

re-IMAGINING

The Railroad Avenue Corridor

A 25-Year Vision
Bellingham, Washington



Winter, Spring 2022 | Urban Planning Studio | College of the Environment | Western Washington University

AN URBAN TRANSITIONS STUDIO
PUBLICATION

RE-IMAGINING The RAILROAD AVENUE CORRIDOR

A 25-Year Vision

DOWNTOWN BELLINGHAM, WASHINGTON



College of the Environment
Western Washington University
Bellingham, Washington 98225 USA
2022

A downloadable PDF file of this report is available at
<https://cenv.wvu.edu/uepp/ba-urban-planning-sustainable-development>

Railroad Ave Businesses - E Maple St to York St

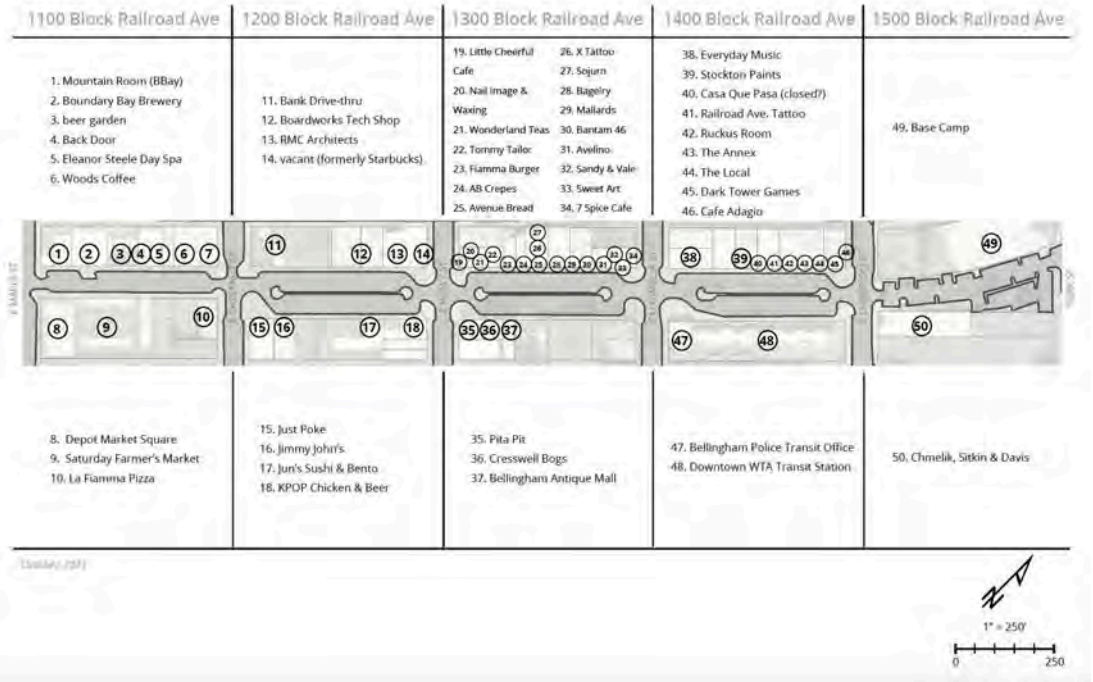


Table of Contents



<i>Table of Contents</i>	<i>page</i>
<i>Part I: Conceptual Plan (winter 2022)</i>	
<i>Partners and Authors</i>	4
<i>1.0 Introduction to the Railroad Avenue Corridor Study</i>	5
<i>2.0 Planning Goals and Public Survey Responses</i>	6
<i>2.1 Planning goals</i>	6
<i>2.2 Community survey responses</i>	10
<i>3.0 Study Analysis</i>	22
<i>3.1 Opportunities and solutions</i>	23
<i>3.2 Infill capacity analysis</i>	24
<i>4.0 Right of Way Design Alternatives</i>	30
<i>4.1 ROW A - One-way northbound travel lane, one street closure</i>	30
<i>4.2 ROW B - One-way southbound lane; two street closures</i>	31
<i>5.0 Ideation Mapping</i>	35
<i>6.0 Design Recommendations</i>	42
<i>6.1 Activating economy</i>	43
<i>6.2 Promoting environmental sustainability</i>	49
<i>6.3 Pedestrianizing the public Right of Way</i>	70
<i>6.4 Housing diversity, affordability, and equity</i>	77
<i>6.5 Enhancing the public realm</i>	86
<i>Part 2. Implementation Strategies (spring 2022)</i>	

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Newly proposed mixed use buildings on the sites former occupied by Hohl's and Clarks Feed and Seed.

*"The best way to predict the future
is to design it"*

Buckminster Fuller

1. Introduction to Railroad Avenue Corridor Study

The 2022 WWU Planning Studio class evaluated development alternatives for improving Bellingham's Railroad Avenue Corridor. Students drew from their acquired knowledge of the site, discussions with city planners and downtown organizations, a community survey, the review of city goals, policies and plans, and inspiration from sustainable design principles, to develop a range of right of way improvement strategies that are intended to help inform the Downtown Comprehensive Plan.

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: its 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 several decades. Downtown Bellingham is a great place because, in part, it wasn't "master planned." Rather, it has experienced a series of organic 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 districts" that have emerged through the attraction of new investments and pioneering business startups that have contributed to the rehabilitation of these formerly underutilized spaces.

Downtown Bellingham's Railroad Avenue corridor comprises a 5-block area located between York Street, to the north, and East Maple Street, to the south. The corridor length exceeds 2,500 linear feet, providing over 5,000 linear feet of sidewalk frontage. The corridor's ROW width ranges between 80 feet and 130 feet. The Railroad Avenue corridor provides a valuable service in supporting downtown businesses and community events. The Railroad Avenue corridor also provides tremendous opportunities for improving the public sphere for the entire downtown community to increase social capital and foster the continued expansion of retail business activity, residential mixed use housing, and other community, environmental, and economic benefits.

This study examined improvement opportunities for our long-time underutilized, yet emerging, downtown. Our students, working in project teams, formulated a series of urban design strategies to help facilitate new ways to think about urban redevelopment opportunities in our downtown in order to meet Bellingham's goals for vibrant central city development. They recommend a series of development concepts that can contribute to the downtown's economic, social justice, and environmental vibrancy and sustainability.

Our students evaluated current conditions, principles in sustainable community development, as well as city center planning goals and offer a series of conceptual design ideas that emphasize:

- The redevelopment capacity and 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
- Conversion of the corridor's rights of way for greater public use and social capital
- Opportunities for creating a central downtown public plaza and green spaces
- Private and public co-use of portions of the public Right of Way
- Improvements for non-vehicular accessibility and connections, and
- Strategies for integrating environmental and sustainable design

Two recommended ROW design concepts are presented in this report. In a subsequent Planning Studio class in the spring, students will consider implementation measures and a recommended phasing schedule to advance these conceptual development strategies

2.0 Planning Goals and Community Survey Results

2.1 Planning Goals

The following public resources were referenced as guidance to the formulation of planning goals for this study:

Bellingham public policies

- Downtown Bellingham Plan
- City Center Neighborhood Plan (2014/2019)
- Bellingham Climate Action Task Force (2019)
- Downtown Bellingham Survey Report (2019)
- Downtown Bellingham Retail Strategy (2018)
- Comprehensive Plan (Ord. No 2016-11-037)
- North State Street Design Concept
- CBD Hist. Res. Survey and Inventory (2012)
- City Center Design Standards (2014)
- Comprehensive Plan Transportation Element
- City-wide Pedestrian Master Plan
- Bellingham Arts Dist. Making Places for People
- Draft RR Avenue Closure

Placemaking Resources

- “Actions for Streets as Places: How Government Makes it Happen” (2016)
- “Navigating Main Streets and Places.”
- WWU Planning Studio Alley Studies (2021)
- LEED Neighborhood Development
- Project for Public Spaces website
- Main Streets as Public Spaces Toolkit
- People over Parking

2.1.1 Economy Goals

- Increase access through the downtown Bellingham area via Railroad Avenue with greater multi-modal transit, allowing greater activation of the streetscape and attracting more patrons to local establishments.
- Promote collaboration between public and private interests in the downtown Bellingham and Railroad Avenue area to better contribute to a greater use of the streetscape, creating a more welcoming and attractive environment for economic and pedestrian activity.
- Promote the use of “streateries” that are currently utilized by local restaurant venues to permanently occupy that space in the future, and include other aspects that improve the sense of activity along Railroad Avenue.
- Develop greater economic activity through the transition of transportation modes along Railroad Avenue. Increasing the amount of pedestrian and bicycle activity along the corridor will positively impact the economic activity of the many integral Bellingham businesses along the corridor.
- Increase the amount of pedestrian activity along Railroad Avenue to incentivize greater economic activity and development such as more housing opportunities in vacant lots and above currently functioning lots.

2.1.2 Environmental Goals

- Protect and restore our community’s natural resources (land, water and air) through proactive environmental stewardship.
- Foster vibrant urban villages.
- Interconnect parks and natural features by establishing an integrated network of trails, parks and open spaces; maintaining existing trees; and incorporating landscaping into new developments.
- Limit urban sprawl and promote sustainable land use planning.
- Reduce Railroad Avenues overall carbon footprint through innovative design changes like increasing greenery and incentivize solar panels, green roofs, water reclaiming systems and green facades.
- Ensure all new and modified structures adhere to LEED standards
- Reduce the Urban Heat Island Effect where possible by adding greenery, shade cover, and particularly using lighter colors for future construction projects.
- Include climate change mitigation additives on the Railroad Avenue Corridor such as pervious ground surfaces, bioswales, greenroofs, and other flood mitigation designs.
- Make use of available energy-harnessing natural resources like wind, rainwater, and sunlight.

2.0 Planning Goals and Community Survey Results

2.1.3 Transportation Goals

- Improve the Railroad Avenue Corridor to include additional weather protection infrastructure.
- Reach 100% renewable energy use for municipal facilities (electricity, heating and transportation), and the Bellingham community's electricity supply by 2030.
- Increase the installations of green infrastructure such as living walls, planter boxes, and street trees.
- Encourage business owner cooperation in keeping downtown clean through the removal of garbage and natural debris.
- Increase lighting on Railroad Avenue while also replacing all existing lighting with LED lights to incentivize more pedestrian traffic and ensure public safety.
- Encourage walking as a mode of transportation that is accessible to all in order to improve the health of the community and the environment. Create an attractive pedestrian environment by increasing space dedicated to pedestrians, specifically improving street edges and frontages, street furniture, and other pedestrian amenities. Improve pedestrian connectivity to amenities and businesses to encourage walking as a viable mode of transportation
- Improve pedestrian safety along the Railroad Avenue corridor like instituting traffic calming measures and improving the design of pedestrian crossings. Reduce vehicle lane width to more appropriately match the speed limit and give more space to pedestrians. Create clear distinctions and physical separations between pedestrian and vehicular space.
- Promote Railroad Avenue as a bicycle route accessible to riders of all ages and skill levels. Develop a separated bicycle facility on Railroad Avenue to promote bicycle use, increase safety and create a link between the South Bay Trail and Whatcom Creek Trail. Install additional bicycle parking on Railroad Avenue, including secure bicycle parking (i.e. bike lockers), in order to facilitate increased ridership.
- Minimize vehicular traffic and parking on Railroad Ave Corridor. Reduce single vehicle occupancy trips by promoting other modes of transportation through adequate facilities. Reduce parking to free up space that could be used more effectively, allowing for higher levels of connectivity for other modes of transportation.
- Transit service on Railroad Avenue is safe, well-connected, affordable, and accessible for all. Work closely with WTA to support the WTA Strategic Plan, ensure that City and WTA policies are consistent, and prioritize transportation improvements that support transit ridership for neighborhood residents.
- Develop a hub area on Railroad Avenue adjacent to the WTA Transit Station to encourage ridership to and from Railroad Avenue events like the Farmer's Market.
- Remove minimum parking requirements to allow infill development on smaller properties which would otherwise be difficult to develop.



Example of green roof

2.0 Planning Goals and Community Survey Results

2.1.4 Housing Goals

- Address and prevent homelessness by increasing the supply of permanent affordable housing for low income residents and working class residents (60-120% AMI).
- Increase the supply of affordable rental and homeownership opportunities that are context sensitive.
- Address emergency shelter and transitional housing needs of those experiencing homelessness.
- Promote neighborhood equity, with a consideration for those experiencing homelessness including permanent shelters and low barrier shelters.
- Encourage the use of innovative housing models such as high-density mixed-use middle-housing and shared equity housing models.
- Encourage and coordinate public-private partnerships using incentives and mandates to increase housing affordability.
- Ensure new developments follow seismic standards, net zero energy efficiency and green building materials.
- Encourage pedestrian and non-car centric infrastructure into new housing developments.
- Encourage the inclusion of dedicated green space and open space where possible in new housing development including the use of rooftops and balconies.
- Evaluate the adaptability and resiliency of existing buildings to identify which buildings need to be retrofitted and rehabilitated into new housing units that meet current housing demands.
- Encourage mixed-use development projects that focus on local business and housing needs, promoting high quality of life attributes.



2.0 Planning Goals and Community Survey Results

2.1.5 Open Space Goals

- Identify areas in the public right of way that need improvements, such as widening sidewalks and creating urban plazas.
- Redesign areas in the public realm which act as connectivity points, including alleys, walkways and sidewalks.
- Create plans to transform the Railroad Avenue corridor into a more flexible urban space that includes multi-modal transportation, public gathering spaces, parks, and open spaces.
- Create plans that treat Railroad Avenue as an artistic corridor by integrating art into Railroad's functional design, including a place of unity like a public square.
- Support formal and informal gatherings through street closures, design, and pursuing use of Depot Market Square outside of the Farmer's Market.
- Create plans for more public spaces, parks, and open spaces in the Railroad Avenue Corridor.
- Create a plan which meets higher walkability standards and connects existing trails.
- Move towards "right-sizing" parking to accommodate for more pedestrian-oriented uses, wider walkways, and cycling paths.
- Make the Railroad Avenue corridor a lively space for people to gather rather than a place for people to consume by creating more public spaces, parks, open spaces, and by supporting street closures.
- Implement human-scaled design infrastructure such as public seating, inviting public areas and other streetscape amenities.



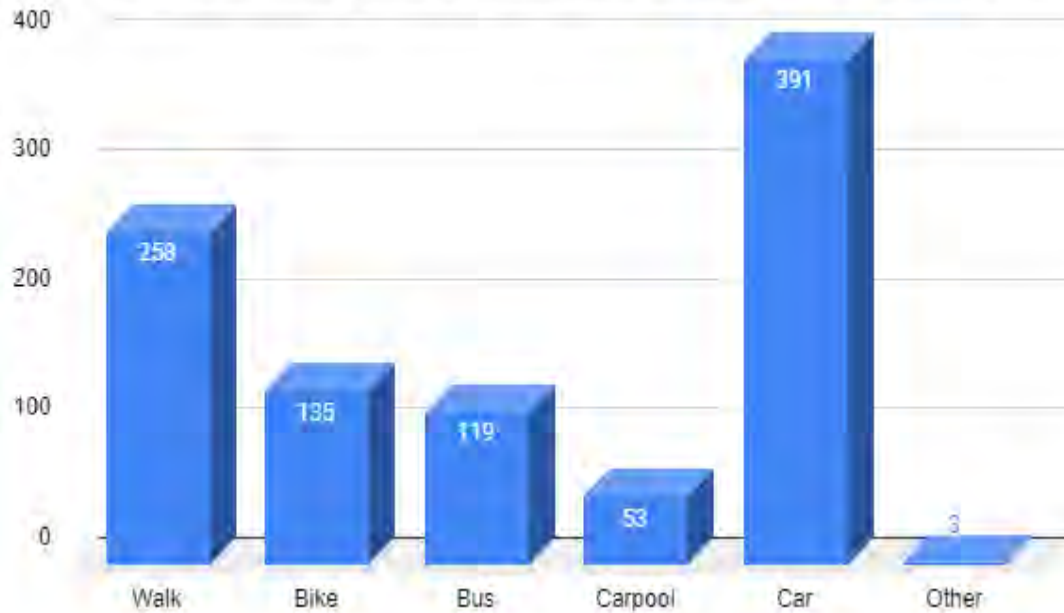
2.2 Community Survey Results

2.2 Community Survey Results

In January, 2022, a survey was released to the public (both digitally and in paper format) inquiring about the community's preferences for improvements to the Railroad Avenue corridor. Over 550 survey responses were received over a 10-day period. The survey results are presented in this section and serve to guide the formulation of design objectives and alternative solutions that attain community preferences.



How do you Primarily Travel to Railroad Avenue or Downtown?



REIMAGINE RAILROAD AVENUE CORRIDOR
COMMUNITY SURVEY

WWU's urban planning students are examining alternatives for improving the Railroad Ave corridor between E. Maple and York Streets in Downtown Bellingham

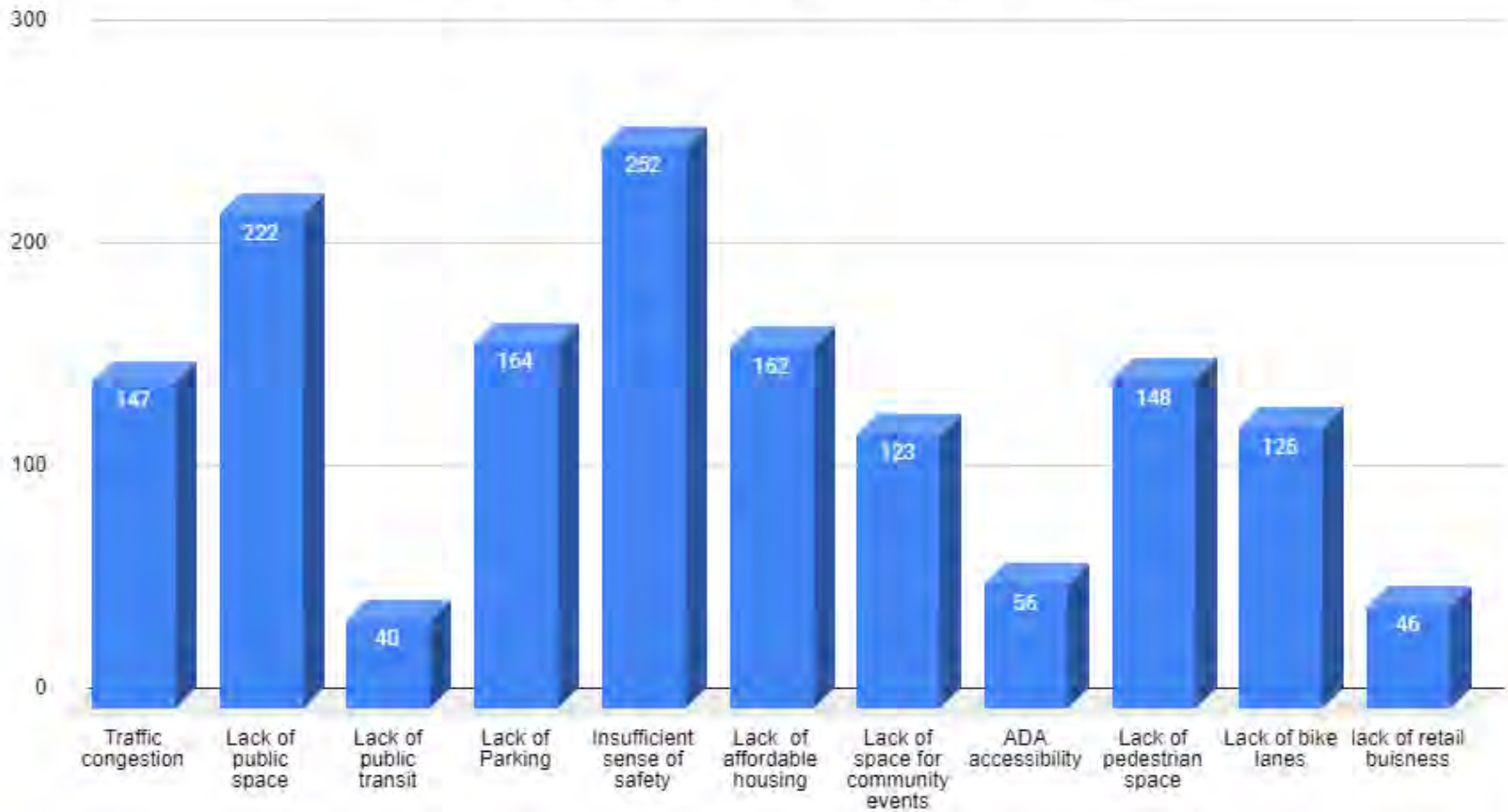
Access digital survey here [\[QR Code\]](#) Or access a paper survey at these pick up and drop off locations

AB Crepes
Food Co-op

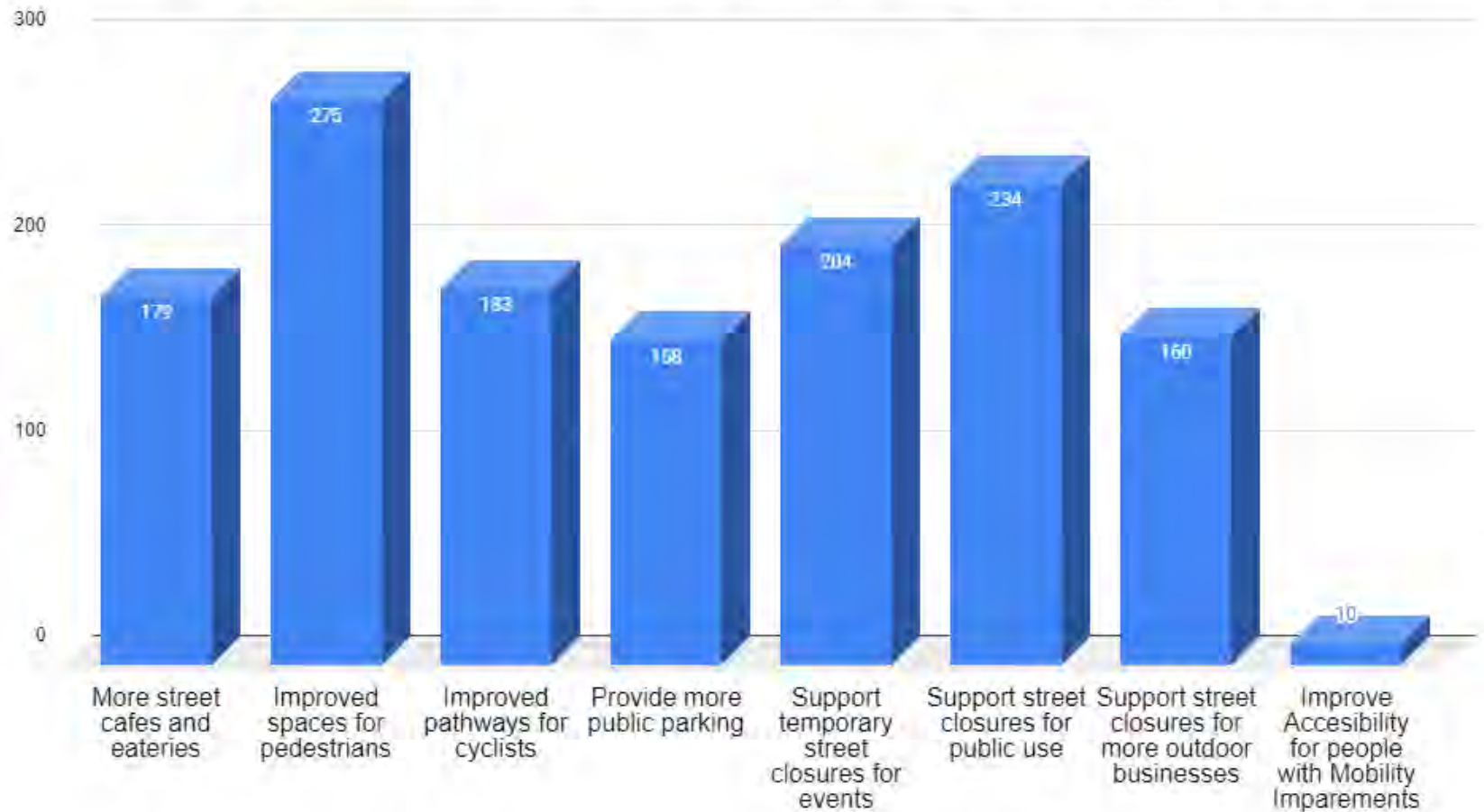
The survey will be available through Sunday, January 23rd

