Arlington

Downtown Master Plan

Urban Planning Studio III
Sustainable Communities Partnership
Western Washington University
Report 3, Spring 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. See Report 1, Fall 2019 for details of the fall quarter work.

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. See Report 2, Winter 2020 for details of the winter quarter work.

In this final 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.

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.

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INTRODUCTION

1.1 STUDY PURPOSE

The City of Arlington asked Western Washington University's Urban Planning and Sustainable Development program to develop a downtown master plan that identifies ways to:

- Attract and retain businesses and housing
- Integrate West Avenue with Olympic Avenue
- Identify ways to improve safety and mobility, especially for pedestrians, but also to consider traffic patterns and parking
- Incorporate the Centennial Trail into the downtown as a draw for business and recreation
- Review Downtown Design Standards

These issues were identified to ensure Arlington's future growth is accommodated in ways that protect and preserve its unique character. People are attracted to Arlington for its quaint downtown, its parks and open space, and its proximity to larger metropolitan areas. To be ahead of future population pressures, and to ensure a community that is accessible and affordable to a range of income levels, while at the same time protecting its natural resources, the City should direct future growth and development toward the downtown core.

The study focused on ways to increase the amount of housing and commercial/retail space in downtown, expand public space and parks, capitalize on the Centennial Trail, and come up with creative solutions for mobility, traffic and parking that will help to accommodate Arlington's future population growth. The design concepts and recommendations are based on feedback we received from community workshops and survey results.

1.2 RECOMMENDATIONS

Report 3, Spring 2020, details recommendations for implementing numerous proposed improvements in the downtown over a span of 20 or more years in the following areas:

- Land Use
- Design
- Social Equity (emphasizing Affordable Housing)
- Public Sphere
- Transportation and Mobility
- Environmental Hazards

Some recommendations are short-term, reflecting actions the city or community could take immediately in light of COVID-19, while others are medium to long-term projects that include code revisions, hazards planning and more. Where applicable, the study identifies anticipated project costs, and funding and technical assistance resources.

In addition, this report concludes with an analysis of three Catalyst Projects that could bring new life to Arlington's downtown by creating and enhancing public spaces, providing attractive and affordable housing, and adding amenities and attractions. These catalysts include:

- The City Center Square
- The Centennial Urban Corridor
- Urban Residential Transitions

Catalyst site costs, as well as other costs detailed in the report, are estimates, and should be verified at the time of project implementation.

The previous reports, Report 1, Fall 2019 and Report 2, Winter 2020, describe other aspects of the study.

1.3 SUMMARY

Together, Arlington's residents, businesses, and the City can promote the social, economic and environmental sustainability of its downtown through code revisions, street improvements, and public sphere enhancements.

All the recommendations are just ideas at this point, and require careful community review and dialogue. We hope these strategies and recommendations help you see the exciting possibilities for Arlington's future.

While we are in the midst of COVID-19, some of our proposals may seem out of reach, and yet, it is never too soon to start thinking about your community's recovery and the possibilities available to you based on your strong assets like historic Olympic Avenue, the Centennial Trail, downtown parks, and more. Your community will keep welcoming new people, and now is your opportunity to think creatively about how you will do that while also enhancing the vibrancy and viability of downtown Arlington.

LAND USE

2.1 INTRODUCTION

In previous reports, Arlington's downtown land use patterns were described, as was the input collected from residents about land use preferences. In addition to an assessment of current conditions and community input, a comprehensive infill development analysis helped describe Arlington's capacity to grow and how the downtown area could accommodate future growth. This section gives suggestions for the implementation of the changes recommended in previous reports.

The previous reports' recommendations emphasized land use consistency, producing a cohesive, mixed-use downtown core and transitioning away from Olympic Avenue as the only pedestrian-oriented commercial "Main Street." Arlington's code allows mixed-use development throughout the downtown area. However, land uses remain divided between light industrial, commercial, multifamily residential, and single family residential uses (Figure 2.1). Promoting new mixed-use development in the downtown would allow Arlington to provide needed housing for the City's projected population growth and assist in creating a vibrant, walkable,

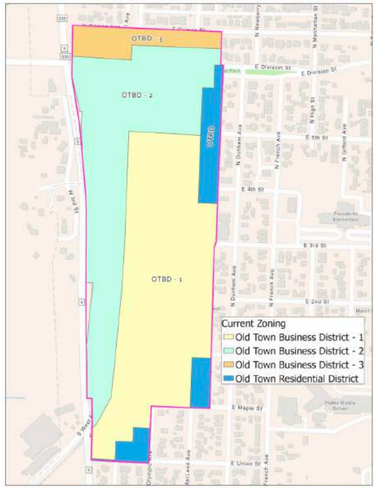


Figure 2.1: Current zoning within the study area

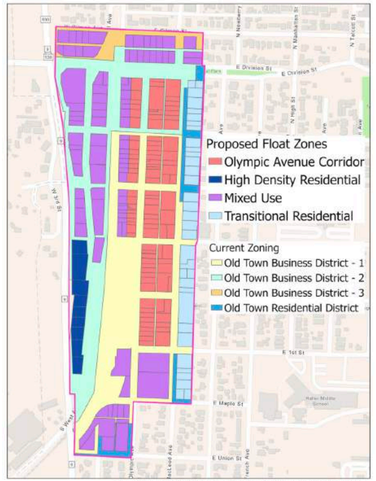


Figure 2.2: Suggested float zones for future uses.

and affordable downtown. Recommendations in this chapter incorporate community input on both aesthetic and land use preferences.

Through community input, four study areas, or 'corridors,' were identified to organize recommendations in the downtown. These include the Transitional Residential Corridor, the Olympic Avenue Corridor, the West Avenue Corridor, and the Centennial Urban Corridor.

- The Transitional Residential Corridor (located on MacLeod Avenue) incorporates a wide variety of housing options near downtown that are higher density than the existing code permits. This area is depicted as the light blue area in Figure 2.2.

- The Olympic Avenue Corridor retains the pedestrian-friendly "Main Street" feel with a smaller scale development footprint than is currently allowed in the municipal code. New development on Olympic Avenue should incorporate mixed-use buildings that share common features and aesthetic to current buildings. These recommendations are based on community preference for retaining Olympic Avenue in its current state. The Olympic Avenue area is shown in red in Figure 2.2.

- The West Avenue Corridor extends the commercial area beyond Olympic Avenue, while accommodating larger mixed-use development and high-density residential. In Figure 2.2, the West Avenue Corridor is shown in purple (mixed-use) and dark blue (high density).

- The Centennial Urban Corridor is a vibrant, pedestrian-oriented green space with higher-density, mixed-use buildings that front the trail for pedestrian access to businesses and residential units. Some parcels that extend from the trail to Olympic Avenue may be subdivided and rezoned to allow for new development along the trail. Figure 2.2 shows the Centennial Urban Corridor in purple.

The study proposes two main strategies for the City of Arlington to facilitate and manage land use changes within the downtown: floating zones and incentive programs. Floating zones establish classifications that are approved for future use on compliant parcels. This allows changes in zoning to occur incrementally, with each property or project receiving approval for a zoning change via an application by the developer or by recommendation from the planning board/commission (Blanchard, 2013). The floating zones proposed here are intended to preserve Olympic Avenue's character, encourage mixed-use development throughout the downtown area, and supply a diverse range of housing options.

The second proposed strategy is to create and implement incentive programs that will assist in making zoning changes and infill projects appealing to developers. The City of Bellingham's Infill Toolkit, City of Ferndale's Catalyst Incentives Program, and City of Rochester's CUE Tax Exemption Program are described as examples below.

In addition to addressing these strategies, this chapter provides code revision recommendations and lists sources for funding and technical assistance to support policy and regulatory land use changes in downtown Arlington.

2.2 PHASING

The following timeline is intended to guide the City of Arlington in the process of adopting land use changes that will promote housing affordability, walkability, vibrancy, and appropriate density downtown.

Phase 0: Within the next year
Begin code revision process to allow for density and land-use changes
- Examine and correct regulatory barriers
- Include incentives or subsidies for desirable forms of development
- Allow for spaces such as business incubators, live-work units, coworking spaces, and temporary/pop-up businesses

Make code more accessible and easy to read
- Hyperlink tables when referenced in text
- Reorganize tables to be easier to understand
- Amend code to include guidance for infill for each corridor

Phase 1: 1-2 years
Define districts and finalize code specifications for each float zone
- Set requirements and limitations for uses, building heights, setbacks, etc.

Create an infill toolkit
- Refer to Bellingham's Infill Toolkit, which contains detailed guidelines for various types of infill housing development

Phase 2: 3-5 years
Align incentives with infill goals
- Incentivize affordable, medium- and high-density housing and mixed-use development in and around downtown

Create form-based code for West Avenue to allow for streamlined permitting processes
- Ensure a cohesive feel for the corridor and incentivize development by simplifying permitting if design codes are met

Phase 3: 6-10 years
Reassess citywide zoning to align with downtown growth patterns
- As new developments are built and demand changes, larger updates and changes to zon-

Table 2.1: Current & Recommended Code Regulations for Downtown Development

Corridor	Current regulations	Recommended regulations
MacLeod Avenue	20-foot setback 40-foot setback from arterial roads 35-foot height maximum	5-foot setback 10-foot setback from arterial roads 45-foot height maximum
Olympic Avenue	50-foot height maximum	35-foot height maximum
West Avenue	50-foot height maximum	65-foot height maximum
Centennial Urban Corridor	N/A	Allow for parcels between Olympic Avenue and Centennial Trail to be subdivided so that frontage on the Trail aligns with the uses and height maximums that apply to West Avenue
All downtown areas	No minimum density in downtown business districts Minimum density of 1 unit per 4,300 square feet of a parcel in Old Town Residential zones	Minimum density requirement of 30 units per acre for all new development Develop form-based code with standards for each corridor

ing and land use codes, as well as incentive programs, may be needed to accommodate a growing Arlington.

2.3 CODE REVISIONS

2.3.1 Floating Zones

Floating zones are a useful regulatory tool that allows for flexibility in zoning regulations (Blanchard, 2013). They can be used to incentivize desirable forms of development while ensuring that certain goals and standards are met. Floating zones for each downtown corridor can be added to the zoning code to guide new development. Updated height and setback requirements are described in Table 2.1.

2.3.2 Incentive Recommendations

The aim of incentive programs is to provide property owners and developers with incentives for development in downtown Arlington. Incentives could jump start new development in areas where the City wants to encourage it rather than having it take place in other locations, like Smokey Point. Three incentive programs are discussed here:

- City of Bellingham, WA, Infill Toolkit: The Infill Toolkit (BMC Chapter 20.28) outlines standards for seven different types of infill housing development options. Compliance with the standards described in the Infill Toolkit code allows for a streamlined permitting process by decreasing the time required in permit review processes.
- City of Ferndale, WA, Catalyst Site Program: The Downtown Catalyst Program (FMC Chapter 18.48) offers a waiver on all one time permitting fees for projects that meet certain requirements (e.g., number or stories, number of residential units, compliance with design guidelines, and parking within building footprint). If adopted in Arlington, this type of program would help facilitate the needs of each corridor in the downtown area.
- City of Rochester, NY, Tax Exemption Program: The Residential-Commercial Urban Exemption Program (CUE) offers a twelve year ad valorem tax exemption schedule for infill development projects in Rochester's downtown. Since 2003, CUE has created $69,000,000 of investment in Rochester's downtown by encouraging the transition of non-residential parcels into mixed-use development.

2.4 FUNDING & TECHNICAL ASSISTANCE

In order to finance the study's proposed changes, Arlington could take advantage of the following technical assistance and funding source opportunities.

2.4.1 Community Development Block Grants

Community Development Block Grants (CDBGs) from the US Department of Housing and Urban Development (HUD) are rooted in providing housing for low-income community members, relieving blight or addressing a threat to public safety. These grant amounts range from $200,000 to $9,000,000. More information is available here: https://deptofcommerce.app.box.com/v/cdbg-fact-sheet-english.

2.4.2 EPA Smart Growth Grants

Occasionally, the EPA offers grants that support the improvement of human and environmental health. At the time of writing this the EPA is not accepting grant proposals and has not listed the requirements for grants. If not already on the list, Arlington should sign up to receive updates on governmental grants via https://www.grants.gov.

2.4.3 Washington Main Street Program

The Washington Main Street Program is a Washington State program that incentivizes towns with a population of 50,000 or less to enhance their downtowns through a 501(c)(3) or (c)(6) nonprofit organization. The program is a "comprehensive, incremental approach to revitalization built around a community's unique heritage and attributes" (DAHP, n.d.).

There are two membership statuses within the program: Main Street Communities and Affiliate Communities.

- Main Street Communities have integrated the Main Street approach that focuses on the organization, promotion, design and economic vitality of downtown. Each of these focuses have certain criteria that are met by Main Street Communities.
- Affiliate Communities have not necessarily met any of the criteria listed by the program but are interested in benefiting from the Main Street approach.

The program itself provides in-depth information on downtown revitalization and a host of resources and guidance on the revitalization process. It also provides access to tax credits for a "Business & Occupation (B&O) or Public Utility Tax (PUT) credit for private contributions given to eligible downtown organizations" (DAHP, n.d.). A business could elect to donate their tax credits to the Main Street program. Once approved, the business is eligible for a tax credit worth 75% of the donation.

Communities also have access to mentors in towns that have already implemented the Main Street approach. These Main Street Communities include Washington towns including Bellingham, Mount Vernon, Puyallup and Issaquah. In addition to the mentorship program, communities can attend the Revitalize WA Conference that focuses on the program's revitalization principles and economic revitalization. More information is available here: http://www.preservewa.org/programs/mainstreet/.

2.4.4 Smart Growth America

Similar to the Washington Main Street Program, Smart Growth America (SGA) provides resources and guidance to towns wishing to revitalize their downtown in accordance with Smart Growth principles. SGA has many different subcategories that they provide technical assistance for such as 'Arts and Culture,' 'Transportation Policy,' 'Form-Based Codes,' and many others. SGA hosts free workshops that encourage community leaders to use smart growth strategies. More information is available here: https://smartgrowthamerica.org/work-with-us/apply-for-our-free-technical-assistance/.

There are two paths to become a member of SGA:

- Wayfinder: aimed at individuals or nonprofit organizations who want to aid in the progress of their community.
- LOCUS: aimed at real estate developers and investors. It provides access to funding for smart growth development and improved regulations related to smart growth. Developers and investors in LOCUS are encouraged to implement smart growth in their projects.

2.4.5 Historic Preservation

Arlington's quaint, all-American main street characteristics can be preserved through a Historic Preservation Plan. Communities with a Historic Preservation Plan can become Certified Local Governments through the Washington Trust for Historic Preservation and have access to state and federal funding (RevitalizeWA, 2018). Through the plan, business owners could be incentivized to preserve their buildings. The incentives could include tax credits, special tax assessments, grants, easements, and alternative paths for building compliance (Puyallup Historic Preservation Plan, 2016).

DESIGN

3.1 INTRODUCTION

This chapter covers different code revisions and additions suggested for the City of Arlington's current design guidelines and standards. Informed by strategies created by cities similar to Arlington (comparable in population size, focus on historic designs, and/or similar growth patterns), the following suggestions would aid Arlington in creating a downtown corridor that protects its historic small-town character. These strategies would also accommodate anticipated future growth in Arlington.

3.2 ARLINGTON DESIGN STANDARDS

The City of Arlington currently has design standards that maintain the small town character. However, with anticipated growth pressures, Arlington should adopt codes that not only protect the character of the City, but also welcome new residents and businesses. After researching downtowns with historic small town character such as downtown Mount Vernon, WA, it is advised that Arlington should incentivize businesses and building owners to maintain their buildings as well as adopt sustainable designs. Codes should not only protect historic buildings, but also ensure that new buildings are built as interpretations of historic and traditional designs.

3.3 STRATEGIES AND RECOMMENDATIONS

The following section outlines strategies and recommendations for the City of Arlington. These proposals work towards the goal of maintaining the historic feel of downtown Arlington, while promoting sustainable practices and renovations for pre-existing and future developments.

Figure 3.1: Historic Storefront. Source: http://misfitsarchitecture.com/2014/05/

3.3.1 Case Study

Mount Vernon, Washington

A strategy Arlington could use in the future follows the lead from Mount Vernon's design guideline. Mount Vernon's downtown expansion is constrained by a river and a freeway, so growth can only occur to the north or south. The downtown is a traditional small-town retail district with contiguous storefronts and other pedestrian-friendly amenities. The rest of the downtown core is more pedestrian-oriented than other parts of town, with non-vehicular connections to areas outside the core. The City has developed a pre-approved list of paint colors. However, more significant renovations, must go through a five-person design review board (Stone, 2018).

3.3.2 Building Renovations

Arlington's Olympic Avenue Design Standards and Development Design Standards thoroughly cover many aspects of downtown design such as modular roofing, landscaping, street lighting, and color pallets along with many other elements. Overall, Arlington's Design Standards do not need many code revisions; however, the design standards relating to historic buildings and architecture could be developed further.

New construction and rehabilitation projects should focus on preserving and establishing character-defining elements, specifically those of historic architecture. Some character-defining elements to preserve are:

- Display windows
- Transom windows
- Recessed doorways
- Sign band
- Kickplate
- Upper story windows
- Cornice molding
- Masonry

Figure 3.1 is an example of a historic building that utilizes architectural characteristics from the list above. The building has kickplates below the large transparent windows, a recessed doorway, upper story windows, transom windows, and pedestrian friendly signage.

Implementing new construction and rehabilitation projects would create a more uniform and aesthetically pleasing downtown area. Arlington's history is also quite important to its residents, so incorporating historical design throughout downtown will help strengthen unity and pride. Arlington could provide markers and door plates for historical buildings to bring attention to the City's rich history.

3.3.3 Form Based Codes

To create a higher quality public realm, Arlington should adopt form-based codes that focus on physical form rather than the separation of land uses (Form-Based Codes Institute, 2020) (Figure 3.2). Form-based codes are a type of zoning that are used "to regulate development that controls building form first and building use second, with the purpose of achieving a particular type of 'place' or built environment based on a community vision" (Madden & Russel, 2014, para. 2). Form-based codes recognize that a public realm and the uses within it are intertwined. In the past, zoning separated the different uses in a community. However, form-based codes recognize that this is not efficient. People wish to live, work, and spend their leisure time in the same location. Mixing uses in close proximity creates a downtown area that is more economically vibrant and lively (Russell & Madden, 2015). It creates a community where people wish to spend time in the downtown area as well as with each other.

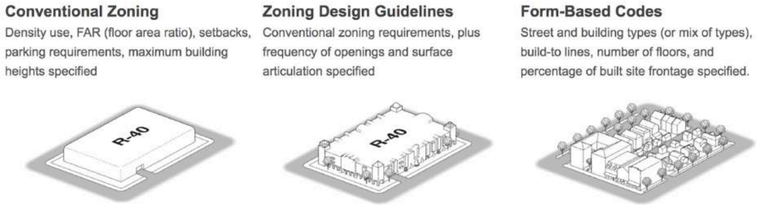


Figure 3.2: Example of different types of zoning. Source: https://smartgrowthamerica.org/app/uploads/2018/11/Zoning-codes-form-based-codes.png

Form-based codes can also be used to create greater equity in communities. For example, form-based codes can facilitate the development of affordable housing in close proximity to employment opportunities and community services, reducing commutes and transportation costs. Form-based codes are flexible enough to allow for greater variability in business frontage sizes, which can be important for retaining small, immigrant-owned restaurants and shops (Goldsmith & Gladney, 2019).

Form-based codes can be implemented through a hybrid strategy, where certain locations, rather than the whole community, are zoned under form-based code standards. The City of Lacey, Washington implemented this strategy in their Woodland district in order to promote development and join the residential and commercial districts. Form-based codes can be implemented through a hybrid strategy, where certain locations, rather than the whole community, are zoned under form-based code standards. The City of Lacey, Washington implemented this strategy in their Woodland district in order to promote development and join the residential and commercial districts. The development was used to support transit and designed to be pedestrian orientated (City of Lacey, 2013).

Figure 3.3: Missing Middle Housing - Small Multiplex. Source: https://missingmiddlehousing.com/types/multiplex-small#prettyPhoto

3.3.4 Missing Middle Housing (MMH)
Missing Middle Housing is a housing movement founded by architectural designer Daniel Parolek. The movement refers to the development of non-traditional homes in single-family zones, such as duplexes, triplexes, and bungalows. Such housing types are called "missing" because they have before been excluded from many cities, where the majority of residential zoning has only allowed for single-family homes. The missing middle housing types serve low-income and middle-income families, college students, and other non-traditional family units. The housing options can also promote community and create a more walkable neighborhood. The Missing Middle Housing Project has compiled information for elected officials, planners, and developers who seek to implement such strategies in their cities and neighborhoods. The information presented by the project shows potential housing styles, such as a multiplex, and gives the ideal lot specifications, location, and implementation strategy for each style.

Figure 3.3 is an example of a small multiplex building. Offering multiple units in one building, this multiplex meets the standard for high-density housing. An attractive design, it fits well in residential zoning. This multiplex can promote a larger sense of community in the building.

3.4 PHASED DEVELOPMENT

Table 3.1 shows the different phases during which the City of Arlington can adopt the proposed design strategies in order to create a lively downtown over time.

3.5 INCENTIVES AND FINANCING

While many property owners wish to engage in sustainability projects, it is often difficult for them to find resources to do so. The following incentives and financing strategies will help Arlington create pathways for businesses and developers to create a more lively downtown.

3.5.1 Incentive Program
Incentives that would encourage businesses to update building designs and adopt sustainable designs include:

- Priority in building processing and plan review
- Tax incentives
- "Break" zoning rules and regulations.
- Marketing / publicity rewards
- Incentive payment from an energy program

Monetary incentives make up 75% of incentives for businesses to go green (Yudelson Associates, 2007). This means that the financial burden of developing green practices is the biggest factor to take into consideration when designing new buildings and renovating existing ones. According to the study by Yudelson Associates (2007), developers agreed that local governments should create incentives if they wish to accelerate the growth of green buildings. Developers also agreed that quicker permitting processes was also an intriguing incentive to adopt green business practices, along with the potential to "break" zoning rules, such as density and floor ratios (Yudelson Associates, 2007).

