SETH LEWELLING ELEMENTARY

Safe Routes *to* School Plan

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

CITY OF MILWAUKIE
SETH LEWELLING ELEMENTARY SCHOOL

SUMMER 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.

STEVE ADAMS
City of Milwaukie

MASON BRANSTETTER
Seth Lewelling Elementary School

NICK D'ALONZO
Lewelling Neighborhood Association

BEN GREEN
City of Milwaukie

NICOLE PERRY
Clackamas County Safe Routes to School

TESSIE PRENTICE
City of Milwaukie

SUPPORTING ORGANIZATIONS

City of Milwaukie

Lewelling Neighborhood Association

Clackamas County Transportation Engineering

North Clackamas School District

ALTA PLANNING + DESIGN STAFF

Jill Roszel

Trevor Luu

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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[1] 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.

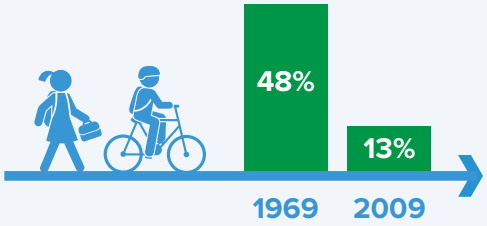
Learn more at [www.oregonsaferoutes.org.](www.oregonsaferoutes.org)

1 The term roll is used in this Plan as an inclusive term that includes biking and using mobility devices, such as wheelchairs and scooters

Why Safe Routes to School?

THE PROBLEM

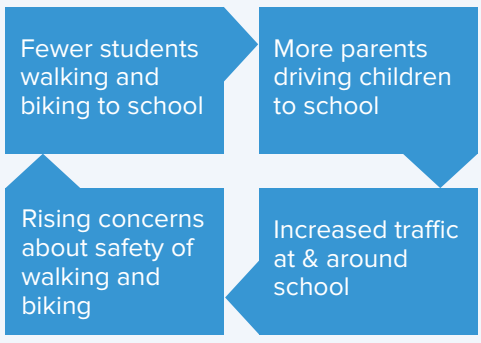
Within the span of one generation, the percentage of children walking or bicycling to school has decreased **73%**.



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**.

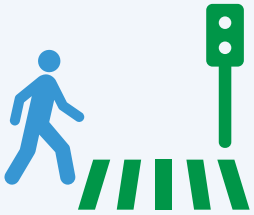


THE SOLUTION

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 to 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 activity – 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.

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*

Seth Lewelling Elementary SRTS Project Identification Program

The City of Milwaukie, officials of Clackamas County, and the school community worked with ODOT's SRTS Technical Assistance Providers— Alta Planning + Design to complete this SRTS Plan.

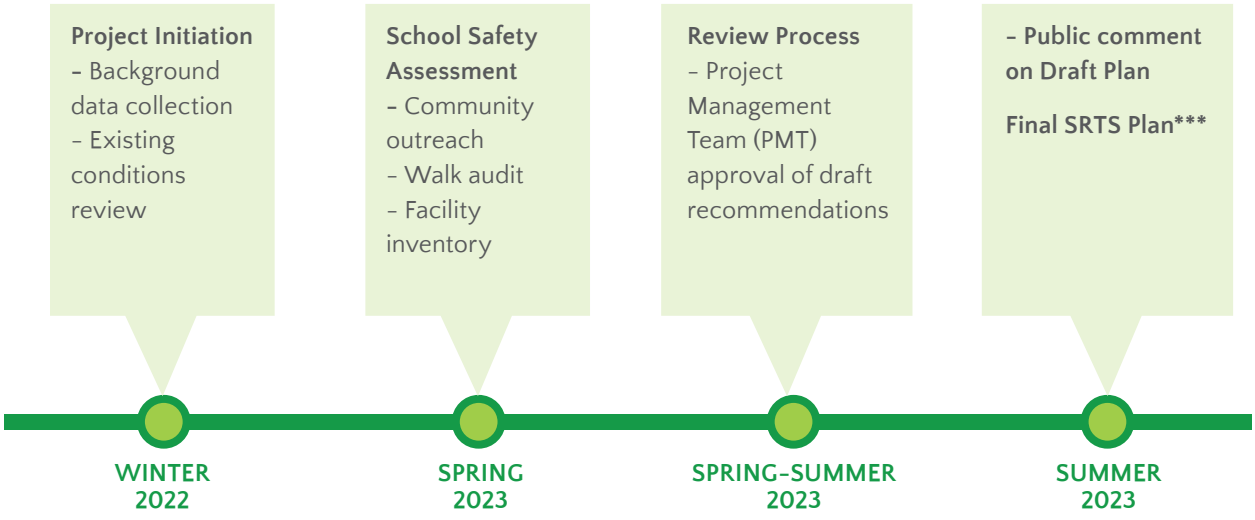
This SRTS Plan supports Oregon's statewide SRTS construction (infrastructure) and education/engagement (non-infrastructure) efforts. The Project Identification Program (PIP) process is an ODOT technical assistance program that helps communities identify needs and opportunities near one or more schools,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

This process includes areas within 1-mile of Seth Lewelling Elementary School which includes areas within Milwaukie and Unincorporated Clackamas County.

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 Seth Lewelling Elementary SRTS Plan Process**



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

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 chapter (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 the recommendations in this plan 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 PE class and offer trainings for PE 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 a 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 Lewelling Neighborhood 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 ODOT SRTS PIP team developed goals to support SRTS in the areas of health, Safety, equity and environment. Participants in the PIP process identified all of these to be main priority for their community. A summary of community engagement activities is included in the following section. The following section lists 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.

Above: school signage near Seth Lewelling Elementary; Below: Departing student with accessibility needs

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: North Clackamas School District will integrate on-campus infrastructure improvements into their ongoing planning and maintenance processes.
- Action: The City of Milwaukie will consider applying to the ODOT SRTS Competitive Infrastructure Grant in 2024 for infrastructure improvements, as outlined in Chapter 4.

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

- Action: The City of Milwaukie will adopt the long-term infrastructure recommendations in Chapter 4 as a part of its planning processes and continue to prioritize themes from the SRTS Plan's community engagement process.
- Action: The City of Milwaukie will begin implementing recommendations as funds for capital improvements become available, particularly lower cost improvements within a quarter mile of each school.
- Action: The City of Milwaukie and its partners will explore opportunities for educational demonstrations of safe streets.

Objective 3: Pedestrian and bicycle safety education is available to students in Milwaukie and the North Clackamas School District.

- Action: The City of Milwaukie and the North Clackamas School District will coordinate with school leadership to apply for the ODOT SRTS Education Grant to fund a Safe Routes to School coordinator position. This coordinator will organize safety, education, and encouragement activities, prioritizing options for activities that take place outside of instructional hours, such as a Bike Train or Walking School Bus.
- Action: Seth Lewelling Elementary will encourage families to walk and bike to school by distributing information regarding safety 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: Engage with families from historically disadvantaged groups to hear and learn about their barriers to students walking or biking to school.

- Action: North Clackamas School District, Seth Lewelling Elementary and City of Milwaukie will provide SRTS information and educational materials in English and Spanish.
- Action: North Clackamas School District, Seth Lewelling Elementary, Clackamas County, and City of Milwaukie will partner with existing groups and organizations that serve particularly the Latino community, low-income households, and other historically disadvantaged groups to help disperse information and better understand needs and barriers.
- Action: Seth Lewelling Elementary 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 2: 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 Milwaukie will implement infrastructure recommendations with a consideration for improvements that serve underserved and low-income communities.
- Action: The SRTS Education and Outreach Program will work to include lower-income students, those with mobility challenges, Spanish-speaking students, and students from other historically marginalized groups in programming.

- Action: The City of Milwaukie and North Clackamas School District will work to establish safe walking or bike access to TriMet bus stops near schools so that students have safe access when needing public transit for after-school activities or other transportation needs.

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: Seth Lewelling Elementary School will look for areas of overlap between SRTS efforts and other health initiatives and PE class.
- Action: Seth Lewelling Elementary will support a Walking School Bus, Bike Train, and 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: North Clackamas School District will consider adopting SRTS-supportive language in school wellness policy.
- Action: Seth Lewelling Elementary School will share relevant health statistics and messages in school newsletters, back-to-school night, or through other communication channels.
- Action: The City of Milwaukie 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: North Clackamas School District will provide parents with education and encouragement materials providing information on carpooling, walking, biking, and school buses.
- Action: The City of Milwaukie will formalize existing cut-through 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. City, county, neighborhood, and school representatives and 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 and community meeting
- Virtual feedback using the online Public Input Map and survey
- Participation in a one-on-one Zoom or telephone interview with school or district staff

The City of Milwaukie, North Clackamas School District, school leadership from Seth Lewelling Elementary School, and members of the Lewelling Neigborhood Association worked diligently to spread the word about the walk audits, community meetings, and online Public Input Map and survey. The school promoted the PIP process and opportunities for community input on social media channels and through e-mail listservs. The City of Milwaukie shared information via social media channels.

The project team hosted a walk audit at Seth Lewelling Elementary on April 13, 2023.

Several community members and the PMT attended the afternoon walk audit at Seth Lewelling Elementary School. The group observed student dismissal and provided feedback about specific barriers and challenging locations near the school. Following the walk audit the group reconvened in the school's gym afterwards, to discuss observations.

Later that night the project team attended the Seth Lewelling Elementary Parent Teacher Organization (PTO) meeting to provide an overview of the ODOT SRTS PIP program and to promote community involvement through the Public input map and survey.

Parents gather at Seth Lewelling Elementary to pick up their students.

Signage on Stanley Ave northeast of Seth Lewelling Elementary School.

DEMOGRAPHIC REPRESENTATION

To determine who was being reached through online engagement, the project team collected information about respondents through the Public Input Map using a short survey. Of the 40 respondents who filled out the survey, 65% were parents or caregivers of students who attend schools in the study area. 43% identified as community members. Ten percent of respondents indicated that they were School or District staff, and five percent chose "Other".

Respondents to the map were mostly white (63%). Only five survey respondents identified as Hispanic/Latino. Three respondents indicated they were multiracial. One respondent indicated they identified as American Indian/Alaska Native and another identified as Asian, while five preferred not to say.

COMMUNITY ENGAGEMENT KEY THEMES

The comment heat maps on the following pages illustrate specific locations of concern and interest that emerged through the online Public Input Map. The map on page 15 indicates areas where participants recorded comments at specific points, while the map on page 16 shows the locations of comments about routes. Particular areas of the Public Input Map received exceptionally high numbers of comments, indicating that parents and caregivers were more concerned with addressing barriers at these locations:

- Logus Rd and Stanley Ave
- Willow St and Stanley Ave
- Stanley Ave and King Rd

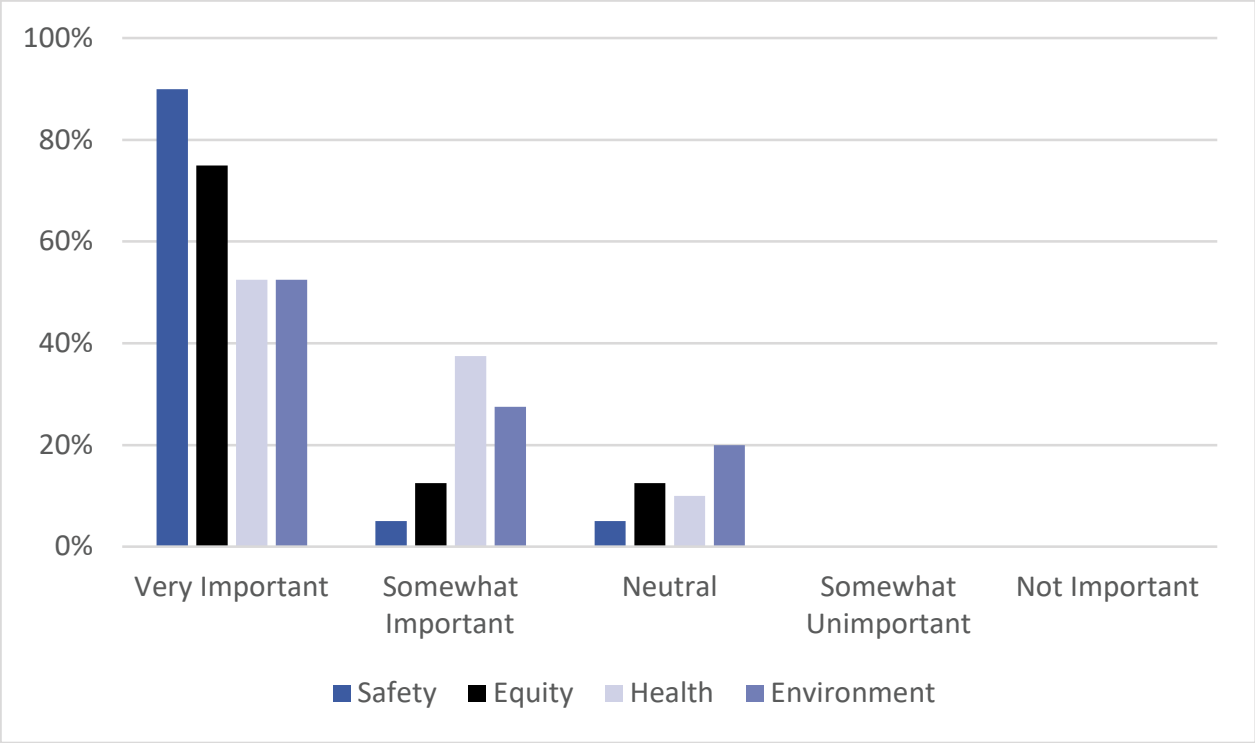
- Stanley Ave from King Rd to Johnson Creek Blvd
- Logus Rd from 49th Ave to 54th Ct

Over, it is clear that the Milwaukie community values active, healthy lifestyles and seeks to make it safer and more comfortable for all students to walk and bike. Participants who engaged with the SRTS planning process want to see more protected, continuous SRTS routes, particularly along Logus Rd, Stanley Ave, and King Rd. Commenters also stressed the importance of the need for safer and more accessible connections to areas south of King Rd and to the Monroe Greenway.

Themes from the online Public Input Map and survey, as well as the Draft City of Milwaukie SRTS Plan Public Comment Period, included:

- Improving efficiency for parents by enabling students to safely walk or bike to school, rather than being dropped off or waiting for a bus
- Ensuring safety for visually-impaired pedestrians and other vulnerable users and improving ADA ramps.
- Reducing vehicle congestion on roads and near schools
- Reducing bussing needs
- Interest in as much physically protected infrastructure as possible, such as pedestrian crossing treaments, protected bike lanes and sidewalks or side paths separated from the road
- Requests for further development of a connected citywide active transportation network to build on SRTS routes, such as the city SAFE Program
- Desire to improve existing neighborhood greenways

When asked through the Public Input Map about the most important goal for a Safe Routes to School Plan for Milwaukie, survey respondents indicated that safety was their top priority, followed by equity, health, and environment, as illustrated in the chart below.



SURVEY RESULTS: MOST IMPORTANT GOALS FOR SAFE ROUTES TO SCHOOL (N=22)

MILWAUKIE SRTS

PUBLIC INPUT MAP

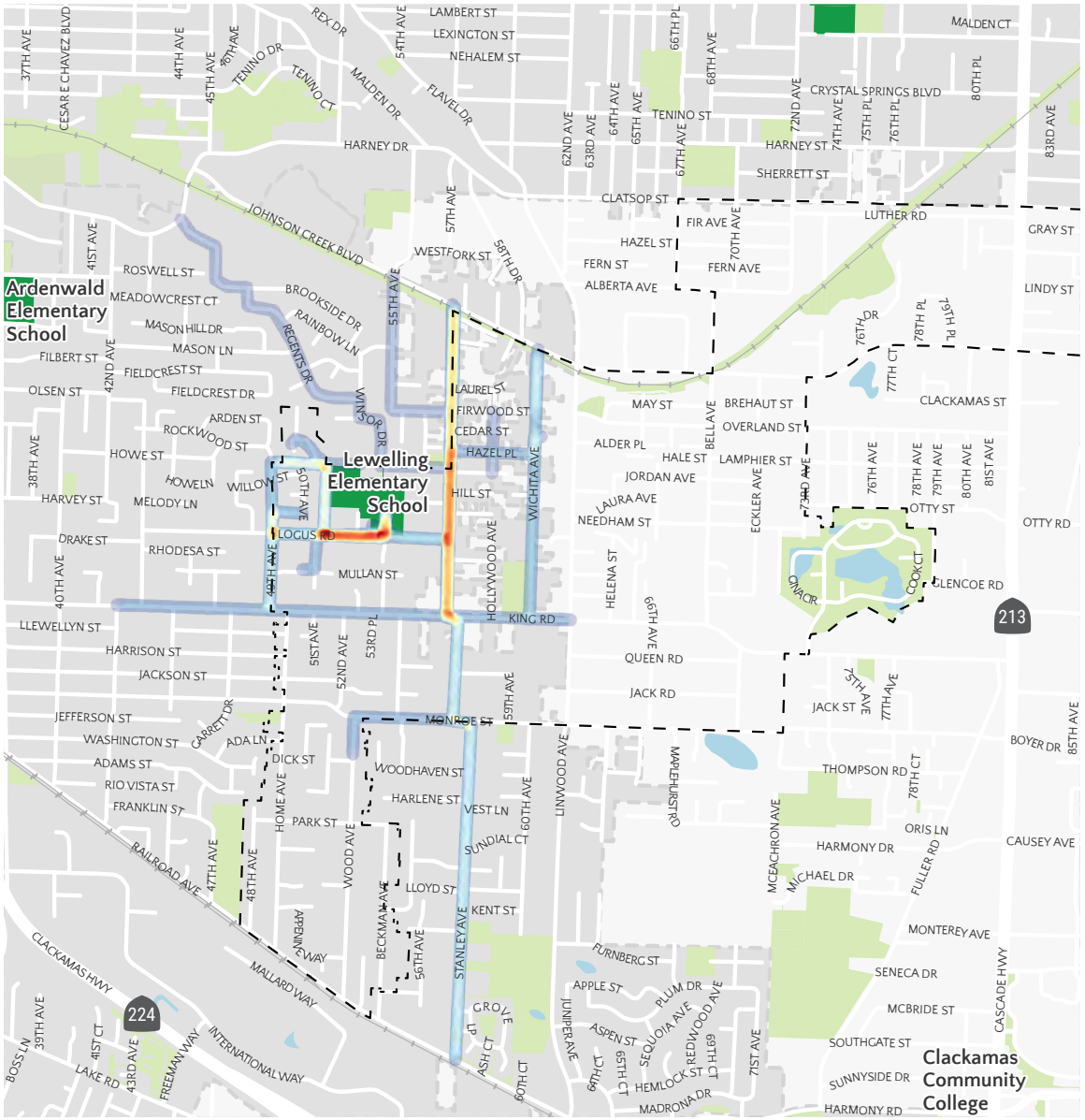
LINE COMMENTS

- High Density of Comments
- Low Density of Comments

MILWAUKIE CONTEXT

- Railroad
- City Boundary
- Water
- School Property
- Parks
- Lewelling Elementary School Attendance Boundary