BELLINGHAM COLLEGE OF ARTS & SCIENCES
WESTERN UNIVERSITY OF BRITISH COLUMBIA
CITY OF BELLINGHAM

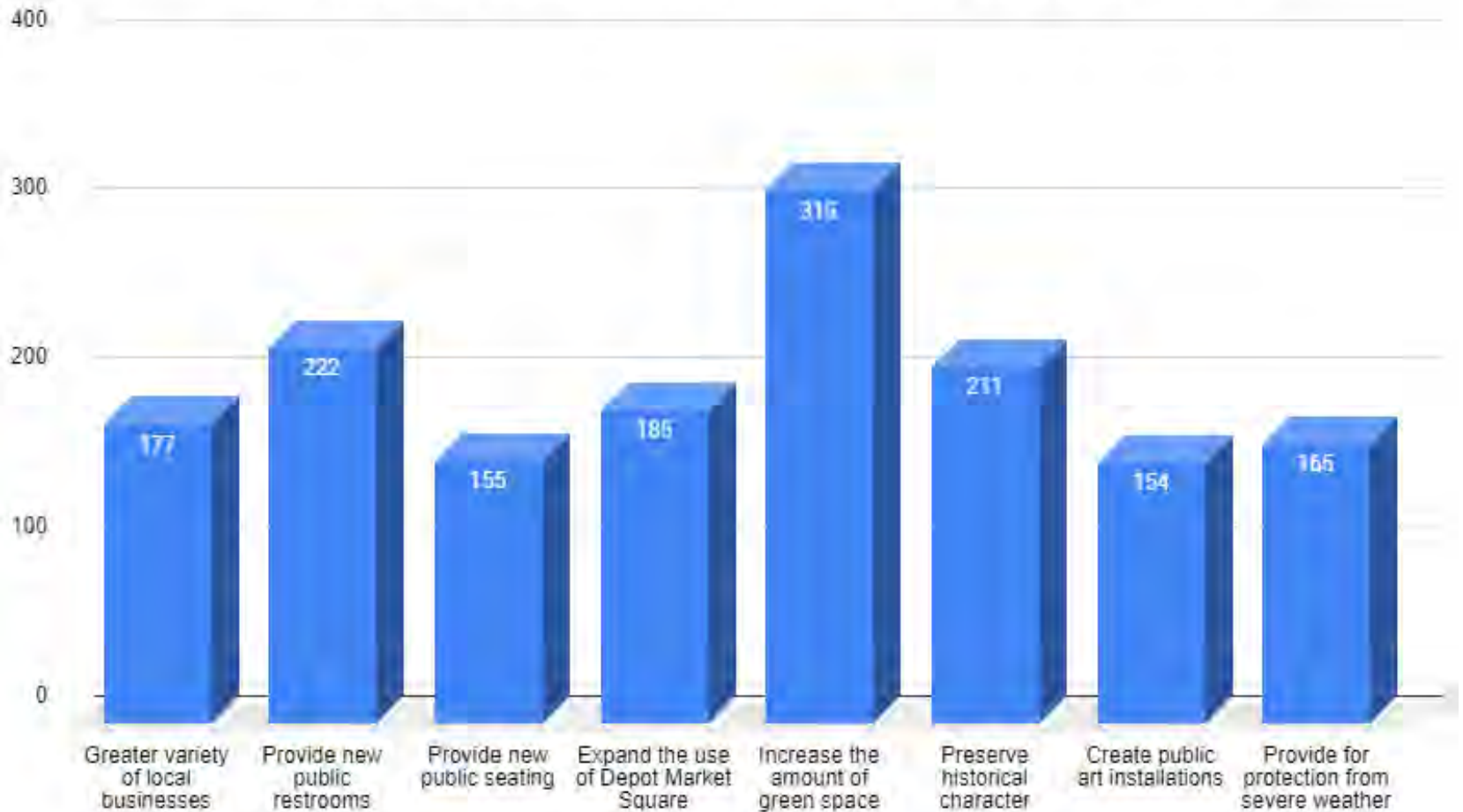
Identify your Top Concerns for Railroad Avenue



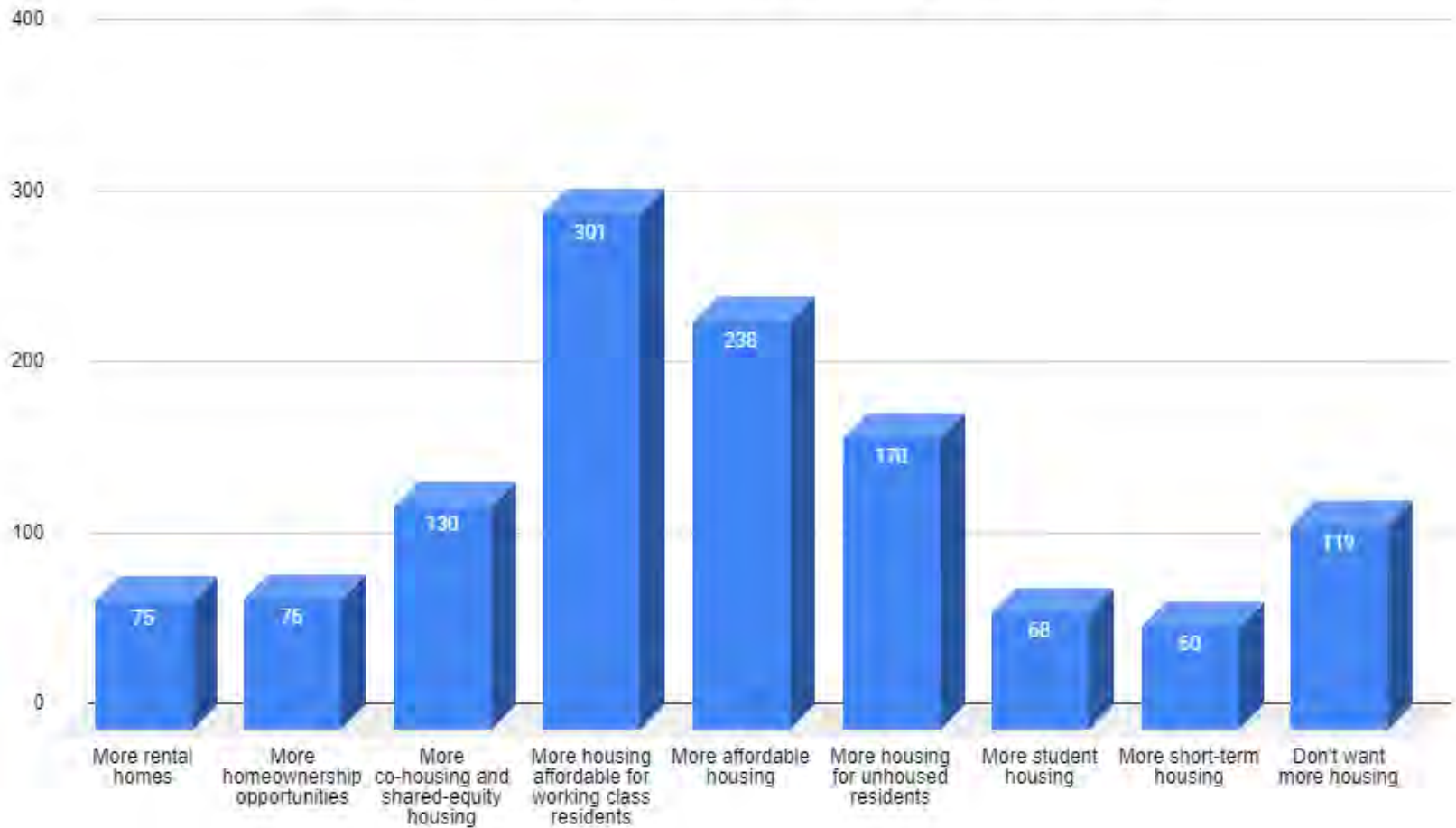
Identify your Top 4 Preferences for Transportation and Right of Way Improvements



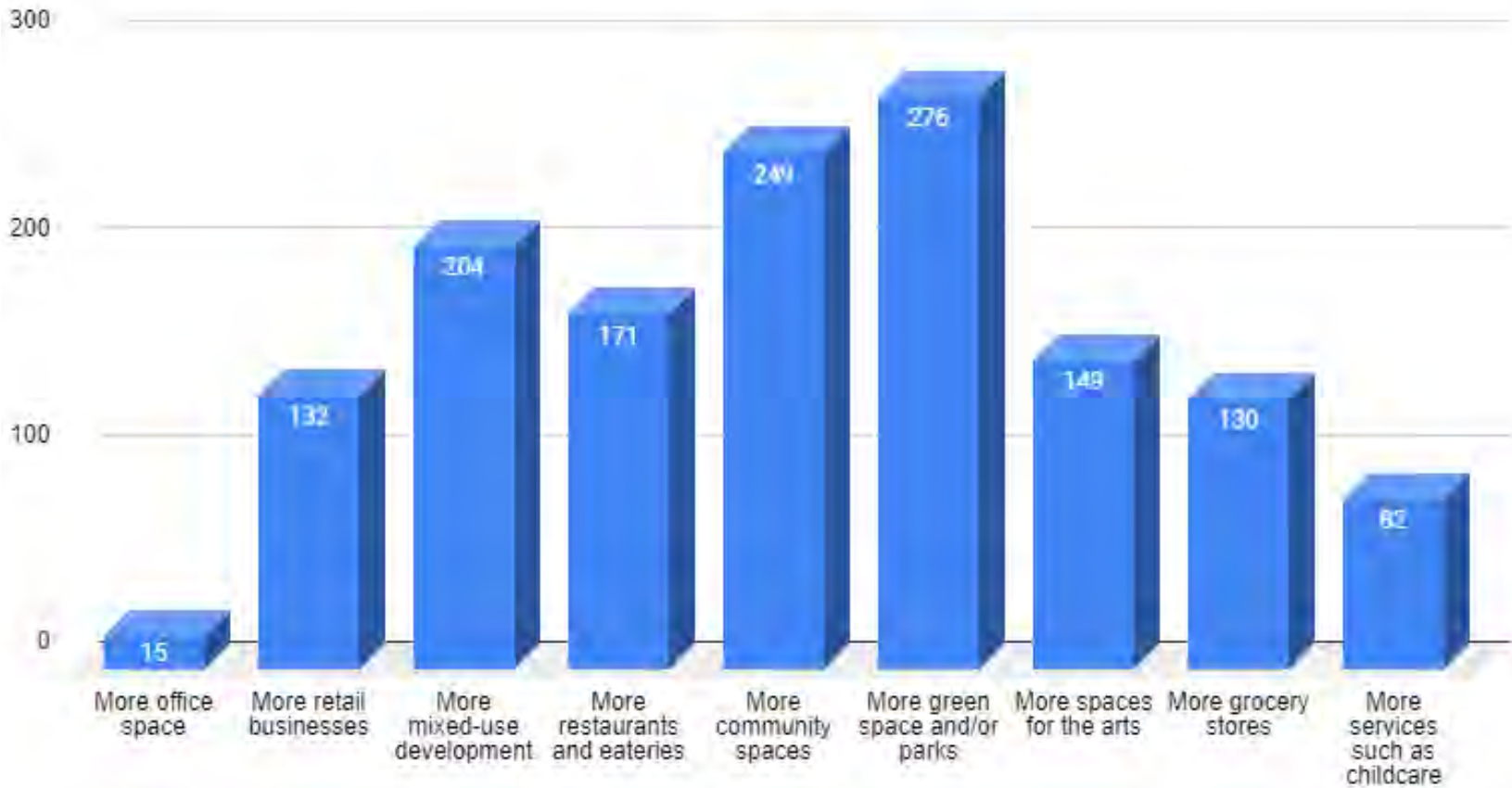
Identify your Top 4 Preferences for Public Space Improvements



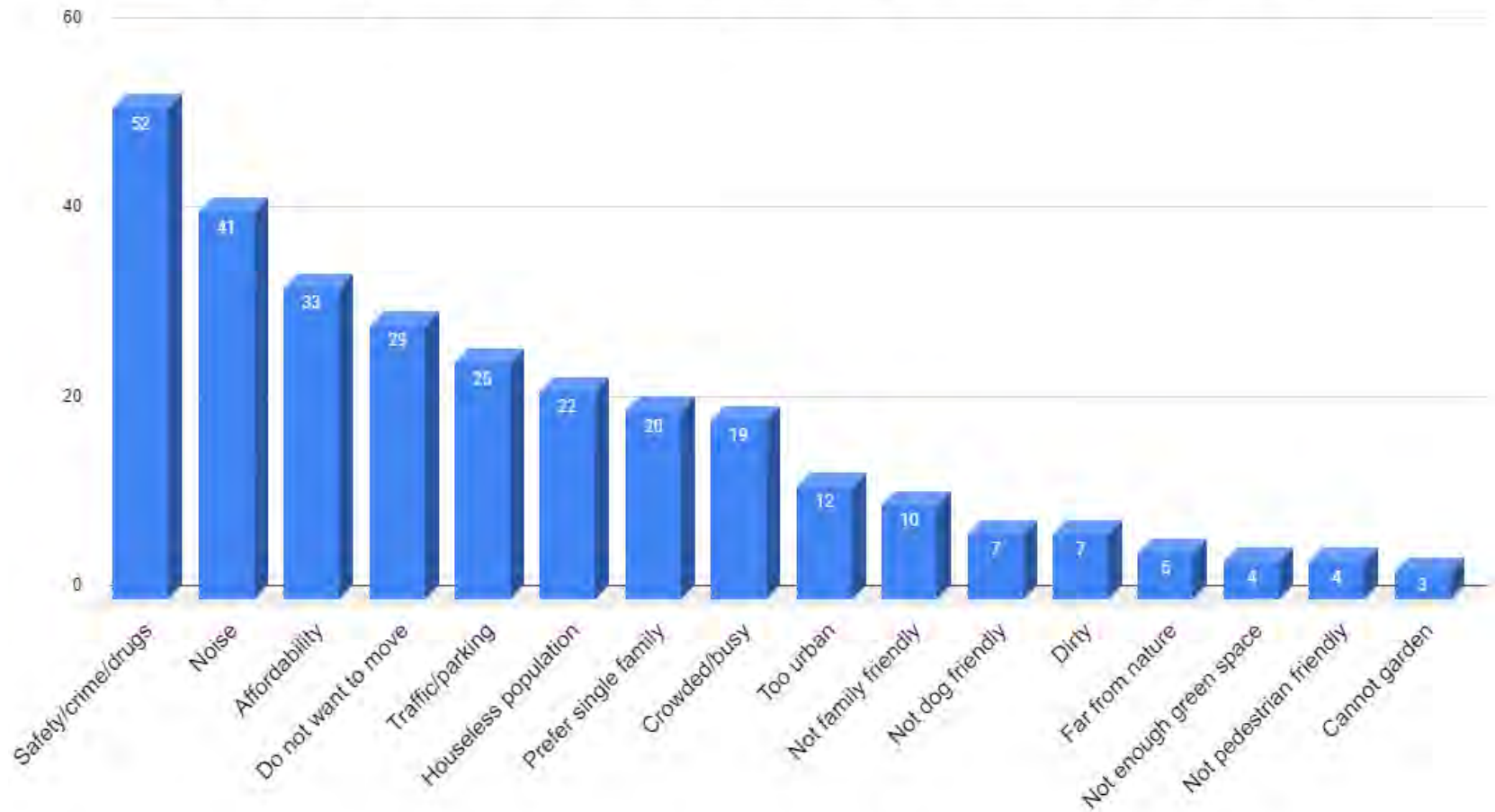
Identify your Top 4 Preferences for Housing Improvements



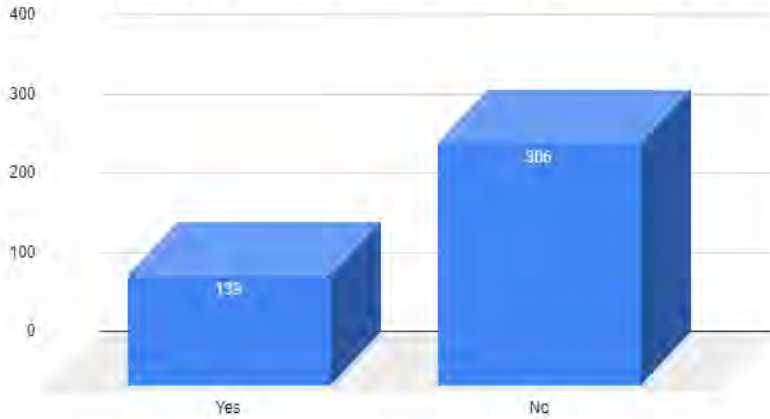
Identify your Top 4 Preferences for the Development of the Vacant Lot of the 1300 Block



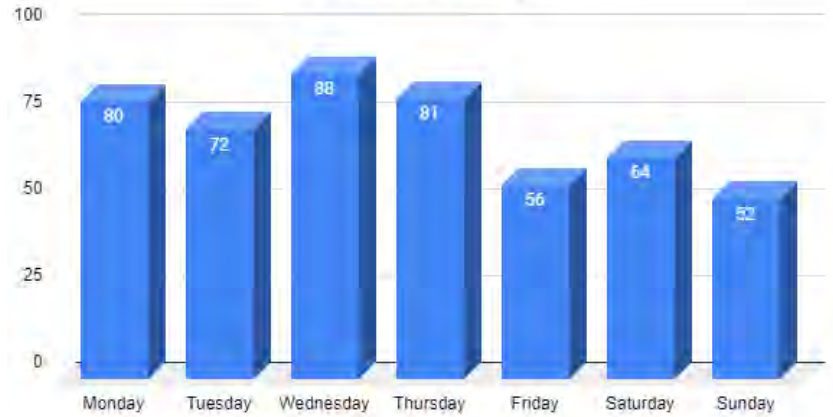
Reasons for not Wanting to Live on Railroad Avenue



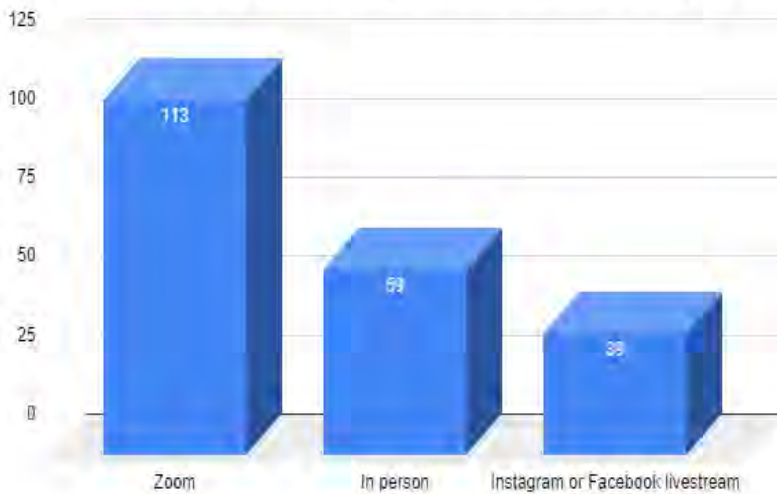
Would you be interested in attending a meeting to share more feedback about the Railroad Avenue Corridor improvement ideas?



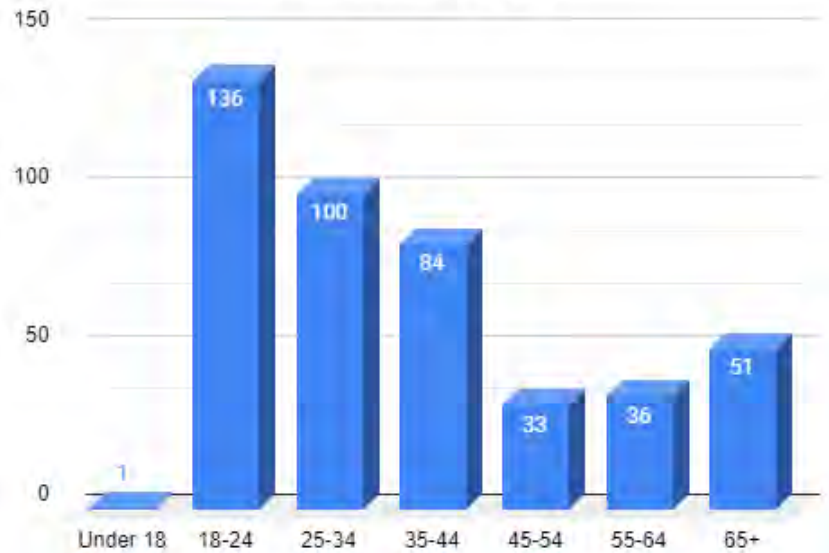
Which Days of the Week would you be most likely able to Attend a Meeting



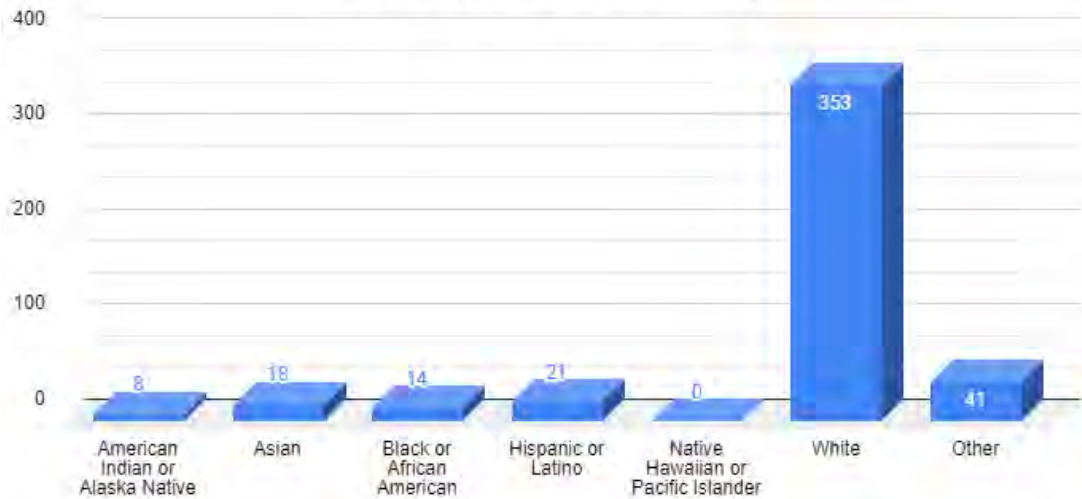
What Meeting Format would be most Accessible to you



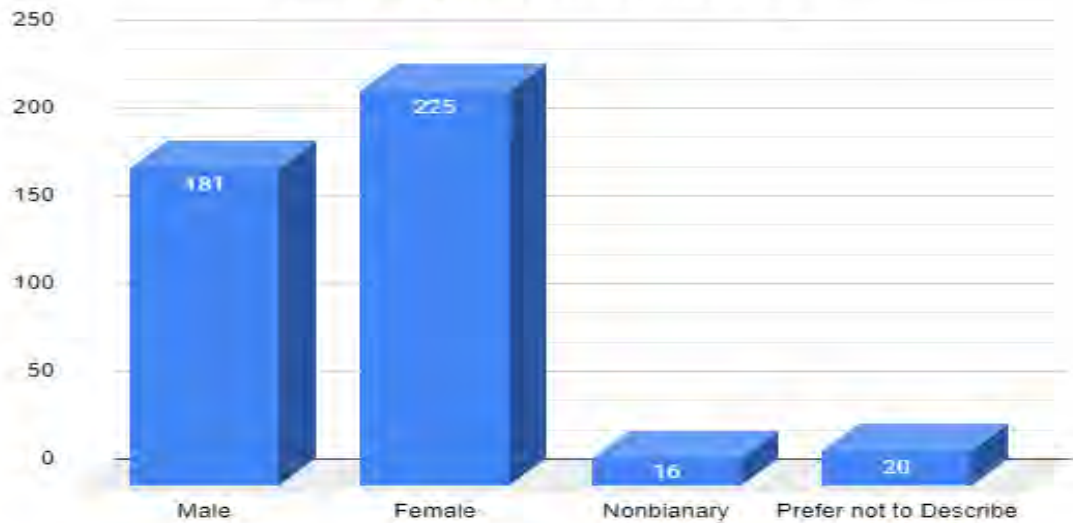
How Old are you



What is your Race or Ethnicity



What is your Gender Identity



3.0 Study Analysis



Streetscape view looking south along the 1300 Block of Railroad Avenue

3.1 Opportunities & Solutions

Group Focus	Opportunities	Solutions
Economic Development	<ul style="list-style-type: none"> • Diverse businesses provide greater employment options • Attract higher wage businesses • Increase the resiliency of existing industry 	<ul style="list-style-type: none"> • Support a diverse economy and local entrepreneurs • Incentivize higher paying businesses in Bellingham • Support industries that promote Bellingham’s natural assets
Environment	<ul style="list-style-type: none"> • Reduce litter and vehicle pollution • Work towards achieving sustainable energy goals • Provide greenspace to facilitate leisure and community activity • Use local vegetation that can aid in storm water management 	<ul style="list-style-type: none"> • Reduction of parking and increasing electric vehicle charging stations promotes sustainable transportation options • Options for clean energy infrastructure include solar panels, storm water turbines, etc. • Additional greenspace improves environment quality • Bioswales create greenspace with local vegetation while aiding in storm water management
Transportation	<ul style="list-style-type: none"> • Increase amenities for pedestrians • Increase connections to bicycle networks and improve safety • Increase the number of buses and routes connecting downtown and greater Bellingham area • Reduction of surface parking to lessen the dependency on cars and the perception that ample parking is needed everywhere 	<ul style="list-style-type: none"> • Wide sidewalks, trees, street furniture, public art, and other amenities increase the usability and quality of the pedestrian network • Railroad Avenue can serve as connector for existing bicycle routes • Planned expansion of the WTA station supports increasing access to downtown without the need for a personal vehicle
Housing	<ul style="list-style-type: none"> • Establish code and regulation for urban village development downtown • Increasing public pedestrian spaces while providing more residences bolsters economic activity, shifting away from shop-and-go commercial activity • Rents are becoming significantly higher portions of people’s income 	<ul style="list-style-type: none"> • Elimination of parking and pedestrianizing of Railroad Avenue provides livable and walkable spaces for the public and residents alike • A housing inventory and analysis of downtown showed the vacancy rate was approximately 1%, which indicates a need for additional housing • Increase housing inventory and affordability
Parks & Greenspace	<ul style="list-style-type: none"> • Reducing the perception that the area is dangerous, especially at night, would help increase pedestrian activity • Reducing space dedicated to cars increases economic capacity 	<ul style="list-style-type: none"> • Increasing pedestrian space and amenities as well as mixed use residential/commercial buildings on Railroad improves safety and economic capacity of Railroad Avenue

3.2 Infill Capacity Analysis

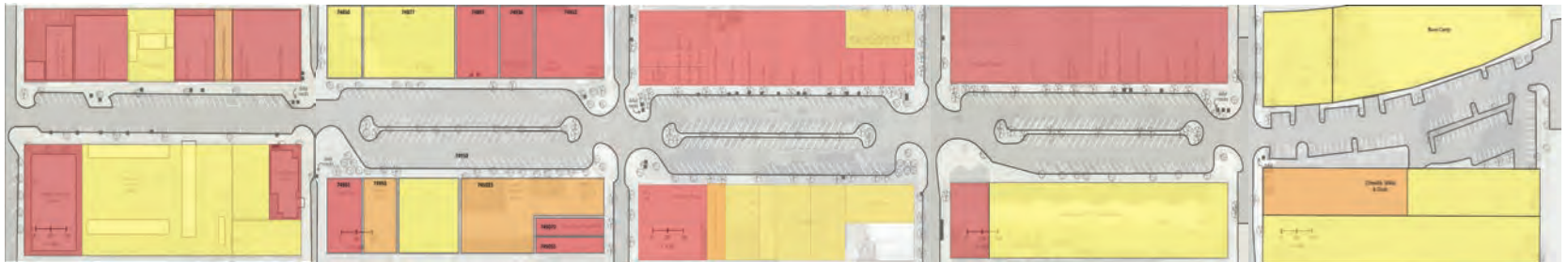
A capacity analysis of Railroad Avenue Corridor properties examined the current uses and potential for infill development along the corridor. The parcel by parcel analysis was preformed using both a qualitative and quantitative assessment methods of each parcel and the assessment of current conditions of property improvements. The quantitative analysis examined a sites' current and potential use. The quantitative analysis assessed the current land value compared to the assessed improvement value, and in combination these analyses denote a site as either 'hard', or permanent, 'soft', as good candidates for infill or redevelopment.