Table 3.1: Design Phased Development

Phase 1 (0-1 Year)	• Building Renovations
	  ○ Gather feedback on incentive programs
	  ○ Standardize Old Town Design Guidelines for new development downtown

Phase 2 (2-10 Years)	• Update Downtown Codes
	  ○ Adopt Form-based Codes
	• Building Renovations
	  ○ Create incentive program for businesses to update building designs/adopt sustainable designs
	  ○ Form a community-led design review board

Phase 3 (11-20 Years)	• Building Renovations ○ Update/improve building renovation incentive program

3.5.2 Building Renovation Financing
Phase 2 and 3 overlap in a lot of potential funding, as they both pertain to sustainable building renovations. A number of funding sources are outlined below:

- USA Grants Applications: Has grants for existing business owners as well as prospective business owners. These commercial property grants can be utilized for a wide variety of uses, including building renovations, which can be accessed here: https://www.governmentgrants.us/commercial-property-grants/
- Environmental Protection Agency: Has grants for sustainable and "green" building renovations. More information can be accessed here: https://www.epa.gov/grants/specific-epa-grant-programs
- The Green Building Alliance: Has an extensive list of loans and grants dedicated to retrofitting buildings to be more sustainable and environmentally conscious, including for LEED certifications. More information can be accessed here: https://www.go-gba.org/resources/green-building/green-building-incentives-guide/.

These are just a few of the many funding sources available to the City of Arlington, business owners, and non-profits for improving upon the existing and future buildings in the downtown corridor.

3.6 SUMMARY

Arlington's current design standards have helped maintain the small town character of downtown. As the City grows, it is important to accommodate that growth with adequate design guidelines and other code requirements. The recommendations listed in this chapter would help Arlington maintain its small town feel while creating a community that is walkable and welcoming.

SOCIAL EQUITY

4.1 INTRODUCTION

This chapter covers social equity solutions that the City of Arlington can adopt and/or revise within its code to protect vulnerable communities from growth and development-related issues. The two main social equity issues addressed in this chapter are affordable housing and gentrification. These issues are the most prominent problems low-income communities and communities of color face as cities grow and develop. The City should address these issues to prevent or mitigate existing social inequity experienced by marginalized populations in Arlington. In addition, this chapter includes suggested actions the City could take to support local businesses and residents in light of the COVID-19 pandemic.

4.2 SOCIAL EQUITY IN COMPREHENSIVE PLAN

Arlington's Comprehensive Plan highlights social equity topics such as affordable and low-income housing, but does not include sections that directly address social equity. As Arlington experiences population growth, it is important for the City to have a social equity section in its comprehensive plan. The reasons for this are discussed in the following sections.

4.3 AFFORDABLE HOUSING NEEDS

As the technology 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 grow to approximately 30,000 residents over the next 20 years. While growth and development can bring many benefits to a city, they can also have negative effects, including the displacement of current residents due to increased housing costs. The City should consider mitigation strategies that anticipate and minimize the negative development impacts associated with growth. The following sections outline a number of strategies.

4.4 STRATEGIES AND RECOMMENDATIONS

Arlington should consider the following strategies to enhance social equity:

- Refining policy documents
- Adopting policies to diversify housing options and increase accessibility to affordable housing
- Taking preventative actions to address public health, COVID-19, and community and economic recovery in order to prevent social equity issues like gentrification and poor access to resources as Arlington continues to grow.

These proposals would aid the City in combating affordable housing shortages, gentrification, and other social equity-related issues.

The strategies and recommendations are organized into phases, as outlined below:
Phase 1: 0-1 year
Phase 2: 2-10 years
Phase 3: 11-20 years
Phase 4: 20+ years

4.4.1 Implementing Social Equity in City Documents

The goal for social equity within Phase 1 is to create policies that address social equity. A review of Arlington's Comprehensive Plan and municipal codes found limited reference to social equity issues; furthermore the City does not have social equity specialists on staff. As Arlington continues to grow, it is important to ensure adequate policy guidance and staffing to prevent social equity issues associated with growth. Many cities throughout the U.S. are recognizing the problems that gentrification can cause within communities and have implemented social equity components within their comprehensive plans or in other planning documents (Eley, 2017; McCormick, 2020).

It is also important for government and public documents to be readily accessible to residents and easy to understand. As cities grow they become more diverse and are more likely to have a larger population of residents who do not speak English as a first language. Public documents, such as comprehensive plans, must be available online, contain limited jargon, and be provided in the languages that are used by residents in the community.

4.4.2 Language Consistency: Carriage Housing versus Accessible Dwelling Units (ADUs)

Currently, Arlington's housing documents describe Accessible Dwelling Units (ADUs) as Carriage Housing. Larger cities like Bellingham use the term ADUs rather than Carriage Housing. The phrase ADU is also more commonly used in planning documents across the nation. Figure 4.1 shows that there are many types of ADUs beyond a Carriage House. Arlington should adopt the language of ADUs in order to keep language consistent in planning documents across Washington State.

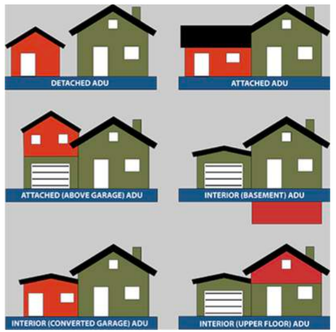


Figure 4.1: Types of ADUs. Retrieved from: https://planning-org-uploaded-media.s3.amazonaws.com/image/adus.png

Figure 4.2: Examples of diverse housing. Source: https://missingmiddlehousing.com/

4.4.3 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 townhomes, duplexes, triplexes, and small apartments. These "missing middle" housing options promote higher densities and could be subsidized and/or designated as affordable housing (Figure 4.2).

According to the Washington State Housing Finance Commission (2018), 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 rent is 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 that they remain in compliance, and thus, eligible for the tax benefits that helped finance them for at least 40 years.

4.4.4 Preventative Action by Community and Government

As neighborhoods gentrify, securing properties for affordable housing projects becomes much more difficult. "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"

(Way, Mueller & Wegmann, 2018, p. 50). According to Way, Mueller and Wegmann (2018), one strategic move cities can make is to buy land and housing in these early periods of transition to give cities, community development organizations, and residents more capacity to mitigate displacement when change does come. In Austin, Texas, the Guadalupe neighborhood's affordable housing inventory is mostly located on land acquired before gentrification became a big issue. And in the Columbia Heights neighborhood of Washington, D.C., subsidized housing was built prior to the neighborhood's gentrification. Way, Mueller, and Wegmann (2018), also suggest that 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 (p. 52).

4.4.5 COVID-19 and Public Health

Many local businesses are facing the challenge of continuing business without putting their customers and staff at risk of catching and spreading COVID-19 to others. The City should partner with the Snohomish County Health District to educate local business leaders/owners on preventative measures they can take to better protect themselves, their staff, and their customers. Through bi-weekly or monthly online "Zoom" meetings during non-business hours, businesses could discuss new and evolving methods to limit the spread of COVID-19 and future viruses. These meetings would also give retail/shop owners the chance to share their successful financial strategies to better mentor other small businesses during these uncertain times.

This pandemic has also caused financial hardships for many low-income families. To help mitigate some of these pains, families will need greater access to the local Arlington Community Food Bank. Currently, the Arlington Community Food Bank is located miles out of town, making it difficult for families who rely on public transportation to get food. By introducing "pick-up" sites closer to lower income neighborhoods, the food bank would provide a greater number of residents with access to food. Furthermore, the City should work with the food bank to identify a more central location and/or multiple locations to better serve Arlington's low-income communities.

Table 4.1: Incentive Strategies for Affordable Housing

Density bonus	Density bonuses provide developers the opportunity to increase the density of their development if they dedicate a portion of it to affordable housing units (Inclusionary Housing, n.d.). This increases the likelihood of new developments being utilized to their highest infill potential.
Subsidies	Subsidies are another incentive used by many cities to encourage higher infill and affordable housing. Subsidies are given to developers for a variety of reasons, including making a percentage of units in a new development affordable.
Tax breaks	Similar to a density bonus or subsidy, tax breaks provide a financial incentive to developers to provide a public amenity such as affordable, equitable housing.
Faster permit processing	Faster permit processing is a unique way to incentivize providing affordable housing. As the permit process for developing can be lengthy, the City could provide fast track permit processing for developers who incorporate affordable units into the proposed developments.
Fee Waivers	Many cities offer partial or full waivers of planning fees, permitting fees, or impact fees to projects that include affordable housing options. This provides local governments ways to create financial benefits for those interested in creating affordable housing (Grounded Solutions Network, n.d.). Fee waivers can address "costs associated with the development process, such as impact fees, and building permit fees, can be reduced or eliminated to encourage selected types of development" (Puget Sound Regional Council, n.d.).

4.5 INCENTIVES AND FINANCING

In order for the City of Arlington to implement the strategies and recommendations made above, the study highlights a variety of incentives and potential methods for financing affordable housing. These incentives, including fee waivers and property tax breaks, would would apply to private landowners and developers who dedicate affordable housing units within their development.

4.5.1 Incentives

Table 4.1 outlines a number of programs the City of Arlington could adopt to incentivize equitable and affordable housing in downtown, such as density bonuses, subsidies, tax breaks, faster permit processing, and fee waivers.

4.5.2 Multifamily Tax Exemption

Multifamily Tax Exemption (MFTE) is a state program in Washington that attracts residential development within city centers where there are insufficient housing options for residents (Puget Sound Regional Council, n.d). The MFTE ensures affordability as communities continually grow, making sure that there is a range of housing options for different income levels (City of Seattle, n.d). Under the Growth Management Act, cities like Arlington are eligible to apply to the state's program once they pass an enabling ordinance to enact the MFTE. Projects that are approved are eligible to be exempt from ad valorem property taxation on residential improvement value for either eight or 12 years. Those eligible for the 12-year exemption must have a minimum of 20% of the units be designated affordable or 100% if the property is solely owner occupied. Eight-year exemptions are dependent on the jurisdiction in type or size and do not have an affordable housing requirement (Puget Sound Regional Council, n.d). In cities like Seattle and Bellingham, the Multifamily Tax Exemption has been successful in creating a number of accessible housing units for residents. In May 2018, 4,000 were rent-restricted through the Multifamily Tax Exemption law (City of Seattle, n.d). In Bellingham, by September 2019, 1,182 residential units had been built (City of Bellingham, n.d.).

4.5.3 Inclusionary Housing

Inclusionary zoning is a tool used to include affordable units within private markets. It incentivizes private developers to designate a certain percentage of units to be offered below market rate. This can be done "by offering developers one or more incentives such as tax abatements, parking reductions, or the right to build at higher densities" (Grounded Solutions Network, n.d). Inclusionary zoning has been successful in creating units for middle-income households as well as facilitating the mixing of class and race and undoing the effects of exclusionary zoning (Schnieder, 2018). In Washington, developments made under the inclusionary zoning state level program must remain affordable for at least 50 years (Puget Sound Regional Council, n.d).

4.5.4 Additional Requirements for Emergent Needs (AREN)

As cities grow, the cost of living also increases, which can lead to people struggling to pay rent and being displaced from their homes. In such situations, tenants as well as the city can look towards Additional Requirements for Emergent Needs (AREN), funded by the Washington State Department of Social and Health Services, to help tenants facing increased costs of living, such as rent. AREN can cover many costs of owning and renting homes, including back rent, deposits for rent and utilities, home repairs, relocation, temporary lodging (e.g. motels), utility bills, and telephone services. This service helps people in need, such as families, refugees, and residents suffering from gentrification.

4.5.5 Affordable Housing Property Tax Levy

The central focus of Washington's Affordable Housing Property Tax Levy is to ensure that there is adequate affordable housing in Washington cities. Under this measure authorized by RCW 84.52.105:

"*A county, city, or town may impose additional regular property tax levies of up to fifty cents per thousand dollars of assessed value of property in each year for up to ten consecutive years to finance affordable housing for very low-income households when specifically authorized to do so by a majority of the voters of the taxing district voting on a ballot proposition authorizing the levies*" (City of Bellingham, 2012).

The City of Arlington should adopt an affordable housing property tax levy for the maximum amount of $0.50 per $1,000, as a way to fund affordable housing and combat drastic increases in housing prices for the community's most vulnerable residents.

Case Study: Bellingham Home Fund - Bellingham, WA

The Bellingham Home Fund is similar to AREN as it also helps low-income communities combat housing insecurities. The Fund, supported through property taxes, was approved by voters in Bellingham, WA, in 2012, and approved by the City Council:

"This proposition funds housing and housing services for people with low or very low-incomes, including those with disabilities, veterans, seniors, and families with children by (a) authorizing an increase in the City's regular property tax levy by up to $0.12/$1,000 to $2.62/$1,000 of assessed value as allowed by RCW 84.55; and (b) authorizing a regular property tax levy of up to $0.24/$1,000 of assessed value under RCW 84.52.105, each for seven years, generating approximately $3,000,000 annually" (City of Bellingham, 2012).

The Bellingham Home Fund, approved by voters again in 2018, helps hundreds of people find affordable homes and supports struggling tenants in efforts to keep their homes. This fund has also supported homeless people in securing housing so that they are able to find a stable job and gain life stability again. The website for the fund also has many stories of the people who they helped. One story is about a family where both of the parents had lost their jobs and were struggling to keep their home and support their children. The family was living in a small trailer, but they got in contact with the Bellingham Home Fund and the fund supported the family in finding a comfortable apartment. Without the fear of housing insecurity, both parents were able to find jobs to support their family (City of Bellingham, n.d.).

Case Study: Sydney, Australia Affordable & Diverse Housing Fund

The Affordable and Diverse Housing Fund is based in Sydney, Australia, and promotes the development of diverse and affordable housing types, such as ADUs, cottage houses, and apartments. The goal of the fund is to make sure that all neighbourhoods within Sydney set aside about 15% of the residential space for affordable housing (City of Sydney, 2016). This fund, granted by the City to developers, can provide as much as $3 million for construction and other development costs.

4.5.6 Accessory Dwelling Unit (ADU) funding

The City should review the costs associated with ADU construction and approval fees. The pre-building costs for an ADU can run close to $16,000. A building permit costs $750, and submitting plans for approval costs an additional $1,700. Working with an architect on designing an ADU could cost up to $11,000, while the expertise of a structural engineer costs around $2,500. In response to the high cost, multiple funding options are available for homeowners looking to add an ADU to their property (United Dwelling, 2020).

- **Home equity loan:** Home equity loans are one of the most common loan approaches. If you own enough of your property outright, and it is deemed valuable enough, a bank may allow you to borrow against that property up to an agreed-upon amount. As with any loan, there are interest payments involved, and since a person's property is their collateral, if they default on it the property will be foreclosed.
- **PACE loan:** Pace loans offer homeowners financing for environmentally-friendly upgrades. These loans require no money down, but come with some major drawbacks. Interest rates on PACE loans often are higher than regular loans. Plus, because a person does not make monthly payments, once or twice a year, their bank account is at risk of taking some real damage if they do not vigilantly budget and save.
- **HELOC (Home Equity Line of Credit):** A HELOC is a second mortgage for homeowners to utilize to access some of the equity in their home. These are adjustable rate loans with interest rates around the Prime Rate. They typically have a 30-year amortization with a 10-year interest only period.
- **Construction loan:** A construction loan is a specialized loan product where the appraisal is based on the after completed value of the home. The closing costs and interest rates on construction loans are typically higher than on a standard refinance.
- **Personal lines of credit:** Many banks offer personal lines of credit for borrowers with good credit scores and income. These lines are typically free to set up and can range from $10,000 to $50,000. They are, however, at higher interest rates than mortgages and HELOC loans.

Table 4.2 shows an example of getting a construction loan for an ADU.

Table 4.2: Construction Loans

Current home value	$400,000
After renovation home value	$500,000
Current loan amount	$200,000
A construction loan to 80% of after improved value	$400,000
Funds available for construction	$200,000 minus closing costs

4.6 PHASED DEVELOPMENT

Table 4.3 lays out the recommended phasing for the financing strategies and recommendations described above. The phasing plan is based on the complexity, cost, and feasibility of each recommendation in a timely manner.

4.7 SUMMARY

Though the City of Arlington has already addressed some ways to implement affordable and low-income housing within the City's comprehensive plan, the recommendations in this chapter would improve the code relating to social equity within the City. Policies and codes that make social equity a priority in the comprehensive plan will be a key part in combating issues such as homelessness and gentrification as the City's population grows.

Table 4.3: Social Equity Phased Development

Phase 1 **(0-1 Year)**	• Affordable Housing Property Tax Levy • Change code language for Carriage Housing to ADU • Draft Social Equity section for comprehensive plan • Partner with a local food bank to set up locations for "pop up" food banks • Connect business leaders to share about social distancing measures that work for them
Phase 2 (2-10 Years)	• Adopt Multifamily Tax Exemption • Adopt Inclusionary Zoning • Create a subsection from the planning association by hiring an employee focused on social equity efforts

Phase 3 (11-20 Years)	• Preventative Actions for community and government
	  ○ Buy land and housing prior to the effects of gentrification
	  ■ N 3rd Street and MacLeod Avenue

Phase 4 (20+ Years)	• Create diverse housing along MacLeod Avenue
	  ○ Cottage housing
	  ○ Apartments and higher density residential areas
	  ○ ADUs
	  ○ Single/multi-family homes
	• Tenant relocation services
	  ○ Help tenants relocate to new homes
	  ■ Emergency housing
	  ○ Storage of personal property

PUBLIC SPHERE

5.1 INTRODUCTION

This chapter focuses on prioritizing recommendations, current code review and revisions, and costs and funding sources for projects associated with the public sphere. In this case, the public sphere is defined as places for "interaction and exchange of ideas that impact the quality of the urban environment" and shape individual and collective behaviors (Pacheco, 2017, para. 4). The public sphere is supported by infrastructure that provides connectivity in a city (e.g., trails, pathways, sidewalks, plazas, parks, and more), and supports both physical and mental health (Pacheco, 2017). This chapter provides recommendations for fostering healthy, vibrant communities through improvements to Arlington's parks, trails, streetscapes, green infrastructure, and public art. In addition, the chapter includes suggestions for social distancing measures in light of the global COVID-19 pandemic.

5.1.2 Phases of Implementation

Each of the projects are categorized into one of several phases from immediate up to 20 years from now (Figure 5.1). Immediate changes

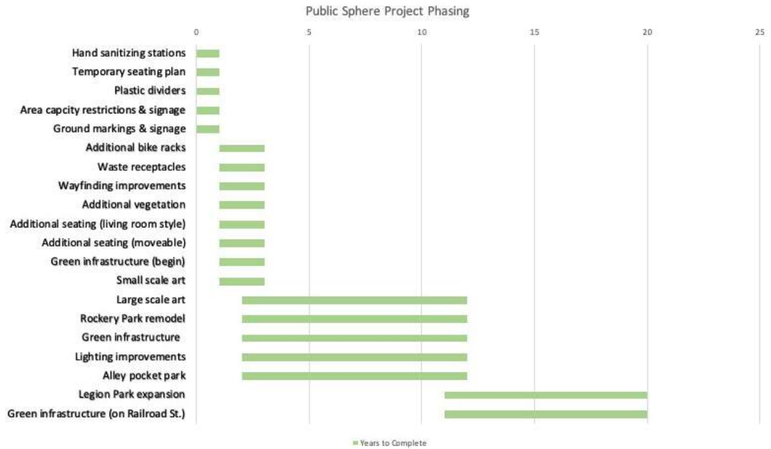


Figure 5.1: Phasing Recommendations for Public Sphere Projects

mostly include social distancing measures as they relate to public safety and the overall health of the community. Phases 1 (0-1 year) and 2 (2-10 years) include projects that could be done fairly quickly, with minimal costs and easily identified funding sources. Phase 3 (11-20 years) includes more expensive projects that would take more time to gather funding, materials, and space to complete.

5.2 COVID DISTANCING MEASURES IN THE PUBLIC SPHERE

The COVID-19 pandemic has already presented itself as the biggest disruption to daily life in recent history. In light of these events, the study recommends a series of measures designed to help Arlington maintain social distancing guidelines when people are using downtown public space. As Washington continues its phased road to recovery, it is important that the City takes steps to ensure the safety of its citizens while they interact and recreate outside. Looking forward, cities must take stock of how they are currently designed, including how and what space is designated for. According to Hurtado, the research director for the American Planning Association, "certain uses will require more space to comply with six-feet distance requirements, while other uses might become virtual and may need less space in the future" (2020, para. 26). For example, restaurants may need more outdoor seating on sidewalks or in parking areas to accommodate social distancing measures. Streets may need to be appropriated to create more space for social "interaction zones" (Hurtado, 2020).

5.2.1 Recommendations

The following recommendations are actions the City of Arlington could take immediately. One of the most basic steps in response to COVID-19 is education. The City could use signage to inform the public of CDC guidelines and best-practices when outside. Signs could range from encouraging stay-at-home practices, distance guidelines (with a creative way to distance), maximum occupancy recommendations, and updates. To reduce costs, signage could be as simple as laminated paper postings.

Additional measures the City could take include installing hand sanitizer stations in public places, such as parks and public restrooms, demarking the ground to encourage social distancing, and providing additional temporary seating. Sanitizer stations could be low-impact installments, placed on existing infrastructure such as light posts. Ground marking could be 6'x6' taped squares to help the public better visualize the CDC distancing measures. This could be implemented on high-pedestrian areas such as sidewalks and public plazas and parks. The City could also develop a temporary seating plan, which may include sectioning current seating and adding temporary seating to ensure appropriate social distancing. For example, benches could be divided with plexiglass or marked for limited occupancy. New seating may be incorporated into existing parks and sidewalks. This is not intended to attract more visitors to public spaces, but to make up for lost seating due to distancing guidelines and provide people with a safe alternative to existing seating options if they choose to be outside. Regular sanitation of existing and new seating should be part of the regular City maintenance schedule.

As local businesses reopen in accordance with state regulations, business owners are looking toward creative solutions to ensure efficient operations with continued safe distancing requirements. The City should coordinate with downtown businesses and local property owners to allow new uses within existing public areas to carry out business operations during these unusual times. For example, restaurants in Dallas, Texas are taking advantage of underutilized outdoor areas such as sidewalks and parking lots to accommodate as many customers as possible (Olin, 2020). These opportunities would allow community members to experience Arlington in an exciting new way and make the best of these current circumstances while supporting the local economy.

5.2.2 Phasing

Recommended COVID-19 social distancing measures are low-cost, temporary actions the City should take to create safe public spaces. They are classified as Phase 0, meaning they should be implemented as soon as possible. Ultimately, social distancing decisions will need to be coordinated with the Safe Start Washington phased recovery plan (Inslee, 2020), and the City's actions will need to be guided by state recommendations.

5.2.3 Code Revisions/Additions

As of spring 2020, Arlington had few confirmed cases of COVID-19 amidst the global pandemic. However, the City should consider taking precautionary steps to be prepared to take action if the situation worsens in the future. The recommended actions would allow the City to access funds and expedite action.

