City of Eugene – City of Eugene Schools Baseline Data Evaluation Report



FINAL June 24 2020

Introduction

This Case Study Evaluation measures the impacts of Oregon Safe Routes to School (SRTS) 2019-2020 Competitive Construction (Infrastructure) Grants in communities across the state. The evaluation will assess the effectiveness of individual SRTS projects, techniques, and programs designed to reduce barriers to biking and walking to and from school. Evaluation research questions include:

- What are the impacts for standalone construction grants, and combined outreach and education and construction grants?
- How do different combinations of interventions effectively address the barriers identified by communities and affect mode shift, safety and perceptions of safety, program lifespan, and equity?

The Baseline Data Evaluation Report represents the "pre-construction" data and provides an overview of existing travel conditions and school site attributes. The Baseline Data Evaluation Report is intended to contain the majority of the information needed to plan for the post-construction data collection. The baseline report summarizes the funded improvement project, demographics of affected schools, and data from Oregon Department of Transportation (ODOT) and local roadway authority crash records, parent surveys, and student travel hand tallies.

Plan for the Final Case Study Evaluation Report

The Final Case Study Evaluation Report will represent the "post-construction" data. A draft outline for this report is included in Appendix A. For data consistency, the post-construction data will be collected as soon as possible after construction is complete, likely starting in spring 2021. This will reduce weather-related impacts and also allow time during the school year for families to establish or change their travel habits. In addition to the standard parent surveys and student travel hand tallies, post-construction data collection methods for the evaluation report may also include: parent focus groups and surveys or interviews with school staff.

The Final Case Study Evaluation Report will measure shifts using the evaluation metrics laid out in this document to identify the successes of SRTS projects and provide insight on opportunities for further improvement. SRTS performance metrics measured during this evaluation process will include:

- **Mode split:** Are more students walking and biking to school after a project's completion than at the time of baseline data collection?
- Access to safe infrastructure: Do students have better access to sidewalks, bike lanes, or safe crossing locations on their route to school after the completion of the project?
- Safety/perception of safety: Do parents and students feel safer or more comfortable walking and biking to school after the project's completion?
- **Program lifespan/partnerships:** Is the SRTS program functioning efficiently and providing adequate support for partner jurisdictions, schools, and districts?

• **Equity:** Are students from a diversity of ethnic/racial and socioeconomic backgrounds benefiting from the investments being made?

In addition to reporting on grant effectiveness, data presented in the Baseline Data Evaluation Report and the Final Case Study Evaluation could be used for a variety of transportation and program planning purposes at the local level. Having a comprehensive set of quantitative data and qualitative feedback on transportation conditions and trends around these sites could help inform decisions on school/district policy, SRTS event and program planning by schools/districts/local jurisdictions, planning future infrastructure projects, as well as providing supporting documentation for future grant applications.

Baseline SRTS Snapshot: City of Eugene Elementary Schools

Summary

The City of Eugene has been approved for funding for projects impacting six different schools in the city. Three of the schools are located within the Eugene School District (Cesar Chavez, Holt, and Village School), and the other three are within the Bethel School District.

- Cesar Chavez Elementary School is a public school in the City of Eugene enrolling students in grades K-5, over 95% of whom qualify for the Free and Reduced-Price Lunch Program. The school is ethnically- and racially-diverse, with a student body that is 55% white and 31% Hispanic. 15% of Cesar Chavez Elementary students are registered as Ever English Learners.
- Holt Elementary School is a public school enrolling students in grades K-5, 59% of whom qualify for the Free and Reduced-Price Lunch Program. 7% of Holt students are registered as Ever English Learners.
- Village School is a public school enrolling students in grades K-8, 63% of whom qualify for the Free and Reduced-Price Lunch Program.
- Prairie Mountain School is a public school enrolling students in grades K-8, 26% of whom qualify for the Free and Reduced-Price Lunch Program. The school is ethnically- and racially-diverse, with a student body that is 51% white and 37% Hispanic. 26% of Prairie Mountain School students are registered as Ever English Learners.
- Meadow View School is a public school enrolling students in grades K-8, 39% of whom qualify for the Free and Reduced-Price Lunch Program. Less than 5% of Meadow View students are registered as Ever English Learners.
- Malabon Elementary School is a public school enrolling students in grades K-5, over 95% of whom qualify for the Free and Reduced-Price Lunch Program. 15% of Cesar Chavez Elementary students are registered as Ever English Learners.

Each of these schools experience issues with the safety of pedestrian and bike infrastructure around the school. In many cases, this is due to the high volume and speed of traffic on adjacent roads. There is also a lack of safe crossing points for students coming to and leaving the campus. This combination of factors makes conditions inconvenient or even unsafe for active transportation at these six schools.

In order to lower speeds in school zones, the Oregon SRTS 2019-2020 Competitive Infrastructure Grant has provided funding for improvements such as school speed zone flashers, speed readers, and speed humps. It

will also provide funds for the installation of crosswalks, curb ramps, pedestrian islands, which will make crossing safer and more convenient for students and other pedestrians.

In terms of education and engagement activities around SRTS, some of these schools have completed SRTS plans, while others have not. However, most of the schools have plans to implement some combination of education, encouragement, and evaluation programs. Specific programs include 2nd Grade pedestrian safety classes, distribution of information about the benefits of active transportation in English and Spanish, Bike & Walk to School Days, promotion of the SchoolPool Ridematch database, Walking School Buses, a Bike Rodeo, Student Classroom Tallies and Parent Surveys, and periodic walking audits. Some schools have already participated in some of these activities.

Key information from parent surveys:

- The distance that families live from school varies considerably from school to school. For example, at Prairie Mountain School, 72% of students surveyed live within a mile of the campus. On the other hand, only 22% at Village School live within a mile.
- At most of the schools surveyed, riding in a family vehicle and taking the school bus were the two
 most common ways to get to/from school.
- Among students who live within a quarter-mile of their school, rates of active transportation ranged from 30% (Malabon Elementary) to 100% (Village School) at these various schools.
- Parents who responded to this survey report that the most common barriers to walking/biking to school include:
 - Speed and amount of traffic along the route,
 - $\circ \quad \text{Safety of crossings, and} \quad$
 - \circ Distance from home to school.

At the schools surveyed, most parents (92-98%) view walking/biking to school as healthy for their student, while 65-79% described it as fun for their student.

Contact Information

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SCHOOL DISTRICT:	Eugene School District
CONTACT:	District Office: (541)790-5300
OTHER CONTACTS:	None

Enrollment and Demographics

Table 1 presents the demographic data collected for the schools included in the City of Eugene's grant application.

Cesar Chavez Elementary School is a public school in the City of Eugene enrolling students in grades K-5, over 95% of whom qualify for the Free and Reduced-Price Lunch Program. The school is ethnically- and raciallydiverse, with a student body that is 55% white and 31% Hispanic. 15% of Cesar Chavez Elementary students are registered as Ever English Learners.¹

Holt Elementary School is a public school enrolling students in grades K-5, 59% of whom qualify for the Free and Reduced-Price Lunch Program. 7% of Holt students are registered as Ever English Learners.

Village School is a public school enrolling students in grades K-8, 63% of whom qualify for the Free and Reduced-Price Lunch Program.

Prairie Mountain School is a public school enrolling students in grades K-8, 26% of whom qualify for the Free and Reduced-Price Lunch Program. The school is ethnically- and racially-diverse, with a student body that is 51% white and 37% Hispanic. 26% of Prairie Mountain School students are registered as Ever English Learners.

Meadow View School is a public school enrolling students in grades K-8, 39% of whom qualify for the Free and Reduced-Price Lunch Program. Less than 5% of Meadow View students are registered as Ever English Learners.

Malabon Elementary School is a public school enrolling students in grades K-5, over 95% of whom qualify for the Free and Reduced-Price Lunch Program. 15% of Cesar Chavez Elementary students are registered as Ever English Learners.

