

**CITY OF MONROE  
PARKS & RECREATION BOARD REGULAR MEETING AGENDA**

**February 20, 2020**

**7:00 p.m.**

**City Hall, Council Chambers**

**CALL TO ORDER**

**ROLL CALL**

[ ]	Tami Kinney	-Chairperson/Citizen
[ ]	Devlin Piplic	-Vice Chairperson/Monroe School District
[ ]	Daniel Enrico	-Secretary/Citizen
[ ]	Keith Dahlenburg	-Board Member/Citizen
[ ]	Ron Petrick	-Board Member/Citizen
[ ]	Jessie Robinson	-Board Member/Citizen
[ ]	Michael Stanger	-Board Member/Planning Commission

**AGENDA REVISIONS**

**APPROVE MINUTES** of January 17, 2020 meeting

**AUDIENCE PARTICIPATION**

**UNFINISHED BUSINESS**

**NEW BUSINESS**

1. AB 2020-002 Western Washington University (WWU) – Presentation of ‘Trail Environmental Assessment’ – WWU Students: Alyssa Leone and Amelia Flores; Faculty: Dr. Tammi Laninga; and Sustainable Community Coordinator: Lindsey McDonald
2. AB 2020-003 Heritage Tree Nominations – Denise Johns
3. AB 2020-004 2020 Park Bond Election – Denise Johns

**STAFF REPORTS/UPDATES**

1. Parks & Recreation Department Report for January 2020
2. AB 20-005 Park Review – Hillcrest Park

**BOARD DISCUSSION**

**AGENCY REPORTS**

1. Planning Commission
2. Monroe School District

**ADJOURNMENT**

**Accommodations for people with disabilities will be provided upon request.  
Please allow advance notice, call Denise Johns at (360) 863 4525.**

**CITY OF MONROE  
PARKS & RECREATION BOARD REGULAR  
MEETING MINUTES**

January 16, 2020

7:00 p.m.

City Hall, Council Chambers

**CALL TO ORDER**

Chairperson Kinney called the Park Board meeting to order at 7:00pm, City Hall Council Chambers.

**ROLL CALL**

Boardmembers Present: Tami Kinney, Daniel Enrico, Keith Dahlenburg, Ron Petrick, Jessie Robinson, and Michael Stanger.

Boardmembers Absent: Devlin Piplic

**AGENDA REVISIONS – None**

**APPROVE MINUTES**

Motion was made by Boardmember Enrico, seconded by Boardmember Petrick, to approve the December 19, 2019 meeting minutes. Motion carried 6-0. Minutes of approved December 19 meeting minutes were signed by Chairperson Kinney and Boardmember Enrico; Boardmember Enrico signed approved October 17 meeting minutes.

**AUDIENCE PARTICIPATION – None**

**UNFINISHED BUSINESS – None**

**NEW BUSINESS**

**AB 2020-001 Presentations: Snohomish County Arrivalist Data** – City Administrator Deborah Knight gave a presentation to the Board on 'Arrivalist' data compiled by County of Snohomish Tourism. Ms. Knight described how data is collected by tracking phone data which tracks visitors to Monroe and surrounding regions, how the information could be used to customize the City's marketing direction, and partnership opportunities with surrounding destinations. Discussion followed about how the data could be used, the need for city wide music/arts events, and examples of successful city-sponsored venues.

**STAFF REPORTS/UPDATES**

1. Monthly Staff Report Ms. Johns updated Boardmembers on recent local events, projects, and activities referencing attached Monthly Staff Report including the public staff maintenance of post-holiday streetscape and "Guardian of the Mountain Pass" sculpture reveal noted homeless encampments have not been sited during inclement weather.
2. Park Review – Currie View Park: Ms. Johns reviewed Currie View Park master plans developed in the 1990's. Discussion followed about site planning, amenities, phasing development, and asked to add Currie View Park to February's agenda to discuss further master planning the park.

**BOARD DISCUSSION**

Chairperson Kinney updated staff and Boardmembers about efforts to relocate the 'Buck Houses' located on Ann Street in Monroe. The houses are free to anyone who will finance their removal from the site in preparation for development.

**AGENCY REPORTS**

**Planning Commission** – Mr. Stanger reported the Planning Commission worked on amendments to its rules and procedures to govern the Commission meeting and operations.

**Monroe School District**- Boardmember – No report

**Accommodations for people with disabilities will be provided upon request.  
Please allow advance notice, call Denise Johns at (360) 863 4525.**

**CITY OF MONROE  
PARKS & RECREATION BOARD REGULAR  
MEETING MINUTES**

**ADJOURNMENT** – Chairperson Kinney requested a motion to adjourn, Boardmember Robinson motioned to adjourn and Boardmember Enrico seconded, motion carried and meeting adjourned at 8:26 PM.

---

Tami Kinney, Chairperson

---

Daniel Enrico, Secretary



# MONROE Park Board

## Agenda Bill No. 20-002

<b>SUBJECT:</b>	<b><i>Western Washington University (WWU) – Trail Environmental Assessment</i></b>
-----------------	--

<b>DATE:</b>	<b>DEPT:</b>	<b>CONTACT:</b>	<b>PRESENTER:</b>	<b>ITEM:</b>
2/20/ 2020	Parks	Denise Johns	WWU Students: Alyssa Leone and Amelia Flores Faculty: Dr. Tammi Laninga Sustainable Community Coordinator: Lindsey McDonald	<b>New Business #1</b>

**Discussion:** -

- Attachments:**
1. *City of Monroe, WA, Multi-Modal Trail: Preliminary Outreach, Design and Research*, WWU ENVS, January 2019
  2. *City of Monroe, WA, Multi-Modal Trail: Transportation Analysis*, WWU, ENVS 373, June 2019
  3. *City of Monroe, WA, Multi-Modal Trail: Environmental Impact Statement*. ENVS 493, December 2019

**REQUESTED ACTION:** For information only

### DESCRIPTION/BACKGROUND

#### Presenters

Students and faculty from WWU Environmental Studies Department and Sustainable Community Coordinator will present their environmental assessment of a temporary trail proposed for the Highway 2 Bypass Corridor. The environmental assessment was completed as a part of their ENVS 493 coursework completed December 2019 through the university’s Sustainable Communities Program.

#### Project Background

Western Washington University (WWU) contacted the City of Monroe May 2018 requesting the City submit any project proposals for the scholastic year’s 2018-2019 Sustainable Communities Program (SCP). SCP offers municipal agencies the opportunity to partner with WWU students and faculty to advance a mutually agreed-upon, community project. The partnering entity (e.g. City of Monroe) receives faculty and students work through a variety of studio and service-learning courses providing students experience tackling real-world projects.

During their June 5, 2018 meeting, City Council reviewed the SCP and discussed possible projects which would benefit from a student-faculty study.

The City selected ‘Planning the Temporary US 2 By-Pass Pedestrian Trail’ (Trail) as its project area. The proposed Trail is located in the Washington State Department of Transportation (WSDOT) US 2 Bypass right-of-way, between Chain Lake Road to the east and 179th Street NW t the west. The Trail project is identified on the City’s adopted trail plan. Student work included coordination with WSDOT, Snohomish County’s Evergreen State Fairgrounds and a public open house with neighborhoods as a part of their work. The goal of the delivered reports is to allow the City to negotiate a trail easement with WSDOT to use the US 2 right-of-way for a temporary recreational trail.



# MONROE Park Board

## ***Agenda Bill No. 20-002***

At the August 28, 2018 City Council meeting, City Council authorized the Mayor to sign an Interagency Agreement between the City of Monroe and Western Washington University to partner in the SCP program.

In December 2018 the City entered into an Interagency Agreement becoming a SCP 'partner' organization and authorized WWU to study the Trail.

Student work commenced during the 2018-2019 academic school year. The original scope of work included community meetings and outreach report, transportation study, wetland identification, and environmental assessment report.

Because the summer 2018 'Wetland Course' was cancelled, the Interagency Agreement was amended December 2019, to exclude the wetland identification course and not-to-exceed amount adjusted to \$21,000.

December 2019 Western Washington University (WWU) students, completed coursework in their study using the Trail to gain experience working on an actual existing project and client. The three courses identified to complete this study are all within the WWU's Environmental Studies Department and were completed from fall 2018 to winter 2019:

1. ENVS 475 *Community Development and Participatory Methods*, taught by Dr. Tammi Laninga. Included in this work are the findings from the student-held community outreach meeting on November 14, 2018, at the Seventh Day Adventist Church in Monroe and focused on outreach, design, and research for the proposed trail (Attachment 1).
2. ENVS 373 *Transportation Systems Analysis*, taught by Dr. Paul Strangl. Students analyzed transportation impacts and made recommendations associated with implementation of a temporary trail in the US-2 Bypass Right-of-Way (Attachment 2).
3. ENVS 493 *Environmental Impact Assessment*, taught by Dr. Tammi Laninga. Completed fall of 2019, the report represents an assessment for the proposed temporary multi-use trail in the US-2 Bypass right-of-way. Special attention was paid to the potentially adverse impacts to critical areas, including wetlands, streams, and steep slopes (Attachment 3).

### **FISCAL IMPACTS**

The fee for participating in SCP is designed to recover direct program costs and no indirect costs were included. Final invoice for the three reports generated by student coursework was \$19,233.75.

### **TIME CONSTRAINTS**

N/A

### **ALTERNATIVES**

N/A

# City of Monroe, WA, Multi-Modal Trail: Preliminary Outreach, Design and Research

Project Report  
Community Development and Participatory  
Methods  
ENVS 475, Fall 2018

Report No. 01 January 2019



## About SCP

Western's Sustainable Communities Partnership (SCP) program focuses the expertise, energy, and ideas of faculty and students upon the issues that communities face as our society transitions to a more sustainable future. SCP partners with communities each academic year, facilitating a program in which many Western courses complete community-engaged learning projects that address problems identified by the partner.



[Sustain.wvu.edu/scp](http://Sustain.wvu.edu/scp)

SCP@wvu.edu

360-650-3824

## SCP Partner for 2018-2019: City of Monroe, WA

SCP is proud to partner with City of Monroe, Washington, during the program's third year. Four Western courses will tackle projects identified in collaboration with city staff.



## Acknowledgement

The [Association of Washington Cities](#) (AWC) has provided invaluable assistance as SCP has grown and developed in its third year. AWC has provided advice on program development, and has assisted in promoting the program.



SCP is housed within Western's [Office of Sustainability](#)



## PREFACE

The fall 2018 Community Development and Participatory Methods course (ENVS 475) worked with the City of Monroe, Washington, on preliminary plans for a multi-use trail. Under the guidance of Dr. Tammi Laninga, three student teams addressed planning elements including: community outreach, conceptual design, and implementation research. In order to understand the needs and interests within the community, students traveled to the City of Monroe on November 14, 2018, to conduct a community outreach meeting. The feedback from this meeting as well as the other teams' findings are included in this report. Future WWU courses will also have the opportunity to work with the City of Monroe on the continuation of this project.

Instructor (ENVS 475, Fall 2018):

Tammi Laninga, Ph.D., AICP

### Contents

Executive Summary	1
Chapter One: Outreach Team Findings	3
Joseph Chang, Reace Fant, Maya Lewis, Madison Swindler, Allison Tompkins and Zoe Watson	
Chapter Two: Design Team Findings	8
Ryan Beberdick, Brannden Nokes, Aidan Simpson, Cosmos Cordova and Tim O'melia	
Chapter Three: Research Team Findings	15
Sami Adams, Marie Blue, Logan Chantelois, Aisaya Corbray, Liam Pollom, Monica Villegas and Dawson Van Cise	
Appendix A	27
Appendix B	34

This page intentionally blank.

# CITY OF MONROE, WA, MULTI-MODAL TRAIL: PRELIMINARY OUTREACH, DESIGN AND RESEARCH

## Executive Summary

The City of Monroe has been updating their Parks, Recreation and Open Space Plan for over 20 years, making efforts to improve their park and trail networks. Having a continuous and reliable network of non-automobile-oriented transportation routes throughout the city serves to increase accessibility for residents. The City of Monroe's multi-model trail proposal aims to implement a high quality, well-utilized trail that provides residents with additional recreation opportunities.

The trail area, which extends from Chain Lake Road to 179th Avenue, is currently a Washington State Department of Transportation (WSDOT) right-of-way. At this time, WSDOT ownership requires any trail building to be classified as temporary, which places restrictions on the path's surface materials and supporting infrastructure that can be developed. The area connects the Evergreen State Fairgrounds to the business district along Highway 2. There is considerable development in both housing and retail directly surrounding the proposed trail area. In response to the increasing number of residents and visitors, City of Monroe aims to provide recreation opportunities as well as options for non-motorized travel through this right-of-way.

As part of a course on community development (ENVS 475), students from Western Washington University (WWU) assisted the City of Monroe with preliminary planning of a multi-model trail within the WSDOT right-of-way. Preliminary planning took place during WWU's 2018 fall quarter. The three student teams focused on outreach, design, and research for the proposed trail.

Chapter one discusses outreach in the City of Monroe community. Students hosted a community outreach meeting, which served as a useful tool for assessing community member investment and interests in the project. Students asked for feedback on design alternatives for trail amenities, access points, and priorities for use. Community members represented a variety of stakeholders with different visions for the trail project. Community attendees answered questions while rotating through three stations: conceptual design, trail access point, and trail priority. A brief summary of each station's findings can be found below.

- The conceptual design station asked four specific questions:
  - What do you want at access points and how should access points be designed?
    - The installation of items like benches, trail maps, water fountains, native plants, doggie bag dispensers, and trash receptacles.
    - The installation of clear signage regarding pathways and allowed uses.
    - A variety of parking amenities for vehicles and horse trailers along with possibly gated parking lots.
    - The installation of lighting for safety at all hours of trail use.
  - What kind of materials should be used to construct the trail?
    - Suggestions included dirt, gravel, and wood fibers with specific requests for bridge materials that would not spook horses.
  - What would you like to see at crossings?
    - The installation of well-marked cross-walks, flashing lights, and clear signage.
    - Crosswalk design that accommodates horse travel.

- The trail access point station asked community members to look at a map of the proposed trail and provide suggestions on where access points could be located.
  - Some community members interested in equestrian trail use requested an access point near the Evergreen Equestrian Park.
  - Community members were interested in creating access points near existing parking. One community member mentioned that depending on location this could be a nuisance to current homeowners.
  - Community members expressed interest in trail connectivity with the downtown, other trails, and neighborhoods.
- The trail priority station asked community members two specific questions:
  - What should the priorities of the trail be?
    - Community members shared their requests regarding safety. They wanted lighting and were curious if the city would patrol and maintain the trail.
  - What should the specific uses of the trail be?
    - Community members were open to an all access trail for pedestrians, bikers, equestrians, and stroller users. There was a push for mountain biking from a youth mountain bike club who attended the community outreach meeting.

Though community members shared diverse interests in the use, design, and implementation of this multi-modal trail project, there was unanimous concern regarding resident safety. All recommendations incorporate this concern along with community investment in seeing a project like this actualized.

Chapter two covers potential designs for the multi-modal trail project. Access points, bridges, road crossings, and pet stations are represented visually. These drafts are the same drafts that community members reviewed at the community outreach meeting.

Finally, chapter three covers extensive background research regarding facets of multi-modal trail installation in communities. Research includes information on economics, health, home values, homelessness, crime and safety, trail connectivity, and trail use and impact. The research demonstrated that the addition of a multi-modal trail in the City of Monroe has the potential to provide recreational activities that support community health, provide alternative commuting options, and stimulate economic growth.

# CHAPTER ONE: OUTREACH TEAM

## Introduction

Under the guidance of Dr. Tammi Laninga, students held an open house meeting on November 14, 2018, to gather feedback on drafts of ideas for the multi-modal trail project. Twenty-three attendees signed in, and there were likely a handful of others. City of Monroe community member participants were encouraged to visit three stations around the room, each tailored to capture feedback about a specific aspect of the proposed project. Station one allowed participants to comment on trail and facility design, station two collected feedback on access points and parking locations, and station three was designed to understand the community's needs and overall ideas on the purpose for the trail.

To maximize community participation and input, the student outreach team researched best practices in facilitation techniques for community meetings of this nature. They were particularly interested in encouraging generative discussion at each of the three stations. The outreach team's research looked at the findings of Andrews, Sippel, and Strain (2015); Futurewise (2014); and the Virginia Department of Transportation (n.d.). An annotated bibliography of the Team's findings can be found in Appendix A.

## Project Objective(s)

**Vision:** "Provide pathways and information for the community of Monroe, and give community members opportunities to provide input through means of public outreach and engagement."

**Goals:** This project was designed to gain meaningful insight from the City of Monroe community regarding public access points, conceptual designs, and concerns/opportunities for the proposed trail location. Through the city outreach meeting, ideas will be gathered so that an effective trail can be developed that is directly related to the community's needs and interests.

### Objectives:

- To understand the community's priorities for the trail
- To identify concerns for the proposed trail area
- To identify potential access points to the trail
- To identify good/bad aspects of trail design



Figure 1.1 Community Outreach Meeting

## Results

### Conceptual Design Feedback

#### *Description of activities*

Participants were shown design alternatives of the proposed trail area. The designs depicted different trail amenities: access points, bridge crossings, pet stations, and road crossings (these designs are included within Chapter Two: Design Team). Additionally, the community was asked four questions, including: 1) what do you want at access points, 2) how should access points be designed, 3) what kind of materials should be used to construct the trail, and 4) what would you like to see at crossings. Respondents were encouraged to write their feedback on sticky notes and then post that feedback to the question board. Student facilitators took notes on various discussions happening between participants as well. The raw data for the responses from this station can be found in Appendix A.

#### *Summary of findings*

Participants were asked what amenities should be located at access points, and how they should be designed. Recommendations for benches, trail maps, water fountains, restrooms, native plants, doggie bag dispensers, and trash receptacles at access points were among the responses. Several participants also expressed their concern for safety and wanted to ensure that access points would be well lit and designed to be open and inviting so that users feel safe. Many participants suggested that if the trail were to be multi-use, there should be clearly marked signs for paths/loops to prevent potential conflict between activities. Many participants advocated for parking at access points. One person suggested locations at the Fairgrounds and off of Chain Lake Road, but only wanted the lots to fit 10-20 cars, at the most. Several participants suggested the lots be large enough to fit horse trailers, which is an important accommodation if the trail were to allow equestrian use. Another person also suggested that the parking lot be gated, so it could be closed at night.

Another question asked the community what they wanted to see at road crossings. Several participants expressed safety concerns and wanted to improve pedestrian visibility with clearly

defined and marked crosswalks. Participants also suggested that the design include flashing crosswalks, with strobes on the ground, and at eye level for cars. One participant suggested including signs at the crossings, to define its designated use (walking, mountain biking, equestrian use, etc.), and referred to the design of Paradise Lake trails as an example.

The final design question asked participants to comment on what type of materials should be used to construct the trail. Participant answers varied according to which activity they preferred as an intended use. Both pedestrian-use advocates as well as those interested in mountain biking suggested the trail be made of dirt. Others recommended using gravel or wood fibers. Additional comments from equestrian advocates suggested researching the best materials for bridges to avoid spooking horses.

Several participants expressed interest in improving connectivity between different neighborhoods, trails, and the downtown, and suggested that there be as many access points as possible to do so. Participants also expressed interest in winding trails for mountain biking as well as specific trails that be used exclusively for mountain biking.

### Trail Access Point Feedback

#### *Description of activities*

Participants were provided a general outline of where the proposed trail could be located. They were encouraged to observe the map and give input on areas that would make the best access points. Participants used stickers to indicate which access locations would be the most and least ideal. Comment cards were matched with a corresponding sticker on the map (See Appendix A).

#### *Summary of findings*

A common request from the community was to include an equestrian access point located near the Evergreen Equestrian Park. Community members shared that the versatility of an equestrian trail would be good for providing a unique mixed-use experience for the community. Common interest regarded the benefits of access points in areas closest to parking. Examples of the proposed access points were the Monroe Seventh-Day Adventist Church as well as adjacent to the Walmart parking lot. One of the access points proposed by the participants was identified as being of potential concern to the neighborhood north of Rainier View Road SE. In this person's opinion, placing an access point, which might also require parking, could pose a nuisance to the community members living in the neighborhood.

It was also recommended by one participant that access points be located south of the trail area. They thought that north of the trail would be inefficient because the majority of existing commercial development is located on the south end of the trail. This individual thought that by placing access points closer to the south region of the trail, more of the community could effectively utilize access points.

There was commentary on access points that have the potential to be problematic. The majority of the comments identified access points that would contribute to making the trail an accessible and enjoyable destination. One thing that came up in the discussion of access points was a number of homeless camps within the existing WSDOT right-of-way. Participants were trying to be thoughtful about access point location in the context of these homeless camps. Within this context, there were

questions regarding safety and the impact of adding access points. The well-being of everyone involved was expressed as important to the community.

## Trail Priority Feedback

### *Description of activities*

At this table, participants viewed a map of the proposed trail area and made comments on the map. Additionally, they were asked two general questions regarding the priorities and expected use of the trail. These questions included: what should the priorities of the trail be and what should the specific uses of the trail be. Participants could comment by writing their feedback on sticky notes and posting them to the question board and area map. Student facilitators took notes on discussion. Raw data can be found in Appendix A.

### *Summary of findings*

The first question asked participants to comment on the priorities of the trail. The feedback the Outreach Team received highlighted lighting and safety. Participants wondered if the trail would be patrolled and maintained by the city. The primary identified preferred purpose of the trail was general recreation, followed by mountain biking, and then equestrian. Neighborhood residents surrounding the trail want to see the trail be integrated into existing trails and bike paths.

The second question asked participants to comment on the desired use(s) of the trail. In general, the community was open to an all access trail (pedestrians, biker, equestrian, strollers). Of the community members who showed up, the most prevalent distinct stakeholder was the Monroe youth mountain bike club. Several parents and youth were there to advocate for a trail system that could be used by the club for practice. Currently the team (most of which who are not of driving age) have to travel outside of the city.

Most participants expressed their eagerness to see this trail plan put into action. This eagerness revealed some unclear notions about the trail. First, participants were unclear about the term “temporary trail” and what that could mean for the design and longevity of the trail. Additionally, participants expressed interest in knowing the city’s timeline for completing the project.

## Additional Comments

### *Description of activity*

A general comment box was provided for participants to leave additional comments or questions.

### *Summary of findings*

Two participants commented on the need of City of Monroe’s mountain bike community to have a space to practice locally. An additional comment was made about how the trail would accommodate E-bikes. Since E-bikes have 3 classifications for speed, the respondent recommended referring to King County’s ordinance for classes 1 & 2 (20mph v. 30mph) when considering how the trail could accommodate their use. Another comment was made in hopes to improve the connectivity between other walking trails, “to go from Lake Tye trails to Fryelands trails etc.” The final comment card recommended different path materials for different uses. These recommendations were similar to

the comments received at the design concept table. The respondent also questioned the possibility of having multiple paths that run alongside each other or cross paths periodically.

## Conclusion

At least twenty-three community members attended the meeting and provided feedback about the proposed trail area. This information will be used by the City of Monroe and other Western Washington University courses in future planning phases of this project. Community outreach is an engaging and rewarding process for both the participants and the facilitators. The outreach team's meeting was the first step in a longer process of community engagement and planning. It is recommended that those who pick up this project continue conducting community outreach, since this was just an initial sampling of community interests. In general, participants expressed concern regarding the safety of the trail, and were curious to know which measures the city would take to ensure safety once the trail is fully constructed. They suggested ample lighting and explicit signage to make the trails safe at night. As for the use of the trail, there was interest in walking, equestrian use and mountain bike paths. Several participants wanted separate trails for each use to avoid conflict. Several participants advocated the trail to be designed as a loop, with smaller trails leading from surrounding neighborhoods as well trails designated for equestrian or mountain biking purposes.

As outsiders to the community, and in implementing this project in just one academic quarter, there were certain limitations to the project that should be acknowledged. Based on limited time, distribution of materials for this public meeting might not have been as comprehensive as it could have been. There might have been certain groups within the city that learned about the meeting, and certain groups that did not. Working within a small window of time, there was little opportunity to identify all stakeholders within the community. The members of the community that were present at the outreach meeting were generally in favor of the trail and were excited about the potential benefits. What was not represented was the general concern or negative consequences of the proposed trail. As this project progresses, and planning moves forward, we encourage the city to engage a broader group of community members.

## References

- Futurewise. (2014). *Community Engagement Toolkit: Guidance and Resources for Engaging Community in Planning and Policy Development*. Retrieved from <http://www.futurewise.org/assets/reports/CET.pdf>.
- Andrews, B., Sippel, Z., Strain, S. (2015). *Community Engagement in Parks & Recreation Planning Carver County, MN*. Carver County Parks and Recreation Department. Retrieved from [https://conservancy.umn.edu/bitstream/handle/11299/185012/RCP\\_24c-PA\\_5253-report.pdf?sequence=2&isAllowed=y](https://conservancy.umn.edu/bitstream/handle/11299/185012/RCP_24c-PA_5253-report.pdf?sequence=2&isAllowed=y)
- Virginia Department of Transportation. (n.d.). *Community Trail Development Guide*. Retrieved from [http://www.virginiadot.org/VDOT/Programs/bikeped/asset\\_upload\\_file816\\_81999.pdf](http://www.virginiadot.org/VDOT/Programs/bikeped/asset_upload_file816_81999.pdf)

## CHAPTER TWO: DESIGN TEAM

### Introduction

This chapter outlines the Design Team's work to conceptualize reasonable and accessible trail options for the City of Monroe. This chapter provides preliminary visuals of trail features such as: Americans with Disabilities Act (ADA) compliant road crossings and bridges, pet stations, and informative access points. These designs were presented to the community for critique and feedback during the November 14, 2018, outreach meeting. The critiques and discussed solutions are included in this chapter. The community deliberation concerning these designs recognized that the proposed designs are only a sampling of trail amenities worth including. In this sense, the outreach meeting proved to be a valuable tool in exploring other potential trail designs to incorporate and consider during future planning phases. Community knowledge and community priorities expressed during the meeting directly informed what is included in this chapter. Future exploration of community interests and assets will benefit the community's efforts to create a recreational walking, equestrian, and bike trail.

### Project Objective(s)

The goal of the design team is to encourage the expansion of the city's current trail system by offering conceptual improvements for infrastructure design. Based on community feedback, the trail should be:

- Modern
- Safe
- Efficient
- Bike, mountain bike, equestrian, and foot traffic oriented
- Pet-friendly
- ADA accessible

These are all key objectives used to create the series of conceptual trail designs detailed in this chapter. The designs were used during the November outreach meeting to spark discussion on trail design with community members. Design visuals created for the proposed trail illustrate:

- Access points
- Pet stations
- Bridges
- Road crossings with ramps and other ADA features such as:
  - Epoxy and natural dirt surface: consistent, durable, and level
  - Rest stations located every 500 feet

## Project Design Elements

### ADA Trail Requirements

To encourage use of the trail by all community members, it is important that it be developed in the most accessible way possible. In doing so the trail surface must consist of a stable, level, consistent, and durable material that will not obstruct wheelchairs or other forms of assistance (Richards, 2007). To be ADA compliant the trail must, at minimum, be 36 inches wide and preferably constructed of an epoxy-based resin mixed with natural dirt and organic materials. This creates a smooth, inexpensive, and accessible surface (Richards, 2007). Another important factor for ADA compliance is integrating periodic rest areas along the trail route. This provides space to recuperate after exertion. A practical solution to this need is placement of trail benches next to pet stations. This not only provides people with disabilities a rest area, but also creates a more coherent and thematic trail experience for its patrons (Richards, 2007).

### Access points

Figure 2.1 depicts an example for an access point to the proposed multi-modal trail. This style of access point is fairly simple and requires minimal low-cost materials. The trailhead map design is inspired by a similar urban trailhead in the City of Monroe area. This sign is simple to construct, is sheltered from the rain, and does not require significant permanent foundation. There are trash and recycling bins for people to dispose of their waste appropriately. Also included is a dog station equipped with a dog waste disposal bin and bag dispenser. This serves to reduce litter on the trails.

At the outreach meeting, multiple concerns were expressed. These concerns included: lack of lighting, bathrooms, benches, parking and water fountains. While these are great ideas that could greatly improve safety and access point infrastructure, this trail is meant to be temporary. Given the temporary nature of the trail, some of these components might be more challenging, or impossible, to implement. The City of Monroe might consider planning for utility connections for lighting and plumbing to the area in order to meet the community's desires. Portable restrooms, on the other hand, could be a solution to the request for restrooms.



Figure 2.1 Access points and information hubs

## Road crossing

Figures 2.2 and 2.3 illustrate a potential road crossing across 191st Avenue SE. The crossing allows for the safe passage of pedestrians, bicycles, and equestrian riders. The current road is made of concrete, but is not currently in use. This design was created with the idea that once the trail construction is completed, 191st Avenue SE would be reopened. There are a variety of design aspects included in this conception. The crossing is equipped with both a trash and recycling bin. These can help mitigate litter on the trail and the impacts on the environment as a result. The bollards at either end of the trail prevent vehicles from driving or parking too close to the trail outlet. There were two proposed streetlights to keep the area illuminated and allow the public to see easily at any time of day. The lights would also help illuminate the white crosswalk stripes and stop signs to make the crossing even more visible to cars.

Participants provided feedback on several design elements. For example, based on the width between each protective pillar, the design only accounted for pedestrian and bicycle use. When horses were considered, respondents asserted that the bollards would be too narrow for a horse to travel between them comfortably. As the project moves along, this must be researched in greater detail and incorporated into the design, if deemed necessary. Although not limited to road crossings, another concern regarding horses was the material with which the trail surface was made.



Figure 2.2. Road crossing (profile view)

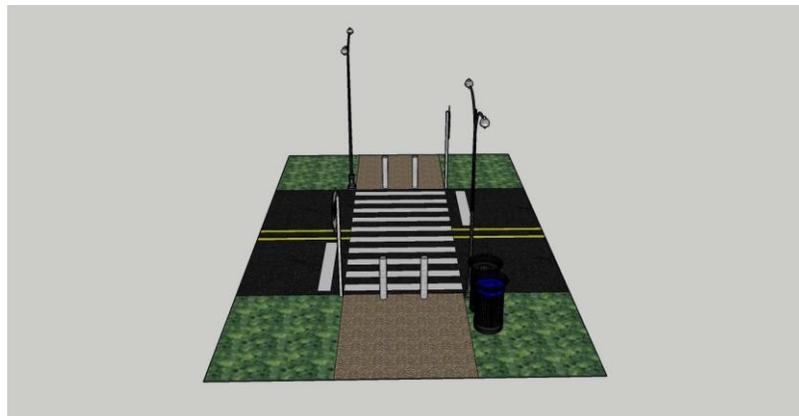


Figure 2.3. Road crossing (perspective from trail)

## Pet stations

Pet stations are a necessary asset for any park system, as trail use inevitably brings along waste from pets. The typical pet station includes trash cans with an attached dispenser to distribute waste bags for picking up after pets. They are placed at trailheads and along the trail. In addition to the pet stations, small signs can be added that inform people of the dangers of leaving pet waste behind. The objective of these pet stations is to encourage the users to enjoy the trail safely with their pets. Figure 2.4 illustrates one possibility for a pet station.

The outreach meeting participants did not have specific feedback on the pet stations other than that they would like to see them. The generally positive feedback from the community and the relative low cost of the stations deems this aspect of trail design to be something that should be pursued during the next phases of design. For user ease and pickup logistics, more specific discussion with community members and city staff should be conducted to figure out exactly where these stations should be located.



Figure 2.4. Preliminary pet station

## Bridges

Figures 2.5 and 2.6 illustrate conceptual bridge ideas for the proposed trail. The use of primarily wood structures was selected because the trail is designated as a temporary trail. Using interlocking wood parts, this bridge could be assembled and disassembled fairly easily. This design is meant to be functional as well as aesthetically pleasing. It has a slight gradient change for fluctuation in stream capacity, but still meets all ADA requirements. The majority of the trail is designed to be compacted dirt and epoxy, so there should be a smooth transition abutting the bridge entrance and exit. Furthermore, small features were included to help with accessibility and safety. The hand rail is designed to extend to the very start and finish of the bridge on both sides. There are also six small LED lights atop the railing supports to help increase visibility. The proposed bridge is ten feet wide, which allows for multiple people to cross in different directions easily, regardless of their mode of transportation.

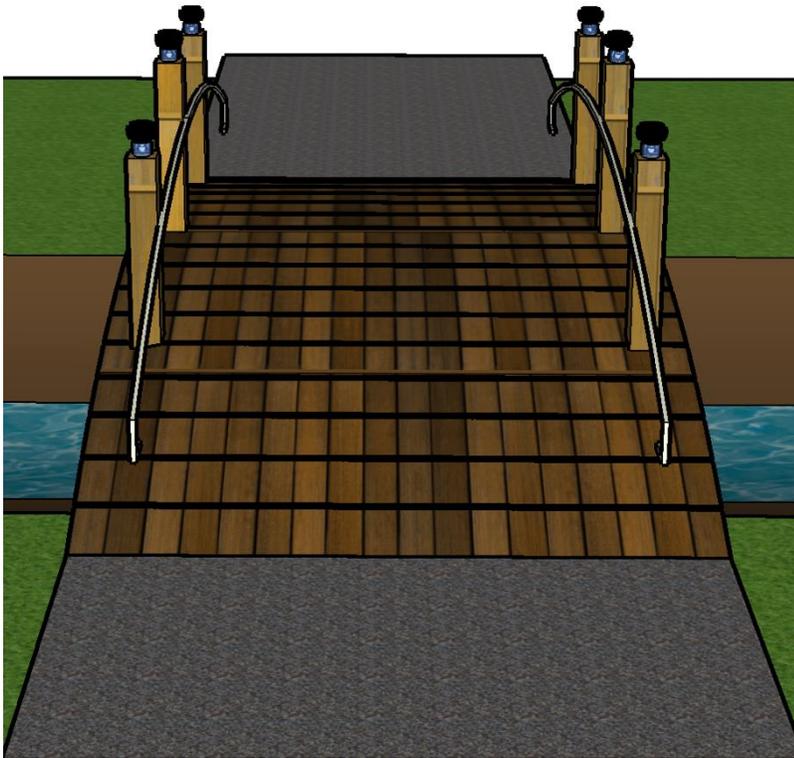


Figure 2.5. Bridge design (perspective from trail)

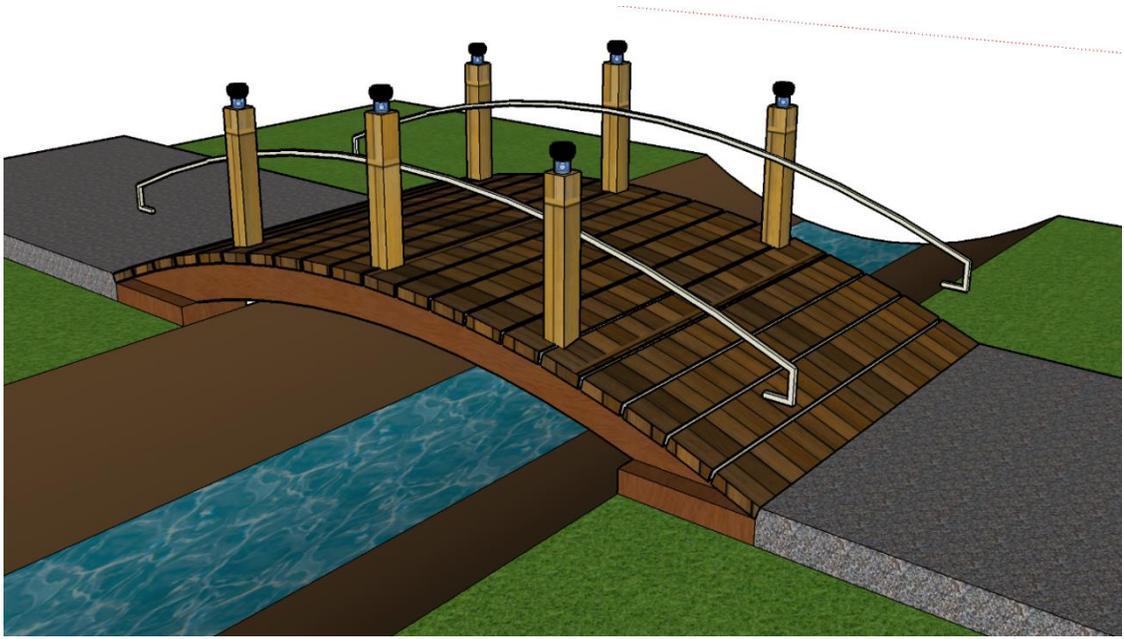


Figure 2.6. Bridge design (profile view)

When this bridge design was presented at the outreach meeting, some concerns were expressed regarding the accessibility. According to some participants, the wood structure might spook a horse. A proposed solution for this challenge is to incorporate packed dirt or fine-crushed gravel on the bridge to make it one cohesive junction (Mclean, 2015).

### Overall Trail Design and Future Opportunities

Proposed trail features include: access points, bridges, road crossings, and pet stations. The proposed trail shown in Figure 2.7 includes a theoretical line established by the design team for the purpose of visual aid. Through insights from meeting participants, it was clear that this theorized route did not serve the community's vision of the trail area. Public input for the trail route improvements included:

- Connecting it to similar trail routes that already exist to the north of the Evergreen State Fairgrounds.
- Creating a loop that could be utilized by mountain bikers in some areas and equestrian traffic in others.

## References

- McLean, A. (2015). Understanding the Horse's Fear Response: Spooking, Bolting, etc. [Web log post]. CRK Training Blog. Retrieved from <http://www.crktrainingblog.com/horse-training/horse-fear-spooking-bolting/>
- Richards, V. (2007). ADA Accessibility Guidelines, Tennessee Department of Environment and Conservation Recreation Educational Services Division Greenways and Trails Program.

## Additional Resources

- City of Bellingham. (n.d.). Pet Waste Belongs in the Trash. Retrieved from <https://www.cob.org/services/environment/stormwater/Pages/pet-waste.aspx>
- Dolesh, R. (2018). Dogs in Parks: Managing the Waste. *Cityofbellingham*. The National Recreation and Parks Association. Retrieved from <https://www.nrpa.org/parks-recreation-magazine/2018/november/dogs-in-parks-managing-the-waste/>
- Flink, C., Olka, K., & Searns, R. (2001). *Trails for the twenty-first century: planning, design, and management manual for multi-use trails*. Island Press.
- U.S. Department of Agriculture/U.S. Forest Service. (n.d.). Standard Trail Plans and Specifications. Retrieved from <https://www.fs.fed.us/managing-land/trails/trail-management-tools/trailplans>
- Wiki Pets. (n.d.). Danger of Dog Poop. *Alamo Area Partners for Animal Welfare*. Retrieved from <http://www.aapaw.org/education/dangers-of-dog-poop.html>

## CHAPTER THREE: RESEARCH TEAM

### Introduction and Project Objectives

The research team's goal was to examine the different outcomes of multi-modal trail implementation on surrounding communities. This chapter summarizes the benefits, challenges and opportunities a multi-modal trail could bring to the Monroe community. Topics covered include: trail modes and materials, physical health of trail users, and effects of a multi-modal trail on surrounding property values.

