

# Clean Air & Safe Routes 4 Schools

## A School Travel Plan Springvalley Elementary School



Springvalley Elementary Clean Air & Safe Routes 4 Schools – a School Travel Plan is delivered in partnership with the City of Kelowna, Regional District of Central Okanagan, School District 23, Interior Health and the Royal Canadian Mounted Police (RCMP). The Regional Air Quality Coordinator compiled this Plan.

Revised September 2025

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# Project Overview

In 2022, the Regional District of Central Okanagan (RDCO), in coordination with the City of Kelowna, started the implementation of the Clean Air and Safe Routes 4 Schools program at Springvalley Elementary School.

The Clean Air and Safe Routes 4 Schools program utilizes the "School Travel Plan (STP)" toolkit, created by Green Communities Canada, in conjunction with the "Cleaner Air 4 Schools" toolkit developed by the City of London, England. The development of the School Travel Plan (STP), combined with the implementation of school programs, has resulted in a reduction in vehicle traffic and an increase in the number of students using active transportation. This integrated framework allowed for collaborative efforts with diverse stakeholders, not only to develop plans addressing safety concerns and infrastructure needs but also to actively identify areas of poor air quality, foster student understanding of air pollution's impacts, and engage the entire school community in improving local air quality.

The Municipal and School Committees collaboratively defined three core objectives for the program:

- Reduce vehicle congestion within school premises and enhance safety at the school site.
- Increase active and sustainable school travel modes for the daily journey.
- Reduce overall school emissions from both travel and school buildings.

The Municipal Committee, comprising City of Kelowna departments, Interior Health, RCMP, and School District 23, and a School Committee, including school representatives and parents, were established to guide the process.

- Baseline Data Collection: Initial research was conducted in 2022 through classroom and family surveys, observations, and traffic counts to understand existing active transportation rates and identify real or perceived barriers.
- School Walkabout: On May 24, 2022, committees actively participated in a walkabout to identify specific areas of concern related to school access and safety.
- Infrastructure Improvements: Between August and November 2023, and continuing into spring 2025, the City of Kelowna implemented significant infrastructure enhancements around the school. These included crosswalk shifts, curb extensions, widened bike lanes, traffic calming measures, and improved lighting and signage.

After three years of dedicated efforts and strategic interventions, significant progress has been observed.

- Follow-up classroom surveys, conducted in 2025 during Bike to School week, indicated a remarkable 26% overall increase in students using sustainable transportation modes (walking, cycling, school bus, and public transit). The significant shift to active transportation is estimated to result in an annual saving of 12 tonnes of greenhouse gas (GHG) emissions, highlighting the environmental benefits.

While the results are highly encouraging, the project emphasizes the importance of continued effort and adaptive strategies. The school is encouraged to continue implementing the recommendations of the Action Plan and monitor transportation patterns, particularly outside of specific awareness events like Bike to School Week, to assess long-term trends.

# Background

## The School Travel Plan

The School Travel Plan (STP) was developed with guidance from HASTE (Hub for Action on School Transportation Emissions) and the Provincial Coordinators for the School Travel Planning program. The Green Communities Canada toolkit has been developed and fine-tuned based on pilot programs run across Canada over several years. A School Travel Plan is a living document belonging to the school and should be revisited regularly to update the status of Action Plan items and to incorporate future evaluation findings. It is part of a complete School Travel Planning process, shown in Figure 1, which has been successfully developed and implemented across Canada since 2007.

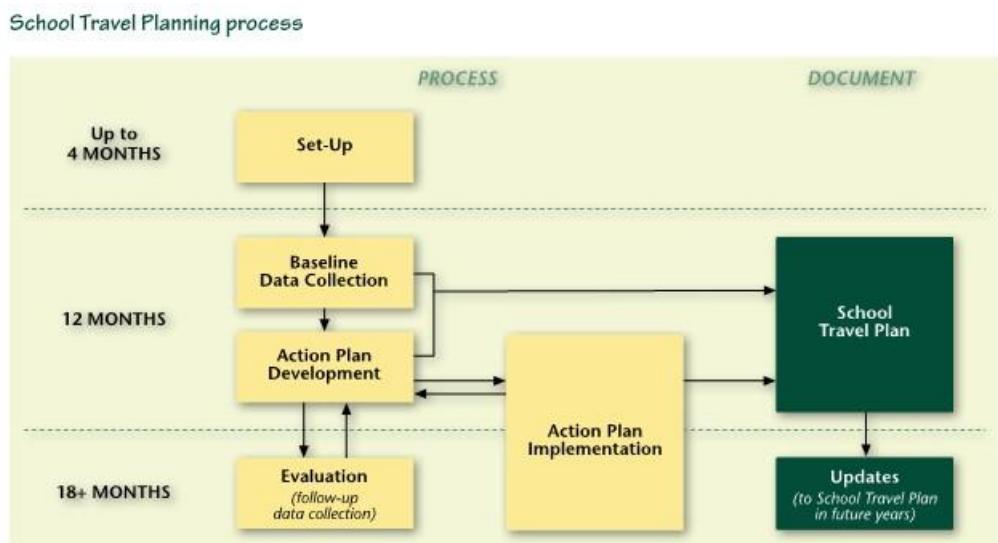


Figure 1. School Travel Planning Process

The National *Children's Health, Mobility, and Happiness: A Canadian School Travel Planning Model project*, completed in 2012, utilized Active and Safe Routes to School programming in conjunction with Transportation Demand Management principles to encourage active and sustainable modes of school travel for students, families, and staff. The project was designed to address barriers to active travel caused by attitudes and car-dominated design in school neighbourhoods, aiming to reduce the health risks to children. Even before many action plan items had been fully implemented, by March 2012, some provinces had seen a shift towards active travel of up to 6 percent, and some individual schools had noticed a change of over 20 percent.

Safe Routes to School programs focus on making it safer for more children to walk and bike to school, which helps increase their physical activity levels. Youth and children who walk or bike to school are more likely to get the **60 minutes of physical activity per day** recommended by the Canadian Physical Activity Guidelines.

A 2019 study shows<sup>1</sup>:

- **39% of kids and teens (5-17 years)** are meeting national physical guidelines of 60 minutes of moderate-to-vigorous physical activity per day.
- **62% of young children (3-4 years)** are meeting national physical activity guidelines.
- **7% of youth (10-19 years)** had a decrease in their levels of physical activity.
- **Boys (52%)** are twice as likely as **girls (26%)** to meet physical activity guidelines.
- Children and youth in Canada spend approximately **8.4 hours** of their day being sedentary.

<sup>1</sup> [Key Statistics and Facts - ParticipACTION](#)

There are many benefits to walking or cycling to school:

- Active transportation contributes to children's participation in physical activity and improves their overall health.
- Social- Time spent walking to school allows students to interact with their parents, siblings, or peers.
- Environment- Active trips are environmentally friendly and can contribute to reductions in greenhouse gas emissions.
- Economic - Walking or cycling to school saves money on gas.
- Education - Physical activity before the school day helps prepare students for learning by increasing concentration and reducing stress. Students arrive at school awake and alert.



Figure 2. Brain scans of students taking test

The effects of physical activity on brain health were analyzed.<sup>2</sup> Figure 2 shows two brain images, taken from the top of the head, representing the average amount of neural activity in students during a test after sitting for 20 minutes and then walking for 20 minutes. Blue represents lower neural activity, while red denotes higher brain activity in a given region. After 20 minutes at a moderate walking pace, children responded to test questions (in the content areas of reading, spelling, and arithmetic) with greater accuracy. Additionally, following physical activity, children completed learning tasks more quickly and accurately, and were more likely to read above their grade level.

## Resources

- School Travel Planning (STP) is presented by a coalition of organizations across Canada working together to enable more children to walk and cycle to school. Green Communities Canada<sup>3</sup> facilitates the coordination of efforts and knowledge transfer among these organizations. This national website offers a wealth of resources, including links to international and provincial/territorial organizations, their curricula, and campaigns that can benefit and complement a school's efforts in health promotion and environmental awareness.
  - Toolkit resources and flexible templates are available to use in every phase of the STP process. Find the Toolkit at [School Travel Planning Toolkit](#)
- Cleaner Air 4 Primary Schools Toolkit was developed by the London Sustainability Exchange (LSx). This organization works to support London in becoming a sustainable city. It provides businesses, governments, communities, and individuals with the motivation, knowledge, and connections they need to implement sustainability.
  - The Toolkit can be found at: [https://www.london.gov.uk/sites/default/files/ca4s\\_toolkit.pdf](https://www.london.gov.uk/sites/default/files/ca4s_toolkit.pdf)

Central Okanagan used a combination of both toolkits to implement [The Clean Air & Safe Routes 4 Schools program](#) at Springvalley Elementary School in the City of Kelowna.