A draft of an emergency proclamation would prepare Arlington to respond swiftly if the City is substantially impacted by successionary waves of illness. Many cities in Washington have taken these measures, commonly to access funds, expedite responses, or enforce distancing measures. In March, the City of Auburn passed such a proclamation, which authorizes temporary staff and expenditures for departments and streamlines bidding procedures for contracts (MSRC (1), 2020). Pertinent are sections 3 and 4 of the proclamation:

"Section 3. These powers will be exercised in light of the exigencies of the situation without regard to time-consuming procedures and formalities prescribed by State statutes and rules, or by City ordinance (except for mandatory constitutional requirements). These include but are not limited to budget law limitations, requirements for competitive bidding, publication of notices related to the performance of public work, entering into contracts, incurring of obligations, employment of temporary workers, rental of equipment, purchase of supplies and equipment, levying of taxes, City performed or directed work in areas of the City that are subject to moratoria, and the appropriation and expenditure of funds.

Section 4. I delegate to Department heads and their designees the authority to solicit quotes and estimates for contracts necessary to combat the emergency. Department heads may enter into contracts in an amount not to exceed Twenty-Five Thousand Dollars ($25,000). Contracts over this amount will be signed by the Mayor" (Auburn, 2020).

If Arlington introduces a proclamation like Auburn's, it would be better prepared to quickly take steps to reduce and prevent further spread of COVID-19. In the case of a recognized emergency, RCW 39.04.280, "Competitive Bidding requirements - Exemptions" and RCW 35.33.081 "Emergency Expenditures - Nondebatable Emergencies" authorize cities to make expenditures with the approval of the legislative body and without public notice or hearing. Having a proclamation in place would allow the City's Public Works and Parks and Recreation departments to access funds to implement social distancing measures. Even if a proclamation is deemed unnecessary at this juncture, ordinances that allow departments to access funds to respond to an emergency would be incredibly valuable for protecting the health and safety of Arlington residents.

5.2.4 Costs & Funding Sources

As mentioned above, the funds for COVID-19 social distancing measures could be made accessible through emergency proclamation or by discretion of City Council per RCW 39.04.280 and RCW 35.33.081. Public Works would likely be the most appropriate department to implement the majority of measures, with the Parks and Recreation Department being responsible for measures taken in parks. Funds from the City's operating budget could be allocated to these departments to fund these measures. Table 5.1 introduces the cost of social distancing measures, as well as funding sources.

Table 5.1: Costs and funding sources for COVID-19 distancing measures.

Measure	Cost	Funding Source
Hand Sanitizer Stations	$15 per unit, plus sanitizer ~$300 for adequate coverage (Grainger, 2020)	Public Works Parks and Recreation
Signage	~$200 Laminated yard signs to cover most public places	Parks and Recreation Public Works
Ground Demarcations	$5 per roll of ground marking tape ~$100 to cover most public spaces in downtown (Uline, 2020)	Public Works
Seating	~$20 per chair (Home Depot, 2020) ~$100 per bench (Home Depot, 2020) Could be sourced from Arlington Hardware & Lumber	Public Works

5.3 PARKS

5.3.1 Recommendations

In recent months, parks and other public spaces have proven to be essential components of cities, with recent stay at home orders and social distancing practices keeping residents close to home (Hurtado, 2020). Communities across the world are recognizing the value of recreational greenspace to promote health and wellness. The City of Arlington has implemented excellent features within their existing park space. The study recommends expanding the existing parks in the downtown, revamping the Rockery Park, as well as adding new green spaces, such as pocket parks, to support Arlington's projected growth.

<u>The Rockery Park</u>

The Rockery Park, located at E Division Street and N West Avenue, is a small neighborhood park with some vegetation and fencing. Three parallel paths run through the park, including the Centennial Trail (Figure 5.2). This park has great redevelopment potential that could serve as a gathering area for small groups and individuals traveling along the trail. When not in use for other purposes, the recommended design, depicted in Figure 5.3, could double as a skatable surface or "skatedot" for wheeled enthusiasts to practice their skills (Parents for Skateparks, n.d.). Differing from a skatepark due to a much smaller scale, this park would offer a space to attract and entertain young adolescents while family members explored the Centennial Trail. Additional landscaping is recommended along the perimeter to further protect users from E Division Street and other nearby roads.

Figure 5.2 Rockery Park, Arlington, WA

Figure 5.3: Reenvisioned Rockery Park as a multi-use gathering area that also serves as a skate facility when not in use for other purposes. Centennial Trail is on the west side of the park.

Alley Pocket Park

An underutilized space exists between buildings along the west side of Olympic Avenue, between 4th and 5th Streets. While the space itself is long and narrow, the vacant gap between two businesses (Figure 5.4) could be utilized as a small pocket park as depicted in Figure 5.5. The suggested additions in this space include a relaxing water feature, seating, lighting, and vertical art and foliage.

***Left**: Figure 5.4: Alley between 4th and 5th along Olympic Avenue*
***Below**: Figure 5.5: Proposed Alley Pocket Park*

Legion Park Expansion

To support anticipated population growth in Arlington, the study recommends expanding Legion Park to continue onto the west side of the Centennial Trail. Currently, this site is bare and underutilized (Figure 5.6). The City could install fencing and trees along the train tracks to separate train car storage from the expanded park and add a play structure appropriate for young children and families (Figure 5.7). A historical railroad themed addition for the playground would promote and preserve Arlington's history and values (Figure 5.8). Expanding the park would enhance trail users' experiences as well as provide more space to accommodate people during events. To implement this plan, the City should verify property lines to ensure that the park does not encroach onto the railroad company's property or sign an agreement with the railroad company for use of the property as a park.

Figure 5.6: Proposed Legion Park expansion area just south of the information building and west of Legion Park and Centennial Trail.

Figure 5.7: Example of children's play structure.

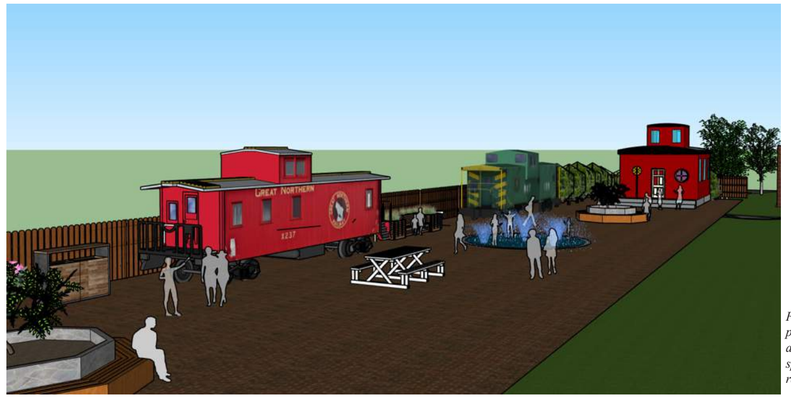


Figure 5.8: Example of train-themed park amenity with reclaimed train cars as play equipment or a pop-up market space with a fence dividing the area from railroad tracks.

5.3.2 Phasing

The recommended phasing for park projects is outlined in Table 5.2 and described in more detail below.

The Rockery Park, pictured in Figure 5.3, and Alley Pocket Park along Olympic Avenue, pictured in Figure 5.5, are recommended to be implemented in Phase 2. The City could move more quickly on the Rockery Park remodel because the City already owns the land. The changes to the Rockery Park are relatively minor, but are aimed at providing a mix of uses to support community members of all ages, socio-economic status, and ability levels. The skatedot design provides a downtown attraction for adolescents, something that is currently lacking according to community member feedback.

The City, with cooperation from neighboring property owners, could implement the Alley Pocket Park along the west side of Olympic Avenue within the next ten years. With existing uses and new developments proposed nearby, this quiet pocket park could provide a unique and relaxing space for visitors to take a break from retail shopping or be a destination in its own right.

The Legion Park expansion is recommended for implementation in Phase 3. While some elements of the plan, such as negotiations with the railroad company and the installation of fencing and tree buffers, could be enacted

Table 5.2: Recommended phasing for parks.

Proposed Change	Phase 0 (Immediate)	Phase 1 (0-1 Year)	Phase 2 (2-10 Years)	Phase 3 (11-20 Years)
Rockery Park Remodel			Add a skatable, multi-use, concrete area, seating and landscaping	
Alley Pocket Park			Add water feature, seating, lighting, vertical art and foliage	
Legion Park Expansion				Install fence and trees along railroad, add play structure, refurbish train cars for public use

Table 5.3: Estimated Park Improvement Costs

Project	Cost Estimate	Funding Options
Rockery Park Remodel	$50,000 - $75,000 (Tony Hawk Foundation, 2020) Consider contracting from Grindline inc, Seattle-based skatepark builder.	Washington RCO Grants Park Impact Fees
Alley Pocket Park	$5,000 - $10,000 (OneSTL, 2020)	Park Impact Fees Private Donations Non-Profit Fundraising
Legion Park Expansion	$250,000-$500,000 (North Carolina State University, 2015)	RCO Grants Park Impact Fees

sooner, the proposed use of the area will be vital to the success of other nearby proposals in the study such as the underground parking lot and retail infill above it. To encourage priority in the other park proposals, this expansion would prove most beneficial just after or around a similar time of the parking garage completion and would tie in nicely with the proposed Civic Plaza.

5.3.3 Costs & Funding Sources

The construction and maintenance of public parks is costly. For example, the standard cost for play structures is up to $1000 per child (Unlimited, 2017). Table 5.3 outlines estimated costs for park improvements. Arlington should seek funding to implement these park projects from multiple sources including federal, state and local programs, as well as support from private partnerships (Delaware Complete Communities Toolbox, n.d.). The Washington State Recreation and Conservation Office (RCO) offers competitive grant funding for various types of public parks and recreation projects (Recreation and Conservation Office, 2020).

5.4 TRAILS

5.4.1 Recommendations

Arlington's existing trail system is quite robust and well used. Several improvements to the amenities along Centennial Trail would further enhance the trail. These improvements include expanding seating options along the trail, ensuring all pathways are ADA accessible, improving lighting, and increasing the availability of waste receptacles and bike racks. The trail is already beloved by the residents of Arlington, but these improvements would further elevate users' experience of the trail and make it more accessible to all. The trail is connected to several other improvement projects, which are addressed in different sections of this report.

To enhance and emphasize the Centennial Corridor, the parking in

Table 5.4: Recommended phasing for trail improvements

Proposed Change	Phase 0 (Immediate)	Phase 1 (0-1 Year)	Phase 2 (2-10 Years)	Phase 3 (11-20 Years)
Improved lighting		Add lighting in trees	Install additional light posts along the trail and other pathways and sidewalks connecting to the trail.	
Bike racks		Add more bike racks in downtown and along the trail.		Require existing and new developments with dual frontage to the trail to install bike racks
Waste receptacles		Install more waste and recycling receptacles (see the Winter Studio Report for more information on the placement of waste receptacles)		
Benches and covered seating options	Paint benches to delineate safe distances that comply with CDC COVID-19 regulations	Install more public seating along trail and other pathways; the benches should be painted by local artists (see the Winter Studio Report)		
Improving ADA accessibility	Widen and resurface pathways to ensure equitable access to benches and trail features			
Parking lots to rain gardens from Division Street to 3rd Street				Convert parking on Railroad Street to open space (see Centennial Urban Corridor development in Chapter 8)

between Railroad Street and the Centennial Trail should be converted into open space with rain gardens from Division Street to 3rd Street. Three parking spaces, one of which is reserved for accessible parking, should be installed at the northern ends of each block from Division Street to 3rd Street to ensure easy access to the trail via the sidewalks. The parking that is lost would be made up for in the parking garages proposed in Chapter 6. Phasing for this would coincide with the phasing for the Centennial Urban Corridor, discussed in Chapter 8.

5.4.2 Phasing

Table 5.4 outlines the proposed trail improvements, which are relatively simple and would enhance the quality of the trail users' experience. Under Phase 1, simple lighting improvements, and additional bike racks, waste receptacles, and public seating options are recommended. Also included in Phase 1 is ensuring that all trails and pathways connecting the trail to seating or other amenities are ADA accessible. The installation of complex lighting improvements, including the addition of light posts or feature lights to increase visibility of trail features, are included in Phase 2 improvements. With these relatively simple improvements, the trail can be a safer, more user-friendly space for Arlington's residents.

5.4.3 Costs & Funding Sources

Costs for recommended trail improvements are detailed in Table 5.5, along with suggested funding sources.

Table 5.5: Cost estimates and funding options for projects along the Centennial Trail

Project	Cost Estimate	Funding Options
Tree lighting		
Additional lighting	~$4,000-$8,000 for fixture and installation costs, depending on style (Johanson, 2020)	Public Works
Bike racks	A custom bike rack ranges from $300-$2,000; standard racks range from $200-$600 depending on size (The Park Catalog)	Arts Commission; Public Works; Donated in Memoriam
Waste receptacles	Recycling receptacles range from $400-$800; waste receptacles range from $300-$600 (The Park Catalog)	Public Works
Benches and covered seating options	$500-$1,000 per bench (The Park Catalog)	Arts Commission; Public Works; Donated in Memoriam
Improving ADA accessibility	Around $2,000 for the whole trail	Public Works
Parking lots to rain gardens from Division Street to 3rd Street	$9,000 ($3,000 each) (Green Values)	Developer of Centennial Corridor (Impact Fees)

5.5 STREETSCAPE

5.5.1 Recommendations

The streetscape, which includes the built and natural environment, is created by the design quality of the street and contributes to the distinct character of a place (Complete Communities Toolbox, n.d.). Streetscape beautification enhances the publics' experience by providing visually appealing places and improved functional uses. There are a number of strategies the City can take to strengthen the downtown's amenities. These strategies, similar to those described in the Trail section, include providing more pedestrian-oriented lighting, accessible recycling receptacles, and additional public restrooms. In addition to those public amenities, bike racks and additional public seating can add to the downtown's accessibility.

5.5.2 Phasing

Table 5.6 outlines street improvement recommendations by implementation phases. The easiest updates are adding public seating options, waste and recycling receptacles, wayfinding signage, and bike racks. These additions improve the usability and accessibility of the streetscape without requiring any changes to infrastructure. For this reason, they are classified as Phase 1 improvements. Updating the lighting would take place over all three phases of improvements. Expanding the use of tree lighting along Olympic Avenue would be relatively simple and low-cost, thus is part of Phase 1. Updating the light posts would be slightly more costly and would require new connections to the power lines, so it falls into Phase 2. The City has expressed interest in installing light poles which also serve as charging stations for electric cars. Due to the cost of engineering and implementing this update, it is included in Phase 3. If the City were able to apply for grants to help offset the costs, this improvement could be moved up to Phase 2. Construction of a public restroom in the downtown will be critical as Arlington continues to grow, but more density is required before a downtown public restroom would be feasible. Thus, this project is included in the Phase 3 improvements. The majority of these streetscape improvements are shown in Figure 5.9.

Figure 5.9: SketchUp model including recommended updates to the streetscape of downtown Arlington

Table 5.6: Recommended phasing for streetscape improvement

Proposed Change	Phase 0 (Immediate)	Phase 1 (0-1 Year)	Phase 2 (2-10 Years)	Phase 3 (11-20 Years)
Improved lighting		Install tree lighting	Add light posts along all streets (see Winter Studio Report for height and spacing guidelines)	Install light posts with electric car charging stations
Waste receptacles		Install more waste receptacles and recycling bins (see the Winter Studio Report for placement information)		
Benches and covered seating	Markings should be painted on benches to delineate a safe distance from person to person that complies with CDC regulations regarding COVID-19	Public seating not only provides places for resting, but also facilitates socialization and strengthens communities; the benches should be painted by local artists wherever possible and plenty of covered options should be available due to the PNW climate (see the Winter Studio Report)		
Wayfinding		Additional signage helps guide people to attractions and amenities of downtown and at places where Centennial Trail intersects with sidewalks to direct more traffic to the trail (See Winter Studio Report)		
Vegetation		Placement of hanging and large movable planters with seasonal vegetation will incorporate color and texture in the study area (See Winter Studio Report)		

5.5.3 Costs & Funding Sources

Costs for recommended streetscape improvements are detailed in Table 5.7, along with suggested funding sources.

5.6 GREEN INFRASTRUCTURE

Surface runoff from urban areas, such as downtown Arlington, contributes to the degradation of waterways via stormwater runoff. It is not uncommon for oil, chemicals, and fecal coliform to appear in nearby waterways. To minimize polluted runoff, green infrastructure improvements can contribute to ecosystem health, particularly along the Stillaguamish River, while sustaining existing infrastructure into the future. Examples of green infrastructure include bioswales, downspout disconnection, rain gardens and harvesting, permeable pavement, green roofs, and urban canopies.

5.6.1 Recommendations

Bioswales could be an integral part of controlling Arlington's surface runoff and protecting local waterways. These features, usually located in the right-of-way between sidewalks and streets, are planted with local vegetation and grasses (Figure 5.10). They capture runoff from impermeable surfaces and filter out pollutants (EPA, 2019). Since they have the capacity to store water, they can also help to reduce flooding. There is very little maintenance involved and the cost is relatively low when compared to long-term cost to the stormwater system (EPA, 2019). The study recommends implementing bioswales in several key areas along Olympic and West Avenues to better facilitate runoff.

Table 5.7: Costs and funding options for projects regarding the streetscape

Project	Cost Estimate	Funding Options
Improved lighting	~$5,300-$13,150 per curbside charging station (OhmHome, 2018).	Public Works
Waste receptacles	See Table 5.4	See Table 5.4
Benches and covered seating	See Table 5.4	See Table 5.4
Wayfinding	$100-$200 per sign; $30 + labor costs for painted signs on the trail or sidewalk (The Park Catalog)	Public Works; Arts Commission
Vegetation	$55 for hanging basket, plus $20 for plants and soil = $75 minimum (Planters Unlimited, 2020).	Public Works; Private Businesses

Table 5.8: Recommended phasing for green infrastructure

Proposed Change	Phase 0 (Immediate)	Phase 1 (0-1 years)	Phase 2 (2-10 years)	Phase 3 (11-20 years)
Bioswale construction		Stormwater guideline revisions Native plant landscaping incentives	Publicly funded bioswales on right of way Developer implementation	

5.6.2 Phasing

Table 5.8 outlines green infrastructure phasing. Phase 1 recommendations include developing private incentives and developer guidelines for green infrastructure and native vegetation improvements. Stormwater mitigation measures such as bioswales and rain capture require more planning and investment, and thus are identified as Phase 2 improvements.

Figure 5.10: Bioswale illustration from Bothell, WA (http://www.ci.bothell.wa.us/1283/Bioswales)

5.6.3 Code Review & Recommendations

Stormwater Guidelines

In the case of mixed-use development, the Arlington Municipal Code (AMC) already has guidelines that call for various green infrastructure features that manage runoff. This language occurs in the mixed-use development regulations, AMC 20.110. Specifically, AMC 20.110.14(j) sets guidelines for Low Impact Development (LID), which aims to manage rainfall and runoff. However, the mixed-use overlay zone where the guidelines apply does not include downtown. The overlay plan should be amended to include the Old Town Business District (OTBD) zone, or the guideline should be added to Chapter 20.46, Section II. - Old Town Residential In-Fill Design Standards (AMC 20.46.110).

Private Incentives for Green Infrastructure

The City should incentivize developers and property owners to add rainwater catchment and harvest features to their properties. This could be done by giving property owners a discount on stormwater utility fees if they implement rain capture and harvesting measures. By utilizing their runoff, building owners would offset their individual load on the stormwater system. Discounts to water usage relative to the amount of water captured could be added as well. The City of Bellingham currently offers a 50% reduction in stormwater development charges if runoff abatement measures are implemented (City of Bellingham, n.d.).

Arlington could also incentivize private developers to use native plants when landscaping their developments by waiving some impact fees. This would ideally extend to the right of way, resulting in an increase of street trees in the area. A native plant guide, similar to ones provided by the City of Bellingham (2004) or King County (2013) would be a tremendously helpful resource as residents implement native vegetation on their properties.

5.6.4 Costs & Funding Sources

Developers would be required to install and pay for bioswales if large-scale renovations or new development projects make improvements to sidewalks and right of ways. For existing right of ways in downtown, the responsibility of implementation would most likely fall on the City of Arlington Stormwater Utility. Fortunately, RCW 35.67.360 enables stormwater utilities to use public monies or credit to implement stormwater mitigation measures. Additionally, the Department of Ecology has a suite of grant and loan options available for Arlington to access state funds. Table 5.9 outlines costs and funding sources.

5.7 PUBLIC ART

Public art installments, designed and chosen by members of the community, can create a sense of place in downtown Arlington and should be integrated into as many aspects of development as possible. Public art enhances the public sphere by creating a unique downtown, highlighting important community values, and making for an interesting destination point for tourists and locals (Arlington Public Art Strategic Plan, 2019).

While Arlington has very prominent art pieces throughout downtown, a case study of

Table 5.9: Costs and funding sources for green infrastructure

Project	Cost Estimate	Funding Options
Bioswales	$5.50-$24.00/sq ft (Green Values, n.d.)	Developer (private) Stormwater Utility (public) Dept. of Ecology water quality grants and loans (Washington DOE, n.d.)

Portland, Oregon, shows just how powerful a simple piece of art can be in transforming a city (Semenza, 2011). The Sunnyside neighborhood was experiencing vandalism, crime, traffic violations, and other undesirable behaviors, which led to negative impacts on residents' health and well-being. To counter these negative impacts, the community painted a giant sunflower in the middle of an intersection and installed several interactive art pieces throughout the neighborhood. These actions created a sense of place, revitalized the community by giving people places to gather and socialize, and increased social capital (Semenza, 2011). While Arlington may not experience the negative behaviors or impacts that the Portland neighborhood did, this case shows how art can have highly positive consequences when created by people from the community. There is room for more art installations throughout downtown Arlington, especially as the downtown expands with new infill development. Incorporating art throughout every step of the development and implementation process would keep the "spaces in between" unique and vibrant.

5.7.1 Recommendations

Small and large scale art installations can be incorporated into downtown Arlington. Small-scale art includes things like murals to enhance blank walls on buildings, painted sidewalks (can include 6' markers to incorporate CDC guidelines for social distancing), as well as fun activities for children and families, creative road signs and directional signs to improve wayfinding, painted benches, or painted storefront windows. The examples shown in Figures 5.11-5.14 are simple ways to add vibrancy to the downtown.