Lots considered “hard sites” are those that have less potential for redevelopment due to their assessed improvement values being greater than their land values. Other considerations include their current social and utilitarian value to the community. Moderate sites include sites that have limited potential for infill or more intensive uses, or buildings that are deemed unattractive or unsafe. Soft sites represent those properties whose land values far exceed the assessed improvement values, such as surface parking lots, or properties showing a greater potential to accommodate more intensive uses.

The map below shows the consolidated 5-block capacity analysis map. Individual maps of

each block are included with accompanying capacity analysis spreadsheets that identify the quantitative and qualitative characteristics for each lot. The qualitative features reflect current use, adaptive feasibility, potential uses, and potential future uses. The quantitative features consider the comparison between assessed land and improvement values. Where the improvement value exceeds that of the land value, a site is determined to be “hard” (>1.0 of improvement to land value), and less suitable for redevelopment. A property whose land value exceeds that of the improvements, it is considered “soft” (<1.0) and more suitable for redevelopment. Strong qualitative characteristics can also influence the hardness or softness of a site.

5-Block Capacity Analysis



1100 Block

1200 Block

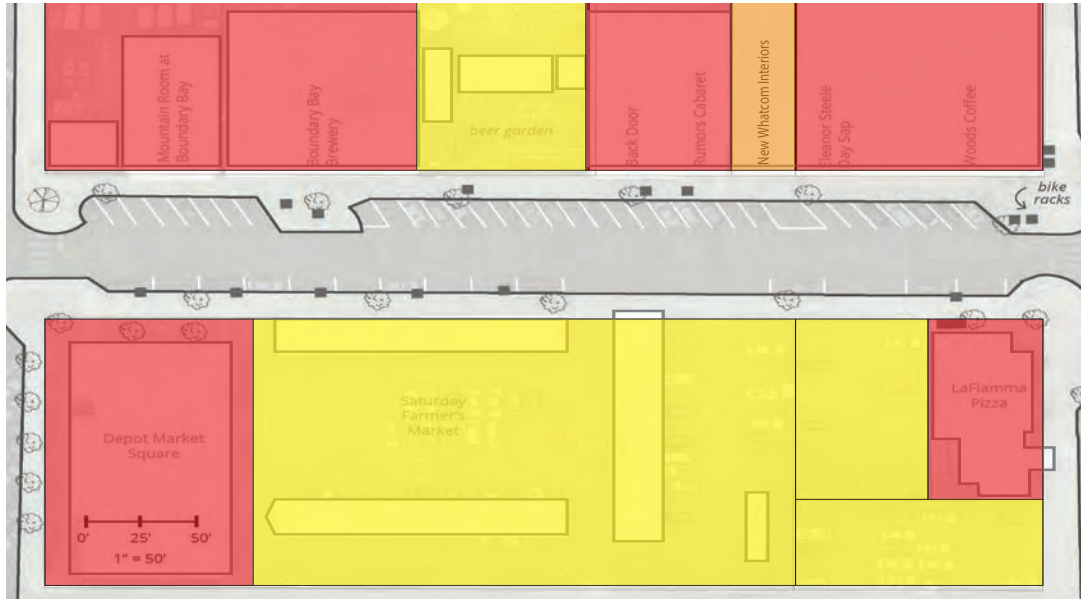
1300 Block

1400 Block

1500 Block

Note: “Hard sites” are less likely to be altered. “Moderate sites” have limited potential for change. “Soft sites” are more suitable for infill development

3.2.1 1100 Block Capacity Analysis



The 1100 block contains several soft sites potentially suitable for more intensive development. They include: the Depot Market open-area parking lot (ID: 74812), Boundary Bay Beer Garden (ID: 74793), and two surface level parking lots adjacent to LaFiamma Pizza (ID: 74883, 74857). The New Whatcom Interiors property (ID: 74798) is also considered a moderate site due to the potential for more intensive infill development.

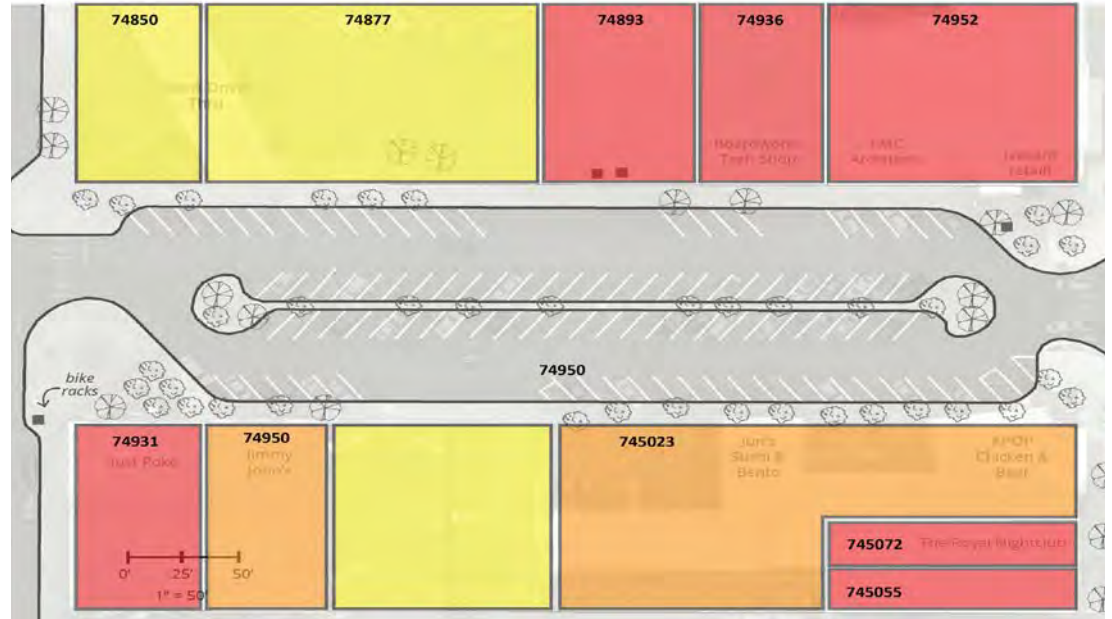
- Hard Site
- Moderate Site
- Soft Site

1100 Block

Property ID	Owner	Floor Area (SF)	Current Use	Adaptive Feasibility	Potential Use	Potential sf size	Land Value	Improvement Value	Ratio I/H	Hard	Medium	Soft
74812	CITY OF BELLINGHAM FINANCE DEPT ASSET DIVISION	10779	PUBLIC MKT	Low	None	10779	\$990,000.00	\$1,006,000.00	1.016	X		
74812	CITY OF BELLINGHAM FINANCE DEPT ASSET DIVISION	7384	PUBLIC MKT	High	Large mixed use, public space	34500	\$990,000.00	\$1,006,000.00	1.016			X
74857	CITY OF BELLINGHAM FINANCE DEPT ASSET DIVISION	6030	AUTO PARKING	High	Small mixed use, green space	6030	\$123,750.00	\$4,000.00	0.032			X
74870	BOTHMAN BROTHERS LLC	2714	EATING PLACE	Low	None	2714	\$330,240.00	\$446,190.00	1.351	X		
74883	HERALD BUILDING LLC	5500	AUTO PARKING	High	Small mixed use, green space	5500	\$220,000.00	\$3,458.00	0.016			X
74798	JOHN H BLETHEN	2800	CARPNT/FLRG	High	Medium mixed use	5600	\$196,000.00	\$76,786.00	0.392		X	
74783	M&L COMMERCIAL LLC	5130	DRINK PLACE	Low	None	5130	\$360,000.00	\$588,392.00	1.634	X		
74739	STEPHEN W & JUDY D PETERSON LIVING TRUST/TR	3000	EATING PLACE	Low	None	3000	\$1,331,000.00	\$866,427.00	0.651	X		
74739	STEPHEN W & JUDY D PETERSON LIVING TRUST/TR	6975	EATING PLACE	Low	None	6975	\$1,331,000.00	\$866,427.00	0.651	X		
74739	STEPHEN W & JUDY D PETERSON LIVING TRUST/TR	1102	EATING PLACE	High	Mixed use retail, green space	3500	\$1,331,000.00	\$866,427.00	0.651			X
74815	ARCHDIOCESAN HOUSING AUTHORITY	10476	MIXED USE	Low	None	10476	\$715,000.00	\$4,252,144.00	5.947	X		

3.2.2 1200 Block Capacity Analysis

The 1200 block identifies the Bank of America drive through (ID: 74850, 74877) and the surface level parking lot (ID: 74936, 74893) as soft sites with under-utilized space. The Jimmy Johns (ID: 74950) and the mixed used building (ID: 75023) are considered moderate sites due to the potential to incorporate more density and environmental features on these sites.



1200 Block

Property ID	Owner Name	Floor Area (Sq ft.)	Current Use	Adaptive Feasibility	Potential Use	Potential sf size	Land Value	Improvement Value	Ratio I/H	Hard	Medium	Soft
74931	BENCHMARK PROPERTIES LLC	5995	MIXED USE	Medium	Green facades/Green roofs, Ground floor expansion, public spaces/seating	5995	\$360,000.00	\$323,540.00	0.89	X		
74950	F & H HOLDINGS LLC	10491	OFF/RET	Low	Green facades/Murals	5300	\$472,500.00	\$893,311.00	1.89			X
75023	EWHA INCORPORATED	21992	MIXED USE	Low	Public space, green roofing, green facades, environmental features	4500	\$1,100,000.00	\$2,833,935.00	2.58			X
75072	SHARABI TRUST AVINOAM & FAYE H SHARABI TR	2752	DRINK PLACES	Low	None	2752	\$151,250.00	\$291,499.00	1.93	X		
75055	SHARABI TRUST AVINOAM & FAYE H SHARABI TR	2748	DRINK PLACES	Low	None	2748	\$151,250.00	\$475,913.00	3.14	X		
74952	CITY OF BELLINGHAM FINANCE DEPT ASSET DIVISION	10993	MIXED USE	Medium	Greenspace/Seating on Corner	2600	\$659,700.00	\$-	0			X
74936	CITY OF BELLINGHAM FINANCE DEPT ASSET DIVISION	5500	AUTO PARKING	Low	None	5500	\$192,500.00	\$-	0	X		
74893	CITY OF BELLINGHAM FINANCE DEPT ASSET DIVISION	7743	AUTO PARKING	Low	None	7743	\$271,005.00	\$-	0	X		
74877	BLUE SEA HOLLY LLC	14750	BANK SERV	Low	Green space/Open space	14750	\$641,880.00	\$97,465.00	0.15			X
74850	BLUE SEA HOLLY LLC	5501	BANK SERV	Low	Green space/Open space	5501	\$247,500.00	\$2,064.00	0.01			X

3.2.3 1300 Block Capacity Analysis

The 1300 block contains multiple soft sites that include surface level parking and vacant lots. These lots offer valuable locations for infill development such as high density mixed use buildings for commercial and residential uses as well as the inclusion of parklets or small public recreation areas.



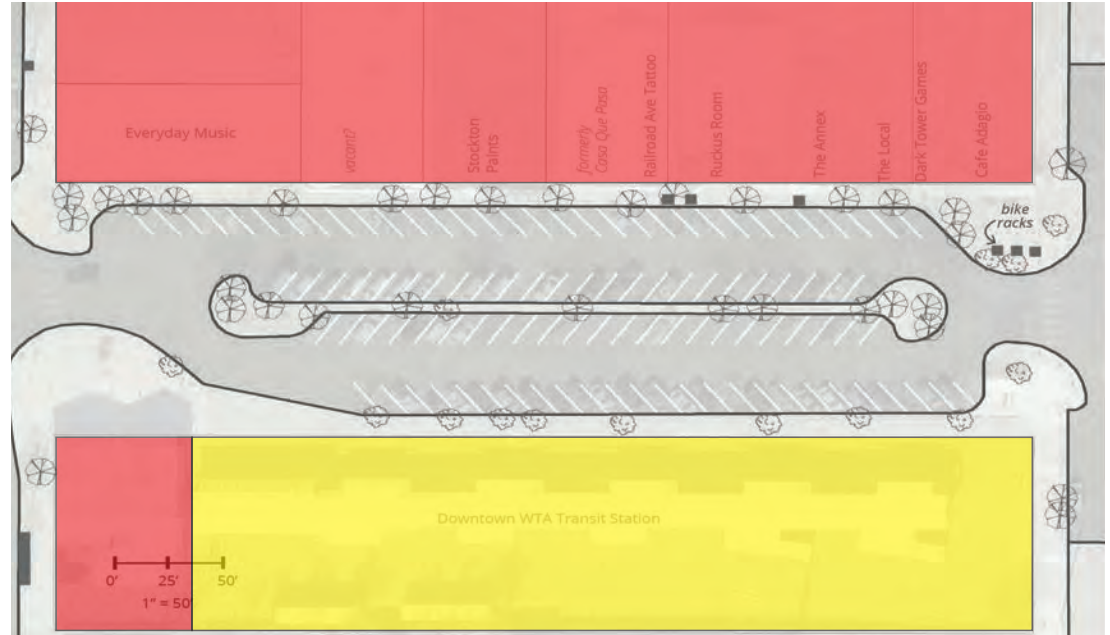
1300 Block

Property ID	Owner Name	Floor Area (Sq ft.)	Current Use	Adaptive Feasibility	Potential Use	Potential size	Land Value	Improvement Value	Ratio I/H	Hard	Medium	Soft
75028	KIENAST PROPERTIES LLC	5000	EATING PLACE	Low	None	5498	\$302,500.00	\$539,648.00	1.78	X		
75045	BJWALLER LLC	2750	DRINK PLACES	Low	None	2746	\$206,250.00	\$383,164.00	1.86	X		
75056	EVERY LAST DIME LLC	2100	EATING PLACE	Low	None	2996	\$225,000.00	\$357,057.00	1.59	X		
75066	JO W GUTHRIE	3500	EATING PLACE	Low	None	2503	\$187,500.00	\$291,871.00	1.56	X		
75090	HALL PROPERTIES LLC	9640	MIXED USE	Low	None	5496	\$302,500.00	\$834,816.00	2.76	X		
75111	KENNETH A JR & MARGUERITE A RYAN TRUST/TR	5400	EATING PLACE	Low	None	5494	\$302,500.00	\$489,541.00	1.6	X		
75134	TACTUS LLC	11000	OTHR RET TRD	Low	None	5496	\$302,500.00	\$1,182,397.00	3.81	X		
75171	HALL PROPERTIES LLC	5500	RET TR-GEN	Low	None	5498	\$330,000.00	\$496,590.00	1.5	X		
75147	BELLINGHAM RENTAL	0	AUTO PARKING	High	Mixed Use	5494	\$302,500.00	\$6,976.00	0.02			X
75269	MAURICE H RICHARDS	3948	LAUND/DRY/DY	Medium	Mixed Use	5502	\$275,000.00	\$96,261.00	0.35		X	
75249	TRUST U/W CHARLES GELB	0	COMMERCIAL	High	Mixed Use	5490	\$330,000.00	\$-	0			X
75226	RAILROAD BELLINGHAM LLC &	0	COMMERCIAL	High	Mixed Use	5493	\$302,500.00	\$-	0			X
75210	1322 RAILROAD AVE LLC & BIRD ALLEY LLC	0	COMMERCIAL	High	Mixed Use	5501	\$302,500.00	\$-	0			X
75187	BIRD ALLEY LLC	0	COMMERCIAL	High	Mixed Use	2742	\$192,500.00	\$-	0			X
75170	BIRD ALLEY LLC	0	AUTO PARKING	High	Mixed Use	5504	\$302,500.00	\$6,478.00	0.02			X
75155	TSIMOURIS HOLDINGS BELLINGHAM 2 LLC	2726	BOOKS	Medium	Mixed Use	2748	\$192,500.00	\$211,562.00	1.1		X	
75127	CITY STATION LLC	20347	MIXED USE	Low	None	5486	\$357,500.00	\$2,913,467.00	8.15	X		
75146	HALL PROPERTIES LLC	5000	RET NOT ELSE	Low	None	5494	\$302,500.00	\$347,822.00	1.15	X		

3.2.4 1400 Block Capacity Analysis

On the 1400 block, the only parcel with a high potential for adaptive reuse is the Whatcom Transit Authority (WTA) transit station (ID: 75376). Because much of this site serves essentially as a surface parking lot, there is significant potential for additional stories to be added that to support a mixed use building, or, as recommended in this study, a multi-story parking structure while providing for the expansion of the WTA transit station on the ground floor.

- Hard Site
- Moderate Site
- Soft Site



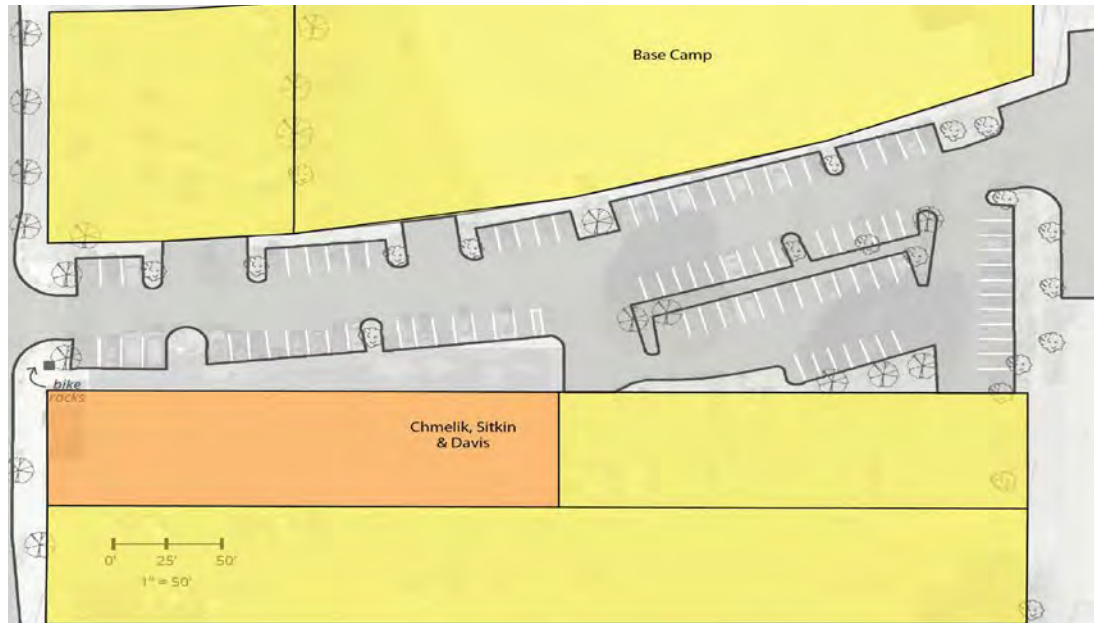
1400 Block

Property ID	Owner Name	Floor Area (Sq ft.)	Current Use	Adaptive Feasibility	Potential Use	Potential sf size	Land Value	Improvement Value	Ratio I/H	Hard	Medium	Soft
75376	WTA Station	44054	BUS PAS LOCL	High	Mixed Use	132162	\$870,000	\$1,000,000.00	1.149			X
75370	Crews Family LLC	5499	EATING PLACE	Low	None	5499	\$313,500	\$469,971.00	1.499	X		
75349	Crews Family LLC	11006	OTHER RTL TRD	Low	None	11006	\$550,000	\$1,112,135.00	2.022	X		
75308	JAYMARCO LLC	5494	EATING PLACE	Low	None	5495	\$302,500	\$484,209.00	1.601	X		
75292	DALE & SUSAN RAGAN	5504	MIXED USE	Low	None	5504	\$308,000	\$683,625.00	2.220	X		
75270	1411 RAILROAD CORPORATION INC	5503	BARBER/BEAUT	Low	None	5503	\$302,500	\$1,446,129.00	4.781	X		
75253	TISCORNIA & SONS LLC	5501	OTHER RTL TRD	Low	None	5501	\$330,000	\$325,739.00	0.987			X
75237	LAIRD CORP C/O MAURI INGRAM	5508	OTHER RTL TRD	Low	None	5508	\$302,500	\$421,063.00	1.392			X

3.2.5 1500 Block Capacity Analysis

The entirety of the 1500 block is considered to have significant potential for infill development. Due to the anticipated relocation of Base Camp to another downtown location (ID: 75445), as well as most of the remaining site utilized for surface parking, most parcels on this block exhibit a high capacity for infill development.

- Hard Site
- Moderate Site
- Soft Site



1500 Block

Property ID	Owner	Floor Area (Sq ft.)	Current Use	Adaptive Feasibility	Potential Use	Potential sf size	Land Value	Improvement Value	Ratio I/H	Hard	Medium	Soft
75371	WASHINGTON FEDERAL SAVINGS	9099	SAVGS/LOAN	High	Mixed use building	27568	\$880,000	\$1,821,179	2.1	X		
75445	JMC 1 LLC	26156	WELFARE/CHAR	High	3 story mixed use building	69813	\$1,483,692	\$1,231,334	0.83			X
75466	FMJB LLC	13474	LEGAL SERVICE	High	Park/open space	27466	\$824,270	\$1,058,849	1.3	X		

Summary

The infill capacity analysis showed a tremendous potential for infill development on existing lots in the Railroad Avenue corridor. According to the study, there is approximately 362,314 square feet of space along the corridor that exhibit a high potential for infill development. This includes sites that were characterized as “soft sites” but does not include “moderate sites” where some potential development is also proposed.

4.0 ROW Design Alternatives

Introduction

The analysis of alternative right of way designs for the Railroad Avenue corridor began with the consideration of five alternative designs that ranged from the retention of the existing parking and a limited driving lane revisions to full street closure and conversion to pedestrian and bicycle based modalities. To incorporate many of these ideations while also recognizing concerns and preferences of downtown stakeholders and the general public, a decision was made to present two right of way design concepts as ROW Alternative A and ROW Alternative B.

