

# Arlington

---

## Downtown Master Plan

Urban Planning Studio II  
Sustainable Communities Partnership  
Western Washington University  
Report 2, Winter 2020



## ACKNOWLEDGEMENTS

The work contained in this report was coordinated through Western Washington University's (WWU) Sustainable Communities Partnership Program (SCP) between the City of Arlington and Huxley College of the Environment's Urban Transitions Planning Studio. The partnership, initiated in the fall of 2019, involves a series of three urban planning courses, led by faculty instructors, 21 student participants, the SCP coordinator, and support staff from the City of Arlington, business leaders, and members of the Arlington community.

The planning study commenced in fall quarter 2019 under the direction of Barbara Coe, instructor, where baseline data was collected and analyzed. During this period, a community-visioning workshop was conducted to ascertain the community's preferences with respect to future growth opportunities and improvements to the Arlington downtown study area.

In winter quarter 2020, the study advanced into the urban design stage. Directed by Professor Nicholas Zaferatos, students analyzed the responses from the community-visioning event, and applying best management planning practices and sustainable development principles, prepared a series of preliminary concepts and recommendations that address the potential and capacity for urban infill, business expansion,

hazards risk reduction, and improvements to transportation systems, parks, trails, open space, and public parking capacity. The draft concepts were then presented at a community public meeting held in February 2020. Community feedback to the preliminary urban design concepts was further analyzed, and a refined urban design proposal was presented through a virtual community meeting held in April 2020 using the Zoom platform.

In this report, recommendations are presented to identify opportunities and strategies that encourage urban infill to meet long-term population growth demands and enhancements to the urban character of the Arlington downtown. Planning recommendations provide for increased integration of the Centennial Trail with the downtown, the transition of West Avenue and MacLeod Avenue to residential and mixed use districts, street improvements to provide for increased on-street parking and pedestrian and bicycle safety, the provision of structured public parking facilities, and the development of pedestrian-centered public and retail square on Olympic Avenue.

Please note, this report contains recommendations, only, which depend on funding, phasing, and community input.

We wish to extend our appreciation to members of the community who participated in this study, our gratitude to Mayor Barbara Tolbert and her lead staff, Sarah Lopez, for their continuing support in conducting this study, and to SCP coordinator Lindsey MacDonald for coordinating this partnership with the City of Arlington.

### 2020 WWU Student Contributors

Britt Banner, Bryan Benjamin, Cora Bern-Klug, Chloe Bensen, Jessica Ibes, Landon Jackson, Ella Liddicoat, Molly McGuire, Jiarrell Michael, Iris Moore, Madelyn Nelson, Sierra Ohlsen, Josie Rademacher, Jasmine Ro, Jaclyn Samson, Colleen Sawyer, Yumi-Shika Shridhar, Claire Swearingen, McKenna Thompson, Olivia Wauzynski, and Thomas Wicker-Fetzer.

### Huxley College Urban planning faculty

Barbara Coe, Instructor  
Nicholas Zaferatos, Professor  
Tammi Laninga, Associate Professor

### Sustainable Communities Partnership

Coordinator  
Lindsey MacDonald

### Student Editors

Cora Bern-Klug  
Sarah Parker

## TABLE OF CONTENTS

PAGE 1

INTRODUCTION

PAGE 7

SOCIAL EQUITY AND GENTRIFICATION

PAGE 13

LAND USE

PAGE 32

INFILL DESIGN

PAGE 45

PUBLIC SPHERE

PAGE 63

TRANSPORTATION AND MOBILITY

PAGE 77

ENVIRONMENTAL HAZARDS

# INTRODUCTION

## WASHINGTON STATE'S GROWTH MANAGEMENT ACT

The necessity of planning for future growth lies in Washington's Growth Management Act (GMA). The GMA requires local governments to identify critical areas for protection, designate urban growth areas to accommodate future population growth, and develop and implement comprehensive plans that meet statewide goals. The GMA develops population projections and provides guidance for how local municipalities can effectively accommodate that growth. Under the GMA, Snohomish County is required to plan fully for projected populations (specific planning requirements are identified in section RCW 36.70A.070). The goal of this study is to comply with the GMA's requirements for infill development within urban growth areas to accommodate Arlington's future population growth.

According to the U.S. Census, as of July 1st, 2018, Arlington was estimated to have a population of 19,803. The GMA's 2035 population projection for Arlington is 26,002, an increase of 6,199 residents. As mandated by the GMA, Arlington's city government

is required to plan and prepare for such growth. This section establishes design recommendations that maximize infill potential based on identified parcels while retaining Arlington's architectural and urban character. In addition, other strategies for reinvigorating Arlington's urban core are examined. While the city of Arlington is mandated to accommodate growth projections, Arlington has adopted design standards that also need to be reflected in future urban growth throughout the study area.

## HISTORY OF ARLINGTON

Arlington was established in the 1800s as a military settlement and for pioneers moving north from California. Prospector Samuel Hancock was led by Stillaguamish indigenous guides up the Stillaguamish River. Partially inhabited by the native Stillaguamish people, European settlers began establishing towns to support logging and mining. A treaty between the Stillaguamish and the settlers allowed for logging of the region. As more settlers came to the area for logging and mining, the population split into two distinctive towns, Arlington, and Haller City. Annual downtown parades in Arlington began in the early 1900s, and historical shops were built. In 1903 Arlington and Haller city merged to become one city. The growth of the logging industry brought the railroad, and Boeing's prominence in the Seattle area brought an airstrip. Interstate-5 was built in 1956, which brought more traffic to Arlington.

Civic buildings such as the 1931 Post Office, A.H. Moll Furniture, and the Arlington Hardware Store remain prominent historical sites. In the mid to late 1900s, Arlington, being a suburb of Seattle and conveniently located to the freeway, began to experience rapid population growth (the City of Arlington, "History of Arlington," n.d.).

## COMMUNITY AND BUSINESS ASSOCIATION SURVEY

A survey was distributed to community members via an Internet platform through the leadership of the Downtown Arlington Business Association (DABA) and through the city administration. The survey was also distributed at the February 11 public meeting. Participants were invited to complete the survey using provided laptops. Twelve community members completed the survey during the meeting. Thirty-two community members completed the survey in total. The purpose of the survey was to assess the opinions and state of awareness of the Arlington public concerning a variety of land use topics. It was comprised of questions relating to building setbacks and preferred locations for urban infill. Other questions concerned the community's awareness about natural hazards and opinions concerning a proposal to install one-way streets within the central business district. The survey also included questions concerning community preferences with respect to the

identification of desired locations for pocket parks and preferences regarding the provision of commercial frontage along the Centennial Trail. Responses to the survey questions guided revised design concepts described and illustrated in this report. The questions and responses are as follows:

1. Building setbacks determine the number of feet a building is required to be distanced from the front of the parcel. With the exception of the Transitional Housing designation, the remaining areas would have no building setback requirements--meaning buildings could occupy 100% of the parcel area. What are your feelings about maintaining setbacks only in the Transitional Residential (Light Blue) area?

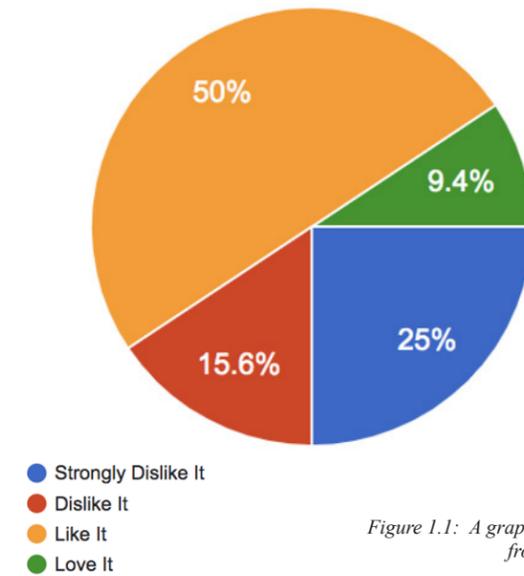


Figure 1.1: A graph of the results from Question 1.

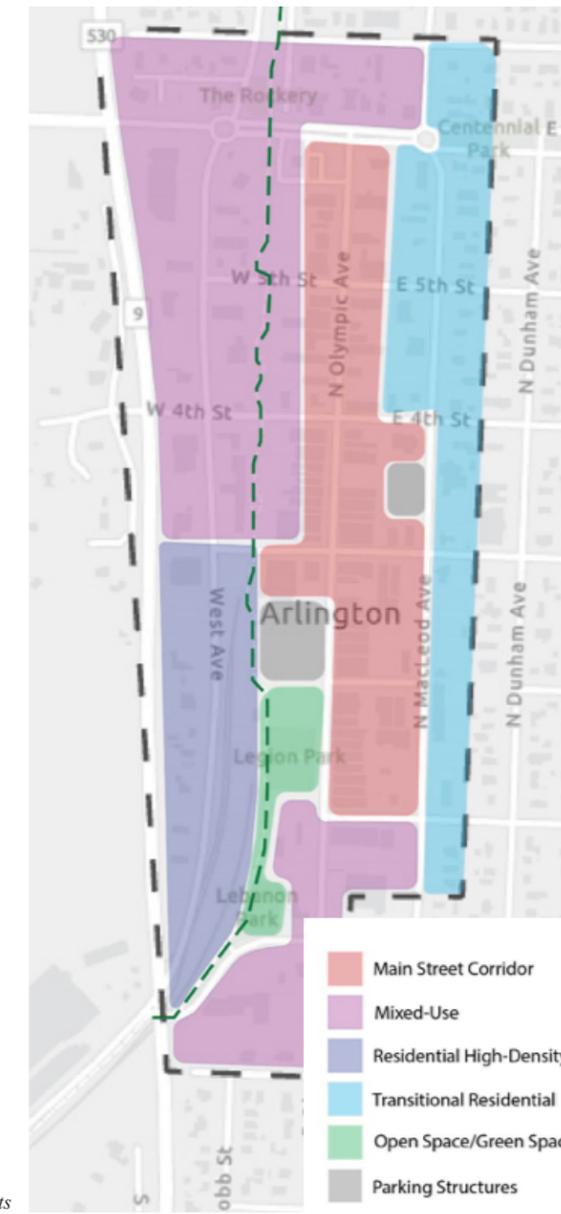


Figure 1.2: Proposed land use designations for Question 1.

2. Is there a need for public restrooms in downtown Arlington?

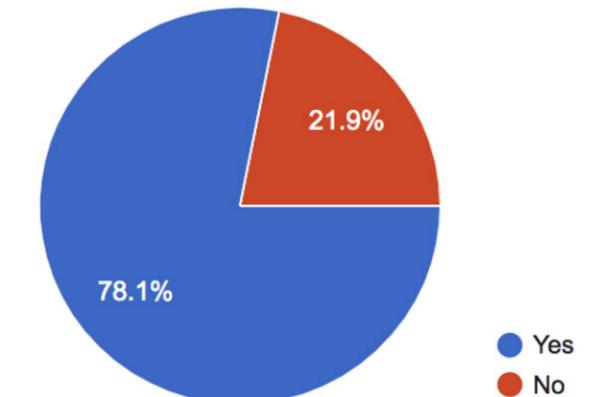


Figure 1.3: A graph of the results from Question 2.

3. If you answered “Yes” to the previous question, where is the best location for a public restroom?

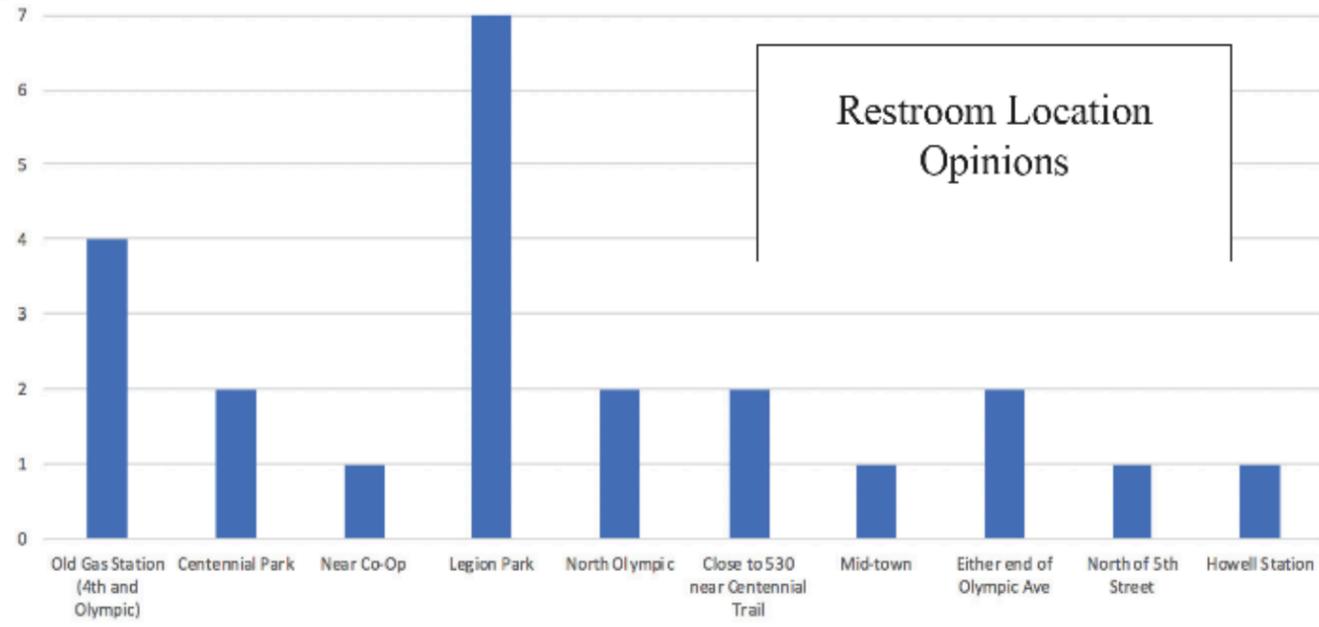


Figure 1.4: A graph of the results from Question 3.

4. How prepared do you feel Arlington is for a natural disaster?

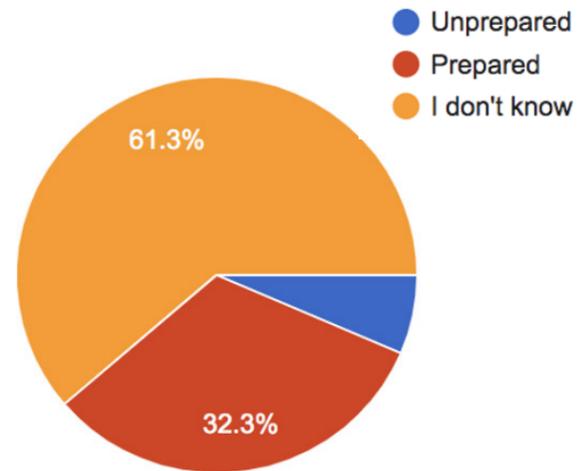


Figure 1.5: A graph of the results from Question 4.

5. Which natural disaster are you most concerned about?

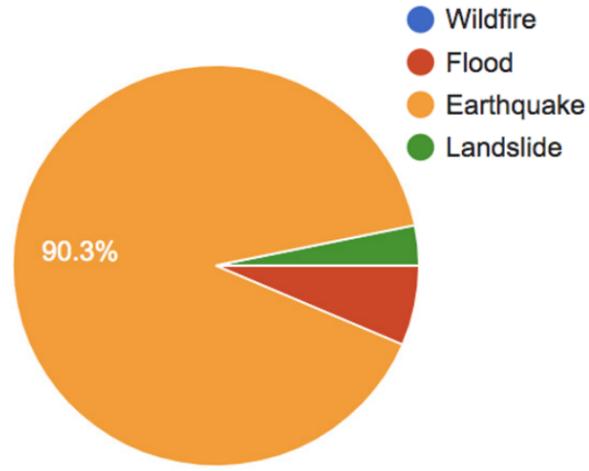


Figure 1.6: A graph of the results from Question 5.

6. One-way streets could make room for more parking as well as pedestrian space in the downtown area. How do you feel about one-way streets being located downtown?

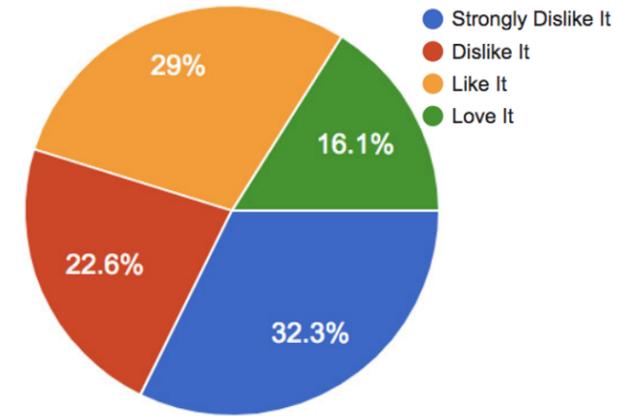


Figure 1.7: A graph of the results from Question 6.

7. This is an example of a high-density, mixed-use building constructed according to Arlington’s design standards and guidelines. Apartments are located towards the back of the building. Do you feel the proposed building suits Arlington’s downtown?



Figure 1.8: Conceptual high-density, mixed-use design.

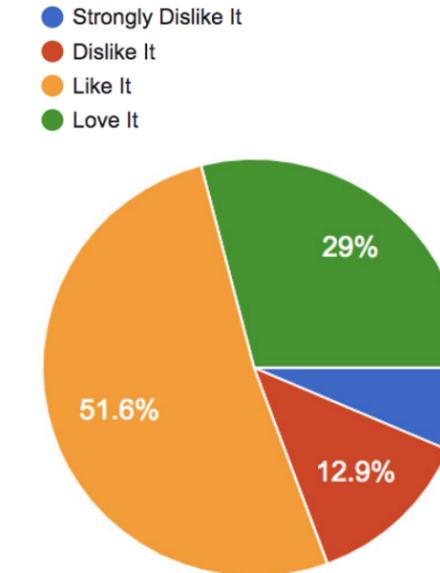


Figure 1.9: A graph of the results from Question 7.

8. In order to conform to commercial land use requirements, this illustration (Figure 1.10) imagines the same building without apartments. Considering the change in appearance, do you think apartments should be located in Arlington’s commercial core?



Figure 1.10: Conceptual high-density, mixed-use design without apartments.

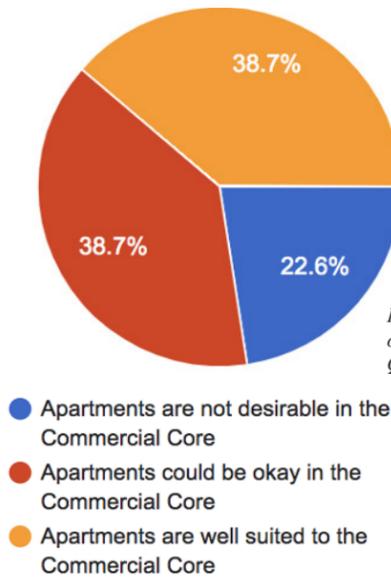


Figure 1.11: A graph of the results from Question 8.

9. Where would you like to see infill development occur in downtown Arlington?

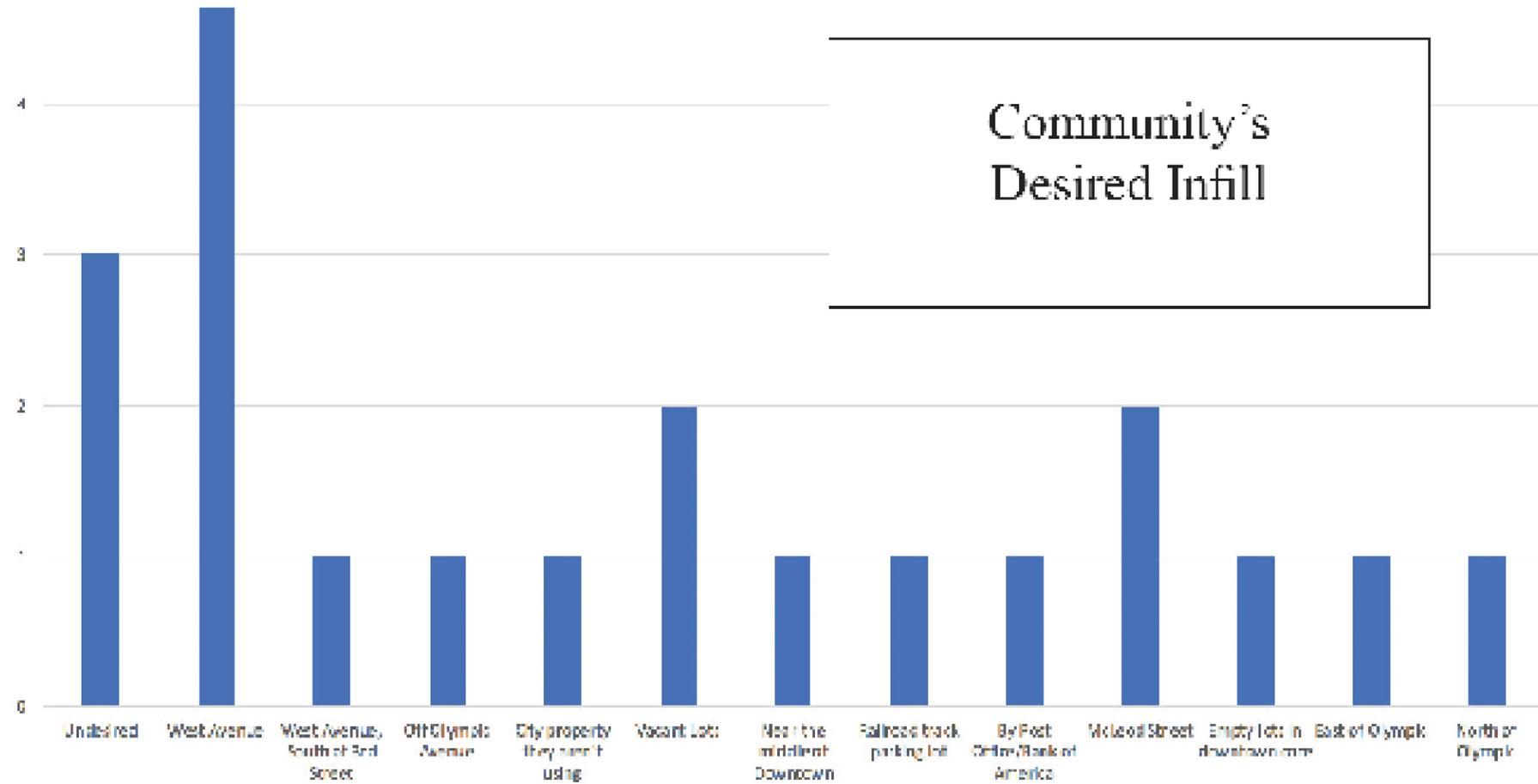


Figure 1.12: A graph of the results from Question 9.

10. The City of Arlington has implemented a wide range of desired amenities into downtown parks and the Centennial Trail. A few spaces for additional recreational uses have also been identified. These areas could feature pocket park spaces, small green areas, for interpretational uses and provide open, grassy areas. Considering the proposed placement of the following locations, how do you feel about the addition of this type of green space downtown?

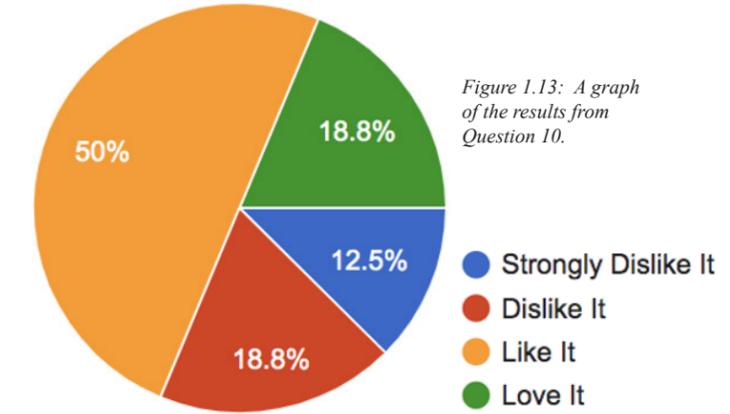


Figure 1.13: A graph of the results from Question 10.

11. How do you feel about businesses being allowed to establish dual frontage - an entrance on Olympic Avenue and an entrance on the Centennial Trail?

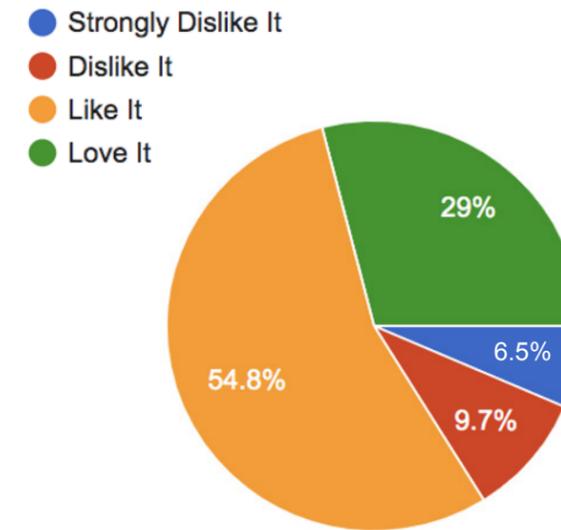


Figure 1.14: A graph of the results from Question 11.

## SOCIAL EQUITY AND GENTRIFICATION

### TRANSITIONAL GROWTH AND SOCIAL EQUITY IN COMMUNITY PLANNING

As the tech industry continues to expand in western Washington and cities including Seattle and Everett continue to grow, Arlington is expected to experience significant growth pressures. Arlington is projected to expand to approximately 30,000 residents over the next 20 years. While growth and development can bring many benefits to a city, it can also have negative effects, including the displacement of current residents. In order to anticipate potential impacts resulting from gentrification and increased social inequity associated with population growth and increasing housing costs, it is important for Arlington to consider mitigation strategies that anticipate and minimize the negative development impacts that are associated with future growth.

The GMA has thirteen planning goals, which guide communities as they plan for their community's future. A central goal is to achieve a community plan that addresses the attainment of social equity. Providing for the availability of affordable housing, enhancing citizen participation in decision making, and ensuring that

public facilities are available to everyone represent several GMA goals to be attained in local comprehensive plans.

### SOCIAL EQUITY AND GENTRIFICATION CASE STUDIES

In order to identify mitigation strategies that Arlington could implement with respect to attaining social equity goals within the community, three cities were researched: Denver, CO, Santa Fe, NM, and Seattle, WA. These three cities are currently facing the effects of rapid population growth and development and have created solutions in order to mitigate gentrification and other social inequities. If implemented in Arlington, such strategies might help to minimize social inequity from occurring in the city as it experiences rapid growth.

#### *Denver, Colorado*

In recent years, Denver has become one of the top 10 fastest growing cities in the U.S. Like Seattle, this population increase is largely due to the boom in the technology industry attracting many new employees to the city. While Denver is proactive in the provision of housing by providing housing to meet the needs of new residents, the demand for housing is greater than the amount of housing the city can supply. While there is a general lack of space to accommodate new housing developments, a large concentration of upscale housing has occurred

within the downtown, forcing lower-income residents to relocate out of the city center and into the outskirts of the city (Shaw, 2019).

North Denver is home to a large percentage of communities of color, specifically Latinx and African Americans. As Denver continues to grow, gentrification is slowly reaching these outskirt communities. Residents in the northeastern part of the city are receiving postcard offers to buy their homes in order to make way for new development. Older residents are losing their sense of place within these neighborhoods as businesses close due to their inability to pay rent. The Latinx population in North Denver has decreased from 70% to 30% as housing prices have increased from an average of \$100,000 to \$450,000 (Tracey, 2016).

Many Denver residents see rapid population growth as the cause of gentrification. In response, neighborhood organizations and the government have taken action to help control the amount of development and displacement of residents. Urban Land Conservancy (ULC) is an affordable housing group that offers programs to protect Denver residents' rights. ULC focuses on advocating for policies that center around expanding affordability and combating gentrification. They also work on land acquisition and purchase land in gentrification-vulnerable areas before neighborhoods gain public attention and attract developers. These programs help to ensure long-term affordability for the city's current residents (Mullane & Moe, 2019).

