

# Adair Village Trails Plan

February 2023

## Appendix A to the Adair Village Transportation System Plan



### Prepared by:

The Corvallis Area Metropolitan  
Planning Organization (CAMPO)  
on behalf of the City of Adair Village



## Adopting Ordinance

The Adair Village City Council adopted this plan at their February 7, 2023 meeting as ordinance #2023-02. The Public Hearing occurred March 7, 2023 and this plan is effective upon April 7, 2023.

# Acknowledgements

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## About CAMPO

The Corvallis Area Metropolitan Planning Organization (CAMPO) serves as the metropolitan planning organization for the Corvallis Urbanized Area, as designated by the Oregon Governor in December 2002. CAMPO is comprised of the Cities of Adair Village, Corvallis, Philomath, parts of Benton County, and the Oregon Department of Transportation (ODOT). CAMPO is governed by a five-member Policy Board consisting of elected representatives from each city or county, as well as a staff person from ODOT. The Oregon Cascades West Council of Governments (OCWCOG), under a contract with the CAMPO Policy Board, provides administrative services and staffing to CAMPO.

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# Chapter 1: Project Purpose and Background

## Project Purpose and Background

As Adair Village grows, the need for improved community connectivity, including safe and comfortable bicycle and pedestrian connections, becomes increasingly important. With anticipated development of an expanded downtown and outstanding natural resources close by Adair Village is uniquely positioned as a balanced and livable community. Nevertheless, key gaps in the local network of multi-use paths and walking trails remain as barriers to safety and comfort.

The Adair Village Trails Plan serves as a blueprint for creating an accessible, all-ages and abilities network of paved multi-use paths, walking trails, and separated bike lanes throughout the community. This document provides details on future trail improvements as a means to help prioritize local investment in Adair Village's multi-modal network of trails. The Adair Village Trails Plan draws on work completed as part of the 2017 Adair Village Transportation System Plan (TSP) to provide a definitive vision for a far-reaching multi-modal network that is safe and comfortable for all users. This Plan is integrated into the Adair Village TSP as an adopted appendix.

## Community Context

In 1976, the City of Adair Village was incorporated at a location rich in military history. It occupies acreage that once supported two military bases. During World War II the United States Army constructed 1,700 buildings including barracks, machine shops, stores, dining halls, theaters, post office, hospitals, and chapels. Eventually, after the war ended, the military vacated these locations leaving a legacy and some remaining infrastructure behind.

Over the past two decades Adair Village has experienced steady population growth. Between 2000 and 2017 Adair Village grew by 73%, more than four times the rate of growth for Benton County. In 2000, Adair Village was home to 536 residents. By 2017 that number had grown to 928 residents, and with additional development currently underway, Adair Village is expected to grow to over 2,000 residents by 2040.<sup>1</sup> Future growth will result in demand for improved connections to regional employment areas, commercial centers, schools, services, and recreation opportunities.

The City of Adair Village is centrally located in the Mid-Willamette Valley on the east side of Highway 99W approximately seven miles north of Corvallis city limits. Adair Village is largely a bedroom community with many residents commuting to work at major job centers in Corvallis, Monmouth, Albany, and Independence. Adair Village is uniquely surrounded by publicly accessible natural areas with diverse habitats and numerous recreation opportunities. The largest natural areas include:

### **McDonald and Dunn Forests**

The McDonald and Dunn Forests, owned and managed by Oregon State University are located directly to the west of Adair Village. The forests boast oak woodlands, forest plantations, riparian areas, and old growth reserves accessible to the general public. The forests are a living laboratory actively managed by the OSU College of Forestry offering extensive recreation opportunities including 26 miles of well-maintained trails and more than 100 miles of forest roads.

While the McDonald and Dunn forests are in close proximity to Adair Village, Highway 99W represents a major barrier to community members accessing them using non-motorized modes of

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<sup>1</sup> 2017 Adair Village Transportation System Plan

travel. High volumes and high-speed vehicles along Highway 99W create a major safety risk to community members seeking to recreate in this beautiful natural area. The Calloway Creek Trailhead is located on Highway 99W directly adjacent to Adair Village and serves as a natural location for improved connections into the Adair community. Enhanced crossings including a signal for people walking and riding bikes, a pedestrian bridge or other connection should be considered.

### **EE Wilson Wildlife Area**

North of Adair Village City limits is the EE Wilson Wildlife Area which was the primary site of the area's World War II military bases. The EE Wilson Wildlife Area is managed by the Oregon Department of Fish and Wildlife (ODFW) and offers miles of roadways stretching into what has become a dynamic and diverse natural area. Many of the roadways inside the Wildlife Area are narrow giving visitors the opportunity to observe a variety of habitats. This area is frequented by nature photographers, equestrians, bird watchers, and fishermen. Hunting is another popular activity at the EE Wilson Wildlife Area.

### **Adair County Park**

Adair County Park sits directly adjacent to Adair Village and serves as much of the community's eastern boundary. Adair County Park offers spacious fields of grass and open areas popular for large groups and parties. The park can accommodate groups of up to 800 people for picnics or barbecues. Adair County Park has two softball fields, two volleyball courts, a playground and an expansive 18-hole disc golf course. A kitchen area and covered seating offers a sink, an electric cooktop stove, electrical outlets and counter space for serving large meals.

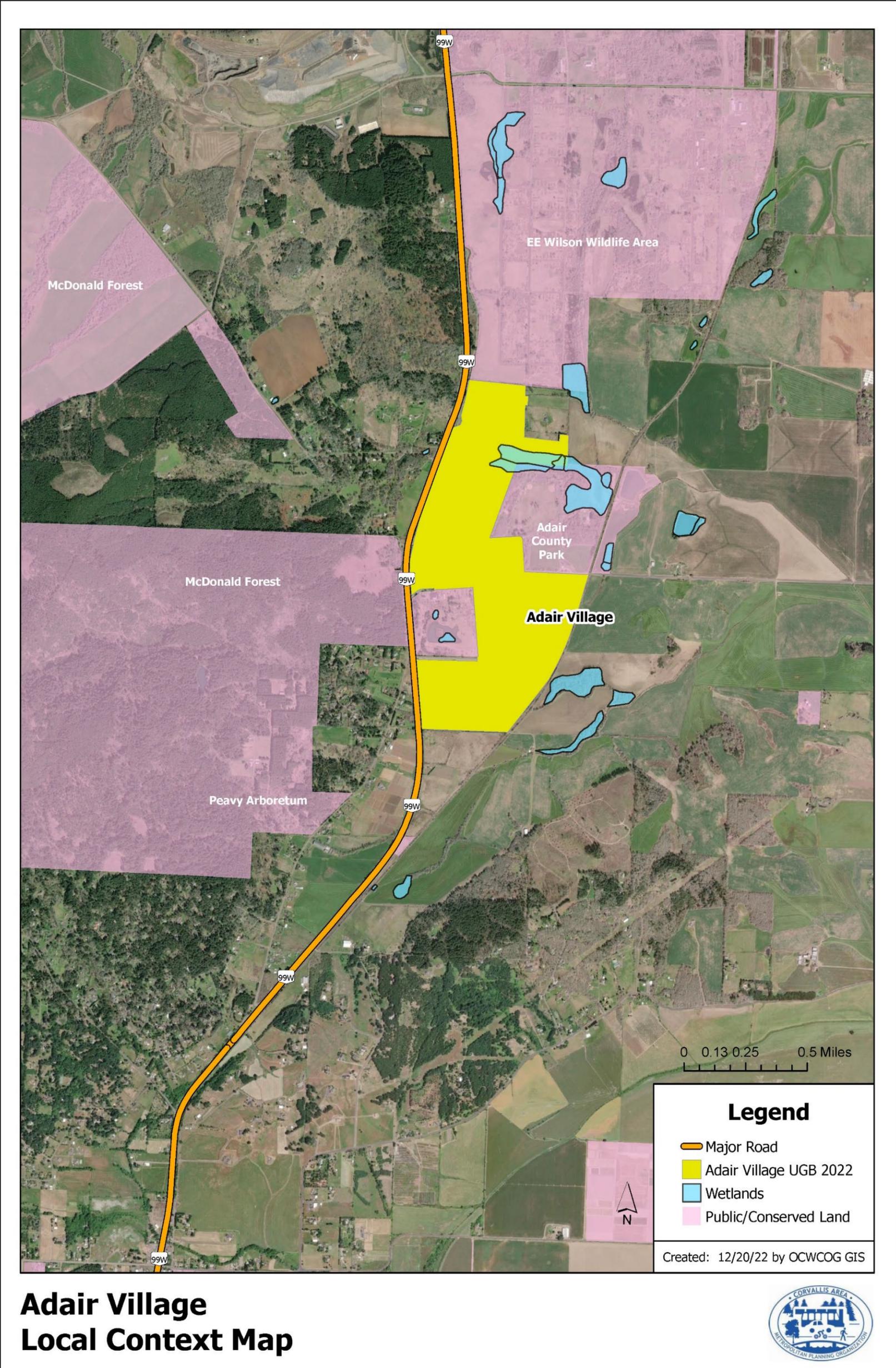
The Local Context Map (**Figure 1**) on the following page shows Adair Village in proximity to natural areas discussed above.

## **Regional Context**

Other key natural areas located near Adair Village include:

- **Peavy Arboretum** (approximately 2 miles south of Adair Village) a popular destination for hiking and walking in the McDonald Forest. Peavy Arboretum features beginner level hiking trails as well as native and non-native tree and plant species.
- The **Jackson Frazier Wetland** and **Owens Farm & Natural Area** sit on the northern edge of the City of Corvallis. A group of public and non-profit agencies including the Greenbelt Land Trust, City of Corvallis, Benton County, Samaritan Health Services, the Willamette Partnership, Oregon Department of Transportation, and more have collaborated on a vision of native and hard surface trails connecting the two sites including a bridge over Highway 99W for people walking and riding bikes.
- **Bowers Rock State Park** and **Hyak County Park** are located a short distance from Adair Village along Highway 20 near North Albany. Benton County and the Oregon Department of Transportation are currently working to obtain funding for a paved multi-use path between Albany and Corvallis along Highway 20.

Figure 1: Local Context Map



## Why Invest in Trails?

As Adair Village continues to develop, non-motorized connections and opportunities for recreation are at risk of being lost or not fully realized. The development of the Adair Village Trails Plan is an opportunity to develop a comprehensive multi-use trail system in areas of growth while implementing neighborhood connections where they don't currently exist. Many of the improvements discussed in this document have been on the City's radar, however, to this point no definitive blueprint has been developed to help guide future connections.

The development of the Adair trail system will provide outdoor amenities and access to parks, open space and other key points of interest throughout the community. Existing amenities such as picnic areas, playgrounds, playing fields, and others will be made more accessible for people walking and riding bikes. Parts of Adair Village are growing rapidly and an opportunity exists to partner with developers to set aside public right-of-way and open space for neighborhood travel and recreation.

Improvements to trail facilities will result in expanded recreation and mobility options throughout Adair Village and into Benton County. Making these improvements will have a broad range of benefits:

- **Establish Key Community Connections:** The proposed trail system outlined in this plan has the potential to create important transportation connections and shortcuts to destination points that make travel by foot or bicycle safe, pleasant and convenient. These improvements will reinforce connections between existing neighborhoods and developing areas.
- **Provide Links to the Natural Environment:** Given the scenic beauty of the area, and proximity to existing parks and open space, the proposed trail system envisions connections to popular destinations located at the community's doorstep. This means that relatively small investments have the potential to improve access to vast natural resource areas such as the McDonald Forest, E.E. Wilson Wildlife Area, and Adair County Park. Much of this work will be contingent on partnership with other entities beyond the City of Adair Village, however, this document serves as the vision for achieving those goals.
- **Improve Community Health:** A safe and connected biking and walking network increases opportunities for exercise. Community members can incorporate exercise into their routine by using sidewalks, bike ways, and trails to access nearby destinations or visit neighbors. Alternatively, people can utilize trails for recreation and exercise purposes without a specific destination in mind. No matter the purpose of the trip, increasing physical activity can help improve overall physical and mental health.
- **Community Building and Sense of Place:** Walking and bicycling are good choices for families and neighbors. A bicycle enables a young person to explore his or her neighborhood, visit places without being driven by their parents, and experience the freedom of personal decision-making. When residents in other communities have been asked to identify civic places that they are most proud of, residents frequently cite locations where walking and bicycling is popular.
- **Safety:** The vision for a robust and cohesive trails network outlined in this Plan also includes the creation of more road crossings, bike lanes, sidewalks, and signage. Pedestrians and bicyclists are among the most vulnerable roadway users and, as such, providing safe and convenient infrastructure is imperative to the successful implementation of this Plan. Locations where trails cross roadways should be examined carefully to ensure appropriate safety solutions are implemented. Trail use also provides more opportunities for residents to speak with neighbors and more "eyes on the street" to discourage crime and violence.