22 LINE COMMENTS
27 ENGAGEMENT (LIKES, DISLIKES)



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Oregon Department of Transportation
Safe Routes to School

MILWAUKIE SRTS

PUBLIC INPUT MAP

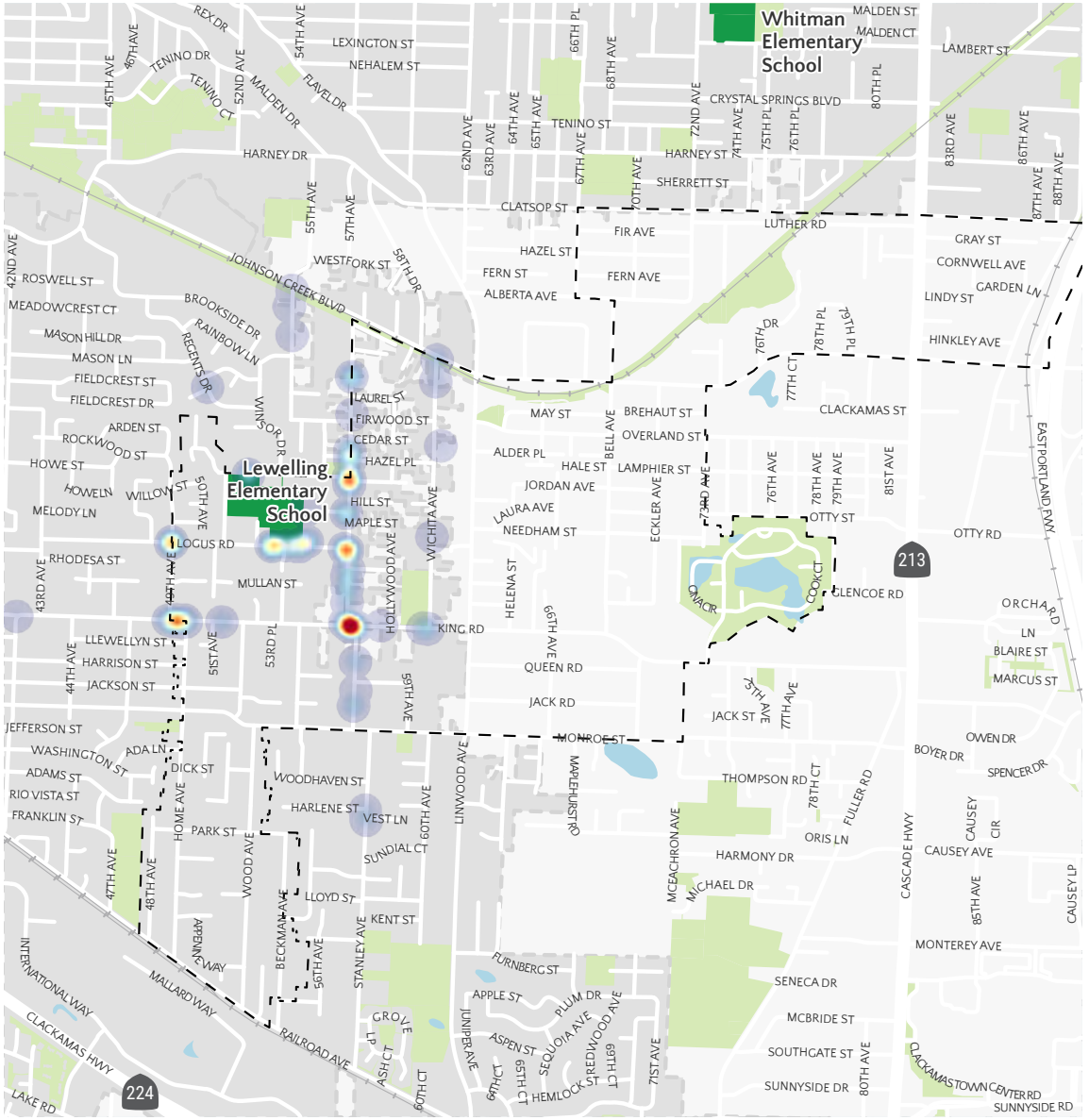
POINT COMMENTS

- High Density of Comments
- Low Density of Comments

MILWAUKIE CONTEXT

- Railroad
- City Boundary
- Water
- School Property
- Parks
- Lewelling Elementary School Attendance Boundary

59 POINT COMMENTS
198 ENGAGEMENT (LIKES, DISLIKES)



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 the school, 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:

Seth Lewelling Elementary School

5325 SE LOGUS RD

PRINCIPAL:
Mason Brantetter

ENROLLMENT:
267

GRADES SERVED:
K-5

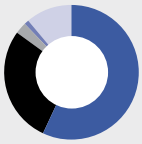
EQUITY FACTORS:
61% of students are below the poverty line.

23% of students are Ever English Learners

18% of students have a disability.

14% of students are chronically absent.

Transportation Disadvantage Index (TDI): 1.09



DEMOGRAPHICS*
- White, non-Hispanic, 57%
- Hispanic, 28%
- Black / African American, 3%
- Asian, 1%
- Multiracial, 11%

TOP LANGUAGES SPOKEN BY STUDENTS IN DISTRICT**

English	5,082
Spanish	1,987
Vietnamese	513
Russian	464
Chinese	400
Other Languages	34

Total Languages Spoken: 22

*Source: Oregon Department of Education 2022-2023 school year
**Source: Oregon Department of Education 2018-2019 school year

Seth Lewelling Elementary Safety Assessment

Date: April 13, 2023

SCHOOL LAYOUT

Seth Lewelling Elementary is a public school located in the Lewelling neighborhood of Milwaukie. The school is on the north side of Logus Rd between 51st Ave and Stanley Ave (see map on next page). There is one main school building that faces Logus Rd and two satelite buildings behind it to the north. The parking lot is located south of the school building off Logus Rd. There is a playground as well as two sports fields north of the school building. Students arriving by walking or rolling use a sidewalk along the west end of the parking lot, while students arriving by car come to the east end of the parking lot. Buses also drop students off on the west end of the parking lot.

A few blocks to the east of the campus, Stanley Ave intersects with Logus Rd. This is a major north-south thoroughfare through town and accommodates both freight and local traffic. Additionally, this corridor has significant cut-through traffic with drivers speeding. South of Logus Rd, there is King Rd. This is another important east-west road that serves Milwaukie and other parts of unincorporated Clackamas County. Other important destinations located near the school include the Ball-Michel Park and the Wichita Center.

SITE CIRCULATION

Vehicles: Vehicles accessing the parking lot south of the school can approach from either the east or west along Logus Rd. There are three driveways that connect the parking lot to Logus Rd. The middle driveway is used for vehicles entering the parking lot from Logus Rd. The driveways on the east and west ends of the parking lot are for egress. Parents and caregivers have been instructed by school staff to queue and pick up their students along the curb on the northeast end of the parking lot. Once there, parents call out which student they are picking up and that student will exit the school and go with their parent or caregiver in the vehicle. The result of this arrangement has been a long queue of vehicles in the parking lot and on Logus Rd, waiting for school to finish and for their turn to pick up their student.

LEWELLING ELEMENTARY SCHOOL

SITE PLAN

LEGEND

- School Property
- City Boundary
- Railroad
- Water

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Oregon Department of Transportation
Safe Routes to School

School Buses: School buses pick up and drop off students at the curb on the northwest end of the school parking lot. There are typically four standard large school buses and two small buses. These buses then take students to areas outside of the school's walk zone.

Pedestrians: Students arriving on foot primarily travel to the school from the east given that the majority of the attendance area of the school is east of the school. Students are advised by school staff to walk south along the sidewalk on the west edge of the school parking lot to the crosswalk on SE Logus Rd. Students can then cross Logus Rd and go either east or west on a sidewalk on the south side of the street.

Bicyclists/Micromobility: Students arriving by bicycle can park their bicycles at a rack on the south side of the school adjacent to the main entrance. There are limited dedicated bicycle facilities on roadways near the school. While Stanley Ave has been designated as a "greenway" by the City and features wayfinding signage, there are few other features that increase comfort for those traveling by bicycle. Students traveling by bicycle may find it more comfortable to ride their bike on the sidewalk.

Transit: There is bus service along SE King Rd to the south of the school, however, school staff have reported that it is unlikely that students use this service to travel to and from school.

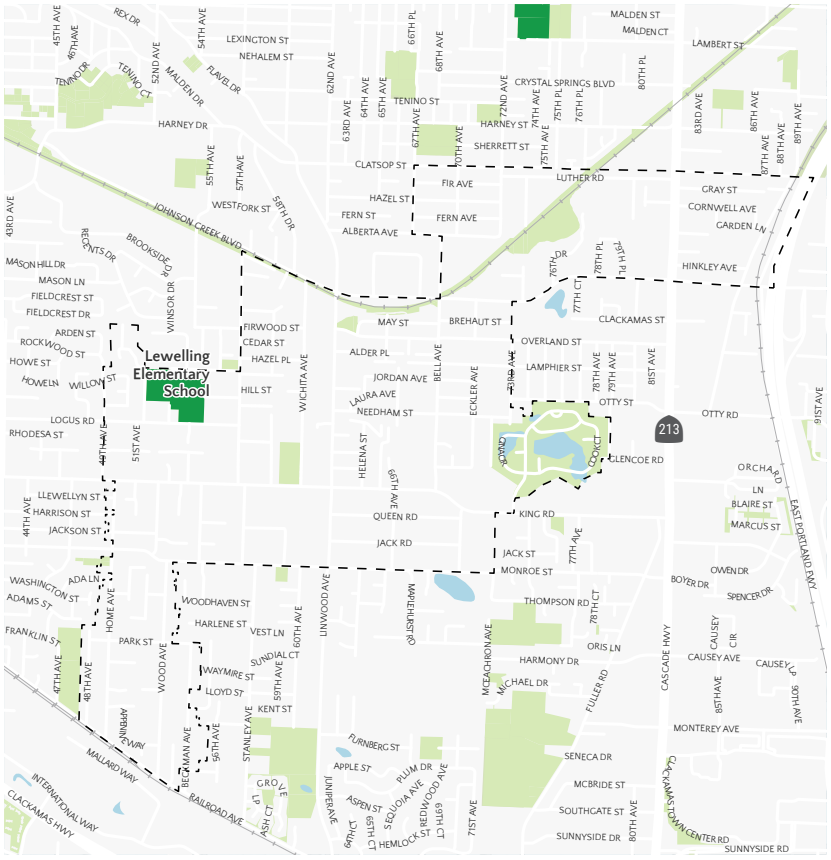
Lewelling Elementary

Attendance Boundaries

Lewelling Elementary School Attendance Boundary

BACKGROUND

- Railroad
- Water
- School Property
- Parks



PREVIOUS SRTS EFFORTS OR WALKING/ BIKING ENCOURAGEMENT ACTIVITIES

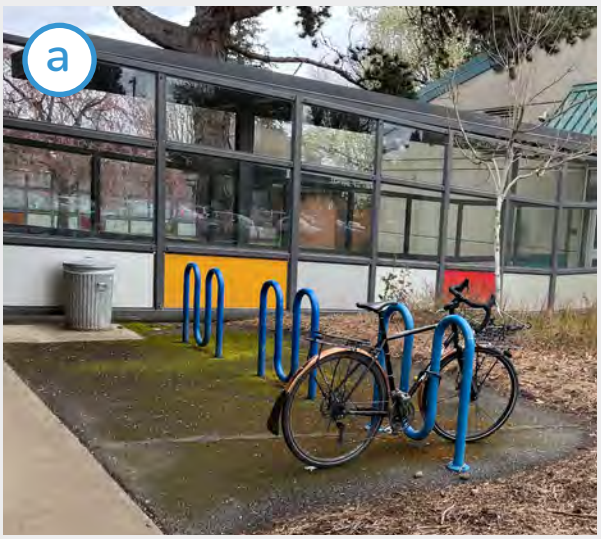
As part of Clackamas County, Seth Lewelling Elementary School is served by countywide Safe Routes to School programming and a coordinator. The program is funded by a Regional Travel Options grant and has goals for building program awareness; promoting active transportation; expanding bicycle, pedestrian, and driver education; and collaborating with various partners while evaluating the process. Program activities include walk and roll encouragement activities, an annual poster art contest, walking school bus groups, and school action plan writing. At this point, Seth Lewelling Elementary School has not completed an action plan. There is a stated desire on the part of the City to partner with the SRTS education program long-term

School bus loading drive in front of Seth Lewelling Elementary School

Bike and Pedestrian Facilities Inventory

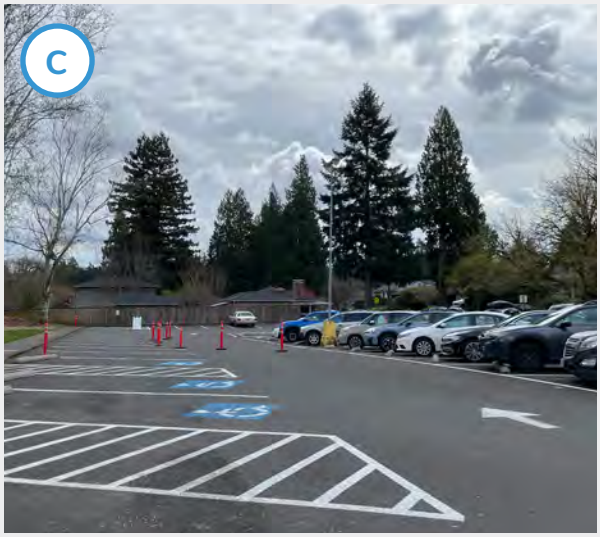
Key Observations

- Majority of school attendance area is east of the school, which is currently lacking pedestrian infrastructure.
- Very few (less than 20) students walk to and from school. No students were observed traveling on bike. Students refrain from crossing King Rd as instructed by school officials.
- Code violations such as sidewalk obstructions, including vegetation, garbage cans, and mail boxes, in the neighborhood may make the walking experience unpredictable and feel less safe.
- There are no crossing guards in the vicinity of the school. North Clackamas School District (NCSD) does not typically station crossing guards in areas beyond the immediate school entrance.
- Parents and caretakers arrive at the school before dismissal and drivers queue vehicles both in the parking lot and along the north edge of Logus Rd approaching the school. Parents and caregivers pick up their student one by one from the driver side along the curb in the northeast parking lot.
- King Rd presents a major barrier for students walking to and from Seth Lewelling Elementary School to the neighborhood south of King Rd. There are few crossing facilities, and drivers travel fast on this roadway. As a result, students living in the area south of King Rd are provided supplemental bussing and are exempt from NCSD bussing policy.

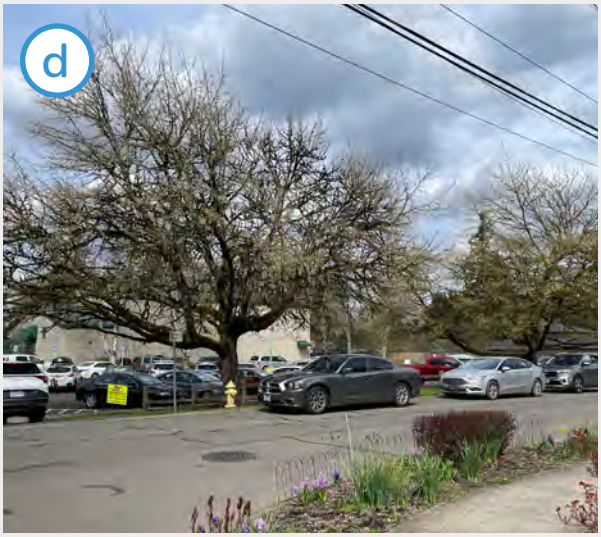


Bicycle parking at Seth Lewelling Elementary School is not used by many students. The facility is outdoors and uncovered.

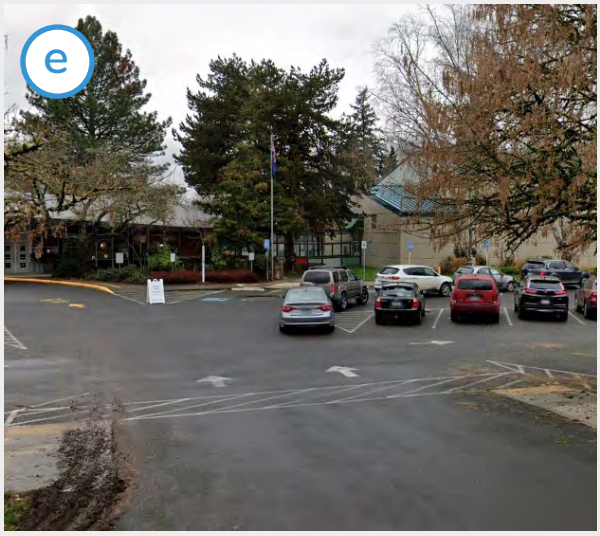
The school bus loading zone is on the west end of the parking lot. Buses enter at the center driveway and exit the parking lot at the western most driveway.



