



Active Transportation

INTRODUCTION

Active transportation represents non-motorized forms of transportation. Nationally and across the Treasure Valley, walking and biking are an integral part of transportation discussions and planning. Walking, biking, and even public transportation promote active living, and the benefits range from reducing personal household expenditures to increasing economic vitality in cities and regions to improving public health.

The goal for active transportation planning in the Treasure Valley is to provide citizens with safe, comfortable, and convenient non-motorized modes of transportation to allow them to access the places that are most important to them. This means a regional network that connects residents and communities to employment, commercial, and recreational destinations. Public transportation plays a large role in the demand for bicycle and pedestrian facilities; therefore, prioritizing bicycle and pedestrian projects around public transportation stops and facilities is imperative.

ACTIVE TRANSPORTATION GOALS AND OBJECTIVES

Seventeen goals and their related objectives were originally developed for *Communities in Motion 2040*; these goals and objectives remain unchanged for *Communities in Motion 2040 2.0*.¹ Four of these goals relate to active transportation.

Goal 1.4 is to “[d]evelop a transportation system with high connectivity that preserves capacity of the regional system and encourages walk and bike trips.” Related objectives are to increase the number of schools with Safe Routes to School programs and improve connectivity between public transportation and the bike/walk network.

Goal 2.4 is to “[s]trive for more walkable, bikeable, and livable communities with a strong sense of place and clear community identity and boundaries.” Objectives for this goal include implementing Complete Streets policies to support community identity and livability and developing and implementing local bicycle/pedestrian plans.

Goal 5.1 is to “[p]romote a transportation system and land use patterns that enhance public health, protect the environment, and improve the quality of life.” Objectives under this goal include sharing information with elected officials, local agencies, and community members about the connection between health and neighborhood design and working with public health professionals to gather and promote health data relevant to transportation planning.

Goal 7.1 is to “[p]romote development and transportation projects that protect and provide all of the region’s population with access to open space, natural resources, and trails.” One of the objectives under this goal is to create a connected network of trails, pathways, and greenways.

To accomplish these goals, COMPASS collects and analyzes data about bicycle and pedestrian use, and shares this with agencies, organizations, and developers to help plan projects that increase the number of active transportation opportunities in the Treasure Valley.



COLLECTING AND ANALYZING SUPPLY AND DEMAND DATA

COMPASS reports on the supply of bicycle and pedestrian infrastructure through its Bike Walk Compass interactive map² and collects, analyzes, and reports on the demand for bicycle and pedestrian infrastructure data through its bicycle and pedestrian counter program. Together, these supply and demand data help determine where and how to program future investments.

Supply

Working with member agencies and the Active Transportation Workgroup,³ COMPASS created the Bike Walk Compass interactive map to portray existing and planned regional bicycle and pedestrian facilities. The planned facilities reflect bicycle/pedestrian plans from COMPASS member agencies across the Treasure Valley. The map also includes locations of bike shops, Fixit stations, and Boise GreenBike hubs. The interactive map is updated twice a year to reflect changes to on-the-ground infrastructure and local and county plans. Agencies use the map to identify gaps in planned and constructed facilities and to prioritize investment accordingly.

In addition, COMPASS employs information from the Bike Walk Compass map in its development review process,⁴ which provides feedback to decision makers regarding how proposed developments align with *Communities in Motion* goals. One aspect of this feedback considers bicycle and pedestrian connectivity. The Bike Walk Compass enables COMPASS to provide information to elected and appointed officials on existing and planned pathways and multimodal roadway infrastructure to help complete gaps in the system and improve the overall health of the region.

Demand

In 2015, to secure data for use in active transportation planning, COMPASS initiated its bicycle and pedestrian counter program⁵ by purchasing permanent and portable counters. As of May 2018, COMPASS had 12 permanent counters placed around the Treasure Valley—eight of these were installed in 2015, two in 2016, and two in 2017 (Figure 1)—in addition to 41 portable counters.