4.1 ROW Alternative A

The first design option, Alternative A, features a one-way road running northbound between blocks 1100 to block 1400, with a road closure in block 1500. The road closure seeks to facilitate a pedestrian oriented ROW once the 1500 block has been redeveloped with a series of residential projects on both sides of the Railroad Avenue, and to replicate the quiet residential atmosphere present on the 1000 block at the south end of Railroad Avenue. In this alternative, the one-way roadway is shown oriented in a south to north direction beginning at the 1100 block along the Depot Market Square, and reaching terminus at the WTA station. This was deemed

the best direction for traffic flow given that the State Street arterial flows from north to south. Furthermore, the elimination of one driving lane provides for expanded sidewalks and additional private economic and public uses within the street ROW. By doing so, this achieves the project's goal for improving the quality and safety of the pedestrian experience. The reduction in on-street parking in favor of structured and underground parking transforms Railroad Avenue's primary use as a surface parking lot into that of a vibrant downtown street. On-street parking has been partially retained for blocks 1100 through 1400, with the expectation that parking in the future should be relocated to off-street locations.



Alternative A would retain a one-way street throughout 4 blocks with road closure in the 1500 block. The 1300 block is shown in this view

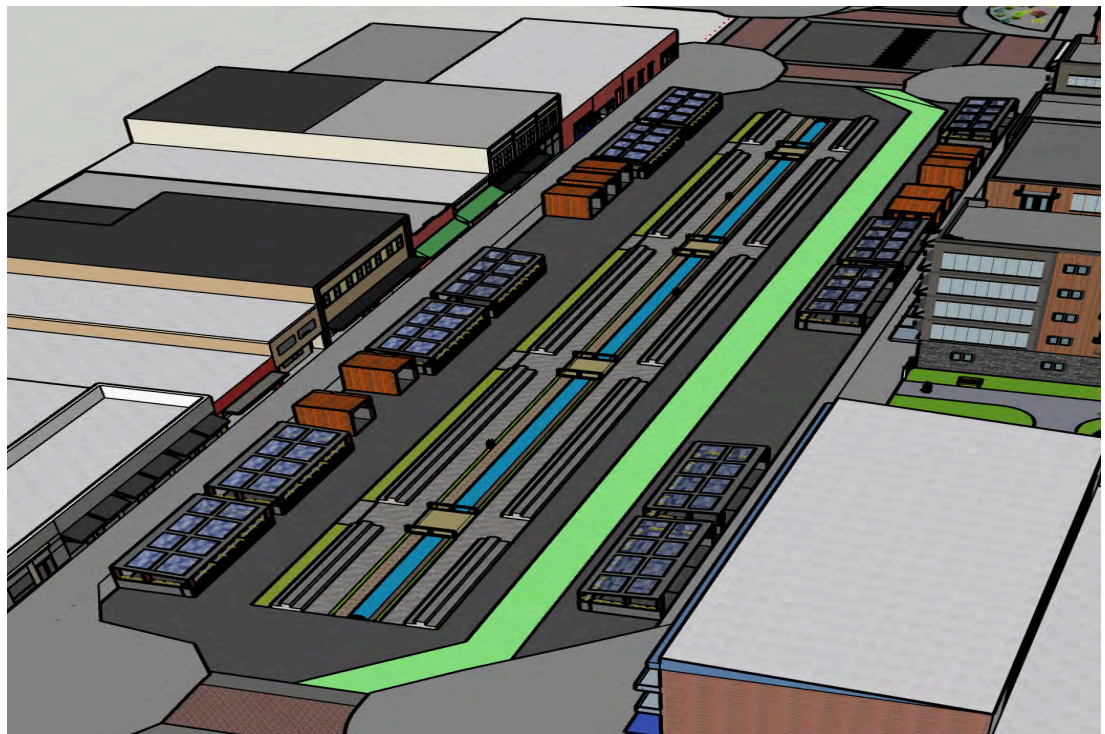
4.2 ROW Alternative B

Compared with the ROW Alternative A design, many of the same design features are retained in ROW Alternative B, with the further reduction of vehicular oriented uses by closing the driving lane on the 1300 block of Railroad Avenue. This block is identified as an economic and retail hub for Railroad Ave and represents an ideal location for prioritizing pedestrian and bicycle use. To enhance the open space and ecological features on the 1300 block, an extensive open rain garden extending the full length of the 1300 block provides a welcoming public plaza use as well as a functional environmental benefit in the treatment of storm water runoff.

While it was preferable to retain the one-way traffic pattern in both alternatives, the closure of block 1300 in Alternative B presented a challenge. By closing a block in the center of Railroad Avenue, traffic moving north from blocks 1100 and 1200 could no longer flow uninterrupted. Additionally, any traffic attempting to enter Bellingham's downtown from East Holly Street, the largest traffic corridor accessing Railroad Avenue, would be unable to turn left or right. This could inevitably result in high traffic congestion on neighboring streets. As a solution, ROW design Alternative B provides for a southbound one-way roadway on

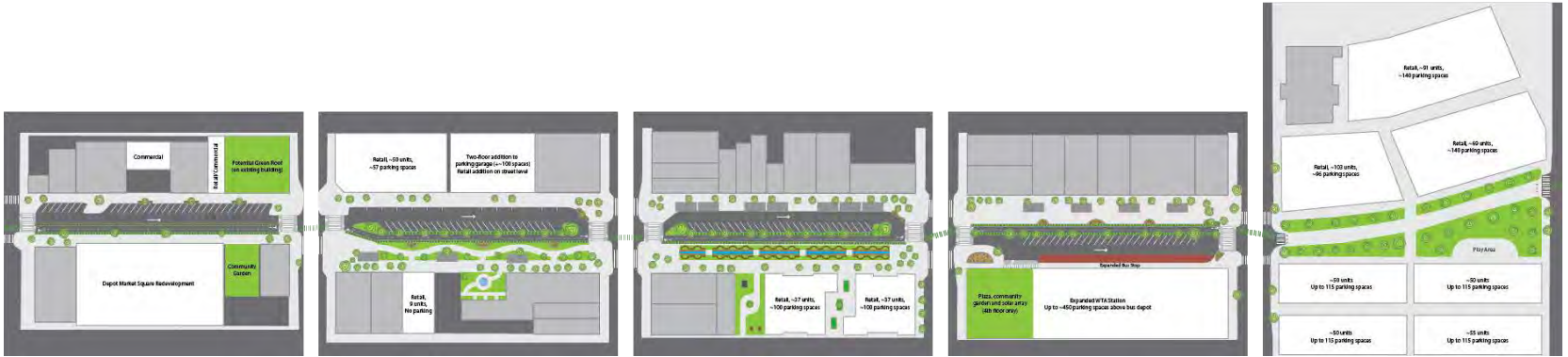
blocks 1100 and 1200, a reversal of Alternative A's traffic direction. In this way, traffic flows from Holly Street can be directed onto Railroad Avenue and provides access to a proposed high capacity parking garage located in the 1200 block, while also providing the functional pedestrian and bicycle spaces present in a one-way road design. North of the 1300 block, the 1400 block preserves the northward flow of traffic allowing bus and vehicle traffic to enter the WTA station and to connect to E. Champion Street.

The 1100 and 1200 blocks in Alternative B feature a southbound traffic flow and angled parking. Overall, the decision to retain a one-way road system in both alternatives was determined to be preferable in order to promote the pedestrian and bicycle uses within the right of way.



Alternative B would close the 1300 and 1500 blocks to through-traffic and remove all on-street parking

Alternative Right of Way Design Concepts A



Site Plan of Alternative A

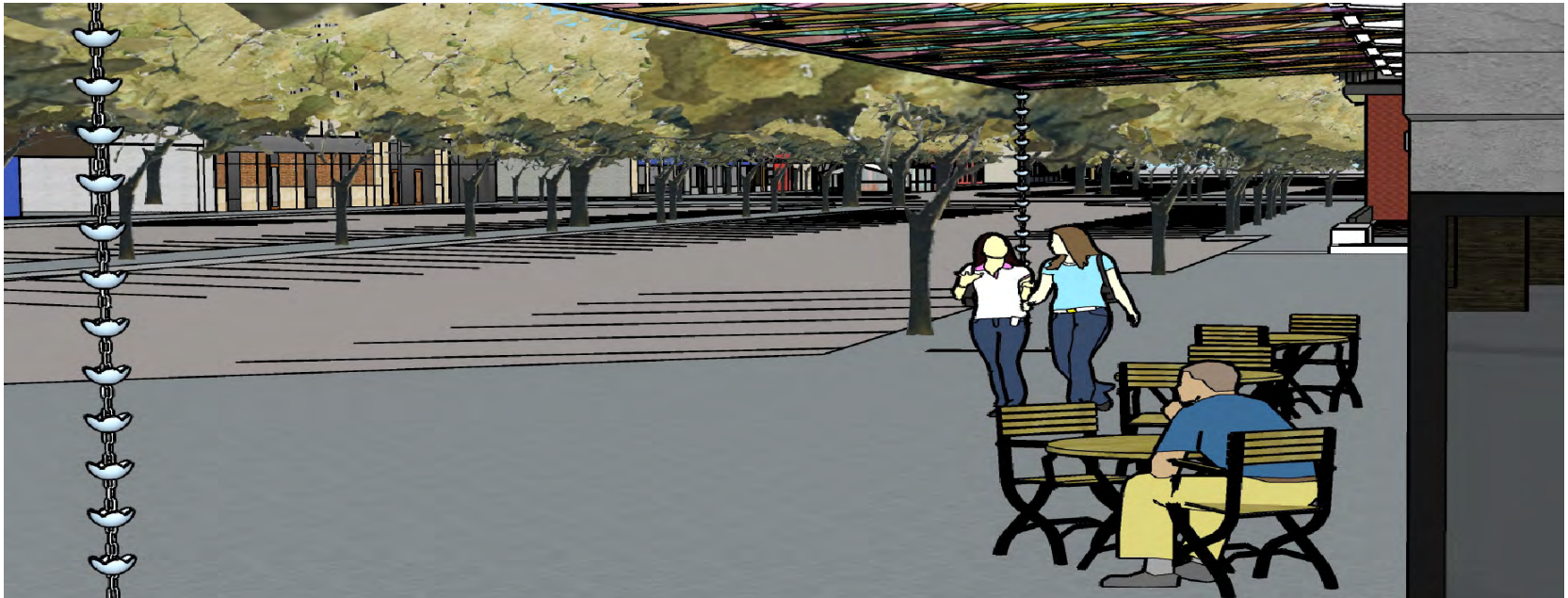


ROW Alternative A. Looking northbound on the 1300 block of Railroad Avenue

Alternative Right of Way Design Concepts B



Site Plan of Alternative B



ROW Alternative B. Looking northbound on the 1300 block of Railroad Avenue

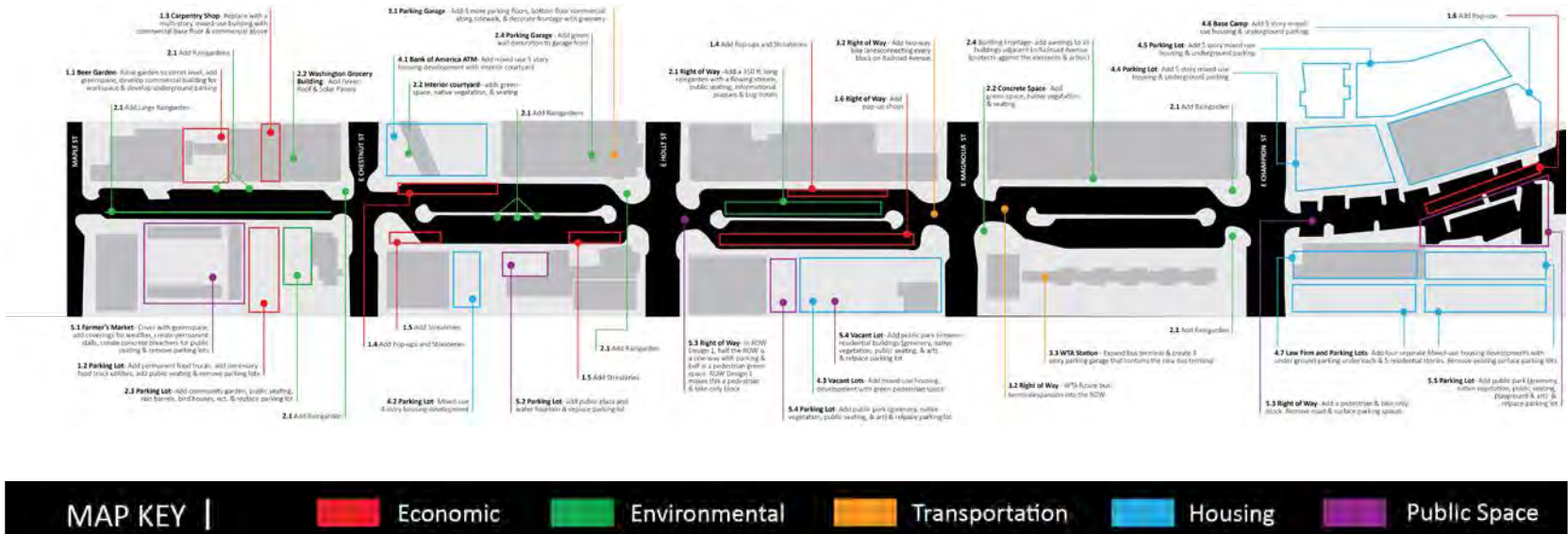


Transitioning auto-centered streetscapes into human-centered streetscapes

5.0 Ideation Mapping

Railroad Avenue Redevelopment Ideation Map

The Urban Transitions Studio is proposing redevelopment recommendations for the entirety of the Railroad Ave corridor including the Right of way (ROW) and the five surrounding blocks 1100-1500. Two alternatives to the ROW are proposed: a continuous north bound one-way road (between the 1100 and 1400 blocks), and a south bound one-way road (between the 1100 and 1200 blocks) with the 1300 and 1500 blocks closed for pedestrians use. The key distinguishing factor between the two ROW alternatives is the road closure of the 1300 block. The design concepts presented in this study focus on economic, environmental, transportation, housing, and public space improvements for private properties abutting Railroad Avenue as well as within the public Right of Way.



Complete ideation map and key for all redevelopment recommendations on Railroad Avenue

1100 Block Ideation Mapping

Recommendations - Economic

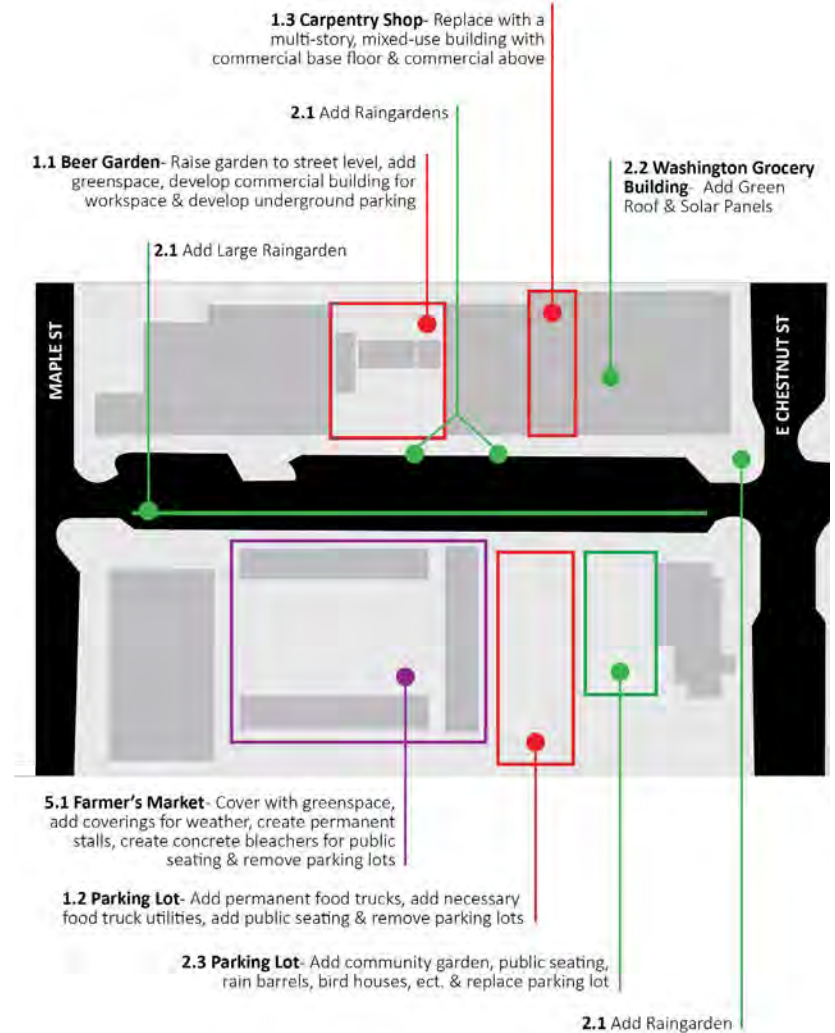
- 1.1:** Raise the Beer Garden to street level. Develop a commercial building and alley oriented parking.
- 1.2:** Replace the parking lot with permanent food trucks and public seating.
- 1.3:** Replace carpentry shop with a commercial multi-use building.

Recommendations - Environmental

- 2.1:** Add a raingarden.
- 2.2:** Add green roofs, greenery, or solar panels.
- 2.3:** Replace the parking lot with community garden.

Recommendations - Public Space

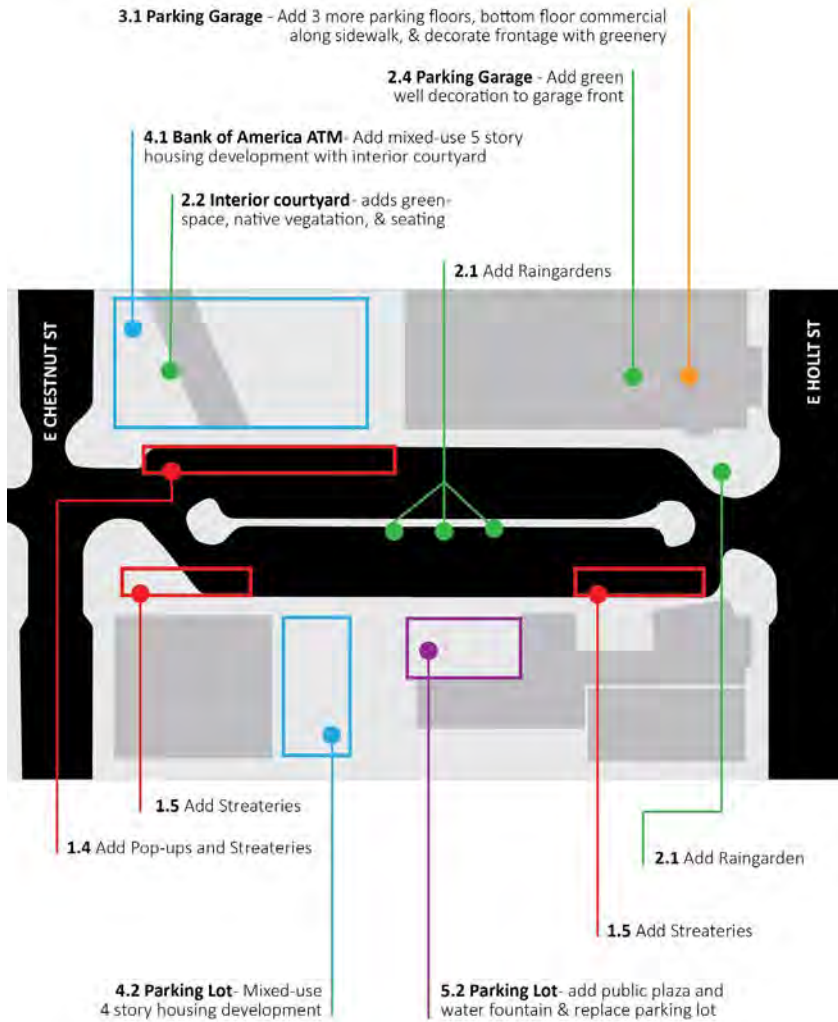
- 5.1:** Remove the parking lot at the Market Depot and redesign to include more greenspace, public seating, vendor spaces, and coverings from the weather.



MAP KEY | Economic Environmental Transportation Housing Public Space

Railroad Avenue 1100 block ideation map with all relevant redevelopment recommendations

1200 Block Ideation Mapping



Recommendations - Economic

- 1.4: Add pop-ups and streateries.
- 1.5: Add just streateries.

Recommendations - Environmental

- 2.1: Add a raingarden.
- 2.2: Add green roofs, greenery, or solar panels.
- 2.4: Add green wall frontage.

Recommendations - Transportation

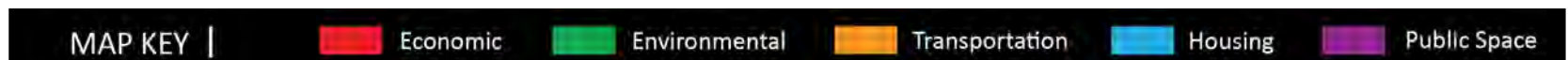
- 3.1: Increase parking garage capacity.

Recommendations - Housing

- 4.1: Replace the Bank of America parking lot with a 5 story mixed-use residential and commercial building
- 4.2: Replace parking lot with 4 story mixed-use residential and commercial building

Recommendations - Public Space

- 5.2: Remove the parking lot and add a public plaza



Railroad Avenue 1200 block ideation map with all relevant redevelopment recommendations

1300 Block Ideation Mapping

Recommendations - Economic

- 1.4: Add pop-ups and streateries.
- 1.6: Add just pop-up shops.

Recommendations - Environmental

- 2.1: Add a raingarden.

Recommendations - Transportation

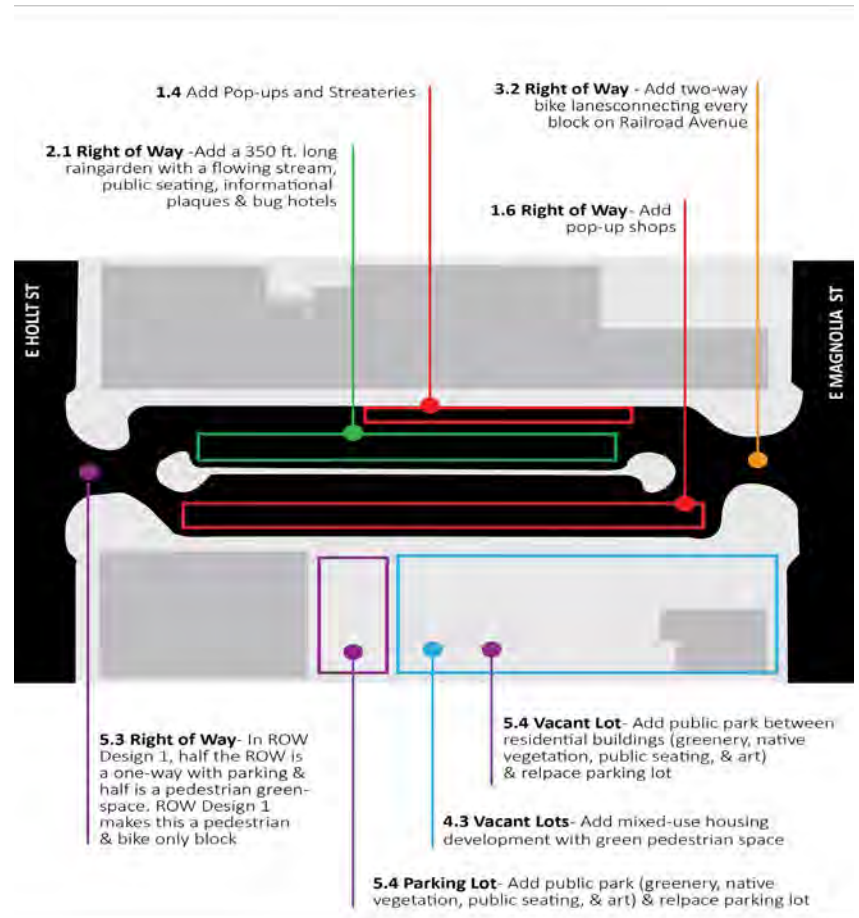
- 3.2: In the ROW, create a two-way bike lane connecting all Railroad Avenue blocks.

Recommendations - Housing

- 4.3: Replace the vacant lot (burned down pet store) with a 5-story mixed-use residential and commercial building.