Another neighborhood group working to protect residents vulnerable to gentrification is the Ethiopian American Development Council (EADC). The EADS was formed in the East Colfax community, a neighborhood historically populated with communities of color and low-income families. The EADC created the East Area plan which sets goals and recommendations for new development and infrastructure in order to add protection for low-income residents and existing small businesses. The East Area plan includes the East Colfax, South Capitol Hill, Hale, and Montclair neighborhoods. The plan recommends actions such as requiring buildings that are being converted from single-unit to multi-unit to include at least one unit of affordable housing, incentivizing landlords to keep rents low, having affordability agreements roll over after they expire, as well as having greater language access in the Comprehensive Plan and design guidelines (Wilson, 2019).

In 2019 the City of Denver Community Planning and Development Department updated their plan, "Blueprint Denver." This document is used to guide land use and transportation planning. It was updated to align with goals set in the city's Comprehensive Plan and to create social equity as a primary principle in land-use decision making (Fleming, 2019). The document highlights different goals such as improvement in access to community resources (such as hospitals and schools), stabilizing residents and local businesses, as well as expanding housing and job diversity (City of Denver, 2019).

#### *Santa Fe, New Mexico*

The City of Santa Fe, New Mexico has been experiencing the ramifications of gentrification throughout the past decade. The Latinx residents, who make up approximately half the population, have faced an especially high rate of displacement (Equitable Development: US Census, American Community Survey 2009-2013). The city government recognizes the need to address gentrification, specifically through allocating more affordable housing and investing in the social equity of the community.

One of the primary organizations that has pushed policymakers to implement stronger housing policies is the Chainbreaker Collective. Amongst many successes, they have achieved passage of a Resident's Bill of Rights for the City of Santa Fe that refines and reiterates the rights and necessities for housing. The five pillars of the Resident's Bill of Rights include:

- **Affordability** — Housing in Santa Fe should be affordable relative to household income and other reasonable expenses.
- **Quality, Sustainability, and Health** — Housing in Santa Fe should contribute to individual, family, community and planetary health.
- **Accessibility, Fairness, and Equity** — Housing in Santa Fe must be made accessible to historically marginalized peoples and be well integrated socially and geographically.
- **Stability, Permanence, and Protection from Displacement** — Ensure that Santa Feans' homes are protected from irrational market

forces and changes in government policies over the long term.

- **Community Control** — Santa Fe's housing should be controlled democratically with special protections allowed for low-income communities and neighborhoods of color (chainbreaker.org).

Community organizations play a large role in mitigating the effects of gentrification in Santa Fe. By listening to the community organizations advocating for policy change, the City of Santa Fe has included broader community representation in the policy-making process, thus implementing more relevant and successful change.

#### *Seattle, Washington*

Due to the growth of the technology industry including companies such as Amazon, Boeing, and Microsoft, Seattle has become one of the fastest-growing cities in the nation. With growth, there has also been a large wave of gentrification spreading across the city. Rents have increased dramatically in the city center as well as in the suburbs on the outskirts of the city. Many low-income households and communities of color have been displaced due to the rise of luxury housing development.

Mandatory Housing Affordability (MHA) is a policy enacted by Seattle to ensure that

new commercial and multifamily residential development contributes to affordable housing within the city. The city predicts MHA will provide at least 6,000 new rent-restricted, income-restricted homes for low-income families within a decade. Affordable housing requirements took effect when the Seattle City Council adopted new zoning that adds development capacity. By enacting affordable housing requirements and increasing development capacity at the same time, MHA is consistent with a state-approved approach used in other Washington cities such as Kirkland and Shoreline. The concurrent provision of both affordable housing and market-rate housing is an important strategy for slowing the increase to housing costs and providing a wider range of housing choices for all residents. The notion of the city exchanging increases in development rights for a fee is a form of “incentive zoning” (see mitigation strategy 8). The policy requires developers to designate five to eleven percent of their residential projects to low-income apartments or pay \$5 to \$32.75 per square foot in fees, depending on where they build and density increases.

It is possible to create more affordable housing that is rent restricted for low-income people by:

- Minimizing the displacement of existing residents.
- Supporting more housing choices, including homeownership and family-size housing.
- Providing opportunities for people to live near parks, schools, and transit centers

- Minimizing the impacts of new development on existing neighborhood character.
- Coordinating growth with infrastructure investments and incorporating new design standards for buildings to reduce impacts on neighborhood character.
- Improving the “green factor” and tree planting requirements to support environmental goals.
- Not allowing zoning changes in federally designated historic districts and critical shorelines.
- Increasing neighborhood commercial zones from a maximum building height of 40 feet to 55 feet.
- Allowing low-rise zones to provide for duplexes, triplexes and small apartment buildings.

**STRATEGIES FOR MITIGATING SOCIAL INEQUITIES**

*Strategy 1 - Fast Actions by Community & Government*

As a neighborhood is gentrified, it becomes more difficult to acquire properties for the preservation and construction of affordable housing in Arlington. For neighborhoods that are susceptible to gentrification or in the very early stages of gentrification, it can be hard to envision the rapid rise in property values that will come in later stages of gentrification. Buying land and housing in this early period gives cities, community development

organizations, and residents more capacity to mitigate displacement when change does come. “For example, affordable housing in Seattle neighborhoods is almost all located on land that was acquired before gentrification accelerated. A large portion of the affordable housing in the Queen Anne neighborhood of Seattle has subsidized housing that was built prior to the neighborhood’s gentrification. Removing as much land from market pressures as possible, through mechanisms such as community land trusts, long-term affordability restrictions, and nonprofit and public ownership of land, can also slow the impact of gentrification.

*Strategy 2 - Provide Tenant Relocation Assistance*

Higher rates of development and redevelopment within neighborhoods may result in changes that necessitate tenant relocation. Arlington can adopt a relocation assistance program, like the Condominium Conversion Ordinance in Somerville, MA which provides assistance to renters whose units are being converted from a rental property to ownership. Under that ordinance, tenants who might be displaced by conversion become eligible for assistance through the Tenancy Stabilization Program offered by the Somerville Community Corporation and funded through the Somerville Affordable Housing Trust. The program helps tenants search for affordable rental housing opportunities throughout the city and also

helps income-eligible tenants with utility arrearages, one-time rental assistance and moving costs.

*Strategy 3 - Diverse Housing*

The most common and profitable housing developments are apartments and single-family homes. However, this study proposes that the City of Arlington incentivize more diverse housing, including, but not limited to townhomes, duplexes, triplexes, and apartments, all of which promote higher densities and can be subsidized and/or designated as affordable housing.

Two primary tools to finance affordable multifamily units include bonds and housing tax credits, both of which are purchased by investors on the private market. The bond sales’ proceeds are loaned to a developer through the

bank, while tax credits are converted into equity in the project. Offering different financing tools allows for a customized approach based on the project’s population and location. Multifamily bond financing, for example, works best in urban areas, where projects are large enough and rents are high enough to enable developers to repay their bond debt. Projects financed with housing credits serve people with lower incomes and greater needs in rural and urban communities alike. After a multifamily project is completed, the housing organization monitors and inspects the properties to ensure they remain in compliance, and thus, are eligible for the tax benefits that helped finance them for at least 40 years.

*Strategy 4 - Community Organizations*

Community organizations have been key in creating change in policy to address gentrification

and other issues of social equity. A common trend in local governments that frustrates community members is the lack of agency and equal footing they are allowed in the political processes. By taking input from community organizations seriously, Arlington can further mitigate the impacts of gentrification. Community organizations can increase support for affordable housing policies through awareness campaigns. Such actions require direct political action and their effective implementation requires broad-based coalition building. Arlington residents in need of an emergency shelter can contact Volunteers of America Sky Valley or North County Family Resource Center.

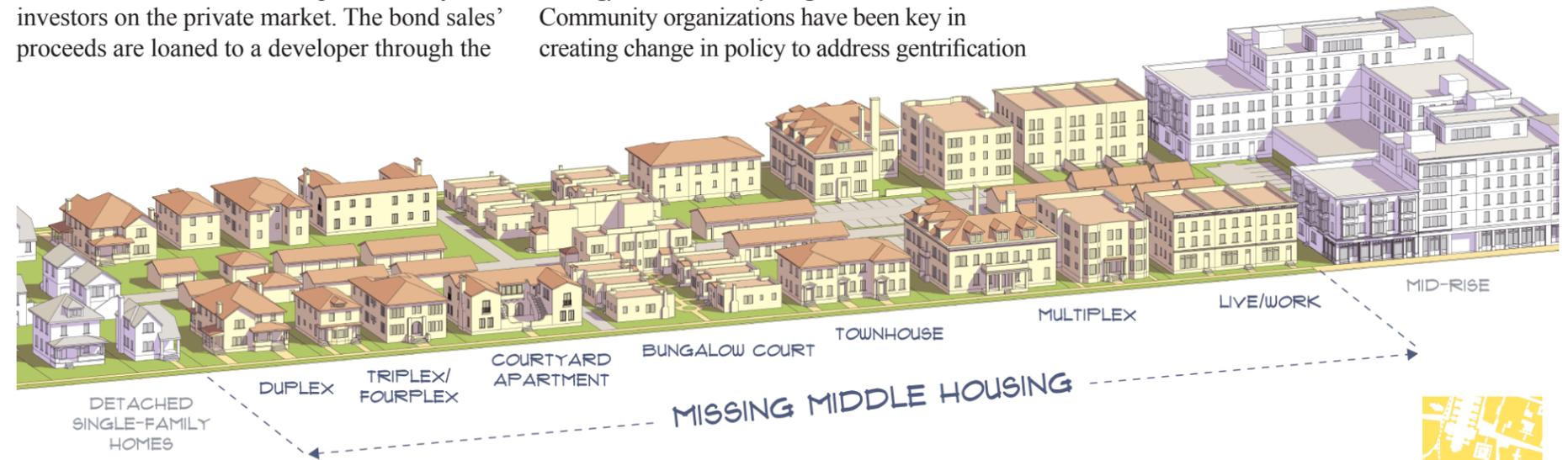


Figure 2.1: Examples of diverse housing.

Celebratory events can help to bring a community together. They offer an opportunity for community members to interact and can be used to highlight local businesses but they also attract people from around the city and emphasizes the sense of community.

#### *Strategy 5 - City Documents*

It is important for the government and public documents to be readily accessible to residents and easy to understand. Documents such as comprehensive plans must be available online, include limited jargon, and be available in multiple languages, including those spoken within the community. Arlington has yet to face large scale displacement due to gentrification, but as the city grows and more people move to Arlington, it is important to prepare for the rise of development and housing costs. Many cities throughout the US recognize the problems that gentrification can cause and have implemented social equity components within their Comprehensive plans or in other planning documents to address these issues.

#### *Strategy 6 - Access to Resources for Low Income and Homeless Populations*

There has been an increase in the homeless population within Arlington in recent years, creating the need for different programs to help rehabilitate those who are seeking services. There has also been a decrease in homeless shelters (Buell, 2019) and the only local food bank in town is located outside the city center,

near the airport. These resources must be made easily accessible for low-income residents and to the homeless population through improved bus routes or locations closer to the city center.

#### *Strategy 7 - Homeownership Counseling and Assistance*

The best time for low and moderate-income individuals to purchase property is right at the beginning of a neighborhood transition. As home values rise, low-income families are unable to afford purchasing a home and may also find it more difficult to rent. Those who own homes at the beginning of a housing cost rise, however, are not only spared from the price increase but can also benefit from increases in home equity. Homeownership counseling should be part of a comprehensive financial awareness training aimed at helping potential home owners accurately assess benefits and risks. Counseling can help potential homeowners to determine whether purchasing is appropriate for them and to identify resources that may be available for first-time homebuyers. In Denver, CO, an affordable home organization called Manna offers an example of how to counsel and support first-time homebuyers. Individual development accounts (IDAs) and other asset-building approaches can help households save for a down payment. City governments can also offer financial assistance to help low-income households amass a down payment.

#### *Strategy 8 - Mandatory Housing policies and Upzoning*

Changes to zoning policies that allow for the construction of taller, mixed-use buildings provide incentives for greater investment returns. Increased city center residential development also provides better access to jobs, services, and economic opportunities. Development policies, as proposed in this study, promote increased density in the commercial core by fostering mixed uses. By requiring new developments to allocate a percentage of newly constructed housing units for low-income families, the community of Arlington can mitigate the effects of gentrification.

#### *Strategy 9 - Inclusionary Zoning*

Affordable housing legislation can be instituted on the state and local level. Local governments can create programs such as housing trust funds and other developer exactions. On the state level, Massachusetts has instituted a regulation that allows developers to overcome local zoning restrictions to construct affordable housing in communities where less than 10 percent of housing units are affordable to residents earning less than area median incomes. Santa Fe's inclusionary zoning regulations require any building of ten or more units to make at least 13 percent of those units affordable to low income residents. Seattle, which has a robust housing market, has not yet enacted inclusionary zoning, though they have considered the policy.

#### *Strategy 10 - Tax Abatement Policies*

Tax abatement policies are undertaken at the local level and can be written in a variety of ways. In each case, however, the goal is to reduce the property tax burden experienced when housing values rise. This financial burden can become too much for homeowners or can spur landlords to increase rent prices. Tax abatement policies are most frequently offered for elderly residents who live on fixed incomes but have also been developed for low-income residents and for those who invest in remodeling. Bellingham's effort to promote infill multifamily, mixed-use housing has proven very successful by offering investors up to 10 years of property tax exemptions on the value of their improvements.

## **CONCLUSION**

Arlington is home to a diverse population of people; therefore, it is important to ensure that vulnerable communities are not displaced from their community. The Growth Management Act recognized that rapid growth and development can disproportionately affect low-income and people of color, and such consequences need to be planned for. The social equity mitigation strategies discussed are examples that Arlington may consider to help mitigate negative impacts of growth on certain populations and meet GMA goals for providing a safe, healthy city for all of the residents.

## **NEXT STEPS**

This study examined how Arlington can incorporate mixed-use and higher density development in its downtown corridor in order to accommodate projected future growth. Additionally, this study considers marginalized populations within the Arlington community. Cities around the United States continue to grow as economies influence migration patterns. With growth comes the demand for development, creating new opportunities for the community as well as social inequity problems in the forms of displacement as a result of gentrification. Arlington has the opportunity to re-create its downtown to accommodate growth while implementing mitigation strategies that prevent social inequity and support a diverse multi-generational community.

## LAND USE

### INTRODUCTION

This chapter presents land use and infill recommendations for the downtown Arlington study area. Recommended changes to land use are based on community input obtained through a Visioning Workshop conducted by Western Washington University planning students in November 2019. Infill recommendations are based on comparisons between property and improvement values, qualitative site-based assessment of buildings, and calculations of each parcel's capacity to meet infill needs based on projected growth.

Recommended changes to land use designation are intended to establish and support a number of features that Arlington's current land use and zoning designations do not, including: increased middle housing stock in the Transitional Residential area; increased residential opportunity throughout Arlington's downtown; the development of a second commercial corridor along West Avenue; increased public parking; and increased mixed-use frontage along the Centennial Trail. Infill opportunities are identified to describe "catalyst," or priority

development sites that are of significant importance to the realization of the land use recommendations contained in this study.

### CURRENT ZONING AND LAND USE DESIGNATIONS

#### *General Commercial (GC)*

The General Commercial designation consists primarily of moderate-sized commercial, office, and professional service uses. The purpose of this designation is to provide a setting for commercial, office, and professional service uses of a moderate size that rely on motor-vehicle accessibility. This designation is intended to be situated along arterials and to serve as a transition area between Highway Commercial designations and residential areas. This zone is characterized as an active automobile and pedestrian environment with commercial buildings situated toward high-volume roads with parking located to the sides of buildings.

#### *High Density Residential (HDR)*

The High Density Residential designation consists mostly of urban residential uses. It is an active pedestrian environment with attached multi-family residences on shared lots. Properties are situated along moderate

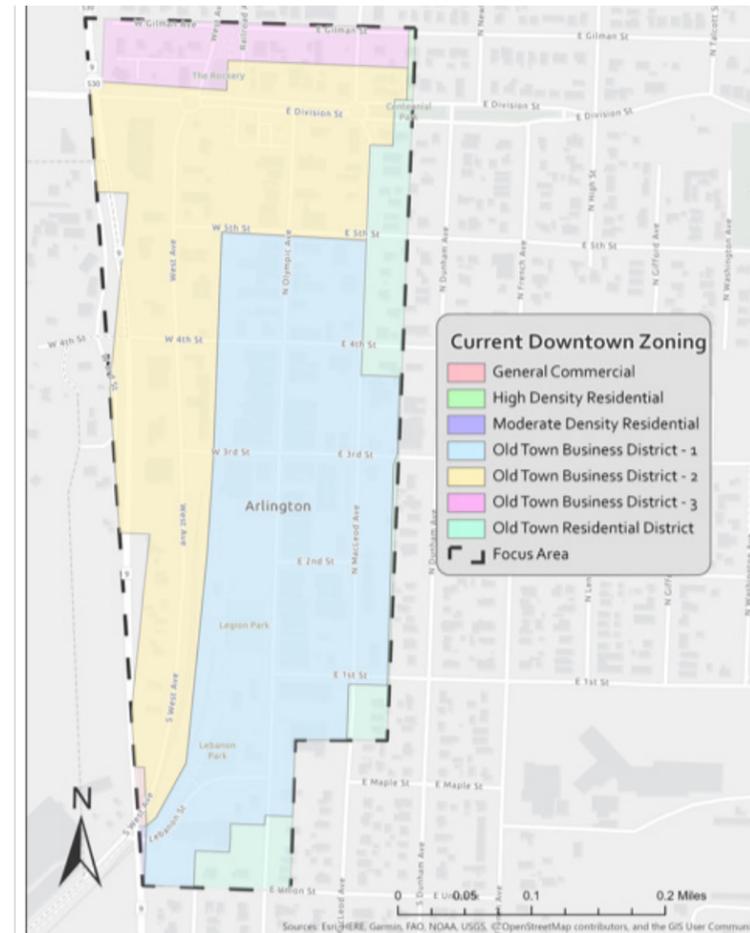


Figure 3.1: Current zoning map of study area.

to high-volume roads. Building setbacks are minimal with residential buildings generally situated toward the front of the lot they occupy and typically not exceeding three stories in height. Residential developments in this designation are subject to design review. The purpose of HDR designation is to provide a close-knit residential environment (minimum ten dwelling units per acre). Buildings consist of detached single-family residences and multi-family complexes which have shared common outdoor space.

#### *Moderate Density Residential (MDR)*

The Moderate Density Residential (MDR) designation consists primarily of urban residential uses. It is generally characterized as an active pedestrian neighborhood environment with detached and attached single-family residences. Lots are of moderate size and are situated along low-to-moderate volume roads. Setbacks are moderate with houses generally situated toward the front of the lot. Residential dwellings typically do not exceed two stories in height. The designation provides a comfortably spaced residential environment (six dwelling units per acre) for detached and attached single-family homes and accessory dwelling units (ADU) on moderately sized lots that provide private outdoor space for each resident. Some properties are within walking distance to commercial services,

employment opportunities, and urban amenities such as parks and trails.

#### *Old-Town Business District (OTBD)*

The Old-Town Business District (OTBD) designation consists of small to medium scale commercial uses. It is characterized by an active pedestrian environment with a traditional "Main Street" character where low-rise buildings are placed adjacent to each other and the right-of-way consists of wide sidewalks and on-street parking. Development projects in this designation are subject to design review. The purpose of OTBD is to preserve the look, feel, and function of Arlington's commercial center. This designation provides a setting for small-scale commercial uses and mixed uses with a residential component, and access relies on both pedestrian and vehicular traffic. This district serves as the focal point of the City's pedestrian center.

There are three sub-districts within this land use designation because each sub-district has a distinguishable development pattern. OTBD 1 consists of Arlington's historic "Main Street" (Olympic Avenue) where commercial buildings are located to form a continuous street wall. OTBD 2 consists of West Avenue and part of Division Street where commercial uses typically have wide front and side setbacks and on-site parking

is provided. OTBD 3 includes portions of Burke Avenue and incorporates much of what was historically Haller City before it merged with Arlington. OTBD 3 consists of a mix of commercial and residential uses on blocks that are oriented east to west, unlike sub-districts 1 and 3.

#### *Old-Town Residential (OTR)*

The Old-Town Residential (OTR) designation consists of urban residential uses and is currently exclusive of multi-family dwellings. It is characterized as old-town Arlington's historic residential neighborhood consisting of detached single-family homes dating from the early 20th century. It is an active pedestrian environment, where properties are situated along low-volume roads. Setbacks are moderate with residential buildings generally situated toward the front of the lot. Buildings typically do not exceed two stories in height. Residential developments in this designation are subject to design review. The purpose of this designation is to preserve the historic look, feel, and function of Arlington's old-town residential neighborhood. The neighborhood primarily consists of single-family residences and accessory dwelling units. Residences are within walking distance to Arlington's Old-Town Business District and other urban amenities such as parks, trails, schools, and transit service.

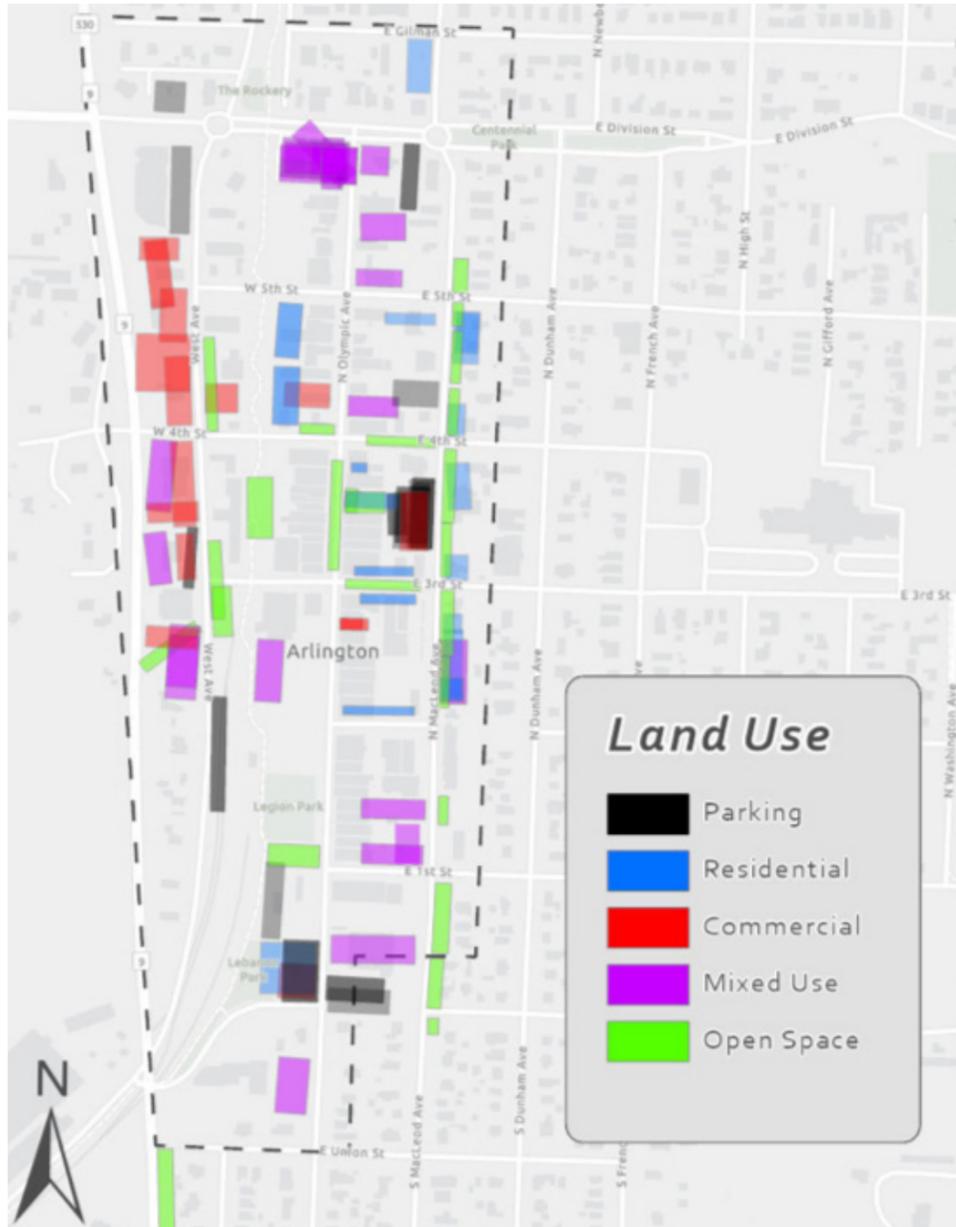


Figure 3.2: Responses from the visioning workshop, overlaid with land use.

**RECOMMENDED LAND USE DESIGNATIONS**

Figure 3.2 is a composite map illustrating data from one of the exercises in the fall 2019 visioning workshop. All shapes represent bricks placed by participants. The colors represent the preferred land uses that participants identified. This map was used to visualize community preference when crafting our recommended land use designations. More information is available in the Transportation and Mobility section of the Studio 1 Report.

Figure 3.3 shows preliminary suggestions for future land use based on citizen input as well as this study’s analysis of infill potential. Below, each land use type is described.

*Main Street Corridor*

The Main Street Corridor includes parcels along the central parts of downtown Arlington that front Olympic Avenue. A strong theme that emerged during the fall 2019 visioning workshop was a desire to maintain a “small town feel” in Arlington, as well as to preserve Arlington’s historic character. The downtown corridor is recommended to maintain its maximum three-story height in order to preserve the pedestrian scale of the historic district. In accordance with suggestions from Arlington city representatives, this land use type would continue to allow the mixed-use buildings that have historically been a part of the fabric of the downtown. In order to maximize the use of space in Arlington’s core, no setbacks are recommended, consistent with Arlington’s current land use code.

*High-Density Residential*

The High-Density Residential (HDR) designation provides for residential uses only. This would support the downtown’s ability



Figure 3.3: Initial land use concepts gleaned from the workshop and initial analysis.

to capture an appropriate amount of Arlington’s future projected growth by increasing residential density. This area would provide up to four stories in building height with minimal setbacks. Examples of housing types include apartments, townhomes, and condominiums.

*Transitional Residential*

The Transitional Residential land use type is applied in residential areas along MacLeod Avenue adjacent to downtown. Its purpose is to support increased residential density near downtown while maintaining its residential character and to promote a variety of housing options. This designation allows for higher density residential uses and serves as a transitional use between the commercial core to the west and single-family detached housing to the east. In order to preserve an appropriate scale, a three-story height limit is recommended. Examples of housing types suitable in this zone include small apartments, accessory dwelling units (ADUs), homes converted into apartments, duplexes, triplexes, and townhomes.

*Mixed Use*

Mixed-use allows for a combination of commercial and residential uses, and in order to increase density, provides for a maximum

building height of four stories and no setback requirements. This designation provides for a variety of mixed- and multi-use developments including live-work units.

*Open Space*

This designation includes public spaces such as parks, plazas, and the Centennial Trail.

*Parking Structures*

The recommended land use designation map (Figure 3.3) indicates locations that residents identified for future parking structures or where public parking should be maintained. In addition to the sites on MacLeod and Olympic Avenues, additional sites are also recommended on West Avenue. Residents noted that parking should be required for commercial and residential uses in future high-density developments throughout the study area.

**IDENTIFYING SITES WITH POTENTIAL FOR URBAN INFILL**

Figure 3.4 represents the raw data collected from the Fall 2019 visioning workshop (Studio 1 Report, 2019). Each rectangle represents a location identified for urban infill by workshop participants. The purpose of this figure is to visualize the distribution of infill preference throughout the study area. For example, we can extrapolate that the participants wanted to see development at Olympic Avenue and Division Street, and on MacLeod Avenue between E 4th Street and E 3rd Street. This qualitative analysis allowed us to gain a better understanding of how the plan could be more in line with community values.

*Quantitative Analysis of Infill Potential by Parcel*

Figure 3.5 presents the results of a quantitative analysis of parcel values located throughout the study area. In the analysis, each parcel’s appraised land value was compared with the parcel’s improvement value (i.e., what is built on the site). The ratio values were used to identify parcels with high, medium and low potential for urban infill redevelopment. If the value of the improvements were lower than the value of the land, these parcels were identified as having high redevelopment potential (shown in green in Figure 3.5). Figure 3.6 shows value ratios for several parcels in the downtown. Those parcels with a ratio value of less than .5 have a high potential for infill redevelopment. Parcels with a ratio value of 1 or higher have a low potential for redevelopment.