The counter program is an important tool in transportation planning, as it provides information about how people get from place to place without the use of cars. It also helps identify where pathways, sidewalks, bike routes, and bike lanes are most needed in the Treasure Valley.

Since the program began in June 2015, over six million cyclists and pedestrians have been counted on the Treasure Valley's pathways, sidewalks, and streets.

The permanent counters provide year-round, long-term data that show trends on the pathway systems. These data help planners identify different types of uses and users. For example, data from the counter at the Anne Frank Memorial on the Boise River Greenbelt (Figure 2) show a spike in use on weekends—likely recreational—and the fairly consistent use on weekdays—likely commuters. Year-round data also reveal seasonal peaks and valleys, as well as spikes related to special events (Figure 3). Data from the permanent counters are summarized on the COMPASS website.⁶

The 41 portable counters are used for on-demand bicycle and pedestrian counts. COMPASS member agencies can request counts to be conducted at places where they are considering improvements to inform their investment decisions. The data are also used to apply for grants, such as through the Safe Routes to



School program, by showing the need for improvements before making an investment and demonstrating changes in use after projects are completed.

The use of demand data is essential for planning and disseminating information to the region. COMPASS will continue to pursue avenues to increase the range of portable counters, expand the permanent counter network, and supply the region with informative results that can direct local and regional planning efforts.