Top Left: *Figure 5.11: Utility box painted by Vikram Madan*
Top Right: *Figure 5.12: Mural by Celeste Byers in Seattle, WA*
Bottom Left: *Figure 5.13: Painted public bench by Amy Woods*
Bottom Right: *Figure 5.14: Painted sidewalk at UC Davis, unknown artist*

Medium and large-scale art projects coincide with new infrastructure. These include mosaics pressed or drawn into new concrete sidewalks and crosswalks (Figure 5.15), artistic bike racks, interesting light posts and signage, interactive art like the sound garden on the Centennial Trail, playground sculptures, and other large sculptures. These pieces would quickly turn into statements throughout the downtown and serve as placemakers for tourists and locals. The red wagon in downtown Spokane, shown in Figure 5.16, is hugely popular with children and families and is something different to do when walking through their trail system.

To enhance the sense of place and community in Arlington, art should be designed and voted on by locals. A competition-based program like KAPOW, in Bellingham, Washington, is a great way to accomplish this and get community members actively involved in shaping the visual future of the downtown. To learn more about KAPOW and how it works, reference the Winter Studio Report under the "Public Art" section. Also found in the Winter Report is information on the program Arlington currently has in place for funding, which comes from 10 percent of new construction sales tax from the Public Art Strategic Plan (City of Arlington Public Art Strategic Plan, 2019).

Figure 5.15: In progress mosaic sidewalk in Portugal, unknown artist

Figure 5.16: Radio Flyer red wagon sculpture playground in Spokane, WA

Table 5.10: Recommended phasing for public art.

Proposed Change	Phase 0 (Immediate)	Phase 1 (0-1 Year)	Phase 2 (2-10 Years)	Phase 3 (11-20 Years)
Small-scale art		Murals on buildings and sidewalks, creative road and directional signs, and painting benches, and storefronts		
Large-scale art			Mosaics in sidewalks and crosswalks, creative bike racks, light posts and signage, playground sculptures, and other interactive art pieces	Continuing projects from Phase 2.
Temporary art	COVID-19 related social distancing measures that could include temporary public art such as painted storefronts, chalk designs on sidewalks, and painted signage			

5.7.2 Phasing

Table 5.10 outlines public art phasing. Small-scale art projects could be undertaken in Phase 1. Large-scale art requires more planning and investment, or might be incorporated into new development, so is listed in Phases 2 and 3.

5.7.3 COVID-19 and Public Art

Locally made art pieces are important in community building and enhance uniqueness and sense of place. People feel more connected to a place that celebrates history and culture through creative, interesting, and uplifting pieces of art.

The COVID-19 pandemic has brought a lot of uncertainty to many cities, but through art, the Arlington community can become closer and stronger.

The following recommendations should be taken into consideration when creating new guidelines for upholding CDC requirements amidst the pandemic.

Sidewalk Art

According to CDC guidelines, people must maintain a distance of at least six feet between each other at all times to limit the spread of viruses. Sidewalk markings serve as reminders for social distancing, and local artists can use this as an opportunity to create unique and temporary designs with paint or chalk on Arlington's sidewalks and the Centennial Trail. Examples from other cities are shown in Figures 5.17 and 5.18. The markings can include inspirational or funny messages, murals, or fun activities like hopscotch. If more permanent pieces are desired, the artist would go through the Art Commission for approval and use paint instead of chalk. General members of the public should use chalk, making for an easy removal if undesirable and creating a new canvas periodically for other artists to utilize after rain.

Storefronts

Many local businesses commission artists to paint seasonal murals on their windows, but in this time, social distancing reminders should be painted in addition to a mural or message from the business owner. This enhances the feeling of a close

Figure 5.18: Fun sidewalk art activities by Abbey Tucker in Georgia.

Figure 5.17: Sidewalk art in Northeast Ohio, from WKYC.

***Above**: Figure 5.19: An uplifting message on a storefront in Washington DC, by Andy Shallal.*

***Right**: Figure 5.20: Another mural painted by Luther Wright at Busboys and Poets Hyattsville, MD.*

community downtown and maintains a connection between businesses and customers, even when local shops are closed for the time being. Examples of painted windows on storefronts are shown in Figures 5.19 and 5.20.

In addition to sidewalks and storefronts, public art should be incorporated into as much of the downtown as possible. Opportunities for more public art include street light posts, trash cans, benches, utility boxes, and even streets.

5.7.4 Costs & Funding Sources

Arlington's Public Art Strategic Plan includes great options for funding for various art projects. Public art funding should be applied to community building during the COVID-19 pandemic, as well as to implement a competition-based program like KAPOW.

TRANSPORTATION, MOBILITY AND PARKING

6.1 INTRODUCTION

The transportation element serves as a guide for enhancing pedestrian access, reducing congestion, and implementing infrastructure to encourage a variety of transportation options in the downtown. This chapter addresses topics such as street network changes, pedestrian safety, and parking. Among the identified topics, there are tangible project recommendations regarding phasing, cost estimates, and potential funding sources to support the suggested projects.

6.1.1 Phases of Implementation

Considering limited fiscal budgets this year at city levels across the nation due to COVID-19, the most costly projects are pushed back to phase 2 or later to allow for financial recovery.

- Phase 1: 0 - 2 Years
- Phase 2: 3 - 10 Years
- Phase 3: 11 - 20 Years
- Phase 4: 21+ Years

6.1.2 Transportation, Mobility and Parking Topics

- Street Network/Traffic Flow
- Parking - On and Off Street
- Public Transit
- Bike Connections
- Pedestrian Safety

The transportation, mobility and parking goals include implementing a street network that is more pedestrian friendly and fosters economic development. Vehicle, bicycle and pedestrian traffic flow could be improved by revising the street network with one-way streets. This could allow for wider sidewalks, as well as dedicated bicycle lanes, and provide better connectivity for bikes to the Centennial Trail. The proposed revisions could further enhance pedestrian safety as Arlington continues to grow.

6.2 STREET NETWORK

Olympic Avenue is the main roadway through Arlington's downtown. As the main thoroughfare, it is used for more than driving and walking down the sidewalks. It is a community gathering place, used for annual parades, the farmers market, and other events. Community members have expressed that pedestrian safety and other transit options could benefit from road improvements. In response to improving safety and increasing transit options in the downtown, the main goals of the street network changes are to:

1. Slow vehicle traffic through downtown
2. Balance different modes of transit
3. Redesign streets to support public safety for people using the downtown

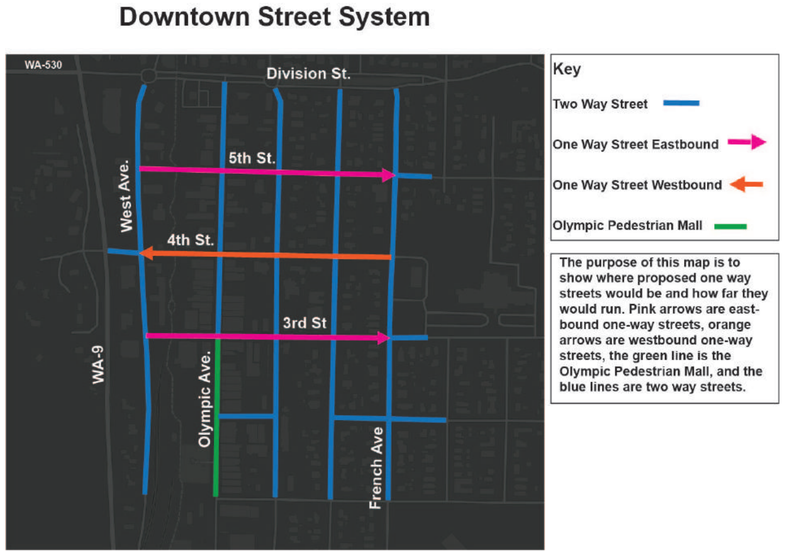


Figure 6.1: Downtown Street System, showing One-way street routes

6.2.1 Recommendations

To meet these goals, the street network relies on the efficient use of the street Right-of-Ways (ROWs). To meet community desires, a one-way street system has been modeled. Most of the projects in this chapter are dependent on the implementation of this one-way street system design (see Winter Studio Report for more information about the one-way streets).

Figure 6.1 portrays the proposed one-way street routes on 3rd, 4th, and 5th Streets. The one-way streets could run from French Avenue to West Avenue.

Suggestions for street network changes include:

- One-way Conversions: on 3rd, 4th, and 5th Streets
- Street Calming Infrastructure: curved driving patterns on Olympic Avenue
- Pedestrian Mall: temporary vehicle traffic closure on Olympic Avenue between 2nd and 3rd Streets (See more about this project in the Catalyst Chapter of this report)
- Code revisions: updated traffic, bicycle, and pedestrian laws

6.2.2 Phasing

This section outlines the phasing of street network changes for each project, which are shown in Table 6.1.

6.2.3 Code Revisions

With a growing population, Arlington will need to accommodate increased traffic flow. Utilizing the proposed one-way streets could help facilitate future increased traffic flow. Arlington should

Proposed Change	Phase 1 (0 - 2 Years)	Phase 2 (3 - 10 Years)	Phase 3 (11 - 20 Years)	Phase 4 (21+ Years)
One-Way Street Conversion	Conduct a traffic analysis to determine current vehicle capacity, model travel demand, and optimize traffic signal installation (FHA, 2018).	Temporary bulb-outs placed prior to proposed permanent bulb-outs to help the public adjust. Update code and traffic laws to include language that specifies laws about driving the wrong way on roads marked with one-way street arrows.	Street conversions and paving to convert 3rd, 4th, and 5th Streets to one-way; convert ROW divisions of Olympic and West Avenues. Install signage to route traffic through the street network system. Signs should include 'do not enter,' 'one-way,' and stop signs for every intersection with a 4-way stop. There should also be symbols painted on the ground such as arrows for traffic direction and traffic lines.	
Traffic Calming Infrastructure	Include language in city code and transportation plan pertaining to the use of bulb-outs and curb extensions for calming traffic.		Street calming infrastructure installed in the study area. Includes bulb-outs, diagonal parking and intersections.	

Table 6.1: Phasing of proposed street network changes

revise their street and traffic codes to include specific one-way street regulations, as the current municipal code does not contain any specific codes related to one-way streets.

Street calming infrastructure is another method of facilitating traffic flow. Traffic calming measures are required by the city's code to be approved by the Director of Public Works (Municipal Code 20.110.014). This code outlines curb extensions (bulb-outs); it currently stipulates that they cannot be larger than one foot of the parking lane width (Arlington, 2020). The proposed bulb-outs are the same width as the parking lane width (Figure 6.2). Arlington should consider revising their code for curb extensions to allow for same size extensions as the parking lane width. This revision could help the City better facilitate traffic flow and emphasize pedestrian safety by increasing pedestrian visibility. An example of bulb-out dimensions ideal for traffic calming can be found in San Francisco's plan. They recommend bulb-outs abutting the travel lane. This increases safety for pedestrians and also prevents damage to parked cars (SF Better Streets, 2015).

6.2.4 Costs & Funding Sources

Potential funding sources for the proposed street network improvements are shown in Table 6.2. To alleviate economic pressure on Arlington, other funding options, such as grants, are available. Grants from the Transportation Improvement Board can fund street calming infrastructure (TIB, 2020). There are also Federal programs such as the Surface Transportation Program through the Federal Highway Administration, Transportation Alternatives Program, and the Highway Safety Improvement Plan (HSIP). The Surface Transportation Program and HSIP funding sources have previously been used by Washington Department of Transportation (DOT) pedestrian and bicycle safety projects (US DOT, 2016).

Table 6.2: Potential funding sources for proposed street network improvement projects

Project	Cost Estimate	Funding Options
One-Way Street Conversion	The existing 3rd, 4th and 5th Streets are each 1,320 feet long (.75 miles total). The total estimated cost for converting all streets into one-way streets is a minimum of $20,000. Lane line eradication costs ~$1.50 per linear feet (LF). For all three streets the total cost is ~$5,940. Bike lane lines (Thermoplastic 6") cost ~$1.50 LF. This is ~$1,980 per street (total cost $5,940). Bike symbols are ~$300 each; with four on each street, totals to ~$3,600. The travel lane line (Thermoplastic 4") cost is ~$1.00 LF. Totals to an estimated cost of ~$1,320 each street (total $3,960) (U.S. DOT, 2016). *excludes sidewalk widening costs	Flexible Funding Programs - Surface Transportation Block Grant Program (23 USC 133) Provides funding for street preservation and improvements for highways, tunnels and bridges on public roads, pedestrian and bicycle safety, and transit projects (FTA, 2020). Highway Safety Improvement Plan (23 U.S.C. 148) This U.S. DOT program provides funding for projects that meet the plan's criteria for decreasing traffic fatalities (U.S. DOT, 2015). Transportation Alternatives Program - Transportation Enhancements Provides federal funds for projects that expand transportation options, including pedestrian and bicycle infrastructure (U.S. DOT, 2017).
Street Calming Infrastructure	Addition of bulb-out crosswalks ranges from $2,000-$20,000 (PEDSAFE, n.d.).	Transportation Improvement Board - Urban Sidewalk Program This grant provides support for transportation related construction for cities with populations of 5,000 and greater (TIB, 2020).

6.3 PEDESTRIAN AND MULTIMODAL SAFETY

The downtown area is the heart of Arlington, and as the community continues to grow it is important to prepare for increased traffic in the downtown. By offering street revisions and multiple modes of transportation, such as bike lanes and sidewalk buffers, Arlington can improve its street connectivity and pedestrian safety.

To promote pedestrian and multimodal safety, the primary goals of the street revisions are:

- Facilitate increased traffic flow
- Offer different modes of transportation to the downtown area
- Increase pedestrian and bike connectivity to the downtown area and Centennial Trail

6.3.1 Recommendations

The study has proposed multiple additions to the downtown area in order to meet these main goals. These suggestions include:

- Street Narrowing on Olympic and West Avenues: to widen sidewalks, add diagonal parking, and improve crosswalks.
- Street Furniture: to permit outdoor furniture on one side of each sidewalk from one edge to 30 inches outwards continuously along the street on all sidewalks in the downtown, except MacLeod Avenue.
- Bicycle Parking Requirements: to ensure adequate bicycle parking assuming car parking demands decrease with increased bicycle infrastructure. Revise code to specify exact dimensions of parking stalls (Section 20.72.110- Arlington Municipal Code: Bicycle parking facilities).
- Bike Lane Infrastructure: add bike lanes with buffers between the sidewalk and the street to the proposed one-way streets on 3rd, 4th, and 5th Streets. The recommended minimum width of bike lanes is six feet for one-way streets and five feet for two-way streets.
- Traffic Calming Infrastructure: incorporate curved streets and four-way stops at every intersection.
- Pedestrian Mall: allow for temporary vehicle traffic closure on Olympic Avenue between 2nd and 3rd Streets. Raised roads with physical barriers prevent vehicles from entering and they also calm traffic (See more about the pedestrian mall idea in the Catalyst Chapter).
- Bulb-out Crosswalks: add bulb-out crosswalks on Olympic and West Avenues and on 3rd, 4th, and 5th Streets where they connect to the Centennial Trail, similar to what is pictured in Figure 6.2.

Figure 6.2: An example of a bulb-out crosswalk (Hering, 2019)

6.3.2 Phasing

The proposed pedestrian and multimodal revisions could take several years to complete (Table 6.3). By dividing these projects into phases, Arlington may prioritize and find proper funding for the

Table 6.3: Phasing of proposed pedestrian and multi-modal revisions

Proposed Change	Phase 1 (0 - 2 Years)	Phase 2 (3 - 10 Years)	Phase 3 (11 - 20 Years)	Phase 4 (21+ Years)
Street Narrowing			Street conversions & paving to convert street width and space delineations.	
Sidewalk Amenities			All sidewalks besides MacLeod Avenue should permit outdoor furniture on either side of the sidewalk from the edge to 30 inches inward.	
Bulb-Out Crosswalks	Revise language in city code, transportation plan, and pedestrian plan to encourage the use of bulb-outs and curb extensions for pedestrian safety in areas with current or anticipated heavy pedestrian use.	Temporary **bulb-outs** placed prior to proposed permanent bulb-outs to help the public adjust.	**Permanent traffic calming infrastructure** installed in the study area. Includes bulb-outs, crosswalks, diagonal parking and intersections.	
Bike Lane Infrastructure			Street conversions & paving: paint bike lanes and install green bike barriers between car traffic and bike lanes.	
Bike Parking			Install bike racks on the wide sidewalks throughout downtown after the new road network has been paved and painted.	

suggested projects.

6.3.3 Code Revisions

Arlington's current code for pedestrian and multimodal safety could be improved by adding specific language that encourages a greater range of mobility options, including more bike lanes and multimodal paths in the downtown. The recommended phasing process allows for the public to adjust to changes that accommodate increasing pedestrian use. Requiring buffers between sidewalks and bike lanes on one- and two-way streets increases the safety and flow of multimodal traffic. Figure 6.3 illustrates what bike lanes with buffers could look like. Arlington's code does not specify dimensions for bike parking stalls. It is recommended that Arlington add more specific requirements based on population projections and bike storage needs.

6.3.4 Costs & Funding Sources

The cost to implement changes for increasing pedestrian and multimodal safety are determined by factors ranging from stormwater management impacts, size of area designated for curb extension, need to remove

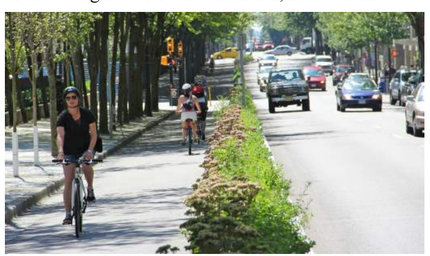


Figure 6.3: Green buffer between a bike lane and car traffic (MAG, 2015).

or relocate existing street furnishings, need to relocate current utility poles, and presence of transit stops. One-way street conversion costs and funding source information can be found in greater detail in the Street Network Section (Section 6.2). Funding options for street calming infrastructure projects can be achieved through grants from the Transportation Improvement Board's Urban Sidewalk Program (Table 6.4). This grant program funds transportation related projects that address pedestrian safety and system connectivity in cities with a population greater than 5,000 (Transportation Improvement Board).

6.4 PARKING

Parking availability downtown is currently limited to surface lots and parallel on-street parking. The residents of Arlington expressed a need for more parking, and this is especially necessary given the forecasted future population growth of the area (GMA, 2020).
The parking change suggestions aim to:

1. Maximize on-street parking by delineating spaces
2. Minimize aesthetic impacts of parking-related infrastructure
3. Balance commercial and residential land uses with parking opportunities
4. Propose parking garages with delineated parking spaces

Table 6.4: Cost estimates and potential funding sources for pedestrian and multimodal safety projects

Project	Cost Estimate	Funding Options
One-Way Street Conversion: • Street Narrowing • Bike Lane Infrastructure	Bike lanes can range from $5,000-$50,000 per mile depending on existing road conditions and if there is a need to adjust other street factors (FHWA). Buffered bike lanes range from $2-9.33 per foot (Active Living Research, 2013). Green curb extensions that create a pedestrian buffer cost roughly $28,397 per extension (Active Living Research, 2013).	Flexible Funding Programs - Surface Transportation Block Grant Program (23 USC 133) Provides funding for street preservation and improvements for highways, tunnels and bridges on public roads, pedestrian and bicycle safety, and transit projects (FTA, 2020). Highway Safety Improvement Plan (23 U.S.C. 148) This U.S. DOT program provides funding for projects that meet the plan's criteria for decreasing traffic fatalities (U.S. DOT, 2015). Congestion Mitigation and Air Quality Program (CMAQ) Federal program supporting projects aiming to improve air quality and decrease congestion (U.S. DOT, 2020).
Street Calming Infrastructure • Bulb-out Crosswalks	Addition of bulb-out crosswalks ranges from $2,000-$20,000 (PEDSAFE, n.d.).	Transportation Improvement Board: Urban Sidewalk Program (TIB, 2020).
Bike Parking	One bike rack is about $100 - $600. Covered bike racks are about $1,500 (The Park, 2019).	Pedestrian & Bicycle and Safe Routes to School (SRTS) programs (WSDOT, 2020).

6.4.1 Recommendations

To meet these parking goals, several projects are proposed. Suggestions for parking changes include:

- Delineated diagonal parking: marked parking spaces on streets to maximize spaces
- Alternating diagonal parking: on West and Olympic Avenues to allow for more parking spaces and to calm traffic.
- Delineated parallel parking: on both sides of MacLeod Avenue to maximize spaces
- Parking garages: located on four parcels with high infill potential in strategic locations near downtown (see Figure 6.5)
- Assess parking requirements: as Arlington and mainstream transportation shifts away from vehicles, the car parking requirements should be reduced in downtown (Shoup, 2018).

Figure 6.4 shows parking on alternate sides of Olympic Avenue on either side of the intersection (east/west). This technique calms traffic while providing parking to both directions of traffic.With delineated parking spots and the addition of the proposed parking garages, 353 additional parking spots could be created. Table 6.5 presents the final number of additional parking spaces to be implemented.

The study recommends that certain off-street parking sites be redeveloped. The Public

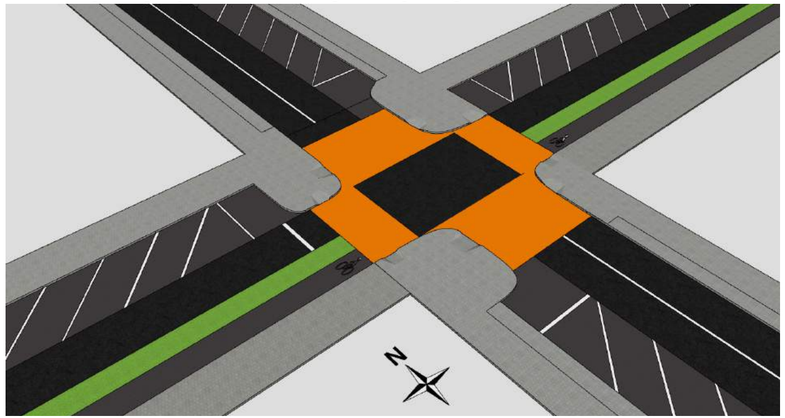


Figure 6.4: Alternate Side Parking Pattern for Olympic Avenue

Figure 6.5: Proposed parking garage locations

Sphere chapter of this report suggests the eventual removal of parking along the Centennial Trail to allow for more green space and a wider trail.

6.4.2 Phasing

The study recommends making parking revisions in Phase 2 or 3 once more development has been added in downtown (Table 6.6).