### Research Results

#### Economics

Urban trails and greenways have a number of effects on local and sub-regional economies. Urban trails, such as the proposed City of Monroe project, are a public amenity. This means that the financial cost associated with building the trail will not see a direct return on investment, but rather will support the community as an added financial asset through indirect economic benefits. One of the most valuable ways that urban trails contribute to a local economy is through property appreciation, as properties in proximity to the trail will have more access to the amenities offered (American Hiking Society, 2004). This is a significant benefit of urban trails and merits its own discussion, separate from other aspects of the economics of urban trails (Bergerson & Dove, 2008). More research on this topic can be found under the section titled 'Home Values.'

The total economic impact of an urban trail system is measured as the sum of four types of economic effects: direct, indirect, induced, and dynamic. Whether these effects are more economically beneficial for a local or regional community than the initial financial investment cost and maintenance costs is contingent upon three things. The three things include: 1) whether or not the trail connects nodes of economic activity to consumers, 2) whether or not the trail accommodates uses associated with market stimulation, and 3) the overall public perception of the trail's uses and benefits.

#### *Findings*

Examining the impacts urban trails have on local and/or regional economies brings a better understanding of community investments, and which investments are likely to be the most successful. The most inclusive format of measuring economic effects of an urban trail system is by studying all four economic effects, the combination of which outline a holistic perspective of what urban trails have to offer their communities (McDonald & Brown, 2015). Economic modeling is also a method of measuring the overall economic impact of a development yet is beyond the scope of this research.

The direct effects of multi-modal urban trails include all gains and expenditures as a direct result of the trail. Included in direct effects are the costs to the public for the construction and maintenance of the trail, as well as the money spent by the public on the access or various uses of the trail, such as bike and equipment services or gasoline. Although access exclusivity (e.g., charging a fee) is a method used by some to increase revenue from trail systems, it is difficult to enforce in urban areas and may decrease overall use of a trail. Trail-based tourism is a major economic asset for many

communities and provides millions of dollars annually to small communities across the United States (Rails-to-Trails Conservancy, n.d.).

Indirect economic effects refer to more broad changes in the economy, such as inter-industry transactions, that result from the publicly implemented amenity. An example of this would be the result of implementing bicycle-oriented trails increasing the sale of bicycle related products for a local business, which in turn means that more of these products must be ordered, increasing revenue to all sources required to make those products.

Changes in the buying power of entities as a result of changes to personal income are considered induced economic effects. Induced effects differ from indirect effects in that although induced economic effects consider broad changes in the economy, as indirect effects do, the purpose is to evaluate changes in the personal income of those affected in those industries so that the additional income can contribute to the economy in markets outside of those markets impacted by the amenity. Trails are a cost-effective mechanism of job creation, as the design, engineering, and construction of multi-modal trails create more jobs per dollar than any other transportation infrastructure (Rails-to-Trails Conservancy, n.d.).

Dynamic effects refer to social or structural changes to a community, that have wider implications for the future of a community, such as changes to populations, land value and use, and the locations of businesses. Dynamic effects are difficult to account for with economic modeling, as they inherently subvert the existing economic conditions by which the initial economic models are based. Dynamic effects also tend to happen as a reaction to the development, such as the opening of businesses specifically tailored to trail uses.

### *Recommendations*

Direct, indirect, induced, and dynamic economic effects demonstrate that despite the requirement of publicly funded direct financial expenditures, multi-modal trails have the potential to be powerful economic assets for communities. As a multi-modal urban trail accommodates more uses, it can stimulate the economy in more beneficial and diverse ways. The benefits of implementing these uses might not always outweigh the incurred costs, financial or otherwise. Although equestrian uses are observed as an option in this research under the section, 'Trail Use and Impacts,' the primary observed uses of multi-modal trails are "biking, running or walking" (East Coast Greenway Alliance, n.d.). In developing this trail, one might consider prioritizing these uses to inspire economic development.

Recreational biking as a use of a multi-modal urban trail presents the most opportunity for a beneficial economic impact on the Monroe community. There are multiple bike shops in the City of Monroe which would greatly benefit from the expansion of bicycling amenities and use. Many bike shops in small communities can attribute entire incomes to the availability of bike paths and trails. These trails can also stimulate retail and food service economies significantly (East Coast Greenway Alliance, n.d.). Although recreational biking facilities are primarily used by middle to upper class residents, use is relatively even among gender and age. Attractive multi-modal trails can help support networks of local hotels, restaurants, and shops (Eastin, n.d.).

## Health

### *Findings*

The health crisis in the United States has been in the spotlight for several years. Evidence of the health crisis related to physical inactivity continues to accumulate (Rails to Trail Conservatory, n.d.; Burbidge & Goulias, 2009). Approximately 300,000 U.S. citizen deaths per year are related to obesity and weight problems (U.S. Department of Health and Human Services, Public Health Services and Office of the Surgeon General, 2001). The total direct and indirect costs attributed to these conditions were approximately \$117 billion in the year 2000 (U.S. Department of Health and Human Services et al., 2001). According to a study done by the American Heart Association, about 600,000 people died from heart disease in 2006, which another study estimates will cost the nation \$316.4 billion in terms of medication, treatment and lost productivity (Lloyd-Jones et al., 2009).

Many Americans live predominately sedentary lives with less than one third of Americans meeting the federal recommendation of at least 30 minutes of moderate physical activity five days a week (U.S. Department of Health and Human Services et al., 2001; U.S. Department of Health and Human Services, 2011). The U.S. Department of Health and Human Services emphasizes the importance of the relationship between exercise and health. Physical activity not only helps control weight but also helps prevent heart disease, slows bone loss associated with advancing age, lowers the risk of certain cancers, helps reduce anxiety and depression, and helps control cholesterol levels and diabetes (Rails to Trails Conservatory, n.d.; American Hiking Society, n.d.; U.S. Department of Health and Human Services, 2011).

Mental health is as important as physical health. Anxiety can be reduced through regular physical activity. When adrenaline accumulates in the body, which is produced regularly to cope with real or perceived danger, it causes the muscles to become tense and releases feelings of anxiety (American Hiking Society, 2004). Exercise can release this built up adrenaline. Results have shown that there are immediate decreases in tension and anxiety after walking, regardless of the intensity. Endorphins released by the body after exercise can lift your spirits throughout the day, keeping your brain as healthy as your body (American Hiking Society, 2004).

One of the most frequently cited barriers to physical activity is lack of safe areas (U.S. Department of Health and Human Services, 2011). Improved pedestrian and cycling infrastructure may promote physical activity by making walking and cycling more appealing, easier, and safer. Trails and greenways create healthy transportation and recreation opportunities by providing citizens of all ages with safe, accessible places to walk, jog, bike, hike or skate, and makes it easier for people to engage in physical activity (Rails to Trails Conservatory, n.d.). Trails and greenways can connect neighborhoods to schools, business districts, and other parts of the city, especially if the communities lack adequate sidewalks. This promotes walking or cycling to work, school, and for running errands, which reduces road congestion and mitigates pollution (Rails to Trails Conservatory, n.d.). Trails and greenways also offer a low-cost alternative to exercising at high priced indoor gyms and health clubs.

A number of studies have looked at exercise rates before and after having close access to a trail. For example, in a study done in southwestern Missouri, 55% of trail users who responded to the survey indicated that they were exercising more after having access to a trail (Brownson, 1999). In a study performed in Indiana, researchers found that in six locations surveyed, over 70% of trail users reported to be getting more exercise as a direct result of the trails and greenways (Wolter & Lindsey,

2001). Living in areas with walkable green spaces can positively influence the longevity of older citizens in large cities as found by researchers, Takano, Nakamura, and Watanabe (2002).

### *Recommendations*

It is clear that having access to outdoor recreation opportunities can be beneficial to a community's health. The placement of the multi-modal trail will promote healthy, alternative transportation options and support walking and biking.

## Home Values

### *Findings*

The literature analyzing the effects of a multi-modal trail on nearby property demonstrates increasing values with proximity to a trail. The increase in home and property value reflects the benefits property owners experience by living close to multi-modal trails. These benefits include having alternative transportation options (biking, walking) and easy access to trails for recreation, which can cultivate health and relaxation.

A multi-modal trail enhances the perception of a community through the above benefits, making the community a more attractive destination for potential homebuyers than compared to a neighborhood without trails. In a survey completed by the Conservation Fund and Colorado State Parks and Trails Program, 55% of real estate agents indicated that a home in proximity to a trail would sell for more than a comparable home in a different neighborhood without one (Webel, 2000). Furthermore, participating real estate agents claimed that "urban trails are regarded as an amenity that helps to attract buyers and sell property" (Webel, 2000). Among the agents, 73% believed a home near a trail would be easier to sell, 82% used the trail as a selling point and 100% considered trails to be a desirable amenity to the community around it (Webel, 2000).

Furthermore, Dhanju and Racca (2006) show supporting evidence for higher property values for properties in close proximity to a trail. In one aspect of the study neighbors of a trail expressed that they felt their quality of life was improved by living near a trail. This study is relevant to the City of Monroe multi-modal trail project as the conclusions of this research found that even those who initially opposed the construction of the trail eventually became "very happy with the trail" (Dhanju & Racca, p. 22, 2006). It is important to acknowledge that although the literature shows that proximity to a trail has a positive impact on property values, it is small amongst the many factors that contribute to property values. All studies address the reality of real estate sales, which combine a multitude of property features for a total assessment of the home, including "the number of bedrooms, years since sale, acres, land, buildings, total number of rooms" etc. (Dhanju & Racca, 2006).

There is some research that shows a slight drop in property value near trails. However, this reduction is usually only present at the time of trail development (Headwaters Economics, 2016). This is shown to occur based on speculations of noise, traffic or crime/safety impacts. Results in such research reveal that once trails are widely accepted and used by the community, home values increase as reflecting an appreciation by the community and a desirable community asset.

## *Recommendations*

Implementing the trail could improve the home values of properties in areas connected to and by the trail. If the trail is implemented, there might be some time needed to acclimate to the trail. Increased home values could result over time.

## Homelessness

### *Findings*

There is little information specifically about the effects of a multi-modal trail through a community and its effects on homelessness. The larger pools of applicable information in this case comes from statistics on homelessness in the City of Monroe and Snohomish County. Snohomish County statistics from 2012 showed that 10.4% of residents lived in poverty and 79,000 people lived below the poverty line (Snohomish County Human Services Department & Homeless Policy Task Force, 2012). Frequently, people experiencing homelessness take advantage of the public nature of parks to establish makeshift homes and temporary shelters in what are intended to be shared public spaces (Taylor, 2018). Their behaviors and belongings are seen as a nuisance by some and can dissuade people from using a park. This frustrates many members of the public, but shelters and services are not always in enough supply to meet the demand (Taylor, 2018). Fortunately, the gathering of homeless people, which frequently occurs in public parks, provides an opportunity for local agencies to collaborate and connect individuals with much needed social services. The community can still regulate some actions and protect homeless people's rights in an effort to shift the greater culture towards compassion and positive actions (Dropinski, Layton & Rainey, 2018).

After speaking to community members at the outreach meeting, new information came to light about homelessness and its effects. The research team was informed that the main area in which homeless people congregate on the site is near the Evergreen State Fairgrounds, where there is a semi-public restroom (it is intended to be used by the users of the fairgrounds). Members of the police department and county agreed that building this area up into a multi-modal trail, combined with the increased use of the area would likely push these people out of the area. With this in mind, it is important to think about how to best support these individuals during the installation of the trail.

### *Recommendations*

This trail is not making anyone homeless. So, the number of people in Snohomish County experiencing homelessness will not change. However, it is frequently shown that a park may attract homeless people who are erecting shelters and temporary structures in the park at night. This potentially provides the community with the opportunity to use its existing programs with better effectiveness to help people within the park.

## Crime & Safety

### *Findings*

The implementation of trails in communities throughout the United States has shown increasingly positive effects on the residents of the area. For the most part, questions of safety pertaining to trails cover issues ranging from lighting, density of vegetation, visibility, maintenance, litter and crowding (Reynolds et al., 2007). Tracy and Morris, authors of "Rail-Trails and Safe Communities: The

Experience of 372 Trails” (1998) have found that crime rates are lower on trails than they are in the surrounding public and private areas, such as highways and parking lots. Largely, the implementation of trails promotes exercise, provides recreational opportunities and alternative transportation routes, fosters a sense of community, and lowers crime rates.

Well utilized trails often have lower crime rates due to the concept of “eyes on the street,” which is a motivator for well-planned and desired trail systems as well as urban street networks (Tracy & Morris, 1998). Trails are ideal routes to keep pedestrians, bicyclists and alternative transportation users safe and separate from automobile traffic. In 1995 and 1996 less than one fourth of Tracy and Morris (1998) study participants experienced any minor crimes on trails, and approximately three percent experienced a major crime, with slight differences between urban, suburban and rural land types. Based on the lower crime rates on trails of all kinds, the tendency for people to fear crime on dark and dense trails is a misperception (Eaken, 2001). Nevertheless, safety concerns are legitimate responses from the public that should be addressed through a process sufficient for examining and mitigating the situation. A positive correlation has been found between trail use and presence of street lights, and a negative correlation has been found between density of vegetation and trail use (Reynolds et al., 2007).

According to the Santa Fe Conservation Trust, a nonprofit dedicated to conserving cultural and environmental landscapes in New Mexico, 69% of urban trails, 67% of suburban trails, and 63% of rural trails are patrolled in some form or another, either by local volunteers or a police force (Alexander, 2010).

### *Recommendations*

Trail design should result from an assessment of the community’s needs, resources, and values. Based on crime and safety research, trail development should include ample visibility at all times, including lighting and trimmed vegetation, which improves line of sight and decreases available hiding places (Tracy & Morris, 1998). Encouraging trail use is an easy way to promote safer trail environments. While there is not statistically significant data to support these efforts, other measures the city might consider include installing emergency phones and posting use rules along the trail or at the trailhead (Tracy & Morris, 1998). Educating the public on trail safety and user precautions is another way to inform the community members who use the trail on what to be aware of when using the trail. Volunteer or professional patrolling is often successful in lowering crime rates on trails (Tracy & Morris, 1998). A well-planned trail would cater to multi-modal transportation options and should be considered a valuable component of the local community. There is reason to believe that community members would support and work toward ensuring that this trail is a safe and sustainable community asset.

### Trail Connectivity

#### *Findings*

The proposed trail linking the Evergreen State Fairgrounds at 179<sup>th</sup> Avenue and the commercial district around Chain Lake Road aims to provide convenient recreation and transportation opportunities for residents. “Monroe citizens expressed a need for a trails system, which includes trails of various classifications linking parks, the river, the downtown area, schools and providing recreation opportunities in open space/natural areas” (Studio Cascade & the City of Monroe, 2015). For those without automobiles, a trail network enables people of many different abilities and circumstances to access city amenities.

Trails serve as safe, environmentally friendly and cost-effective avenues of transportation for city residents. One benefit of having urban trails is providing people with more options for moving throughout the city. As automobile traffic increases, residents may find it quicker to travel by foot or bicycle on trails or sidewalks. “US 2 serves as major north/south divider, bisecting the community as signal timing favors highway traffic and the width of the roadway makes it unappealing for pedestrians” (City of Monroe, p. 111, 2015). Highway 2 is an intimidating area for pedestrians and cyclists because of the sheer automobile volume. Additionally, there are not currently adequate sidewalks or bike lanes. The proposed trail would provide residents with a connecting route that bypasses Highway 2 completely.

The proposed trail location is nestled between residential and commercial development. Its location has the potential to serve several different audiences and purposes. Where Chain Lake Road and North Kelsey Street meet, there is access to a residential neighborhood through a greenway. This trail would serve residents by providing a convenient place to get outside for a walk or bike ride. It is not necessary for residents to drive to this southeast trail entrance, making it appropriate for younger people to participate in recreational activities. The Evergreen State Fairgrounds sits at the northwest end of the trail at 179<sup>th</sup> Avenue, serving people staying at the Fairgrounds for events. Often people stay in tents, motorhomes and trailers, not always having access to day-use automobiles. This multi-modal trail would allow visitors to comfortably access the commercial district to pick up items needed for their stay. Having a well-developed trail network helps to mobilize a greater portion of a city’s population and decrease the necessity of automobiles.

### *Recommendations*

Residents of the City of Monroe have expressed the need for linking existing parks with urban greenways. There is potential to connect the proposed trail with Al Borin Park on the south side of Highway 2. A safe crossing point for pedestrians and cyclists would require further research and planning, but if feasible, it would improve the value of this proposed trail. Having a destination such as Al Borin Park and the Skykomish River at one end of the trail would increase interest in, and use of, the trail.

### Trail Use & Impacts

Pedestrian and bicycle traffic are known to have a relatively low impact. Horse impacts, on the other hand, are more unknown. Most research was done to review equestrian impacts and not pedestrian or bicycle. After review, horses on multi-modal trails do not cause significant harm environmentally, but could pose a challenge to other users.

### *Findings*

Although research has been conducted on the impact of equestrian traffic on trails, more research needs to be done to create conclusive evidence. It is hard to distinguish whether a higher impact can be attributed specifically to equestrian traffic over other modes because of their interconnected use and similar impact (Pickering, Hill, Newsome, & Leung, 2010; Beavis, 2005).

The primary environmental concerns regarding trails are erosion, damage to surrounding plants and animals, introduction of invasive species, and trail runoff. Other traffic, specifically bike and pedestrian, are widely considered low impact, when users stay on the trail. Horses tend to have similar levels of impact. A major issue arises, however, when traffic of all kinds travel off trail. Impact related to horses, specifically, is described below.

- Environmental Impact - Soil: Horses are considered by many to be low impact trail users. This sentiment has been reinforced from agencies including the National Park Service, the USDA, and the US Forest Service (Quinn, 2004). This statement has been scrutinized, however, for being broad; there are varying levels of impact severity (Pickering et al., 2010). For example, Beavis (2005) shows that the hoof of horses delivers significant force onto the soil, which can displace it more than other modes (e.g., hiking, biking).

Regardless, many studies have shown that trail erosion has primarily to do with soil composition type (e.g., fine sediments or rocky gravel), average rainfalls, and grade (e.g., steepness) of a trail (Marion & Wimpey, 2016). Many of the main drivers of erosion are naturally occurring phenomena, and trail users, particularly traffic associated with horses, do not have considerable effect on erosion itself.

- Environmental Impact - Water & Plants: Although horses have been found to be less likely to scare off wildlife than hikers or bikers (Quinn, 2004), they do have the potential to have an impact on the flora around them. Horses may eat plants from the edge of the trail, disrupting the natural environment around them (Pickering et al., 2010). Consumption of plants can also be a source of invasive seed transmission, although many seeds are unable to germinate in horse waste (Quinn, 2004; Pickering et al., 2010). Additionally, their waste has the potential to create higher nitrogen and phosphorus levels in the soil, ultimately having the potential to affect what plant life can grow near the trail (Pickering et al., 2010, p. 554). Many of these nutrients, however, dissipate quickly (Quinn, 2004).

Horse waste has been shown to have minimal impact on water sources unless directly deposited into the water source. Horses will be coming from a stable of some kind where most of the defecation will happen and waste on the trail will be minimal (Quinn 2004). As stated above, many of the harmful nutrients that horse waste could add to water sources (excess nitrogen causing algae blooms, for example) dissipate quickly. Diseases harmful to humans, such as E-coli and salmonella, are at an insignificant level to begin with, and are neutralized completely within 24 hours (Quinn, 2004). The main concern to be considered in this context is the City of Monroe's wet, temperate environment with rainfall as a potential catalyst for runoff into waterways in a short period of time.

- Surface Material Considerations: The surface commonly suggested is a mixture of fine and course materials. Marion and Wimpey's (2016) research on trail soil loss suggested that this mixture is important because the course material creates a hard surface while creating drainage, and compacts over time with finer material, making a much more cohesive solid path (Wimpey, 2016, p. 50). Quinn, with American Trails, recommends "spreading 3/4" hard native rock, decomposed granite (DG), or basalt" to provide a firmer trail tread (Quinn, 2004, p. 18). Additionally, the manual, Trails for the Twenty First Century, stipulates ten feet of clearance from the trail surface to accommodate equestrian riders (Flink, Olka & Searns, 2001).
- Social Impact: The possible downsides of having horses share a multi-modal trail with other users are minimal, but there are two distinct issues: aesthetic loss and modal conflict. In terms of aesthetic loss, a trail with horse use will have some waste either on or directly next to the trail, which could be a potential issue for walkers and bikers. Further, conflict can arise from interaction between equestrian traffic and other modes. Horses can be easily scared by quickly

moving objects, as well as being approached from behind (Quinn, 2004). On a multi-modal trail, where there are potential walkers and bikers from both directions, this could be problematic and dangerous. Quinn (2004) suggests communicating with the rider for instructions on how to pass safely. Generally, these issues can be mitigated, and equestrian traffic can be integrated into a multi-modal trail successfully.

Trails open to equestrian use do not face very many drawbacks, particularly in the case of a constructed multi-modal trail. Horses are not significantly more damaging to their environment or the trail itself than their bike or foot traffic counterparts. All three of these modes can also be successfully implemented on the same trail surface. The main drawback of equestrian traffic is the problematic issue of passing a horse safely, which is easily done, but the public must be educated to understand how to do so to avoid dangerous situations or injury to either party.

### *Recommendations*

Speaking specifically of equestrian traffic, the main area of equestrian use should be centralized around the Evergreen State Fairgrounds, between the fairgrounds and 191<sup>st</sup> Avenue SE. This would give equestrian traffic enough space to have a functioning trail system, while also keeping the impact more centralized and manageable, reducing construction cost of a longer equestrian trail system.

If possible, the city should consider providing separate trails for different users. One option is separating bikers and walkers from a secondary trail for equestrian only use. This secondary trail would be slightly offset from the other, giving equestrian riders the ability to avoid direct interaction with other trail users. This recommendation, however, does not separate bikers and walkers, creating a shared path that would have to support the two uses together.

Another option would be creating three different trail networks. At the public meeting there was expressed concern of horses being spooked by bicycle riders or walkers, as well as an interest to have trails designated solely for bike riding. Providing three different trail systems in the area remove all dangerous encounters between bikers, walkers and equestrian traffic, while providing the three uses freedom of their own space. Additionally, this option could also include trails that intermix bikers and walkers. These mixed trails would be less abundant than the single use trails and could be utilized as trailhead arterials that lead into the trail system from park entrances.

### **Conclusions**

The findings of this chapter indicate that a multi-modal trail could create positive health and economic impacts for the community of Monroe without negatively affecting the environment in any significant way. The trail could create greater opportunities for a variety of outdoor recreational activities that support personal and community health as a whole. The trail system would create an alternative commuting option, as well as the potential to establish a network of connected parks throughout the City of Monroe area. The trail has the potential to accommodate hikers, bikers, and horses. Lastly, it might also stimulate economic growth. As the City of Monroe continues its efforts to implement a multi-modal trail, these areas of inquiry and recommendations should be considered.

## References

- American Hiking Society. (2004). *A Step in the Right Direction: The Health Benefits of Hiking and Trails*. American Hiking Society. Retrieved from, <https://www.americantrails.org/files/pdf/AHShealthben.pdf>
- American Hiking Society. (n.d.). *Health Benefits of Hiking*. Retrieved from, <https://americanhiking.org/wp-content/uploads/2013/04/Heath-Benefits-of-Hiking-fact-sheet.pdf>
- Alexander, M. (2010). Neighborhoods and trails: why trail? *Santa Fe Conservation Trust*. Retrieved from <https://sfct.org/trails/neighborhoods/>
- Beavis, S. (2005). Biophysical Impacts of Recreational Horse Riding in Multi-use National Parks and Reserves. *Australasian Journal of Environmental Management*, 12(2), 109–116. <https://doi.org/10.1080/14486563.2005.9725079>
- Beeton, S. (2006). Sustainable tourism in practice: Trails and tourism. Critical management issues of multi-use trails. *Tourism and Hospitality Planning & Development*, 3(1), 47–64. <https://doi.org/10.1080/14790530600727227>
- Bergerson, T., Dove, A. (2008). Benefits of Trails & Greenways [brochure]. Retrieved from <https://www.cdlandtrust.org/sites/default/files/publications/Benefits%20of%20Trails-NPS.pdf>
- Brownson, R. C. (1999). Promoting and evaluating walking trails in rural Missouri. *Saint Louis University School of Public Health*.
- Burbidge, S.K., and Goulias, K.G. (2009). Evaluating the Impact of Neighborhood Trail Development on Physical Activity of Suburban Residents. *Transportation Research Record*, 2135, 78-86.
- City of Monroe. (2015). Appendix D - Transportation Plan. *In the City of Monroe's, 2015-2035 Comprehensive Plan*. Retrieved from <https://www.monroewa.gov/DocumentCenter/View/3682/Appendix-D---Transportation-Plan>
- Dhanju, A., & Racca, D. P. (2006). Project Report for Property Value/Desirability Effects of Bike Paths Adjacent to Residential Areas. *Center for Applied Demography & Survey Research*.
- Dropinski C, Layton R, Rainey J. (2018). Homelessness and How It Affects Parks and Recreation Agencies. Retrieved from <https://greenplayllc.com/wpcontent/uploads/2018/02/Homelessness-Article.pdf>
- Eaken, A., & Hart, J. (2001). Tunnels on Trails. Retrieved from <http://www.americantrails.org/resources/railtrails/Tunnels.html>
- East Coast Greenway Alliance. (n.d.). Benefits of Greenways and Trails. Retrieved from

- <https://www.greenway.org/uploads/attachments/cj4oa2ra401nw79qixmt4ooj1-benefits-of-greenways-and-trails.pdf>
- Eastin, T. (n.d.). The Business of Trails: A Compilation of Economic Benefits. *American Trails*. Retrieved from <https://www.americantrails.org/resources/the-business-of-trails-a-compilation-of-economic-benefits>
- Flink, C. A., Olka, K., and Searns, R. M. (2001). *Trails for the twenty-first century: Planning, design, and management manual for multi-use trails*. Rails-to-Trails Conservancy. Washington, DC: Island Press.
- Headwaters Economics. (2016). *Measuring Trails Benefits: Property Value: Overall Benefits*. [Brochure]. Retrieved from <https://headwaterseconomics.org/wp-content/uploads/trails-library-overview.pdf>
- Lloyd-Jones, D., Adams, R. J., Brown, T. M., Carnethon, M., Dai, S., De Simone, G., ... & Go, A. (2009). Heart disease and stroke statistics—2010 update. *American Heart Association*. Circulation.
- Marion, J. L., & Wimpey, J. (2017). Assessing the influence of sustainable trail design and maintenance on soil loss. *Journal of Environmental Management*, 189, 46–57. <https://doi.org/10.1016/j.jenvman.2016.11.074>
- McDonald, J., & Brown, L. (2015). The Economic Impact of Greenways and Multi-Use Trails. Naugatuck Valley Council of Governments.
- Pickering, C. M., Hill, W., Newsome, D., & Leung, Y.-F. (2010). Comparing hiking, mountain biking and horse-riding impacts on vegetation and soils in Australia and the United States of America. *Journal of Environmental Management*, 91(3), 551–562. <https://doi.org/10.1016/j.jenvman.2009.09.025>
- Quinn, A. (2004). Environmental Aspects of Horses on Trails. Retrieved October 31, 2018, from <https://www.americantrails.org/resources/environmental-aspects-of-horses-on-trails>
- Rails-to-Trails Conservancy. (n.d.). Investing in Trails: Cost-Effective Improvements – for Everyone. Retrieved from <https://www.railstotrails.org/resourcehandler.ashx?name=investing-in-trails-cost-effective-improvementsforeveryone&id=3629&fileName=Economic%20Impacts%20of%20Trails.pdf>
- Rails to Trails Conservancy. (n.d.). Health and Wellness Benefits. Retrieved from, <https://www.railstotrails.org/resourcehandler.ashx?name=health-and-wellness-benefits-of-trails-and-greenways&id=3070&fileName=HealthandWellness.pdf>
- Reynolds, K. D., Wolch, J., Byrne, J., Chou, C. P., Feng, G., Weaver, S., & Jerrett, M. (2007). Trail characteristics as correlates of urban trail use. *American Journal of Health Promotion*, 21(4\_suppl), 335-345.

- Snohomish County Human Services Department and Homeless Policy Task Force. (2012). Point In Time Count of Homeless Persons in Snohomish County. Retrieved from <http://snohomishcountywa.gov/DocumentCenter/View/7269>
- Studio Cascade and the City of Monroe. (2015). Appendix F - Parks, Recreation and Open Space. In Studio Cascade's and the City of Monroe's, 2015-2035 Comprehensive Plan. <http://www.monroewa.gov/DocumentCenter/View/3712/Appendix-F---Parks-Recreation-Open-Space-Plan?bidId>
- Takano, T., Nakamura, K., and Watanabe, N. Urban Residential Environments and Senior Citizens' Longevity in Megacity Areas: The Importance of Walkable Green Spaces. *Journal of Epidemiology and Community Health*, Vol. 56, pg. 913-918, 2002.
- Taylor, D. (2014) Out of the Shadows. Retrieved from: <https://www.nrpa.org/parks-recreation-magazine/2014/january/out-of-the-shadows/>
- Tracy, T., and Morris, H. (1998). Rail-trails and safe communities. Rails-to-Trails Conservancy, Washington, DC.
- U.S. Department of Health and Human Services/Centers for Disease Control and Prevention. (2011). Strategies to Prevent Obesity and Other Chronic Diseases: e CDC Guide to Strategies to Increase Physical Activity in the Community. Retrieved from [https://www.cdc.gov/obesity/downloads/PA\\_2011\\_WEB.pdf](https://www.cdc.gov/obesity/downloads/PA_2011_WEB.pdf)
- U.S. Department of Health and Human Services, Public Health Services and Office of the Surgeon General. (2001). Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity. Retrieved from <https://www.cdc.gov/nccdphp/dnpa/pdf/CalltoAction.pdf>
- Webel, S. (2000). Trail Effects On Neighborhoods: Home Value, Safety, Quality Of Life [web article]. Retrieved from <https://www.americantrails.org/resources/trail-effects-on-neighborhoods-home-value-safety-quality-of-life>
- Wolter, S., and Lindsey, G. (2001). Summary report: Indiana trails study. *Bloomington IN: Eppley Institute for Parks & Public Lands*, Indiana University.

## APPENDIX A

### Outreach Team Findings

#### Annotated Bibliography of Outreach Techniques

Futurewise. (2014). Community Engagement Toolkit: Guidance and Resources for Engaging Community in Planning and Policy Development. Retrieved from <http://www.futurewise.org/assets/reports/CET.pd>.

“SpeakOut.” This outreach approach is organized around local issues, with a number of issue stalls set up that relate to results of community surveys, topics of concern or to specific project goals (Futurewise 2014). Heavily resourced “SpeakOut” will have a trained Listener and a trained Recorder in each issue stall. The Listener pays close attention to what a participant is saying and asks relevant questions while the Recorder writes down the person’s comments (Futurewise 2014). Our plans for the community meeting will model this approach, as we will have several tables addressing trail access points, conceptual designs, and discussion of the trail area. We will also have a recorder and a listener at each table, as well as a representative from the design team and the research time available to address community comments.

Youth Component. Adding a table that engages youth provides a way for them to participate while their parents are interacting with the “adult” components (Futurewise 2014). Our plans for the community meeting include a Kid’s table, where youth in the community can answer what they want to use the trail for by drawing a photo of themselves using the trail.

Andrews, B., Sippel, Z., Strain, S. (2015). *Community Engagement in Parks & Recreation Planning Carver County, MN*. Carver County Parks and Recreation Department. Retrieved from [https://conservancy.umn.edu/bitstream/handle/11299/185012/RCP\\_24c-PA\\_5253-report.pdf?sequence=2&isAllowed=y](https://conservancy.umn.edu/bitstream/handle/11299/185012/RCP_24c-PA_5253-report.pdf?sequence=2&isAllowed=y)

“Sticker Voting.” This approach acts as a simple method to effectively gain immediate feedback on ideas (Andrews, B., Sippel, Z., & Strain, S. 2015). Our plans for the community meeting will utilize this table-top exercise at Table 1, where we will ask for community insight on possible access points. We will provide sticky dots of different colors that members can place on the trail area map to provide comment for why this would be a good/bad space for an access point.

Virginia Department of Transportation. (N.D). *Community Trail Development Guide*. Retrieved from, [http://www.virginiadot.org/VDOT/Programs/bikeped/asset\\_upload\\_file816\\_81999.pdf](http://www.virginiadot.org/VDOT/Programs/bikeped/asset_upload_file816_81999.pdf)

Maps. The use of maps to mark possible trail routes, destinations of importance, and areas with possible hazards can help create trail alignments that have the greatest amount of community support, and ensures that the trail will be utilized. Having maps for each person in attendance is the best way to get individual input to routing, while a large map creates a means of consensus (VDOT N.D.). Our plans for the community meeting will utilize this approach in our table-top exercise at Table 1 and Table 3, where community members will provide insight for trail access points and identify areas of concern on one large map.

Priorities. Discussing top priorities for trail use and alignment is critical at meetings, including signage, possible uses, trail type, and desired destinations (VDOT N.D). These include a few of the key discussion topics that we will address at Table 3: Trail Area Discussion.

## Conceptual Design

Raw Data (\*'s indicate additional counts of similar comments made).

### Question one: What do you want at access points?

- Lighting
- Benches
- Native plants
- Maps \* \*
- Parking \*
- Clear signs
- Water fountains
- Restroom
- Gated parking lot to close at night
- Large enough parking lots for horse trailers
- Dog bag dispensers
- Trash cans

### Question two: How should access points be designed?

- To allow enough space for some horse trailer parking
- Suggested design example: Redmond Watershed Preserve Trail
- Packed dirt, clean and manicured
- Open as many connecting access points as possible, connect to chain lake trail
- Open and inviting so people feel safe
- To connect neighborhoods together

### Question three: What kind of materials should be used to construct the trail?

- Bridge material needs to be safe for horses

- Can we have multiple uses?
- Dirt for mountain bikes
- Gravel or wood fiber
- Wood chips
- Consider horses and any bridges
- Asphalt- Bicycling & Walking
- Gravel- Wide enough for horses & bikes, could be shared.

#### Question Four: What would you like to see at crossings?

- flashing crosswalks \*
- strobes on ground & eye level for cars
- clearly defined and marked crosswalks
- signs to designate if its equestrian, mountain bike, walking, - refer to design of paradise waters trail?

#### Additional feedback/facilitator's notes:

- One respondent suggested the use of solar powered lights along the trail to improve visibility, safety, and night use.
- One respondent would like the trail to be designed as a loop.
- One respondent was interested in having exclusive sections of the trail designated for mountain biking and suggested several characteristics they would like to see including meandering trails, small exists, a steep zigzag pattern, and having connections to major roads.
- One respondent was wondering if the trail length could be expanded farther north to connect to the developments on 179th Ave SE/Robinhood Ln.
- One respondent suggested that the trail connect to the foothills trails.
- Several respondents suggested that if the trail were to be multi-use, there should be clearly marked signs for paths/loops for the different uses to prevent potential conflict.
- Several respondents want a separate trail from walkers, equestrian users, etc. for mountain biking, and want the design to have switchbacks.
- A respondent mentioned liking the conceptual crossing design and how it addressed safety concerns.
- A respondent suggested that the trail provided connection to the downtown to increase walkability from surrounding neighborhoods.

- One respondent mentioned liking the design of the Burt Gilman Trail in Bothell, which has an asphalt path for bicycling & walking.
- One respondent had many recommendations for additional research that should be conducted in order to best design the trail. Trees will have to be removed, so he mentioned how someone will have to decide what to preserve & take out, and how it'll impact the root system. He also mentioned that a loop trail would double the length which could be beneficial. Additionally, he mentioned how elevation has to be considered, and if there's switchbacks how this will affect ADA accessibility. He also stressed how the use of the trail will determine the width/overall design. Finally, he recommended some resources for additional research, chapter 9 from the Manual on Uniform traffic Control Devices (MUTCD), and the National Park Service Trail Design Handbook.

## **Access Points**

### Question one: How many access points should the trail have?

- Multiple \*
- 4-5
- North neighborhoods, by church \*main, equestrian main east, 1-2 smaller south edge
- potential trail model systems (multi use)
  - Lord Hill Park
  - Paradise Lake
  - For combining equestrian, mtn biking, walking, running
- As many access points as possible
- connect to existing pedestrian trail on north

### Question two: Where should the access points be located?

- parking only at chain lake road and at fairgrounds
- fairgrounds \*
- walmart \*
- where trail could connect to pedestrian trail along the north \*
- chain lake road \* \*
- connection to walkways at south
- top of 191st and Rainier
- at each end

- any possibility to connect with trail system behind foothills neighborhood which is also on DOT HWY 2 bypass land?
- access points where trail could connect to pedestrian trail along north and on chain lake road. - Also connect to walkways to south
- Parking at fairgrounds and at chain lake road (10-20 cars max)

## **Trail Priorities**

### Question one: What should the priorities of the trail be?

- family and pet-friendly\*\*\*
- walking\*
- family oriented
- maintenance
- lighting
- safety
- lights, solar?
- Will the park be patrolled?
- emergency accessible
- connect to bike path
- lighting for safety
- perimeter walking trail across access on 191st south
- Interior mountain biking trails twisting and meandering around interior acreage
- Priority- recreation fitness & walking. Secondary priority- mountain biking, equestrian

### Question two: What should the specific uses of the trail be?

- all access \*
- multi use, dirt, gravel, and paved
- Walking \*
- Biking
- running \*
- strollers
- horses

- mountain biking trails \* \*
- this could be a rougher trail (not so stroller, walker, wheelchair friendly) as we develop a smoother material trail near Sky River Park.

### Additional feedback/facilitator's notes:

- One respondent wanted the city to express their long-term goal for the trail. Would it eventually connect to other future trails in the area? Is there potential for connecting it to other existing community and regional trails (like the Centennial Trail)?
- Another respondent expressed the concern that the proposed trail would not be big enough to classify as a regional or intercommunity attraction and wanted clarity from the city on the project's scope. Would the trail be scaled for community use only, or is the city expecting some level of regional attraction? The same respondent expressed concern about the location of the trail and the community's accessibility. What plans does the city have to make the trail accessible for the entire community, keeping in mind the highway two divide?
- Several respondents talked about the homeless populations known to reside within the WSDOT right of way, and the routine sweeping/clearing of campsites done by city law enforcement. In general, participants saw the trail as a way of "citizen patrolling" of the area. The increased pedestrian traffic and community use of the area has the potential to reduce the demand for law enforcement intervention.
- Several respondents asked about the timeline of the trail. When would the community see a "groundbreaking," and completion of the trail?
- Lighting was a concern that was brought up by two individuals at the meeting. The concern was that the trail needed ample lighting to provide a safer atmosphere, it was also mention that lighting that is too intense may be a bother to local residences that surround the trail.

