaces at the ends of blocks where differing street grids intersect.
5.4: Continue to foster partnerships between property owners and arts organizations to create street-level interest in vacant ground floor commercial spaces with pop-up galleries and art in display windows.
5.5: Enhance and upgrade the City’s Downtown outdoor art collection.
5.6 Encourage private and public galleries and other art venues to locate Downtown, especially within the Arts District.
5.7: Enliven Downtown streets by allowing and encourage street performers.
5.9: Support community arts events, such as monthly “First Friday Art Walks”.

GOAL 5.2: Downtown Bellingham is an increasingly attractive destination for tourists.

POLICIES
5.14: Enhance the way-finding experience of visitors Downtown by providing signage, clear driving directions, information kiosks, a visitor's center, and pedestrian amenities.
5.15: Promote Downtown as a historic destination.
GOAL 6.3: Plazas and pocket parks draw people to use these spaces in a variety of positive ways.

GOAL 6.5: Visitors and residents have well-connected, safe and pleasant ways to walk or bike to, from, and through Downtown, and can easily access nearby parks and trails.

POLICIES
6.1 Partner with community organizations to provide an ongoing variety of programmed activities in the park.

6.3: Encourage use of new and existing public spaces by incorporating amenities and opportunities for interactive play and functions that serve all ages and demographic groups.

6.4: Review and prioritize investment in identified Placemaking Opportunity sites.

6.5 Conduct short-term experimental uses of public assets for community events and public outdoor space. This could include temporary street closures, events on the Commercial Street Parking Garage rooftop, and creative use of sidewalk space.

6.7 Encourage and support establishment of a year-round Farmers Market

6.8 Continue to experiment with temporary closure of Railroad Avenue during market days.

6.9 Enliven the Depot by adding retail and food services, programming the space for community events/competitions/etc., incorporating tables and movable furniture, and installing a permanent outdoor performance space.

6.10 Use Placemaking or other enhancement tools to improve and expand the public spaces and/or increase activities at the Commercial Street Plaza, Unity Circle, the Whatcom Museum parking lot, City Hall Flag Pavilion, Central Library lawn and Bay Street Plaza.

6.11 Continue to develop a coordinated circulation system with wayfinding and connections to existing trails and abutting neighborhoods to facilitate non-motorized transportation use and bring more people Downtown from adjacent neighborhoods.

6.12 As redevelopment and infill continue to occur, seek partnership opportunities to add plazas and walkways that will enhance the existing open space network serving the urban core.

GOAL 7.3: Downtown’s sidewalk and trail network accommodates pedestrians and bicyclists and provides linkages to regional trail systems.
POLICIES
7.4: Link popular Downtown destinations by clear transportation connections, activity along sidewalks, safe crossings and directional signage.
7.5: Fill infrastructure gaps in the sidewalk, bicycle, and multi-use trail networks between Downtown, the surrounding neighborhoods and the Waterfront District.
7.6: Strengthen safe, convenient, and easily accessible connections to surrounding neighborhoods.
7.7: Work with Downtown businesses to promote pedestrian, bicycle, and transit use for their employees and customers.

GOAL 7.4: Creative alternative uses of the public right-of-way offer new opportunities for public space, while balancing the needs for traffic flow and parking.

POLICIES
7.9 Use streetscape amenities to establish a unified image for Downtown and promote a sense of place.
7.10 Allow and support parklets, bike corrals, and other creative uses of the right-of-way in appropriate locations to activate the street and provide public space.
7.11 Incorporate Placemaking principles where the right-of-way can accommodate attractive and inviting pedestrian amenities.
7.12 Continue to promote uses and facilities that enhance the public realm, such as ground floor retail, plazas and parks, landscaping and street trees.

GOAL 7.5: Downtown alleys are clean and safe, with targeted corridors serving as bicycle or pedestrian connections where appropriate, and may include public space amenities and retail destinations.

POLICIES
7.14 Accommodate all users of alleyways and support businesses adjacent to alleyways.
7.15 Where appropriate, install warning signs or alternative surfacing treatments to signal to all alley users that this is a shared space and to use caution.
3. Alley Redevelopment Strategies
3.1.1. Introduction

Alley 1, 2, and 3 sit nestled in between the historic commercial centers of Old Whatcom and Sehome, which were connected in 1889 when Holly Street bridged Whatcom Creek for the first time and promoted new enterprise along the lower waterfront. Initially the area was dependent on the shipping commerce, which entered the towns along the pylon piers that jutted out over Bellingham Bay, as well as the seedy yet lucrative Red Light District situated across the Creek. The area benefitted from its proximity to the railroad tracks and access to water, which helped it grow rapidly during its first 50 years, bringing in sailors, merchants and entrepreneurs. The Great Depression abruptly ended a long period of local prosperity, and as mining and logging commerce slowed following WWI the area went into a slow decline. The population shifted out of the area and up the adjacent hills away from the dirty industries, which
then lined the waterfront. Today the area is experiencing a slow revitalization after a many years of losing retail and commercial leases to cheaper land away from the waterfront. Old Town sits poised to reinvigorate as it enters the next decades of the 21st century, thanks to major redevelopment plans for the waterfront; both on the former Georgia Pacific site and in the Army Street corridor. With existing flourishing local businesses and a rich historic and artistic culture, Old Town alleys can be a powerful tool for restoring the district’s former strength in concurrence with both the Downtown Draft Plan (2014) and the Old Town Subarea Plan (2008), by invigorating certain spaces not addressed in either.

3.1.2. Objectives

The intent of this plan is to provide framework for renewal of the forgotten areas behind favorite local buildings and businesses: the alleys. These areas are currently out of sight and mind for many people, despite their massive footprint and provision of existing quality and historic infrastructure. Adaptability and reuse are key to shifting the attitude many hold towards these dark and dirty spaces which persist around society but act as barriers to interaction and local appreciation while their surroundings are rapidly beautifying with utmost attention to economy, equity and environment.

Vision
The alley sites could benefit from a set of objectives that embrace the former walkability of the area and historic uses of the waterfront and adjacent districts. This should be accomplished through conscious 21st century implementation of multi-modal travel infrastructure and enhanced pedestrian vitality with the intent to reclaim the former commercial successes of the historic center of the Four Cities. This vision is concurrent with the plans put forward by the City of Bellingham to create an urban village atmosphere in Old Town and along the Waterfront. Studies of the alley infrastructure in Old Town and the CBD, along with data gathered from the local business, property owners, and nearby residents, have resulted in the following visions relating to the redevelopment of these spaces:

1. The alleys are clean, safe, well-lit, and desirable family-friendly spaces that allow for a variety of uses including, but not limited to:
   - Pedestrian and bike paths buffered from car traffic on downtown streets
   - Wind and rain shelter from inclement weather
   - Bike parking spaces
   - Delivery zones, waste pickup and the provision of utility services
   - New development and economic infill opportunities along vacant spaces fronting the alleys
   - Green spaces and pocket parks
   - Food vendor areas and other semi-permanent services
   - Educational spaces that inform citizens about the local history and former character of the district
   - Wayfinding sites for critical and historical points throughout the downtown corridor
   - Views of the Bay, mountains and landmark architecture throughout Old Town and downtown

2. The alleys enhance the interconnectedness of the city’s parks, plazas, green spaces and pedestrian trails.

3. The alleys are an integral part of the city’s history and cultural character, and are maintained with the same attention given to the streetscape and adjacent building fronts.

4. The alleys promote safe multi-modal travel and are quickly accessible by transit, bicycle and on foot.

5. The alleys are spaces for new development opportunities that depart from a 60-year history of auto-oriented infrastructure in the downtown core, re-focusing on pedestrian access and adaptable uses to the benefit of the community.

6. The alleys are destinations for people of all income levels and backgrounds.
7. The alleys enhance the visibility, prominence and success of new and existing adjacent businesses, contributing significantly to downtown's economic engine.

8. The alleys continue their function as delivery and waste corridors, with notable improvements to each.

9. The alleys provide signage and wayfinding through the downtown district, allowing shoppers and pedestrians clear directions to nearby destinations.

10. The alleys mitigate stormwater runoff with environmentally sound practices that prevent water damage and pooling, as well as new techniques that mitigate chemical runoff into the Bay.

3.1.3. Site Analysis

**Understanding the Nature of the Alleys**

Currently, alleys 1, 2 and 3 do not reflect the desirable characteristics of the vision put forward by the City and community. The spaces, character and users of the alleys change drastically between mornings, day and night, as well as seasonally and annually. This dynamic nature presents a variety of issues and opportunities relating to these spaces.

**Land Use Analysis (Existing)**

Existing local land uses are mostly commercial offices and ground floor retail, with a few buildings containing upper level residential units. Logos software is the largest area employer, but the majority of space is devoted to local businesses, including art shops, museums, cafes and restaurants, and small retailers.
Hard Soft Analysis (Proposed)

In analyzing the district for redevelopment potential, surveying yielded several areas that show opportunities for new uses. These are categorized as the “soft” spaces in the diagram above. These include parking lots and building-back storage spaces that front the alley and could be converted into new retail or other uses. “Medium” spaces include larger, more profitable parking lots that could accommodate diurnal uses, as well as a building in Alley 2 that could see some spaces reused (it currently contains a mix of uses, some of which are not permanent).

Issues

The alleys have a variety of problems to address before they are able to properly harbor the uses that would best benefit the community. A study of the local needs resulted in identification of the following issues:

Disputes over Garbage Receptacles

Despite the tremendous number of waste, recycling and compost bins that line the alleys, businesses regularly fill theirs before sanitation services come to pick them up. Without an alternative for disposing of this waste, businesses sometimes throw things away in bins belonging to other businesses. They do not pay for the pickup of others’ bins, and in certain areas this is damaging the district’s cohesion if adjacent businesses are continually conflicting over this issue. This minor social tension between businesses will need resolution before the alleys can function properly.