 $^{^1}$ Unless otherwise noted below, demographic data are from the Oregon Department of Education 19-20 SY, collected October 1, 2019

^{4 |} Oregon Department of Transportation Safe Routes to School Infrastructure Program

Table 1. Demographics by School

	CESAR CHAVEZ ELEMENTARY SCHOOL	HOLT ELEMENTARY SCHOOL	VILLAGE SCHOOL	PRAIRIE MOUNTAIN SCHOOL	MEADOW VIEW SCHOOL	MALABON ELEMENTARY SCHOOL
ENROLLMENT	428	531	220	684	767	421
GRADE LEVELS SERVED AND SCHOOL TYPE	K-5, Public	K-5, Public	K-8, Public	K-8, Public	K-8, Public	K-5, Public
STUDENT ETHNIC / RACIAL DEMOGRAPHICS						
American Indian/Alaska Native: Asian: Hispanic or Latino: Native Hawaiian/ Pacific Island: Multiracial: Black/African American: White: PREDOMINANT LANGUAGES (BY DISTRICT)	1.4% 0.5% 31.1\$ 0.7% 7.9% 3.3% 55.1%	1.5% 2.4% 13.9% 1.3% 10.9% 2.6% 67.2% English: 16,393 Spanish: 1,204 Chinese: 132	1.8% 0.5% 11.4% 0.0% 10.5% 0.5% 75.5%	0.7% 2.8% 37.4% 0.3% 5.7% 1.9% 51.2%	1.2% 2.6% 12.3% 1.3% 9.4% 2.1% 71.2% English: 5,273 Spanish: 666	0.7% 0.2% 26.8% 0.5% 10.5% 0.7% 60.6%
STUDENTS LIVING WITHIN 1 MILE OF SCHOOL ²	37%	72%	54%	67%		
TITLE 1 STATUS ³	Yes	Yes	Yes	Yes	Yes	Yes
EVER ENGLISH LEARNERS ⁴	15%	7%	< 10 students or data not available	26%	<5%	15%
FREE AND REDUCED-PRICE LUNCH ELIGIBILITY	>95%	59%	63%	62%	39%	>95%

² SRTS Program parent surveys, 2013

³ Title 1 schools are schools where 40% or more of students are enrolled in USDA's Free and Reduced-Price Meals Program. ⁴ Number of students who have been served or were eligible for an English language development program during 2018-19 or at any time in the past. Oregon Department of Education 18-19 SY collected May 1, 2019.

Community Context and Place Type - Cesar Chavez Elementary School

Place type describes attributes of a built environment, including: access to destinations, density, walkability, mixing of uses, and presence of transit. The evaluation team compiled Oregon Department of Land Conservation and Development's (DLCD) measures of place type for each community studied. Each attribute is rated as "Very Low, Low, Medium, or High" by block group. Place type characteristics provide important context for transportation opportunities and challenges in a community and influence the transportation decisions people make.

According to the Place Type Tool, the area surrounding Madras Elementary School is categorized as Suburban/Town, meaning it contains low density development, and Employment, meaning the surrounding census block group generally contains more commercial than residential development with 1,149 people residing and 897 people working within the census block. The area has a low level of access to regional employment centers and destinations. The overall level of street connectivity in the area is characterized as "very low."

AREA TYPE describes the role of each neighborhood district compared to the rest of the region (regional center, close- in community, suburban/town, low density/rural)	 Regional Center High densities of housing ar Region's center of employm Street design and transit-su jobs in denser core area 	nd employment ient pportive densities expand access to
DEVELOPMENT TYPE describes more detailed physical characteristics of each neighborhood (transit supportive development, mixed use, employment, residential, rural/ low density):	Employment Land use is dominated by co Low diversity of land uses Jobs/Housing balance: most Missing either the density o use	ommercial or industrial activities Ily jobs r street design required of mixed
JURISDICTION POPULATION (ACS 5-YEAR E	STIMATES):	City of Eugene 171,245 people
CENSUS BLOCK GROUP POPULATION (201	0):	883 people
NUMBER OF JOBS IN CENSUS BLOCK GROU	JP (2010):	6,049 jobs
ACCESS TO DESTINATIONS - describes the r	number of regional jobs within 5 miles:	High
DENSITY LEVEL- jobs and households per ac	re within ¼ mile:	Medium
DESIGN LEVEL- level of street connectivity, p	pedestrian-oriented street density:	High
DIVERSITY LEVEL- Mix of housing and emplo	pyment:	Medium
TRANSIT LEVEL- Afternoon peak hourly tran	sit service within ¼ mile:	High

Community Context and Place Type - Holt Elementary School

Place type describes attributes of a built environment, including: access to destinations, density, walkability, mixing of uses, and presence of transit. The evaluation team compiled Oregon Department of Land Conservation and Development's (DLCD) measures of place type for each community studied. Each attribute is rated as "Very Low, Low, Medium, or High" by block group. Place type characteristics provide important context for transportation opportunities and challenges in a community and influence the transportation decisions people make.

Holt Elementary School is located in the City of Eugene, and the block group encompasses a small area in the northeast portion of the city limits. According to the Place Type Tool, the area surrounding Holt Elementary School is categorized as a close-in community, meaning it contains medium density development and the surrounding census block group generally contains more residential than commercial development, with 1,391 people residing and 196 people working within the census block group. The area has a medium level of access to regional employment centers and destinations, partially facilitated by a high degree of access to transit. The overall level of street connectivity in the area is characterized as "low."

AREA TYPE describes the role of each neighborhood district compared to the rest of the region (regional center, close- in community, suburban/town, low density/rural)	 Close-In Community Medium densities of housing Located adjacent and with employment center Lower densities decrease mu 	and employment n good access to the region's lti-modal access to jobs
DEVELOPMENT TYPE describes more detailed physical characteristics of each neighborhood (transit supportive development, mixed use, employment, residential, rural/ low density):	Residential Land use is dominated by hou Low diversity of land uses Jobs/Housing balance: mostly Missing either the density or s	using r housing treet design required of mixed use
JURISDICTION POPULATION (ACS 5-YEAR E	STIMATES):	City of Eugene 171,245 people
CENSUS BLOCK GROUP POPULATION (2010	0):	1,391 people
NUMBER OF JOBS IN CENSUS BLOCK GROU	JP (2010):	196 jobs
ACCESS TO DESTINATIONS - describes the r	number of regional jobs within 5 miles:	Medium
DENSITY LEVEL- jobs and households per ac	re within ¼ mile:	Medium
DESIGN LEVEL- level of street connectivity, p	pedestrian-oriented street density:	Low
DIVERSITY LEVEL- Mix of housing and emplo	pyment:	High
TRANSIT LEVEL- Afternoon peak hourly trans	sit service within ¼ mile:	High

Community Context and Place Type - Village School

Place type describes attributes of a built environment, including: access to destinations, density, walkability, mixing of uses, and presence of transit. The evaluation team compiled Oregon Department of Land Conservation and Development's (DLCD) measures of place type for each community studied. Each attribute is rated as "Very Low, Low, Medium, or High" by block group. Place type characteristics provide important context for transportation opportunities and challenges in a community and influence the transportation decisions people make.

Village School is located in the City of Eugene, and the block group encompasses a small area in the southern portion of the city limits. According to the Place Type Tool, the area surrounding Village School is categorized as a Close-in Community, meaning it contains medium density development, and Mixed Use, meaning the surrounding census block group generally contains an even balance of residential and commercial development with 952 people residing and 705 people working within the census block group. The area has a high level of access to regional employment centers and destinations, partially facilitated by a medium degree of access to transit. The overall level of street connectivity in the area is characterized as "medium."

AREA TYPE describes the role of each neighborhood district compared to the rest of the region (regional center, close- in community, suburban/town, low density/rural)	 Close-In Community Medium densities of housing Located adjacent and with employment center Lower densities decrease mu 	and employment n good access to the region's Iti-modal access to jobs
DEVELOPMENT TYPE describes more detailed physical characteristics of each neighborhood (transit supportive development, mixed use, employment, residential, rural/ low density):	 Mixed Use Medium to high densities of i High diversity of land use mix Multimodal transportation n transit service 	residential and commercial uses , with both jobs and housing etwork supported by peak period
JURISDICTION POPULATION (ACS 5-YEAR E	ESTIMATES):	City of Eugene 171,245 people
CENSUS BLOCK GROUP POPULATION (201	0):	952 people
NUMBER OF JOBS IN CENSUS BLOCK GRO	UP (2010):	705 jobs
ACCESS TO DESTINATIONS - describes the	number of regional jobs within 5 miles:	High
DENSITY LEVEL- jobs and households per ac	cre within ¼ mile:	Medium
DESIGN LEVEL- level of street connectivity,	pedestrian-oriented street density:	Medium
DIVERSITY LEVEL- Mix of housing and emplo	oyment:	High
TRANSIT LEVEL- Afternoon peak hourly tran	nsit service within ¼ mile:	Medium

Community Context and Place Type – Prairie Mountain School

Place type describes attributes of a built environment, including: access to destinations, density, walkability, mixing of uses, and presence of transit. The evaluation team compiled Oregon Department of Land Conservation and Development's (DLCD) measures of place type for each community studied. Each attribute is rated as "Very Low, Low, Medium, or High" by block group. Place type characteristics provide important context for transportation opportunities and challenges in a community and influence the transportation decisions people make.

Prairie Mountain School is located in the City of Eugene and serves the city and wider rural Lane County. The block group encompasses a suburban area on the western edge of the city limits. According to the Place Type Tool, the area surrounding Prairie Mountain School is categorized as Suburban/Town and Residential, meaning it contains low density development and the surrounding census block group generally contains more residential than commercial development, with 3,728 people residing and 235 people working within the census block group. The area has a low level of access to regional employment centers and destinations. The overall level of street connectivity in the area is characterized as "low."

