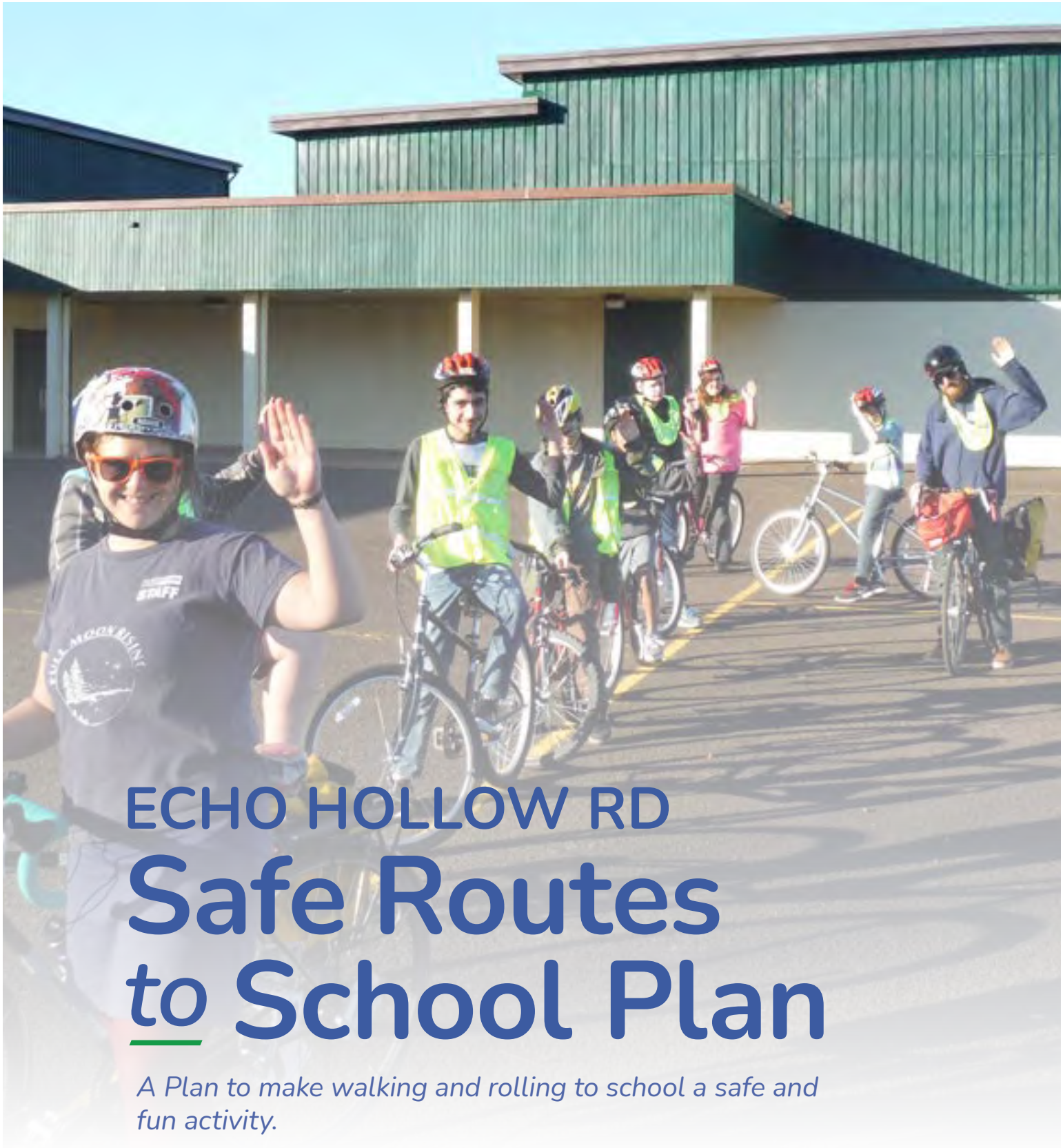


ECHO HOLLOW RD
Safe Routes *to* School Plan

A Plan to make walking and rolling to school a safe and fun activity.

CITY OF EUGENE
WILLAMETTE HIGH SCHOOL
CASCADE MIDDLE SCHOOL

DRAFT REPORT / NOVEMBER 2023

Oregon Department of Transportation
Safe Routes to School

ALTA · COMMUTE OPTIONS · THE STREET TRUST

ACKNOWLEDGMENTS

The following key people and their organizations participated in the Safe Routes to School (SRTS) Plan efforts. Their creativity, energy, and commitment were critical to the success of this Plan.

REED DUNBAR
City of Eugene Transportation

ROBBIE GUTHRIE
City of Eugene Parks & Recreation

DANIEL HEDBERG
Bethel School District

RACHEL TOCHEN
Bethel School District

KODJO WILDER
Bethel School District

LIN WOODRICH
Active Bethel Community

SUPPORTING ORGANIZATIONS

City of Eugene

Bethel School District

Cascade Middle School

Willamette High School

ALTA PLANNING + DESIGN STAFF

Amelia Adams

Alex Rau

Trevor Luu

TABLE OF CONTENTS

01 INTRODUCTION

WHAT IS SAFE ROUTES TO SCHOOL?

*Safe Routes to School (SRTS) is a comprehensive program to **make school communities safer** by combining engineering tools and engagement with education about safety and activities to enable and encourage students to **walk and roll to school**. SRTS programs involve partnerships among municipalities, school districts, transit districts, parks and recreation districts, public health agencies, community members, parent volunteers, and community groups.*

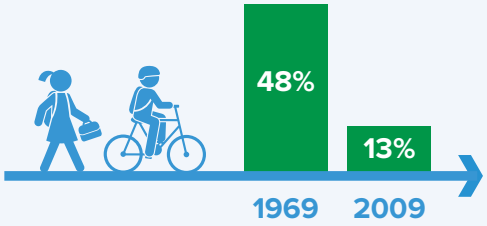
The benefits of implementing a SRTS Plan include improving safety, increasing access, encouraging physical activity, and reducing traffic congestion and motor vehicle emissions near schools. Implementing SRTS programs and projects benefits adjacent neighborhoods, as well as students and their families, by reducing traffic conflicts and enabling walking and rolling trips for all purposes.

Learn more at [www.oregonsaferoutes.org.](www.oregonsaferoutes.org)

Why Safe Routes to School?

THE PROBLEM

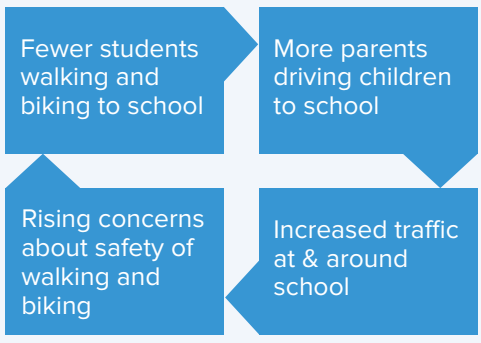
Within the span of one generation, the percentage of children walking or bicycling to school has decreased **73%**.



Children and adolescents should have **60 minutes (1 hour)** or more of physical activity daily.

Roads near schools are congested, **decreasing safety and air quality** for children.

This movement away from active transportation is a **self-perpetuating cycle**.

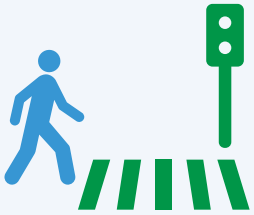


THE SOLUTION

SRTS programs and activities help overcome obstacles to walking, biking, and skating by **improving safety** and making these activities **fun and convenient for everyone**.

SRTS education and encouragement programs can result in a **25%** increase in walking and biking over five years.

When education and encouragement programs are combined with infrastructure improvements, such as sidewalks and safe crossings, SRTS can result in a **45%** increase in walking and biking.



One mile of walking each way to school equals **2/3 of the daily recommended 60 minutes** of physical activity.

Sources: McDonald, Noreen, Austin Brown, Lauren Marchetti, and Margo Pedroso. 2011. "U.S. School Travel 2009: An Assessment of Trends." American Journal of Preventive Medicine. + Centers for Disease Control. www.cdc.gov/physicalactivity/basics/children/index.htm; McDonald, N., Steiner, R., Lee, C., Rhoulac Smith, T., Zhu, X., and Y. Yang. (2014). Impact of the Safe Routes to School Program on Walking and Bicycling. Journal of the American Planning Association.

Student Benefits of Safe Routes to School

Numerous studies have documented that Safe Routes to School projects and programs can lead to increased walking and bicycling activity among students. But why is it important for communities to make it safer and more convenient for students to walk and bike to school?

INCREASED SAFETY FOR STUDENTS

Even if some caregivers choose to drive their students to and from school, many families don't have this option. Some families have no access to a vehicle, and others have work schedules that don't allow them to drop their students off or pick them up at school. When we provide critical SRTS improvements and education to our communities, we make it safer for these (and all) students to to get to school.

REDUCTION IN ABSENCES AND TARDINESS

Especially in historically disadvantaged communities, lack of transportation can be a considerable barrier to attending school consistently. Programs such as Walking School Buses and Bike Trains, which offer supervision and structure for walk or ride to school, provide alternative options for students to arrive on time and ready to learn.[1]

HEALTHIER STUDENTS

Because SRTS programs make it easier to walk, bike, skate, and scoot to school, they directly support increased physical activity for young people.[2] Walking even one mile to school and one mile home gives a student about 40 minutes of physical acitivity – two-thirds of the recommended amount!

IMPROVED ACADEMIC PERFORMANCE

Staying healthy and getting regular exercise have been shown to improve students' academic performance. In one study, researchers found that after walking for 20 minutes, students responded to test questions with greater accuracy and had more brain activity than students who had been sitting. They also learned tasks faster and more accurately following this physical activity.[3]

CLEANER AIR, FEWER EMISSIONS

Increasing the number of students walking and biking to school means decreasing the number who have to rely on private vehicles. This improves air quality near schools, decreasing students' exposure to pollution generated by idling vehicles and heavy traffic.

GREATER CONFIDENCE

When young people are able to navigate their neighborhood on their own, they build self-confidence and independence. They may also learn to read signs, monitor time, keep track of their belongings, and gain other valuable skills.

STRONGER SOCIAL CONNECTIONS

Arriving to school via Walking School Bus, Bike Train, or even just with a friend or sibling fosters community and builds social bonds. Especially when so many students face challenges like bullying and isolation, this opportunity to make connections can be extremely beneficial.

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1 *Attendance Works. "Springfield: Walking School Bus - Attendance Works." Accessed August 22, 2016. http://www.attendanceworks.org/what-works/springfieldwalking-school-bus/.*

2 *Cooper et al., Commuting to school: Are children who walk more physically active? Amer Journal of Preventative Medicine 2003: 25 (4)*

3 *Hillman CH, Pontifex MB, Raine LB, Castelli DM, Hall EE, Kramer AF. The effect of acute treadmill walking on cognitive control and academic achievement in preadolescent children. Neuroscience. 2009;159(3):1044-1054. doi:10.1016/j.neuroscience.2009.01.057*

Community Benefits of Safe Routes to School

Students and their families are not the only ones who benefit when we encourage and enable young people to walk or bike to school safely. In many ways, Safe Routes to School benefits the whole community. Communities that prioritize active transportation can see the following improvements:

REDUCED TRAFFIC CONGESTION

Reducing the number of families commuting to school in private vehicles reduces traffic around the school. This means improved circulation for people driving, as well as safer conditions for pedestrians and bicyclists. As more people feel comfortable walking and bicycling, this can also foster an environment where community members see active transportation as a viable option and a priority, leading to additional shifts from driving to active modes.

STRONGER SENSE OF COMMUNITY

Opportunities for social connection and a greater sense of community increase as students and parents participate in collective active transportation (such as Walking School Buses) or get to know neighbors while out walking or biking. Additionally, the common goal of improving conditions for walking and bicycling can bring families, neighbors, school officials, and community leaders together.

SAFER STREETS

As the use of private vehicles increases, crash rates tend to increase[1]. Conversely, when higher numbers of people are able to walk and bike safely, communities can see a decrease in crashes. More people engaged in active transportation can also improve personal security and the perception of safety by providing more "eyes on the street."

1 *Litman, Todd and Fitzroy, Steven (2021), Safe Travels: Evaluating Transportation Demand Management Traffic Safety Impacts, Victoria Transport Policy Institute*

LOWER COSTS

Encouraging and enabling bicycle and pedestrian trips reduces costs for families, communities, and school districts. Families save on gas, while communities spend less on building and maintaining roads. Meanwhile, school districts spend less on busing students who live within walking distance of schools.

IMPROVED ACCESSIBILITY

When communities prioritize infrastructure improvements and make walking and biking to school safer, all community members benefit. Improved facilities make it easier for all people to get around, including parents with strollers, senior citizens, residents without cars, and residents with temporary or permanent mobility impairments.

ECONOMIC GAINS

Studies show that businesses in neighborhoods that are walking and bicycle friendly see more business and higher sales.[2]

2 *Rodney Tolley (2011), Good For Busine$$ - The Benefits Of Making Streets More Walking And Cycling Friendly, Heart Foundation South Australia*

Echo Hollow Rd SRTS Project Identification Program

The City of Eugene, Oregon Department of Transportation (ODOT) Region 2 representatives, and the school community worked with ODOT's SRTS Technical Assistance Providers— Alta Planning + Design and the Willamette Valley and Coast region SRTS Hub—to complete this SRTS Plan.

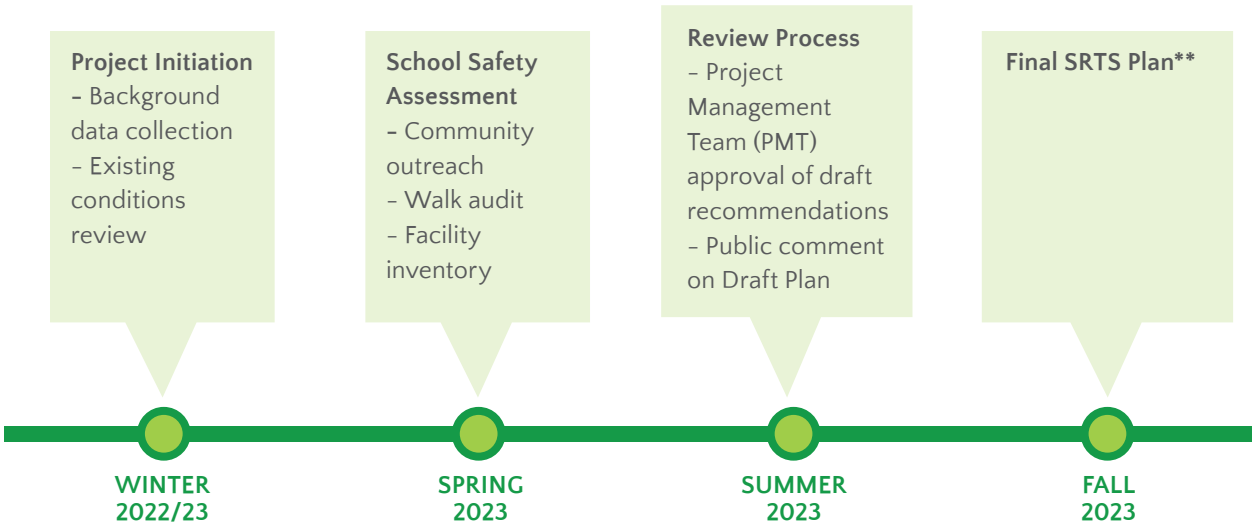
This SRTS Plan supports Oregon's statewide SRTS construction (infrastructure) and education/engagement (non-infrastructure) efforts. The Project Identification Program (PIP) process is an ODOT technical assistance program that helps communities identify needs and opportunities near one or more schools, focusing on streets within a quarter mile of the school, as well as critical issues within a mile of the school.*

This process did not include schools outside City boundaries.

The goals of the PIP process are:

- To engage school partners in identifying and prioritizing projects that will improve walking and bicycling routes to schools.
- To identify and refine specific projects that are eligible for the ODOT SRTS Infrastructure Grants and prepare jurisdictions to apply for the funding.

The Echo Hollow Rd SRTS Plan Process



*For more information on the PIP program, visit www.oregon.gov/ODOT/Programs/Pages/SRTS-Project-Identification-Program.aspx.
**Final SRTS Plans can be found at www.OregonSafeRoutes.org.
Note: A detailed summary of the planning process is included in Appendix B.

Plan Audience

This Plan lays the foundation for local public agency staff, schools, the community, and ODOT to work together on reducing barriers for students walking and biking to school. Because of the many people involved in this planning process, this Plan is written in a way that attempts to speak to several different audiences at once:

- **School, district, and local public agency staff:** The PIP process is usually initiated by a combination of these groups, which generally make up the PMT and have both a technical and experiential understanding of issues and needed improvements. At the same time, these stakeholders may or may not have an engineering background. The majority of this Plan is written to be read and understood by these important contributors.
- **Interested community members:** Because the success of any SRTS effort depends on engagement with the people who will ultimately use these routes, facilities, and programs, key sections of this Plan are intended to be understandable to the general public, including the school community and residents in general. In particular, the Existing Conditions section (which takes inventory of barriers and issues) is important for interested community members to review and add to. Recommendations are written in more technical language...
- **Planners, engineers and public works staff:** Ultimately, many of these recommendations involve highly specialized and technical processes, as well as competitive funding applications, which is why the Recommendations chapter is written with this audience in mind.
- **Local decision makers:** Elected officials, such as councilmembers, commissioners, and tribal governance bodies, are also a critical component of shaping active transportation. The Goals, Objectives, and Actions listed in the Vision and Goals Chapter will be particularly relevant for this group, as well as the Recommendations chapter. However, the majority of this Plan is written to be accessible to this group.

Student submission to Oregon Safe Routes to School Walk + Roll Art Contest, 2021

How to use this Plan

Each partner has a key role to play in contributing to this Plan's success. This section provides some ideas for how different groups can take part in advancing SRTS goals in their community.

WHO ARE YOU?

I AM A STUDENT

- Practice and encourage safe walking and rolling to, from, and near school.
- Participate in a Walking School Bus or another education/encouragement idea identified in **Chapter 4.**
- Promote SRTS activities through artwork or school projects.