### Raw Data. Submitted via comment card

- Somehow tie trail in to other walking trails so we can go from Lake Tye trails to Fryelands trails, etc. Connectivity is key.
- Mt Bike groups
  - Monroe mountain bike team 6-12 grade
  - WA student cycling league
  - Would love a local, intown area to practice.
- Need to consider e-bikes - They are here!
  - 3 classifications
  - Look at King County ordinance for class 1+2 (20mph v. 30mph)
  - How will these be accommodated?

- There is a student Mtn. bike team for Monroe that currently utilizes Lord Hill Park & the Paradise Conservation Park. Having a dirt trail with differing elevations at this park would enable the team to use it every week or every other week for practices.
  - Lisa Brown 425-770-5922
  - [lisa.m.brown3@comcast.net](mailto:lisa.m.brown3@comcast.net)
- Materials of path?
  - Runners prefer gravel or paved
  - Bikes prefer dirt
  - Horses?
  - Is it possible to have multiple paths that run alongside each other or cross paths periodically?

## APPENDIX B

Meeting materials, maps, and comment posters

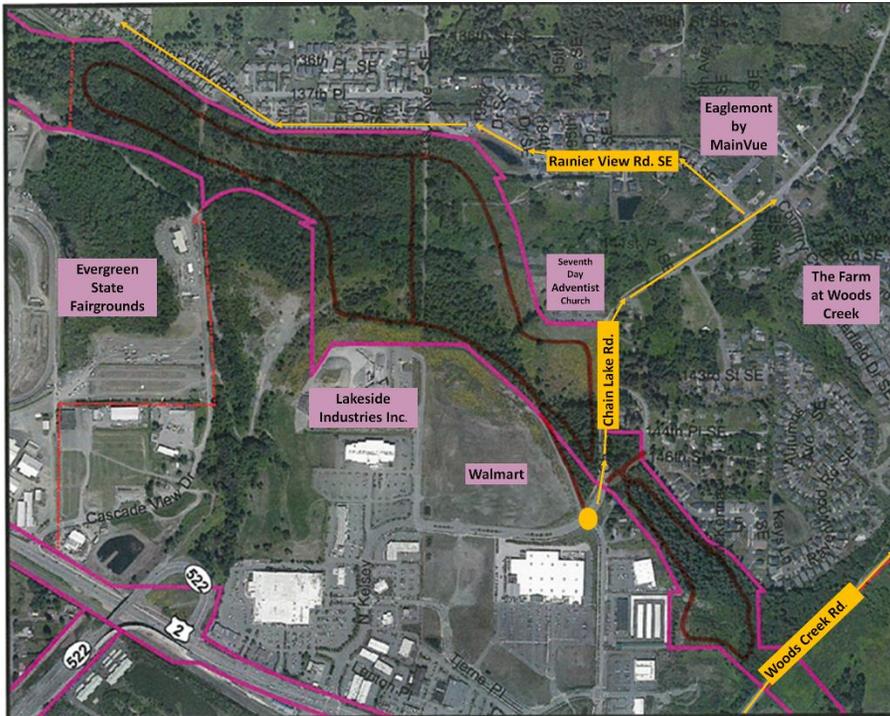


Figure B.1. Proposed trail area map. Used for table activities 2 and 3.

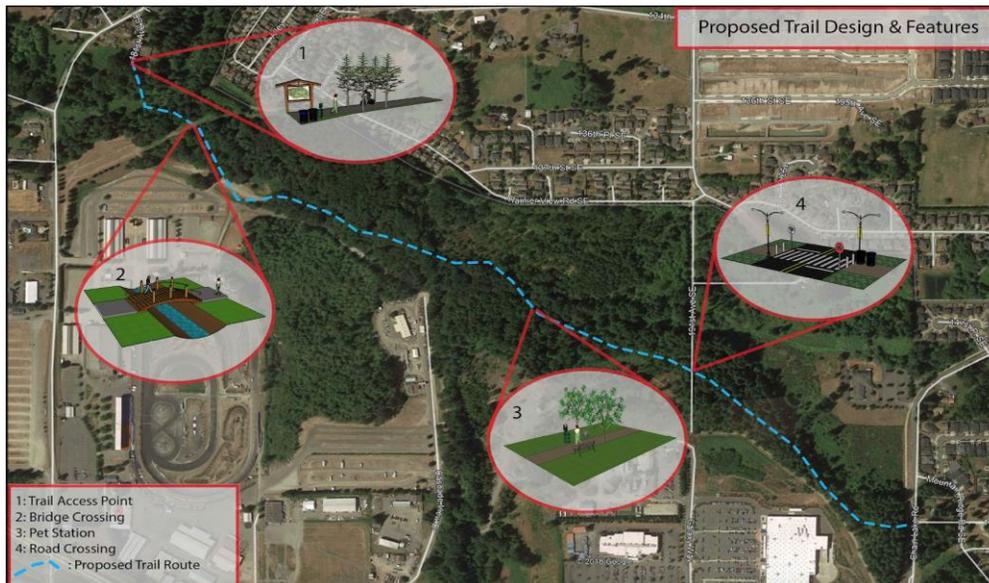


Figure B.2. Conceptual design map. Visual used for table one



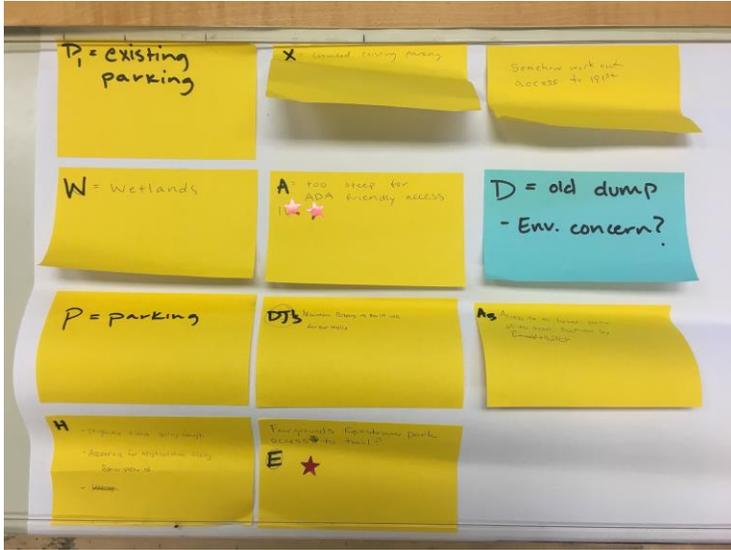


Figure B.7 Comment card for activity 2.

# City of Monroe, WA, Multi-Modal Trail: Transportation Analysis

Project Report  
ENVS 373: Transportation Systems & Planning,  
Independent Study  
Winter - Spring 2019

Report No. 02 June 2019



## About SCP

Western's Sustainable Communities Partnership (SCP) program focuses the expertise, energy, and ideas of faculty and students upon the issues that communities face as our society transitions to a more sustainable future. SCP partners with communities each academic year, facilitating a program in which many Western courses complete community-engaged learning projects that address problems identified by the partner.



[Sustain.wvu.edu/scp](http://Sustain.wvu.edu/scp)

SCP@wvu.edu

360-650-3824

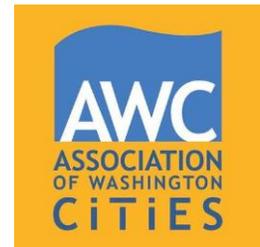
## SCP Partner for 2018-2019: City of Monroe, WA

SCP is proud to partner with City of Monroe, Washington, during the program's third year. Four Western courses will tackle projects identified in collaboration with city staff.



## Acknowledgement

The [Association of Washington Cities](#) (AWC) has provided invaluable assistance as SCP has grown and developed in its third year. AWC has provided advice on program development, and has assisted in promoting the program.



SCP is housed within Western's [Office of Sustainability](#)



## PREFACE

This project was conducted by Dr. Paul Stangl's *Transportation Systems and Planning* class (ENVS 373) and two students completing senior projects at Western Washington University. With the guidance of Dr. Paul Stangl, students analyzed transportation impacts associated with the implementation of a temporary trail and various entrances in the US-2 Bypass Right-of-Way. They demonstrated considerable improvements to park accessibility for Monroe residents by measuring the number of households that could walk or bicycle to the new trail. They identified significant reductions in the time required for pedestrians and bicyclists to travel between complimentary land uses surrounding the trail area, such as residences and retail. Finally, they identified potential improvements to links with nearby parks, particularly for bicyclists.

### Western Team

Instructor (ENVS 373, Winter 2019) and Faculty Advisor:	Paul Stangl, Ph.D.
Student Research Team:	Cosmos Cordova Andrew Randall
SCP Coordinator:	Lindsey MacDonald

### City of Monroe Staff

Parks and Recreation Director:	Mike Farrell
Community Development Director:	Ben Swanson

# CONTENTS

Introduction.....	1
Methods.....	2
Walking Analysis of Access Points in the Study Area.....	3
Cycling Analysis of Monroe.....	4
Potential Contribution of Trail and Access Points.....	5
Utilitarian Trips.....	5
Recreational Trips.....	8
Cycling Use.....	8
Equestrian Use.....	8
Evaluation of Potential Access Points.....	9
Analysis of Potential Access Point 1.....	10
Analysis of Potential Access Point 2.....	13
Analysis of Potential Access Point 3.....	15
Analysis of Potential Access Point 4.....	17
Analysis of Potential Access Point 5.....	20
Analysis of Potential Access Point 6.....	22
Analysis of Potential Access Point 7.....	24
Analysis of Potential Access Point 8.....	27
Analysis of Potential Access Point 9.....	29
Conclusion.....	32

# TRANSPORTATION ANALYSIS OF PROPOSED ACCESS POINTS TO US-2 BYPASS TRAIL

## Introduction

The City of Monroe is divided by US-2, which passes directly through the city. The area south of US-2 includes residential neighborhoods, a great deal of park space, and some retail including the old downtown. The area north of the highway contains The Evergreen State Fairgrounds, residential neighborhoods, and a considerable amount of suburban retail. There are no large parks here and few small ones. Washington State Department of Transportation (WSDOT) acquired land for a bypass to the north of the city, but it has not been developed. The City of Monroe is interested in using this land for a trail.

As part of Sustainable Communities Partnership, City of Monroe staff worked with Western Washington University (WWU) students and faculty to conduct a community outreach meeting in the fall of 2018. Feedback from that meeting indicated that residents are interested in adapting the US-2 Bypass Right-of-Way (ROW) into a pedestrian, bicycle, and equestrian trail. This study analyzes the value of different potential trail entrances and identifies improvements to adjoining pedestrian and bicycle networks to improve access to the trail. It utilizes the research and community outreach feedback acquired in the fall, in combination with best practices in transportation planning, and transportation data specific to the area of study.

Nine potential access points were identified based on suggestions from the attendees at the outreach meeting, discussions with city staff, and the WWU research team's analysis. During the fall outreach meeting, students collected feedback from the public, providing insight into where community members can find access to the trail, and where there might be high demand for access based on the ways in which people move through the city and/or congregate. The City provided insight on these high demand areas as well, and recommended that there be access points on either side of the former road located at 191st Avenue SE. The rest of the access points were identified by the transportation research team using GIS and visual analysis of the city's current layout.

City planners use various distances to plan for pedestrian access to parks, typically ranging from an eighth of a mile to half a mile.<sup>1</sup> Evidence suggests that the distance people will walk, and presumably, bicycle, to a park varies with park size, park amenities, and the personal characteristics

---

<sup>1</sup> Harnik, P., & Simms, J. (2004). Parks: How far is too far. *Planning*, 70(11), 8-11.

of the user.<sup>2</sup> While research supports using both quarter-mile and half-mile pedestrian sheds for different types of park, the larger threshold is more suitable for a trail in a low-density area such as Monroe.<sup>3</sup> Less is known about bicycling distances, though the Federal Transportation Authority uses a three-mile bike shed for travel to public transit.<sup>4</sup> Bicycling trips for recreational purposes are likely longer than those for utilitarian trips, but the three-mile standard is practical as a threshold that will encompass a sizeable portion of bicycle trips to the US-2 Bypass Trail.

## Methods

This needs some clarification between “route distance” and “reach.” Can you integrate this with the rest?

The relative value of potential trail entrances were evaluated for their contribution to utilitarian and access to recreation. In this study, utilitarian travel includes movement between households and commercial areas or the State Fairgrounds. Areas with homogenous land uses were grouped into zones, each with a centroid, representing the core of the area. Travel between pairs of zones was measured along the shortest route distance connecting their centroids. This is similar to both traditional travel demand forecasting models and pedestrian connectivity studies relying on “route distance.” Route distances between each pair of centroids were multiplied by pedestrian and bicycle walking speeds to identify travel times under current conditions, and after the addition of each potential trail entrance.

The research team also assessed improved access to recreation (parks and trails) for residents surrounding the study area. Many studies draw a half-mile buffer around a park entrance to identify the area within walking distance of a park. This does not provide an accurate depiction of park access, as residents must travel along city streets and trails that do not follow straight lines. For a more precise analysis, the research team opted to employ a “reach” measure. The reach for each park entrance includes a half-mile distance along the centerline of every possible route extending from the entrance. All residences with frontage directly adjoining these routes were counted as having pedestrian access to the new trail.

For a citation regarding reach the article in this link gives a definition drawn from an earlier study:

---

<sup>2</sup> Giles-Corti, B., Broomhall, M. H., Knuiaman, M., Collins, C., Douglas, K., Ng, K., ... & Donovan, R. J. (2005). Increasing walking: how important is distance to, attractiveness, and size of public open space?. *American journal of preventive medicine*, 28(2), 169-176.

<sup>3</sup> Donahue, R. (2011). Pedestrians and park planning: How far will people walk. *City Parks Blog*.

<sup>4</sup> McNeil, N., Dill, J., DeVitis, D., Doubleday, R., Duncan, A., & Weigand, L. (2017). *Manual on Pedestrian and Bicycle Connections to Transit* (No. FTA Report No. 0111). United States. Federal Transit Administration. Office of Research, Demonstration, and Innovation.

[https://www.researchgate.net/publication/233520508\\_Understanding\\_the\\_link\\_between\\_street\\_connectivity\\_land\\_use\\_and\\_pedestrian\\_flows](https://www.researchgate.net/publication/233520508_Understanding_the_link_between_street_connectivity_land_use_and_pedestrian_flows)

Utilizing ArcGIS Pro, the transportation research team found the reach of each potential entrance for pedestrians and bicyclists traveling along the street network throughout the Monroe Urban Growth Area (see Figure 1). This was done by taking the WSDOT identified public roads and trails identified in the Monroe Comprehensive Plan and measuring the distance (in linear feet) from the entrance along the road network. Researchers then identified all parcels that lay within 50 feet of the road network identified to be within a half-mile to an access point.

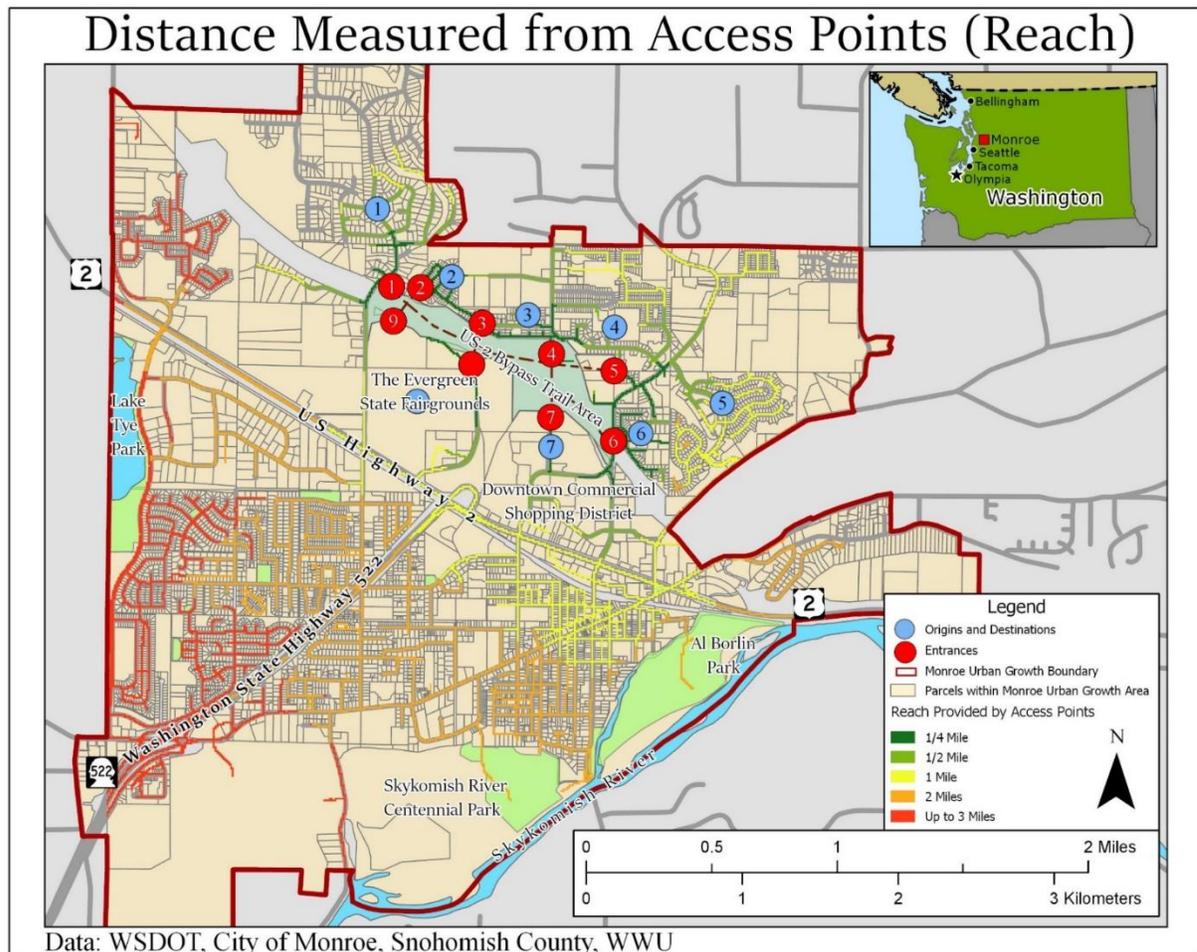


Figure 1: Preliminary view of the reach provided by each proposed Access Point.

### Walking Analysis of Access Points in the Study Area

On March 1st, 2019, students from Western Washington University's Transportation Systems and Planning course (ENVS373) conducted an on-site walking audit of the current existing road networks located near the US-2 Bypass Trail Area. Specific routes that students evaluated can be

found in the Appendix. Following instruction from Dr. Paul Stangl, the course instructor, 26 students walked roughly two miles of public roads in teams of 3-4 to complete a walking survey of their respective study areas. The students provided a subjective score from 1-10 on level of safety, comfort, and interest pertaining to specific street segments and intersections found within their study area.

Safety refers to the relative feeling of security or danger students felt in respect to traffic. Comfort refers to a sense of uneasiness that may occur whether one senses danger or not. Traffic racing along behind bollards might not pose danger, but could make one uncomfortable. A muddy path poses no danger at all, but can be very uncomfortable. Finally, interest was assessed based on the appeal of the surrounding area to each student. The student observations and scores varied slightly, ranging between 1 and 3 point differences on a 10-point scale. These differences are potentially due to the diversity in backgrounds of environments within which the students came from, and their relative experiences.

### Cycling Analysis of Monroe

The compact size of the City of Monroe means that throughout the Urban Growth Area of Monroe, the US-2 Bypass Trail Area is within the three-mile reach for bicyclists to access from anywhere in the city, should all nine access points be implemented. Additional bicycle infrastructure should be constructed to promote connections to the other parks throughout the city. Bicycling provides benefits to the community in the form of more activity, less congestion, and a smaller impact on the environment. Additionally, a major factor for a lack of cycling is a lack of proper bicycle infrastructure to promote safe cycling.<sup>5</sup> By extending current bicycle infrastructure and paved multi-use trails found throughout the city, major connections to Lake Tye Park, Skykomish River Centennial Park, and Al Borlin Park are possible. Figure 2 depicts the current bicycle infrastructure in the Monroe Comprehensive Plan in blue, yellow, and red, while the proposed additional bicycle infrastructure is highlighted in green.

---

<sup>5</sup> Handy, S. L., Xing, Y., & Buehler, T. J. (2010). Factors associated with bicycle ownership and use: a study of six small U.S. cities. *Transportation*, 37(6), 967–985..

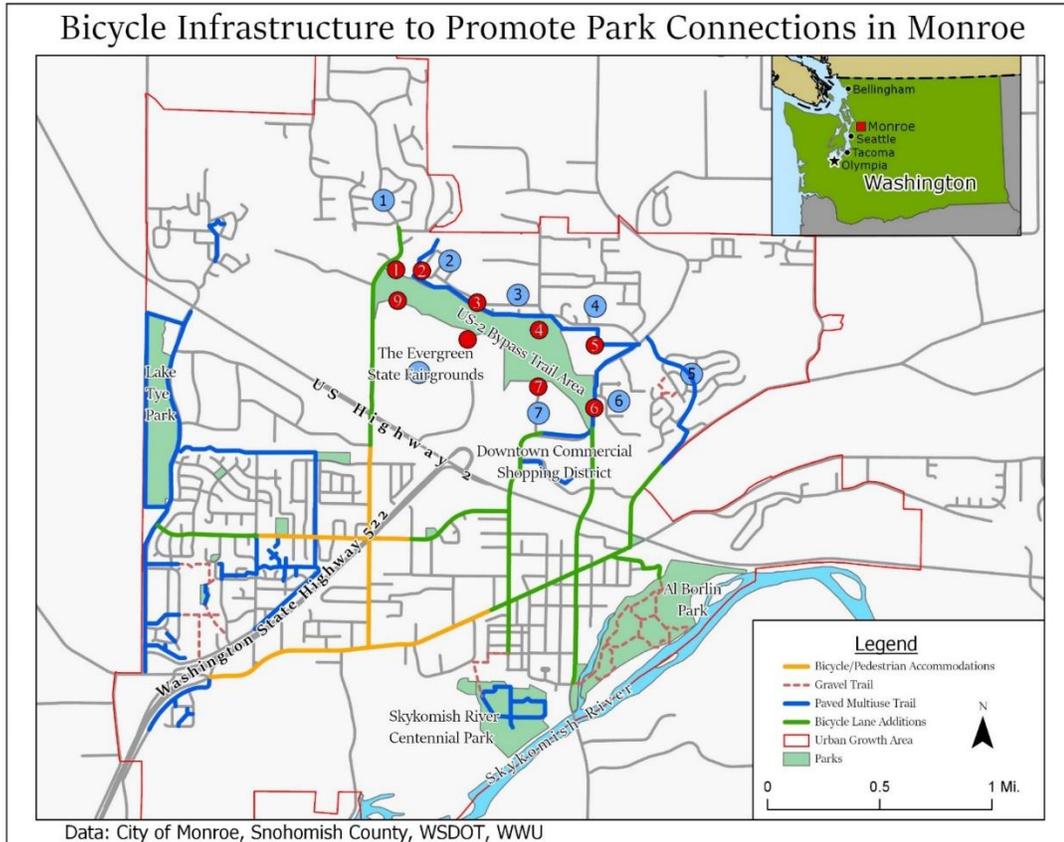


Figure 2: Bicycle additions to promote connectivity between city parks

### Potential Contribution of Trail and Access Points

The transportation research team examined the extent to which the proposed trail and its potential access points could improve access to open space and access to use non-motorized transportation for utilitarian trips and recreational trips. Access to the retail shopping located to the north of US-2 is important to the City as well as the residents in the northern neighborhoods. The proposed US-2 Bypass Trail will create opportunities for residents to access those shopping opportunities or attend events at The Evergreen State Fairgrounds via foot or bicycle. Additionally, the trail will provide much need access to open space for residents north of I-5 and provide an area to practice equestrian skills. A more comprehensive analysis of the benefits of each access point is provided in the Evaluation of Potential Access Points section. The following section summarizes the potential contributions the US-2 Bypass Trail Area will have on utilitarian, recreational, pedestrian, cycling, and equestrian usage.

#### Utilitarian Trips

Utilitarian trips are often taken with the desire to travel from one point to another in the shortest time and distance possible. Residents will see improvements in utilitarian trips with the

implementation of all nine access points (see Figure 3). Residents located in the northern neighborhoods of Crescent Drive, north of Rainier View Road, Blueberry Lane, and the neighborhood near Tahoma Street and Summit Avenue will experience the greatest benefit. These neighborhoods will have a significantly shorter distance to travel along the trail in comparison to the current routes that require residents to travel down 179<sup>th</sup> Avenue (with little protection from traffic at some points) or down Chain Lake Road to reach the shopping area or The Evergreen State Fairgrounds. Improvements for utilitarian trips were measured in two ways: 1) reductions in travel time and distance for pedestrians and bicyclists and 2) percent of travel along a trail versus a roadway.

Utilitarian trips are far more likely to take place when the path to a location is shortened.<sup>6</sup> Although the walking time from northern neighborhoods to the shopping center or Fairgrounds will still be 15 minutes or more, which is beyond the travel time many people will choose for utilitarian trips, residents nearest to the trail area may consider it reasonable. For many residents, the addition of the US-2 Bypass Trail and entrances can make trips for a small item from the store a more direct route to walk than to drive. Further, driving entails traveling along a longer route, searching for parking, and then walking up to five hundred feet to the store entrance during peak travel times and shopping days. At these times, there is a special appeal to traveling by foot or bicycle on a pleasant trail through the woods, saving both aggravation and vehicle miles traveled.

---

<sup>6</sup> Greenwald, M. J., & Boarnet, M. G. (2001). The Built Environment as a Determinant of Walking Behavior: Analyzing Non-Work Pedestrian Travel in Portland, Oregon. 30.  
Hoogendoorn, S. P., & Bovy, P. H. L. (2005). Pedestrian Travel Behavior Modeling. *Networks and Spatial Economics*, 5(2), 193–216.

# Areas Accessible for Utilitarian Trips by Foot from US-2 Bypass Trail Entrances

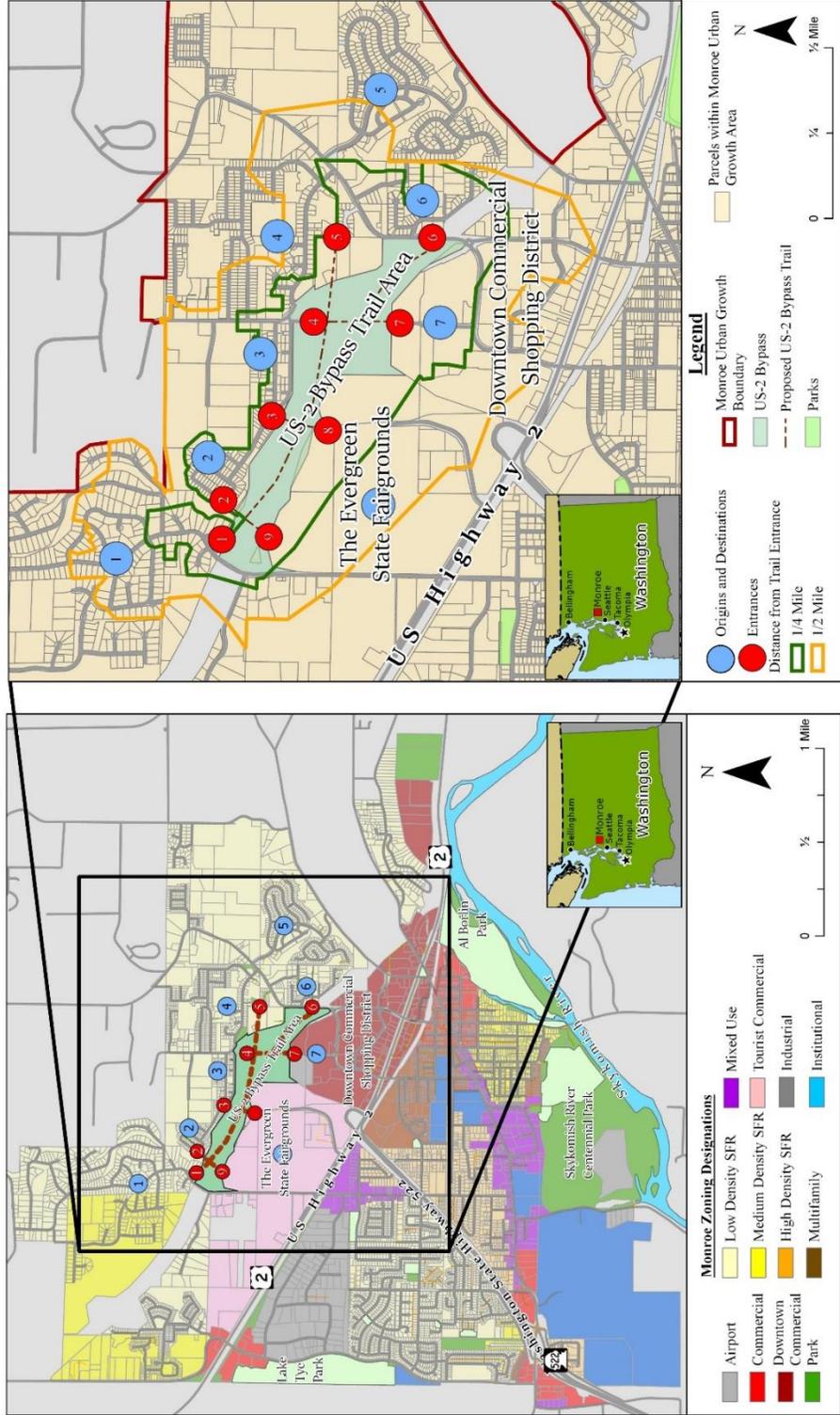


Figure 3: Areas accessible for utilitarian trips by foot

Implementing all nine access points will result in an average reduction of about 14 minutes for utilitarian trips. While this time is spread unevenly amongst the access points, it reduces the average pedestrian trip from a neighborhood to either the shopping area or the Fairgrounds. Figure 4 shows neighborhoods and nearby associated access points, or entrances, to the US-2 Bypass Trail Area. Adding all nine entrances will reduce the average time for a pedestrian trip from a neighborhood to an amenity from 36 minutes to roughly 22 minutes. The reduction is most significant for access points that are more closely connected as will be described below.

The second measure of improved pedestrian travel is the amount of travel by trail rather than alongside a roadway. The reduction in travel time shows that though there may be amenities within the immediate vicinity of a neighborhood, road networks and barriers create a situation where “near is far” and residents must travel long distances to reach amenities that are nearby in straight line distance, or “as the crow flies.”<sup>7</sup> Measuring the amount of travel by trail is important because trails allow pedestrians to walk in a safe, comfortable environment, instead of along a busy road with little protection from motorized vehicles.<sup>8</sup> Trails are also much more interesting, as pedestrians and bicyclists can enjoy nature and their surroundings during their trip, rather than breathing exhaust fumes and viewing the speeding cars along a roadway. For the purposes of this study, we define a trail as a walking path that is at least 20 feet from a roadway, with greenspace occupying at least one side of the walkway.

Implementing all access points will give residents an average of 56% of the distance traveled along a trail, a 20% increase in travel by trail when compared to current conditions. The new trail will likely be more interesting, safe, and visually appealing, from a pedestrian point of view, than the existing trails located along Chain Lake Road and Rainier View Road. While both the walking paths along Chain Lake Road and Rainier View Road are considered a trail under the study’s definition, they are bordered by a roadway on one side, exposing pedestrians and cyclists to nearby road traffic and occasionally are cut through by driveways and side streets. The qualitative difference between traveling along a busy roadway (such as Chain Lake Road) and traveling through a well-designed forested trail should be emphasized. Residents’ enjoyment of nature adds a recreational dimension to utilitarian trips that will likely increase both their willingness to walk and the distance they are willing to walk. While existing trails on the edge of the same natural area (specifically along Chain Lake Road) provide some benefits, they are still subject to the sounds and sights of automobile traffic.

---

<sup>7</sup> Duany, A., Plater-Zyberk, E., & Speck, J. (2001). *Suburban nation: The rise of sprawl and the decline of the American dream*. Macmillan.

<sup>8</sup> To measure the amount traveled by trail, researchers found the distances of existing conditions traveled by sidewalk, roadways, and trails via satellite imagery analysis. New travel along trail was measured by finding the access point researchers identified, and utilizing a preliminary draft of a trail line that runs directly through the trail area. These distances were converted to percentage traveled along a trail to identify the difference between existing conditions and improved conditions that are traveled along a trail.

## Recreational Trips

The GIS analysis findings indicate that building this new trail, with all nine proposed entrances, will provide residents an opportunity to visit a large park area. Using GIS, researchers identified 865 parcels within a half-mile of an access point. This analysis was done both tabular and visually, as visual analysis results were checked against the Snohomish County Assessor's master records. The image on the left side of Figure 4 shows the associated land uses based on the Comprehensive Plan. While the parcels north and east of the trail area are zoned as single family residences, the parcels located to the south of the trail area are shopping and The Evergreen State Fairgrounds. Visual analysis as well as research into the Snohomish County Assessor data and Monroe Comprehensive Plan indicates that all 865 parcels in the residential area to the north and east are single-family residences. These 2,578 people or roughly 13.3% of the population of Monroe, will be direct beneficiaries of increased park access.<sup>9</sup> Currently, residents in the northern portion of the city must travel several miles and cross US-2 to access a city park other than the small playground parks found in the northern residential areas.

## Cycling Use

The Bypass Trail will make the time required to drive on roads or bicycle on the trail roughly equivalent for travel from many of the neighborhoods to the shopping center. In some cases, cycling will be faster than driving, even without considering savings in parking time. GIS analysis conducted to determine the amount of additional cycling infrastructure needed indicates that if all the bicycle lane additions proposed in Figure 2 were adopted, it will add 5.54 miles of new bicycle infrastructure throughout Monroe. This will help create connections between the proposed US-2 Bypass Trail Area, Lake Tye Park, Al Borlin Park, and Skykomish River Centennial Park. The total cost to complete the cycling network is an estimated \$740,000.

## Equestrian Use

The US-2 Bypass Trail will also allow horses participating in equestrian events at The Evergreen State Fairgrounds to warm-up on a new equestrian trail. The implementation of equestrian-friendly facilities was suggested at the community development meeting held in the fall of 2018.

The potential benefits of implementing all nine proposed access points are significant (see Figure 4). The average pedestrian travel distance from northern neighborhoods to the Fairgrounds or commercial areas will be reduced from 1.85 miles to an average of 1.16 miles. In some cases, travel times for pedestrians will be reduced by as much as an hour, as demonstrated in the next section. This is especially dramatic for Access Points 2 and 9, which will reduce a long circuitous route by

---

<sup>9</sup> Assuming that each household contains an average of 2.98 people, and the population is 19,363. U.S. Census Bureau QuickFacts: Monroe, Washington. (2019).

roughly three miles by creating a direct access route to the Fairgrounds. The analyses of potential benefits in this section assumed that all nine potential trail access points are implemented. To better inform the trail design process, the next section provides an in-depth look at the merits of each potential access point.

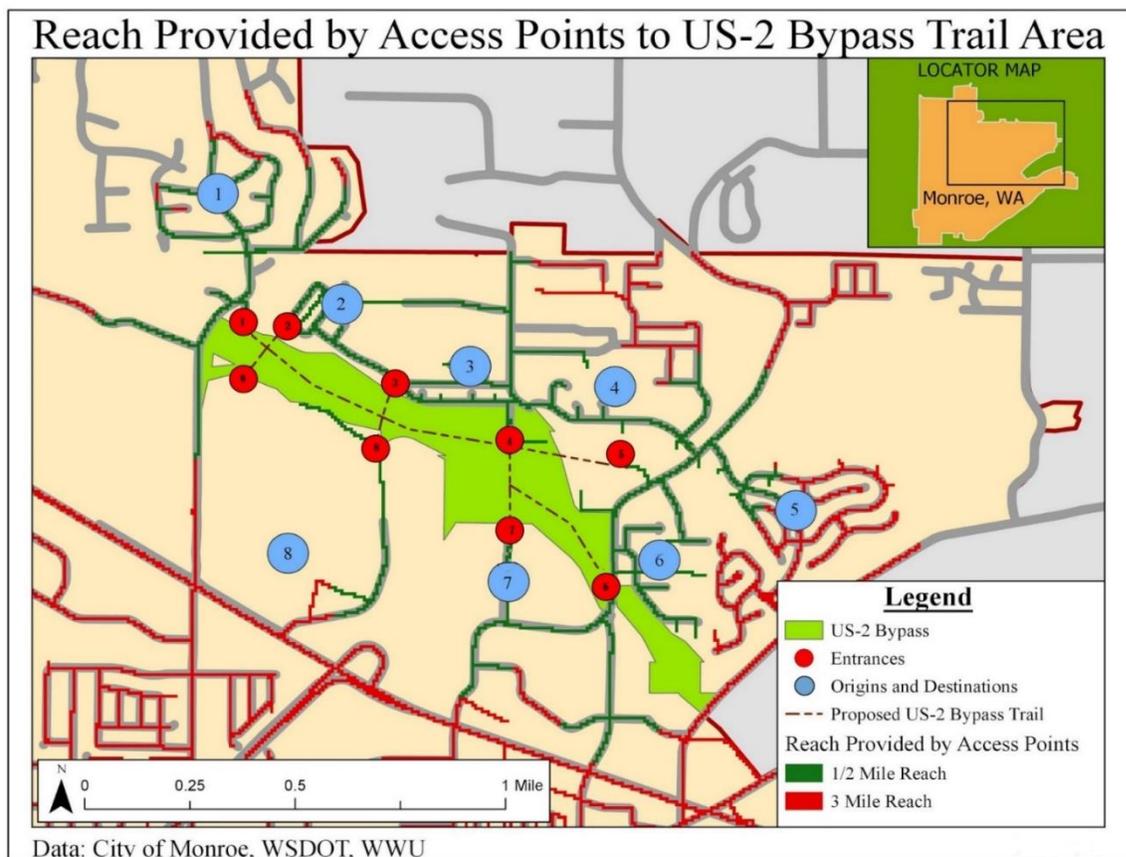


Figure 4: Neighborhoods and nearby associated access points to the US-2 Bypass Trail Area.

