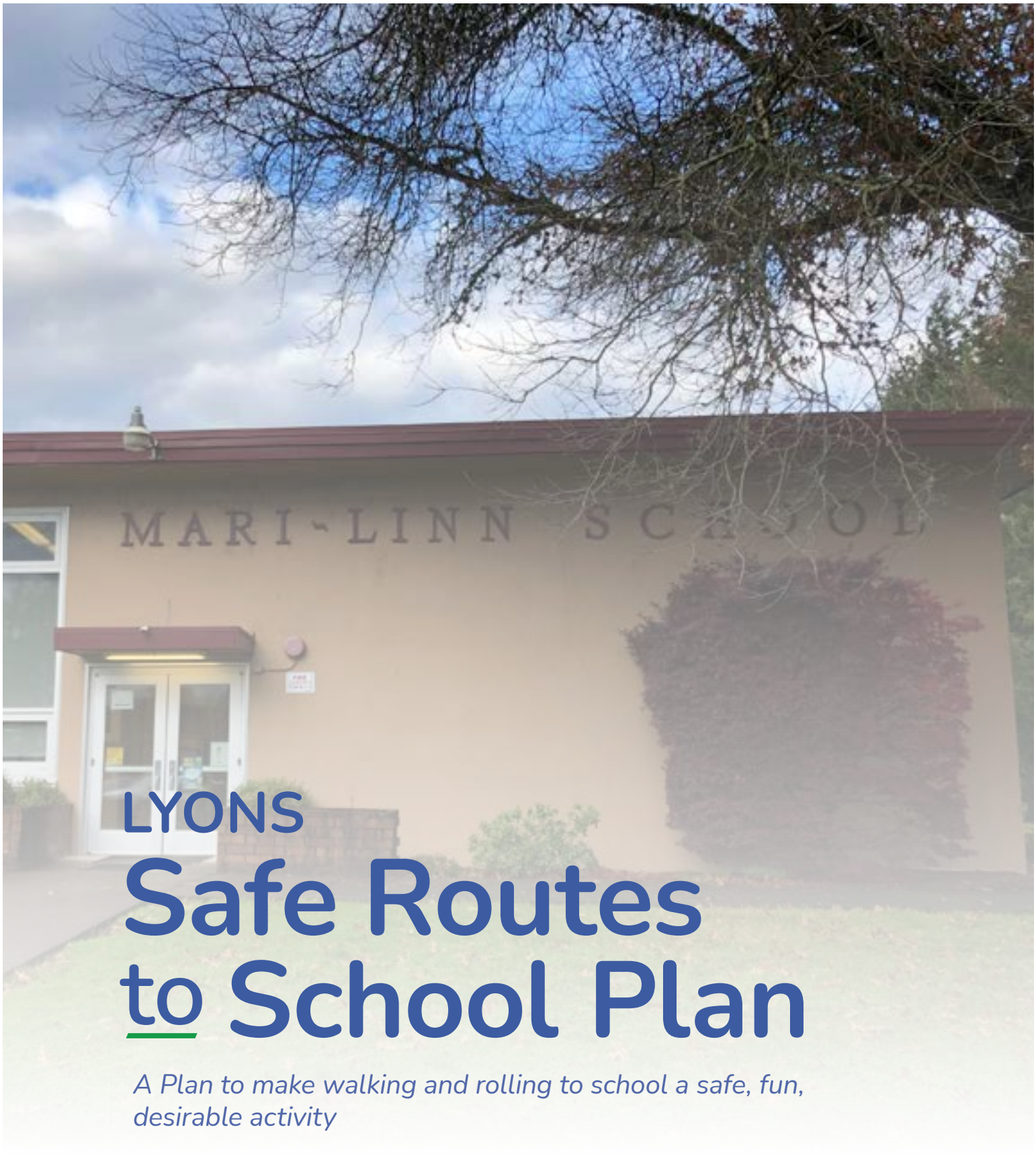


LYONS
Safe Routes to School Plan

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

CITY OF LYONS
MARI-LINN ELEMENTARY
FINAL REPORT / APRIL 2022

Oregon Department of Transportation
Safe Routes to School

ALTA · COMMUTE OPTIONS · THE STREET TRUST

ACKNOWLEDGEMENTS

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.

JERI HARBISON
Mari-Linn School

MICKI VALENTINE
City of Lyons

JENNA BERMAN
ODOT

TABLE OF CONTENTS

01 INTRODUCTION

WHAT IS SAFE ROUTES TO SCHOOL?

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

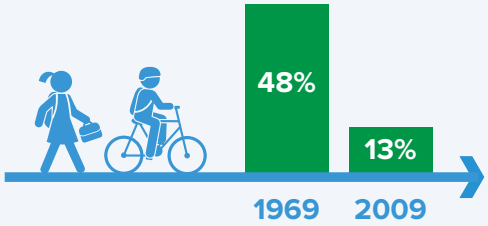
The benefits of implementing a SRTS Plan include improving safety, increasing access, encouraging physical activity, and reducing traffic congestion and motor vehicle emissions near schools. Implementing SRTS programs and projects benefit adjacent neighborhoods as well as students and their families,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

Learn more at: www.oregonsaferoutes.org

Why Safe Routes to School?

THE PROBLEM

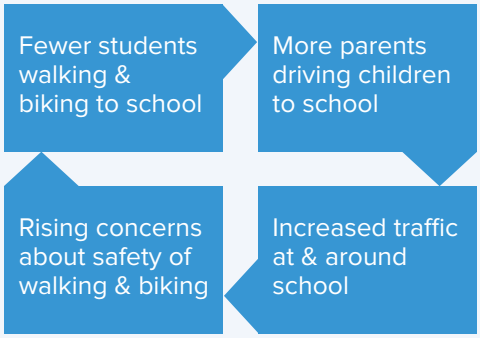
Within the span of one generation, the percentage of children walking or bicycling to school has decreased **73%.**



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

Safe Routes to School programs and activities help overcome obstacles to walking, biking, and skating by **improving safety** and making it **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.

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

* 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 travel safely.

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 provide alternative options for students to get to school 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 ASTHMA COMPLICATIONS

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 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 improvements such as:

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 priority, leading to additional shift 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."

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].

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

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

ODOT's Project Identification Program

The City of Lyons, ODOT Region 2 representatives, and the school community worked with ODOT's SRTS Technical Assistance Providers- Alta Planning + Design and the Willamette Valley and Coast SRTS Hub- to complete this SRTS Plan.

This SRTS Plan supports Oregon's statewide SRTS construction (infrastructure) and education/ engagement (non-infrastructure) efforts. The Project Identification Program (PIP) Process is an Oregon Department of Transportation (ODOT) technical grant program that connects communities in Oregon with Planning assistance to 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.*

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 Lyons SRTS Plan Process**

*For more information on the program, visit: www.oregon.gov/ODOT/Programs/Pages/SRTS-Project-Identification-Program.aspx
**The COVID-19 pandemic impacted the timeline and approach to the planning process. A detailed summary of the planning process is included in Appendix C.
***Final SRTS Plans can be found at www.OregonSafeRoutes.org

Using this Plan

This Plan lays the foundation for schools, the community, local public agency staff and ODOT to work together on reducing barriers for students walking and biking to school.

These recommendations include both long- and short-term construction improvements as well as education and encouragement program recommendations. 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.

WHO ARE YOU?

Each partner has a key role to play in contributing to this Plan's success.

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

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

I AM A CAREGIVER

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

I WORK FOR THE SCHOOL DISTRICT

- Distribute information about walking and rolling safely, and SRTS talking points in Appendix B 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.

I AM A TEACHER OR OTHER STAFF MEMBER

- Include bicycle and pedestrian safety in lesson Plans and school curriculum (see Chapter 4 and Appendix B).
- 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 citywide issues and opportunities related to walking and bicycling and to prioritize construction improvements provided in Chapter 4
- Pursue funding for improvements, using sources listed in Appendix E

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

INTRODUCTION

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.