6.4.3 Code Revisions

Arlington's current code does not require businesses in the Old Town Business District 1 to provide parking unless the lot is zoned as residential. Zoning laws for residential lots require a minimum of two parking spaces per unit (unless it is a single room unit). There is a growing movement in cities to reduce or remove off-street parking requirements. Cities like Hartford, Minneapolis, and San Francisco have made these changes. The private developer can still choose to have parking while allowing incentives for increased density via less parking requirements (Shoup, 2018). Additionally, if vehicle parking requirements are decreased, increased attention should be given to multimodal mobility including public transit, pedestrian, and bicycle connectivity.

Table 6.5: Current and proposed downtown parking amounts

Type of Parking	Current On-Street Parking	Additional Proposed On-Street Parking	Additional Proposed Structured Parking Spots	Total Additional Proposed Parking Spots
Approximate Number of Parking Spots	480	120	233	353

Table 6.6: Scheduled steps towards completion of the downtown parking proposal

Proposed Change	***Phase 1 (0 - 2 Years)***	***Phase 2 (3 - 10 Years)***	***Phase 3 (11 - 20 Years)***	***Phase 4 (21+ Years)***
Assess parking requirements	Evaluate parking demand - consider reducing requirements in downtown.		Reassess parking demand.	Continue reevaluating parking demand every ten years.
Delineate Parking			Pave and mark all on-street parking to ensure the amount of parking spaces is maximized. This should be done in tandem with the general road repavement.	

6.4.4 Costs & Funding Sources

Table 6.7 reviews the proposed parking improvement projects and their potential funding sources. Through increased bicycle parking, delineated parking, and the continuous assessment of parking requirements, Arlington can prepare for fluctuating parking demand. Potential funding sources include the Transportation Improvement Board (TIB) and the Transportation Alternatives Program.

6.5 PUBLIC TRANSIT

According to the community meetings, public transit is underutilized due to its infrequency and one-way flow. The one-way flow is inconvenient for travel from Smokey Point to downtown Arlington. The community suggested the current configuration be replaced with a closed-loop bus service circling the downtown to Smokey Point and routing through the neighborhoods in between. The proposed frequency could be 20 minutes, which could require about 6 busses to cover the estimated total route time of 60-80 minutes. Greater population density is needed in Arlington to justify the large initial and annual costs of a more frequent public transit system (Guerra, 2018).

The public transit changes focus on:

- Improving the bus route to reach more people

Table 6.7: Funding sources for proposed parking improvement projects

Project	Cost Estimate	Funding Options
Assess Parking Requirements	Salary of planning staff and GIS technician(s).	Arlington's Adopted Budget is sufficient enough to cover these costs (Arlington Budget, 2020).
Bike Parking	One bike rack is about $100 - $600. Covered bike racks are about $1,500. (The Park, 2019).	Transportation Alternatives Program - Transportation Enhancements Provides federal funds for projects that expand transportation options, including pedestrian and bicycle infrastructure (U.S. DOT, 2017).
Delineate Parking	With the proposed parking improvements, Arlington's downtown area can have an additional 120 parking spots, totaling 600 on-street parking spots. The general costs for striping parking lots is $4-5 for each parking stall, with handicap stalls costing about $25-30 each (Seal, n.d.). Arlington would need to set aside $3,000-4,000.	Arlington's Adopted Budget can cover the costs of delineated parking (assuming the budget is not drastically lower than the 2019-2020 budget). (Arlington Budget, 2020). Transportation Improvement Board: Urban Sidewalk Program This grant provides support for transportation related construction for cities with populations of 5,000 and greater (TIB, 2020).

outside the downtown area
- Accommodating for future population growth to keep up with demand
- Decreasing the reliance on private vehicles to increase public transit use

6.5.1 Recommendations

The suggested changes to the public transit are:

- Bus Stops: Renovate and add new bus stops to accommodate the new transit route.
- Access Management: Revise routes to include Smokey Point, other high-visit areas (e.g., parks), and locations with populations that are less likely to have vehicles (e.g., retirement homes, schools) emphasizing areas with children, elderly, and lower income residents.
- Park & Ride Facility: Construct a parking lot at the Smokey Point transit station to accommodate increased transit use (particularly for those commuting outside Arlington).

6.5.2 Phasing

Due to public transit's immense initial and continuous implementation costs, expansion should be timed strategically to limit financial losses. Waiting for appropriate density and demand is the best way to do this. Table 6.8 shows the estimated schedule for the transit network restructuring and growth.

Arlington currently has limited transit access that only flows north-south once an hour. The original residents surveyed showed little knowledge about the bus system. The lack of knowledge stems from a lack of use. This showcases the need to restructure the transit system itself. A stronger transit system could also significantly reduce car traffic, preventing future issues with congestion.

6.5.3 Costs & Funding Sources

This section breaks down funding and costs of the recommended public transit projects. Table 6.9 itemizes the required costs for implementing the proposed transit improvements along with external funding avenues. The total cost after being fully established could be between $5,560,000 and $5,750,000 paid over the minimum course of 20 years with an additional $1,800,000 annual cost. While this is a large upfront sum, many federal grants are available to help pay for the big expenses transit improvements can incur.

6.6 SUMMARY

The transportation proposals outline a variety of mobility options. The recommendations would result in more equitable sharing of the streets between car, pedestrian, bicycle, and public transit. One-way streets allow the widening of sidewalks and insertion of bike lanes. Other traffic calming techniques--such as diagonal parking, chicanes, and bulb-outs--in the main streets enhance the atmosphere of leisure, attract more people, create a livelier streetscape, and boost the local economy. The bicycle plan's bike lanes capitalize on the beloved Centennial Trail by extending its network and further integrating it into downtown. Finally, the transit plan provides better connectivity throughout Arlington to grant more accessibility to carless communities. All the multimodal suggestions work to balance the streetscape and improve transportation and mobility.

Table 6.8: Recommended phases for the implementation of different aspects of the transit proposal

Proposed Change	*Phase 1 (0 - 2 Years)*	*Phase 2 (3 - 10 Years)*	*Phase 3 (11 - 20 Years)*	*Phase 4 (21+ Years)*
Gather Ridership Data	Conduct ridership analysis to collect information on current transit use to understand ridership patterns.	Conduct ridership analysis.	Conduct ridership analysis.	Continue conducting ridership analysis to collect information on current transit use to understand ridership patterns. Use to revise the new transit route.
Implement Improved Bus Route	Identify targeted communities to begin planning the new shuttle route, such as communities without car access (children, elderly, low-income), starting with one bus in each direction of the route.	Begin route with two buses on the route going in opposite directions.	Add an additional two busses to the route to increase frequency.	Add an additional two busses to the route to increase frequency to the target twenty-minute interval.
Bus Amenities & Transit Signage		Install bus stops and signage.	Update signs to reflect the true schedule.	Continually ensure signs are up-to-date after every adjustment.
Public Outreach to Make Public Aware of Route Changes		Advertise all public transit changes at bus stops and frequently visited locations in town.		Continue advertising public transit changes.
Park & Ride at Smokey Point to Alleviate Increased Transit Use.	Begin surveying the lot for potential development.			Begin construction of the Park & Ride.

Table 6.9: Explores the cost estimates and multiple funding avenues for the transit plan

Project	Cost Estimate	Funding Options
Gather Ridership Data	Automatic Passenger Counters (APCs) is one method for data gathering. They cost between $900 to $2000. The total cost for 6 busses would be $5400 to $12000 (Automated Data Collection, 2003).	Arlington's adopted budget should be sufficient enough to cover these costs (Arlington Budget, 2020).
Improved Bus Route	An electric bus costs $750,000 upfront with a $150 hourly rate. Total cost would be $300,000 for operation costs annually. The goal of 6 busses would be $4,500,000 with $1,800,000 annual costs at full operation (MacKechnie, 2019).	The FTA's Low or No Emission Program funds busses with reduced GHG emissions (FTA, 2020).
Bus Amenities & Transit Signage	The 48 proposed bus stops would require $6,000 to $10,000 each, or between $300,000 and $480,000 total (Schmitt, 2018).	Grants for Buses and Bus Facilities Formula Program - 5339(a) funds new busses and related infrastructure (FTA, 2020). Urbanized Area Formula Grants - 5307 funds the transit networks of rural areas and small towns (FTA, 2020).
Public Outreach	Advertising on the bus or around town would require a budget of about $4,000 annually (Bus Exterior Advertising, 2020).	There is room in the budget.
Park & Ride	Parking lot square foot construction is ~$150. There are 1.2 acres available so it comes out to $3,000 to $6,000 for clearing the lot and about $750,000 if 250 parking spaces were created. The total cost would be $756,000 (Asphalt Paving Costs, 2018).	Grants for Buses and Bus Facilities Program (FTA, 2020).

ENVIRONMENTAL HAZARDS AND CLIMATE CHANGE

7.1 INTRODUCTION

To address future development and growth in Arlington, the environmental hazards and climate change chapter highlights project recommendations, outlines phasing strategies, and identifies costs and potential funding sources. This chapter presents implementation suggestions that could serve to protect the community from future natural hazards and provide for a healthy environment while considering the implications of climate change in the Puget Sound region. The winter studio report details local hazards and specific mitigation actions that could reduce impacts during a hazard event. Mitigation projects similar to the ones outlined in the winter report should be included in a city level hazards mitigation plan.

Downtown Arlington is well situated in terms of avoiding significant damage from natural hazards as they are currently mapped. However, future climate change risks could increase hazard exposure, resulting in future threats such as inundation from flooding. The City should improve their hazards planning by taking the precautions outlined in this chapter.

7.1.1 Phases of Implementation

- Phase 1: 0 - 2 Years
- Phase 2: 3 - 10 Years
- Phase 3: 11 - 20 Years
- Phase 4: 21+ Years

7.1.2 Environmental Hazards & Climate Change Themes

Hazard mapping and localized mitigation and hazards planning improve public accessibility to local hazard information. Hazard maps should be updated to keep communities and infrastructure safe from potential hazard events through proper mitigation and planning. Arlington's current hazard plan is under Snohomish County's plan. A localized mitigation and hazards plan may better prepare the City for environmental hazards and climate change.

7.2 LOCAL HAZARD PREPAREDNESS AND SAFETY

The City has updated Digital Flood Insurance Rate Maps (DFRIMs) in PDF form and divided them into parcels (Figure 7.1). These maps are difficult to locate and interpret in their current form (FEMA, 2016; Snohomish County, n.d.). Despite the downtown not being located within the current mapped floodplain, surrounding infrastructure that is critical to reach the downtown could be damaged by a 100- or 500-year flood. Updated DFIRMs can be accessed online in a searchable form similar to Google Maps. Figure 7.2 shows what the DFIRM portal looks like when the flood maps are most up to date.

Figure 7.1: FEMA's preliminary DFIRMs of Arlington's 100-year floodplain in blue, the 500-year floodplain is shown in orange (FEMA, 2016).

In response to improving safety and preparedness in Arlington, the main goals of localizing hazard preparedness and safety are to:

1. Promote safety of residents.
2. Avoid placement of road infrastructure in areas highly vulnerable to natural hazards.
3. Understand and plan based on localized data and hazard risks.

7.2.1 Recommendations

Suggestions for localizing hazard preparedness and safety include:

- Updating DFIRMs: digital online map portal.
- Creating a city level hazards plan.
- Update suggestions for City Comprehensive Plan Hazards Appendix - Intermediate step to creating a city level hazards plan.

7.2.2 Phasing

Currently, Arlington is included within the Snohomish County Hazard Mitigation Plan. In Washington State, small cities are typically under the county's Emergency Management Division. However, once cities reach populations of about 40,000, they usually make their own city specific hazards mitigation plan. Puyallup has a population of about 40,000 and has created their own city hazards plan aside from the county planning efforts (Puyallup, 2013). Arlington is predicted to grow to a population of about 25,000 by 2035. Thus, 20+ years from today, the City should be considering and preparing to create their own hazards mitigation plan that is community specific in order to allow ample time to create a localized hazards plan prior to reaching a population of 40,000.

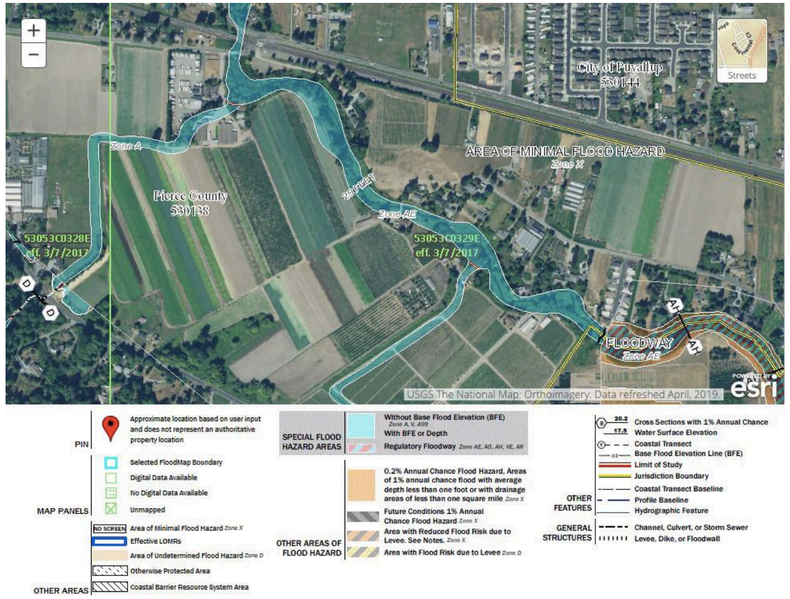


Figure 7.2: Updated DFIRM in the City of Puyallup, Washington (FEMA, 2019)

Arlington's Hazards Appendix in the comprehensive plan is appropriate for the current population and is a good start toward evaluating community specific needs and vulnerabilities (Arlington WA, 2017). Hazards mitigation plans take time to write and accumulate necessary data and information. Efforts to continue improvement of the hazards appendix in the current comprehensive plan could make the transition from using a county hazards plan to a city hazards plan smoother. Table 7.1 describes the suggested projects phasing in more detail.

7.2.3 Costs & Funding Sources

The projects outlined in this chapter have alternative funding sources available to reduce cost impacts on the City. The Washington Department of Ecology, FEMA, and the Washington Emergency Management Division provide funding for projects similar to the ones suggested. Table 7.2 provides a cost analysis and funding options to provide routes for project implementation. Inaction in disaster preparedness and mitigation can result in large financial and social costs to a city or region. Every $1 spent on mitigation efforts is equivalent to $4 spent on recovery efforts (FEMA, 2019). The upfront cost of mitigation and planning for local hazards is worth the investment when looking at that cost comparison.

7.3 SUMMARY

Anticipation of growth in Arlington will require changes in the developmental phases of hazard planning documents. For now, the hazards analysis in the appendix of the City's comprehensive plan is sufficient and standard for cities of equivalent size. However, starting the process of creating a more detailed hazards appendix could make the transition to a localized hazard mitigation plan smoother and quicker. The suggestions of updating DFIRMs and creating a local hazards plan for the downtown corridor could foster a resilient and prepared community.

Table 7.1: Phasing timeline for environmental hazard actions

Proposed Change	*Phase 1 (0 - 2 Years)*	*Phase 2 (3 - 10 Years)*	*Phase 3 (11 - 20 Years)*	*Phase 4 (21+ Years)*
Update DFRIMs		Update DFIRMs and ensure they are available through FEMA's website.		Continue updating hazards data and mapping to account for changes in the local climate.
Create a City Level Hazards Plan			Continue to detail the localized hazards plan as data is updated. Begin updating the hazards portion of the comprehensive plan by incorporating more details, hazards, and analysis. Continue to make updates to the localized hazards plan as data is updated. Start planning for hiring and creation of a local hazards plan.	Contract or hire staff to write a localized hazards plan. A larger population could support staffing for a division of emergency management. Make updates to the localized hazards plan as data is updated.

Table 7.2: Cost estimates and funding opportunities to complete the suggested environmental hazards projects

Project	Cost Estimate	Funding Options
Update DFIRMs	There are 240 in progress flood map updates in the U.S. Annually, FEMA spends about $116 million on updates. The annual costs divided by the number of current projects means that each project costs nearly $500,000. Most flood map updates are funded by FEMA and not a city cost (FEMA, 2019). Arlington has already collected the data, so the cost of uploading the data to DIFRMs could be a fraction of a typical project cost. Flood maps are supposed to be updated every 5 years. Updates will be a recurring cost.	Floodplain by design grant or loan through the Washington Department of Ecology. These grants go toward projects such as Risk MAP to reduce flood risks in Washington communities and restore habitat in floodplains. Projects funded through this program require the jurisdiction receiving funding to match the grant by 20 percent of the cost of the project (DOE, n.d.). FEMA budgets about $100 million for flood map updates across the nation for the fiscal year of 2020 (E&E News, 2020).
Create a City Level Hazards Plan	Salary of planning staff and GIS technician(s) to create and write the plan. Post job as an RFP or hire permanent or temporary city staff.	Hazard Mitigation Grant Program through FEMA provides funds to local communities to implement mitigation projects (FEMA, 2019). Homeland Security Grant Program provides grants to projects that support the National Preparedness Goal to have a secure and resilient nation. Funding includes planning projects that relate to preparedness efforts (EMD, 2018). Washington State Department of Commerce is providing five $20,000 grants to help fund climate change planning in the state (WA State Department of Commerce, 2017).

CATALYST SITES

8.1 INTRODUCTION

The following chapter highlights specific locations in downtown Arlington with high infill potential, provides details about what future development could look like, and outlines the steps necessary for implementing that development. The chapter outlines the phasing and prioritization of catalyst projects and highlights the changes, such as zoning and code revisions, that need to be made in order to support these projects. The catalyst projects being considered are:

- City Center Square
- Centennial Trail Corridor
- Urban Transitions

Each of these projects comprise various aspects that will be phased at different times throughout the next 20 years. The City Center Square consists of a pedestrian mall, a parking garage, new buildings, and a city plaza. The Centennial Trail Corridor includes phasing out industrial uses on West Avenue, adding mixed-use development with dual frontage businesses, and making trail improvements.The Urban Transitions focuses on medium-density housing on MacLeod Avenue to create a transition zone between downtown and single-family residential zones, as well as to ensure a gradual integration of multi-family development near downtown.

These projects are broken down into phases, with certain projects happening before others (Figure 8.1):

- Phase 1: 0 - 1 year
- Phase 2: 2-10 years
- Phase 3: 11-20 years
- Phase 4: 20+ years

Generally, smaller changes (e.g., streetscape and zoning) will be easier to complete and can be done sooner. Larger scale projects will require more time to phase out existing uses, acquire funding and permits, and construct. For each catalyst site, details are provided about the proposed uses, as well as projected construction costs and annual revenues. NOTE: All costs in this chapter are estimates, and should be verified at time of project development.

8.2 CATALYST 1: CITY CENTER SQUARE

The City Center Square comprises multiple projects: the pedestrian mall on Olympic Avenue, a revised surface parking lot and parking garage, new infill development, and a Civic Plaza. The phasing plan outlines actions to be taken within a 20 year planning horizon (Figure 8.1).

Phase 1 (0-1 Year):

Pedestrian Mall

Create the ability to temporarily close Olympic Avenue between 1st and 3rd Streets for pedestrian use. Making Olympic Avenue more pedestrian friendly would encourage people to spend time downtown. This is an easy way to begin the revitalization of downtown and thus is suggested for Phase 1. Actions required include:

- Raising the street up to the level of the sidewalk between 1st and 3rd Streets to encourage more pedestrian traffic while slowing vehicle traffic.
- Installing retractable bollards to temporarily block off the street for special events, and give pedestrians more space for social distancing.
- Improving the streetscape with the addition of street trees, planter boxes, lighting, and street furniture to enhance the pedestrian experience on Olympic Avenue.

Underground Parking

The first step in planning for the underground parking garage is to secure the parcel where the proposed access tunnel would be located. With purchase of this West Avenue parcel (#3105110010090), the process of building the parking garage could begin.

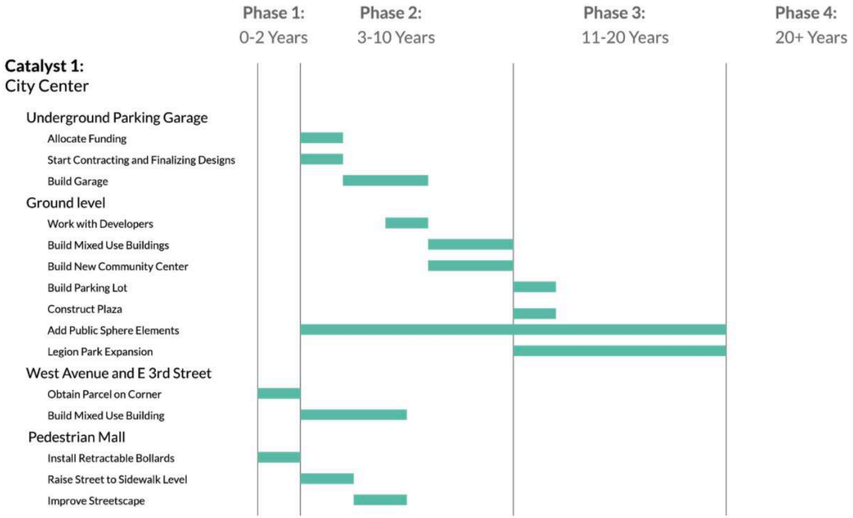


Figure 8.1: Phased Development Plan for Catalyst 1

Phase 2 (2-10 Years):

Underground Parking Garage

- Allocate funding through (Years 2-4)
- Apply for grants
- Capital improvements money
- Start contracting and finalizing designs (Years 2-4)
- Start construction of the garage (Years 5-6).
- Public/private partnership for retail infill (Years 6-7)

There are several options that the City may pursue to implement the proposed development.

- Option 1: City retains ownership of the parcels and leases the land for development.
- Option 2: City sells the parcels along Olympic Avenue for the proposed infill development, while retaining ownership of the land that would be used for the new surface parking lot behind the buildings.
- Construct new community building (Year 8)

Phase 3 (11-20 years):

Civic Plaza

- Civic Square Plaza construction should begin after the retail infill and community buildings have been constructed.
- Connections from the plaza to the Olympic Underground Parking Garage, Legion Park Expansion, and Pedestrian Mall should be completed to tie everything together.

Figure 8.2: Olympic Avenue where the proposed City Center Square Catalyst projects are proposed

Figure 8.3: Olympic Avenue where the proposed Pedestrian Mall would be built

8.2.1 Catalyst 1 Existing Conditions

The parcels where the City Center Square site is proposed include a paved public parking lot, a gravel parking lot, and a small civic plaza surrounded by the Chamber of Commerce and City Hall buildings. Figure 8.2 shows the parcels and Figure 8.3 shows Olympic Avenue, where the pedestrian mall is proposed.