Poor Lighting

Much of the alleys do not have proper lighting that would befit a safe and walkable space. This is especially the case far from the block edges, deep behind the buildings. Bad lighting prevents a majority of the population from using these spaces or even walking through them, and allows for illicit activities where visibility is low.

Blind Spots

Many building backs do not have first or second-story windows at all, which allows for areas in the alleys where there is a severe lack of attention or visibility to the streetscape. Some buildings do not even have back doors to the alleys, which would provide another possible mitigation for this issue. When coupled with bad lighting, this greatly reduces the desirability of the spaces behind buildings for a large proportion of people, and makes unwanted activity extremely easy for people looking to be invisible to passers-by.

Cleanliness
The state of the alleys today is one of minimal responsibility, both from local businesses and the City. Occasionally cleaning crews wash the alleys, but this is an infrequent and costly practice, and only exercised when absolutely needed. More oversight and business involvement is needed to keep the alleys in the proper shape for additional uses. Everyone who uses, and will use, the alleys can take a portion of the responsibility of keeping the ground clear of disposed items, increasing their aesthetic appeal.

**Loitering**

Another major issue discussed during the survey period was the high incidence of loitering going on in the alleys. Loitering is not inherently criminal, but this is a problem due to the types of uses this promotes today, especially in the deep alley blind spots far from the sidewalks. Proper plazas and sitting areas promote loitering as well, but it is currently an equity issue at the moment. Certain groups currently overuse the alleys due to their lack of eyes, and these activities unfortunately dissuade the majority of the population from walking down or using them. Incorporation of these groups into the larger scheme will be essential to make these spaces useful and beautiful in the future. The right spaces allow for people of all income levels and backgrounds to enjoy them equally without constraint.

**Opportunities**

In addition to the issues discussed above, the alleys, and the areas directly adjacent also present the city with numerous opportunities that could merit transformational changes in the appearance, uses, and visitors of these spaces. Some have been identified below:

**Historic Qualities**

The Old Town subarea features some of the oldest commercial buildings in the city, as well as beautiful architecture reflecting Bellingham’s maritime and cultural past. These qualities make the area an ideal location for new educational and wayfinding destinations, as well as framed views leading to historically significant buildings and other landmarks. This thematic character of the area should be at the forefront of any changes made in or around the alleys.

**Existing Anchors and Destinations**

With a variety of existing shops, boutiques, restaurants, and museums, the area already represents a great cultural value to the city, and this could be reinforced with additional retail, food, or open space that encourages further interactions between people and the existing character.

**Event Facilities**
Existing infrastructure has a high potential for certain areas to support transformation into a variety of event staging grounds. With many of these open spaces going underused, there is an opportunity for temporary or even semi-permanent provisions of community-engaging infrastructure that promotes interaction and local relevance.

**Sanitation**
Due to the issues with sanitation occurring in the alleyways, there is a need put forth by the business owners for a solution to this problem. Simply by making a designated area for waste receptacles, the alley could become more than just a place to store trash.

**Plaza Spaces**
Some areas display a high potential for new plazas that would promote leisure. Places to sit, talk, eat, meet friends, promenade and people-watch are all forms of community engagement that would lend heavily to the character of the district, and enhance the culture and vigor of the current site.

**Greenery**
In addition to plazas and other uses, there is a high capacity for additional greenery in and around the alleys. Small footprint green areas will lend themselves to the city’s desire to harbor an environment that embraces nature at every turn. Bioswales, columnar trees, local and native plant boxes on building sides and green roofs/walls are all possibilities for turning a blank space into an ecological niche. These also contribute to the aesthetic appeal of the area.

**Future Development (Army Street, Waterfront)**
With a number of new projects slated for Old Town and the surrounding area, major investments will greatly impact the character and uses of the existing spaces. New small-scale retail and local vendors can supplement these large-scale projects. Alley frontage can be converted to hold a number of these new additions, and maximize the economic potential of existing infrastructure, without tearing down historic buildings for large-scale projects. The major projects will bring new residents and patrons in, increasing cohesion in the sense of community that already binds the district. The area is returning to its former status as the center of economic opportunity and vitality in the city; it will be essential to guide new development to fit into the historic fabric that made Old Town the cultural center of the city.

**Lighting**
There is a large opportunity to increase the visibility of the alleys by creating better lighting. The Old Town character can be continued in the alleys with old lamp fixtures. Adding sufficient lighting will create a safer area so people are more likely to
explore at all times of the day. By creating a well-lit and fun space with string lights, it will invite people to explore and walk down the alleys.

3.1.4. Character Districting

Surveys of the existing forms and functions of Old Town have yielded insight to the uses and retail types that currently make up the district. This lends information to the types of uses that are in abundance, as well as certain gaps in function that reflect current needs for new development types. Alley 1, 2 and 3 currently sit in a well-defined district with plenty of existing uses and business types. Minimal storefront vacancies and a strong economic history help detail what kind of uses can best supplement the existing businesses. An equally strong public realm can best serve a strong private realm. Businesses would benefit from additional outdoor uses to attract pedestrian customers and generate intrigue towards the dynamic streetscape. The area currently features a healthy variety of restaurants, bars and cafes (the most prominent of which include Bayou on the Bay, Rocket Donuts, the Old Town Cafe and the Wild Buffalo), in addition to some large-scale offices (Logos Software), cultural commerce (Mindport Museum, Spark Museum, Pickford Cinema and the Upfront Theatre) as well as a few smaller retailers.
3.1.5. Alley Redevelopment Strategies

The Alleys
Assigning a name to each of the alleyways provides society with a definite sense of place. These names are a way of placemaking and adding to the character of the Old Town area. The names that have been chosen are ones that have been picked for certain historically information, but there are endless possibilities.

Alley 1: Oakland Row
Oakland Row sits nestled on the smallest of Old Town’s commercial blocks, behind the former Oakland Hotel. Today it features local specialty businesses like The Old Town Cafe and Rocket Donuts, as well as a triangular block caused by the nexus of the offset grid patterns of the former towns of Whatcom and Sehome. Oakland Row is short and well enclosed, sided by adjacent historic buildings of similar heights and styles. It has the potential to encapsulate many of the goals of the Old Town and 2014 Downtown Draft Plans, while increasing economic viability and pedestrian uses throughout. The site’s vision embeds it in the historical and cultural context of the surrounding area’s character, while offering opportunities for new adaptive uses.
**Alley 2: Whatcom Lane South**
Named after the historic settlement atop which it sits, today's business district, Whatcom Lane South leads from Holly Street South towards stunning views of the Georgia Pacific Industrial Complex and to the Bay and islands beyond. While it features relatively less intense uses than Alley 1 and 3, it has more redevelopment potential in the near future. With major projects coming soon to the West and South of the site, it will soon be a major transitional corridor between the Waterfront and Downtown. Also, infill opportunities abound thanks to much open space currently reserved for parking lots, and its North entrance leads to the dense retail and restaurant district along Holly Street.

**Alley 3: Whatcom Lane North**
Whatcom Lane North is situated behind many of the most prominent local establishments in Bellingham. The Pickford Cinema, Wild Buffalo Bar and music venue, and Bayou On The Bay restaurant are all major cultural institutions that open onto Alley 3. These are already well-known, loved businesses by locals, and would greatly benefit from additional surrounding infrastructure that would attract pedestrians and night-lifers to the area. It also features several historic buildings (including a perfect view of the Bellingham Tower landmark to the North framed by the buildings along the alley) and could easily capture the vibe of the district with minor improvements to the building backs and some public provisions, like benches and greenery.
1. Development Opportunities

Storage Space Reuse (Alley Frontage Potential)

Alley 1 contains an old cargo door that opens to a storage area shared by the Whatcom Conflict Resolution Center and Rocket Donuts. This could be repurposed to allow a small retailer or food vendor to inhabit the space and add a significant destination to the mid-alley section.

Alley 3 also has a storage door with potential for adaptation to modern uses. This sits midway down the alley, and could be ideal for a late-night food joint that attracts the bar crowd, providing a safe space to sit and eat away from the busy downtown streets.

Outdoor Seating Area

Seifert Wine Merchants has used Alley 1 as an event space for providing food and entertainment in the past, through obtaining permitting from the city. This could become a more permanent fixture in this short alley, during times when garbage pickup is not occurring and declare an additional destination for shoppers. This would appear as a fenced-off outdoor seating area for people to come enjoy drink and food while sitting outside under a colorful awning, instigating an interactive streetscape for enjoying nice weather in an urban setting.

Temporary Infill

Infill opportunities are abundant on the edges of the area of study. With numerous parking lots that sit over 75% vacant daily, there is much space that can be reorganized to engage pedestrian activity and increase economic potential.

In Alley 2 this could be added midway down the block, where two parking lots meet at the alley providing an unobstructed connection between Bay and Commercial streets. One option is the creation of a formal pedestrian path buffered from the streets and parking, allowing for more direct accessibility between current and future destinations.

Parking Lot Reuse Opportunities

In line with infill, interactive spaces and destination creation, parking lots provide the largest footprint for reuse in the area of study. Alley 2 features 4 lots, and Alley 3 contains 2 of significant size. Without completely removing these vital spots for downtown shoppers, much of this space can be retooled during off-peak times for additional uses. Buffers from the street would create formal outdoor rooms for pedestrians and food truck vendors.
2. Open Spaces/Parks/Plazas

Food Vendor Plaza

Food vendors could be a great addition to downtown development. They not only provide options for people on their lunch break or just looking for something to eat, they have the potential to bring in a constant flow of people to keep the area well populated. This provides eyes on the streets, or in this case, eyes on the alley, during most of the day.

If the food vendors were permitted to be parked in the plazas that would make the area safe throughout the entire day and well into the night when the downtown becomes a places for the bar crowd.

There could be a food vendor plaza located in Alley 2 in an existing underutilized parking lot on the west side of the alley.
Old Town Plaza
Downtown Bellingham seems to have existing parking lots that are being left vacant most hours of the day. Turning these parking lots into public plaza space could benefit the City of Bellingham tremendously, providing a public place for citizens to congregate throughout the day.