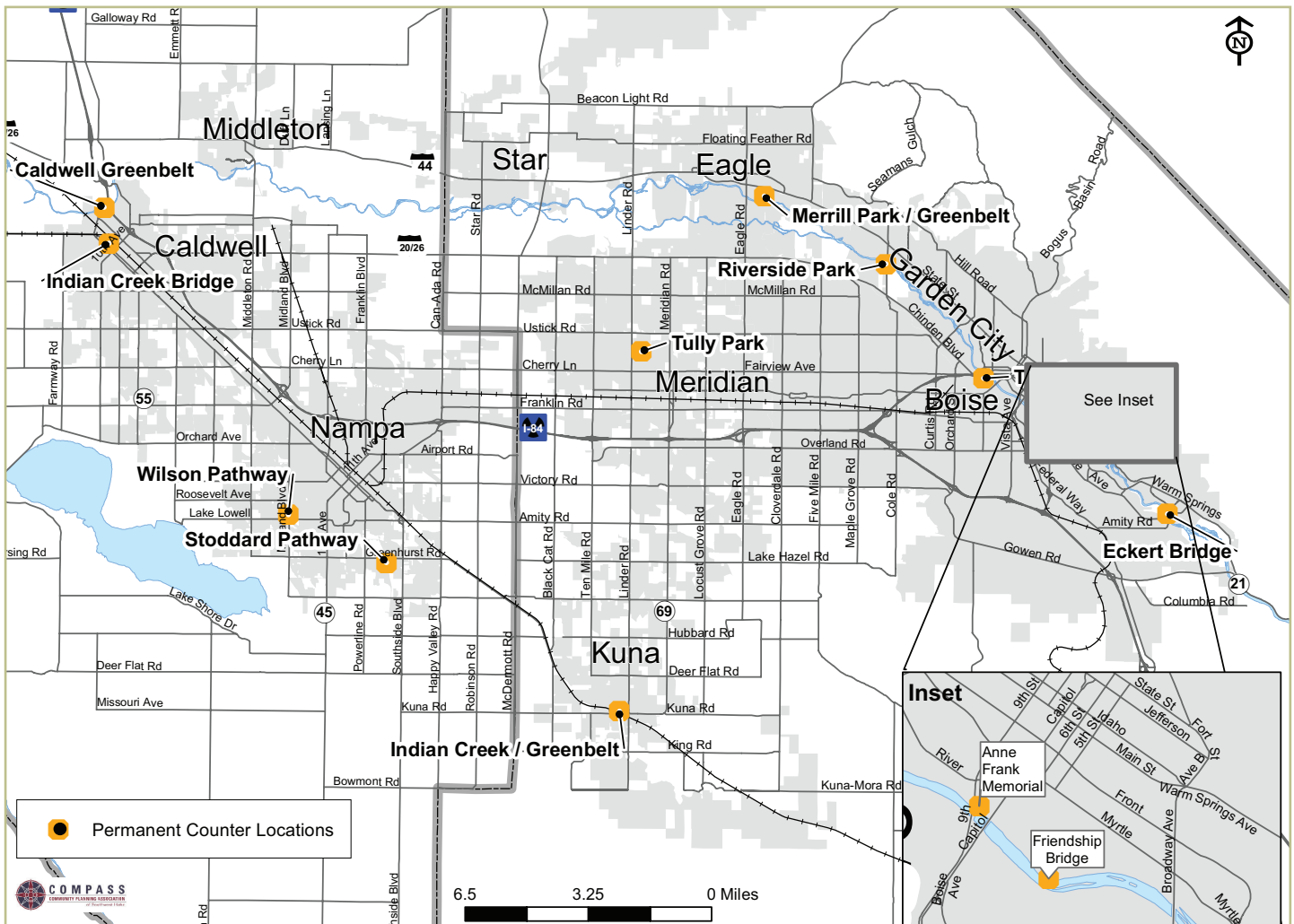


Figure 1. Permanent bicycle and pedestrian counter locations, 2018

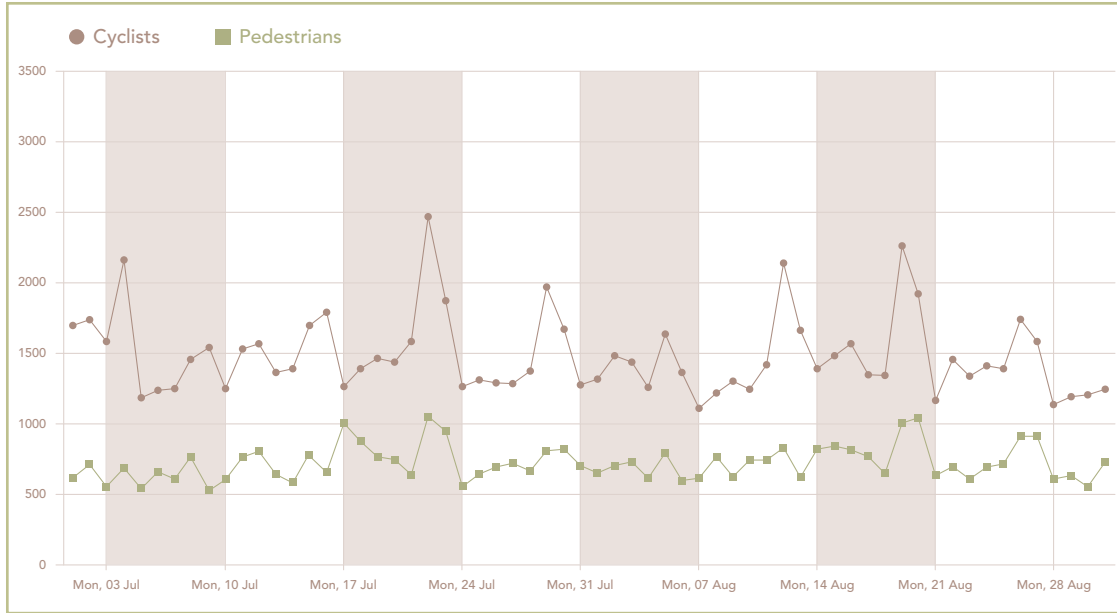


Figure 2. Pedestrian and cyclist counts at the Anne Frank Memorial along the Boise River Greenbelt in Boise from July 1 to August 31, 2017