- **Cost Savings and Benefits to the Economy:** An integrated and cohesive trail system can result in significant economic benefits to the city and individual households. Benefits include increases in property values for homes near high-quality trail facilities; retention and attraction of residents and businesses; and expenditures from visitors exploring the area on expanded pedestrian and bicycle routes.

Biking and walking improvements are much less expensive than vehicle roadway improvements, allowing tax dollars to be used in other ways. Some studies have shown that trails projects employ more people on a per cost basis than other transportation projects.

- **Greenhouse Gas Reduction:** Improving biking and walking facilities increases opportunities to travel without a vehicle. Substituting an automobile trip with a walking or biking trip reduces greenhouse gas emission, improving local air quality. Since bicycling and walking contribute no pollution, require no external energy source, and use land efficiently, they effectively move people from one place to another without adverse environmental impacts.
- **Low Impact and Educational:** The proposed trails outlined in this plan would have relatively low impacts to the natural environment. Direct access to trail systems and natural environments provides opportunities for environmental education and cultivating a conservation ethic.

## How Was this Plan Developed?

The Adair Village Trails Plan was developed as a collaborative effort by the City of Adair Village; Benton County Natural Areas, Parks, and Events; Benton County Public Works; Benton County Community Development and the Corvallis Area Metropolitan Planning Organization (CAMPO). CAMPO staff took the lead on the development of the plan with direction and support from partner agencies.

Oversight for the project was provided by a Project Management Team including:

- Pat Hare, City of Adair Village
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In January, 2021 the Project Management Team held a kick-off meeting to launch the trails planning effort. During the kick-off meeting the Project Team discussed partner roles, project goals and public engagement strategies. In the spring of 2021, CAMPO staff provided an overview presentation on the trails planning effort to Adair Village City Council and Benton County Natural Areas & Parks Advisory Board.

During this time, CAMPO staff began reviewing the Adair Village Transportation System Plan (TSP) and identifying elements suitable for inclusion in the Trails Plan. Much of the work done as part of the TSP development was directly utilized as part of this Plan. CAMPO staff went on to review example trails plans including local trail planning efforts at the Owen's Farm Natural Area outside Corvallis.

CAMPO and the City of Adair Village collaborated to launch the Trails Plan Outreach Survey. Surveys were distributed to households in Adair Village through utility bill mailings in May 2021. Respondents were asked to answer questions about their experience walking and bicycling in Adair Village, discuss barriers to safety and comfort, and prioritize potential improvements to the local system of sidewalks and trails. A total of 42 surveys were returned and while this does not represent a statistically significant assessment, comments and priorities helped the Project Team evaluate community input. Survey responses, balanced with Project Team input were used to guide project development.

**Emphasis Areas**

The Adair Village Trails Plan focuses on solutions which prioritize safety and accessibility for bicycle and pedestrian travel within the community and connections to key amenities adjacent to City limits. Early in the planning process, CAMPO staff identified four emphasis areas to help guide the project. The framework below was used throughout the planning process and helped influence development of the final document.

 <p><b>Emphasis Area 1:</b> Identifying safe routes to school</p>	 <p><b>Emphasis Area 2:</b> Accessibility to parks, future downtown, and other amenities</p>
 <p><b>Emphasis Area 3:</b> Improved wayfinding including historic Adair Village plaques</p>	 <p><b>Emphasis Area 4:</b> Opportunities for new bike and pedestrian paths and regional connections</p>

**What is in this Document?**

The remainder of this plan is broken into the following chapters:

- **Chapter 2: Analysis of Existing Conditions**— This chapter discusses existing conditions in the study area including demographic data as well as needs and opportunities within the local network of roadways, paved multi-use paths, walking trails and separated bike lanes.
- **Chapter 3: Partner Input and Community Survey**— Provides details on collaboration with key partners and input received through the community survey.
- **Chapter 4: Trail Standards and Design Guidelines**— This chapter provides details on how future trails should be built including recommended trail types, trail amenities, and roadway crossings.
- **Chapter 5: Recommended Trail Network**— Lays out recommended trail routes and discusses regional trail connections
- **Chapter 6: Project Implementation**— Provides information on potential funding sources and project delivery options.

- **Trails Plan Appendices:**

- *Appendix A: Level of Stress Analysis (From Benton County/Adair Village TSP)*
- *Appendix B: Transportation Acronyms*
- *Appendix C: Transportation Glossary*

# Chapter 2: Analysis of Existing Conditions

This chapter serves as a baseline analysis of demographic information and existing conditions relevant to the Adair Village Trails Plan. The sections below discuss current conditions, deficiencies and needs of the local network of roadways, paved multi-use paths, walking trails and separated bike lanes. Site data and observations are summarized throughout the chapter.

## Key Takeaways

Key takeaways related to the existing conditions discussed in this chapter include:

- Adair Village is growing rapidly which means greater demand for safe infrastructure for people walking and biking
- Nearly one in every three people living in Adair Village is under the age of 18 (30.8% of total population)
- Several road facilities are not built to city standards or lack adequate bicycle and pedestrian facilities
- Recreation sites located in and around Adair Village are not well connected with city transportation facilities, bicycle and pedestrian connections are especially missing
- A lack of identified crossings on OR 99W creates a safety hazard for people walking or riding bikes to access the Calloway Creek trailhead from Adair Village
- Level of stress analysis found that walking and biking in Adair Village places a high level of stress on pedestrians due to missing sidewalks and lack of existing multi-use paths

## Demographic Profile

### Rapid Population Growth

Adair Village grew by 79% between 2000 and 2020, while Benton County grew by 21%. In 2000, Adair Village was home to 536 residents. By 2020 that number had grown to 994 residents, and with additional development currently underway, Adair Village is expected to grow to over 2,000 residents by 2030.<sup>2</sup> Continued growth will result in increased demand for improved connections to regional employment centers and recreation areas as well as improvements to infrastructure for internal trips in Adair Village.

***Figure 2: Adair Village Population Growth History and Forecast***

Year	2000	2010	2020	2030	2040
<b>Adair Village</b>	536	840	994	2,068*	2,472*
<b>Benton County</b>	78,153	85,579	94,665	108,881	120,481

*Source: 2000 and 2010 data from PSU Population Research Center via the Adair Village Transportation System Plan (TSP). 2020 from 2020 US Census via PSU Population Research Center. \*2030 and 2040 Adair Village population numbers include areas within Urban Growth Boundary.*

<sup>2</sup> 2020 data PSU Population Research Center 2020 Census Summary.

## **Housing Growth**

Between 2010 and 2020 the total number of housing units in Adair Village grew from 293 to 359, a 22.5% increase. Based on current construction, as well as population projections, this number is expected to continue growing over the coming years. The average household size in Adair Village for 2020 was 2.87 people per unit. This is larger than the 2020 household sizes for Albany (2.51/unit) and Corvallis (2.25/unit).

## **Age**

As of 2019, nearly one in every three people living in Adair Village was under the age of 18 (30.8%). This is a considerably higher rate than the state and national averages. Not surprisingly, Adair Village also had a larger proportion of residents in age cohorts likely to have children (35 to 44 and 45 to 54) than the state of Oregon and country as a whole. Adair Village was also home to fewer people in the 55 to 64 and 65 plus age cohorts.

***Figure 3: Age Distribution Comparison (Total Population)***

Age Cohort	Adair Village	Oregon	United States
65 plus	7.5%	17.2%	15.6%
55 to 64	6.7%	13.2%	12.9%
45 to 54	17.2%	12.4%	13.0%
35 to 44	17.3%	13.3%	12.6%
25 to 34	11.9%	14.1%	13.9%
18 to 24	8.5%	8.8%	9.4%
Under 18	30.8%	21.0%	22.6%

Source: 2015-2019 5-Year ACS, Table B01001

## **Income**

In 2019, Adair Village had a higher median household income compared to the county, state, and rest of the country (see **Figure 4**). Adair Village also had fewer individuals living below the poverty level.

***Figure 4: Median Annual Household Income***

Statistic	Adair Village	Corvallis	Philomath	Benton County	Oregon	United States
Median Annual Household Income	\$75,000	\$52,942	\$72,564	\$62,077	\$62,818	\$62,843

Source: 2015-2019 5-Year ACS, S1901

## **Race and Ethnicity**

The 2020 United States Census found that 90.9% of the Adair Village population identify as White and 2.7% identify as Black or African American. Residents of Asian origin made up 4.7% of the population while residents of American Indian or Alaska Native represented 4.3%, and Native Hawaiian and other of Pacific Islanders represented 1.5% of the population. Approximately 8.9% of respondents identified as some other race.<sup>3</sup> A separate Census question found that 10.8% of residents identify as Hispanic or Latino.

## **Local Transportation Network**

### **Street Functional Classification**

Functional classification is the grouping of highways, roads and streets based on the type of service they provide. Basic to this concept is the recognition that individual road segments do not serve travel independently in any major way. Instead, most travel trips involve movement through a network of interconnected roadways. In transportation planning, functional classification helps define the role individual road segments should play in the flow of trips through the larger network. As such, all roadways in a transportation system must balance network mobility (i.e. through trips over long distances) and land access (i.e. direct links to individual parcels of land).

The Adair Village Transportation System Plan (TSP) utilizes the federal functional classification system for categorizing roadways as follows:

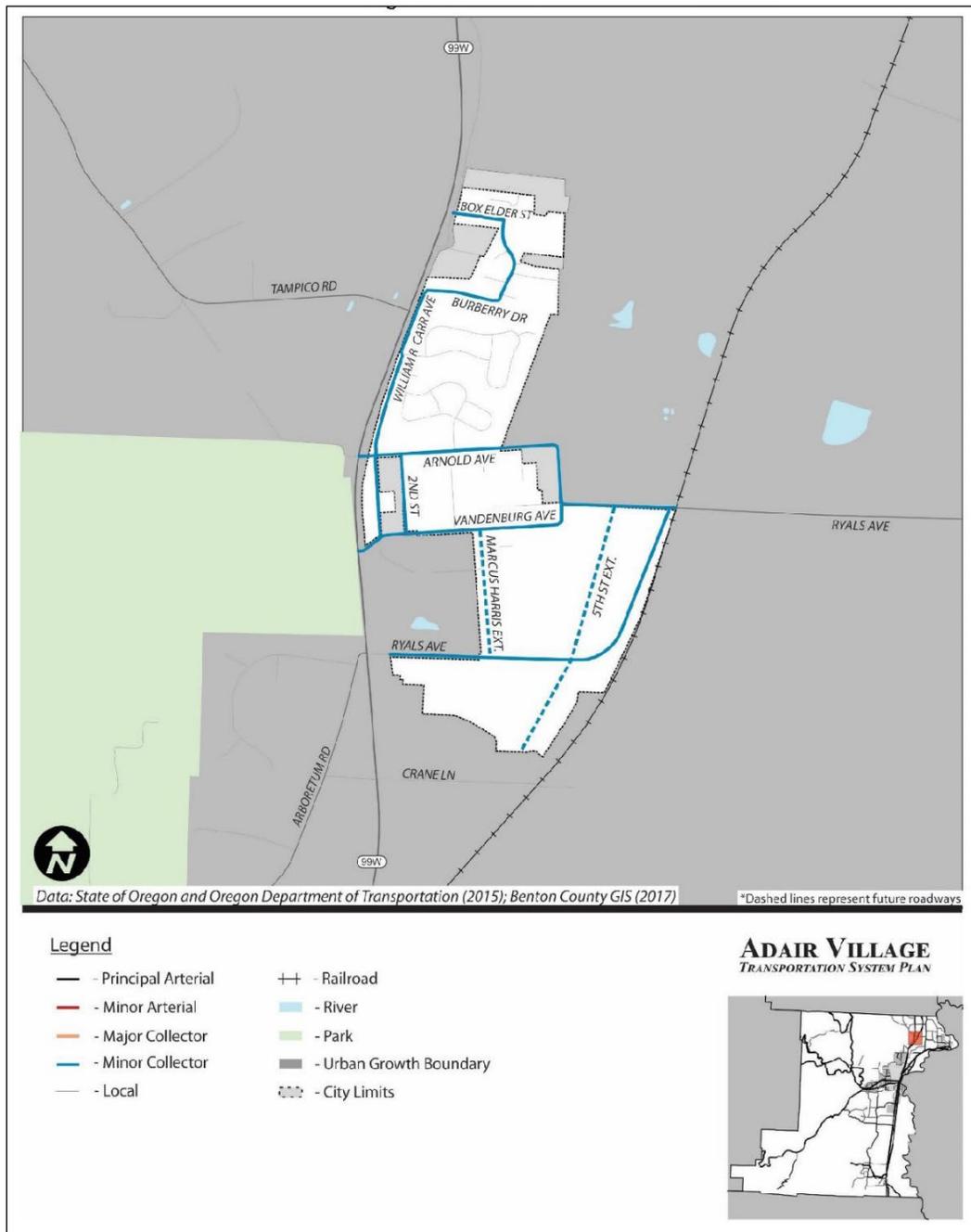
- **Principal Arterials** carry regional traffic with origins and destinations outside the area. There are no Principal Arterials located in Adair Village. Highway 99W, which runs adjacent to Adair city limits, is considered a Principal Arterial by the federal functional classification system.
- **Minor Arterials** carry major local traffic between communities or nearby areas, or between community districts. There are no Minor Arterials located in the vicinity of Adair Village.
- **Major Collectors** carry major local traffic between communities or nearby areas, or between community districts. Major Collectors typically carry higher traffic volume than Minor Collectors but lower traffic volume than Minor Arterials. There are no Major Collectors located in the vicinity of Adair Village.
- **Minor Collectors** carry local traffic between communities or nearby areas, or between community districts. Minor Collectors typically carry lower traffic volume than Major Collectors. There are several Minor Collectors located in Adair Village including those captured in *Figure 5*.
- **Local Streets** primarily carry local traffic seeking access to adjacent property. Local Streets typically have lower speeds and traffic volumes than other segments in the transportation network. *Figure 5* illustrates the network of Local Streets in Adair Village.

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<sup>3</sup> Note, the total of the Race and Ethnicity statistics presented is greater than 100 percent because the numbers were taken from questions which looked at “Race alone or in combination with one or more other races” which means respondents may fall into more than one category.

## Existing Road Network

**Figure 5: Functional Street Classification**



Map source: Adair Village Transportation System Plan

## **Existing Pedestrian and Bicycle Infrastructure**

In Adair Village, the following bike and pedestrian infrastructure is available.

- **Sidewalks:** Sidewalks are intermittent in Adair Village with gaps in several key locations. William R. Carr Avenue, Adair Village's future downtown, does not currently have sidewalks. Arnold Avenue has a continuous sidewalk with a wide planted buffer along the south side from 2<sup>nd</sup> Street to Adair County Park. On the north side of Arnold Avenue sidewalks are adjacent to the curb with intermittent gaps that are missing altogether. All sidewalks and shoulders end at the entrance to Adair County Park. There are no sidewalks located along Vandenburg Avenue.

Local Streets generally have continuous sidewalk on at least one side of the roadway. Roughly half of the Local Streets have a continuous sidewalk on both sides, while the other half have a sidewalk along one side of the road only. Sidewalks in newer developments are in good condition with consistent ADA accessibility.

- **Multi-use Paths:** Multi-use paths serve a variety of non-motorized travelers, including people walking, biking, running, and using mobility devices. Multi-use paths are typically paved (asphalt or concrete) but may also consist of an unpaved smooth surface as long as it meets Americans with Disabilities Act (ADA) standards. Multi-use paths are usually wider (e.g., 8-14 feet) than average sidewalks (e.g., 5-6 feet). An example multi-use path in Adair Village is the path through a neighborhood park connecting Laurel Drive with Columbia Avenue.
- **Roadway shoulders:** Roadway shoulders are commonly used by people walking and riding bikes in Adair Village where sidewalks or bike lanes do not exist. Notable examples include William R Carr Ave, Vandenberg Ave, and a few minor streets.
- **Enhanced Roadway Crossings:** Enhanced Roadway Crossings are infrastructure treatments designed to provide safer and more comfortable places for pedestrians and cyclists to cross high-volume and high-speed roadways. Common examples of enhanced crossings include Rectangular Rapid Flashing Beacons (RRFBs), Pedestrian Hybrid Beacons (PHBs), pedestrian islands, curb extensions, and more. Adair Village does not currently have any enhanced roadway crossing, however, there are key locations where these treatments could improve safety and enhance walkability (e.g. crossing OR 99W at Vandenburg Avenue to access the McDonald Forest trailhead).

Although they do not include dedicated facilities, two very low volume roadways are commonly used as informal multi-use paths. Purple Vetch Lane, located on Oregon Department of Fish and Wildlife property, provides access to a fishing pond and natural areas south of Vandenberg Ave. ODOT's Adair Frontage Road is used to access the EE Wilson Wildlife Area north of the city limits. Within the Wildlife Area, a network of paved and gravel roads, from the land's previous US Government use, provides multimodal access to the area.

## **Pedestrian System Performance -Level of Stress Analysis**

Memorandum #4: Existing Transportation System Conditions and Deficiencies, developed in support of the Benton County Transportation System Plan (TSP), includes a Level of Traffic Stress (LTS) analysis for pedestrian travel in Adair Village. The LTS pedestrian analysis ranks road segments and intersections on scale of 1 (low stress) to 4 (high stress) based on design as a tool for evaluating walkability. Key findings from the LTS pedestrian analysis include:

- Roadway segments in Adair Village had an average level of traffic stress of 3.3 for pedestrians (moderate to high stress)
  - Less than 25% of segments had an LTS of 2 or less, indicating a deficit of adequate pedestrian facilities overall
  - Roads that had a pedestrian LTS at or above 3 include William R Carr Avenue, Laurel Avenue, Arnold Avenue, and Vandenburg Avenue
- When evaluating intersections, the average pedestrian LTS was scored at 1.2, indicating a low level of exposure
  - As a result, the LTS analysis recommends focusing pedestrian improvements on segment connections rather than intersections
- A recommendation to utilize shared used pathways (also referred to as multi-use paths) as connections between looping residential streets

A summary table and map capturing the results of the LTS pedestrian analysis can be found in **Appendix A**. For additional information see **memorandum #4** on the [Benton County TSP Project Library Page](#). Discussion on the Adair Village pedestrian LTS begins on page 78.

### **Bicycle System Performance -Level of Stress Analysis**

Memorandum #4 from the Benton County TSP also includes a Level of Traffic Stress (LTS) analysis for bicycle travel in Adair Village. The LTS bicycle analysis ranks road segments and intersections on scale of 1 (low stress) to 4 (high stress) as a tool for evaluating the community's bicycle network. The analysis notes that Adair Village's small geographic size is conducive to travel by bicycle. Key findings from the LTS bicycle analysis include:

- The majority of Adair Village's bicycle system is located on local streets
- Most of the roads do not have a separate bike lane or accessible shoulder but traffic speeds and volumes are generally low
- As of 2017, only about 0.6% of Adair Village residents travel by bicycle for work trips
- The average LTS for the system was 1.3, indicating low exposure to traffic stress
- About 93% of studied roadway segments provide an LTS of 2 or lower
- Ryals Avenue is the longest stretch of roadway with a high bicycle LTS. Ongoing development provides opportunity to reconstruct the roadway to include bike lanes and a paved multi-use path.

A summary table and map capturing the results of the LTS bicycle analysis can be found in **Appendix A**. For additional information see **memorandum #4** on the [Benton County TSP Project Library Page](#). Discussion on the Adair Village bicycle system LTS begins on page 82.

## Key Destinations

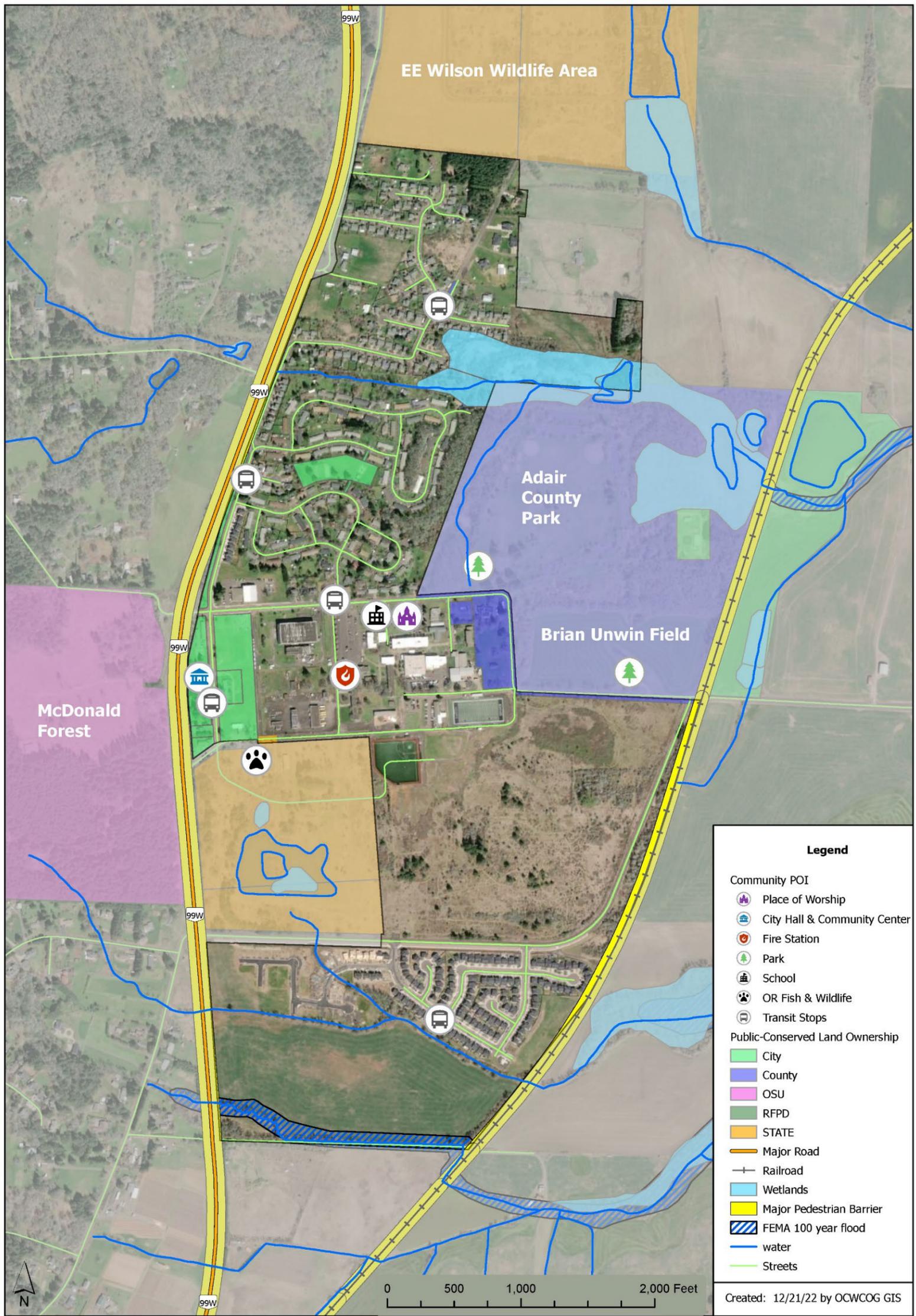
The small geographic size of Adair Village creates excellent conditions for residents to complete many trips by walking or biking, provided there is adequate safe infrastructure. The Points of Interest and Trail Constraints Map (**Figure 6**) on the following page depicts local destinations likely to be frequented by people using trails for regular travel. Additionally, the map identifies major barriers to local travel, namely high speed traffic on Highway 99W and the Portland & Western Railroad railroad line known as the Western Branch.