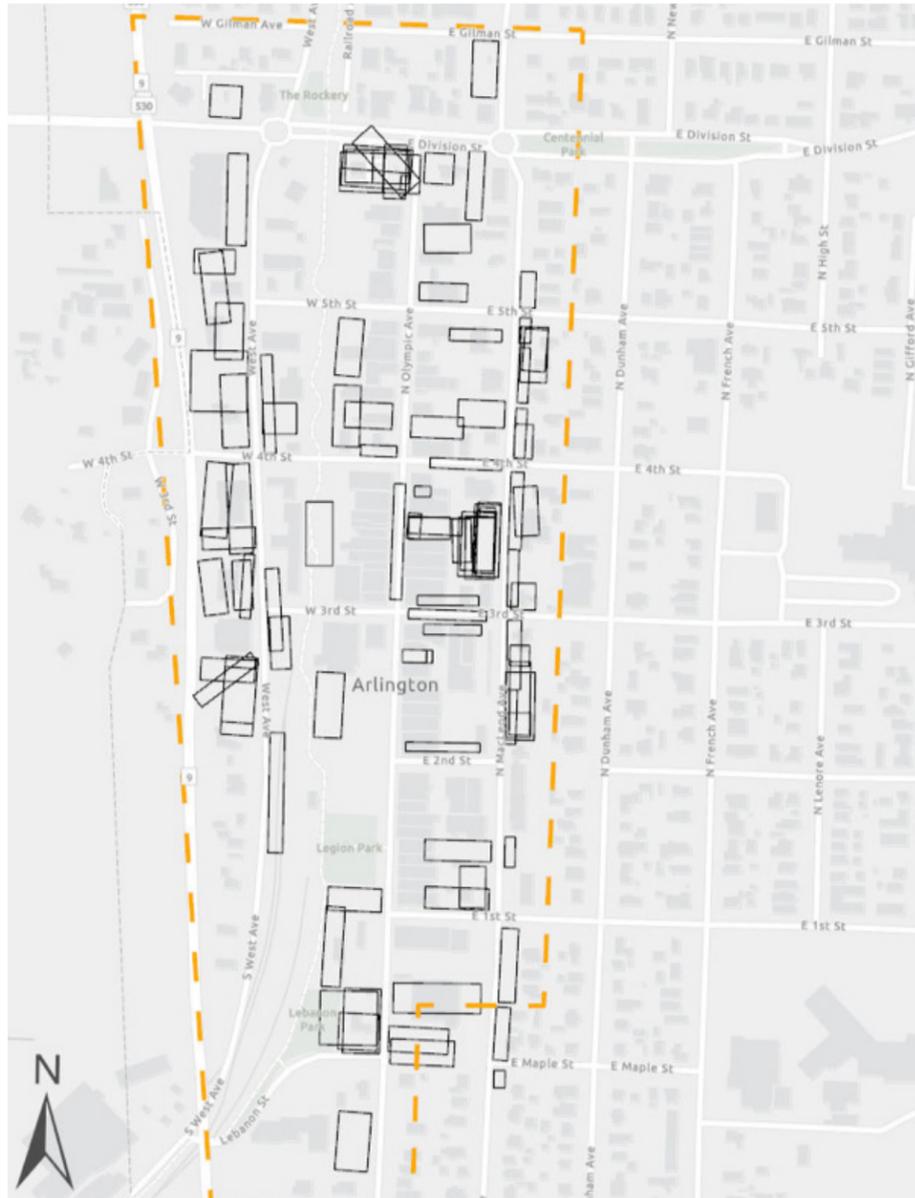


Figure 3.4: Responses from the visioning workshop, without land use.

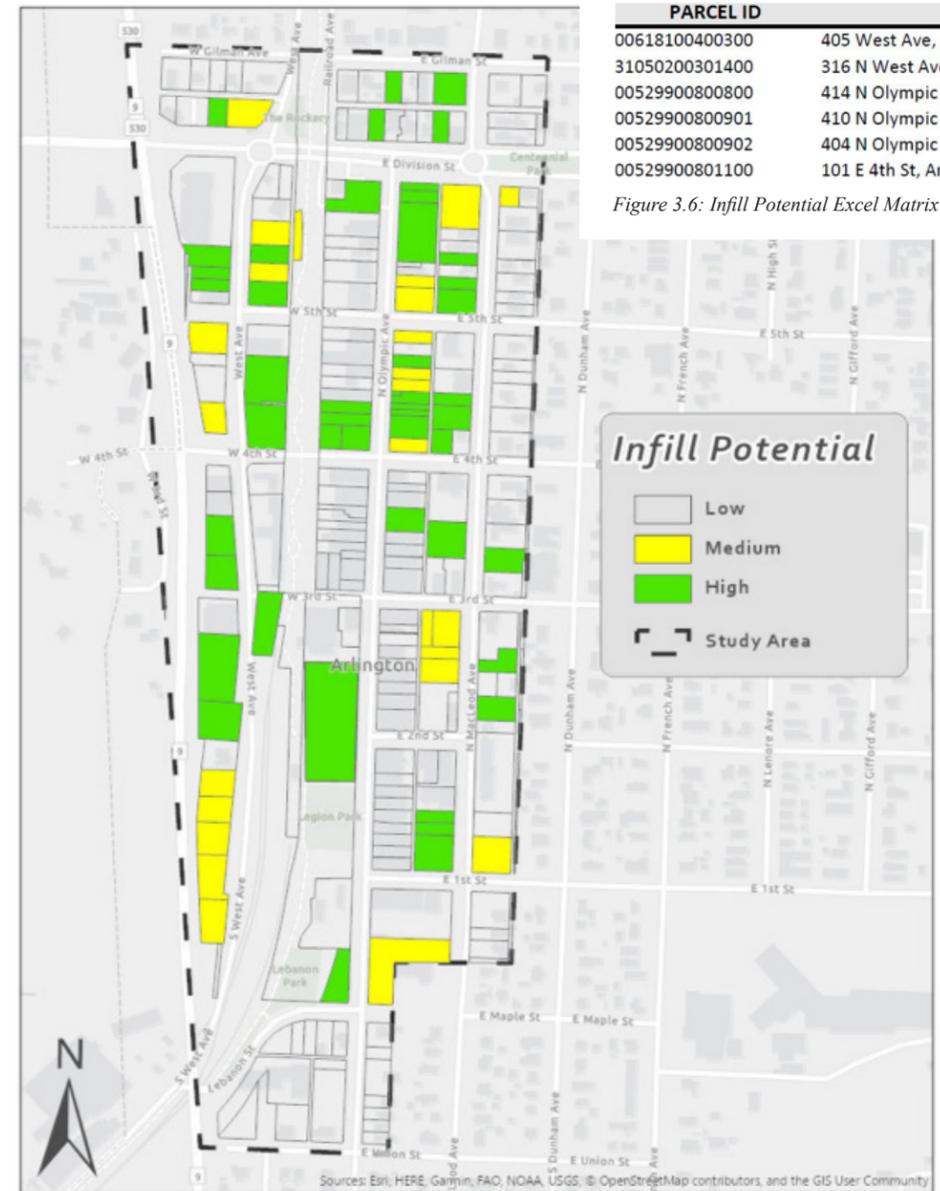


Figure 3.6: Infill Potential Excel Matrix

**IDENTIFYING CATALYST SITES**

Catalyst sites were selected by a combination of quantitative and qualitative measures. The term ‘catalyst’ is used to describe these sites, as redevelopment can serve to stimulate new investment for the downtown core. The infill potential excel matrix was used to determine suitability and capacity of possible infill. Community feedback, such as visioning workshop responses, were considered. Sites that had high infill potential were cross-referenced with responses from the visioning workshop. The current intensity of land use was also examined. Sites with current commercial and residential use were prioritized as secondary sites. This was intended to minimize displacement while enticing further redevelopment. At some point, these parcels may be appropriate to redevelop to a more intense land use, however, that can come at a later time. All identified catalyst site parcels are shown in Figure 3.7.

*Priority Catalyst Sites*

*City Hall Parking Lot (#1 on Figure 3.7)* - The study proposes that the east half of the lot be converted into a mixed-used development, leaving the west side as a surface parking lot. Additionally, the study recommends that the area abutting City Hall be expanded to become a civic plaza and used for public open space. The section of Olympic Avenue between 2nd and 3rd Street would be raised to create a pedestrian mall, promoting street-level business and space for events.

Figure 3.5: All parcels in the study area coded by their infill potential

*540 N Olympic Avenue (#3 on Figure 3.7)* - This is the site of Triple Shot Espresso coffee kiosk. The site is mostly an underutilized gravel lot. It lies within the Main Street Corridor designation. If built to full capacity under the recommended standards for this land use designation, it could potentially accommodate 5 businesses and about 21 apartment units.

*101 E 4th Street, 410 N Olympic Avenue, 414 N Olympic Avenue (#4 on Figure 3.7)* - This site is currently occupied by Arlington Muffler and Brake, and most of the land is designated for parking. The City is already pursuing redevelopment at 404 N Olympic Avenue for an innovation center. Infilling the surrounding parcels under the Main Street Corridor designation would spur further development. If built to full capacity under the recommended land use designation, the site could accommodate 14 small businesses and about 58 apartment units.

*405 N West Avenue (#5 on Figure 3.7)* - This site is currently A-Z Transmission and Differential. Most of the surface area of the parcel is devoted to car storage and an auto shop. This type of use would be more suited in a commercial-industrial area outside of the downtown core. Built to full capacity, this site could accommodate 7 commercial businesses and 41 apartment units and would further goals around development adjacent to the Centennial Trail.

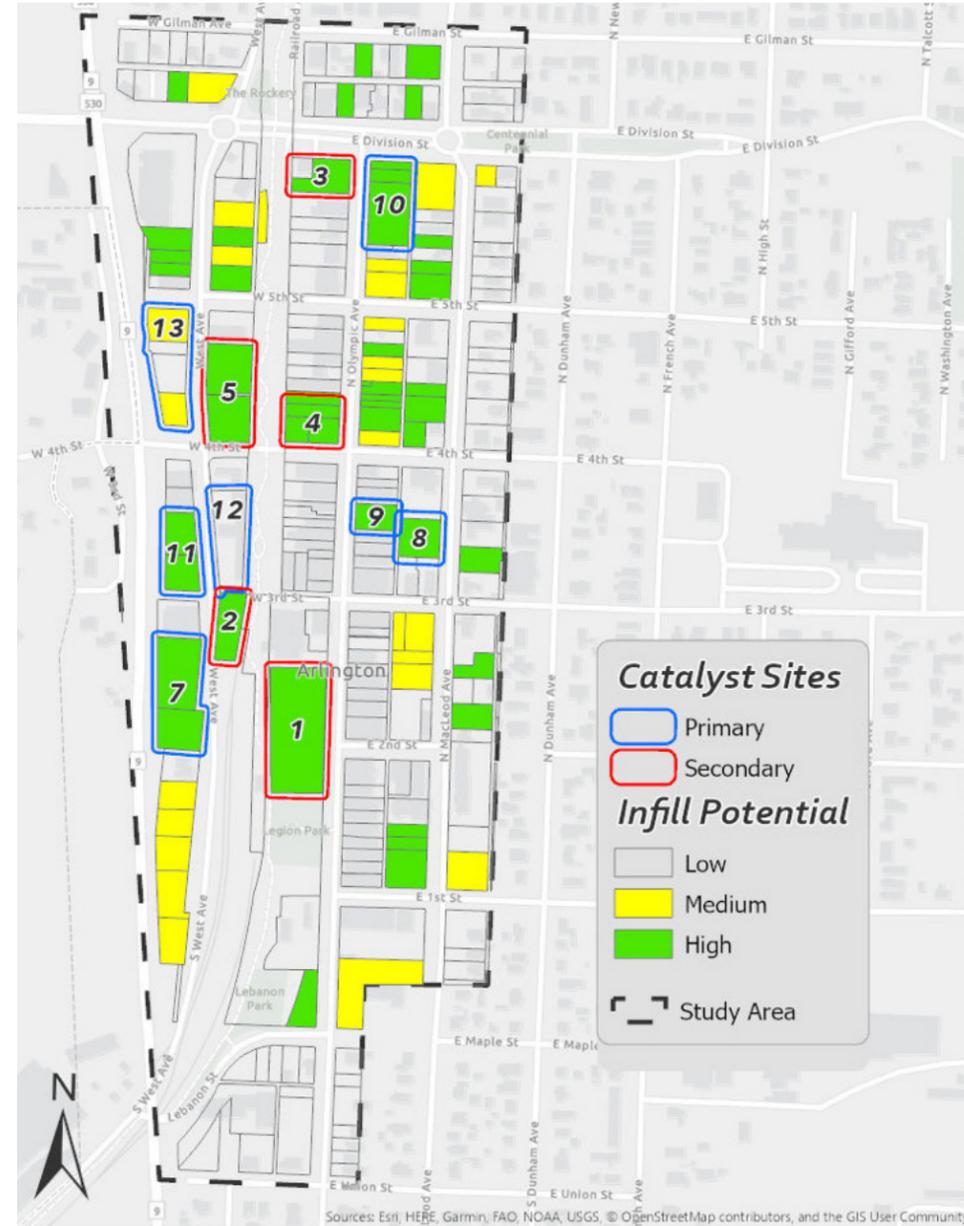


Figure 3.7: Parcels coded by their infill potential with preliminary sites for catalyst areas.

*Secondary Catalyst Infill Sites*

*298 West Avenue (#7 on Figure 3.7)* - This is currently occupied by Local Joe Espresso. Much of the parcel is used only for parking and is located within the proposed High-Density Residential designation. If built to full capacity under the recommended land use designation, the site could accommodate about 78 apartments.

*388 N MacLeod Avenue Parking Lot (#8 on Figure 3.7)* - This site currently contains a parking lot. Workshop participants identified this site for more intense public parking development, such as a garage.

*325 N Olympic Avenue (#9 on Figure 3.7)* - This site is currently a parking lot. The implementation of other parking options outlined in this plan would allow for this site to complete frontage along this block.

*535 N Olympic Avenue, 525 N Olympic Avenue (#3 on Figure 3.7)* - These parcels are occupied by KeyBank, a parking lot, and a vacant building. This area would be infilled complementary to 540 N Olympic Avenue.

*316 N West Avenue (#11 on Figure 3.7)* - This is currently the site of Mission Motors. While it is a thriving business, this use may be better suited to another area of land. Built to capacity, this site could accommodate 28 residential and four commercial units.

*315 N West Avenue (#12 on Figure 3.7)* - This is currently the site of Arlington Tire Pros. It falls within the Mixed-use designation. If built to full capacity under the standards of this land use designation, it could accommodate about 14 small businesses and about 90 apartment units.

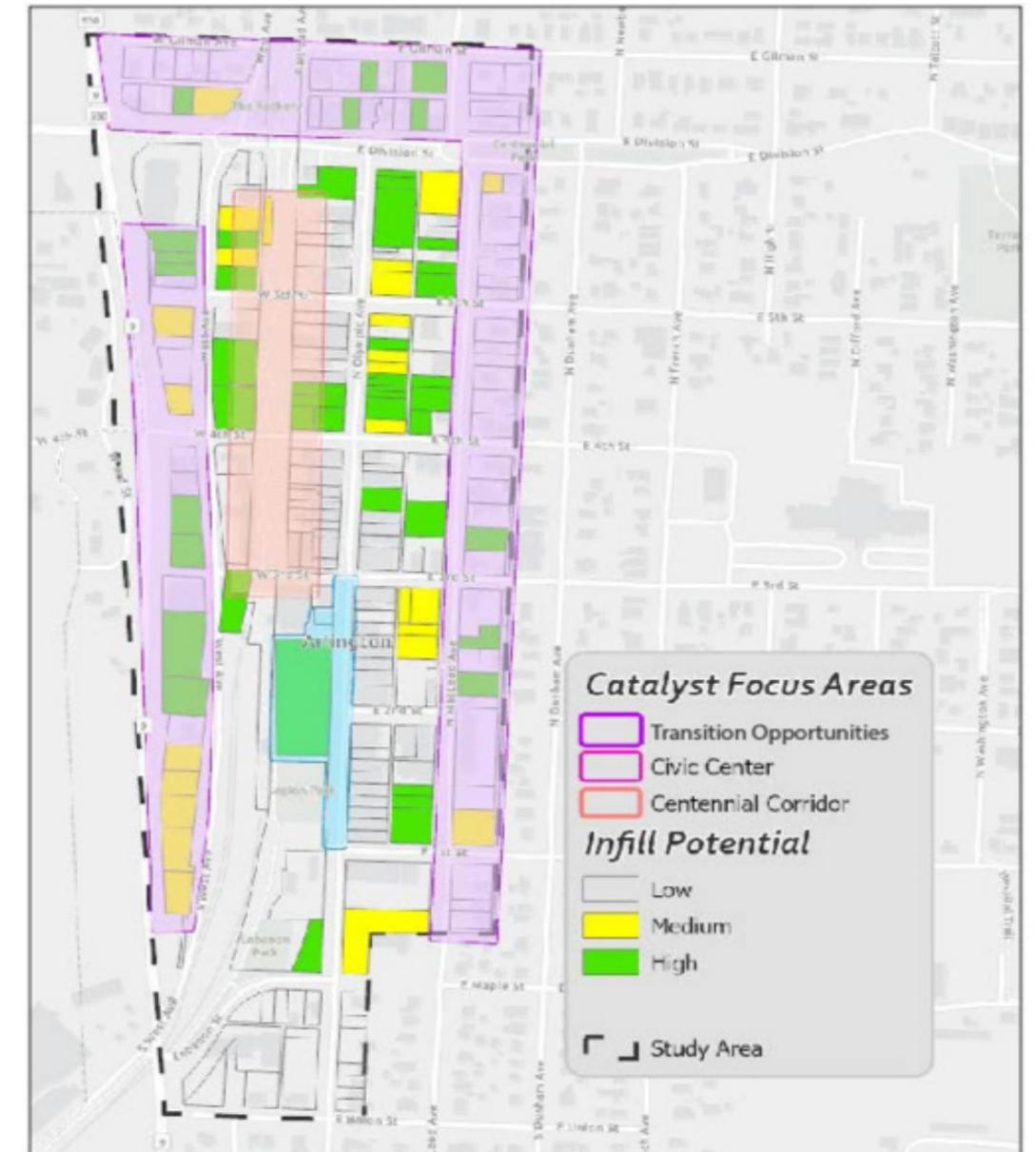


Figure 3.8: Parcels coded by infill potential with final catalyst focus areas overlaid

**CATALYST FOCUS AREA**

In the process of plan development, the planning team arrived at three Catalyst Focus Areas to pursue longer term projects. These areas are related, but not dependent on the catalyst sites that were outlined. These Focus Areas are not site specific and instead, are aimed at developing the character of the entire downtown.

*Civic Center Square*

The study proposes a large-scale change to the area surrounding City Hall, including the parking lot, courtyard, and Centennial Trail linkage. Proposed changes include additional commercial mixed-use development on the parking lot adjacent to Olympic Avenue. The rest of the parking lot would remain, and would be expanded to include an underground facility, which should be able to adequately address the increased parking demand in the area. Additionally, a plaza abutting the Council Chambers is proposed, which would link to the Centennial Trail and by extension, Legion Park. The study is also proposing the section of Olympic Avenue between 2nd and 3rd Street be raised to create a pedestrian mall, promoting street-level business and space for events such as festivals or farmer’s markets. Auto travel would still be allowed on the mall during limited hours.

The goal of the Civic Center Square is to create a centralized space in downtown that is focused on public interaction and community.

*Centennial Urban Corridor*

The Centennial Urban Corridor presents an opportunity for enhancement of the trail experience, as well as for additional commercial frontage. Future infill that utilizes the Centennial Trail for frontage would create a new pedestrian experience. The idea is to build the importance and development of the trail as a focal point within downtown.

Parcels that could contribute to creating the Centennial Urban Corridor include:

- 103 3rd Street - a city-owned parking lot.
- 101 E 4th Street, 410 N Olympic Avenue, 414 N Olympic Avenue - currently operated by Arlington Muffler and Brake.
- 405 N West Ave - currently operated by A-Z Transmission and Differential.
- 315 N West Avenue - currently operated by Arlington Tire Pros.

By redeveloping the identified parcels, the Centennial Urban Corridor would become a walkable, mixed-use core of development with a similar, but more modern aesthetic to Olympic Avenue.

*Urban Transition Zone*

The Urban Transition Zone is defined as parcels located between downtown and residential neighborhoods east of MacLeod Avenue, north of Division & west of West Avenue. The purpose of this transition zone is to carry the appeal and charm of Olympic Avenue

into the surrounding blocks by blending new development with the established character of downtown. This would be done by allowing for increased densities, building heights, and reduced setbacks.

Parcels that are located in the Urban Transition zone with redevelopment potential to higher density residential or mixed-use development include:

- 325 N Olympic Avenue - currently a parking lot.
- 525 and 535 N Olympic Avenue - currently Key Bank, parking lot and vacant building.

Redeveloping these parcels with higher density developments would carry the feel and charm of downtown beyond Olympic Avenue and

*Parking Structures*

The study has identified several locations for parking structures in and around the downtown. By changing surface lots to parking structures, these recommendations address community concerns about parking availability in the downtown. These locations include:

- *Public Parking on N Olympic Avenue* - modified surface parking lot and addition of an underground parking garage.
- *200 Block of MacLeod Avenue* - currently a surface parking lot.

- *208 West Avenue* - currently occupied by Local Joe Espresso.
- *316 N West Avenue* - currently operated by Mission Motors.
- *City Hall Parking Lot* - The Civic Center Plan proposes underground parking to offset the demand induced by infill on the site.
- *200 Block of MacLeod Avenue* - This site currently contains a parking lot and workshop participants identified this site for more intense public parking development, such as a garage.
- *208 West Avenue* - This is currently occupied by Local Joe Espresso. Much of the parcel is used only for parking and is located within the proposed High-Density Residential designation. However, it would also be a suitable site for a parking structure, at least on part of the parcel.
- *316 N West Avenue* - While Mission Motors is a thriving business, this site location is suitable for a parking structure. Mission Motors may be better suited to another area of commercial land.

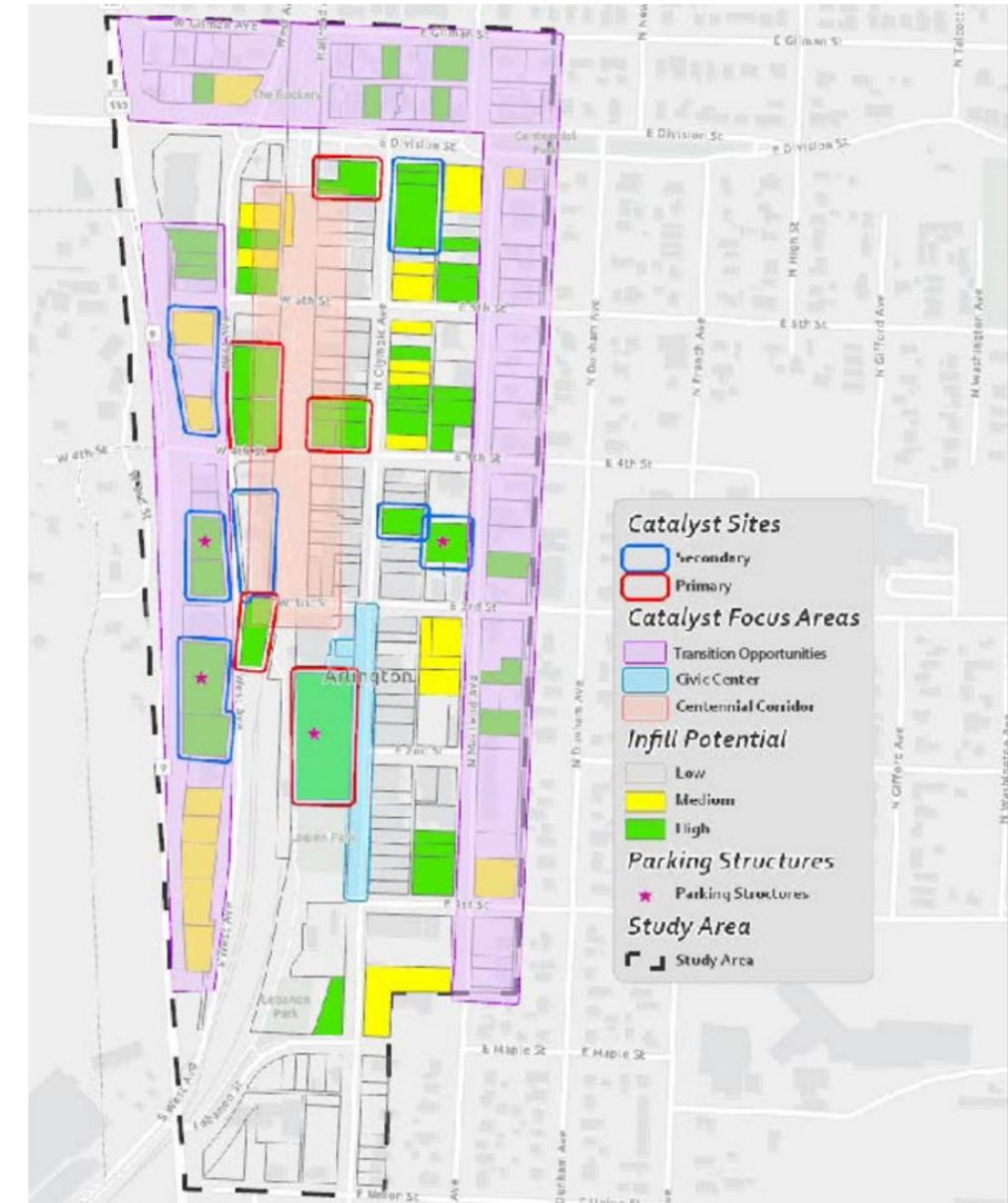


Figure 3.9: Depicts Infill potential, final catalyst focus areas, site recommendations, and parcels that could accommodate parking structures.

CONCEPTUAL DESIGNS



Figure 3.10: What frontage on Olympic Avenue could look like under the land use recommendations proposed.

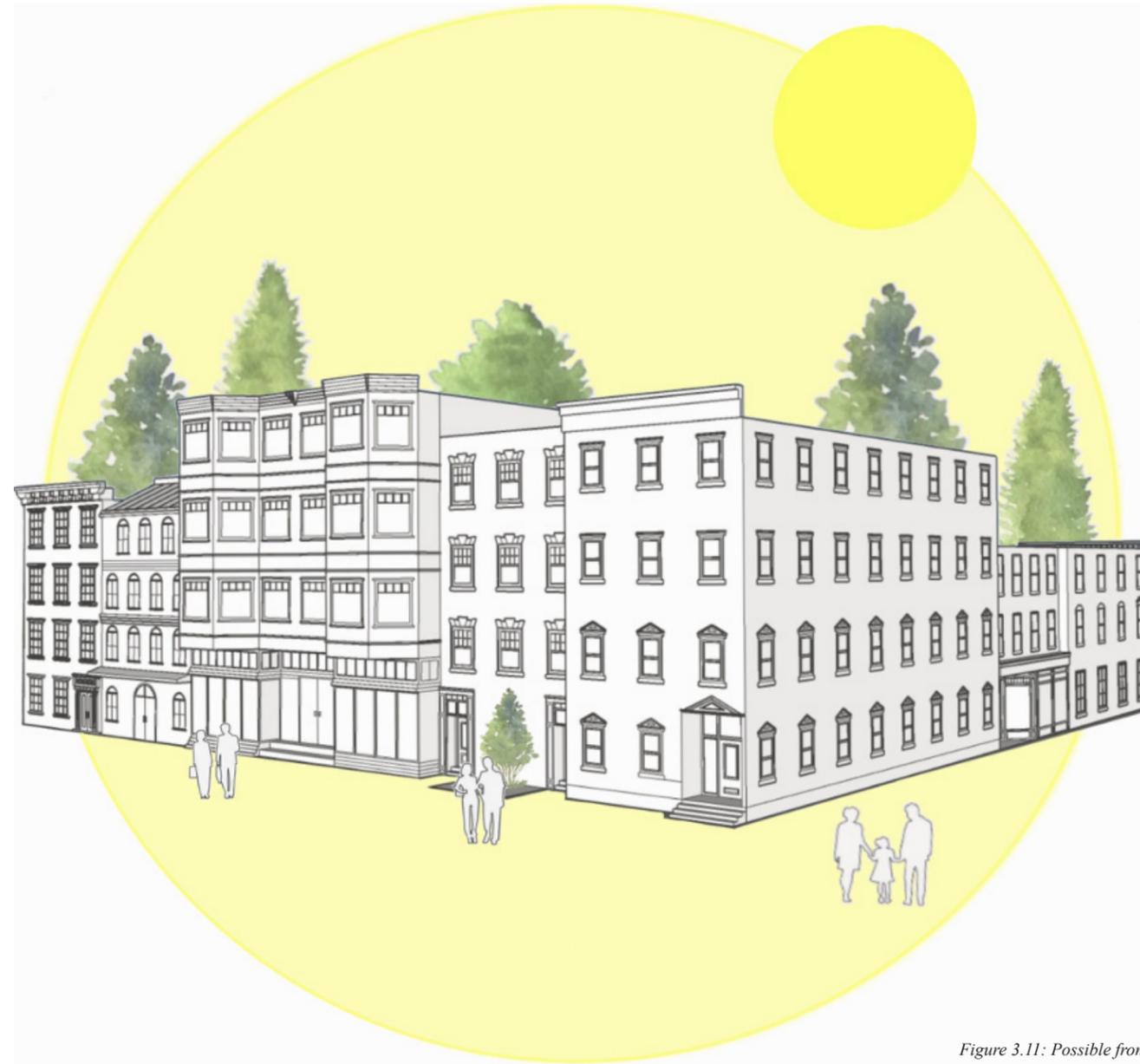


Figure 3.11: Possible frontage for the Centennial Urban Corridor.