Vision

The Lyons 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 suggested overall goals to support SRTS in the areas of health, safety, equity, or the environment. Participants in the Lyons PIP process selected Safety. A summary of community engagement activities is included in the following section.

The following are specific recommended objectives and actions based on the community-identified goals, 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.

SAFETY

Goal: Increase safety for families traveling to school, including perceptions of safety, since perceived barriers can have a real impact on whether parents allow their students to walk or bike.

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 Santiam School District will integrate on-campus infrastructure improvements into their ongoing planning processes.
- Action: The City of Lyons will consider applying to the ODOT Competitive SRTS Infrastructure Grant in 2022 for infrastructure improvements, 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 Lyons will adopt the long-term infrastructure recommendations as a part of its planning processes, potentially into its Transportation System Plan, and continue to prioritize themes from the SRTS Plan's community engagement process.
- Action: The City of Lyons and ODOT Region 2 will begin implementing recommendations as funds for capital improvements become available, particularly lower cost improvements within a quarter mile of the school, which are a priority for school leadership.

Objective 3: Pedestrian and bicycle safety education is available to students in Lyons.

- Action: The North Santiam School District and Mari-Linn school staff will coordinate with school leadership to consider applying for the ODOT SRTS Education Grant to fund bike and pedestrian education.
- Action: Mari-Linn School 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: Mari-Linn School 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.
- Action: Mari-Linn School will provide SRTS information and educational materials in English and Spanish.
- Action: Mari-Linn School 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 Lyons and ODOT Region 2 will implement infrastructure recommendations with a consideration for improvements that serve or were requested by underserved and low-income communities.

HEALTH

Goal: Increase student access to physical activity and reduce emissions near schools.

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

- Action: Mari-Linn School will look for areas of overlap between SRTS efforts and other health initiatives and P.E. class.
- Action: Mari-Linn will consider adding educational programs, such as a 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: The North Santiam School District will consider adopting SRTS-supportive language in school wellness policy.
- Action: Mari-Linn School will share relevant health statistics and messages in school newsletters, back to school night, or through other communication channels.

ENVIRONMENT

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

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

- Action: The North Santiam School District will provide parents with education and encouragement materials providing information on carpooling, walking, biking, and school buses.
- Action: The North Santiam School District 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 were shaped by community input. School leadership members, City staff, 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
- Participation in a PTSA meeting
- Virtual feedback using the online Public Input Map and survey

The City of Lyons and school leadership from Mari-Linn School promoted input opportunities throughout the planning process.

The project team hosted a walk audit in Lyons on November 9, 2021. Community members were invited to participate. In addition to the project team, two school board members attended the observation period. The team observed students walking and biking to the school at various locations near the school campus. The intention of the observation period was to identify both routes of travel as well as challenges and opportunities for improving safety and comfort of student travel to school. The team also conversed with the school crossing guard to understand the common challenges of the morning commute period. Following the observation period, walk audit participants gathered to discuss observations and possible solutions.

In addition to the walk audit, staff from Alta Planning + Design presented an overview of the project identification program at the December 7th PTSA meeting. During this meeting, participants had an opportunity to ask questions about the planning process, provide input on challenges and opportunities along the corridor, and learn about other ways to get involved.

DEMOGRAPHIC REPRESENTATION

To determine who was being reached through online engagement, the project team collected information about respondents the Public Input Map using a short survey. Of the 16 respondents who filled out the survey, majority were parents or caregivers of students who attend Mari-Linn School. One respondent stated they were “city or county staff.”

Respondents to the map were majority white (69%), and one survey respondent selected American Indian/Alaska Native. Three respondents chose “prefer not to say.”

COMMUNITY ENGAGEMENT KEY THEMES

Though limited in number, the public input map comments provided important insights and informed the SRTS Plan recommendations. The comments provided were consistent with the input provided during the walk audit and PTSA meeting, while also providing insight into other areas near Mari-Linn School.

Key themes included the following:

- Hwy 226 is perceived as a significant barrier for travel to school. The community noted the incomplete sidewalk along the west side of the road, high traffic speeds, and limited visibility at crossings as key concerns.
- There are limited opportunities to cross Hwy 226 to reach the school. Specifically, Fir St was a commonly-noted location that may benefit from a marked crosswalk.
- During dark and rainy months, water pooling creates barriers for travel along routes without sidewalks and affects crossing of Hwy 226. Further, lack of lighting limits visibility.
- There are no designated bicycle facilities leading to the school campus.

03

EXISTING CONDITIONS

INTRODUCTION

This chapter summarizes the key challenges and opportunities for families accessing schools by walking or bicycling that this Plan seeks to address.

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

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

SCHOOL CONTEXT:

Mari-Linn School

641 5TH ST

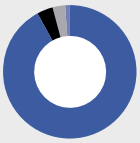
PRINCIPAL:
Jeri Harbison

ENROLLMENT:
164

GRADES SERVED:
K-8

56% of students eligible for free or reduced lunch**

DEMOGRAPHICS**



- White, non-Hispanic, 92%
- Multiracial, 4%
- Hispanic, 3%
- Native Hawaiian, Pacific Island, 1%

TOP 5 LANGUAGES SPOKEN BY STUDENTS IN DISTRICT*

English	1,833
Spanish	246
Other Languages	10

Total Languages Spoken: 12

*Source: Oregon Department of Education 2020-2021 school year

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

Mari-Linn Elementary Safety Assessment

Date: November 6th, 2021

SCHOOL LAYOUT

Mari-Linn Elementary School is a public K-8 school located in Lyons, Oregon. The school is on the west side of Hwy 226, a common trucking route. The school is set back from the highway, with a pull-through parking area located between the school building and roadway. This parking area was highly utilized on the day of the site visit. To the west of the school, there is another parking area where the majority of drop-off activity occurred. Beyond this parking lot are bike racks, a park area, and tennis courts.

The area surrounding the school is primarily residential. There are several places of worship, City Hall, and a corner market south of the school along Hwy 226.

SITE CIRCULATION

Vehicles: The parking area to the east of the school was primarily utilized by school staff, although some parents and caregivers used this space for morning drop off. This was generally for vehicles traveling from north of the school. For vehicles traveling from south of the school, drop off generally occurred in the parking lot to the south of the school. Traffic occasionally backed up on Hwy 226 for those waiting to access this area. Vehicles would then exit to the south of the school and use Dogwood St to access Hwy 226.

School Buses: Three buses were observed, and each arrived from the south and turned off Hwy 226 to the southern entrance of the school to drop off students, then circulated out via Dogwood and back onto Hwy 226. There were only several students observed on each bus.

Mari-Linn School

Site Plan

Pedestrians: There were about 10-12 students observed walking to school. Most were walking from south of the school along the eastern side of Hwy 226, where the sidewalk is complete. A marked crosswalk is located north of Dogwood, prior to the parking lot entrance. A crossing guard supports student crossings at this location. Students coming from the north were most frequently observed crossing Hwy 226 at Fir St, although some students did walk south to the crossing guard location. Several other students were observed walking along the west side of Hwy 226 from south of the school. This route includes a wide shoulder, and the crossing guard noted that pooling water is often a concern along this route.

Bicyclists/Micromobility: No students were observed biking to school. One student was seen skateboarding in the street. The bike rack in front of the tennis courts south of the school was empty.

Transit: There is no current transit service in Lyons.