The parent/caregiver drop off and pick up occurs on the east end of the parking lot. Drivers enter at the center driveway and exit at the eastern most driveway. The ADA parking spaces become blocked and unavailable to use during drop off and pick up.

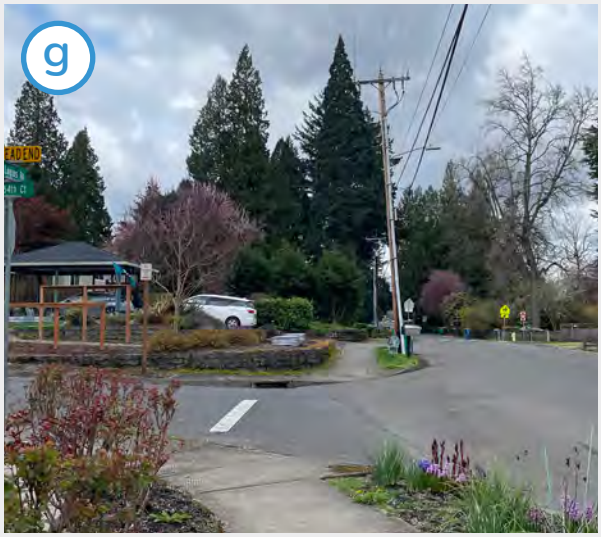


Parents and caregivers picking up students queue on Logus Rd in front of Seth Lewelling Elementary during student dismissal. Frustrated motorists have been known to pass that line of cars, posing a risk to school children and other people.



The crosswalk at the center driveway of the school parking lot does not use standard high visibility markings and ADA-accessible ramps.

The center driveway of the school parking lot is for entry only. The "ENTRANCE ONLY" sign is not highly visible.



The intersection of 54th Ct and Logus Rd, directly across from the school, does not have a marked crosswalk nor ADA-compliant curb ramps.

Some sidewalks in the vicinity of Seth Lewelling Elementary are obstructed by garbage bins or mailboxes.

Stanley Ave is lacking sidewalks between Willow St and Johnson Creek Blvd. Pedestrians must walk on narrow, unprotected shoulder.

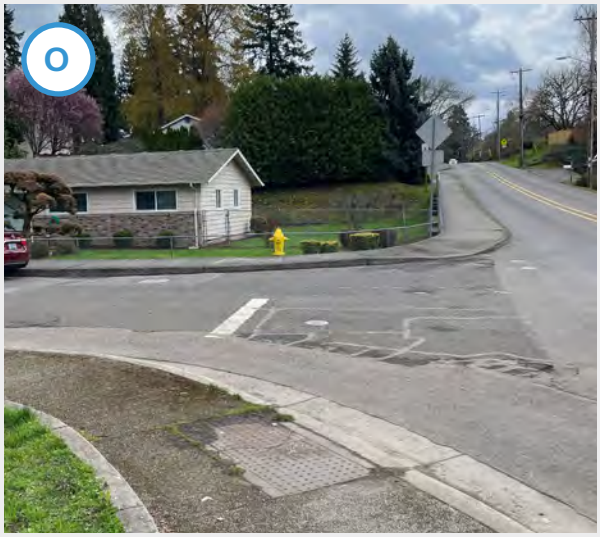
Stanley Ave is lacking sidewalks between Willow St and Johnson Creek Blvd. Pedestrians must walk on narrow, unprotected shoulder.

The Stanley Ave bridge over Johnson Creek is very narrow and does not provide a safe path for pedestrians or bicyclists.

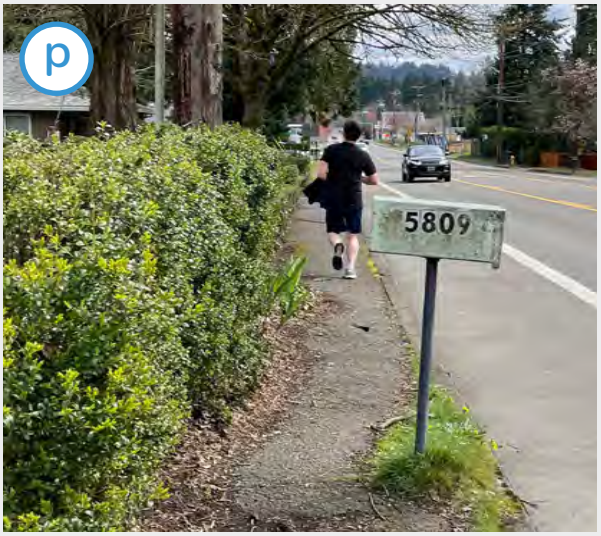
The Springwater Corridor is a regional trail intersecting Stanley Ave at the north end. This trail could be used as part of a low-stress route for students walking and biking in the neighborhood.

On the west side of Stanley Ave near Hazel Pl there is a narrow pedestrian path rather than an ADA-compliant sidewalk.

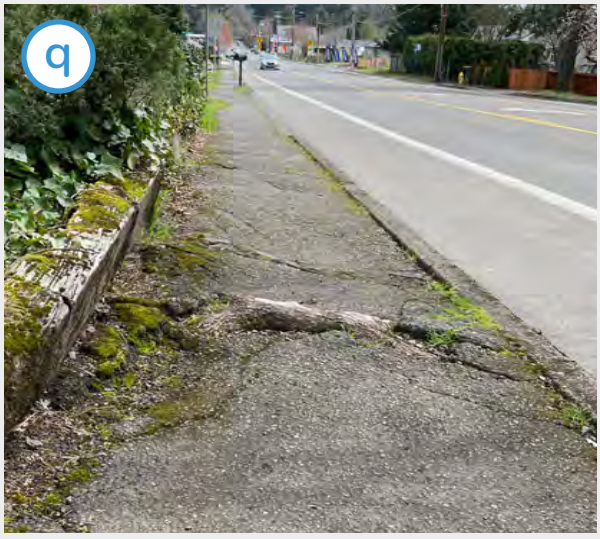
Some existing pedestrian facilities along Stanley Ave are not ADA-compliant.



At the intersection of Stanley Ave and Willow St there are no marked crosswalks to safely cross Willow St and the ramps are missing or not ADA-compliant.

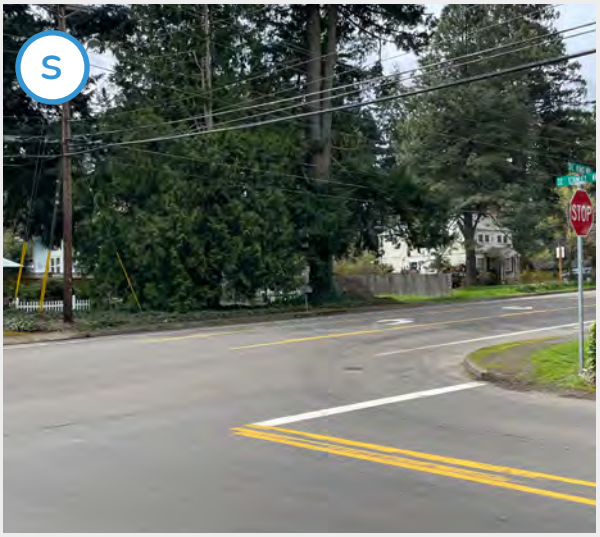


Many sections of King Rd have narrow pedestrian facilities, some are obstructed by vegetation or mailboxes.



Many sections of King Rd have pedestrian facilities that are missing or in disrepair.

There are unprotected bike lanes on both sides of King Rd, which do not provide a buffer between the bicyclist and traffic.

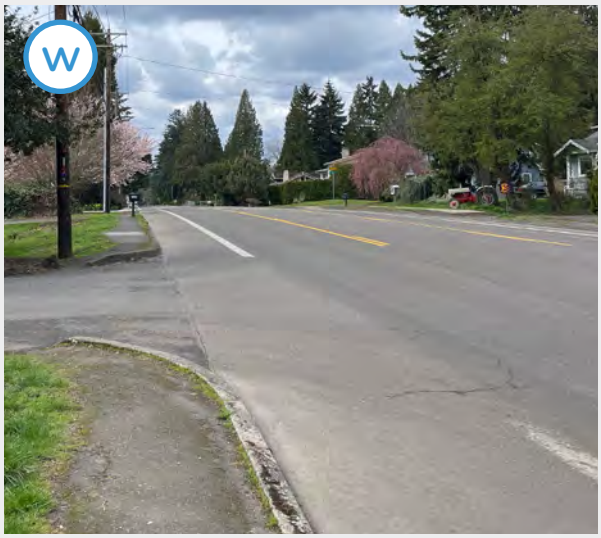


At the intersection of King Rd and Stanley Ave the north leg has a stop sign, however, traffic on King Rd does not stop. There is no marked crosswalk at this intersection. The nearest crossing facility is the midblock RRFB over 750 feet east.

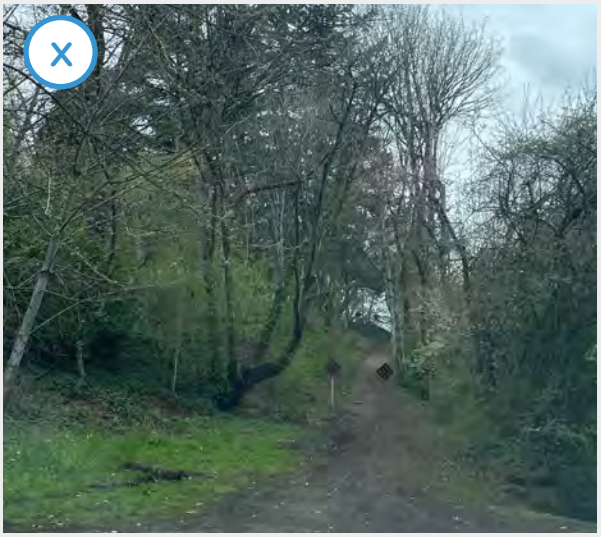
TriMet bus stops are located on both the north and south sides of King Rd at the intersection with Stanley Ave. Pedestrians accessing a bus stop must cross without a designated crossing facility or walk to the distant crossing facility near the intersection of King Rd and Witchita Ave.

The curb ramps at the intersection of King Rd and Stanley Ave are not ADA-compliant.

Wichita Ave is a north-south corridor that may serve as an alternative route to Stanley Ave for low-stress travel. However, Wichita Ave currently lacks sidewalks or other active transportation features.



At the intersection of King Rd and 55th Ave the north leg does not have any ADA-compliant curb ramps or a marked crosswalk.

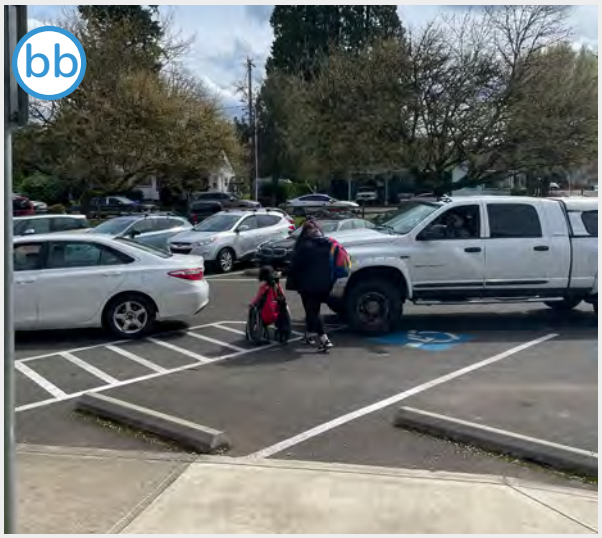


There is a unimproved dirt path on the west end of Willow St that connects to 51st Ave. This path becomes difficult to pass during wet conditions.

51st Ave, adjacent to the Seth Lewelling Elementary athletic fields, does not have sidewalks. Students access Seth Lewelling Elementary School by walking across the fields, however, there are currently no designated pedestrian routes.

The raised crosswalks on Logus Rd are not ADA-compliant and need to be removed, or made to be compliant with US Access Board.

Buses drop off and pick up students on the west side of the parking lot.



Students with disabilities have to navigate through the drivers queued up in the parking lot. The ADA parking stalls are blocked and not accessible during drop off and pick up.

Some caregivers walk with their students across the parking lot to return to their parked vehicles in the parking lot or in the nearby neighborhood streets.

Parents and caregivers queue in front of the east side of the Seth Lewelling Elementary School building to pick up their student. Staff members coordinate to send out the students as they arrive.

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 streetscape are essential to making walking and rolling to school safer and more comfortable. Infrastructure improvements make it safer and more comfortable for families to walk and roll to school, as well as benefiting everyone who travels to school and through the school area.

In addition, education and encouragement programs are a necessary component of any successful SRTS Plan. Often, programs that get more youth walking and rolling lead to increased public support for infrastructure projects. They 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 cost less to implement.

The recommendations for construction projects and education and encouragement programs contained in this chapter were informed by existing conditions and input from school and district staff, caregivers, students, community members, and city and county staff. They are tailored to meet the needs and interests of the school community.

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**

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.

PEDESTRIAN FACILITIES

Pedestrian facilities offer an alternative solution to create safe space for people walking and rolling. In rural contexts, complete sidewalks with curb and gutter can prove cost prohibitive.

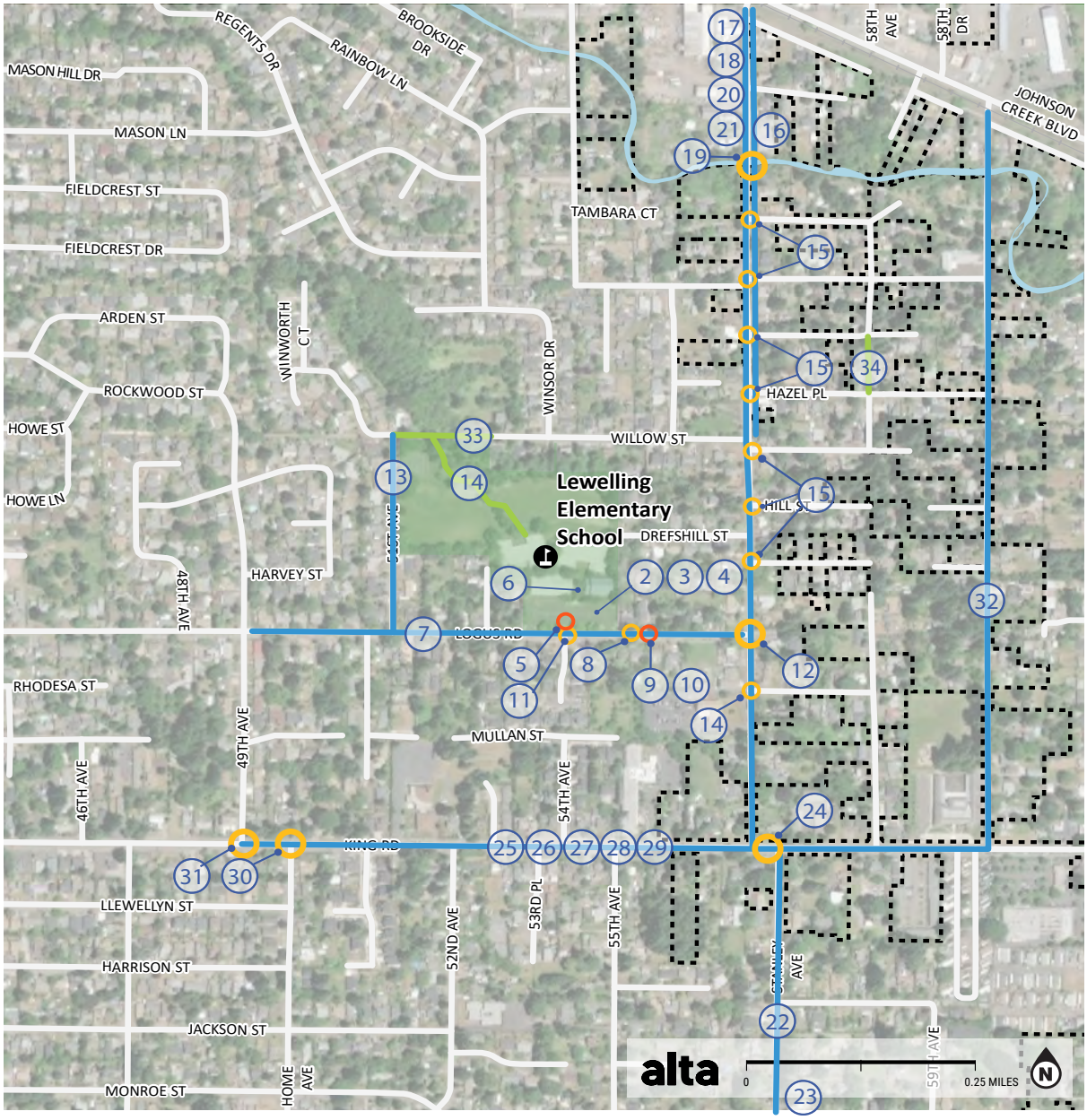
Pedestrian facilities can offer temporary or permanent solutions that are appropriate on roads with low to moderate speeds and volumes. A pedestrian lane, for example, is a designated space on the roadway for exclusive use of pedestrians.[1] The lane may be on one or both sides of the roadway and can fill gaps between important destinations in a community.

Other types of pedestrian facilities include curb or bollard-protected shoulders, striped buffers, or curb-protected sidewalks. Importantly, these facilities should still include tactile strips and remain ADA-accessible.