The existing parking lot located at the end of Alley 3 could potentially be a great location for a public plaza. Given that it is a privately owned parking lot, a row of spots could be left to maintain some parking for the public. Another option would be to have the parking closed at certain hours of the day for pedestrian use, than open it up for parking at a different time.

Pocket Parks/Shaded Areas
Pocket parks are a great way to provide for a small getaway from the urban landscape. Because of their size, they can essential be planned for any space that is being underutilized in the alleyways.

At the far south end of Alley 2, there is a small grassy alcove. Currently it is surviving no purpose, and therefore could be a great location for a small pocket park with possible waterfall feature.

3. Social Capital: Community Space/Art/Design

Whimsical and eye-catching gutter designs not only keep water from spewing out into the alley during storm events, but also raises awareness and provides
aesthetically pleasing mechanisms for storm drainage and potential water retention. This has been implemented in many places around the world with positive results, and would be ideally placed on buildings with little or no roof drainage. Mindport Museum would be a perfect candidate for this, as their playful local exhibit designs would be complimentary to the look and use of interesting gutters.

**Wall Art**

In order to highlight these alleyways as a key part of the pedestrian experience, wall art can be used to create a sense of space and invite pedestrians into the alley. Partnering with the businesses along these alleys to facilitate these installations will be mutually beneficial for the micro economy of the alley and the needs of the larger community.

In other Bellingham alleyways, wall art has been used successfully as a mitigation technique for graffiti. There are stark differences in the amount of graffiti on blank walls and walls where noticeable effort has been put into wall design. The City of Bellingham could partner with businesses along this alleyway to rejuvenate blank alley walls with interesting art and design.

**Local Art Installations**

As part of Bellingham's Arts District, this alleyway has a unique opportunity to utilize art installations in open spaces to create a sense of place and highlight local artisans. The work of local artists should be highlighted along the alleys; this will support local artisans and preserve the Bellingham city character throughout these spaces.

**Old Town Character**

Development in this alleyway should be carefully considered in order to highlight and preserve the historic and cultural qualities of Old Town. Designs for this space should reflect the aesthetic qualities of the landmark buildings of Old Town, as outlined in the Old Town Sub-Area Plan (3.1, 2008). For example, when choosing lighting fixtures, bollards, trash receptacles, water catchment systems, and other staples of the vision for this alleyway, homage can be paid to the area’s historic makeup by reflecting classic architecture in these choices. This will maintain the functionality of the space as an alleyway while reinvigorating it as a
continuous part of historic Old Town.

In order to preserve the historic integrity of Old Town throughout the design of this alley, not only should street furniture reflect the aesthetics of Landmark Buildings (Old Town Sub-Area Plan, 3.1), but art installations in the alleyway should highlight the rich historical qualities of this area. Diverse representations of historic properties should be enthusiastically encouraged in this and other Old Town alleys.

The artistic development of this alley should reflect and enhance upon existing efforts to incorporate the history of Bellingham and Old Town in particular. There exists a beautiful mural by Lanny Little depicting a historic view of Old Town on the wall of the Bay Street Plaza. Efforts should be made to be transparent and accurate in this depiction. In particular, women and people of color, and historic Lummi people should be recognized for the contributions they made to Bellingham’s history. Honest representations of the lifestyles, architecture, culture, employment and commerce should all be identified.

Starting as a pilot program in this alley with the potential for expansion is a chance to highlight individuals or representatives throughout the neighborhood’s history. Life-size, full body depictions of individuals or small groups will be incorporated as wall art throughout this alley, with accompanying information about their cultural and historical contributions. These could depict actual key individuals in our history or be indicative of a larger cultural group. This project will provide a wealth of relatable information on pedestrian scale that will be easily understood by individuals utilizing these alley spaces. This project will partner with local historical societies to accurately portray Bellingham’s unique history.

**Interactive Spaces**

The City of Bellingham could utilize currently underused alley spaces to create unique interactive spaces that promote the development of community capital. These interactive spaces have the opportunity to reflect the needs of local businesses and venues for economic integration into the public sphere.

The inclusion of a performance pavilion in Alley 2 could repurpose currently underused parking space for community capital opportunities. A raised pavilion would provide performance space for local musical and theatrical performance venues, as well as an interesting space for visitors from all walks of
life to interact with when it is not in use for performance purposes.

The City of Bellingham has a number of innovative cinema organizations and businesses that could benefit from the inclusion of an outdoor movie screen in Alley 3. Similar to what has become an established community gathering center in Fairhaven, a deliberately blank wall could become a unique movie screening opportunity for community events.

4. Environment/Sustainability

Stormwater Management

After having walked through the alleys, there is a clear issue with stormwater management. Much of the rainwater that pours off the building rooftops doesn’t have anywhere to go, causing flooding in the alleys. There are many strategies for dealing with stormwater that could be implemented here.

Bioswale could be a great option for managing stormwater in all three alleys.
When rainwater flows through the bioswale, pollution and silt is removed as well as providing a place for the rainwater to go.

This process could increase the City of Bellingham's want for environmental stewardship.

**Green Space**

There is a great opportunity for the City of Bellingham to include greenery in the alleyways. A great option could be to install green walls. Not only will it help raise awareness to sustainability and environmental issues, it can aid in managing stormwater that is coming off from the rooftops of the local businesses.

Small gardens could also be added to provide visual appeal to the alleyways, as well as add to a “green” character to the downtown area.

All alleyways have the capacity for additional/new greenery, but Alley 3 shows remarkable potential due to the large amount of blank wall space.

5. **Utilities**
**Lighting**

To continue the Old Town Character we suggest adding old lamp fixtures to bring people back in time. String lights would brighten up the area and create a nostalgic and romantic place. The string lights will catch people’s attention and invite them to explore the alley. Adding sufficient lighting will create a safer area for people at all times of the day.

Adding covered lighting that shines downwards will reduce light pollution. LED (cool white) outdoors lighting, while energy efficient, still emits light pollution with its blue lights. Warm white lighting is the best option because it has lower wattage demand and better human scale illumination. This has been successfully implemented in other famed pedestrian spaces, like the historic streets of Spain.

In addition, it is wasteful to have lighting when there are no people around. Having motion sensitive street lighting eliminates this problem. The lights turn on when people start approaching. If applied all over the downtown corridor, it will reduce light pollution dramatically.

**Sanitation**

A more innovative idea includes adding an electro-hydraulic underground waste container system or an Automated Vacuum Collection System. The AVAC system works better in areas with high densities, so Bellingham as it exists today isn’t the best place to implement this practice, but may become viable sometime in the future.

Seattle is doing a cleanup program that replaces dumpsters with small bins for garbage in the International District to be picked up daily, sometimes even 2-3 times a day, instead of a mere once a week. Increasing pickups would also further mitigate problems, allowing for more foot traffic. A pilot program test period in one of our Downtown alleys (preferably Alley 1) would yield information about future successful implementation in a local setting.
Some more easily implemented ideas include garbage consolidation, putting the trash bins in containers with vegetation to hide them, and adding color and completely changing the look of the trash bins.

Public Restrooms
In Alley 2 there could be a public restroom near the amphitheater and garbage consolidation. This will be nice for pedestrians to have access to a restroom when there are public events, strolling the alleys, and prevents people from using the businesses’ near by restrooms.

6. Connectivity

Walkability
To enhance the existing walkability of the area, some minor changes can be implemented to further the pedestrian network. With existing anchors, destinations, views, retail and restaurants the
area is in good shape to accommodate a variety of pedestrians and paths. Some new practices such as raised midblock crossings or altered ground surfacing and bump-outs where viable can slow traffic, notifying drivers of pedestrian paths. This will allow for swift crossing of busy streets near Holly and Commercial Streets and maintain a concise flow. Angled parking along dense corridors also fulfills a traffic calming need, and may dissuade large trucks or heavy congestion from using certain transitional areas now undesirable to vehicles due to their heavy pedestrian congestion.

**Destinations**

In addition to the plethora of retail and ground level storefronts, new destinations can be tucked away into the existing fabric and provide a more uninterrupted streetscape for pedestrians. Vacancies in ground level windows can be filled through lower rents or financial incentive programs to attract new life to downtown. Also adapting open spaces like parking lots and unused alley-fronting storage into new retail opportunities would completely update the density of the area, and provide a variety of new places to walk, explore, eat, sit, shop and interact for people on the street. Locating these in alleys will have the additional benefit of keeping people and congested traffic apart from each other, lowering the incidence of accidents.
3.2.1. Introduction and overview

The redevelopment of downtown Bellingham alleyways has the potential to create a major impact upon the character of the city. People are going to alleys and using them as pedestrians and cyclists because they have a decidedly more urban feel and minimal traffic nuisances - this enables the adjacent spaces, whether public or private, to be used in a manner that revitalizes these spaces to create a pedestrian friendly environment that encourages economic stimulation through amenities such as restaurants and shopping. The oncoming text is specific suggestions for alleys four, five and six to reach full potential through economic and structural redevelopment.

This section focuses on alleys 4, 5 and 6, which lie between Commercial St. and Cornwall Ave. As the future Waterfront development progresses the economic and geographical center of downtown will shift from Railroad Ave. towards where these alleys are presently located. Improving the alley corridors in correlation with the Waterfront Redevelopment will prove to be a vital step in creating a more fluid cohesion between Bellingham’s present downtown and planned future development.