AREA TYPE describes the role of each neighborhood district compared to the rest of the region (regional center, close- in community, suburban/town, low density/rural)	Suburban/Town Lower densities of jobs and/c Lower accessibility to regiona Lower densities decrease mu 	or housing 1 jobs Iti-modal access to jobs
DEVELOPMENT TYPE describes more detailed physical characteristics of each neighborhood (transit supportive development, mixed use, employment, residential, rural/ low density):	Residential Land use is dominated by how Low diversity of land uses Jobs/Housing balance: mostly Missing either the density or s	using / housing street design required of mixed use
JURISDICTION POPULATION (ACS 5-YEAR E	ESTIMATES):	City of Eugene 171,245 people
CENSUS BLOCK GROUP POPULATION (201	0):	3,728 people
NUMBER OF JOBS IN CENSUS BLOCK GROU	UP (2010):	235 jobs
ACCESS TO DESTINATIONS - describes the r	number of regional jobs within 5 miles:	Low
DENSITY LEVEL- jobs and households per ac	rre within ¼ mile:	Low
DESIGN LEVEL- level of street connectivity,	pedestrian-oriented street density:	Very Low
DIVERSITY LEVEL- Mix of housing and employ	pyment:	Medium
TRANSIT LEVEL- Afternoon peak hourly tran	sit service within ¼ mile:	Medium

Community Context and Place Type – Meadow View School

Place type describes attributes of a built environment, including: access to destinations, density, walkability, mixing of uses, and presence of transit. The evaluation team compiled Oregon Department of Land Conservation and Development's (DLCD) measures of place type for each community studied. Each attribute is rated as "Very Low, Low, Medium, or High" by block group. Place type characteristics provide important context for transportation opportunities and challenges in a community and influence the transportation decisions people make.

Meadow View School is located in the City of Eugene and serves the city and wider rural Lane County. The block group encompasses a suburban area on the western edge of the city limits. According to the Place Type Tool, the area surrounding Meadow View School is categorized as Suburban/Town and Residential, meaning it contains low density development and the surrounding census block group generally contains more residential than commercial development, with 3,728 people residing and 235 people working within the census block group. The area has a low level of access to regional employment centers and destinations. The overall level of street connectivity in the area is characterized as "low."

	Suburban/Town	
AREA TYPE describes the role of each neighborhood district compared to the rest of the region (regional center, close- in community, suburban/town, low density/rural)	 Lower densities of jobs and/o Lower accessibility to regiona Lower densities decrease mul 	r housing I jobs ti-modal access to jobs
DEVELOPMENT TYPE describes more detailed physical characteristics of each neighborhood (transit supportive development, mixed use, employment, residential, rural/ low density):	Residential Land use is dominated by hou Low diversity of land uses Jobs/Housing balance: mostly Missing either the density or s	ising housing treet design required of mixed use
JURISDICTION POPULATION (ACS 5-YEAR E	STIMATES):	City of Eugene 171,245 people
CENSUS BLOCK GROUP POPULATION (201):	3,728 people
NUMBER OF JOBS IN CENSUS BLOCK GROU	JP (2010):	235 jobs
ACCESS TO DESTINATIONS - describes the r	number of regional jobs within 5 miles:	Low
DENSITY LEVEL- jobs and households per ac	re within ¼ mile:	Low
DESIGN LEVEL- level of street connectivity, p	pedestrian-oriented street density:	Very Low
DIVERSITY LEVEL- Mix of housing and emplo	yment:	Medium
TRANSIT LEVEL- Afternoon peak hourly tran	sit service within ¼ mile:	Medium

Community Context and Place Type – Malabon Elementary School

Place type describes attributes of a built environment, including: access to destinations, density, walkability, mixing of uses, and presence of transit. The evaluation team compiled Oregon Department of Land Conservation and Development's (DLCD) measures of place type for each community studied. Each attribute is rated as "Very Low, Low, Medium, or High" by block group. Place type characteristics provide important context for transportation opportunities and challenges in a community and influence the transportation decisions people make.

Malabon Elementary School is located in the City of Eugene and serves the city and wider rural Lane County. The block group encompasses a suburban area on the western side of the city limits. According to the Place Type Tool, the area surrounding Malabon Elementary School is categorized as Suburban/Town and Residential, meaning it contains low density development and the surrounding census block group generally contains more residential than commercial development, with 2,149 people residing and 422 people working within the census block group. The area has a medium level of access to regional employment centers and destinations, partially facilitated by a high degree of access to transit. The overall level of street connectivity in the area is characterized as "very low."

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AREA TYPE describes the role of each neighborhood district compared to the rest of the region (regional center, close- in community, suburban/town, low density/rural)	 Lower densities of jobs and, Lower accessibility to regior Lower densities decrease m 	/or housing nal jobs ulti-modal access to jobs
DEVELOPMENT TYPE describes more detailed physical characteristics of each neighborhood (transit supportive development, mixed use, employment, residential, rural/ low density):	Residential Land use is dominated by he Low diversity of land uses Jobs/Housing balance: most Missing either the density or	ousing Iy housing • street design required of mixed use
JURISDICTION POPULATION (ACS 5-YEAR E	STIMATES):	City of Eugene 171,245 people
CENSUS BLOCK GROUP POPULATION (201	0):	2,149 people
NUMBER OF JOBS IN CENSUS BLOCK GROU	JP (2010):	422 jobs
ACCESS TO DESTINATIONS - describes the r	number of regional jobs within 5 miles:	Medium
DENSITY LEVEL- jobs and households per ac	re within ¼ mile:	Low
DESIGN LEVEL- level of street connectivity, p	pedestrian-oriented street density:	Very Low
DIVERSITY LEVEL- Mix of housing and emplo	pyment:	High
TRANSIT LEVEL- Afternoon peak hourly tran	sit service within ¼ mile:	High

Access Analysis for Students Walking and Biking to School

The project team conducted an analysis to estimate the number of people who would gain walking and biking access to each Eugene elementary school when the project improvements are constructed, shown in Table 2 and Figure 1. First, the project improvements were evaluated to understand the geographic areas that would gain safe access to the school once the funded project was constructed. Next, American Community Survey (ACS) data was combined with zoning data to estimate the number of people and school-age children that live within the new access areas.

According to this analysis, more than a third of the Cesar Chavez Elementary student body (477 students) would gain access through these improvements. More than a quarter of students at Malabon Elementary and Meadow View School would also gain the option to walk or bike. Considering all six schools combined, this analysis estimates that approximately 1,183 students, or 18% of students living within a mile of the school, would gain safer walking or biking access to the school.

Table 2. Access Analysis Results

METRIC	CESAR CHAVEZ ELEMENTARY SCHOOL	HOLT ELEMENTARY SCHOOL	VILLAGE SCHOOL	PRAIRIE MOUNTAIN SCHOOL	MEADOW VIEW SCHOOL	MALABON ELEMENTARY SCHOOL
Total Population of New Access Areas	3,940	973	683	575	884	2,335
School Age Population of New Access Areas ⁵	477	118	83	70	107	283
Percentage of Students within the School Areas Gaining Access ⁶	36%	8%	5%	11%	26%	28%

⁵ Calculated using the proportion of school-age children (5-17 years old) within the City of Eugene.

⁶ The School Area is defined as the area within the school enrollment area that is within one mile of the school.

NEW ACCESS AREA ASSUMPTIONS

The following assumptions are made in designating the New Access Areas for each school:

<u>Cesar Chavez Elementary School:</u> Starting with the easternmost edge, it is assumed that residents east of this boundary will utilize Polk Street for accessing the school rather than Chambers Street. Residents in the western portion of the access area are assumed to utilize the crossing at Garfield in conjunction with the trail access point to the west. Additionally, the residential areas to the south and west were still considered to be inaccessible enough from City View Street and W 18th Avenue that they were left out of the access area. Given the size of 17th Avenue and the incomplete sidewalk network, as well as the assumption that they would access the school from the trail east of Chambers Street, the residents just south of the trail were left out of the access area analysis.

<u>Holt Elementary School</u>: It is assumed that residents north of Harlow Road are not impacted significantly by the project. It is also assumed that residents west of the access area would be crossing Harlow Road at the intersection at Palomino Drive and that residents east of the access area would cross Harlow Road at North Garden Way.

<u>Village School</u>: The access area analysis assumes that the residential areas south and southwest of the access area remain inaccessible despite the crosswalk on Willamette Street because of the incomplete sidewalk network and the Willamette Street crossing at Brae Burn Drive. Additionally, residents of the residential areas that make up the western portion of the access area are assumed to access the school via Crest Drive, which already has a light, resulting in these residents being excluded from the new access area.

<u>Prairie Mountain School:</u> This new access area analysis assumes that residents north and west of Terry Street and Donohoe Avenue can already comfortably cross Donohoe Avenue to access the western path or the eastern sidewalk of the school grounds. Residential zones which contained no built housing (according to satellite imagery) were excluded from the analysis in order to improve the estimate. Note that the estimated percentage of students affected is likely an underestimate.

<u>Meadow View School:</u> This analysis assumes residents in the access area all have adequate sidewalk access to the improvement project.

<u>Malabon Elementary School</u>: The northern access area assumes residents in the access area all have adequate sidewalk access to the improvement project, and that residents east of the access area would be crossing Barger Drive at the light at Taney Street. It also assumes that this project would be utilized by the residents included in the access area, even though these residents currently have access to N Clarey Street via Aerial Way to cross Barger Drive. For the southern access area, it assumes that residents to the west still face Echo Hollow Road as a significant barrier.