BENEFITS

- Provide a stable surface off of the roadway for pedestrians to use when sidewalks or side paths are deemed impractical or otherwise undesirable.
- Can provide visual indication of prioritized connection to community amenity.
- Require minimal roadside infrastructure and no impacts to stormwater management if existing pavement is used.
- May reduce potential conflict between vehicles and pedestrians.
- Lack the built curb and gutter infrastructure of a sidewalk or other facility.

1 Small Town and Rural Design Guide. Center for Prevention at Blue Cross and Blue Shield of Minnesota. https://ruraldesignguide.com/introduction



LEWELLING ELEMENTARY SCHOOL IMPROVEMENTS

IMPROVEMENTS

- On-Street Facilities
- Off-Street Trail
- Crossing
- Signage

LEGEND

- School Property
- Water
- City Boundary

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Oregon Department of Transportation
Safe Routes to School

Table 1. Seth Lewelling Elementary School Infrastructure Needs and Recommendations

Rec #	Recommendation	Responsible Agency	Implementation Next Steps
	General Recommendations		
01	**Issue:** Sidewalks obstructions (i.e. waste bins, mailboxes, utility poles, and vehicles). **Recommendation:** Enforce Milwaukie city code 12.14.020 prohibiting encroachments in public rights-of-way, easement, or public property.	City of Milwaukie	
	Seth Lewelling Campus		
02	**Issue:** Parent / caregiver drop-off / pick-up vehicles block access to ADA parking stalls. Students with mobility issues must manuever past vehicle line. **Recommendation:** Consider counterclockwise drop-off / pick-up circulation in the east parking lot to prevent queuing in front of and blocking of ADA parking stalls.	North Clackamas School District	
03	**Issue:** Crosswalks are faded and not standard markings throughout the school parking lot. **Recommendation:** Remove and replace existing transverse crosswalk markings with high-visibility continental-style crosswalk markings.	North Clackamas School District	
04	**Issue:** Parked vehicles overhang the sidewalk in front of school. **Recommendation:** Consider adding curb stops to parking stalls to eliminate overhanging.	North Clackamas School District	
05	**Issue:** "Enter only" sign at school parking lot entrance driveway is damaged and not highly visible. **Recommendation:** Replace sign with more visible signage.	North Clackamas School District	
06	**Issue:** Bike parking located near the front entrance of the school is not covered, which may result in students' bikes getting wet on inclement weather days. **Recommendation:** Construct covered bike parking if possible. Consider installing a skateboard and scooter rack.	North Clackamas School District	
	Logus Road		
07	**Issue:** Drivers are speeding and using this street to cut through the neighborhood. City is conducting a traffic study to determine the speeds and volumes. This data should inform recommendations. **Recommendation:** Consider additional traffic calming measures (such as in-road chicanes, travel lane narrowing, etc.) if necessary to reduce vehicle speeds. Reinforce the existing school zone on Logus Road between 48th Ave and Stanley Ave by adding flashers to existing the school zone signs and replace the WHEN CHILDREN ARE PRESENT plaques with WHEN FLASHING (S4-4P) for consistent messaging. Consider installation of END SCHOOL ZONE signage at appropriate locations to further define the school zone area. Need to verify westbound location. Enforce the speed limit in the school zone.	City of Milwaukie	ODOT SRTS Construction Grant Priority

Rec #	Recommendation	Responsible Agency	Implementation Next Steps
08	**Issue:** The midblock crossing of Logus Rd directly east of Seth Lewelling Elementary has a speed table with a marked crossing, however, the school has discouraged students from using this facility due to a perception that it is unsafe. **Recommendation:** Consider stationing a crossing guard at the crossing of Logus Rd near the southwest corner of Seth Lewelling Elementary parking lot.	Lewelling Elementary School	
09	**Issue:** "Pedestrian crossing" sign at crosswalk to east of school is in wrong location. **Recommendation:** Relocate high visibility ped crossing sign from existing location east of school to be installed on sidewalk adjacent to the marked crosswalk.	City of Milwaukie	
10	**Issue:** The raised crosswalks are not ADA-compliant and need to be removed, or made to be compliant with US Access Board. **Recommendation:** Replace existing raised crosswalks with speed tables with crosswalks at standard dimensions. (Ensure compatibility with school buses – check with transportation department).	City of Milwaukie	ODOT SRTS Construction Grant Priority
	Intersection of Logus Road and 54th Ct		
11	**Issue:** There is no safe ADA-compliant crossing at this location. **Recommendation:** *Add high-visibility continental crosswalk markings across 54th Ct and construct ADA curb ramps.*	City of Milwaukie	
	Intersection of Logus Road and Stanley Ave		
12	**Issue:** Drivers often speed on Stanley Ave. This intersection has a continental crosswalk on the south leg, as well as a controlled stop for eastbound drivers on Logus Rd. Issue of visibility as cars turn left from Logus Rd onto Stanley Ave coming from the west **Recommendation:** *Install a Rectangular Rapid Flashing Beacon (RRFB) with School Crossing Assembly (S1-1, W16-7p) in both directions across Stanley Ave at existing crosswalk location.*	City of Milwaukie	ODOT SRTS Construction Grant Priority
	51st Ave		
13	**Issue:** This route is used by students walking and rolling to and from school. **Recommendation:** Consider installing a pedestrian facility to provide a safe path for pedestrians and bicyclists to travel.	City of Milwaukie	51st Ave between Logus Rd and Winworth Ct is included in a planned Capital Improvement Project (CIP) for FY 2026-2027.
14	**Issue:** This route is used by students walking and rolling to and from school. **Recommendation:** Consider adding a walkway from 51st to Seth Lewelling Elementary School between NCSD tennis courts and ballfield and connect to an existing school pathway, and/or add a walkway south of the ball field. .	North Clackamas School District	ODOT Community Paths Grant Eligible

Rec #	Recommendation	Responsible Agency	Implementation Next Steps
	Stanley Ave		
15	**Issue:** Crossings are not marked at many intersections along Stanley Ave. **Recommendation:** Add high-visibility continental crosswalk markings and construct ADA curb ramps at intersections along the east side of Stanley Ave from King Road to Johnson Creek Blvd. Relocate advanced stop bars to behind crossings (aligned with stop signs) as needed.	City of Milwaukie	
16	**Issue:** Stanley Ave between Johnson Creek Blvd and Willow Ave does not have sidewalks. Pedestrians must walk on a very narrow shoulder. **Recommendation:** Consider installing a pedestrian facility on the east side of Stanley Ave.	City of Milwaukie	
17	**Issue:** There are significant amounts of freight and cut-through traffic adding vehicle volume to Stanley Ave and decreasing pedestrian and bicycle comfort along the roadway. **Recommendation:** Conduct additional studies to reduce freight and cut-through traffic on Stanley Ave, using SE Linwood Ave as the preferred route.	City of Milwaukie, Clackamas County	ODOT SRTS Construction Grant Priority
18	**Issue:** Stanley Ave is designated a Class 1 Greenway. However, minimal Greenway features have been implemented. There is bicycle wayfinding along the route and there is potential to connect to the Monroe St Greenway to the south. Additionally, this is a critical north/south route and connects Seth Lewelling Elementary to the Springwater Corridor Trail. Note: The City plans to eliminate greenway designation on Stanley. **Recommendation:** Consider painting fog lines at the edge of the travel way on both sides of Stanley Ave from SE Johnson Creek Blvd to SE King Rd to delineate the travel lane width and reduce speeds.	City of Milwaukie	
19	**Issue:** The bridge crossing at Johnson Creek has no safe path for pedestrians. **Recommendation:** Consider signage and or push button system that alerts drivers when pedestrians and bicyclists are on the bridge.	Clackamas County	Requires More Detailed Design
20	**Issue:** Drivers speed along Stanley Ave. The corridor is wide and hilly, which increases speeding and reduces visibility. Traffic studies from the City of Milwaukie indicate drivers at 85th percentile speed at 5 miles per hour greater than the posted speed limit along this corridor. **Recommendation:** Consider installing driver speed feedback signs on northbound and southbound Stanley Ave between Johnson Creek Blvd and King Rd. Consider installation of curb extensions at strategic crosswalk locations, road shifts or narrowing of lanes in some locations along the corridor.	City of Milwaukie	ODOT SRTS Construction Grant Priority

Rec #	Recommendation	Responsible Agency	Implementation Next Steps
21	**Issue:** Drivers speed along Stanley Ave. The corridor is wide and hilly, which increases speeding and reduces visibility. Traffic studies from the City of Milwaukie indicate drivers at 85th percentile speed at 5 miles per hour greater than the posted speed limit along this corridor. **Recommendation:** Consider painting fog lines at the edge of the travel way on both sides of Stanley Ave from SE Johnson Creek Blvd to SE King Rd to delineate the travel lane width and reduce speeds..	City of Milwaukie, Clackamas County	
22	**Issue:** Stanley Ave between King Rd and Monroe St does not have sidewalks. Pedestrians must walk on street or on a very narrow shoulder. **Recommendation:** Consider installing a pedestrian facility on the east side of Stanley Ave until more permanent sidewalk infrastructure can be constructed as identified in the TSP.	City of Milwaukie	
23	**Issue:** Stanley Ave between Monroe St and Railroad Ave does not have sidewalks. Pedestrians must walk on street or on a very narrow shoulder. **Recommendation:** Consider installing a pedestrian facility on the east side of Stanley Ave until more permanent sidewalk infrastructure can be constructed as identified in the TSP.	City of Milwaukie	
	Intersection of Stanley Ave and King Road		
24	**Issue:** Drivers on King Rd speed through intersection and there is no safe crossing for students to get across King Rd. At this location Stanley Ave is offset when it reaches SE King Rd, and travelers must use part of SE King Rd to continue along SE Stanley Rd. This location has bus stops for TriMet Line 33 on either side of King Rd. (School buses are mandatory option as the school district recommends parents not let children living south of King Rd walk or roll to the school.) **Recommendation**: Follow the active transportation study recommendations for the King Road Improvement project Consider installing a Rapid Rectangular Flashing Beacon (RRFB) with School Crossing Assembly (S1-1, W16-7P) in both directions. Consider installing high-visibility continental crosswalk markings with ADA curb ramps at intersection of Stanley Ave and King Rd. Consider reviewing school zone limits and signage standards based on proximity (green vs yellow signs). Consider installing a pedestrian refuge island at this intersection.	City of Milwaukie	This intersection is under design with a planned Capital Improvement Project. The design engineers are evaluating the best solution for this off-set intersection.

Rec #	Recommendation	Responsible Agency	Implementation Next Steps
	King Road		
25	**Issue:** There are narrow sidewalks on King Road decreasing pedestrian comfort. **Recommendation:** Replace existing sidewalk with multi-use path and repave road. Consider widening sidewalks to minimum of 5 feet width, 8 feet width where possible.	City of Milwaukie	This corridor is under design with a planned Capital Improvement Project.
26	**Issue:** Many intersections are missing crosswalks and curb ramps along King Rd. **Recommendation:** Upgrade crossings with standard high-visibility continental crosswalk markings and construct ADA curb ramps at intersections along King Road from 49th Ave to Linwood Ave. Relocate stop lines to behind crossings (aligned with stop signs) as needed.	City of Milwaukie	This corridor is under design with a planned Capital Improvement Project.
27	**Issue:** There are bike lanes along King Rd east and west of the intersection with Stanley Ave, however, people traveling by bicycle may have difficulty making left turns from King Rd onto Stanley Rd in either direction because it requires crossing two lanes of bidirectional traffic. Providing a space for bicyclists to wait for vehicle traffic to clear may make this turn less stressful. **Recommendation:** Consider enhancing bike infrastructure between Linwood Ave and 43rd Ave by adding shared use path or considering moving the curb to edge of travel lanes and create multi-use bike/ped paths on both sides of street.	City of Milwaukie	This corridor is under design with a planned Capital Improvement Project.
28	**Issue:** Bike lanes are narrow and directly adjacent to 35 mph traffic lane. **Recommendation:** Consider narrowing travel lanes and center turn lane to add buffered marking to bike lanes.	City of Milwaukie	This corridor is under design with a planned Capital Improvement Project.
29	**Issue:** People must wait for the bus on narrow sidewalks blocking the path for other pedestrians. **Recommendation:** Consider adding space for people waiting for TriMet bus stops along King Rd.	City of Milwaukie, TriMet	This corridor is under design with a planned Capital Improvement Project.

Rec #	Recommendation	Responsible Agency	Implementation Next Steps
	Intersection of King Road and Home Road		
30	**Issue:** Drivers speed through this intersection and there is no safe crossing for students to get across King Rd. (Buses are mandatory option as the school district recommends parents not let children living south of King Rd walk or roll to the school.) **Recommendation:** Consider adding high-visibility continental crosswalk markings with ADA curb ramps at the south leg of intersection of King Rd and Home Ave. Consider constructing ADA curb ramps at the west leg of the intersection of King Rd and Home Ave and adding a pedestrian refuge island at the median. Evaluate the need for a Rapid Rectangular Flashing Beacon (RRFB) with School Crossing Assembly (S1-1, W16-7P) across SE King Rd in both directions.	City of Milwaukie	This intersection will be studied in a planned Capital Improvement Project.
	Intersection of King Road and 49th Ave		
31	**Issue:** There is no safe crossing for students to get across 49th Ave. **Recommendation:** Consider adding high-visibility continental crosswalk markings with ADA curb ramps at north leg of intersection of King Rd and 49th Ave.	City of Milwaukie	This intersection is under design with a planned Capital Improvement Project.
	Wichita Ave		
32	**Issue:** Wichita Ave serves as a low-stress connection for north-south travel and includes a bridge across Johnson Creek. However, the road currently lacks sidewalks or other pedestrian facilities. Additionally, the bridge crossing at Johnson Creek has no safe path for pedestrians **Recommendation:** Install pedestrian facility on both sides of street. Consider traffic calming measures (such as speed humps, travel lane narrowing, etc.) if necessary to reduce vehicle speeds.	City of Milwaukie	ODOT SRTS Construction Grant Priority
	Informal path along Hollywood Ave between Cedar St and Hazel Pl		
33	**Issue:** This informal path is used by students traveling to and from school for walking or biking. **Recommendation:** Formalize the off-street path on Hollywood Ave between Cedar St and Hazel Pl.	City of Milwaukie	ODOT Community Paths Grant Eligible
	Informal path at west end of Willow St connecting to Winworth Ct		
33	**Issue:** This informal path is used by students traveling to and from school for walking or biking. **Recommendation:** Formalize the off-street path between Willow St and Winworth Ct.	City of Milwaukie	ODOT Community Paths Grant Eligible

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.

Suggested walking routes were also developed with project partners, based on community input and findings from the bike and pedestrian facility inventory. The Suggested Route Map on the next page provides current routes for students and families to consider when walking and biking to school. The map also provides an aspirational vision for a more complete SRTS network for future investments and improvement. These future network additions are shown as dashed lines.

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/

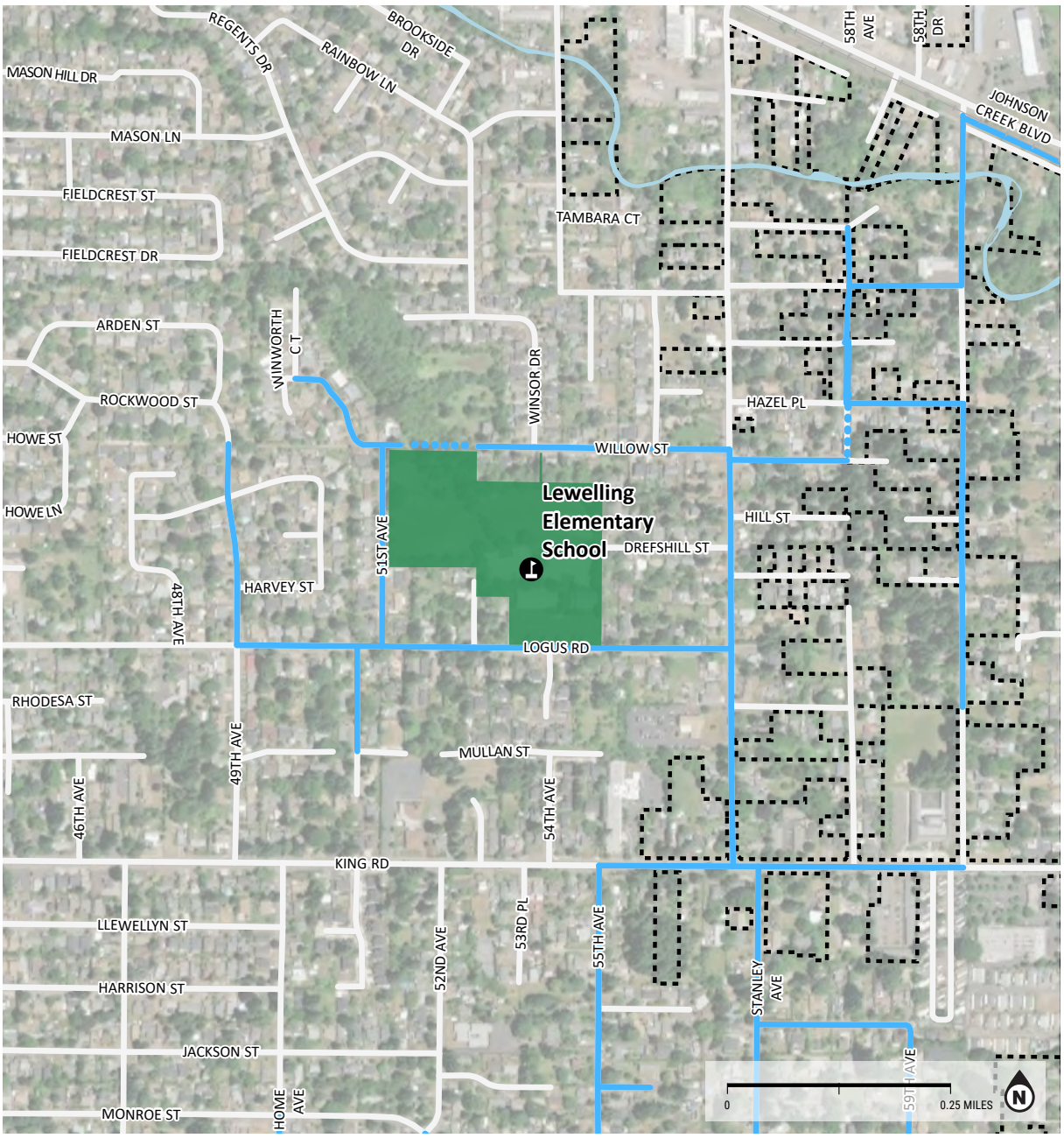
Learn more and keep in touch by signing up for the ODOT SRTS Newsletter: https://www.oregonsaferoutes.org/

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.