Parcel 1:
Parcel ID: 31051100100600
Land Use: Commercial
Area: 4.31 acres

Parcel 2:
Parcel ID: 31051100103500
Land Use: Commercial
Area: 0.18 acres

Parcel 3:
Parcel ID: 31051100100900
Land Use: Undeveloped
Area: 0.32 acres

Parcel 4:
Parcel ID: N/A
Land Use: Public ROW—Road and Sidewalk
wArea: ~2 acres

8.2.2 Catalyst 1 Basic Site Plan

The City Center Square site plan proposes an underground parking garage and a more pedestrian friendly streetscape. The proposed site will include (1) new commercial and civic buildings on the west side of Olympic Avenue, (2) a pedestrian-oriented Olympic Avenue that can be temporarily closed as a pedestrian mall, and (3) an expanded plaza, all tied together with more public art and landscaping (Figure 8.4). The new commercial buildings would be located on top of the underground garage and would hide the surface level parking lot from the street.

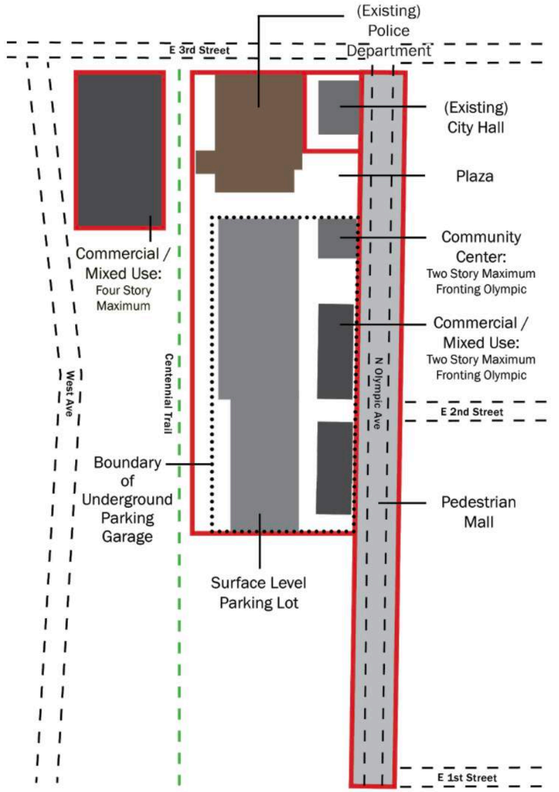


Figure 8.4: City Center Square Site Plan

8.2.3 Catalyst 1 Site Concepts

Figures 8.5-8.7 show the refined concepts for the public parking surface lot and underground garage. Figure 8.8 shows examples of bright and welcoming underground parking garages, which would allow the space to be used as an events center during winter/inclement weather months. Figures 8.9 and 8.10 show the Pedestrian Mall and City Center Plaza.

Figure 8.5: Surface parking lot and new commercial infill buildings

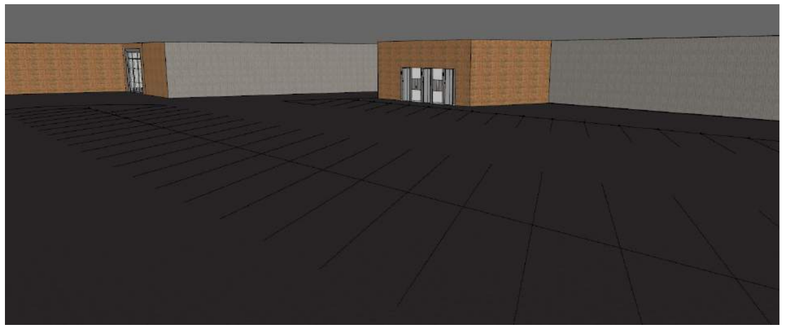


Figure 8.6: Underground parking featuring the elevator core and the enclosed police parking

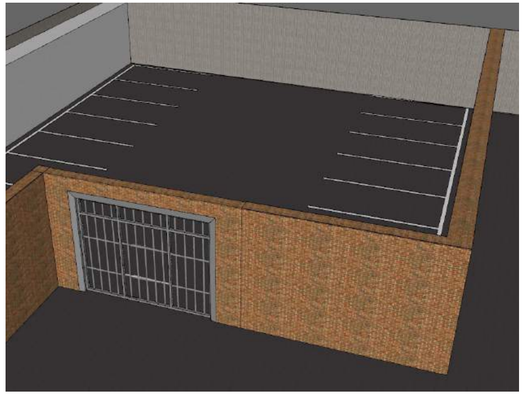


Figure 8.7: Secure police parking

Figure 8.9: Proposed Pedestrian Mall on Olympic Avenue. This image is facing southeast. The buildings in the image are replicas of the current buildings on the east side of Olympic Avenue between 3rd Street and 2nd Street.

Figure 8.8: Different underground parking styles

Figure 8.10: An eye-level view of the City Square Plaza and Pedestrian Mall

Table 8.1: Estimated costs of the different elements of the City Center Square

Project	**Cost Estimates**	**Funding**
Parking Garage (Google Earth Area = 5716.52 SQ Yard)	Construction of Site: $3,963,000 ($64 per sq ft) Demolition/Excavation: $1,134,000 ($110 per CY)	-Community Development block grants -City of Arlington capital improvements budget
New Buildings (Commercial Use)	Minimum of $14.5 million (Cumming, 2020). Elevator (one unit): $28,000	-The City will maintain ownership of the property, lease property to a developer.
New Civic Building	Minimum of $3.7 million (Cumming, 2020).	-The City will maintain ownership of the property, lease property to a developer.
Police Station Add-Ons	Walled-off Portion with Gate: $53,800 Elevator: $28,000 Security Features: $19,000	-Police Budget
Pedestrian Mall ~30,000 sq ft	Raising the Street: $150,000	-Community Development block grants -Capital improvements funding
Civic Plaza ~12,000 sq ft	Laying Brick: $180,000	-Capital improvements funding
Other Expenses	Sidewalks: Standard: $88,000 Brick: $135,000 Landscaping (25,000 sq ft): ~$54,000 Utilities ((Two) 275 sq ft bathrooms): ~$165,000	-Community development block grants -Capital improvements funding
Total Cost	at a minimum $24 million	

8.2.4 Catalyst 1 Costs and Funding

The City Center Square recommendations consist of multiple elements which, taken together, will be quite costly to implement. Table 8.1 outlines the estimated costs and funding options for the various elements.

Parking Garage:

The current parking lot is 5,717 square yards. To remove the current parking lot and excavate the new garage would cost roughly $1,133,574 at $110 per cubic yard (Homewyse Calculator, n.d.). The construction of the new underground garage would cost $3,963,276 at $64 per square foot. There are additional costs that come with the design for this parking garage. The underground portion that is for police use only will include a $53,800 wall to separate pedestrian parking from police parking. The private police elevator would add an additional $28,000. Lastly, the security gate that would only be accessible via police badge would cost roughly $19,000. The 275 square foot public restroom inside the garage would cost $82,500. The public elevator would cost $28,000.

New Buildings:

The new two-story, 50,000 square foot commercial buildings, while requiring a substantial upfront investment, would generate significant annual rental revenues. One of the commercial buildings would include access to the public parking garage elevator. It would also include the other public restroom costing $82,500. If the City were to contract a private developer, the price of the developer and construction would cost a minimum of $14.5 million (Cumming, 2020). The City would still own the property, receiving rent from the developer.

The new two-story, 10,000 square foot civic building would cost a minimum of $3.7 million if contracted out like the new commercial buildings (Cumming, 2020).

Pedestrian Mall:
The pedestrian mall is roughly 30,000 square feet. To raise the street six inches to sidewalk level would cost roughly $150,000 (RaiseRite, 2012).

Civic Plaza:
The 12,000 square feet of brick work that the Civic Plaza design requires would cost around $180,000 (CostOwl, 2020).

Other Expenses:
Other expenses include the construction of new sidewalks to replace the existing ones that would be removed for construction of the parking garage. There would also be more sidewalks constructed to align with designs, and offer additional pedestrian spaces. There are two different materials chosen for the sidewalks. The standard sidewalks would cost $88,160 and the brick sidewalks and public space would cost $135,000. The total sidewalk cost would be $223,160. Additional costs would include landscaping for the 25,000 square feet of new greenspace in the design. Landscaping would cost roughly $54,000, although this could be lower if current trees and landscaping were preserved.

8.3 CATALYST 2: CENTENNIAL URBAN CORRIDOR

The Centennial Urban Corridor proposes transforming the Centennial Trail between 3rd and Division Streets into a vibrant mixed-use corridor that includes pedestrian-friendly infrastructure and mixed-use retail and multi-family housing. Included in the plan are enhancing trail amenities, phasing out incompatible land uses, expanding green space, and improving walkability. The following section describes the current conditions (including zoning and use) in the corridor, provides contrasting images of current and proposed development, and outlines two site-specific examples that the City could capitalize on in the near future to catalyze change in the corridor.

8.3.1 Centennial Corridor Existing Conditions

The existing Centennial Trail is a recreation-centered route through downtown Arlington and is an important asset. However, as Arlington continues to experience population growth, the corridor along the trail could serve as a key catalyst site for mixed-use development. Figure 8.11 shows two high-potential parcels ripe for redevelopment:

- 102 East Division Street and 540 North Olympic Avenue
- 405 West Avenue and 406 West Avenue

They will be further detailed in the following sections. For more information about how high-potential infill sites were determined, please refer to the Downtown Arlington Master Plan Report (Urban Planning Studio, Winter 2020).

The trail corridor straddles the Old Town Business Districts 1 and 2 (Figure 8.12). The following conditions are present along the existing Centennial Trail corridor, between 3rd and Division Streets:

- Auto-focused (repair & service) commercial development on the majority of parcels bordering West Avenue
- Only backsides of Olympic Avenue businesses face trail; no trail-facing entrances
- Barrier between existing businesses and trail by Railroad Street that parallels the trail
- Trail art is present, but limited
- Underutilized land on both the east and west sides of the trail

Figure 8.13 shows a picture of the current trail, with Railroad Street on the right side of the image.

8.3.2 Centennial Corridor Basic Plan

As outlined in Chapter 2, Land Use, the study recommends developing floating zoning, which will be less technically intensive and provide more flexibility in downtown zoning. As shown in Figure 8.12, the current zoning is retained, but floating zones float over different sections of the downtown, allowing different types of uses without having to change the underlying zoning. The proposed Centennial Urban Corridor would include both retail (red) and mixed-use (purple) uses.

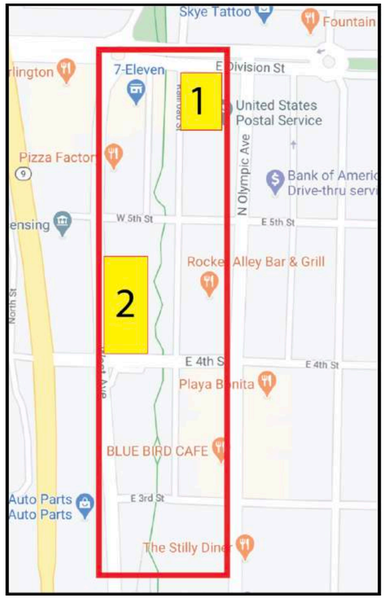


Figure 8.11: The Centennial Urban Corridor between 3rd and Division Streets (red outline)

Figure 8.14 illustrates the proposed Centennial Urban Corridor, with access to Railroad Street restricted, the trail and green space expanded, and new mixed-use development built to the parcel boundary. Figure 8.15 is a rendering of what the corridor could look like with development directly

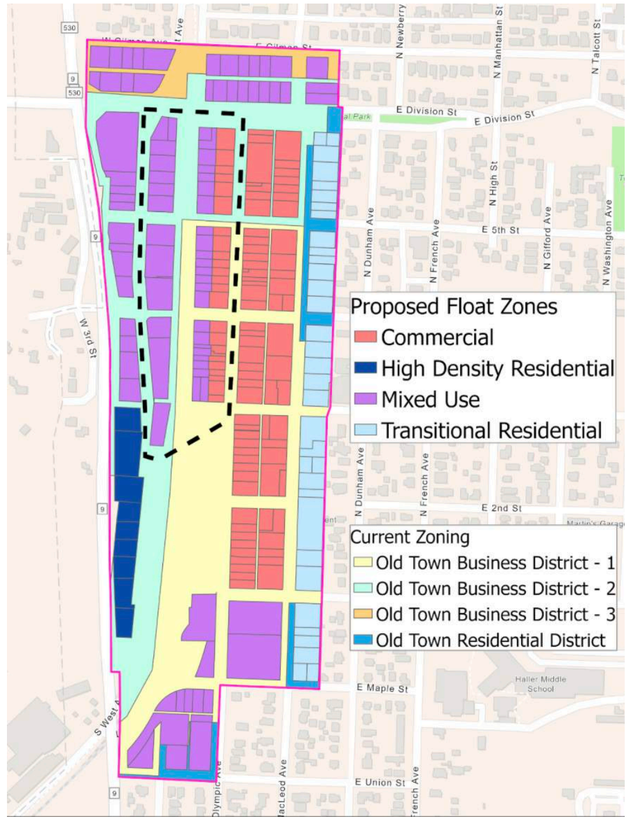


Figure 8.12: Proposed floating zones on top of existing overlay zoning; Centennial Urban Corridor outlined by dashed black line

Top Left: *Figure 8.13: Existing Centennial Trail*
Top Right: *Figure 8.14: Rendering of proposed Centennial Urban Corridor*
Bottom: *Figure 8.15: Alternate view of Centennial Urban Corridor with appropriately scaled, mixed-use development*

on the trail. Figure 8.16 is an example from London, UK; although the developments are taller, the image offers an example of how walkability and mixed-use commercial/residential development can create a vibrant and accessible place. Figure 8.17 is Mount St. Helens Cafe along the Interurban Trail in Seattle, WA. Figure 8.18 is a sketch of what Olympic Avenue could look like with larger scaled development behind it along the trail.

8.3.3 Centennial Urban Corridor Phasing

Figure 8.19 shows the proposed phasing for the Centennial Urban Corridor. Details about each of the phases are outlined below.

Figure 8.16: 250 City Road in London, UK

Figure 8.17: Mount St. Helens Cafe along the Interurban Trail in Seattle, WA

Figure 8.18: Centennial Urban Corridor (new development and height limits) as seen from Olympic Avenue. Yellow arrows are pointing to the taller stories of buildings that face the Centennial Trail.

Phase 1 (0-1 Year):

Dual-frontage requirements for businesses

- Require dual-frontage for any new businesses on Olympic and West Avenues that abut the Centennial Trail (allowed in current code - AMC 20.46.050c).
- Incentivize existing businesses between 3rd and 5th Streets to incorporate dual-frontage with an informative guide that outlines the benefits including return on investment (more business) and a more dynamic environment for the downtown.

Trail improvements

- Begin implementing amenities and improvements along the southern end of Centennial Trail (See Chapter 5 Public Sphere for details).

Phase out industrial uses on West Avenue that directly abut the trail

- Designate elsewhere. Follow recommendations from the Land Use Chapter in phasing out vehicle-focused development.

Attract more attention and use to the Centennial Trail

- Place Centennial Trail-specific wayfinding along West and Olympic Avenues to increase trail visibility.
- Design kiosks that illustrate future proposals for the corridor to garner interest and public support.
- Market high-potential infill parcels to private developers.
- Improve public art installations along the trail, with contributions from local schools and/or artists.
- Negotiate agreement with Arlington Tire Pros to paint a mural on the rear wall of their building that faces the trail. This will make the corridor between 3rd and 4th Streets more attractive while incompatible uses are still present.

Restrict access to Railroad Street

- Announce plans to restrict access on Railroad Street to businesses and residents, allowing for only necessary access and deliveries. The majority of public parking, except accessible spots, would be removed to expand green space, the trail network, and walkability.

Phase 2 (2-10 Years):

Dual Frontage

- All businesses in the Centennial Urban Corridor that abut the trail should implement dual-frontage.

Subdivision Regulations

- Parcels abutting the trail to the west and Olympic Avenue to the east should be subdivided to encourage infill development along the trail.

Mixed-Use Development

- Require the majority of new development on the trail to be mixed-use.
- Require residential units in the majority of new development along the corridor.
- Incentivize green roof on existing and new commercial buildings to add value to the residential component through a landscaped

roof terrace.

Attract more attention and use to the trail

- Add highly visible and easy-to-read wayfinding signage to enhance user experiences.
- Track trail usage annually to gauge trail improvements and new development impacts.

Phase out industrial uses on West Avenue that directly abut the trail

- Identify parcels in the corridor and acquire/ zone appropriately by the end of phase 2.
- Create incentives, in the form of permitting and fee waivers, for businesses to move.
- Develop and display future development concepts for available building sites to show the transition of the corridor and ensure incorporation of appropriate businesses for the trail.

Restrict access to Railroad Street

- Restrict access to Railroad Avenue for all but essential uses (e.g., delivery, emergency); maintain a minimum number of accessible parking spaces along the trail.

Phase 3 (11 - 20 Years):

Reevaluation

- Track trail use to gauge effectiveness of trail improvements.
- Evaluate building size (e.g., scale and bulk) requirements.
- Adjust code to account for demand and capacity (i.e., allow for taller buildings).

Phase out incompatible uses completely

- Additional parcels should be identified and all incompatible uses should be phased out of the Corridor by the beginning of phase 3.

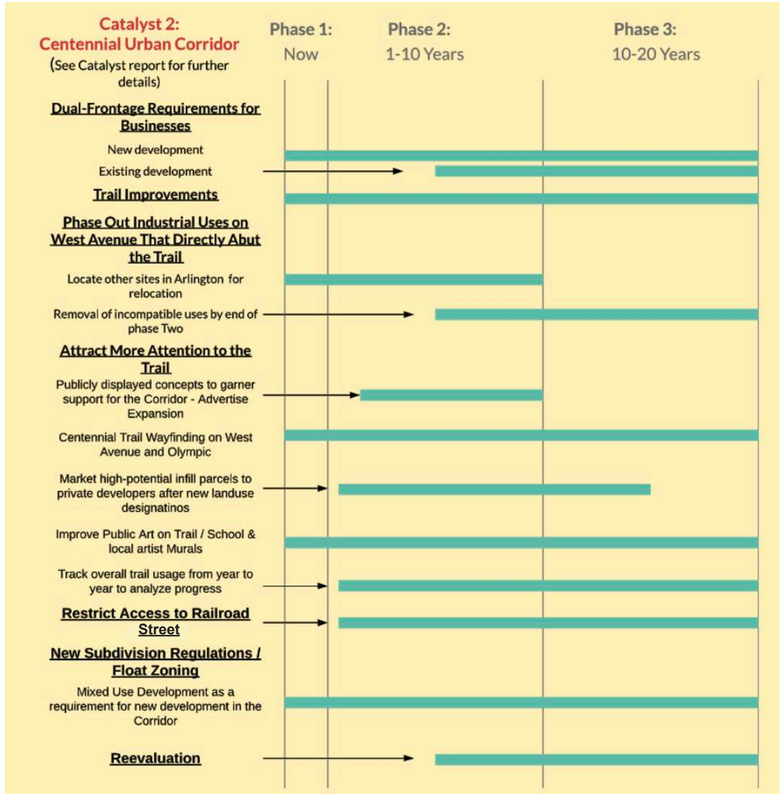


Figure 8.19: 20-year phasing timeline for the Centennial Urban Corridor

8.3.4 Site 1: 102 East Division & 540 North Olympic Avenue

8.3.4.1 Site 1 Existing Conditions

Site 1 in the Centennial Urban Corridor consists of two parcels previously occupied by the Bookshelf store (land currently for sale) and neighboring Triple Shot Espresso, which is still operating (Figure 8.20). These parcels, with some of the highest infill potential in the downtown, occupy a prime location for initiating the Centennial Urban Corridor concept.

Parcel Numbers:

102 East Division - #00529900900300

- Use Code: 662 Special Construction Trade
- Size (Gross): 0.08 Acres / 3484.8 Sq. Ft.
- Owner: Poyner Family LLC

540 North Olympic - #00529900900101

- Use Code: 910 Undeveloped (Vacant) Land
- Size (Gross): 0.32 Acres / 13939.2 Sq. Ft.
- Owner: City of Arlington

Zoning: Both parcels are currently in the Old Town Business District #2 Zone.

Combined Size (Gross): 0.40 Acres or 17,424 Sq. Ft.

Figures 8.21 and Figure 8.22 show the existing site uses of the two parcels.

Figure 8.20: Site 1 (outlined in red)

Figure 8.21: 102 East Division Street - parcel #00529900900300 (May 2020)

Figure 8.22: 540 North Olympic Avenue - parcel #0052990090010 (May 2020)

8.3.4.2 Site 1 Basic Site Plan

Redevelopment of these two parcels into a single, mid-rise, mixed-use development is recommended. These parcels, with their limited development, are easily developable. And, new development on the north end of the corridor (where new development is relatively static), would catalyze the area.

The mixed-use development would have commercial use on the first floor and two to three stories of residential development above (Table 8.2). The building height along Olympic Avenue would be restricted to two stories; the half bordering the trail could be as high as four stories. Figure 8.23 shows the basic site plan. Conceptual renderings are shown in Figures 8.24-26.