Figure 1. City of Eugene Schools New Access Area for Students Walking and Biking

Eugene Schools: New Access to Walking and Biking

Holt

118

8%

	vvan	ing an		''y	0	0.0	A	
	Meadow	Prairie			Cross	swalk Im	proveme	ent
Malabon	View	Mountain	Village	_	New	Speed Z	one	
283	106	70	83		Appli	cant Sch	ool	
28%	26%	11%	5%		Other	School		
					New	Access A	Area	

2 Miles

SafeRoutes

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14 | Oregon Department of Transportation Safe Routes to School Infrastructure Program

Cesar

Chavez

477

36%

All

1,137

18%

To view the methods for this analysis, please see Appendix

Estimated Number

Proportion of Students

within 1 Mile of school:

of Students:

Baseline Data – Cesar Chavez Elementary School

The following section presents pre-construction data, which will be compared against similar data collected after the project has been construction, in order to estimate the impact of the improvements.

Hand Tallies

DATE COLLECTED:	November, 2017
DATA COLLECTION PROCESS:	8 classrooms surveyed about their trip to and from school
NUMBER OF STUDENTS:	No information available
TRIPS RECORDED	960 trips recorded by the hand tallies

SUMMARY OF DATA COLLECTION AND METHODOLOGY

The November 2017 baseline hand tally data from Cesar Chavez Elementary includes 960 recorded trips collected from students in 8 classrooms. The hand tally process surveyed all students in each classroom on which transportation mode(s) they had used to get to and from school the day of the survey and the day prior to the survey. The National Center for SRTS's standard hand tally data collection forms and process were used. This data provides a snapshot of student travel behavior trends.

SUMMARY OF RESULTS:

Cesar Chavez Elementary hand tally data from 2017 indicates that a majority of students (53%) surveyed ride in a family vehicle to school, and 46% rode home (see Figure 2 and Table 3). In addition, 38% rode the school bus in the morning and 45% rode the bus in the afternoon. Approximately six percent of students walk to or from school. Fourteen students reported biking to school, while ten reported biking home.



Figure 2. Student Mode Split by Time of Day, 2017 Hand Tally Data

Table 3. Count of Student Mode Split to and From School, 2017 Hand tally Data

TIME OF DAY	WALK	BIKE	SCHOOL BUS	FAMILY VEHICLE	CARPOOL	TRANSIT	OTHER
Morning	28	14	177	246	0	1	1
Afternoon	29	10	220	226	2	3	3

Parent/Caregiver Surveys

DATE COLLECTED:	November 2013	
DATA COLLECTION PROCESS:	The National Center for SRTS's parent/caregiver survey was distributed online to parents at Madras Elementary School to assess family perceptions about school travel options and behavior.	Commented [NS1]: This should be Chavez Elementary
NUMBER OF SURVEYS:	52; 12% response rate	

SUMMARY OF DATA COLLECTION AND METHODOLOGY

The parent/caregiver survey data included in this report was collected from 52 participants with students attending Cesar Chavez Elementary.

SUMMARY OF RESULTS:

Parent/caregiver survey analysis found that just over one third of respondents live within one mile of Cesar Chavez Elementary (37%), with an additional 30% living between one and two miles of the school site (see Figure 3). Another third of students live more than two miles from the school. This indicates that the majority of students are eligible for school bussing and live too far to easily walk or bike to school.





Driving in a family vehicle was the most commonly-used transportation option for the students of parents surveyed, accounting for 54% of trips reported (see Figure 4 and Table 4). Students Among those who live less than a quarter mile from Cesar Chavez Elementary, however, 42% used active modes, and another 17% used shared modes. However, active modes were not reported by many families living more than a half-mile from the campus. Almost two thirds of students who live a half-mile to a mile from school used shared

modes, and only a quarter used a family vehicle. For students living between a mile and two miles from Cesar Chavez Elementary, 54% traveled by family vehicle, while 42% used shared modes.

Figure 4. Mode Split by Distance from School, 2013 Parent/Caregiver Survey

•	•			-			•
DISTANCE	WALK	BIKE	SCHOOL BUS	FAMILY VEHICLE	CARPOOL	TRANSIT	OTHER
Less than 1/4 mile	5	0	2	5	0	0	0
1/4 mile up to 1/2 mile	0	0	0	2	0	0	0
1/2 mile up to 1 mile	0	0	12	5	2	0	0
1 mile up to 2 miles	0	0	11	14	0	0	1
More than 2 miles	0	0	6	19	0	0	0

Table 4. Count of Trips by Distance the Family Lives from School, 2013 Parent/Caregiver Survey

According to the survey, 33% of students had asked their parent or caregiver for permission to walk or bike to/from school in the last year. While parents and caregivers reported varying concerns that limit their student's ability to walk or bike to school, some were more commonly expressed than others (see Figure 5). The following were top concerns for the Cesar Chavez Elementary School community:

- The distance from home to school
- Safety of intersections and crossings
- The amount of traffic along the route
- Weather or climate
- The speed of traffic along the route



Figure 5. What Issues Affect the Decision to Walk or Bike to School?, 2013 Parent/Caregiver Survey

A majority of parent and caregiver respondents (60%) felt Cesar Chavez Elementary encouraged or strongly encouraged active transportation at the time of the survey (see Figure 6). Just over a third felt that the school neither encouraged or discouraged students from walking and biking to school (36%). Only 4% characterized the school as discouraging walking and biking.



Figure 6. Does your School Encourage Walking or Biking to/from School?, 2013 Parent/Caregiver Survey

At the time of the survey, the majority (65%) of parents and caregivers reported that they thought walking or biking to school would be a fun or very fun activity for their students, while only 2% disagreed. An additional 32% were neutral or unsure on whether their student would enjoy walking and biking to school (Figure 7).



Figure 7. How Fun is Walking and Biking to School?, 2013 Parent/Caregiver Survey

A majority of parents and caregivers recognized the health benefits of active transportation, with 92% reporting that walking or biking to school would be healthy or very healthy for their student. Only 8% were neutral regarding the health benefits of walking and biking (see Figure 8).



Figure 8. How Healthy is Walking or Biking to School?, 2013 Parent/Caregiver Survey

Crash Data – Cesar Chavez Elementary School

DATE COLLECTED:	2012-2016
DATA COLLECTION PROCESS:	Crash Data included in this report originates the ODOT SRTS Web Map Application, with supplemental data from roadway jurisdictions as available. This analysis does not determine whether the grant intervention caused any change in the occurrence of crashes, due to small sample size. Additionally, due to insufficient mode split data to calculate crash rates, this report offers a count and description of reported incidents.
NUMBER OF REPORTED CRASHES INVOLVING BIKES AND PEDESTRIANS WITHIN 1 MILE OF SCHOOL:	Between 2012 and 2016, 116 crashes involving a bicyclist or pedestrian were reported within one mile of the school.
TIME OF REPORTED CRASHES INVOLVING BIKES AND PEDESTRIANS WITHIN 1 MILE OF SCHOOL*:	106 of these reported crashes occurred during school commuting hours; the majority occurred during PM commuting hours. * For these purposes school commuting hours were defined as 6 AM to 9 PM.
NUMBER OF REPORTED INJURIES BY SEVERITY WITHIN 1 MILE OF THE SCHOOL:	All 116 of these reported crashes involved an injury to a bicyclist or pedestrian. Of the 82 reported crashes involving a bicyclist, 81 were non-fatal and one was fatal. Of the 34 reported crashes involving a pedestrian, 31 were non-fatal and one was fatal. Figure 9 illustrates the location of the crashes by type and injury severity.
ADDITIONAL CRASH DATA CONSIDERATIONS:	School speed zone flashers, speed readers and traffic calming measures are planned on Chambers Ave, where several recorded crashes have occurred including a pedestrian fatality at the intersection of Chambers at 18 th Ave.
	In its application, the City of Eugene cited a more recent incident, in 2017, wherein a student was hit within the existing RRFB-protected crosswalk across Chambers Street on the way to school. The City of Eugene also cited a recent non-injury crash at Garfield St/14 th Ave, where crossing improvements are planned.

Notes on Community Context or other Relevant Information:

None.



Figure 9: Cesar Chavez Elementary School Bicycle & Pedestrian Collisions (2012-2016)

Baseline Data – Holt Elementary School

The following section presents pre-construction data, which will be compared against similar data collected after the project has been construction, in order to estimate the impact of the improvements. Note: Hand Tally and Parent Survey statistics are unavailable for Holt Elementary.