<sup>2</sup> Active Living Research

<sup>3</sup> Canada Walks - Green Communities Canada

# Introduction

The Regional District of Central Okanagan (RDCO), in coordination with the City of Kelowna, invited Springvalley Elementary School to participate in the Clean Air and Safe Routes 4 Schools program to increase participation in active transportation, reduce the number of motorized vehicles used for travel to and from school and reduce emissions around and from school buildings.

Springvalley Elementary School was invited to participate in the process and signed the School Agreement on **March 10, 2022**. A presentation was delivered by the project coordinator, the facilitator, and the city traffic technician to the Parent Advisory Committee (PAC) and administrative personnel on May 9, 2022, to explain the project's scope and their respective roles in the process. Additionally, an introductory document for parents and the Terms of Reference of the school committee were sent for their review.

A City of Kelowna municipal committee was previously established and reaffirmed its commitment to support this school. All members previously signed a statement of support, which is included in *Appendix 1* of this document. With the school and municipal committees integrated, a general project timeline was presented to both committees for their review.

City staff prepared maps for the Walkabout route. City personnel also used traffic count data collected near Springvalley Elementary and analyzed the family and classroom baseline surveys. The municipal and school committee members actively participated in the process. They provided feedback on the draft maps and surveys, discussed the walkabout findings, and analyzed graphs and baseline data to develop and implement programs and activities targeting specific behaviours and barriers. All these are included in the Action Plan.

The following sections provide a comprehensive overview of all the baseline and follow-up data collected. This information is not just data, but a testament to the progress and outcomes of the Clean Air and Safe Routes to School program. It reflects our collective efforts and the positive changes we are making together.

## School Profile

Springvalley's Vice Principal provided the school profile on **March 18, 2022**, which contains general information, as well as the main concerns and issues the school was facing.

Table 1. Springvalley's Profile

Profile	Description
School Name	Springvalley Elementary School
School Type, e.g., public, separate, private	Public School
Age of School / Year Opened	Approx. 1975
Name of School Board	Central Okanagan Public Schools
Number of Students	260
Number of Families	Approx. 200
Grades, e.g. K-6, K-8	K- 5
School Bell Times	8:25, 2:30, 2:43
Number of Parking Spaces, staff/visitor	36
Description of Location, e.g., District centre/suburban/rural	Urban, next to Middle School, multi-age housing, Care house, industrial buildings nearby, as well as parks and highways, and busy arterial roadways
Is the school in a Neighbourhood Watch? or Block Parent Community?	No
% Bussed Students	0
Socio-Economic Description of Families	According to EDI (Early Development Index), the lowest SES score in this district is among mid-low-income families.
Any local programs, e.g., French immersion, fine arts, special needs, before- and after-school daycare, etc.	There is an after-school daycare in this building.
High-Level Description of Any Major School Travel Problems e.g., catchment size, driver behaviour, on local or connector road, traffic speed, heavy trucks, bussing wait times	Driver behaviours (speeding, ignoring stop signs), heavy trucks, we are a connector road between Hwy. 33 and Springfield Rd., sidewalk concerns: drivers are not observing the do not park/do not stop' signs in front of the school.

Profile	Description
Existing Facilities at School Site, e.g., bike rack/storage, kiss' n ride, school bus drop-off zone, adult or student crossing guards, public transit bus stops serving school, transport arrangements to after school programs.	Bike storage compound, student crossing guards, transport to after-school programs, and a school bus drop-off zone
Existing Safety Policy & Education, e.g., school safety policy and rules, current safety education programs	Not now, we hope this will come from our involvement in this program.
Programs at this school that have goals like STP, e.g., environmental, physical activity, mental health	SEL program to improve mental health of students (Rest and Return Room)
Types of school/parent committee communications used/available (i.e., newsletter, website, Facebook page)	Monthly newsletter, email, SMS text messages, school website
Other Information	

## Catchment

In 2022, there were 260 students in grades K-5 and 200 families. In 2024-2025, there were 295 students and 225 families. The catchment area is shown below:

 Springvalley Elementary Catchment

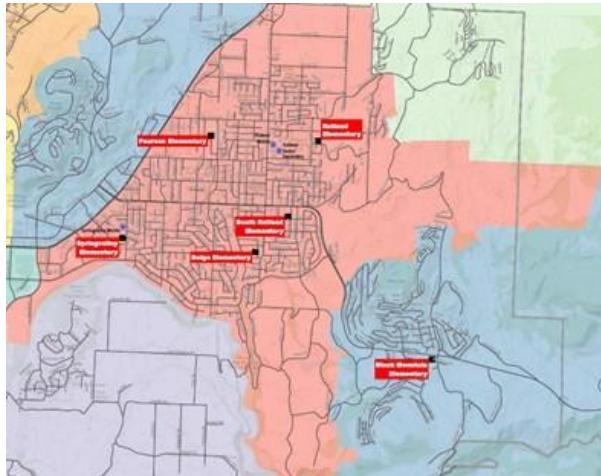


Figure 3. Springvalley Elementary Catchment Area

## GIS Analysis - Distance to School

Via the postal codes from all students attending Springvalley Elementary School in 2021, general information was obtained to support some strategies and actions within the school. A GIS analysis was conducted using ArcInfo to calculate the distance from home to school for all students. The following are the results:

**Distance to School**

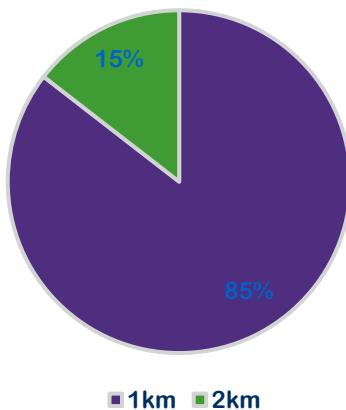


Figure 4. Distance to School

- 85% of current students live within 1.0 km of school
- 15% of students require a longer walk/bike ride to reach school as they live within 2.0 km

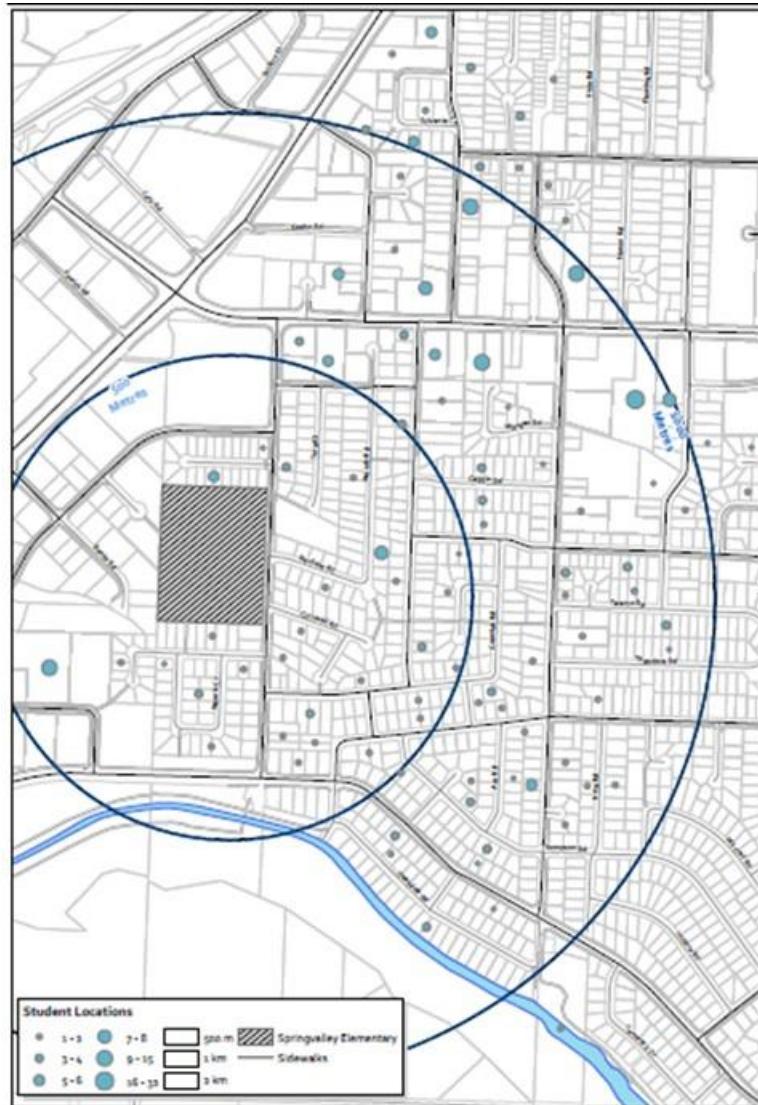
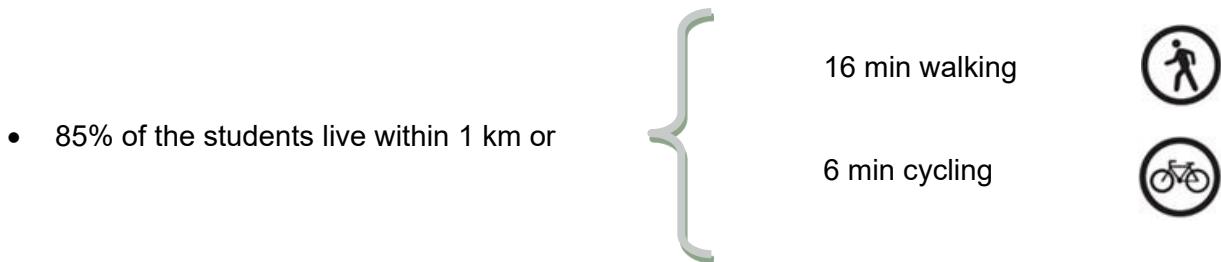