3.2.2. Planning objectives

Alley six, along the U.S. Bank parking lot, has a degraded surface and could be repaved to pursue Greenroad certification. The parking lot that lies on parcel 1223 and
3.2.3. Issues and opportunities

<table>
<thead>
<tr>
<th>Issues</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underutilization of Parkade</td>
<td>• Enable the use of alley-level mezzanine as a “vendor’s row” during after</td>
</tr>
<tr>
<td>• Safety concerns - There is no reassuring</td>
<td>• Designate a public lookout on top level</td>
</tr>
<tr>
<td>presence during the night hours, often</td>
<td>• Incorporate rainwater collection &amp; conveyance</td>
</tr>
<tr>
<td>unhygienic garage</td>
<td>systems with greenwalls on façade of Parkade</td>
</tr>
<tr>
<td>• Poor visual accessibility</td>
<td></td>
</tr>
<tr>
<td>• High amounts of impervious surface and</td>
<td></td>
</tr>
<tr>
<td>minimal vegetation</td>
<td></td>
</tr>
<tr>
<td>Lease vacancies along alleyway</td>
<td>• Promote a downtown bar district adjacent to existing wine &amp; whiskey bars</td>
</tr>
<tr>
<td>• Pedestrians &amp; cyclists like alleys because</td>
<td>• Integrate inviting components including: lighting, signage, seating; mixed-uses; commercial use such as bars, food carts</td>
</tr>
<tr>
<td>they don’t have to compete with traffic.</td>
<td></td>
</tr>
<tr>
<td>• How can we generate more revenue for the</td>
<td></td>
</tr>
<tr>
<td>City and private business?</td>
<td></td>
</tr>
<tr>
<td>Flawed urban design</td>
<td>• Centralize garbage/recycling</td>
</tr>
<tr>
<td>• Unconsolidated capital assets</td>
<td>• Consolidate bank drive thurs to better utilize land</td>
</tr>
<tr>
<td>• Lack of natural lighting</td>
<td></td>
</tr>
<tr>
<td>• No aesthetic landscaping or wayfinding</td>
<td></td>
</tr>
<tr>
<td>Degraded alley surfaces</td>
<td>• Pursue Greenroad certification</td>
</tr>
</tbody>
</table>
Alleyways are perceived by the general public as uninviting and at times dangerous. The key to making alleyways a desirable place is to improve the atmosphere while encouraging activities that will draw people from the main sidewalks. In order to create this atmosphere the issues associated with alleyways and their perception must be addressed and corresponding strategies for improvement must be formulated based on the issues and the opportunities associated with them. Below are some examples of the issues that can be observed in alley 4, 5 and 6 and corresponding opportunities that could deal with this issues accordingly.

### Hard/Soft Analysis:

![Hard/Soft Analysis Map]

#### 3.2.4. Character District Plan

Alley number four has historical significance for the city of Bellingham. With the Montague and McHugh building as well as the old site of the Bellingham Carnegie Library in this section of the alley, we feel it is important to recognize the historic characteristics. We want to bring about more awareness to the historic presence as well as expand the daycare to create a sense of enclosure. The access point to our alley is also a parking lot that will be converted into a pocket park, creating accessible public space for patrons of the alley. This section of the alley will characterized with a historic preservation theme.

Alley number five has been identified with the most improvement/development options. Creating a bar district with food trucks is the character district plan. Extending Vinostrology Wine and Lounge along with Tubs Whiskey Bar into the alley will bring people into the alley for the amenities and in turn, be drawn further in. This bar district
will be characterized by the availability of seating and drinking space within the alley. Further down the bar district is an enclosed open space at grade with the alley. This underutilized space has been recognized as having great potential for use as a night time/weekend market. This market space could be used by food trucks at night drawing people into the alley for a bite to eat. Alley number 5 is characterized by the bar and dining options available.

Alley number six in between Chestnut and E. Holly: This is prime real estate for urban development of a high density, mix-use building such as a grocery store with residential space above and parking below. This westernmost block of the alley has a residential/retail character that is improved by the availability of amenities for food and living. Several restaurants on this block have the potential to create outdoor seating and increase their presence in the alley. Creating a setting that fosters pedestrian travel is important for safety and congestion reasons. Creation of more mixed use housing above these restaurants will generate more business and create a higher population density by keeping people within the city limits of Bellingham.

3.2.5. Development Strategies

1. Development opportunity

1.1 In alley six encourage new mixed-use (residential/commercial) development on site that will become a vital hub with the progression of the planned Downtown Bellingham Waterfront Development. This will create more pedestrian traffic through the alley and raise economic vitality and could address growing demand for grocery stores downtown.
1.2 Encourage Café Akroteri and Indian Grill to utilize alley space for outdoor restaurant seating while creating alleyway entrances to business. Utilize second levels as residential mixed-use housing to create higher population density in the downtown area along alley six.

1.3 Promote the creation of a Bar District at south-west sections of Alley 5. Bringing about more visibility to these businesses will allow for their expansion into the alley. This will populate the alleyways during the night and create a safer environment for bar-goers, Parkade patrons, and pedestrians. Adding windows along Tubbs Whiskey Bar will create eyes on the street and an interesting facade for pedestrians passing by on foot.

1.4 Increase alley access and promote residential development of upper levels along alley 5. Again, this will create more pedestrian traffic through the alleyways and higher density in the downtown area. This will create social capital and in turn, more support
for revitalizing adverse alleyway conditions - based upon the input of the residents within the alleyways.

1.5 Promote better utilization of the Parkade and the street level mezzanine parking garage. The mezzanine parking garage is a separate parking lot at grade with the alley. This area can be used for multiple purposes depending upon the time of day and time of year. Possibilities include but are not limited to: a covered farmers market for the rainy winter months, an area where vendors can conglomerate and provide consumers with food or retail, or another form of public use that is conducive to business and ideal utilization. Decorate Interior façade with a recognizable theme for both aesthetics and possible wayfinding options. Keeping in mind the necessity for both a parking garage during hours of peak usage and it could be easily converted into a “vendor’s row” for evenings/weekends.

1.6- Decorate Interior façade with a recognizable marine themes for both aesthetics and possible way finding options. Promote underutilized space as a restaurant with outdoor seating lining alleyway five. This specific spot has noticeable intimacy and sense of place when in conjunction with the plaza directly across the alley. If properly utilized these areas could become a hub for social interaction. Temporary/retractable road barriers could also be used during the evening and night to further promote the use of this space by pedestrians.

1.7- Expand daycare center with additional structure and/or landscaping. This will create a sense of safety and enclosure for children and teachers alike. Dedicating more parking lot space as daycare space will generate the creation social capital in alley four.
2. Open Space/Parks

2.1 The top floor of Parkade offers some of the best views of Downtown Bellingham, Bellingham Bay, the City’s waterfront, and the surrounding mountain scenery. Designation and construction of a pedestrian viewing area is suggested. These viewpoints could be complemented with informational plaques about the geography of the Cascades to the east, and to the west, the geology and/or history of Bellingham Bay (e.g., identifying what islands can be seen, suspended sediment clouds from the Nooksack River Delta, Captain Vancouver’s anchorage).

2.2 Improve Parkade and Alleyway extension to promote more citizen usage of public space and public bathrooms. Plaza improvements could include providing extra space for adjacent businesses. This will generate social interaction and additional social capital. Bringing about a sense of place in this plaza and creating a destination will transform the character of alley five.
2.3 Build a park ("Orcas Park") on the southeast corner of Alley four. This site could provide a visual portal to the downtown and eventually a key connection point to the Waterfront development. This also creates open, public space in the immediate downtown area and increased visibility for the historical district.
3. Social and Human capital

"Orcas Park" Along Transition Zone

Potential sites to improve social and human capital
3.1 Promote way-finding artistic mural on the bare brick wall of the Teriyaki Bar in alley six. This way is highly visible and could provide a perfect spot to promote the revitalization of downtown and the new Waterfront development through artistic expression.

3.2 Decorate alleyway façade to match the theme of the “Bar District” characteristic. A simple mural or addition of windows/alley access could create a better sense of place and be conducive to the “Bar District” atmosphere.

3.3 Bringing about visibility to the historical significance of buildings such as the Montague and McHugh building as well as the old site of the Carnegie library is important in alley four. Raising historical awareness to downtown travelers could potentially enhance civic engagement and social capital.

4. Environmental and sustainability

4.1 Pursue Greenroad certification (within alleys five and six) to improve the sustainability of Bellingham’s downtown alleyway network through stormwater pollution prevention. New pavement would also serve as an improvement of the aesthetics of the alley and change the perception of run-down alleys used only for unsavory interactions and trash collection. Other non-conventional Greenroad credits can be obtained from this particular alleyway.
4.2 Construct vertical gardens and greenwalls on Parkade's alleyway facades and plaza frontage. This will give the Parkade building a new look and will utilize the vertical facades that are presently bare. This will also add to the sense of place making the Parkade and surrounding businesses more attractive to pedestrians and Parkade patrons. This also reduces stormwater flows and traffic noise associated with large parking garages.

4.3 Rainwater collection is a perfectly viable option for the Parkade's top floor. This rainwater could be repurposed to be used within the buildings grey water systems or it could serve as a water source for the proposed green walls and vertical gardens.
5. Utilities

5.1 Consolidate trash collection areas. Encourage the use of “community compactors”. This will create more space, reduce clutter and improve the appearance of the alleyways.

5.2 Increase lighting throughout alleyways. New lighting should be warm light that will give a better sense of safety to pedestrians and reduce light pollution within the downtown area. Alleyways should be inviting to all during all hours and improving lightning is a necessary, economical viable way of improving alleyway appearance.

6. Connectivity and public safety

6.1 Open up the Parkade’s exterior stairwell in order to make it more permeable with the adjacent ground-level mezzanine and alleyway. This will increase the perceived safety of the Parkade and discourage transient populations from loitering.

6.2 Retractable Auto Barriers for evening/weekend use to promote pedestrian use and safety.
3.3.1 Introduction and Overview

The alleys between Cornwall and Railroad avenues and the parallel Maple and Magnolia streets, alleys 7, 8 and 9, have many soft features – features that are easy or likely to change – such as parking and vacant lots, that provide opportunities to bring greater density and visitors to restaurant and entertainment destinations via colorful, inviting pedestrian paths, and creative lighting with welcoming street art covering empty walls.