Crash Data – Holt Elementary School

DATE COLLECTED:	2012-2016
DATA COLLECTION PROCESS:	Crash Data included in this report originates the ODOT SRTS Web Map Application, with supplemental data from roadway jurisdictions as available. This analysis does not determine whether the grant intervention caused any change in the occurrence of crashes, due to small sample size. Additionally, due to insufficient mode split data to calculate crash rates, this report offers a count and description of reported incidents.
NUMBER OF REPORTED CRASHES INVOLVING BIKES AND PEDESTRIANS WITHIN 1 MILE OF SCHOOL:	Between 2012 and 2016, 41 crashes involving a bicyclist or pedestrian were reported within one mile of the school.
TIME OF REPORTED CRASHES INVOLVING BIKES AND PEDESTRIANS WITHIN 1 MILE OF SCHOOL*:	36 of these reported crashes occurred during school commuting hours; the majority occurred during PM commuting hours. * For these purposes school commuting hours were defined as 6 AM to 9 PM.
NUMBER OF REPORTED INJURIES BY SEVERITY WITHIN 1 MILE OF THE SCHOOL:	All 41 of these reported crashes involved an injury to a bicyclist or pedestrian. All 20 of the reported crashes involving a bicyclist were non-fatal. Of the 21 reported crashes involving a pedestrian, 20 were non-fatal and one was fatal. Figure 10 illustrates the location of the crashes by type and injury severity.
ADDITIONAL CRASH DATA CONSIDERATIONS:	School speed zone flashers and speed readers are planned on Harlow Rd adjacent to the school. In addition to the crashes between 2012-2016 illustrated on the map, in its application the City of Eugene cited 8 crashes including four injuries on Harlow Road in the project area.

Notes on Community Context or other Relevant Information:

None.



Figure 10: Holt Elementary School Bicycle & Pedestrian Collisions (2012-2016)

Baseline Data – Village School

The following section presents pre-construction data, which will be compared against similar data collected after the project has been construction, in order to estimate the impact of the improvements.

Hand Tallies

DATE COLLECTED:	November 2017
DATA COLLECTION PROCESS:	5 classrooms surveyed about their trip to and from school
NUMBER OF STUDENTS:	No information available
TRIPS RECORDED	425 trips recorded by the hand tallies

SUMMARY OF DATA COLLECTION AND METHODOLOGY

The November 2017 baseline hand tally data from Village School includes 425 recorded trips collected from students in 5 classrooms. The hand tally process surveyed all students in each classroom on which transportation mode(s) they had used to get to and from school the day of the survey and the day prior to the survey. The National Center for SRTS's standard hand tally data collection forms and process were used. This data provides a snapshot of student travel behavior trends.

SUMMARY OF RESULTS:

Village School hand tally data from 2017 indicates that a majority of students (73%) surveyed ride in a family vehicle to school, and 71% rode home (see Figure 11 and Table 5). Approximately 8% of students walk to school, and 7% walk home. In addition, 8% of students reported biking to and from school.

Figure 11. Student Mode Split by Time of Day, 2017 Hand Tally Data



Note: Percentages may not total 100% due to rounding.

Table 5. Count of Student Mode Split to and From School, 2017 Hand tally Data

TIME OF DAY	WALK	BIKE	SCHOOL BUS	FAMILY VEHICLE	CARPOOL	TRANSIT	OTHER
Morning	20	20	0	180	25	5	0
Afternoon	12	14	0	125	21	2	1

Parent/Caregiver Surveys

DATE COLLECTED:	November 2013
DATA COLLECTION PROCESS:	The National Center for SRTS's parent/caregiver survey was distributed online to parents at Village School to assess family perceptions about school travel options and behavior.
NUMBER OF SURVEYS:	56; 25% response rate

SUMMARY OF DATA COLLECTION AND METHODOLOGY

The parent/caregiver survey data included in this report was collected from 56 participants with students attending Village School.

SUMMARY OF RESULTS:

Parent/caregiver survey analysis found that only 22% of respondents live within one mile of Village School, with an additional 23% living between one and two miles of the school site (see Figure 12). 55% of students live more than two miles from the school. This indicates that the majority of students are eligible for school bussing and live too far to easily walk or bike to school.



Figure 12. How Far Does your Family Live from School?, 2013 Parent/Caregiver Survey

Driving in a family vehicle was the most commonly-used transportation option for the students of parents surveyed, accounting for almost half of the total trips reported in this survey. Among those who live less than a quarter mile from Village School, however, 100% used active modes (see Figure 13 and Table 6). The same was true for students who live between a half-mile and a mile from the campus. Overall, students who live closer than a mile from the school had very high rates of commuting by active modes. Those who live more

than a mile from Village School are most likely to ride in a family vehicle, but many also reported using active modes (primarily biking) even at these distances.



Figure 13. Mode Split by Distance from School, 2013 Parent/Caregiver Survey

Table 6. Count of Trips by Distance the Family Lives from School, 2013 Parent/Caregiver Survey

DISTANCE	WALK	BIKE	SCHOOL BUS	FAMILY VEHICLE	CARPOOL	TRANSIT	OTHER
Less than 1/4 mile	10	0	0	0	0	0	0
1/4 mile up to 1/2 mile	5	4	0	3	0	0	0
1/2 mile up to 1 mile	2	0	0	0	0	0	0
1 mile up to 2 miles	2	7	0	12	1	2	0
More than 2 miles	0	12	0	35	9	2	0

According to the survey, 55% of students had asked their parent or caregiver for permission to walk or bike to/from school in the last year. While parents and caregivers reported varying concerns that limit their student's ability to walk or bike to school, some were more commonly expressed than others (see Figure 14). The following were top concerns for the Village School community:

- The amount of traffic along the route
- The speed of traffic along the route
- The distance from home to school
- Safety of intersections and crossings
- The time it takes to get to school by walking or biking



Figure 14. What Issues Affect the Decision to Walk or Bike to School?, 2013 Parent/Caregiver Survey

A majority of parent and caregiver respondents (94%) felt Village School encouraged or strongly encouraged active transportation at the time of the survey (see Figure 15). Only 6% characterized the school as neither discouraging or encouraging walking and biking.



Figure 15. Does your School Encourage Walking or Biking to/from School?, 2013 Parent/Caregiver Survey

At the time of the survey, the majority (79%) of parents and caregivers reported that they thought walking or biking to school would be a fun or very fun activity for their students, while only 2% disagreed. An additional 19% were neutral or unsure on whether their student would enjoy walking and biking to school (Figure 16).



Figure 16. How Fun is Walking and Biking to School?, 2013 Parent/Caregiver Survey

A majority of parents and caregivers recognized the health benefits of active transportation, with 98% reporting that walking or biking to school would be healthy or very healthy for their student. Only 2% felt that walking and biking were unhealthy for their student (see Figure 17).



Figure 17. How Healthy is Walking or Biking to School?, 2013 Parent/Caregiver Survey

Crash Data – Village School

DATE COLLECTED:	2012-2016
DATA COLLECTION PROCESS:	Crash Data included in this report originates the ODOT SRTS Web Map Application, with supplemental data from roadway jurisdictions as available. This analysis does not determine whether the grant intervention caused any change in the occurrence of crashes, due to small sample size. Additionally, due to insufficient mode split data to calculate crash rates, this report offers a count and description of reported incidents.
NUMBER OF REPORTED CRASHES INVOLVING BIKES AND PEDESTRIANS WITHIN 1 MILE OF SCHOOL:	Between 2012 and 2016, 34 crashes involving a bicyclist or pedestrian were reported within one mile of the school.
TIME OF REPORTED CRASHES INVOLVING BIKES AND PEDESTRIANS WITHIN 1 MILE OF SCHOOL*:	Of these reported crashes, 29 occurred during school commuting hours, with an even spread over AM and PM commuting hours. * For these purposes school commuting hours were defined as 6 AM to 9 PM.
NUMBER OF REPORTED INJURIES BY SEVERITY WITHIN 1 MILE OF THE SCHOOL:	All 34 of these reported crashes involved an injury to a bicyclist or pedestrian. All 23 of the reported crashes involving a bicyclist were non-fatal. All 11 of the reported crashes involving a pedestrian were non-fatal. Figure 18 illustrates the location of the crashes by type and injury severity.
ADDITIONAL CRASH DATA CONSIDERATIONS:	An improved crossing is planned on Willamette Street just south of 34 th Avenue, where one of the bicycle crash injuries was reported.

Notes on Community Context or other Relevant Information:

None



Figure 18: Village School Bicycle & Pedestrian Collisions (2012-2016)

Baseline Data – Prairie Mountain School

The following section presents pre-construction data, which will be compared against similar data collected after the project has been construction, in order to estimate the impact of the improvements.

Hand Tallies

DATE COLLECTED:	November, 2017
DATA COLLECTION PROCESS:	25 classrooms surveyed about their trip to and from school
NUMBER OF STUDENTS:	No information available
TRIPS RECORDED	2,928 trips recorded by the hand tallies

SUMMARY OF DATA COLLECTION AND METHODOLOGY

The November 2017 baseline hand tally data from Prairie Mountain School includes 2,928 recorded trips collected from students in 25 classrooms. The hand tally process surveyed all students in each classroom on which transportation mode(s) they had used to get to and from school the day of the survey and the day prior to the survey. The National Center for SRTS's standard hand tally data collection forms and process were used. This data provides a snapshot of student travel behavior trends.

SUMMARY OF RESULTS:

Prairie Mountain School hand tally data from 2017 indicates that a majority of students (73%) surveyed ride in a family vehicle to school, and 71% rode home (see Figure 19 and Table 7). Approximately 8% of students walk to school, and 7% walk home. In addition, 8% of students reported biking to and from school.