Figure 5. Students within the catchment area by postal codes

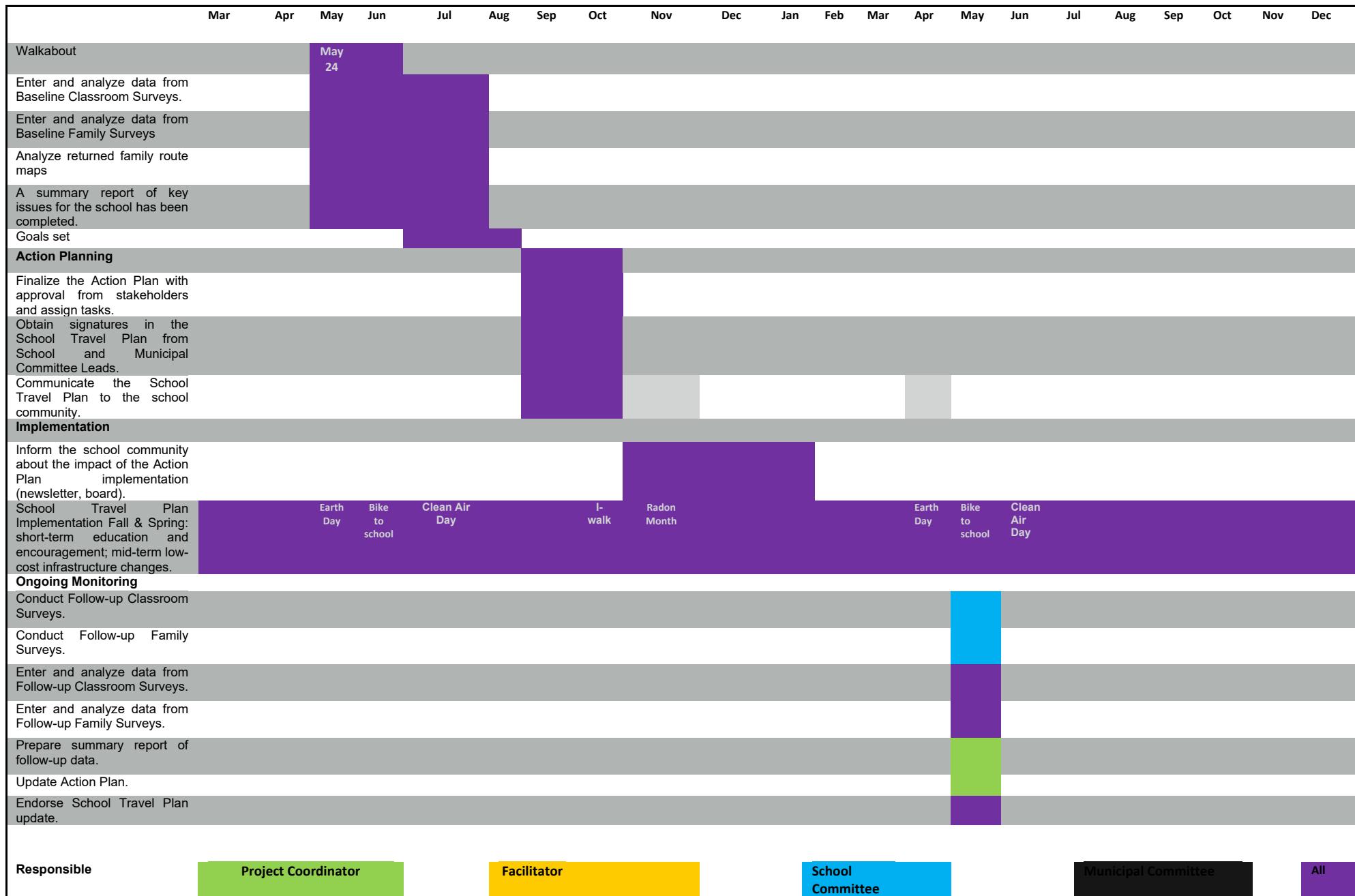


**CAUTION:** ArcInfo was used to calculate the distance (in meters) from multiple points to a single point, specifically Springvalley School. Distances are calculated on a straight line to the reference point. Use caution when calculating walk or bike distances, as they do not account for paths that may connect roads.

# Timeline of Main Tasks

Table 2. Timeline of Main Tasks

STP/Project Timeline	2022												2023																																						
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec																													
Activity																																																			
Municipal Stakeholder Committee established																																																			
Coordinate & follow up activities of the two committees and facilitator																																																			
Schools chosen and invited.																																																			
Springvalley																																																			
Send the School agreement for signature.	March 10																																																		
School STP Committees established	March 18																																																		
Prepare and deliver an introductory presentation/documents to PAC and the formalized School committee.	Mar																																																		
Newsletter																																																			
Prepare surveys for data collection for the STP Committee.																																																			
Deliver online link surveys for data collection to the STP Committee.																																																			
School Stakeholder Committee meetings																																																			
School Stakeholder Committee meetings/email communication																																																			
Municipal Steering Committee meetings	Ongoing over the 2-year period – approximately 2 x per year (can be combined with other meetings as appropriate) or by email																																																		
Project Preparation and Data Collection																																																			
Complete School Profile	March 18																																																		
Inform the school and parents about the project																																																			
Prepare and submit online surveys																																																			
Conduct Baseline Classroom Surveys over five consecutive days	May 2-6																																																		
Conduct Baseline Family Survey	April 22- May 8																																																		



## Baseline Data Collection

Springvalley is composed of approximately 200 families. An [online Family survey](#) was set up and was available for Springvalley parents from **April 22 to May 8, 2022**. From Monday, May 2, to Friday, May 6, 2022, teachers assisted with 12 classrooms "hands-up surveys" and reminded students to complete and submit the Family surveys. The survey was advertised through the school website:

With the kind support of Braintrust Canada and to encourage students' participation, the City of Kelowna provided:

- 1 Grand Prize, which included 1 bicycle, a helmet, a lock, a USB rechargeable led bicycle light set and a water bottle.

The winner of the bicycle prize was a grade 4 student, Markus Waygood.



Figure 6. Facilitator Dan Glasscock delivering the bicycle & Group photo



## Student Classroom Survey Findings

With the teachers' support, 12 classroom surveys were received, reflecting that travel "to" the school was reported by seventy-seven percent of the students, as shown in Figure 7.