LEWELLING ELEMENTARY SCHOOL PRIORITY ROUTES

LEGEND

- Priority Routes
- Off-Street Connection
- Railroad
- School Property
- Other School Property
- Water
- Parks
- City Boundary

alta

Oregon Department of Transportation Safe Routes to School

Table 2. Seth Lewelling Elementary School 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	Seth Lewelling Elementary School, North Clackamas School District	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, or other languages as needed.	Feedback from families; observations from school leadership
Basic Bicycle Skills instruction as a part of Bike Education	SRTS Coordinator, Seth Lewelling Elementary School	Coordinate with Seth Lewelling Elementary School PE teacher to incorporate training in bike handling skills and safety into their bicycle unit as an option for students with little or no riding experience.	Basic bicycle skills curriculum/ materials	Provide materials in Spanish, or other languages as needed.	Number of students without prior experience who are able to ride a bike as a result
Pedestrian and Bike Safety Education	SRTS Coordinator, Seth Lewelling Elementary	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	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
Community School Safety Campaign	Seth Lewelling Elementary School	A school zone safety campaign can be used to share simple safety messages and increase the visibility of the school zone.	Outreach materials	Provide materials in Spanish, or other languages as needed..	Feedback from families; observations from school leadership
Walking School Bus and Bike Train	SRTS Coordinator	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, a 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, or other languages as needed. Consider how students with mobility challenges could 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	SRTS Coordinator, Seth Lewelling Elementary School	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, incentives or prizes for students	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
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 provided by SRTS HUB 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
SRTS Demonstration Projects	SRTS Coordinator, City of Milwaukie	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 parent engagement materials in Spanish, or other languages as needed.	Feedback from families
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
Student Safety Patrol Program	Student Safety Patrol	Student volunteers can sign up to help the adult crossing guard at arrival and dismissal. The jobs of the children's safety patrol may include waving at cars as they pass, helping crossing guards prepare their materials, and guiding students across the street.	Safety vests, signs or flags, adult crossing guard	Offer multiple ways for students to participate. Host a pizza party for student safety patrol as a "thank you".	Number of students participating; number of communities participating

Activity	Responsible Party	Description (Additional details provided on following page)	Resources Needed	Inclusion Considerations	Measures of Success
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
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
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	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
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
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
Bike Lock Giveaway	ODOT SRTS Team, SRTS Coordinator, Schools	Meet with ODOT SRTS HUB lead to discuss options for funding bike locks for students. Hold event or integrate into existing event to give away the bike locks and teach students how to properly use them to lock up their bike.	Bike locks, promotional materials	Provide promotional materials in Spanish and/or other languages as needed.	Number of students who receive bike locks and learn how to use them to properly lock their bike.

RECOMMENDATIONS HIGHLIGHT:

Neighborhood Greenways

This plan recommends designating several streets near Lewelling Elementary School as neighborhood greenways. Sometimes referred to as "bicycle boulevards" or "slow streets," neighborhood greenways are deliberately designed to reduce traffic speed and establish a secure environment for walking and biking. Rather than engineering the roadway to maximize vehicle speeds, a neighborhood greenway prioritizes the safety and comfort of people walking and rolling. Neighborhood greenways are often designated on priority routes that connect key destinations within the community such as neighborhoods, parks, schools, and business districts.

The City of Milwaukie can implement a neighborhood greenway by adding streetscape elements that slow motor vehicles and encourage sharing the road. Neighborhood greenways are distinct from other bike routes in the street network because they don't separate cars and bikes with bike lanes and sidepaths. Increased separation is helpful on corridors with higher speeds, but on neighborhood greenways, traffic should be calm enough that people of all ages and abilities are able to walk and roll safely. The City of Milwaukie has the following hierarchy for its Greenway network as described in the City's TSP:

- Level 1: Signage (e.g., wayfinding and warning signs along and approaching the neighborhood greenway).
- Level 2: Pavement markings (e.g., directional pavement markings, shared lane markings).
- Level 3: Intersection treatments (e.g., signalization, curb extensions, refuge islands).
- Level 4: Traffic calming (e.g.,speed humps, mini traffic circles).
- Level 5: Traffic Diversion (e.g., choker entrances, traffic diverters).

For more information about these design elements, see NACTO's Urban Bikeway Design Guide: https://nacto.org/publication/urban-bikeway-design-guide/bicycle-boulevards/

Speed humps help to slow traffic.

Curb extensions narrow the roadway and pavement markings reinforce the greenway designation.

Planters can be used to divert traffic on neighborhood streets but allow bikes and pedestrians to pass through.

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 rolling, as well as communicating the benefits of active transportation, can encourage more families to walk and roll. 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 rolling 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.

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:

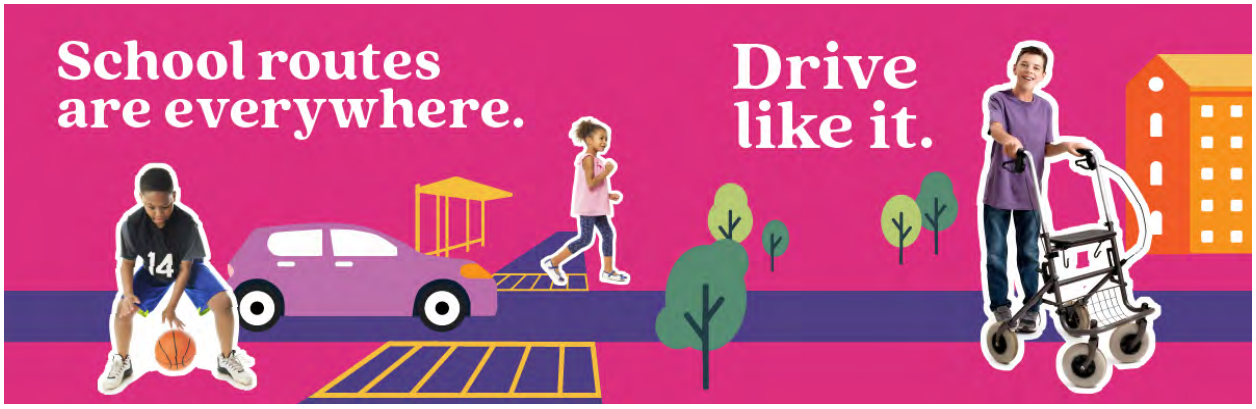
- The Oregon SRTS website has a host of banners, brochures, and other materials that schools can use to raise drivers' awareness of students traveling in a school area. Order materials from the ODOT Storeroom and check the ODOT SRTS website for current incentives and outreach materials available.
- The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

Resources include the following:

- The Oregon SRTS Team is available to train PE teachers to deliver bicycle and pedestrian education in classes through the new Jump Start program! You can sign up for training or to borrow a bike fleet for an event such as a Bike Rodeo by visiting the Jump Start Program page of the ODOT SRTS website.
- 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.

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, Cycle September

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.Education and Encouragement Program Descriptions

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 Competitive Construction Grant and prepare jurisdictions to apply for the funding. This chapter describes the community-driven process to prioritize recommendations for the ODOT SRTS Competitive Construction 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

Table 3 lists the top-priority improvements recommended for the ODOT SRTS Competitive Construction Grant Application. These projects were chosen due to their emphasis on safety, proximity to school, and ability to serve a large number of students walking and biking both to and from and between schools. The table also provides a planning-level cost estimate for each project. Table 4 (page 52) provides additional project-specific information needed for ODOT grant applications.

The City of Milwaukie and North Clackamas School District will be the relevant parties to prepare the Competitive ODOT SRTS IN Grant and ODOT Community Path Applications for these projects.

Table 3. City of Milwaukie Implementation Priority Projects

PROJECT DESCRIPTION	PLANNING-LEVEL COST ESTIMATE
Mobilization	$103,100
Traffic Control	$154,600
Erosion Control	$20,700
Reinforce the existing school zone on Logus Rd between 48th Ave and Stanley Ave by adding flashers to existing school zone signs and replace the WHEN CHILDREN ARE PRESENT plaques with WHEN FLASHING (S4-4P) for consistent messaging.	$19,350
Install END SCHOOL ZONE signage at appropriate locations to define school zone area.	$34,200
Relocate high visibility ped crossing sign from existing location east of school to be installed on sidewalk adjacent to the marked crosswalk. Replace existing raised crosswalks with speed tables with crosswalks at standard dimensions.	$20,144
Add high-visibility continental crosswalk markings across 54th Ct and construct ADA curb ramps.	$31,560
Install a Rectangular Rapid Flashing Beacon (RRFB) with School Crossing Assembly (S1-1, W16-7p) in both directions across Stanley Avenue at existing crosswalk location.	$25,000
Add high-visibility continental crosswalk markings and construct ADA curb ramps at intersections along the east side of Stanley Avenue from King Road to Johnson Creek Blvd. Relocate advanced stop bars to behind crossings (aligned with stop signs) as needed. Install a pedestrian facility on the east side of Stanley Ave.	$841,200

PROJECT DESCRIPTION	PLANNING-LEVEL COST ESTIMATE
Paint fog lines at the edge of the travel way on both sides of Stanley Ave from SE Johnson Creek Blvd to SE King Rd to delineate the travel lane width and reduce speeds. Paint fog lines at the edge of the travel way on both sides of Stanley Ave from SE Johnson Creek Blvd to SE King Rd to delineate the travel lane width and reduce speeds.	28,800
Install driver speed feedback signs on northbound and southbound Stanley Ave between Johnson Creek Blvd and King Rd.	$34,000
Additional Costs	$844,100
Total Project Cost	$2,152,754

Table 4. Project Details for ODOT SRTS Competitive Construction Grant

PROJECT DESCRIPTION	RESPONSE FOR CITY OF MILWAUKIE
Relevant Right of Way ownership	The City of Milwaukie owns all relevant right of way.
Utility implications	N/A
Environmental resource implications	N/A
Stormwater management implications	The pedestrian facility improvements on Stanley Ave would require modifications to existing stormwater drainage.
Near a railroad? Or bridge, tunnel, retaining wall affected?	N/A
AADT	Unknown
Priority Safety Corridor	No

Next Steps

With a 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 roll 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.

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

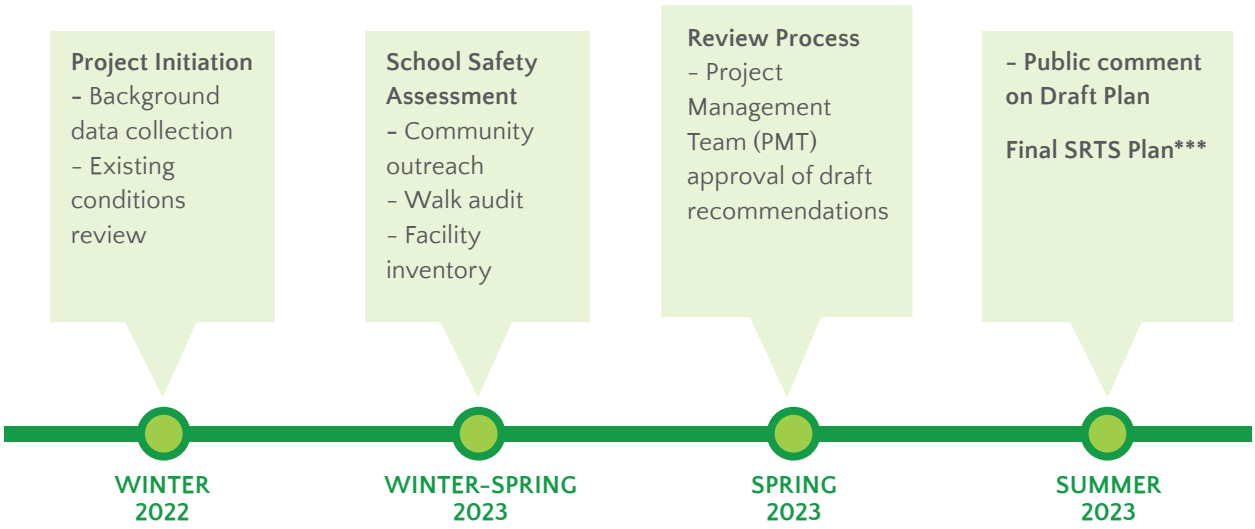
The Oregon Department of Transportation (ODOT) SRTS Program provides technical assistance to support local SRTS efforts. This support includes:

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 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/

APPENDIX B. PLANNING PROCESS

The Seth Lewelling Elementary School 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

CLACKAMAS COUNTY TRANSPORTATION SYSTEM PLAN (2022)

A significant portion of Lewelling Elementary School's enrollment boundary is made up of unincorporated Clackamas County rather than the City of Milwaukie. Therefore, Clackamas County's transportation system plan (TSP) was reviewed as a part of this planning process. The document serves as the primary guidance for transportation planning in Clackamas County between 2013 and 2033. The following goals from the TSP support Safe Routes to School planning efforts in unincorporated Clackamas County and guide the implementation of the plan.

- Goal 3: Tailor transportation solutions to suit the diversity of local communities.
- Goal 4: Promote a transportation system that maintains or improves our safety, health, and security.
- Goal 5: Provide an equitable transportation system.

There is a neighborhood east of Lewelling Elementary school bounded by Johnson Creek Blvd on the north, Stanley Ave on the west, King Rd on the south, and Wichita Ave on the east where there is a mix of jurisdiction between City of Milwaukie and Clackamas County, however the road authority for this area is the City of Milwaukie, based on a 2009 transfer of road authority from Clackamas County.

TRAFFIC NEEDS AND FINDINGS THAT RELATE TO SRTS

The TSP catalogs the transportation needs of the County; however, it recognizes countywide challenges surrounding limited funding, reduction of congestion, balancing different mobility needs, safety, environmental impacts, and ensuring accessibility. The County also acknowledges the role of Oregon's Transportation Planning Rule (Oregon Planning Goal 11) in ensuring a vital link between transportation and land use planning is maintained and that there is not an overreliance on any given transportation mode.

Several of these findings may align with the goals of this Safe Routes to School planning effort and help justify a need for mobility improvements in the vicinity of Lewelling Elementary School.

POLICIES THAT RELATE TO SRTS INITIATIVES

The following TSP policies may be able to support this SRTS planning effort:

- **5.C.1:** Support programs and projects, such as pedestrian and bike connections to transit stops, that expand and improve transportation options for residents in areas with identified transportation-disadvantaged populations.
- **5.C.2:** Protect neighborhoods, recreation areas, pedestrian facilities, bikeways, and sensitive land uses (such as schools) from transportation-related environmental degradation. Coordinate transportation and land use planning and use mitigations strategies, such as physical barriers and design features, to minimize transmission of air, noise, and water pollution from roads to neighboring land uses.
- **5.C.4:** Ensure that programs to encourage and educate people about bicycle, pedestrian, and transit transportation options are appropriate for all county residents, particularly transportation-disadvantaged populations.
- **5.E.4:** Support programs that work with schools to identify safe bicycle and pedestrian routes to connect neighborhoods and schools. Seek partnerships and funding to support improvements of these routes.
- **5.G.4 Urban:** Allow the removal of existing, on-street parking along arterials and collectors to create bikeways, construct travel or turning lanes, or increase sight distance.
- **5.J.1:** Coordinate the implementation of pedestrian facilities and bikeways with neighboring jurisdictions and jurisdictions within the county.
- **5.J.7:** Inform property owners of their responsibilities for the maintenance of sidewalks and pedestrian pathways.
- **5.J.8:** Identify low traffic volume streets that are appropriate for signing as bicycle routes to enhance

safety and connectivity and to supplement the system of bikeways found on the major street system.