3.3.2 Planning Objectives

To provide restaurant, entertainment, retail and recreation options to Bellingham community members in the alley between Railroad and Cornwall avenues and the parallel Maple and Magnolia streets. Improving safety and connectivity will be a priority. The colorful walk will offer inviting street art and park spaces while integrating innovative stormwater alternatives. In working with existing businesses, the aim is to increase the sense of safety and cleanliness and open storefront access to the alley in order to help businesses become pedestrian destinations that increase their clientele.
3.3.3 Issues and Opportunities

Similar to many other alleys, the alley between Railroad and Cornwall avenues is filled with poorly organized trashcans of varying size. Trash is scattered and the lack of sanitary standards leaves the alley a mess. Consolidating business’ and residents’ trash would remedy this issue. The dull, dim lighting is uninviting and even poses a danger to pedestrians. Festive, bright lighting would improve the safety of the space. However, the alley’s unique character is in its human presence. Loiterers gather throughout the day in open areas of the alley. These changes will likely displace a great number of loiterers or homeless community. Considering the limited capacity at the Lighthouse Mission, a walk-in rescue mission, a new facility closer to downtown that would provide temporary shelter, a meal and resources would aid in this transition. Additionally, including them in this planning process would ensure the transient population, that their needs and wants, is reflected in alleyway improvements. Including them part of the community through this project will be the most affective approach. Underutilized space and vacancies can be remedied by bringing new businesses, residential units and making new pedestrian connections between streets. Stormwater runoff poses a risk to the bay ecosystem, as water accumulates petroleum and other residues and carries it unfiltered to the bay. Green spaces and visually interesting on-site water filtration systems would lessen this environmental degradation.

<table>
<thead>
<tr>
<th>Issues</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Large Transient Population</td>
<td>→ Incorporate participation</td>
</tr>
<tr>
<td>• Unclean</td>
<td>→ Consolidate waste receptacles</td>
</tr>
<tr>
<td>• Unsafe</td>
<td>→ Improve lighting, CPTED</td>
</tr>
<tr>
<td>• Underutilized/Vacancies</td>
<td>→ Economic infill, pedestrian connectivity</td>
</tr>
<tr>
<td>• Storm-water runoff</td>
<td>→ Local water filtration, green spaces</td>
</tr>
</tbody>
</table>

Hard and Soft Capacity Analysis

Spaces identified as hard are permanent, historic or currently making good use of space, such as the historic Leopold Hotel. Medium spaces have existing structures that are not being used to their full potential and have room for future improvements,
such as the old JC Penny building and single-story restaurants such as La Fiamma Burger. Those identified as soft mean they are poorly utilized have the highest potential for development.

![Image of alley study]

**3.3.4 Character**

There is potential for a retail and restaurant district surrounding the already-popular Boundary Bay and Rumors bars as infill could open store frontage and festival space onto the alley. This could be expanded upon. In the block between E Chestnut and E Holly streets, usable green space and landscaping would treat stormwater in an aesthetically pleasing way. The alley behind Horseshoe Cafe and Mallard's Ice Cream, among other popular businesses, has blank walls and empty nooks and crannies that offer opportunities for art installations and galleries.

![Image of alley study]

*Character districts that are emerging or show promise.*
3.3.5 Development Strategies

Alleys 7, 8, 9: Alley Redevelopment Strategies
Jonathan Lu, Josh Dolechek, Francine St. Laurent, Claire Bertuleit, Riley Marcus

1.1 Open Space/Parks/Plazas: arcade-style stores and boutiques in the old J.C. Penny Building

The bottom floor of the old J.C. Penny building could be subdivided into a collection of galleries. An indoor hallway, in an arcade-style, increases connectivity between the streets and encourages pedestrian access to the galleries and alley. By bringing the mall design back downtown, this would redesign a former large retail store into a collection of smaller stores, galleries and spaces for rent. Each store would essentially have three sidewalk frontages: the road, the interior arcade corridor and the alleyway thereby maximizing retail visibility and accessibility. The art theme is continued on the alley façade of the J.C. Penny building with continuously changing interactive art installations.

1.2 Open Space/Parks/Plazas: mixed-use infill in current Bank of America drive-thru lot

The current lot use is automobile-oriented and highly underutilized. This lot would be transformed into two four-story mixed-use buildings. Their design, with corners cut at 45-degree angles, would enhance pedestrian sidewalk space, which would invite people
into the space and enhance views of a new rooftop park. A wide pedestrian path between the two buildings would connect a larger pedestrian network to the park. The path would also terminate at a new landmark observation tower. The buildings would have ground floor retail frontage on all sides except the northeastern building, which would enhance access to the current parking garage.

Wide pedestrian path with store frontage and view of observation tower.

1.3 Open Space/Parks/Plazas: mixed-use buildings behind Boundary Bay

The site, which is located directly behind Boundary Bay is currently a greatly underutilized parking lot. With the addition of two five-story mixed-use buildings that offer residential, retail, office and restaurant space will enliven the area. The buildings would be situated to enhance waterfront views. Ground-level store frontage on both the street and alley would also open to a festival parking lot that would separate the buildings.

Proposed infill location.
1.4 Open Space/Parks/Plazas: mixed-use building beside Boundary Bay

In its current state, the space diminishes a sense of safety in the alley. It has high potential for a new three story mixed use corner lot building. Ground floor would attract retail shops and the top two floors would be residential units. This space would also take advantage of the steep grade change, allowing for an additional level that would face the alley. This level would make a good nightlife entertainment locale. The shape of the building would have features that enhance sidewalk space and attract pedestrians. This involves non right-angle frontage on the corners.

Corner-lot mixed-use building with balconies.
2.1 Open Space/Parks/Plazas: dual-purpose festival space and parking lot

Currently a parking lot, this site would connect the two mixed-use towers mentioned earlier. It would function as parking for adjacent retail daily, but be used as a festival market space in the evenings and weekends. It would expand the capacity of the current Saturday Market space a block south on Railroad Street by additionally offering temporary concert and stage space, as seen in Fairhaven during Ski to Sea, or for showing outdoor films with mobile seating during the summer months.

2.2 Open Space/Parks/Plazas: convert Chase bank parking lot into park

The space next to Chase Bank on East Magnolia Street is currently a parking lot, could be converted to a park that features glass sculptures made by local artists. Its purpose would be to create an inviting open space with glass seating for people to gather and socialize. There would also be sheltered bike parking in one corner of the park that would be open 24 hours a day. One of the walls enclosing the park would be an open canvas or interactive art for street artists to express themselves. The other wall enclosing the park would be a green wall collecting rainwater from the roof of the two buildings enclosing the park. A playful design in the corner of the park would funnel water from the engineered wetland to the stormwater system in the alleyway.
Pocket park featuring local art.

Living wall and water treatment system in the pocket park.
2.3 Open Space/Parks/Plazas: convert parking to park

Next to the Leopold and above the Shrimp Shack, there is currently a parking lot with a small covered staircase to the businesses below. This parking area would be converted into a park used by both the public and nearby businesses. This location is raised in elevation and has a great view of the waterfront. Because of its location next to the Leopold retirement home and a potential observation tower, it would draw a range of people. This park has the potential to be a playground with food or coffee vendors, art and grass. It would incorporate a midblock pedestrian path to Cornwall Avenue. Outdoor exercise equipment, such as that in Zuanich Park near the waterfront, would make the park a destination for runners and other pedestrians.

Exercise Equipment at Zuanich Park.

Birds-eye view of proposed park and possible amenities; Stairway from Cornwall to proposed park.
2.4 Open Space/Parks/Plazas: convert landmark into observation point

The observation tower provides structural reinforcement for the Leopold steam stack while offering an excellent view of Bellingham Bay and downtown. This is a landmark for downtown and is centered between multiple pedestrian pathways and compliments the rooftop park.

*Photo illustration of stairs around landmark*

2.5 Open Space/Parks/Plazas: improve Boundary Bay beer garden

Although it has good permeable pavement and greenery, it is isolated from both the alley and the street. By bringing the beer garden up to street level, views of the Bellingham waterfront will be enhanced and a livelier street atmosphere will be achieved. The space where the beer garden used to be can now be used as retail/café space fronting onto the alley.

*View of the beer garden from the alley with new alley store frontage.*

3.1 Social and Human Capital/Arts/Design: interactive art and mural wall

Interactive art installations such as the "Before I die..." model provide an opportunity for people to share their personal aspirations in a public space. By doing so, it promotes a sense of connectedness and community. Such installations would draw people into the alley and enliven the space.

*Before I die…” mural in Savannah, Georgia.*
3.2 Social and Human Capital/Arts/Design: alley arch to enclose the space

The arches on either end of Horseshoe Alley provide a sense of enclosure. They delineate a creative space and draw people in to the art walls and pedestrian access to the Arcade.

Photo illustration of an alley archway.

3.3 Social and Human Capital: information kiosks

Kiosks act as interactive information boards to provide various resources, such as nearby shelters, health services and directions to the soup kitchen. They also provide a forum for people to communicate about events, classes and act as a meeting point.

4.1 Environmental and Sustainability: living walls and green facades

Living walls and green facades, which have been used for thousands of years to cover palaces and as architectural symbols in the Mediterranean, are growing in popularity throughout urban environments for their thermal benefits, air filtration, noise reduction, biodiversity and potential food production properties. Commercial production and installation is still experimental and somewhat unique, therefore cost estimates are unavailable. Designers are beginning to employ this technique more often.
These modular vertical gardens are by Greeneme, a company formed in 2005 by artists, ecologists, architects, scientists and builders.
4.2 Environmental and Sustainability: highlight stormwater filtration

Stormwater management has the potential for up to four points in the “Green Infrastructure and Buildings” rating system for LEED Neighborhood Development. The city constructed two rain gardens, in Bloedel Donovan Park, to mitigate the runoff of toxicants and pollutants into Lake Whatcom via stormwater. Visually interesting stormwater filtration features can serve the same function in the downtown area and prevent runoff into Bellingham Bay. Pedestrian traffic within alleyways provides opportunities to highlight the importance and process of the ecosystem’s function as a filter and educate passersby of the importance of pollution prevention.