Table 8.2: Site 1 Mixed-Use Development Space Allocation

	Floor Space	Average Square Foot of Unit	Public Space per Floor*	Residential Sq. Ft. (-) Open Space/Floor	Number of Units
First-Floor Commercial	16,624 ft²	Smaller Commercial Unit relevant to Arlington = **8,000** ft²	N/A	N/A	2 Commercial Units
Total Commercial					**2 Units**
Second Story Residential	16,624 ft²	1,000 ft²	2,000 ft².	~ 14,500 ft².	15 Residential Units
Third/Fourth Story Residential	10,000 ft²	1,000 ft²	1,500 ft²	~ 8,500 ft²	17 Residential Units (8.5 Units / floor)
Total Residential					**~ 32 Units**

* On average, about 15% of the square footage of multifamily property consists of unusable space such as elevator shafts, building lobbies, and common areas (Multifamily.Loans, 2019).
Site 1 Public Space (sq. ft.) per floor = ~ 1,500 sq. ft. [1,000 sq. ft. amenities (e.g., elevator, washroom, etc.) + 560 sq. ft. of corridor space per floor]

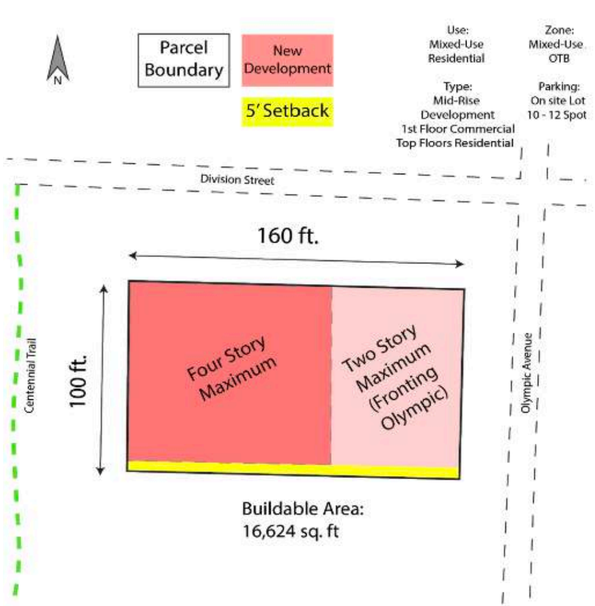
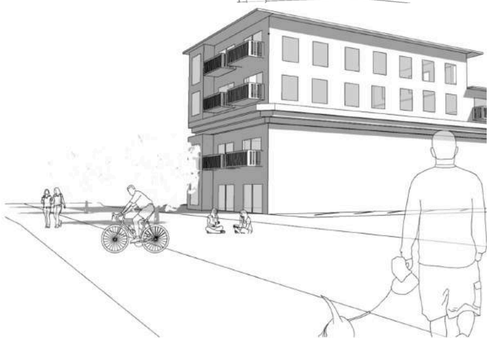


Figure 8.23 - Basic site design for mixed-use development on 102 East Division Street & 540 North Olympic Avenue



Top: *Figure 8.24: Site 1 first floor commercial/retail space*
Bottom Left: *Figure 8.25: Site 1 Development from Centennial Trail*
Bottom Right: *Figure 8.26: Site 1 Rendering (two-story height on Olympic Avenue, three-four stories facing the Centennial Trail)*

Table 8.4: Estimated Revenues, expenses, and net operating income for Site 1 Mixed-Use

	% of GPR	Annual Revenue/Cost
Revenue		
Gross Potential Revenue (GPR)		$958,348
Less: Vacancy	5.00%	($45,615)
Less: Bad Debt	0.50%	($4,562)
Effective Gross Revenue (EGR)		$862,124
Expenses(b)		
Salaries and Personnel	8.5%	$81,460
Management Fees	3.00%	$28,750
Taxes	15.4 %	$14,7585
Insurance	1.4%	$13,7416
Utilities	2.3%	$22,024
Marketing	1.8%	$17,250
Contract Services	2.8%	$26,833
Replacement Reserve	2.6%	$24,917
Total Operating Expenses	37.8%	$362,255
Net Operating Income (NOI)		**$596, 093**

8.3.4.3 Site 1 Cost/Revenue Analysis

The proposed development for Site 1 includes 32 residential at about 1,000 square feet per unit, and 16,000 square feet of commercial space. The apartments would rent for $1000/month (NAA), while the commercial is valued at $2.70 per square foot (based on average commercial rates in Arlington). Annual revenue from the residential units comes to $384,000. Annual revenue for the commercial space would be $518,400. Total, the residential and commercial rents would generate about $958,348 per year. Table 8.3 outlines the details.

Table 8.3: Estimated annual rental revenue from Site #1 – 102 East Division / 540 North Olympic

Rental Space	No. of Units	Rent/ft²	Area/Unit ft²	Total ft²	Rent/Month/Unit	Total Monthly Rent	Total Annual Rent
Apartments 1,000 sq ft	32	$1.00	1,000 ft²	32,000 ft²	$1,000	$32,000	$384,000
General Commercial	2	$2.70	8,000 ft²	16,000 ft²	$21,600		$518,400
Other Rental Revenue					6.2 % of Rental Revenue *	=	$55,948
Total Rental Revenue	34			48,000 ft²			**$958,348**

* If not otherwise noted, all multiplier factors (%) were taken from the NAA 2018 averages

Table 8.4 displays the annual income, expenses, and net operating income (NOI) that are associated with the proposed development.

Table 8.5 shows the valuation of the building, which is estimated to be $7,276,800. The table also includes the projected debt associated with the project. Based on the estimated project value, the loan amount that the developer could expect, which is based on 70% of the project valuation (CREFCOA), would be about $5,588,731.

A summary of the numbers:
Net Operating Income: $596,093
Effective Gross Revenue: $862,124
Annual Operating Expenses: $362,255
Total Initial Project Debt (assuming loan based on LTV): $1,688,096

After consulting with local developers, the study used an example construction cost estimate worksheet for a similar building to base construction costs off of. Hard and soft development costs were estimated to

Table 8.5: Arlington Site #1 Mixed-Use Project Valuation and Debt

Pro Forma Net Operating Income (NOI) and Value	
Pro Forma NOI	$596,093
Capitalization Rate	8.00%
Value of Income Property Only (NOI / Cap Rate)	$7,451,162
Loan Terms	
Interest Rate	5.75%
Amortization (years)	30
Debt Based on Loan to Value (LTV)	
Maximum LTV Percentage	75.00%
Maximum Loan Based on LTV for Income Property	$5,588,731
Using Debt Coverage Ratio (DCR)	
Monthly NOI	$49,674
Maximum DCR	1.25
Maximum Monthly Payment (NOI/DCR/12)	$39,739
Maximum Loan Based on DCR for Income Property	$8,293,467

be $150 per square foot for the entire building conforming to Washington State averages.

The valuation of the building was found to be $7,451,162 (with 8% CAP rate). The project would qualify for a loan of $5,588,732 (75% of project valuation). The construction costs are estimated at $7,200,000, and operating income of $596,093 making this development project relatively feasible with the right investor.

8.3.5 Site 2: 405 West Avenue & 406 West Avenue

8.3.5.1 Site 2 Existing Conditions

The second redevelopment site along the Centennial Trail is two high-infill potential parcels on West Avenue (Figure 8.27). The proposed development would occur after the existing automotive uses relocate. Figures 8.28 and 8.29 show the current conditions of the parcels.

Parcel Numbers:

405 West Avenue - #00618100400300

- Use Code: 641 Automobile Repair & Services
- Size (Gross): 0.45 Acres / 19,602 Sq. Ft.

406 West Avenue - #31050200301400

- Use Code: 699 Other Miscellaneous Services NEC
- Size (Gross): 0.39 Acres / 16988.4 Sq. Ft.

Zoning: Old Town Business District 2

Combined Size (Gross): 0.84 Acres / 36590.4 Sq. Ft.

8.3.5.2 Basic Site Plan

The parcels along West Avenue are centrally located and have high-infill potential. The proposed mixed-use development emphasizes residential units designed as multifamily "stacked flats" that are appropriately scaled, well designed, higher density units that can provide a range of rental rates. Table 8.6 shows the proposed uses by floor. Figure 8.30 shows the basic site plan.

Top Left: *Figure 8.27: Site 2 parcels (outlined in red)*
Top Right: *Figure 8.28: Site 2 as seen from the corner of West Avenue and Fourth Street*
Right: *Figure 8.29: Site 2 from Centennial Trail*

Table 8.6: Site 2 Multifamily "Stacked Flats" Space Allocation

	Floor Space	Average Square Foot of Unit	Public Space per Floor (*Exp. below)	Residential Sq Ft. (-) Open Space/Floor	Number of Units
First-Floor Commercial	34,569 ft²	Commercial Unit relevant to Arlington = 10,000 ft²	N/A	N/A	3 Commercial Units
Three Stories of Residential (Second, Third, and Fourth Floors)	34,569 ft²	1,000 ft²	4,000 ft²	~ 30,500 ft²	90 Residential Units

Site 2 Public Space (sq. ft.) per floor = ~ 4,000 sq. ft. [2500sq. ft. amenities (e.g., 2x elevator, washroom, etc.) + 1,652 sq. ft. of corridor space per floor]

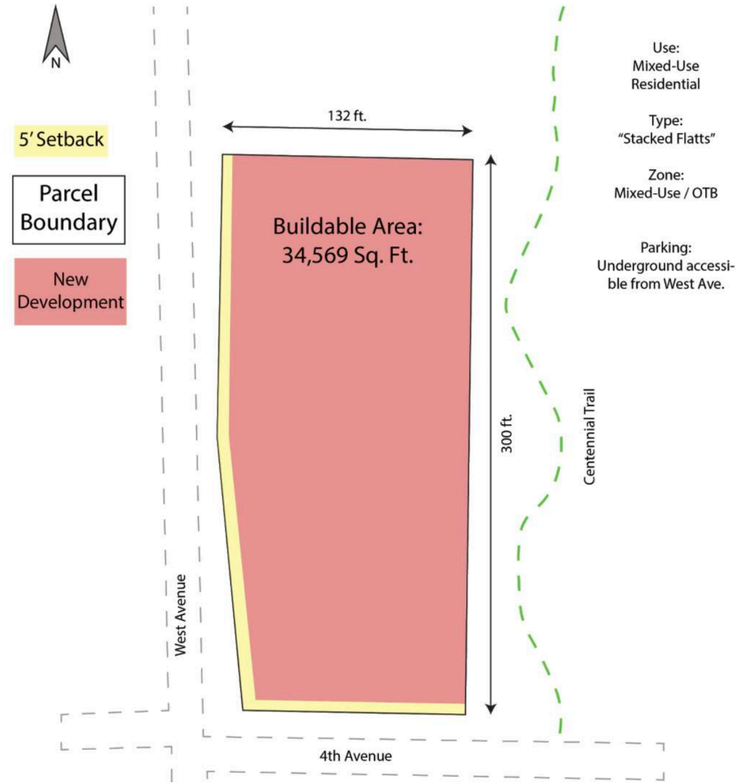


Figure 8.30: Site 2 Basic Site Plan

Images 8.31 and 8.32 are from a proposed development in Toronto, ON. The "Vic Towns" on Victoria Park Avenue in North York, ON serve as an excellent example of the development being proposed for 405/406 West Avenue. The Vic Towns are four-stories with a variety of communal and private rooftop terraces. Although the Vic Towns are more modern than the current aesthetic of downtown Arlington, development along the Centennial Urban Corridor in Arlington could take on a more modern look as design standards transform over phases 1 and 2.

Figure 8.31"The Vic Towns" in North York, on Victoria Park Avenue in Toronto, ON. (Source: the Solotex Corporation).

Figure 8.32:"The Vic Towns" in North York, on Victoria Park Avenue in Toronto, ON. (Source: Supplied by the Solotex Corporation).

8.3.5.3 Site 2 Cost/Revenue Analysis

The proposed development includes 90 residential units at about 1,000 square feet per unit, renting for $1000/month. These are estimated to generate an annual rental revenue of $1,080,000. In addition, the development includes 30,000 square feet of commercial space valued at $2.70 per square foot, which yields an annual revenue of $972,000. Together, along with other estimated revenue, the development would generate about $2,179,224 per year as shown in Table 8.7.

Table 8.8 displays the annual income, expenses, and net operating income (NOI) associated with the proposed development.

Table 8.9 shows the valuation of the building, which is estimated to be $18,654,600. The table also includes the projected development debt. Based on the estimated project value, the loan amount that the developer could expect, which is based on 75% of the project valuation (CREFCOA), which amounts to about $13,990,500.

Summary of the numbers:
Net Operating Income: $1,235,623
Effective Gross Revenue: $2,059,367
Operating Expenses: $823,744
Total Initial Project Debt (assuming loan based on LTV): $4,664,100

The valuation of the building was found to be $18,654,600 (with 6.6% CAP rate.) The project would qualify for a loan of $13,990,500 (75% of project valuation). The construction costs are estimated at $18,654,600, with an annual operating income of $1,235,623 and initial project debt of $4,664,100, making this development project feasible.

Table 8.7: Estimated annual rental revenue from Site 2

Rental Space	No. of Units	Rent/Ft²	Area/Unit (ft²)	Total Ft²	Rent/Month/Unit	Total Annual Rent
Apartments 1,000 sq ft	90	$1.00	1,000 ft²	90,000 ft²	$1,000	$1,080,000
General Commercial	3	$2.70	10,000 ft²	30,000 ft²	$27,000	$972,000
Other Rental Revenue					6.2 % of Rental Revenue*	$127,224
Total Rental Revenue	93			120,000 ft²		$2,179,224

Table 8.8: Revenues, Expenses, and Net Operating Income for the Site 2 Development

	% of GPR	Annual Revenue/Cost
Revenue		
Gross Potential Revenue (GPR)		$2,179,224
Less: Vacancy	5.00%	($108,961)
Less: Bad Debt	0.50%	($10,896)
Effective Gross Revenue (EGR)		$2,059,367
Expenses		
Salaries and Personnel	8.5%	$185,234
Management Fees	3.00%	$65,376
Taxes	15.4 %	$335,600
Insurance	1.4%	$30,509
Utilities	2.3%	$50,122
Marketing	1.8%	$39,226
Contract Services	2.8%	$61,018
Replacement Reserve	2.6%	$56,659
Total Operating Expenses	37.8%	$823,744
Net Operating Income		$1,235,623

Table 8.9: Site 2 Development Valuation and Debt

Pro Forma Net Operating Income (NOI) and Value	
Pro Forma NOI	$1,235,623
Capitalization Rate	6.6%
Value of Income Property Only (NOI / Cap Rate)	$18,721,560
Loan Terms	
Interest Rate	5.75%
Amortization (years)	30
Debt Based on Loan to Value (LTV)	
Maximum LTV Percentage	75.00%
Maximum Loan Based on LTV for Income Property	$13,990,500
Using Debt Coverage Ratio (DCR)	
Monthly NOI	$102,968
Maximum DCR	1.25
Maximum Monthly Payment (NOI/DCR/12)	$82,374
Maximum Loan Based on DCR for Income Property	$17,971,276

8.4 CATALYST 3: URBAN TRANSITION ZONE

The Urban Transition Zone includes parcels between downtown and residential neighborhoods east of MacLeod Avenue, north of Division, and west of West Avenue. The purpose of this transition zone is to continue the appeal and charm of Olympic Avenue into MacLeod Avenue by blending new development with the established character of downtown. This would be done by allowing for increased densities and building heights, and reduced setbacks. The goal is to transition from the single-family residential zone located to the east of the parcels to the mixed-use and commercial uses in the downtown. The phasing plan outlines actions to be taken within a 10-year planning horizon.

Phase 1 (0-2 years):
Modify zoning and adopt incentives:

- While the transition to denser housing in and around downtown will be a gradual process, Arlington can begin that process by modifying the zoning on MacLeod Avenue to allow for higher density residential.
- Identify incentives to encourage private investors/developers to build townhomes through the use of bonds and housing tax credits to keep the developments affordable.

Phase 2 (3-10 years):
Contract with Developers: Identify developers to construct medium-density housing on MacLeod Avenue.

8.4.1 Catalyst 3 Existing Conditions

The existing conditions of the parcels include: a funeral home, an asphalt parking lot owned by the funeral home, and a detached single family residence.

Parcel 1:

- Parcel ID: 00529900301700
- Use Code: 624 Funeral & Crematory Services (Inc. Cemeteries)
- Area: 0.22 Acres
- Parking Requirement: 34

Parcel 2:

- Parcel ID: 00529900301500
- Use Code: 624 Funeral & Crematory Services (Inc. Cemeteries)
- Area: 0.22 Acres
- Parking Requirement: 21

Parcel 3:

- Parcel ID: 00529900301300
- Use Code: 624 Funeral & Crematory Services (Inc. Cemeteries)
- Area: 0.22 Acres
- Parking Requirement: 0

Parcel 4:

- Parcel ID: 00529900301100
- Use Code: 111 Single Family Residence - Detached
- Area: 0.21 Acres
- Parking Requirement: 2

8.4.2 Catalyst 3 Basic Site Plan

The medium density Urban Transitions Plan on 3rd Street and MacLeod Avenue proposes a townhouse development with 12 units (Figures 8.33). Each unit would have an individual entry facing the street (Figure 8.34). Each unit would also incorporate approximately 1,000 square feet of private open space through individual roof access (Figure 8.35). This development is meant to increase the amount of diverse housing types, provide more affordable housing, and promote walkability with close proximity to the downtown.

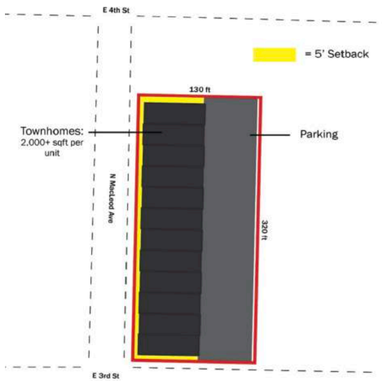
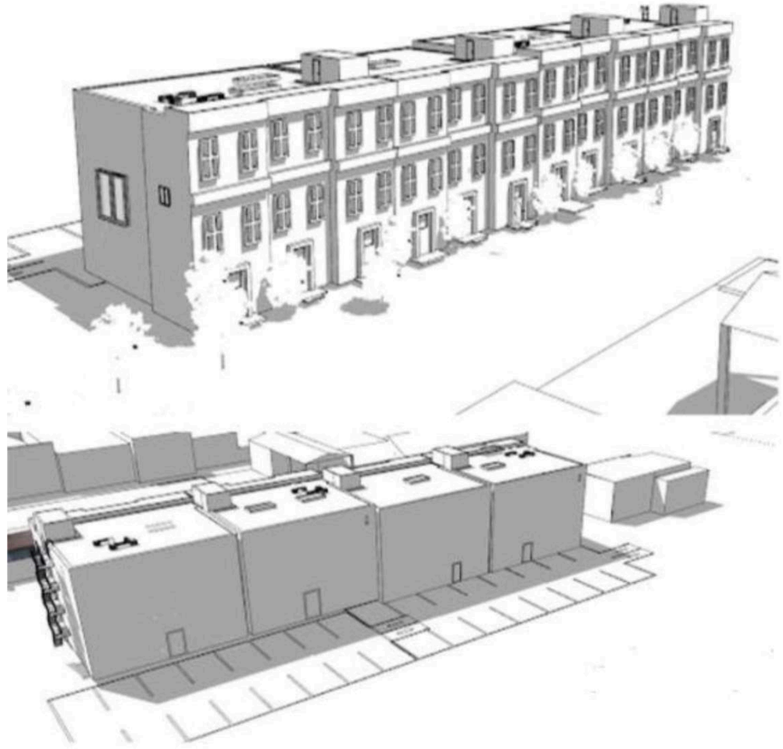


Figure 8.33: MacLeod Ave Site Plan

8.5 SUMMARY

This chapter outlined three catalyst areas in Arlington: the City Center Square, the Centennial Urban Corridor, and the Urban Transitions Residential Housing Zone. These areas have high-infill potential parcels that could support mixed-use retail and higher density housing. Developmetns in these areas will be critical as Arlington finds efficient and effective ways to accommodate future population growth while preserving and enhancing its downtown core.



Figures 8.34 and 8.35: The front and back views of the medium density infill on MacLeod Avenue

REFERENCES

Land Use

Blanchard, Jennie. (2013). Neighborhood Development Floating Zone: A Model Ordinance to Foster Green Community Development Using the LEED for Neighborhood Development Rating System. Land Use Law Center, Pace University. Whiteplains, NY.

City of Bellingham, WA Municipal Code, Chapter 20.28. Retrieved June 15, 2020 from: https://bellingham.municipal.codes/BMC/20.28.

City of Ferndale, WA Municipal Code, Chapter 18.48, Ordinance #2095. Retrieved June 15, 2020 from: https://www.codepublishing.com/WA/Ferndale/html/ords/Ords2000/2095.pdf.

Gorman III, Francis & Mastrosimone, Nicholas. (2019). Mixed-Use Development Incentives for Downtown Rochester Extended to 2021. Ed. Harris Beach PLLC. Retrieved on June 15, 2020 from: https://www.jdsupra.com/legalnews/mixed-use-development-incentives-for-70008/.

RevitalizeWA. (2018). Retrieved June 15, 2020, from http://www.preservewa.org/news-events/revitalizewa/.

Historic Preservation: Puyallup, WA. (n.d.). Retrieved June 15, 2020, from http://www.cityofpuyallup.org/453/Historic-Preservation.

Design

City of Lacey. (2013). "Ordinance 1487" Retrieved from: https://formbasedcodes.org/content/uploads/2016/05/Ordinance-1487-Woodland-District-Form-Based-Code-02.25.16.pdf.

EPA. n.d. "Green Building". Retrieved from: https://archive.epa.gov/greenbuilding/web/html/funding.html.

Form-Based Codes. (n.d.) "Form-Based Codes Defined" Form-based Codes. Retrieved from: https://formbasedcodes.org/definition/.

Green Building Alliance. (n.d.). "Green Building Incentives Guide." Retrieved from: https://www.go-gba.org/resources/green-building/green-building-incentives-guide/.

Goldsmith, Marta and Calvin Gladney. (2019). Form-based codes: A means to equity in a compassionate city. Form-based Code Institute (FBCI). June 13. Retrieved from: https://formbasedcodes.org/blog/form-based-codes-means-equity-compassionate-city/.

Madden and Russel. (2014). "Part 1: What Is a Form-Based Code?" Planners Web. Retrieved from: http://plannersweb.com/2014/12/fbc1/.

Matthews, K. (2018). " Smart Lighting Contributes Energy-Savings to Automated City Systems" Meeting of the Minds. Retrieved from: https://meetingoftheminds.org/smart-lighting-contributes-energy-savings-to-automated-city-systems-29314.

Opticos Design, Inc. (2020). Missing Middle Housing. Retrieved from https://missingmiddlehousing.com/types.

Stone, Brandon. (2018). Mount Vernon City Council Approves Downtown Design Standards. GoSkagit.com. December 22. Retrieved from https://www.goskagit.com/news/local_news/mount-vernon-city-council-approves-downtown-design-standards/article_de4a12a2-d7a4-5a77-9540-e6d07916f75b.html.

Russell, Joel and Mary Madden. (2015). An Introduction to Form-based Codes. Planners Web. Retrieved from: https://formbasedcodes.org/content/uploads/2015/05/FBC-PlannersWeb-Article-Dec2014a.pdf.

USA Grant Applications. n.d. "Commercial Property Grants" Government Grants. Retrieved from: https://www.governmentgrants.us/commercial-property-grants/.

Yudelson Associates. (2007). Green Building Incentives That Work: A Look at How Local Governments Are Incentivizing Green Development. National Association of Industrial and Office Properties Research Foundation.

Social Equity

Bellingham Home Fund. (n.d.). Retrieved from: https://bellingham.maps.arcgis.com/apps/Cascade/index.html?appid=144b4a582a4f409caf10f5e76c1ff262.