Bike and Pedestrian Facilities Inventory

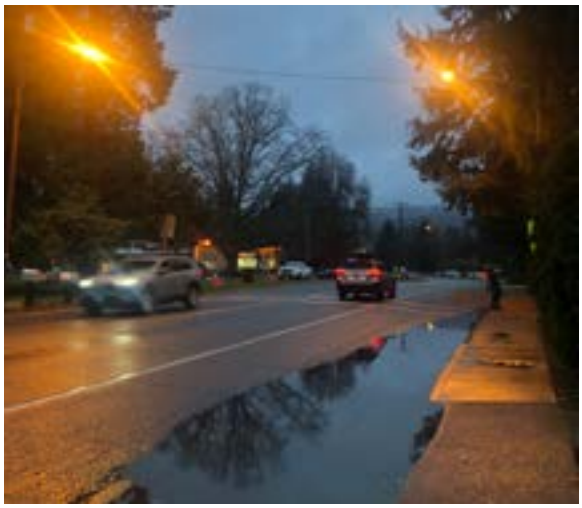
Some students walked from north of Mari-Linn, generally crossing Hwy 226 at Fir St. There are no marked crosswalks at Fir St, and students often crossed diagonally across the intersection.

The residential area north of Mari-Linn, adjacent to Hwy 226, does not include complete sidewalks. This area has low traffic volumes along residential roadways.

School Zone signs alert vehicles of the reduced speed limit during drop-off and pick-up times. For traffic traveling south, this sign with flasher is located just south of the intersection of Hwy 226 and Fir St.

The flashing School Zone sign for north-bound traffic located at the intersection of Hwy 226 and Cedar St. During the walk audit, traffic slowed noticeably once the flashers were on.

The school parking lot is where many caregivers dropped off students. It filled up with cars quickly in the morning.



During much of the school year, morning drop-off is dark and wet. Many areas near the school experience water pooling. This large puddle extended into the crosswalk where the crossing guard is stationed.

The crossing guard helps students walk across Hwy 226 to the front of the school building, just north of the intersection with Dogwood St. Recently-installed lights help illuminate this area. There is a sign marking the crosswalk, but it is partially hidden behind hedges along the east side of the roadway. There is no curb ramp here.

Hwy 226 near Mari-Linn features a sidewalk on the east side of the road that is complete. However, no sidewalk is present on the west side along school grounds and continuing south along Hwy 226. Students were observed walking to school on both sides of the roadway.

Students walking to school along the west side of Hwy 226 from south of the school typically cut across the park area immediately south of the school. With no sidewalk located along the road, this route provides the shortest path to the school entrance.

Bike racks are located south of Mari-Linn, along the tennis courts.

The stop line and pedestrian signage were added to Dogwood and Hwy 226 to increase driver awareness of pedestrian traffic, however this is still an area of conflict between pedestrians and drivers.

Students traveling along the west side of Hwy 226 south of the school cross Dogwood St, a common exit point for school buses and motor vehicles. No sidewalks and marked crosswalks limit visibility despite the improvements shown in the previous image.

The Lyons Corner Market is located south of Mari-Linn and was reported as a common destination for students after school. Infrastructure improvements are needed along Hwy 226, including sidewalk construction, marked crosswalks, and ADA-compliant curb ramps.

The intersection of 6th St & Hwy 226 is a challenging crossing for pedestrian travel. Hwy 226 curves as it turns into Main St heading east, making it difficult for vehicles to clearly see pedestrians. Additionally, there is no stop sign for southbound traffic, and there are no marked crosswalks on the south leg of this intersection.

Key Themes

- Crossing Hwy 226 at Fir St is a popular route for many students; however, this intersection does not have a marked crosswalk to facilitate travel across the highway.
- A wide shoulder currently supports travel south of the school along the west side of Hwy 226. This area does not have a sidewalk for most of the area between the Lyons Corner Market and Mari-Linn School. Further, water pools along the shoulder during rainy seasons.
- The existing marked crosswalk north of Dogwood St across Hwy 226 features improved lighting and signage. However, improvements should be considered that can increase visibility of students crossing at this location.
- Crossing improvements across Dogwood St along the west side of Hwy 226 can improve visibility of students traveling south of the school. This is a popular crossing for many students and also a popular route for vehicles as they exit the school parking lot after pick-up/drop-off.
- The intersection of Hwy 226/6th St/Main St south of Mari-Linn is challenging to travel. The highway turns south at this location, with southbound traffic not stopping. There is currently no marked crosswalk on the south leg of this intersection, and crosswalks are faded on the north and east legs. This intersection is a significant barrier for students traveling from east along Main St.
- There are currently no sidewalks or designated bike routes for students to travel from the eastern areas of the city to the school that provide alternative routes to Hwy 226, both for pedestrian and bicycle travel.

04 NEEDS AND RECOMMENDATIONS

INTRODUCTION

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 bike to school – and benefit 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 towards building out the physical elements that make walking, biking, and rolling safer and more comfortable. Also, relative to many construction projects, most education and encouragement programs are very low cost.

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, and are tailored to meet the needs and interests of the school community.

Construction Project Recommendations

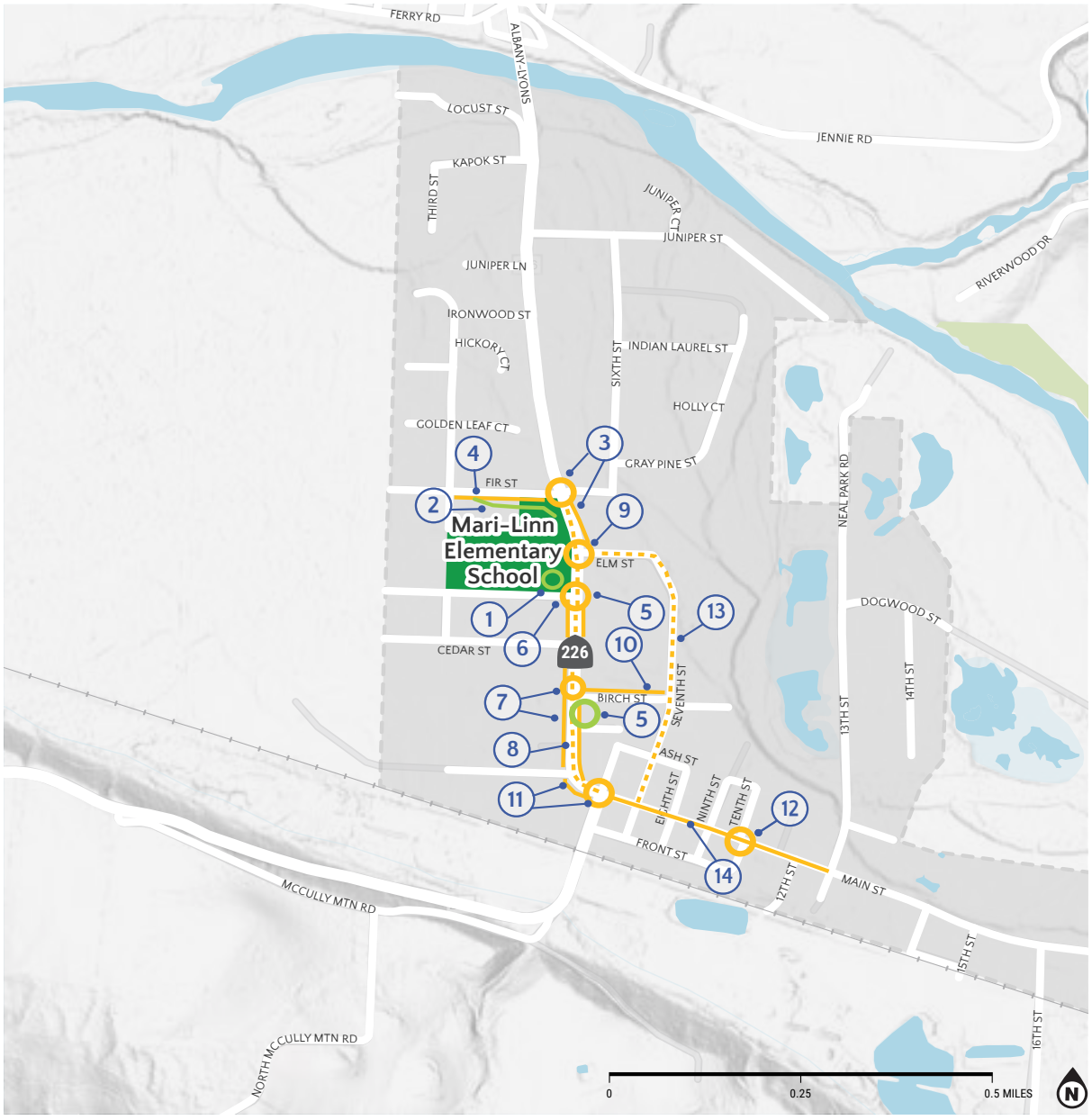
Construction project recommendations are shown and described on the following pages. The map on the following page is a guide to the location of recommendations described in detail in Table 1. A more detailed table is included in Appendix F that includes: the needs identified at each location and ensuing construction recommendations, as well as 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.