Figure 3.12: Current building envelopes in the study area with maximum block density under land-use recommendations.

**CONCEPTUAL DESIGNS**

The following section presents visuals created to demonstrate the land use concept plan. The graphics were created to show design concepts for the central corridor in Arlington and buildings with frontage on Centennial Trail. Other visuals include photos from the master SketchUp model and illustrations showing infill potential.

*Visualizing Infill Potential*

Figures 3.12-3.14 show the infill potential in perspective to downtown Arlington. The 3D model, developed in Sketchup, shows both the current building footprints in Arlington along with visualizing parcels that have high and medium infill redevelopment potential. The green transparent boxes represent high

infill potential and high priority and the yellow represents medium infill potential and secondary priority.



Figure 3.13: Alternate view of current building envelopes overlaid with maximum block density under land-use recommendations



Figure 3.14: Birds-eye view of building envelopes with maximum block density recommendations





Figure 3.15: Master model of all current buildings in study area and potential block density per land-use recommendations.

**MASTER MODEL**

Figures 3.15-3.19 show perspectives of a model that combines design work with existing structures and infill potential illustrations. This model helps illustrate a more complete idea

of infill potential in Arlington. Included in the model are example designs for the Civic Center Square (expanded plaza, mixed-use infill, modified parking lot, and pedestrian mall on Olympic Avenue), improvements and infill along the Centennial Urban Corridor, townhouses in the

Urban Transition Zone on MacLeod Avenue, a parking structure on Olympic Avenue and updates to the street network.



Figure 3.16: Alternate view of master model.



Figure 3.17: Visual of the Olympic Avenue pedestrian mall.



Figure 3.18: Centennial Trail Corridor, from E 4th Street, with mock-up development abutting the trail.



Figure 3.19: Concept design of The Rockary Park improvements.

## INFILL DESIGN

### INTRODUCTION

Washington State's GMA requires counties and cities to accommodate for projected growth in planning and development. Considering Arlington's growth projections, the Act requires city planning to involve innovative and creative infill design strategies that properly incorporate the growing populations within existing urban centers in order to avoid unnecessary and costly urban sprawl. This chapter reviews in greater detail the most efficient and best uses for parcels identified for infill potential. Each site depicts an infill strategy that meets Arlington's current design standards.

#### *Overall Goal of Chapter*

Arlington's development design standards aim to maintain historic architecture while incorporating the goals of the Arlington Comprehensive Plan (Arlington Comprehensive Plan). Several important goals in the Comprehensive Plan apply to the design of future development on Olympic Avenue. They include: increased pedestrian walkability, preservation of neighborhood character, integration of public transit, and enhancement of downtown liveliness, along

with promoting the Growth Management Act's requirements to maximize infill potential in order to accommodate future population growth. Future urbanization should be depicted in the development of larger, mixed-use buildings, emphasizing diverse housing alternatives such as duplexes, townhouses, and other higher density housing alternatives that are not currently present in Arlington. While such future developments represent changes to the downtown, the application of historic design standards becomes increasingly vital in order to retain Arlington's character. This section illustrates several examples showing how new infill development in the downtown can align with both GMA goals and Arlington's Comprehensive Plan and design standards.

In addition to accommodating growing populations through infill building strategies, rapid population growth can also pose negative impacts to local communities by displacing existing people (historically people of color and low-income) that results in social inequalities and gentrification. This section reviews several successful case studies illustrating how many of these social inequalities associated with gentrification processes may be mitigated.

### URBAN DESIGN PREFERENCES

#### *Visual Preference Survey*

On November 14, 2019, Arlington residents participated in a community visioning workshop. The survey identified specific improvements the community supported for their downtown. Each resident rated 35 images (ranging from "love it" to "hate it") from several different categories including streetscapes, building heights, storefront styles, residential housing, crosswalks, seating, town signage, setbacks, and city landscaping. While community members' preferences varied with each image, the consensus included maintaining low height restrictions (2-3 stories) within the retail core and maintaining the historic design character of the downtown. Arlington's residents expressed wanting to maintain their historic "old town feel" but expressed the desire to see modern improvements. There was also a strong preference for improving safety for older residents along with incorporating more green spaces and bump-out sidewalks at street crossings.

#### *Arlington's Design Standards*

##### Residential Standards:

Arlington's design standards for residential uses focus on the privacy and safety of the residents while facilitating neighbor interaction. Within occupiable areas, buffers are required between

the private residential space and the street that may include a screen, raising of ground-level floor windows, strategic landscaping, or partially enclosed areas. This provides security and privacy to those who live in the occupiable spaces. Setbacks are required between neighboring buildings. Buildings must face the street and have clear entryways from the sidewalk in order to enhance pedestrian access. Neighbor interaction is encouraged throughout the design by including building elements such as patios, low fences and walls, or courtyards. These elements can also be used to transition between private and public realms. Residential areas within the central city are also intended to integrate the mixed-use units. Suburban-scale housing within these central areas is discouraged and group buildings and higher densities are encouraged. Transit alternatives are also encouraged by locating higher density housing accessible to public transit. Mixed-use buildings should include structured parking, as well as pedestrian accessible routes.

#### Commercial Core Standards:

Arlington's design guidelines for the commercial core focus on enhancing pedestrian safety, creating an urban retail district with minimal building setbacks, increasing screening of off-street parking facilities, and maximizing the human scale of the commercial core. Historic preservation is a focal emphasis of Arlington's design guidelines, specifically focusing on Old Town (Olympic Avenue) historic buildings.

The guidelines emphasize the rehabilitation of historic buildings with appropriate additions. This is achieved by utilizing appropriate building materials, building styles, signage, and designated color schemes. Specific ways in which a building can be redesigned to complement the historical design character are discussed in the following section to illustrate the application of design guidelines that facilitate mixed-use development and maintenance of downtown's historic character.

#### *Infill Design Goals*

As expressed in Arlington's Comprehensive Plan and design standards, it is essential that Olympic Avenue maintains its "small town" and historic characteristics. With respect to the GMA, it is also imperative that new developments incorporate higher density housing and a variety of uses to support the community's projected population growth. The following design illustrations depict how infill development can achieve both goals while maintaining the city's retail core as the city's civic destination.

#### *540 N Olympic Avenue*

The first opportunity infill site is 540 N Olympic Avenue (on the corner of N Olympic and E Division). The current use of the lot is a drive-through coffee stand, which occupies approximately 150 square feet of the 13,483.5 square foot lot. As discussed in the Land Use Chapter, this site has a high potential for infill,

as the site is highly underutilized and therefore a strong candidate for redevelopment to meet Arlington's future development needs.

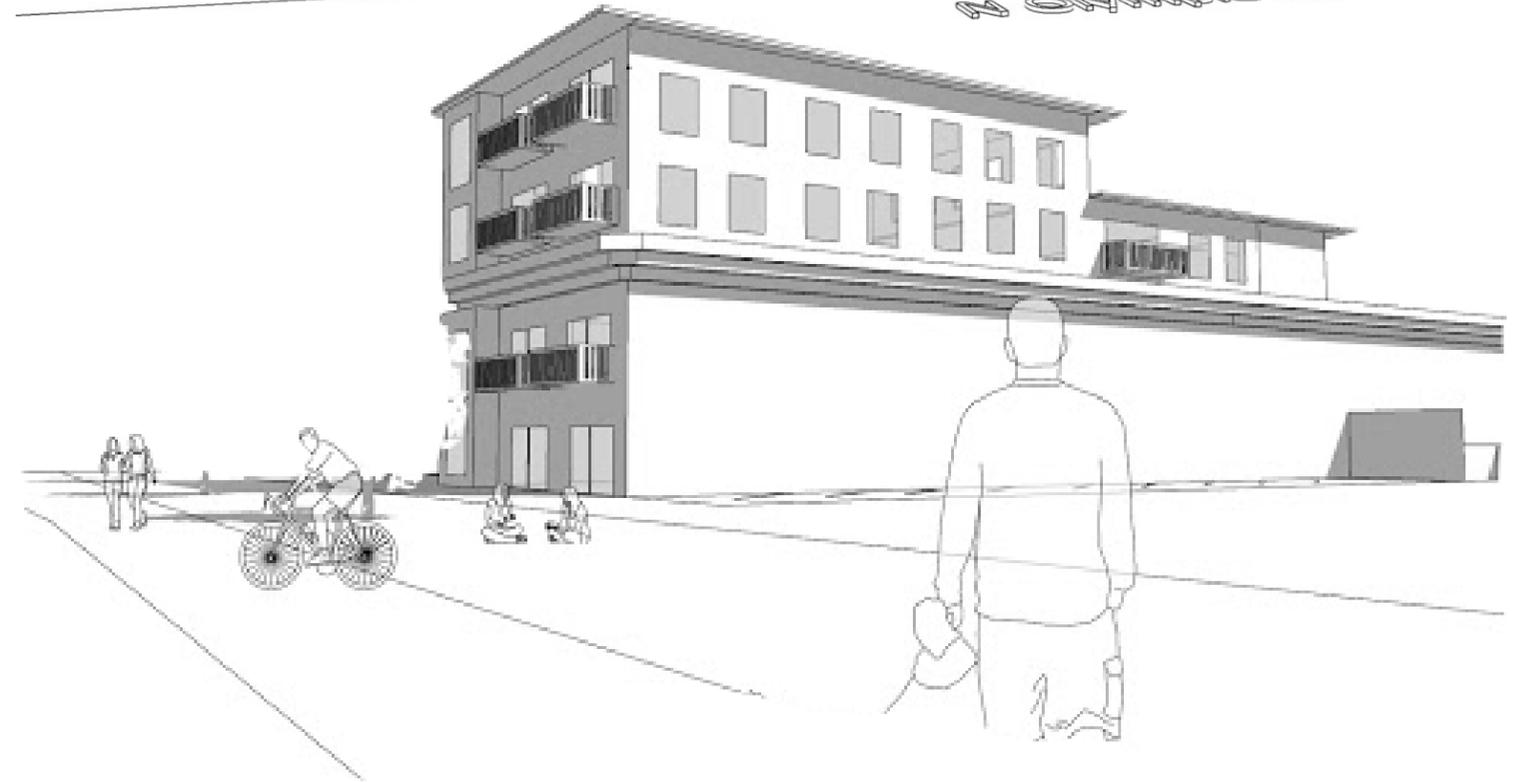
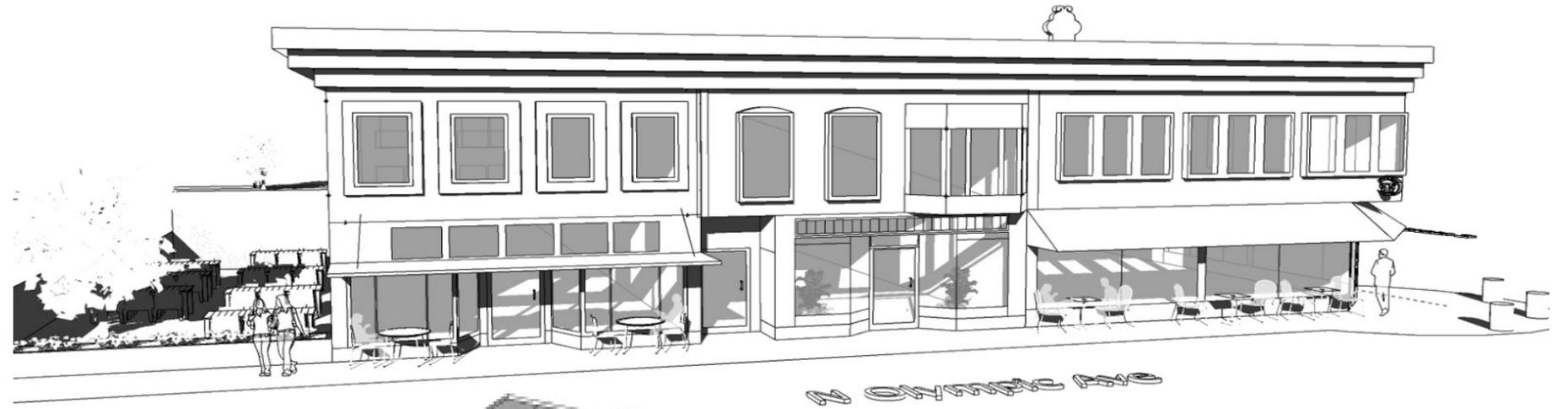
The proposed design is a mixed-use building comprised of three retail stores fronting on Olympic Avenue, with a four-story residential apartment building facing the Centennial Trail. The design of the building illustrates Arlington's historic design guidelines as the building fronts the sidewalks; the materials, windows, and recessed doorways align with historic architecture, in addition to a color scheme reflecting guidelines. To maintain the 'small town' appeal of Old Town, the building fronting Olympic is two stories in height and provides for high density residential uses in a four-story structure fronting the trail.

The additional two stories in the residential structure are shown to be staggered and therefore not visible from Olympic Avenue. The building could support up to eight additional commercial businesses and a capacity for 17 residential units averaging 1,000 square feet each.

The additional retail space provided by this building concept could emphasize community-engaging businesses such as eateries, coffeeshops, a movie theater, and other uses that serve a wide variety of residents.



Figure 4.1: Front view of proposed high infill building design.



*Opposite Page: Figure 4.2: Street view of proposed building design.  
 Above: Figure 4.3: No residential buildings on to level.  
 Left: Figure 4.4: A view of the building from Centennial Trail.*



*404 N Olympic Avenue*

Another potential infill site is located at 404 N Olympic Avenue. The current use of this site is an auto service business. The location is in the center of downtown at the intersection of N Olympic Avenue and 4th Street and is an ideal site for a mixed-use building. Since the city has plans to create a community innovation center, the proposed infill development integrates the center along with additional infill development. The

proposed building has commercial frontage on N Olympic Avenue and 4th Street, in addition to residential apartments oriented to the Centennial Trail.

The lot could contain a range of residential housing density options depending on the number of stories of the buildings. Due to the commercial frontage along Olympic Avenue, the retail frontage buildings conform to Arlington’s design standards and lower building heights, while the residential

building oriented to the trail is four stories in height to maximize infill capacity. The development is built to the lot line, with no setbacks, and incorporates historical design characteristics to blend in with existing downtown development.



*Top Right: Figure 4.5: A view of the residential building on 4th Street and Centennial Trail.  
Left: Figure 4.6: A view from N. Olympic Avenue.  
Bottom Right: Figure 4.7: A view of the building from 4th Street.*

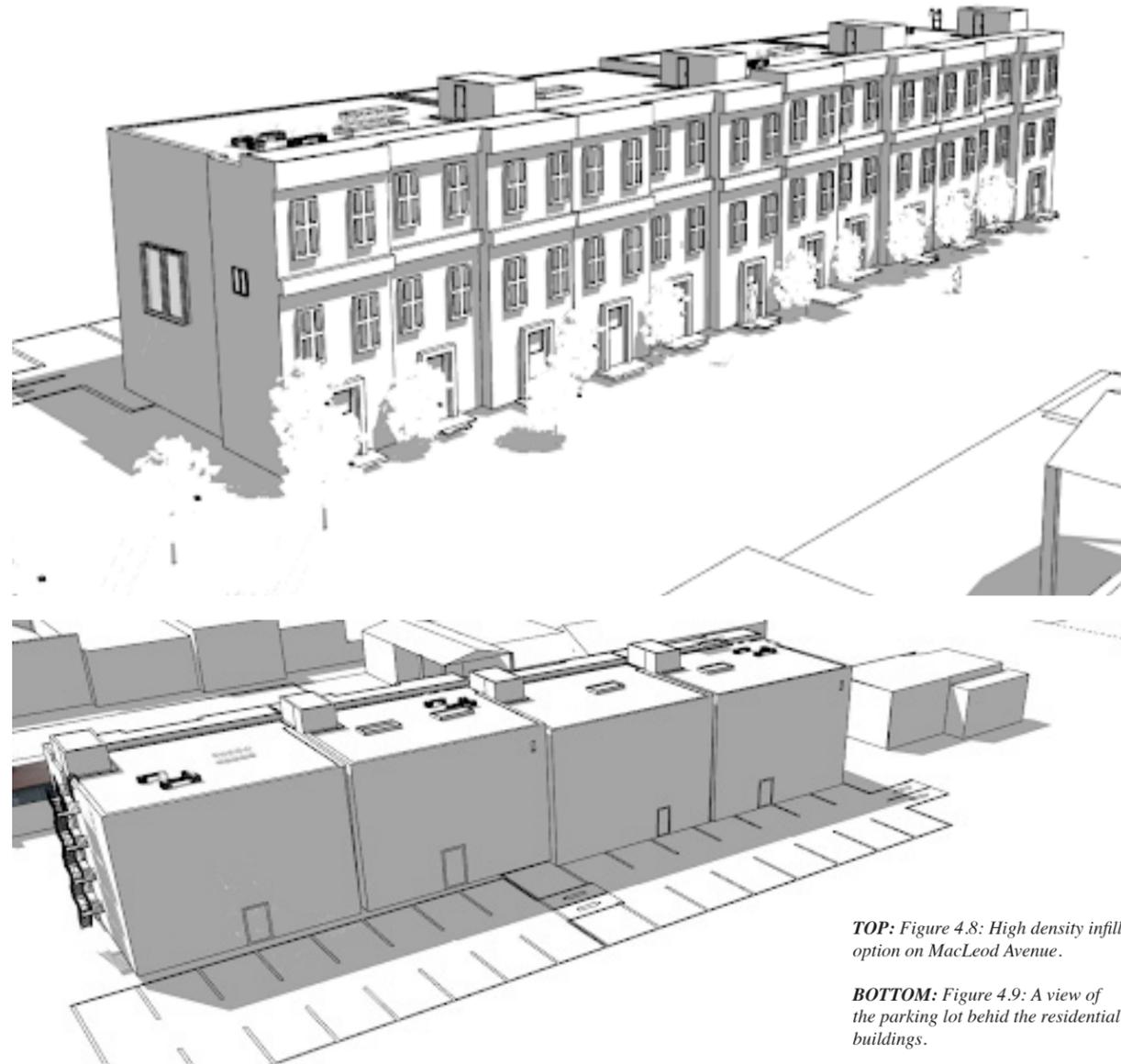


3rd Street & MacLeod Avenue

Unlike the previous infill sites, 3rd Street and MacLeod Avenue is in a predominately residential area. The parcel currently contains two vacant residences, giving it a high redevelopment potential. Two types of residential infill housing are proposed. One consists of lower density and one depicts moderate density housing. The goal is to transition from the single-family residential zone located to the east of the parcel to the mixed-use and commercial uses in the downtown.

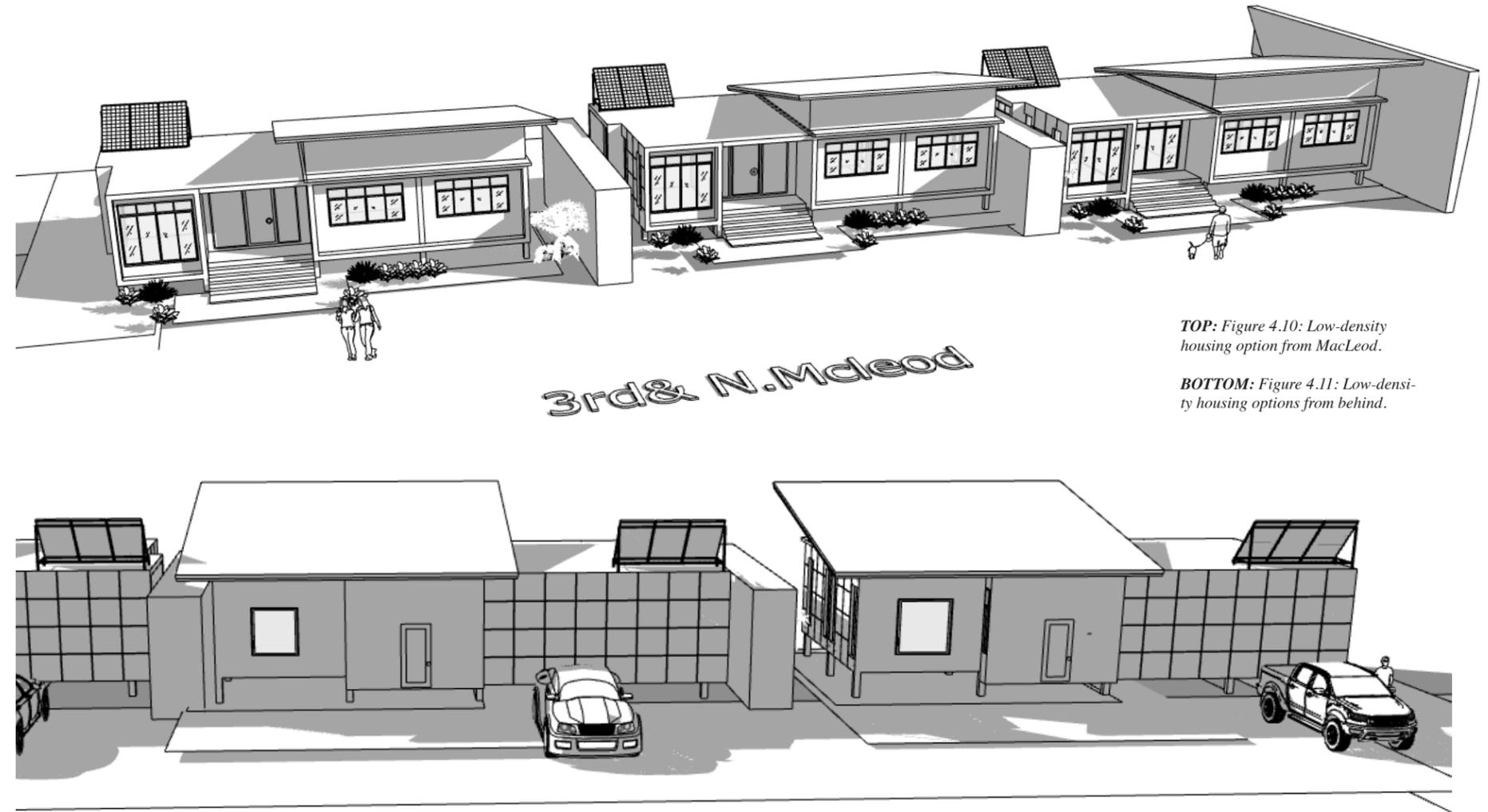
The lower-density design concept utilizes smaller, single-family residences. The parcel has an infill capacity to accommodate small homes to transition from the residential single-family area and the mixed uses in the downtown.

In order to comply with Arlington’s design guidelines, a moderate-density residential development consisting of townhomes is depicted. The building features exterior wood siding and brick that maintains the historic character and complies with design standards. The development could support 12 residential units.



TOP: Figure 4.8: High density infill option on MacLeod Avenue.

BOTTOM: Figure 4.9: A view of the parking lot behind the residential buildings.



TOP: Figure 4.10: Low-density housing option from MacLeod.

BOTTOM: Figure 4.11: Low-density housing options from behind.

3rd Street & Olympic Avenue

The next infill site is the large public parking lot located on 3rd Street and N Olympic Avenue. The location was identified as having high infill potential due to its size and ability to efficiently accommodate commercial retail uses and a community facility, along with a multi-purpose public parking facility. An important use of this publicly owned parcel is to host community events; therefore, the proposed design incorporates several infill opportunities while maximizing community use space and accommodating public parking. The proposed commercial buildings along N Olympic Avenue

have dual frontage, allowing pedestrians to enter from the street or from the rear parking lot. The addition of retail buildings helps to retain the retail corridor of N Olympic Avenue and visually buffer the parking area from the street. The site plan depicts a surface level parking lot behind the commercial buildings, which is smaller than the existing parking lot. To account for the loss of parking spaces, an underground parking lot is proposed to maximize the parking capacity of the site. Details regarding the parking facility are discussed later in the report. The proposed site also includes a new civic community building along N Olympic Avenue, between the proposed commercial buildings

and the city hall. The building is designed with multiple entrances and large windows to enhance natural light and a strong visual connection to a proposed civic plaza. The building could be used as an informative center or provide an indoor space for community events and gatherings. The illustrated infill development would not cause disruptions to city events as the surface level parking lot can be closed and converted for public events and the entire section of N Olympic Avenue can be closed between 2nd and 3rd Streets to further expand the public areas for community events.

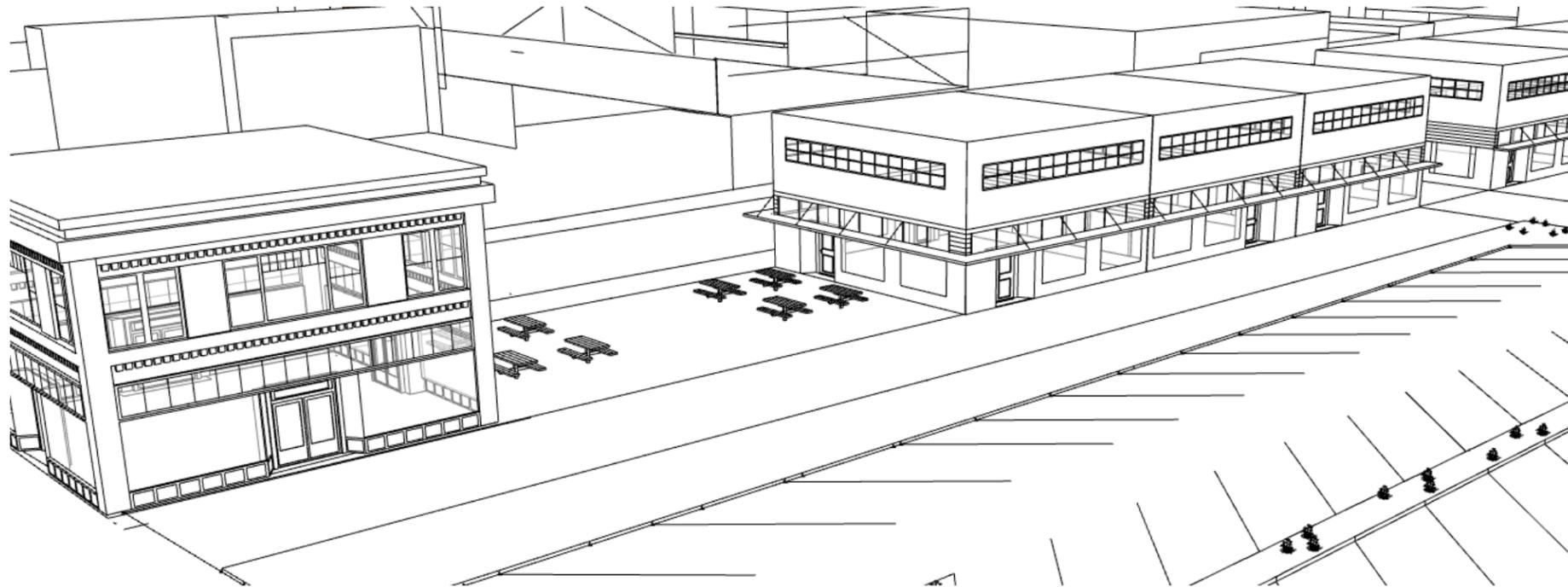


Figure 4.12: Rearview depicting dual frontage buildings and a large public parking lot.