Figure 19. Student Mode Split by Time of Day, 2017 Hand Tally Data



Note: Percentages may not total 100% due to rounding.

Table 7. Count of Student Mode Split to and From School, 2017 Hand tally Data

TIME OF DAY	WALK	BIKE	SCHOOL BUS	FAMILY VEHICLE	CARPOOL	TRANSIT	OTHER
Morning	203	43	333	797	72	0	15
Afternoon	293	44	498	542	73	0	15

Parent/Caregiver Surveys

DATE COLLECTED:	November 2013
DATA COLLECTION PROCESS:	The National Center for SRTS's parent/caregiver survey was distributed online to parents at Prairie Mountain School to assess family perceptions about school travel options and behavior.
NUMBER OF SURVEYS:	133; 19% response rate

SUMMARY OF DATA COLLECTION AND METHODOLOGY

The parent/caregiver survey data included in this report was collected from 133 participants with students attending Prairie Mountain School.

SUMMARY OF RESULTS:

Parent/caregiver survey analysis found that 72% of respondents live within one mile of Prairie Mountain School, with an additional 17% living between one and two miles of the school site (see Figure 20). In addition, 11% of students live more than two miles from the school. This indicates that many students are within a reasonable walking or biking distance from the school.





Overall, driving in a family vehicle was the most common mode of transportation to and from Prairie Mountain School. Among those who live less than a quarter mile from the campus, however, 35% used active modes and 24% used shared modes (see Figure 21 and Table 8). For students who live between a quartermile and a mile from the campus, only 44% of trips were made by family vehicle. Those who live more than a mile from Prairie Mountain School are much more likely to ride in a family vehicle, but around a third reported using shared modes (primarily the school bus or carpool).



Figure 21. Mode Split by Distance from School, 2013 Parent/Caregiver Survey



DISTANCE	WALK	BIKE	SCHOOL BUS	FAMILY VEHICLE	CARPOOL	TRANSIT	OTHER
Less than 1/4 mile	13	2	8	9	0	0	0
1/4 mile up to 1/2 mile	13	18	8	21	3	0	0
1/2 mile up to 1 mile	10	14	16	27	3	0	1
1 mile up to 2 miles	1	0	7	22	6	1	1
More than 2 miles	0	0	9	14	2	0	0

According to the survey, 81% of students had asked their parent or caregiver for permission to walk or bike to/from school in the last year. While parents and caregivers reported varying concerns that limit their student's ability to walk or bike to school, some were more commonly expressed than others (see Figure 22). The following were top concerns for the Prairie Mountain School community:

- The weather or climate
- The distance from home to school
- The speed of traffic along the route
- The time it takes to get to school by walking or biking
- The amount of traffic along the route



Figure 22. What Issues Affect the Decision to Walk or Bike to School?, 2013 Parent/Caregiver Survey

A majority of parent and caregiver respondents (75%) felt Prairie Mountain School encouraged or strongly encouraged active transportation at the time of the survey (see Figure 23). A quarter of respondents characterized the school as neither discouraging or encouraging walking and biking.



Figure 23. Does your School Encourage Walking or Biking to/from School?, 2013 Parent/Caregiver Survey

At the time of the survey, the majority (69%) of parents and caregivers reported that they thought walking or biking to school would be a fun or very fun activity for their students, while only 3% disagreed. An additional 28% were neutral or unsure on whether their student would enjoy walking and biking to school (Figure 24).



Figure 24. How Fun is Walking and Biking to School?, 2013 Parent/Caregiver Survey

A strong majority of parents and caregivers recognized the health benefits of active transportation, with 92% reporting that walking or biking to school would be healthy or very healthy for their student. Only 9% felt neutral about whether these activities would be healthy or unhealthy (see Figure 25).



Neutral

Unhealthy

Figure 25. How Healthy is Walking or Biking to School?, 2013 Parent/Caregiver Survey

Healthy

Very healthy

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Very unhealthy

Crash Data – Prairie Mountain School

DATE COLLECTED:	2012-2016
DATA COLLECTION PROCESS:	Crash Data included in this report originates the ODOT SRTS Web Map Application, with supplemental data from roadway jurisdictions as available. This analysis does not determine whether the grant intervention caused any change in the occurrence of crashes, due to small sample size. Additionally, due to insufficient mode split data to calculate crash rates, this report offers a count and description of reported incidents.
NUMBER OF REPORTED CRASHES INVOLVING BIKES AND PEDESTRIANS WITHIN 1 MILE OF SCHOOL:	Between 2012 and 2016, 13 crashes involving a bicyclist or pedestrian were reported within one mile of the school.
TIME OF REPORTED CRASHES INVOLVING BIKES AND PEDESTRIANS WITHIN 1 MILE OF SCHOOL*:	Of these reported crashes, 12 occurred during school commuting hours; the majority occurred during PM commuting hours. * For these purposes school commuting hours were defined as 6 AM to 9 PM.
NUMBER OF REPORTED INJURIES BY SEVERITY WITHIN 1 MILE OF THE SCHOOL:	All 13 of these reported crashes involved an injury to a bicyclist or pedestrian. All five of the reported crashes involving a bicyclist were non-fatal. Of the eight reported crashes involving a pedestrian, 6 were non-fatal and two were fatal. Figure 26 illustrates the location of the crashes by type and injury severity.
ADDITIONAL CRASH DATA CONSIDERATIONS:	Intersection improvements are planned at the intersection of Terry St and Donohoe Ave, where several crashes have been recorded nearby including a pedestrian fatality in 2013.

Notes on Community Context or other Relevant Information:

None



Figure 26: Prairie Mountain School Bicycle & Pedestrian Collisions (2012-2016)

Baseline Data – Meadow View School

The following section presents pre-construction data, which will be compared against similar data collected after the project has been construction, in order to estimate the impact of the improvements.

Hand Tallies

DATE COLLECTED:	November 2017
DATA COLLECTION PROCESS:	16 classrooms surveyed about their trip to and from school
NUMBER OF STUDENTS:	No information available
TRIPS RECORDED	1,698 trips recorded by the hand tallies

SUMMARY OF DATA COLLECTION AND METHODOLOGY

The November 2017 baseline hand tally data from Meadow View School includes 1,698 recorded trips collected from students in 16 classrooms. The hand tally process surveyed all students in each classroom on which transportation mode(s) they had used to get to and from school the day of the survey and the day prior to the survey. The National Center for SRTS's standard hand tally data collection forms and process were used. This data provides a snapshot of student travel behavior trends.

SUMMARY OF RESULTS:

Meadow View School hand tally data from 2017 indicates that a majority of students (52%) surveyed ride in a family vehicle to school, and 49% rode home (see Figure 27 and Table 9). Approximately 23% of students walk to school, and 24% walk home. Additionally, 11% rode the school bus to school, and 12% rode home. Only 3% of students reported biking to and from school.



Figure 27. Student Mode Split by Time of Day, 2017 Hand Tally Data

Note: Percentages may not total 100% due to rounding.

Table 9. Count of Student Mode Split to and From School, 2017 Hand tally Data

TIME OF DAY	WALK	BIKE	SCHOOL BUS	FAMILY VEHICLE	CARPOOL	TRANSIT	OTHER
Morning	204	27	98	462	35	1	62
Afternoon	196	24	98	400	41	1	49

Parent/Caregiver Surveys

DATE COLLECTED:	November 2013
DATA COLLECTION PROCESS:	The National Center for SRTS's parent/caregiver survey was distributed online to parents at Meadow View School to assess family perceptions about school travel options and behavior.
NUMBER OF SURVEYS:	25; 3.2% response rate

SUMMARY OF DATA COLLECTION AND METHODOLOGY

The parent/caregiver survey data included in this report was collected from 25 participants with students attending Meadow View School.

SUMMARY OF RESULTS:

Parent/caregiver survey analysis found that 54% of respondents live within one mile of Meadow View School, with an additional 25% living between one and two miles of the school site (see Figure 28). Approximately 21% of students live more than two miles from the school.



Figure 28. How Far Does your Family Live from School?, 2013 Parent/Caregiver Survey

Overall, driving in a family vehicle was the most common mode of transportation to and from Meadow View School. Among those who live less than a quarter mile from the campus, however, almost two thirds used active modes (see Figure 29 and Table 10). For students living between a quarter-mile and a half-mile, three fourths used active modes. Those who live more than a mile from Meadow View School are much more likely to ride in a family vehicle, but 60% of students who live more than two miles from school reported using shared modes (primarily the school bus).