This Plan does not represent a comprehensive list of every project that could improve conditions for walking and bicycling in the neighborhood. 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.

The recommendations are categorized into implementation timelines based on existing conditions, input from local partners, readiness of the school or community to accomplish the recommendation, resources available and other factors:

- **Short term:** within a year
- **Medium term:** 1-3 years
- **Long term**: 3-5 years

Implementation takes place continuously over time, with cooperation amongst partners and often, new sources of funding. Appendix F lists a variety of funding sources that can be used to implement the recommendations outlined in this section.



IMPROVEMENT RECOMMENDATIONS

- Street Improvement
- Crossing Improvement
- Off-Street Improvement (Trail/Path)
- Off-Street Improvement
- Bike Lane Improvement

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

alta

Safe Routes to School

Table 1. Mari-Linn School Infrastructure Needs and Recommendations

Rec #	Recommendation	Timeline
	Mari-Linn School Grounds	
01	Replace existing bike racks with covered, U-style bike racks.	Medium term
02	Establish a pedestrian-friendly path that provides access across the school field directly to the school entrance.	Medium term
	Fir St and Hwy 226	
03	Install high-visibility continental crosswalk markings and School Crossing warning signage (S1-1, W16-7P) across north leg of intersection with ADA-compliant curb ramps. Include curb extension on north-east corner to reduce crossing distance and improve visibility.	Short term
	Expand the established school speed zone to the north and relocate the existing southbound School Speed Zone sign assembly a minimum of 200 feet north of Fir St. Relocate the existing northbound END SCHOOL ZONE sign (S5-2) and SPEED LIMIT sign (R2-1) to match the expanded limits of the school speed zone.	Short term
	Revise the School Zone signs that are currently located north of Fir St to simplify the messaging. Remove the School Advance Crossing assembly (S1-1, W16-9P) and the TRAFFIC FINES DOUBLE IN THIS SCHOOL ZONE sign. Install a School Zone Sign assembly (S1-1, S4-3P) with the FINES HIGHER sign (R2-6P) added below, about 100-200 feet in advance of the School Speed Zone sign assembly. Provide pedestrian-oriented lighting at the crosswalk that illuminates the front side of pedestrians as viewed from the approaches to the crosswalk.	Short term
	Consider re-striping and narrowing of travel lanes to implement a pedestrian refuge island, to increase safety and shorten crossing distances for pedestrians. Install buffered bike lanes for both directions of travel to provide continuous bicycle facilities along Hwy 226.	Medium term
04	Install sidewalk along the south side of Fir St to connect with the proposed crosswalk across the highway. This includes approximately 750 feet of sidewalk west of Hwy 226 and 300 feet of sidewalk east of Hwy 226.	Long term
	Dogwood St. and Hwy 226	
05	Trim vegetation along the sidewalk on the east side of the road to improve visibility of the existing School Crossing sign and remove obstructions in the walking path. Consider installing an in-street pedestrian sign (R1-6C).	Short term

Rec #	Recommendation	Timeline
	Re-stripe the crosswalk approximately 90 feet north (to accommodate students traveling to/from the north), in approximate alignment with the paved pedestrian path along the south side of the school parking area. This location will facilitate access to the school entry and also provide direct access to the school's bicycle racks. Install approximately 145 feet of sidewalk along the west side of the road, between Dogwood and the pedestrian path on the school campus. Install high-visibility continental crosswalk markings, ADA-compliant curb ramps, and School Crossing sign assemblies (S1-1, W16-7P). Provide pedestrian-oriented lighting at the crosswalk that illuminates the front side of pedestrians as viewed from the approaches to the crosswalk. Consider installation of a Rectangular Rapid Flashing Beacon (RRFB). Consider reviewing the possibility of including a pedestrian refuge island in conjunction with re-striping of the roadway and with consideration for buffered bike lanes.	Medium term
	Revise the School Zone signs that are currently located south of Dogwood St to simplify the messaging. Remove the School Advance Crossing assembly (S1-1, W16-9P) and the TRAFFIC FINES DOUBLE IN THIS SCHOOL ZONE sign. Install a School Zone Sign assembly (S1-1, S4-3P) with the FINES HIGHER sign (R2-6P) added below, on the existing sign pole used for the TRAFFIC FINES DOUBLE IN THIS SCHOOL ZONE sign	Short term
	Dogwood St.	
06	With installation of sidewalk along Hwy 226, mark the crosswalk across Dogwood and include ADA-compliant curb ramps.	Long term
	Install advanced stop line and STOP pavement marking on Dogwood	Short term
	Hwy 226	
07	Install approximately 1800 feet of sidewalk along the west side of Hwy 226, located between the northern boundary of the school's parking lot and Main St. Include ADA-compliant curb ramps at crossings of Cedar St, Ash Ln, and Main St.	Medium term
	Install a new high-visibility marked crosswalk on the north leg of the Hwy 226 at Birch St intersection.	Long term
08	Install buffered bike lanes from intersection of Hwy 226/6th St/Main St. to Fir St, in both directions of travel. Integrate enhanced crossings at key locations across corridor, including Birch Street, with consideration for buffered bike lane implementation. In the long term, install vertical elements (e.g. flexible posts or concrete curbing) for greater separation.	Medium term

Rec #	Recommendation	Timeline
	Elm St.	
09	Install ADA-compliant curb ramps to support crossing of Elm St along east side of Hwy 226.	Medium term
	Birch St.	
10	Install approximately 630 feet of sidewalk along the north side of Birch St, east of Hwy 226. Include ADA-compliant curb ramps.	Long term
	Hwy 226 / Main St / 6th St	
11	Install approximately 275 ft of sidewalk along the south side of Hwy 226 between Main St and the intersection of Hwy 226/Main St/6th St. Include ADA-compliant curb ramps. Project may include access management for adjacent land uses.	Long term
	Perform a traffic study to review the ability to establish an all-way stop at the intersection. Install a high-visibility crosswalk on the south leg of the intersection. Inclusion of ADA-compliant curb ramps and pedestrian infrastructure meeting ODOT's standards may require property acquisition.	Medium term Long term
	Install high-visibility continental crosswalk markings on the east leg of the intersection to replace existing markings. Install ADA-compliant curb ramps. Install Pedestrian Crossing sign assemblies (W11-2, W16-7P).	Medium term
	Main St and 10th St	
12	Install high-visibility continental crosswalk markings across the east leg of Main St at 10th St. Install Pedestrian Crossing sign assemblies (W11-2, W16-7P) and ADA-compliant curb ramps at the proposed crossing. Refine access control along north side of roadway to formalize driveway approaches. Install curbs and sidewalk to define the corners of 10th St on the north side of Main St.	Medium term
	7th St / Birch St / Elm St	
13	Begin phased development for a neighborhood greenway that begins at 7th St and Main St., travels north along 7th St, and connects to Birch St and Elm St. Elm St will provide access to the school campus via the proposed relocated crossing just south of Elm St. Consider widening sidewalk between Elm St. and new crosswalk to encourage use of crosswalk.	Long term
	Main St	
14	Implement enhanced crossings along Main St, between 6th St and 13th St. Include high visibility continental crosswalk markings, curb extension, and ADA-compliant curb ramps to reduce crossing distance and increase visibility along the corridor. Improvements should consider both existing and future bikeway opportunities.	Long term

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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. Table 2 includes additional 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 provided on page 54 encourages students and families to consider walking and biking to school. It also provides a School Commute network for the City to focus future infrastructure investments along the most important routes to school.