### Evaluation of Potential Access Points

Nine potential access point locations were identified, analyzed, and evaluated for the benefits for recreational and utilitarian travel (Figure 1). This analysis was done based on public comment at the community development meeting in the fall, City recommendations, and technical analysis conducted by the transportation research team. Residents will likely travel a half-mile to access recreational areas on foot and three miles by bicycle to access recreational facilities.<sup>10</sup> Figure 3 shows the parcels that are accessible within a half-mile along the current road network to the proposed trail area (see yellow line). The eight blue circles on the map in Figures 1, 2, and 3 represent trip origins and destinations, and were used to measure walking, bicycling and driving distances. Blue circles one

<sup>10</sup> Harnik, P., & Simms, J. (2004). Parks: How far is too far. *Planning*, 70(11), 8-11.

through six represent adjoining residential neighborhoods, or trip origins. Circles seven and eight represent the shopping center and The Evergreen State Fairgrounds, respectively. These are the destinations that residents are likely to travel to for utilitarian trips, though a small number of social visits between neighborhoods could also be expected. The pedestrian and bicycle networks in neighborhoods adjoining these access points were found to have a number of inadequacies. A series of improvements are recommended along with their estimated costs.<sup>11,12,13</sup>

## Analysis of Potential Access Point 1

### *Justification for Access Point 1*

This access point will provide the opportunity for a number of residents in the neighborhoods surrounding Robinhood Lane to reach a trail with a short walk or bicycle ride. The study area of Access Point #1 encompassed the neighborhoods along Robinhood Lane (see Figure 5). It is essential in this regard for a number of northwestern neighborhoods. Though entrances two and nine are nearby, neither is accessible in the current state from this area. To reach entrance two, residents must walk an additional one thousand feet along a road with no sidewalks and little shoulder. It is not possible to directly reach entrance number nine from this location. Residents must travel an extremely long, circuitous route to the north in order to access areas on the eastern side of the Fairgrounds under current conditions. However, Access Point 1 will allow residents in the Robinhood Lane neighborhoods to reach the Fairgrounds without using an automobile. The benefits for utilitarian travel are very significant. At present, residents must travel 2 miles along the roadside to get to the shopping center. With the new trail, they will only have to walk 1.4 miles along a pleasant trail and exit at Access Point 7 to reach the shopping center.

---

<sup>11</sup> Smith, P. (2014). Tompkins County Wayfinding & Interpretive Signage Plan.

<sup>12</sup> Bushell, M., et al. (2013). Costs for Pedestrians and Bicyclist Infrastructure Improvements: A Resource for Researchers, Engineers, Planners and the General Public.

<sup>13</sup> Craighead, M. (2018). A Comparison of Highway Construction Costs in the Midwest and Nationally. Midwest Economic Policy Institute.



Figure 5: Access Point 1 study area and suggested area of proposed changes.

However, Robinhood Lane is far from optimal for pedestrians in its current state as student researchers noted during their on-the-ground surveys.

*Access Point 1: Walking Survey Results*

Students performing a walking survey of the area found some key issues facing the Robinhood Lane neighborhoods. Among them were the lack of pedestrian infrastructure, high speeds of automobile traffic, and winding roads with a slope that limit visibility. This led to an average safety rating of 2.1 out of 10, suggesting that major improvements will be needed for pedestrian safety.

The main thoroughfare into and out of the neighborhood is Robinhood Lane. Student researchers reported that a number of the streets have fairly steep slopes. Furthermore, there are no sidewalks, bike lanes, or even a shoulder, which limits pedestrian opportunities. This is especially problematic with the presence of vehicles moving quickly through the area, specifically on Robinhood Lane.

*Key Improvements to Promote Pedestrian Access (see Figures 6 and 7)*

- Sidewalks throughout the neighborhood, specifically on Robinhood Lane.
- Dedicated street crossings along Robinhood Lane, to include flashing lights visible to drivers.
- Traffic calming devices to slow drivers along pedestrian routes.
- Dedicated bike lanes along Robinhood Lane.
- Signage (with adoption of access point 1) to US-2 Bypass Trail Entrance

Table 1: Access Point 1 Improvement Costs			
Key Improvements	Price / Qty	Qty Needed	Total Cost

Sidewalk	\$32 / linear foot	2,820 feet	\$90,240.00
Bike Lane	\$133,170 / mile	2,820 feet	\$71,125.00
Pedestrian Hybrid Beacon	\$57,680 each	1	\$57,680.00
Painted Crosswalk	\$2,540 each	7	\$17,780.00
Speed Bump	\$1,550 each	2	\$3,100.00
Way-finding Signage	\$1,900 each	2	\$3,800.00
		TOTAL COST:	\$243,725.00

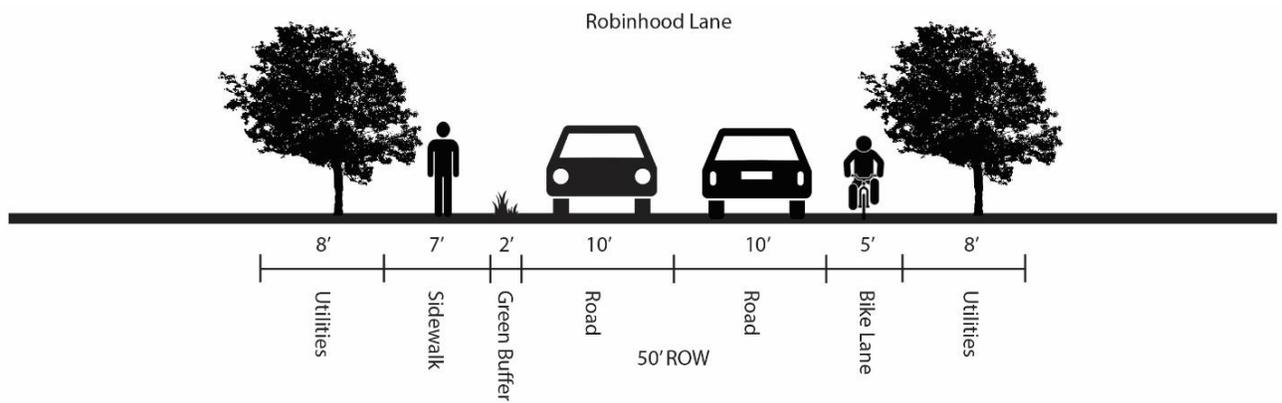


Figure 6: A depiction of the Right of Way changes recommended to promote a safer and more pedestrian and bicycle friendly environment.

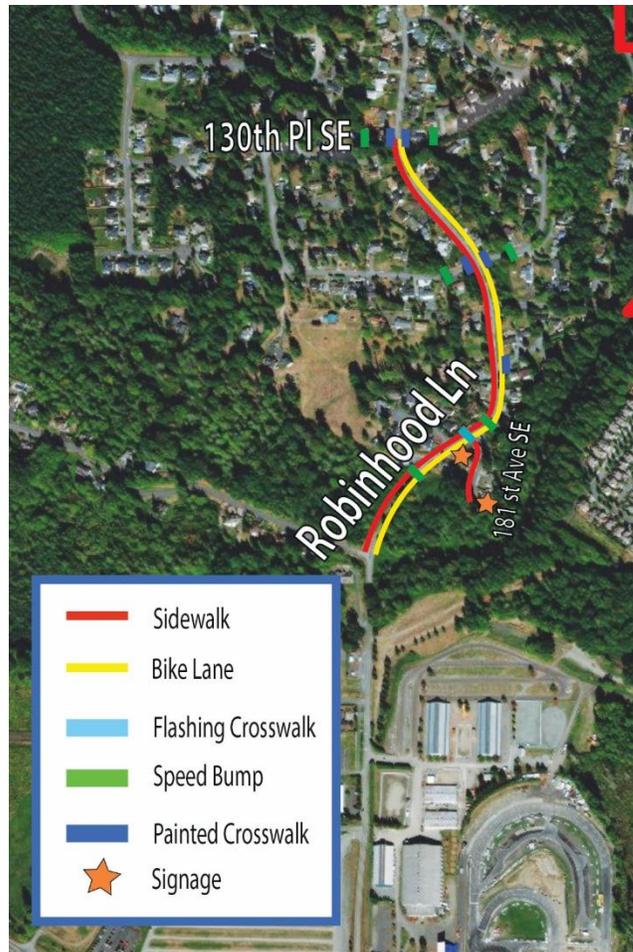


Figure 7: Key improvements to promote pedestrian access.

## Analysis of Potential Access Point 2

### *Justification for Access Point 2*

Access Point 2 provides the most direct access to the residents living in the Summit Avenue neighborhood, located to the northwest of Rainier View Road (see Figure 8). Approximately 85 households are located within a quarter-mile of the proposed access point. If pedestrian connections are added when development continues to the north and east of this neighborhood, Access Point 2 will provide the most direct entrance to the trail for a number of new residents. Another option worth exploring is the potential to extend a trail on private or public property owned by the North Crest Development Corporation. As a private trail, it would provide excellent access for residents in this subdivision. As a public trail, it could be extended north to reach multiple neighborhoods. However, there must be coordination between the City and North Crest Development Corporation.



Figure 8: The study area and suggested area of proposed changes for Access Point 2.

For the residents in the Summit Avenue neighborhood, adoption of Access Point 3 or 4 will still allow them the ability to walk along the existing trail to access the shopping area. However, Access Point 2 (in conjunction with Access Point 9) will give residents the shortest path to The Evergreen State Fairgrounds, eliminating the need for automobile use. Currently, residents live less than a half-mile from the Fairgrounds, but, if utilizing a personal vehicle, must travel 3.8 miles down Rainier View Road to Chain Lake Road, and then down US-2 to reach the parking lot. With the US-2 Bypass Trail and Access Points 2 and 9, residents in the Summit Avenue neighborhood will benefit from dramatically reduced travel distance to an average of 0.65 miles and travel time on foot reduced from 73.5 minutes to approximately 12.5 minutes.

Additionally, because Access Point 2 is best located at the convergence of Tahoma Street and Forest View Avenue, the cost for implementing Access Point 2 will likely be lower than other points of entry because of the close proximity to the current neighborhood trail and the existing roads. Pedestrian infrastructure in the area is already significantly upgraded, with sidewalks and an existing

trail, requiring less pedestrian improvements. Access Point 2 can utilize the existing neighborhood trail and will likely only require signage directing residents to the trail area.

*Access Point 2: Walking Survey Results*

Students conducting walking surveys in the Summit Avenue neighborhood noted that the residential area was “pleasant,” with ample sidewalks, buffered pedestrian space, and plenty of green space. The students rated the area 8.85 out of 10 for safety, and 8.86 out of 10 for comfort. However, the students did rank the area as 6.4 out of 10 for interest, indicating that additional features in the suburban neighborhood may add to the interest level.



Figure 9: Identification of the location for signage and infrastructure for Access Point 2.

*Key Improvements to Promote Access*

- Paved walkway from the neighborhood sidewalk located along Tahoma Street to the neighborhood trail.
- Signage to indicate that the US-2 Bypass Trail can be accessed.

Table 2: Access Point 2 Improvement Costs			
Key Improvements	Price / Qty	Qty Needed	Total Cost
Unpaved Trail	\$121,390 / mile	30 feet	\$690.00

Way-finding Signage	\$1,900 each	1	\$1,900.00
		TOTAL COST:	\$2,590.00

### Analysis of Potential Access Point 3

#### *Justification for Access Point 3*

With the current rapid urban growth throughout the region, there is likely to be more development in Monroe, particularly to the north of Rainier View Road SE (see Figure 10). Access Point 3 gives park access to residents located along Rainier View Road (west of 191st Avenue), as well as the housing located along 137th Street, and future developments north of the trail area. Access Point 3 can directly link residents along Rainier View Road to the eastern side of the Fairgrounds via Access Point 8. This shorter route is significantly easier than the longer current route that requires residents to transit Rainier View Road to Chain Lake Road, and access the Fairgrounds via US-2. Implementing Access Points 3 and 8 will reduce foot travel by roughly 2 miles from 2.9 miles to 0.95 miles while increasing the percentage of travel along a trail by 16%.

In addition to providing a more direct link to The Evergreen State Fairgrounds, Access Point 3 is cost-effective as it could utilize an existing access point to the residential trail. Implementation of Access Point 3 will provide recreational access to roughly 80 households residing along Rainier View Road by utilizing the existing access path to reach the US-2 Bypass Trail Area.

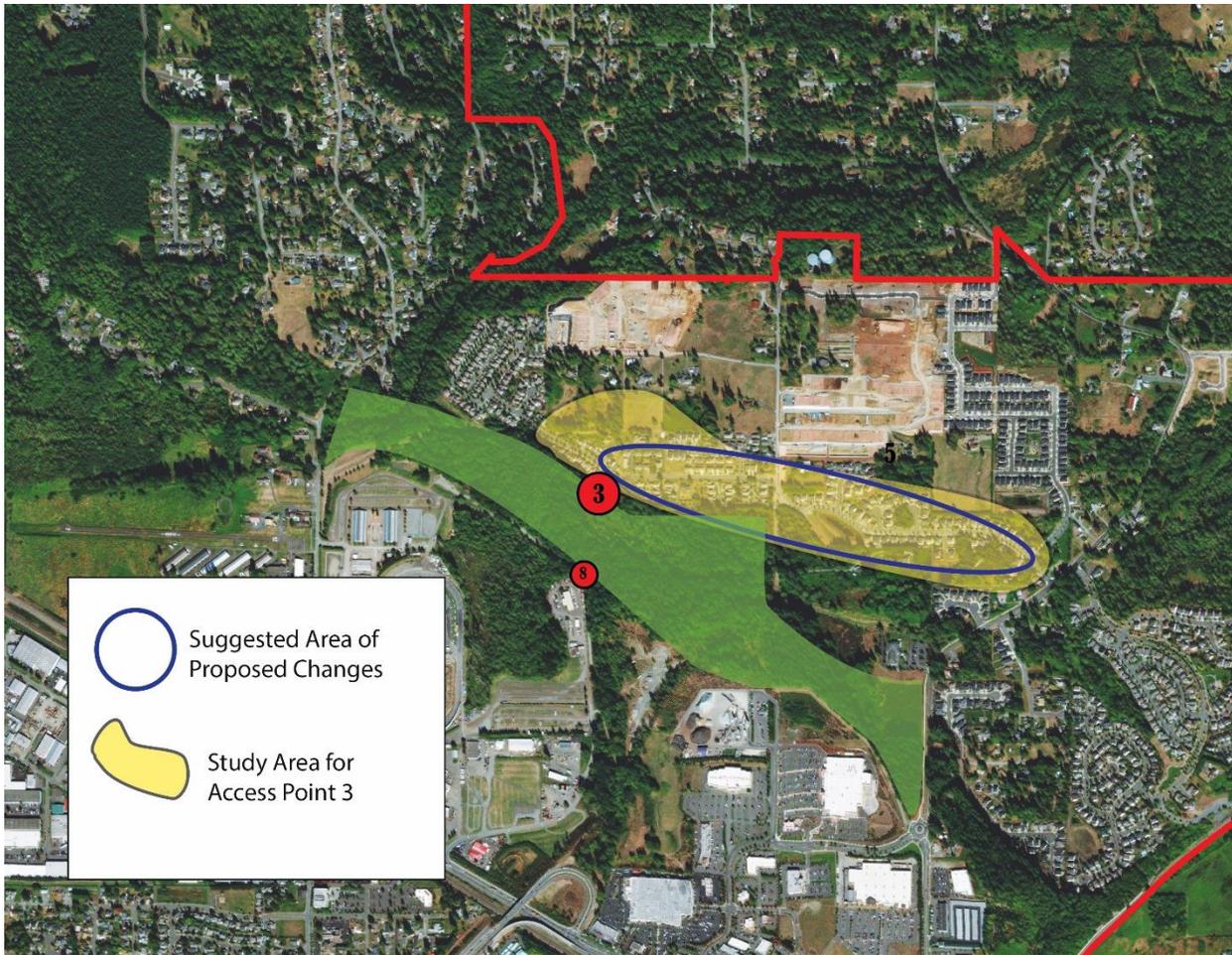


Figure 10: Rainier View Road area. Rainier View Road will provide access to Access Points 2, 3, 4, and 5.

### *Access Point 3: Walking Survey Results*

Access Point 3 will primarily serve Rainier View Road and 137th Street. As such, the pedestrian infrastructure in place is the same as Access Point 2. Student researchers noted that the surrounding residential area has adequately buffered sidewalks along Rainier View Road., the main corridor along Access Point 3.

### *Key Improvements to Promote Access:*

- Signage at the current access lane to the Trail Area.
- Traffic calming measures, such as speed bumps and painted sidewalks, along Rainier View Road will ensure that drivers are mindful of the potential for pedestrians to cross Rainier View Road (see Figure 11).

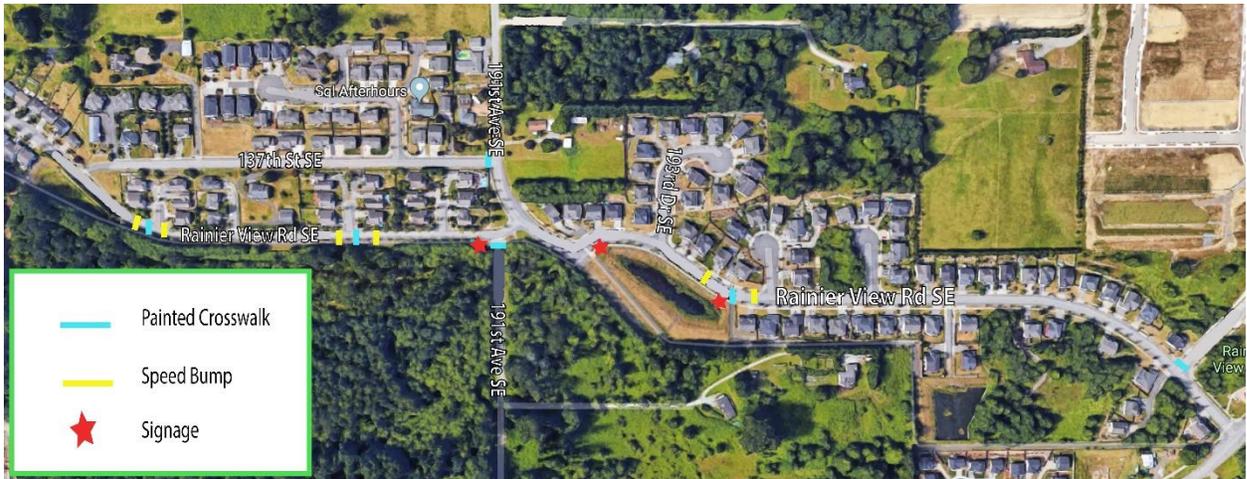


Figure 11: Traffic calming recommendations for safe pedestrian travel along Rainier View Road. These improvements will slow traffic as more pedestrians will be present in the area.

Key Improvements	Price / Qty	Qty Needed	Total Cost
Painted Crosswalk	\$770 each	5	\$3,850.00
Speed Bump	\$1,550 each	6	\$9,300.00
Way-finding Signage	\$1,900 each	3	\$5,700.00
TOTAL COST:			\$18,850.00

### Analysis of Potential Access Point 4

#### *Justification for Access Point 4*

This point was recommended by the City of Monroe because of the improbability of reestablishing 191st Avenue SE as a thoroughfare to the shopping area due to the US-2 Bypass right of way (see Figure 12). Access Point 4 will provide residents with the most direct route to the shopping area from the neighborhoods directly north of the trail area. Access Points 4 and 7 will create the fastest and most direct walking route to the shopping center for those living north of the park area. The new trail cuts travel distance from 1.4 miles to 0.8 miles while adding 11% more distance traveled by trail along a safe, forested route.

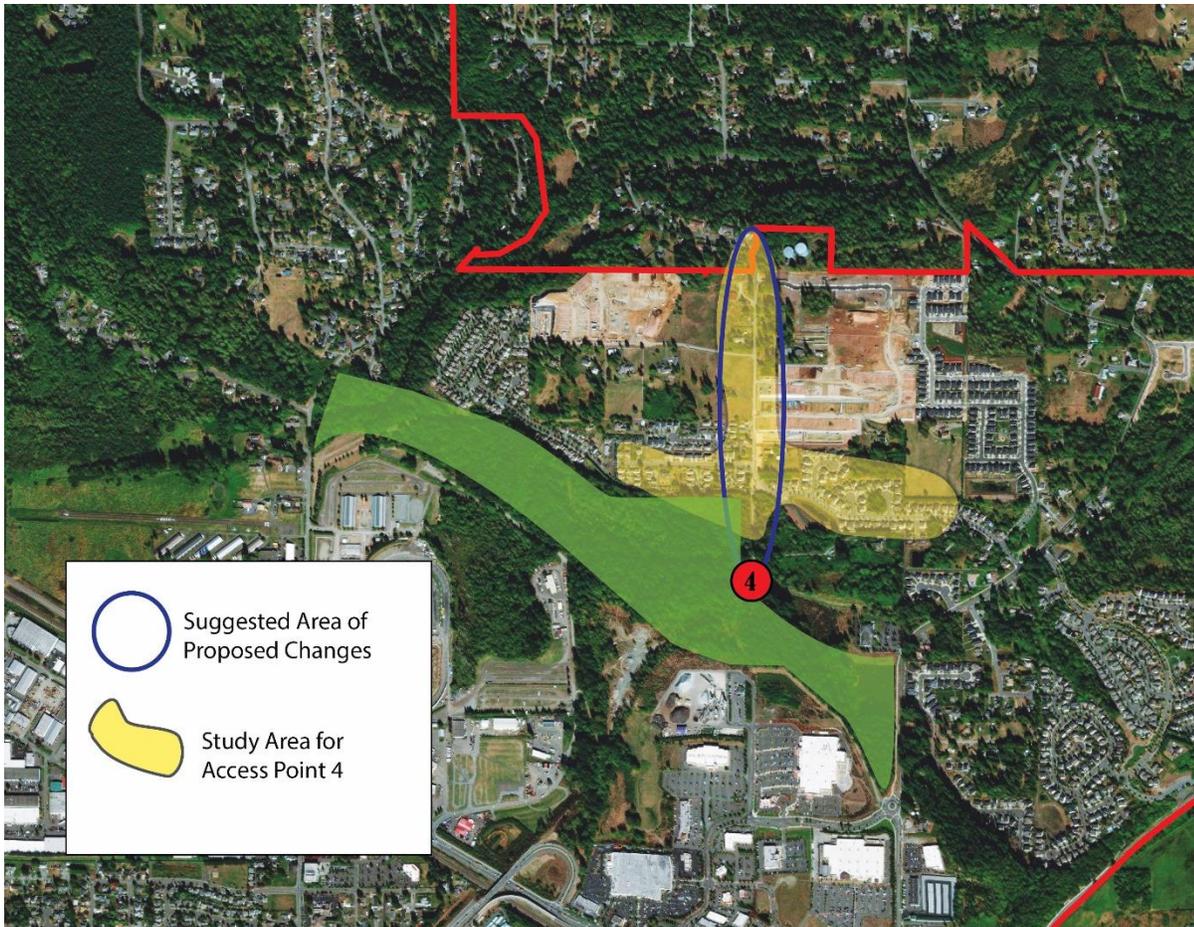


Figure 12: The study area for Access Point 4 surrounds 191<sup>st</sup> Avenue SE.

Like Access Points 2, 3, and 5, Access Point 4 has the ability to make use of existing infrastructure. Currently, 191st Avenue SE runs downhill from Rainier View Road to the US-2 Bypass Trail Area. Public vehicular access is restricted at the bottom of 191st along the northern edge of the trail area, while the road no longer exits near Access Point 7. While existing infrastructure provides a north/south connection along 191st Avenue, there is opportunity for additional trail or street connections running north and south as future development spreads to the north.

#### *Access Point 4: Walking Survey Results*

Students ranked 191st Avenue SE and El Bella Paseo (the two roads that lead directly to Access Point 4) as a 5.83 out of 10 for safety. Students' low safety ranking was due to incomplete sidewalks along 191st Avenue SE and El Bella Paseo, particularly south of Rainier View Road, and north of 134th Street leading to El Bella Paseo.

Additionally, students pointed out that at 191st Avenue and Rainier View Road there is a potential “blind corner” for pedestrians looking to cross the road and access the trail area from the neighborhoods located north of Rainier View Road.

*Key Improvements to Promote Access*

- Sidewalks completely along 191st Avenue SE and leading up El Bella Paseo Road.
- Completion of current sidewalks located along 191st Avenue SE.
- Implementation of Access Point 7 in conjunction with Access Point 4.



Figure 13: The major recommendations for Access Point 4 are focused on developing better sidewalks along 191<sup>st</sup> Avenue SE.

Table 4: Access Point 4 Improvement Costs			
Key Improvements	Price / Qty	Qty Needed	Total Cost
Sidewalk	\$32 / linear foot	2,144 feet	\$68,608.00
Paved Trail	\$481,140 / mile	1,893 feet	\$172,500.00
TOTAL COST:			\$241,108.00

## Analysis of Potential Access Point 5

### *Justification for Access Point 5*

Access Point 5 provides beneficial access to the Country Crescent neighborhood and the Eaglemont development along 199th Avenue SE (see Figure 14). Currently, only Rainier View Park, a small neighborhood playground, is within walking distance. Access Point 5 will bring a large recreational area within a half-mile walk of many living within these neighborhoods.

Residents traveling from Country Crescent to the Fairgrounds on foot will see their walking distance cut by almost half-a-mile, while the length of travel by trail increases from 21% to 62%. This means a much safer and more pleasurable route for recreational and utilitarian purposes.

Access Point 5 is located along an established trail, and will be another cost effective entrance. In addition, the access point could utilize the existing residential trail that winds around the private property lines of residents in the area, mitigating the need for easements or costly acquisitions of land to get local resident access to the Bypass Trail. Finally, Access Point 5 will reduce the amount of time pedestrians travel along Chain Lake Road, a major thoroughfare in the northern portion of Monroe.

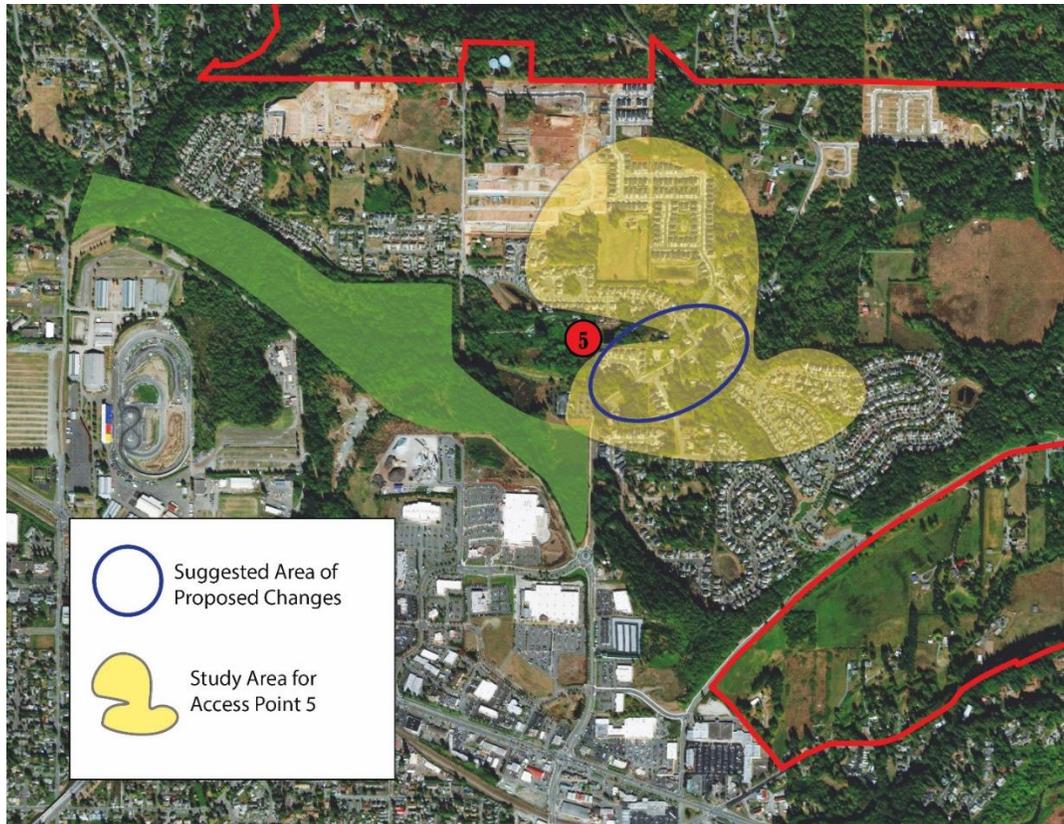


Figure 14: Study area around Access Point 5. The intersection between Chain Lake Road and Rainier View Road. Access Point 5 is located off of the current trail that runs along Rainier View Road.  
*Access Point 5: Walking Survey Results*

Two separate student teams interacted with Chain Lake Road and Rainier View Road. One team transited down Rainier View Road toward Chain Lake Road while the other team had to cross Chain Lake Road at Country Crescent Boulevard. The team that traveled down Rainier View Road to get to Chain Lake Road noticed a crosswalk across Chain Lake Road to well-paved sidewalks located along Rainier View Road. The team that crossed Chain Lake Road at Country Crescent Boulevard noticed a lack of sidewalks north of the Country Crescent neighborhood along Chain Lake Road. Some of the student researchers felt uneasy crossing Chain Lake Road as there was fast traffic. The group that did not traverse Chain Lake Road had an average safety score for this crossing of 7.3 out of 10. The group that actually crossed the road scored the same crossing as a 2 out of 10.

*Key Improvements to Promote Access (see Figure 15)*

- Flashing Crosswalk at Chain Lake Road and Rainier View Road.
- Traffic calming measures to reduce high speed traffic at crossings.
- Signage at the current trail entrance promoting access to US-2 Bypass Trail.



Figure 15: Access Point 5 pedestrian improvement recommendations are centered on the Chain Lake Road and Rainier View Road intersection to promote safe crossing and entry to the US-2 Bypass Trail Area.

Table 5: Access Point 5 Improvement Costs			
Key Improvements	Price / Qty	Qty Needed	Total Cost
Flashing Crosswalk	\$57,680 each	1	\$57,680.00
Speedbump	\$1,550 each	3	\$4,650.00
Way-finding Signage	\$1,900 each	2	\$3,800.00
		TOTAL COST:	\$66,130.00

## Analysis of Potential Access Point 6

### *Justification for Access Point 6*

This access point, located at the roundabout on Chain Lake Road, provides increased recreational opportunities for the neighborhoods adjacent to Mountain Ridge Road, with a potential added benefit to the residents located in the southwestern sector of the Country Crescent Neighborhood. Residents in the Country Crescent Neighborhood may be able to travel along an informal trail just west of Autumn Avenue to 146th Street to travel to Access Point 6.

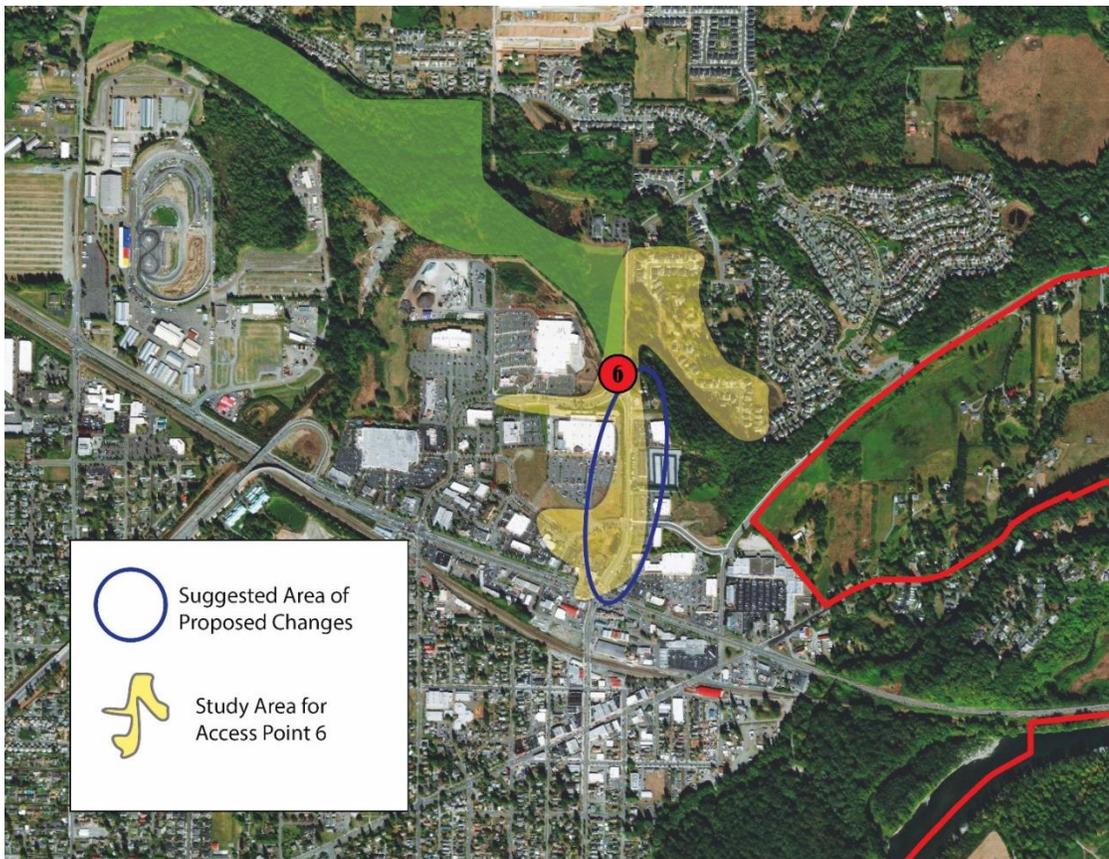


Figure 16: The Chain Lake Road roundabout and shopping area located around the Walmart and Galaxy movie-theater are the focus for Access Point 6.

Existing road conditions provide faster access to the shopping area for the residents in the vicinity of Mountain Ridge Road. The trail and Access Point 6 will provide a minimal reduction in travel distance to the Fairgrounds, decreasing the distance by only 0.2 miles. However, the distance traveled by trail to the Fairgrounds will be increased from 0% to 69%. This increase in travel by trail will promote a safer route, as residents looking to walk to the Fairgrounds from Mountain Ridge Road must currently travel down Chain Lake Road, and eventually walk along US-2, a major arterial and a highway, respectively.

Access Point 6 will also provide access to the informal BMX park located adjacent to the Chain Lake Road roundabout. This will likely promote the use of the US-2 Bypass Trail Area for cyclists as well. Because cyclists may opt to use Access Point 6 as a major entry point, increased bicycle infrastructure should be considered. This will also give the ability to create a cycling connection between the US-2 Bypass Trail Area and other parks located in the southern part of the city.

*Access Point 6: Walking Survey Results*

During the walking survey, students noted that Chain Lake Road has good crosswalks and signage around the roundabout to create a safe travel space. However, the students felt there was an opportunity for a more inviting surrounding area. The roundabout at Chain Lake Road is a node in the automotive network, not a community focal point. Access Point 6 could be more balanced by becoming more pedestrian-friendly and a focal point for the trail with an inviting entrance.

*Key Improvements to Promote Access (see Figure 17)*

- Bicycle lanes along Chain Lake Road and North Kelsey Street to connect to the Access Point.
- Flashing lights near the roundabout to further promote pedestrian safety.
- Access Point 6 may be an ideal location to create a “Main Entrance” to the trail area. Creating a “Main Entrance” at Access Point 6 can make the roundabout area more visually appealing and inviting to pedestrians.



Figure 17: The pedestrian facilities around Access Point 6 are appealing and adequate. However, because of the existing BMX area and the potential to create a connection to the south with other parks, additional cycling lanes can promote cycling.

Table 6: Access Point 6 Improvement Costs			
Key Improvements	Price / Qty	Qty Needed	Total Cost
Flashing Beacon	\$10,010 each	3	\$30,030.00
Painted Bike Lane	\$133,170 / mile	1,770 feet	\$44,642.00
		TOTAL COST:	\$74,672.00

Analysis of Potential Access Point 7

*Justification for Access Point 7*

Access Point 7 is critical to providing a connection for the residents in up to 300 homes within a half-mile to access the trail area for recreation or short trips to the shopping center (see Figure 18). A utilitarian trip from any neighborhood along Rainier View Road is significantly closer because of the ability to access the trail if Access Points 4 and 7 are adopted. This is essential for the utilitarian purposes of this bypass trail, as it greatly shortens the distance traveled from the neighborhood adjacent to Rainier View Road to the shopping area from 1.4 miles to slightly more than  $\frac{3}{4}$  of-a-mile. Those unable to drive, especially children and teenagers, may find this opportunity to walk to a movie theater and restaurants a great asset.

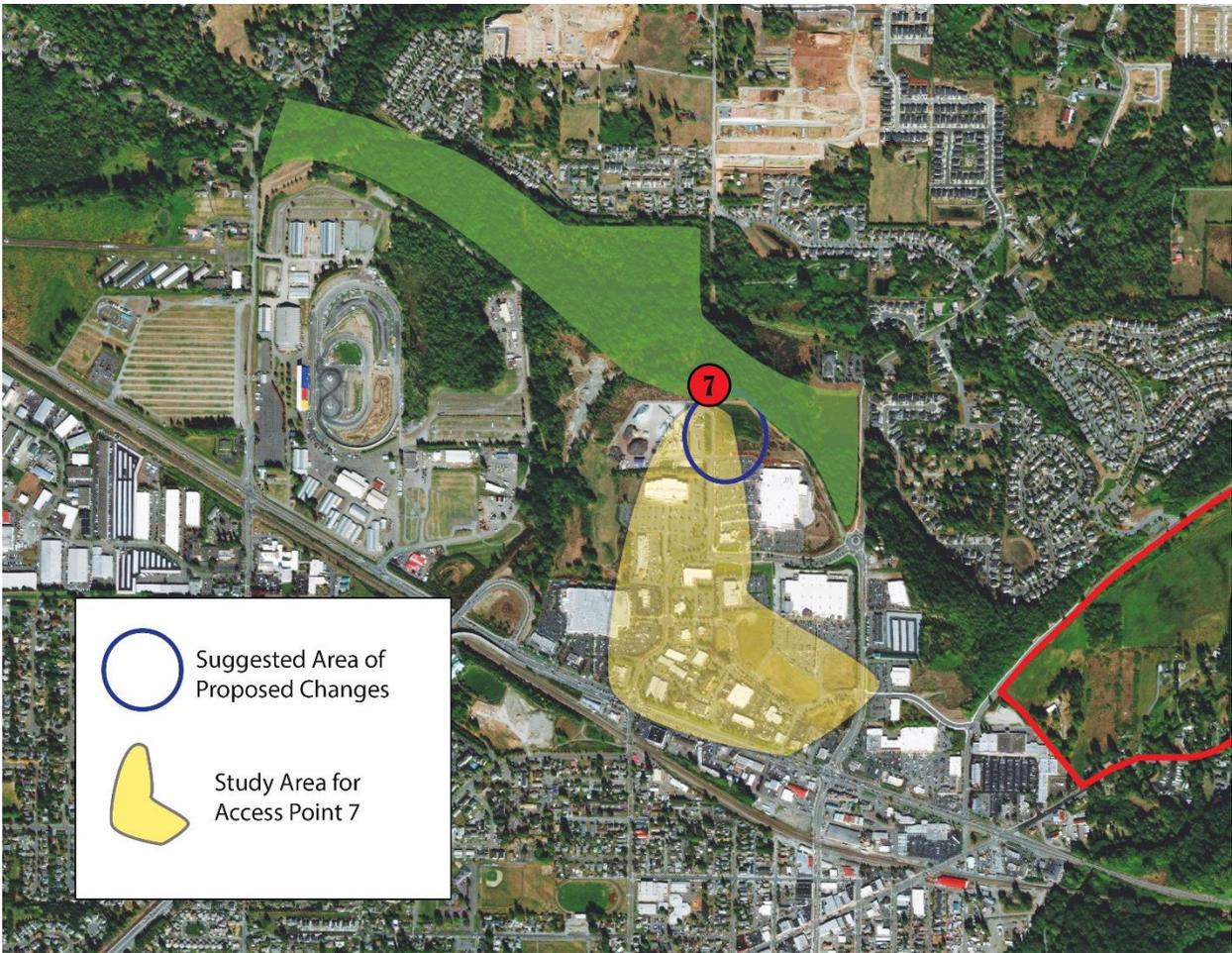


Figure 18: The Access Point 7 study area focused around the shopping area and connection with US-2 Bypass Trail Area.