## Connections to Transit

Successful transit systems rely on safe and accessible pedestrian and bicycle networks connecting riders to access points for boarding and alighting. This means transit riders (and potential riders) need suitable infrastructure to arrive safely at bus stops. Adair Village is served by the 99 Express, a free commuter bus service between Corvallis and Adair Village operated by Benton Area Transit (BAT). The service provides 4 loops per day, Monday - Friday (except certain holidays). BAT riders traveling from Adair Village can transfer to several other transit options in Corvallis including the Corvallis Transit System (CTS), Linn-Benton Loop, Philomath Connection, Oregon State University Beaver Bus, and the Coast to Valley Express (also operated by BAT). The Linn Benton Loop connects to the Albany Transit System, Linn Shuttle and Amtrak in Albany. Other private transit options are available in Corvallis and Albany.

The route for the 99 Express makes a loop through Adair Village and includes stops in residential neighborhoods for convenient access. There are five stops located throughout the community. The bus route and transit stop locations captured in (**Figure 7**) below.

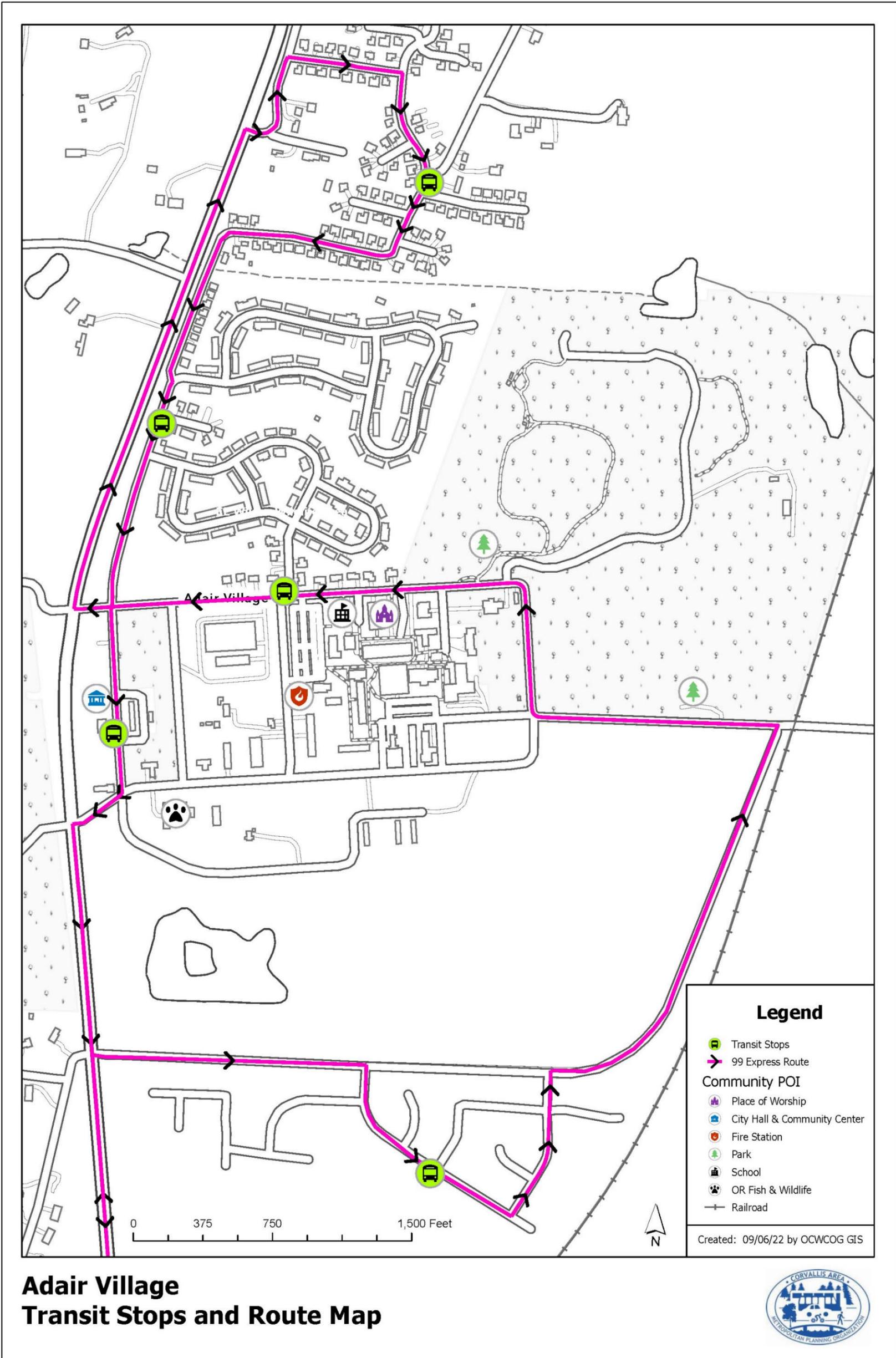
**Figure 6: Points of Interest and Trail Related Constraints**



**Adair Village  
Points of Interest and Trail Related Constraints**



**Figure 7: Transit Stops and Route Map**



## Chapter 3: Partner Input and Community Survey

### Planning Team Overview and Coordination

This project was undertaken as a collaborative effort by the City of Adair Village, Benton County Community Development, Benton County Public Works, Benton County Natural Areas and Parks, and the Corvallis Area Metropolitan Planning Organization (CAMPO). CAMPO staff took the lead on the development of the plan with direction and support from partner agencies.

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- Matt Wadlington, Civil West Engineering
- Laurel Byer, Benton County Public Works
- Patrick Depa, Benton County Community Development
- Lynne McKee, Benton County Natural Areas, Parks and Events
- Jesse Ott, Benton County Natural Areas, Parks and Events
- Shane Galloway, Benton County Natural Areas, Parks and Events

In January, 2021 the Project Management Team held a kick-off meeting to launch the trails planning effort. During the kick-off meeting the Project Team discussed partner roles, project goals and public engagement strategies. In the spring of 2021, CAMPO staff provided an overview presentation on the trails planning effort to Adair Village City Council and Benton County Natural Areas & Parks Advisory Board.

During this time, CAMPO staff began reviewing the Adair Village Transportation System Plan (TSP) and identifying elements suitable for inclusion in the Trails Plan. Much of the work done as part of the TSP development was directly utilized as part of this Plan. CAMPO staff went on to review example trails plans including local trail planning efforts at the Owen's Farm Natural Area outside Corvallis.

### Local and Regional Plan Support

Implementation of the Trails Plan will provide new recreational opportunities and access to park amenities, while preserving public right-of-way and open space throughout the community. Projects identified in the Plan will advance many of the Goals and Objectives identified in the Adair Village Transportation System Plan (TSP), namely:

- **Goal 3 – Health:** The transportation system should encourage healthy lifestyles.
- **Goal 4 – Mobility and Circulation:** The transportation system should efficiently connect people with where they want to go.
- **Goal 6 – Financial Stewardship:** Investments in transportation should manage assets efficiently and responsibly.
- **Goal 7 - Environment:** The transportation system should allow a community to live harmoniously with the environment.

Investment in multi-use trails is further supported by the Benton County Natural Areas, Parks and Events Department which oversees operations and maintenance at Adair County Parks. Benton County

has indicated interest in investing in trails through the Park which will help complete the trail network envisioned in this document. The City of Adair Village's City Manager's Office, Public Works, and Planning Teams have also expressed enthusiastic support for this effort.

The path system will be primarily managed and maintained by the City of Adair Village with additional support from the Benton County Natural Areas, Parks and Events Department. Benton County Public Works may be involved with implementation and maintenance at locations where trails cross County owned roadways. If bicycle and pedestrian crossings along Highway 99W are completed the Oregon Department of Transportation would likely be the agency on point for improvements and maintenance. All of these identified agencies have administrative and maintenance staff experienced in managing and maintaining infrastructure described.

Finally, this project has received a tremendous amount of support through expressed approval by developers willing to integrate trail connections into new development including Calloway Creek Homes and other future projects. A native trail is already being integrated into the Calloway Creek Homes development and future investments are expected as new residential construction takes place moving forward.

## **Community Engagement Survey**

CAMPO and the City of Adair Village collaborated to launch the Trails Plan Outreach Survey. Surveys were distributed to households in Adair Village through utility bill mailings in May 2021. Respondents were asked to answer questions about their experience walking and bicycling in Adair Village, discuss barriers to safety and comfort, and prioritize potential improvements to the local system of sidewalks and trails.

### **Overview of Survey Responses**

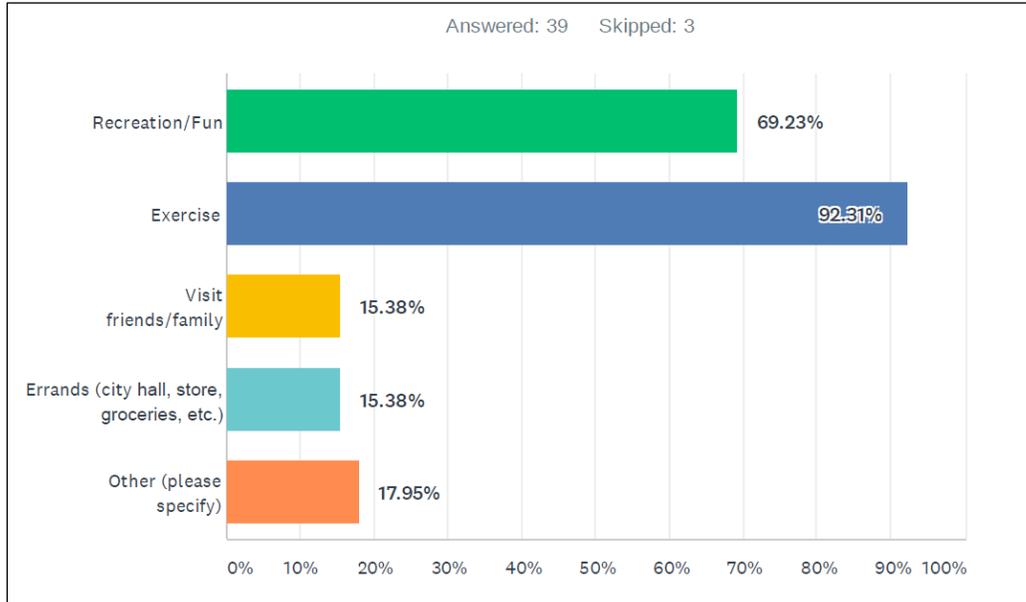
- A total of 42 surveys were returned; while this does not represent a statistically significant assessment, comments and priorities helped the Project Team evaluate community input
- Sixty-three percent of survey respondents were female; 37% were male
- The age of survey respondents was varied with birth years distributed across five decades (1940s through 1980s)
- Approximately 89% of respondents own their home, while 5.4% rent and 5.4% own and rent
- Two person households were most common among survey respondents (48.6%)

### **Purpose and Frequency of Walking and Bicycling Trips**

Approximately **76% of respondents** indicated that they walk or ride a bicycle in or around Adair Village at least three days per week. Additionally, 32% walk or ride a bicycle "Most every day (six or more days per week)" and 44% walk or ride a bicycle "Three to five days per week".

As seen in **Figure 8, Exercise (92%)** followed by **Recreation/Fun (70%)** are the most common reasons survey respondents walk or bike in Adair Village.