Figure 29. Mode Split by Distance from School, 2013 Parent/Caregiver Survey

Table 10. Count of Trips by Distance the Family Lives from School, 2013 Parent/Caregiver Survey

DISTANCE	WALK	BIKE	SCHOOL BUS	FAMILY VEHICLE	CARPOOL	TRANSIT	OTHER
Less than 1/4 mile	9	0	0	5	0	0	0
1/4 mile up to 1/2 mile	4	2	0	2	0	0	0
1/2 mile up to 1 mile	0	0	0	2	0	0	2
1 mile up to 2 miles	0	0	0	11	1	0	0
More than 2 miles	0	0	4	4	2	0	0

According to the survey, 67% of students had asked their parent or caregiver for permission to walk or bike to/from school in the last year. While parents and caregivers reported varying concerns that limit their student's ability to walk or bike to school, some were more commonly expressed than others (see Figure 30). The following were top concerns for the Meadow View School community:

- The distance from home to school
- The threat of violence or crime
- The amount of traffic along the route
- The speed of traffic along the route
- The weather or climate



Figure 30. What Issues Affect the Decision to Walk or Bike to School?, 2013 Parent/Caregiver Survey

A majority of parent and caregiver respondents (76%) felt Meadow View School encouraged or strongly encouraged active transportation at the time of the survey (see Figure 31). About a quarter of respondents characterized the school as neither discouraging or encouraging walking and biking.





At the time of the survey, the majority (72%) of parents and caregivers reported that they thought walking or biking to school would be a fun or very fun activity for their students, while only 4% disagreed. An additional 20% were neutral or unsure on whether their student would enjoy walking and biking to school (Figure 32).



Figure 32. How Fun is Walking and Biking to School?, 2013 Parent/Caregiver Survey

A strong majority of parents and caregivers recognized the health benefits of active transportation, with 96% reporting that walking or biking to school would be healthy or very healthy for their student. Only 4% felt neutral about whether these activities would be healthy or unhealthy (see Figure 33).



Figure 33. How Healthy is Walking or Biking to School?, 2013 Parent/Caregiver Survey

Crash Data – Meadow View School

DATE COLLECTED:	2012-2016
DATA COLLECTION PROCESS:	Crash Data included in this report originates the ODOT SRTS Web Map Application, with supplemental data from roadway jurisdictions as available. This analysis does not determine whether the grant intervention caused any change in the occurrence of crashes, due to small sample size. Additionally, due to insufficient mode split data to calculate crash rates, this report offers a count and description of reported incidents.
NUMBER OF REPORTED CRASHES INVOLVING BIKES AND PEDESTRIANS WITHIN 1 MILE OF SCHOOL:	Between 2012 and 2016, three crashes involving a bicyclist or pedestrian were reported within one mile of the school.
TIME OF REPORTED CRASHES INVOLVING BIKES AND PEDESTRIANS WITHIN 1 MILE OF SCHOOL*:	All three of these reported crashes occurred during school commuting hours. * For these purposes school commuting hours were defined as 6 AM to 9 PM.
NUMBER OF REPORTED INJURIES BY SEVERITY WITHIN 1 MILE OF THE SCHOOL:	All three of these reported crashes involved an injury to a bicyclist or pedestrian. The one reported crash involving a bicyclist was non-fatal. The two reported crashes involving a pedestrian were non-fatal. Figure 34 illustrates the location of the crashes by type and injury severity.
ADDITIONAL CRASH DATA CONSIDERATIONS:	School speed zone flashers and speed readers are planned on Barger Dr, where all of the recorded crashes occurred. In its application the City of Eugene cited four crashes including three injuries (the additional crash presumably after 2016).

Notes on Community Context or other Relevant Information:

None





Baseline Data – Malabon Elementary School

The following section presents pre-construction data, which will be compared against similar data collected after the project has been construction, in order to estimate the impact of the improvements.

Hand Tallies

DATE COLLECTED:	November 2017
DATA COLLECTION PROCESS:	13 classrooms surveyed about their trip to and from school
NUMBER OF STUDENTS:	No information available
TRIPS RECORDED	1,636 trips recorded by the hand tallies

SUMMARY OF DATA COLLECTION AND METHODOLOGY

The November 2017 baseline hand tally data from Malabon Elementary School includes 1,636 recorded trips collected from students in 13 classrooms. The hand tally process surveyed all students in each classroom on which transportation mode(s) they had used to get to and from school the day of the survey and the day prior to the survey. The National Center for SRTS's standard hand tally data collection forms and process were used. This data provides a snapshot of student travel behavior trends.

SUMMARY OF RESULTS:

Malabon Elementary School hand tally data from 2017 indicates that a majority of students (53%) surveyed ride in a family vehicle to school, and 39% rode home (see Figure 35 and Table 11). Approximately 10% of students walk to school, and 14% walk home. In addition, 31% rode the school bus to school, and 39% rode home. Only 3% of students reported biking to and from school.



Figure 35. Student Mode Split by Time of Day, 2017 Hand Tally Data

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Note: Percentages may not total 100% due to rounding.

Table 11. Count of Student Mode Split to and From School, 2017 Hand tally Data

TIME OF DAY	WALK	BIKE	SCHOOL BUS	FAMILY VEHICLE	CARPOOL	TRANSIT	OTHER
Morning	81	24	251	428	24	7	6
Afternoon	114	25	319	319	24	8	6

Parent/Caregiver Surveys

DATE COLLECTED:	May 2014
DATA COLLECTION PROCESS:	The National Center for SRTS's parent/caregiver survey was distributed online to parents at Malabon Elementary School to assess family perceptions about school travel options and behavior, with support from Alta Planning + Design for data collection materials and methods.
NUMBER OF SURVEYS:	60; 14% response rate

SUMMARY OF DATA COLLECTION AND METHODOLOGY

The parent/caregiver survey data included in this report was collected from 60 participants with students attending Malabon Elementary School.

SUMMARY OF RESULTS:

Parent/caregiver survey analysis found that 67% of respondents live within one mile of Malabon Elementary School, with an additional 25% living between one and two miles of the school site (see Figure 36). Only 7% of students live more than two miles from the school. This indicates that many Malabon students live within possible walking and/or biking distance from the school.

Figure 36. How Far Does your Family Live from School?, 2014 Parent/Caregiver Survey



Overall, driving in a family vehicle was the most common mode of transportation to and from Malabon Elementary School. Among those who live less than a quarter mile from the campus, however, almost a third used active modes and nearly a third used shared modes (see Figure 37 and Table 12). Active modes were not popular among students who lived more than a quarter mile from school. For students living between a quarter-mile and a half-mile, 43% used shared modes and the rest rode in a family vehicle. For students who

live between a half-mile and two miles away, half rode in a family vehicle. Those who live more than two miles from Malabon Elementary all rode in a family vehicle.

100% Family Vehicle 80% 40% 46% Number of Trips per Week 50% 57% 60% 100% Shared Modes 30% 40% (school bus, 46% carpool, transit) 44% 43% 20% 30% Active Modes 0% (walk, bike, Less than 1/4 1/4 mile up to 1/2 mile up to 1 1 mile up to 2 More than 2 other) mile 1/2 mile mile miles miles Distance from School

Figure 37. Mode Split by Distance from School, 2014 Parent/Caregiver Survey

Table 12. Count of Trips by Distance the Family Lives from School, 2014 Parent/Caregiver Survey

DISTANCE	WALK	BIKE	SCHOOL BUS	FAMILY VEHICLE	CARPOOL	TRANSIT	OTHER
Less than 1/4 mile	6	0	6	8	0	0	0
1/4 mile up to 1/2 mile	0	0	4	8	2	0	0
1/2 mile up to 1 mile	0	2	12	16	2	0	0
1 mile up to 2 miles	0	2	12	12	0	0	0
More than 2 miles	0	0	0	8	0	0	0

According to the survey, 65% of students had asked their parent or caregiver for permission to walk or bike to/from school in the last year. While parents and caregivers reported varying concerns that limit their student's ability to walk or bike to school, some were more commonly expressed than others (see Figure 38). The following were top concerns for the Malabon Elementary School community:

- The threat of violence or crime
- The speed of traffic along the route
- The amount of traffic along the route
- The safety of intersections and crossings
- The distance from home to school



Figure 38. What Issues Affect the Decision to Walk or Bike to School?, 2014 Parent/Caregiver Survey

A majority of parent and caregiver respondents (78%) felt Malabon Elementary School encouraged or strongly encouraged active transportation at the time of the survey (see Figure 39). In addition, 22% of respondents characterized the school as neither discouraging or encouraging walking and biking.



Figure 39. Does your School Encourage Walking or Biking to/from School?, 2014 Parent/Caregiver Survey

At the time of the survey, the majority (75%) of parents and caregivers reported that they thought walking or biking to school would be a fun or very fun activity for their students, while an additional 25% were neutral or unsure on whether their student would enjoy walking and biking to school (Figure 40).



Figure 40. How Fun is Walking and Biking to School?, 2013 Parent/Caregiver Survey

A strong majority of parents and caregivers recognized the health benefits of active transportation, with 93% reporting that walking or biking to school would be healthy or very healthy for their student. Only 7% felt neutral about whether these activities would be healthy or unhealthy (see Figure 41).