A large amount of landscaping will be required due to the steep slope at the end of Galaxy Way entering the US-2 Bypass Trail Area. Switchbacks or grading may be required to promote cycling and create an ADA (Americans with Disabilities Act) appropriate path (see Figure 19).

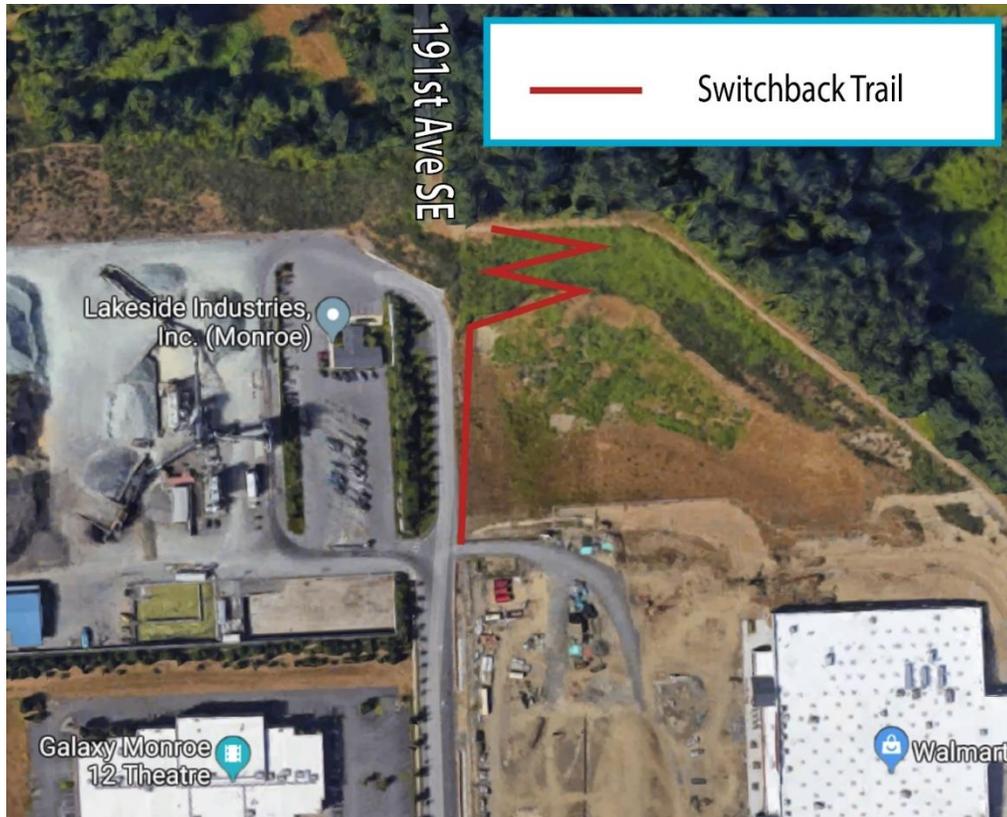


Figure 19: Access Point 7 will likely require a trail switchback network to connect the trail area to Galaxy Way. This will provide greater access to the shopping area for residents in northern Monroe.

*Access Point 7: Walking Survey Results*

Students traveling along Galaxy Way and North Kelsey Street noted that there were large sidewalks with nearby shops. However, they also lamented the large parking lots as space that could be better used if more stores were available to access via foot along the sidewalks. There is a potential to place liner stores along the Northern end of Galaxy Way, converting it to a pedestrian-friendly urban village.

*Key Improvements to Promote Access*

- Switchback pathway from the now-defunct 191st Avenue in the US-2 Bypass Trail Area to Galaxy Way.
- Alternative option: Stairs down the southern slope of the US-2 Bypass Trail area to access Galaxy Way.
- Additional shopping opportunities may be available by reducing the parking requirements in the Downtown Commercial Zoning area and creating a line of shops in the current parking lots of Walmart and the movie theater along Galaxy Way.

Table 7: Access Point 7 Improvement Costs			
Key Improvements	Price / Qty	Qty Needed	Total Cost
Paved Trail	\$481,140 / mile	1,050 feet	\$95,681.00
		TOTAL COST	\$95,681.00

## Analysis of Potential Access Point 8

### *Justification for Access Point 8*

Access Point 8 benefits families living in more than 450 households located in the neighborhoods north of Rainier View Road or east of Chain Lake Road within a half-mile of proposed Access Points 2, 3, 4, and 5. Residents interested in destinations on the eastern half of the Fairgrounds<sup>14</sup> could enter the Fairgrounds through the orange and blue gates for a short route to a range of exhibits, the food midway, and most important for families, Kiddieland. Access Point 8 will greatly cut the distance traveled between the northern Monroe neighborhoods along Rainier View Road, particularly those who enter the trail area at Access Point 3, by about two miles from 2.9 miles to 0.95 miles. Along with this two-mile reduction in travel distance to the eastern side of the Fairgrounds, there would also be an increase in the percent traveled by trail from 31% to 47%.

Access Points 8 and 9 provide direct access to The Evergreen State Fairgrounds. Currently, residents in Monroe who wish to visit the Fairgrounds must travel along US-2 to get to the main gate. Portions of US-2, particularly near the Fairgrounds, have no sidewalks and place pedestrians in a dangerous predicament as speeding traffic is feet away from the shoulder that must be traveled along to access 179th Avenue to get to the main gate. Furthermore, 179th Avenue does not have sidewalks for pedestrians either, making travel a potential danger for pedestrians. While the area around the Fairgrounds are not within Monroe city limits, there is an opportunity for collaboration between the City, Snohomish County, and WSDOT to promote a safer travel path to the Fairgrounds via the US-2 Bypass Trail Area.

---

<sup>14</sup> Travel distances from all neighborhoods to the Fairgrounds were measured to blue point 8. This provides a general picture of the impact of different access points, but does not account for the various destinations within the Fairgrounds.

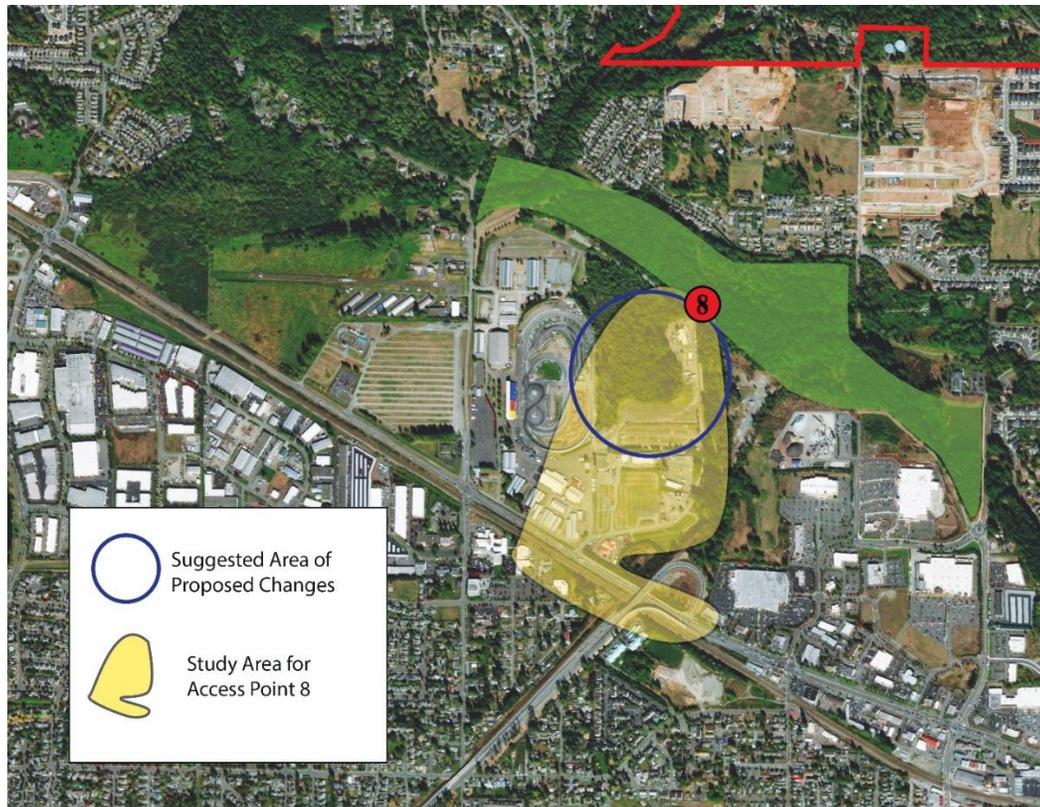


Figure 20: Access Point 8 and the study area surrounding it are focused primarily on the eastern portion of the Evergreen State Fairgrounds.

### *Access Point 8: Walking Survey Results*

Students found the area behind the Fairgrounds to be safe and interesting, rating it as 8.6 for safety, 8 for comfort, and a 9.3 for interest. While the students found the trail behind the Evergreen State Fairgrounds to be interesting, comfortable, and safe, they did note that during the inclement weather they had to deal with a muddy travel route.

### *Key Improvements to Promote Access*

- A trail from Access Point 8 to the northeastern side of the Fairgrounds that transits through Snohomish County land to The Evergreen State Fairgrounds as depicted in Figure 20.
- Alternate route recommendations: Sidewalks or a trail that drains well along Cascade View Drive and behind the Fairgrounds to keep residents clean during inclement weather.



Figure 21: Key improvements to Access Point 8 include a trail that transits through land that borders the eastern portion of The Evergreen State Fairgrounds (owned by Snohomish County) and the US-2 Bypass Trail Area.

Table 8: Access Point 8 Improvement Costs			
Key Improvements	Price / Qty	Qty Needed	Total Cost
Unpaved Trail	\$121,390 / mile	1,533 feet	\$33,244.00
Signage	\$1,900 each	1	\$1,900.00
		TOTAL COST	\$35,144.00

### Analysis of Potential Access Point 9

#### *Justification for Access Point 9*

Access Point 9 is ideal for residents who want to travel to the main gate of the Fairgrounds (see Figure 22). It provides a direct route across the greenway for residents in the Robinhood Lane and Tahoma Street neighborhoods through Access Points 1 and 2. This entrance provides the most direct route for all residents seeking to visit the equestrian exhibits and carnival area. For residents

traveling from the Tahoma Street neighborhood, Access Points 2 and 9 dramatically reduce travel distance and time. Under current conditions, residents must travel a circuitous route of 3.8 miles, or about 73.5 minutes to reach The Evergreen State Fairgrounds by foot. With the implementation of Access Points 2 and 9, the distance traveled will be reduced to about 0.65 miles, and about a 12.5-minute walk time. This will make a trip from Tahoma Street to The Evergreen State Fairgrounds much easier to walk than to drive. Improvements should be made to increase pedestrian and cyclist safety for residents who reside south of US-2 and want to travel to access the US-2 Bypass Trail Area. Additionally, any further development west of 179th Avenue will likely increase the demand for pedestrian usage of the trail area as well.

Access Point 9 gives horse enthusiasts the ability to access the trail for equestrian travel or warm-up prior to events at The Evergreen State Fairgrounds, an idea that appealed to residents during the fall, 2018, community meeting on the trail system.

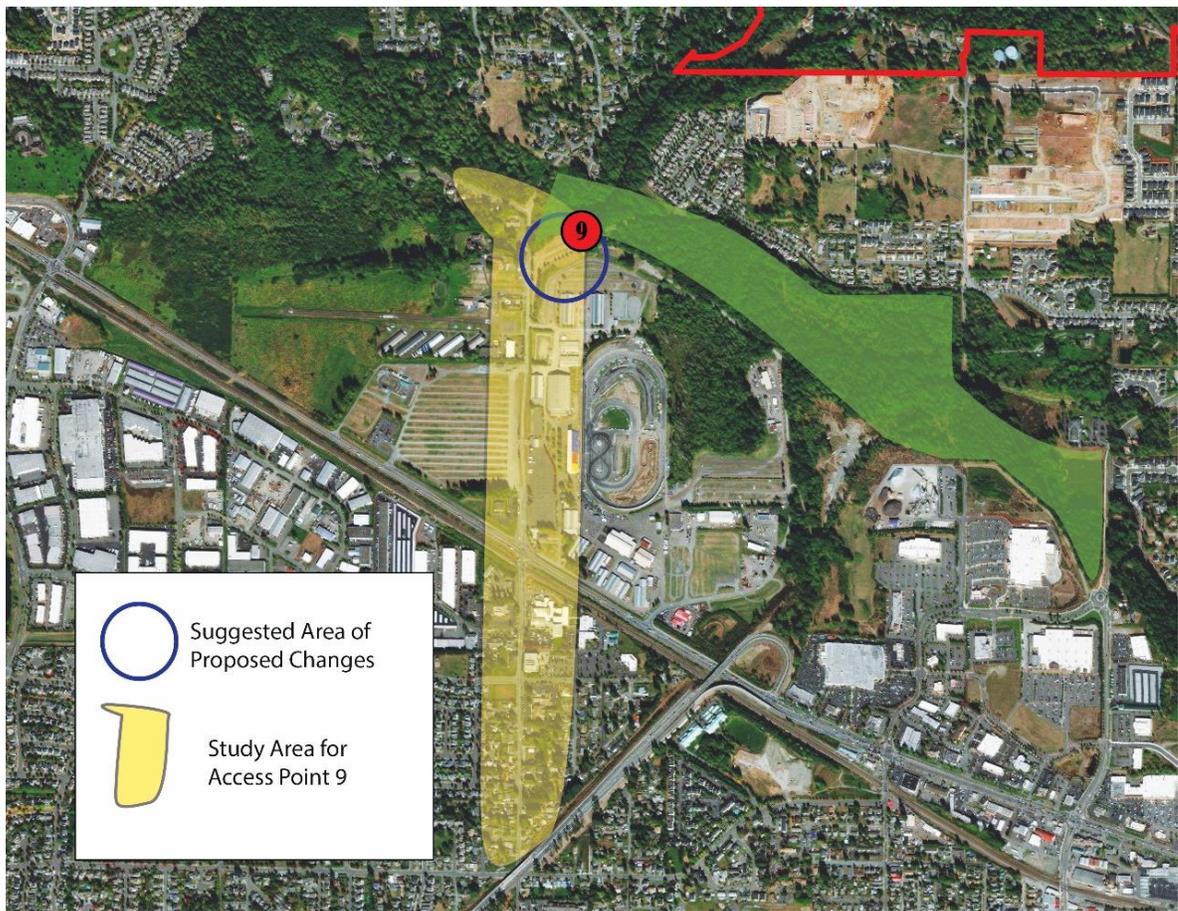


Figure 22: The area surrounding Access Point 9 is primarily located in the Robinhood Lane neighborhood and the northern portion of The Evergreen State Fairgrounds.

### *Access Point 9: Walking Survey Results*

Students found the roadways surrounding the Fairground main entrance to be dangerous for pedestrians. Among the issues that were identified was a lack of sidewalks and a narrow bridge crossing along 179th Avenue from US-2 to the entrance, and a lack of sidewalks along US-2 adjacent to the Fairgrounds. Safety, comfort, and interest along 179th Avenue were ranked as the lowest for all three categories for any street within the study area. Students ranked 179th Avenue as 1 out of 10 for safety, 1 out of 10 for comfort, and 2 out of 10 for interest. Additionally, due to the lack of safe sidewalks and the presence of high-speed traffic, the surveyors did not attempt to walk along US-2 between 179th Avenue and the WA-522 Interchange.

### *Key Improvements to Promote Access*

- Widening the right of way to accommodate a new sidewalk and bicycle lane for pedestrian and cycling connectivity.
- The inclusion of a pathway that is safe for equestrian activities will ensure that residents of Monroe who want to use the trail for horseback riding is essential at Access Point 9, as it will become the main access point for equestrian use.
- The implementation of Access Points 1 and 2 will provide a safe alternative for residents looking to walk to the Fairgrounds. Without implementation of all three access points, residents in Monroe must travel along unsafe pedestrian paths to walk to the Fairgrounds.

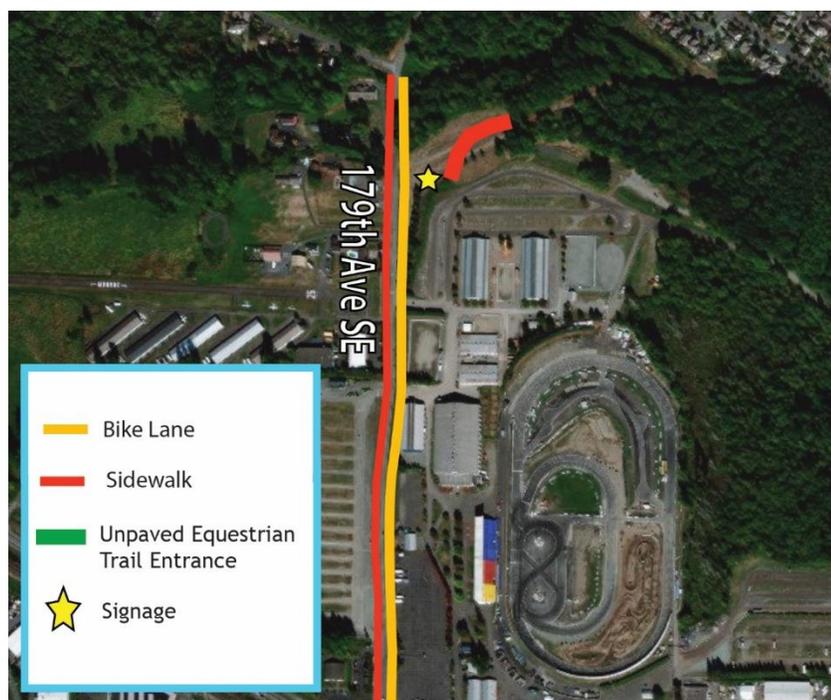


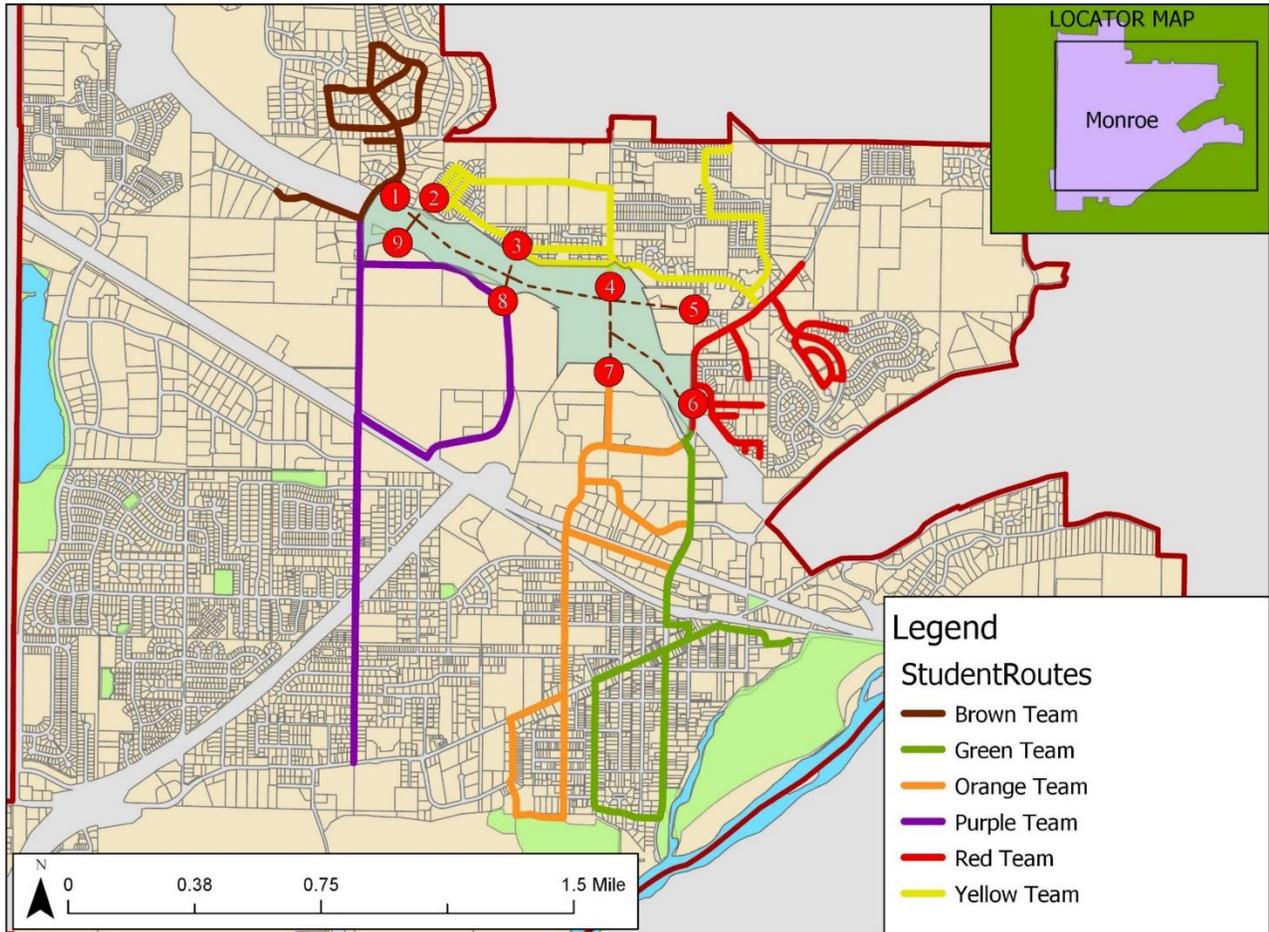
Figure 23: Key improvements to the area surrounding Access Point 9 include an equestrian-friendly trail entrance and the implementation of Access Points 1 and 2.

Table 9: Access Point 9 Improvement Costs			
Key Improvements	Price / Qty	Qty Needed	Total Cost
Lane Widening	\$82,594 / mile	0.69 miles	\$56,989
Unpaved Trail	\$121,390 / mile	541 feet	\$12,438.00
Sidewalk	\$32 / linear foot	3,650 feet	\$116,800
Bike Lane	\$133,170 / mile	0.69 miles	\$91,887
Signage	\$1,900 each	1	\$1,900.00
		<b>TOTAL COST</b>	<b>\$280,014.00</b>

## Conclusion

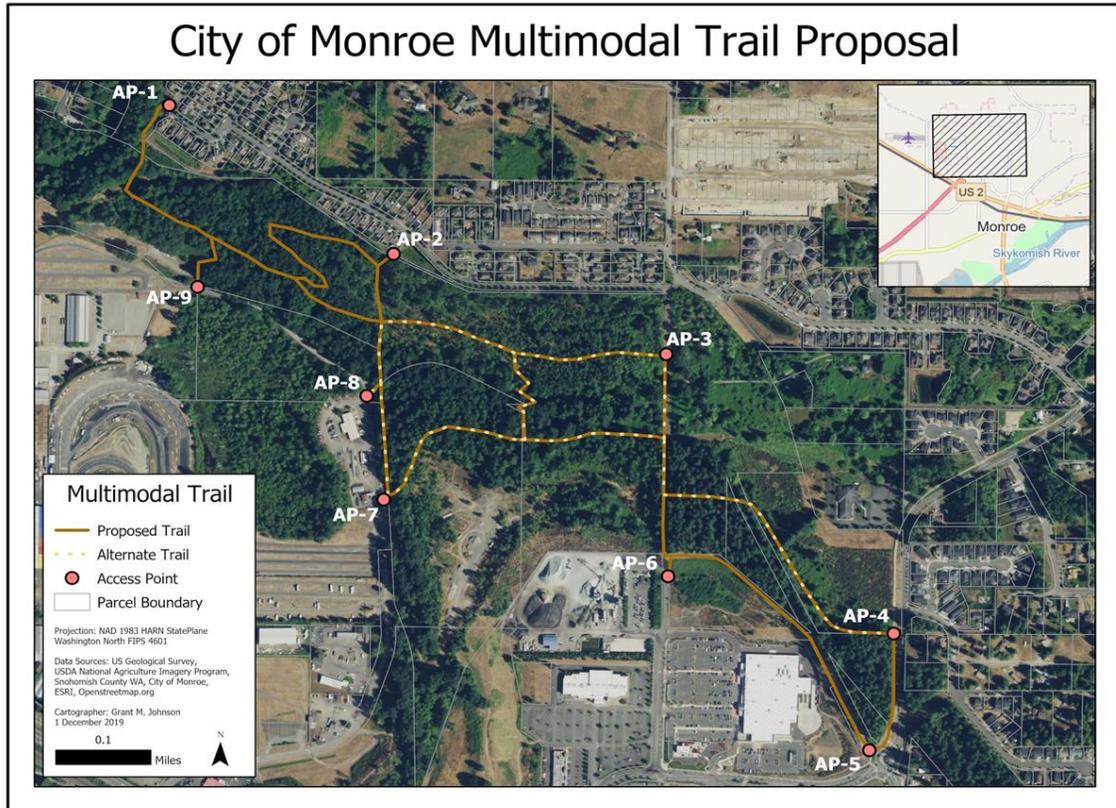
Currently, residents to the north and east of the project site have limited access to parks and trails. The implementation of multiple entrances to the US-2 Bypass Trail area will greatly increase park access for these residents, similar to levels found in the southern portion of the city. There are currently three large parks in the southern portion of Monroe, and the new trail will provide one in the northern portion of the city. Extending the bicycle infrastructure to connect the three parks in the south with the new US-2 Bypass Trail can create a larger trail system with connections for residents throughout the city. The new trail will also have the added benefit of expedient, non-motorized travel to shopping, retail, and the movie theaters for residents of all ages. Currently, the distance and time required to travel to shopping, recreation, and community events often requires a vehicle trip.

# Appendix



Data: City of Monroe, WSDOT, WWU

# City of Monroe, WA, Multi-Modal Trail: Environmental Impact Statement



## Project Report Environmental Impact Assessment ENVS 493, Fall 2019

Report No. 03

December 2019



## About SCP

Western's Sustainable Communities Partnership (SCP) program focuses the expertise, energy, and ideas of faculty and students upon the issues that communities face as our society transitions to a more sustainable future. SCP partners with communities each academic year, facilitating a program in which many Western courses complete community-engaged learning projects that address challenges identified by the partner.

[Sustain.wvu.edu/scp](http://Sustain.wvu.edu/scp)

SCP@wvu.edu

360-650-3824



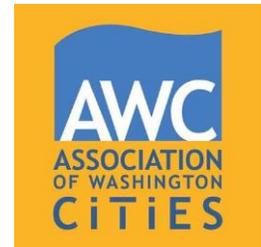
## SCP Partner for 2018-2019: City of Monroe, WA

SCP is proud to partner with City of Monroe, Washington, during the program's fourth year. Three Western courses have tackled projects identified in collaboration with city staff.



## Acknowledgement

The [Association of Washington Cities](#) (AWC) has provided invaluable assistance as SCP has grown and developed. AWC has provided advice on program development, and has assisted in promoting the program.



SCP is housed within Western's [Office of Sustainability](#)



# PREFACE

This project was completed Fall of 2019 by a group of students in Dr. Tamara Laninga’s Environmental Impact Assessment course (ENVS 493). In this course, students prepared an impact assessment for a proposed multi-use trail in the US-2 Bypass right-of-way in Monroe, Washington. Special attention was paid to the potentially adverse impacts to critical areas, including wetlands, streams, and steep slopes. This report has not been done at the request of anyone representing local governments or private individuals, nor does it necessarily represent the opinion or position of individuals from government or the private sector. The following report builds on the work of two prior reports, completed by faculty and students from Western Washington University.

## Western Team

Instructor (ENVS 493, Fall 2019):	Tamara Laninga, Ph.D., AICP
Student Research Team:	Amelia Flores, Nora Harper, Grant Johnson, Alyssa Leone, Andrew Randall
Graduate Student Editor:	Kristen Doering
SCP Coordinator:	Lindsey MacDonald

## City of Monroe Staff

Parks and Recreation Director:	Mike Farrell
Parks and Recreation Senior Planner:	Denise Johns
Community Development Director:	Ben Swanson

# CONTENTS

Dear Concerned Citizen Letter.....	2
Fact Sheet.....	3
List of Figures.....	5
List of Tables.....	5
Glossary.....	6
Executive Summary.....	7
1.0 Project Overview.....	9
1.1 Site Background.....	9
1.2 Proposed Action.....	9
1.3 Alternative Action.....	10
1.4 No Action Alternative.....	11
2.0 Environmental Setting, Impacts, and Mitigation.....	12
2.1 Earth.....	12
2.2 Water.....	14
2.3 Plants.....	17
2.4 Recreation.....	18
2.5 Transportation.....	19
2.6 Aesthetics.....	24
3.0 Summary of Findings.....	26
4.0 References.....	27

**Environmental Impact Assessment**  
Huxley College of the Environment

I/we grant to Western Washington University the non-exclusive royalty-free right to archive, reproduce, distribute, and display this Environmental Impact Assessment document in any and all forms, including electronic format, via any digital library mechanisms maintained by WWU.

I/we represent and warrant this is original work, and does not infringe or violate any rights of others. I/we warrant that I/we have obtained written permissions from the owner of any third party copyrighted material included in this document.

I/we acknowledge that I/we retain ownership rights to the copyright of this work, including but not limited to the right to use all or part of this work in future works, such as articles or books. Library users are granted permission for individual, research and non-commercial reproduction of this work for educational purposes only. Any further digital posting of this document requires specific permission from the author(s).

Any copying or publication of this document for commercial purposes, or for financial gain, is not allowed without my/our written permission.

Signature Alyssa Leone  
Alyssa Leone

Signature Amelia Flores  
Amelia Flores

Signature Andrew Randall  
Andrew Randall

Signature Grant Johnson  
Grant Johnson

Signature Nora Harper  
Nora Harper

Signature \_\_\_\_\_

Date 12/9/19

December 2019

Dear Concerned Citizen,

The City of Monroe is proposing to develop a temporary multi-use trail on land owned by Washington State Department of Transportation (WSDOT). The land was originally acquired for the purpose of creating a bypass for US-2 to the north of the city of Monroe. Due to residential development north of North Kelsey Road and east of Chain Lake Road, there are no plans to create the bypass in the foreseeable future and the site currently has an informal trail network utilized by residents and the houseless population. The City of Monroe is proposing to use the WSDOT right-of-way land to develop a trail system for recreational purposes.

Western Washington University's (Western) Huxley School of the Environment offers Environmental Impact Assessment (EIA) as a culminating course known as a capstone. The following document is an Environmental Impact Statement (EIS) conducted by Western seniors as the final project in the EIA Capstone course. The environmental factors identified as being potentially impacted are earth, water, plants, recreation, transportation, and aesthetics.

The EIS that follows assesses the impacts of the proposed project and identified alternatives, and advises on potential mitigation measures aimed to protect the environment that our region depends on. This EIS – conducted under the supervision of Dr. Tamara Laninga, AICP, and prepared for the City of Monroe – offers a comprehensive review of the natural and built environmental impacts of the proposed action. Thank you for your interest in this site.

Sincerely,

Amelia Flores, Nora Harper, Grant Johnson, Alyssa Leone, & Andrew Randall  
Western Washington University – Huxley College of the Environment  
ENVS 493 – Environmental Impact Assessment  
US-2 Bypass Multi-use Trail Team

## **Fact Sheet**

### Title

US-2 Bypass Temporary Trail

### Description of project

The City of Monroe (CITY) is proposing to develop a temporary trail in a WSDOT-owned right-of-way. The project involves construction of a temporary trail between Chain Lake Road and the Evergreen State Fairgrounds. This trail will serve nearby neighborhoods for recreational use, provide access to the fairgrounds and some access to CITY and retail areas in the North Kelsey area. The proposed soft-surface trail will be approximately 2.8 miles long and three feet wide

### Location

Monroe, Washington

### Legal description of the location

Township: 28 North

Range: 6 East

Section: 36

Latitude: 47°52'14.7"North

Longitude: -121°58'28.9" West

### Proposers

City of Monroe

806 West Main Street, Monroe, WA 98272

### Lead agencies

City of Monroe

806 West Main Street, Monroe, WA 98272

### Contributors

Alyssa Leone - Earth, Recreation

Nora Harper - Editor, Plants

Amelia Flores - Recorder, Water

Grant Johnson - Editor, Maps

Andrew Randall - Liaison, Transportation

## Distribution list

Dr. Tamara Laninga  
Department of Environmental Studies  
Huxley College of the Environment  
Western Washington University

Lindsey MacDonald  
Sustainable communities Partnership  
Office of Sustainability  
Western Washington University

## Acknowledgments

Dr. Tamara Laninga, Western Washington University  
Denise Johns, City of Monroe  
Lindsey MacDonald, Sustainable Communities Partnership

## Issue Date

December 16, 2019

## Presentation to City staff time and date

9 December 2019, 10:00 am PST

## List of Figures

Figure 1. Proposed Trail System	10
Figure 2. Alternate Trail System	11
Figure 3. Slope Angle Analysis	12
Figure 4. Elevated Boardwalk over Stream	13
Figure 5. Proposed Trail System and Critical Areas	15
Figure 6. Alternate Trail System and Critical Areas	16
Figure 7. Proposed Access Points to US-2 Bypass Trail Area	19
Figure 8. Proposed Action Access and Connectivity	21
Figure 9. Alternative Action Access and Connectivity	22
Figure 10. No Action Access and Connectivity	24

## List of Tables

Table ES-1. Decision Matrix	8
Table 1. Transportation Analysis Overview	20
Table 2. Decision Matrix	26

## **Glossary**

<u>Notation</u>	<u>Definition</u>
CITY	City of Monroe
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
HOA	Homeowners Association
HPAC	Homeless Policy Advisory Committee
MBSC	Mountain Bike Skills Course
ROW	Right-of-Way
RRP	Railroad Properties LLC
SEPA	State Environmental Policy Act
WSDOT	Washington State Department of Transportation

## Executive Summary

The City is proposing to develop a temporary trail in Washington State Department of Transportation (WSDOT) right-of-way (ROW) known as the US-2 Bypass. The proposed trail will incorporate existing social trails into a temporary trail system. Project goals include increasing recreational opportunities and possible access to shopping, the theater, and restaurants (See: Figures 6-8). Because trail access in northern Monroe is currently limited, this project will increase community access to local green spaces.

The existing social trails are located in a remnant disturbed temperate forest ecosystem including a seasonal creek. The ROW is a part of the Snohomish River watershed, and residential water service is provided by Highland Water District. Because wetlands are present, they are protected as designated critical areas according to Washington State's Growth Management Act.

There are six environmental factors identified and analyzed in this document as being potentially impacted: earth, water, plants, recreation, transportation, and aesthetics.

This Environmental Impact Statement (EIS) examines potential impacts of the City of Monroe (CITY) developing a temporary trail within the WSDOT ROW adjacent to the Evergreen State Fairgrounds, residential, commercial and retail areas. The three alternatives analyzed in this report include the Proposed Action, Alternate Action, and No Action, defined below.

- The Proposed Action: A 2.85 mile temporary soft-surface trail system (See: Figure 1) built and maintained with volunteer labor. The Proposed Action maximizes trail length, connectivity, and recreation opportunities developing a designated trail system within the WSDOT ROW. This action will include a stream crossing.
- The alternate action: Constructing a temporary loop trail (See: Figure 2) using a volunteer-built and maintained system. This action is dependent on the access to the Railroad Properties LLC (RRP) ROW.
  - Option 1: If access is granted to the CITY, the trail will be 1.32 miles long and will not include a stream crossing.
  - Option 2: If access is not granted, the loop will be 1.14 miles long and a stream crossing will be included in this action without the use of stream crossing infrastructure.
- No action alternative: Leaving the informal, socially developed trail system as is.

Using the state of Washington’s State Environmental Policy Act (SEPA) guidelines, impacts were identified and assessed for each potential action identified above. Suggested mitigation measures will minimize potential impacts identified in the analysis of each element.

Analysis of each proposed action revealed minimal impacts to environmental elements studied: earth, water, and plants. However, the No Action Alternative analysis identified the greatest negative impact on earth and water from continued uncontrolled disturbance associated with the existing informal trail system. Analysis also noted recreation, transportation, and aesthetics have the largest positive impacts resulting from trail development. The most significant positive impacts results from the Proposed Action with mitigation. This is an indirect result from the overall increase in connectivity and recreational opportunity.

Based on the overall assessment of identified environmental elements, findings are summarized in a decision matrix (Table ES-1). The decision matrix identifies “The Proposed Action with Mitigation” as having the greatest positive impact. The “No Action” alternative results in the largest negative impact.

Table ES-1: Decision Matrix

	Proposed Action	Proposed Action with Mitigation	Alternative Action	No Action
Earth	-1	+1	-1	-2
Water	+1	+2	-1	-2
Plants	-2	-1	-1	0
Recreation	+2	+2	+1	0
Transportation	+1	+2	0	-2
Aesthetics	+1	+2	+1	0
<b>Total</b>	<b>+2</b>	<b>+8</b>	<b>-1</b>	<b>-6</b>

Legend: strong negative impact (-2), negative impact (-1), neutral impact (0), positive impact (+1), strong positive impact (+2)

## **1.0 Project Overview**

### 1.1 Site Background

The City of Monroe (CITY) is located in Snohomish County, Washington with an estimated population of 19,363 people. The CITY is divided by US-2, a state highway connecting eastern Washington with the I-5 corridor at the City of Everett. The Washington State Department of Transportation (WSDOT) has a right-of-way (ROW) set aside for a future US-2 Bypass, which is currently undeveloped. The WSDOT property is located north of the commercial and retail core and northeast of The Evergreen State Fairground. Single-family housing is located to the north and east of the property. The CITY has proposed to develop a temporary recreational trail within the US-2 Bypass ROW. WSDOT has agreed to consider approval for development of a temporary trail by the CITY in the ROW.

The following document identifies the proposed trail system, alternatives to the trail system, impacts of trail development, and potential mitigation measures.

### 1.2 Proposed Action

The CITY desires to create a trail on WSDOT's US-2 Bypass. The Proposed Action is to work with the Washington Trails Association (WTA) to create a temporary trail network within the WSDOT ROW to enhance recreational opportunities in the area (Figure 1). The Proposed Action trail will include multiple community access points. The Proposed Action will create 2.85 miles of trail, offering increased connectivity and new recreational opportunities to the community.