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 (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 - coming in fall 2022

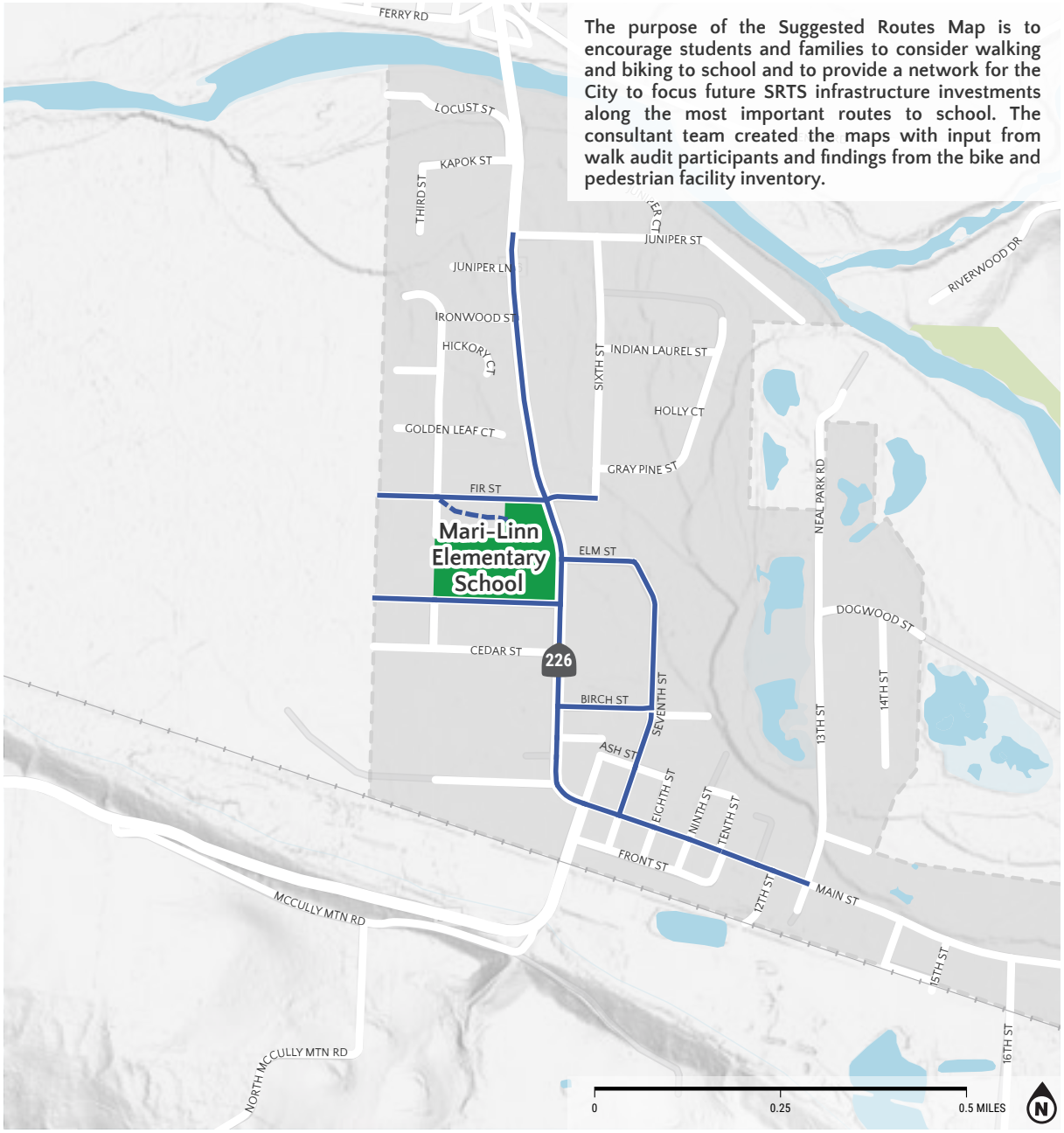
Learn more and keep in touch by signing up for the ODOT SRTS Newsletter:
https://www.oregonsaferoutes.org/

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.

SRTS champions or involved staff in or near Lyons are part of the Coast/Willamette Valley Hub. Register for the meetings and office hours here or fill out the contact form to be connected with your Regional Hub Coordinator. Review Table 2 to identify educational and encouragement priorities and discuss with the Regional Hub Coordinator.

The purpose of the Suggested Routes Map is to encourage students and families to consider walking and biking to school and to provide a network for the City to focus future SRTS infrastructure investments along the most important routes to school. The consultant team created the maps with input from walk audit participants and findings from the bike and pedestrian facility inventory.



SUGGESTED WALKING AND BIKING ROUTES

- Suggested Route
- Off-street connection
- Railroad
- School Property
- Parks
- Water
- City Boundary

Table 2. Mari-Linn Elementary School Education and Encouragement Recommendations

Activity	Responsible Party	Description (Additional details provided on following page)	Timeline	Resources Needed	Inclusion Considerations	Measures of Success
Expand opportunities to promote biking and walking safety	Teachers	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.	Short term	Lesson plans	Incorporating wheelchair users into pedestrian counts	More conversation and curiosity from students about active transportation in Lyons.
Pedestrian Safety Education	ODOT SRTS Team, PE Teachers	Pedestrian Safety Education can be incorporated into any class, but is typically a part of PE for grades K-5. Starting in fall 2022, the ODOT SRTS team will be training PE teachers across the state with a new curriculum.	Medium term	Curriculum (Neighborhood Navigators 2.0 is a good place to start)	Communicate with families ahead of time to learn about what needs their children may have	Number of students walking to school, excitement to engage with the curriculum
Bike Skills Education	ODOT SRTS Team, PE Teachers	Bike skills is typically for grades 6-8. The ODOT SRTS team will be training PE teachers in 2022-2023 to facilitate bike education and increasing access to bike fleets.	Long term	Curriculum (Neighborhood Navigators 2.0 is a good place to start)	Communicate with families ahead of time to learn about what needs their children may have related to riding bikes	Number of students biking to school, excitement to engage with the curriculum
Communication with Parents and Caregivers	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.	Short term	Letter template, travel tips flyer	Provide materials in Spanish, or other languages as needed.	Parents are interesting in volunteering and are asking questions
Host a Crossing Guard Appreciation Event	Administration	Students can write thank you cards upon arrival or during the school day, families can be invited to bring a gift or treat for the crossing guard.	Short term	Outreach materials about the event (i.e. posters, emails), art supplies	Offering multiple ways of expressing thanks. If some students don't want to draw, they could sing a song or ask the crossing guard if they want a hug instead.	Crossing guard feels appreciated, many students participate

Activity	Responsible Party	Description (Additional details provided on following page)	Timeline	Resources Needed	Inclusion Considerations	Measures of Success
Student Crossing Guard Program	Crossing Guard	Student volunteers can sign up to help the adult crossing guard at arrival and dismissal. Jobs may include waving flags to stop traffic, waving at cars as they pass, and guiding students across the street.	Long term	Safety vests, signs or flags, adult crossing guard	Offer multiple ways for students to participate. If students aren't able to help with the crossing itself, they can greet students after they cross the street safely.	Students are excited to volunteer and feel safe, adult crossing guard approves of program.
Walk+Roll to School Day	ODOT SRTS Team, Administration	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.	Medium term	Printer, adult volunteers to pass out incentives	Ensure that students who live too far to walk or bike are able to participate on campus. Consider having a remote drop off site.	Number of students and community members participating
Lunchtime or After School Walking Club	Teacher, or After school Staff	To get students moving during the school day or after school, parent or teacher volunteers could lead students in small groups on walks to familiarize themselves with what routes they may be able to take the school and practice safe walking.	Medium term	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
Community School Safety Campaign	Administration	A school safety zone campaign can be used to share simple safety messages and increase the visibility of the school zone.	Medium term	Outreach materials	Provide materials in Spanish or other languages as needed.	Feedback from families, observations from school staff.
Walking School Bus and Bike Train	Parent volunteers, administration	Walking school buses and bike trains are ways for students to meet up while walking and biking in order to travel together. These typically include adult volunteers or a SRTS coordinator to walk with students.	Medium term	Communication with families, signs, volunteers, designated meet up points	Consider how students with mobility challenges can participate.	Number of students participating.