City of Bellingham. (n.d.). Multi-Family Tax Exemption Program. Retrieved from: https://www.cob.org/services/planning/development/Pages/mfte.aspx.

City of Bellingham. (2012). Affordable Housing Property Tax Levy. Retrieved from: http://mrsc.org/Ballot-Details.aspx?bid=362.

City of Sydney. (2016). Affordable & Diverse Housing Fund. Retrieved from: https://www.cityofsydney.nsw.gov.au/community/grants-and-sponsorships/business-grants/affordable-diverse-housing-fund.

Donel, Benjamin. (2020). "California's New Accessory Dwelling Units Laws: What You Should Know". Forbes. March 12. Retrieved from: https://www.forbes.com/sites/forbesfinancecouncil/2020/03/12/californias-new-accessory-dwelling-units-laws-what-you-should-know/#3cb693e617a3.

Eley, Carlton, C. (2017). "Planning for Equitable Development: Social Equity by Design." PAS Memo. American Planning Association. March/April. Retrieved from https://www.cohpa.ucf.edu/partnerships/wp-content/uploads/sites/22/2017/06/planning-for-equitable-development.pdf.

Grounded Solutions Network. (N.d.). "What Is Inclusionary Housing?" Inclusionary Housing. Retrieved from: https://inclusionaryhousing.org/inclusionary-housing-explained/what-is-inclusionary-housing/.

Grounded Solutions Network. (N.d.). "Incentives." Retrieved from:https://inclusionaryhousing.org/designing-a-policy/land-dedication-incentives/.

McCormick, Kathleen. (2020). "Rezoning History: Influential Minneapolis Policy Shift Links Affordability, Equity." Land Lines. Lincoln Institute of Land Policy. January. Retrieved from https://www.lincolninst.edu/publications/articles/2020-01-rezoning-history-minneapolis-policy-shift-links-affordability-equity.

Puget Sound Regional Council. (N.d.). "HIP Tool: Multifamily Tax Exemption" Retrieved from: https://www.psrc.org/multifamily-tax-exemption.

Puget Sound Regional Council. (N.d.). "HIP Tool: Inclusionary Zoning" Retrieved from: https://www.psrc.org/inclusionary-zoning.

Schneider, Benjamin. (2018). “Citylab University: Inclusionary Zoning” CityLab. Retrieved from: https://www.citylab.com/equity/2018/07/citylab-university-inclusionary-zoning/565181/.

Seattle Housing Authority. (N.d.). “Multi-Family Tax Exemption Program” Retrieved from: https://www.seattlehousing.org/multi-family-tax-exemption-program.

United Dwelling. (2020). “How to Finance an ADU” United Dwelling Retrieved from: www.uniteddwelling.com/adu/how-to-finance-adu-accessory-dwelling-unit.

Washington State Department of Social and Health Services. (2019). “Emergency Assistance Programs - Additional Requirements for Emergent Needs (AREN).” May 10. Retrieved from: https://www.dshs.wa.gov/esa/emergency-assistance-programs/emergency-assistance-programs-additional-requirements-emergent-needs-aren.

Washington State Housing Finance Commission. (2018). Bond/Tax Credit Program. Retrieved from https://www.wshfc.org/mhcf/4percent/index.htm

Way, Heather, Mueller, Elizabeth, and Wegmann, Jake. (2018). Part 3: Case Studies of Local Efforts to Mitigate Displacement in Gentrifying Neighborhoods. In Uprooted: Residential Displacement in Austin’s Gentrifying Neighborhoods and What Can Be Done About It. University of Texas Center for Sustainable Development. Retrieved from https://sites.utexas.edu/gentrificationproject/..austin-uprooted-report-maps/.

Public Sphere

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

City of Auburn. (2020). Emergency Proclamation 2020-02. Retrieved from: http://mrsc.org/getmedia/1b93078c-027f-4ef9-aa21-99e597c1defe/a9coronaep.pdf.aspx.

City of Bellingham. (N.d.). Green Building Incentives. Retrieved from https://www.cob.org/services/environment/lid/Pages/green-building.asp.

City of Bellingham. (2004). Native Plants for Landscaping in Bellingham, WA. Retrieved from https://www.cob.org/Documents/planning/publications/native_plants_brochure2004.pdf.

Complete Communities Toolbox. (N.d.). Streetscaping | Planning for Complete Communities in Delaware. Retrieved from: https://www.completecommunitiesde.org/planning/complete-streets/streetscaping/.

Delaware Complete Communities Toolbox. (N.d.). Local Government Funding Strategies for Parks and Recreations. Retrieved from: https://www.completecommunitiesde.org/planning/healthy-and-livable/local-government-funding-strategies-parks-rec/.

EPA (2019). What is Green Infrastructure? Retrieved from: https://www.epa.gov/green-infrastructure/what-green-infrastructure.

Grainger. (2020) Purell-ADX Hygiene Series. Retrieved from: https://www.grainger.com/product/PURELL-ADX-Hygiene-Series-12Z349.

Green Values. (N.d). National Stormwater Management Calculator. Retrieved from: http://greenvalues.cnt.org/national/cost_detail.php.

Home Depot. (2020). Madras High-back Patio Club Chair. Retrieved from: https://www.homedepot.com/p/Madras-High-Back-Patio-Club-Chair-US457110/202221900.

Home Depot. (2020). Jeco Crossweave Curved Back Steel Park Bench. Retrieved from: https://www.homedepot.com/p/Jeco-50-in-Crossweave-Curved-Back-Steel-Park-Bench-PB004/205555256.

Hurtado, P. (2020). A Necessary Paradigm Shift in How We Use Urban Space. American Planning Association. May 27. Retrieved from: https://www.planning.org/blog/9200400/necessary-paradigm-shift-in-how-we-use-urban-space/.

Inslee, G. J. (2020). Inslee signs new COVID-19 order for phased re-opening of Washington’s economy. Medium. May 4. Retrieved from: https://medium.com/wagovernor/inslee-signs-new-covid-19-order-for-phased-re-opening-of-washingtons-economy-ad5ea919ab56.

Johanson, B. (2020). Cost Comparison Between Solar vs. Traditional Lights. Greenshine. February 28. Retrieved from https://www.streetlights-solar.com/cost-comparison-between-solar-vs-traditional-lights.html#:~:text=Traditional%20Street%20Lighting%20Costs&text=Traditional%20street%20lighting%20is%20defined,and%20base%2C%20averages%20at%20%242000.

King County. (2013). Native Plant Guide. Retrieved from https://green2.kingcounty.gov/gonative/index.aspx.

LED Master. (2020). What is the Cost of Street Lamp? How Much to Replace and Run the Street Lights? Retrieved from: https://www.ledsmaster.com/channel/How-Much-Do-Street-Lights-Cost-Replacing-and-Running-the-Street-Lamp--77.html.

Municipal Research & Service Center (MRSC) (1). (2020). Coronavirus (COVID-19) Emergency Declarations and Authority. June 2. Retrieved from: http://mrsc.org/Home/Explore-Topics/Public-Safety/Emergency-Services/Public-Health-Emergencies/Coronavirus-Emergency-Declarations.aspx.

MRSC (2). (2020). Parks and Recreation Finance. January 21. Retrieved from: http://mrsc.org/Home/Explore-Topics/Parks-and-Recreation/Parks-and-Recreation-Funding/Parks-and-Recreation-Finance.aspx.

North Carolina State University. (2015). Cost Analysis for Improving Park Facilities to Promote Park-based Physical Activity. NC State Extension Publications. December 16. Retrieved from: https://content.ces.ncsu.edu/cost-analysis-for-improving-park-facilities-to-promote-park-based-physi-cal-activity.

OhmHome. (2018). EV Charging Station Cost. Retrieved from https://www.ohmhomenow.com/electric-vehicles/ev-charging-station-cost/.

Olin, A. (2020). Could parklets help Houston restaurants recover from the pandemic? The Kinder Institute for Urban Research. May 11. Retrieved from: https://kinder.rice.edu/urbanedge/2020/05/11/Covid-19-par-klets-help-houston-restaurants-economic-recovery-outdoor-dining.

OneSTL. (2020). Pocket Parks In a Nutshell. Retrieved from: https://www.onestl.org/toolkit/list/practice/pocket-parks.

Parents for Skateparks (n.d) Sandel Park. What is a Skatedot? Integrated Skatedots. Retrieved from: http://www.parents4sk8parks.org/pdf/Sandel.pdf.

Pacheco, Priscila. (2017). Public Spaces: 10 Principles for Connecting People and the Streets. The City Fix. Retrieved from: https://thecityfix.com/blog/public-spaces-10-principles-for-connecting-peo-ple-and-the-streets-priscila-pacheco/.

Planters Unlimited. (2020). 22" English Garden Flat Steel Hanging Basket with Coco Liner and Chain. Retrieved from https://www.plantersunlimited.com/hanging-baskets/hangingbasket.html.

Revised Code of Washington (RCW) 39.04.280, "Competitive Bidding requirements - Exemptions." Retrieved from: https://app.leg.wa.gov/RCW/default.aspx?cite=36.32.270.

RCW 35.33.081 "Emergency Expenditures - Nondebatable Emergencies." Retrieved from: https://app.leg.wa.gov/rcw/default.aspx?cite=35.33.081.

RCW 35.67.360 "Conservation of stormwater and sewer services—Use of public moneys." Retrieved from: https://app.leg.wa.gov/rcw/default.aspx?cite=35.67.360.

Recreation and Conservation Office. (2020). Find a Grant - Recreation and Conservation Office. Retrieved from: https://rco.wa.gov/recreation-and-con-servation-office-grants/find-a-grant/.

Semenza, J. C. (2011). The Intersection of Urban Planning, Art, and Public Health: The Sunnyside Piazza. American Journal of Public Health.

Tony Hawk Foundation. (2020). How Much Do Skateparks Cost? – Public Skatepark Development Guide. Retrieved from: https://publicskatepark-guide.org/fundraising/how-much-do-skateparks-cost/.

The Park and Facilities Catalog. (2020). Commercial Bike Racks. Retrieved from: https://www.theparkcatalog.com.

Uline. (2020). Industrial Vinyl Safety Tape. Retrieved from: https://www.uline.com/Product/Detail/S-7194/Safety-Reflective-Tape/Uline-Industrial-Vinyl-Safety-Tape-2-x-36-yds-Blue?pricode=W-B3880&utm_source=Bing&utm_medium=pla&utm_term=S-7194&utm_campaign=Tape&utm_source=Bing&utm_medium=pla&utm_ter-m=S-7194&utm_campaign=Tape&msclkid=04ad1bb1410f1c-2ba65245688b6c8985&gclid=CNq42cfr6ekCFYNjfgodDK0O6A&gclsrc=ds.

Unlimited, T. (2017, April 26). How Much Does Commercial Playground Equipment Cost? Medium. Retrieved from: https://medium.com/age-of-awareness/how-much-does-commercial-playground-equipment-cost-ed74ce947671.

Washington Department of Ecology (DOE). (n.d.). Water Quality Grantsand Loans. Retrieved from: hhttps://ecology.wa.gov/About-us/How-we-op-erate/Grants-loans/Find-a-grant-or-loan/Water-Quality-grants-and-loans.

Transportation and Mobility

Active Living Research. (2013). Cost Analysis of Bicycle Facilities: Cases from cities in the Portland, OR region. Retrieved from: https://activelivingresearch.org/sites/activelivingresearch.org/files/Dill_Bicycle_Facility_Cost_June2013.pdf

City of Arlington Municipal Code. (2020). Code of Ordinances. Retrieved from: https://library.municode.com/wa/arlington/codes/code_of_ordinances?nodeId=TIT20ZO

City of Arlington Adopted Budget. (2020). 2019-2020 Adopted Budget. Retrieved from: https://www.arlingtonwa.gov/DocumentCenter/View/1926/2019-2020-Adopted-Budget-Document?bidId=

"Asphalt Paving Costs in Cleveland: Maintenance, Construction & Paving." Ohio Paving, Ohio Paving & Construction, 2018, ohiopaving.com/asphalt-paving-costs/.

"Bus Exterior Ads." Bus Exterior Advertising, Blue Line Media, 2020. www. bluelinemedia.com/bus-advertising/bus-exterior#rates.

Federal Transit Administration (FTA). (2020). Grant Programs. Retrieved from: www.transit.dot.gov/funding/grants/grant-programs.

Federal Transit Administration (FTA). (2020). Flexible Funding Programs - Surface Transportation Block Grant Program - 23 USC 133 https://www.transit.dot.gov/funding/grants/flexible-funding-programs-surface-transportation-block-grant-program-23-usc-133.

FHA. (2018). U.S. Department of Transportation Federal Highway Admin-istration. Traffic Analysis Tools Program. Retrieved from: https://ops.fhwa. dot.gov/trafficanalysistools/type_tools.htm.

FHWA. (n.d) U.S. Department of Transportation Federal Highway Admin-istration. Road Design: Adding Bike Lanes Retrieved from: https://safety.fhwa.dot.gov/saferjourney1/library/countermeasures/10.htm#:~:tex-t=Estimated%20cost,adjust%20signalization%2C%20and%20other%20 factors.

GMA. (2020). Growth Management Act. Retrieved from: http://mrsc.org/Home/Explore-Topics/Planning/General-Planning-and-Growth-Management/Comprehensive-Planning-Growth-Management.aspx.

Guerra, Erick, and Robert Cervero. "Transit and the 'D' Word." ACCESS Magazine, UCConnect, 14 Feb. 2018, www.accessmagazine.org/spring-2012/transit-d-word/.

"Handbook of Automated Data Collection Methods for the National Transit Database ." National Center for Transit Research, Center for Urban Transportation Research at the University of South Florida, Oct. 2003, www.nctr.usf.edu/.

Hering, Hasso. (2019). Suggestion: Make This Bulb-Out Easier to See. Retrieved from: https://hh-today.com/suggestion-make-this-bulb-out-easier-to-see/.

MacKechnie, Christopher. (2019). How Much Does It Cost to Purchase and Operate a Bus. Retrieved from: www.liveabout.com/bus-cost-to-purchase-and-operate-2798845.

MAG. (2015). The Best Safety Gear for Urban Cyclists. Retrieved from: https://momentummag.com/top-5-best-safety-equipment-urban-cyclists/.

PEDSAFE.(n.d.) Pedestrian Safety Guide and Countermeasure Selection System: Curb Extensions. Retrieved from: http://pedbikesafe.org/PEDSAFE/countermeasures_detail.cfm?CM_NUM=5.

Portland State University. (2013). Cost Analysis of Bicycle Facilities. Retrieved from: https://activelivingresearch.org/sites/activelivingresearch.org/files/Dill_Bicycle_Facility_Cost_June2013.pdf.

City of Puyallup. (2013). Hazards Mitigation Plan. Retrieved from: http://www.cityofpuyallup.org/DocumentCenter/View/4855/Puyallup-Haz-ard-Mitigation-Plan-2017-Update-Draft?bidId=.

Schmitt, Angie, and Kea Wilson. "Why We Need a Bus Shelter at Every Stop." Streetsblog USA, 3 Oct. 2018, usa.streetsblog.org/2018/10/01/opinion-we-should-put-a-bus-shelter-at-every-stop-in-america/.
Seal Master. (n.d.). Cost of Striping Parking. Retrieved from: https://seal-master.net/faq/much-cost-stripe-parking-lot/&sa=D&ust=1590783996859000&usg=AFQjCNF8Vnl3y373Dtjj4b159QXm7hZAbQ.

SF Better Streets. (2015). Curb Extensions (Bulb-Outs). Retrieved From: https://www.sfbetterstreets.org/find-project-types/pedestrian-safe-ty-and-traffic-calming/traffic-calming-overview/curb-extensions/#:~:text=Width%20and%20length&text=The%20bulb%2Dout%20should%20extend,freight%20route%20or%20industrial%20street.

Shoup, Donald. "The 3 Essential Rules of Parking Reform." CityLab, Bloomberg L.P. , 23 Sept. 2019, www.citylab.com/perspective/2019/09/parking-lot-urban-planning-transit-street-traffic-congestion/598504/.

Shoup, Donald. "Donald Shoup's Three Parking Reforms." Transfers Mag-azine, Pacific Southwest Region UTC, 19 July 2018, transfersmagazine.org/2018/07/19/donald-shoups-three-parking-reforms/.

The Park. (2019). Commercial Bike Rack Buyer's Guide. Retrieved from: https://www.theparkcatalog.com/best-selling-bike-racks.

Transportation Improvement Board. (2020). Urban Programs. Retrieved from: http://www.tib.wa.gov/grants/grants.cfm.

U.S. Department of Transportation (DOT). (2015). Highway Safety Improvements Plan. Retrieved from: https://safety.fhwa.dot.gov/hsip/resources/fhwasa15011/.

U.S. Department of Transportation (DOT). (2016). Road Diet. Retrieved from: https://safety.fhwa.dot.gov/road_diets/resources/fhwasa16100/fhwa-sa16100.pdf.

U.S. Department of Transportation (DOT). (2017). Transportation Enhancements. Retrieved from: https://www.fhwa.dot.gov/environment/transportation_enhance-ments/.

U.S. Department of Transportation DOT. (2020). Congestion Mitigation and Air Quality Improvement Program. Retrieved from: https://www. fhwa.dot.gov/environment/air_quality/cmaq/index.cfm http://pedbikesafe.org/PEDSAFE/countermeasures_detail.cfm?CM_NUM=5.

WSDOT. (2020). Funding Sources for Bicycle and Pedestrian Facilities. Retrieved from: https://www.wsdot.wa.gov/travel/commute-choices/bike/funding-sources.

Environmental Hazards

City of Arlington. (2017). Comprehensive Plan. Appendix E: Natural Environment. Retrieved from: https://www.arlingtonwa.gov/Document-Center/View/452/Appendix-E---Natural-Environment-PDF.

E&E News. (2020). Studies Sound Alarm on "Badly Out-of-Date" FEMA Flood Maps. Retrieved From: https://www.scientificamerican.com/arti-cle/studies-sound-alarm-on-badly-out-of-date-fema-flood-maps/.

EMD. (2018). Washington State Emergency Management Division. Preparedness Grants. Retrieved from: https://mil.wa.gov/prepared-ness-grants.

FEMA. (2016). Flood Map Service Center. Retrieved from: https://msc.fema.gov/portal/search.
FEMA. (2019). Flood Map Revision Process. Retrieved from: https://www.fema.gov/flood-map-revision-processes.

FEMA. (2019). Hazard Mitigation Grant Program. Retrieved from: https://www.fema.gov/hazard-mitigation-grant-program.
Snohomish County. (n.d.). Preliminary Digital Flood Insurance Rate Maps. Retrieved from: https://snohomishcountywa.gov/Archive.aspx?AMID=70.

Washington State Department of Commerce. (2017). Growth Management Grants. Retrieved from: https://www.commerce.wa.gov/serving-communi-ties/growth-management/growth-management-grants/.

Washington Department of Ecology (DOE). (n.d.). Floodplains by Design. Retrieved from: https://ecology.wa.gov/Water-Shorelines/Shoreline-coast-al-management/Hazards/Floods-floodplain-planning/Floodplains-by-de-sign.

Catalyst Sites

Administration, N. C. (n.d.). Cemetery Components—Public Restrooms—National Cemetery Administration [General Information]. Retrieved from https://www.cem.va.gov/cem/grants/public_restrooms.asp

CostOwl. (2020). How Much Does A Brick Walkway Cost? Retrieved from: https://www.costowl.com/home-improvement/landscaping-brick-walkway.html.

Commercial Construction Cost Calculator. (n.d.). Retrieved from http://www.buildingjournal.com/construction-estimating.html

Community Development Block Grants (CDBG)—Home Page. (n.d.). Washington State Department of Commerce. Retrieved from https://www.commerce.wa.gov/serving-communities/community-development-block-grants/

Commercial Real Estate Finance Company of America (CREFCOA). (n.d.). DSCR Debt Service Coverage Ratio. Retrieved from http://www.crefcoa.com/commercial-loan-debt-ratios.html

Cost of Concrete Block Wall—Calculate 2020 Prices. (n.d.). Retrieved from https://www.remodelingexpense.com/costs/cost-of-concrete-block-wall/

County Board Votes to Encourage More Accessory Dwellings | ARLnow.com. (n.d.). Retrieved from https://www.arlnow.com/2017/11/28/county-board-votes-to-encourage-more-accessory-dwellings

County Readies Zoning Changes to Encourage Construction of New, Detached Accessory Dwelling Units | ARLnow.com. (n.d.). Retrieved from https://www.arlnow.com/2019/03/07/county-readies-zon-ing-changes-to-encourage-construction-of-new-detached-accesso-ry-dwelling-units/

Cumming. (2020). An in-depth look at construction costs per square foot in the United States. Retrieved from https://ccorpinsights.com/costs-per-square-foot/.

Dimensions. (2020). Corridors/Hallways. Retrieved from https://www.dimensions.com/collection/corridors-hallways.

Homewyse Calculator: Cost to Excavate Land. (n.d.). Homewyse. Retrieved from //www.homewyse.com/services/cost_to_excavate_land. html.

How much does it cost to install concrete sidewalk? (n.d.). HowMuch. Retrieved from https://howmuch.net/costs/sidewalk-concrete-in-stall-build

How much money would a commercial elevator cost? - Quora. (n.d.). Retrieved from https://www.quora.com/How-much-money-would-a-commercial-elevator-cost

Landscape Design Costs & Prices—ProMatcher Cost Report. (n.d.). Retrieved from https://landscape-designers.promatcher.com/cost/

Learn how much it costs to Install a Security Gate. (n.d.). Retrieved from https://www.homeadvisor.com/cost/safety-and-security/install-a-securi-ty-gate/

Multifamily.Loans (2020). Construction Costs: An Investor Guide. Retrieved from https://www.multifamily.loans/apartment-finance-blog/multifami-ly-construction-costs-an-investor-guide

National Apartment Association (NAA). (2019). 2018 NAA Survey of Operating Income & Expenses in Rental Apartment Communities. September 16. Retrieved from https://www.naahq.org/news-publications/units/septem-ber-2018/article/survey-operating-income-expenses-rental-apartment

Parking Garage—Commercial Construction Costs Per Square Foot. (n.d.). Retrieved from https://www.rsmeans.com/model-pages/parking-garage.aspx

RaiseRite. (2012). How much does concrete raising cost? (2012, February 27). Retrieved from: https://www.raise-rite.com/blog/how-much-does-concrete-raising-cost/

Solotex Corporation. (2017)."The Vic Towns" Toronto, ON. Retrieved from http://solotexcorporation.com/CurrentRelease