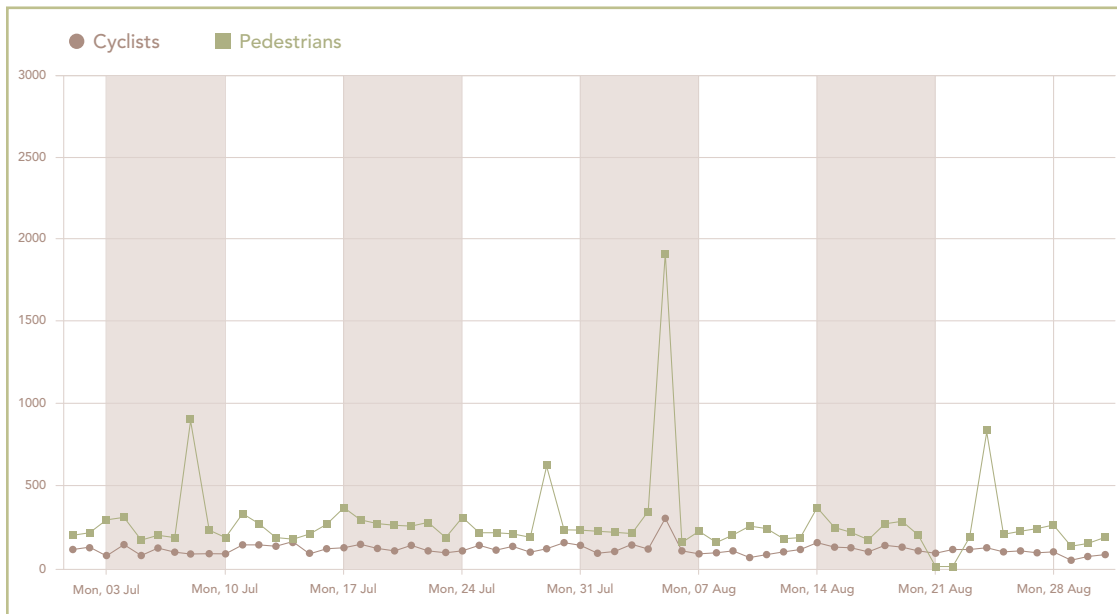


Figure 3. Pedestrian and cyclist counts along Indian Creek in Kuna from July 1 to August 31, 2017. The spike in use corresponds to the Kuna Days celebration.



FUTURE REGIONAL ACTIVE TRANSPORTATION CORRIDORS

Proposed Treasure Valley Regional Bikeway and Pathway Network

COMPASS staff worked with the Active Transportation Workgroup to identify a proposed future regional bikeway and pathway network for the Treasure Valley (Figure 4). While this network is still in the conceptual stage, once it is fully developed, it will offer an opportunity for pedestrians and cyclists alike to travel along rivers, railroad corridors, roadways, and canals. The network will be designed to connect the region with a low-stress pathway network—away from cars and/or high-speed vehicles—that engages residents in active living.

Several data sets were examined to help identify corridors for this future 2040 network, including existing routes and conditions, crash data, crowdsourced bicycle/pedestrian data sets, demographic trends, public transportation routes, and priority corridors identified in *Communities in Motion 2040*. This process led to the identification of 17 corridors most critical to connecting the two-county region by 2040. The 17 corridors would comprise 389 linear miles of pathways, trails, and roadways. Accessibility analyses reveal that 88% of all households, 89% of all jobs, and 94% of the total population would be within one mile of the 2040 network. Once complete, this network will fulfill Goal 1.4, above, to develop a transportation system with high connectivity that encourages walk and bike trips, and an objective under Goal 7.1, to develop a connected network of trails, pathways and greenways.

In order to assess investments needed to complete this ambitious network, COMPASS developed a planning-level cost estimate. Of the total proposed 390-mile network, 90 miles of pathways already exist, leaving 300 miles to be developed at an estimated total cost of \$87 million (Table 1). These costs provide only high-level estimates; they are not intended to presuppose specific termini, designs, or other considerations. Final cost estimates will be developed as discrete projects and designs are determined, coordinated with local bike and pedestrian plans and priorities, and prioritized to implement a regional pathway network. The COMPASS Complete Streets policy⁷ (to be updated in 2019) will be used as a guide as projects move through this process.