PARENT EDUCATION AND OUTREACH

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

Resources include:

- 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.

SAFE ROUTES TO SCHOOL COORDINATOR POSITION

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

Funding for SRTS Coordinators is available through ODOT's competitive Education Grant process, as well as some regional and local governments.

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

WALKING SCHOOL BUS/BIKE TRAIN

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

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

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

WALK + ROLL TO SCHOOL DAYS

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

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

September: Back to School

October: International Walk to School Day

November: Ruby Bridges Walk to School

February and March: Winter Walk+Roll

April: Earth Month

May: Bike Month

Parents can set up a table on the event day to provide refreshments and small rewards for families who participate, as well as maps, lights, and safety information to encourage more students and families to join in the fun. Even families who live too far from school to walk and bike can participate by driving to a designated central location and walking together from there. Coffee and breakfast can be provided, and students can dress up or hold posters to make

a fun, parent-supervised parade to school. Walks could also take place as a part of another health-related event or to benefit a cause.

Resources include:

- 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.

05

IMPLEMENTATION

INTRODUCTION

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

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

Project Prioritization Process

Walk audit and community meeting participants provided feedback on how actions and recommendations should be prioritized in their community 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 was 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?

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

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

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.

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.

High Priority Construction Projects

The following are top priority improvements recommended for the Competitive ODOT SRTS Infrastructure 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 City of Lyons and Mari-Linn Elementary will be the relevant parties to prepare the Competitive ODOT SRTS IN Grant and ODOT Community Path Applications for these projects.

Table 3 (page 42) provides a planning-level cost estimate for each recommendation to the City. Table 4 (page 42) provides additional project-specific information needed for ODOT grant applications.

Appendix E includes more detailed project cost estimates, as well as a graphical guide to the grant eligibility process.

Table 3. City of Lyons Implementation Priority Projects

Rec. #	PROJECT DESCRIPTION
	Fir St and Hwy 226
03	Install high-visibility continental crosswalk markings and School Crossing warning signage (S1-1, W16-7P) across north leg of intersection with ADA-compliant curb ramps. Include curb extension on north-east corner to reduce crossing distance and improve visibility.
	Expand the established school speed zone to the north and relocate the existing southbound School Speed Zone sign assembly a minimum of 200 feet north of Fir St. Relocate the existing northbound END SCHOOL ZONE sign (S5-2) and SPEED LIMIT sign (R2-1) to match the expanded limits of the school speed zone.
	Revise the School Zone signs that are currently located north of Fir St to simplify the messaging. Remove the School Advance Crossing assembly (S1-1, W16-9P) and the TRAFFIC FINES DOUBLE IN THIS SCHOOL ZONE sign. Install a School Zone Sign assembly (S1-1, S4-3P) with the FINES HIGHER sign (R2-6P) added below, about 100-200 feet in advance of the School Speed Zone sign assembly. Provide pedestrian-oriented lighting at the crosswalk that illuminates the front side of pedestrians as viewed from the approaches to the crosswalk.
	Dogwood St. and Hwy 226
05	Re-stripe the crosswalk approximately 90 feet north (to accommodate students traveling to/from the north), in approximate alignment with the paved pedestrian path along the south side of the school parking area. This location will facilitate access to the school entry and also provide direct access to the school's bicycle racks. Install approximately 145 feet of sidewalk along the west side of the road, between Dogwood and the pedestrian path on the school campus.
	Dogwood St.
06	With installation of sidewalk along Hwy 226, mark the crosswalk across Dogwood and include ADA-compliant curb ramps.
	Hwy 226
07	Install approximately 1800 feet of sidewalk along the west side of Hwy 226, located between the northern boundary of the school's parking lot and Main St. Include ADA-compliant curb ramps at crossings of Cedar St, Ash Ln, and Main St.
08	Install buffered bike lanes from intersection of Hwy 226/6th St/Main St. to Fir St, in both directions of travel. Integrate enhanced crossings at key locations across corridor, including Birch Street, with consideration for buffered bike lane implementation. In the long term, install vertical elements (e.g. flexible posts or concrete curbing) for greater separation.

Next Steps

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

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

START SMALL

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

FOCUS ON EQUITY

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

BUILD PARTNERSHIPS

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

EMPOWER STUDENTS AS LEADERS

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

TRACK PROGRESS

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

CELEBRATE SUCCESS

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

06

APPENDICES

APPENDICES

APPENDIX A. FOR MORE INFORMATION

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

NATIONAL RESOURCES

Safe Routes to School Data Collection System

http://www.saferoutesdata.org/

Pedestrian and Bicycle Information Center

http://www.pedbikeinfo.com/

National Center for Safe Routes to School

http://www.saferoutesinfo.org/

Safe Routes to School Policy Guide

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

School District Policy Workbook Tool

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

Safe Routes to School National Partnership State Network Project

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

Bike Train Planning Guide

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

10 Tips for SRTS Programs and Liability

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

Tactical Urbanism and Safe Routes to School

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

STATE RESOURCES

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

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

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

APPENDIX B. SRTS TALKING POINTS

To ensure a successful SRTS program, it is crucial to get school principals and other school administration leaders the communications resources they need to share the importance of SRTS with caregivers. To get these leaders involved initially, in-person meetings are a great start and opportunity to share SRTS goals and potential activities for the year. This gives school leaders a chance to learn more about the program, but also share thoughts and ideas unique to their school. Share with them the academic benefits: students that walk or bike to school arrive awake, alert, and ready to learn, and physical activity before school increases academic performance and reduces student absences.

The following list of facts and statistics can be used by principals and other SRTS advocates in communications materials to share the benefits of a SRTS program. These points have been collected from national sources, and apply to all schools and school districts: big or small, urban or rural, etc.. They are intended to be used in communication materials such as school newsletters, emails, school websites, social media posts, signs, videos, and direct communications with caregivers (including handouts, emails, texts, automated calls, etc.). Except where otherwise noted, the following are based on research summarized by the National Center for Safe Routes to School. More information, including primary sources, can be found at http://guide.saferoutesinfo.org.

Traffic: Costs, Congestion, and Safety

- In 1969, half of all US students walked or biked to school; by 2009, that number had dropped to just 13 percent.
- In the United States, 31 percent of students in grades K–8 live within one mile of school; 38 percent of these students walk or bike to school. You can travel one mile in about 20 minutes by foot or six minutes by bicycle.
- Personal vehicles taking students to school accounted for 10 to 14 percent of all personal vehicle trips made during the morning peak commute times. Walking, bicycling, and carpooling to school reduces the numbers of cars dropping students off, reducing traffic safety conflicts with other students and creates a positive cycle—as the community sees more people walking, biking, and rolling, more people feel comfortable walking and bicycling.
- Reducing the miles caregivers drive to school by just one percent would reduce 300 million miles of vehicle travel and save an estimated $50 million in fuel costs each year.
- Did you know that as more people bicycle and walk, biking and walking crash rates decrease? This is also known as the ‘safety in numbers’ principle. As more families walk and bike to school, streets and school zones become safer for everyone.