**Figure 8: Why do you currently walk or bike in Adair Village? (check all that apply)**

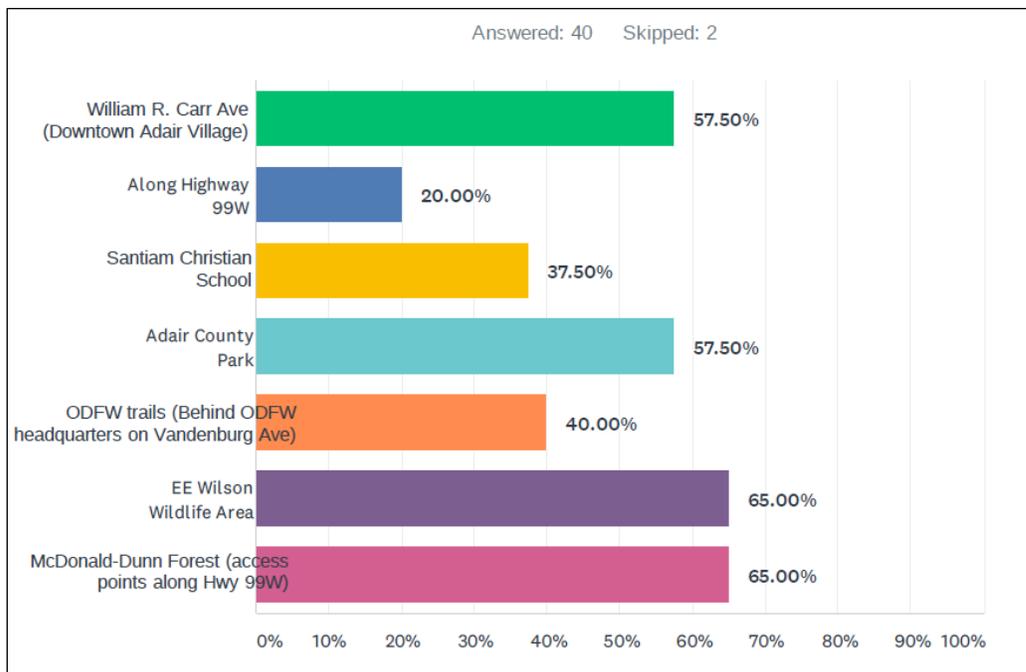


**Most Common Walking and Bicycling Destinations**

Survey respondents walk and bike to a broad range of locations, most notably (**See Figure 9**):

- EE Wilson Wildlife Area (65% of respondents walk or bike to this location)
- McDonald-Dunn Forest (65% of respondents walk or bike to this location)
- Adair County Park (57.5% of respondents walk or bike to this location)
- William R. Carr Ave/Downtown (57.5% of respondents walk or bike to this location)

**Figure 9: Where in the community do you currently walk or ride a bicycle to? (check all that apply)**



## Desired Walking and Bicycling Destinations

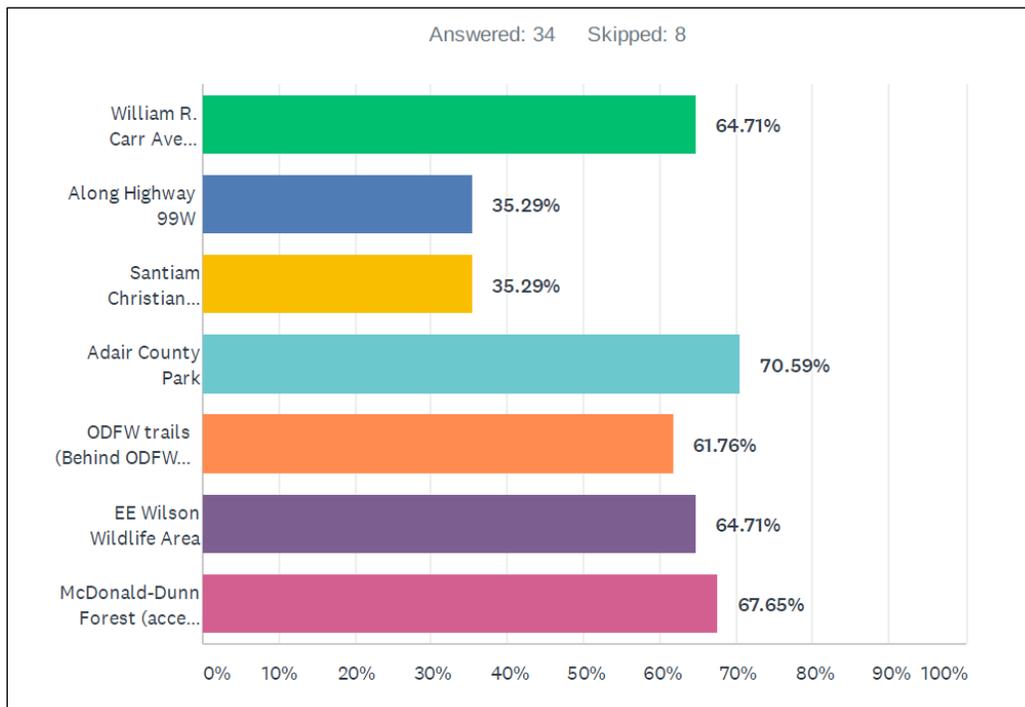
The top destinations in or adjacent to Adair Village survey respondents would like to walk or bike to include (**Figure 10**):

- Adair County Park (71%)
- McDonald-Dunn Forest (access points along Hwy 99W) (68%)
- EE Wilson Wildlife Area (65%)
- William R Carr Ave (Downtown Adair Village) (65%)
- ODFW trails (Behind ODFW headquarters on Vandenburg Ave) (62%)

When asked about destinations further away from Adair Village survey respondents indicated interest in walking or biking to the following locations:

- Corvallis
- North Albany
- Lewisburg
- Peavy Arboretum
- Monmouth/Independence

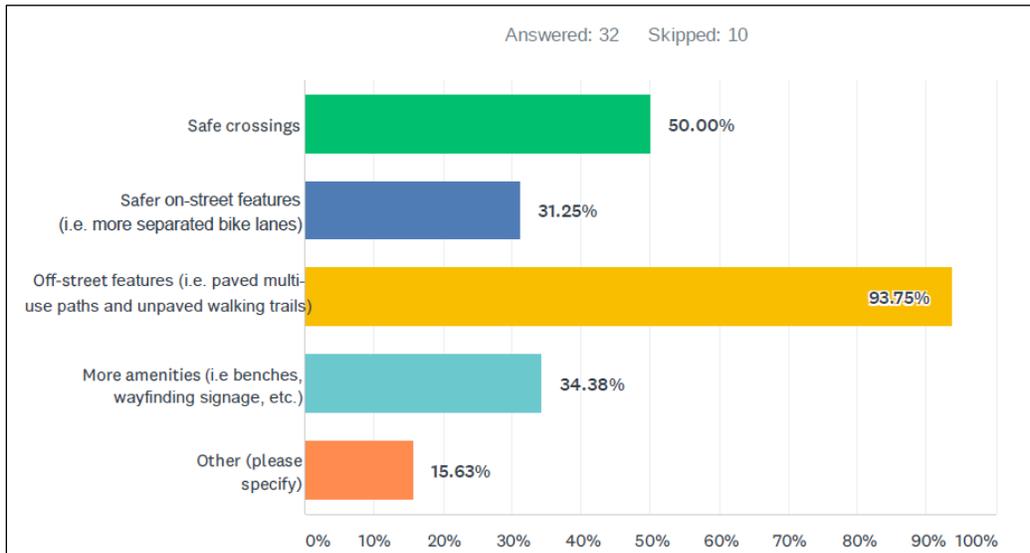
**Figure 10: Where in the community would you like to walk or ride a bicycle to? (check all that apply)**



## What Would Cause you to Walk or Bike in Adair Village More?

When asked “What would cause you to walk or bike around Adair Village more?” approximately **94% of respondents** selected “**Off-street features (i.e. paved multi-use paths and unpaved walking trails)**” (*Figure 11*).

***Figure 11: What would cause you to walk or bike around Adair Village more? (check all that apply)***

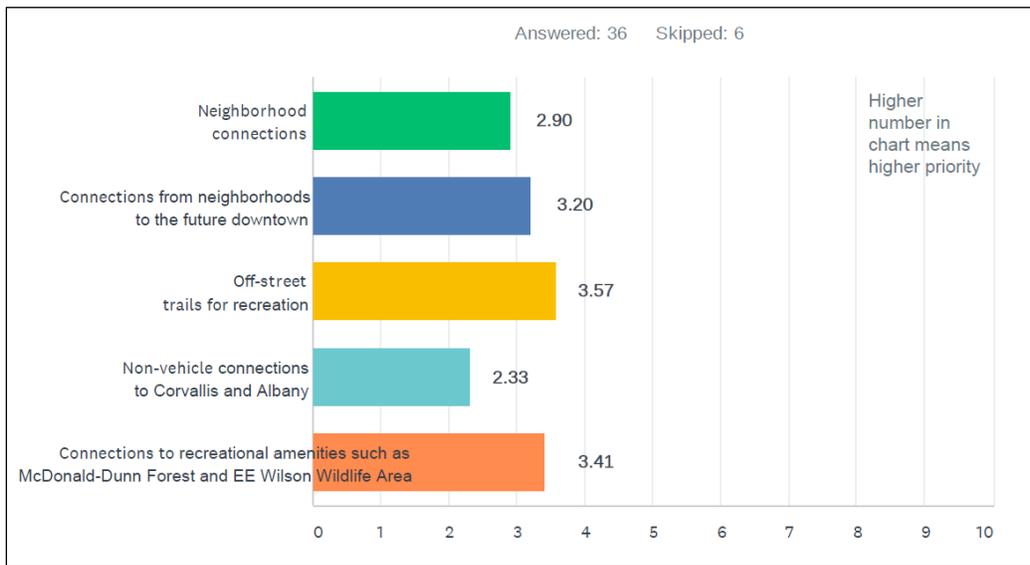


## Input on Future Improvements

When asked if there are specific locations that need improvement for people walking and biking the most common response was the **addition of a pedestrian crossing along Highway 99W**. Other common suggestions were improved lighting and better connections between the Calloway Creek development and other parts of Adair Village.

When asked to prioritize a list of potential walking and biking improvements **survey respondents favored “Off-street trails for recreation” and “Connections to recreational amenities such as McDonald-Dunn Forest and EE Wilson Wildlife Area”** (*Figure 12*).

**Figure 12: How would you prioritize walking and biking improvements in Adair Village? (1 being highest priority and 5 being lowest)**



Other comments related to future improvements included:

- A desire for a trail connection from the end of NE Hibiscus Drive to the County Park in Adair
- Concern about speeding vehicles on neighborhood streets
- A need for more lighting along sidewalks, including near Calloway Creek on Ryals

# Chapter 4: Trail Standards & Design Guidelines

## Recommended Trail Types

There are four main trail types identified as part of this plan as well as several additional variations which can be made to each trail type. The four main trail types outlined in this plan include:

- Intercommunity Trails
- Primary Trails
- Connector Trails
- Natural Trails

A brief overview of each trail type is discussed below.

### **Intercommunity Trails**

Intercommunity Trails are longer-distance routes which connect Adair Village with unincorporated areas in Benton County, and other nearby communities including Lewisburg, Corvallis, and Albany. While many of the Intercommunity Trail segments located in the area will likely be constructed by other agencies, such as Benton County or the Oregon Department of Transportation, Adair Village may play an active role in designing, funding and constructing some segments.

Intercommunity Trails can be used for commuting and recreation purposes and all segments should be constructed to accommodate two-way bicycle and pedestrian traffic. To maximize access for all users, these trails should be paved with poured concrete, concrete pavers, asphalt, or other smooth -rolling surface materials and should meet the standards of the Americans with Disabilities Act (ADA) of 1990.

### **Primary Trails**

Primary Trails outlined in this document are designated to facilitate key connections in the local trail network, linking important land uses, including parks, schools, retail areas, transit stops, churches, employment areas, and other points of interest within Adair Village. The Primary Trails designated in this plan are designed to serve as the backbone of the Adair trail system with other trail types (i.e. Connector and Natural Trails) supporting and extending the overall reach of the network.

Similar to Intercommunity Trails addressed above, all segments of Primary Trail should be designed to accommodate two-way bicycle and pedestrian traffic. Because Primary Trails play such an important role in establishing a comprehensive network for people walking and riding bikes they are likely to see greater user volumes than Connector and Natural Trails. As with Intercommunity Trails, hard surface paving such as asphalt, poured concrete or concrete pavers are recommended for these trails. Aggregate surface treatments may be used in place of pavers, however, all Primary Trails should be constructed to meet ADA standards. Wider gravel or soft surface shoulders for runners/joggers may be included if space allows.