Table 3. Baseline Summary - TO School (Frequency)

	Walked	Walked part-way	Bicycle	School Bus	Public Transit	Carpool	Car	Other	Total
<b>Monday</b>	49	12	15	0	3	6	119	1	<b>205</b>
<b>Tuesday</b>	46	17	19	0	1	4	104	4	<b>195</b>
<b>Wednesday</b>	58	16	17	0	2	7	112	2	<b>214</b>
<b>Thursday</b>	49	12	20	0	3	6	111	3	<b>204</b>
<b>Friday</b>	45	12	18	0	3	9	98	2	<b>187</b>
<b>Total</b>	<b>247</b>	<b>69</b>	<b>89</b>	<b>0</b>	<b>12</b>	<b>32</b>	<b>544</b>	<b>12</b>	<b>1005</b>
<b>Average</b>	<b>49</b>	<b>14</b>	<b>18</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>109</b>	<b>2</b>	<b>201</b>

**Student Hands-up Survey:  
Total Travel Mode TO School Over A Week  
Springvalley Elementary**

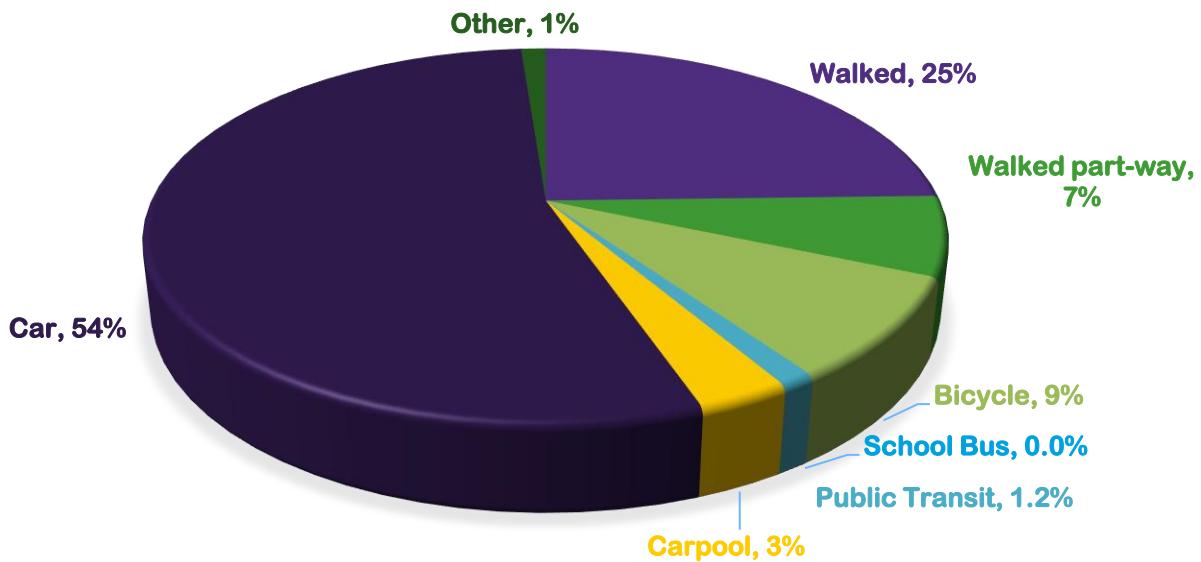


Figure 7. Travel Model to School over a week- SVE Baseline 2022

We received 12 complete classroom surveys outlining "from" school results. Sixty-seven percent of the 260 students attending Springvalley were tracked over one whole week.

Table 4. Baseline Summary - FROM School (Frequency)

	Walked	Walked part-way	Bicycle	School Bus	Public Transit	Carpool	Car	Other	Total
<b>Monday</b>	55	11	11	1	3	3	107	2	<b>193</b>
<b>Tuesday</b>	44	18	16	0	2	3	85	3	<b>171</b>
<b>Wednesday</b>	49	12	18	0	2	6	90	2	<b>179</b>
<b>Thursday</b>	41	8	17	0	3	6	90	2	<b>167</b>
<b>Friday</b>	43	11	16	0	3	8	77	2	<b>160</b>
<b>Total</b>	<b>232</b>	<b>60</b>	<b>78</b>	<b>1</b>	<b>13</b>	<b>26</b>	<b>449</b>	<b>11</b>	<b>870</b>
<b>Average</b>	<b>46</b>	<b>12</b>	<b>16</b>	<b>0.2</b>	<b>3</b>	<b>5</b>	<b>90</b>	<b>2</b>	<b>174</b>

**Student Hands-up Survey:  
Total Travel Mode FROM School Over A Week  
Springvalley Elementary**

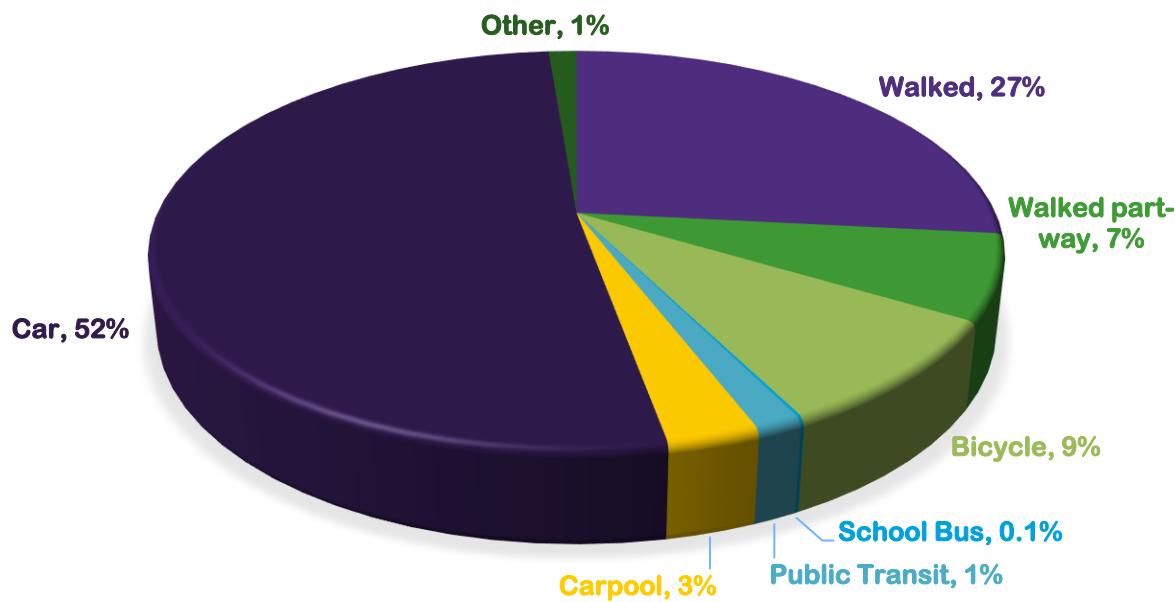


Figure 8. Travel Model from School over a week-SVE Baseline 2022

As shown in Figure 8, in the afternoon, fewer kids are driven to school compared to the "to" school results.

## Baseline Family Survey Findings

### Obstacle Map

In 2022, through the online family survey, parents identified obstacles they encountered on their way to or from school on a map.



Figure 9. Traffic issues around the school

- Traffic issues (congestion, speeding, etc.)
- Sidewalk missing or requires maintenance
- Traffic sign needed



Figure 10. Ziprick Rd @ Hwy 33

- Better marked crosswalk area
- Red light is run. Timing for the light change is long
- Traffic lights needed possibly for drop off & pick up times to help traffic flow onto 33 from Springfield.