I AM A CAREGIVER

- Understand the conditions at your student's school (see **Chapter 2**) to plan a walking/rolling route or advocate for improvements.
- Help implement the educational and encouragement programs suggested in **Chapter 4**.
- Support fundraising for projects and programs (see **Appendix D**).

I WORK FOR THE SCHOOL DISTRICT

- Distribute information about walking and rolling safely and SRTS talking points to caregivers and the school community.
- Tackle the SRTS objectives and actions from **Chapter 2** that are relevant to the school district, and develop **Chapter 4** programs that educate and encourage students and caregivers to seek alternatives to single family commutes to school.
- Prioritize facility improvements on District property.
- Work with multiple schools, sharing information and bringing efficiencies to programs at each school working on SRTS.
- Incorporate bike and pedestrian safety lessons into P.E class and offer trainings for P.E. teachers to learn about available curricula.

I AM A TEACHER OR OTHER STAFF MEMBER

- Include bicycle and pedestrian safety in lesson plans and school curriculum
- Arrange field trips within walking distance of school and teach lessons about safety along the way.
- Be positive and encourage students and families to try walking and rolling!

I AM A COMMUNITY MEMBER

- Learn about walking and bicycling conditions in your neighborhood and how an SRTS program can improve them (see **Chapter 2)**.
- Participate as an advocate to support education and encouragement programs (see **Chapter 4**).

I WORK FOR THE CITY OR COUNTY

- Identify city- or countywide issues and opportunities related to walking and bicycling, prioritizing construction improvements provided in **Chapter 4**.
- Pursue funding for improvements, using sources listed in **Appendix D**.

I WORK FOR LAW ENFORCEMENT

- Raise awareness of traffic rules, focusing on key SRTS locations that have a history of crashes.
- Focus on traffic safety education, rewarding positive behavior, and supporting school walk and bike events. Be mindful of strategies that may disproportionately and negatively affect children and families of color, low wealth, or marginalized populations.

I WORK IN PUBLIC HEALTH

- Identify specific opportunities to collaborate with schools and local governments to support safety improvements and encourage healthy behaviors (see **Chapter 4**).

02 VISION AND GOALS FOR SRTS

VISION AND GOALS

This chapter includes an overall vision as well as specific actions that city and school leadership can take to support SRTS. It also includes an overview of the public input process that shaped this Plan.

Community Vision for SRTS

The Bethel community envisions a future where students and their families safely, comfortably, and conveniently walk and bicycle as part of the daily school commute and a healthy lifestyle.

Goals, Objectives, and Actions

The following are specific recommended objectives and actions based on the community-identified goals of health, safety, equity, and the environment, as well as community input from the walk audit and data collected throughout the PIP process. Actions may relate to achieving more than one goal, but each action is only listed once.

A summary of community engagement activities is included in the following section.

Above: Students and caregivers arrive to school on Ruby Bridges Day

SAFETY

Goal: Increase safety for students and families traveling to school, particularly those who walk and bike out of necessity.

Objective 1: Students are able to walk and bike to and from campus, between schools, and to homes within a quarter mile of the school.

- Action: Bethel School District will integrate on-campus infrastructure improvements into their ongoing planning processes.
- Action: The City of Eugene will consider applying to the ODOT Competitive SRTS Infrastructure Grant over the next few grant cycles for infrastructure improvements on and around the Echo Hollow Rd Corridor, outlined in Chapter 4.
- The City of Eugene will consider opportunities for Quick Build projects and apply for funding through ODOT.

Objective 2: Safe walking or biking access is available to all families within one mile of the school.

- Action: The City of Eugene will support the long-term infrastructure recommendations in Chapter 4 as a part of its planning processes and continue to prioritize themes identified through the Echo Hollow Rd Corridor SRTS Plan's community engagement process.
- Action: The City of Eugene will begin implementing recommendations as funds for capital improvements become available and/or as roads are scheduled for repaving. The City will focus particularly on critical improvements within a quarter mile of each school.
- Action: The Bethel School District's SRTS Coordinator and City of Eugene staff will continue to coordinate on recommendations, observations, and opportunities for SRTS improvements.

Objective 3: Pedestrian and bicycle safety education is available to students in Eugene and Bethel School District.

- Action: The Bethel School District SRTS Coordinator will continue to provide education and encouragement activities to students through the City of Eugene's River House and community Learn to Ride Events.
- Action: Schools along Echo Hollow Rd will encourage families to walk and bike to school by distributing information about improvements, as well as safety tips and suggested routes.

EQUITY

Goal: Increase access and opportunity to walk and bike to school for all residents, with a particular focus on transportation disadvantaged populations.

Objective 1: Center equity in all SRTS activities with particular attention to ensuring that outcomes are fair and increasing safety and health for students with disparate outcomes in the areas of active and shared transportation.

- Action: Bethel School District, along with it's partner schools in the Eugene-Springfield area, will develop strategies for using an equity lens in program development and implementation to ensure that SRTS programs are culturally relevant and reach students belonging to transportation disadvantaged populations.

Objective 2: Engage with families from historically disadvantaged groups to hear and learn about their barriers to students walking or biking to school.

- Action: Bethel School District and its schools will provide SRTS information and educational materials in English and Spanish.

- Action: Bethel School District and the City of Eugene will partner with existing groups and organizations that serve particularly the Latinx community, low-income households, and other historically disadvantaged groups to help disperse information and better understand needs and barriers.
- Action: Bethel School District and its schools will consider how to overcome barriers such as parent work schedules and transportation limitations to enable all parents to participate in SRTS programs and activities.

Objective 3: Prioritize infrastructure and non-infrastructure improvements that connect underserved or low-income communities to schools and improve access for students walking, biking, and taking transit to school campuses.

- Action: The City of Eugene will implement infrastructure recommendations with consideration for improvements that serve or were requested by underserved and low-income communities.
- Action: The Bethel School District SRTS Coordinator will continue working to include lower-income students, those with mobility challenges, Spanish-speaking students and students from other historically marginalized groups in SRTS programming.

HEALTH

Goal: Increase student access to physical activity, recreation, and mental wellness while reducing emissions near schools.

Objective 1: Students have increased physical activity before, after, and during the school day.

- Action: The Bethel School District SRTS Coordinator and school administration will look for areas of overlap between SRTS efforts and other health initiatives and PE class.
- Action: Schools along Echo Hollow Rd will support and promote encouragement and education activities organized and facilitated by the SRTS Coordinator, such as a Walking School Bus, Bike Train, or other similar initiatives to encourage students to walk and bike to school.

Objective 2: The school community supports families using active and shared transportation to access school and reach nearby destinations.

- Action: Bethel School District will consider adopting SRTS-supportive language in school wellness policy.
- Action: Schools located along the Echo Hollow Rd corridor will share relevant health statistics and messages in school newsletters, back-to-school night, or through other communication channels.
- Action: The City of Eugene will coordinate with local public health agencies to share information about SRTS and coordinate around shared wellness goals.

ENVIRONMENT

Goal: Increase environmental health near schools, including air and water quality

Objective 1: Reduce congestion and air pollution near the school campus.

- Action: Bethel School District will provide parents with education and encouragement materials providing information on carpooling, walking, biking, and school buses.
- Action: The City of Eugene will work to improve connections to existing shared-use paths to improve off-street travel options for people walking and rolling to school.

A Community-Driven Planning Process

The vision, goals, objectives and actions provided here, as well as the detailed construction project and programmatic recommendations to follow in Chapter 4, were shaped by community input. Community members had the opportunity to participate in the SRTS planning process and provide feedback in the following ways:

- Participation on the Project Management Team (PMT)
- Participation in a school walk audit
- Attending a community meeting held at Willamette High School
- Providing virtual feedback using the online Public Input Map and survey
- Participation in a Willamette High School student focus group
- Providing in-person feedback on roadway design concepts at the We Are Bethel community event

The City of Eugene, Bethel School District and school leadership from Willamette High School and Cascade Middle School spread the word to students and families about the walk audits, as well as the online Public Input Map and survey. The two schools promoted the PIP process and opportunities for community input on social media channels and through e-mail listserv. The City of Eugene also shared information via social media channels and the City website.

The project team hosted two walk audits on April 11th, 2023. City of Eugene staff, Bethel School District Staff, and community members attended the walk audits. Included in the walk audits were observations of infrastructure, travel behavior and pedestrian activity.

On April 11, 2023, Willamette High School students engaged in a planning exercise, hosted by the Bethel School District SRTS Coordinator with assistance from the planning team. Students were asked to represent on a large map any landmarks, areas of concern and aspirational designs for the Echo Hollow Rd corridor. Students also discussed how the competing demands in their lives shape their travel options.

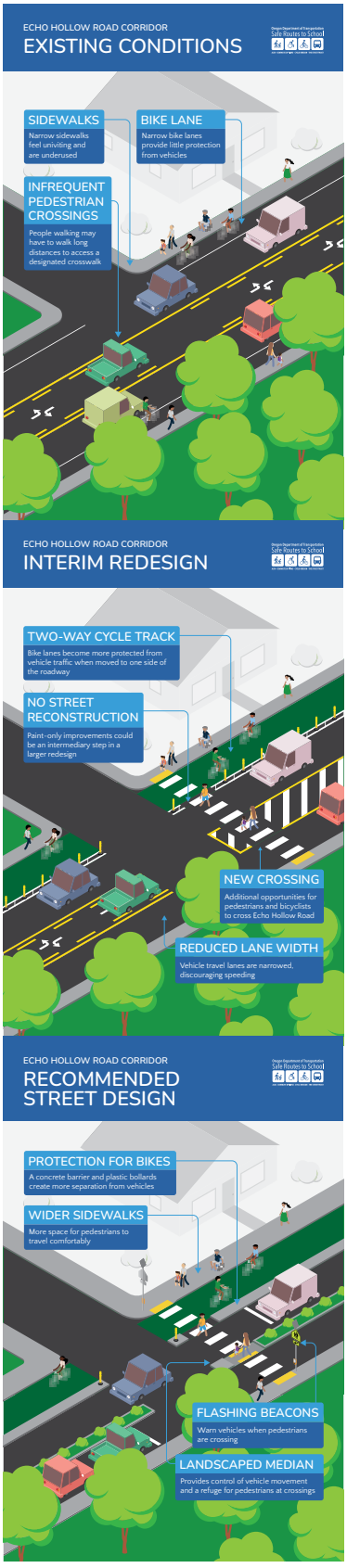
Willamette High School Students engaged in an activity to share their presective on travel on Echo Hollow Rd.

The Bethel School District SRTS Coordinator and project team attended the We Are Bethel celebration, where they discussed corridor recommendations with members of the community.

On June 10th, the Active Bethel Community Organization hosted the We Are Bethel Celebration community event at the Petersen Barn community center. The celebration featured live music, food vendors, dance performances and games. During the event, the planning team set up a booth with engaging activities and presented three posters illustrating the current conditions, proposed interim infrastructure improvements (paint only) and enhanced infrastructure improvements on Echo Hollow Rd. These engaging displays aimed to gather input from community members regarding their experiences with Echo Hollow Rd and other travel routes in the Bethel Neighborhood.

Community members shared valuable insights, which the planning team recorded. One recurring theme was the avoidance of Echo Hollow Rd during school arrival and departure times. Residents expressed that they tend to utilize residential streets for walking and biking.

Based on the feedback received, the community expressed a preference for lighter, paint-focused infrastructure improvements. Specific suggestions included greater separation between bicycle and motor vehicle traffic on Echo Hollow Rd, adjusting school speed zones to include Willamette High School, improving existing crosswalks, adding new sidewalks at identified intersections and making changes to the stoplight near the shopping center.



COMMUNITY ENGAGEMENT KEY THEMES

The Community Engagement Heat Map was not widely used during the planning process. The planning team conducted in-person activities to gather discrete information from key stakeholders to supplement this limited data.

Based on the feedback received through all engagement methods, it is clear that the Bethel neighborhood values active, healthy lifestyles and seeks to make it safer and more comfortable for all students to walk and bike. Areas that repeatedly came up during public engagement activities included:

- Echo Hollow Rd. and the shopping center entrances
- Echo Hollow Rd. and Dove Ln.
- Echo Hollow Rd. and the entrances to Echo Hollow Community Pool
- Echo Hollow Rd and Willhi St.
- Echo Hollow Rd and Royal Ave.

Participants who engaged with the SRTS planning process want to see more protected, continuous safe travel routes. Commenters also focused on the need for traffic calming measures along the Echo Hollow Rd corridor, proposing treatments such as bump outs, protected cycling infrastructure, and rapid flashing beacons.

Themes from the public engagement included:

- Reducing conflict between entering and exiting traffic from the schools and community pool onto Echo Hollow Rd
- The need for more visible crosswalks
- A desire to improve the existing cycling infrastructure
- Concern about speeding and vehicle congestion on roads near schools
- The challenge of dealing with increased traffic flow during peak times, including school arrival, lunch, and departure

03

EXISTING CONDITIONS

EXISTING CONDITIONS

This chapter summarizes the key challenges and opportunities that families walking or bicycling to school face and that this Plan seeks to address.

The following pages provide contextual information for each of the schools, as well as key themes documented during the walk audits and through community and partner input. A detailed summary of the planning process and activities that took place to support this Plan is included in Appendix B.

Previous planning processes and additional data informed the existing conditions documented in this chapter.

SCHOOL CONTEXT:

Cascade Middle School

1525 ECHO HOLLOW RD

PRINCIPAL:
Ry Robinson

ENROLLMENT:
392

GRADES SERVED:
6-8

EQUITY FACTORS:
75% of students below the poverty line*

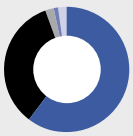
19% of students who are Ever English Learners**

21% of students have disabilities**

23% of students are chronically absent*

Transportation Disadvantage Index (TDI): 1.36

DEMOGRAPHICS*



- White, non-Hispanic, 55%
- Hispanic, 31%
- American Indian/Alaska Native, 2%
- Black / African American, 1%
- Asian, 1%

TOP LANGUAGES SPOKEN BY STUDENTS IN DISTRICT**

English	4,455
Spanish	640
Vietnamese	20
Chinese	15

Total Languages Spoken: 15

**Oregon Department of Education 2020-2021 school year,*

***Oregon Department of Education 2021-2022 school year,*

Cascade Middle School

Date: April 11, 2023

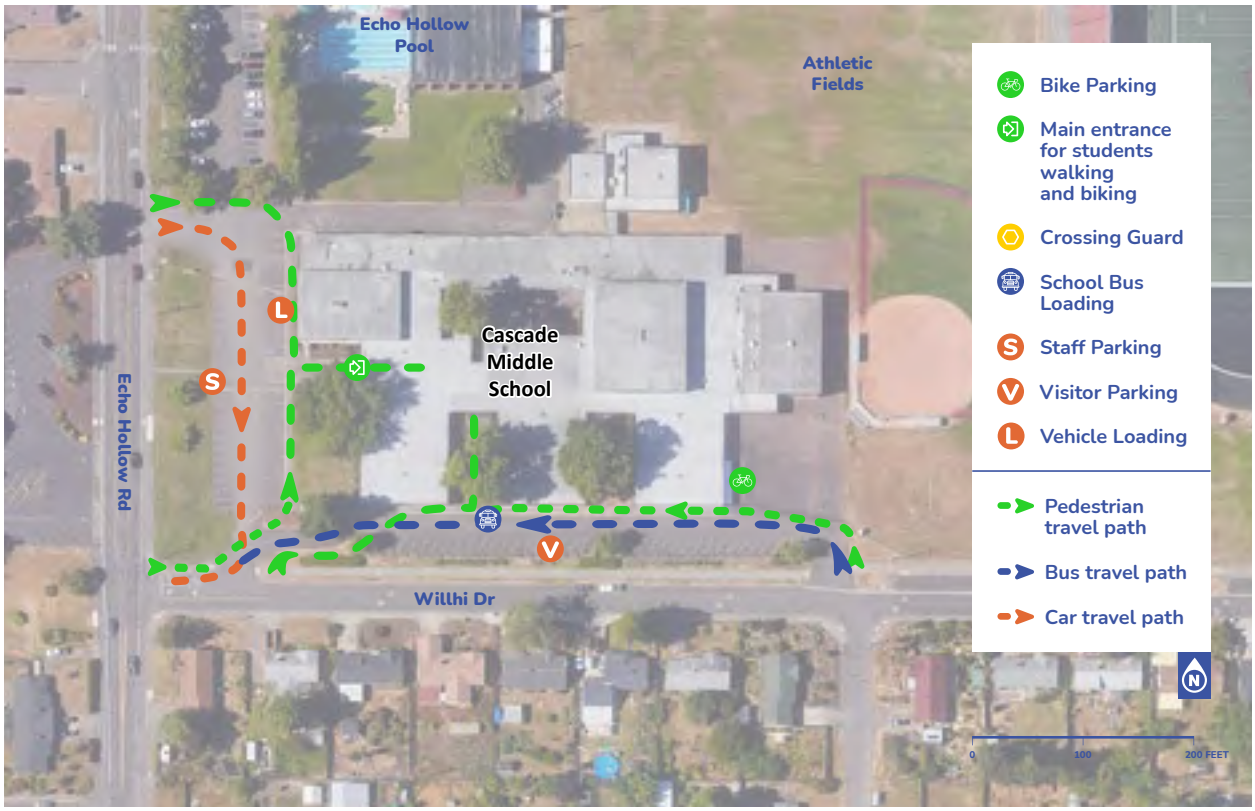
SCHOOL LAYOUT

Cascade Middle School is a public school located in the Bethel neighborhood of Eugene. The school is on the east side of Echo Hollow Rd between Dove Ln.and Willhi St (see map on opposite page). A new building is currently being constructed slightly east on Willhi St. The new structure will relocate the main school building to the east, farther from Echo Hollow Rd.

SITE CIRCULATION

Currently, there is a vehicle ingress/egress for the school on Echo Hollow Rd, as well as a circular driveway off of Willhi St with entrance on the east and exit on the west (near the intersection of Willhi St and Echo Hollow Rd). However, site circulation will change significantly as a result of the school reconstruction process. The following circulation configuration was proposed as part of the redesign:

- Focus vehicle drop-off along a circular driveway with two entrance points on Willhi St and an exit on Echo Hollow, which allows either left or right turns.
- Provide two designated drop-off lanes along this circular route.
- Retain an alternative ingress point on Echo Hollow Rd
- Locate bus drop-off and pickup on the east side of the campus with a separate circulation pattern from other vehicles.