### **Connector Trails**

Connector Trails will play an important role in the Adair Village trail network. The purpose of these trails is to provide linkages between neighborhoods, popular areas of interest, and connections to Primary and Intercommunity trails. Connector Trails are similar to other trails in that they typically

have their own right-of-way or easement and allow only non-motorized users. In some instances, it may be appropriate to follow local roads where a separated right-of-way does not exist.

Connector Trails are normally less than a few hundred feet long although some trails may be significantly longer. Typically these trails are 5 to 6 feet wide with paved surfacing, although some can be natural or aggregate surfaced.

### **Natural Trails**

Natural Trails are soft-surface trails generally appropriate for segments that are expected to experience lower use, are in close proximity to natural resource areas, or located on the edge of the community. Natural trails can also be used in higher traffic areas and may be deployed for their cost effectiveness. The surface of these trails are typically organic materials such as earth, bark mulch, wood chips, or even filbert shells.

Natural Trails are usually for pedestrians only but may also allow mountain bikers. Most often, areas with natural trails are not ADA accessible and, therefore, should not be relied upon as key network connections. If Natural Trails are sited along key linkages in the trail network, they should be built alongside a complimentary route that meets ADA standards.

Trail width will vary depending on topographic and environmental conditions. When building natural trails factors impacting longevity like drainage, erosion, compaction and sensitive riparian and habitat areas should be considered. The City of Adair Village is striving to build natural trails that are between five and six feet in width but narrower trails may be used in constrained areas.

## **Trail Standards and Design Details**

Trail standards set forth in this plan are included to help ensure that the proposed trail network is integrated and consistent. In constructing new trails it is important to refer to any guidelines developed by the jurisdiction with governing authority for the land where the trail is located. The table below includes an overview of trail types and basic dimensions.

**Figure 13: Trail Standards**

<b>Trail Type</b>	<b>Standard Width</b>	<b>Surfacing</b>	<b>Vertical Clearance</b>	<b>Notes</b>
<b>Intercommunity Trails</b>	12' with 2' gravel shoulders	Paved or other smooth-rolling surface to accommodate all trail users	Minimum 10'	Guided by Benton County standards. County Engineer may reduce width to 8' if necessary.
<b>Primary Trails</b>	10' with 2' gravel shoulders	Paved or other smooth-rolling surface to accommodate all trail users	Minimum 10'	Guided by Adair Village standards. If narrowed, minimum suggested width is 8'.
<b>Connector Trails</b>	5'6' to 8'+	Paved or aggregate surface to accommodate most trail users	Minimum 7'	Could be served by a sidewalk in some instances
<b>Natural Trails</b>	Varies	Earth, gravel, bark mulch, wood chips or other soft surface materials	Minimum 7'	More recreational focus

## Recommended Trail Standards

Adair Village and Benton County identify standard cross sections in their respective Transportation System Plans for multi-use paths. The Oregon Department of Transportation Highway Design Manual, Appendix L includes detailed guidance on developing and designing shared use paths, or multi-use paths (terms are interchangeable). The Federal Highway Administration (FHWA) *Small Town and Rural Multimodal Networks* publication also provides detailed guidance on designing multi-use paths, including width guidance based on known or project user volumes, integrating crossings with roads, and case studies from across the country.

In general, path design should consider:

- A minimum width of 8' only suggested for pinch points or constrained areas
- General widths of 10' – 12' or more, depending on known or projected volumes and user types
- A 10' vertical clear distance, which can be lowered to 7' if constrained
- Shoulders of 2' on each side to be kept clear of vertical elements or obstructions
- Maximum grade of 5%, with maximum cross slope grade of 2%
- A typical section (i.e. depth of pavement and subbase) equivalent to local street standards
- In lack of typical section guidance, 2" of pavement or 4" of aggregate on top of 6" - 8" of subbase is recommended. This follows the Vermont Agency of Transportation's Shared Use Path Typical Detail (link below).

All design resources mentioned above are linked below for use.

### **Design Resource Links (2022):**

[ODOT Highway Design Manual Section 900, Bikeway Design](#)

[ODOT Highway Design Manual Appendix L, Chapter 7: Shared Use Paths](#)

[FHWA Small Town and Rural Multimodal Network Guidelines](#)

[VTrans Shared Use Path Typical Detail](#)

[ODOT Shared Use Path Typical Section](#)

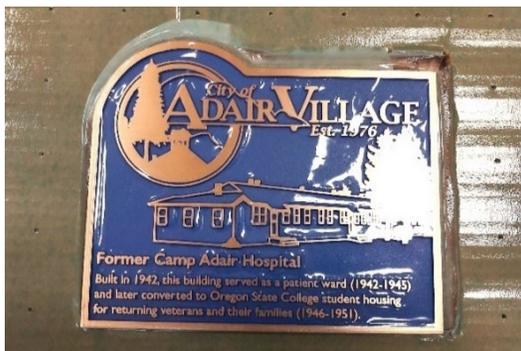
## Trail Amenities

Incorporating a variety of amenities can help make a trail system more inviting to potential users. The sections below discuss common amenities that can make trail systems stand out. As new trail segments are developed, City officials should plan to include trail amenities at key locations. Whenever possible, it is advisable to use vandal resistant materials when adding amenities. Ongoing maintenance and upkeep should be considered as well.

### Interpretive Signage and Historic Markers

Comprehensive interpretive signage with maps and site information should be located at key access points and parking areas throughout the trail network. These installations help visitors orient with their surroundings and learn more about nearby destinations and local ecology. Interpretive signage can also include historical information linking Adair Village to its rich history. A historic marker from Adair Village (**Figure 14**) is depicted below along with an example of general interpretive signage incorporating a site map (**Figure 15**).

**Figure 14: Adair Village Historic Marker**



**Figure 15: Interpretive Signage with Trails Map**



### Wayfinding Signage

**Figure 16: Wayfinding Signage Examples –Ruth Bascom Riverfront Path System Eugene, Oregon**



Wayfinding signage designed to help visitors navigate the proposed trail network should be strategically placed at key locations including trail intersections and road crossings. Wayfinding signage helps people on trails keep from getting lost and can incorporate information about how far they have traveled. Estimated travel times to nearby destinations can be included as well. Example wayfinding signage is captured in the images below.

### **Benches and Trash Receptacles**

Placing benches at defined rest areas encourages people of all ages and abilities to use a trail system by providing comfortable places to take a break along the way. Since people may choose to eat a snack while they rest including trash cans at these locations is advisable. Trash cans help keep trails clean and discourages littering. Bag dispensers for picking up after dogs may be included at these locations as well.

***Figure 17: Example Bench***



### **Lighting, Bicycle Parking and Water Fountains**

Lighting can be incorporated at high traffic locations such as trail intersections and key trail access points. Ample lighting adds to the overall feeling of safety and can help visitors navigate signage and other amenities. Water fountains provide drinking water for people and pets and bicycle parking allows visitors to safely store their bikes when stopping along the trail.

***Figure 18: Example Trail Lighting***



***Figure 19: Example Bicycle Rack***



## **Trail Access**

Generally, all new public facilities must be built to meet the requirements of the Americans with Disabilities Act of 1990 (ADA). The ADA was established to prohibit discrimination on the basis of disability and requires places of public accommodation and commercial facilities to be designed, constructed, and altered in compliance with the accessibility standards established by the ADA. ADA design standards establish criteria to support universal access. Generally, all paths and ramps are to be designed with the least possible slope. Local officials in Adair Village should work closely with contractors and other entities to ensure ADA standards are met with all new construction projects.

## Trail-Roadway Crossings

There are several locations where the proposed network of trails will need to cross roadways. While at-grade crossings create points of potential conflict between trail users and motorists, well-designed crossings which incorporate evidence based best practices can work well in a variety of settings. In most instances, properly designed at-grade crossings create a reasonable degree of safety and meet existing traffic and safety standards. Grade separated crossings are recommended in certain situations, however, grade-separated crossings are often substantially more expensive and should therefore be considered only when other traffic control measures have been deemed inadequate.

Trail-roadway crossings should comply with the Association of American State Highway and Transportation Officials (AASHTO), Oregon Department of Transportation (ODOT), and Manual of Uniform Traffic Control Devices (MUTCD) standards. The subsections below explore crossing options and other features available as part of the proposed trail network.

### **Unmarked/ Unsignalized Crossings**

While unmarked and unsignalized crossings are commonly found in locations where bicycle and pedestrian traffic cross general travel lanes, they are **not recommended as part of this plan**. The City of Adair Village should strive to mark all unsignalized trail crossings and incorporate advance warning signage for motorists (“Trail Xing”) and trail users (“Road Xing”).

### **Marked/ Unsignalized Crossings**

A marked crosswalk is any portion of a roadway at an intersection or elsewhere that is distinctly indicated for pedestrian crossing by lines or other markings on the surface. Marked crosswalks are critical components that support the creation of a comprehensive trail network. Typically, a marked and unsignalized crossing consists of a crosswalk and signage but no other devices to slow or stop traffic. Marked crosswalks may be located at either intersections or at mid-block locations between intersections. The approach to designing crossings at mid-block locations depends on an evaluation of vehicular traffic, sight lines, trail traffic, use patterns, vehicle speed, road type and width and other safety issues such as proximity to schools. As noted above, it is recommended that the City of Adair Village strive to, at minimum, mark all trail crossing and deploy advanced warning signage.

Curves in trails that cause trail users to face oncoming traffic before entering a crossing is helpful in slowing users and making them aware of oncoming traffic. Similarly, bollards and other geometry changes may be effective mitigation strategies on the trail approach.

Vegetation and other obstructions should be kept out of the sight line for motorists and trail users. In some instances, a flashing yellow beacon may be used in certain instances to alert drivers they are approaching a trail crossing. When using this feature, it is preferable to have a flashing beacon that is activated by the trail user rather than operated continuously.

### **Raised Crosswalks**

A raised crosswalk is any portion of a roadway that is designated for pedestrian crossing which is elevated above surrounding roadway pavement. Raised crosswalks provide more visibility for pedestrians (especially those in wheelchairs or other mobility devices) and help slow automobile traffic. Raised crosswalks may be sited at intersections or at mid-block crossings between intersections.

## **Pedestrian Safety Islands**

Pedestrian safety islands are raised sections within the roadway that serve as protected space for people walking and bicycling to pause while crossing a street with multiple travel lanes. Median pedestrian and bicycle refuge islands make roadway crossings easier and safer by 1) limiting exposure to through moving vehicles; 2) enabling crossings to commence when there are gaps in traffic from one direction at a time; and 3) providing a safe stopping place in the middle of the roadway for pedestrians who are not able to make the complete street crossing during a pedestrian signal phase. They may be used at signalized and unsignalized intersections or mid-block.

## **Pedestrian Hybrid Beacons (PHB)**

PHBs, also known as a High-intensity Activated Crosswalk (HAWK), were developed to enhance pedestrian crossings along major streets. These devices consist of a signal-head with two red lenses over a single yellow lens, and pedestrian and/or bicycle signal heads for the crosswalk. When a pedestrian activates the PHB the device moves through several stages, including steady red lights facing the roadway. Pedestrians and bicyclists are able to cross the road while vehicular traffic is stopped.

## **Rectangular Rapid Flashing Beacon (RRFB)**

RRFBs are devices which use LED flashing beacons in combination with pedestrian and bicycle warning signs to provide a high-visibility strobe-like warning to drivers when pedestrians and bicyclists use a crosswalk. RRFBs can be used when a signal is not warranted at an unsignalized crossing. They are not appropriate at intersections with signals or “STOP” signs. RRFBs can be found along South 3rd Street, 9th Street, and Circle Boulevard in Corvallis and in Philomath along Philomath Boulevard.

## **Signalized/Controlled Crossing**

New signalized crossings may be recommended for crossings that meet pedestrian, school, or modified warrants. The Federal Highway Administration (FHWA) provides guidance to determine where full traffic control signals should be considered for installation. The Adair Village TSP identifies two locations along Highway 99W where traffic signals may be implemented in the future –Arnold Avenue/Hwy99W intersection and Ryals Avenue/Hwy 99W intersection. Installation of traffic signals at these locations are subject to ODOT approval, the TSP also indicates that ODOT will consider roundabouts as potential options for these locations.