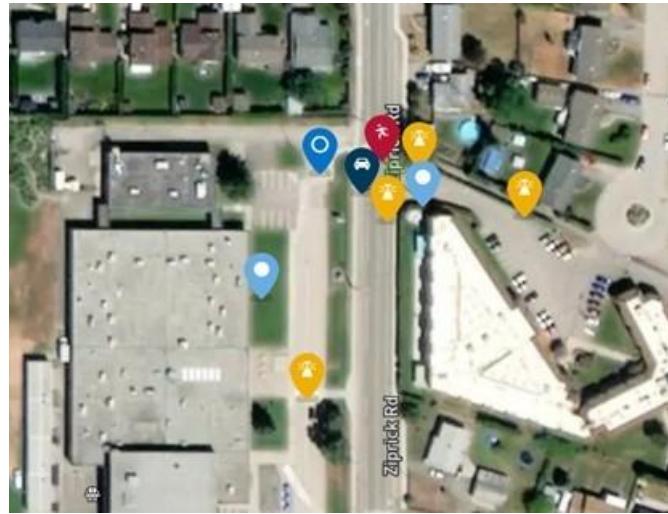


Figure 11. Ziprick RD @ School

- Kids run across walk here and at both ends without looking, very dangerous.
- There is no secure place for bikes to be stored at the middle school, and bike theft is a prominent issue. Do not allow my child to bike to school for this reason.
- This crossing might have to be removed. Children quite often will just walk out without looking.
- There is a walkway that ends right at the crosswalk. It is hard to see kids coming out from the walkway until they are basically in the crosswalk.
- Light on path and end of this path on Ziprick when it rains there is a large puddle and winter freezes
- two flashing crosswalks would be great. One at the end of a walkway where children come out of in front of the middle school, and one directly in front of the elementary school
- Traffic is always backed up, making it hard to turn left into the school lot or the pick-up and drop-off zone. Kids often run out without looking



Figure 12. Ziprick Rd @ Cornwall and Renfrew Rd

- Traffic gets very backed up. Traffic congestion. Add another crosswalk toward Springfield
- Vehicles often disregard the school zone speed limit and/or do not yield for pedestrians trying to cross the crosswalk. Ziprick is a straight-through and lots of speeder before and after school hrs
- After school is congested and the buses take this route from the school. There is so much to watch at this exit that it makes it difficult to get out into traffic. A controlled traffic crosswalk light would be fantastic here.



Figure 13. Ziprick Rd @ Springfield Rd

- From Hollywood to Ziprick - since there is no school bus route, and kids are expected to walk 4 km, a safe sidewalk or alternate route should be installed. Or even better establish a school bus route
- Sighting for traffic coming down Springfield is impeded by a large power pole; its location also makes people stand closer to the edge. Which is more dangerous for them as well as for drivers turning right onto Springfield
- Gets backed up. Lights should change more quickly to green and last longer to turn left off Ziprick onto Springfield, especially around school start and end times, to help move traffic in and out of school areas.

## Walkabout and Route Map

The Walkabout was performed on **May 24, 2022, from 8:00 to 10:30 a.m.** Five members from the Municipal Committee and three members from the School Committee attended. The following pages show a detailed overview of the walking route and key findings. The agenda, walkabout route map, and a walkability checklist with key points to consider during the route were provided to every participant before the meeting.

The walkabout route was created by city staff based on the information provided by the school committee.

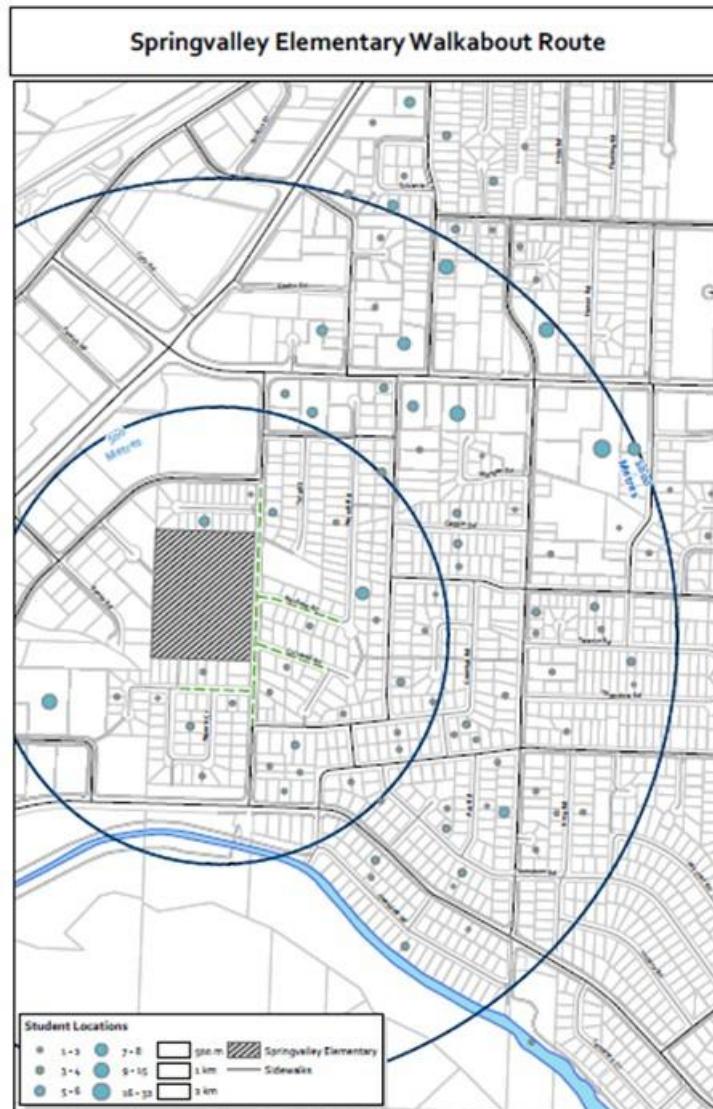


Figure 14. Springvalley Walkabout Route Map

## Walkabout Main Findings

After the Walkabout, the Municipal and School Committee members discussed the main findings and issues Springvalley was facing. Attendees provided insightful information to consider in the development of the Action Plan. The following is a summary of the Walkabout findings.

Table 5. Springvalley Walkabout Main Findings

The Walkability Checklist	General Findings
Parking lot, or on road parking at school	<p><b>Is there potential for vehicle and pedestrian conflict? If yes, where?</b> The crosswalk in front of the school. Even though there is normally a teacher crossing guard, cars often still speed through and sometimes may brake at the last minute. A flashing light would be great here. signage hard to see. due to tree growth. Entrance/exit to school parking lot. Many cars fail to come to a complete stop when leaving. Also, neglecting to check for pedestrians on the sidewalk or crosswalk before exiting.</p> <p><b>How do children access the school from parked vehicle? (Do they use a crosswalk, is one available?)</b> There is one available, but it is not noticeable. Kids get dropped off on the street and in front of the school doors. The crosswalk is heavily utilized. Along Ziprick and in the middle school drop-off area. Crosswalks or sidewalk next to makeshift parking area on Ziprick. Parents Park on bike lanes</p> <p><b>Number and position of safety patrollers (adult and/or student, if any). If they are not currently organized, are they needed?</b> 1-3 Safety patrollers at crosswalk and 1 adult. There is no supervision for walkers on the street adjacent to the school site. One adult and two student crossing guards at the crosswalk. One adult is on parking lot duty overseeing traffic.</p>
Facilities for walkers on the street next to the school site	<p><b>What are the sight distances from school crossing to road curves, blind corners, or school and transit bus zones?</b> The walkway is slightly blind when exiting. Tight turn into school for busses. Too close for walkway between Terai Ct and Ziprick. Lots of sight line issues when cars park on Ziprick for drop-off.</p> <p><b>Where are the access points for students?</b> On Ziprick and at the back bushes (there is an opening and a sidewalk). At walkway area and Renfrew. The area is walkable for students; however, improving visibility and trimming hedges would enhance walkability. Walkways are present all around, but they need regular cleanup and better lighting.</p>
Walking paths to the school	<p><b>Is there potential conflict with vehicles? If Yes, where- X street @ X street</b> Parking lot. Entrance to parking lot. Ziprick Road. Turning left into school driveway. Ziprick and north walkway. There is no sidewalk along Cornwall Rd which has a walkway at the end for students to access the neighbourhood. Ziprick/Cornwall, Ziprick/Renfrew. Terai Ct walkway is dark. There is no lighting along pathways. Good sidewalks. Walkway exit needs improvement. Bushes need to be trimmed.</p>
Bicycle facilities	Needs improvement
School Bus/After School Care Loading Zone	We do not have buses at SVE. Inside school grounds away from the street. No buses are at the elementary and middle school, which are on school property with supervision. 4-5 buses for the middle school
Walking facilities and traffic observations	<p><b>Are there ramps, any special entrances, or accommodation for students with diverse abilities? Yes</b></p> <p><b>What is the noise and pollution of traffic on surrounding streets—perceived and real (the municipality has vehicle volume?)</b> We have ambulances using Ziprick often. During the day, we often have speeders going through the school zone. Constant flow of traffic at all times of the day. Yes, it is noisy. Not many heavy trucks seem to use this road. No problem areas where it might turn, based on my daily observations. Not just trailers attached to cars.</p> <p><b>Are there on-street signs that indicate to drivers they are approaching a school zone? Are they visible?</b> Yes but mostly ignored! Having the fake wood police officer with the radar gun guy out really helps. People think he is real and will slow down. I think this should be permanent. I observe people speeding past the school morning and afternoon constantly. Yes. It's a long-standing school founded. One could be added in the middle.</p>
Alternative safe parking locations	Yes, usually on Ziprick. We do not allow parents to pick up their kids in front of the school at the end of the day. The parking lot is closed off with orange safety cones and a sign. The old Costco parking lot perhaps? Or Mission Creek Park? Yes. Terai Ct. Cornwall. all the side streets close to school. Appears to be good park and walk availability. Mission Creek Park Springvalley Middle School right next door. Senior home across the street
General Comments	Springvalley Elementary is located on a very busy street. Many children are dropped off either in front of the school or on the road. Parents sometimes walk their kids to school. Kids come to school on bikes, skateboards, scooters and rollerblades. I would love to see the city install flashing lights at the crosswalks. Additionally, the daily use of the "fake police officer/radar" sign in the school zone should be employed to slow down traffic. Perhaps speed/school zone signs should be replaced with something more visible? if visibility and speed-reducing projects happen safety will be much better