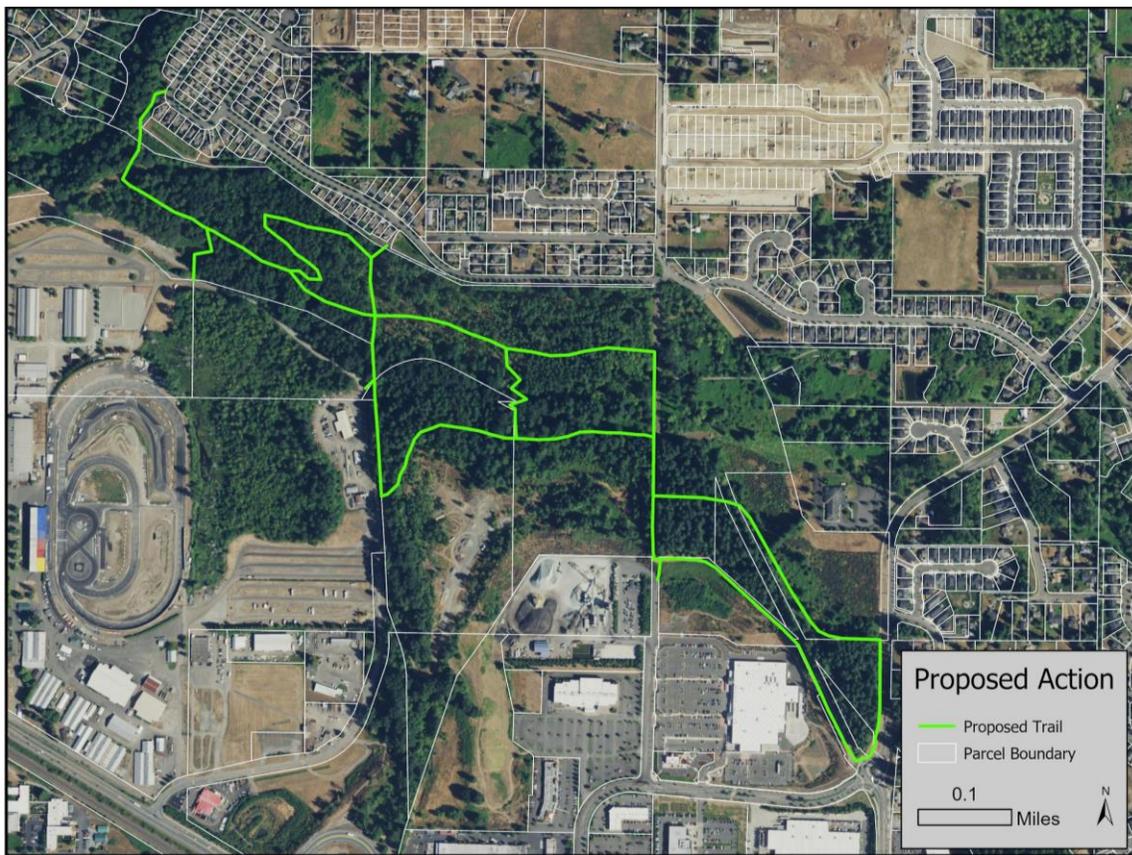


Figure 1. Proposed Trail System

### 1.3 Alternative Action

The Alternative Action creates a temporary loop trail using WTA volunteers to construct and maintain the trail (Figure 2). By comparison to the Proposed Action, the Alternative Action, Option 1, will minimize environmental impact, by avoiding an ephemeral stream crossing. To avoid a stream crossing, the Alternative Action trail will need to be routed through the parcel to the south, owned by Railroad Properties (RRP) LLC. Without the RRP parcel, a loop trail, will be routed across the stream. The Alternative Action creates a loop trail of 1.14 to 1.32 miles long.

Option 1: Access to RRP ROW-- NO inclusion of a stream crossing

Option 2: No access to RRP ROW-- Inclusion of a stream crossing

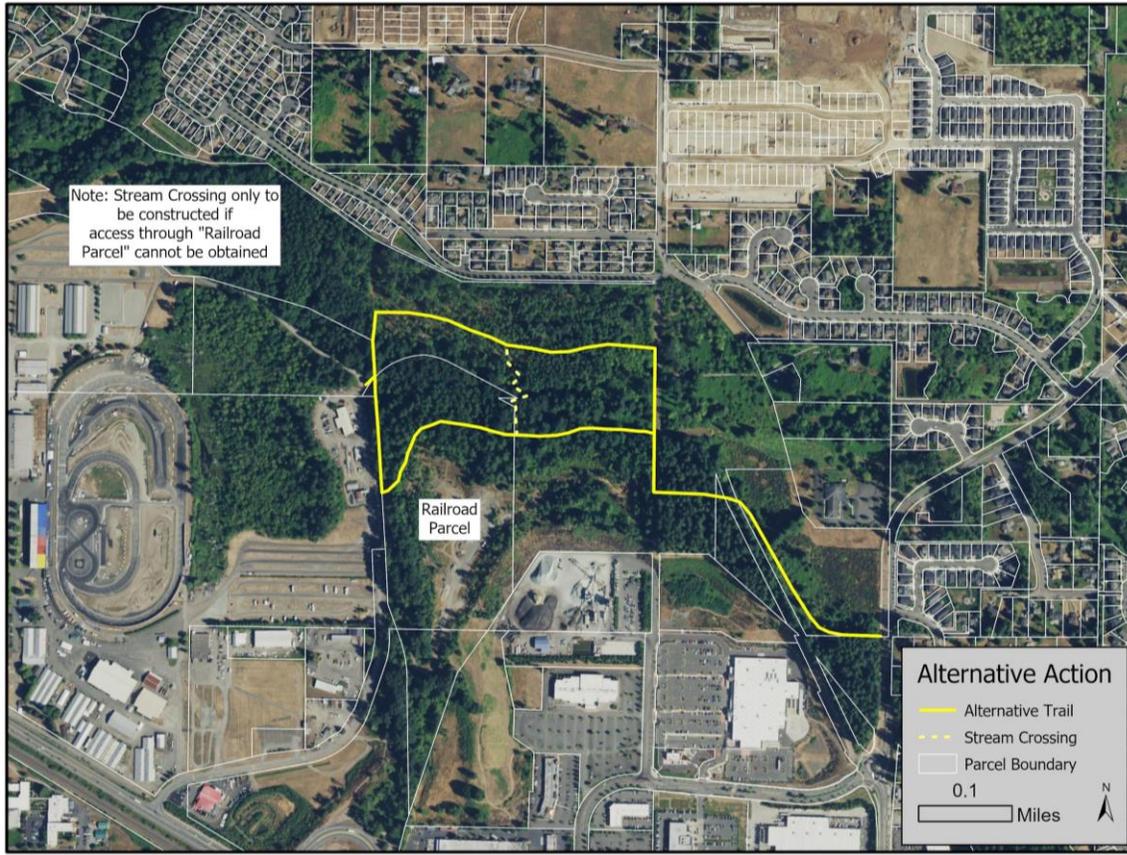


Figure 2. Alternative Trail System

#### 1.4 No Action Alternative

The No Action Alternative maintains current informal trail system as is, used by visitors and houseless to reach their camps. Currently the ROW contains areas of refuse, abandoned campsites, and hazardous biowaste (e.g., needles, drug vials, condoms). The No Action Alternative will see the ROW continue as an informal trail network, with few safe opportunities for residents to access a recreational trail.

## 2.0 Environmental Setting, Impact, Mitigation

### 2.1 Earth

#### *Existing Conditions*

The ROW has varied topography and is situated below a housing development and above a shopping center. Most slope angles are under 8%, with maximum slope angles of 25% occurring along the creek (Figure 3).

The soil types are Tokul gravelly medial loam and Terric Medisaprists, both of which are classified as poorly drained (Mealy, 2017). When wet, the soil is muddy and prone to erosion. Signs of unstable soils along the existing trail include exposed tree roots and erosion into the creek at crossings. Currently the ROW has no established trails and users are creating informal trails, leading to the removal of vegetation and increased erosion.

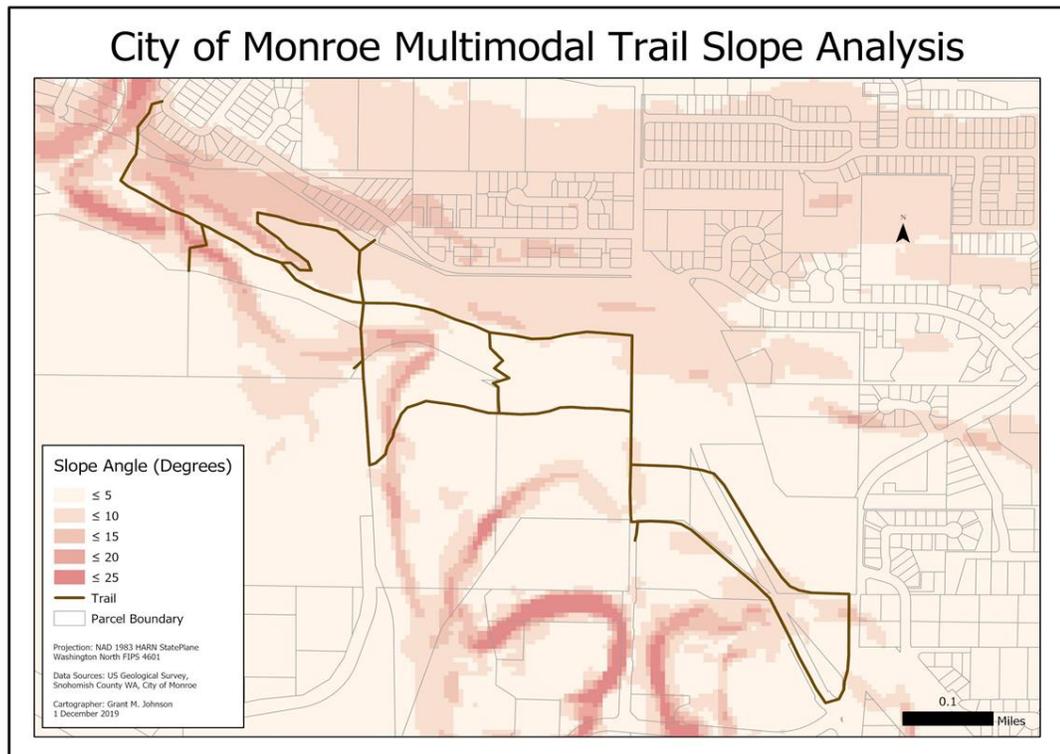


Figure 3. Slope Angle Analysis

### *Proposed Action*

The Proposed Action creates a trail to serve as a recreation area for pedestrians. The Proposed Action will involve construction of new trails, with improvements to, and incorporation of, already existing informal trails. An unknown amount of filling, excavation, and grading will be required to create the mile-long trail system. Erosion of the trail may occur with increased use, resulting in degradation of the trail and exposed tree roots. These impacts can be mitigated with the use of surface coverings.

### *Alternative Action*

The Alternative Action, to create a loop trail with limited connectivity, will have minimal impact to the earth. The impacts of the Alternative are the same as the Proposed Action but scaled down. With construction of new trails, existing informal trails can be reworked to be incorporated into the new trail system. Depending on access to the RRP parcel, the loop trail may need to cross over the seasonal stream running through the site. Potential for erosion into the stream is high, given the steep embankments and poorly drained soil. The likelihood of erosion on the trail itself is the same for the Proposed Action as the Alternative Action, with trail degradation as a main concern. With no connectivity to the surrounding area other than 191st Avenue SE, the proposed trail may lead to the creation of additional social trails from the adjacent housing development. This informal trail creation has the potential to further erode the site.

### *Mitigation*

The largest impact to the earth element for the proposed and Alternative Action is erosion. Using a surface material such as compacted gravel or concrete on the trail will reduce erosion, and act as a visual guide for users of the trail system to prevent off-trail activity. Building a simple bridge across the stream will prevent erosion and damage to the stream, while making the path more accessible (Figure 4).

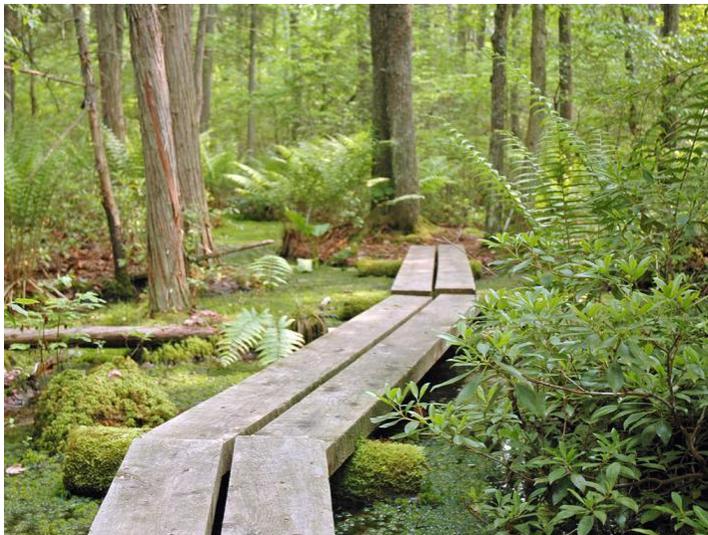


Figure 4. Elevated Boardwalk over Stream (Bushey, 2016)

For this site, the creation of the temporary trail, in both the Proposed and Alternative Actions, will be most beneficial in reducing erosion. The establishment of trails will prevent users from creating informal paths and eroding more of the area. Moreover, with reduced use, the existing informal trails not incorporated into the new trail system will be repopulated with plants, which will further stabilize the area's soils.

### *No Action*

If no action is taken, users of the site will continue to create informal trails, resulting in continued erosion with potential negative effects on stream flow, as well as exposure of tree roots making them vulnerable to damage.

## 2.2 Water

### *Existing Conditions*

The WSDOT ROW includes a seasonal creek system. This creek system is within the greater Snohomish River watershed and is in close proximity to Lake Tye. The seasonal creek is reflective of the amount of surface runoff in the surrounding geographic area. The seasonality of the area's hydrologic system created a gully within the site, illustrating the lasting impacts of the creek through gradual topographic elevation changes.

Within the site there are existing wetlands defined by the Washington Growth Management Act as critical areas (RCW 36.70A.030(5) and RCW 36.70A.060). Wetlands are "fragile ecosystems that serve important beneficial functions, such as assisting in the reduction of erosion, siltation, flooding, ground and surface water pollution, and providing wildlife, plant, and fisheries habitat" (MRSC, 2016). The Proposed, Alternative and No Action Alternatives must take into consideration wetland protections and sensitivities. Any action will impact the existing hydrogeologic conditions of the site.

### *Proposed Action*

Construction of a trail system for the Proposed Action will create trails intended for pedestrian use (Figure 5) and include a stream crossing. Without a 'bridge' crossing, continued trail use across the creek will intensify the volume and frequency of erosion into the seasonal creek and creek basin.

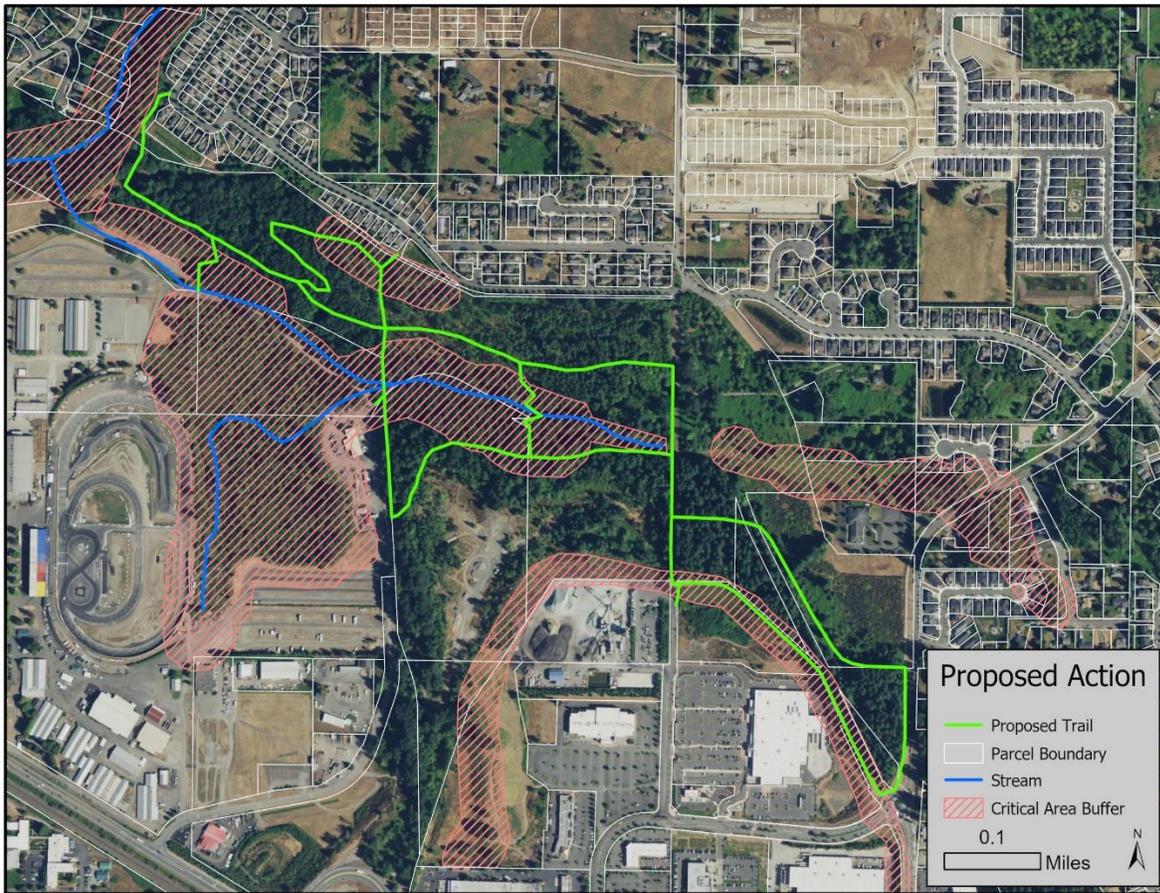


Figure 5. Proposed Trail System and Critical Areas

*Alternative Action*

The Alternative Action is to construct a loop trail (Figure 6) based on the variability of access to the adjacent parcel of land.

- Option 1: Access to RRP property -- NO inclusion of a stream crossing
- Option 2: No access to RRP property -- Inclusion of a stream crossing

Alternative Action Option 1 indicates the absence of a stream crossing and will not have effects on stream health and the existing hydrogeologic conditions.

Under Option 2, the stream crossing will have impacts on the hydrologic system health of the area. There will be removal of riparian species along the stream, contributing to the probability increased effects of erosion from trail use.

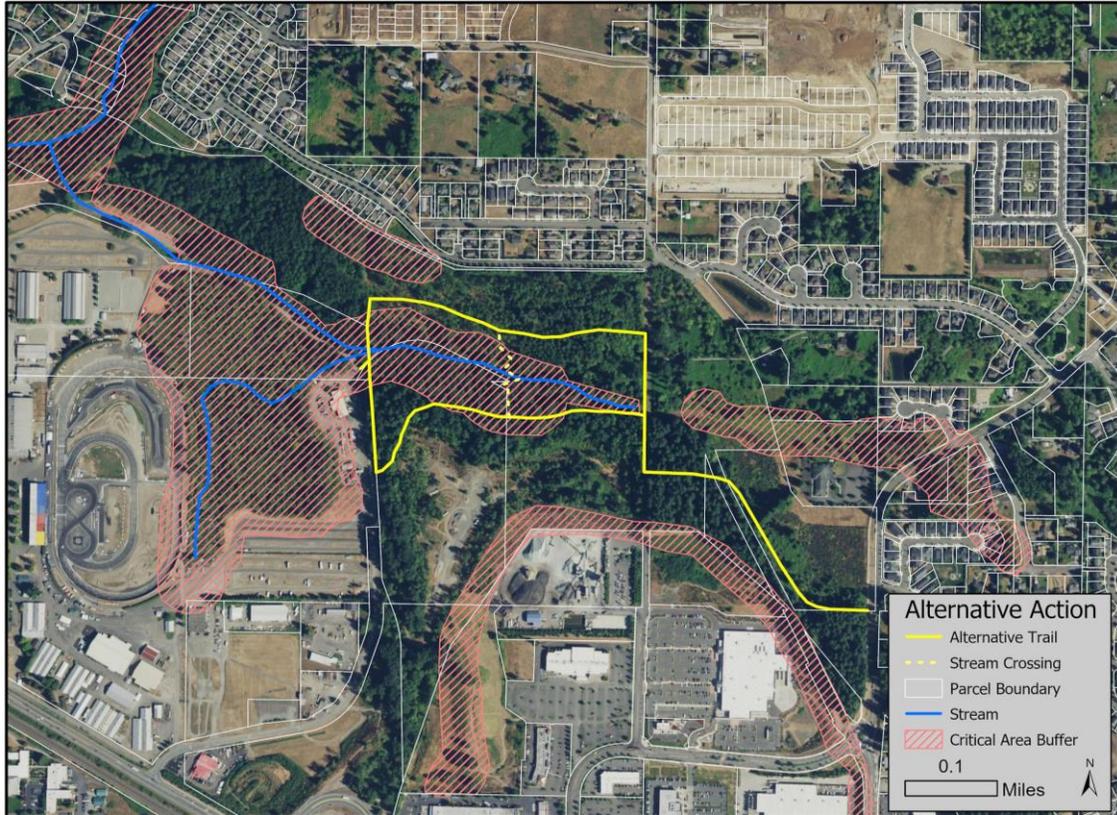


Figure 6. Alternative Trail System and Critical Areas

### *Mitigation*

Consideration of the proposed development of the Alternative Action concludes the impacts will be minimal to moderate. Under Alternative Action Option 2, it is undetermined how severe erosion will be or how erosion will impact overall ecosystem health. Effects of erosion are considered to be the most significant degrading factor for the purposes of this study.

Stream crossing mitigation measures to avoid erosion.

- a. The first mitigation measure targets bank stabilization using bank reinforcements such as brick retaining blocks or construction of steps up and down stream banks.
- b. The second mitigation measure will be construction of a simple bridge over the stream. This will eliminate the need to remove riparian vegetation and bank reinforcement.

### *No Action*

No Action results in minimal to moderate impacts on water quality. There will be continued, and likely additional informal use through the seasonal creek, increasing the potential for and volume of erosion.

## 2.3 Plants

### *Existing Conditions*

The WSDOT ROW is currently a mature temperate forest. Plants growing within the project area include mostly conifers, including Western Red Cedar and Douglas Fir, and deciduous trees and shrubs, such as Big Leaf Maple and Vine Maple. The area also includes some riparian species along the ephemeral streams. During the team's site visit noxious weeds, including English Ivy and Himalayan Blackberry, were identified within the project site. The team did not identify any endangered or protected species within the area, nor are any identified or listed by the Washington Department of Fish and Wildlife.

### *Proposed Action*

The Proposed Action will create approximately 2.85 miles of trail. Development involves removal of all vegetation within the trail's route. The trails' routes will not include removal of large trees, and development will not threaten any protected or endangered plant species. Continued and increased trail use will inhibit future plant growth in the trail surface. The Proposed Action will limit removal of existing vegetation to only the trail surface. Overall, the proposed project will have minimal impact on the area's plant community.

### *Alternative Action*

The Alternative Action is to construct an approximately 1.14 to 1.32-mile loop trail, which will involve removal of plants in the proposed trail's path. If the CITY does not gain access to the neighboring RRP parcel, as outlined by Option 2, the constructed trail will include a stream crossing. In this situation, trail construction will include removal of plant material at the stream bank crossing only. Similar to the Proposed Action, the trail will limit future plant growth on the path, and will not threaten protected species.

### *Mitigation*

The overall impacts to the plant community for the Proposed and Alternative Actions are minimal. However, mitigating plant removal in a variety of forms is still useful. The removal of invasive plant species near the trail's path and planting native species along the trail will help to mitigate the loss of plants at the project site and help prevent the colonization and spread of invasive species. Since the stream crossings will be located outside the typical high-water mark, no plant material removal within the stream banks will occur.

### *No Action*

The No Action Alternative will not have any direct impacts on the plant community. No plants will be removed, and no mitigation will need to take place. However, due to the current use of the area and the continued creation of informal trails, plants will be impacted by trampling to create and extend the informal trail system.

## 2.4 Recreation

### *Existing Conditions*

Currently the WSDOT ROW has an informal user-created trail system and a mountain bike skills course (MBSC). The trail system has many different offshoots that do not lead anywhere and are confusing to follow. The MBSC is located in the southeast corner of the parcel, but will not be negatively impacted by either the proposed or Alternative Action. The user created system connects the site to the adjacent housing development through the use of HOA trails, as well as the fairgrounds and nearby shopping center.

### *Proposed Action*

The Proposed Action will utilize the existing trails as much as possible. It will serve to improve the site, by further developing the small and difficult to navigate trails. The trail system will enable visitors to more easily traverse the area and will not diminish or impede current recreational use. The added connectivity to the adjacent housing development and fairgrounds will increase recreational opportunity in the area. Moreover, the trails may allow for bikers to easily travel to the MBSC from nearby neighborhoods by creating wider and more stable surfaces.

### *Alternative Action*

The Alternative Action proposes to build a smaller loop trail, with limited connectivity.

### *Mitigation*

No mitigation is necessary for the three alternatives because they either maintain or improve current recreation use. However, the installation of trail signs will enhance navigation in the area and prevent off-trail activity.

### *No Action*

Under the No Action Alternative, users will continue to use the ROW with informal trails. This will impact the environment and will provide less recreational use than an improved trail.

## 2.5 Transportation

### *Existing Conditions*

The WSDOT ROW currently contains two informal uses, the MBSC and informal trail network, which generate minimal trips to the area. Vehicle parking is available along Chain Lake Road and the parking lots in the nearby commercial area. There is limited transit service;<sup>1</sup> the Community Transit route 270/277 stops along North Kelsey Street, about ¼ mile from the nearest access point.

Parking. The informal MBSC has nearby parking located along the shoulder of Chain Lake Road, with area for approximately four vehicles parked parallel. Users may access the MBSC via bicycle. Users of the current informal trail network include houseless individuals, who likely access the area by foot or bicycle. Parking is unavailable along 191st Avenue SE and long-term parking along Chain Lake Road is not allowed.

Access & Connectivity. The site is currently accessible at three locations. The existing access points are labeled as AP-3, AP-4, and AP-5 in Figure 7; AP-6 is a future access point. Residents can access the area along Chain Lake Road at two locations, one near the MBSC (AP-4) and one near the roundabout and Chain Lake Road and North Kelsey Street (AP-5). Residents north of the ROW can access the area by foot at 191st Avenue SE from Rainier View Road (AP-3). Another future access point is at 191st Avenue SE and Galaxy Way adjacent to Walmart (AP-6). Access is also available from the northeastern side of the fairgrounds via the northwestern portion of the RRP parcel.

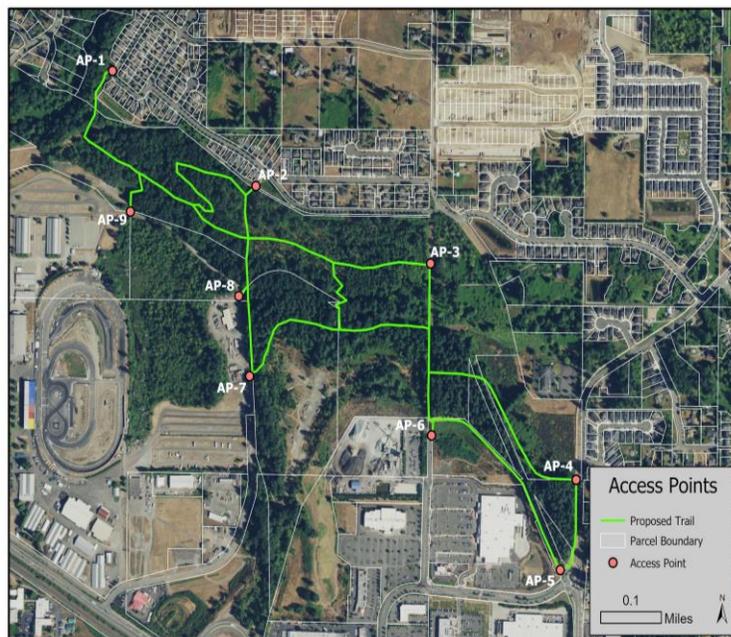


Figure 7. Proposed Access Points to US-2 Bypass Trail Area

<sup>1</sup> Demand for public transit is likely limited to regional commutes, as the population and land use patterns in the CITY likely cannot sustain a robust public transit system. Therefore, the transportation considerations for the Proposed Action, Alternative Action, and No Action rely on access and connectivity, parking, trip generation, and pedestrian and bicycle facilities.

Under the existing conditions, 363 residential parcels are within a half-mile of the nearest access point. This represents about 5.6% of the population of Monroe (U.S. Census Bureau, 2019). Additional information regarding the transportation element in the Proposed Action, Alternative Action, and No Action is shown in Table 1. The comparison of each action shows the difference in connectivity and access provided to residents, as well as available parking to accommodate users.

Table 1: Transportation Analysis Overview

<b><u>Transportation Analysis Overview</u></b>			
<b>Action</b>	<b>Access Points</b>	<b>Reachable Parcels*</b>	<b>Parking Areas</b>
<b>No Action</b>	<ul style="list-style-type: none"> <li>· 191st Ave SE North of Trail</li> <li>· Chain Lake Road – MBSC</li> <li>· Chain Lake Road Roundabout</li> </ul>	<ul style="list-style-type: none"> <li>· 363 Residential</li> <li>· 96 Commercial, Industrial, Retail, or Institutional</li> </ul>	<ul style="list-style-type: none"> <li>· Chain Lake Road – MBSC Entrance</li> <li>· Walmart Parking Lot</li> </ul>
<b>Loop Trail</b>	<b>Same as No Action and...</b> <ul style="list-style-type: none"> <li>· Cascade View Dr. – NE of Fairgrounds</li> </ul>	<ul style="list-style-type: none"> <li>· 365 Residential</li> <li>· 106 Commercial, Industrial, Retail, or Institutional</li> </ul>	<b>Same as No Action and...</b> <ul style="list-style-type: none"> <li>· Cascade View Drive</li> </ul>
<b>Proposed Action</b>	<b>Same as Loop Trail and...</b> <ul style="list-style-type: none"> <li>· Cascade View Drive – North of Fairgrounds</li> </ul>	<ul style="list-style-type: none"> <li>· 533 Residential</li> <li>· 108 Commercial, Retail, Industrial, or Institutional</li> </ul>	<b>Same as Loop Trail and...</b> <ul style="list-style-type: none"> <li>· Evergreen State Fairgrounds</li> </ul>

\*Reachable Parcels refers to parcels within a half-mile of the nearest access point.

### *Proposed Action*

The Proposed action identified access points for nearby residents seeking recreation opportunities or utilitarian trips by foot. Additional parking may be added along Chain Lake Road and 191st Avenue SE to accommodate for increased demand to access the trail area. To ensure multiple uses of the trail area, additional pedestrian accommodations are suggested (Stangl, Cordova, & Randall, 2019).

Parking. A parking demand assessment should be conducted as per the Monroe Municipal Code (MMC 22.44.050.F). However, under the Proposed Action, four parking areas have been identified that should be able to accommodate the expected daily trips generated. The introduction of additional parking, and usage of the parking facilities can lead to runoff from vehicle fluids, and therefore the impact that additional parking has on the environment must be considered (Groundwater Foundation, n.d.).

Access & Connectivity. An improved trail as advocated by the Proposed Action will include access points to the trail. Along with the initial access points identified above, other additional access points have been identified (Figure 8).

Access to the site and other destinations, such as the North Kelsey shopping area and the Evergreen State Fairgrounds, are dependent on the implementation of all access points identified by residents,

researchers, and the CITY (Stangl et al., 2019). For residents situated north and west of Rainier View Road SE, access points 1, 2 and 9 can reduce a pedestrian trip from the residential area of northern Monroe to the Evergreen State Fairgrounds by up to 3.2 miles (Stangl et al., 2019, p. 14); thus, making a trip to the fairgrounds a pleasant and pedestrian friendly experience, while reducing vehicle miles traveled.

The implementation of all nine access points will provide connectivity to residents west and north of Rainier View Road, to include many of the new single-family residences in northern Monroe. Figure 8 shows the parcels that fall within the 1/2-mile pedestrian shed. As larger parcels zoned as low-density single family residential are subdivided and developed, even more residences will fall into the suggested pedestrian shed.

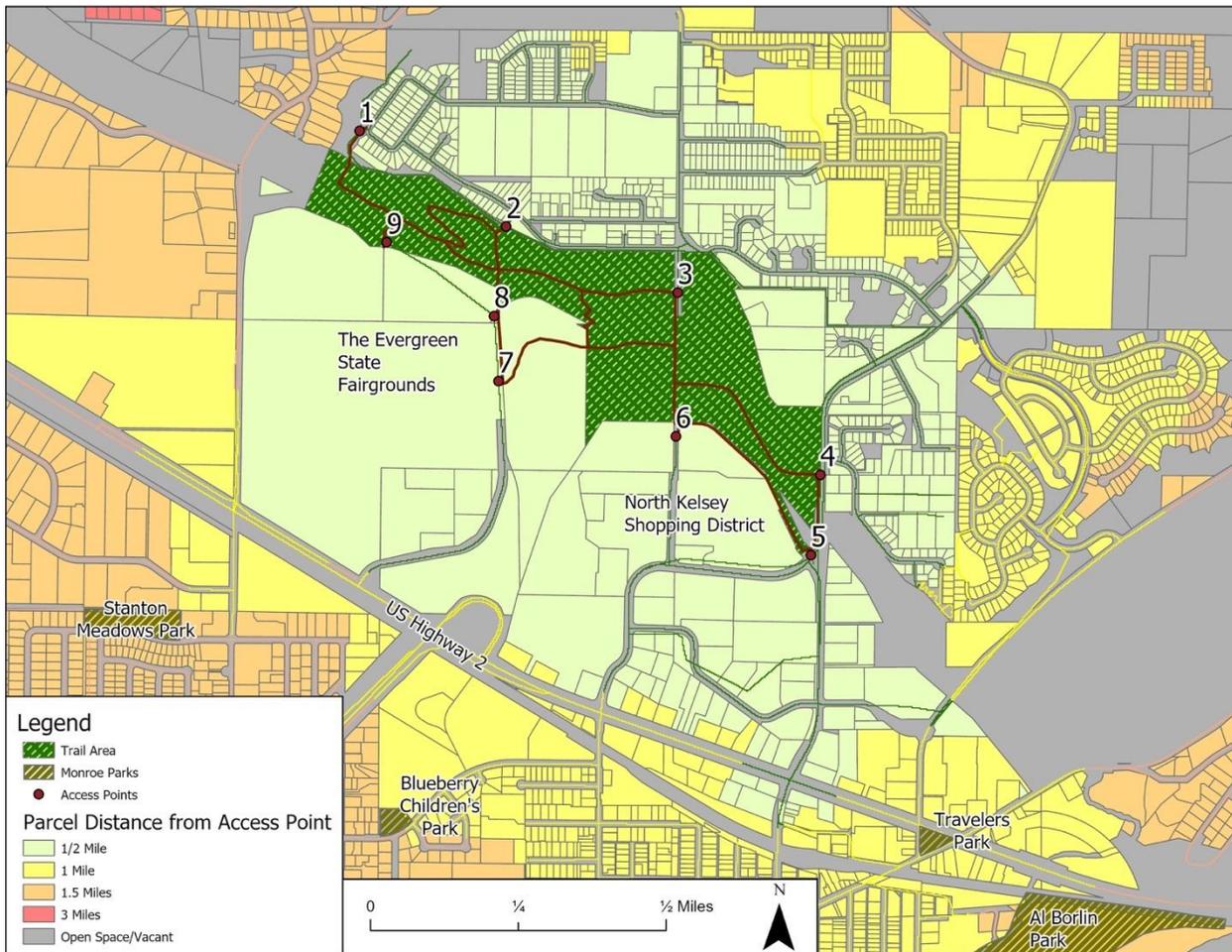


Figure 8. Proposed Action Access and Connectivity

Pedestrian and Bicycle Facilities Upgrades. A previous Western Washington University report “City of Monroe, WA, Multi-Modal Trail: Transportation Analysis” identified proposed pedestrian and bicycle facilities upgrades (Stangl et al., 2019). Proposed bicycle and pedestrian facilities upgrades will require minimal construction on pre-existing rights-of-ways

**Trip Generation.** A new recreation area will generate minimal additional trips to and from the area than currently occur. A trail network as called for in the Proposed Action will occur over 51.2 acres, resulting in 112.2 daily trips when accounting for the trips to a public park (TRPA, 2019). However, with an accurate count of daily users, the average trip rate will be 0.95/daily user (TRPA, 2019).

*Alternative Action*

The Alternative Action calls for a shorter loop trail to be constructed within the US-2 Bypass. The shorter loop trail will have fewer access points and require fewer parking spots because the developed trail area will be smaller, thus reducing the expected trips generated. The shorter loop will eliminate connectivity for residents to the west of Rainier View Road to the Evergreen State Fairgrounds and shopping area, as many users will fall outside of the half-mile pedestrian shed with the loss of Access Points 1 and 2 (Figure 9).