Rails with Trails

Trails built alongside operational railroad tracks, also known as “rails with trails,” are being planned and developed across the country. In the Treasure Valley, just over 35 miles of railroad along the Boise Cutoff were identified as a potential location for a rails-with-trails project. The Boise Cutoff is an operational railroad corridor that receives relatively light use, with an average of four trips per day, five days a week.

If completed, this pathway could connect the hearts of the Cities of Boise, Meridian, and Nampa, providing one-mile access to more than 140,000 valley residents. Of the 35 total miles, 25.7 linear miles are owned by Union Pacific and the remaining 9.7 miles are owned by the City of Boise (Figure 5).

The 25.7 linear miles owned by Union Pacific encompass 506.8 acres of right-of-way, which was primarily donated to Union Pacific by area residents at the turn of the 20th century.

COMPASS’ Rails with Trails Workgroup,⁸ comprising planners, elected officials, advocacy groups, police officers, health departments, bike shop owners, and other members of the community, is exploring the potential of a rails-with-trails route along the Union Pacific Boise Cutoff.



The workgroup has identified potential trail alignments and barriers such as canals, drainage areas, wetlands, spur lines, maintenance roads, constrained right-of-ways, and intersections. A preferred alignment has yet to be determined; however, 25-foot cross-section design preferences are taking shape through rural, suburban, and urban settings. Planning-level costs to acquire the adequate 25-foot right-of-way (25.72 linear miles totaling 82 acres) and build the trail, based on different material types and cross-section designs, range between \$1.3 million and \$1.7 million per mile.

Currently, Union Pacific Railroad has expressed an unwillingness to allow a pathway within the existing right-of-way adjacent to the railroad. It has cited safety, security, economics, customer satisfaction, and liability as major concerns that will need to be addressed before negotiations can take place. Once all identified issues have been addressed, gaining access to the railroad right-of-way will need to be negotiated either through an outright land purchase or some form of access agreement between parties. In 2019 COMPASS completed a study to further define design and cost estimates for a rail with trail. See www.compassidaho.org/documents/prodserv/CIM2040_20/COMPASS_FINAL_RWT_COST_STUDY_090419_web.pdf.