[Check here the Online Walkabout Summary](#)

## Photography record:



Figure 15. Crosswalks are blocked



Figure 16. Cars stop too close to crosswalk



Figure 17. Garbage along walkways



Figure 18. Cars parking on bike lane



Figure 19. Bicycle storage location could be improved



Figure 20. Overgrown bushes on Walkway



Figure 21. Baseline data presentation



Figure 22. School and Municipal Committee



Figure 23. Collect new data- MioVision camera



Figure 24. Cars parking on "No parking" Zones



Figure 25. Vehicle parked too close to hydrant and stop sign



Figure 26. Faded markings within school site and driveway



Figure 27. Current Kiss and Drop area



Figure 28. Hedges protruding into sidewalk space

# Reducing Emissions from School Buildings

All but the most efficient buildings release emissions of gaseous pollutants, including nitrogen dioxide, particulate matter, and carbon dioxide. These pollutants not only contribute to poor outdoor air quality and climate change, but they also lead to poor indoor air quality. Inadequate ventilation can lead to the accumulation of air pollutants in buildings, which at high levels pose a significant health risk.

This section aims to identify some of the key sources of building-related emissions. By implementing the recommendations outlined in the action plan, the school will not only reduce the emissions of pollution from the building, but it may also be able to lower its energy costs. Projects to reduce school buildings' emissions also provide an opportunity to influence and educate the school community on air quality and energy consumption issues.

## Where do emissions come from?

In Canada, approximately one-third ( $\approx 34\%$ ) of the GHGs emitted by school buildings come from electricity, while nearly two-thirds ( $\approx 63\%$ ) are due to heating-related energy use, primarily space heating<sup>4</sup>. In BC schools, natural gas heating accounts for  $\sim 85\text{--}90\%$  of emissions, while electricity contributes a relatively small 10–15%—thanks to the province's clean hydroelectric grid. Typical sources of pollution from school buildings include:

- Boilers (combustion of gas, releasing nitrogen dioxide)
- Back-up generators (combustion of gas)
- Air conditioning systems
- Kitchens and canteens
- Vehicle: school transport, supplies and deliveries, cars idling
- Garden equipment (gas lawnmowers, leaf blowers, etc.)
- Other equipment, such as gas-fired water heaters

## Opportunities for Emission Reduction

Understanding and managing the school's energy consumption can also help reduce emissions of pollutants. Springvalley can take several actions to lower energy use and greenhouse gas (GHG) emissions, as outlined in the Action Plan. Additionally, school staff can calculate, mitigate, and track their carbon emissions using the tools below.

Carbon Calculators:

- [Count Your Carbon](#)
- [Carbon Calculator – EarthGen](#)

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<sup>4</sup> [Commercial/Institutional Sector Canada Table 22: Educational Services Secondary Energy Use and GHG Emissions by Energy Source | Natural Resources Canada](#)

## Indoor Air Quality

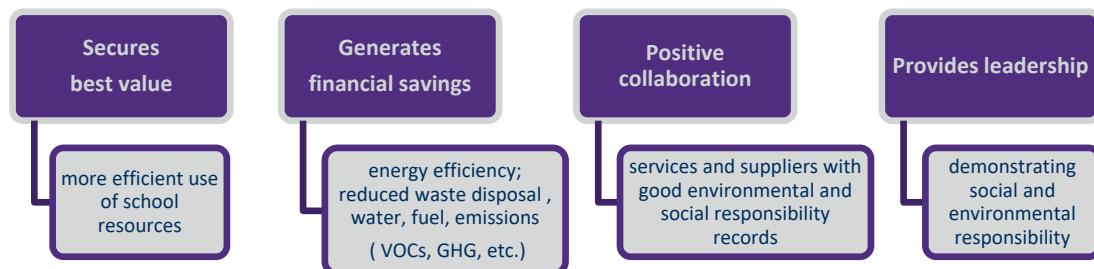
### Why is indoor air quality important?

The [British Columbia Lung Foundation](#) states that Canadians spend approximately 90% of their day indoors, with about 70% of this time at home and 20% at work or school. Poor indoor air quality may cause headaches, tiredness, coughing, sneezing, sinus congestion, shortness of breath, dizziness, and nausea. It can irritate the skin, eyes, nose, or throat. Allergy or asthma symptoms could get worse. Poor indoor air quality is caused by indoor air pollution. Knowing possible causes will help you improve the quality of the air you breathe indoors.<sup>5</sup> There are three primary ways to enhance indoor air quality: controlling the source, improving ventilation, and purifying the air.

SD23 and the school administration should work together to ensure the best indoor air quality in school buildings. Here are some valuable resources for creating Healthy Indoor Air Quality (IAQ) in Schools:

- [Framework for Effective School IAQ Management](#)
- [IAQ Tools for Schools Action Kit](#)
- [IAQ Tools for Schools Preventive Maintenance Guidance Documents](#)
- [IAQ Tools for Schools Video Resources](#)
- [Communicable Disease Prevention in K-12 Schools-BC](#).
- [The IAQ Fact Sheet Series](#) is designed to help individuals without a technical background understand the details of indoor air quality (IAQ), enabling them to make informed decisions about their schools' ventilation, HVAC filtration, in-room air cleaners, germicidals, electronic air cleaners, and disinfectants.
- [Radon Education for BC Youth](#). [Radon testing](#), mitigation and awareness.
- Implement a [sustainable procurement](#) policy; this helps make measurable progress towards sustainability goals, such as reducing greenhouse gas emissions, achieving zero waste, and promoting social, diversity, economic, and local responsibility.

Figure 29. Benefits of Sustainable Procurement



## School Travel Planning and Clean Air Goals

Considering all data from the Family Surveys, traffic count observations, classroom surveys, and the GIS analysis, the Municipal and School Committees defined the Goals and Strategies to implement Clean Air and Safe Routes for Springvalley. The three main goals were:

- Reduce congestion within school premises and increase safety at the school site.
- Increase active school travel on the school journey; and
- Reduce overall school emissions

<sup>5</sup> [Indoor Air Quality | HealthLink BC](#)

# Action Plan

This Action Plan outlines short, medium, and long-term measures. All tasks, including those assigned to responsible parties and their target completion dates, have been identified.