RENOVATION AND REVITALIZATION

Another important strategy for revitalizing the downtown is the renovation of existing buildings to comply with current design standards. While specific recommendations for implementing renovations downtown are discussed in a later section, several design elements are recommended to business owners to upgrade their storefronts and contribute to a revitalized downtown. Several building design elements include revealing transom windows, installing recessed doorways, providing clear windows, applying exterior wood and brick siding, and utilizing wood and metal signage as depicted in the following figures.

CONCLUSION

The proposed design inspirations are centered around the idea of creating a downtown corridor that meets the diverse needs of the current and future population of Arlington. In order to maintain a sustainable community, it is important to look at opportunities where mixed-uses can be integrated within the urban fabric while still retaining its character. Increased urban growth, if done properly, can provide new opportunities for reinvigorating Arlington's downtown and economy.



Figure 4.13: An example of a building in downtown that does not meet the historic design standards, this building has since been improved.



Figure 4.14: A proposed redesign of the same building, utilizing more of the specific historic aspects.

## PUBLIC SPHERE

downtown and contributes to improved public health and social capital.

### THE STREETScape

The streetscape creates the distinct character of the downtown. The beautification of the downtown streetscape enhances the experience of the public by providing both visually appealing and improved functional uses (Figure 5.1). The study proposes several strategies to strengthen the downtown's amenities by providing more pedestrian-oriented lighting, accessible recycling receptacles, and additional restrooms. In addition to those public amenities, bike racks and additional public seating can add to the accessibility of the downtown. The streetscape embodies both the community's aesthetic and serves a variety of functions.



Figure 5.1: Example of streetscape improvements, 4th Street and Olympic Avenue

### Lighting

Lighting in public spaces can serve to improve safety, provide geographic orientation, highlight focal points in an area, and mark entrances and boundaries. Cities can also utilize methods of lighting other than a traditional light post. Examples of this include tree lighting (Figure 5.2), which is currently in place on Olympic Avenue but could be expanded to other streets and within parks and the trails, as well as retail lighting displays, sculpture lighting, and lighting for signage. These lighting forms all signal to drivers that the area is oriented for pedestrians, which in turn serves to calm traffic and makes streets safer for pedestrians.

The study recommends that Arlington expand tree lighting throughout the entire study area, to



Figure 5.2: Tree Lighting along streetscape

set apart downtown as a distinct district, with an emphasis on walkability and pedestrian safety. Where tree lighting is not suitable, pedestrian-scale light posts can be installed.

Lighting in public spaces should be designed on a pedestrian scale, especially along pedestrian walkways (trails, sidewalks). Pedestrian scale lighting should be placed frequently and close to the ground. For example, a 13-foot tall lighting fixture should be placed at approximately 50 foot intervals along pathways. This method reduces light pollution and enhances pedestrian scale.

### Seating

Seating is an important feature in any public

space, and the design, location, and materials used are all critical to consider when adding or updating public seating. ADA accessibility standards should be the first consideration in the design of public seating. This includes considerations such as avoiding gravel or grass pathways. It is also preferable for seating to include backrests. Bench backrests can also provide useful aids to wayfinding, as illustrated in Figures 5.3 and 5.4. Public seating should be provided no greater than 160 feet apart to accommodate those who may not be able to walk long distances. Additionally, seating should be made of materials that are comfortable in high and low temperatures and tolerant to the wet conditions of the Pacific Northwest. This may require the inclusion of



Figure 5.3: Public seating that incorporates wayfinding



Figure 5.4: Accessible public seating

covered seating in certain locations such as bus stops. Public seating in parks allows for greater enjoyment of Arlington's natural features, and seating along streets creates a more vibrant and interactive community.

### Restrooms

Public restrooms should be provided in each of Arlington’s downtown parks. Currently, the only public restroom in the study area is located at Legion Park. A small restroom facility should be built along the Centennial Trail and included in the community building proposed at 4th Street and Olympic Avenue. As Arlington continues to grow, the provision of a restroom facility on either Olympic Avenue or Division Street is recommended. All restrooms should be ADA accessible, well-lit, and have a relatively small footprint. Restroom design alternatives are depicted in Figures 5.5 and 5.6.



Figure 5.5: Small public restroom example with floor plan

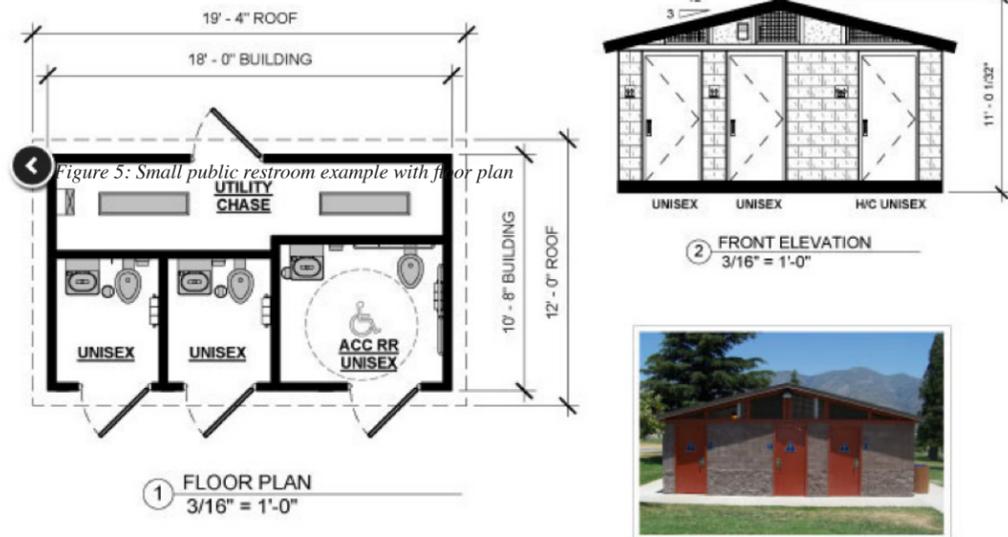


Figure 5.6: Large public restroom example with floor plan

### Wayfinding

Various forms of wayfinding are recommended throughout the downtown corridor and along the Centennial Trail. Signage helps guide people toward attractions and other amenities such as restrooms, restaurants, public services, and retail shops. Informational kiosks along the trail and in the downtown provide the public with information about community events, news, and other important events happening in the area. Designs for signage and kiosks should be creative and unique. Various forms of wayfinding should be placed where the trail intersects streets to guide visitors into the downtown, toward new businesses that abut the trail, and to other amenities (Figures 5.3 and 5.7). Specific recommendations include: directional and informative signage, maps, and informational kiosks.



Figure 5.7: An example of signposts as wayfinding from the Watson Lake Signpost Forest.

### Bike Racks

There are currently few bicycle racks accessible along the Centennial Trail and throughout downtown. The addition of more bicycle racks allows for cyclists to more easily access downtown businesses and other amenities. The racks should be easy to use and recognize and can also serve as a form of street art to enhance the streetscape throughout the study area. An example of an artistic bike rack is illustrated in Figure 5.8. Bicycle racks should be designed as part of a community event in order to foster community engagement. This can be organized through competitive events as discussed in the “Art” section of this report.



Figure 5.8: An example of a creative bicycle rack that emphasizes the culture and character of Arlington (Rossi Sculptural Designs).

### Recycling/Waste Receptacles

Frequently spaced waste receptacles along the Centennial Trail and in the downtown corridor discourage littering and provide for a cleaner and healthier community. Additional receptacles should be added to locations that attract more people, such as at the proposed City Hall Plaza and pocket parks. Additionally, recycling receptacles should be placed in close proximity to trash receptacles. Designs can be creative to encourage use. Though the receptacle designs should be creative, they must be easily recognizable as a place to put waste so as to not discourage use (Project for Public Spaces, 2008). Some examples of waste and recycling receptacles are illustrated in Figure 5.9.



Figure 5.9: An example of interesting and functional waste and recycling receptacles (Wabash Valley Catalog)



Figure 5.10: Green space provided that serves both an ecological and urban function (E-landscapell.com).

### Vegetation

As with other recommended improvements to the built environment that shape the streetscape, the incorporation of vegetation buffers and native plants further provide a sense of character and ecological function (Figure 5.10). Low maintenance woody plants, such as shrubs and small trees can be placed in larger buffer areas. Perennials and grasses act as accents throughout the streetscape, allowing for year-round greenery. The placement of hanging and larger movable planters in the downtown is a seasonal contribution to the incorporation of color and texture to the study area. Vegetation and planters can be used to enhance the aesthetic of current and proposed public amenities.

The addition of rain gardens throughout Arlington's downtown provides an aesthetically pleasing streetscape that also helps to filter and absorb water runoff from the streetscape (Figure 5.11). Rain gardens are created to function as native forests, allowing water to be soaked up quickly by plants, reducing the amount of pollutants in the local groundwater. Designed for a range of different spaces, rain gardens mitigate pollution from fertilizers, pesticides, oil, and sediments from reaching water resources. Rain gardens are recommended along the Centennial Trail and along streets in the study area to reduce standing water and road pollutant runoff.



Figure 5.11: Rain gardens buffering the street and sidewalk (Patch.com)

## PUBLIC ART

The mission statement from Arlington's Public Art Strategic Plan states that it will be used "to build a unique community and regional identity through art and use public art as a tool for sustainable growth" (City of Arlington Public Art Strategic Plan 2019). In addition, public art is important because it creates a unique and vibrant community by increasing cultural, social, and economic community values. A critical part of establishing a strong cultural identity in a community is through community involvement in projects through public art (City of Arlington Public Art Strategic Plan, 2019).

The study recommends the implementation elements of Arlington's Public Art Strategic Plan in the design of the downtown streetscape in order to increase the artistic character of the built environment with site-integrated art. Whimsical designs in public seating, street paving, and signage contribute to fostering placemaking within the streetscape. The use of various textures, colors, and patterns in the downtown enhances functionality and interest, seen in Figure 5.12 (City of Arlington Public Art Strategic Plan 2019).

### KAPOW

The study recommends implementing a program similar to KAPOW (Sustainable Connections, Bellingham, WA) as a way to increase community involvement and



LEFT: Figure 5.12: Example of creative crosswalk (Pinterest.com)  
BELOW: Figure 5.13: An example of an art piece that uses natural vegetation in the design



placemaking. This program engages the community in "designing inexpensive, individual projects that make small places livelier and more enjoyable." One example where the program can be applied is in "Site Integrated" art installments. Before a new development project commences, local artists can be assigned a specific area to create an art piece that is integrated into the construction project. KAPOW provides a procedural process for community engagement in the development and selection of art proposals. The submissions are solicited and selected by a review team based on specified criteria. The selection criteria include the potential for enhancing placemaking, social impact, design creativity,

health impact, and other criteria. Proposals are then selected for public presentation at an award event where the community votes on the art proposal they would like installed on the site. A program such as KAPOW could engage the community in decision making regarding installed artwork, and could address designs for bike racks, sidewalk inlay designs, and sculptures, murals, and interactive art pieces along the Centennial Trail. Arlington already has a Public Art Fund that could be accessed for projects like this.



Figure 5.14: The Shop of Arlington Tire Pros - A potential site for mural installation to enhance the surrounding trail.



Figure 5.15: Example of art installation unique to the Bellingham's identity ("Bellinghamster Wheel" by Patrick Hurley, KAPOW, 2015)

**Murals**

Several art installations currently exist in Arlington and more are planned for the future. As the downtown solidifies its identity and character as growth and urbanization approach, determination of how to maintain the right identity and character through public art should be at the forefront of consideration. Through programs such as KAPOW, installations in several high-potential locations could be transformed into creative place-making hubs of the community while engaging local residents in the process. Figures 5.15 and 5.16 are a couple of examples of proposals from Bellingham's KAPOW program.

The study further recommends appropriate and tangible installations of murals on several locations throughout the downtown. Community sponsored murals could prove to be a non-intrusive way to promote more downtown art and

identity through partnerships with building owners. Several locations throughout the study area have been identified as ideal locations for installations of community murals. Images of candidate sites as well as examples of murals from other communities are illustrated in Figures 5.16 – 5.20.

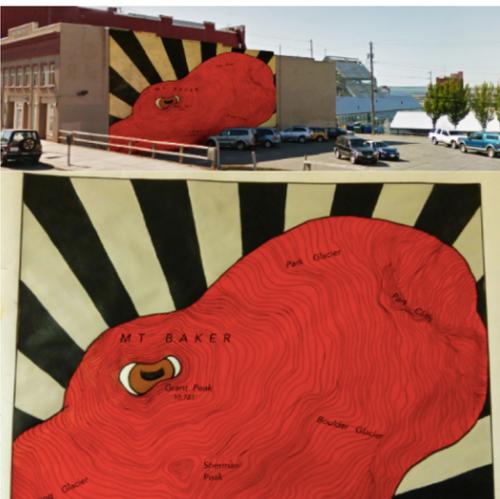


Figure 5.16: Example of a mural proposal on the side of a privately-owned building in downtown Bellingham ("ArtQuake" by Nick Hartirch, Sara Snedecker, & Scott Miles, KAPOW, 2016)



**BOTTOM RIGHT:**Figure 5.17: Example of a mural on a multi-use trail from the Interurban Trail in Seattle, WA.  
**TOP RIGHT:** Figure 5.18: "Alley" between 4th and 5th Street on Olympic could serve as a pocket park with a mural.  
**LEFT PHOTOS:** Figures 5.19 (above) and 5.20 (below): Current examples illustrating ideal scale and theme for art and murals.



**PARKS AND TRAILS**

The City of Arlington has already implemented a wide range of design elements in parks and along the Centennial Trail. While the trail and parks appear to be in excellent condition with several recently updated improvements, the study identified several potential locations for additional features. Figure 5.21 shows locations for the placement of several additional improvements.

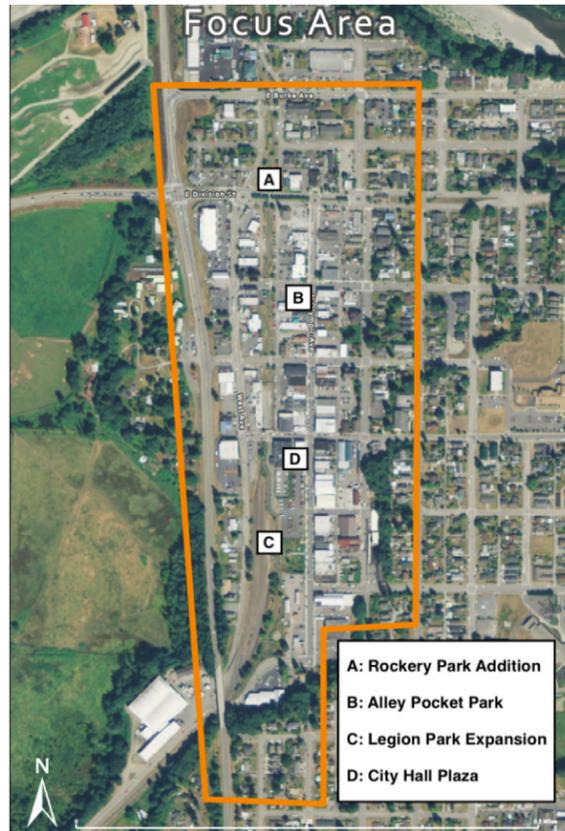


Figure 5.21: The Focus Site - Lettered are potential spaces for pocket parks and park space that could be enhanced

*Rockery*

A location identified for revitalization includes the Rockery Park section of the Centennial Trail located south of Haller Park, represented in Figure 5.21 as A. The area currently consists of three different paths and fencing from old infrastructure. The study proposes to remodel the park as a multi-use area as depicted in Figure 5.22. This proposed remodel shows a triangular concrete area with built-in features that include benches, steps and native foliage to provide a buffer from the roads and encourage social gathering. When not in use by pedestrians, this discreet concrete design could serve as a “skate dot,” providing recreational skaters the ability to utilize these structures for skill improvement and exercise. This recommendation addresses the community’s desire to welcome younger residents to the downtown. Additional infrastructure improvements would include wayfinding signs.



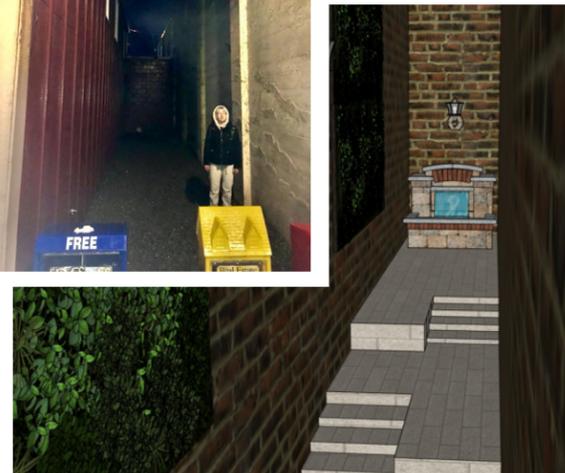
Figure 5.22: an example of a multi-use gathering area that also serves as a skate facility when not in use for other purposes.

*Alley Pocket Park*

A potential pocket park location is shown by B in Figure 5.21. It is a small space between the Remax and Country Rose buildings (Figure 5.23). Lighting, seating and foliage could transform the nook into a unique community gathering space or, alternatively, an artistic alleyway providing connection from the Centennial Trail with Olympic Avenue access.



Figures 5.23, 5.24: The Alley between 4th and 5th Avenue and proposed improvement to this space.



*Legion Park Expansion*

As the population of Arlington increases, current

site the study has identified is the parcel of land adjacent to the railroad (Figure 5.25). This parcel could be used to expand Legion Park and provide additional space for public recreational use. Legion Park is shown as C in Figure 5.21. Fencing and a tree buffer could be added along the railroad tracks on the vacant parcel, as depicted in Figure 5.26. The tracks on the west side of the parcel are active, used during weekdays as a holding space for train cars. A barrier with a setback allows for the parcel to be sectioned into a safe space for future development. The parcel extends between Legion Park and Lebanon Park and runs parallel to the Centennial Trail.

Several Arlington residents at the October 2019 public workshop voiced a need for more family-friendly spaces within the downtown. The feedback from the public workshop showed an interest in additional covered areas, kid-friendly spaces, and seating. Although fairly small, the section of the Centennial Trail that extends along this parcel could provide a location for play equipment as shown in Figure 5.27. The appearance of added play structures and popup market spaces should complement a historical theme. This parcel is designated as Old Town Business District 2 and has no current plans for development. This designation of land-use emphasizes the importance of preserving “the look, feel, and function of Arlington’s traditional commercial center” (Arlington Comprehensive Plan).

This parcel could provide an opportunity for use for festivals, events, and other community needs. Public structures, such as the restoration of train cars or other features that celebrate Arlington’s rich history could also be installed.

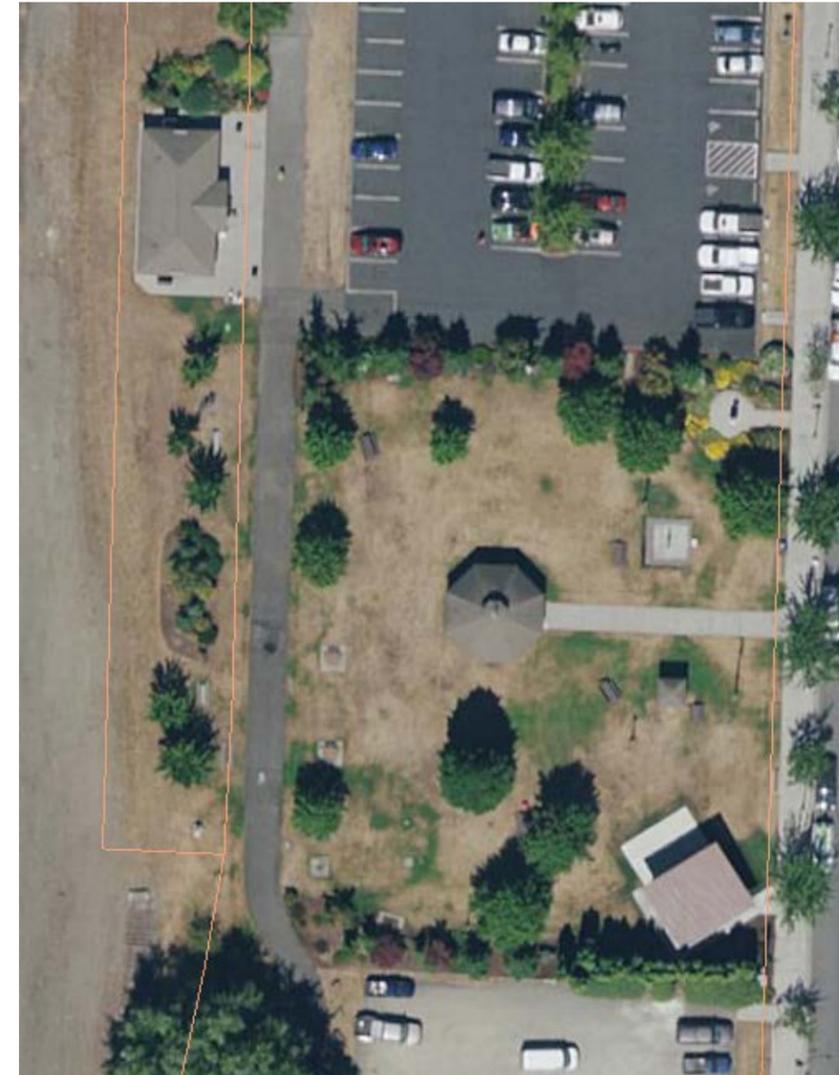


Figure 5.25: Parcel containing railroad tracks showing a potential site for park expansion

sites used for city events and festivals may need to be expanded to accommodate a larger number of residents and visitors. A potential

*BELOW: Figure 5.26: Example of reclaimed train caboose used as a popup market space (model not drawn to scale: space is more limited than it appears)*

*RIGHT: Figure 5.27: Example of children's play equipment (space would not accommodate a full playground, but could select a few playground items)*

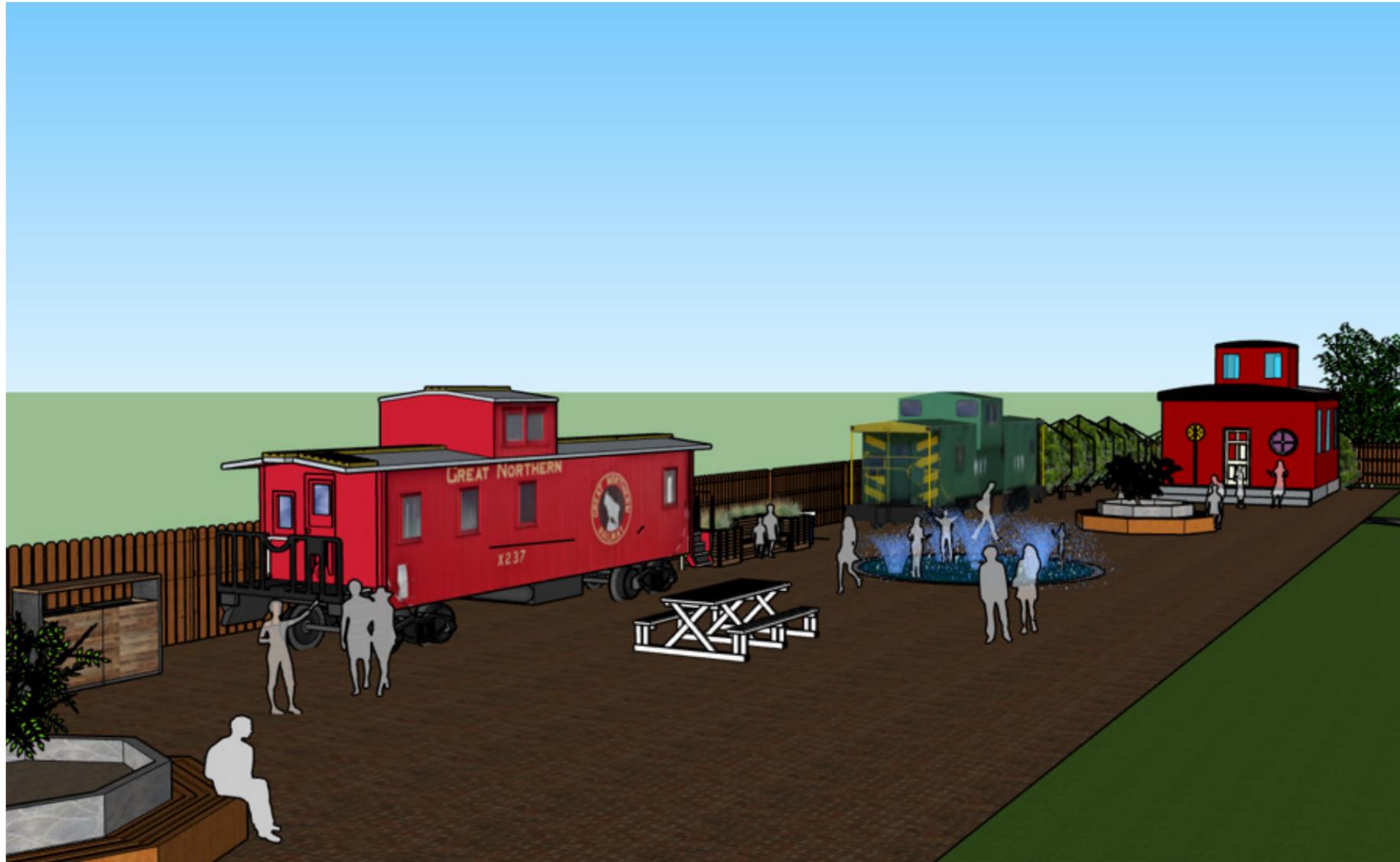




Figure 5.28: The proposed City Hall Plaza - perspective view

**City Hall Plaza**

A plaza is an open public space that serves as a transformative center for civic life. Plazas enrich and are enriched by their surrounding buildings. The study proposes the development of an expanded City Hall Plaza at the northern end of the current City Hall parking lot (D on Figure 5.21). This City Hall Plaza can connect to the proposed

commercial retail development along Olympic Avenue as well as an onsite public parking garage.

The Arlington Art Strategic Plan emphasizes site integrated art, such as including artistic designs in pavements. The proposed City Hall Plaza illustrates the integration of design with the application of brick patterns

similar to the brick patterns used at Western Washington University’s Haskell Plaza, shown in Figure 5.30. Where Haskell Plaza utilizes yellow bricks to represent the San Juan Island marine currents, the proposed City Hall plaza shows the use of blue bricks to represent the Stillaguamish River as illustrated in Figures 5.28 and 5.29.



LEFT: Figure 5.29: City Hall Plaza - Plan view showing the connection of the Plaza to the centennial trail  
ABOVE: Figure 5.30: WWU - Haskell Plaza

**TRAIL ORIENTED DEVELOPMENT**

An important element of the proposed plan to enhance Arlington’s public sphere is to capitalize on the proximity of the Centennial Trail to downtown businesses. The unique shops and restaurants on Olympic Avenue that contribute to its charm and character should not only be seen and enjoyed from Olympic Avenue, but also from the trail. As one of the main travel routes through Arlington, the Centennial Trail represents a unique pedestrian-oriented path. Creating improved access to the downtown and its businesses through adaptive, trail-oriented-development (TOD) strategies, including the promotion of dual-frontage businesses and the establishment of a “Centennial Corridor” can greatly improve healthy and vibrant accessibility to downtown Arlington.

TOD encourages mixed-use development strategies and active mobility. If implemented along the Centennial Trail, TOD would enhance the potential for urban infill and vibrancy of Arlington’s downtown corridor as density and accessibility maintain persistent concerns with inevitable growth. TOD would address concerns regarding the lack of parking and infill capacity within the urban core. This form of development emphasizes walking, biking, and other non-motorized transportation modes and mitigates some of the negative impacts resulting from population growth.



Figure 5.31: Examples of Business Dual Frontage in Seattle.

The study proposes two adaptive strategies to transform the Centennial Trail as a central destination and a key element to downtown Arlington’s vibrancy. The study envisions a dynamic new pedestrian-oriented environment supported by infill residential housing as well as dual-frontage businesses along the entire length of the trail.