Cascade Middle School (Existing)

Site Plan

PREVIOUS SRTS EFFORTS OR WALKING/ BIKING ENCOURAGEMENT ACTIVITIES

Cascade Middle School has participated in International Walk and Roll to School Day and Ruby Bridges Walk to School Day. The school has also conducted an infrastructure assessment through the Eugene-Springfield SRTS coalition. Finally, SRTS program website includes a suggested walking route maps for Cascade Middle School.

Above: School staff encourage students on Ruby Bridges Walk to School Day.

Above: A PE Teacher working with 2nd through 4th grade students in a skateboard, scooter, and strider unit.

SCHOOL CONTEXT:

Willamette High School

1801 ECHO HOLLOW RD

PRINCIPAL:
Dan Hedberg

ENROLLMENT:
1582

GRADES SERVED:
9-12

EQUITY FACTORS:

41% of students below the poverty line*

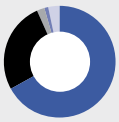
14% of students who are Ever English Learners**

17% of students have disabilities**

22% of students are chronically absent*

Transportation Disadvantage Index (TDI): 1.36

DEMOGRAPHICS*



- White, non-Hispanic, 61%
- Hispanic, 24%
- Black/African American, 2%
- American Indian/Alaska Native, 1%
- Asian, 3%

TOP LANGUAGES SPOKEN BY STUDENTS IN DISTRICT**

English	4,455
Spanish	640
Vietnamese	20
Chinese	15

Total Languages Spoken: 15

*Source: Oregon Department of Education 2019-2020 school year

**Source: Oregon Department of Education 2018-2019 school year

Willamette High School Safety Assessment

Date: May 4, 2023

SCHOOL LAYOUT

Willamette High School is a public school located in the Bethel neighborhood of Eugene, on the east side of Echo Hollow Rd between Dove Ln and Willhi St. (see map on opposite page). There is one main school building that fronts Echo Hollow Rd and several smaller buildings to the east of the main building. North of the school, behind the building, there is a driveway and small parking lot providing access to the smaller out buildings. East of the buildings is the sports field. Parent drop-off occurs widely throughout the neighborhood.

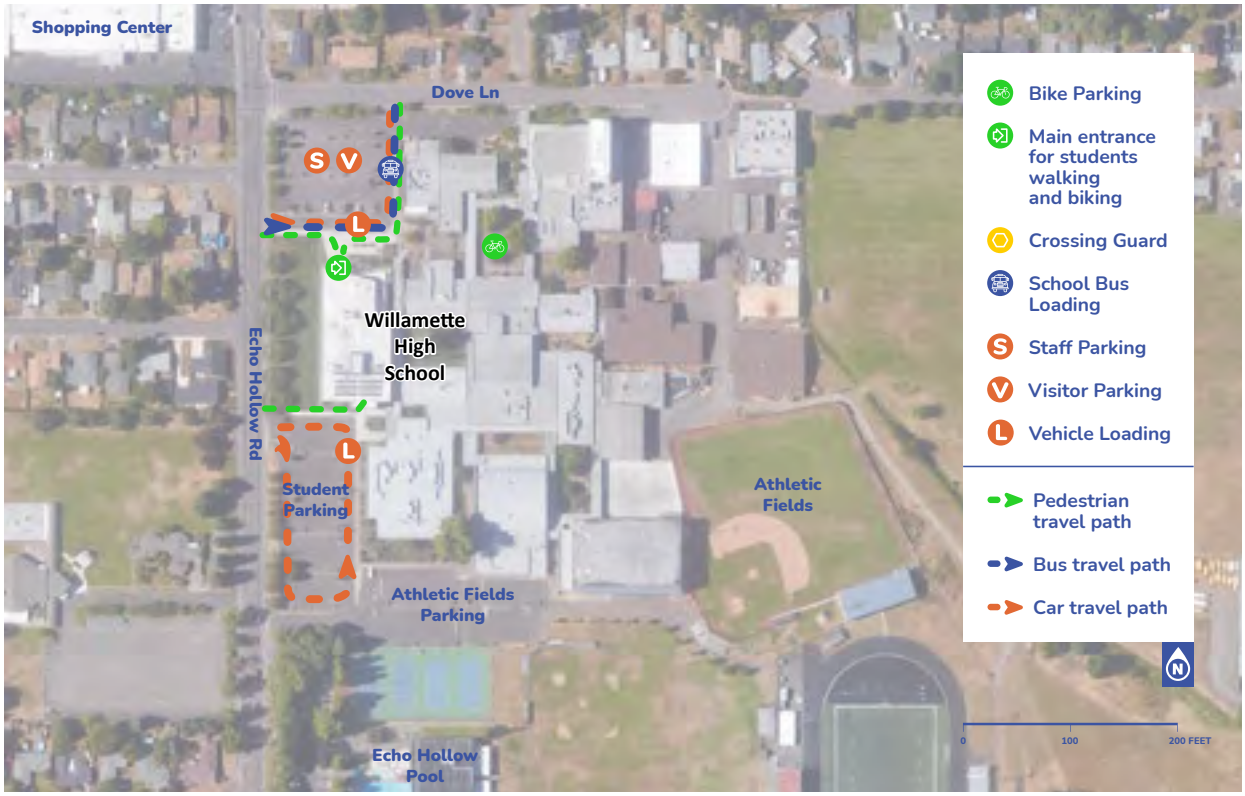
Like Cascade Middle School, Willamette High School is located near Barger Dr, as well as Randy Pape Beltline Rd/Hwy 569.

SITE CIRCULATION

Vehicles: Students are dropped off in several locatons around the school. Parent drop off has created several informal drop off locations, including in neighboring business's parking lots and residential streets. Students can purchase a parking pass from the school, but many choose to park off campus on residential streets and walk onto campus. In some cases, this is due to the fact that the parking lots have insufficient space to accomodate all students who choose to drive to school, and in other cases students decide to park elsewhere for finacial reasons.

School Buses: School buses enter the north parking lot, circle past the school counter-clockwise, and drop students off on the east side of the lot.

Pedestrians: Student arrive on campus from all directions. Several pedestrian cut-thru's exist where motor vehicle is closed, such as on Dove Ln and Ruskin St. Many students park off campus on residential streets and walk a short distance to campus, typically across Echo Hollow Rd.



Willamette High School

Site Plan

Bicyclists/Micromobility: Students arriving by bicylce were observed riding on sidewalks and through parking lots rather than existing bike lanes.

Transit: A fair amount of students arrive to school and leave via public transit. Bus stops are located on both sides of Echo Hollow Rd near the intersection with Dove Ln. The western bus stop recieves higher usage and has improvements such as benches, a shelter, and trash cans not found at other bus stops near the schools.

PREVIOUS SRTS EFFORTS OR WALKING/ BIKING ENCOURAGEMENT ACTIVITIES

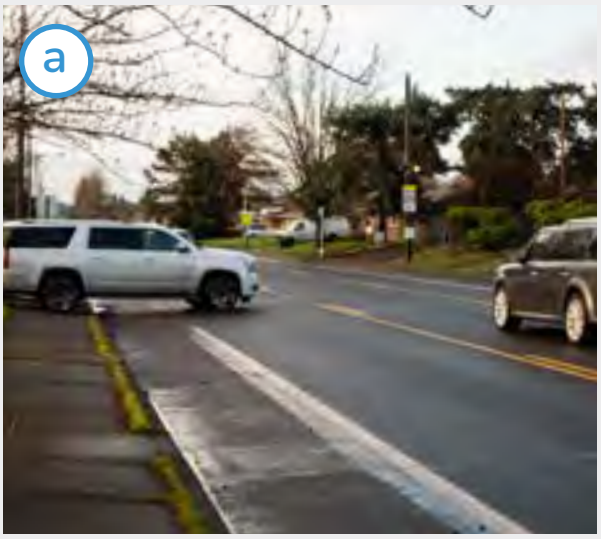
Willamette High School has participated in walking and rolling events organized by the Bethel School District SRTS Coordinator. There used to be a bike repair shop located at Willamette High School to aid students who travel by bicycle to school and experience mechanical issues. The district has secured funding and formed a partnership to restart this bike repair shop under the name Bike Lab in partnership with Shift Community Cycle.

The school has also conducted an infrastructure assessment through the Eugene-Springfield SRTS coalition. Finally, SRTS program website includes a suggested walking route maps for Willamette High School.

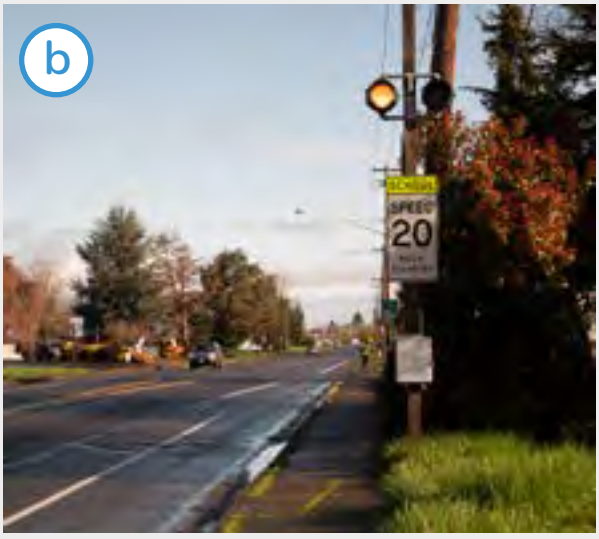
Bike and Pedestrian Facilities Inventory

Key Observations

- Motor vehicle traffic in the Bethel neighborhood uses Echo Hollow Rd as a minor arterial to connect to educational and commercial destinations on Barger Dr and to access Beltline Road - Hwy 569, This means speeding can be an issue.
- Student drop-off and pickup is a chaotic experience along Echo Hollow Rd. Parents and caregivers rely on adjacent residential streets to drop off and pick up students near the schools while minimizing interactions with other drivers.
- While dedicated cycling infrastructure exists on Echo Hollow Rd, cyclists prefer to travel on residential streets or sidewalks. The existing bicycle lanes on Echo Hollow Rd are of substandard width and have no buffer or protection from the vehicle travel lanes.
- There are few marked east-west crossings along Echo Hollow Rd.
- Willamette High School students have an open lunch period, creating heavy midday pedestrian traffic at the intersection of Dove Ln and Echo Hollow Rd.



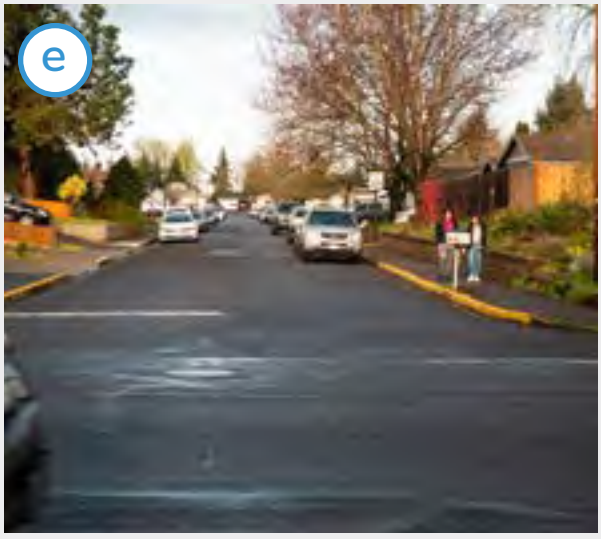
While the Echo Hollow Rd corridor has bicycle and pedestrian facilities, these facilities are narrow, while vehicle travel lanes are wider than necessary for safe travel.



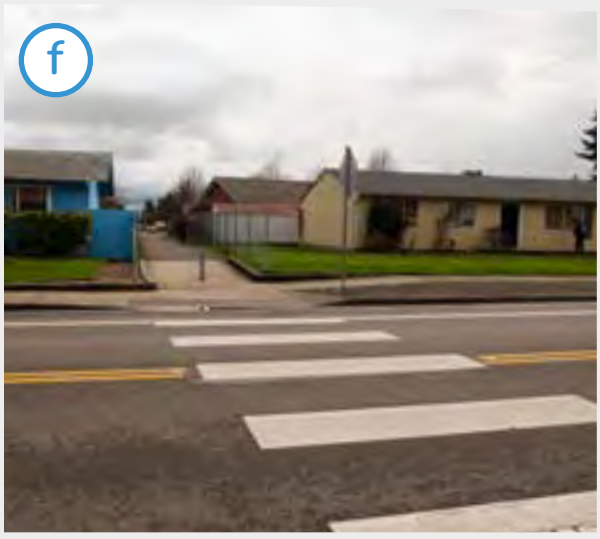
School zone signage along Echo Hollow Rd indicates to drivers that they are within a school zone. The flashing lights are turned on only during school arrival and dismissal hours, which is in line with best practices.

Vehicle congestion can be an issue on Echo Hollow Rd, especially during school drop-off and pickup times. Vehicles turning in and out of the parking lots have poor visibility and struggle to turn left across backed-up traffic.

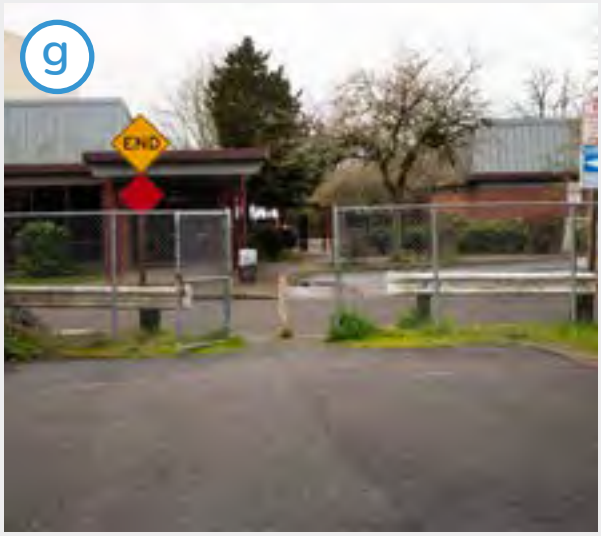
Lane Transit District provides service to Echo Hollow Rd via on Route 40, which connects to the Downtown Eugene Station.



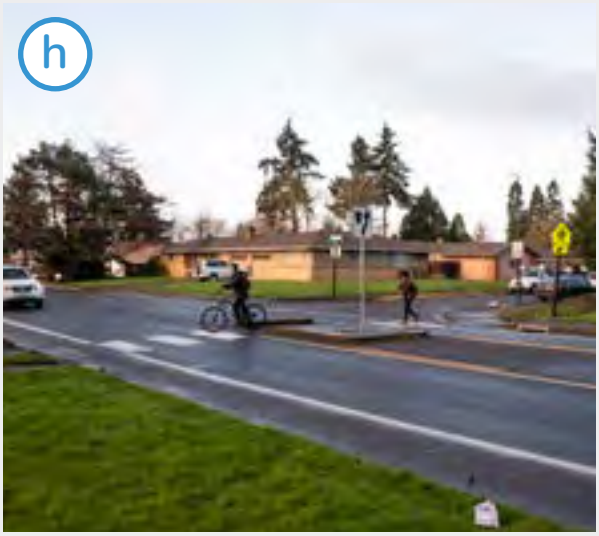
Because of limited parking lot space, high school students utilize surrounding neighborhood streets, such as Boston Ln, for parking, crossing Echo Hollow Rd at unmarked crosswalks to reach the high school campus.



There are several cut-through paths that connect students who live in the surrounding neighborhoods with the schools. These paths provide convenient pedestrian and cyclist access.

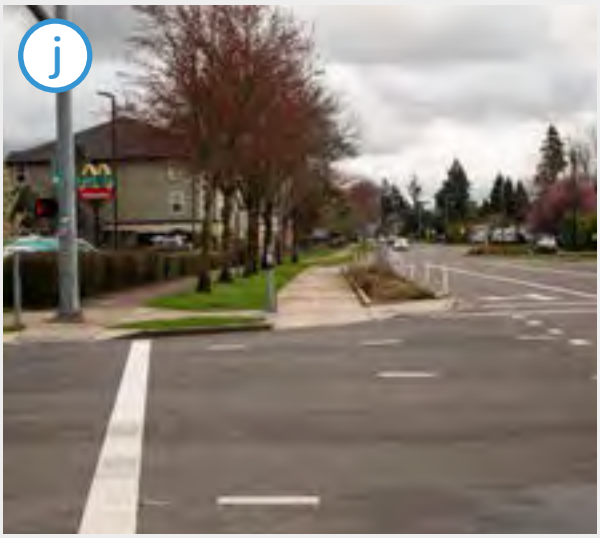


Ruskin St dead ends at Dove Ln, prohibiting the passage of motor vehicle traffic while allowing access for pedestrians and cyclists.



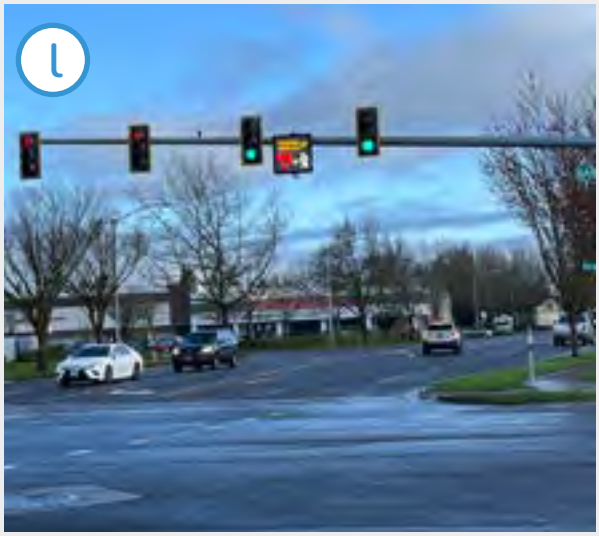
Refuge islands protect pedestrians and cyclists as they cross Echo Hollow Rd at Murnane St.