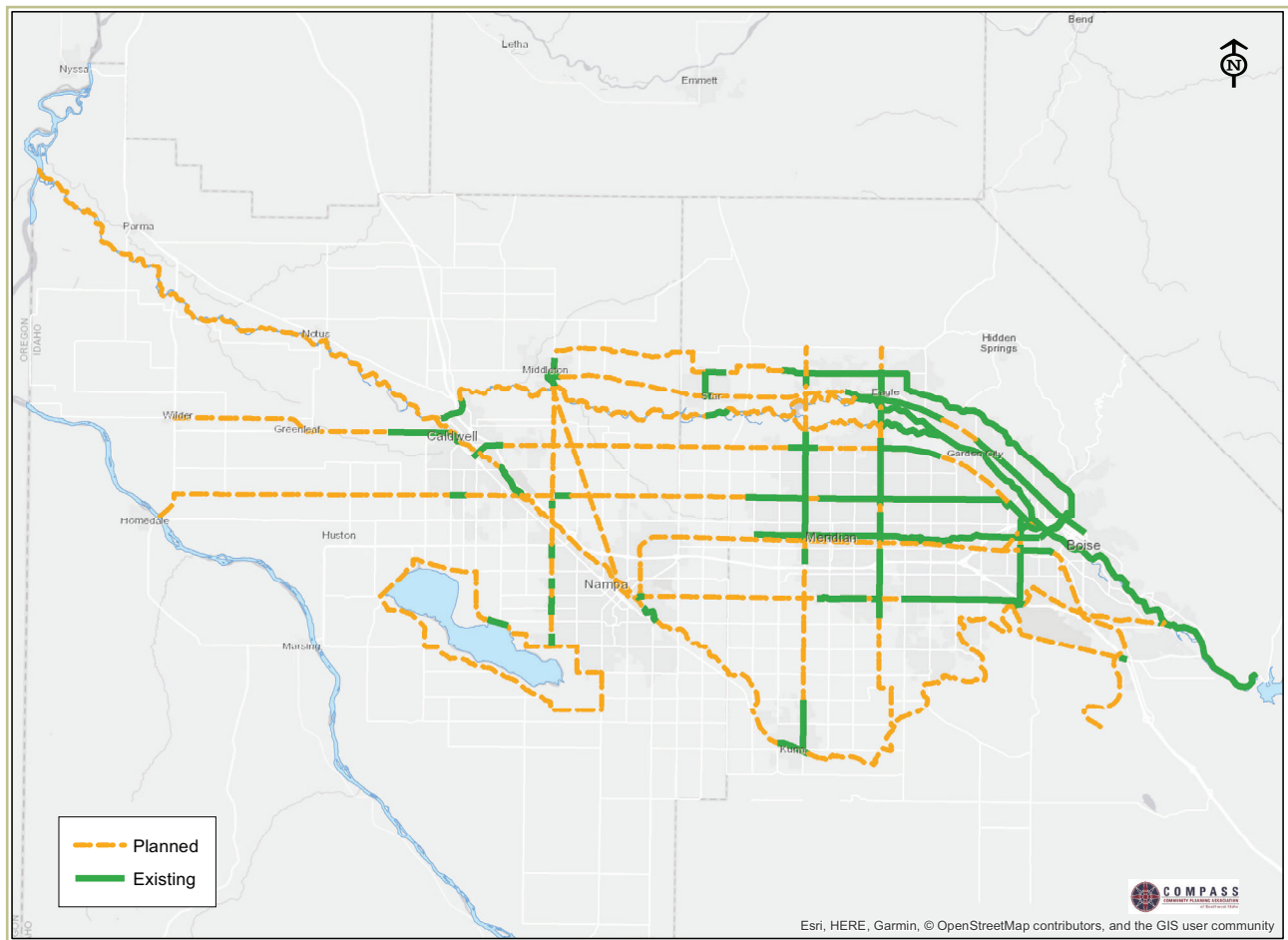


Figure 4. Proposed Treasure Valley regional bikeway and pathway network



Table 1. Proposed Treasure Valley regional pathway and bikeway network estimated construction costs

Project name	Estimate gap distance (miles)	Estimated construction cost
Existing pathways included in the network	90	\$0
Additional pathways to complete the network:*		
Boise River Greenbelt	45	\$17,380,000
Chinden Boulevard (US Highway 20/26)	20	\$6,470,100
Eagle Road	12	\$1,566,800
Emerald Street/Pine Avenue	1	\$188,900
Indian Creek Pathway	19	\$7,188,100
Lake Lowell	25	\$7,541,700
Middleton Road	11	\$2,309,300
New York Canal	24	\$9,054,600
Linder Road	12	\$1,573,000
Cherry Lane/Ustick Road	27	\$ 5,374,200
Foothill Road/Floating Feather Road	13	\$1,731,500
Orchard Street to Gowen Road	9	\$1,117,900
Rail with Trail, Boise Spur	32	\$12,335,000
Rail with Trail, Middleton/Nampa Spur**	8	\$ 3,184,500
Rail with Trail, Wilder/Caldwell Spur**	11	\$4,316,300
Victory Road	11	\$1,446,700
State Street/State Highway 44	20	\$ 4,251,300
Total estimated gap distance and cost	300	\$87,029,900
Total network	390	

*The most appropriate type and design of pathway for each location has yet to be determined; these decisions will be guided by local plans and the COMPASS Complete Streets policy.