*Dual Frontage on Centennial Trail*

Dual business frontage would primarily be implemented between 3rd and 5th Avenue, and between West and Olympic Avenues on the

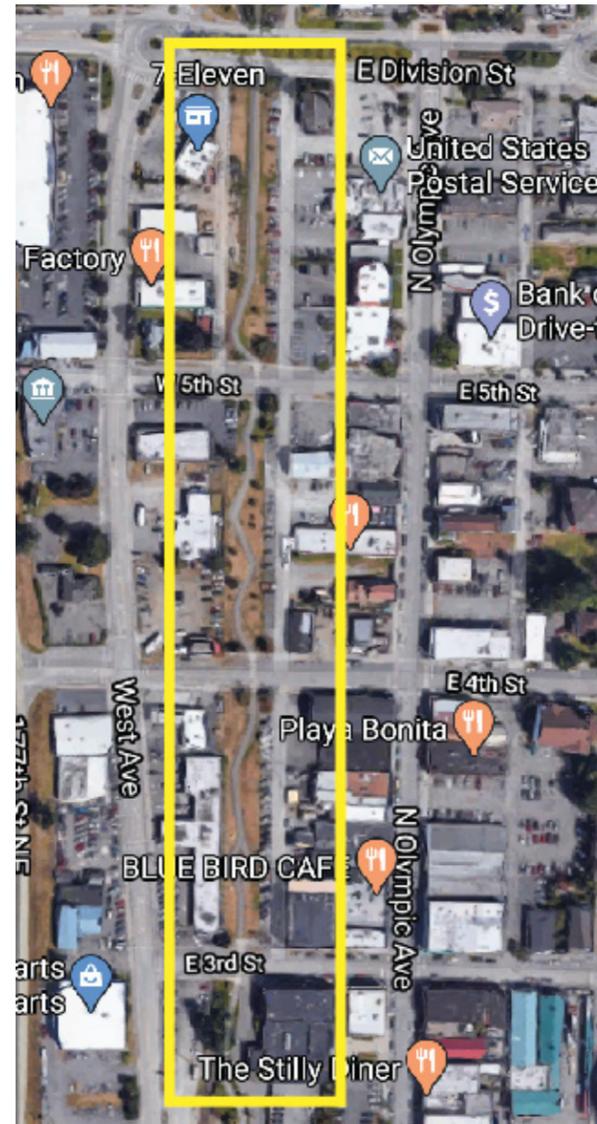


Figure 5.32: A depiction of the proposed site along the downtown section of Centennial suited for dual frontage

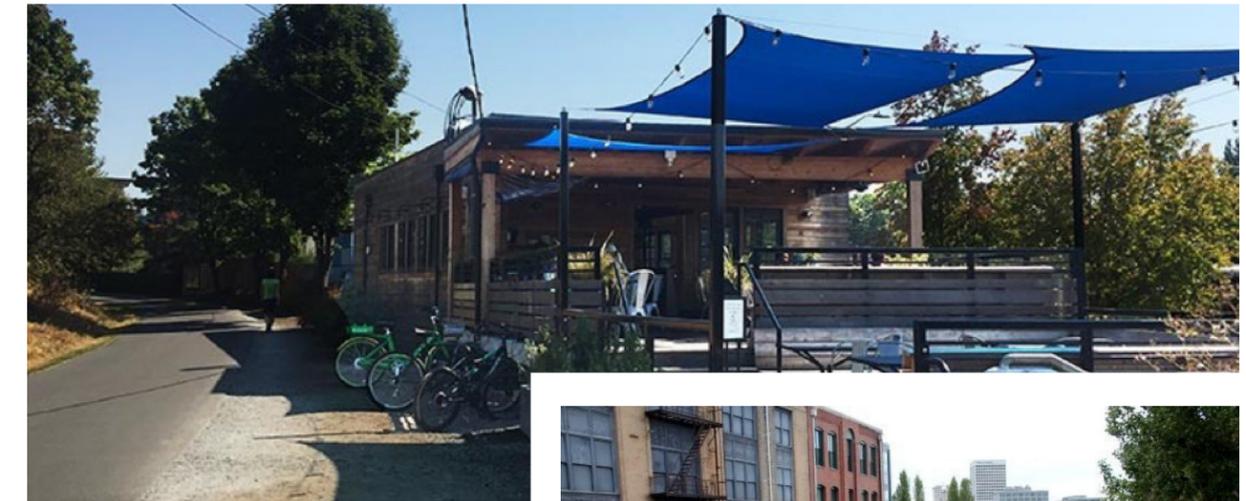
Centennial Trail. Dual frontages for downtown businesses along the trail would increase the amount of pedestrian traffic. While visitors on Olympic Avenue can visibly identify adjacent businesses, adding entrances on the trail side of buildings would make businesses more visible and provide opportunities to expand onto spaces that abut the trail.

Greater visibility and accessibility to local businesses would increase safety on the trail. Increased lighting would create a safer environment for trail users, particularly at night when pedestrians are most likely to feel “unsafe.”

According to a TOD report published by the University of Washington:

“When restaurants are located along trails, and easily accessible by bike, an area can simultaneously transform into a leisure destination and a transportation corridor. Food is a universal need and restaurants create spaces for people to congregate and linger. They are vital in urban trail systems that flourish” (Carroll, 2019).

Olympic Avenue offers very limited outdoor seating; transforming the rear of Olympic and West Avenues’ businesses onto the trail corridor would benefit both businesses and the trail user. The adaptive use of the trail corridor transitions the single-use trail space into a multi-use



ABOVE: Figure 5.33: St. Helens Cafe invites trail-goers to stop in and grab a bite to eat on its patio (Carroll, 2019)  
 RIGHT: Figure 5.34: Prairie Line Trail in the City of Tacoma

corridor that incorporates new residential housing and businesses and better promotes social and economic activities. Trail access to retail businesses may also reduce congestion on Olympic Avenue. For businesses located on the west side of Centennial Trail (primarily auto-oriented businesses) where dual frontage would not appear feasible, installing additional art and murals on the backs of buildings could further complement the trail.



Figure 5.35: Residential Development on the Interurban Trail (Seattle, WA.)

*Centennial Corridor*

The study proposes a new residential/mixed-use corridor along the Centennial Trail between 3rd Street and Division Avenue and between West and Olympic Avenues. A lively mixed-use corridor would alleviate some of the pressures of Olympic Avenue, contrasting its old-town oriented, low-density development, with the creation of more densely oriented urban development along the trail corridor. This mixed-use corridor can promote trail-oriented development that accommodates future population growth with an urban vibrancy.

New development along the Centennial Trail in the proposed urban corridor behind Olympic Avenue between 4th and 5th Streets is proposed to be residential. While development between 3rd and 4th Streets would be mixed-use with commercial on the first floor, and office and residential uses on the upper floors. The emphasis on mixed-use development in the corridor is integral to its success. Examples of trail-oriented development to illustrate how Centennial Corridor could be developed can be found in Figures 5.35-5.37.



Figure 5.36 & 5.37x: 250 City Road (London, United Kingdom) - (MacCleery, 2016). These buildings are taller than the study recommends however provide comparative visuals of the concept



Figure 5.39: A possible design for frontage on Centennial Trail.

# TRANSPORTATION AND MOBILITY

## TRAFFIC REVISION

This section of the report covers traffic revisions to 3rd Street, 4th Street, 5th Street, MacLeod Avenue, West Avenue, and Olympic Avenue as a complement to proposals made throughout the rest of this report. These recommendations would increase public use of downtown, accommodate future growth, encourage more active modes of transportation, and improve mobility for Arlington’s residents. There are two separate proposals in this section for transforming 3rd, 4th, and 5th Streets; alternatives A and B. Generally, revisions include wider sidewalks, dedicated right-of-way (ROW) green space, and delineated parking spaces.

*Olympic and West Avenue Revisions*  
Figures 6.1 and 6.2 depict the proposed plan for Olympic Avenue’s 60-foot-wide ROW. Widening the sidewalks to 12.25 feet would allow for increased walkability and opportunities for business spillover into the public realm. Two 11-foot lanes provide for two-way vehicular traffic on Olympic Avenue to meet present and future traffic requirements. Bulb-out curbs are

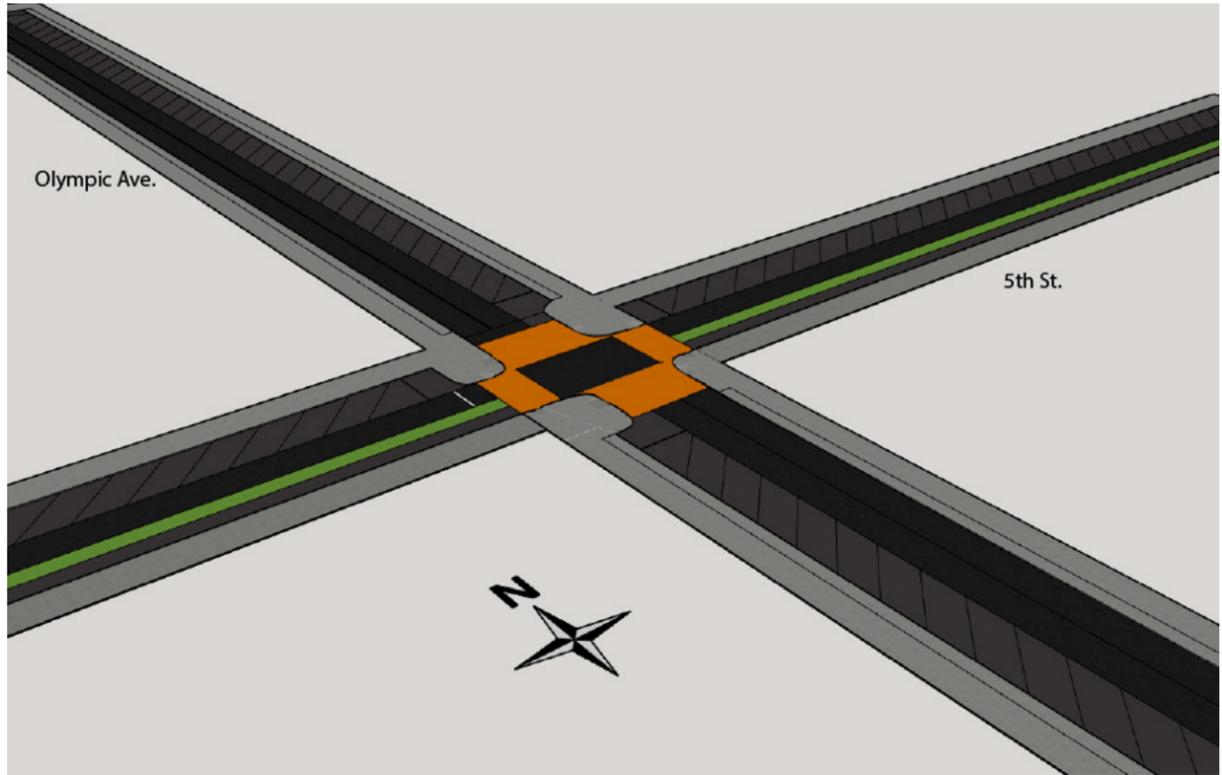


Figure 6.1. Model of the intersection at Olympic Avenue and Fifth Street.

proposed to allow for a larger vehicle turning radius, making street crossings safer for pedestrians. Bulb-outs are also recommended at all Centennial Trail crossings to improve pedestrian safety. The study also proposes a pedestrian mall on Olympic Avenue between 1st and 3rd streets.

*Olympic Pedestrian Mall*  
Olympic Avenue makes up the center of downtown and embodies Arlington’s historic

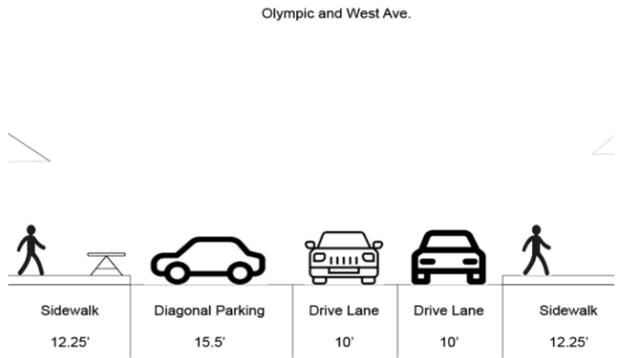


Figure 6.2. Illustration of the proposed (ROW) of Olympic Avenue as described in the report.



Figure 6.3 Model of proposed pedestrian mall on Olympic Avenue between 1st and 2nd Streets looking east from City Hall..

character. To further enhance Olympics Avenue’s walkability, the study recommends converting Olympic Avenue into a pedestrian mall between 1st and 3rd Streets (Figure 6.3). This would entail raising the road level to meet the sidewalk, adding retractable bollards, adding planter boxes and vegetation, incorporating street furniture, and designating the entire street for pedestrian use. The pedestrian mall

would be closed to vehicles at designated times by raising the bollards and opening for traffic when necessary. The raised street would compel drivers to travel slower through the space. It would also connect to the plaza, outlined in the “Public Space” section of this report, in order to serve as a spillover area during festivities in Legion Park and the proposed Civic Plaza. This

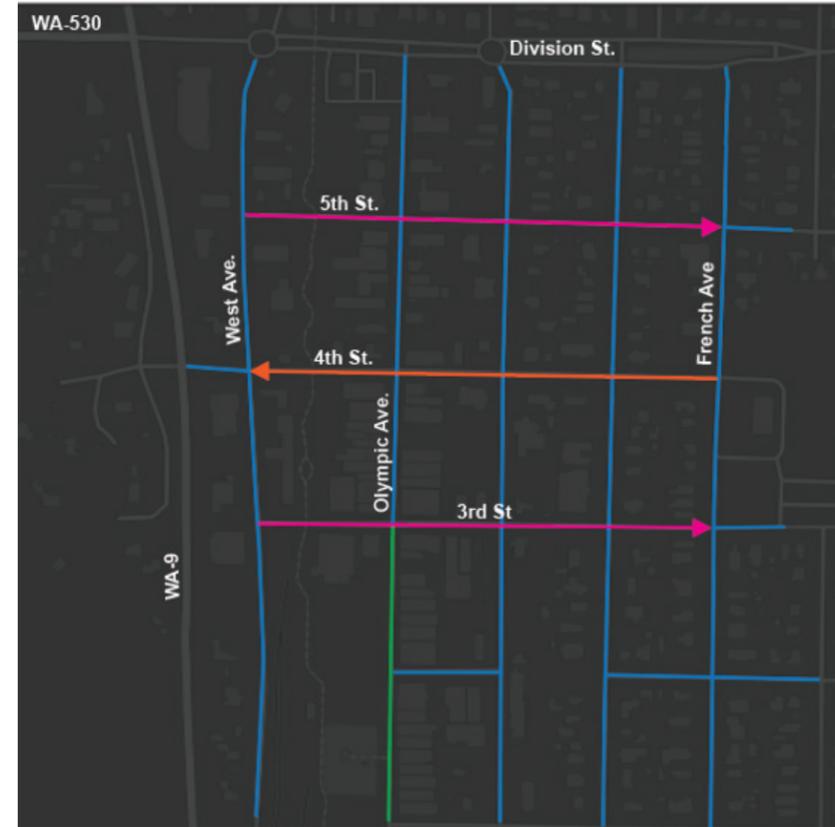
would accommodate an increase in event size that would occur with the City’s growing population. Additionally, the converted street would encourage greater social interaction and boost economic activity in downtown. Figures 6.4 and 6.5 illustrate examples of pedestrian malls in other communities.



Figure 6.4. Pedestrian mall in Boulder, CO.



Figure 6.5. Pedestrian mall in Charlottesville, VA.



**Downtown Street System**

**Key**

- Two Way Street ———
- One Way Street Eastbound →
- One Way Street Westbound ←
- Olympic Pedestrian Mall ———

The purpose of this map is to show where proposed one way streets would run and how far they would run. Pink arrows are eastbound one-way streets, orange arrows are westbound one-way streets, the green line is the Olympic Pedestrian Mall, and the blue lines are two way streets.

Figure 6.6. Illustration of proposed road revisions corresponding with Option A in the study area.

The study devised two options for traffic revisions on 3rd, 4th and 5th Streets.

*Option A: 3rd, 4th, and 5th Street Revision*  
 Option A converts 3rd, 4th, and 5th Streets into one-way streets. 5th and 3rd Streets would run eastbound while 4th Street would run westbound. The one-ways would extend from West Avenue to French Avenue. Additionally, there would be diagonal parking available on Olympic Avenue, West Avenue, 3rd, 4th and

5th Streets. The existing parking available in the study area is not delineated. There are an estimated 480 on-street parking spots currently available in the study area. The new approximately 600 diagonal parking spots would be clearly marked. Figure 6.6 shows the suggested flow of traffic on the streets downtown. The street revision concepts in Option A changes traffic flow, provides traffic calming, and creates a pedestrian oriented downtown. Where the one-way streets turn into

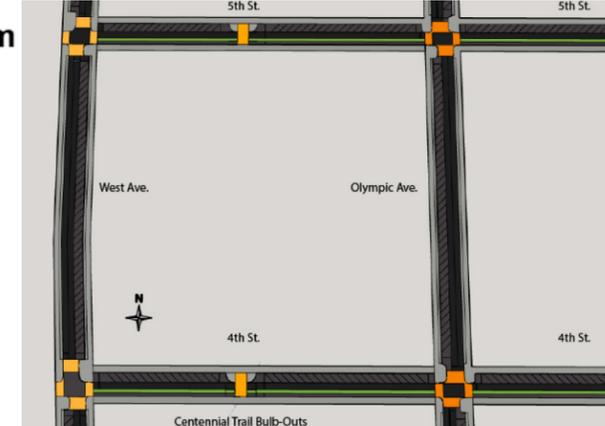


Figure 6.7. Sketchup model of 5th Street with a raised Centennial Trail bike crosswalk.

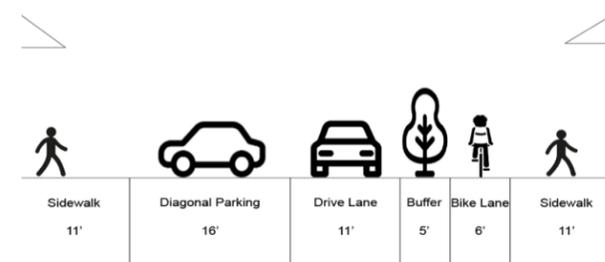


Figure 6.8. Illustration of Option A: 4th Street as a one-way street. This ROW would use the full width of the street and include wide sidewalks, diagonal parking spaces, a one-way driving lane, and a buffer between the car and bike lane.

two-way streets at French and West Avenues, ‘do not enter’ signs would be posted for traffic facing toward downtown and road paint would be added to make the changes apparent to drivers. The one-way streets would include four-way stops at each intersection to slow traffic and make pedestrian crossings safer. In addition, where these streets intersect with Centennial Trail bicycle crosswalks would be added. The bicycle crosswalks would be raised

from the street level and would act as a speed bump for cars. Figures 6.7 and 6.8 provide a visual of the ROW and streetscape depicting these revisions.

*Option B: 3rd, 4th, and 5th Street Revision*

As an alternative to the one-way street system, 4th and 3rd Streets would be retained as two-way streets with diagonal parking on one side and parallel parking on the other. 3rd and 4th Streets would not have bike lanes. Arlington’s bike improvement plan outlines 5th Street for bike lanes. Figures 6.9 and 6.10 depict the proposed Option B ROW design.

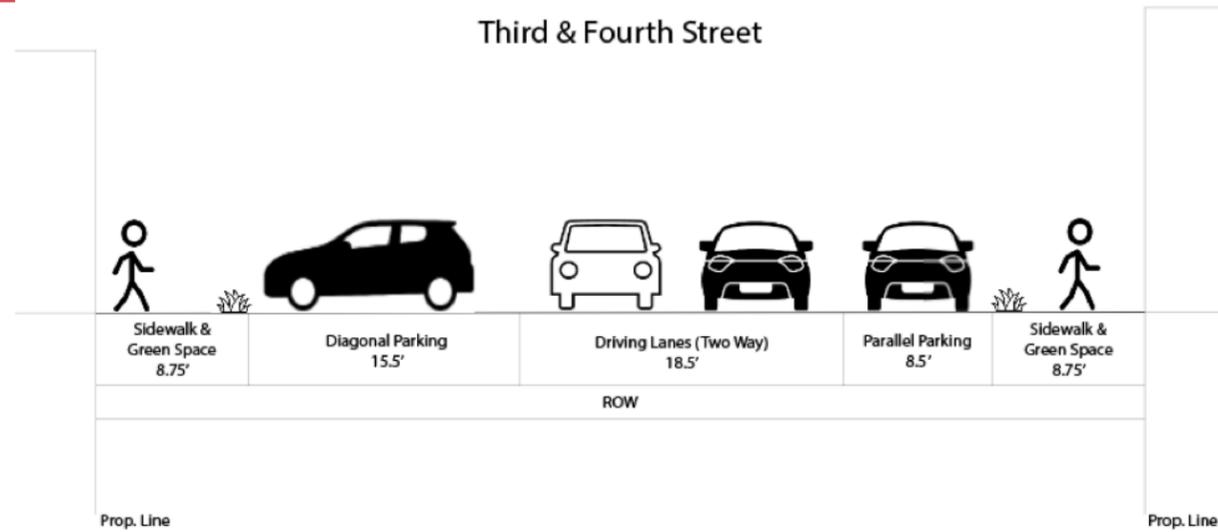


Figure 6.9. Illustration of Option B; 3rd & 4th Streets are two way streets with increased parking and sidewalk space.

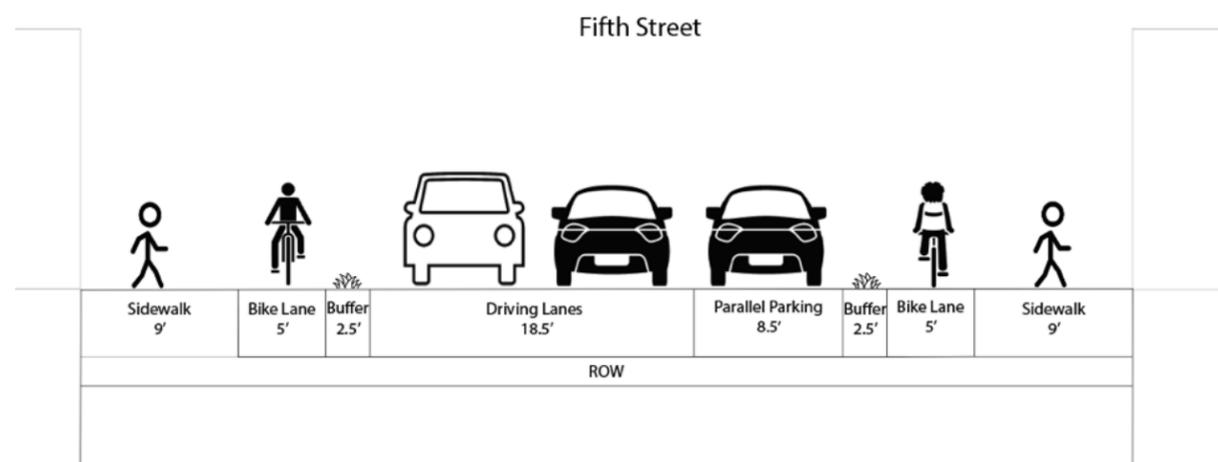


Figure 6.10. Option B, the ROW for 5th Street, including bike lanes and two-way streets.

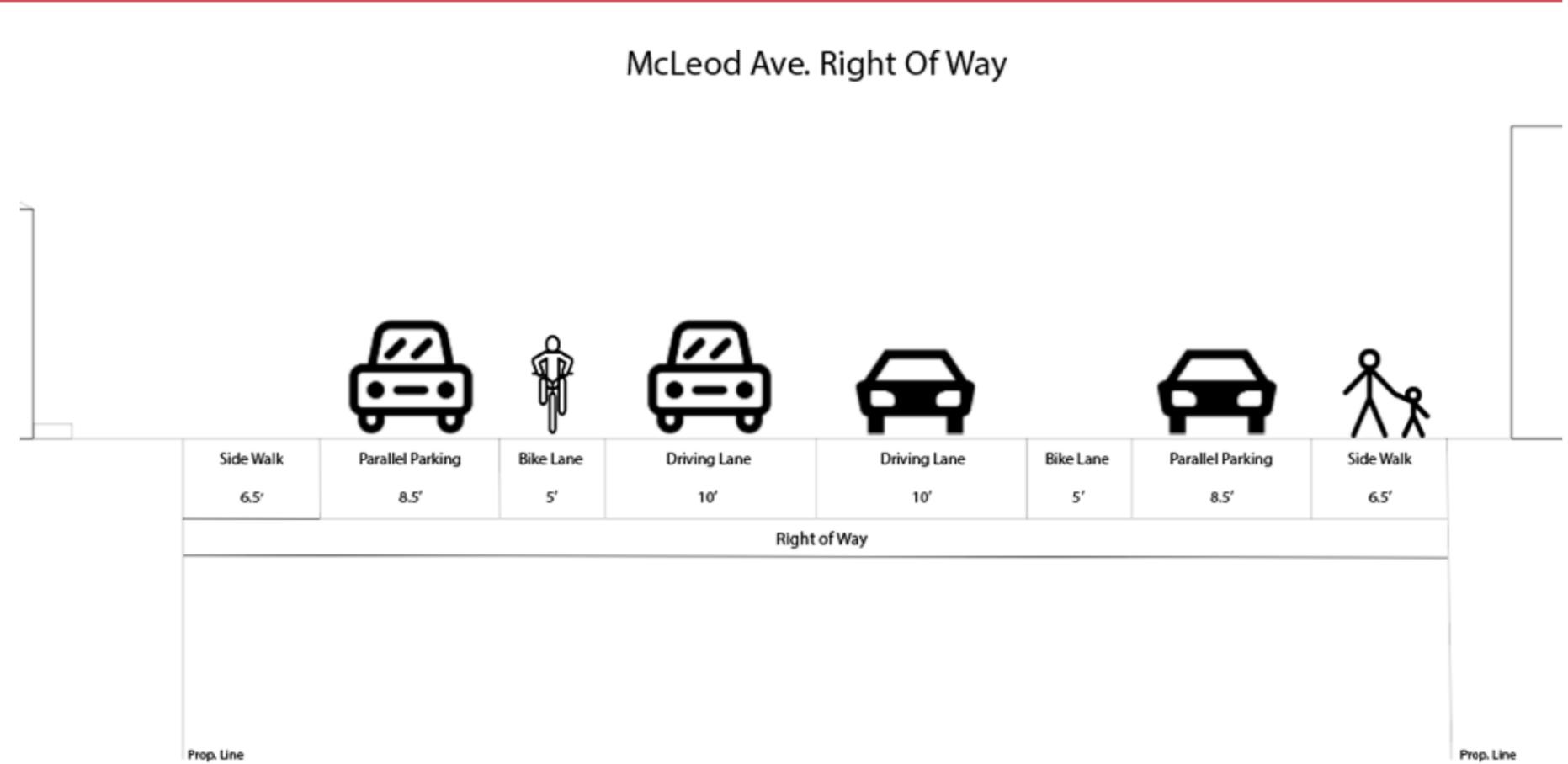


Figure 6.11 Illustration of revisions to MacLeod Avenue.

*MacLeod Avenue*

The study recommends improvements to MacLeod Avenue with the inclusion of continuous sidewalks and bike lanes on both sides of the street. Figure 6.11 depicts the 60-foot ROW inclusive of the multi-modal transportation features. Retaining MacLeod Avenue as a two-lane road accommodates

forecasted growth. The 20-foot dimensions in the middle of the ROW provides 10-foot travel lanes for traffic calming, making it safer for both cyclists and pedestrians. The sidewalks are narrower on this street because it is expected that there would be less foot traffic than on Olympic and West Avenues.