The intersection of Dove Ln and Echo Hollow Rd is signalized. This intersection experiences heavy pedestrian traffic during arrival, lunch and dismissal, as does the neighboring shopping center.



The bicycle facilities on Barger Dr are buffered from motorists at the intersection by a landscaped barrier. The City of Eugene recently replaced a right turn lane with these new curbs, plastic bollards, and a rain swale.

Vehicles traveling north toward and turning right onto Barger Dr do so at an increased speed, which is facilitated by the wide curb radius on the southeast corner. There is limited space at this corner for pedestrians to wait, especially after school and at lunch, when crowds are largest.



For bicyclists traveling north on Echo Hollow Rd and turning west onto Barger Dr, there is a newly-constructed staged left turn that routes them onto the separated cycle track on the north side of Barger Dr. However, the signage explaining this maneuver is located too close to the intersection for bicyclists to take note of and follow the instructions.

School staff report that people driving north on Echo Hollow Rd often do not seem to notice and respond to the signal located at the shopping center entrance. This results in short stops and near-collisions with pedestrians crossing the street.

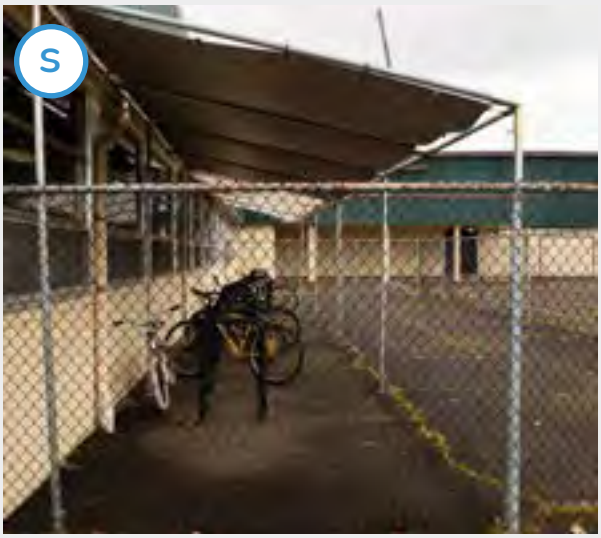
The angle of northbound vehicles turning left into the shopping center parking lot affords them poor visibility of pedestrians in the crosswalk.

There is an unmarked crossing with curb ramps on the east leg of the intersection of Willhi St and Echo Hollow Rd. However, cars pulling up to this intersection on Willhi St from the east tend to pull out past the area where pedestrians would cross in order to see oncoming traffic.

Jay St runs parallel to Echo Hollow Rd, meaning that it could serve as an excellent pedestrian and bicycle alternative to the congested main thoroughfare. However, this street does not have pedestrian facilities.

Jay St could serve as a connection to the off-street shared-use path south of Marshall Ave. However, there is no connection between the southern end of Jay St and the path. There is a ditch here, and a bridge would be needed to access the path.

The bicycle and skateboard parking area at Willamette High School has ample space to accommodate the existing cyclists at the school, and there is space for more. Bicycles are generally covered from the elements and located in a locked courtyard.



Bicycle parking at Cascade Middle school is protected from the elements by a lightweight awning.

04

RECOMMENDATIONS

RECOMMENDATIONS

This chapter outlines recommendations for construction projects as well as education and encouragement programs that address the issues identified in Chapter 3.

Changes to the street-scape are essential to making walking and rolling to school safer and more comfortable. Infrastructure improvements benefit students and families who walk and bike to school, as well as everyone who travels through the school area.

In addition, education and encouragement programs are a necessary component of any successful SRTS Program. Often, programs that get more students walking and rolling lead to increased public support for infrastructure projects. So, programs can be an important first step toward building out the physical improvements to walking and rolling infrastructure. Also, relative to many construction projects, most education and encouragement programs are less costly to implement.

The recommendations for construction projects and education and encouragement programs outlined in this chapter were informed by existing conditions and input from school and district staff and city staff. They are tailored to meet the needs and interests of the school community and align with the goals of the larger Eugene-Springfield Safe Routes to School program.

Construction Project Recommendations

This section describes recommended construction projects within two miles of the focus schools.The map on the following page is a guide to the location of these recommendations, which are described in detail in Table 1.

This Plan does not represent a comprehensive list of every project that could improve conditions for walking and bicycling in the community. Instead, it calls attention to key conflict points and potential improvements near the schools. Recommendations range from simple striping changes and signing to more significant changes to the streets, intersections, and school infrastructure. All construction projects need to be reviewed and designed by engineers and approved by the local road authority.

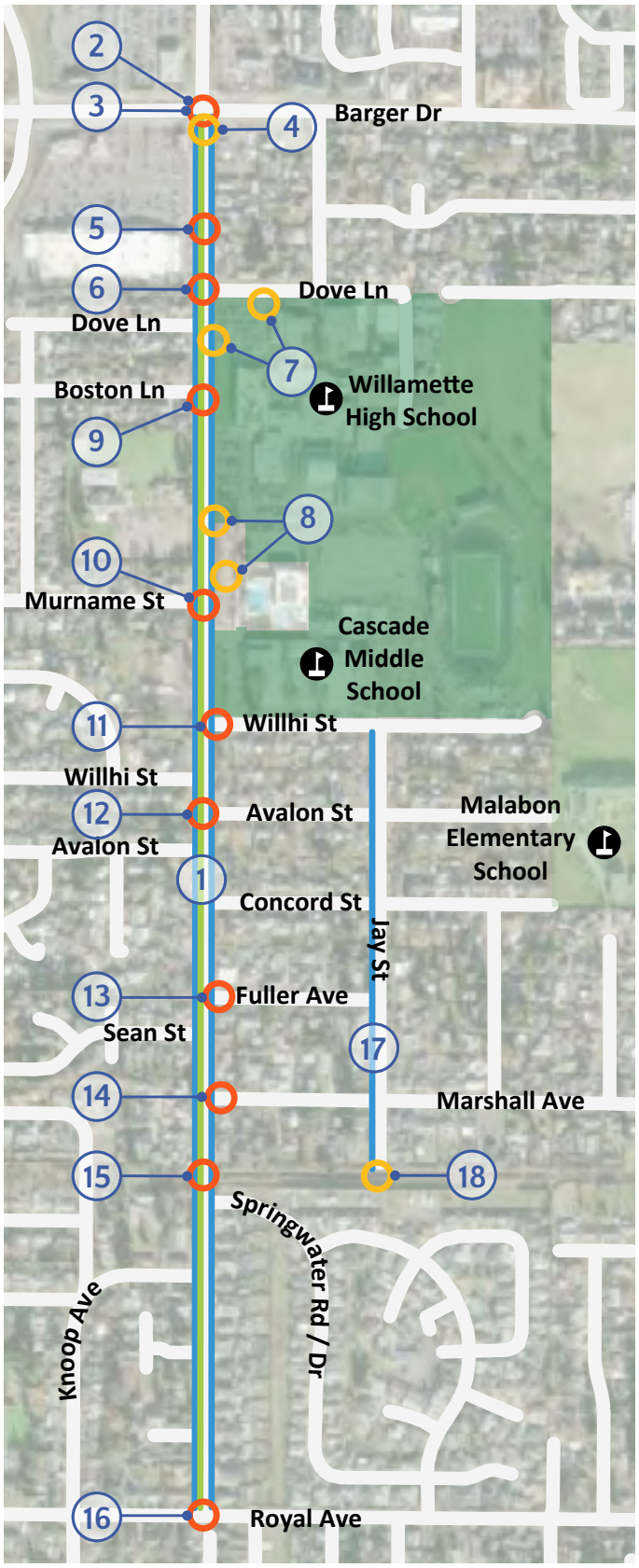
It should be noted that not all of these projects and programs need to be implemented right away to improve the environment for walking and bicycling to school. Some projects will require more time, support, and funding than others. It is important to achieve shorter-term successes while laying the groundwork for progress toward some of the larger and more complex projects.

Each recommendation is flagged with implementation next steps to provide guidance about how to move them forward:

- Requires Additional Traffic Analysis
- Requires More Detailed Design
- ODOT Community Paths Grant Eligible
- Quick Build Compatible
- Demonstration Project Compatible
- ODOT SRTS Construction Grant Priority
- Roadway Maintenance Issue

Implementation takes place continuously over time, with cooperation among partners and, often, new sources of funding. Appendix D also lists a variety of funding sources that can be used to implement the recommendations outlined in this section. as well as a table outlining more detailed cost estimates for the priority improvements.

ECHO HOLLOW ROAD RECOMMENDED CORRIDOR IMPROVEMENTS



RECOMMENDED IMPROVEMENTS

- Pedestrian Facilities
- Bicycle Facilities
- Crossing Improvement
- Other Improvement

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Table 1. Echo Hollow Rd Infrastructure Needs and Recommendations

Rec #	Recommendation	Responsible Agency	Implementation Next Steps
	Overall Corridor Improvements		
01	**Issue:** Currently, there are problems with speeding, congestion, and lack of visibility on Echo Hollow Rd. While the corridor has bicycle and pedestrian facilities, these are narrow, while vehicle travel lanes are wider than necessary for safe travel. **Recommendation:** *Interim Recommendation:* Remove the existing substandard bike lanes, and install a two-way cycle track along the west side of Echo Hollow Rd. Install a 2 ft. buffer with vertical delineators/ bollards to separate this area from the vehicle travel lanes. Near crossings, use paint to close the center turn lane, creating a painted pedestrian refuge island. *Full-build Recommendation:* Rebuild the street to widen sidewalks. Remove center turn lane, and install a landscaped median strip, allowing breaks in this median wherever left turns are permitted (while restricting these turning movements where they aren't desired). Replace the painted buffer between the cycle track and vehicle travel lane with a raised concrete barrier. Install vertical delineators or bollards at the ends of these barriers.	City of Eugene	Requires Additional Traffic Analysis Requires More Detailed Design ODOT SRTS Construction Grant Priority
	Echo Hollow Rd and Barger Dr		
02	**Issue:** Cars traveling west on Barger Dr and turning south onto Echo Hollow Rd could also create a hazard for pedestrians crossing east-west across the south leg of the intersection, especially when the sun is low in the sky, limiting visibility. At least two accidents involving students have occurred at this location. **Recommendation:** Consider adjusting signal phasing to increase the Leading Pedestrian Interval from three seconds to five seconds, allowing pedestrians a more significant head start into the crosswalk before turning vehicles are given a green signal indication.	City of Eugene	Requires Additional Traffic Analysis
03	**Issue:** Vehicles traveling north toward and turning right onto Barger Dr do so at an increased speed, which is facilitated by the wide curb radius on the southeast corner. There is limited space at this corner for pedestrians to wait, especially after school and at lunch, when crowds are largest. **Recommendation:** Reduce turning speeds at the southeast corner of the intersection by installing a curb extension or mountable "truck apron"	City of Eugene	

Rec #	Recommendation	Responsible Agency	Implementation Next Steps
04	**Issue:** For bicyclists traveling north on Echo Hollow Rd and turning west onto Barger Dr, there is a newly-constructed staged left turn that routes them onto the separated cycle track on the north side of Barger Dr. However, the signage explaining this maneuver is located too close to the intersection for bicyclists to take note of and follow the instructions. **Recommendation:** Maintain existing signage and install additional staged left turn signage further south to allow time for bicyclists to read and respond. Consider use of small "bike dots" (white circles with directional arrows) to direct cyclists in more detail as they travel through the staged turn.	City of Eugene	Quick Build Compatible
	Echo Hollow Rd at Shopping Center Entrance		
05	**Issue:** School staff report that people driving north on Echo Hollow Rd often do not seem to notice and respond to the signal located at the shopping center entrance. This results in short stops and near-collisions with pedestrians crossing the street. The angle of northbound vehicles turning left into the parking lot affords them poor visibility of pedestrians in the crosswalk **Recommendation:** Consider options to modify the Shopping Center entrance using one of the following methods: • Extend the NW corner ramp south to shorten crosswalk length, or • Reconstruct the SW ramp so that it has two curb ramps (one for N-S crossing of the entrance and the other for E-W crossing of Echo Hollow Rd) Consider the following options, as well: • Install intersection lighting to improve visibility. (There is currently one luminaire on the NE corner, where pedestrians are not located.) • Install a pedestrian refuge island or hardened centerline on the south and west sides of the intersection so that northbound vehicles entering the parking lot turn slowly and position themselves for better visibility of the crosswalk on the west leg. • Install retroreflective backplates on the signal heads if people are not seeing the signals.	City of Eugene	Requires Additional Traffic Analysis Requires More Detailed Design

Rec #	Recommendation	Responsible Agency	Implementation Next Steps
	Echo Hollow Rd and Dove Ln		
06	**Issue:** This is a popular intersection for students walking and biking during school arrival/dismissal and during lunch periods. While the pedestrian crossings are generally visible to people driving, crowds of crossing students at lunchtime and dismissal tend to cause cars to back up on the streets leading to this intersection. The school community reports that people waiting in vehicles to turn at this intersection are often prevented from doing so because of students crossing, creating a sense of agitation and impatience that could increase the risk of impulsive driving behavior (such as last minute turns).. **Recommendation:** *Restripe existing transverse crosswalk with high-visibility continental-style pavement markings.* *Consider adjusting signal phasing to increase the Leading Pedestrian Interval from three seconds to five seconds, allowing pedestrians a more significant head start into the crosswalk before turning vehicles are given a green signal indication.* *Consider providing a pedestrian-only crossing phase that allows all pedestrians to cross at one time.*	City of Eugene	Requires Additional Traffic Analysis ODOT SRTS Construction Grant Priority
	Willamette High School Parking Lot		
07	**Issue:** There was considerable traffic backed up while trying to exit the parking lots during dismissal. There are many driveways providing access to the schools and Echo Hollow Pool. This situation felt most chaotic where vehicles were waiting to turn both north and south onto Echo Hollow Rd but were blocked by cars already backed up on the street (due to congestion originating from the intersection of Echo Hollow Rd and Dove Ln). Drivers were visibly irritated by the delays and congestion, some honking their horns and driving erratically. **Recommendation:** Study left turn volumes and parking lot circulation in and out of the high school parking lot. If feasible, restrict parking lot entrance south of Dove Ln to right in/right out movement, using the recommended landscaped concrete median to prevent left turns. (Vehicles needing to travel south on Echo Hollow Rd after exiting the parking lot would use the Dove Ln entrance/exit to the north.) If left turns in and out of the parking lot cannot be restricted, install pavement markings ("Keep Clear") and signage.	School District, City of Eugene	Requires Additional Traffic Analysis (Determine if there are any SB buses on Echo Hollow Rd that need to turn left into the driveway.) Requires More Detailed Design

Rec #	Recommendation	Responsible Agency	Implementation Next Steps
08	**Issue:** Where the high school property abuts the pool property, there are two adjacent driveways that both exit onto Echo Hollow Rd. At dismissal especially, this area is chaotic, as people driving are attempting to exit both driveways to go both north and south simultaneously, while Echo Hollow Rd is backed up with traffic. The project team observed this as stressful at the least but also potentially hazardous. **Recommendation:** Study left turn volumes and parking lot circulation in and out of the high school parking lot. If feasible, restrict parking lot entrance to right in/right out movement, using the recommended concrete median to prevent left turns. Consider installing pavement markings and signage to make the Echo Hollow Pool driveway one way, allowing vehicles to enter at the north end of the lot and exit through the south end. Restrictions on turning movements into and out of the parking lot could be considered but may not be necessary.	School District, City of Eugene	Requires Additional Traffic Analysis Requires More Detailed Design
	Echo Hollow Rd and Boston Ln		
09	**Issue:** Due to limited on-campus parking, students park in the residential areas west of Echo Hollow Rd, especially Dove Ln and Boston Ln. Because there are only designated crosswalks at Dove Ln and Murnane St, some students cross Echo Hollow Rd without walking to one of these crossings, which could result in a potential conflict with vehicles traveling north-south **Recommendation:** Construct a midblock crossing of Echo Hollow Rd just south of Boston Ln. Use high-visibility continental crosswalk markings and consider a rectangular rapid flashing beacon (RRFB) system for higher visibility and driver yielding compliance. Evaluate need for additional street lighting at this location (in addition to existing lamp on the east side of Echo Hollow Rd).	City of Eugene	ODOT SRTS Construction Grant Priority

Rec #	Recommendation	Responsible Agency	Implementation Next Steps
	Echo Hollow Rd and Murname St		
10	**Issue:** There are few opportunities for pedestrians to cross Echo Hollow Rd. With the introduction of a bi-directional bike facility on the west side of the street, there will be an increased need to provide east-west crossing opportunities, and Murname St is located adjacent to the Echo Hollow Pool facility. **Recommendation:** Reconstruct the midblock crossing of Echo Hollow Rd at Murname St with high-visibility continental crosswalk markings, and consider a rectangular rapid flashing beacon (RRFB) system for higher visibility and driver yielding compliance. Evaluate need for street lighting at this location.	City of Eugene	
	Echo Hollow Rd and Willhi St		
11	**Issue:** There is an unmarked crossing with curb ramps on the east leg of this intersection. Westbound cars pulling up to this intersection on Willhi St tend to pull out past the area where pedestrians would cross in order to see oncoming traffic, creating a potential for conflict. **Recommendation:** Stripe a high-visibility continental crosswalk across the east leg of this intersection to make the pedestrian area clear to drivers. Depending on bicycle facility along Echo Hollow Rd, consider installing green skip striping alongside the continental crosswalk striping.	City of Eugene	Quick Build Compatible
	Echo Hollow Rd and Avalon Ave		
12	**Issue:** There is a signalized crossing with three transverse crosswalks located at this intersection. However, curb ramps are substandard, and crosswalks are not high-visibility. **Recommendation:** Restripe existing transverse crosswalk with high-visibility continental-style pavement markings. Upgrade curb ramps to meet ADA standards.	City of Eugene	