- **5.K.1:** Require bikeways and pedestrian facilities for all new roadway construction or substantial reconstruction, allowing for flexibility to accommodate characteristics of terrain, scenic qualities, existing development, and environmental constraints.
- **5.K.2:** Design and implement innovative bicycle and pedestrian facilities that improve the convenience and safety of these facilities. Use facility types described in the Active Transportation Plan as a reference.
- **5.K.3:** Improve the safety and appeal of walking and biking by supporting the development of bikeways and pedestrian facilities and networks on low volume or local roads and off existing street right-of-way.
- **5.K.4 Urban:** Identify pedestrian facilities and bikeway improvements necessary to ensure direct and continuous networks of pedestrian facilities and bikeways on the county road system.
- **5.K.5 Urban:** Identify locations where bicycle and pedestrian access is blocked by rivers and other natural barriers and encourage the creation of bicycle and pedestrian facilities to extend across these barriers.
- **5.K.7 Urban:** Create a networked system of pedestrian facilities and bikeways connecting cities, neighborhoods, commercial areas, community centers, schools, recreational facilities, employment centers, other major destinations, regional and city bikeways and pedestrian facilities, and other transportation modes. Utilize separate accessways for pedestrian facilities and bikeways where street connections are impractical or unavailable

PROJECTS THAT RELATE TO SAFE ROUTES TO SCHOOL

The Clackamas County TSP provides a list of prioritized transportation projects that may help achieve plan goals. The projects are divided into three priority categories (see Figure 1 for a map showing the transportation projects by category):

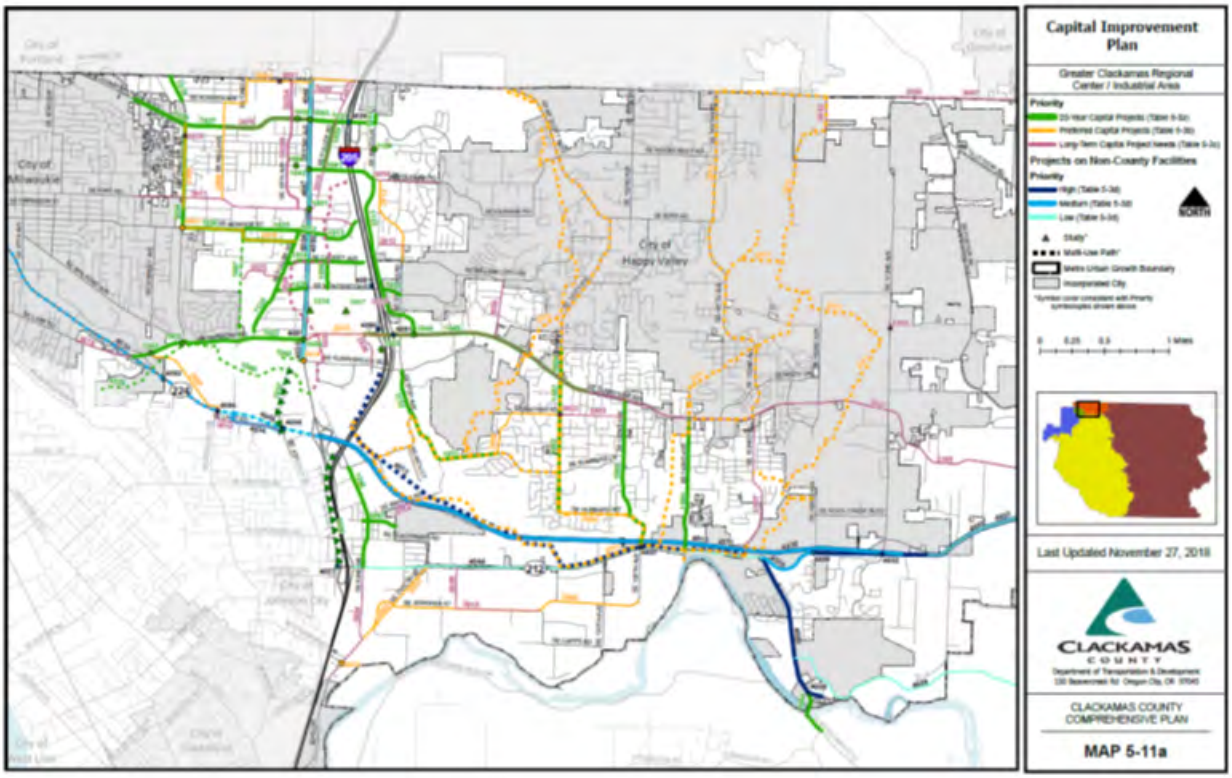
20-Year Capital Projects: contains the prioritized list of needed transportation projects that can reasonably be undertaken given the current estimates of available funding.

Preferred Capital Projects: contains a second group of needed, prioritized transportation projects that the County would undertake if additional funding becomes available during the next 20 years.

Long-Term Capital Projects: contains the remainder of the needed transportation projects. Although these projects will be needed to meet the transportation needs of the County in the next 20 years, they are not expected to be funded or constructed by the County.

The following projects described in the TSP may align with this planning process:

Figure 1: Clackamas County Capital Improvement Priority Projects



PROJECT NO.	STREET	LOCATION	PRIORITY	RECOMMENDED IMPROVEMENTS
1027	Johnson Creek Blvd	55th Ave to I-205	20-year (highest)	Perform road safety audit or transportation safety review to identify appropriate safety improvements
1029	Johnson Creek Blvd	55th Ave to Bell Ave	20-year (highest)	Widen to 3 lanes with bikeways and pedestrian facilities
1030	Johnson Creek Blvd	Johnson Creek Blvd/ OR 213 intersection	20-year (highest)	Extend westbound left-turn lane and rebuild median; install dual northbound and southbound left-turn lanes
1034	Linwood Ave	Monroe St to Johnson Creek Blvd	20-year (highest)	Add pedestrian facilities in accordance with the Active Transportation Plan
1035	Monroe St	72nd Ave to Fuller Rd	20-year (highest)	Add bikeways, pedestrian facilities, and traffic calming in accordance with the Active Transportation Plan

PROJECT NO.	STREET	LOCATION	PRIORITY	RECOMMENDED IMPROVEMENTS
1036	Monroe St/72nd Ave/ Thompson Rd/Fuller Rd	Linwood Ave to Causey Ave	20-year (highest)	Add bikeways and traffic calming in accordance with the Active Transportation Plan
2000	Bell Ave/ Alberta St/72nd Ave	King Rd to County Line	Preferred (medium)	Add bikeways and pedestrian facilities
2001	Clatsop St/ Luther Rd	72nd Ave to Fuller Rd	Preferred (medium)	Add turn lanes and signals at OR 213 intersection; add bikeways, pedestrian facilities, and traffic calming
2007	Linwood Ave	Linwood/Monroe St Intersection	Preferred (medium)	Add curbs/sidewalks, improve horizontal alignments
2008	Linwood Ave	Queen Rd to Johnson Creek Blvd	Preferred (medium)	Add bikeways in accordance with the Active Transportation Plan
2010	Monroe St/72nd Ave/ Thompson Rd	Linwood Ave to Fuller Rd	Preferred (medium)	Add pedestrian facilities
3009	Cornwell Ave	OR 213 to Fuller Rd	Long-term (low)	Add pedestrian facilities; connect to I-205 Multi-Use Path
3016	Johnson Creek Blvd	Bell Ave to OR 213	Long-term (low)	Widen to 3 lanes from Bell Ave to 76th Ave and 5 lanes from 76th Ave to 82nd Ave; add bikeways and pedestrian facilities
3017	King Rd	Milwaukie City Limits to Spencer Dr	Long-term (low)	Fill gaps in pedestrian facilities in accordance with the Active Transportation Plan
3020	Linwood Rd Bridge	Bridge	Long-term (low)	Construct bridge with bike lanes and sidewalks in accordance with the Active Transportation Plan
3021	Luther Rd Bridge	Bridge crossing Johnson Creek	Long-term (low)	Replace bridge

ACTIVE TRANSPORTATION NEEDS

The County developed pedestrian and bicycle master plans and an Active Transportation Plan to guide countywide active transportation efforts. Active Transportation Plan projects relevant to this SRTS planning process have been identified in the previous table.

MILWAUKIE TRANSPORTATION SYSTEM PLAN (UPDATED, 2018)

According to the City of Milwaukie's Transportation System Plan (TSP), the City of approximately 21,000 lies at the intersection of several regional transportation facilities and downstream from several areas slated for significant growth in Metro's 2040 Growth Concept, and thus the area may experience growth and greater demands on the transportation system in coming years. As the primary transportation planning document for the City of Milwaukie, the 2018 TSP provides an overarching structure for proposed infrastructure changes in the area surrounding Lewelling Elementary. The following Milwaukie TSP goals may align with this Safe Routes to School planning effort:

Goal 1: Livability: Design and construct transportation facilities in a manner that enhances the livability of Milwaukie's community.

Goal 2: Safety: Develop and maintain a safe and secure transportation system.

Goal 3: Travel Choices: Plan, develop, and maintain a transportation system that provides travel choices and allows people to reduce the number of trips made by single-occupant vehicles.

Goal 6: Sustainability: Provide a sustainable transportation system that meets the needs of present and future generations.

The Milwaukie TSP also assesses conditions of the existing transportation network and identifies the following deficiencies in the pedestrian and bicycle systems:

- Incomplete arterial/collector sidewalk system
- Lack of local street connectivity
- Arterial crossings with potential safety and connectivity issues
- Lack of complete multiuse trails
- Lack of connectivity
- Difficult crossings
- Insufficient street designations

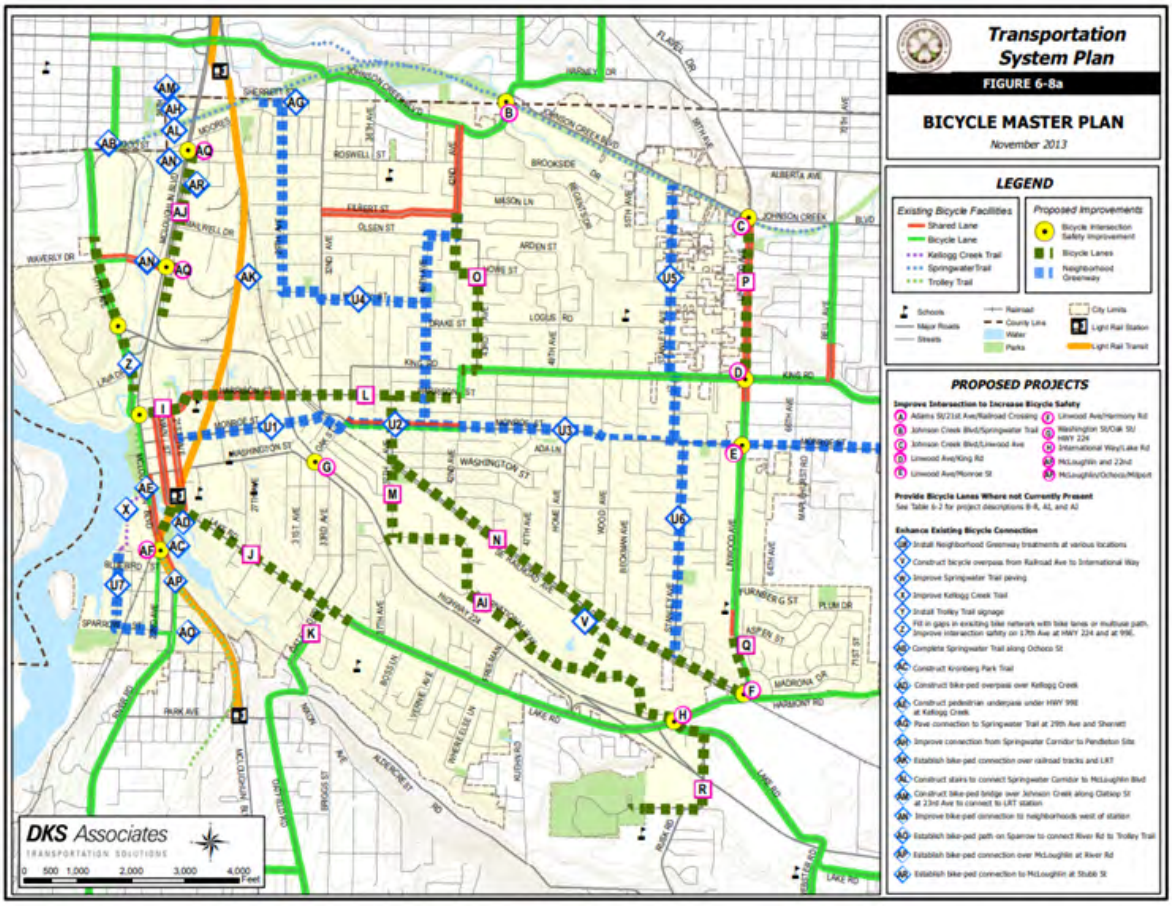
As such, the TSP recommends the following citywide improvements to address deficiencies:

- Develop and distribute walking maps that show routes to major destinations such as parks, schools, commercial areas, and trails
- Enforce against motorists who speed and run stop signs
- Close gaps in bicycle network
- Improve crossing safety
- Maintain the existing system
- Improve signage
- Educate bicyclists and motorists

The City will prioritize transportation projects with a high degree of "implementability," primarily smaller projects with local funds that can be leveraged for state and federal funds. The City has also identified a list of transportation projects that are financially constrained, or "unfunded." Projects move from the unfunded section of the Capital Improvement Plan (CIP) list to the funded section of the list if funding becomes available. The City Council reviews projects recommended for funding every two years through the City's budgeting process. Consulting the City's CIP can reveal which projects are likely to be constructed in coming years. See the Milwaukie Capital Improvement Plan (FY 2023-2028) section for a list of relevant projects.

In recent years, the City of Milwaukie has embarked on plans to construct several neighborhood greenways, which involves assigning priority to bicyclists while encouraging through-vehicle traffic to use alternative parallel routes. The projects include signage, pavement markings, intersection treatments, traffic calming, and traffic diversion to achieve a more comfortable experience for pedestrians and bicyclists. Proposed neighborhood greenways and other bicycle and pedestrian enhancements can be observed in Figure 2, a map from the City's 2013 Bicycle Master Plan.

Figure 2. Milwaukie Proposed Bicycle Projects



MILWAUKIE AMERICANS WITH DISABILITIES ACT TRANSITION PLAN FOR ACCESSIBILITY IN THE PUBLIC RIGHT-OF-WAY (2018)

The Americans with Disabilities Act Transition Plan for Accessibility in the Public Right-of-Way describes the City of Milwaukie's efforts and strategy regarding accessibility improvements on City facilities. The plan was created to meet Milwaukie's growing need for pedestrian connectivity, to address key issues with accessibility, and to comply with Title II requirements of the Americans with Disabilities Act (ADA). The plan identifies City facilities that do not comply with ADA standards and recommends, through its action plan, a methodology of prioritizing projects to meet compliance. The findings of this plan can be used to better understand which roadways near Lewelling Elementary do not meet ADA standards, and thus may also be ideal candidates for Safe Routes to School improvements.

Several roadways and curb ramps within the vicinity of Lewelling Elementary do not comply with ADA standards (see Figure 3 and Figure 4). Notably, several sidewalks and curb ramps along Logus Road in front of the elementary school are currently non-compliant, and Logus Road was described by the ADA Transition Plan as a Priority 1 corridor demonstrating its mobility importance for people with disabilities.

Figure 3: ADA Compliance of Roadways Near Lewelling Elementary

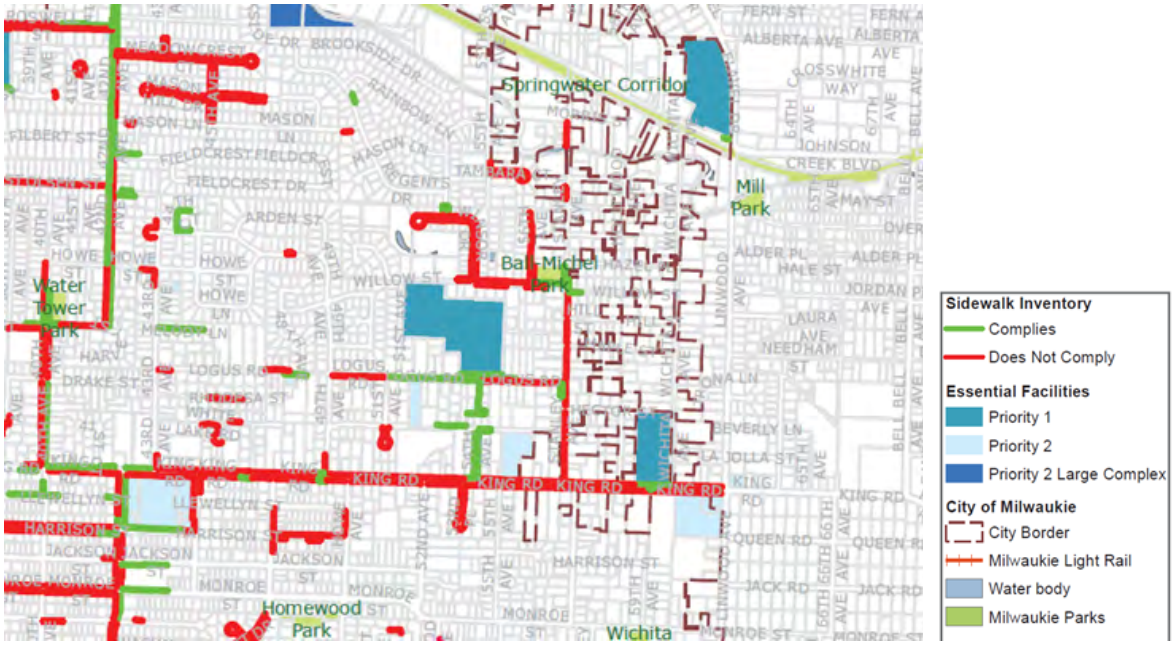
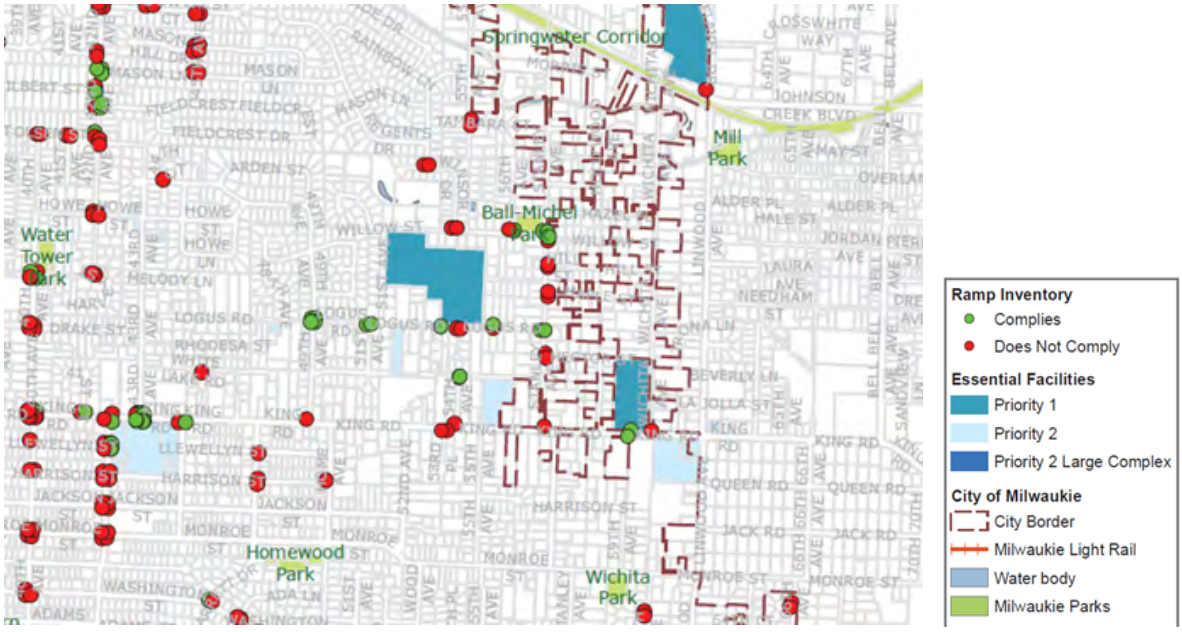


Figure 4: ADA Compliance of Curbs Near Lewelling Elementary



Additionally, the following project recommendations described in the ADA Transition Plan may be relevant to this planning process:

STREET	LOCATION	RECOMMENDED IMPROVEMENTS
Monroe St	Oak St to Linwood Ave	Designate as "neighborhood greenway" and install traffic-calming improvements.
Stanley Ave	Johnson Creek Blvd to King Rd	Fill in sidewalk gaps on both sides of street, designate as a "neighborhood greenway" and install traffic-calming improvements.