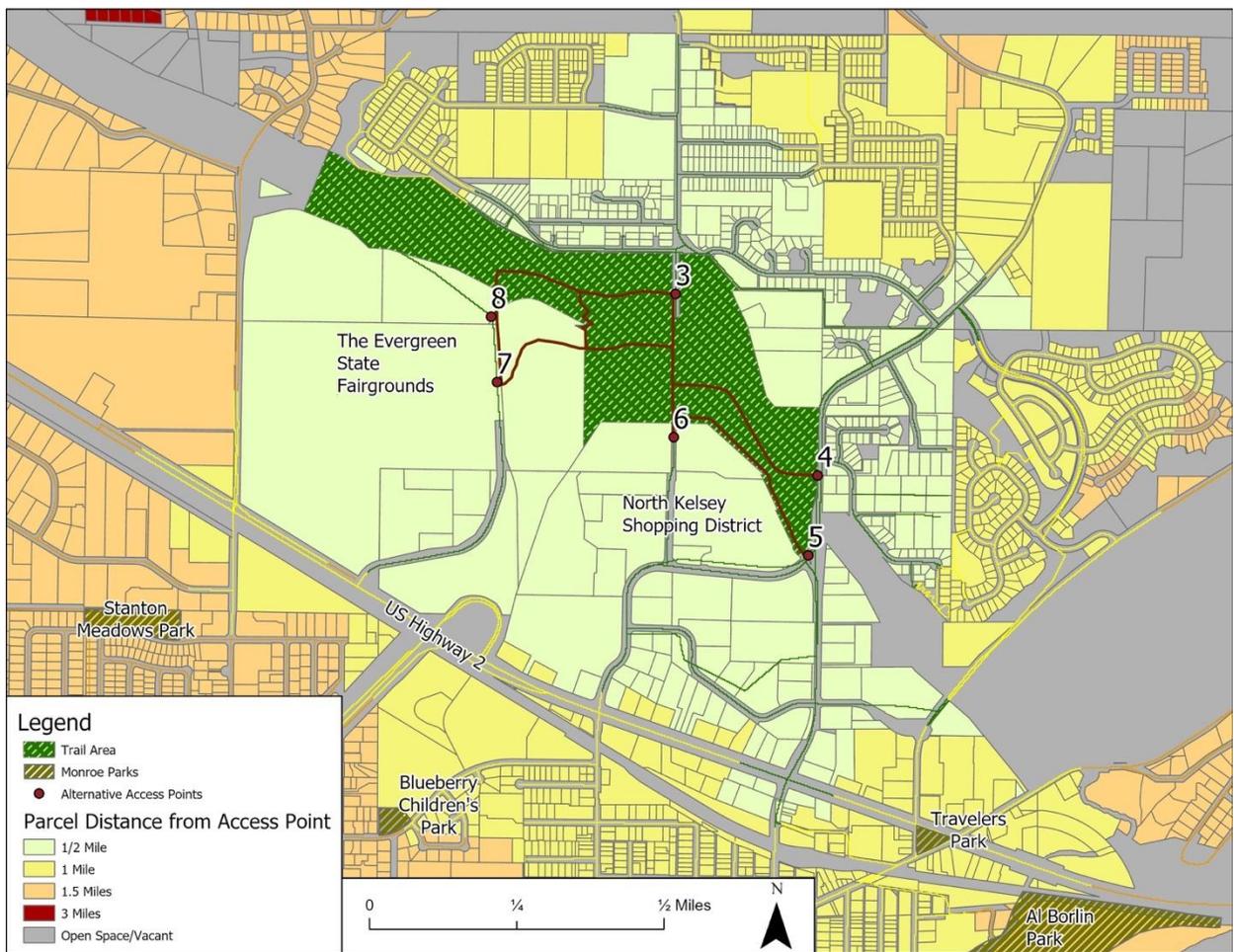


Figure 9. Alternative Action Access and Connectivity

**Parking.** The Alternative Action trail will have less parking availability than the Proposed Action, as the parking area located north of the Evergreen State Fairgrounds will not have access to the trail area via Access Point 9. Parking will be allowed along Cascade View Drive east and northeast of the Evergreen State Fairgrounds near Access Points 7 and 8.

Access & Connectivity. The Alternative Action's shorter, loop trail will require addition of two access points, located along the gravel road east and northeast of the fairgrounds. Access Point 7 will enter the trail area through the RRP Parcel, while Access Point 8 will access the trail area further north along Cascade View Drive.<sup>2</sup> These additional access points will provide access to 365 residential parcels, or roughly 5.6% of the City's population.

Trip Generation. The Alternative Action consisting of a loop trail will encompass approximately 41.1 acres. The smaller trail area is expected to generate 90 daily trips to the multi-use trail (TRPA, 2019). Much like the comprehensive trail system, an accurate tally of daily users can give a more realistic trip generation.

### *Mitigation*

Parking. If a parking demand analysis determines additional parking is needed, mitigation techniques will be required to reduce the impact of additional vehicle traffic to the environment. Below are two options for reducing pollution caused by vehicle runoff in parking areas.

- Rain Gardens:
  - Rain gardens are easy to implement and cost-effective ways to reduce effluent discharge from automobile runoff (Groundwater Foundation, n.d.).
- Permeable Pavement:
  - Permeable pavement has the ability to allow excess water to filter through the concrete surface, and into the ground.

Access & Connectivity. Access from Galaxy Way up to the former 191st Avenue SE at Access Point 6 and northeast of the Fairgrounds will not be recommended without constructed access (Olive, 2009, p.1491), such as stairs or switchbacks. The construction of switchbacks in those areas will lead to the movement of additional earth and soil content, though may have less loss of soil long-term. Either mitigation technique for Access Points 6, 7, and 8 will also create a safer pedestrian environment.

### *No Action*

The no action alternative will see the ROW used as it currently is, for informal usage as a trail network primarily used by houseless residents and as access to the MBSC.

Access & Connectivity. Maintaining the trail area as it currently is can provide access to 5% of the City's residents.

---

<sup>2</sup> If the CITY does not get permission to access RRP Inc. parcel, only Access Point 8 can be implemented.

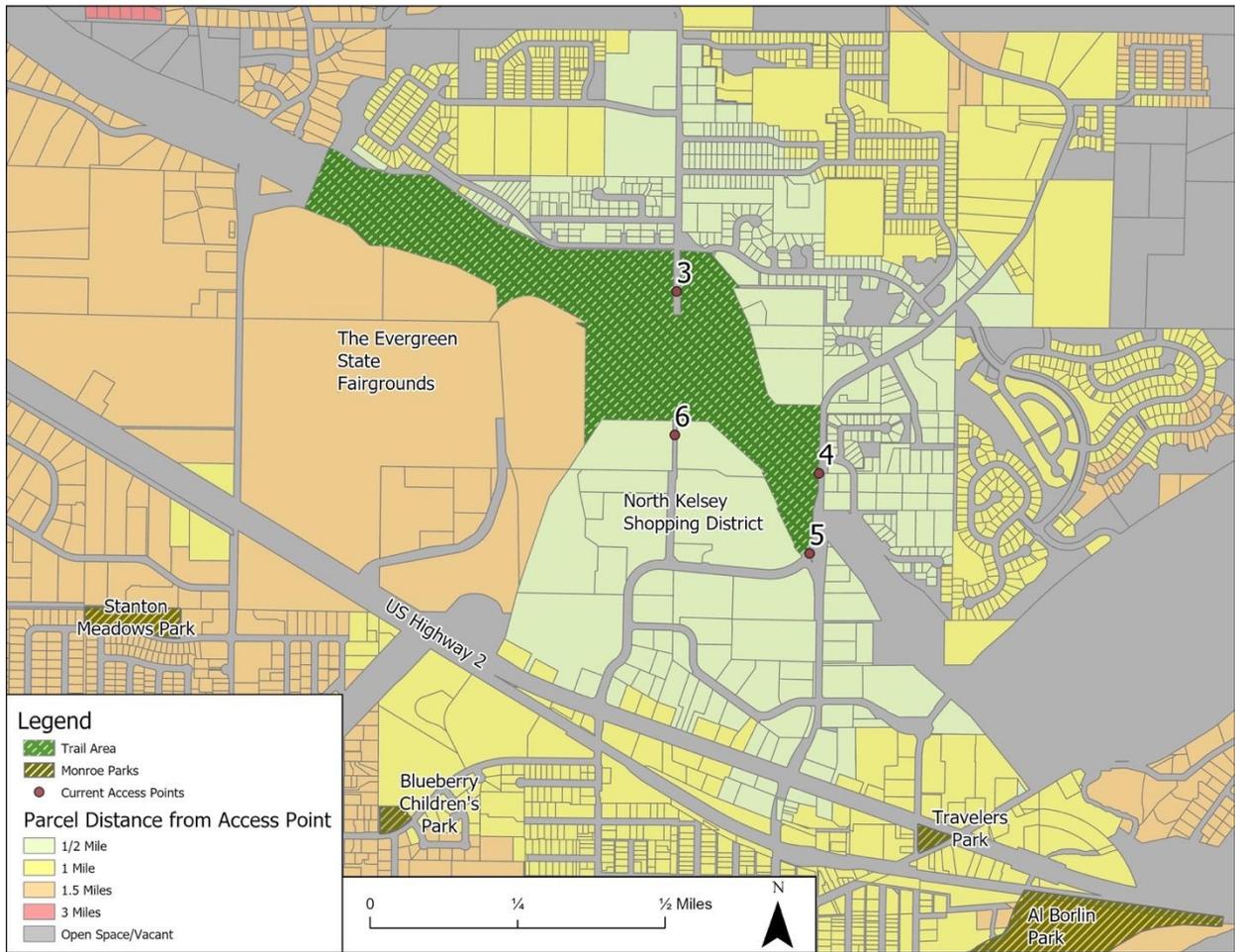


Figure 10. No Action Access and Connectivity

Parking. Parking will continue to occur along Chain Lake Road and at Walmart with minimal impact. Access via the trail connecting Galaxy Way and the former 191st Avenue SE will continue to see an increase in deterioration due to erosion with use over time.

Trip Generation. No additional trips will be generated other than users of the MBSC and the informal trails. The number of trips generated will be less than implementation of a formal trail network.

## 2.6 Aesthetics

### *Existing Conditions*

The site is currently being used by the houseless population as indicated by the numerous abandoned encampments. Litter was common and dangerous objects such as needles and other drug paraphernalia are found on site and often impeded trail use in areas. The area east of 191st Avenue SE contains clearings in wooded areas marked with graffiti. These images were scattered around the site, but mostly concentrated in what could be described as a teen hangout area.

### *Proposed Action*

The Proposed Action increases recreational use while maintaining the current natural viewshed for nearby homeowners and recreational users. The completion of a Proposed Action Alternative includes clearing of debris and encampments. The CITY will follow its existing protocol and process for clearing of encampments and displacement of any houseless individuals. A well-used designated trail system will likely result in fewer encampments and social trail creation.

### *Alternative Action*

The Alternative Action loop trail increases recreational use of the area, but to a lesser degree. The benefits resulting from a trail system will be greatly reduced with the loop trail. With fewer trails and connectivity, the usage of the trail will be limited and preservation efforts to maintain the natural character of the area may be hindered by continued use of the areas west of the established loop trail by the houseless and teen populations.

### *Mitigation*

In order to develop a desired character for the area and maintain the natural viewshed for users and residents, waste removal and support to the houseless population have been identified as primary mitigation measures needed. Waste removal prior to construction of the trail area and opportunities to maintain the cleanliness after completion will preserve the character of the area. Support to houseless individuals currently within the ROW will maintain health, comfort, and safety standards for trail users.

Waste Removal. Waste removal will help maintain the viewshed and has previously been conducted with WSDOT. Volunteer work parties from the community can pick up debris and remove unwanted graffiti from trees. Community organization around beautification of a new park area can create a sense of place for nearby community members and excitement about new recreational opportunities.

To preserve the cleanliness and viewshed of either the trail system or shorter loop trail, trash receptacles and pet waste stations have been identified as a mitigation measure. Trash receptacles and pet waste stations with disposable bags located near the access points will ensure that users do not bring rubbish to the trail area and can easily dispose of any trash they bring out. Locating the receptacles near the access points can ensure that lasting improvements remain outside of the ROW.

Outreach and Support to the Houseless Population. The CITY can utilize existing programs and services that are currently in place. These include the Homeless Policy Action Committee (HPAC), Community Outreach Team, and the Monroe City Parks Homeless Response (City of Monroe, n.d.). The Outreach Team has been impactful in providing outreach to support houseless individuals into housing, drug treatment, mental health assessments and other support services. Community groups such as Take the Next Step can also provide vital assistance by connecting families and individuals in need to emergency shelter, support services, and accurate referrals to other organizations (Take the Next Step, n.d.). Additional support can be provided through community response and local policies.

Responsive action can continue to be done by the HPAC and the City Parks Department, where the HPAC can advise CITY leaders on potential policies and the Parks Department provides the vital assistance to the community of cleaning debris. The Housing Consortium of Everett and Snohomish County have identified and published several policies that local jurisdictions in Snohomish County can implement to respond to the shortage of affordable housing for low-income and at-risk citizens (2018).

*No Action*

If no action is taken on the site, the current aesthetics will remain the same. This will include the unsightly graffiti, temporary encampments, and possible biohazardous materials, reducing the family-friendliness of the trail area.

**3.0 Summary of Findings**

Analysis indicates development of a trail, whether it be the Proposed Action trail network or the Alternative Action loop trail, will primarily have negative, but minimal, impacts on the natural environment, and positive impacts for the elements of the built and social environment (Table 2). However, by implementing the recommended mitigation measures, the proposed action far outweighs the Alternative Action. Taking no action will result in the area continuing to be used for illegal activities, with limited use for recreation, and almost no utility for residents seeking alternative means of transportation to and from Monroe’s commercial and retail core.

Table 2: Decision Matrix

	Proposed Action	Proposed Action with Mitigation	Alternative Action	No Action
Earth	-1	+1	-1	-2
Water	+1	+2	-1	-2
Plants	-2	-1	-1	0
Recreation	+2	+2	+1	0
Transportation	+1	+2	0	-2
Aesthetics	+1	+2	+1	0
Total	+2	+8	-1	-6

Legend: -2 = negative impact, -1 = limited negative impact, 0 = no impact, +1 = limited positive impact, +2 = positive impact

## 4.0 References

- Bushey, W. (2016). Stewardship Tip: The Biology of Bog Bridges. *Nature Groupie*. Retrieved from <https://naturegroupie.org/story/stewardship-tip-biology-bog-bridges>
- Groundwater Foundation. (n.d.). Retrieved November 22, 2019, from <https://www.groundwater.org/action/home/raingardens.html>.
- Housing Consortium of Everett and Snohomish County. (2018). *Housing Snohomish County Project Report*. Retrieved December 5, 2019, from <https://housingsnohomish.org/wp-content/uploads/2018/04/HousingSnohomishCountyProject.pdf>.
- Mealy, J. D. (2017). *Stormwater Site Plan for Clothier SP*. September 29. Retrieved December 6, 2019, from <https://www.monroewa.gov/DocumentCenter/View/5026/Drainage?bidId=>.
- Monroe Municipal Code (2019). *Municipal Code*. Retrieved from <https://monroe.municipal.codes/>.
- MRSC. (2016, Sept 30). *Wetlands*. Retrieved from <http://mrsc.org/Home/Explore-Topics/Environment/Critical-Areas-and-Species/Wetlands.aspx> .
- Stangl, P., Cordova, C., & Randall, A. (2019). *City of Monroe, WA, Multi-Modal Trail: Transportation Analysis*. Western Washington University.
- Tahoe Regional Planning Authority. (2019). *TRPA Trip Table*. Retrieved December 6, 2019, Retrieved from [http://www.trpa.org/wp-content/uploads/Attachment\\_A\\_Trip\\_Table\\_2019.pdf](http://www.trpa.org/wp-content/uploads/Attachment_A_Trip_Table_2019.pdf).
- Take the Next Step. (n.d.). *Our Mission, Vision, and History*. Retrieved December 4, 2019, from <https://www.ttns.org/our-mission-vision-history>.
- U.S. Census Bureau. (2019). *Quick Facts: Monroe, WA*. Retrieved November 14, 2019, from <https://www.census.gov/quickfacts/fact/table/monroecitywashington,US/PST045218>.



# MONROE Park Board

## Agenda Bill No. 20-003

<b>SUBJECT:</b>	<i>Heritage Tree Program Nominations</i>
-----------------	--

<b>DATE:</b>	<b>DEPT:</b>	<b>CONTACT:</b>	<b>PRESENTER:</b>	<b>ITEM:</b>
2/20/2020	Parks	Denise Johns	Denise Johns	<b>New Business #2</b>

**Discussion:** -

- Attachments:**
1. Heritage Tree Brochure
  2. 2014 South Blakeley Street
  3. Evergreen Health Hospital Tree Grove

**REQUESTED ACTION:** Motion to accept Heritage Tree nominations for 2020.

### DESCRIPTION/BACKGROUND

The Heritage Tree Program, launched in 2019, encourages residents of all ages to seek out significant trees within the City limits and nominate them for recognition. Applications received prior to the December 31<sup>st</sup> deadline will be considered for nomination the following year. Community members are encouraged to look around the city, neighborhoods and parks to find unusual, large or historic trees for nomination. A group of trees in a grove are also eligible.

This year the City received two nominations: *Monroe Middle School- Park Place* and *Evergreen Health Hospital Tree Grove*. One of the Park Board duties is to review, and if suitable, accept nominated trees as a part of the Heritage Tree Inventory listing and include in the Monroe Historical Society's annual Heritage Tree Tour.

### FISCAL IMPACTS

N/A

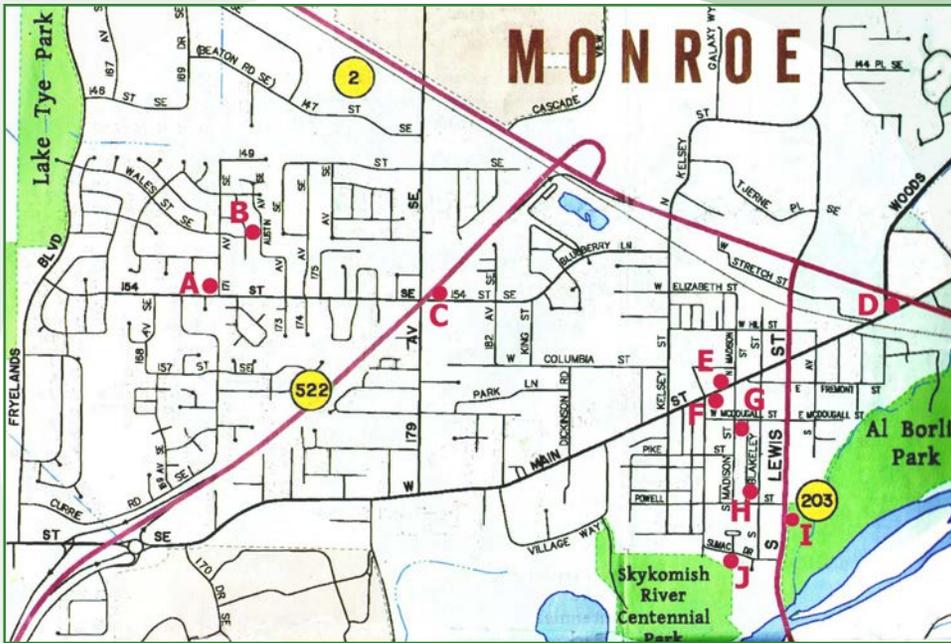
### TIME CONSTRAINTS

Goal to coincide announcement of new heritage trees with Arbor Day celebration, tentatively scheduled for April 24, 2020

### ALTERNATIVES

N/A

# Monroe's Heritage Trees



*Feel free to view the trees in any order.*

## **I: White Kousa Dogwood** **Lewis Street Park | 561 Lewis Street**

This Dogwood is "jaw-dropping" when in bloom and is important to the history of the Monroe Garden Club. Members planted the tree in 1958 to honor charter member Mabel Killien who passed away that year. It was a fitting choice as the Monroe Garden Club's signature flower is the Dogwood. Across the street from the park was the home of Park Board Member Lucille Streissguth. She had a hand in selecting the placement of the tree. Some say she had it planted where she could see it every time she opened her front door!



## **J: Magnolia** **230 Sumac Drive**

This magnificent 26-foot Magnolia tree is an evergreen, although it sheds leaves year-round. It is consistently in bloom and highly visible on Sumac Drive.



**The Heritage Tree program is sponsored by the City of Monroe, Monroe Parks Board and Monroe Historical Society.**  
*The acknowledgement is solely for recognition and does not attach additional preservation or retention requirements to the tree or property.*

**Monroe Parks and Recreation | 806 W. Main Street, Monroe, WA 98272 | 360-863-4557**  
**Monroe Historical Society | 207 E. Main Street, Monroe, WA 98272 | 360-217-7223**



**The Monroe Heritage Tree Program identifies and honors unique and significant trees in the community. Each year, nominations will be accepted and trees added to the register.**

*You may use this brochure to locate the 10 Heritage Trees nominated in 2018. Please be respectful to the homeowners when viewing the trees and do not touch them or walk into the yards.*

*Trees are nominated in the following categories:*

- Historic** – A tree recognized by virtue of its age, its association with or contribution to a historic structure, event, district or person.
- Specimen** – A tree of exceptional size, form or rarity.
- Landmark** – Trees that are community landmarks.
- Collection** – Several trees in a notable grove, avenue or other planting.

**A: Black Walnut**  
**17089 154th Street SE, Frylands**

This beautiful walnut tree is estimated to be more than 100 years old. It is the inspiration for the surrounding neighborhood name of Walnut Grove. Its owners purchased the house because they loved this incredible tree so much. The walnut was originally on land owned by John N.H. Heinz, Monroe's first mayor. Later, Mervin "Bud" Beavers had a ranch and farm on the land and raised hay and cattle there. Another old walnut tree is next door. Perhaps a homesteader planted them both in the late 1890s?



**B: White Ash Grove**  
**Austin Avenue**

These trees' vibrant, flaming autumn display is unmatched. This collection of Ash trees is among the first to turn color in the fall and they boldly announce the new season. The best color varieties are from the end of September to early October.



**C: Camperdown Elm**  
**17921 154th Street SE**

The Camperdown Elm was discovered about 1840 as a young contorted elm growing in the forest at Camperdown House, in Dundee, Scotland by the Earl of Camperdown's head forester, David Taylor. No one is sure how this unusual, 100-year-old tree ended up in Monroe, although according to nominator Andrew Martin, one also exists in nearby Carnation on the Morris Family Farm. Many years ago Shagmar Morris went to Scotland and brought Camperdown grafts back as gifts for his daughters. Moses Norris later moved from Carnation to Snohomish. Could there be a connection?



**D: Coastal Sequoia | Travelers Park**  
**SW intersection of Hwy 2 and Main Street**

This tree was planted and donated to the city by the Monroe Garden Club. According to club member Mildred Ness, the tree was decorated with lights by the garden club until it grew too tall to reach the branches. In 2017, the tree was once again used for a community tree lighting ceremony. With permanent lights installed in its branches, it will continue to be a gathering point for Monroe residents to celebrate the holidays.



**E: Horse Chestnut**  
**305 West Main**

Near the gateway to downtown Monroe, this beautiful tree was planted in 1940 by 6-year-old Grant Pfeiffer who lived at 305 West Main with his parents Dutch and Elfrieda. Dutch owned Pfeiffer's Service Station where Union Bank now stands, and his grandfather, Henry, owned a cigar store on Main Street. Henry moved to Monroe from Ontario. A handwritten nomination letter was sent in by Grant's wife Elaine.



**F: Port Orford Cedar**  
**322 West Main**

This large cypress is next to the cornerstone of the 1905 Monroe Church of the Nazarene. According to church records, the tree may have been planted in 1941 when a basement was dug and the building moved on top. The trunk splits in two at around 6 feet. It is native to Oregon and Northern California and is listed as a near-threatened tree. It is a beautiful anchor at the entrance of Monroe's downtown.



**G: Ginkgo**  
**302 South Blakeley**

This prehistoric tree species is known to live for 1,000 years. It is often called a living fossil. Its brilliant gold foliage attracts many admirers in the fall. It may have been planted by early Monroe Garden Club member Lucille Streissguth who owned the home at 302 South Blakeley in the 1920s and was known for her beautiful gardens. The Ginkgo's golden leaves are featured in a watercolor painting by local artist Joan Pinney.



**H: Catalpa Grove**  
**437 South Blakeley**

The catalpa is sometimes called the Indian bean tree for its production of a distinctive fruit that resembles long, thin bean pods that can grow up to two feet long. This house was originally owned by a supervisor at the Monroe reformatory. Although the house has been rebuilt after a fire, the stone fence and trees are original.



# Heritage Tree Nomination Form

Anyone may nominate a tree. The owner's approval is needed for Heritage Tree designation. To nominate a tree, fill out the following and return to the City of Monroe, 806 W. Main St., Monroe WA 98272.

Please print legibly:

Today's Date 10/7/19

Nominator's Name Monroe Middle School Cross Country Team  
Park Place Middle School  
 City Monroe State WA Zip 98272

Phone 360.348.1766 Email tamilkinney2@gmail.com

Tree Species/Common Name (if known) White Oak - Quercus alba  
*Use a separate page for each "single tree" or "grouping of trees".*

Location of the tree in the City of Monroe. Give the address or specific location (GPS coordinates) of nominated trees(s) 214 S. Blakeley street

Has the owner been contacted? Yes  No

Owner's Name Sherril Kottke

Address 214 S. Blakeley City Monroe State WA Zip 98272

Phone 360.932.2146 Email sherrilkottke@gmail.com

Thank you for your nomination. If your tree is selected you will be notified by postcard. Nominations are accepted year-round and trees are selected at the end of each year for recognition in April. It may be a year before your tree is reviewed.

**NOMINATING A TREE PROVIDES RECOGNITION OF A TREE'S INTRINSIC WORTH AND VALUE TO THE COMMUNITY**

*Trees that are selected as Heritage Trees are recognized during a ceremony each year in April to coincide with Earth Day and Arbor Day and are placed on a map of Heritage Trees in the City. The acknowledgement is solely for recognition and does not attach additional preservation or retention requirements to the tree or property.*



## Monroe

### Heritage Tree Program

The Heritage Tree Program recognizes and celebrates significant trees in the City of Monroe on either private property or public lands. Trees can be native or non-native species.

Ninety percent of the tree must be visible from a public right of way (ROW). The categories for Heritage Trees are:

**SPECIMEN:** A tree of exceptional size, form, or rarity.  
**HISTORIC:** A tree recognized by virtue of its age, its association with or contribution to a historic structure or district, or its association with a noted person or historic event.

**LANDMARK:** Trees that are community landmarks.  
**COLLECTION:** Several trees in a notable grove, avenue, or other planting.

**Monroe Heritage Tree Program**  
 City of Monroe  
 806 West Main Street  
 Monroe WA 98272



# Heritage Tree Criteria Form



Tree Species/Common Name:

Why is this tree special?  
*(Use extra sheet of paper if needed)*

Describe anything else we should know about the tree(s)

Indicate one: Individual tree  Group of trees

Location of the tree in the City of Monroe:

*(Give the address or specific location (GPS coordinates) of nominated trees(s))*

214 S. Blakely Street

Does the tree have an association with historical or community related events?  Planted @ a

historic home owned by a well-known doctor in 1903.

Do you believe the tree(s) is healthy and in overall good condition?  (Provide arborists report if available)

yes

Provide a picture or newspaper article, if available.

Is the tree a significantly large, old or rare specimen tree?  (Please describe)

Tree is @ least 100 yrs. old.

Does the tree have a special significance in the overall 'landscape' of the City (such as a highly visible tree at a community park or gateway)?

Highly visible on Blakely Street.

The tree is planted in the front yard of a home owned by two prominent Monroe doctors. Dr. Herman Stockwell may have built the house in ~~1890~~ and planted (1903) the tree. He responded to the bellington fire. A large disaster in 1910. The same year he bought Stephens Hospital across the street. He sold his practice and his home to Dr. Allison in 1923. Dr. Allison was the only medical doctor in Monroe during WWII.

~~Acacia~~  
"Hickory" ~~Acacia~~  
Oak, white  
This tree is the tallest oak species and can live to 500 years.

According to a founding historical member of the Monroe Historical Society, this tree was once thought to be the largest Elm west of the Mississippi River. An arborist once told the current owner it may be more than 200 years old.

Certification: I hereby state that I am the applicant listed and certify that all information contained and exhibits attached hereto is true and correct to the best of my knowledge and belief and is submitted for consideration by the City of Monroe.

Signature of Applicant:

*Jeanne Stearns* Nurse

Date: 10/17/19

Signature of Owner\*

*A. L. [Signature]*

Date: Oct 31, 19

(\*Owner signature required if different than the Applicant and if the tree(s) are located on private property)

Trees that are selected as Heritage Trees are recognized during a ceremony each year in April to coincide with Earth Day and Arbor Day and are placed on a map of Heritage Trees in the City. The acknowledgement is solely for recognition and does not attach additional preservation or retention requirements to the tree or property.



Scanned 11/18/19

# Heritage Tree Nomination Form

Anyone may nominate a tree. The owner's approval is needed for Heritage Tree designation. To nominate a tree, fill out the following and return to the City of Monroe, 806 W. Main St., Monroe WA 98272.

Please print legibly:

Today's Date 10/18/19  
Nominator's Name JANNA OTT  
Address 205 N MADISON ST City MONROE State WA Zip 98272  
Phone 425 891 7476 Email JANNAOTTPT@GMAIL.COM

Tree Species/Common Name (if known) ?  
*Use a separate page for each "single tree" or "grouping of trees".*

Location of the tree in the City of Monroe. Give the address or specific location (GPS coordinates) of nominated trees(s)

Has the owner been contacted? Yes          No

Owner's Name EVERGREEN HEALTH MONROE HOSPITAL  
Address 179th Street City Monroe State WA Zip 98272

Phone                                  Email                                 

Thank you for your nomination. If your tree is selected you will be notified by postcard. Nominations are accepted year-round and trees are selected at the end of each year for recognition in April. It may be a year before your tree is reviewed.

**NOMINATING A TREE  
PROVIDES RECOGNITION OF  
A TREE'S INTRINSIC WORTH AND VALUE TO THE COMMUNITY**

*Trees that are selected as Heritage Trees are recognized during a ceremony each year in April to coincide with Earth Day and Arbor Day and are placed on a map of Heritage Trees in the City. The acknowledgment is solely for recognition and does not attach additional preservation or retention requirements to the tree or property.*



## Monroe

### Heritage Tree Program

The Heritage Tree Program recognizes and celebrates significant trees in the City of Monroe on either private property or public lands. Trees can be native or non-native species.

Ninety percent of the tree must be visible from a public right of way (ROW). The categories for Heritage Trees are:  
SPECIMEN: A tree of exceptional size, form, or rarity.

HISTORIC: A tree recognized by virtue of its age, its association with or contribution to a historic structure or district, or its association with a noted person or historic event.

LANDMARK: Trees that are community landmarks.

COLLECTION: Several trees in a notable grove, avenue, or other planting.

**Monroe Heritage Tree Program**  
City of Monroe  
806 West Main Street  
Monroe WA 98272



# Heritage Tree Criteria Form



## Tree Species/Common Name:

Indicate one: Individual tree \_\_\_\_\_  
Group of trees   X  

Location of the tree in the City of Monroe:  
(Give the address or specific location (GPS coordinates) of nominated trees(s))

EHM PARKING LOT  
OUR COMMUNITY HOSPITAL

Does the tree have an association with historical or community related events?

Do you believe the tree(s) is healthy and in overall good condition? (Provide arborists report if available)  
YES

Provide a picture or newspaper article, if available.

Is the tree a significantly large, old or rare specimen tree? (Please describe)  
NO

Does the tree have a special significance in the overall "landscape" of the City (such as a highly visible tree at a community park or gateway)?

MANY PEOPLE UTILIZE THE HOSPITAL

Describe anything else we should know about the tree(s)

(Use extra sheet of paper if needed)

THESE TREES ARE INCREDIBLY BEAUTIFUL (IN ALL SEASONS), BUT PARTICULARLY THEIR RED LEAVES IN FALL. THEY WELCOME THE COMMUNITY TO OUR HEALTH CARE CENTER + ALWAYS MAKE ME SMILE AS A STAFF MEMBER WHO CROSSES THE PARKING LOT OFTEN! THEY BRING THE BEAUTY OF NATURE TO OUR FACILITY!

Certification: I hereby state that I am the applicant listed and certify that all information contained and exhibits attached hereto is true and correct to the best of my knowledge and belief and is submitted for consideration by the City of Monroe.

Signature of Applicant: Jennifer Olet

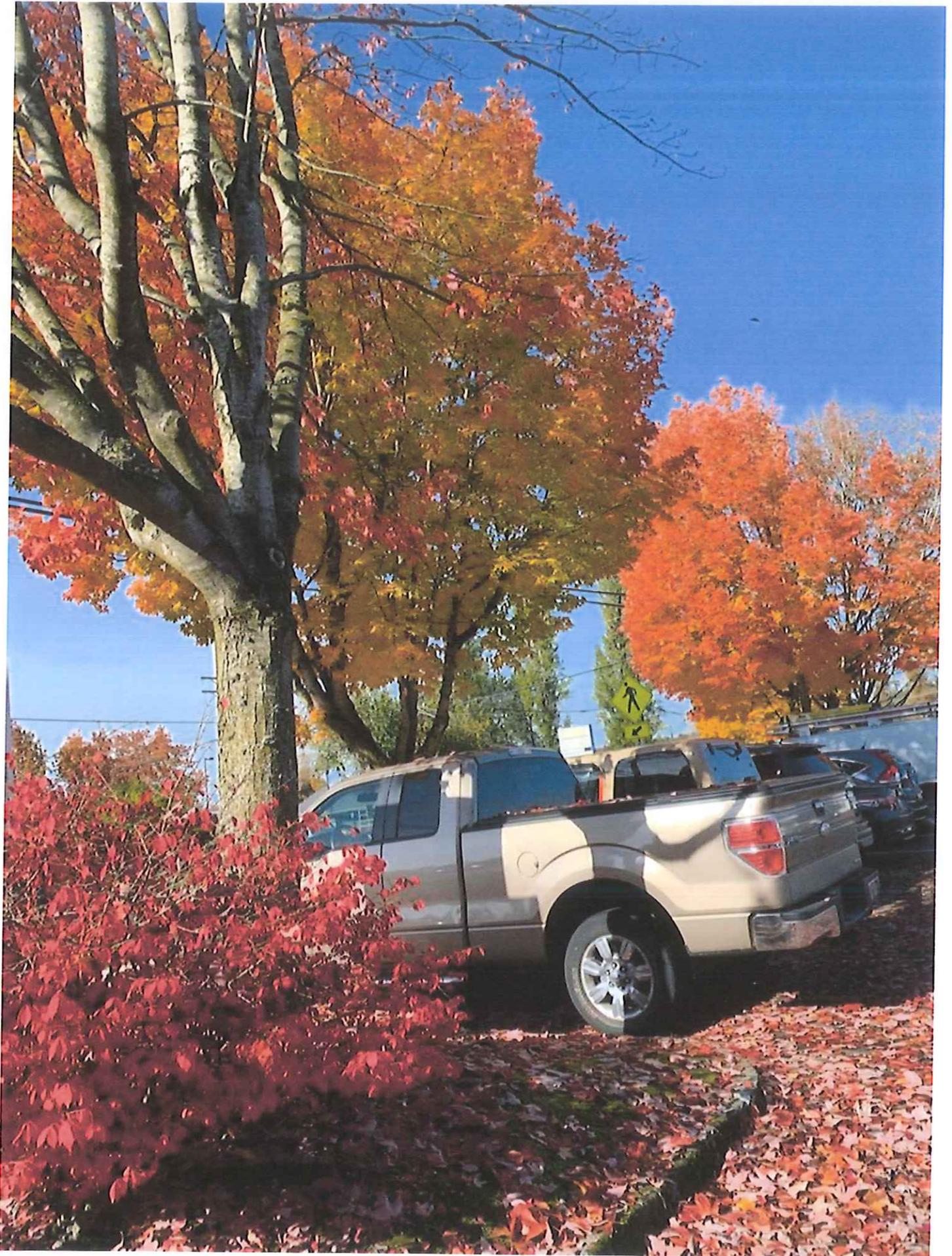
Date 10/18/19

Signature of Owner\* \_\_\_\_\_

Date \_\_\_\_\_

(\*Owner signature required if different than the Applicant and if the tree(s) are located on private property)

Trees that are selected as Heritage Trees are recognized during a ceremony each year in April to coincide with Earth Day and Arbor Day and are placed on a map of Heritage Trees in the City. The acknowledgment is solely for recognition and does not attach additional preservation or retention requirements to the tree or property.





# MONROE Park Board

## Agenda Bill No. 20-004

<b>SUBJECT:</b>	<b>2020 Park Bond Election</b>
-----------------	--------------------------------

<b>DATE:</b>	<b>DEPT:</b>	<b>CONTACT:</b>	<b>PRESENTER:</b>	<b>ITEM:</b>
2/20/2020	Parks	Denise Johns	Denise Johns	<b>New Business #3</b>

**Discussion:** -

- Attachments:**
1. Precinct Report
  2. 2020 Election Timeline
  3. Parks Recommended Project List
  4. Park Bond Ordinance

<b>REQUESTED ACTION:</b>	Motion to support 2020 Park Bond Election Ordinance
--------------------------	---

### DESCRIPTION/BACKGROUND

RCW 35A.40.090 and the City’s Debt Policy allows the City to requests its own park capital bond measure. Based on the returns from the November 5, 2019 election, it is recommended that the City place a bond measure request on the April 28, 2020 special election.

During 2019, the City assisted the East County Parks and Recreation District with a bond/excess levy request to help fund capital parks projects located within the District. Because the City is part of this District, the excess levy request included City of Monroe priority capital parks projects.

The Washington State constitution requires that excess tax levies (bond request) used to pay for capital projects must pass by a minimum of 60% (sixty percent). As illustrated in Attachment 1, the bond measure only passed by 56.79%, thus failed to meet the 60% threshold. However, within the City of Monroe precincts, the bond measure passed by 61.90%.

Upon consideration of the strong support for the measure within Monroe, the Monroe City Council passed an ordinance on February 11, 2020, providing for the submission of a bond measure to fund Monroe’s priority parks capital projects to City voters at a special election, April 28, 2020. If passed by voters, the proposition would authorize the City to issue general obligation bonds financing park and recreation acquisitions and improvements listed below, with a bond principal amount, not to exceed \$8,155,000.

### Park Recommended Projects

The City has identified four development projects to be bond funded:

1. **Lake Tye Park** – funding needed \$2,300,000
2. **Playground Equipment for:** Cedar Grove, Currie View, Hillcrest, Stanton Meadows, Wales Street, Rainier View, Blueberry, and Park Meadows Parks, funding needed \$2,000,000
3. **North Hill Park Acquisition, Design, and Development**, funding needed \$3,200,000
4. **Chain Lake Road Trail** between Rainier View and Brown Road, funding needed \$655,000



# MONROE Park Board

## Agenda Bill No. 20-004

### FISCAL IMPACTS

Staff has updated both the timing and the estimated costs associated with each project. Total authority being requested is \$8.155 million. Bonds would be issued in two installments, to be timed with when the identified projects are ready for development. Bonds can be issued this fiscal year, with first payments due in 2021, once the election is certified.

Conservative potential impacts to real property located within the City of Monroe are based on issuing 30 year bonds. The following table highlights specific year's impacts based on a \$8.155 million 30 year bond issued in two installments (2020 & 2023 issue years. The first three years would only collect for the first issuance of bonds, currently estimated at \$5.355 million. In fiscal year 2024, tax collection would include the entire bond amount (estimated at \$8,155 million). Impacts per property are estimated to be approximately \$0.15 per \$1,000 of assessed valuation the first year and would decrease steadily each year as new construction values continue to be added to the City of Monroe's overall assessment. ):

Year	Rate per \$1,000	Annual impact on \$300,000 home	Annual impact on \$500,000 home	Annual impact on \$600,000 home	Monthly impact on \$500,000 home
2021	\$0.14669	\$44.01	\$73.34	\$88.01	\$6.11
2024	\$0.13413	\$40.24	\$67.07	\$80.48	\$5.59
2053	\$0.05700	\$17.10	\$28.50	\$34.20	\$2.38

The East County Parks and Recreation Board (ECPRD) bond request had an estimated impact of \$0.16 per \$1,000 in the first year and a \$0.26 per \$1,000 at its highest point. Again, the proposed City of Monroe Parks Capital bond would have an estimated \$0.15 per \$1,000 impact in the first year and would steadily decrease in the remaining years.