Rec #	Recommendation	Responsible Agency	Implementation Next Steps
	Echo Hollow Rd and Fuller Ave		
13	**Issue:** Everyone's Market is located on the northeast corner of this intersection, but there is no designated east-west crosswalk across Echo Hollow Rd for pedestrians traveling to and from the market. **Recommendation:** Stripe a high-visibility continental crosswalk across the east leg of this intersection to make the pedestrian area clear to drivers. Depending on bicycle facility along Echo Hollow Rd, consider installing green skip striping alongside the continental crosswalk striping.	City of Eugene	Quick Build Compatible
	Echo Hollow Rd and Marshall Ave		
14	**Issue:** Pedestrian crossings on the east leg of this intersection are unmarked. **Recommendation:** Stripe a high-visibility continental crosswalk across the east leg of this intersection to make the pedestrian area clear to drivers. Depending on bicycle facility along Echo Hollow Rd, consider installing green skip striping alongside the continental crosswalk striping.	City of Eugene	Quick Build Compatible
	Echo Hollow Rd at Marshall Path		
15	**Issue:** The Marshall Path is a valuable off-street connection, especially if the City makes improvements to bicycle and pedestrian facilities along Echo Hollow Rd. However, a crossing will be needed to connect the path with bike facilities on the west side of Echo Hollow Rd. **Recommendation:** Construct a midblock crossing of Echo Hollow Rd at the Marshall Path. Use high-visibility continental crosswalk markings and consider a rectangular rapid flashing beacon (RRFB) system for higher visibility and driver yielding compliance. Evaluate need for street lighting at this location.	City of Eugene	

Rec #	Recommendation	Responsible Agency	Implementation Next Steps
	Echo Hollow Rd and Royal Ave		
16	**Issue:** At the south end of Echo Hollow Rd (where it meets Royal Ave), there is a signalized intersection and a pedestrian cut-through to Nebraska St. This is an opportunity to route the bicycle facilities into the neighborhood streets south of Royal Ave, but the intersection must be engineered to allow safe transition between the bike facilities on the west side of Echo Hollow Rd. **Recommendation:** Transition the bi-directional bike facility on the west side of Echo Hollow Rd to connect with the cut-through path (leading to Nebraska St). The following are potential options to facilitate this transition: • Install and program a bike signal so that it has its own phase, which would allow the southbound left turn. (Use signage to designate the southbound right turn as "No Turn on Red".) • Allow southbound bikes to turn left along with southbound vehicles. Allow southbound vehicles to turn right only when eastbound vehicles are signaled to turn left onto Echo Hollow Rd. (Use signage to designate the southbound right turn as "No Turn on Red".) Restripe existing transverse crosswalk with high-visibility continental-style pavement markings. Upgrade curb ramps to meet ADA standards.	City of Eugene	Requires Additional Traffic Analysis Requires More Detailed Design ODOT SRTS Construction Grant Priority

Rec #	Recommendation	Responsible Agency	Implementation Next Steps
	Jay St		
17	**Issue:** Jay St runs parallel to Echo Hollow Rd, meaning that it could serve as an excellent pedestrian and bicycle alternative to the congested main thoroughfare. However, it has no designated facilities for active transportation. **Recommendation:** Install a pedestrian lane along at least one side of Jay St. (As an alternative, the City could choose to install curb, gutter and sidewalk, depending on the needs of the community.)	City of Eugene	Quick Build Compatible

Education and Encouragement Program Recommendations

The programs outlined in this section are intended to increase awareness, understanding, and excitement for walking and rolling to school among families and students. Table 2 includes details about each recommended program including a brief description, suggested leads, timeline, and resources.

Based on the input from the community and findings from the bike and pedestrian facility inventory, the project team develop the maps of Priority SRTS Routes on the following pages. These maps highlight the corridors that should be prioritized as comfortable travel routes for community members of all ages and abilities, particularly students. The route networks depicted on the maps include existing routes with sufficient infrastructure in place, as well as priority routes that are recommended for potential improvements as funding becomes available.

Check out the ODOT SRTS Menu of Services here: https://www.oregonsaferoutes.org/about-oregon-safe-routes-to-school/

In addition to planning support provided through this process, the ODOT SRTS Program also offers technical assistance to support local SRTS efforts in education and encouragement. This support includes:

1. Coordination between practitioners through Regional Hubs (see call-out below) https://www.oregonsaferoutes.org/contact
2. Trainings and resource guides, which can be found on the Oregon SRTS website https://www.oregonsaferoutes.org/resources/
3. Incentives, activities, and messaging for monthly Walk+Roll events https://www.oregonsaferoutes.org/walkroll/
4. Bicycle and pedestrian safety trainings and a loaner bike fleet

https://www.oregonsaferoutes.org/train-the-trainer/

Learn more and keep in touch by signing up for the ODOT SRTS Newsletter: https://www.oregonsaferoutes.org/

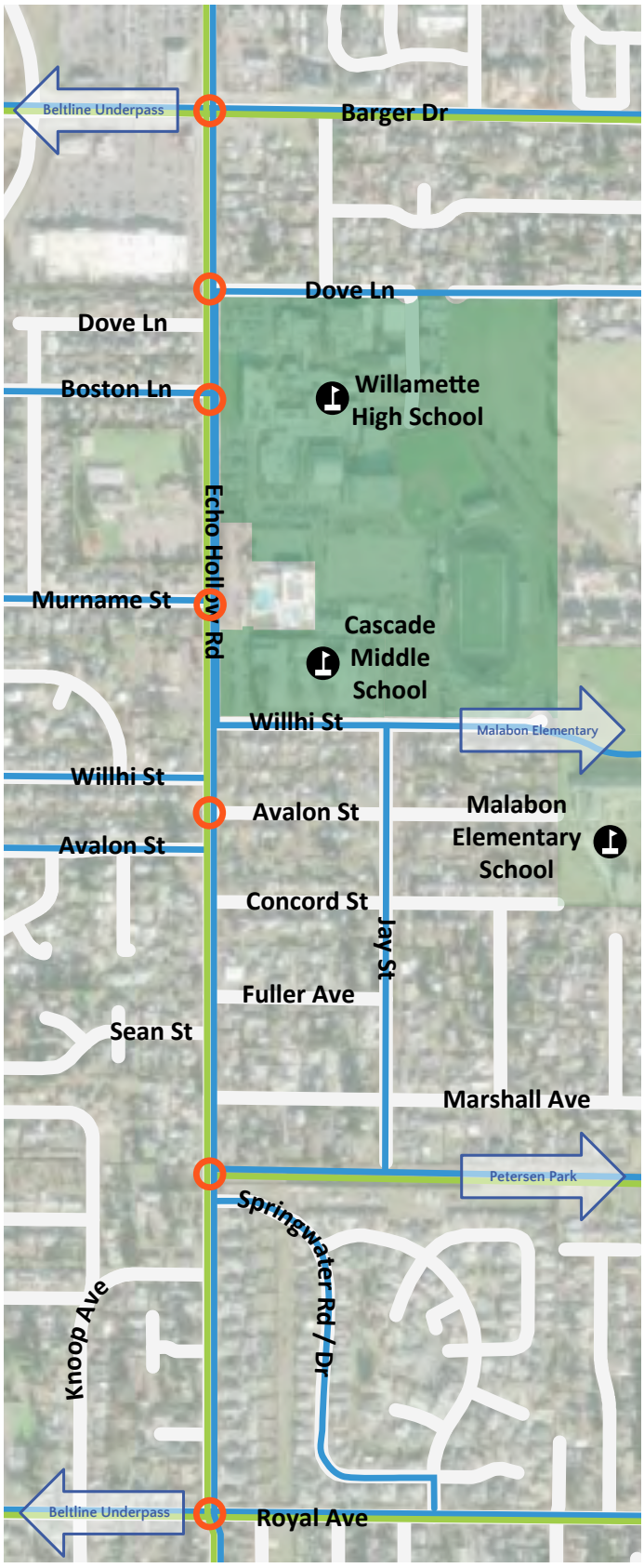
CONNECT WITH YOUR ODOT SRTS REGIONAL HUB COORDINATOR

The ODOT SRTS Program can provide free resources, materials, and guidance to implement education and encouragement programs. The ODOT SRTS Education team is working in parallel with the Construction team to help communities across the state implement education and encouragement efforts. The team holds Regional Hub meetings to discuss statewide and regional SRTS strategies and efforts. Regional Hub Coordinators are a resource for local SRTS coordinators and regions without a coordinator to help create and sustain successful SRTS programs.

Learn more about the SRTS Regional Hubs and how they can support your SRTS Program here: https://www.oregonsaferoutes.org/oregon-safe-routes-to-school-local-coordinators/.

Review Table 2 to identify educational and encouragement priorities and discuss with the Regional Hub Coordinator.

ECHO HOLLOW RD CORRIDOR PRIORITY SRTS CONNECTIONS



PRIORITY SRTS CONNECTIONS

- Pedestrian Connections
- Bicycle Connections
- Key Crossings

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Table 2. Echo Hollow Road Corridor Education and Encouragement Recommendations

Activity	Responsible Party	Description (Additional details provided on following page)	Resources Needed	Inclusion Considerations	Measures of Success
Parent Education and Outreach	Schools	Provide travel safety tips for parents aimed at people walking, biking, driving, or riding the bus. Emphasize proper vehicle circulation procedures, safe routes for students, and traffic reduction at arrival and dismissal times, including the option to park and walk with students.	Seasonal travel tips for school communications, flyer	Provide materials in Spanish and/or other languages as needed.	Feedback from families; observations from school leadership
Pedestrian and Bike Safety Education	SRTS Coordinator, Schools	Work through after-school programs or within existing education curriculum (where possible) to provide pedestrian and bicycle safety education to students. Place a particular emphasis on safe crossing behavior and route planning.	Travel safety hand-out, messaging, curriculum	Communicate with families ahead of time to learn about what needs their children may have. Focus on walking and biking safely in students' neighborhoods or on field trips, even if not near the school.	Number of students participating, feedback from families, observations from school leadership
School Zone Traffic Safety Campaign	School Administration	A school zone traffic safety campaign can be used to share simple safety messages, encourage attentive behavior, and increase the visibility of the school zone.	Outreach materials	Provide materials in Spanish and/or other languages as needed.	Feedback from families, observations from school leadership
Walking School Bus and Bike Train	Parent volunteers, administers, SRTS Coordinator, Parents/Caregivers	Bike Train or Walking School Bus events could be held periodically to raise awareness of these options among students and families (for example, as part of Walk + Roll to School Day). With interest from the school community, an SRTS Coordinator could help staff and parents organize a regular Walking School Bus or Bike Train for students who usually walk alone or whose parents have work schedules that conflict with drop-off times.	Communications to parents, routes and meet-up points, signs, staff/volunteer time	Provide materials in Spanish and/or other languages as needed. Consider how students with mobility challenges can participate.	Number of students participating, feedback from families

Activity	Responsible Party	Description (Additional details provided on following page)	Resources Needed	Inclusion Considerations	Measures of Success
Walk+Roll to School Day (one of five options listed below)	ODOT SRTS Team, SRTS Coordinator, Schools	Organize a Walk + Roll to School Day to encourage and celebration of walking and biking at the school. Participate in International Walk+Roll to School Day in October to encourage and incentivize walking and rolling. The ODOT SRTS team can provide materials and activities to help support the event including flyers, activity sheets, stickers, and more.	Food, music, decorations, printer, incentives or prizes for students (could be solicited from local businesses or ordered for free through ODOT), volunteers to pass out incentives	Ensure that students who live too far to walk or bike are able to participate on campus. Consider locations to hold a remote drop-off site.	Number of students and community members participating
Ruby Bridges Walk to School Day	ODOT SRTS Team, SRTS Coordinator, Schools	The perfect opportunity to teach children about the civil rights movement and make connections to today's collective efforts for change. Ruby Bridges Walk to School Day gives children the opportunity to celebrate Ruby's courage by walking to school.	Food, music, decorations, printer, incentives or prizes for students (donations from local businesses or incentives ordered free from ODOT), and volunteers to pass out incentives.	Ensure that students who live too far to walk or bike are able to participate on campus. For example, consider locations to hold a remote drop-off site, such as a park or other landmark, where students can meet and walk to school together.	Number of students and community members participating
Winter Walk to School Day	ODOT SRTS Team, SRTS Coordinator, Schools	Winter Walk to School Day encourages kids to walk and roll to school even in winter and all year round! As an accompanying activity, invite students to play bingo, take part in an art activity, organize a clothing swap, or have a fashion show, and be sure to share the event on social media.	Food, music, decorations, printer, incentives or prizes for students (donations from local businesses or incentives ordered free from ODOT), and volunteers to pass out incentives.	Those who have disabilities may have trouble moving through the snow. Consider options for a remote drop-off and suggested travel route that is accessible for all students considering the weather conditions.	Number of students and community members participating

Activity	Responsible Party	Description (Additional details provided on following page)	Resources Needed	Inclusion Considerations	Measures of Success
Earth Month	ODOT SRTS Team, SRTS Coordinator, Schools	As part of an Earth Month celebration, host Walk + Roll events and encourage students to learn more about how they can be kind to the Earth. Plant seeds at your school or around your community, write a thank you card to the Earth, create a collaborative mural at your school about biking and walking to school, or invite students to make posters about why they love the Earth.	Food, music, decorations, printer, incentives or prizes for students (donations from local businesses or incentives ordered free from ODOT), and volunteers to pass out incentives.	Ensure that students who live too far to walk or bike are able to participate on campus. Consider locations to hold a remote drop-off site.	Number of students and community members participating
The Walk+Roll May Challenge	ODOT SRTS Team, SRTS Coordinator, Schools	This annual event encourages kids and families to walk, bike, and roll to school and to stay active and healthy.	Food, music, decorations, printer, incentives or prizes for students (donations from local businesses or incentives ordered free from ODOT), and volunteers to pass out incentives.	Ensure that students who live too far to walk or bike are able to participate on campus. Consider locations to hold a remote drop-off site.	Number of students and community members participating
SRTS Demonstration Projects	SRTS Coordinator, Roadway Jurisdiction Staff	Organize demonstration projects to engage students and families in opportunities to improve the built environment. Cooperate with road jurisdictions to ensure that these projects are compliant with permitting regulations.	Cones, barricades, paint, signage	Provide materials in Spanish and/or other languages as needed.	Feedback from families and community members
Lunchtime or After School Walking Club	Teachers or After-School Program Staff	To get students moving during the school day or after school, parent or teacher volunteers could lead small groups of students on walks. This is also an opportunity for students to familiarize themselves with what routes they may be able to take the school and practice safe walking.	Parent or teacher volunteers, safety vests (optional)	Consider how students with mobility challenges may need extra support participating	Number of interested volunteers, number of interested students, increase in students walking and biking to school outside the club

Activity	Responsible Party	Description (Additional details provided on following page)	Resources Needed	Inclusion Considerations	Measures of Success
Promote biking and walking safety through school curriculum	Teachers/ School Staff	Consider incorporating activities related to active transportation into classes to promote greater awareness of travel by these modes. For example, math classes may help with pedestrian counts and art classes may make creative walking route maps.	Lesson plans	Incorporate users of mobility devices into pedestrian counts	More conversation and curiosity from students about active transportation
Communication and Engagement with Parents and Caregivers	School Administration	Send a letter to parents at the beginning of the year with travel safety tips and how they can add to their children's learning about active transportation through walking with them and volunteer opportunities	Letter template, travel tips flyer	"Provide materials in Spanish, or other languages as needed."	Parent interest in volunteering or engagement in walking and rolling
Bike and/or Bus Fairy	School Administration or SRTS Coordinator	Collect little treats and place them on student's bus seats or bikes during a celebration day.	Gift bags, pencils, stickers, erasers	Wings or Wand for Bike/ Bus Fairy may add to the fun.	Number of students participating
Train-the-Trainer Bike and Pedestrian Education	Teachers/ School Staff	Provide training for Physical Education teachers to facilitate bicycle and pedestrian education in schools.	Free education with the potential to include bike fleets and helmets for student use.	Consider how students with disabilities could participate	Number of students participating, skills learned, number of volunteers
Cocoa for Carpools	Teachers/ School Staff	Offer hot cocoa or other treats to encourage and celebrate students who carpool to school. It can also be fun to include a selfie or photo contest.	Food, music, decorations, photo contest guidelines, promotional materials	Provide materials in Spanish and/or other languages as needed.	Number of students participating, increase in carpooling
Walk Around Campus Event (AKA walk-a-thons)	Teachers/School Staff	When students arrive at school, have them do a quick lap around the school campus to get their energy up for a day of learning. Walking around the school campus is also a great addition to encouragement events.	Music, Incentives, punch cards. Speak with teachers about adding events into curriculum.	This event is inclusive of all students, including those who ride the bus or are dropped off by an adult.	Number of students participating

Education and Encouragement Program Descriptions

PARENT EDUCATION AND OUTREACH

Parents are the primary decision-makers when it comes to how their students get to school. Informing parents about their options for walking and bicycling, as well as communicating the benefits of active transportation, can encourage more families to walk and bike. This can happen through school e-news or announcements, and other informational resources. After high-priority construction recommendations are implemented, suggested route maps can show parents the best walking or biking route to the school and help overcome concerns and barriers.

Resources include the following:

- The Oregon SRTS website has a host of safety tips for parents who are interested in their student walking and biking to school. Also, sign up for the newsletter to get current materials and seasonal safety tips.
- The National Center for SRTS offers tools and training to provide communities the technical support they need to make community-enhancing decisions.

SAFE ROUTES TO SCHOOL COORDINATOR POSITION

A designated individual who is tasked with coordinating and championing Safe Routes to School can greatly increase the likelihood of program success. A SRTS coordinator is usually charged with scheduling, publicizing, and administering SRTS programming, including encouragement events, educational activities, safety campaigns, Walking School Buses and Bike Trains for students and their families. This person is also responsible for coordinating between various involved jurisdictions, community groups, and community stakeholders to promote SRTS as a priority. The SRTS coordinator position is best housed at an agency that can work across the whole school district.

Funding for SRTS Coordinators is available through ODOT's competitive Education Grant process, as well as some regional and local governments. This grant can also provide technical assistance with hiring a coordinator, developing a work plan, and getting the program off the ground.

TRAFFIC SAFETY CAMPAIGN

A school traffic safety campaign can share simple safety messages and increase the visibility of the school zone and families traveling in the area. Focus outreach during back-to-school time, as the weather turns and time changes in the late fall, and during the early spring months, to address seasonal visibility issues.