MILWAUKIE CAPITAL IMPROVEMENT PLAN (FY 2023-2028)

The City of Milwaukie's CIP provides guidance and planning for the City's capital investment infrastructure and illustrates long-term needs and goals. Several projects from the most recent CIP relate to this SRTS effort. These projects have a high feasibility of being funded through various City revenue streams. Several projects contained within the CIP are part of the City's Safe Access for Everyone (SAFE) program. These include bicycle and pedestrian enhancements and thus may benefit walking and biking to and from Lewelling Elementary School. In addition, some CIP projects fall under the Street Surface Maintenance Program (SSMP), which improves and maintains Milwaukie's streets using a pavement condition index score, and are funded through a utility bill fee. The following projects contained within the CIP may relate to this Safe Routes to School planning effort:

PROJECT	OVERARCHING PROGRAM	TIMELINE	RECOMMENDED IMPROVEMENTS
King Road Improvements	SAFE, SSMP	2028	King Road (42nd Ave to Linwood Ave): replace existing sidewalk with multiuse path and repave road.
SAFE spot improvements	SAFE	2023	Fund City-identified or community-requested sidewalk infill or repairs, curb ramp repairs at intersections, or add new crosswalks.
Monroe Street Greenway Improvements	SAFE, SSMP, TIF	2024	Create low-stress bikeway on Monroe Street between downtown Milwaukie east to city limit. Replace portions of existing sidewalk, remove barriers, and construct new surface overlay from 25th Ave to 28th Ave.
Home Ave and Wood Ave Improvements	SAFE, SSMP	2023	Home Avenue (King Road to Railroad Avenue): construct continuous sidewalk along the west side of Home Avenue and repave road. Wood Avenue (Park Street to Railroad Avenue): construct curb ramps at Appenine Way and repave road.
Lewelling Improvements	SAFE, SSMP	2027	49th Ave (King Rd to Logus Rd), 51st Ave (Logus Rd to Winworth Ct): add sidewalk and repave roadway. 49th Ave (Willow St to Harvey St): construct curb ramps and repave road. Willow St (Winworth Ct to Stanley Ave): replace portions of existing sidewalk and install multiuse path connection.

PROJECT	OVERARCHING PROGRAM	TIMELINE	RECOMMENDED IMPROVEMENTS
Park Street and Lloyd Street Improvements	SAFE/SSMP	2026	Park Street (Home Ave to Beckman Ave), Beckman Terr (Beckman Ave to 56th Ave), 56th Ave to Stanley Ave: add sidewalk or remove barriers in existing sidewalk and repave road. Beckman Ave (Park St to Beckman Terr): add sidewalk. Stanley Ave (Railroad Ave to Lloyd St): repave road.

SAFE PROGRAM DOCUMENTATION

Milwaukie's SAFE program has the stated goal to improve safety for people walking, biking, and more. The program seeks to upgrade the City's network of connections, such as sidewalks, ramps, and crossings to fill network gaps; replace portions that do not meet ADA standards; and remove barriers for people to get where they need to go safely. A measurable goal of the program is to build 27.9 miles of sidewalk and 900 ADA-compliant ramps in nine years. Paired with the SSMP program, the work undertaken on the part of SAFE has the potential to align with Safe Routes to School planning efforts around Lewelling Elementary School.

Documentation reviewed by the planning team regarding Milwaukie's SAFE program includes:

- SAFE Program Funding Breakdown
- SAFE Program Breakdown
- SAFE Program Factsheet
- SAFE Program Map

The SAFE projects that are slated to be completed within Lewelling Elementary School's boundaries, such as those on King Road and Home Avenue, have the potential to improve walking and biking to school (see previous table for a list of relevant SAFE projects). Additional information about Milwaukie's SAFE program can be found at https://www.milwaukieoregon.gov/engineering/safe.

MONROE STREET GREENWAY DOCUMENTATION

The City of Milwaukie is in the process of completing improvements on Monroe Street to create a lower-stress neighborhood greenway between downtown Milwaukie and the east city limit. The following documents were reviewed, providing insight on what pedestrian and bicyclist enhancements are in store for the corridor:

- Monroe Street Greenway "Two Pager"
- Monroe Greenway Needs and Opportunities Memo (2014)
- Monroe Greenway Public Needs and Opportunities Comment Summary
- Monroe Greenway Public Workshop Comment Summary
- Monroe Street Greenway Concept Plan (2015)

As part of the concept plan, the following improvements will be made at the intersection of SE Monroe Street and SE Linwood Avenue, which may have an impact on people walking and biking to school near Lewelling Elementary School:

- Pedestrian-/bike-activated signal at crosswalk at SE Linwood and SE Monroe Street
- Diverter at SE Linwood Avenue and Monroe Street

Enhancements that are included as part of the Monroe Street Greenway have the potential to set the stage for future improvements closer to Lewelling Elementary School. Design guidance such as for bicycle signals and road sections may be applied to future roadway designs.

NORTH CLACKAMAS SCHOOLS BUS POLICY

Transportation eligibility for students is based on the distance between the student's property line and the property line of their school of residence. North Clackamas elementary students who live more than one mile from their school of residence are eligible

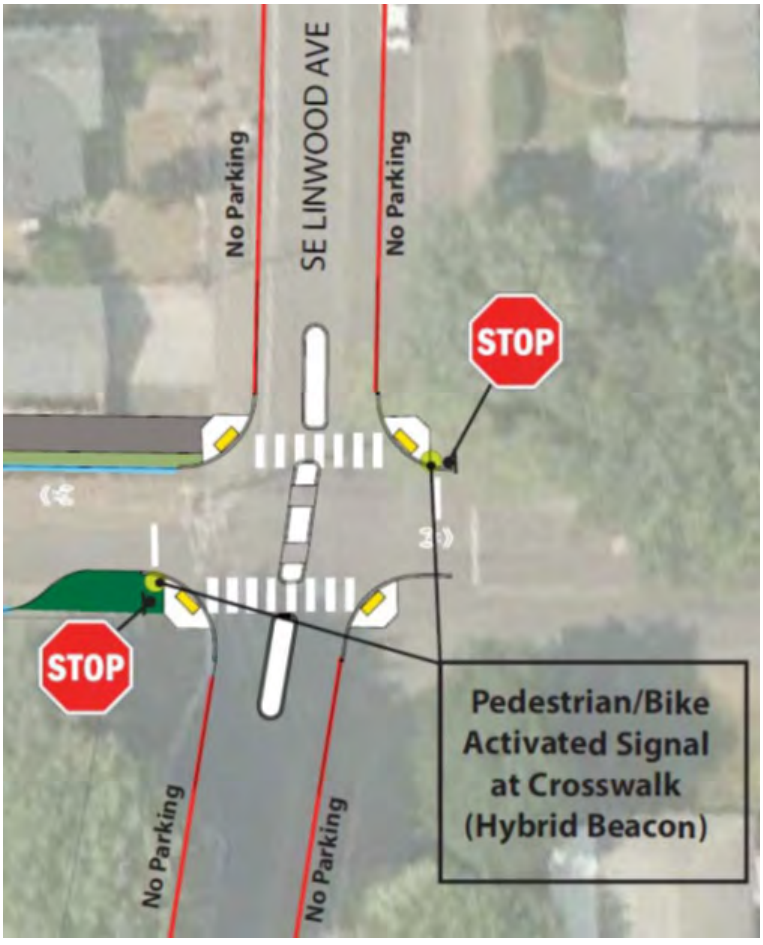
for transportation services. Distance is determined by District Transportation practice, in accordance with Oregon Administrative Ruling 581-023-0040 (1)(e)."Mile(s) from School" means the distance a student lives from school, measured from the closest, reasonable, and prudent point between the school property identified by the local board for that pupil's attendance and the property where the pupil lives. The distance will be measured over the shortest practical route on maintained public roadways or over existing pedestrian facilities capable of meeting the requirements listed in ORS 332.405 (4).

NORTH CLACKAMAS SCHOOLS SUPPLEMENTAL WALK ZONE PLAN

The Supplemental Walk Zone Plan documents the analysis of hazards in school walk zones that may require a bus stop for safety. This planning process determines certain areas within one mile of Lewelling Elementary School that are unsafe enough to allow bussing for students living in those areas based on an evaluation of speed and volume of vehicles, width and condition of the street, shoulders and sidewalks, visibility, crossings, intersections, and any other potential hazards. The results of their findings for the 2017-2018 school year can be seen in Figure 7.

Based on the supplemental plan and proposed changes, there were no changes to the number of students who were provided supplemental transportation. These maps can help the SRTS team understand where existing walking barriers may exist. Notably, the plan also describes how upgrades in sidewalks and completed construction projects can result in students not needing to be provided

Figure 5. Draft Concept of Improvements at SE Linwood Ave and SE Monroe St for Monroe Street Greenway Project



supplemental transportation which results in fewer buses needed and potentially increased ability to deploy buses elsewhere. If Safe Routes to School improvements are constructed in the future, it may result in several students who will be required to walk to school who had previously been transported by bus.

TRAFFIC STUDIES

Traffic studies conducted by the City of Milwaukie provide insight into where speeding occurs on roadways near Lewelling Elementary School. A majority of the traffic studies reviewed recorded a "85th percentile speed" higher than the posted speed limit. Posted speed limits are calculated by transportation planners and engineers as the speed which 85% of drivers will drive below to maintain safe roadway conditions. Drivers may choose to disregard the posted speed limit and instead use visual cues to determine their speed. A higher 85th percentile speed than the posted speed limit may merit the construction of traffic-calming measures along the roadway to help decrease driver speed to be better in line with the posted speed limit. Traffic studies of Stanley Avenue and Wichita Avenue revealed drivers traveling in excess of the posted speed limit, with the average speeds higher than the posted limits in some cases. Stanley Avenue also has had the greatest number of traffic studies, which may illustrate community concern around the roadway. Traffic studies revealed drivers with an 85th percentile speed at 5 miles per hour or over 5 miles per hour greater than the posted speed limit of the roadway, which may indicate excessive speeds, at the following locations:

- 40th Ave between King St and Harvey St
- Harrison St and 37th Ave (west and east)
- SE Harvey St near 33rd Ave
- SE Harvey St and 36th St
- King St at 41st Ct
- SE 42nd Ave between Covell St and Howe St
- SE 42nd Ave between Roswell St and Meadowcrest Ct
- SE 43rd Ave south of Logus Rd
- SE Stanley Ave north of SE Hazel Pl
- SE Wichita Ave north of SE Hazel Pl (two traffic studies)
- Stanley Ave and Grove Lp (two traffic studies)
- Stanley Ave near Willow St
- Stanley Ave near Hector St
- Stanley Ave from Hector St to Logus Rd
- SE Stanley Ave north of Hazel Pl
- SE Stanley Ave north of Railroad Ave

LEWELLING NEIGHBORHOOD DISTRICT ASSOCIATION TRAFFIC SAFETY PROJECT (2021)

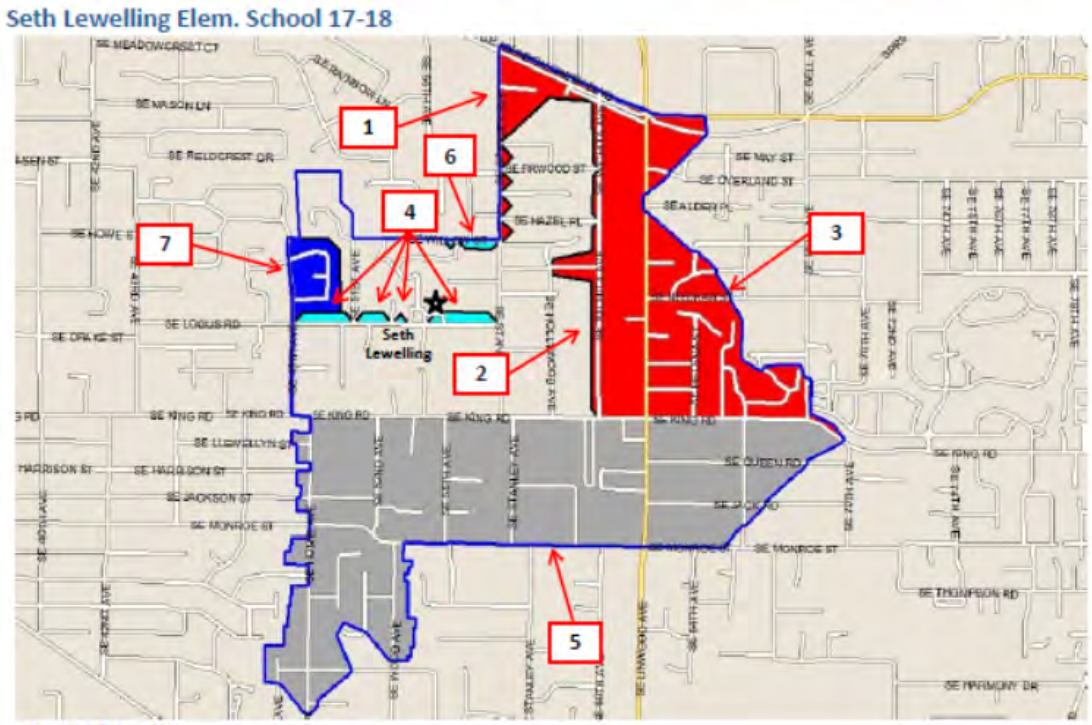
In 2021, the Lewelling Neighborhood District Association embarked on a traffic safety project in response to concerns around a growing volume and speed of vehicular traffic affecting pedestrian and bicycle safety. Key issues identified in the survey include:

- Approximately 75% of respondents felt that vehicles in the neighborhood travel faster than they should.
- Stanley Avenue was mentioned by 1/3 of survey participants as an issue in the open response section.
- Popular improvement option include: speed bumps (61% up-votes), digital speed readers (54% up-votes), and flashing signage/crosswalks (50% up-votes).

Recommendations made by Neighborhood Safety Project team include:

- Install traffic calming measures such as speed bumps, flashing signs and crosswalks, and digital speed readers on Stanley Avenue and Wichita Street.
- Add a flashing crossing light and crosswalk at the King and Stanley intersection.

Figure 7. Lewelling Elementary Supplemental Transportation Areas 2017-2018



Revised 1-3-17

1 - Hazard area - Unsafe to walk on Stanley Ave. north of Firwood St.
# of Students affected (0)

2 - Hazard area - Unsafe to walk on Wichita Ave.
# of Students affected (4)

3 - Hazard area - Unsafe to walk on or cross Linwood Ave.
# of Students affected (35)

4 - Hazard area - Unsafe to walk on north side of Logus Rd.
Students can cross Logus Rd. at an intersection, and walk on south side of road on sidewalk.
# of Students affected (1)

5 - Hazard area - Unsafe to cross King Rd.
# of Students affected (40)

6 - Hazard area - Unsafe to walk along Willow St.
# of Students affected (0)

7 - Hazard area - Unsafe to walk along 49th Ave. between Logus Rd. and Rockwood St.
# of Students affected (0)

Transit Information

TriMet serves the City of Milwaukie and Lewelling Elementary School. The nearest bus stop is at SE King and 52nd and is serviced by the 33-bus route, which runs east/west, just south of the school. This bus runs every hour with service to Oregon City and Eastern Milwaukie. The 34-bus route runs north/south with a stop at SE Linwood and Needham Ct, just east of the school. This bus arrives and departs once every hour Monday through Friday with service to the Clackamas Town Center and north to the Springwater Corridor. Both routes are within one mile of the elementary school.

Previous SRTS Efforts or Walking/Biking Encouragement Activities

EDUCATION AND ENGAGEMENT ACTIVITIES

As part of Clackamas County, Lewelling Elementary School is served by countywide Safe Routes to School programming and a coordinator. The program is funded by a Regional Travel Options grant and has goals for building program awareness; promoting active transportation; expanding bicycle, pedestrian, and driver education; and collaborating with various partners while evaluating the process. Program activities include walk and roll encouragement activities, an annual poster art contest, walking school bus groups, and school action plan writing. At this point, Lewelling Elementary School has not completed an action plan. There is a stated desire on the part of the City to partner with the SRTS education program long-term.