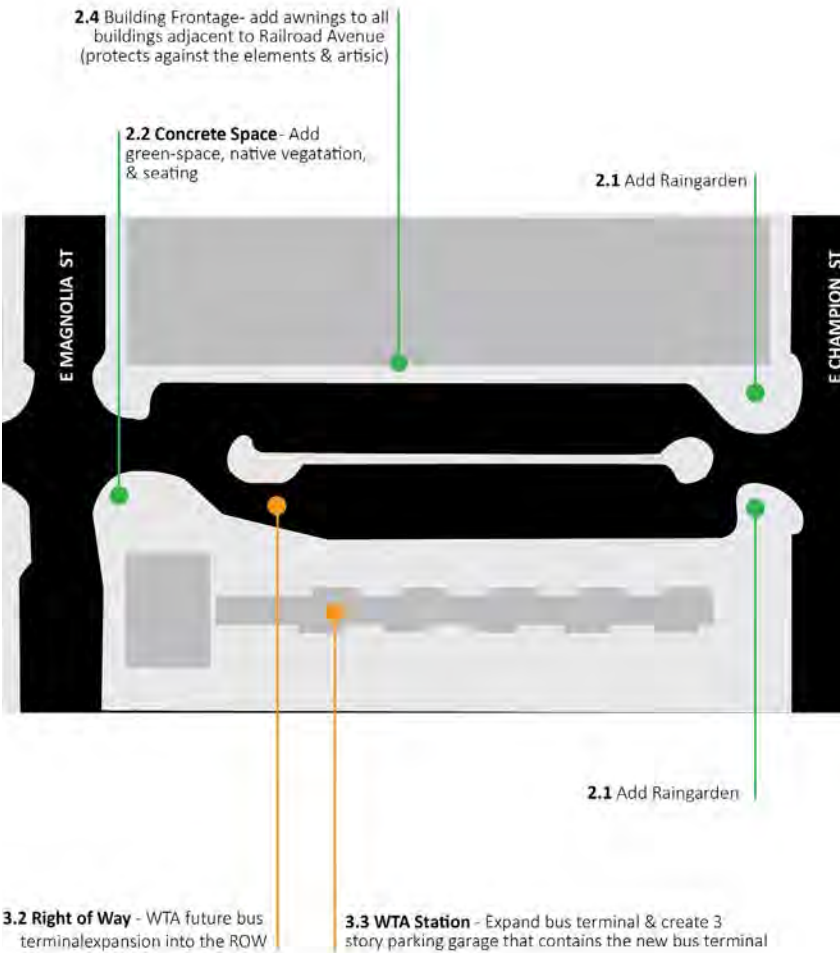
Recommendations - Public Space

- 5.3: Redesign the ROW to either close half of the block to automotive traffic or close the entire block to traffic. Part or all of the block will be a pedestrian and bike only space.
- 5.4: Add a public park in between the two mixed use residential building developments.



MAP KEY | ■ Economic ■ Environmental ■ Transportation ■ Housing ■ Public Space

Railroad Avenue 1300 block ideation map with all relevant redevelopment recommendations



Recommendations - Environmental

- 2.1: Add a raingarden.
- 2.2: Add green roofs, greenery, or solar panels.
- 2.4: Add green wall frontage.

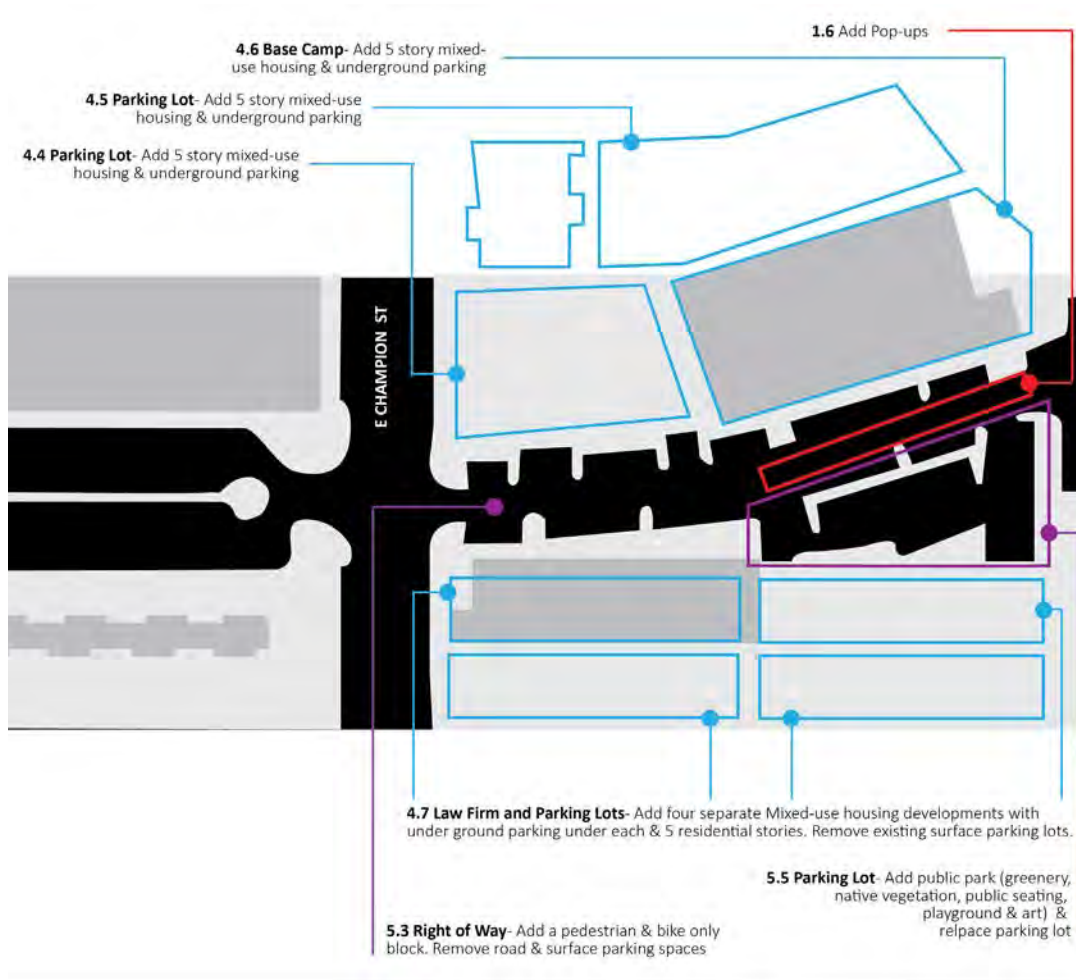
Recommendations - Transportation

- 3.2: In the ROW, accommodate space for the WTA proposed terminal expansion.
- 3.3: Create a 3 story parking garage that contains the new bus terminal.

MAP KEY | Economic Environmental Transportation Housing Public Space

Railroad Avenue 1400 block ideation map with all relevant redevelopment recommendations

1500 Block Ideation Mapping



Recommendations - Economic

1.6: Add just pop-up shops.

Recommendations - Housing

4.4: Add 5 story mixed-use building & underground parking.

4.5: Add 5 story mixed-use building & underground parking.

4.6: Add 5 story mixed-use building & underground parking.

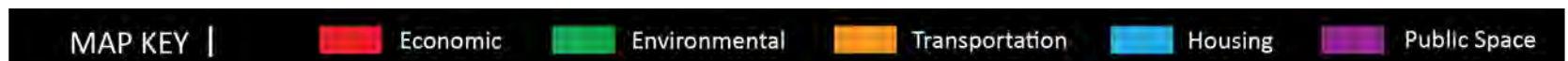
4.7: Add 5 story mixed-use building & underground parking.

4.8: Add 4 separate mixed-use housing developments & underground parking

Recommendations - Public Space

5.3: Create a pedestrian and bike-only block in the ROW.

5.4: Replace the parking lot with a public park.



Railroad Avenue 1500 block ideation map with all relevant redevelopment recommendations



View of proposed improvements to the Debot Market parking lot

6.0 Railroad Avenue Corridor Design Recommendations



Viewscope looking north on the 1300 block featuring a central raingarden and public seating

6.1 Railroad Avenue Corridor Economic Design

6.1 Alternative A - One way street design - Economic Features

Right of Way Alternative A allows for several opportunities for economic activities within the Right of Way. These activities include ground floor retail in existing or proposed infill buildings as well as economic activities that can be accommodated within the public Right of Way. The table indicates the potential addition of new business opportunities throughout the Railroad Avenue corridor.

ALTERNATIVE A			
Business Type	Total Square Footage	Potential Number of Shops	Potential Employment
Streateries	3000	25	50
Retail Pop-ups	2520	21	42
Commercial Development	86,052	56	168-250
Food Trucks	6,000	8	16

6.1 Alternative B- Partial street closure design - Economic Features

Right of Way Alternative B increases the potential space for economic activities within the Right of Way on the 1300 block due to the closure of the roadway to automobile traffic. These business opportunities include increasing the amount of streateries and retail pop-ups, which would extend existing businesses into the public right of way as well as create opportunities for new businesses. All other business types, such as food trucks and retail space remain the same between Right of Way Alternative A and Right of Way Alternative B.

ALTERNATIVE B			
Business Type	Total Square Footage	Potential Number of Shops	Potential employment
Streateries	3720	32	64
Retail Pop-ups	4320	36	72
Commercial Development	86,052	56	168-250
Food Trucks	6,000	8	16

The tables above describe the use of potential square footage for business, including streateries, retail pop-ups, ground floor retail, and food trucks. For the purposes of this study, the total square footage of potential infill space was divided by the estimated size of the business type to estimate how many businesses and employment opportunities should be created. The study estimated that each small shop would be 1,500 square feet, and should employ 3-5 people. Streateries were designed to be 576 square feet and retail pop-ups were designed to be 120 square feet, and both assumed to employ two additional workers. Rotating food trucks were estimated to be about 200 square feet, and assumed to employ two workers.

6.1.1 Streateries and Retail Pop-Ups



Illustration of typical stateries and retail pop ups

Streateries are outdoor restaurant seating that are typically located on streets adjacent to restaurants. They are most commonly seen placed in areas of former parking spaces. Retail pop-ups are temporary retail spaces where vendors are able to set up shop for a limited period of time. The flexibility of retail pop-up uses allows people to engage in various retail businesses to test out new products and services at a smaller scale - as incubators to stimulate retail activities. Streateries and retail pop-ups provide for the expansion of economic development on Railroad Avenue. Streateries provide restaurants with the expansion of outdoor seating into the public sphere while retail pop-ups provide opportunities for a variety of new entrepreneurs to enter into business

activities. Both work together to activate the pedestrian public space on the street and support greater economic activity.

The study identifies potential locations for streateries and retail pop-ups scattered along the corridor with most of the placements located in the 1300 block. The streateries are placed next to restaurants while the retail pop-ups are placed next to retail uses. Streateries are designed to be adapted to the year-round weather in Bellingham. The roof systems and side enclosures can be designed to be changed according to the season.

The pop ups should have an architectural design style that complements the current architectural character found in the Railroad Avenue corridor.



6.1.2 Commercial Retail Development

New infill development proposed on existing lots aims to utilize commercial space to its maximum potential, both in size and in social value. The study identified multiple locations for commercial development, which in total could comprise 86,052 square feet of new space and potentially provide space for an additional 56 retail shops throughout the corridor. Estimating that each shop should support 3-5 employees, commercial development could create an additional 168-250 retail jobs. Increasing residential density along the Railroad Avenue corridor in the Downtown neighborhood introduces new opportunities for increased retail frontage along the pedestrian and vehicular Right-of-Way. The proposed mixed-use buildings along Railroad Avenue proposed in this study could provide space for up to 43 small commercial operations and eateries.

The expansion of businesses in the Bellingham central business district is important to better balance the types of retail and commercial activity in the Downtown. Additional housing proposed along Railroad Avenue will also increase the demand for services within walking distance for those relying on the convenience of living in a downtown environment.

Images in this section include visually appealing retail frontages on the ground floor of proposed mixed-use buildings across the span of Railroad Avenue. Important aspects of these retail frontages include the visibility from the street and Right-of-Way. Additionally, these frontages create more welcoming pedestrian environments by including design features like awnings, man illustrated in these images use clear material so sunlight may still pass through the surface intended to shield pedestrians from any weather. Greater retail activity adjacent to public sidewalks also greatly increases public safety and security. Buildings along Railroad Avenue should directly abut the pedestrian realm.



New Whatcom Interiors is currently a one story, antiquated building tucked near retail, housing, and bar/club settings on the 1100 block. The proposed redevelopment shown above retains ground floor retail, with an additional two stories supporting office spaces.



Boundary Bay Beer Garden is an impressive greenspace that is enjoyed by patrons, however the lot it exists on is large and has little infrastructure. This redevelopment shows construction of a 4-story multi-use building occupying the western portion of the lot, while maintaining the beer garden on the eastern portion abutting the sidewalk, retaining its existing amenities, including covered seating, greenery, and a stage. The multi-use building would have alley-accessible first floor parking, second story space for Boundary Bay to expand, and artists lofts or office spaces on the 3rd and fourth levels. The beer garden would be elevated to the elevation of Railroad Avenue to eliminate flooding on the lot.



Proposed to be located adjacent to the current Jimmy Johns, this mixed-use structure can accommodate a small businesses on the ground level, with several stories of residential units above.



This complex consisting of two large mixed-use buildings is situated on the site of the vacant lots on the 1300 block, directly across from the WTA terminal on the corner of Railroad Avenue and Magnolia Street. These two buildings provide a significant amount of retail space providing economic growth and employment opportunities in Downtown Bellingham.



A large mixed-use development in the 1500 block of Railroad Avenue providing many new housing units to the downtown area and with opportunity for many retail and dining venues on the ground level. Each of the proposed buildings have expansive windows along the frontage for better visibility and to allow natural light into the retail spaces.

Located on the 1500 block of Railroad Avenue, this mixed-use building provides new residential space on the northern end of the downtown core. This structure's first floor can be segmented to accommodate several small retail stores or other commercial activity including more dining opportunities along the public right of way, also increasing the opportunities for eateries and retail pop-ups along the pedestrian space in front of the building.

Located on the 1200 block, these two retail spaces occupy the ground floor of a public-owned parking garage. Including commercial business in buildings that would otherwise have unoccupied space will help to expand small business opportunities on Railroad Avenue. Frontages containing large windows, lights, and greenery create a welcoming patron and pedestrian experience.

6.1.3. Food Trucks

Space allocated within the farmers market square that is currently being used for surface level parking is proposed to be converted into a rotating food truck lot. The rotating food trucks could be moved and changed for the Saturday Farmers Market, and could be permanent fixtures throughout the week according to demand. The food trucks would offer patrons quick and diverse eating options.

Along with the proposed permanent public plaza in the farmers market square, the images show an approximate 6,000 square foot section designated as a rotating food truck and seating area, that can support up to 8 vehicles and 80 seats. The study estimates food trucks will each employ 2 people, creating 16 new jobs.



6.2 Promoting Environmental Sustainability

Vision Statement

Creating a greener, more sustainable, and natural hazard resistant Railroad Avenue for the present and future community.

Sub-Section Roadmap

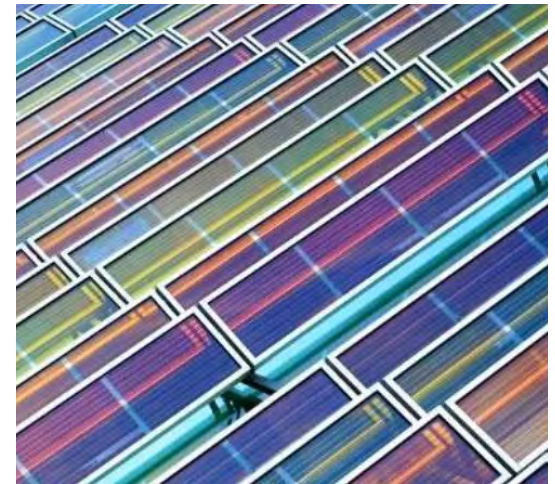
- I. Raingarden Implementation and Templates
- II. Water Management
- III. Urban Green Roofs
- IV. Community Gardens
- V. Inclement Weather Protection



Railroad Avenue 1500 block showing green roofing and solar panels on parking garage



A community garden to support growing Railroad Avenue residents



Railroad Avenue Colorful Solar Panels

6.2.1 Raingarden Implementation



This study proposes two alternatives to the Railroad Avenue Right of Way (ROW): a continuous south to northbound one-way road, and a north to southbound one-way road with the 1300 block converted into a pedestrian block. Railroad Avenue's 1300 block is shown to include a continuous raingarden in each ROW alternative. The large raingarden stream extends along a majority of the 1300 block and located in center of the ROW. Additionally, smaller raingardens are placed along all each of the blocks. Implementing raingardens accomplishes several environmental goals that include: filtering

water pollutants before they reach the drainage pipes that flow to Bellingham Bay or to Whatcom Creek, mitigating urban flooding, revitalizing the wildlife corridor, as well as creating an open water and urban greenery feature.

The raingarden stream is a bioretention system – with bioswales designed to collect storm water, street runoff, and collected rooftop rainwater from an interconnected Railroad Ave rainwater collection system. Bioswales are shallow, open, planted channels that remove pollutants and carry runoff water (Global Designing Cities

Initiative, 2022). While not pipes, swales serve as an alternative drainage system comprised of soil that water moves horizontally through along subsurface layers. Because swales slow water flow and trap sediments, they also can improve runoff and storm water quality (Global Designing Cities Initiative, 2022). For exact measurements, the raingarden stream is based on the Raingarden Template I Model.

Design #1: 1300 Block Street Closure

The first raingarden stream design will be placed in the middle of the 1300 block. In this scenario, the 1300 block is converted to a pedestrian-only realm, with the raingarden and its surroundings functioning as both a public plaza space and an environmental feature. Along each side of the

stream are concrete steps that serve as seating. They are designed so that seating faces both the raingarden as well as to the pedestrian realm and adjacent shops and restaurants. Trees along the outer edge provide shade similar to the trees currently in place. Additionally, the sides of the

stair seating are shown decorated with hand-painted tiles, either commissioned from local artists or local school students. Insect hotels are situated along the raingarden. There are four bridges which allow access to both sides of the ROW throughout the block.



Large Raingarden Stream Design #1 with the entire block converted as a pedestrian space.

Design #2: One-Way Lane

The second raingarden design for the 1300 block provides for a single car lane and an associated parking strip. Semi circular benches are connected by benches with back rests to ensure there is sufficient seating, while also looking aesthetically pleasing. Trees in the center of each bench will provide shade, additional greenery, and will prevent pedestrians from entering the raingarden. Similar to the first design, ROW Alternative 2 also includes native plants, bug houses, and four bridges to improve connectivity in the ROW.



Raingarden Features

Flanked by the pedestrian realm, the large raingarden stream design for the 1300 block has several components – evident in a visual cross section analysis (see Raingarden Cross Section Template) that help attain Railroad Avenue’s water filtration, flood mitigation, wildlife, and urban greenery goals. Plant species native to western Washington, informational signs, bug hotels, bird houses, a pedestrian bridge, and a path of river rocks comprise the raingarden’s surface level.

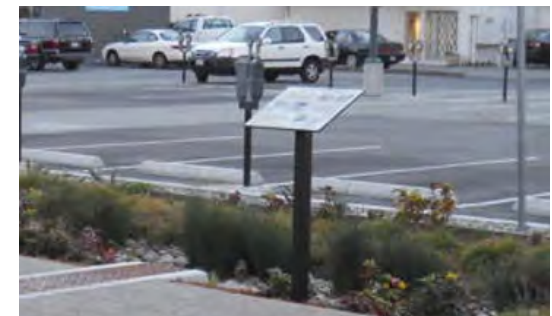
Informational Signs

Raingardens provide benefits to both the urban and environmental ecosystem in Downtown Bellingham that may not be apparent at first glance to the community. Thus, informational signs will be critical in explaining the layered benefits raingardens bring to the community. Illustrative visuals in conjunction with explanatory text can show how the raingarden’s surface and subsurface levels contribute towards flood mitigation, water filtration, wildlife revitalization, and environmental revitalization.

Bug Hotels and Bird Houses

Because insects and birds are vital to uplifting the natural environment, there must be space created for their longevity.

- First, adding bird houses to the downtown area would bring more birds downtown and benefit both native bird populations and the pedestrian environment: while birds have sustenance and can utilize the downtown green space, people can enjoy the birds’ presence downtown.
- Secondly, insect houses (see figure) are artificial structures that mimic the natural nesting cavities insects would find and use in the wild (University of Michigan-Dearborn, 2022). In downtown, insect houses are a simple, effective way to provide space for solitary insect species to lay their eggs. Insects such as solitary bees, wood-boring beetles, and ladybird beetles – commonly referred to as “ladybugs” (University of Michigan-Dearborn, 2022).



Informational signage

Attracting Insects

Regarding how to attract certain types of insects with insect hotels, the table below illustrates the correlation between natural building items and potential insect visitors. Notably, the bees listed are solitary bees and not hives of bees; the insects that insect hotels draw in are solitary in nature (University of Michigan-Dearborn, 2022). Furthermore, these insect hotels are based upon the University of Michigan-Dearborn's Environmental Interpretive Center Insect Hotel Project and accordingly focus on insects present in Michigan state. However, the insects drawn to insect hotels in Michigan are verified to be either native to or present in Washington state as well.



Insect hotel and wildlife revitalization visual



Natural Building Item	Potential Insect Visitors
Sawn logs	Mason bees
Wooden blocks with pre-drilled holes	Leaf-cutter bees*
Dry leaves	Centipedes
	Beetles
	Harvestmen
Sticks	Ladybird beetles ("ladybugs")
Bark strips	Beetles
	Woodlice
	Centipedes
	Millipedes
	Spiders
* Insect is not native to Washington State but is present in Washington State.	

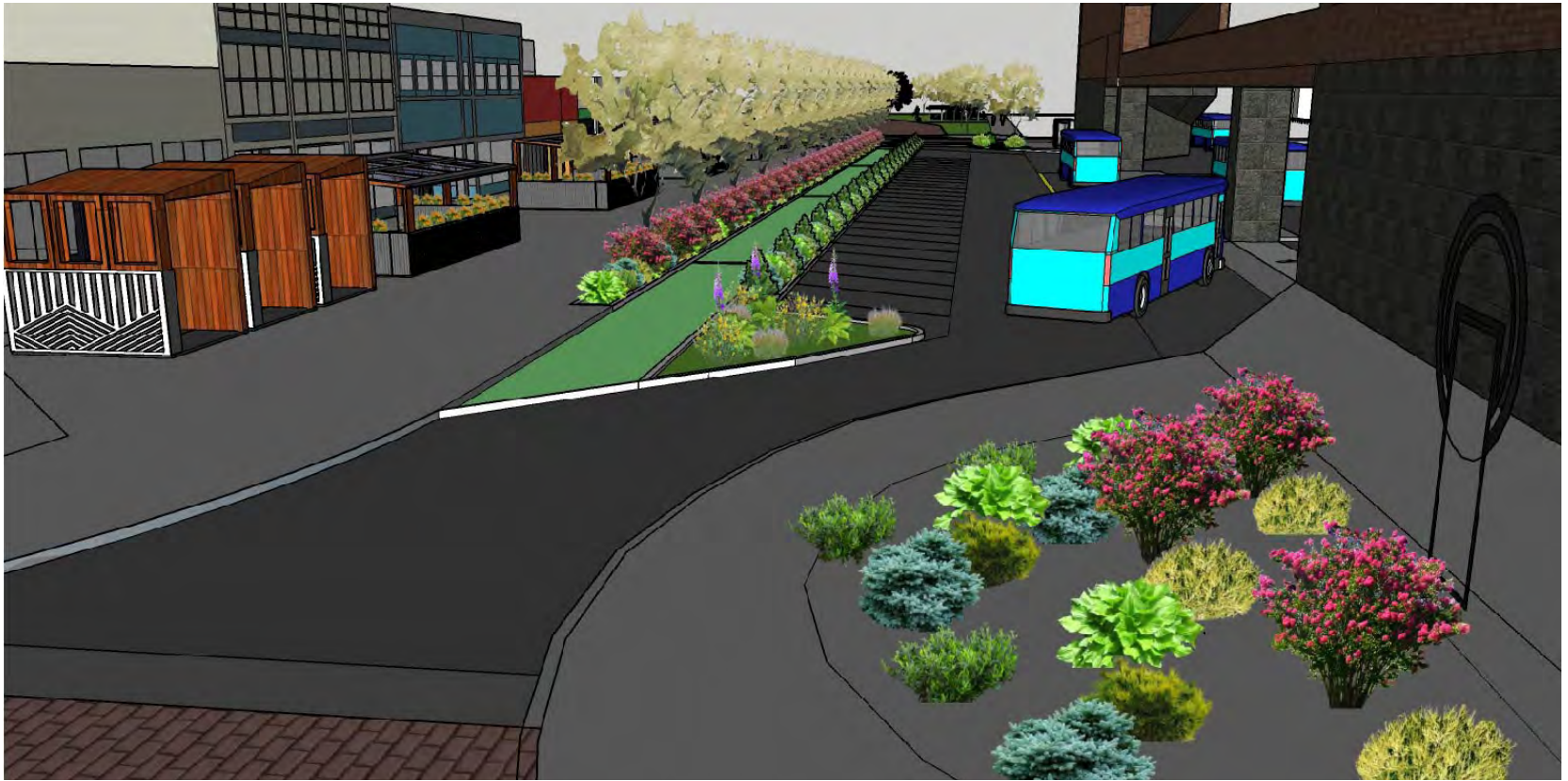
Table of Natural bug hotel building items and the insect visitors they attract.