The storm water treatment will run through all three alleys. It will collect rainwater from roofs and streets and feed into the stormwater system. The cover of the stormwater system also acts as a speed bump as it runs down the alley through main street traffic. This will slow down ongoing traffic and increase the connectivity between alleys. There are also cisterns on each end of the alley; the collected water can be turned into a grey water system used for landscaping or restroom water.

Underground rainwater storage system; Stormwater filtration system visible through clear or glass panels in the alleyway.

“Funnel Wall,” this system in Neustadt, Germany creates music when it rains.
Stormwater treatment system.

5.1 Utilities: consolidate trash

The garbage consolidation area could fit 4 large bins and 4 smaller size bins, all of which are on wheels with a ramp at the entrance allowing the collectors to roll them in and out. The roof would be exposed to the sky allowing light into the compound. The roof could also act as a rain collector, which would direct rainwater into the alley’s stormwater treatment system. Additionally, incorporating consolidated trash and recycling spaces that are artistic and playful would distract from their presence and purpose.

Enclosed and consolidated trash and recycling.

6.1 Connectivity and Public Safety: open windows onto the alley

Leopold Hotel, located at 1224 Cornwall Avenue, is on both the National and Local Historic Registry. The nine-story brick building was constructed in 1899 and changed ownership just 15 years later. Despite a large reconstruction in 1967 the tower remained and housed restaurants and businesses. Today, the Leopold serves as retirement apartments. The Crystal Ballroom, built in 1929, has room for 250 to standing
capacity at 448 people and is used for various community group meetings, such as the Downtown Bellingham Neighborhood Association. The room’s large, non-transparent windows on the alley would add a human presence to the alley if replaced with clear panes.

6.2 Connectivity and Public Safety: string lights over the alley

Simple artistic string lights would illuminate the alley in a festive way. Increased and improved lighting would provide a sense of safety.
3.4.1 Introduction

The project that was given to our class was to come up with a plan to rejuvenate and invigorate the alleyways of downtown Bellingham. The group visited the site several times to assess the strengths, deficiencies, and opportunities of the area. We also had a chance to talk to several of the workers and some store owners in the area. Some of the common themes among the people we all talked to were:

- Unwanted uses and users in alleys
- Safety concerns
- Debris and cleanliness
- Too many nooks and crannies down certain alleys
- Would like more lighting and art area (solid colors on buildings was also thought to cut down on unwanted graffiti)
• Would like to see it used for more than just utilities - like art festival, music events, etc.

Some concerns were had by local business employees and owners. The most expressed concern was that altering the area and the form would not necessarily alter how the space is used; function does not follow form. The public’s perception of the alleyways are a symptom of how they are currently being used, what goes on in and around them. They are a part of downtown and deserve attention. Some business owners would like to see businesses take responsibility in cleaning the alleys, like how most local businesses clean the front of their businesses. The connectedness of the alleys, including how different areas of the city could use the alleys as the main connective path was also brought up.
Project Area for 3.4.1
E.Holly to E. Champion St. and Cornwall Ave. to North State St.

Area Bubble Diagram

Location Map
3.4.2 Vision Statement, Goals & Objectives

The vision of the project is that the alleys are safe, clean, well-traveled on foot and bike, offers robust vendor activity and makes a meaningful contribution to the community and City of Bellingham.

Goals for alley development include:

- Renovate, revitalize, clean, and light the alleyways.
- Maintain and improve beneficial ecological systems.
- Improve the economic vitality of the alleyways.
- Bolster social capital in the alleyways and surrounding neighborhoods
- Maintain alley use for all times of day for various users and multimodal transportation.
- Provide a mixed use built environment to foster diversity.

The objectives are rooted in improvements to health (Environmental and User), access, social and economic capital and making the area aesthetically appealing while utilizing CPTED (Crime Prevention through Environmental Design) strategies.

Health improvements can be implemented by improving stormwater remediation around the existing drains, where feasible, that enter the Bellingham Bay and Whatcom
Creek with enhanced filtration systems. Further ecological improvements can take place by repairing the alleyway surfaces, adding DIGs (Downtown Improvement Garden) and vertical gardens in alleyways. The filtration of stormwater in the alleyways will also be enhanced by adding green roofs and green spaces in select locations. The health of the alleyways and the area can further be enhanced with art installations that sequester pollutants (VOCs in particular). The installation of a public restroom in the alleyways can also add to the improvement of the area. The creation of mixed use buildings, using LEED as a guide, can contribute to greater surveillance with more "eyes on the street", which also improving the social health of the area.

Access to the area is enhanced by offering more secure bike storage in the area to encourage biking. Enhancing the areas lighting and distinguishing use of space by utilizing different materials will encourage user access. By including mixed use housing with affordable units, this will foster diversity in the area.

Social Capital is enhanced by creating more public gathering spaces in the form of parks and community gardens. By including more outdoor seating and offering vendors in the alleyways, a social gathering place will bring more people to the area and enhance the lives of those who live there already.

Economic capital is enhanced by creating more living spaces (construction, rent, and tax base), spaces for vendors and new businesses, and the improvement and upkeep of the area will also create jobs.

Aesthetics is increased by building on already existing features. The creation of new art and spaces for graffiti, increased the lighting of the alleyways, wayfinding signs, and by the creation and addition of entrance enhancements, such as arch ways, to the alleyways themselves.

3.4.3 Issues and Opportunities

In site visits, buildings were identified and rated to be either “soft" or hard”. Soft buildings or spaces are ones that are determined to potentially best serve the area and
the city in a better capacity than the current form it is in. Hard buildings and spaces are ones identified as serving the area well and contribute to the city.

**Process**

The spaces were scored individually, on a scale from 1 (soft) to 5 (hard). The median of the individual building scores were used to compile the final chart. The soft areas on the East Holly Block include the Columbia Bank parking lot area, the Diamond paid parking across the alley from there, the Copper Hog parking area, the Rite Aid on Cornwall, and the vacant store next to The Local Public House on Railroad. The medium spaces (pink) are: The Great Northern bookstore located next to the Diamond paid parking area off Railroad, Sherwin-Williams Paint store on E Magnolia and State Street, the Sugar on Magnolia smoke shop, The Jiffy Lube. Most of the places that abut the alleyways of the project space were determined to be hard, meaning they are permanent structures that are deemed to render valuable services. A few soft places, or places that are suitable for different uses other than they are currently being used for, have also been identified.

The first soft place is the area next to the parking of Columbia Bank, on East Holly Street and North State Street. Currently this space is a simple buffer space, 906 sq. ft., filled with rocks, shrubs and trees. While not inappropriate, this space is viewed more suitably for conversion for use as a small commercial node, adding local jobs to the area as well as increased revenues to property owners.

The Great Northern Books adult Shop, is another identified soft space in the project area. This building is ~2,986 sq. ft. and is ideally located in a prime spot off of Railroad Avenue. The parking lot located next door is ~5,478 sq. ft. and offers the possibility of being used for other purposes as well. The building next to that houses El Capitan’s and Growing Washington, but the space is underutilized and could house additional small businesses towards the rear of the building nearest the alley. This is also identified as a soft area in the alleyways. While Jiffy Lube provides a great service to the community, it seems out of place to the area and is therefore considered a soft sight.
3.4.4 Character

There are several prominent features in each of our alleys that lend significant identifying character traits. In alley number 10, there are several bars abutting the alley as well as the PFC’s Limelight Cinema which has art hanging in the alley. Alley 11, the long open stretch located next to the WTA station, is very airy and open. Envision a bazaar, a vendor’s row of goods and produce. Being close to the WTA station this would be a perfect place for citizens who rely on mass transit to shop while they arrive or depart on their journey.

Alley 12 is rich with historical markings; the PSE and Copper Hog building, a no longer used grain bin and embedded trolley tracks tell a rich visual story of a myriad and different use in the past.

When looking at these three alleys, site specific features that create a unique character for each alleyway. Within the alley 10, we found artwork right behind the limelight building.

Also envisioned are inspirational murals along walls, with colorful blue lights to add to a unique atmosphere and contribute to space making. In alley number 11, the alleyway behind the bus station, there is a prime location for a vendor’s bazaar to visit as pedestrians make their way to and from the bus station.

In alley number 12 there are unique features, and historical buildings. For example, the Fish Store is one of the oldest continuing businesses in that area that still operates today. The PSE/Copper Hog building is an old building that adds considerable
character. The Dahlquist Building is also an older building that lends unique character to this area. There is also a historical landmark of a grain building viewable from the alley only.

Down alley 12 and 11 is also the old and historical trolley tracks that are still visible along the surface of the roadway.

![Grain building in alley behind Hohl Garden and Pet](image)

**3.4.5 Strategies**
Development Opportunities

1.1 Above existing structures on Railroad Ave (Adiago, Everday Music, The Local, Dark Tower Games, Casa que Pasa and the Alternative Library) block could be dwelling units. These dwelling units could have price ranges that would allow some of them to be classified in the affordable housing spectrum, thus fostering diversity. The new dwelling units could also help Bellingham to become more compliant with the Washington State Growth Management Act RCW 36.70A.30.

1.2 The existing Rite Aid building is proposed to be split into three separate spaces. The two new spaces could open and face the alleyway. These two spaces could be used for commercial such as restaurants or bars, or other commercial goods.

1.3 The alley next to the WTA station is a space that could be well used for mobile vendors to occupy.

Open Space/Parks/Plaza

2.1 Proposed outdoor seating in the alley, next to the two new business that were once part of Rite Aid, offers alley way seating for outdoor eating or taking in a chess game. Our creation of open spaces as well as parks and plazas is meant to make a more vibrant area in our alleys. We want this area to feel friendly and welcoming. One way of doing this is to encourage both the incumbent bars and restaurants and any new businesses to add more outdoor seating. Ultimately, the alleyway will serve for an ideal place for this new seating. Completion of this objective will look something like this:

2.2 Behind the Allied Arts of Whatcom County, Express Computer Care and Chocolate Necessities there is currently parking for those business employees. It its place we propose a seated plaza with a small stage abutting The Limelight theatre for small outdoor productions or for local performers to take advantage of.
2.3 Currently there is an unoccupied business space between the Alternative Library and The Local. This space could be removed and in its place a pocket park be installed. The additional access to the alleyway, green space, art and outdoor seating adds diversity of spaces to the area and allows greater access to the alleyway, enabling and fostering use of the alleyway.