**Additional rails-with-trails segments not included in the Boise Cutoff proposed rails-with-trails networks

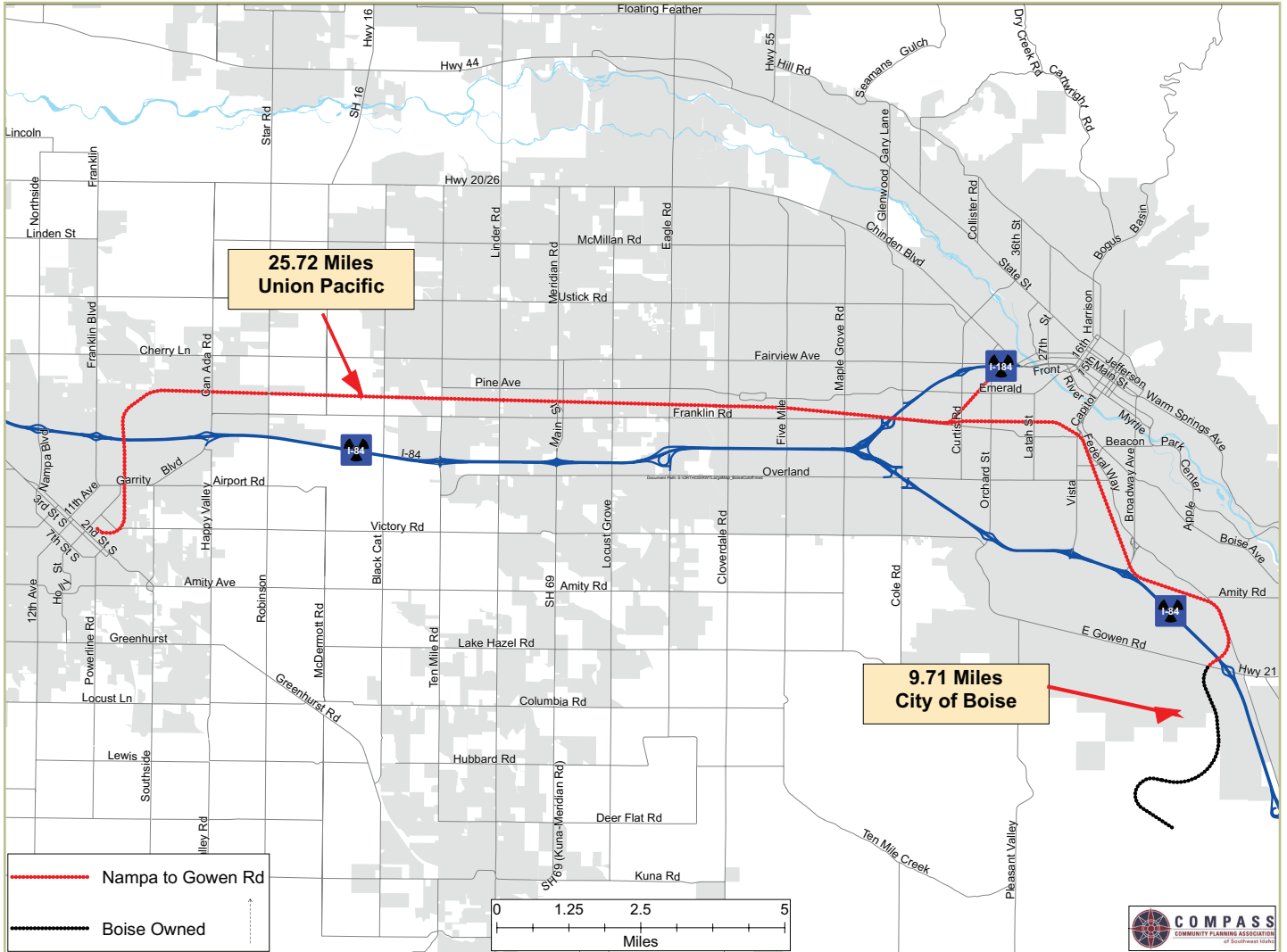


Figure 5. Proposed rails-with-trails alignment along the Boise Cutoff



FUTURE NEEDS AND CONSIDERATIONS

As the Treasure Valley continues to grow at a rapid pace, so do the design and planning elements particular to active transportation. Many approaches can be taken to resolve safety issues, increase active transportation mode choices, and spur implementation. COMPASS will need to stay abreast of innovations that will help achieve the goals outlined in CIM 2040 2.0.