Smaller Raingardens, Bike Buffers, & Gardens

Beyond the Large Raingarden Stream, smaller raingardens and standard gardens will decorate the rest of the corridor. These raingardens are based on the Raingarden Templates II, III, and IV. Additionally, these raingardens will serve to add greenery, improve water filtration,

and mitigate flood events. The current curb extensions are large and underutilized, as well as adding excessive impervious surface. Adding raingardens or converting existing gardens into raingardens will add another space for surface water to drain into. Furthermore, seating can be

provided along the interior edge of the curb raingardens. Standard gardens serve to add greenery, beautify the area, and decrease the quantity of impervious surfaces.



Smaller raingardens and bike path garden along the 1400 block.

6.2.1 Raingarden Implementation

Smaller Raingardens, Bike Buffers, & Gardens

The ROW recommendations include adding bike lanes throughout the Railroad Corridor and provide vegetative buffers on either side to keep users safe. These buffers can also function as gardens, further increasing greenery

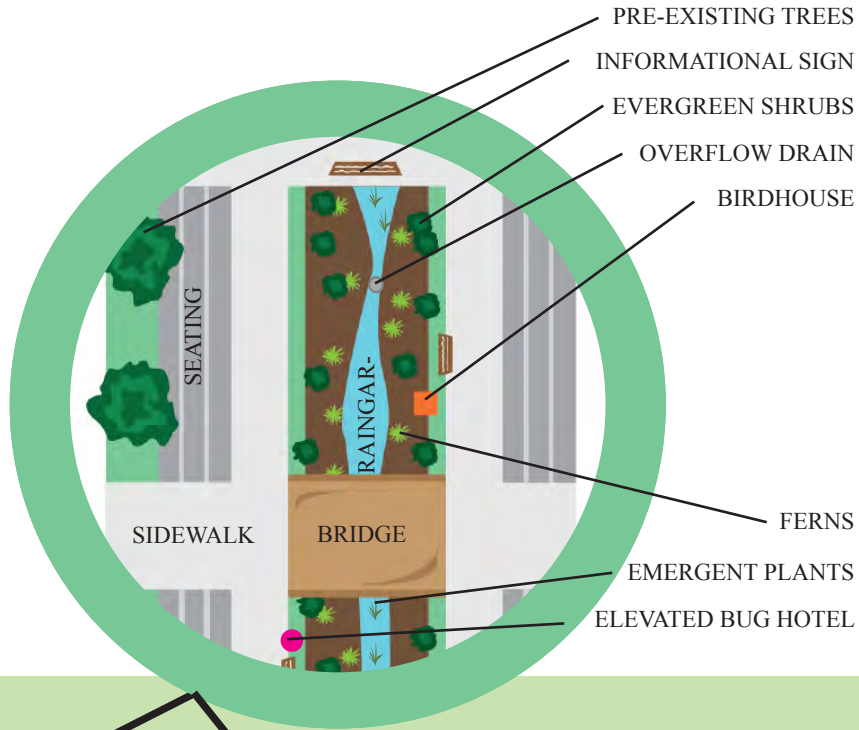
and pervious surfaces. Maintaining existing trees and adding new trees within the medians along Railroad Avenue will also add shade and decrease the urban heat island effect. These medians can also benefit from additional native landscaping and gardens.



Smaller raingardens, bike buffers, and gardens visual collage

RAINGARDEN TEMPLATE I

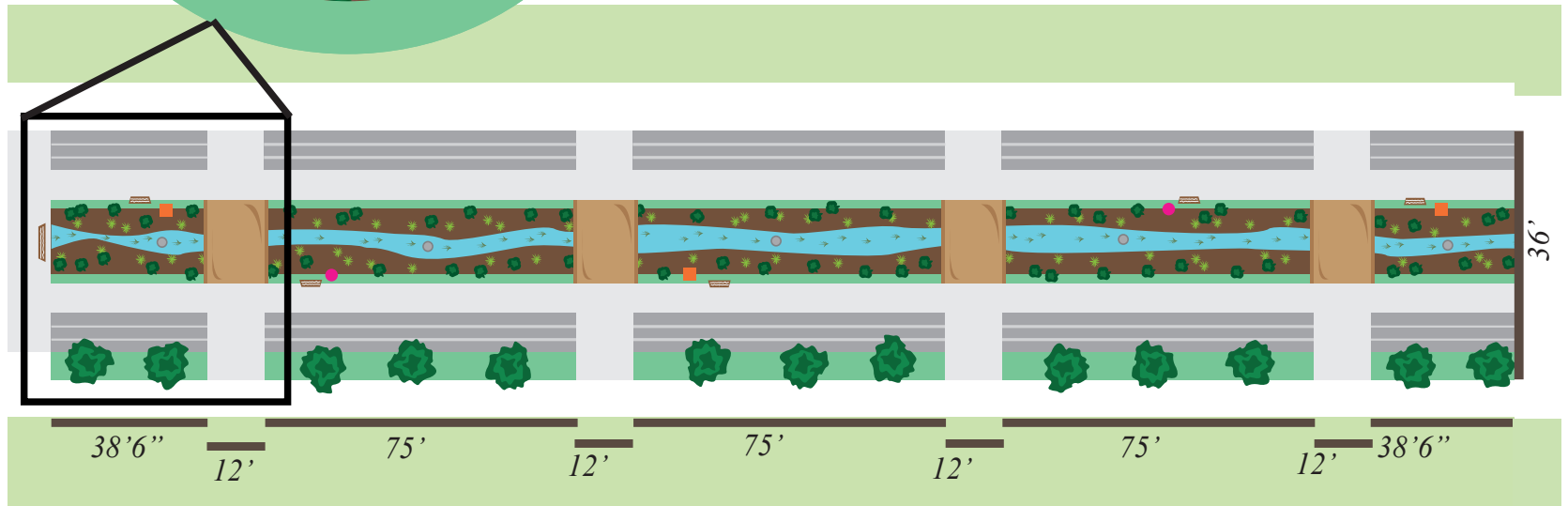
1300 BLOCK URBAN STREAM

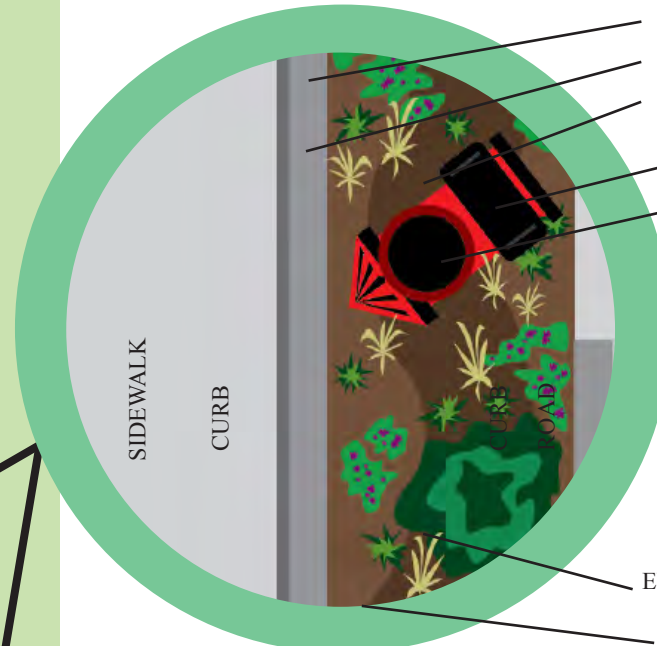
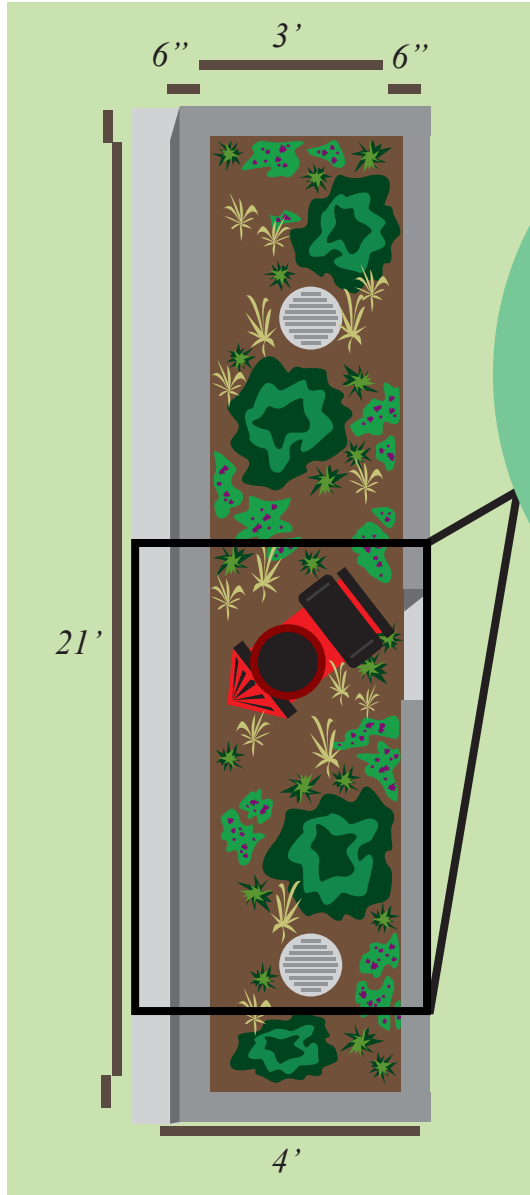


RAINGARDEN OVERVIEW

The pedestrian only 1300 Block contains a 350 ft. long and 36 ft. wide Urban Raingarden Stream. The raingarden is comprised of flat grass on its outer sides that gradually decline inwards to a rocky basin with slow-moving water.

Native emergent plants, evergreen shrubs, ferns, overflow drains, bird houses, and bug hotels pepper the raingarden's interior. Pedestrian walkways, ceramic art tiles, and public seating comprised of wooden panels atop concrete steps flank the raingarden to the East and the West.





- DECIDUOUS SHRUB
- EMERGENT PLANTS
- TRAIN SCULPTURE
- CURB CUT
- FERNS

**ELEVATED
TRAIN
SCULPTURE**



Elevated on a post, this train sculpture highlights Railroad Avenue's locomotive history.

- EVERGREEN SHRUBS
- OVERFLOW DRAIN

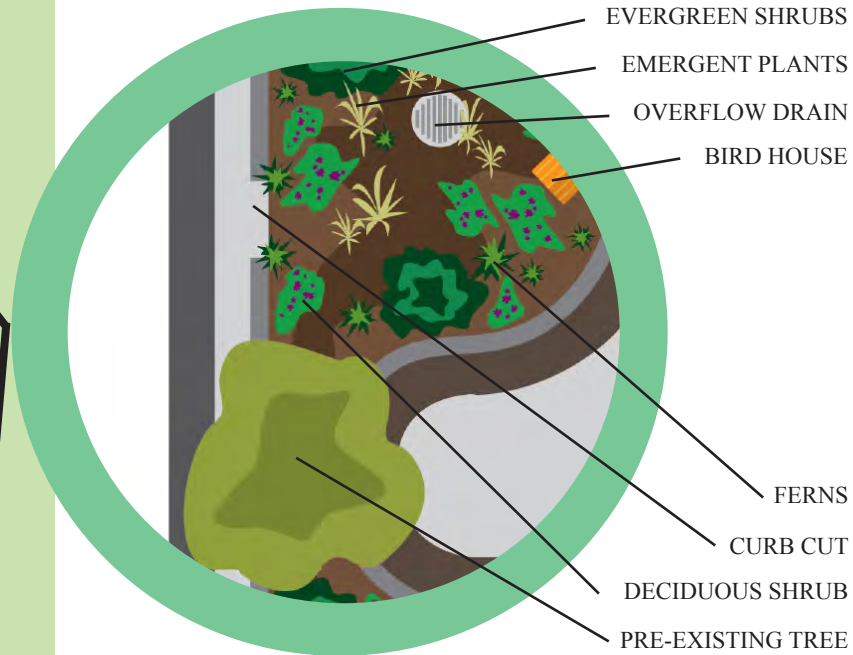
RAINGARDEN OVERVIEW

The 20 ft. long and 3 ft. wide Curbside Rain Garden has both artistic and natural features (21' by 4' including the curb). The rain garden contains permeable soil sloping inward towards the center to create an open water feature.

A raised artistic sculpture, native emergent plants, evergreen shrubs, ferns, deciduous shrubs, and overflow drains pepper the rain garden's interior. Situated against Railroad Avenue's one-way road, the rain garden captures road runoff water and filters pollutants through the soil and vegetation.

RAINGARDEN TEMPLATE III

ASYMMETRICAL RAINGARDEN



STAINED
GLASS
SCULPTURE



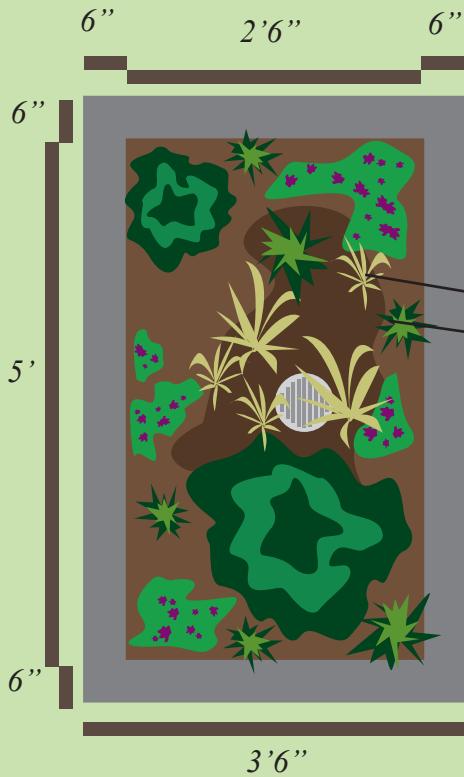
Propelled by the wind, the arched blades with stained glass interiors cascade colorful light on street.

RAINGARDEN OVERVIEW

The 17 ft. long and 6 ft. wide Asymmetrical Rain Garden has both artistic and natural features (18' by 7' including the curb). The rain garden proper contains permeable soil sloping inward towards the center to create an open water feature and has built-in public seating.

Native emergent plants, evergreen shrubs, ferns, deciduous shrubs, overflow drains, a bird house, and an artistic sculpture pepper the rain garden's interior. This rain garden is adjacent to the road.

RECTANGULAR MODEL



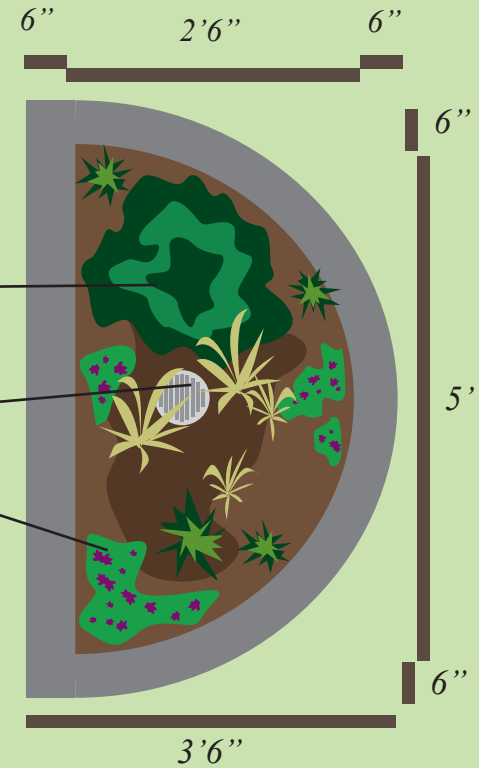
RAINGARDEN OVERVIEW

The two 5 ft. long and 2.5 ft. wide Pocket Raingarden designs are compact and add to environmental infrastructure on Railroad Avenue (6' by 3'6" including the curb). The raingarden proper contains permeable soil sloping inward towards the center to create an open water feature.

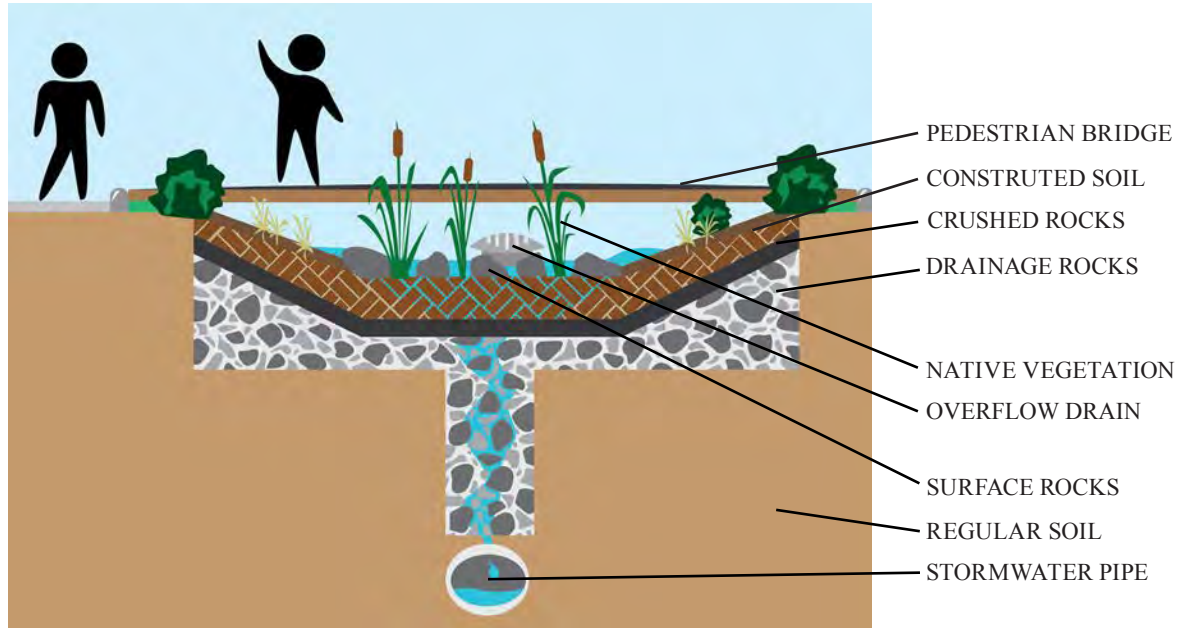
- EVERGREEN SHRUBS
- EMERGENT PLANTS
- FERNS
- OVERFLOW DRAIN
- DECIDUOUS SHRUB

Native emergent plants, evergreen shrubs, ferns, deciduous shrubs, and overflow drains pepper these raingardens. These Raingardens are designed to be versatile and fit even in the smallest of spaces.

SEMICIRCLE MODEL



RAINGARDENS I-IV CROSS SECTIONS

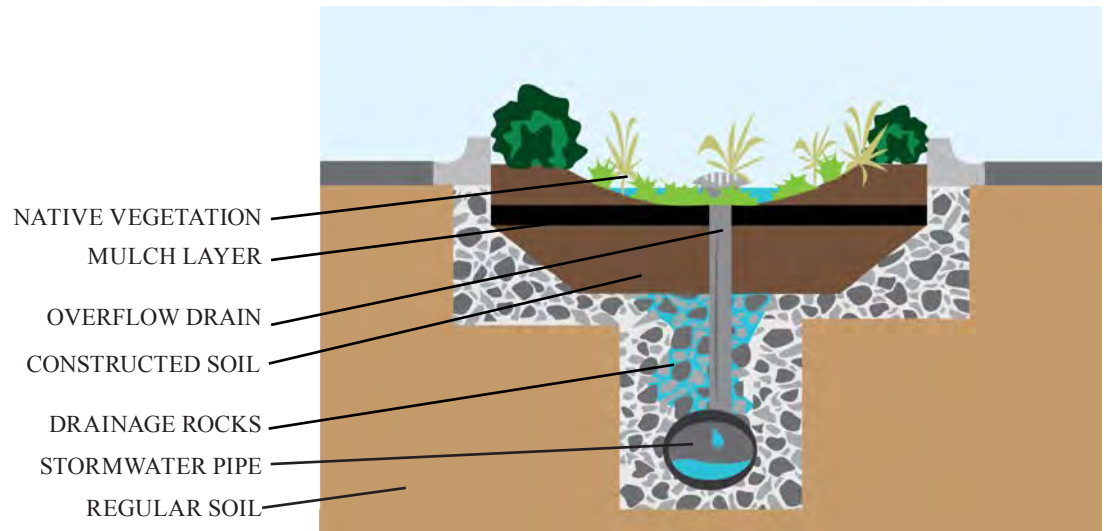


RAINGARDEN I

Raingarden I needs expansive filtration system. It will be channeling rainwater from adjacent buildings on Railroad Ave., runoff water from sidewalk spaces, and rainwater from severe storm events. Layering a mixed soil composition (50% washed uniform sand, 20-30% loamy peat, & 20-30% organic leaf compost), crushed rocks, and drainage allows slow permeability to be balanced with flood mitigation.

RAINGARDENS II, III, & IV

Raingardens II and IV require basic underground raingarden filtration. Layering a mixed soil composition, a mulch layer, and drainage rocks all contribute to allowing small scale water permeability without as much of a focus on standing water as the Raingarden I design. All four raingarden designs will also have an extra layer before the regular soil begins.

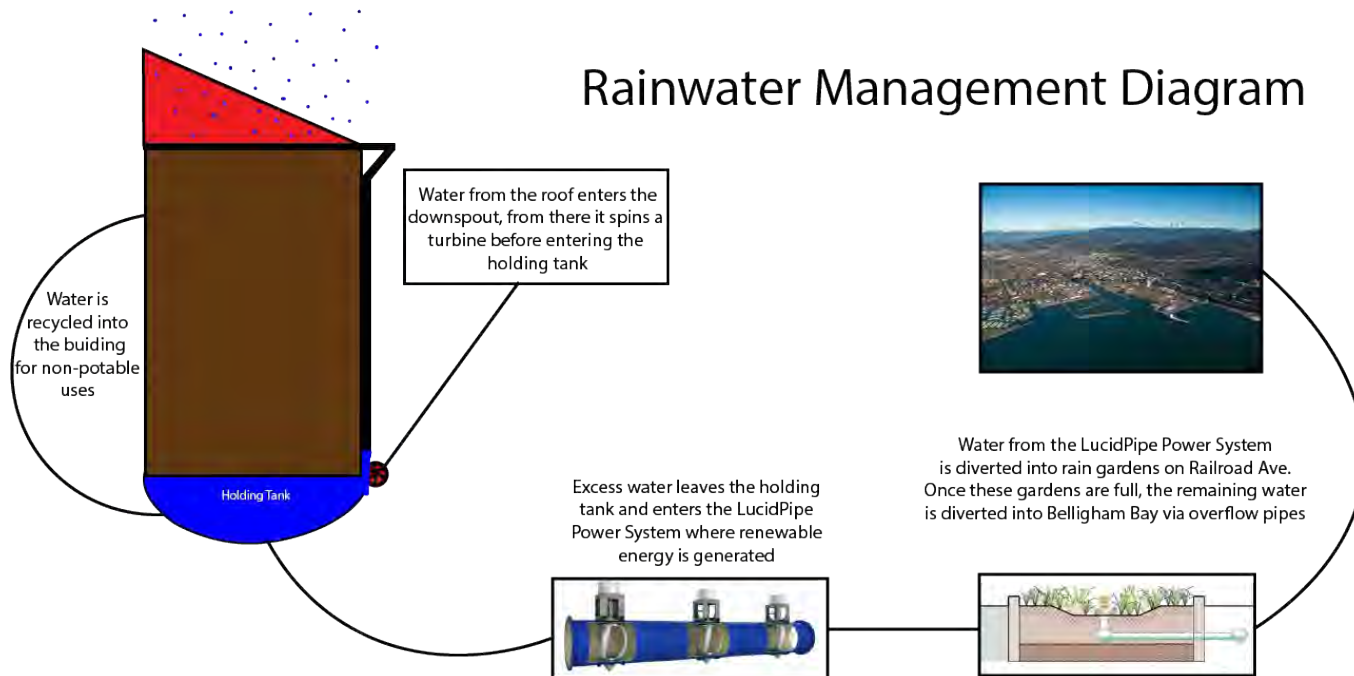


6.2.2 Water Management

As flooding and renewable energy generation become pressing issues in the world and in Whatcom County, introducing sustainable infrastructure that both mitigates flooding and produces clean energy can achieve multiple benefits. Water can be collected by property owners via their roofs which can then travel down the downspout into a holding tank for recycled uses within each building.