## **Grade-Separated Crossings**

Grade-separated crossings may be needed when routing trails across high volume or high-speed roadways. When considering grade-separated options, specific attention should be paid to project cost, natural topography, and ADA standards. One potential road segment which may be appropriate for a grade-separated crossing is Highway 99W. An overcrossing may be considered here, especially at locations where topography lends itself to this type of infrastructure.

# Chapter 5: Recommended Trail Network

The purpose of this chapter is to provide details on future trail improvements as well as a prioritized project list. The project and priorities discussed below are based on the desire to construct a functional trail system that allows users to access key points of interest in the near-term while building towards long-term goals for trail development. Long-term projects include segments that are dependent on future infrastructure improvements such as the need for a safe crossing of Highway 99W.

## Methodology

The process of identifying projects for this plan began by reviewing the 2017 Adair Village Transportation System Plan (TSP) which includes long-range transportation projects for the local network of roadway, pedestrian and bicycle connections. Incorporating local knowledge through mapping exercises and discussion with the Trails Plan Project Team led to further refinement and new additions to the projects list. The Project Team looked at local points of interest likely to be destinations for non-motorized travel and worked towards creating local connections throughout the community.

## Recommended Trail Routes

The Adair Village Transportation System Plan (TSP) identifies future transportation projects (across a 20-year timeline) regardless of cost, priority, or likelihood of being constructed. Many of the projects listed in the TSP focus specifically on improvement to bicycle and pedestrian infrastructure and have been incorporated as part of the recommended trails network identified in this plan. **Figure 20** lists TSP projects directly relevant to the Adair Village Trails Plan.

***Figure 20: TSP Projects Most Relevant to Trails Planning***

Project Name and Description
<b><u>AdVAT-01: Adair Frontage Road Active Transportation Corridor</u></b> Prohibit motor vehicle access along Adair Frontage Road north of the UGB to create an active transportation path. Requires coordination with ODOT.
<b><u>AdVAT-12: Arnold Avenue - Adair County Park Shared-use Path</u></b> Construct shared-use path along the Arnold Avenue corridor from OR 99W to Adair Park.
<b><u>AdVAT-08: Marcus Harris Extension Pedestrian Crossing</u></b> Provide an enhanced pedestrian connection across the Marcus Harris Extension.
<b><u>AdVAT-09: Arnold Avenue Pedestrian Crossing</u></b> Provide an enhanced pedestrian connection across Arnold Avenue between 5 <sup>th</sup> Street and Ryals Avenue to connect future development to Brian Unwin Field and Adair County Park.
<b><u>AT-168: Vandenberg Ave/OR 99W Enhanced Pedestrian Crossing</u></b> Construct an enhanced pedestrian crossing on OR 99W at the Vandenberg Avenue intersection to improve access to Calloway Creek Trail. May be addressed as part of project CC-179. Project is subject to ODOT approval.
<b><u>AT-236: Lewisburg-Adair Village Shared-use Path</u></b>

Construct shared-use path within the OR 99W corridor (may use parallel facilities). Project should connect with Corvallis-Lewisburg shared-use path. Project is subject to ODOT approval.

**AdVCC-11: 5th Street & Ryals Avenue Intersection Improvement**

Construct a roundabout or traffic signal, when warranted. Project may also include an enhanced pedestrian crossing.

**CC-116: OR 99W/ Arnold Avenue Intersection Improvement**

Project may install a traffic signal or roundabout, if feasible, when warranted. Project is subject to ODOT approval. May be addressed as part of project CC-179.

**CC-179: OR 99W Streetscape Study**

Streetscape Study to explore alternative highway designs and gateway treatments to slow traffic on OR 99W to enhance the safety and accessibility of Adair Village. May include intersection improvements and enhanced pedestrian crossings. Project is subject to ODOT approval.

The conceptual trails plan on the following page (**Figure 21**) incorporates relevant projects from the TSP list included above. Several new segments and connections have been added to create a full network of trail connections.

## Regional Trail Connections

Long range planning documents including the Benton County Transportation System Plan (TSP) and CAMPO Regional Transportation Plan identify future development of a multi-use path between Adair Village and Corvallis alongside Highway 99W.

Project listing in Benton County Transportation System Plan:

- AT-235: Corvallis-Lewisburg Shared-use Path
- AT236: Lewisburg-Adair Village Shared-use Path

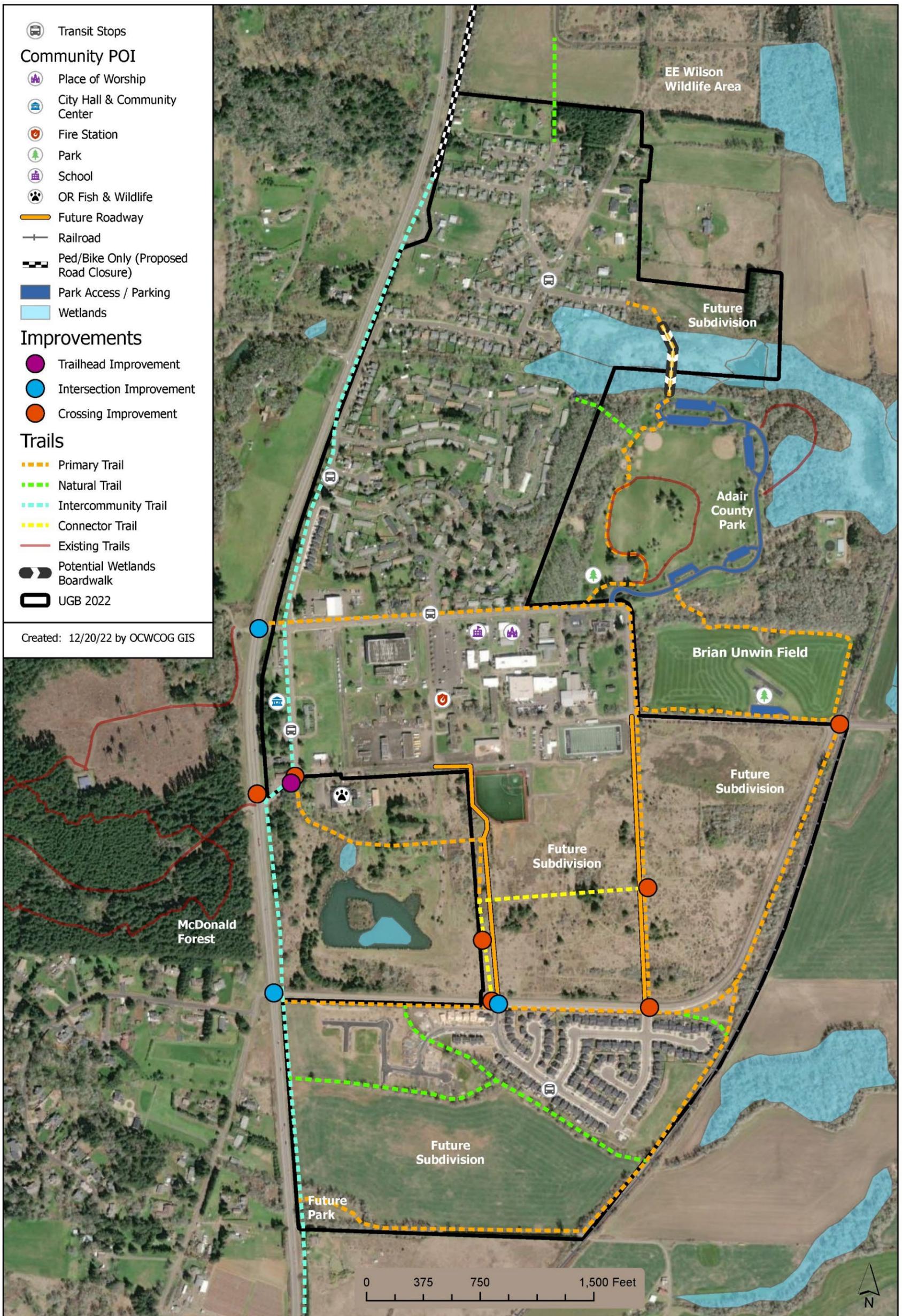
Project listing in CAMPO Regional Transportation Plan:

- AC6: Adair Village to Corvallis Path

The Adair Village to Corvallis Intercommunity Path is included in the conceptual trails map below and would connect Adair Village to nearby resources as well as jobs and shopping in Corvallis. On the northern edge of Corvallis, a group of public and non-profit agencies including the Greenbelt Land Trust, City of Corvallis, Benton County, Samaritan Health Services, the Willamette Partnership, Oregon Department of Transportation, and more have collaborated on a vision for native and hard surface trails connecting the **Jackson Frazier Wetland** and **Owens Farm & Natural Area** including a bridge over Highway 99W for people walking and riding bikes.

The opportunity to connect the Adair to Corvallis Intercommunity Path into these natural areas is apparent and would help leverage support for the multimodal pathway. While the Intercommunity Path is largely outside of Adair Village, public officials and project partners should follow along with this effort and look for opportunities to collaborate on trail standards and connections. Alignment of the future Adair Village to Corvallis Intercommunity Path is yet to be determined, however, **Figure 22**, highlights the corridor where it will eventually be constructed. On the Corvallis end the goal will be to connect the trail into the existing multi-use path along Highway 99W which currently terminates at Circle Boulevard.

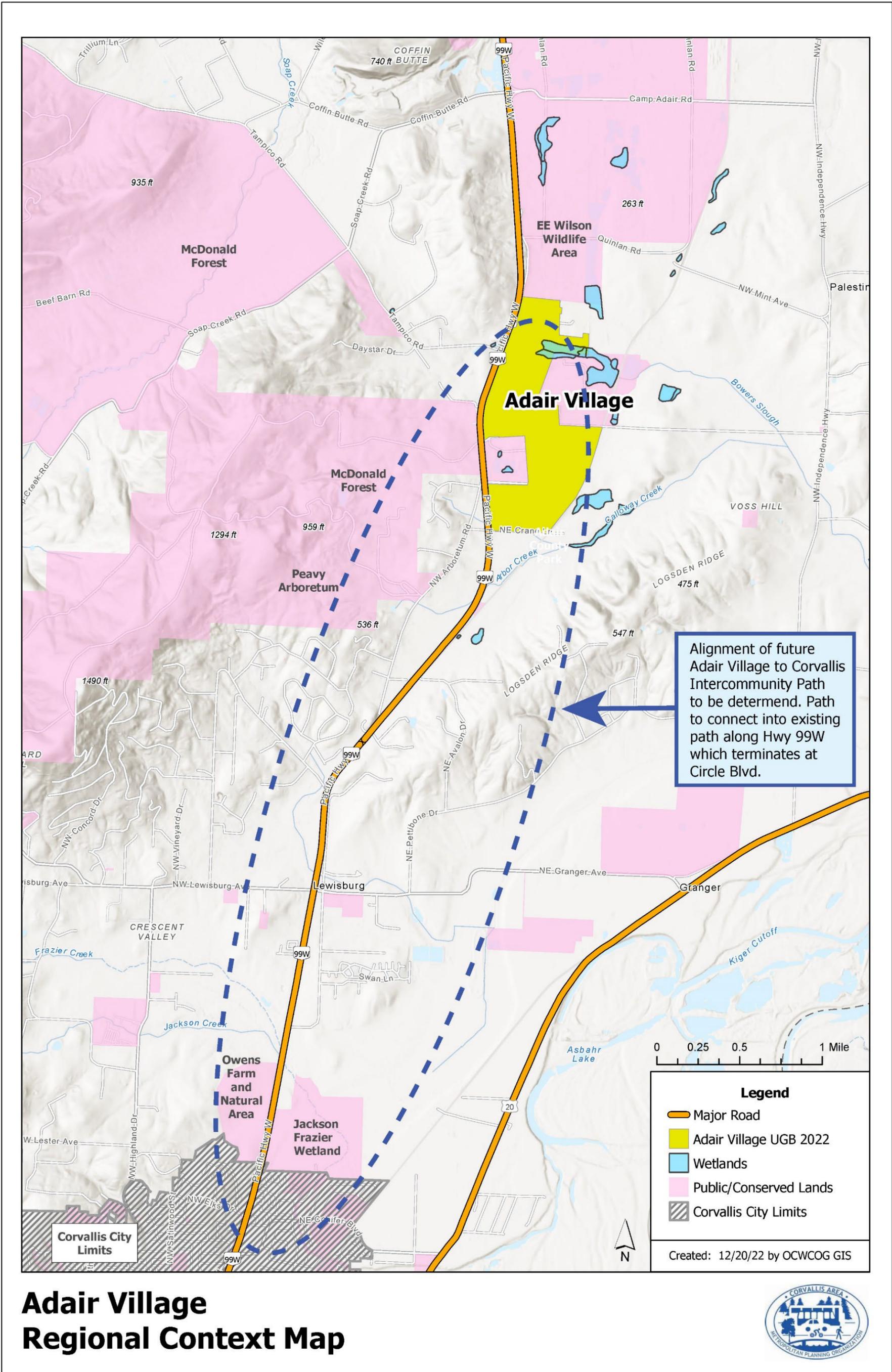
Figure 21. Conceptual Trails Plan



# Adair Village Conceptual Trails Plan



**Figure 22: Regional Context Map**



# Adair Village Regional Context Map



## **Education Programs, Safety Programs, Community Involvement Programs**

Education, safety and community involvement programs can be an effective way to encourage local residents to use trails and incorporate physical activity into their daily lives. This section provides policy and program recommendations for Adair Village to consider adopting and implementing. It is not expected that every policy and program recommendation will be adopted in Adair Village, instead the community can elect to adopt and try out options that fit best.