Health: Physical Activity and Obesity

- The U.S. Department of Health and Human Services recommends that children do one hour or more of physical activity each day. Walking just one mile each way to and from school would meet two-thirds of this goal.
- Studies have found that students who get regular physical activity benefit from healthy hearts, lungs, bones, and muscles; reduced risk of developing obesity and chronic diseases; and reduced feelings of depression and anxiety. Teachers also report that students who walk or bike to school arrive at school alert and "ready to learn."
- Researchers have found that people who start to include walking, biking, and rolling at part of everyday life (such as the school commute trip) are more successful at sticking with their increased physical activity in the long term than people who join a gym.
- One recent study showed that students who joined a "walking school bus" ended up getting more physical activity than their peers. In fact, 65 percent of obese students who participated in the walking program were no longer obese at the end of the school year.
- Childhood obesity rates have more than tripled in the past 30 years, while the number of students walking, biking, and rolling to school has declined. According to the 2009 National Household Travel Survey, 13 percent of students between the ages of five and 14 walked or biked to or from school, compared to 48 percent in 1969.

Environment: Air Quality, Climate Change and Resource Use

- Did you know? When you walk, bike, or carpool, you're reducing auto emissions near schools. Students and adults with asthma are particularly sensitive to poor air quality. Approximately 5 million students in the U.S. suffer from asthma, and nearly 13 million school days per year are lost due to asthma-related illnesses.
- Did you know that modern cars don't need to idle? In fact, idling near schools exposes students and vehicle occupants to air pollution (including particulates and noxious emissions), wastes fuel and money, and increases unnecessary wear and tear on car engines. If you are waiting in your car for your student, please don't idle – you'll be doing your part to keep young lungs healthy!
- Families that walk two miles a day instead of driving will, in one year, prevent 730 pounds of carbon dioxide from entering the atmosphere.
- Short motor-vehicle trips contribute significant amounts of air pollution because they typically occur while an engine's pollution control system is cold and ineffective. Thus, shifting 1 percent of short automobile trips to walking or biking decreases emissions by 2 to 4 percent.
- Eight bicycles can be parked in the space required for just one car.

APPENDIX C. PLANNING PROCESS

The Lyons 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 Project Management Team (PMT) to identify issues and opportunities related to SRTS. Existing Conditions information is included in Chapter 3 and Appendix D.

School Safety Assessment

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

WALK AUDIT

During the 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 D. EXISTING CONDITIONS

Plan Review

LINN COUNTY TRANSPORTATION SYSTEMS PLAN (2018)

This 2018 version is an update to the original TSP which was adopted in 2003. The 2007 update was also reviewed. In the recent 2018 update, Goal 2, Active Transportation, is relevant to SRTS and meant to "increase convenience and availability of bicycle and pedestrian modes." There are 6 objectives within Goal 2, which include:

1. Identify improvements that encourage more use of the facilities

2. Improve walking and biking connection to county amenities

3. Enhance wayfinding signage for those walking and biking

4. Promote walking, biking, and sharing the road through programs and public information

5. Identify necessary changes to land development code to ensure connectivity for bicycle and pedestrian trips

6. Support rails-to-trails programs

The effectiveness of these goals is measured by scoring how much connectivity and accessibility are improved, how much access to community destinations are improved, and how much the facility amenities are enhanced. There are other goals that are in line with the mission of SRTS including Goal 4: Equity, Goal 5: Health and Safety, and Goal 6: Sustainability.

LYONS COMPREHENSIVE PLAN (2003)

Within the Lyons Comprehensive Plan, there is a transportation goal which aims "to provide a safe, convenient, and economic transportation system for the residents of the City of Lyons and those traveling through the community." Goal #12 within the transportation goal is related to identifying and providing resources for the development of bicycle and pedestrian routes connecting key community locations including Mari-Linn Elementary School.

Previous SRTS Efforts or Walking/Biking Encouragement Activities

EDUCATION AND ENGAGEMENT ACTIVITIES

Though there has been no previous SRTS activities in Lyons, there is a crossing guard who helps students cross OR-226. She is an important part of the Mari-Linn community, and knows most students by name. She assists with crossing the state highway during school pick up and drop off times.

CONSTRUCTION ACTIVITIES

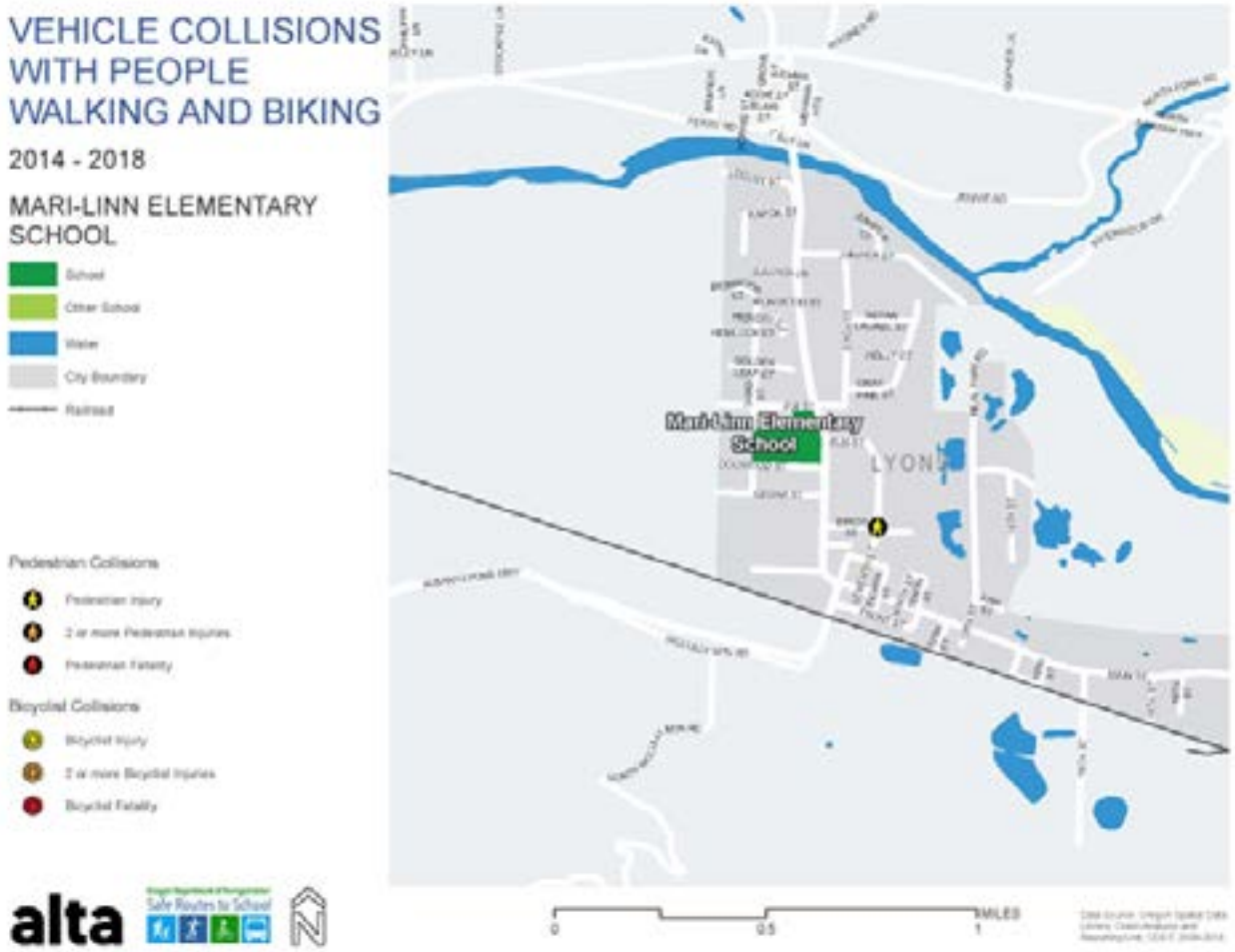
Though there haven't been any major construction projects, there was a stop line added to the corner of Dogwood & OR-226. Many parents and caregivers drop off and then exit onto the highway at Dogwood. Many students who walk to school also cross the street there, and the stop line keeps cars from coming into the roadway where students are crossing. Signage indicating that there are pedestrians around is also meant to keep cars behind the stop line,

Crash History

From 2014 to 2018, there was one pedestrian collision at Birch & 7th, south of the school.