Resources include the following:

- The Oregon SRTS website has a host of banners, brochures, and other materials that schools can use to raise drivers' awareness of students traveling in a school area. Order materials from the ODOT Storeroom and check the ODOT SRTS website for current incentives and outreach materials available.

- The Drive Like It campaign offers yard signs, safety kits, and other materials with a simple, clear message.

PEDESTRIAN AND BIKE SAFETY EDUCATION

Pedestrian and bike safety education teaches students basic traffic laws and safety rules. Lessons are usually during PE classes or after school and may be one-time Bike Rodeos or multi-day courses[1].

Resources include the following:

- The ODOT SRTS Neighborhood Navigators 2.0 Curriculum includes a flexible in-class and on-bike Walk and Roll Safety Education lesson plans and workbooks. The ODOT SRTS technical assistance team are piloting bike fleets and new Train-the-Trainer materials in 2022. Sign up for the Oregon SRTS newsletter or join the Regional Hub meetings to learn when these will launch.
- Oregon SRTS provides curriculum for activities and lessons that teach the knowledge and skills necessary to be safe road users, including bike and pedestrian education videos.
- The National Highway Traffic Safety Administration offers a child pedestrian safety curriculum and Cycling Skills Clinic Guide to help organizations Plan bike safety skills events.

1 Bethel School District has an IGA with River House Outdoor Center to provide bicycle safety training.

WALKING SCHOOL BUS/BIKE TRAIN

In a walking school bus, a group of students walks together to school, accompanied by one or two adults (usually parents or guardians of the students on the "bus"). As the walking school bus continues on the route to school, they pick up students at designated meeting locations. Similar to walking school buses, bike trains involve a group of students biking together with adults.

Bike trains and walking school buses for elementary school students are typically led by a parent, however, middle school students can become leaders, act as role models, and practice and teach safe bicycling behaviors. Bike trains may be more appropriate for middle school students, as they enable students to feel independent in their mobility, while also providing the safety and comfort of riding in a group.

ODOT's SRTS Website has resources and tips to get started, including a 2021 webinar on the topic

WALK + ROLL TO SCHOOL DAYS

Walk+Roll events encourage and celebrate students walking and rolling to school.

Keep the momentum going year-round with ODOT SRTS' monthly themes:

September: Back to School

October: International Walk to School Day

November: Ruby Bridges Walk to School

February and March: Winter Walk+Roll

April: Earth Month

May: Bike Month

Parents can set up a table on the event day to provide refreshments and small rewards for families who participate, as well as maps, lights, and safety information to encourage more students and families to join in the fun. Even families who live too far from school to walk and bike can participate by driving to a designated central location and walking together from there. Coffee and breakfast can be provided, and students can dress up or hold posters to make a fun, parent-supervised parade to school. Walks could also take place as a part of another health-related event or to benefit a cause.

Resources include the following:

- Schools in Oregon can order incentives to support and promote Walk + Roll to School Day.
- King County Metro in the Seattle area has a Tool Kit with resources to plan a Walk + Roll to School Day event.
- Walk and Bike to School suggests event ideas and planning resources for encouraging active transportation at schools.
- The National Center for SRTS maintains a national database of walk and bike to school day events, as well as event ideas and planning resources.

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05

IMPLEMENTATION

IMPLEMENTATION

This chapter identifies high priority projects and provides guidance for implementation, including information about the ODOT SRTS Competitive Grants.

One of the goals of the PIP process is to identify and refine specific projects that are eligible for the ODOT SRTS Infrastructure Grant and prepare jurisdictions to apply for the funding. This chapter describes the community-driven process to prioritize recommendations for the Competitive ODOT SRTS Infrastructure Grant Application, as well as additional project-related details that will be needed to complete the application.

Project Prioritization Process

Walk audit and community meeting participants provided feedback on how actions and recommendations should be prioritized in their community, ranking various criteria (see sidebar on this page) on a sliding scale of "Not Important" to "Very Important". This exercise requires thinking about trade-offs between different goals and actions. Participants generally felt that most of the prioritization measures were quite important to consider for SRTS projects in the community.

Participants found safety to be the most important factor, while also recognizing that equity, student density, and proximity to school were essential when considering projects. Participants discussed the trade-offs between feasibility and safety, deciding that they would be interested in looking at both short-term highly feasible improvements but also considering a long-term approach that maximized safety.

Prioritization Criteria

How should we prioritize projects in your community?

SAFETY ★

Projects should be prioritized based on how unsafe a road is, looking at factors such as speed, traffic volumes, number of lanes, crossing distance or history of crashes.

EQUITY

Projects should be prioritized based on their ability to support walking and biking for all students regardless of age, ability, race, language, or income.

PROXIMITY TO SCHOOL

Projects should be prioritized based on their distance from a school.

COMMUNITY-IDENTIFIED NEED

Projects should be prioritized because they were identified through school or community engagement, parent/caregiver feedback, or during another planning process.

STUDENT DENSITY

Projects should be prioritized based on their proximity to current and future students and families.

FEASIBILITY

Projects should be prioritized based on their location on or along a street that is already planned for improvements, their cost, or other feasibility measures that make them most achievable in the short term.

★ *Prioritization criteria identified as the most important to the community*

High Priority Construction Projects

The City of Eugene determined that improvements along Echo Hollow Rd were a top-priority for the ODOT SRTS Competitive Construction Grant Application. Tables 3 and 4 describe two project phases recommended for this corridor. The first phase (Table 3) includes the installation of a two-way cycle track from the shopping center entrance south to Royal Ave. The second phase (Table 4) provides a connection between the shopping center intersection and Barger Dr to the north. The first improvement has a staged crossing where bicyclists transition from the two-way cycle track to the one-way bike lanes on either side of Echo Hollow, while the second stage involves a bicycle facility alongside the west sidewalk. These projects were chosen due to their emphasis on safety, proximity to the schools and ability to serve a large number of students walking and biking both to and from school and around the community in general.

Tables 3 and 4 provide planning-level cost estimates for each project. (See Appendix D for detailed cost estimates.) Table 5 (page 56) provides additional project-specific information needed for ODOT grant applications.

The City of Eugene will be the relevant party to prepare the Competitive ODOT SRTS IN Grant for these projects.

Table 3. Echo Hollow Road Corridor Implementation Priority Project: Two-way Cycle Track

PROJECT DESCRIPTION	PLANNING-LEVEL COST ESTIMATE
Mobilization	$92,000
Traffic Control	$138,000
Erosion Control	$18,400
Two-Way Cycletrack (Echo Hollow Rd from Echo Hollow Plaza to Royal Ave)	**$1,168,361**
Additional Costs	$753,700
Total Project Cost	**$1,922,061**

Table 4. Echo Hollow Road Corridor Implementation Priority Project: Cycle Track Connection North to Barger Lane

PROJECT DESCRIPTION	PLANNING-LEVEL COST ESTIMATE
Mobilization	$47,000
Traffic Control	$70,500
Erosion Control	$9,400
Connection between Two-Way Cycletrack and Barger Dr	**$596,412**
Additional Costs	$384,800
Total Project Cost	**$981,212**

Table 5. Project Details for ODOT Competitive Infrastructure Grant

PROJECT DESCRIPTION	RESPONSE FOR CITY OF EUGENE
Relevant Right of Way ownership	City of Eugene
Utility implications	N/A
Environmental resource implications	N/A
Stormwater management implications	N/A
Near a railroad? Or bridge, tunnel, retaining wall affected?	N/A
AADT	Unknown
Priority Safety Corridor	Yes

Education Implementation Next Steps

EQUITY

- Develop and utilize an equity lens for program development, distribution of resources, and staff recruitment. Publicize this commitment to equity, and use it to measure program effectiveness.

ENGAGEMENT

- Develop engagement processes and procedures for stakeholder recruitment, event documentation, and follow-up efforts.
- Develop engagement goals and outcomes to measure success in reaching target populations through the SRTS program.

EDUCATION

- Expand the bicycle and pedestrian safety programs.
- Ensure that the educational curriculum is presented effectively to multicultural students and English as a Second Language (ESL) students.
- Continue working to differentiate instruction for all skill levels.
- Expand work with underserved and historically marginalized populations.
- Continue to build partnerships with schools to increase school and student participation.
- Hire an instructor pool that reflets the diversity of the region, and train instructors in diversity, equity, and inclusion.
- Continue to offer adaptive equipment, implement pop-up traffic gardens, and educate community members about safe driving in school zones and parking lots.
- Formalize the Learn-to-Ride program to reach hundreds of students each year.
- Pilot a transit education program.
- Participate in the creation of one or more permanent traffic gardens.
- Incorporate personal safety and route selection into traffic safety programs.

ENCOURAGEMENT

- Encourage and assist with at least one annual encouragement activity event at all schools.
- Continue to work towards institutionalizing Walking School Bus (WSB) and potentially Bike Train programs.
- Expand middle and high school programming.
- Make programming and materials culturally and linguistically accessible.
- Work with Lane Transit District (LTD) to get transit passes to as many students as possible and to increase ridership through the Youth Pass program.
- Identify and support school champions at each school.
- Encourage connections between families that lead to more carpools; walking, biking and transit buddies; and walking school buses.

Next Steps

With an SRTS Plan in place, it's time to shift attention to implementation.

The strategies identified in this Plan may seem overwhelming at first. Just remember that anything you can do to make walking, biking, and rolling to school safer, easier, and more fun for students is a step in the right direction. Here are some things to remember:

START SMALL

Small actions can have a big impact, especially when it comes to building support, interest, and momentum for bigger initiatives.

FOCUS ON EQUITY

Not everyone has equal opportunities to walk and bike to school. Identify and prioritize strategies to address and overcome barriers that disproportionately impact the most vulnerable students.

BUILD PARTNERSHIPS

Look for opportunities to strengthen existing partnerships and build new ones. Reach out to caregivers, community members, local agencies and community organizations, and other partners to expand capacity and support for SRTS initiatives.

EMPOWER STUDENTS AS LEADERS

Student-led initiatives can generate enthusiasm and improve social conditions for SRTS. Empower students to take ownership of programs to raise awareness, build excitement, and expand opportunities for their peers to walk and bike to school.

TRACK PROGRESS

Continue to track trips and survey caregivers and students about their experiences walking, biking, and rolling to school. Conducting regular evaluation will help your team understand what works and what doesn't work and allocate resources accordingly. Consider reporting annually on progress.

CELEBRATE SUCCESS

Take time to recognize efforts and celebrate progress. Whether it's changing travel habits, achieving a major milestone, implementing an infrastructure improvement, launching a new program, or hosting a successful event, recognize and celebrate success. Empower students as leaders

Student-led initiatives can generate enthusiasm and improve social conditions for SRTS. Empower students to take ownership of programs to raise awareness, build excitement, and expand opportunities for their peers to walk and bike to school.

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06

APPENDICES

APPENDICES

APPENDIX A. FOR MORE INFORMATION

This appendix provides contact information for state and national SRTS program resources as well as school partners.

NATIONAL RESOURCES

Safe Routes to School Data Collection System

http://www.saferoutesdata.org/

Pedestrian and Bicycle Information Center

http://www.pedbikeinfo.com/

National Center for Safe Routes to School

http://www.saferoutesinfo.org/

Safe Routes to School Policy Guide

http://www.saferoutespartnership.org/sites/default/files/pdf/Local_Policy_Guide_2011.pdf

School District Policy Workbook Tool

https://www.changelabsolutions.org/product/safe-routes-school-district-policy-workbook

Safe Routes to School National Partnership State Network Project

http://www.saferoutespartnership.org/state/network

Bike Train Planning Guide

http://guide.saferoutesinfo.org/walking_school_bus/bicycle_trains.cfm

10 Tips for SRTS Programs and Liability

http://apps.saferoutesinfo.org/training/walking_school_bus/liabilitytipsheet.pdf

Tactical Urbanism and Safe Routes to School

http://www.saferoutespartnership.org/resources/fact-sheet/tactical-urbanism-and-safe-routes-school

STATE RESOURCES

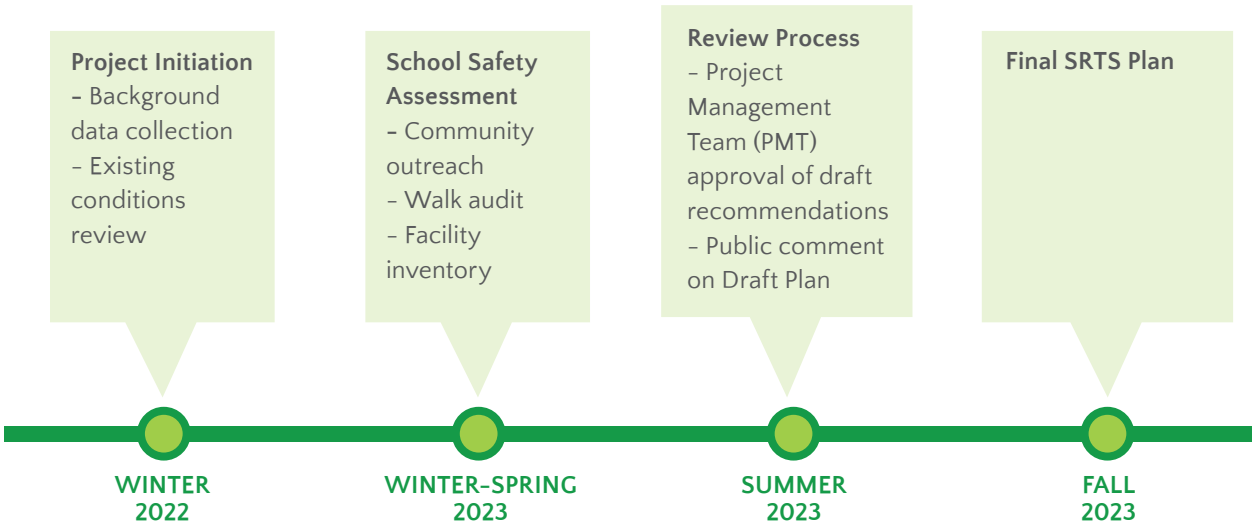
The Oregon Department of Transportation (ODOT) SRTS Program provides technical assistance to support local SRTS efforts. This support includes:

1. Coordination between practitioners through Regional Hubs that meet monthly https://www.oregonsaferoutes.org/contact
2. Trainings and resource guides, which can be found on the Oregon SRTS website https://www.oregonsaferoutes.org/resources/
3. Incentives, activities, and messaging for monthly Walk+Roll events https://www.oregonsaferoutes.org/walkroll/
4. Bicycle and pedestrian safety trainings and a loaner bike fleet – coming in 2022

Learn more and keep in touch by signing up for the ODOT SRTS Newsletter: https://www.oregonsaferoutes.org/

APPENDIX B. PLANNING PROCESS

The Echo Hollow Rd Corridor SRTS Plan Process



Project Initiation

The first step in the Planning process was to collect data and information to support evaluation of existing conditions. This included two meetings with the PMT to identify issues and opportunities related to SRTS. Existing Conditions information is included in Chapter 3 and Appendix C.

School Safety Assessment

The School Safety Assessment included the walk audit observations, community meetings, and a bike and pedestrian facility inventory.

WALK AUDIT

During each walk audit, the PMT and community participants observed traffic conditions, travel patterns, and behaviors for all modes of travel during arrival or dismissal at each school. Before each walk audit, the team gathered to identify key routes and locations for observation.

COMMUNITY MEETING

The School Safety Assessment community meeting was an opportunity for school leadership, roadway jurisdiction staff, teachers, and parents to discuss barriers to walking and biking to school, and brainstorm ideas for how to overcome them. The meetings were held directly after each walk audit. Meeting participants discussed the typical routes that students who walk and bike take to and from school, points of conflict between people driving and walking/biking, ongoing SRTS programming and some additional ideas for education and engagement events at the school.

BIKE AND PEDESTRIAN FACILITY INVENTORY

The bike and pedestrian facility inventory documented existing infrastructure, focusing on all streets within a quarter mile of all schools. The inventory collected the following information about general infrastructure deficiencies and needs:

- **Sidewalk deficiencies** – lack of continuity, insufficient width, poor surface condition, non-compliant cross-slopes and driveways, lack of separation from the travel lane, and obstacles (utility/light poles, signs, and vegetation)
- **School area signs and pavement markings** – presence, placement, and condition
- **Paths** – formal or informal, surface material
- **Bike lanes** – lack of continuity, insufficient width or markings, presence of on-street parking, speed and volume of traffic, poor pavement condition
- **Bicycle, scooter, and/or skateboard parking** – presence, location, visibility, degree of security, and utilization
- **Drop-off/pick-up areas** – designated areas, curb paint, and signs
- **Visibility** – insufficient pedestrian lighting, line of sight obstacles (parked cars, vegetation, signs, and poles)

The bike and pedestrian facility inventory collected the following information about street crossings:

- **Traffic signals** – pedestrian signals, push-button location and reach distance, signing, countdown feature, accessible pedestrian signal feature, and sufficient crossing time
- **Marked crosswalks** – condition, type, signs, visibility, and whether ramp is contained within crosswalk markings
- **Curb ramps** – presence at corners, ADA-compliant design (tactile domes, ramp and flare slope, level landing)
- **Connections with neighborhood trails or paths** – signage, bike parking, ease of connection to transit hubs, parks, or schools

Deficiencies and needs identified in the bike and pedestrian facility inventory inform the infrastructure recommendations described in Chapter 4.

Review Process

Following the School Safety Assessments, initial recommendations were prepared and shared with the PMT for review. The PMT met to discuss the recommendations, and to identify priority projects for the Competitive ODOT SRTS Infrastructure Grant. Once this was complete, a Draft SRTS Plan was prepared and underwent both PMT review as well as Public Review in the form of an online interactive PDF document.

APPENDIX C. EXISTING CONDITIONS

Plan Review

EUGENE TRANSPORTATION SYSTEM PLAN (2017)

The City of Eugene's 2017 Transportation System Plan (TSP) serves as a resource for future transportation decision-making and as a "blueprint for investments in transportation projects and programs that provide 'complete streets' and improved safety and access for all travelers, reduce the community's contribution to climate change, and improve community resilience in the face of unforeseen changes and an unpredictable future." As such, the document can provide insight into what planning processes are already underway that may align with SRTS planning near the focus schools and along the Echo Hollow Road corridor.