Table 6. Springvalley Action Plan

Action/Initiative	Tasks	Responsibility	Start Date	Completion date	Estimated Cost
<b>Objective 1: Improve the safety of children on the active school journey</b>					
Pedestrian and bike safety presentations	Seek road safety curriculum resources for classroom teaching. ICBC road safety teaching resources: <a href="http://Road safety (icbc.com)">Road safety (icbc.com)</a>	STP facilitator-delivers presentation School Committee- help set up a date for presentation during school assembly	Fall 2022	Spring/Fall 2022-2023	No cost
Parent role modelling messaging	Provide messages for use in school and parent communications <a href="http://Parents as Role Models - SCAN of Northern Virginia (scanva.org)">Parents as Role Models - SCAN of Northern Virginia (scanva.org)</a>	School Committee-share information through newsletter	TBD	Year round	No cost
Road safety/personal safety presentation	School-wide assembly combined presentations from STP facilitator & Street Crime Unit - School Resource Officer, RCMP Contact community police to present at an assembly <ul style="list-style-type: none"> <li><a href="http://Road safety for your kids (icbc.com)">Road safety for your kids (icbc.com)</a></li> <li><a href="http://Contact B.C. RCMP - Speed Watch (rcmp-grc.gc.ca)">Contact B.C. RCMP - Speed Watch (rcmp-grc.gc.ca)</a></li> </ul> Resources available for teachers and parents at <a href="http://KidSmartz (missingkids.org)">KidSmartz (missingkids.org)</a> RDCO Air Quality Safe Walk to School- <a href="https://youtu.be/REuxjNyav6E">https://youtu.be/REuxjNyav6E</a>	STP facilitator and RCMP deliver the presentation (in person or virtual). The school committee helps set up a date for the presentation during the school assembly, usually during the pedestrian and bike presentations.	Fall 2022	TBD	\$
School speed zone awareness	Seek road safety curriculum resources for classroom teaching. ICBC road safety teaching resources: <ul style="list-style-type: none"> <li><a href="http://Pace Car Community Guide (parachute.ca)">Pace Car Community Guide (parachute.ca)</a></li> <li><a href="http://Teach road safety (icbc.com)">Teach road safety (icbc.com)</a></li> </ul>	School Committee- share information through teachers and the newsletter	Spring 2023	April 2023-every year	\$
Implement a Student Valet Service	The Student Valet Program operates each morning in the student drop-off loop supervised by staff members. The student valets are in 5 <sup>th</sup> -6 <sup>th</sup> grade. They dress in high visibility vests and welcome arriving students with a friendly smile. The goal of this program is to promote safety, reduce traffic congestion and demonstrate good manners.	STP facilitator School Committee	September 2022	Year-round	
Improve access points for students	Parents or school administration should submit a <a href="http://City of Kelowna service request">City of Kelowna service request</a> to address issues such as Walkway maintenance, overgrown bushes from private property blocking sidewalks and walkways, snow and ice on roads, sidewalks, and pathways, potholes, and graffiti. You will need: <ol style="list-style-type: none"> <li>Address (or pin on map) the problem location</li> <li>Take a photo (optional)- maximum 5 photos, each up to 10.0 MB, and attach it to the service request.</li> </ol> To pick up drug paraphernalia (needles) found outdoors adjacent to private or public property, contact the non-emergency fire department number, <b>250-469-8801</b> – select option 1	School Committee	Depending on priority with other projects	Year-round	\$
Improve access points for students	Investigate concerns about drainage, lighting, tripping hazard in walkways. Determine if driveways can be optimized to increase pedestrian comfort. Consider requesting vegetation trimming adjacent to sidewalks.	City of Kelowna	2023	2023	\$ Medium

Action/Initiative	Tasks	Responsibility	Start Date	Completion date	Estimated Cost
Review and adjust traffic signal	Review nearby traffic signal timings. Contact MOTI if required	City of Kelowna	2023	2023	\$ Low - medium
School Site Improvements	Consider site improvements including bike compound, Kiss& Drop signage/markings, speed bumps, median area within parking lot, repaint road markings, stop bars at exits	School Administration/SD23/City of Kelowna	2023	2023	\$ Low - high
Crosswalks and Pedestrian Improvements	Review candidacy for pedestrian activated flashers, twin parallel bar crosswalks, curb extensions, in-street crosswalk signs, etc.	City of Kelowna	2023	2023	\$ Medium - high
Road marking improvements	Review site access needs and roadway operations	City of Kelowna/SD23	2023	2023	\$ Medium - high
Traffic Calming	Review potential traffic calming strategies such as traffic calming curbs, delineator posts,	City of Kelowna	2023	2023	\$ Medium - high
Parking Behavior Improvement	Review roadway design, parking configuration, and signage (including No Parking and No Stopping). Consider physical barriers at key locations such as crosswalks	City of Kelowna	2023	2023	\$ Low - high
Best Walking Routes Map brochure	Create map showing the best routes and distribute it to families along with walking safety information.	City of Kelowna	2023	2023	No cost
Bike Rodeo	Youth learn the basic rules of the road, hand signals, obstacle avoidance, and scanning techniques through the Cycle Education Program "Learn2Ride" for students in Grades 3-6.	STP facilitator/School Administration	May 2023	Every two years	
<b>Objective 2: Raise the awareness of the environmental and health benefits of active travel</b>					
Provide a Cleaner Air 4 school Program	The program was designed and provided by the Air Quality Program. The lesson must be delivered to grades 3-6 by the school teachers. <ul style="list-style-type: none"> <li>• Air Quality/ provided ready-to-use materials</li> <li>• Parents Council shares info through newsletter</li> <li>• School Administration supports delivering at least one lesson (around 30 min) a year through teachers grades 3-4</li> <li>• Check this Cleaner Air Program in the Resources section at <a href="http://kelowna.com/airquality">kelowna.com/airquality</a>.</li> <li>• Share <a href="#">Don't Sit Idly By: An Air Quality Initiative by RDCO</a></li> </ul>	Air Quality/School Committee	March of every year (Earth Day Assembly)	June of every year to 3 <sup>rd</sup> grades.	No cost
Have students create artwork for temporary/permanent outdoor signage	Identify classes that can make an art project or run an Art contest. The art contest theme should be: Clean Air, Safety, and Active Transportation. The STP Program will cover the cost of producing 6 signs (20 inches in height x 18 inches in width). The school committee will cover the cost of producing any additional signs.	School Committee - PAC to create a video for new kiss and drop this fall	Spring 2023	Spring 2023	\$
Have physical activity benefits messaging in newsletters/Health presentations.	Review information on the Public Health Agency of Canada website. <ul style="list-style-type: none"> <li>• <a href="http://www.interiorhealth.ca/YourHealth/SchoolHealth/HealthPromotion/Pages/default.aspx">http://www.interiorhealth.ca/YourHealth/SchoolHealth/HealthPromotion/Pages/default.aspx</a></li> <li>• <a href="http://www.interiorhealth.ca/sites/Partners/SchoolDistricts/Pages/HealthPromotionResources.aspx">http://www.interiorhealth.ca/sites/Partners/SchoolDistricts/Pages/HealthPromotionResources.aspx</a></li> <li>• <a href="http://Online Action School (actionschoolsbc.ca)">Online Action School (actionschoolsbc.ca)</a></li> </ul>	School Committee- share information through newsletters	Monthly	ongoing	No Cost
<b>Objective 3: To encourage more students to walk to school</b>					
Drop & Go / Walk a Block or Two	Identify suitable locations for students to be dropped off outside the school zone (Options: Mission Creek Park or Kelowna Crossing Plaza Parking Lot) <ul style="list-style-type: none"> <li>• <a href="#">Safe routes 4 schools - Regional District of Central Okanagan</a></li> <li>• <a href="#">Back to School – BusReady</a></li> </ul>	School Committee with the support of STP facilitator	2023	2023 & 2025	\$ No Cost
Buddy Scheme	Set up scheme to encourage students to walk and cycle with others	School Committee STP facilitator	TBD	TBD	
Neighborhood Walking School Bus	Identify a route from a suitable neighborhood to school. Organize Walking School Bus. Communicate the possibility for this and possible meeting points. <a href="#">Walking School Bus - Society for Children and Youth of BC</a>	School Committee STP facilitator	TBD	TBD	
Walking Competition	Detail a challenge and promote Walking Wednesdays (and other days). Walking Competition. Set up a walking competition for 3-4 weeks (March-June). Air Quality	Parents Council with support of STP facilitator-	Reminder at the PAC	Spring 2022	Cost per pedometer \$6-7