There were many vehicle only collisions between 2014 and 2018 mostly north and south of the school. North of the school, the majority of crashes occurred on OR-22, and south of the school, many crashes occurred at the in between the school and the corner market where the road curves.

See the maps on the following pages for locations of the crashes between 2014 and 2018.


VEHICLE COLLISIONS WITH PEOPLE WALKING AND BIKING
2014 - 2018
MARI-LINN ELEMENTARY SCHOOL
School
Other School
Water
City Boundary
Railroad
Pedestrian Collisions
Pedestrian Injury
2 or more Pedestrian Injuries
Pedestrian Fatality
Bicyclist Collisions
Bicyclist Injury
2 or more Bicyclist Injuries
Bicyclist Fatality
Mari-Linn Elementary School
LYONS
0
0.5
1
MILES
alta
Safe Routes to School

VEHICLE COLLISIONS

2014 - 2018

MARI-LINN ELEMENTARY SCHOOL

School

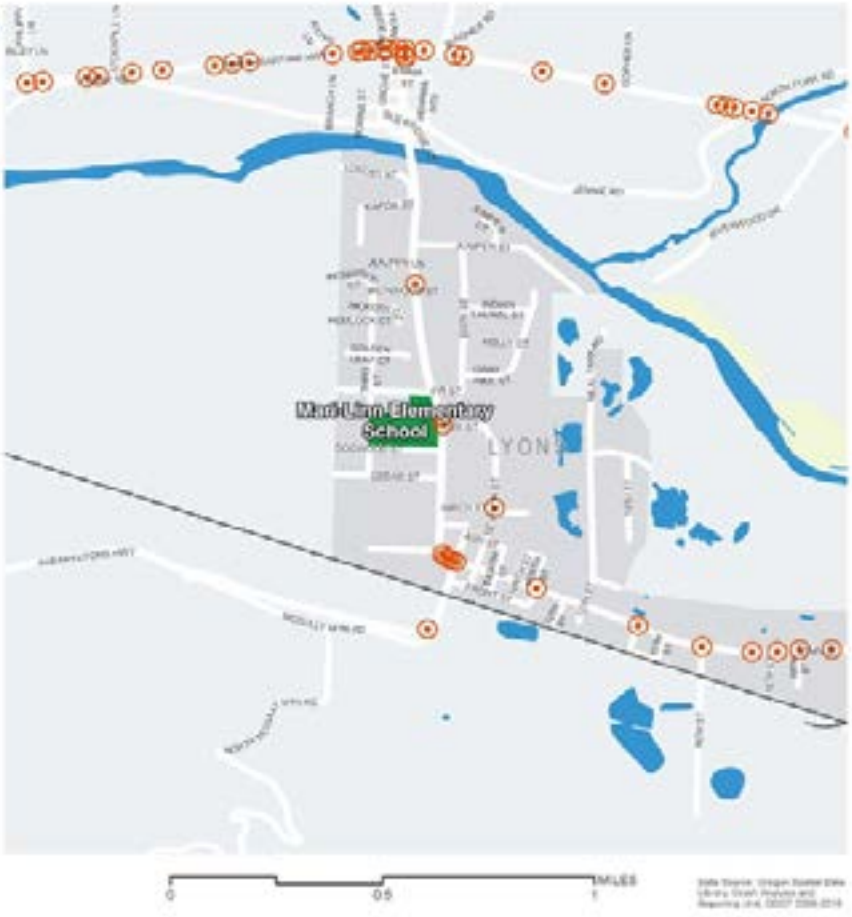
Other School

Railroad

Water

City Boundary

Vehicle Only Collision



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Oregon Department of Transportation Safe Routes to School

APPENDIX E. 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 includes detailed construction recommendations tables building on Table 1 in Chapter 4, and includes: ensuing construction recommendations and high-level associated cost.

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 Multi-modal 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 programing 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 BUILD PROJECTS

Quick Build projects 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 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 from several days to several months.

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Table 4. HWY 226 Crossing Enhancements at Fir Street

ITEM DESCRIPTION	MEASUREMENT	COST/UNIT	UNITS	ESTIMATE
MOBILIZATION	10%	$8,300	1	$8,300
TRAFFIC CONTROL	15%	$12,500	1	$12,500
EROSION CONTROL	2%	$1,700	1	$1,700
HWY 226 CROSSING ENHANCEMENTS AT FIR STREET				
REMOVE ASPHALT PAVEMENT	SF	$5	140	$700
REMOVE CONCRETE CURB	LF	$6	70	$420
REMOVE CONCRETE SIDEWALK	SF	$7	350	$2,450
REMOVE SIGN	EA	$100	2	$200
RELOCATE EXISTING SIGN & POST	EA	$200	2	$400
RELOCATE EXISTING SIGN, FLASHERS, POST, AND SOLAR ENGINE TO NEW FOUNDATION	EA	$2,000	1	$2,000
INSTALL CONCRETE CURB	LF	$40	70	$2,800
INSTALL ASPHALT PAVEMENT	TON	$230	7	$1,610
INSTALL CONCRETE SIDEWALK	SF	$30	250	$7,500
INSTALL ADA CURB RAMP	EA	$10,000	4	$40,000
INSTALL MARKED CROSSWALK	SF	$15	140	$2,100
INSTALL NO PARKING SIGN	EA	$250	1	$250
INSTALL CROSSWALK WARNING SIGN	EA	$500	4	$2,000
INSTALL SCHOOL ZONE SIGN	EA	$500	1	$500
INSTALL STREET LIGHT	EA	$10,000	2	$20,000
SUBTOTAL				**$105,430**
CONSTRUCTION ENGINEERING	15%	$15,900	1	$15,900
CONTINGENCY	30%	$36,400	1	$36,400
TOTAL CONSTRUCTION COST				**$157,730**
SOFT COSTS (DESIGN ENGINEERING)	15%	$15,900	1	$15,900
Total Project Cost:				**$173,630**

Table 5. HWY 226 West Side Sidewalk

ITEM DESCRIPTION	MEASUREMENT	COST/UNIT	UNITS	ESTIMATE
MOBILIZATION	10%	$90,700	1	$90,700
TRAFFIC CONTROL	15%	$136,000	1	$136,000
EROSION CONTROL	2%	$18,200	1	$18,200
HWY 226 WEST SIDE SIDEWALK				
REMOVE CONCRETE PAVEMENT	SF	$7	1700	$11,900
REMOVE CONCRETE CURB	LF	$6	270	$1,620
REMOVE CONCRETE SIDEWALK	SF	$7	325	$2,275
INSTALL UNDERGROUND PIPE/INLET DRAINAGE SYSTEM	LF	$160	1460	$233,600
INSTALL CATCH BASIN	EA	$10,000	7	$70,000
INSTALL AGGREGATE BASE	CY	$60	200	$12,000
INSTALL CONCRETE CURB	LF	$40	1880	$75,200
INSTALL ASPHALT PAVEMENT	TON	$230	318	$73,140
INSTALL CONCRETE SIDEWALK	SF	$20	7465	$149,300
INSTALL CONCRETE PAVEMENT	SF	$30	3260	$97,800
INSTALL ADA CURB RAMP	EA	$6,000	22	$132,000
INSTALL 1' WIDE STOP LINE	LF	$15	61	$915
INSTALL MARKED CROSSWALK	SF	$15	480	$7,200
SUBTOTAL				**$1,151,075**
CONSTRUCTION ENGINEERING	15%	$172,700	1	$172,700
CONTINGENCY	30%	$397,200	1	$397,200
TOTAL CONSTRUCTION COST				**$1,720,975**
SOFT COSTS (DESIGN ENGINEERING)	15%	$172,700	1	$172,700
Total Project Cost:				**$1,893,675**