RELEVANT STRATEGIES AND ACTIONS

There are several strategies and actions identified by Central Lane Metropolitan Planning Organization (CLMPO) that elevate local SRTS planning efforts including the following:

- Potential action items for meeting 2035 TSP policy objectives including school-based transportation options (incl. Safe Routes to School) to improve safety for all travelers and providing support for SRTS programs and other programs that create safe walking conditions between residences and schools and other neighborhood destinations.
- A system-wide policy of the 2035 TSP is fostering neighborhoods where Eugene residents can meet most of their basic daily needs without an automobile by providing streets, sidewalks, bikeways, and access to transit in an inviting environment where all travelers feel safe and secure. The related potential action item is the creation of a strategy to facilitate 90 percent

Relevant Projects (Source: 2017 Eugene TSP)

PROJECT ID	PROJECT LOCATION	RECOMMENDED IMPROVEMENTS
PB-14	Avalon Street, Haven Street to Juhl Street over Beltline Road	Mulit-use Path bridge
PB-166	Avalon Street, Juhl Street to Malabon Elementary School	Neighborhood Greenway
PB-577	Jay Street, Willhi Street to southern terminus	Neighborhood Greenway
PB-578	Cubit Street, Jessen Drive to Wagner Street	Neighborhood Greenway
PB-387	N Clarey Street, Barger Drive to Cubit Street	Neighborhood Greenway
PB-167	Berntzen Road, Royal Avenue to Elmira Road	Neighborhood Greenway
PB-390	Jay Street Bridge, Marshall Street to Marshall Path	Grade Seperated Path
PB-73	N Danebo Avenue, Barger Drive to Avalon Street	Neighborhood Greenway
PB-609	Throne Drive, Royal Ave to Avalon St	Neighborhood Greenway
PB-74	Devos Street, Jessen Dr to Barger Dr	Neighborhood Greenway
PB-223	Jessen Path, Ohio St to Beltline Path	Shared Use Path
PB-435	Avalon Street, Echo Hollow Road to eastern terminus	Sidewalk on South Side
PB-437	N Danebo Avenue, Gap south of Barger Drive	Sidewalk on East Side
PB-438	N Danebo Avenue, Barger Drive to Souza Street	Sidewalk on West Side
PB-436	N Danebo Avenue, Gap north of Souza Street	Sidewalk on East Side
PB-196	Avalon Street Accessway, Candlelight Drive to N Danebo Avenue	Accessway

of Eugene residences to be within 20-minute neighborhoods.

- The 2035 TSP recognizes Regional Transportation Options Plan (RTOP) adopted by the Central Lane MPO as the regional guidance for programs that reduce reliance on single-occupancy vehicles and identifies seven key programs and services, including: Transportation Options: Build off existing SRTS programs to include coordinated program with ridesharing and transit promotion and expand the program to middle and high schools; Rideshare (carpooling and vanpooling); and, LTD's Group Bus Pass program.
- The City should provide support for Safe Routes to School programs and other programs that create safe walking conditions between residences and schools and other neighborhood destinations.
- The City should support Safe Routes to School programs and other programs that create safe bicycling conditions between residences, schools and other neighborhood destinations

RELEVANT PROJECTS

The 2017 TSP also lists several bicycle and pedestrian projects within the vicinity of Willamette High School and Cascade Middle School that may be relevant to SRTS planning efforts. (See Figure 1 for the spatial distribution of projects around the focus schools.) The majority of projects are neighborhood greenways, which may, once completed, enable the safer passage of students along lower-traffic roadways to and from school. According to the TSP, all projects within this category are to be completed within 20 years.

CENTRAL LANE METROPOLITAN PLANNING ORGANIZATION (CLMPO) 2045 REGIONAL TRANSPORTATION PLAN (2022)

Planning at the regional level for the Eugene metropolitan area is facilitated through Central Lane Metropolitan Planning Organization (CLMPO).

In general, the RTP calls for greater attention to pedestrian and bicycle infrastructure. The Plan states that "Investing in walking and biking can help create a safer, more connected, and accessible system. The benefits resulting from walking and biking networks to the local economy, health, safety, sustainability, and accessibility are well documented."

PROJECTS THAT RELATE TO SRTS

Inclusion of SRTS projects within a region's Regional Transportation Plan (RTP) increases the likelihood that they will be completed. The following project is included among the constrained pedestrian project list, meaning that the MPO can reasonably expect this project to be completed with available revenue sources.

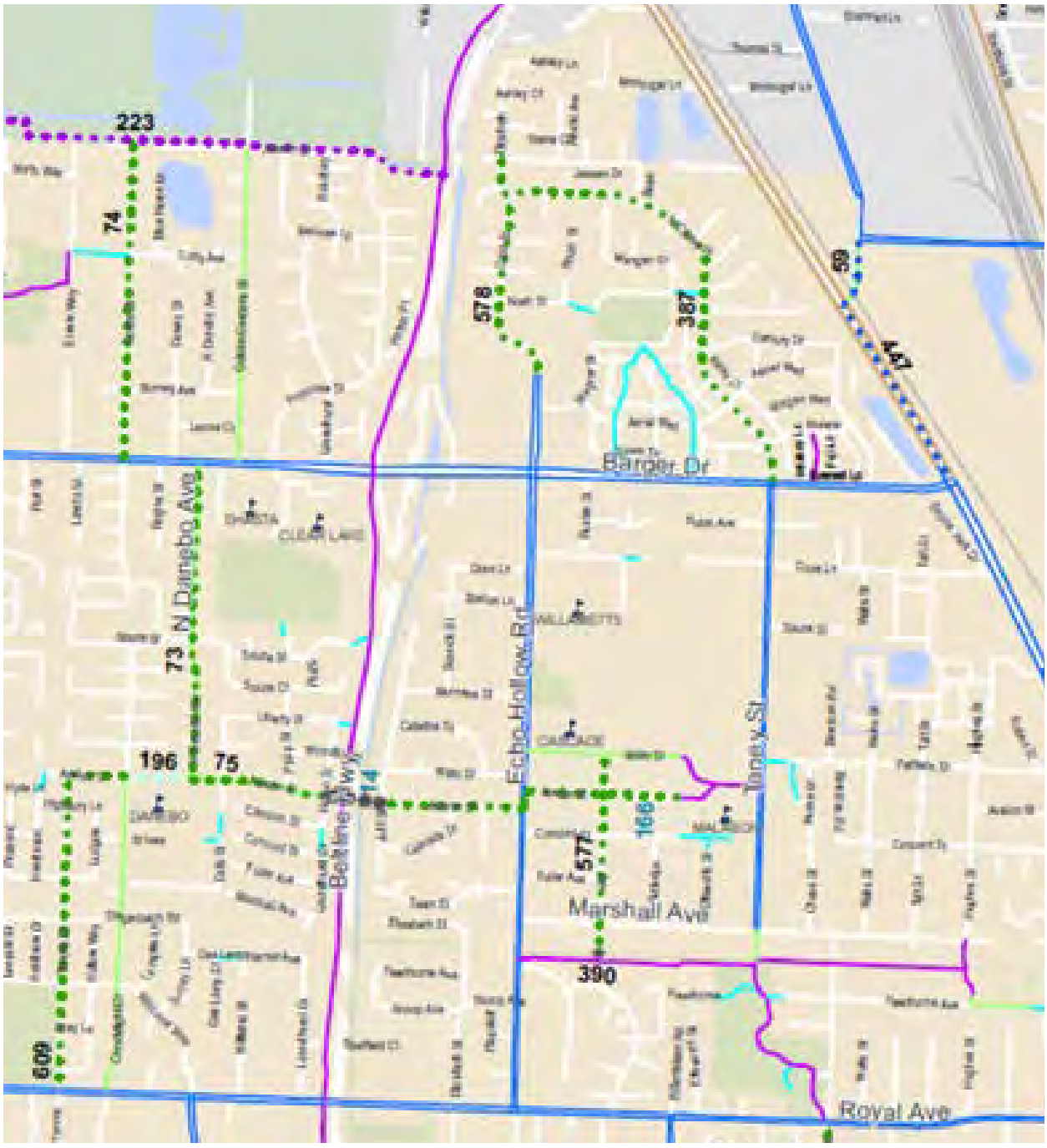
In addition to this project, the RTP makes mention of other local projects which may further active transportation in the region, including the Jay Street bridge (connecting Marshall Ave with the multi-use path).

MOVE EUG ACTIVE TRANSPORTATION FIVE-YEAR REPORT 2015-2020

This document provides an overview of the accomplishments of the City of Eugene in regards to pedestrian and bicycle improvements and programming between 2015 and 2020 and evaluates the progress of the active transportation aspects of previous planning efforts. The report is organized around the six E's: Education, Encouragement, Enforcement, Engineering, Evaluation, and Equity. The document makes note of SRTS planning efforts in the Bethel School District as well as multimodal improvements constructed on Barger Drive.

EUGENE TRAILS PLAN (2018)

This plan focuses less on on-street improvements and more on off-street trails and multi-use paths. However, the Plan identifies Echo Hollow Road between Barger Drive and Springwater Road as a key on-street connection, as well as Taney Street and



City of Eugene 2017 TSP Bicycling Improvements

Legend to Map Symbols

Proposed Bicycle Improvements
- Bike Lane
- Protected Bike Lane
- Shared Use Path
- Neighborhood Greenway
- Sidewalk Path
- Accessway
- Grade Separated Crossing

Current Bicycle Facilities
- Bike Lane
- Paved Shoulder
- Bike Boulevard
- Shared Use Path
- Sidewalk
- House
- Pedestrian & Bicycle Access Way
- Buffered Bike Lane

- Schools
- Railroad
- Streets
- Water
- Parks & Open Space
- Eugene City Limits
- Urban Growth Boundary

Barger Drive.

CASCADE MIDDLE SCHOOL ACCESS EXCEPTION AND ADJUSTMENT REQUEST

As part of the reconstruction of Cascade Middle School, Sandow Engineering on behalf of the Bethel School District requests permission from the City of Eugene to implement a new parking configuration for the facility. The proposed layout includes one access point to Echo Hollow Road (existing access location) and 4 new access points on Willhi Street. These new access connections require an exception request to standards within EC 7.410 and an adjustment review to standards within EC.6703. The following exception requests are made:

- EC 7.410 (1) – This access standard limits each development to one access point, however, Sandow requests five access points which include the existing Echo Hollow access point along with four access points on Willhi Street. Sandow describes the access points as necessary to separate bus circulation, parent drop-off circulation, and the main parking area to improve safety for all users accessing the site.
- EC 7.410 (2) – This access standard limits access connections to a width of 20 feet, however, Sandow proposes a connection at a width of 37 feet at Echo Hollow Road, 22, 24, and 24 feet for the access points on Willhi Street. Sandow describes these widths as necessary to accommodate safe turning movements of vehicles.
- EEC 7.420 (1)(c) – This standard requires access connections to be on the street with the lowest classification if a development is adjacent to two or more streets of different classifications, however, Sandow posits that all access connections are essential for the traffic flow of the school use.
- EC 9.6703 (3)(a) – This access standard concerns "internal vehicle stacking" and requires a minimum 50-foot distance from the back of the sidewalk to the centerline of the first internal circulation driveway or parking aisle. Each of the access connections from Willhi Street are proposed to have an internal vehicle stacking area of less than 50 feet and Sandow proposes a sidewalk set back to limit conflict between pedestrians and vehicles at these locations. Sandow presents an alternative traffic safety study that shows the stacking distances will not result in a hazard to the bicycle, pedestrian, or others using the right-of-way.

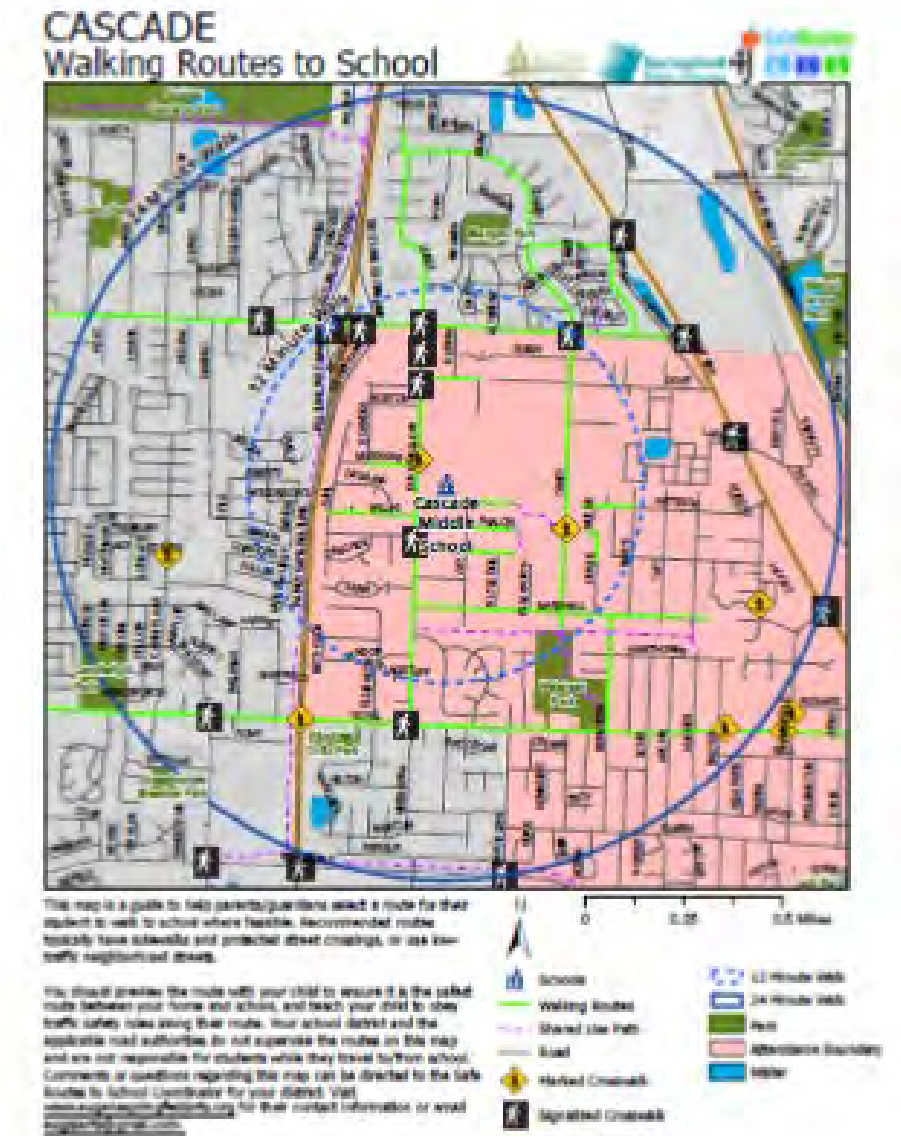
PEDESTRIAN AND BICYCLE SAFETY

In addition, the site plan describes multiple pedestrian and bicycle access points. In particular, pedestrians and bicycles would be able to access the site from Echo Hollow from the north and south without having to cross driveways on Willhi Street. The report contends that there are no safety concerns with pedestrians crossing the proposed access connections.

WILLAMETTE HIGH SCHOOL STUDENT CROSSING OBSERVATION

This report catalogues observations made of student walking behavior near Willamette School on September 21, 2022 during the lunch period and at dismissal time. Staff members made the following observations.

- The report notes that the scene appears chaotic but also likely safe due to there being a large contingent of students
- Several students who cross Echo Hollow Road at an unmarked crossing south of the signalized intersection at Dove
- There are some students who travel to/from school by bicycle



RECOMMENDATIONS THAT RELATE TO SRTS

Based on the observations, the report includes several recommendations that may help improve safety for students walking and bicycling to Willamette High School. The report also includes maps which detail the proposed improvements (see Figure X). The recommendations include:

- Increase pedestrian walk time on signalized crossing at Echo Hollow Rd and Dove Ln especially during school year at lunch and dismissal time.
- Consider alternative crosswalk design such as "bar pairs" and widen
- Increase distance for stop bar for north bound traffic on Echo Hollow Rd at Dove Ln
- Widen curbs on both sides of Echo Hollow Road especially on west side of Echo Hollow Rd at Dove Ln
- Construct raised sidewalk adjacent to businesses northwest of Willamette High
- Consider constructing mid-block crossing directly west of Willamette High
- Consider constructing diagonal crosswalk on Echo Hollow Rd and Dove Ln intersection.

CITY OF EUGENE RESOLUTION NO. 5143

City Council gave its support to "efforts by the City of Eugene and our regional partner agencies to prioritize safety improvements for people walking, bicycling, and using mobility devices" and to "efforts by the City of Eugene and our regional partners to eliminate deaths and serious injuries on our transportation system, with an emphasis on the most vulnerable users."

The resolution recognizes that pedestrians and bicyclists represent a disproportionate number of fatalities and injuries on the transportation network and that a vision zero plan would be a way to address it.

TRANSIT INFORMATION

Lane Transit District serves the City of Eugene and Lane County. The nearest bus stop is on Echo Hollow, adjacent to Willamette High School. The bus route 40 runs through this bus stop and runs every 30 mins Monday-Friday.

The following destinations are accessible on this route:

- Lane County Courthouse
- Amtrak Station
- Eugene Mission
- Four Corners
- Cascade Middle School
- Willamette High School
- WinCo

Previous SRTS Efforts or Walking/Biking Encouragement Activities

EDUCATION AND ENGAGEMENT ACTIVITIES

The Bethel School District has engaged in a significant number of SRTS education and engagement activities in the past. The district has a website for its SRTS program and has created suggested walking route maps for Willamette High School and Cascade Middle School, which are designed to help families select routes for their students to walk to school (See Figure X). Additionally, there is an SRTS Program Coordinator with Bethel School District and another with Lane County. In the past, the two focus schools have had several SRTS programs, such as walk and roll to school challenge month. However, SRTS programming may have had to be modified or scaled down in recent years due to COVID-19 public health concerns. There was also a Bethel Bike repair shop located at Willamette High School to aid students who travel by bicycle to school and experience mechanical issues. The district's long-term goal is to work with business students at Willamette High School to find funding and open the shop to the community.