Excess water from these tanks can be diverted into the LucidPipe System. When no holding tank exists, water can flow directly from downspouts into the larger LucidPipe System. The LucidPipe System is a storm water pipeline used in Portland that produces renewable energy as water flows through the pipes' generators. Water can be diverted from the main LucidPipe System into the many raingardens proposed on Railroad Avenue. Overflow from the raingardens flows directly into Bellingham Bay. Renewable energy can also be produced by small generators located at the bottom of downspouts.

Overflow from the raingardens flows directly into Bellingham Bay. Renewable energy can also be produced by small generators located at the bottom of downspouts.



Rainwater Management Diagram

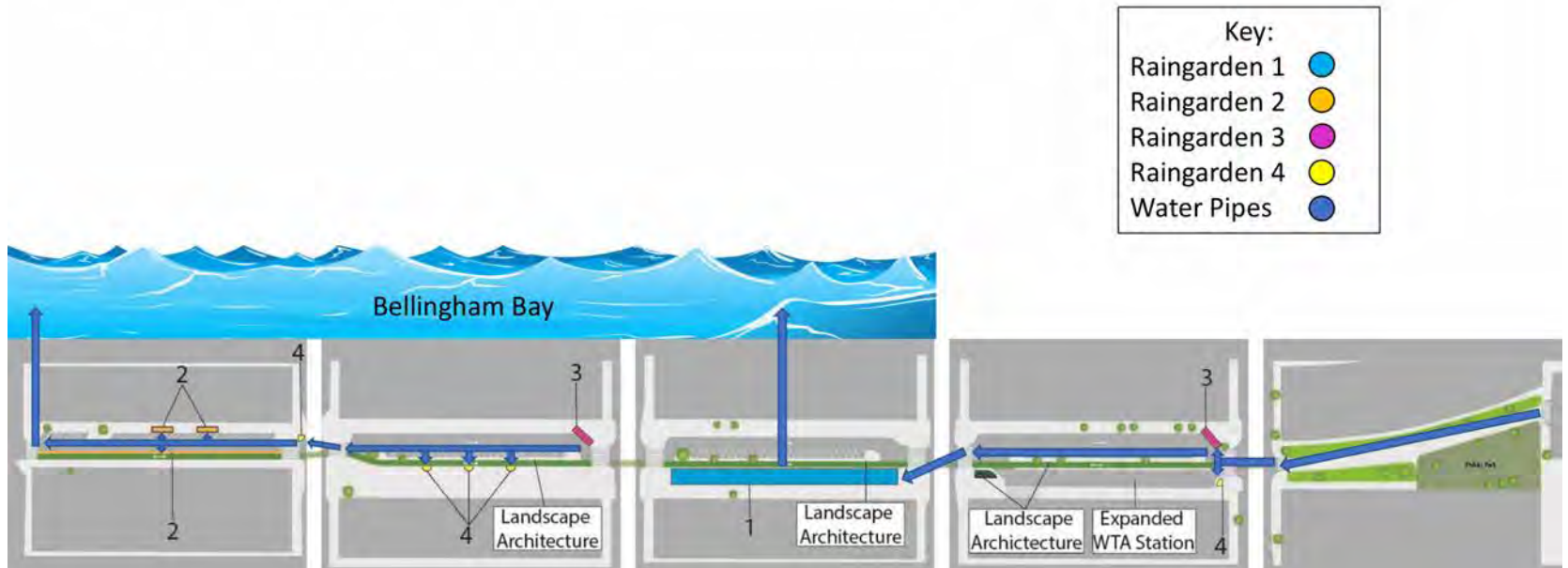
Raingarden and Severe Storm Event Management

Flooding impacts in Whatcom County are occurring more frequently, and the 2021-2022 winter flooding season illustrates how high magnitude and intensity flood events can cause severe damage. Mitigating storm water runoff is crucial to protecting our built environment in

the future as natural disasters become ever more frequent. Four different raingarden designs are introduced on Railroad Avenue which are shown connected by a central Lucidpipe System to generate renewable energy.

Each raingarden design is explained in detail in the diagrams in this report section. Each raingarden should emphasize native plants and act as a natural water filter for the treatment of street runoff.

Raingarden and Stormwater Management Diagram



Railroad Avenue raingarden and water channeling diagram for the entirety of the corridor

6.2.3 Urban Green Roofs



Washington Grocery Building



Green roofing applied to Railroad Avenue buildings

Green Roof Overview

The green roof design concept took its inspiration from a wide variety of well established and tested green roofs from around the world, and could be applied as an environmental benefit. Railroad Avenue consists of numerous buildings with flat rooftops that could be retrofitted with greenery and water catchment systems. Furthermore, as future infill development occurs, new buildings should each incorporate green roofs. Green roofs come with a variety of community, environmental and economic benefits that include:

- Water management and non-potable uses (dish washing, toilets, laundry)
- Energy efficiency via reduced heating and cooling costs
- Reduced heat island effect
- Increased biodiversity and wildlife habitat
- Improved air quality
- Aesthetically pleasing
- Construction and maintenance jobs

Green Roof Designs

Of the three types of common green roof designs, “extensive”, “semi-intensive” and “intensive”, it is recommended that, for Railroad Avenue, either extensive or intensive roofs would be most suitable. Extensive systems are those that would be inaccessible to the public and self-sufficient. They would provide the primary purposes of water filtration, heating / cooling and a habitat for local flora and fauna. Intensive green roofs are those that are accessible and serve not only for the above purposes but also as places for the community to enjoy, commonly called rooftop gardens.

The choice between these two types would be dependent on the building type, height, and usage. For example, those serving as housing could apply intensive designs and those used for commercial purposes could apply extensive designs. By and large all green roofs have the same structural requirements, but the availability of design options are broad. This allows each building to select the most feasible option.

Solar Energy Designs

Solar energy over the decades has become more common place, affordable and efficient. It has been proven to be a tried-and-true energy generation method and has the potential to provide numerous benefits to the community which include:

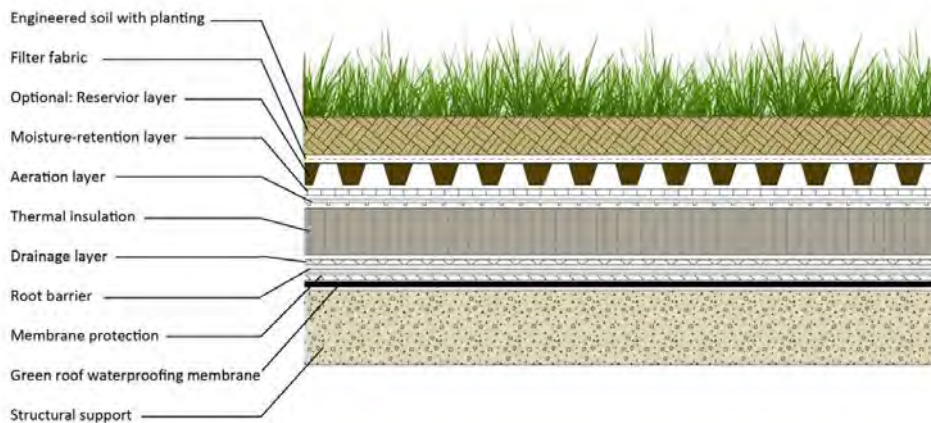
- Increased energy efficiency
- Less reliance on large scale power grids
- Job creation in installation and maintenance
- Reduction in emissions

These attributes coupled with the abundance of available rooftops and a north - south orientation along the corridor create an environment conducive to solar energy use. As such, it is recommended that all new infill developments should include the installation of solar panels with the goal of meeting a building’s overall energy demand. Panels could also be added incrementally onto already established structures. To achieve the goal of applying panels along the corridor, it might be useful to implement

legislation modeled from California's mandates requiring all new single family, multistory and commercial buildings to include solar panels. At the same time, incentive programs, such as tax breaks or subsidies, can be offered to property owners who wish to add panels. Bellingham also has at least three local solar installation companies in the area that could be contracted to provide local technical services. As Railroad continues to evolve, solar energy has the potential to serve a prominent role in energy generation to reduce the community's overall carbon footprint.



Example of extensive green roof



Green Roof Layering



Example of intensive green roof

6.2.4 Community Garden: Overview

Keeping in line with the idea of creating a sustainable connected community along the corridor, one measure that could benefit this area is the creation of a community garden on the east side of the 1100 block. A garden is shown located on the current parking lot between La Fiamma Wood Fire Pizza and the Market Depot.

This site was chosen due to its proximity to the farmers market and nearby apartment complexes. The design incorporates 26 9x9ft garden plots that could be rented out to local residents. There could also be a garden shed for housing tools that could utilize solar panels for indoor lighting.

Additional features of the community garden could include a water collecting system, compost bins, bird houses and benches. The community benefits include increased social interaction among residents, increased recreation, and alternative food sources. This site could serve as testing ground and other similar sites in the downtown area could be added as residential infill increases.



Existing example of a downtown community garden and utilities collage



Railroad Avenue 1100 Block Community Garden Design



Existing example of a downtown community garden and utilities collage

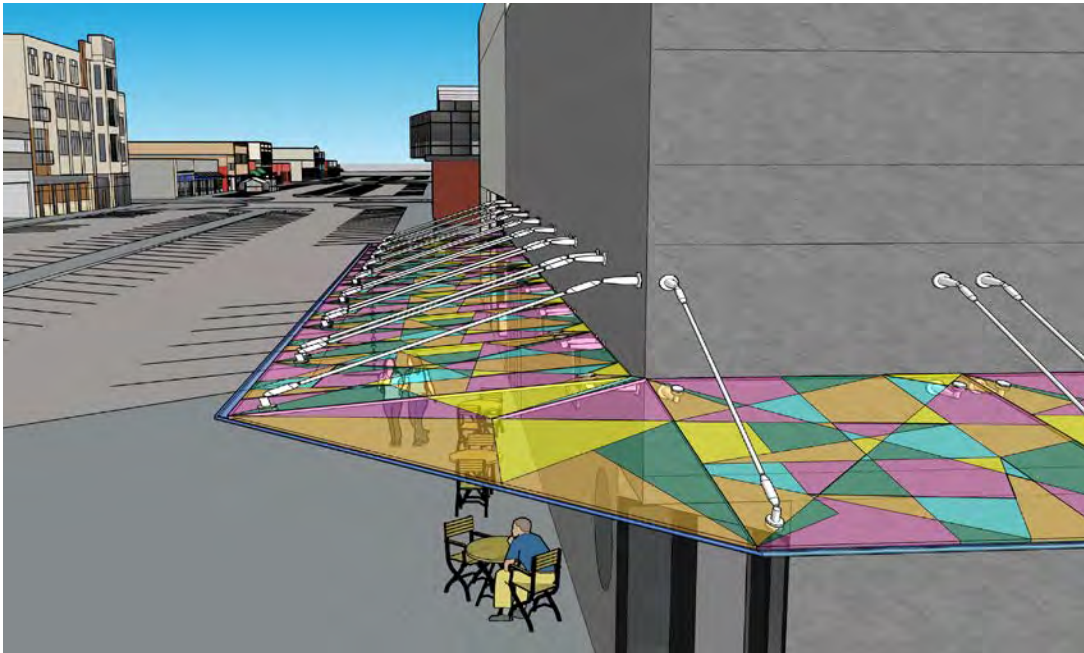


6.2.5 Inclement Weather Protection

Awning Coverage Overview

Railroad Avenue should incorporate a complete awning coverage system along all sidewalks adjacent to buildings. A covered pedestrian sidewalk allows for greater downtown functionality regardless of the weather. Furthermore, coverage along the corridor should serve the dual purpose of protection from inclement weather and urban beautification. This design study recommends that awnings be constructed of stained glass to cascade colorful

light across the sidewalks during the daytime. Stained glass awnings can also be embedded with solar panels to generate renewable energy in addition to sheltering the pedestrian realm and uplifting urban beautification. Secondly, rain chains can be added to awnings across the corridor as a unique water feature and as a means of collecting rainwater from awnings and buildings in the Railroad Avenue corridor.



Proposed stained glass awning



Proposed awning rain chains

Awning Policy Needs

Currently Railroad has some weather protection coverage along the corridor but there is abundant potential for adding more. It is recommended that to achieve more coverage, amendments should be made to the Bellingham City Center Design handbook to mandate the installation of awnings.

6.2.5 Inclement Weather Protection



Proposed dual awning system that combines rain chains and stained glass while weather protecting the sidewalk space

Inclement Weather Policy Proposal

Coverage should be opaque or semi opaque to allow the inflow of light so as not to darken the walkway below. Lengths can vary depending on the individual building. Widths should be between 8 and 10 feet to provide adequate coverage for pedestrians, and also to provide space for businesses to have outdoor seating.

An optional feature would be to include photovoltaic glass embedded within the awnings to harness sunlight and convert it into energy to offset some of the energy costs for the building.

Finally, as infill is added to the area, it is advisable to require new developments to have street coverage pursuant to the above concepts. Incentive programs could be offered to both new and future buildings along the corridor

6.3 Transportation - Pedestrianizing the ROW

Introduction

The community outreach survey identified a lack of Downtown public space and seating as top concerns of Bellingham-area residents. Additionally, improved infrastructure for non-motorized modes of transportation and street closures were the most commonly mentioned desired improvements for the corridor. At the same time, many businesses and local residents identified retention of parking capacity and vehicle throughput as important to the functioning of Railroad Avenue’s economy. Seeking to balance these two interests, the proposals provide a solution that supports both priorities by devoting a portion of the right of way to human-oriented uses through the application of a one-way road system and adding new structured and underground parking solutions to offset lost street parking and meet future parking demand. The reduction in on-street parking in favor of structured and underground parking will transform Railroad Avenue’s primary use as a surface parking lot into that of a vibrant downtown street.

6.3.1 Bike Lane

Around 40% of survey respondents expressed a desire for improved bicycle facilities along the Railroad Avenue corridor. A protected cycle track is proposed as part of both design alternatives and creates a direct connection between the South Bay Trail and the Whatcom Creek Trail. This two-way, 10 foot wide bike path would begin at the southwest end of the 1100 block

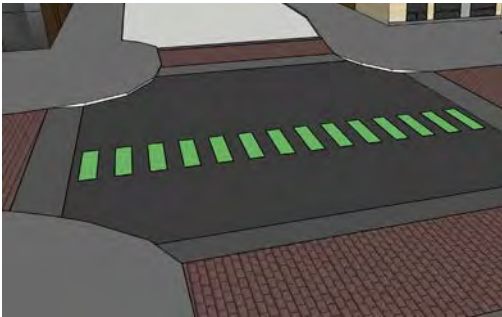
and end at the northeast end of the 1400 block of Railroad Ave. On the 1500 block, bicycles and pedestrians share the right-of-way in a similar fashion to the current 1000 block of Railroad Avenue. To minimize interactions between bicycles, cars and pedestrians, the lane will be separated by a buffer and use dedicated bike signals and green paint markings at intersections.



Bike lane looking south on the 1200 block

6.3.2 Intersection Improvements

With many major roads bringing vehicle traffic and community desire for improved pedestrian safety along Railroad Avenue, safety improvements are proposed for intersections. Curb extensions are proposed to be expanded further into the driving lanes. Additionally, crosswalks are proposed to be raised to be flush with the sidewalk and expanded width-wise to be 15 feet wide with 5 foot inclines on each side. Brick textures will be installed in the newly raised crosswalks to clearly demarcate pedestrian areas. These improvements will act as a form of traffic calming and signal to drivers that they are entering pedestrian space when they cross an intersection.



Detail of intersection improvements, showing raised crosswalks and bike lane markings

6.3.3 Pedestrian Space Expansion

Improving spaces and infrastructure for pedestrians was the top rated transportation improvement from the community outreach survey. In accordance with this, pedestrian space is proposed to be expanded significantly. On the 1100 block, sidewalks will be expanded by several feet on both sides of the roadway. On the 1200 and 1300 blocks, the north sidewalk will be expanded to 24-28 feet wide, and the south sidewalk will expand to be nearly 50 feet

wide. On the 1400 block, the east sidewalk will also be expanded to nearly 50 feet wide, and a wider sidewalk will be added to the west side of the block. The 1500 block will become a shared pedestrian street, similar in design to the 1000 block of Railroad Avenue. These expansions in pedestrian space will provide ample room for additional green space, recreation opportunities, outdoor dining, retail pop ups, seating, and other pedestrian-oriented street uses.



Improved pedestrian space, east side of the 1400 block

6.3.4 1200 Block Garage Expansion

It is recommended that two additional floors should be added to the existing publicly owned parking garage on the 1300 block to increase capacity while still fitting in with the surrounding development. The ground floor should expand the storefronts while still allowing for the remaining handicap parking to be accessible by pedestrians via a walkway. A staircase could also be added to the south side to allow for pedestrian safety with the increased usage of the structure.



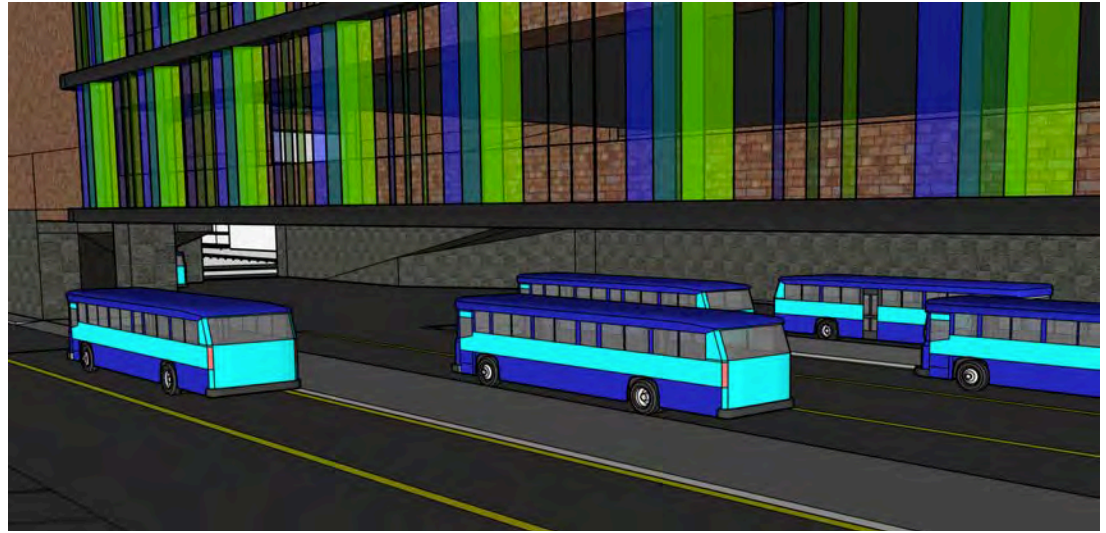
View of expanded 1200 block garage looking towards northwest



View of expanded 1200 block garage looking towards the southwest

6.3.5 WTA Station Redesign

The WTA bus station holds great potential to become a multimodal hub. There are already plans for the station to accommodate an increase of buses in general as well as to accommodate new electric buses that will be necessary to meet Bellingham's future growth. The opportunity to utilize the airspace above WTA is yet to be incorporated in WTA's plans. In accordance with the project's goal to reduce motor vehicle use in the right of way while still providing the convenience of centralized public parking, the plan recommends the construction of a structured multi-story parking garage above the existing WTA bus station. Greenery and artistic elements should be added to beautify the building's exterior. Secure bike storage should be added to increase the multimodality of the station. An elevator would provide access for all of the levels of the parking structure along with an improved public rest room.



View of expanded bus station beneath the proposed parking garage



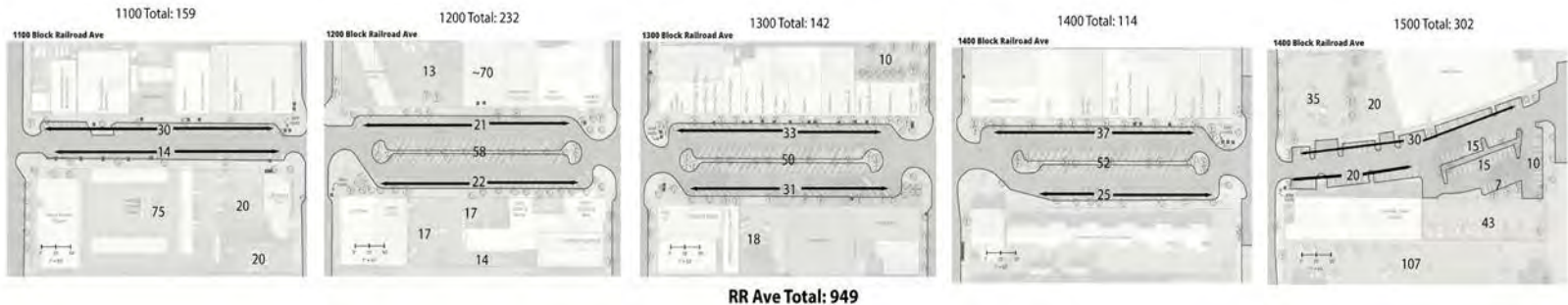
View of WTA station redesign looking towards northeast

6.3.6 Underground Parking in Proposed Infill Developments

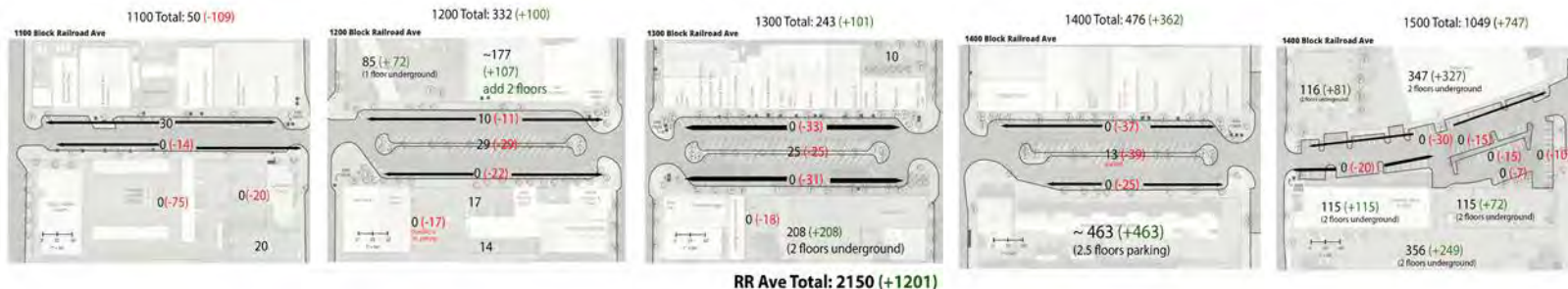
Both right-of-way alternatives eliminate on-street parking completely from the 1500 block to better replicate the planned pedestrian-focused nature of the block which will mirrors the existing 1000 block at the south end of the corridor. The only difference between the two alternatives is that in alternative B, the 1300 block is closed and transformed entirely into a pedestrian plaza, resulting in 25 fewer parking spots. Total parking capacity in alternative A is 2150 parking spaces, an increase of 1201 spaces from existing conditions. In contrast, total parking capacity

in alternative B is 2125 spaces, an increase of 1176 spaces over existing conditions. In both alternatives, the greatest amount of newly added parking is located in underground parking garages along the corridor's 1500 block. The large parking garage added above the WTA station also provides a substantial addition of 463 spaces. Parking capacity for underground and structured garages was estimated taking the total square footage of each lot and dividing by 238 square feet. The number of 238 is used as an estimate as it reflects the Bellingham City Code's minimum dimensions of 28 feet by 8.5 feet for a parking space. This number includes an extra 11 feet in length behind each parking space for backing up space and driving lanes.

Currently there are approximately 949 parking spaces along the 1100 - 1500 blocks of Railroad Avenue. The vast majority of these spaces (879) are surface parking, either along the street or in off-street parking lots. The only structured parking along the corridor currently is in the 1200 block garage, which contains approximately 70 spaces. The greatest capacity is in the 1500 block with 302 spaces due to the dominant use of the block as a surface parking lot by various public and private landowners.