CONSTRUCTION ACTIVITIES

At the time of application for the ODOT PIP grant, local roadway authorities have not completed any ODOT-funded SRTS construction projects in the vicinity of Lewelling Elementary School

Crash History

Examining the recent history of collisions in the area around the school can aid understanding of 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 is 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 essential to understanding existing SRTS issues.

PEDESTRIAN AND BICYCLIST COLLISIONS

Between 2016 and 2020, there were 34 reported vehicle crashes involving people walking and biking within one mile of Lewelling Elementary School (see map in Figure 8). Notable information about pedestrian- and bicycle-involved crashes is outlined below:

- There were 18 pedestrian crashes and 16 bicycle crashes within a mile of the school between 2016 and 2020.
- Three crashes with pedestrians resulted in the fatality of the pedestrian.
- In 2016 and in 2020, two people lost their lives within a block of each other at the intersection of SE 65th/66th Ave and SE King Rd. The first incident occurred during nighttime hours, and the other occurred during daylight hours.
- In 2020, another person lost their life while walking along SE Wichita Ave south of the intersection with SE Firwood St. The crash occurred between noon and 12:59 in the afternoon. This incident was a hit-and-run crash.
- The greatest number of incidents occurred along King Road, with seven events involving a pedestrian and five events involving a bicyclist.

Additional information regarding severity of bicyclist crashes in the City of Milwaukie was furnished by the City of Milwaukie and displayed in Figure 9. The City of Milwaukie also provided details about crashes

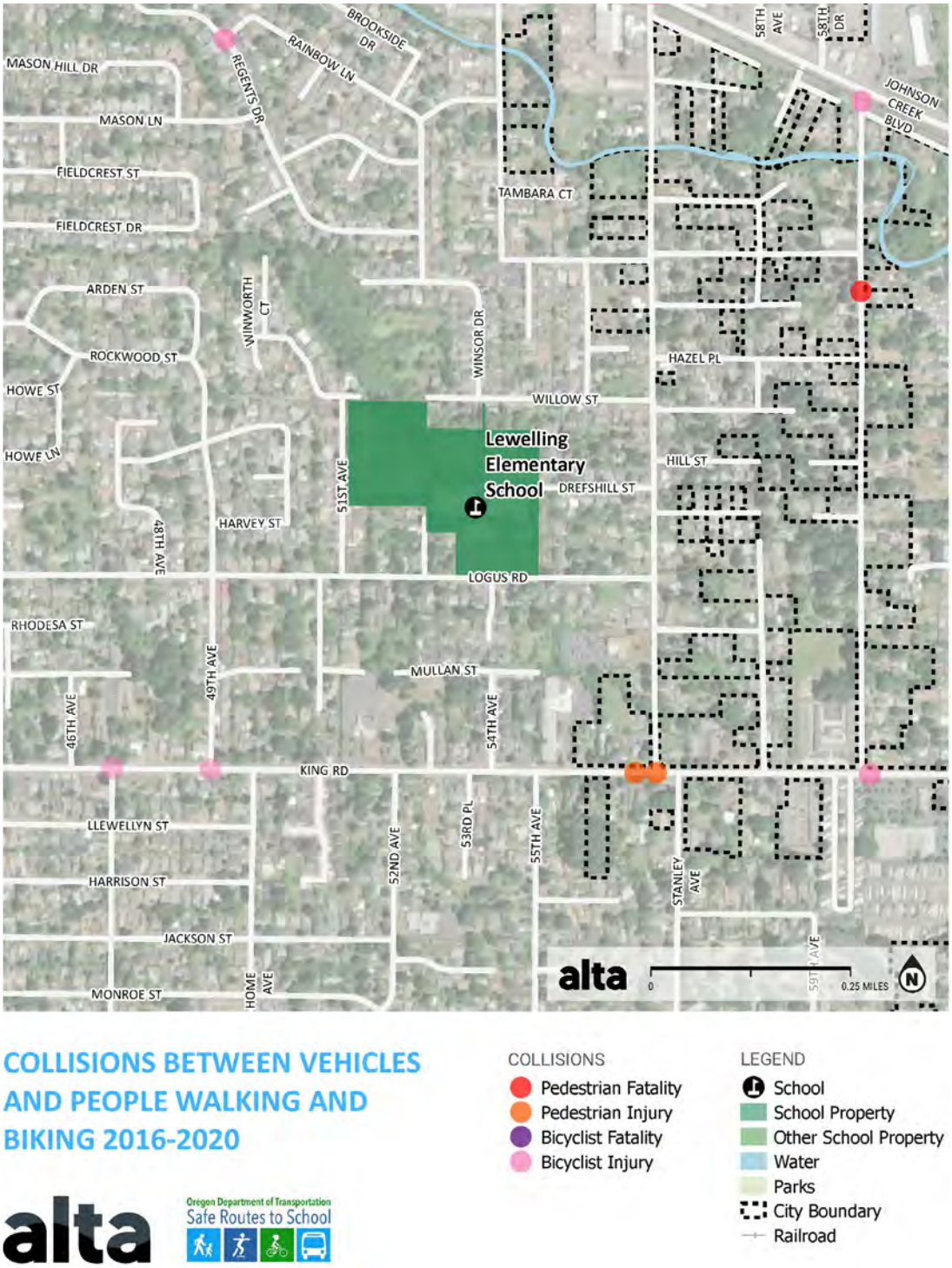
between 2020 and 2022 in Milwaukie in spreadsheet form. Notable information about pedestrian- and bicycle-involved crashes is outlined below:

- In May 2021 in the mid-morning there was a collision between a pedestrian and a vehicle at SE Linwood Ave and SE King Rd resulting in a non-injury.
- In November 2021 in the early afternoon there was a collision between a person riding a scooter and a vehicle at SE Monroe St and SE Home Ave, resulting an injury.
- In March 2022 in the mid-morning there was a collision between a person walking and a vehicle when the vehicle backed into the pedestrian at 4320 SE King Road (Safeway) resulting in a non-injury.

VEHICLE-ONLY COLLISIONS

The second set of crash maps (see Figure 10) 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. A greater number of vehicle crashes occurred along King Road and Johnson Creek Boulevard as compared to other nearby roadways.

Figure 8. Collisions between vehicles and people walking or biking near Lewelling Elementary School



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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Figure 9. Bicyclist Crashes and Severity of Injury

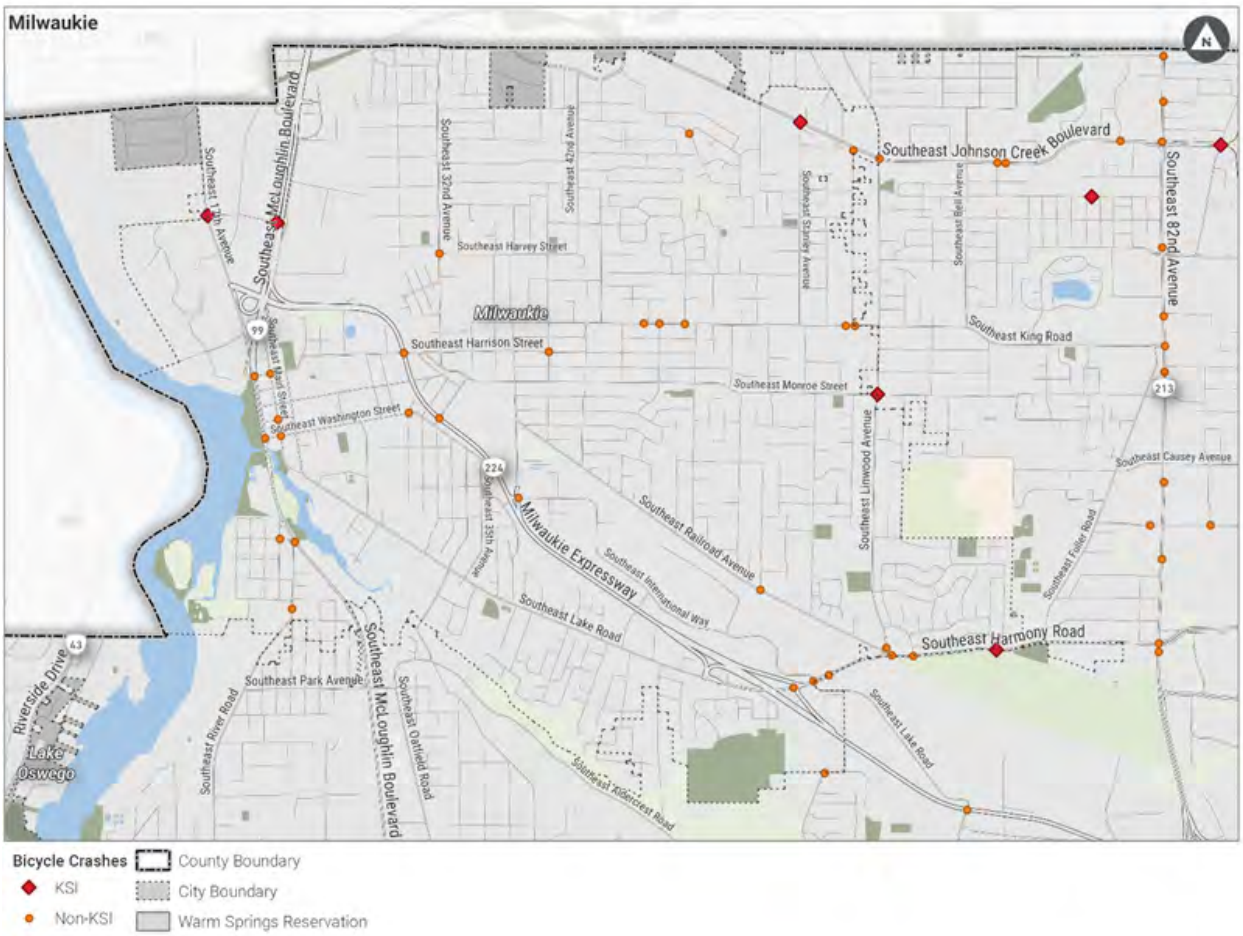
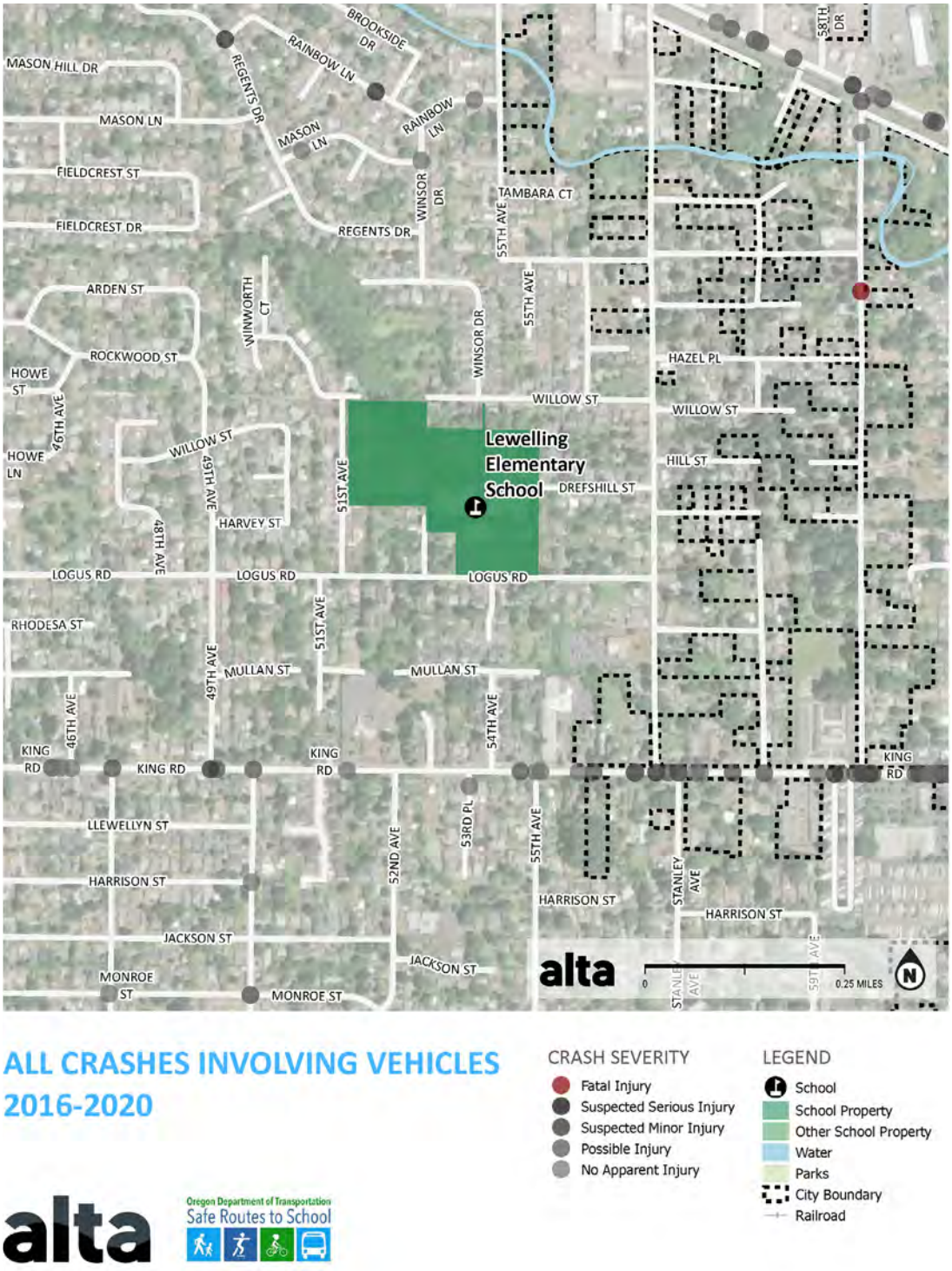


Figure 10. All crashes involving vehicles near Lewelling Elementary School



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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Oregon Department of Transportation
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. City of Milwaukie Prioritized Project Cost Estimates

ITEM DESCRIPTION	PERCENT or MEASUREMENT	COST/UNIT	UNITS	ESTIMATE
Mobilization	10%	$103,100	1	$103,100
Traffic Control	15%	$154,600	1	$154,600
Erosion Control	2%	$20,700	1	$20,700
Logus Road Traffic Calming				
Two Sets Of Chicanes				
Remove Asphalt Pavement	SF	$5	656	$3,280
Install Aggregate Base	CY	$60	8	$480
Install Concrete Curb	LF	$40	164	$6,560
Install Asphalt Pavement	TON	$230	5	$1,150
Install Concrete Pavement	SF	$30	196	$5,880
Install Object Marker Sign	EA	$500	2	$1,000
Install 'Traffic Calming Ahead' Sign	EA	$500	2	$1,000
				Subtotal: $19,350
School Warning Signs				
Remove Sign	EA	$100	2	$200
Install School Speed Sign With Flashing Beacons	EA	$17,000	2	$34,000
				Subtotal: $34,200
Logus Road Raised Crosswalk				
Remove Asphalt Pavement	SF	$5	320	$1,600
Remove Concrete Pavement	SF	$7	160	$1,120
Remove Concrete Curb & Gutter	LF	$7	32	$224
Remove Sign	EA	$100	1	$100
Install Concrete Raised Crosswalk	EA	$15,000	1	$15,000
Install ADA Detectable Warning Surface	SF	$40	40	$1,600
Install Crosswalk Sign	EA	$500	1	$500
				Subtotal: $20,144

ITEM DESCRIPTION	PERCENT or MEASUREMENT	COST/UNIT	UNITS	ESTIMATE
Logus Rd And 54th Ct Ada Curb Ramps And Crosswalk Improvements				
RRFB And Pedestrian Island Crosswalk Improvements				
Remove Concrete Pavement	SF	$7	480	$3,360
Remove Asphalt Pavement	SF	$5	288	$1,440
Install Crosswalk Markings	SF	$15	120	$1,800
Install ADA Curb Ramp	EA	$12,000	2	$24,000
Install ADA Detectable Warning Surface	SF	$40	24	$960
				Subtotal: $31,560
Logus Rd and Stanley Rd RRFB				
Continental Crosswalk Improvements				
Install RRFB Assembly - Post-Mounted	EA	$12,500	2	$25,000
				Subtotal: $25,000
Stanley Ave Sidewalk Infill				
Se Johnson Creek Blvd To Willow St (Excluding Bridge)				
Remove Asphalt Pavement	SF	$5	4182	$20,910
Remove Pavement Marking	SF	$5	90	$450
Install Aggregate Base	CY	$60	137	$8,220
Install Underground Pipe/Inlet Drainage System	LF	$160	1670	$267,200
Install Catch Basin	EA	$10,000	5	$50,000
Install Concrete Sidewalk	SF	$30	8490	$254,700
Install Concrete Curb & Gutter	LF	$50	1415	$70,750
Install Ada Curb Ramp	EA	$12,000	12	$144,000
Install Asphalt Pavement	TON	$230	35	$8,050
Install ADA Detectable Warning Surface	SF	$40	144	$5,760
Install 2' Wide Stop Line	LF	$30	72	$2,160
Install Crosswalk Markings	SF	$15	600	$9,000
				Subtotal: $841,200

ITEM DESCRIPTION	PERCENT or MEASUREMENT	COST/UNIT	UNITS	ESTIMATE
Stanley Ave Fog Lines				
Se Johnson Creek Blvd To King Rd				
Install Lane Line Stripe	LF	$4	6200	$24,800
				Subtotal: $24,800
Stanley Ave Speed Feedback Signs				
Se Johnson Creek Blvd To King Rd				
Install Speed Feedback Sign	EA	$17,000	2	$34,000
Right-Of-Way Costs	LS	$5,000	1	$5,000
				Subtotal: $34,000
Additional Costs				
Construction Engineering	15% Of Subtotal	$196,300	1	$196,300
Contingency	30% Of Subtotal & Construction Engineering	$451,500	1	$451,500
Soft Costs (Design Engineering)	15% Of Subtotal	$196,300	1	$196,300
				Total Project Cost = $2,152,754