First/Last Mile

As mentioned earlier, one of the goals of CIM 2040 is to improve the connectivity of the transportation system. Active transportation is not just about walking and biking. Non-vehicle households and those wishing for less car dependency require the service of public transportation. However, one of the major obstacles is connecting users to bus stops—known as the “first/last mile.” Active transportation can resolve first/last mile barriers and make each trip safer and more comfortable and entice more trips.

Active transportation planning assumes that pedestrians are willing to walk one-half mile to connect to public transportation. This distance extends to three miles for persons on a bike. Sidewalks that are buckled and broken, and that lack a smooth rolling surface become barriers for first/last mile users. Bike lanes relegated to tight spaces next to high-speed and high-volume traffic often discourage people with disabilities, the young, and the elderly from attempting first/last mile trips. Even the intrepid cyclist may not feel compelled to use a facility under such conditions. Part of first/last mile planning is assessing bike lane and sidewalk conditions near bus stops. The assessment is used to identify critical needs and prioritize them for future funding in regional plans.

COMPASS began an assessment of first/last mile opportunities by analyzing potential access to existing Valley Regional Transit bus stops. Given the large number of bus stops, the analysis focused on identifying stop locations that are of regional significance and that will most benefit from capital investments.

Equipping buses with automated passenger counters to provide boarding and alighting data for each stop would further assist in first/last mile analyses. Until such data can be acquired, anecdotal and planning-level methods can still be useful in targeting future investments.

Pilot Projects

While most new roadway projects include sidewalks and bike lanes, finding adequate right-of-way and funding for other bicycle and pedestrian projects is one of the greatest challenges facing the region. In many instances, bicycle/pedestrian plans are constrained by the high cost of implementation. To overcome these barriers, communities often test concepts with low-cost approaches such as paint and street bollards before making curb and gutter investments. Local transportation plans should encourage pilot project testing, allowing for the flexibility and application of interim materials coupled with public input and feedback.

As mentioned earlier, the cost to finish the proposed Treasure Valley regional bikeway and pathway network would require investment levels of over \$87 million. Until sufficient funds can be found to complete the network, intermediate steps, including pilot projects, could be taken to help test concepts to improve safety and enhance bicycle and pedestrian facilities. The end goal is to create permanent change by demonstrating whether low-cost endeavors could have long-lasting benefits.



CONCLUSION

Active transportation is taking shape in the Treasure Valley with informed goals, regional foresight, data collection/dissemination efforts, and an eye to the ever-evolving future. Low-stress active transportation opportunities center on the regional bikeway and pathway network in addition to the rails-with-trails project along the Boise Cutoff. Next steps for these efforts include continued planning and coordination, finalizing cost estimates, and securing funding.

NOTES

- 1 CIM 2040 goals, COMPASS, <http://compassidaho.org/CIM2040-2.0/communities-in-motion-goals>
- 2 Bike Walk Compass interactive map, <https://compassidaho.maps.arcgis.com/apps/webappviewer/index.html?id=8a567a39377a46bfb7e38f8172261809>
- 3 COMPASS Active Transportation Workgroup, <http://www.compassidaho.org/people/workgroups.htm#atwg>
- 4 COMPASS development review process, <http://www.compassidaho.org/dashboard/devreview.htm>
- 5 COMPASS bicycle and pedestrian counter program, <https://www.compassidaho.org/prodserv/activetrans/activetransportation.html#bikepedcounters>
- 6 COMPASS bicycle and pedestrian traffic count data, http://www.compassidaho.org/prodserv/traffic_counts.htm
- 7 Complete Streets policy, COMPASS, <https://www.compassidaho.org/prodserv/activetrans/activetransportation.html#los>
- 8 COMPASS Rails with Trails Workgroup, <http://www.compassidaho.org/people/workgroups.htm#rwtwg>