2.4 In between the buildings that currently hold El Capitan’s and Great Northwest Books on Railroad Ave there is a parking lot that is underutilized. This space could be turned over to public use as a public park, gathering space and community garden. This park would include a covered meeting area as well as multiple benches to encourage it as a community meeting space. It would also include play equipment of some kind to give children that live in the area a place to safely play. This park would also be a space for bike racks to encourage biking to and from downtown. A community garden would give people that do not have access to their own open space an opportunity to grow plants. It would also be a potential space to place historical murals that would support the theme of a historic alley as well as beautifying two currently blank, windowless walls.
3.1 Mural art and wall art (graffiti) could be expressed in this alley. Some sections would be made designated for artist to use while other buildings would be painted a solid color, preferably a light color to brighten the alleyway, in hopes that the solid color scheme prevents unwanted “tagging” or art. Throughout our alleyways we would like to add as much art as possible. One inspiration for this is the success of the Mission District in San Francisco. Littered with murals, the Mission District has become a hub of culture and also a tourist destination. We love the art on the side of the El Capitan’s building and believe there are canvases everywhere in the city. History as well as social and political thoughts are expressed in the Mission District, and we would like to have the same thing here. Commissioned murals as well as the auctioning off of mural space could bring diverse artistic talents and may help raise money towards other needs of our project (such as garbage consolidation or green space funding). Sidewalk art and sculptures throughout these areas could be encouraged also.
3.2 Outdoor sculptures could be featured in the proposed plaza and pocket park. This art could also be commissioned to local artists, for space making reasons.

3.3 This alley has a historical building in it, the Benevolent and Protective Order of Elk’s building built in 1912. This has a clear marker on the front of the building but not the back. It is also unoccupied at this time. We propose a placard on the back of the building so alleyway users can be educated about this historical building as well. The space is also ripe for a business to open, either a restaurant or a bar. If this space has a basement it would be converted into a speakeasy-style bar with entrance only in the rear (alley) of the building.
The Stockton Paint store building, while not a historically registered building, is still old and adds historical weight to the area. Placards are to be added in the front and rear of this building.

Environment and Sustainability

4.1 All new building additions for this block should be encouraged to have green roofs installed. Green roofs bring several benefits: insulating effect, diversity of wildlife, pre-filtration of rainwater, and they help to combat the urban heat island effect (increased heat in cities from intensive concrete use). The growth thickness could be appropriate for structure load bearing and native green and brown plants could be used on them. Green spaces, such as the plaza and pocket park, could also improve the local area environment. On the North side of the Alternative Library there could also be ivy added to the wall. Trees could be used where permitting in the plaza and pocket park as well.

Stormwater Drainage:

Current system: No surrounding buffer, ineffective secondary catchment and a lot of turbid runoff seen.

Suggested Improvements: Installation of bioswales and rain gardens with plants that sequester pollutants located above drainage location. Root systems will also capture heavy metals. Improve aesthetics and health of surrounding Bay and Whatcom Creek.

Green Roof:
The Energy Policy Act of 2005 applied Federal tax credits of up to $1.80 per sq. ft. for green building projects that install green roof systems under program’s standards. The EPA provides these Benefits and Costs: (http://www.epa.gov/heatisland/mitigation/greenroofs.htm)
In addition to mitigating urban heat islands, the benefits of green roofs include:

- **Reduced energy use:** Green roofs absorb heat and act as insulators for buildings, reducing energy needed to provide cooling and heating.
- **Reduced air pollution and greenhouse gas emissions:** By lowering air conditioning demand, green roofs can decrease the production of associated air pollution and greenhouse gas emissions. Vegetation can also remove air pollutants and greenhouse gas emissions through dry deposition and carbon sequestration and storage.
- **Improved human health and comfort:** Green roofs, by reducing heat transfer through the building roof, can improve indoor comfort and lower heat stress associated with heat waves.
- **Enhanced stormwater management and water quality:** Green roofs can reduce and slow stormwater runoff in the urban environment; they also filter pollutants from rainfall.
- **Improved quality of life:** Green roofs can provide aesthetic value and habitat for many species.

Estimated costs of installing a green roof start at $10 per square foot for simpler extensive roofing, and $25 per square foot for intensive roofs. Annual maintenance costs for either type of roof may range from $0.75–$1.50 per square foot. While the initial costs of green roofs are higher than those of conventional materials, building owners can help offset the difference through reduced energy and stormwater management costs, and potentially by the longer lifespan of green roofs compared with conventional roofing materials.

**Green roof design:**

4.2 Vertical gardens are soilless structures that stand upright vertically along a wall surface. Without soil, this garden benefits the wall a lightweight structure. In dense urban cities space for greenery is difficult to set aside.

**Benefits of vertical gardens:**

- Use of vertical space
- Improved air quality
- Aesthetics
- Building cooling
- Self-sustaining with rooftop water
• Filtration of rain water

Using supporting structure with a 10 mm PVC board mounted on a stud work. This solid PVC-board is sealed at its joints, and there is an air gap between the board and the wall it is attached to. This helps protect against moisture, and deterioration of the wall. On top of the board is a multi-layered, synthetic, and highly absorbent felt fabric attached. This surface type helps give an even distribution of water down to all foliage attached to the felt. To attach plants, a cut is made in the outer felt layer to place plants in-between. The photo above is of the Drew School in San Francisco, including 40% native plants to the Bay area, and even edible plants such as strawberries.

The second design type uses smaller structures using pockets of felt containing dirt. Example design companies: Flora Felt, and Plants on Walls. It uses a variety of fern types such as blue star and leather. San Francisco's street layout lacks room for trees to thrive well on narrow sidewalks. It is probably the best example we have in terms of what size will work for our own downtown Bellingham.
4.4 Implement sustainable design by creating greywater cycling systems in couple with rainwater harvesting tanks.

The following calculations of a potential water catchment, in gallons per day, show that some buildings could implement greywater systems and greatly benefit their own building water demands. Greywater usages include flushing toilets and watering gardens (see figure on right). We offer four sites that could implement this greywater system in the diagram below and multiple sites that could harness rainwater catchment for whatever use they deem appropriate.
Greywater Cycling and Rainwater Catchment Sites

Calculations

<table>
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<th>Greywater Cycling</th>
<th>Actual Use</th>
<th>Desired Use</th>
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<td>1</td>
<td>900,740 gal/day</td>
<td>112,150 gal/day</td>
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<td>1a</td>
<td>1,551,250 gal/day</td>
<td>99,512 gal/day</td>
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<tr>
<td>1b</td>
<td>1,551,250 gal/day</td>
<td>102,643 gal/day</td>
</tr>
<tr>
<td>2</td>
<td>1,551,250 gal/day</td>
<td>103,399 gal/day</td>
</tr>
<tr>
<td>2a</td>
<td>1,551,250 gal/day</td>
<td>103,399 gal/day</td>
</tr>
<tr>
<td>1b, 2b, 3b- Dwelling Units w/ 50 residents on average. 1- Dwelling Units w/ 30 residents on average.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Restroom</td>
<td>250,000 gallons/month</td>
<td>307,711 gallons/month</td>
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</table>

Rainwater catchment

<table>
<thead>
<tr>
<th>Rainwater harvesting calculations made with average yearly Bellingham precipitation of 2.94 inches/month.</th>
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<td>4a</td>
</tr>
<tr>
<td>5a</td>
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</table>
4.5 Install sculptures that sequester pollutants

*Prosolve370e* is a decorative architectural structure that can effectively reduce air pollution in cities when installed near traffic or on building facades. The company is Elegant Embellishments Ltd. based in Berlin. They are coated with a superfine titanium dioxide (TiO2), a pollution-fighting technology that is activated by daylight. The structure neutralizes specifically:

1. Volatile Organic Compounds (VOCs), produced by cars
2. Nitrogen oxides (NOx), which are a harmful by-product of combustion engines most commonly produced by cars. NOx is a key contributor to air pollution in cities, and a precursor to ground-level ozone.

It uses natural UV light and humidity and transitions these compounds into carbon dioxide and water. Specifically, if they are placed beside the alleyway façade adjacent to the Downtown Bellingham Bus Station, they would be able to reduce the nitrogen oxides and VOCs from this direct polluting source. Also, by placing these in the alleyways along unused walls they can improve the air quality for these dense areas subject to delivery truck and business pollution such as hood vent exhaust from restaurant operations. By installing these prosolve370e structures they could improve the air quality of downtown.
The Manuel Gea González hospital in Mexico City is about 2,500 square meters. It is located in one of the most air polluted cities in the world, due to inefficient cars. Based on third-party testing of their material, Schwaag estimates the facade will neutralize roughly the same amount of smog produced each day by about 1,000 vehicles in Mexico City.

Combining both the vertical garden structures, greywater systems, and prosolve370 e structures side by side could create a beneficial symbiotic relationship. Nitrogen oxides and VOCs of the prosolve370e clean air and their outputs of carbon dioxide and water are a resource to the vertical gardens. The combination of prosolve370e and vertical gardens tackles the downtown issue of air quality improvements. More use of greywater systems could supply the final amounts of water needed for these vertical gardens.

4.7 Consolidated trash sites could be used to cut down on obstacles to foot traffic in the alleys and to make them more aesthetically pleasing.