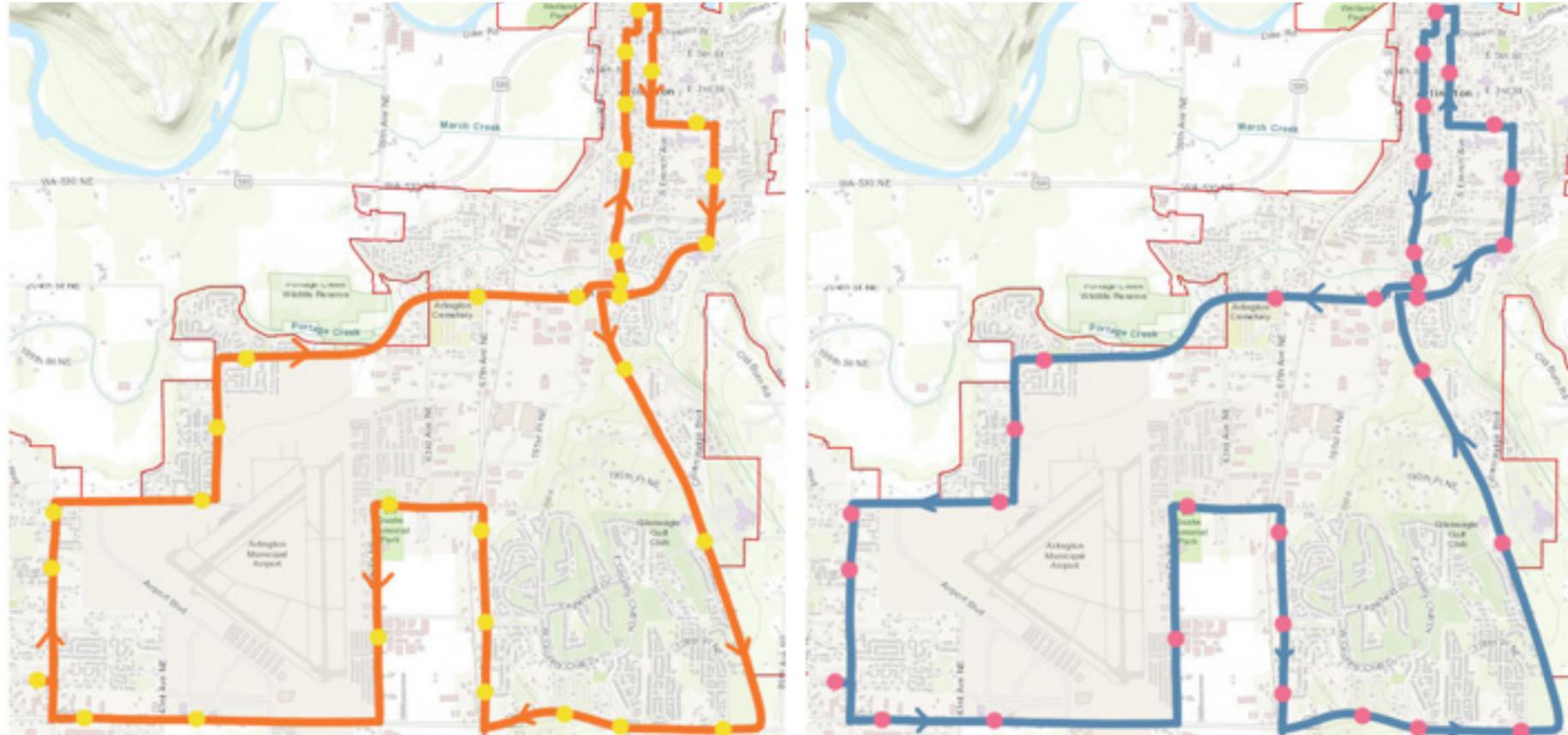


Figure 6.12 and 6.13. The same routes flowing clockwise and counterclockwise. Both routes are proposed to operate simultaneously. A 30-minute interval would require 2-3 buses in each direction (4-6 buses total).

**TRANSIT REVISIONS**

During the October 2019 community workshop, residents expressed that their reason for not using the bus was the infrequency of service. To address infrequency, residents suggested a continuous shuttle-style service with a frequency of 15-30 minutes.

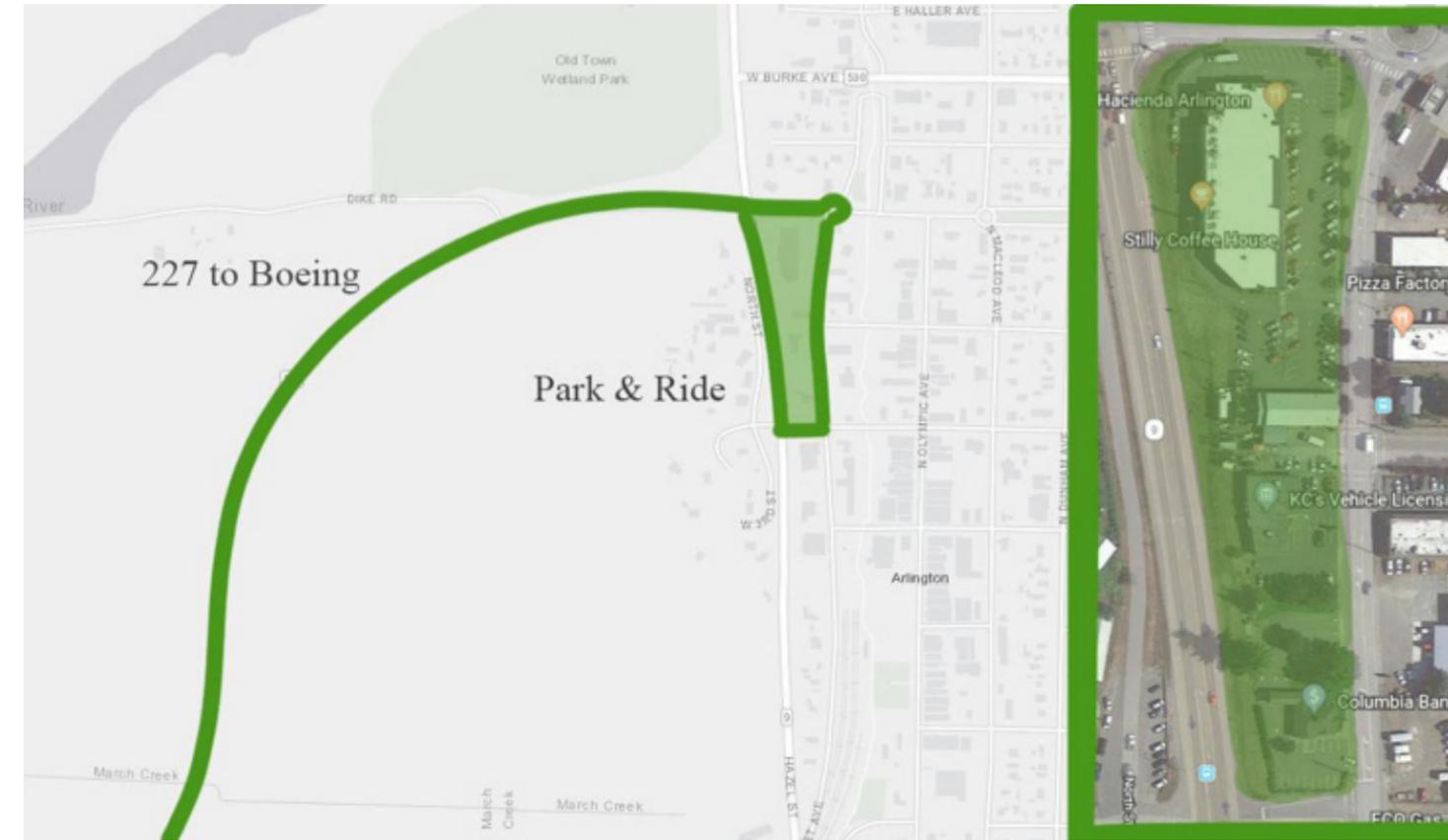
**Bus Routes and Amenities**

While Arlington’s current population likely could not sustain a shuttle service every 15-30 minutes, a schedule would become more feasible with Arlington’s projected growth and the increase in urban density within the downtown. Increased bus service and infrastructure improvements would increase transit use and reduce single occupancy car traffic. While the current bus routes largely serve the working community, there should be

greater consideration for people who are more disenfranchised, such as children, elderly, and low-income populations. Stops should be added at parks, retirement homes, and Smokey Point Transit Center. Figures 6.12 and 6.13 present a recommended bus route that would take an estimated 60 to 90 minutes.

**Park and Ride**

The Arlington Complete Streets Program does note the lack of parking at the Smokey Point Transit Center and the impact it has on ridership. Figures 6.14 and 6.15 show a possible location for an additional park and ride facility.



LEFT: Figure 6.14. The Complete Streets Program suggests a park and ride located downtown, which would relieve some parking issues downtown. However, it may interfere with the businesses and this parking lot location may be better utilized as a higher density mixed-use site.

ABOVE: Figure 6.15. The forested lot adjacent to the transit center. This parcel provides an opportunity for a park and ride.

*Bus Stop Safety and Comfort*

Having well-lit covered bus stops is important for the safety of passengers and provides better visibility to bus drivers. This is particularly important during the rainy period in late fall and winter months. The addition of amenities such as signage, benches, weather protection, and buffers from traffic can make bus stops more enjoyable.

*Passenger Train Connection*

At the October 2019 community meeting, Arlington residents mentioned that the railroad tracks that end in downtown are an asset due to their historical value. Currently, the rails are used for train car storage. Considering the growing population projections for Arlington and the Seattle- Everett metropolitan region, connecting these rails for passenger use could provide for a more efficient and sustainable transportation system. The continuous rail line between Seattle and the Canadian border is owned by BNSF Railway, which already supports both industrial and passenger trains. Currently, the closest train station to Arlington is the Stanwood Station, which is about a 20 minute drive in light traffic (Figure 6.16). Establishing another connection could alleviate some commuter traffic by shortening trips.

Arlington’s history as a railroad town

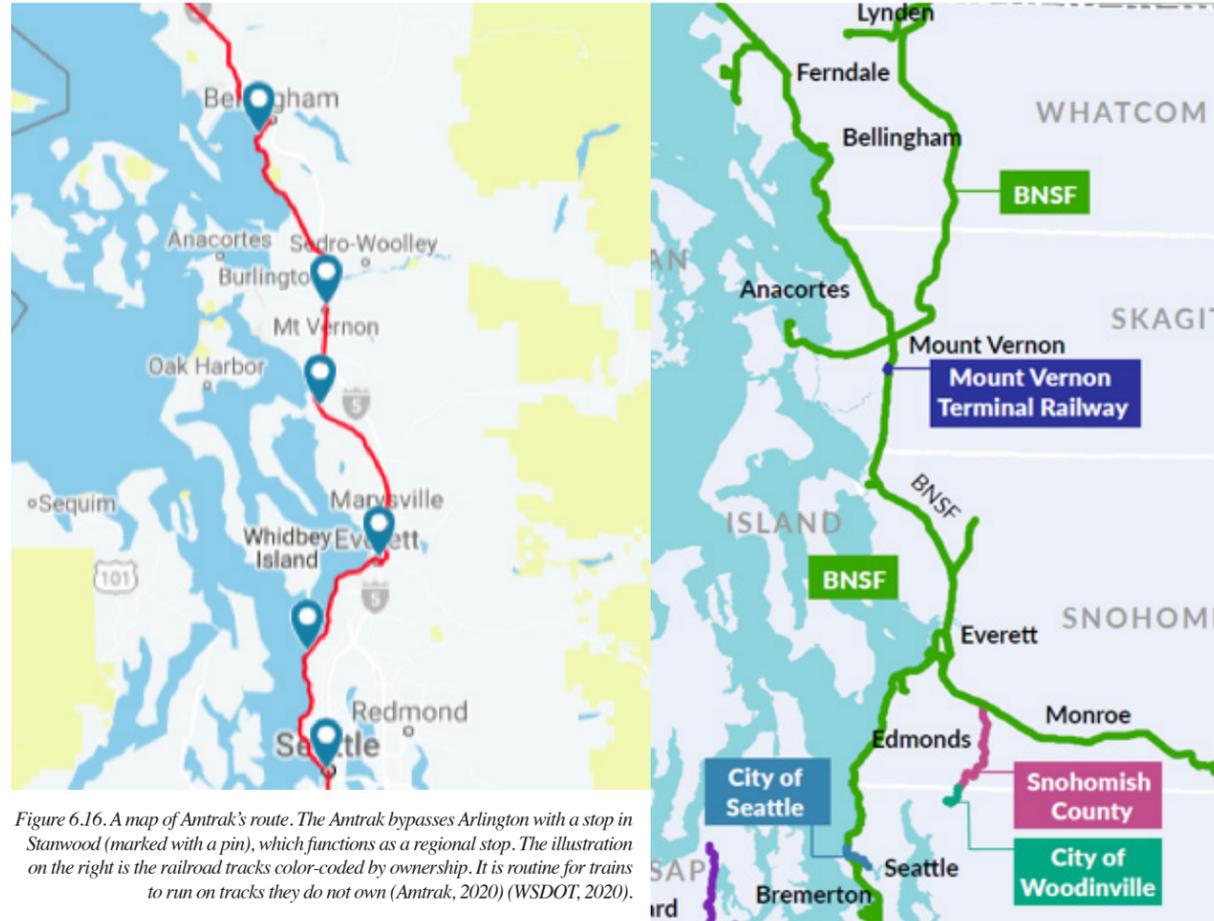


Figure 6.16. A map of Amtrak's route. The Amtrak bypasses Arlington with a stop in Stanwood (marked with a pin), which functions as a regional stop. The illustration on the right is the railroad tracks color-coded by ownership. It is routine for trains to run on tracks they do not own (Amtrak, 2020) (WSDOT, 2020).

provides an opportunity to recreate a transportation system that connects the downtown to the greater Puget Sound. This travel corridor could make commuting much easier for people who would otherwise use I-5, especially as congestion increases. The study recommends investigating the possible inclusion of a light rail. Light rails are

often preferred for downtown development because they are quieter than industrial-grade trains. Figure 6.17 shows proposed railroad revisions.

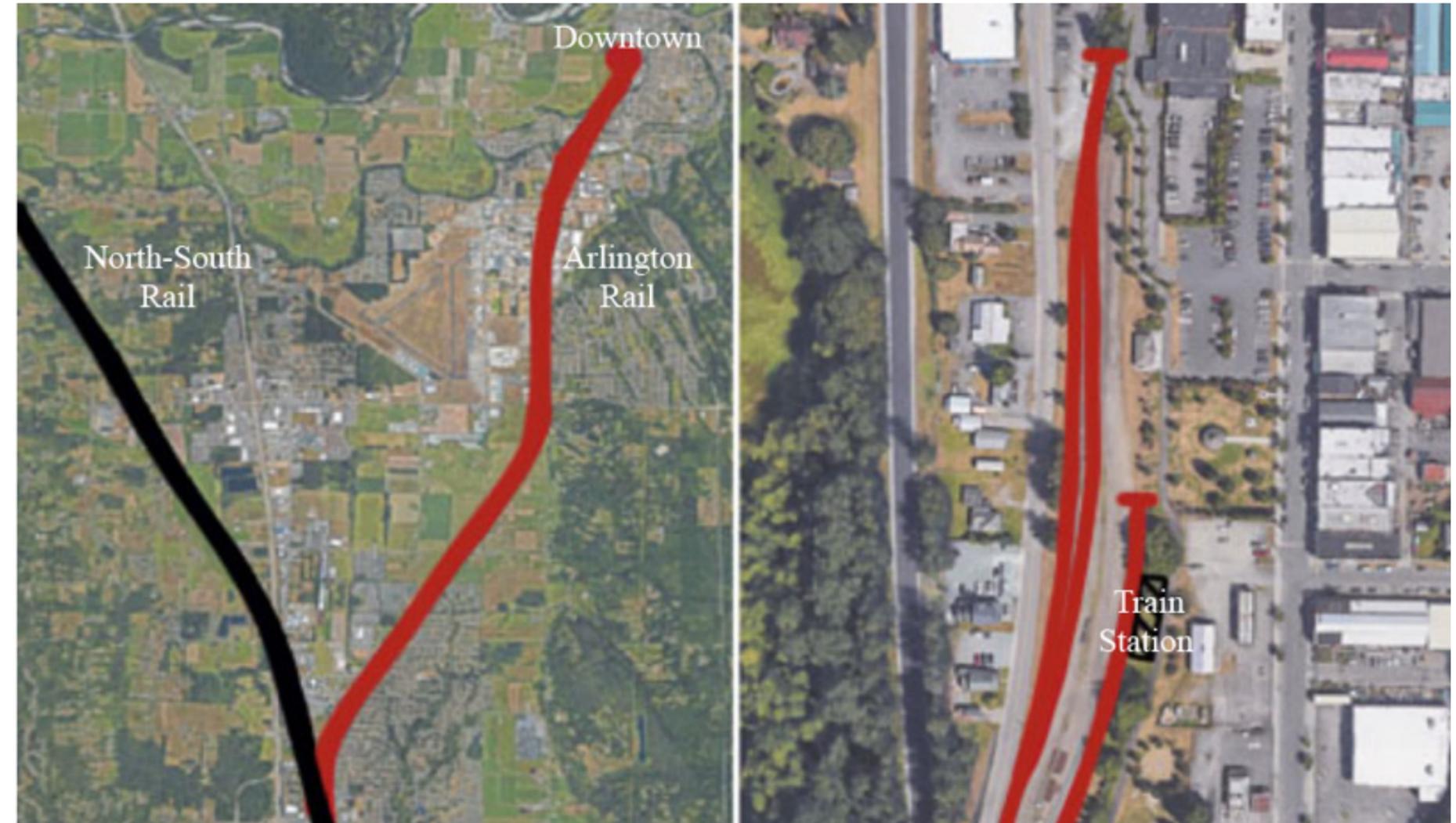


Figure 6.17. A visual of the existing railroad lines. The black line is the railroads used by Amtrak. The railroads connect in North Marysville. The image to the right is the rail line in downtown Arlington that could be repurposed into a commuter light rail system. The other rails could potentially be removed and the space could be used for park or redevelopment.

## PUBLIC PARKING FACILITIES

There are four locations within the study area that can support parking structures, including Olympic Avenue and 3rd Street, 338 MacLeod Avenue, 220 West Avenue, and 316 West Avenue. These parcels support two different types of parking structures that could serve the purpose of relieving pressure on parking demand associated with growing residential and commercial density. Figure 6.18 depicts a preliminary concept drawing of proposed parking structures on Olympic Avenue and Figure 6.19 shows the concept as a model.

In addition to the surface parking lot,



Figure 6.18. A concept drawing of Olympic Avenue and 3rd Street.

additional parking can be provided underground with access on West Avenue. The existing surface parking lot on Olympic Avenue would be reduced to provide for a new civic building and retail businesses fronting Olympic Avenue. The design provides for dual frontage of retail businesses onto a sidewalk abutting the parking lot. Green buffers between the pedestrian areas and the parking lot are also provided. The surface parking lot has a capacity for 81 parking spots at 45-degree angled spaces as well as four handicap parking spaces. The underground parking structure would provide for an additional approximately 81 parking spots as well as an enclosed parking area for

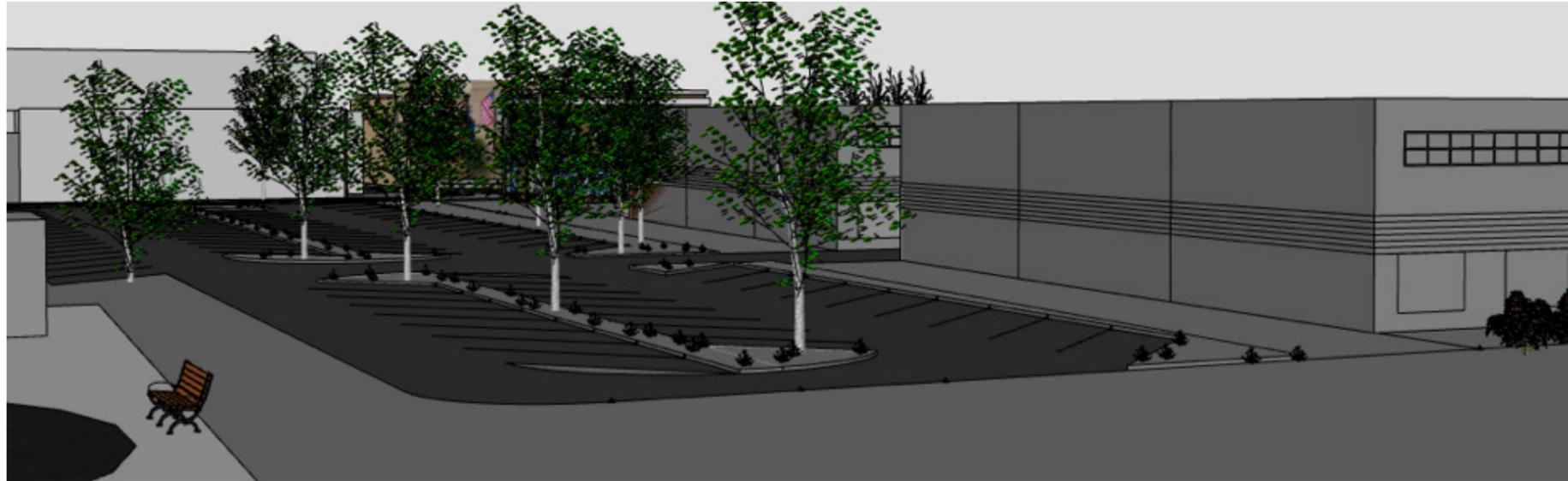


Figure 6.19. The proposed parking lot off Olympic Avenue and 3rd Street.

exclusive police parking. An elevator could be installed between the police station and the police parking area. The underground parking structure would be accessible by staircases and an elevator.

The parking lot next to 338 MacLeod Avenue is a prime spot for additional public parking. This location currently serves as a parking lot for a church and funeral home. By transforming this location to a three-story parking garage, with one level above ground, one level at ground level, and a third level underground, the site could triple the amount of parking that is available in the downtown core (Figure 6.20). Ivy or other vegetation could be used to obscure the parking structure. This parking structure would provide 45 parking spots along with motorcycle and handicap parking.

Additional parking structures at 220 and 316 West Avenue (Figure 6.21) are recommended to provide high density and mixed-use buildings with underground and street level parking structures. The buildings would provide commercial retail space along West Avenue with residential units on upper stories. In addition to the public parking facilities proposed in this study, higher density infill development would be required to provide on-site parking for building occupants.



Figure 6.20. A proposed parking structure next to 338 MacLeod Avenue.



Figure 6.21. A proposed parking structure next to 338 MacLeod Avenue.

### BIKE AND PEDESTRIAN NETWORK

#### Safe School Routes

Safe routes to schools should be an essential part of the city’s bike and pedestrian network. As shown in Figure 6.22, in the Bicycle Improvement Plan and Pedestrian Improvement Plan, Arlington has proposed multiple improvements that would increase safe routes to school through better bike and pedestrian path connectivity.

Arlington could further develop both its physical and social assets to achieve safer routes to school. Physical improvements that would improve the safety of pedestrian and bike routes include but are not limited to: rumble strips or bumps along the edge of roads, better lighting on pedestrian/biking paths, physical barriers between cars and pedestrian/biking paths (such as bollards, planters, or curbs), raised crosswalks at critical intersections, and high-intensity activated crosswalk (HAWK) beacons. In addition, Arlington could work with schools and community members to develop programs that encourage safer routes for students. This might include educational programs in schools to teach students pedestrian and bike safety and contests or events that encourage students to use more active modes of transportation.

The US Department of Transportation National Highway Traffic Safety Administration has developed a toolkit to assist communities in

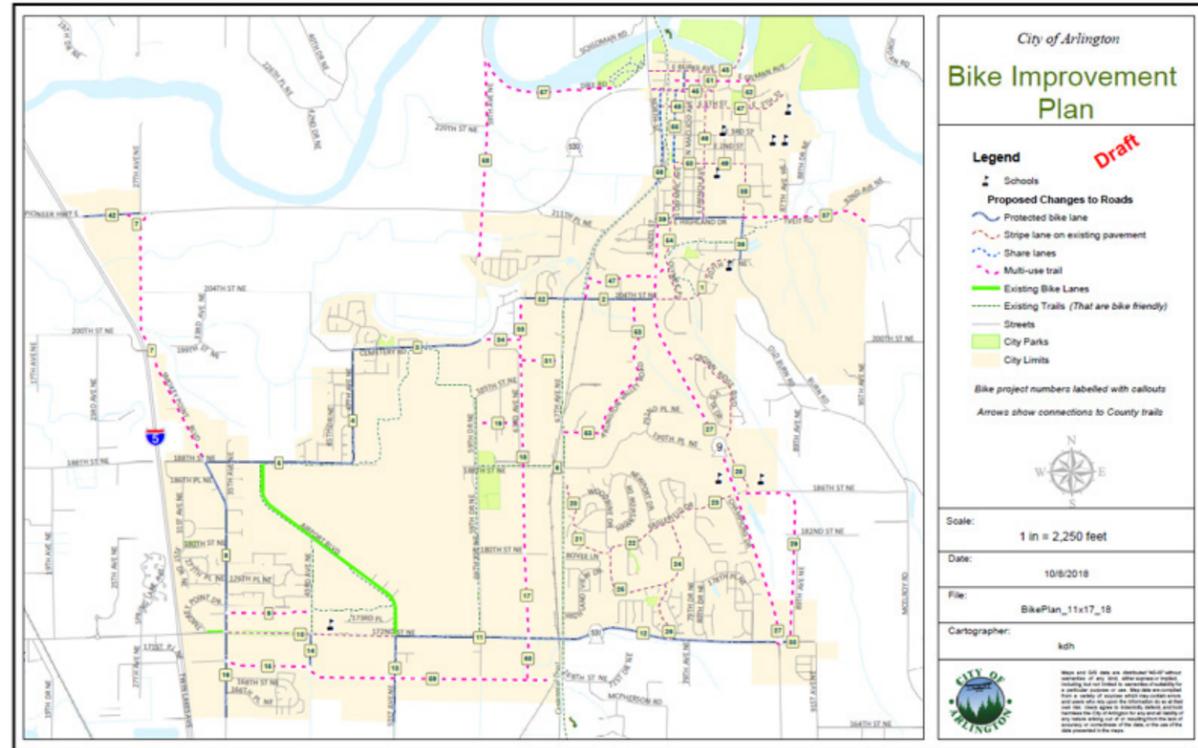


Figure 6.22. Schools like Arlington High School, Pioneer Elementary, and Weston High School would have better pedestrian and cyclist access.

ensuring safer routes to school. The Complete Streets Program covers funding options for safer school route actions.

#### Pedestrian Safety: Commuter and Non-Recreational Trips

In 2018, Arlington adopted a complete streets ordinance that is focused on meeting the needs of everyone who uses the transportation infrastructure. This includes drivers, family and commuter cyclists, pedestrians, people with accessibility needs, and public transit riders. The

street layouts proposed in this report support the goals of the Complete Streets Program.

The Centennial Trail is an invaluable asset to the Arlington community and could be expanded to connect to a network of trails for commuting and recreation. Connection of the Centennial Trail to other trails in the city would encourage Arlington residents to walk to run errands or access downtown services, thereby helping to reduce car trips and traffic. Figure 6.22 shows areas near downtown where the addition of trails could



Figure 6.23. The proposals for trail connections from downtown to residential areas.

encourage residents to walk instead of drive to several popular spots in town. For improved trail connectivity, the Portage Creek Wildlife Area could be connected to the Centennial Trail. The residential area east of downtown could also be connected by trail to downtown. Figure 6.23 shows how trail connections could be made.

## ENVIRONMENTAL HAZARDS AND CLIMATE CHANGE RISK

reduce exposure to potential disaster situations.

### Noise

As a small city, Arlington has low noise levels. The major sources of noise pollution in the city include Highway 9, Interstate 5, and the Arlington airport (Arlington, WA, 2017). Construction and development, which will be necessary to accommodate growth in the city, are known to result in increased decibel levels. Once development activities conclude, the sound levels can be kept to a minimum by using noise mitigation strategies. Some of the leading noise mitigation practices common in municipalities

include strict noise codes that require contractors to implement a noise mitigation plan before starting a project, restricting excessive animal noise depending on the time of day, and establishing maximum decibel levels for noise associated with bars or restaurants (NYC, n.d.). Noise mitigation plans can ensure that noise pollution does not increase with growing populations and increases in density.