CONSTRUCTION ACTIVITIES

BIKE RACKS AT WILLAMETTE HIGH SCHOOL

Students at Willamette High School worked on a project to create a covered, padded bike parking with racks at the high school. However, the project was stalled due to permitting issues. The bike parking was projected to be completed between April and June of 2019, but that work may have been stymied by the COVID-19 pandemic.

BARGER DRIVE CORRIDOR

In 2019, the City made major improvements to the Vision Zero corridor of Barger Dr from Primrose St to Altamont St, near the Randy Pape Beltline. The City reduced the number of motor vehicle, added stormwater treatments and channelizing medians, improved access and curb ramps for accessibility, and installed sections of protected bike lanes. The City's hope is that these changes will make the corridor safer and easier to navigate for road users of all ages and abilities.

FLASHING SPEED READERS

Cascade Middle School Meeting notes indicate that the principal at Cascade Middle School was in support of installing flashing speed readers on Echo Hollow Road in 2019

Crash History

Examining the recent history of collisions in the area around the focus schools is one component of understanding the potential hazards for people walking and biking to school. Locations with single or multiple crashes can indicate issues with infrastructure or behavior that could be addressed through SRTS improvements.

However, it's important to note that this data is incomplete, as it does not account for near-misses or crashes that may have occurred since 2020. Local knowledge of past incidents, as well as reports of perceived discomfort or danger, are an essential understanding existing SRTS issues.

PEDESTRIAN AND BICYCLIST COLLISIONS

Between 2016 and 2020, there were seven reported vehicle collisions involving people walking and biking near Echo Hollow Rd schools (see map on page 72). Notable information about crashes between vehicles and people walking and biking is outlined below:

- Due to the proximity of Cascade Middle School and Willamette High School, many of the crashes that occurred within one mile of one school also occurred within a mile of the other. There were twenty-one crashes in total within this radius of both schools. However, four additional crashes pedestrian/bicycle crashes occurred near Cascade Middle School.

- All of these crashes resulted in non-fatal injuries.
- Seven of the twenty-one crashes occurred along Barger Dr. In particular, the intersection of Barger Dr and Echo Hollow Rd and the intersection with Taney Street were locations where several crashes occurred.
- Two crashes occurred along Echo Hollow Rd, both adjacent to the property of Willamette High School.
- Cascade Middle School meeting notes indicate that two students have been hit in the past while traveling by bicycle along Echo Hollow Rd. The notes also indicate that a student at Malabon Elementary may have been involved in a crash in 2018.
- While near the edge of the one-mile buffer from Cascade Middle School, three crashes between vehicles and pedestrians occurred at the intersection of Danebo Ave and Unthank St. There is a bus stop on either side of the street and no crosswalk. The nearest crosswalk is approximately 500 feet to the north.
- Three pedestrian crashes and one bicycle crash occurred along Royal Ave.

VEHICLE-ONLY COLLISIONS

The second crash map (See page 73) illustrates the locations of vehicle-only crashes. While these crashes did not involve pedestrians and bicyclists, they may indicate areas of potential danger for all road users.

COLLISIONS BETWEEN VEHICLES AND PEOPLE WALKING AND BIKING 2016-2020

COLLISIONS
- Pedestrian Fatality
- Pedestrian Injury
- Bicyclist Fatality
- Bicyclist Injury

LEGEND
- School
- School Property
- Other School Property
- Water
- Parks
- City Boundary
- Railroad

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Oregon Department of Transportation
Safe Routes to School

ALL CRASHES INVOLVING VEHICLES 2016-2020

CRASH SEVERITY

- Fatal Injury
- Suspected Serious Injury
- Suspected Minor Injury
- Possible Injury
- No Apparent Injury

LEGEND

- School
- School Property
- Other School Property
- Water
- Parks
- City Boundary
- Railroad

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Safe Routes to School

APPENDIX D. FUNDING AND IMPLEMENTATION

This section lists a variety of funding sources that can be used to implement the recommendations outlined in Chapter 4. These funding sources are accurate as of July 2021, but may change over time. Please refer to ODOT or other funding jurisdictions website for the most up to date information.

This section also includes a graphical flowchart of the ODOT SRTS Competitive Infrastructure Grant eligibility process, to help guide partners in the application process.

Finally, this section includes a detailed construction recommendations table building on Table 1 in Chapter 4, and includes: needs identified at each location and ensuing construction recommendations, the relative priority of the recommendation, a high-level associated cost, the agency responsible for implementing the recommendation, and any potential funding source for construction. The final table includes detailed Planning-level cost estimates for the High Priority Projects identified in Chapter 5.

Statewide Funding Opportunities

ODOT SRTS GRANTS

ODOT currently offers Safe Routes to School specific funding pools for local jurisdictions interested in improving walking and biking conditions near schools, including a competitive infrastructure grant program, a rapid response infrastructure grant, and an education (non-infrastructure) grant.

COMPETITIVE INFRASTRUCTURE GRANT

ODOT's SRTS Competitive Infrastructure Grant program funds roadway safety projects located within a one-mile radius of an educational facility that improves walking and biking conditions for students on their way to school. Funding requests may range between $60,000 and $2 million, with a 40% local match (special circumstances may allow a 20% reduction in match requirements). These funds are awarded on a competitive application basis to cities, counties, transit districts, ODOT, any other roadway authority, and tribes are in compliance with existing jurisdictional Plans and receive school or school district support. Learn more about the 2021-2022 grant cycle at https://www.oregon.gov/odot/Programs/Pages/SRTS-Competitive-Infrastructure-Grant.aspx.

RAPID RESPONSE INFRASTRUCTURE GRANT

Up to 10% of state SRTS funding will be reserved for projects that can demonstrate serious and immediate need for safety improvements within a one-mile radius of schools. This funding would be awarded outside of the Competitive Infrastructure Grant cycle as a Rapid Response Infrastructure Grant. Eligibility requirements for Rapid Response Infrastructure grants can be found at https://www.oregon.gov/odot/Programs/Pages/SRTS-Rapid-Response-Grant-Program.aspx.

EDUCATION GRANT

In addition to funding construction improvements for Safe Routes to School programs, ODOT reserves approximately $300,000 annually for funding of SRTS Education programs and projects that encourage students in grades K-8 to walk and roll to school. This competitive grant program distributes funding to a project over the course of two to three years with a 12% match requirement. Grant funds are traditionally used for capacity building and innovation. For more information, visit https://www.oregon.gov/ODOT/Programs/Pages/SRTS.aspx.

SMALL CITY ALLOTMENT PROGRAM (SCA)

The Small City Allotment Program is available to communities with less than 5,000 residents. One application may be submitted per city per year, and successful projects may receive up to $100,000. Successful applicants may request an advance of up to 50% of their award and will receive the remainder of their award upon submission of project invoices. An awardee may not have more than two active SCA projects at any given time; if the awardee has two active projects, another application cannot be submitted until one is completed. SCA funds can be used as a match for SRTS grant funding, but the SRTS grant has to have already been awarded prior to the request for SCA funds as match. SCA projects must be completed within two years from the agreement execution date. For example, if a community receives a SRTS grant award and an SCA

grant for matching funds, chances are they may need to extend the SCA grant to coordinate with the SRTS project work. This is permitted, but the SCA award would be considered an open project until the SRTS project was closed out. Also important to note, the SCA program does not require any matching funds. The state cannot reimburse for any right of way or utility costs, and all work must be performed within the public road right of way. For more information, visit https://www.oregon.gov/ODOT/LocalGov/Documents/SCA-Guidelines.pdf

OREGON COMMUNITY PATHS PROGRAM

The Oregon Community Paths Program (OCP) is funding 21 off-road Active Transportation projects totaling $15 million in 2021. Through the OCPP, ODOT strives to fund projects for pedestrian and bicycle transportation projects including the development, construction, reconstruction, resurfacing, or other capital improvement of multi-use paths, bicycle paths, and footpaths that improve access and safety for people walking and bicycling. The program is funded through FHWA Transportation Alternatives funds, and state Multimodal Active Transportation funds. For more information visit https://www.oregon.gov/ODOT/Programs/Pages/OCP.aspx

TRANSPORTATION AND GROWTH MANAGEMENT (TGM) FUNDS

TGM supports community efforts to expand transportation choices by linking land-use and transportation planning.. TGM services include an annual competitive grant program for Planning work leading to local policy decisions for transportation facilities and services or for land uses with supportive transportation changes. The grant application period opens in the Spring and closes in the Summer. In addition to grants, TGM provides several other non-competitive services to help resolve land-use and transportation planning issues: Quick Response to bridge the gap between long range Planning and development of specific properties, Code Assistance to identify and remove barriers to smart growth, Transportation System Plan (TSP) Assessments to evaluate local TSPs, and Education and Outreach projects to move community conversations forward. For more information visit https://www.oregon.gov/lcd/TGM

STATE TRANSPORTATION IMPROVEMENT FUND (STIF)

Walking and biking connections to transit are eligible under ODOT's STIF Discretionary and Statewide Network Program, a new fund for transit started in 2018. STIF formula and discretionary funds may be used to support projects that connect pedestrians and bikers to public transit. This fund program was created in response to HB 2017 and funds are dispersed every two years. For more information visit https://www.oregon.gov/odot/RPTD/Pages/Funding-Opportunities.aspx

CONGESTION MITIGATION AND AIR QUALITY (CMAQ) PROGRAM

The CMAQ program is jointly administered by the FHWA and FTA, with projects selected by local jurisdictions designated as high pollution areas. Bike/pedestrian projects make up a significant portion of the funded projects, which must focus on air quality improvement. For more information visit www.fhwa.dot.gov/environment/air_quality/cmaq/

Federal Funds

Some federal funding sources may be available to certain communities and can be used for Safe Routes to School projects. Such as:

- Community Development Block Grant Program, https://www.orinfrastructure.org/Infrastructure-Programs/CDBG/
- Rural Development Grant Assistance Program, https://www.usda.gov/topics/farming/grants-and-loans

Local Funding Opportunities

POTENTIAL SCHOOL BOND OPPORTUNITIES

Localities can leverage school bonds to collect funding for transportation educational programming and school zone pedestrian/bicycle infrastructure improvements. School bonds may be sufficient to cover the cost of low- to mid-cost projects or could be utilized to collect local match dollars for state awarded grants.

SRTS PROJECTS AND THE TSP

Cities and counties undergoing transportation system Plan updates should consider including a section on their Plans and priorities for Safe Routes to School infrastructure upgrades and programming to identify project expenses well in advance and allow ample time to gather project funding.

QUICK BUILDS

Quick Builds are temporary roadway improvement installments that utilize temporary barriers (such as traffic cones, Planters, hay barrels, etc.) to test and demonstrate how a street would operate with bicycle and/or pedestrian infrastructure improvements. These low-cost Quick Build projects can serve as an immediate term temporary solution to traffic issues while local jurisdictions build support and funding for permanent infrastructure improvements. Depending on specific site conditions and the nature of materials used, Quick Builds can last for several hours to several months.

Table A-1. Echo Hollow Road Corridor Prioritized Project Cost Estimate: Two-way Cycle Track

ITEM DESCRIPTION	% OR MEASUREMENT	COST/UNIT	UNITS	ESTIMATE
MOBILIZATION	10%	$92,000	1	$92,000
TRAFFIC CONTROL	15%	$138,000	1	$138,000
EROSION CONTROL	2%	$18,400	1	$18,400
Echo Hollow Rd - Echo Hollow Plaza to Royal Ave - Two-Way Cycletrack				
REMOVE LANE LINE STRIPE*	LF	$3	20750	$62,250
REMOVE PAVEMENT MARKING*	SF	$5	20	$100
REMOVE PAVEMENT ARROW*	EA	$350	130	$45,500
REMOVE ASPHALT PAVEMENT	SF	$5	2160	$10,800
REMOVE CONCRETE CURB & GUTTER	LF	$7	201	$1,407
REMOVE CONCRETE SIDEWALK	SF	$7	1207	$8,449
REMOVE AND RELOCATE CATCH BASIN	EA	$10,500	3	$31,500
INSTALL AGGREGATE BASE	CY	$60	41	$2,460
INSTALL ASPHALT PAVEMENT	TON	$230	12	$2,760
INSTALL CONCRETE SIDEWALK	SF	$30	2943	$88,290
INSTALL CONCRETE CURB	LF	$40	343	$13,720
INSTALL CONCRETE CURB & GUTTER	LF	$50	197	$9,850
INSTALL ADA DETECTABLE WARNING SURFACE	SF	$40	144	$5,760
INSTALL ZICLA MODULAR BUS PLATFORM**	EA	$50,000	5	$250,000
INSTALL STREET LIGHT	EA	$10,000	5	$50,000
INSTALL SET OF TWO (2) RRFB ASSEMBLIES - POST-MOUNTED	EA	$25,000	3	$75,000
INSTALL CROSSWALK MARKINGS	SF	$15	1460	$21,900
INSTALL BIKE CONFLICT MARKINGS	SF	$20	1695	$33,900
INSTALL 6" BIKE LANE	LF	$5	8096	$40,480

ITEM DESCRIPTION	% OR MEASUREMENT	COST/UNIT	UNITS	ESTIMATE
INSTALL LANE LINE STRIPE	LF	$5	2505	$12,525
INSTALL DOUBLE YELLOW LANE MARKING	LF	$5	5480	$27,400
INSTALL BROKEN YELLOW LANE LINE STRIPE	LF	$5	3950	$19,750
INSTALL BIKE LANE SYMBOL AND ARROW MARKING	EA	$350	42	$14,700
INSTALL TURN ARROW PAVEMENT MARKING	EA	$350	4	$1,400
INSTALL PAVEMENT LEGEND (LETTER)	EA	$75	32	$2,400
INSTALL 8" WIDE INTERNAL BUFFER HATCH MARKING	LF	$5	752	$3,760
INSTALL 2' WIDE STOP LINE	LF	$30	255	$7,650
INSTALL FLEXIBLE DELINEATOR	EA	$150	195	$29,250
INSTALL CROSSWALK WARNING SIGN	EA	$500	6	$3,000
INSTALL BICYCLE WAYFINDING SIGN	EA	$500	8	$4,000
TRAFFIC SIGNAL TIMING ADJUSTMENT	EA	$5,000	$4	$20,000
TRAFFIC ANALYSIS	EA	$20,000	1	$20,000
			Subtotal	**$1,168,361**
Additional Costs				
CONSTRUCTION ENGINEERING	15% of SUBTOTAL	$175,300	1	$175,300
CONTINGENCY	30% of SUBTOTAL & CONSTRUCTION ENGINEERING	$403,100	1	$403,100
				Total Construction Cost: $1,746,761
SOFT COSTS (DESIGN ENGINEERING)	15% of SUBTOTAL	$175,300	1	$175,300
				Total Project Cost: $1,922,061

**contingent on separate paving project*

***specific location and design of transit platform to be coordinated with transit agency*

Table A-2. Echo Hollow Road Corridor Prioritized Project Cost Estimate: Cycle Track Connection North to Barger Lane

ITEM DESCRIPTION	% OR MEASUREMENT	COST/UNIT	UNITS	ESTIMATE
MOBILIZATION	10%	$47,000	1	$47,000
TRAFFIC CONTROL	15%	$70,500	1	$70,500
EROSION CONTROL	2%	$9,400	1	$9,400
Echo Hollow Rd – Barger Dr to Echo Hollow Plaza – Two-Way Cycletrack Extension				
REMOVE LANE LINE STRIPE*	LF	$3	594	$1,782
REMOVE PAVEMENT MARKING*	SF	$5	20	$100
REMOVE PAVEMENT ARROW*	EA	$350	7	$2,450
REMOVE ASPHALT PAVEMENT	SF	$5	5950	$29,750
REMOVE CONCRETE CURB & GUTTER	LF	$7	375	$2,625
REMOVE CONCRETE SIDEWALK	SF	$7	3730	$26,110
REMOVE AND RELOCATE CATCH BASIN	EA	$10,500	2	$21,000
INSTALL AGGREGATE BASE	CY	$60	113	$6,780
INSTALL ASPHALT PAVEMENT	TON	$230	42	$9,660
INSTALL CONCRETE SIDEWALK	SF	$30	6460	$193,800
INSTALL CONCRETE CURB & GUTTER	LF	$50	395	$19,750
INSTALL ADA DETECTABLE WARNING SURFACE	SF	$40	120	$4,800
INSTALL LANDSCAPED FURNISHING ZONE	SF	$40	1860	$74,400
INSTALL UNDERGROUND PIPE/ INLET DRAINAGE SYSTEM	LF	$160	280	$44,800
INSTALL CROSSWALK MARKINGS	SF	$15	260	$3,900
INSTALL BIKE CONFLICT MARKINGS	SF	$20	280	$5,600
INSTALL 6" BIKE LANE	LF	$5	312	$1,560
INSTALL LANE LINE STRIPE	LF	$5	505	$2,525

ITEM DESCRIPTION	% OR MEASUREMENT	COST/UNIT	UNITS	ESTIMATE
INSTALL DOUBLE YELLOW LANE MARKING	LF	$5	410	$2,050
INSTALL BROKEN YELLOW LANE LINE STRIPE	LF	$5	310	$1,550
INSTALL BIKE LANE SYMBOL AND ARROW MARKING	EA	$350	4	$1,400
INSTALL TURN ARROW PAVEMENT MARKING	EA	$350	4	$1,400
INSTALL 2' WIDE STOP LINE	LF	$30	24	$720
INSTALL BICYCLE WAYFINDING SIGN	EA	$500	2	$1,000
TRAFFIC SIGNAL TIMING ADJUSTMENT	EA	$5,000	$2	$10,000
			Subtotal	**$596,412**
Additional Costs				
CONSTRUCTION ENGINEERING	15% of SUBTOTAL	$89,500	1	$89,500
CONTINGENCY	30% of SUBTOTAL & CONSTRUCTION ENGINEERING	$205,800	1	$205,800
				Total Construction Cost: $891,712
SOFT COSTS (DESIGN ENGINEERING)	15% of SUBTOTAL	$89,500	1	$89,500
				Total Project Cost: $981,212

**contingent on separate paving project*