Utilities

5.2 Adding bike racks and storage at two locations in this alleyway could support and encourage multimodal transportation. Bike racks are welcomed, but bike hangers could be used as well as they have pleasing aesthetic values. The hangers are designed for use in tight spots and can be built for low costs. By installing bike hangers, we could see more bike activity in the alleyways. Some bike hangars are designed for urban spaces, as shown.
5.3 Improve the lighting of the alleyways

Existing Lighting Map
Lighting down this alley is sparse, harsh and inadequate. By adding string lights (led) above the alley, high enough to accommodate service vehicles, as well as entry lights, appropriately styled neon bar and park lights, the area would be welcoming, safe to use at all hours, and attractively adding to the narrative we are building downtown.

There is opportunity to bring unique types of lights to each of our alleyways. Better lighting is needed in alley 11 and 12, but especially in alley 10. Better lighting will bring a sense of safety and encourage both foot and bike traffic down them during all hours. In turn, crime and loitering could go down as well. The goal is to illuminate each of these alleys in the best way possible and to do so at a cost effective price point.

To build upon the feel of alley 12, putting in both street and building lights with classical designs could be used. Classically designed street and building lights can be purchased from several places, with many of them replicating the cast iron look while implementing fiberglass technology. This ensures both an efficient design and sturdy product. The efficient design will save on maintenance costs that are associated with cast iron poles, and the fiberglass design conforms to AASHTO and ANSI wind load.
and breakaway standards. These lights will could utilize a system such as the Sylvania LED system. Sustainable and efficient classical style lights will bring a great blend of new technology and an aesthetically pleasing old look to this alley that will complement the historic buildings found here.

For the alleyway 11, the main focus is to restore and/or replace the building lights that line the alley. This is a unique alley because there is one side enclosed by buildings, and the other side is open air with only a fence enclosing the alley. This allows for several bright street lights from the bus station to partially illuminate the alley. Fixing up broken and burnt out building lights here will complete the illumination of the alley and by adding string lights could to give this alley a friendly accessible sense of space. The string lights will run from the sides of the buildings, over the chain link fence to the street lights (where they will be strung to) and back.

The main feature of the alley 10 could be string lighting. The lighting of this alley is the direst in terms of needing updating and repair. This alley has areas of decent lighting that contrast with very dark areas filled with nooks and crannies. Loitering and graffiti have been cited as problems here. String lights above the alley will provide good lighting, a great nightlife feel, and a sense of enclosure to the area. By
placing lighted arches in the entrances of both ends of the alley it could bring a more welcoming and intriguing look to this alley, inviting use to it. Neon bar signs could also be used here, building on the nightlife theme of the abutting bars.

6.1 Create Enhanced Pedestrian Crosswalks between Alleyways

The installation of enhanced pedestrian crosswalks to connect alleyways on Holly Street could allow easier access to these spaces. These crosswalks could be equipped with Rapid Flashing Beacons and appropriate signage. This would create a more human scale and enable easier access for pedestrians.

6.2 Distinguish between roadway, sidewalks, and alleyways by different materials and gradients to give users a sense of place.

6.3 Archways at the entrance of each alleyway, coupled with wayfinding signs will give our alleys a welcoming and familiar feel. These could be used in all alleys, but would make the most impact in alley 10. Way finding signs could also increase the access and navigability of features and attractions in the alleyways.

References

Project Groups weebly site: [http://studioalleyredevelopment.weebly.com/](http://studioalleyredevelopment.weebly.com/)
Biomimicry. [http://biomimicry.net/](http://biomimicry.net/)
3.5.1: Introduction and Overview

Alley 13 is located between Railroad and State Street and bounded by East Laurel and East Maple, at the mouth of the Interurban Bike Trail. Alley 14 is located between Railroad and State Street and bounded by East Maple and East Chestnut. The Farmers Market is an important social amenity to the community, and attracts large volumes of pedestrian traffic during market hours. Alley 15 is located between Railroad and State Street and bounded by East Chestnut and East Holly. It is characterized as having historic buildings worthy of preserving as well as prime locations for infill development.
3.5.2: Planning Objectives

Bellingham is committed to enhancing its downtown alleyways through innovative strategies that extend and strengthen the vibrant character of the city. Integrating alleyways into the pedestrian network exposes underutilized assets and unique opportunities for sustaining the character of our city.

3.5.3: Issues and Opportunities

Alley 13 has several opportunities including parking stalls that could be converted to retail space, a prime location for experimental parklets and thriving alley-fronted businesses. Its issues range from unconsolidated trash, poor lighting, and underutilized real-estate. Alley 14’s opportunities include the Farmers Market, prime infill opportunities, and midblock connectivity. Its issues include unconsolidated trash, poor lighting, and decaying pavement. Alley 15 offers infill opportunities, historic preservation, and distinctive architecture. Its issues are unconsolidated trash, underutilized space, and monotony.

3.5.4: Character

Character in the alley communicates its distinct qualities, including the differentiation between auto and pedestrian space, its relative safety, and economic vitality. Capitalizing on opportunities each alley’s unique characteristics can establish the alley as a vibrant public space.

Alley 13:

The location of alley 13 provides the opportunity for promotion of multimodal transportation because it is situated at the mouth of Interurban Bike Trail. It also offers existing alley fronted businesses that attract pedestrian activity, making it a popular place for business activity. There are, however, an increasing number of residents using the alley to access parking garages, which presents a challenge ensuring pedestrian safety.
Alley 14:

The Farmers Market is a social amenity for the Whatcom community as well a valuable asset to the alleyway itself. The market receives financial support from the City and community advocates. The Saturday market brings exciting and lively activity to the alley with over 2000 visitors occupying the market each week. The Market offers a variety of stalls including farm, craft, botanical, and food stalls. The market provides an anchor to the downtown alley area. When not in use, however, the market depot space is largely vacant. This offers a meaningful point for improvement by promoting more community events and maximizing its use year-round. The Harold building parking lot also presents a good opportunity for infill on the edges of the lot.

Alley 15:

Alley 15 is a prime locale for infill. The character of the alley should remain consistent with alley 13 and 14 by providing wayfinding amenities at alley entrances. It provides historic buildings that should be identified and preserved for future generations.

3.5.5 Development Strategies

1. Development Opportunity

1.1 Opening backs of buildings- Buildings adjacent to the alley should open their unused spaces facing the alleyway in order to draw more storeowners into the area. Doing this invites economic opportunities and enables place-making.

1.2 Open up behind the Green Frog- Provide seating and other pedestrian amenities in order to create plazettes for alley users, these are unique areas that differentiate pedestrian space from auto-space. (Alley 13.)

1.3 Infill parking garages with commercial- Encourage the infill of under-building parking that currently borders the alley in order to provide more commercial opportunities (Alley 13.)

1.4 Parking lot infill with alley-fronted entrances- Encourage developers to create infill buildings in the parking lot directly across from the market. These buildings should be built in compliance to local character and with available store space fronting the alley (Alley 14.)

1.5 Parking lot infill, with alley fronted businesses- to draw further pedestrian activity to the ‘Daylight Alley’ “with eyes on the street” to increase safety during business hours (Alley 15.)
2. **Open Space/Parks/Plazas**

2.1 Incorporate Dynamic Seating - Seating should be accommodated along the alley corridors in the form of dispersed benches surrounded by plants. Moveable chairs and tables should be considered where possible, as well as seat-walls creating a dynamic public space.

2.2 Parklets - Install parklets paralleling the alleyway to provide seating for pedestrians and bring unique character and texture to the area.

2.3 Pedestrian covers - Provide pedestrians with shelter from weather conditions, such as rain in the winter, and provide a shaded space in the summer months, also creating a sense of enclosure for pedestrian users.

2.4 Pocket park, at end of alley and across from market, with sufficient seating to accommodate market crowds (Alley 14.)

3. **Social and Human Capital/Arts/Design**

3.1 Safety through Environmental design – Access Control, Natural Surveillance, Territorial Behavior (CPTED recommendations)

3.2 Art - Alley facades should incorporate art depicting local culture and character throughout alleyways.
   - Hire local artists to create and place mural on building bordering alley to enhance the pedestrian experience by creating a better sense of comfort and enclosure (Alley 15.)

3.3 Develop historic walking tour signage for sites- Label historic building and sites to encourage tourism and enhance the historic downtown experience.

3.4 Plazzettes to accommodate social “spilling” from restaurants by creating clear pedestrians zones- Create plazzettes outside of popular restaurants and other areas of entertainment to encourage public use. These areas should be aesthetically and functionally different from the rest of the alleyway through the use of pavers, and the incorporation of pedestrian amenities (Alley 13.)
4. Environmental and Sustainability

4.1 Rain Gardens/Bioswales placed at select locations to function as natural stormwater treatment facilities, also enhancing the built environment by beautifying it with local flora.

4.2 Use of permeable paving materials where applicable to reduce and filter pollutants from stormwater.

4.3 Tree-lined parking lots to alleviate monotony- Place trees, native to Washington State, around perimeter in order to enhance human scale qualities for pedestrians, and bring nature to the fringe of the alley (Alley 14.)

5. Utilities

5.1 Lighting - Lighting should help provide a regimented structure in the alleys. Lighting fixtures should be spaced so that the alleys are not excessively illuminated, yet still safe.

5.2 Garbage – Create central consolidated trash locations with compactors. Create public trashcan locations, and encourage the use of corrals to conceal private trashcans.

5.3 Enhanced Paving – Pedestrian alley paving should extend into intersecting sidewalks to the back of the curb to clearly identify these spaces as a transition between existing sidewalks and the enhanced alley environment.

5.4 Metal lattices with vines, lit from the bottom- enclose this space further, while bringing more natural vegetation into the alleyway (Alley 13.)

6. Connectivity and Public Safety

6.1 Bike parking- Alleys should create adequate and secure parking for bicycles.

6.2 Install Wayfinding Signage - Identification and way finding signage should have a relatively subdued presence at alley gateways. The signage should be employed in the form of paving inserts to identify the alley, and directional arrows attached to provide direction to businesses and other significant destinations.

6.3 Stairway extended to run length of retaining wall to accommodate through-traffic produced by the Saturday Market as well as providing a place for pedestrians to sit and socialize (Alley 14.)