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Crash Data – Malabon Elementary School

DATE COLLECTED:	2012-2016
DATA COLLECTION PROCESS:	Crash data included in this report originates the ODOT SRTS Web Map Application, with supplemental data from roadway jurisdictions as available. This analysis does not determine whether the grant intervention caused any change in the occurrence of crashes, due to small sample size. Additionally, due to insufficient mode split data to calculate crash rates, this report offers a count and description of reported incidents.
NUMBER OF REPORTED CRASHES INVOLVING BIKES AND PEDESTRIANS WITHIN 1 MILE OF SCHOOL:	Between 2012 and 2016, 25 crashes involving a bicyclist or pedestrian were reported within one mile of the school.
TIME OF REPORTED CRASHES INVOLVING BIKES AND PEDESTRIANS WITHIN 1 MILE OF SCHOOL*:	Of these reported crashes, 23 occurred during school commuting hours; the majority occurred during PM commuting hours. * For these purposes school commuting hours were defined as 6 AM to 9 PM.
NUMBER OF REPORTED INJURIES BY SEVERITY WITHIN 1 MILE OF THE SCHOOL:	All 25 of these reported crashes involved an injury to a bicyclist or pedestrian. All 15 of the reported crashes involving a bicyclist were non-fatal. Of the 10 reported crashes involving a pedestrian, nine were non-fatal and one was fatal. Figure 42 illustrates the location of the crashes by type and injury severity.
ADDITIONAL CRASH DATA CONSIDERATIONS:	Traffic calming measures are planned along Marshall Avenue, where one of the recorded non-fatal pedestrian injuries occurred.

Notes on Community Context or other Relevant Information:

None



Figure 42: Malabon Elementary School Bicycle & Pedestrian Collisions (2012-2016)

- Bicycle: No Injury 0
- Pedestrian: No Injury

Source: Crash Analysis and Reporting Unit, ODOT (2012-2016)

Follow-Up Data Collection Plan

Timeline

Post-grant field visits to collect follow-up data will be scheduled to take place the spring following the completion of each grant intervention. The City of Eugene estimates project completion is planned for June 2020.

Follow-up Data Collection Process

METHOD	PLANNED AT THIS SITE?	TARGET SAMPLE SIZE	TARGET FIELD WORK DATE
STUDENT HAND TALLIES:	Yes	At least 2 classrooms per grade per school	Late spring 2021 (assuming project completion)
PARENT SURVEYS:	Yes	At least 30 parents per school	Late spring 2021 (assuming project completion)
PARENT FOCUS GROUPS:	Yes	4-10 parents	Late spring 2021 (assuming project completion)
STAFF SURVEYS:	Yes	1-3 school staff and administration	Late spring 2021 (assuming project completion)
CRASH DATA:	Yes	N/A	N/A
OTHER (LIST):	None	N/A	N/A

Appendix A. Final Report DRAFT Outline

Note: The following Final Report outline is subject to change.

Chapter 1. Introduction

- Description of SRTS IN Grant Program
- Description of Final Report purpose and contents

SUMMARY OF FUNDED INFRASTRUCTURE IMPROVEMENTS

- Project description
- Map of improvements
- Project timeline

BACKGROUND

- School demographics
- Summary of Non-Infrastructure SRTS Work
- Place Type

Chapter 2. Data Collection and Results

HAND TALLY DATA

- Data Collection Methods
- Change in walking and biking rates

PARENT SURVEY DATA

- Data Collection Methods
- Change in mode split by distance from school
- Change in barriers to walking and biking
- Change in perceptions of walking and biking
- Other observations

FOCUS GROUPS

- Data Collection Methods
- Change in barriers to walking and biking
- Change in perceptions of walking and biking

CRASH DATA

- Data included in analysis
- Change in crash data (If available, otherwise this will provide updated baseline crash data from ODOT)

Chapter 3. Findings

- Impact of Infrastructure improvements on mode split
- Impact of Infrastructure Improvements on Access to Safe Infrastructure

- impact of infratructure improvements on safety/perception of safety
- Impact of Infrastructure Improvements on Program lifespan/partnerships
- impact of infrastructure improvements on equity
- Other Findings
- Next Steps and Recommendations

Appendix B. Competitive SRTS IN Grant Funded Project Area Map

Figure 43. City of Eugene Competitive SRTS IN Grant Funded Project Area Map City of Eugene – 4j School District & Bethel School District SRTS Project Area Map • Holt Elementary **H** (K-5) \mathbf{H} Prairie Malabon School (K-5) Mountain School (K-8) 1 Meadowview School (K-8) Cesar Chavez Village School Elementary (K-8) (K-5) **H** School 1 School Speed Zone Enhanced Crossing

Appendix C. Access to SRTS Detailed Methodology

Purpose

The access map analysis was designed to estimate the number of students with new or significantly improved access to school upon the implementation of a proposed walking or biking facility. While determining the number of students who benefit from a proposed project is not an exact science, this analysis provides a common approach that utilizes school district boundaries, census population data and local zoning codes to generate rough estimates. These estimates lend greater insight into the impact of a particular Safe Routes to School project, allowing facility improvements to be compared and thus aid in prioritizing investments. This memo outlines the data sources, methods, and assumptions that inform the access map analysis described in this report.

Data Sources

Three primary data sources were used in this analysis in conjunction with the information provided in each project application:

Name	Source
American Community Survey (ACS) Population Estimates	<u>US Census Bureau</u>
Oregon School District Boundaries	Oregon Department of Education
2017 Oregon Statewide Zoning Map	Oregon Department of Land Conservation and Development

Methods

The analysis establishes two geographical areas in which census block population data are apportioned to: 1) the school area and 2) the access area. The school area is defined as the area that is within a 1-mile radius of the applicant school or within the enrollment boundary, whichever is closer. This area covers residents within reasonable walking or biking distance of the to school. The access area is the area that covers all residents who would experience new or significantly improved access to school upon the implementation of the proposed walking or biking facility.

Once both of these areas have been established, the consultant team identified the census blocks that intersect each. We then apportioned the population data from the census blocks to the school area and the access area, based on the relative coverage of each census block. To account for varying residential densities in each census block, we used residential zoning data to determine the proportion of the population that should be attributed to the school area and access area.

After the estimated populations of both the school area and the access area are calculated, the local jurisdiction's youth rate is applied to each to get the number of people ages 5-17 in those areas, which we refer to as the 'school age population'. Finally, the school age populations of the access area and the school area are compared. The percentage of school age students with new or improved access to school represents the proportion of students impacted by the project out of all the students in the school area who could reasonably walk or bike to school.

Defining the Access Area

The boundary of the school area is readily calculable using GIS and the rules described above. By contrast, the access area boundary was determined manually based on the project description and professional judgement of impact. While this method inherently includes subjective judgement, the high variability and nuance in the transportation context surrounding the proposed project makes this method more suitable for determining the residential areas would benefit from its implementation than a purely GIS-based workflow. The following assumptions and rules of thumb were adopted in order to make the assessment of the access areas as uniform as possible:

- 1. The analysis assumes people are willing to "walk around the block" half the distance of their street in the opposite direction of school in order to utilize a safe path to school.
- 2. The analysis assumes that Google Earth street view imagery is up to date, as this was used to determine sidewalk connectivity and condition, which informed the access areas.
- 3. Places without sidewalks, particularly in small towns, are considered walkable if the street is narrow, residential, and designed for a low volume of traffic (i.e., lacks a centerline)
- 4. The access areas consider ADA accessibility and account for those in wheelchairs or other mobility devices.
- The access areas may include residents who have to walk more than one mile to school, based on the available street network.
- 6. Even if some residents may have already had access to school, they might be included in the access area if the proposed project would significantly improve their access to school.

Apportioning Census Population Data

As described above, census population data was apportioned to both the school area and the access area based on how much a census block covered them. However, to account for varying population densities across census blocks, residential zones in the census blocks were identified.

The statewide zoning data provided by the Oregon Department of Land Conservation and Development groups residential zones across all jurisdictions in the state into 13 categories of increasing density. Our team further consolidated these categories into just 4: Low Density, Medium-Low Density, Medium-High Density, and High Density. We then weighted these categories by their relative density compared to Low Density:

Residential Zone Group	Population Density Factor
Low Density	1
Medium-Low Density	2
Medium-High Density	5
High Density	15

These factors serve to more accurately distribute the population data across the residential zones within the census block. In other words, if the census block contained only Low Density residential zones, then the population of any given area within that census block is equal to the proportion of the census block that that area covers. By contrast, if a census block contains Low Density residential zones and High Density zones, we attribute 15 times the population of the census block to the High Density zones than the Low Density zones. The density factors were determined using the typical number of dwellings per acre in in each zone.

The analysis uses these four zoning categories to identify the spatial distribution of the population of the census block and apportion it to the overlaying school area and access areas based on how much those areas cover the residential zones of the census block.

General Assumptions

- This analysis assumes that the Oregon Statewide Zoning code reflects the actual residential densities of the current built environment.
- Areas that were zoned for housing that had no development on them according to the latest satellite imagery (and significantly impacted the output) were removed from the analysis in order to improve the accuracy of the estimates. This was only utilized in a few low-population jurisdictions.
- This analysis assumes that families are evenly distributed between each of the four residential zone groups.
- The reported number of school-age students includes all students ages 5-17, not just elementary or middle school students. Thus, the number of students who actually attend the applicant school is likely much lower than the reported figure.