### Stillaguamish River

The Stillaguamish River is an important natural feature within Snohomish County and Arlington. The North and South forks of the river meet at

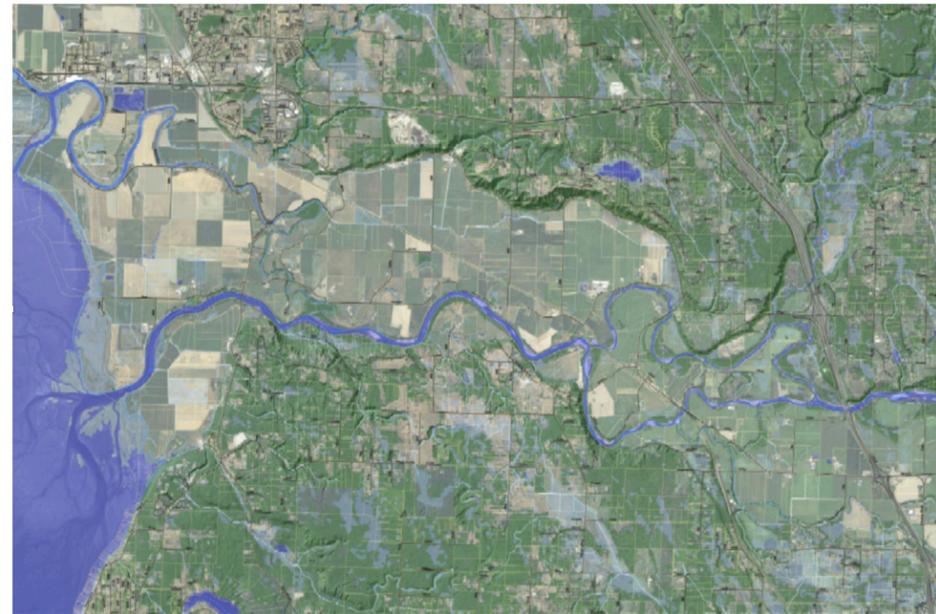


Figure 7.1 shows the Stillaguamish River and Valley. Arlington is near the middle of the image where the two forks of the river meet (Snohomish County, 2017).

the edge of the city. The river provides ample opportunity for recreation and wildlife habitat, and is appreciated for its natural beauty. As the river approaches the city, flooding becomes a risk to residents, businesses, and wildlife within the floodplain. New development in and near the current 100-500 year floodplain should be well monitored. In a 2017 report, FEMA identified that Snohomish County is in need of floodplain updates (FEMA, 2017).

Increasing native vegetation is a strategy to mitigate flooding and prevent landslides and mass movements that are triggered by flooding. In Europe, many cities are looking towards adopting a blue-green city model. The idea behind a blue-green city is to incorporate environmentally friendly building practices with supporting natural water cycles (EEA, 2016). Adopting new building and development codes related to water and river health can protect the river and all of its qualities that the community enjoys such as boating and fishing.

### North Stillaguamish Valley

The North Stillaguamish Valley runs directly through the city and is home to the Stillaguamish River, wildlife, and agricultural lands. Figure 7.1 shows the Stillaguamish River running through with the two forks meeting in Arlington (Snohomish County, 2017). The valley is a vital resource to the Stillaguamish Tribe, for local food production and food security, and for its

contributions to the local economy (Snohomish County, 2017).

### ENVIRONMENTAL HAZARD MITIGATION AND CLIMATE ADAPTATION

Environmental hazards are geological or weather-related events and, when combined with human or wildlife vulnerability, can result in disaster. Hazards can be destructive to critical infrastructure such as road systems, water treatment plants, power services, and other kinds of built infrastructure that people depend on. There are several identified environmental hazards relevant to downtown infill: flooding, tsunamis, earthquakes, landslides, wildfires, severe weather, and volcanoes. Actions can be taken to mitigate and adapt to these hazards. Mitigation strategies are intervention techniques that take place in a particular geographical location to reduce losses and future risks from hazards. Climate adaptation refers to actions taken to natural or human systems as a response to current or projected climate behaviors in order to achieve a desired outcome (San Diego County, 2015). The combination of climate change and population growth are expected to increase the magnitude and intensity of hazards. This chapter identifies best management practices for climate adaptation and hazard mitigation techniques that can be implemented in Arlington.

### Earthquakes

The city of Arlington is in close proximity to several fault lines including Devil's Mountain, South Whidbey, and the Cascadia faults. Figure 7.2 shows the location of these faults in proximity to the city. Experts predict that future earthquakes will damage bridges and overpasses in the region and may shut down connective transportation systems, including Highways 9, 530, 531, and Interstate 5 (Snohomish County, 2015). Prominent risk of soil liquefaction triggered by ground movement is also expected to collapse critical infrastructure. Unreinforced masonry (URM) is particularly vulnerable to collapse from ground movement and liquefaction. There are two known URM in the study area that are of primary concern. Buildings prior to the year 2000 are likely not built to current earthquake codes. While these buildings pose a potential threat to the health and safety of the community, considering the potential impact to Arlington's historical characteristics is also important. Secondary URM concerns include structures such as unreinforced chimneys and walls.

Arlington can implement best management mitigation strategies to foster resilience to earthquakes such as zoning, stricter building codes, conducting building assessments, and reinforcement and redevelopment of weak buildings. Expanding the downtown outside

### ENVIRONMENTAL RESOURCE ENHANCEMENT PLAN

The City of Arlington has several natural resources that are valuable to the community and its character. Natural resources are important to identify and consider in the planning process in order to protect the benefits they provide to the community and to its visitors. Natural resources associated with downtown Arlington include the quiet atmosphere with minimal noise pollution, its proximity to the Stillaguamish River, and the North Stillaguamish Valley's beauty.

### Environmental Hazards and Resources Goals

The goals and policy section in the Comprehensive Plan should connect the land use hazards goals and population growth goals to the climate change emissions goals. The first goal proposed is to reduce greenhouse gas emissions and the impacts of increased extreme weather events that are predicted in the region in order to preserve natural resources and foster a resilient community as it grows. A second goal proposed is to develop and implement continuous mitigation and adaptation techniques to combat climatic changes that impact local resources and

of the current study area could encroach on higher risk areas. If expansion does occur outside of the current downtown, zoning could be used to prevent dangerous development, and strict building codes that account for the expected magnitude earthquakes could be strictly enforced. Building assessments should be conducted in the downtown to identify URMs. Once weak buildings are identified, they should be reinforced using parapet bracing, wall to roof diaphragm anchors, wall to floor diaphragms, or redeveloped to avoid collapse and potential damage.

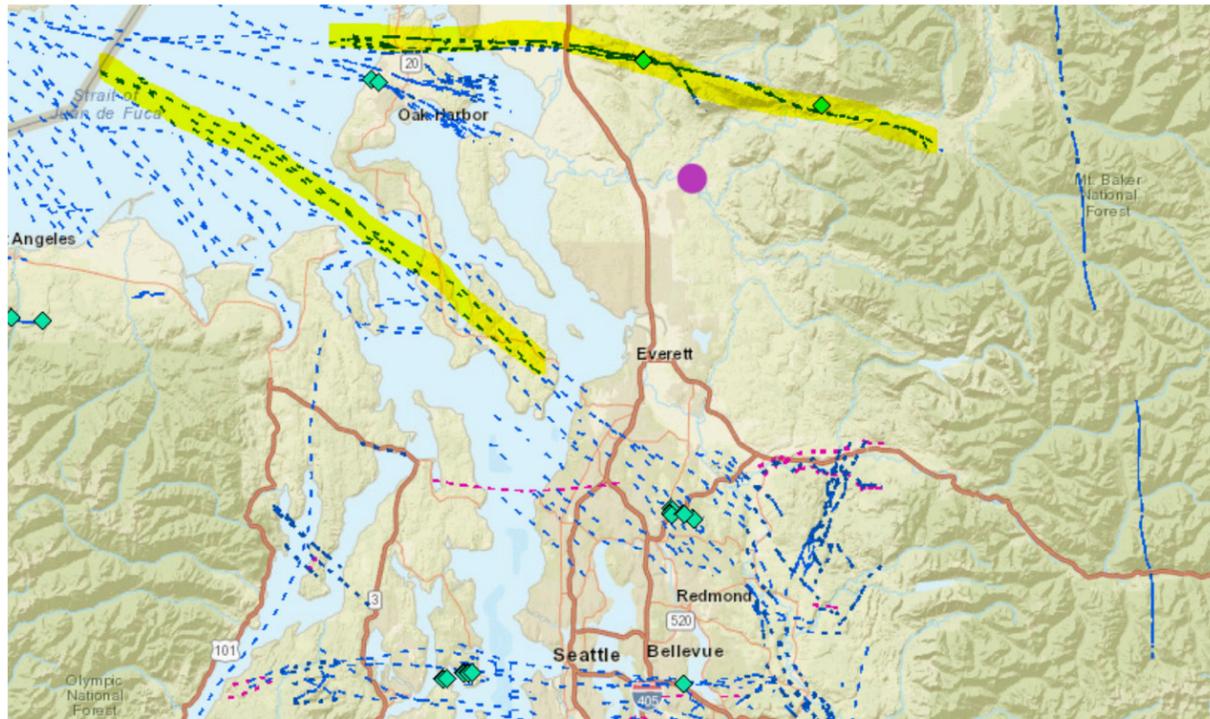


Figure 7.2 shows the fault lines of highest concern to Arlington, indicated by the purple dot. These faults pose a moderate shake factor to Arlington (DNR, 2020).

### Wildfires

Wildfires represent a low threat to the study area; however, considering climate change, increasingly drier and hotter summers, and decreasing snow melt, fire seasons are expected to be longer and more severe (DNR, 2020). The wildland urban interfaces (WUIs) are expected to expand with climate change which could lead to newly proposed infill being too close to a growing fire risk. After a fire occurs, rainstorms can trigger erosion and flooding due to the reduction of vegetation and poor

soil retention. It is also important to note that the elderly are most vulnerable to fine particle pollution from wildfires which can cause cardiac and respiratory complications (Simoni, 2015). Increases in water demand during summer also exacerbates declining water supply. This could be problematic for Arlington because the closest watersheds are the Stillaguamish and the Snohomish watersheds which contain wildfire risk zones.

There are multiple ways to mitigate wildfire risk. Using fire-resistant building materials such as metal, tile, and stucco is an effective strategy which can be enforced by local governments. The average roof is 1,700 square feet and at \$4-\$7 per square foot, replacing the roof of an average home with fire resistant materials would cost \$6,800-\$12,000 on average (FEMA, 2008). Establishing defensible space is another mitigation option which involves plant removal, planting fire-resistant vegetation, and shielding flammable substances within a 100-200 foot radius around a structure (FireWise, 2008). This strategy costs around \$4,000-\$5,000 per acre. Another technique is land use policy and regulations which can dictate building materials or implement development bans in WUIs (FEMA, 2013).

### Volcanoes

Volcanic activity occurs relatively infrequently in Arlington. Glacier Peak is the closest active volcano to Arlington, located about 50 miles east

of downtown. Glacier Peak has a limited amount of monitoring which could reduce warning (USGS, 2015). Ashfall and lahars are two of the biggest threats from an eruption. Heavy ashfall can cause corrosion and collapse from vertical weight load. Roof collapse is predicted to affect buildings in Arlington if the ashfall is mixed with moisture such as rain. According to the Volcanic Ashfall Impacts Working Group, “metal roofs, fastenings and claddings may be vulnerable to

corrosion when exposed to ash” (USGS 1, 2015). Ashfall can also collapse buildings, cause traffic accidents, prevent air travel, and be hazardous to human health (USGS, 2015).

Lahar flow data is currently the same as flooding data in the Stillaguamish River, and there is no anticipated direct threat to the study area. However, the access routes to downtown would be impacted in the event of a lahar flow. Figure

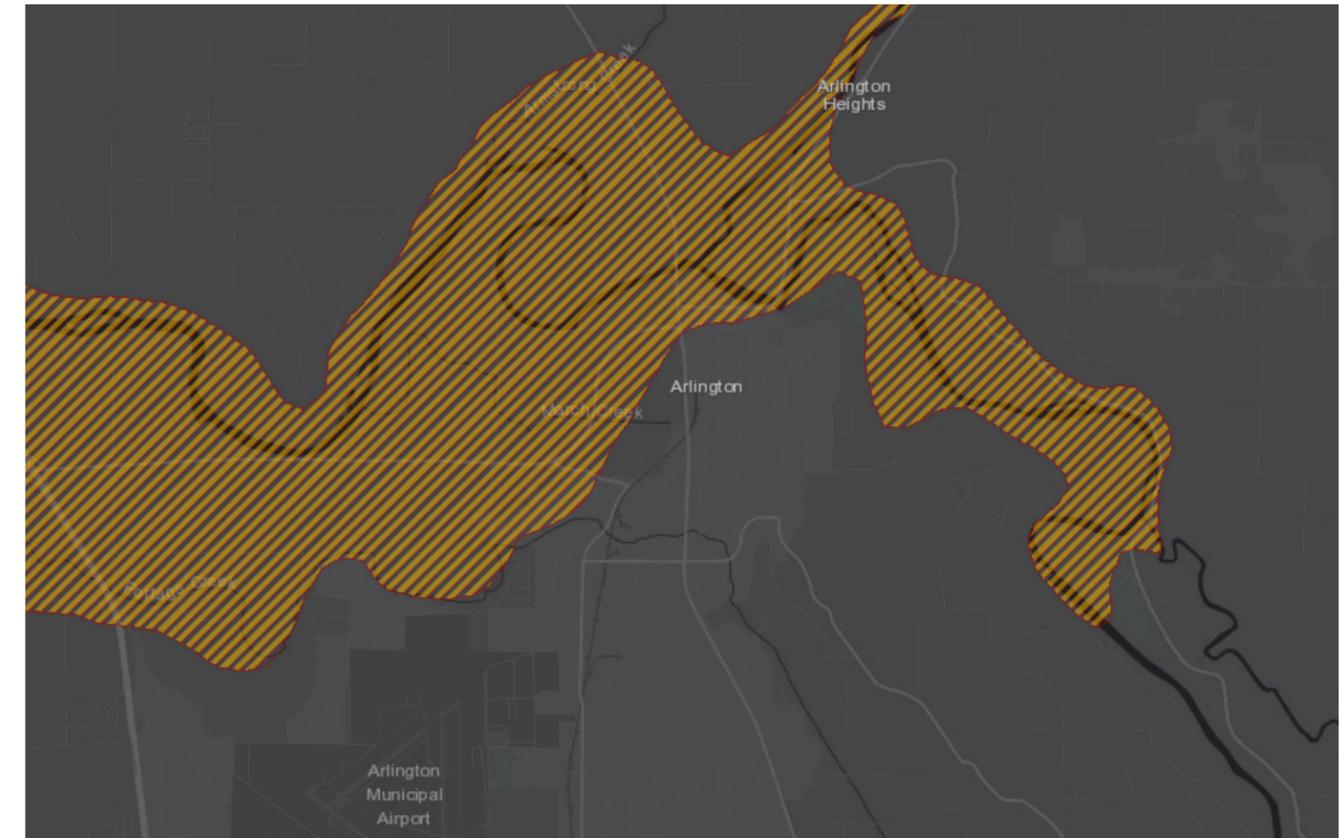


Figure 7.3 shows potential lahar flows in the event of a Glacier peak eruption. Lahar flows are symbolized by the yellow hatched lines. Arlington is affected north of division street and west of highway 9, including the obstruction to highway 530 (Snohomish County, 2018).

7.3 shows the lahar map for the Stillaguamish. There are 499 buildings in Arlington that are exposed to volcano and lahar risks with damage estimated at \$123,307,500 (Snohomish County, 2015). Knowing which buildings are at risk is an important step toward protecting existing and new infrastructure as well as public health and safety.

Consideration of more stringent mapping could

be implemented at the city level. The primary mitigation actions recommended for volcanic activity are: constricting growth to areas outside of lahar zones, enacting stricter building codes for materials and vertical load capacities, and developing a plan for mitigation and response to ashfall. Humboldt County’s Volcano Ash Contingency Plan is a good model for ashfall mitigation, recovery, and response. Education and awareness programs would be an effective way of ensuring the safety of Arlington residents as a lower cost option.

*Tsunami*

Although the city of Arlington is not located along the coast, the Stillaguamish River is susceptible to flooding during tsunami events in the Puget Sound. Tsunamis are caused by motion in the ocean floor, such as seismic events, that produce a series of waves. There is limited data on Arlington’s tsunami vulnerability. Snohomish County’s Department of Emergency Management used a hypothetical worst-case scenario to identify the Tsunami Risk Zone. Figure 7.4 shows the simulation of the Cascadia Subduction Zone earthquake of 9.0 magnitude, and the high wave

activity at the mouth of the Stillaguamish River. The simulation has not been mapped to include the more inland portions of the river. Tsunami mitigation is similar to flooding mitigation.

*Flooding and Landslides*

The most concerning area for flooding in Arlington is the Stillaguamish River. Flooding is overflowing water onto typically dry lands which can be triggered by landslides, wildfires, earthquakes, heavy precipitation, dam breakage, rapid snow melt, and tsunamis. Arlington’s current 100-year floodplain does not extend into the study



Figure 7.4 shows a DNR map of The Cascadia Subduction Zone 9.0 earthquake simulation. Port Susan Bay near the Stillaguamish River mouth is circled in red. The dark red displayed in the circled area means those waters could potentially be 10 feet or higher in this tsunami scenario (DNR, n.d.).



Figure 7.5 displays FEMA’s preliminary DFIRMs of Arlington’s 100-year floodplain in blue, the 500-year floodplain is shown in orange (FEMA, 2016).

area. A 100-year flood event means that the river has a 1% chance of rising to a calculated height every year. FEMA is in the process of creating online Digital Flood Insurance Maps (DFIRMs) for Snohomish County. The preliminary DFIRMs are available online, however, they are difficult to locate. Figure 7.5 shows the flood hazard area that is vulnerable to the 1% chance of flooding. Climate change is forecasted to intensify flooding in the future due to increases in temperature, snow melt, and rainfall, and decreasing water retention in soils. Downtown Arlington is not in immediate threat of flooding because of its higher elevation.

Steep slopes surrounding the study area could be triggered to slide during flood events. Figure 7.6 shows the areas highly susceptible to liquefaction. Liquefaction causes soil to flow like liquid causing floods and landslides, which is dangerous for both humans and infrastructure stability. The slopes west of downtown have high susceptibility to liquefaction. When intense liquefaction occurs, higher elevations (including locations in the study area) will likely experience ground movement.

One effective mitigation strategy for landslides is a combination of hazard mapping, climate change forecasting, and site selection which can inform

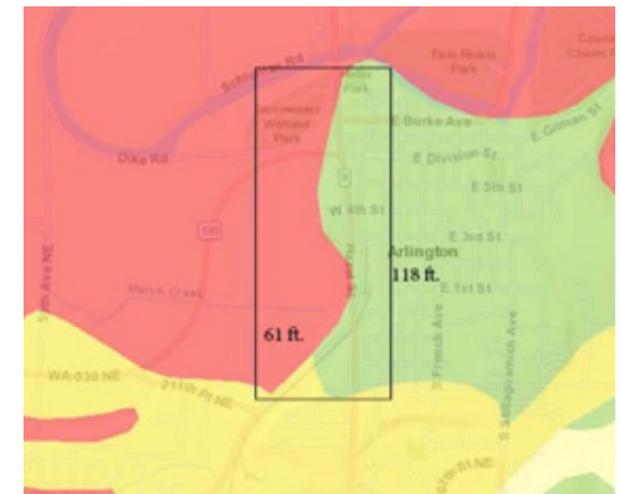


Figure 7.6 shows the liquefaction risks in and near the study area. Red areas are of highest risk and green of lowest. The text depicts elevation. (DNR, 2020).

land use planning. Layering critical facilities, infrastructure, occurrences of landslides, vegetation, soil, and slope data is a best practice for landslide hazard mapping. To mitigate flooding on critical roads, Arlington should consider creating flood resistant roadways with drainage infrastructure and ditches to minimize damage to roads. Mitigation for flooding could also include installation of rain gardens and french drains near the river and at locations within the study area.

*Climate Change: Severe Storms and Extreme Weather Events*

Climate change is impacting the frequency and severity of storms and weather events across the world. Climate change, and its influence on storms and weather events, is an agreed upon fact by more than 97% of scientists today (NOAA, 2020; UN, 2015). Severe storms and extreme weather expected in this region include increased snow accumulation, wind, flooding, drought, and rainfall, along with problems associated with slope stability and landslides (EPA, 2016). Drought is defined regionally based on precipitation that is regionally based on the amount of precipitation that is normal for a particular area. Drought occurs when there is a shortage of water, when weather patterns produce less precipitation than usual for a set

period, or when populations increase enough that there is a strain on water sources. Weather events such as snowstorms, heavy rainfall, strong winds, and heat waves can be disastrous for unprepared communities. On average, Arlington sees 5 inches of snow and 42 inches of rain annually (Best Places, n.d.). Snow, rain, and heat events will be more sporadic in terms of length and intensity of the storms. The lowlands and valleys of Washington State are

predicted to see heavier rains while snowpack melts on the mountains. Combined, current floodplains will change over the next 50 to 100 years (EPA, 2016). As climates change, so will the effectiveness of native trees and plants in keeping soil intact and slopes stable. Areas that are already susceptible to landslides may become more prone and additional sloping areas may become hazardous. Other jurisdictions in Washington State are

Relationship Between Climate Change and Identified County Hazards											
CLIMATE RISKS	Coastal Erosion	Drought	Earthquake	Flood	Landslide	Severe Weather			Wildfire	Tsunami	Volcano*
						Cold	Heat	Winter storms			
Increased temperatures	X	P		X	X	X	X	X	P		
Changes in Hydrology	X	P	X	P	P			X	X	X	
Increased Wildfires		X		X	X				P		
Increase in ocean temperatures and changes in ocean chemistry	P			X				P			
Increased Drought		P									
Increased Coastal Erosion	P									X	
Changes in habitat	X	X		X	X				X		
Increase in Invasive Species and Pests		X		X	X		X		P		
Decrease in natural vegetation	X	X		P	P	X		X	P		
Loss of Wetland ecosystems and services	X	P		P	X				X		
Increased frequency of extreme precipitation events and flooding				P	P			X			
Increased Landslides	X	X		X	P			X	X		

Figure 7.7 is an example of how other communities in Washington State are incorporating climate change as an important element in Comprehensive Planning for risks that are influenced by climate change. "P" represents secondary climate risks, "X" represents primary climate risks associated with the corresponding climate conditions (Grays Harbor County, 2018).

moving towards applying climate science to landslides, severe weather, blizzards, and wildfire risks in their mitigation plans. Adapting a table similar to that shown in Figure 7.7 for Arlington would foster the consideration of climate adaptation and risk assessments as part of comprehensive hazards planning.

To mitigate for all risks associated with climate change, historical events should not be the only factor that determines the extent of actions that need to be taken. Considering climate change mitigation actions is pertinent going forward to address the threat that flooding, erosion, drought, landslides, severe weather, and wildfire hazards pose to Arlington. Earthquake and volcanic risk evaluations should also consider changes in hydrology related to climate change. Associating climate change risks with particular hazards can help predict future hazard exposure. Identifying exposure to different hazards is crucial to effective mitigation action planning.

“Amtrak Cascades Train.” Amtrak, National Railroad Passenger Corporation, 20 Feb. 2020, [www.amtrak.com/routes/cascades-train.html](http://www.amtrak.com/routes/cascades-train.html).

“Asphalt Paving Costs in Cleveland: Maintenance, Construction & Paving.” Ohio Paving, Ohio Paving & Construction, 2018, [ohiopaving.com/asphalt-paving-costs/](http://ohiopaving.com/asphalt-paving-costs/).

“Arlington, WA GIS.” Create-A-Map, ArcGIS Web Application, [arlingtonwa.maps.arcgis.com/apps/webappviewer/index.html?id=414ee02ef0754d95bc0e83ebda458d7b](http://arlingtonwa.maps.arcgis.com/apps/webappviewer/index.html?id=414ee02ef0754d95bc0e83ebda458d7b).

Buell, Douglas. “Highway 530 Roundabout Could Come around Sooner for Traffic Relief.” Arlington Times, Arlington Times and Sound Publishing, Inc., 4 Dec. 2019, [www.arlingtontimes.com/news/highway-530-roundabout-could-come-around-sooner-for-traffic-relief/](http://www.arlingtontimes.com/news/highway-530-roundabout-could-come-around-sooner-for-traffic-relief/).

Carroll, Aidan, Recommendations for Trail Oriented Development along the Wilburton Segment of the ERCT. Seattle: University of Washington, Livable City Year. 2018-2019.

City of Arlington Public Art Strategic Plan (2019, May 18) <https://www.arlingtonwa.gov/DocumentCenter/View/2419/Public-Art-Strategic-Plan-2019-final>

COA, (2019). SR-530/Smokey Point BLVD Roundabout. Retrieved from: <http://www.arlingtonwa.gov/649/SR-530Smokey-Point-Blvd-Roundabout>

COA, (2019). City of Arlington Council Agenda. Retrieved from: <http://arlingtonwa.gov/DocumentCenter/View/3286/Attachment-F>

Conservancy, Rails-to-Trails. “Do Trails Really Equal Dollars for Trail-Side Communities? Here’s What Business Owners Say.” Rails-to-Trails, 10 Oct. 2012, [www.railstotrails.org/trailblog/2012/october/10/do-trails-really-equal-dollars-for-trail-side-communities-heres-what-business-owners-say/](http://www.railstotrails.org/trailblog/2012/october/10/do-trails-really-equal-dollars-for-trail-side-communities-heres-what-business-owners-say/).

“Cost of Concrete Floor Coating.” Fixr.com, Fixr, 2020, [www.fixr.com/costs/concrete-floor-coating](http://www.fixr.com/costs/concrete-floor-coating).

“Current Vanpools.” Community Transit, Snohomish County, 2020, [www.communitytransit.org/vanpool/current-vanpools](http://www.communitytransit.org/vanpool/current-vanpools).

E-landscapellc.(2012, April 11) “Reducing Runoff Through Rain Gardening” (<https://www.e-landscapellc.com/reducing-runoff-through-rain-gardening/>)

Federal Highway Administration. “Road Design.” Adding Bicycle Lanes, U.S. Department of Transportation, [safety.fhwa.dot.gov/saferjourney1/library/countermeasures/10.htm](http://safety.fhwa.dot.gov/saferjourney1/library/countermeasures/10.htm). WSDOT, 3 Feb. 2020, WSDOT, (2020) Freight Rail, 3 February, 2020, [www.wsdot.wa.gov/Freight/Rail/default.htm](http://www.wsdot.wa.gov/Freight/Rail/default.htm).

Finger, Tobias. “Luminescent Paint Lights up Cycling Paths around Europe.” My Bike Citizens, Urban Independence, 23 Nov. 2017, [www.bikecitizens.net/glowing-cycling-lanes-when-bike-paths-light-up/](http://www.bikecitizens.net/glowing-cycling-lanes-when-bike-paths-light-up/).

“How to Create a Rain Garden.” ICPRB, Interstate Commission for the Potomac River Basin, 15 Sept. 2015, [www.potomacriver.org/resources/get-involved/water/rain-garden/](http://www.potomacriver.org/resources/get-involved/water/rain-garden/).

MacCleery, Rachel. “Active Transportation and Real Estate.” Urban Land Institute, Mar. 2016, [uli.org/wp-content/uploads/ULI-Documents/Active-Transportation-and-Real-Estate-The-Next-Frontier.pdf](http://uli.org/wp-content/uploads/ULI-Documents/Active-Transportation-and-Real-Estate-The-Next-Frontier.pdf).

MacKechnie, Christopher. “How Much Does It Cost to Purchase and Operate a Bus?” LiveAbout, .Dash, 31 Jan. 2019, [www.liveabout.com/bus-cost-to-purchase-and-operate-2798845](http://www.liveabout.com/bus-cost-to-purchase-and-operate-2798845).

Project for Public Spaces. (2008, December 31). Waste Receptacles. <https://www.pps.org/article/wastereceptacles>

Shea, Marybeth.(2011, September 21) “Rain Gardens: Managing Stormwater and Preventing Pollution” <https://patch.com/maryland/hyattsville/rain-gardens-managing-storm-runoff-and-preventing-pollution>

Sustainable Connections. (2015). KAPOW Projects

“To Build or Not to Build Parking: Automated Parking Lifts Have Changed the Rules.” CityLift News, CityLift, 13 Dec. 2016, [cityliftparking.com/build-not-build-parking-automated-parking-lifts-changed-rules](http://cityliftparking.com/build-not-build-parking-automated-parking-lifts-changed-rules).

W. Daniel. “2020 Land Clearing Costs: Avg. Cost Per Acre: Wooded Lot Clearing.” HomeGuide, Liaison Ventures, Inc., [homeguide.com/costs/land-clearing-cost](http://homeguide.com/costs/land-clearing-cost).