Bond counsel and bond underwriting services would only attach if the bond measure is approved by voters and we issue the bonds. These costs would be incorporated into the bond issue and paid from bond proceeds. An additional \$6,000 may be spent on Strategies360 to assist with the educational efforts associated with this bond measure

### TIME CONSTRAINTS

In order to qualify for the April 28, 2020 special election, the City must present an approved ordinance to the County no later than February 28, 2020.

### ALTERNATIVES

N/A

Precinct Report  
 Snohomish County, 2019 General, Nov 05, 2019  
 All Precincts, All Districts, All ScanStations, All Contests, All Boxes  
 Official Precinct Results  
 Total Ballots Cast: 204160, Registered Voters: 475926, Overall Turnout: 42.90%  
 781 precincts reported out of 784 total

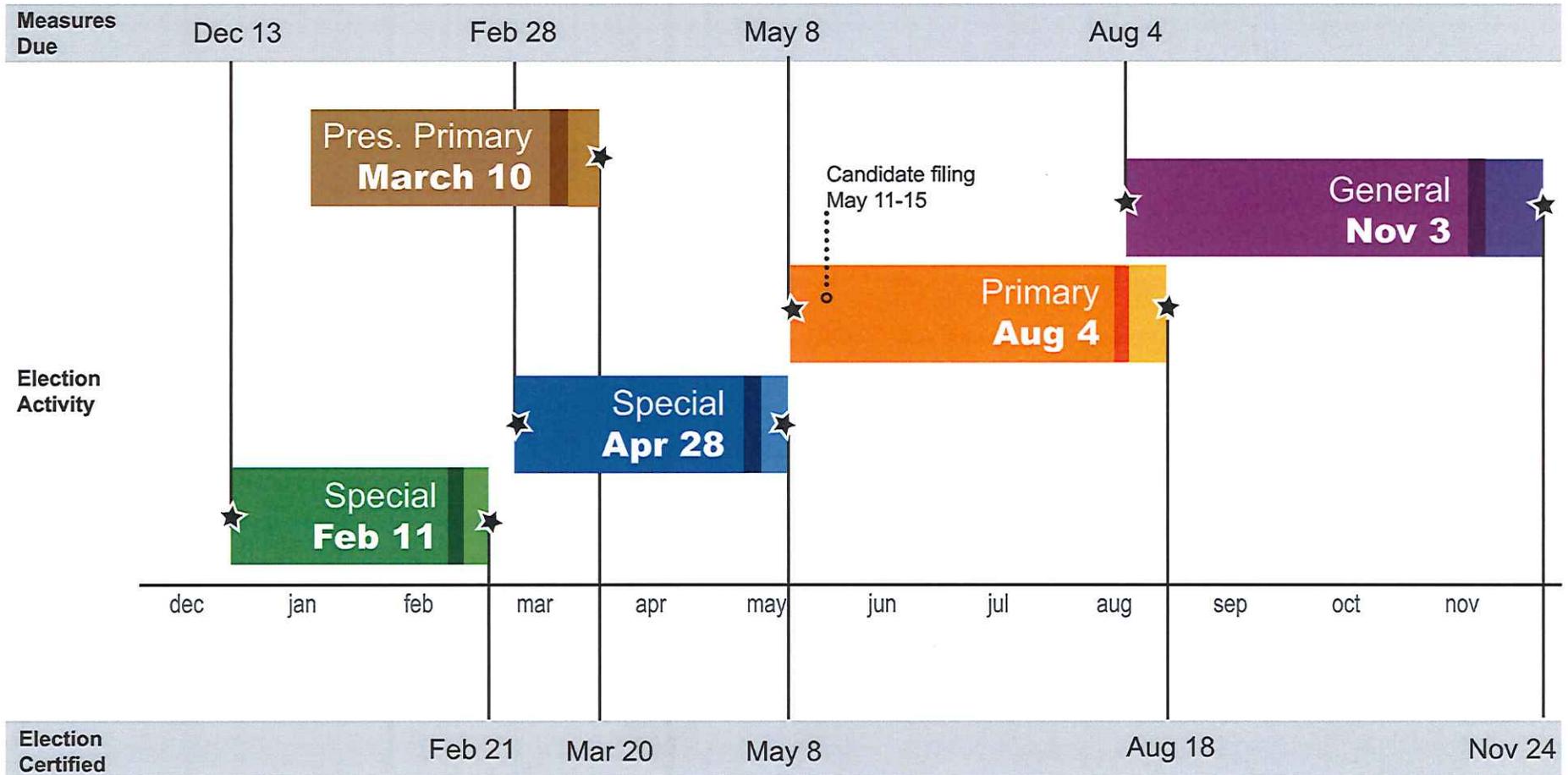
Page: 748 of 751  
 2019-11-26  
 09:20:18

**ECPRD Prop. 1 Bonds (Vote for 1)**

Precinct	Ballots Cast	Reg. Voters	Total Votes	Yes	No	Over Votes	Under Votes
Precinct BLUFF	313	632	306	185 60.46%	121 39.54%	0	7
Precinct BROCKLIN	329	689	311	148 47.59%	163 52.41%	0	18
Precinct CHAIN LAKE	442	900	429	248 57.81%	181 42.19%	0	13
Precinct CLEARVIEW	351	730	337	189 56.08%	148 43.92%	0	14
Precinct ECHO LAKE	396	810	375	187 49.87%	188 50.13%	0	21
Precinct FAIRVIEW	250	550	241	163 67.63%	78 32.37%	0	9
Precinct HIGH BRIDGE	429	850	404	204 50.50%	200 49.50%	0	25
Precinct HIGH ROCK	253	571	243	120 49.38%	123 50.62%	0	10
Precinct HIGHLAND	244	499	237	115 48.52%	122 51.48%	0	7
Precinct LOST LAKE	205	410	197	130 65.99%	67 34.01%	0	8
Precinct LUPINE	254	520	239	147 61.51%	92 38.49%	0	15
Precinct MALTBY	307	642	300	160 53.33%	140 46.67%	0	7
Precinct MONROE 1	344	842	338	214 63.31%	124 36.69%	0	6
Precinct MONROE 2	340	915	326	209 64.11%	117 35.89%	0	14
Precinct MONROE 3	251	841	241	139 57.68%	102 42.32%	0	10
Precinct MONROE 4	353	862	337	190 56.38%	147 43.62%	0	16
Precinct MONROE 5	372	884	359	226 62.95%	133 37.05%	0	13
Precinct MONROE 6	289	657	278	169 60.79%	109 39.21%	0	11
Precinct MONROE 7	318	716	300	162 54.00%	138 46.00%	0	18
Precinct MONROE 8	196	402	186	127 68.28%	59 31.72%	0	10
Precinct MONROE 9	435	993	418	278 66.51%	140 33.49%	0	17
Precinct MONROE 10	329	817	323	205 63.47%	118 36.53%	0	6
Precinct MONROE 11	102	229	99	54 54.55%	45 45.45%	0	3
Precinct MONROE 12	167	491	161	108 67.08%	53 32.92%	0	6
Precinct MONROE 13	81	245	78	51 65.38%	27 34.62%	0	3
Precinct OWEN	245	616	234	129 55.13%	105 44.87%	0	11
Precinct PARADISE	361	751	343	172 50.15%	171 49.85%	0	18
Precinct PARK PLACE	107	281	102	48 47.06%	54 52.94%	0	5
Precinct PIPELINE	295	632	289	149 51.56%	140 48.44%	0	6
Precinct POND	227	473	217	120 55.30%	97 44.70%	0	10
Precinct RICHLAND	128	286	123	65 52.85%	58 47.15%	0	5
Precinct SILER	183	384	178	98 55.06%	80 44.94%	0	5
Precinct SOFIE	157	363	151	90 59.60%	61 40.40%	0	6
Precinct TROMBLEY	252	593	238	130 54.62%	108 45.38%	0	14
Precinct TUALCO	278	563	266	140 52.63%	126 47.37%	0	12
Precinct TURNER	438	846	419	247 58.95%	172 41.05%	0	19
Precinct WAGNER	335	710	322	150 46.58%	172 53.42%	0	13
Precinct WELCH	344	690	329	167 50.76%	162 49.24%	0	15
Precinct WELLINGTON	8	22	8	6 75.00%	2 25.00%	0	0
<b>Total</b>	<b>10708</b>	<b>23907</b>	<b>10282</b>	<b>5839 56.79%</b>	<b>4443 43.21%</b>	<b>0</b>	<b>426</b>

2132 yes  
 3444 total > 61.90%

# 2020 Elections Timeline



New Business #2  
AB20-027

*Measures for special elections are due 60 days before an election day.  
Measures for the primaries are due by the Friday before candidate filing.  
Measures for general elections are due by the date of the primary.*

*Ballots are mailed 19 days before an election day.  
Military and overseas ballots are mailed 30 days before special election days  
and 45 days before primary and general election days.*

*Special elections are certified 10 days after an election day.  
Primaries are certified 14 days after an election day.  
General elections are certified 21 days after an election day.*



**Snohomish County Elections**  
A Division of the Auditor's Office

(425) 388-3444 • elections@snoco.org  
www.snoco.org/elections

MCC Agenda 2/11/20  
Page 5 of 21

Priority	Total Estimate	Dollars in-hand	Remaining Est. need	Shovel-ready (Y/N/WB)	2020-2022	2023-2025
1. Lake Tye Park athletic fields renovation	\$3,500,000	\$1,300,000	\$2,300,000	Yes	\$2,300,000	
2. Playground equipment renovations	\$2,000,000		\$2,000,000	Yes	\$1,000,000	\$1,000,000
3. North Hill Park acquisition, design/development	\$3,200,000		\$3,200,000	Will be	\$1,400,000	\$1,800,000
4. Chain Lake Rd. Trail development	\$2,500,000	\$1,845,000	\$655,000	Yes	\$655,000	
<b>Total</b>	<b>\$11,200,000</b>	<b>\$3,145,000</b>	<b>\$8,155,000</b>		<b>\$5,355,000</b>	<b>\$2,800,000</b>

#### City of Monroe Recommended Projects List

- **Lake Tye Park** athletic fields renovation - \$2,300,000. Convert un-lighted, poor-draining grass fields to all-weather, lighted, synthetic turf, multi-purpose athletic fields that increase capacity and improve the use experience.
- Replace and upgrade playground equipment at 8 remaining City parks - **Cedar Grove, Currie View, Hillcrest, Stanton Meadows, Wales Street, Rainier View, Blueberry, Park Meadows** - utilizing features and materials similar to recent upgrades to Lake Tye & Sky River Parks - \$2,000,000
- **North Hill Park** acquisition, design & development - \$3,200,000. Priority project from Parks 6-year CIP. Would become new city park serving North Hill area residents.
- Develop **Chain Lake Road Trail** (between Rainier View Park and Brown Road) - \$655,000. Priority pedestrian project from 6-year TIP. Will extend existing southerly segment to connect new residential developments in north area of City to central commercial core services.

**CITY OF MONROE**  
**ORDINANCE NO. \_\_\_\_\_**

AN ORDINANCE OF THE CITY OF MONROE, WASHINGTON, PROVIDING FOR THE SUBMISSION TO THE VOTERS OF THE CITY AT A SPECIAL ELECTION TO BE HELD ON APRIL 28, 2020, OF A PROPOSITION AUTHORIZING THE CITY TO ISSUE ITS GENERAL OBLIGATION BONDS FOR THE PURPOSE OF FINANCING PARK AND RECREATION ACQUISITIONS AND IMPROVEMENTS, IN THE PRINCIPLE AMOUNT OF NOT TO EXCEED \$8,155,000, PAYABLE BY ANNUAL PROPERTY TAX LEVIES TO BE MADE IN EXCESS OF REGULAR PROPERTY TAX LEVIES, AND TO LEVY THOSE EXCESS PROPERTY TAXES.

---

WHEREAS, the City Council of the City of Monroe, Washington (the "City"), has determined that it is in the best interest of the City to undertake park and recreation acquisitions and improvements (the "Projects") to be located within the City; and

WHEREAS, the City Council wishes to seek voter approval for the issuance and sale of not to exceed \$8,155,000 of general obligation bonds of the City to pay the costs of the Projects and the costs of issuance of such bonds, to be repaid by an annual excess property tax levy; and

WHEREAS, the constitution and laws of the State of Washington provide that the question of whether or not the City may issue such bonds be submitted to the qualified electors of the City for their ratification or rejection at an election;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MONROE, WASHINGTON, DOES ORDAIN AS FOLLOWS:

**Section 1. Projects.** The City Council finds that in order to provide park and recreation opportunities for its citizens, it is in the best interest of the City to undertake the following Projects:

- Lake Tye Park athletic fields renovation - convert unlighted, poor draining grass fields to all-weather, lighted, synthetic turf, multi-purpose athletic fields that increase capacity and improve the use experience.
- Replace and upgrade playground equipment at 8 remaining City parks – Cedar Grove, Currie View, Hillcrest, Stanton Meadows, Wales Street, Rainier View, Blueberry, Park Meadows – utilizing features and materials similar to recent upgrades to Lake Tye & Sky River Parks.

- North Hill Park acquisition, design & development to serve the North Hill area residents.
- Develop Chain Lake Road Trail (between Rainier View Park and Brown Road) – extend existing southerly segment to connect new residential developments in north area of City to central commercial core services.

The Projects shall include all necessary equipment, supplies, and appurtenances. The cost of all necessary architectural, engineering, legal and other consulting services, inspection and testing, administrative expenses, site acquisition or improvement, demolition, site utilities, related improvements and other costs incurred in connection with the Projects shall be deemed a part of the costs of such capital improvements.

The estimated cost of the Projects, including the costs of issuing and selling the bonds authorized by this ordinance, is declared to be approximately \$11,200,000.

The City Council may modify the details of the foregoing Projects where necessary or advisable in the judgment of the City Council.

**Section 2. Description of Proposed Bonds.** The Bonds may be issued as a single issue, as a part of a combined issue with other authorized bonds, or in more than one series, as deemed advisable by the City Council and as permitted by law. The Bonds shall be fully registered bonds; shall bear interest payable as permitted by law; shall mature within 31 years from the date of issue, or within any shorter period fixed by the City Council; shall be paid by annual property tax levies sufficient in amount to pay both principal and interest when due, which annual property tax levies shall be made in excess of regular property tax levies without limitation as to rate or amount but only in amounts sufficient to meet such payments of principal and interest as they come due; and shall be issued and sold in such manner, at such times and in such amounts as shall be required for the purpose for which such Bonds are to be issued. The exact date, number of series, form, terms, option of prior redemption, price, interest rate or rates and maturities of the Bonds shall be hereafter fixed by ordinance of the City Council. Pending the issuance of the Bonds, the City may issue short-term obligations pursuant to chapter 39.50 RCW or such other obligations as are permitted by law to pay for the costs of the Projects. Such obligations and their costs may be paid or refunded with proceeds of the Bonds when issued.

**Section 3. Proceeds of the Bonds.** If available money from the proceeds of the Bonds is more than sufficient to pay the costs of the Projects, or if state or local circumstances require any alteration in the Projects, the City may acquire, construct, equip and make other park and recreation related capital improvements, or retire and/or defease a portion of the Bonds, all as the City Council may determine and as permitted by law. If the proceeds of the sale of the Bonds and other available money are insufficient to make all of the capital improvements herein provided for, or if it has become impractical to accomplish the Projects or portions of the Projects, the City may use the proceeds of the Bonds and other available money for paying the costs of those portions of the Projects deemed by the City Council to be most necessary and in the best interest of the City.

**Section 4. Calling of Election.** The City Council requests that the Auditor of Snohomish County, Washington (the "Auditor") call and conduct a special election in the City, in the manner provided by law, to be held therein on April 28, 2020, for the purpose of submitting to the voters of the City, for their approval or rejection, the question of whether or not general obligation bonds of the City shall be issued in the principal amount of not more than \$8,155,000 (or such lesser maximum amount as may be legally issued under the laws governing the limitation of indebtedness), the proceeds of which shall be expended to pay the costs of the Projects, and annual excess property taxes shall be levied to pay and retire the Bonds.

If such proposition is approved by the requisite number of voters, the City shall be authorized to issue the Bonds in the manner described in this ordinance, to spend the proceeds thereof to pay the costs of the Projects, and to levy excess property taxes to pay and retire such Bonds. The proceeds of the Bonds shall be used for capital purposes only and not for the replacement of equipment.

**Section 5. Ballot Proposition.** The City Clerk is authorized and directed to certify, no later than February 28, 2020 to the Auditor, as *ex officio* supervisor of elections in the City, a copy of this ordinance and the proposition to be submitted at that election in the form of the following ballot title, as follows:

PROPOSITION NO. \_\_\_\_

CITY OF MONROE  
PARK AND RECREATION BONDS

The City Council of the City of Monroe adopted Ordinance \_\_\_\_\_ concerning a proposition for financing park and recreation acquisitions and improvements. If approved, this proposition authorizes the City to issue bonds to finance or reimburse costs of renovating Lake Tye Park athletic fields, improve playground equipment at 8 parks, develop Chain Lake Road Trail and acquire and develop North Hill Park. It authorizes the issuance of not more than \$8,155,000 of general obligation bonds maturing within 31 years, and authorizes the annual levy of excess property taxes to pay such bonds, as provided in Ordinance \_\_\_\_\_. Should this proposition be approved?

YES.....   
NO.....

For purposes of receiving notice of any matters related to the ballot title, as provided in RCW 29A.36.080, the City Council hereby designates its bond counsel, Foster Garvey P.C. (Nancy Neraas, 206-447-6277, Nancy.neraas@foster.com), as the person to whom such notice shall be provided.

**Section 6. Authorization of Local Voters' Pamphlet.** The City Council authorizes the Finance Director to elect to prepare and distribute a local voters' pamphlet, including an explanatory statement and statements in favor of and in opposition to the ballot measure, if any. The preparation of explanatory statement, the appointment of pro/con committees and the preparation of statements in favor or and in opposition to the ballot title shall be in accordance with chapter 29A.32 RCW and the rules and guidelines of the Auditor, and the City authorizes the Finance Director to take such actions as may be necessary on behalf of the City to carry out the foregoing.

**Section 7. General Authorization.** The proper City officials are authorized to perform such duties as are necessary or required by law to the end that the question of whether or not Bonds shall be issued and excess taxes necessary to pay and retire the Bonds be levied, all as provided in this ordinance, shall be submitted to the voters of the City at the April 28, 2020 general election.

**Section 8. Intent to Reimburse.** The City Council declares that to the extent that the City makes capital expenditures for the Projects, prior to the date the Bonds or other short-term obligations are issued to finance the Projects, those capital expenditures are intended to be reimbursed out of proceeds of the Bonds or other short-term obligations issued in an amount not to exceed the principal amount of the Bonds provided by this ordinance.

**Section 9. Severability.** If any provision of this ordinance is declared by any court of competent jurisdiction to be invalid, then such provision shall be null and void and shall be severable from the remaining provisions of this ordinance, and shall in no way affect the validity of the other provisions of this ordinance or of any other ordinance or resolution or of the Bonds.

**Section 10. Publication and Effective Date.** This ordinance or a summary thereof consisting of the title shall be published in the official newspaper of the City, and shall take effect and be in full force five days after publication.

**Section 11. Ratification of Prior Acts.** Any action taken consistent with the authority of this ordinance, after its passage but prior to the effective date, is ratified, approved, and confirmed.

PASSED by the City Council and APPROVED by the Mayor of the City of Monroe, Washington, at an open public meeting thereof, this \_\_\_\_\_ day of February, 2020.

---

Mayor

ATTEST:

---

City Clerk

APPROVED AS TO FORM:

---

Bond Counsel

**CERTIFICATION**

I, the undersigned, City Clerk of the City of Monroe, Washington (the "City"), hereby certify as follows:

1. The attached copy of Ordinance No. \_\_\_\_\_ (the "Ordinance") is a full, true and correct copy of an ordinance duly passed at a regular meeting of the City Council of the City held at the regular meeting place thereof on February \_\_, 2020, as that ordinance appears on the minute book of the City.

2. The Ordinance will be in full force and effect five days after publication of a summary of the Ordinance in the City's official newspaper, which publication date is \_\_\_\_\_, 2020.

3. A quorum of the members of the City Council was present throughout the meeting and a majority of the members voted in the proper manner for the passage of the Ordinance.

Dated: \_\_\_\_\_, 2020.

CITY OF MONROE, WASHINGTON

\_\_\_\_\_  
City Clerk



City of Monroe, Washington  
Parks & Recreation Department

January, 2020

---

## Mission

**Protect and enhance the natural beauty of Monroe through the development of a vibrant system of parks, open space and trails. Provide citizens of all age's positive recreational opportunities in clean, safe and accessible recreation facilities. Enhance health, quality living and the natural environment for future generations.**

---

## Department Update

### Operations

Parks and Recreation Department team members have been busy this winter with daily recreation use of our park's facilities and athletic fields, as well as scheduled maintenance, park improvements such as landscape winterization and repair work on facilities, equipment and landscaped areas.

The Department was also busy during our January snow storm. They worked hard to keep our paths around City Hall clean and safe. They also worked with cleaning up trees and limbs that fell from the weight of the snow in our parks.



Another January task consisted of removing the overgrown Japanese Birch Trees from the Main Street pots and replanting them. 10 of the Birch trees were planted on the east side of Lake Tye while 1 was planted at the 522 roundabout. The 11 new trees that will replace them are Coral Bark Maples. They were donated by Plants Northwest, Inc. out of Redmond and Samantha Idle with the Downtown Monroe Association helped procure them.

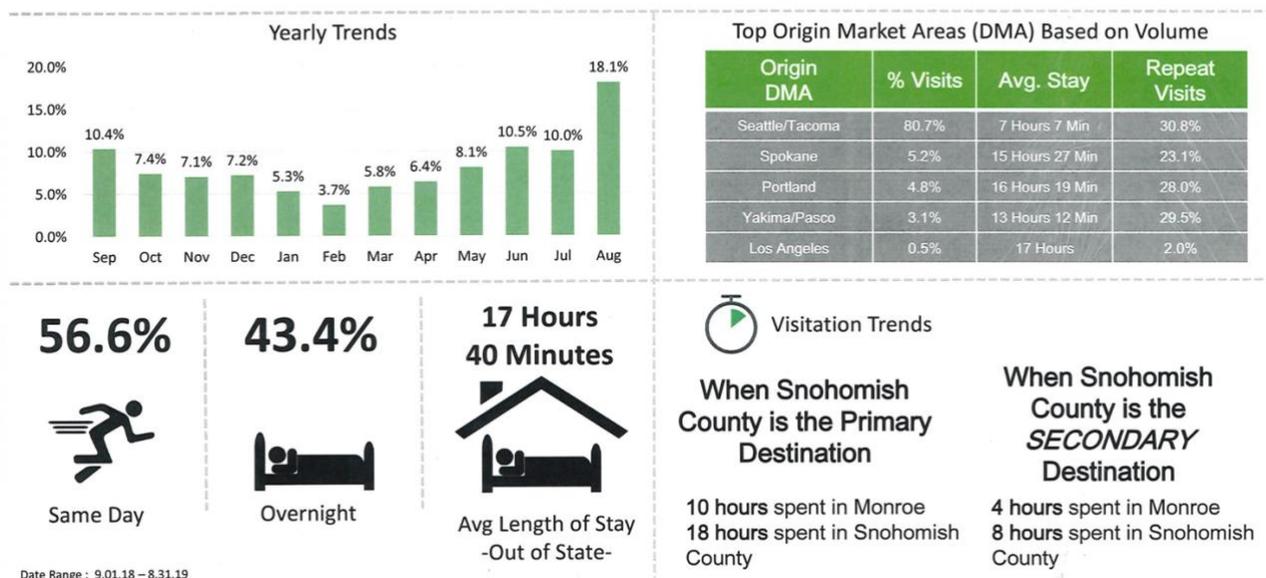


Parks and Recreation members work on planting the new trees in the Main Street pots and transplanting the grown trees at Lake Tye.

### Monroe Park Board

During their January meeting, the Monroe Park Board reviewed 'Arrivalist' data compiled by County of Snohomish Tourism, Bureau presented by City Administrator, Deborah Knight. Discussion followed about how the information could be used, the need for city wide music/arts events, and examples of successful city-sponsored venues. The Board also discussed possible improvements for Currie View Neighborhood Park.

## Monroe Yearly Visitor Profile – Sep 2018-Aug 2019



## Park Planning

The City's landscape architectural consultant, DA Hogan & Associates worked with staff to complete their permitting requirements for the Lake Tye All –Weather Turf Project. Although complete funding for this project has yet to be identified, staff and consultant are completing the development construction plans for a 'shovel-ready' project.

The City's Park Director, Mike Farrell, attended, Mayor Geoffrey Thomas, Councilmember Heather Rousey along with other City staff attended, Advocacy Day, January 23. It was an opportunity to lobby our legislators and have an impact on policy and budget legislation.

---

## Living Christmas Tree Donation

Monroe residents' Amy Martin and Ian Fairweather donated their 7' Douglas Fir Living Christmas tree to Monroe's Parks Department to be planted in a City Park. Their donated tree has been planted at the north end of Lake Tye.



Photo of planted living Christmas tree at the north end of Lake Tye.

---

## Park Flooding

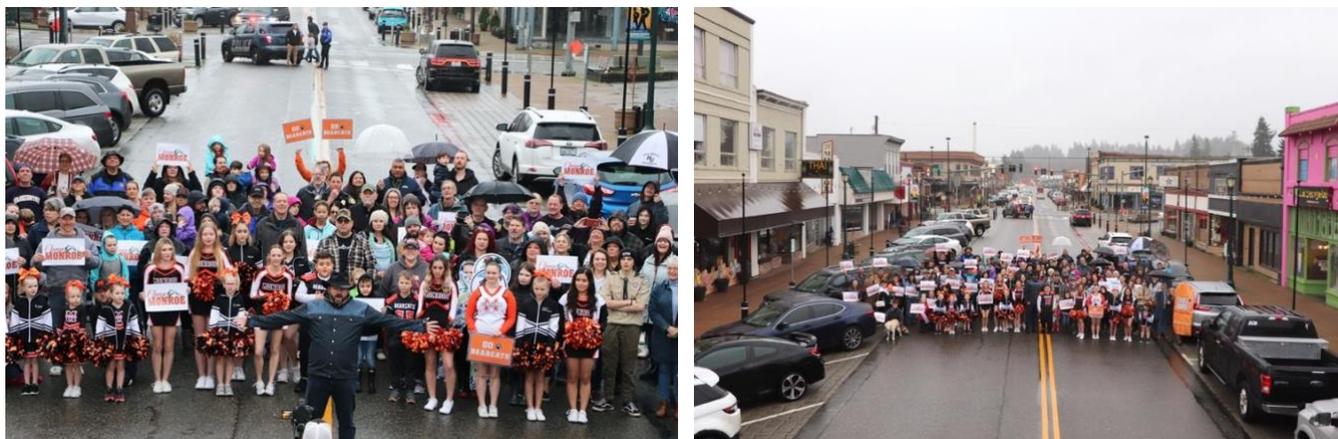
With the amount of rain, we've received the past few weeks our parks experienced significant flooding and closures in January. Al Borlin, Lewis Street and Skykomish River Park were affected. Our Parks and Recreation Department team members worked quickly once the water resided to clean the Skykomish River Park playground from debris.



Left photo: Skykomish River Park Flooding. Right Photo: Lewis Street Park pedestrian bridge walkway.

## HGTV Photo Shoot

The City is submitted a video to HGTV for a chance to be featured on their new show, Home Town Takeover; the network's biggest renovation project ever. Our video submission will be focused on historic downtown and the gateway entrances to the area. The video ended with a photo and live video of Mayor Geoffrey Thomas and a large group of community members. You can see the City's video submission on our Facebook page, through last week's Monroe This Week or on our YouTube Channel at [Monroewaparksrec](https://www.youtube.com/channel/UCqKwvXpYpYpYpYpYpYpYpYp).



Mayor Geoffrey Thomas and members of our community gather for the HGTV Photo Shoot.

## Jayme Biendl 5k Run/Walk

The 9th Annual Jayme Biendl Memorial 5k Run/Walk was a success. There were 309 total registrations. All proceeds from the event are donated to Behind the Badge Foundation at the request of Officer Biendl's family.



Left Photo: The start of the race. Right Photo: Participants look on as Jayme Biendl's father says a few words.

### City Parks Unmarked Trails Inspections

In 2017, a weekly maintenance monitoring emphasis by park staff was initiated on unmarked trails at Al Borlin and Sky River Parks to identify and resolve, in cooperation with our Police Department, any unlawful encampments that may occur in City parks. Attached is the comprehensive data from 2017 to preview. The following is a summary of data for the past month:

#### Locations: Al Borlin Park, Sky River Park

DATE	TOTAL LABOR HOURS	# BAGS OF LITTER COLLECTED	NOTES
1/20	10	4	
1/28	7.5	7	
Avg.	8.75	5.5	
			See attached Parks Homeless Response Data 2017- 2019

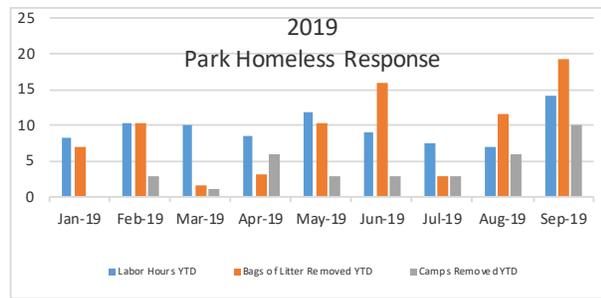
**Volunteer Opportunities** Join the City of Monroe team by volunteering your talent and time to support City programs, projects and events. Volunteering is an opportunity to learn about Monroe’s diverse community, understand how local government works and connect with other community members. The City offers on-going and one-time event volunteer opportunities. If you are interested in volunteering, or seeking additional information, please contact Katie Darrow at (360) 863-4519.

Visit the City website [www.monroewa.gov](http://www.monroewa.gov) for information on upcoming programs and events.

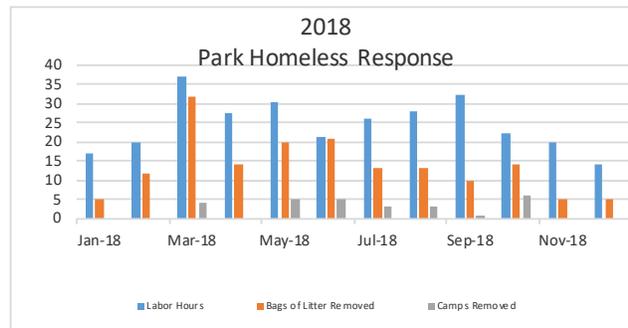
**2017-2020  
Park Homelessness Response**

	<b>Labor Hours YTD</b>	<b>Bags of Litter Removed YTD</b>	<b>Camps Removed YTD</b>
Jan-20	8.75	5.5	0
Feb-20			
Mar-20			
Apr-20			
May-20			
Jun-20			
Jul-20			
Aug-20			
Sep-20			
Oct-20			
Nov-20			
Dec-20			
<b>Total 2020</b>	<b>8.75</b>	<b>5.5</b>	<b>0</b>

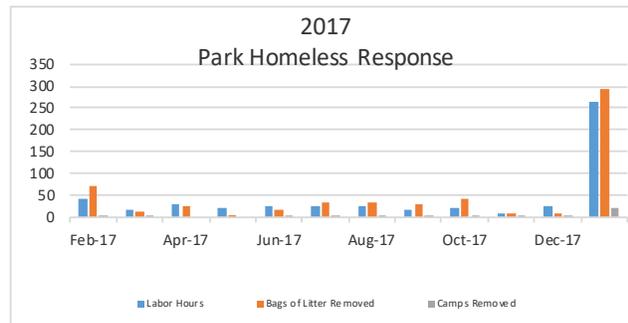
	<b>Labor Hours YTD</b>	<b>Bags of Litter Removed YTD</b>	<b>Camps Removed YTD</b>
Jan-19	8.3	7	
Feb-19	10.2	10.3	3
Mar-19	10	1.5	1
Apr-19	8.5	3.25	6
May-19	11.9	10.25	3
Jun-19	9	16	3
Jul-19	7.5	3	3
Aug-19	6.9	11.5	6
Sep-19	14.25	19.25	10
Oct-19	7.3	19.4	6
Nov-19	7.5	0.875	4
Dec-19	7.3	1.2	3
<b>Total 2019</b>	<b>108.65</b>	<b>103.525</b>	<b>48</b>



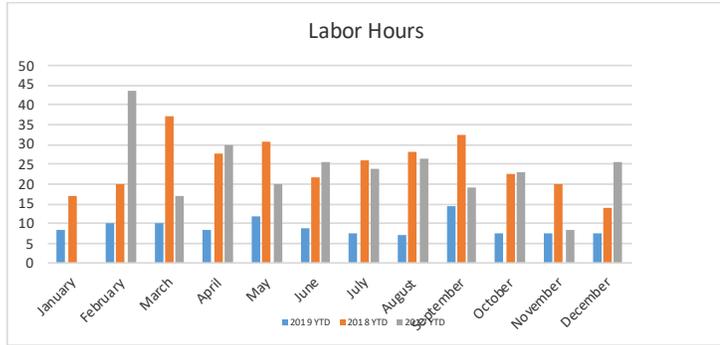
	<b>Labor Hours</b>	<b>Bags of Litter Removed</b>	<b>Camps Removed</b>
Jan-18	17	5	0
Feb-18	20	12	0
Mar-18	37	32	4
Apr-18	27.5	14	0
May-18	30.5	20	5
Jun-18	21.5	21	5
Jul-18	26	13	3
Aug-18	28	13	3
Sep-18	32.5	10	1
Oct-18	22.5	14	6
Nov-18	20	5	0
Dec-18	14	5	0
<b>Total 2018</b>	<b>296.5</b>	<b>164</b>	<b>27</b>



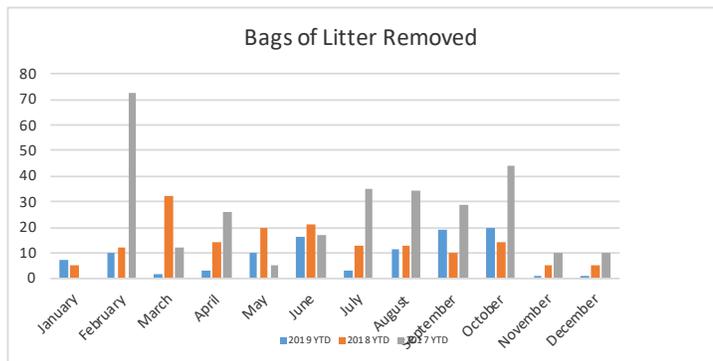
	<b>Labor Hours</b>	<b>Bags of Litter Removed</b>	<b>Camps Removed</b>
Feb-17	43.5	72.5	4
Mar-17	17	12	3
Apr-17	30	26	0
May-17	20	5	0
Jun-17	25.5	17	2
Jul-17	24	35	3
Aug-17	26.5	34	3
Sep-17	19	29	2
Oct-17	23	44	1
Nov-17	8.5	10	3
Dec-17	25.5	10	1
<b>Total 2017</b>	<b>262.5</b>	<b>294.5</b>	<b>22</b>



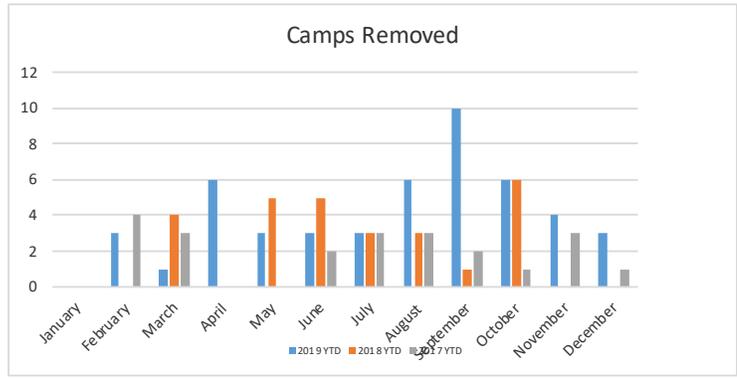
Labor Hours	2020 YTD	2019 YTD	2018 YTD	2017 YTD
January	8.75	8.3	17	0
February		10.2	20	43.5
March		10	37	17
April		8.5	27.5	30
May		11.9	30.5	20
June		9	21.5	25.5
July		7.5	26	24
August		6.9	28	26.5
September	14.25	32.5	19	19
October	7.3	22.5	23	23
November	7.5	20	8.5	8.5
December	7.3	14	25.5	25.5



Bags of Litter Removed	2020 YTD	2019 YTD	2018 YTD	2017 YTD
January	5.5	7	5	0
February		10.3	12	72.5
March		1.5	32	12
April		3.25	14	26
May		10.25	20	5
June		16	21	17
July		3	13	35
August		11.5	13	34
September		19.25	10	29
October		19.4	14	44
November		0.875	5	10
December		1.2	5	10



Camps Removed	2020 YTD	2019 YTD	2018 YTD	2017 YTD
January	0		0	0
February		3	0	4
March		1	4	3
April		6	0	0
May		3	5	0
June		3	5	2
July		3	3	3
August		6	3	3
September		10	1	2
October		6	6	1
November		4	0	3
December		3	0	1





# MONROE PARK BOARD

## *Agenda Bill No. 20-005*

<b>SUBJECT:</b>	<i>Park Review – Hillcrest Park</i>
-----------------	-------------------------------------

<b>DATE:</b>	<b>DEPT:</b>	<b>CONTACT:</b>	<b>PRESENTER:</b>	<b>ITEM:</b>
2/20/2020	Parks & Recreation	Denise Johns	Denise Johns	<b>Staff Report 2</b>

**Discussion:**

**Attachments:** 1. Park Plan Snapshot – Currie View Park

<b>REQUESTED ACTION:</b> For Information
--

**DESCRIPTION/BACKGROUND**

Snapshot of park from the City's 2015 Park Recreation and Open Space Plan describes location, size, classification of park; its existing amenities and proposed improvements per the 20-year plan cycle. Improvements identified in the City's PROS Plan include: Playground equipment, picnic shelter, basketball court, and parking area. Proposed improvements: Playground equipment renovation

**FISCAL IMPACTS**

PROS Plan estimated annual maintenance cost: \$20,000

**TIME CONSTRAINTS**

The PROS Plan is regularly updated every 6 years, including extensive public input on park and recreational needs and improvement projects. The next update is scheduled to commence this year (2020).

**ALTERNATIVES - N/A**

## Monroe Parks, Recreation, and Open Space Plan

# Hillcrest Park

Address:	14175 Country Crescent Road
Size:	1.50 acres
Zoning:	Residential 4 Dwellings per Acre
Park Classification:	Neighborhood Park
Existing Facilities:	Playground equipment, picnic shelter, basketball court, and parking area
Proposed Improvements:	Playground equipment renovation
Estimated Improvement Costs:	\$ 144,000
Maintenance Level:	I
Annual Maintenance Cost:	\$ 20,000