Current parking capacity on Railroad Avenue

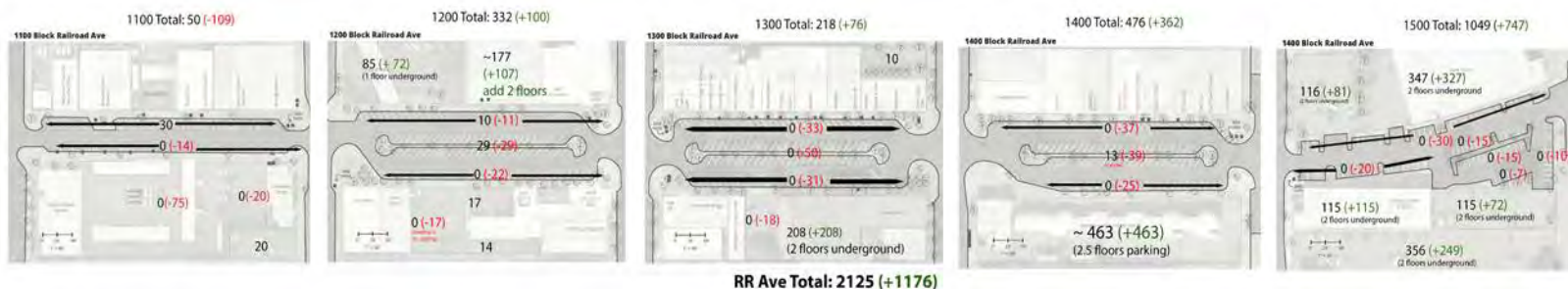


Parking capacity under alternative A (no block closure)

Under alternative A, on-street parking is substantially reduced from current conditions. The decrease in on-street parking along every block is offset by 1027 new spaces of underground parking underneath proposed

infill development in the 1200, 1300, and 1500 blocks. In addition, the expansion of the 1200 block garage and the new parking garage above the WTA station result in 570 new spaces. Alternative A represents a net gain of 1201

spaces for the 5 blocks, and a total of 2150 spaces. The majority of this new parking would be underneath the substantial infill development proposed in the 1500 block.



Parking capacity under alternative B (with block closure)

Parking capacity in alternative B is largely identical to alternative A. The small difference is that in alternative B, on-street parking is removed completely from the 1300 block, representing the closure of the street for a pedestrian plaza. The result is a total of 2125 parking spaces, a decrease of 25 spaces compared to alternative A and a net gain of 1176 spaces from current conditions.



Infill mixed use housing development on the northeast corner of the 1300 block

Acti

6.4 Housing Diversity, Affordability, and Equity

Introduction

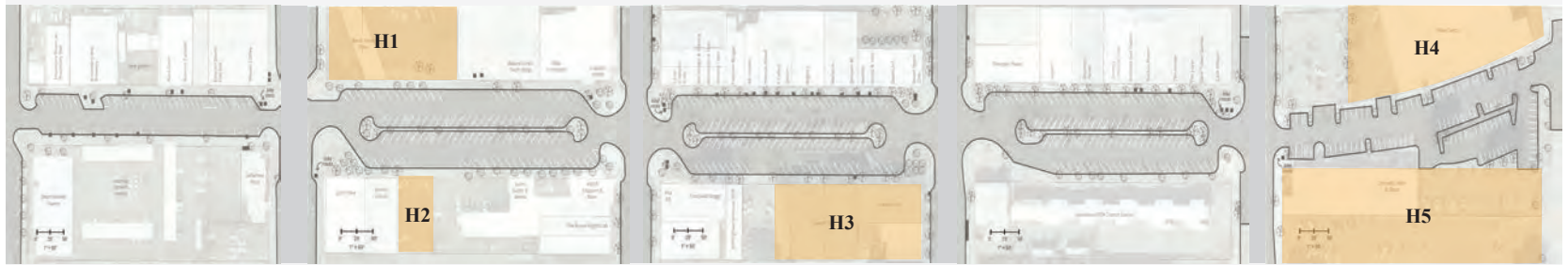
To increase vibrancy and commercial activity of the Railroad Avenue Corridor, this study proposes several sites along the corridor to be redeveloped with high-density, mixed-use residential buildings to increase the housing supply in the Downtown district. While the Downtown district is recognized for its unique shops and local restaurants, there is a clear lack of housing to support the growing population especially for residents who cannot afford current market housing in the area. There are opportunities for infill housing developments in the central interior of the Corridor (H1-H3); however, to replicate the high-density residential area located at the southern end of the Railroad

Avenue Corridor, multiple residential buildings are recommended (H4-H5) on the northern-most end of the Corridor to create a walkable, pedestrian-oriented space and a balanced land use design complementing the southern end of the corridor.

The new residential developments proposed are within easy access to the WTA Station, an urban park, retail and restaurant businesses, a connected bike path, civic services, and other amenities. To foster increased usage of the transit station as well as the pedestrian and bicycle pathways, all proposed infill housing developments except for H2 feature underground parking garages with unbundled parking passes

that will be available to purchase for those residents who need them. Unbundled parking is a great alternative to including the cost of parking within the monthly rent because it will lower monthly costs for residents who don't require on site parking. Additional parking spaces that are unused by residents can be made available for daily public use.

The proposed infill housing developments on the Railroad Avenue Corridor could create a total of over 725,000 square feet of residential space comprising almost 700 additional housing units which has the potential to house over 1500 Bellingham residents.



Site plan of all proposed mixed use infill housing developments along the Railroad Avenue Corridor

Affordability

The study prioritizes the need to ensure the proposed infill housing is safe, healthy, equitable, and affordable for all income levels in Bellingham. Bellingham is currently facing a housing crisis with rising rent and home prices that far exceed the Washington State averages. It is imperative that new housing developments are affordable to a range of incomes within the Bellingham community as well as serve a spectrum of household types including young professionals, families, and older adults. The US Department of Housing and Urban Development defines affordable housing as housing that costs no more than 30% of a household's monthly income.

The proposed infill housing along the Railroad Avenue Corridor is comprised of a range of units at both market-rate and below-market rate prices. The high-end, luxury units will help offset the cost of the units that are designated for moderate income, low-income, and extremely low-income residents. Public Private Partnerships could also be utilized to ensure the permanent affordability of the units. Examples of these partnerships could include Opportunity Council, Mercy Housing, Bellingham Housing Authority, City of Bellingham, Kulshan Land Trust, and Whatcom County. Other regulatory measures and incentives should also be explored to ensure affordability of proposed residential developments along the Corridor such as inclusionary zoning, affordability overlays, and multi-family tax exemptions.

Infill Site/Building Name	Block Location	Average Sq. Footage per Residential Unit	Total Square Footage	Total Number of Units	Approximate Residents Housed*
H1: Huerta Courts	1200	~1000	72,160	65	148.2
H2: Fawn Flats	1200	~1000	12,420	12	27.36
H3: Vienna Apartments	1300	~1000	81,920	73	166.44
H4: Site A: Jemison Apartments & Townhouses	1500	~1000	128,893	128	291.84
H4: Site B Hampton Apartments & Townhouses	1500	~1000	90,330	90	205.5
H4: Site C: Champion Apartments	1500	~1000	114,030	114	259.92
H5: The Brownstones	1500	~1000	225,993	205	467
Total Impact			725,746	687	1566.36
*US Census Data of Bellingham, WA. Estimated 2.28 persons per household, 2015-2019					

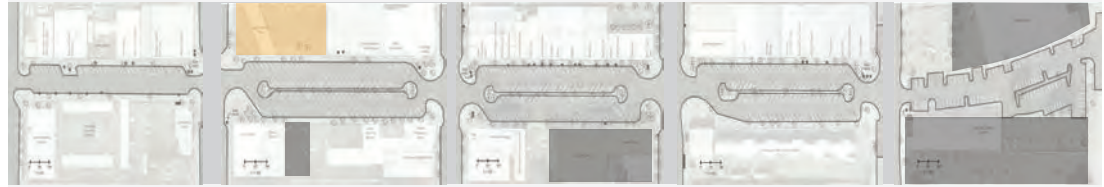
Table of estimated residential impact

6.4.1 H1: Huerta Courts

This large scale mixed-use residential building repurposes the underutilized Bank of America parking lot on the 1200 block of Railroad Avenue into a vibrant space. The first floor is comprised of a commercial uses to serve the urban residents of the Railroad Avenue Corridor. The remaining four floors are meant for a mélange of families and younger residents seeking affordable housing. A range of unit sizes would be offered from studio apartments to 3-bedroom apartments. In total, Huerta Courts would provide up to 65 housing units. In addition to adding to the urban vibrancy it would bring to the Railroad Corridor, residents would also have access to a multi-purpose community courtyard in which community-building events could be held for residents. The courtyard could also serve as a place for residents to relax and provide a shared space symbolic of cohesive urban communities.



Street view of Heurta Courts



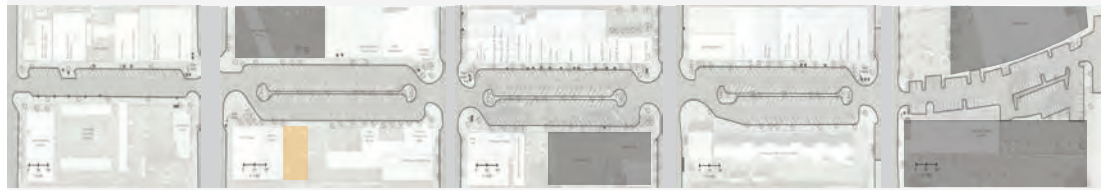
Site plan highlighting the H1 lot for redevelopment.



Aerial view of Huerta Courts looking west

6.4.2 H2: Fawn Flats

This small multi-use apartment building fills the Jimmy Johns adjacent parking lot on the 1200 block of Railroad Avenue. At four stories, the first floor offers two commercial spaces while the top three floors provide residential space. With 12 residential units, at about 1,000 square feet each, this 16,785 square foot building complements this section of the Corridor with a traditional brick exterior. On the first floor, between the two commercial spaces, there is a mural to introduce an artscape to the street. This complex can house about 27 people, with units varying from 2-3 rooms, housing both family and single occupant households. For this site, there is no reserved parking. This model follows the community design goal from the Bellingham's 2016 Comprehensive Plan which "Encourage[s] contextually-appropriate infill development projects and property renovations" (GOAL CD-6, p.3). This infill model utilizes this space well because it was previously an underutilized parking lot to help meet the housing shortage in the downtown area.



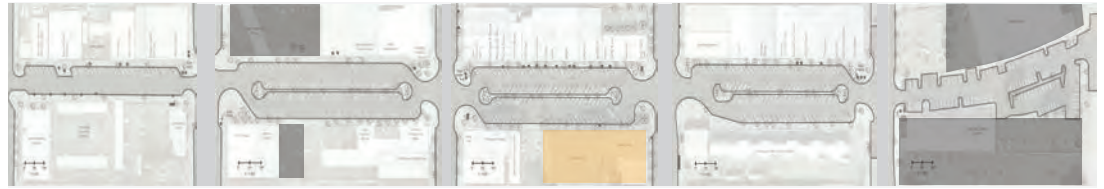
Site plan highlighting the H2 lot for redevelopment.



View of Fawn Flats

6.4.3 H3: The Vienna Apartments

The Vienna Apartments is comprised of two apartment buildings that would replace the large empty lot and dry cleaners business on the corner of Railroad Avenue and Magnolia Street on the 1300 block of the Corridor, rising five stories in height. The Vienna Apartments can provide up to 73 residential units with units varying from studio to 3-bedroom apartments averaging approximately 1,000 square feet. The proposal is shown containing a public park on the south side of the complex and an open space area between the apartments.



Site plan highlighting the H3 lot for redevelopment



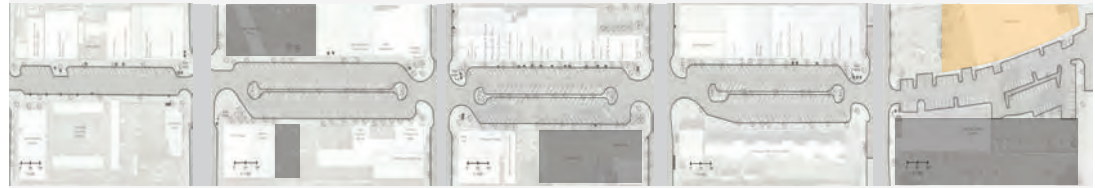
Aerial view of the Vienna Apartments



Street view of the Vienna Apartments

6.4.4 H4 Site A: The Jemison Apartments & Townhomes

This proposed Jemison multi-use building provides commercial and residential spaces. The total square footage of the Jemison Apartments & Townhomes is about 129,000 square feet, providing about 128 units. This space can accommodate almost 300 people comfortably. Half of the first floor (~16,000 Sq. Ft.) is designated commercial space fronting Cornwall Avenue, and the other half of the first floor provide for townhomes fronting an interior pedestrian corridor. The interior of the building fronting two mixed-use buildings in the 1500 block is designed as an alley to encourage community interaction and increases pedestrian safety. With townhomes on the first floor, this creates a welcoming space. The design of the Jemison Apartments & Townhomes aims to achieve goal 2 of the housing section of Bellingham’s 2016 Comprehensive Plan to “foster housing that is safe, healthy, livable, and affordable for all income levels in all neighborhoods” (Goal H-2, p.3). To protect the privacy of townhome residents, the floor is raised two feet above the ground. The apartment units range in size from 2-4 bedrooms averaging approximately 1000 square feet, allowing for affordable options, but also providing units large enough for families. Additionally, the range of sizes are meant to support mixed income housing. Each floor contains balconies that function as outdoor common spaces for building residents. The underground common parking garage can be accessed through any of the buildings on the 1500 block.



Site plan highlighting the H4 lot for redevelopment.

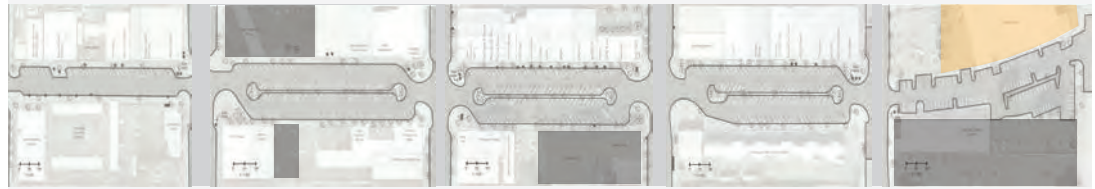


Aerial view of the Jemison Apartments & Townhomes

6.4.5 H4 Site B: Hampton Apartments & Townhomes

The Hampton Apartments & Townhouses are a mixed-use, mixed income, multigenerational development that can transform an underutilized section of Railroad Avenue into a dynamic commercial and residential area. Located directly across the 1500 block Public Park, this development has a mix of affordable apartments and townhouses to alleviate Bellingham's housing crisis. Similar to other proposed infill sites, the proposed infill site offers a range of housing units, ranging from studio apartments to 3-bedroom units, as well as townhouses.

For apartment residents, 2nd story residents would each have private terraces, while residents of other floors have private balconies. Residents residing in townhouses face a pedestrian-only alley. Townhouse properties each have a ground floor terrace with space for a garden that would liven the alley. As a whole, all residents of the 1500 Block West site would have access to a community terrace and garden abutting York Street. Additionally, underground parking is an optional amenity for residents who choose to include parking in their lease.



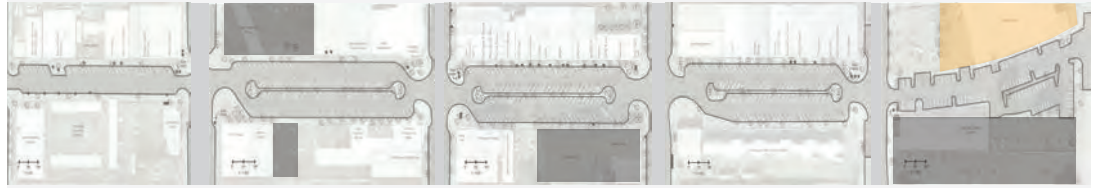
Site plan highlighting the H4 lot for redevelopment



Street view of the Hampton Apartments & Townhomes

6.4.6 H4 Site C: Champion Apartments

The Champion Apartments are a mixed-use residential building that adds housing density to a site containing a parking lot. This building, in conjunction with the others on this block, serves to create a dense residential area, supported with public space and commercial retail uses fronting Railroad Avenue. This building can provide 114 housing units ranging from studio to 3-bedrooms.



Site plan highlighting the H4 lot for redevelopment.



Corner view of the Champion Apartments



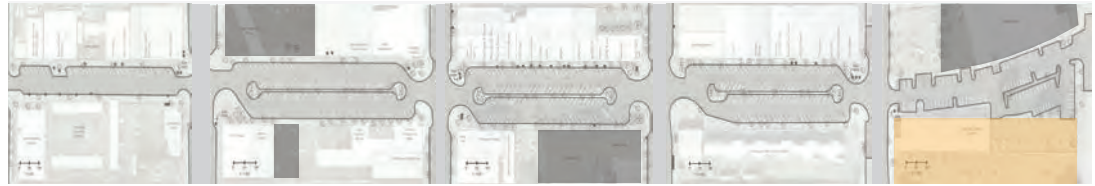
View of the Champion Apartments

6.4.7 H5: The Brownstones

The Brownstones is a mixed-use, mixed income, multigenerational housing development that transforms an underutilized site on the east side of the 1500 block of Railroad Avenue into approximately 205 affordable rental homes ranging from 1-bedroom to 3-bedroom apartments and townhomes in four separate buildings. The development provides over 200,000 square feet of residential space and has the potential to house 470 residents with a focus on housing workforce families. The design combines the perks of downtown living while preserving semi-private pedestrian spaces for the residents through an interior pedestrian alley lined with small porches of the townhome units. The design emulates the classic Brownstone building style to increase neighborly interactions and create a vibrant, walkable neighborhood.



Balcony view of The Brownstones



Site plan highlighting the H5 lot for redevelopment



View of The Brownstones' townhome-lined pedestrian pathway

6.5 Enhancing the Public Realm

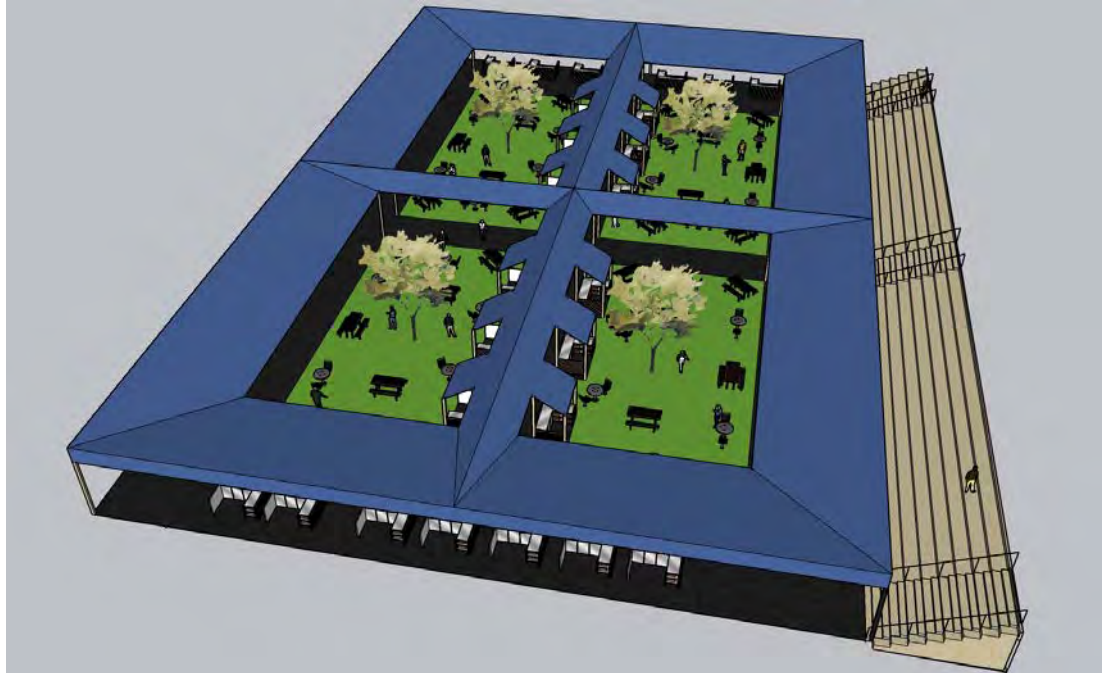


A typical streatery

6.5.1 1100 Block: Depot Market Square

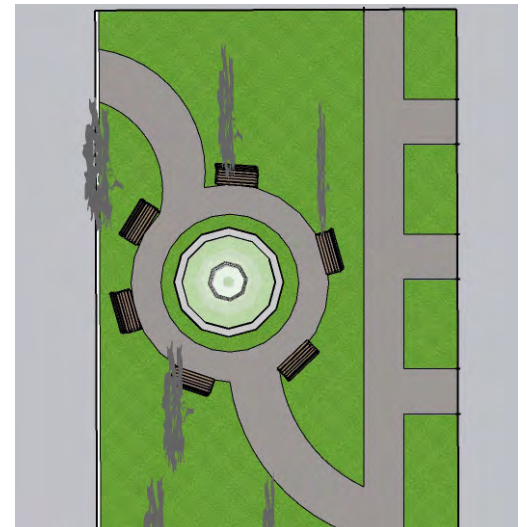
The data collected in the earlier stages of this project illuminate a public preference for more public areas and green space. To meet this demand the study proposes the redevelopment of Market Depot Square. The redevelopment design will remove underutilized parking spaces and replace the asphalt surface with four small green spaces flanked on all sides by retail and craft market stalls supporting the Farmers Market. Other provisions of the redevelopment include an expanded covered area to protect against inclement weather and excessive sun exposure during the Summer, public seating, and the addition of amphitheater-like seating connecting the site to the adjacent alley, further increasing pedestrian connectivity.

In addition to meeting the demand for more public and green space, this redevelopment proposal also helps mitigate flooding by replacing the impermeable asphalt that currently covers the site with pervious surfaces. In turn, this will increase the capacity of Railroad Avenue to absorb storm water.



6.5.2 1200 Block: Vest Pocket Park

Much like the Depot market Square redesign, this development aims to increase public greenspace and disincentivize auto use by redeveloping underutilized parking spaces with a small vest pocket park in the 1200 block. By angling the parking adjacent to the park, this development provides space for four additional parking spaces to help offset the reduction in parking capacity necessitated by the overall street realignment plan.



6.5.3 1300 Block: Railroad Avenue Plaza



ROW Alternative 2 features a pedestrian-oriented superblock in the 1300 block of Railroad Avenue. The design proposes the closure of the entire block to vehicular traffic (except for emergency vehicles), transforming the block into a large open-air public plaza. This superblock would feature a continuous rain garden that spans the entire length of the Right of Way, while improving stormwater runoff in an aesthetically pleasing manner. The data collected in the survey shows that Bellingham residents are strongly supportive of a fully-dedicated pedestrian space within the Railroad Avenue corridor.

A central rain garden provides seating on both sides to promote public areas to sit as well as to enjoy food provided by the eateries located on this block. More streateries can be added providing additional outdoor seating for surrounding restaurants. The streateries are interchangeable with the pop-up retail shops placed adjacent to sidewalks on each sides of the 1300 block, as demand requires. The pop-up retail shops helps to diversify businesses on Railroad Avenue and contribute to an activated streetscape.



A view of the 1300 block looking toward the south

6.5.4 1300 Block: Pocket Park



Currently, on the South East side of the 1300 block there is a small parking lot next to the antique mall. This space is proposed to be transformed into a public park to complement the street revisions in the 1300 block. The park is built around a central tree in the middle of the park, providing shade for users in the park and to serve as an iconic point of reference. The tree is surrounded by vegetation and a circular path connecting the alley to the sidewalk on the 1300 block. The park paths are lined with benches.

Most of the space in the park is dedicated to public seating. In the back of the park, picnic tables. In the front, an art sculpture is shown to encourage greater public art.



View through pocket park towards Railroad Avenue

6.5.5 1300 Block: Pocket Plaza

A pocket plaza is shown between the proposed two mixed-use buildings located on the vacant lot on the 1300 block. The building structures consists of two complementary buildings separated by the plaza. The plaza has two thirty foot wide entrances fronting Railroad Avenue as well as access to the alley. The central space broadens to a width of fifty feet. Formal entrances to the mixed use buildings are located in the center of the plaza along with ground floor retail shops also fronting on the plaza.

Three planter boxes contain ornamental plants and a shade tree is located in the center planter box. The planter boxes are surrounded with benches so people can enjoy the space. String lights are draped across both entrances to the pocket plaza, creating a welcoming first impression as well as to enhance public safety. The lighting also serve to illuminate plantings.



6.5.6 1500 Block Public Park



The 1500 block currently includes a considerable amount of space reserved for parking. The corridor itself will be converted to a pedestrian only right of way to support the surrounding proposed infill with stores and housing. A public park is proposed to be located between the right of way and the housing developments on the east side of Railroad Avenue. The park serves the surrounding community, especially those residing in the new housing added on the block.

The park supports several features to serve the needs of the community. Most notably, a large area of open space is designed to support recreation and leisure activities, including a public playground and play set for children. Benches and tables are provided for users to relax or enjoy a meal in the park. A path connects to the South Bay Trail located across York Street.



The park includes a sidewalk connecting Champion and York Streets. It also has a direct path to the walkway located between the adjacent housing development. The pathway includes a covered pergola to provide protection from the elements. A large oak tree is planted in the middle of the park, with several other trees on the park periphery. The park provides a refreshing green space among the high density buildings that surrounding it.

Urban Transitions Studio
WWU College of the Environment

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Railroad Avenue
Corridor
Design Alternatives

Bellingham, Washington

2022