Policy recommendations include the following topics:

- Increased bike parking
- Deployment of bicycle and pedestrian route signage
- Including lighting at key junctions in the path system or along unlit corridors
- Maintain trees and vegetation along pathway network
- Regular maintenance and upkeep of bicycle and pedestrian infrastructure investments

Program recommendations include the following topics:

- Develop and distribute bicycle and pedestrian route maps
- Partnering with outside organizations or encouraging the creation of local walking groups
- School related walking and biking programs
  - Walk & Roll to School Day
  - Walking School Bus
  - Safe Routes to School bike rodeos and education curricula
  - Annual school count of walking and biking
- Bike/Walk/Ride Transit to Work Day or Week
- Encourage local businesses to become designated as Bike-Friendly Businesses
- Annual Slow/Open Streets Event(s)

## Chapter 6: Project Implementation

Implementation of projects outlined in this plan will take place incrementally and require financial investments in planning, engineering, construction and other supporting efforts. Leveraging local dollars from developers and the City of Adair Village can help leverage trails development and accelerate construction timelines. This chapter provides information on potential funding sources for investing in trails and strategies to make limited dollars go further.

### Funding Sources and Opportunities

There are a variety of opportunities the City of Adair Village can explore to help fund investment in trails infrastructure. These include traditional funding sources, such as state gas tax revenues and system development charges (SDCs) as well as competitive grants like those offered through regional, state and federal government agencies. An overview of competitive sources is provided below.

#### **Competitive Grant Programs**

State and Federal grants are a great way to supplement local tax dollars when completing small or large infrastructure projects. Many grants and outside funding sources are only available for a limited duration or during a defined period of time so it is important to continually track grant availability. City staff can stay in touch with the Corvallis Area Metropolitan Planning Organization (CAMPO), Benton County Natural Areas, Parks & Events Department, Cascades West Area Commission on Transportation (CWACT), Oregon Department of Transportation (ODOT), the Oregon Parks and Recreation Department and others partner agencies for updates on grants and other funding availability.

- **Oregon Community Paths Program:** The Oregon Community Paths (OCP) Program is an ODOT grant program dedicated to helping communities create and maintain connections through multi-use paths. ODOT uses money from the state Multimodal Active Transportation fund and federal Transportation Alternatives Program to fund the OCP program. Grants can be used for project development, construction, reconstruction, major resurfacing or other improvements of multi-use paths that support access and safety for people walking and riding bikes. The first round of funding was disbursed in 2021, funding is expected to grow in the future. For more info visit: <https://www.oregon.gov/ODOT/Programs/Pages/OCP.aspx>
- **Safe Routes to School:** Safe Routes to School (SRTS) is a federally funded program that promotes walking and bicycling to school through infrastructure improvements, enforcement, safety education, and incentives. Federal transportation bills designate money for SRTS programming, which is then disbursed to individual state departments of transportation (DOTs). In Oregon, ODOT manages competitive funding for SRTS infrastructure (increasing to \$10 million in 2023) and non-infrastructure (\$300,000). Infrastructure projects focus on making sure safe walking and biking routes exist through investments in crossings, sidewalks, bike lanes, flashing beacons, and other improvements within one mile of a school in the public right of way. Non-infrastructure programs focus on education and outreach to assure awareness and safe use of walking and biking routes.

ODOT divides SRTS funding into three different programs (two for construction and one for planning), each with their own eligibility requirements, application guidelines, and timelines. Trail improvements or crossings in Adair Village may be eligible for this funding so long as they are within the right of way and within one mile of the local school.

- **Competitive Construction Grant Program:** Most of the funds, 87.5% or greater, are used for a competitive grant program to build street safety projects to reduce barriers and hazards for children walking or bicycling to or from schools. The grant program operates on a biannual cycle (opens every two years).
- **Rapid Response Construction Grant Program:** Up to 10% of funds are used for urgent needs or systemic safety issues in between competitive program grant cycles.
- **Planning Assistance Program/Project Identification Grant Program:** Up to 2.5% of funds are used by ODOT to help communities identify projects to reduce barriers and hazards for children walking or bicycling to and from school and that will lead to eventual construction.

For more on the Safe Routes to School Program visit the link below:

<https://www.oregon.gov/ODOT/Programs/Pages/SRTS.aspx>

- **Sidewalk Improvement & Quick Fix Programs:**

ODOT’s Sidewalk Improvement Program (SWIP) and Quick Fix Program help build bicycle and pedestrian improvements on or along state highways. Both programs operate on a rolling basis and are particularly good for filling in missing pieces of sidewalk.

- **Recreational Trails Program:** The Recreational Trails Program (RTP) is a federally funded grant program administrated by the Oregon Parks and Recreation Department. Since 1993, Oregon has funded over 500 projects with RTP funds to develop, improve, or expand motorized and non-motorized trails and their facilities.

Oregon’s annual RTP allocation is approximately \$1.6 million. At least 30% of funds are set aside for motorized trail projects.

The minimum grant request amount is \$10,000. There is a recommended grant request maximum of \$150,000 for non-motorized proposals and no maximum for motorized proposals. Applicants must commit to at least 20% match. Match can include volunteer labor or other donations.

For more information visit: <https://www.oregon.gov/oprd/GRA/Pages/GRA-rtp.aspx>

- **Local Government Grant Program:** The Local Government Grant Program (LGGP) is a voter approved, State lottery funded grant program administrated by the Oregon Parks and Recreation Department. Typically, the program awards over \$5 million annually to qualified projects, and has awarded over \$60 million in grant funding since the program began in 1999.

Recreational trails are eligible for this funding. Local match is required

For more information visit: <https://www.oregon.gov/oprd/gra/pages/gra-lggp.aspx>

## **Other Funding Opportunities**

The table below includes other grant opportunities not discussed in detail above. As mentioned above, it is important for City staff to keep up to date about changing grant opportunities and funding amounts on an ongoing basis. Staying up to date with transportation grant cycles allows staff to match projects with the grant opportunities they will be most competitive for, as different grants have different eligibility requirements. It’s also important to note that grants rarely cover the full cost of a project and often require matching funds.

Grant Program Name	Grant Information	Program Focus
<b>Surface Transportation Block Grant (STBG) Program</b>	<ul style="list-style-type: none"> <li>Provides flexible funding that may be used by States and localities for projects including road, pedestrian and bicycle infrastructure, transit capital projects, and more.</li> <li>CAMPO administers STBG funding Adair Village is eligible to receive.</li> </ul>	<ul style="list-style-type: none"> <li>Federal aid hwy, bridge and tunnel projects public roads, bike and pedestrian infrastructure, and transit capital</li> </ul>
<b>Rebuilding American Infrastructure with Sustainability and Equity (RAISE)</b>	<ul style="list-style-type: none"> <li>U.S. Department of Transportation program</li> <li>Supports transportation projects that promise to achieve national objectives (previously called BUILD and TIGER grants)</li> </ul>	<ul style="list-style-type: none"> <li>Very large</li> <li>Multimodal</li> <li>Multi-jurisdictional</li> </ul>
<b>All Roads Transportation Safety Program (ARTS)</b>	<ul style="list-style-type: none"> <li>ODOT program designed to address safety needs on all public roads in Oregon</li> <li>Funding is data-driven relative to safety factors and based on cost benefit analysis.</li> </ul>	<ul style="list-style-type: none"> <li>Projects that address hotspot and systemic safety issues and concerns</li> </ul>
<b>People For Bikes Community Grants</b>	<ul style="list-style-type: none"> <li>Private grant program that awards funds to non-profits and local government (up to \$10,000). People For Bikes is an industry coalition focused on promoting the use of bikes for recreation, fitness and transportation)</li> <li>Supports bicycle infrastructure projects and targeted advocacy initiatives that make it easier and safer for people of all ages and abilities to ride.</li> </ul>	<ul style="list-style-type: none"> <li>Bicycling</li> <li>Active transportation</li> <li>Community development</li> </ul>
<b>Travel Oregon Grants</b>	<ul style="list-style-type: none"> <li>Travel Oregon awards <a href="#">matching grants of up to \$20,000</a> for projects with a tourism purpose</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
<b>Private Contributions</b>	<ul style="list-style-type: none"> <li>Certain walking and biking improvements (sidewalk installation/repairs, etc.) can be required as conditions of approval of land use development proposals, or asked for as a negotiated mitigation agreement, or upon property transfer.</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>

## Project Phasing

Several projects identified in the Trails Plan may be large enough to break into multiple phases or take place over the course of several years. Such large-scale projects can be implemented in phases by focusing on one piece of the project at a time –for example constructing one segment of a multi-use path while additional funding is identified for future segments. Following the adoption of this document,

the City of Adair Village may wish to do some additional strategizing on where project phasing might be appropriate. Grant cycles and other funding opportunities may also impact phasing options.

## **Project Bundling**

Project bundling involves incorporating projects, or portions of projects, from the Trails Plan into other planned transportation improvements, such as street resurfacing, intersection upgrades, urban upgrades, safety projects, or utility projects. Incorporating projects identified in this Plan into other infrastructure efforts can help reduce overhead costs and speed up the timeline for trail implementation. Improvements like striping bicycle lanes, incorporating enhanced roadway crossings, or modernizing lane markings can all be rolled into other infrastructure projects. Enhancement of lighting, ADA ramps, and establishing more space for people walking and riding bikes are other examples of meaningful improvements that can be bundled into larger projects.

Project bundling can also be a good strategy when applying for grants. Bundling a handful of small projects can result in a more compelling story that makes a grant application more competitive. Bundling for grants can be based around themes such as neighborhood connectivity, access to transit stops, connections to open space, or safe routes to school.

## **Volunteer Support for Development and Maintenance**

As noted in Chapter 4, the path system will be primarily managed and maintained by the City of Adair Village with additional support from other agencies including:

- Benton County Natural Areas, Parks and Events Department (in Adair County Park)
- Benton County Public Works (Roadway crossings on County roadways)
- Oregon Department of Transportation (if bicycle and pedestrian crossings along Highway 99W are undertaken)
- Oregon Department of Fish and Wildlife (native trails located on their property)

These agencies have staff experienced in managing and maintaining the type of trail and roadway infrastructure attributed to their respective jurisdictions. Nonetheless, the City of Adair Village may seek to recruit community volunteers interested in helping maintain trails. Volunteer work groups are often willing to support maintenance and upkeep of trail infrastructure as a way to give back to the community and protect recreational assets they use on a regular basis. Frequent visitors, hiking groups, and neighbors commonly support work parties or report issues with trail infrastructure before they are spotted by public officials. The City of Adair Village may seek to empower community members to help maintain trail investment. Because of the complexity and hard infrastructure associated with paved multi-use paths these types of volunteer arrangements may be most appropriate along native or gravel pathways.