Action/Initiative	Tasks	Responsibility	Start Date	Completion date	Estimated Cost
	<p>could provide pedometers for each participant class and cover the pool entry fee for one winner class at the H2O Aquatic Centre.</p> <p>School committee pays for class transportation to H2O</p> <ul style="list-style-type: none"> <li>• <a href="#">ParticipACTION - Home   ParticipACTION</a> (challenges and prizes)</li> <li>• How to setup a Walking Competitions-School Resources at <a href="#">Air quality   City of Kelowna</a></li> </ul>	School Committee	meeting February 15		
IWALK (International Walk to School Month – October)	Organize a Walk to School Week How to setup a Walking Competitions-School Resources at <a href="#">Air quality   City of Kelowna</a>	School Committee	2022 - October	Every year	\$ minimal (for prizes- pedometer)
Bike and Walk to School Days	Encourage students and their families to walk, scooter, skateboard or ride their bikes to and from school. Detail a challenge and advertise Walking/Biking Wednesdays or other specific days (March-June)	School Administration	May 2023	Every year	\$
Bike and Walk to School Week	Encourage students and their families to walk, scooter, skateboard or ride their bikes to and from school. <a href="#">Homepage - GoByBike BC</a>	School Committee	May 2023	Every year	
Celebration	Organize a community walk to school on Earth Day How to setup a Walking Competitions-School Resources at <a href="#">Air quality   City of Kelowna</a>	School Committee	April 22, 2023	Every year	
Commuter challenge	Promotes friendly competition to see who can get the highest percentage of employees out of single occupancy vehicles <a href="http://commuterchallenge.ca">http://commuterchallenge.ca</a>	School Committee	1 <sup>st</sup> week June 2023	Every year	
Carpool month	Promote Carpooling as a simple way for individuals to participate in the climate change challenge while saving money, reducing congestion, and conserving energy. Communicate in the monthly newsletter for families and staff). Resources: <ul style="list-style-type: none"> <li>• <a href="#">Free Carpool and Rideshare Listings (carpoolworld.com)</a></li> <li>• <a href="#">Carpooling Software for Schools (carpoolworld.com)</a></li> <li>• <a href="#">Carpooling and Car Sharing - Province of British Columbia (gov.bc.ca)</a></li> <li>• <a href="#">Rideshare in Kelowna (shareyourride.net)</a></li> </ul>	School Committee	October 2022	Every year	
Clean Air Day	Participate in activities that contribute to cleaner air, healthier communities and a better quality of life for all. Promote actions you can take to <a href="#">improve local air quality</a> . <ul style="list-style-type: none"> <li>• <a href="#">Okanagan Regional Library Introduces Air Quality Monitor Kit to Help Patrons Breathe Easy (orl.bc.ca)</a></li> <li>• <a href="#">Digital Radon Detector Kit   Okanagan Regional Library   BiblioCommons</a></li> </ul>	School Committee- share information through newsletters	1 <sup>st</sup> week June 2023	Every year	
<b>Objective 4: To facilitate safe bicycling to and from school</b>					
Cycle Storage	If additional bike racks are needed or a secure location on the school site is required. The principal should request it from the Director of Operations. Add work to the Annual Facilities Grant and/or Capital Plan). Secure scooter and skateboard storage needed. Move Bike Compound to front of school (possibly where portable currently is and will be removed) <a href="#">Bike registration to reduce theft and help recovery   529 Garage (project529.com)</a>	SD23/ School Committee	Depending on priority with other projects	TBD	The school
<b>Objective 5: Reducing Emissions from School Buildings</b>					
Understanding Energy Use, and Improving Monitoring and Measurement	Monitor usage over a period of time, such as a week or a month. When and how often is the emissions source used? Report on areas of waste, across all spectrums of school (each year groups, staff department, etc.) • Where possible, establish permanent mechanisms to monitor energy or equipment use (e.g. meter readings, use of smart meters)	SD23	Ongoing		\$
Reducing Energy Demand & Improving Building Efficiency	<ul style="list-style-type: none"> <li>• Reduce energy waste (switch off appliances when not in use, install occupancy sensors for lights, and use Thermostatic Radiator Valves to control temperature, etc.)</li> <li>• Investigate energy efficiency of key building systems (i.e. most efficient boiler in place, investigating more suitable solutions such as Combined Heat and Power CHP)<a href="#">School IAQ Fact Sheet: Overview   U.S. Green Building Council (usgbc.org)</a></li> </ul> Carbon Calculators:	SD23	Ongoing		\$

Action/Initiative	Tasks	Responsibility	Start Date	Completion date	Estimated Cost
	<ul style="list-style-type: none"> <li>• <a href="#">Count Your Carbon</a>: Calculate, Reduce, and Track School Carbon Emissions.</li> <li>• <a href="#">Carbon Calculator – EarthGen</a>-Identify opportunities to reduce the carbon footprint of the school community</li> </ul>				
Investigate Opportunities for Renewable Energy Provision	• Investigate potential for on-site renewable energy generation, e.g. Photo Voltaic solar panels, wind turbines, ground source heat pumps etc. • If renewable energy options are not possible, ensure energy supplies are from a green provider	SD23	Ongoing		
Reducing Emissions from Procurement	<ul style="list-style-type: none"> <li>• Source supplies locally where possible - reducing emissions from transport and delivery (e.g., food/stationery supplies)</li> <li>• Use sustainable products (i.e., recycled paper and stationery, cleaning products with low environmental impacts, energy-efficient kitchen/office equipment – Energy Star Label)</li> </ul>	SD23	Ongoing		\$
Test for radon gas and ensure lowest levels reasonably achievable, with all space below the Canadian Guideline of 200 Bq/m <sup>3</sup>	<p>Screen each building by deploying detectors during the cold months of the year for a minimum of 91 days in the lowest level of the building receiving occupancy &gt;4 hours/day</p> <ul style="list-style-type: none"> <li>• Implement interim and permanent radon reduction measures in areas of concern, particularly those with high radon levels.</li> <li>• Test buildings per the <a href="#">Health Canada Guide for Radon Measurements</a> in Public Buildings, Workplaces, Schools, Day Cares, Hospitals, Care Facilities, Correctional Centres</li> <li>• Make radon inclusive of general building oversight, maintenance and data collection; obtain a portable radon monitor and routinely check buildings under different seasons, HVAC and energy efficiency adjustments, and after significant indoor renovation or equipment alterations</li> <li>• Be transparent with radon test results to staff and parents, along with promotional material encouraging staff and parents to test their indoor environments</li> <li>• Educate students about radon, health effects and testing</li> <li>- Resources available: <ul style="list-style-type: none"> <li>o IH Healthy Community Development team at HBE@interiorhealth.ca, information and links on the <a href="#">Interior Health Radon Page</a> <ul style="list-style-type: none"> <li>• <a href="#">School Resources - Take Action on Radon</a></li> <li>• <a href="#">Resources for Homeowners - Take Action on Radon</a></li> </ul> </li> </ul> </li> </ul>	SD23/School Committee  Air quality As part of the <a href="#">RDCO school radon screening</a> .	2020-2022	2020-2022  Retesting is recommended after major renovations, such as window replacements or HVAC upgrades, which can affect airflow and pressure.  Retest after 5 years.	
<b>Objective 6: To monitor the effectiveness of initiatives and revise the School Travel Plan annually</b>					
Monitor transportation mode	Conduct Follow-up Classroom Survey	Air Quality/ School Committee	Spring 2023	Spring 2025	
Monitor behaviour changes	Conduct Follow-up Family Survey	Air Quality/ School Committee	Spring 2023	Spring 2025	\$
Report on implementation of STP and initiatives	Follow-up of first year actions or when substantial work has been completed. Revise the Plan and compile a final report with recommendations.	Air Quality/ School Committee	Spring 2023-2024	Spring 2025	\$
Oversee the implementation of Action Plan items and track changes over time	The follow-up hands-up classroom survey could be performed at the end of every school year. If possible, a family survey should be conducted every second year.	School Committee	Spring 2023	Spring 2025	\$

# Follow-up activities 2022-2025

## School Committee Activities

An Art Contest was held from April 3 to 28, 2023, to promote and help reduce emissions and traffic, and increase student participation in travelling to school by foot, biking, or scooter. Suggested themes and "titles" were as follows (but not limited to):

- K-1- Bike Safety- "Use your helmet."
- Gr. 2-3: Encourage Walking - "Be cool- walk to school."
- Gr. 4- 5- Traffic awareness- "Slow Down" or "Kids Zone"

Below are the contest winners:



Figure 30. Art Contest winners

## Walk, Bike, Roll to School- April 17- 21, 2023

The school set up a Walking competition. "During this week, we ask that you track how many students/ walk/ bike/ roll to school. The class that has the most participation at the end of the week won a class pizza party!"

## Whole School Assembly - April 26, 2023

Earth Day (April 22) celebration. Had a whole school assembly to celebrate Earth Day and announce the winner of the Pizza Party.

## Walk, Bike, Roll to School- June 2- 6, 2025

The school set up a Walking competition. Ms. Nobes' grade 4/5 won, and 30 students enjoyed a pizza party on June 12.



Figure 31. Pizza party- Walking Competition Winner Class

## Infrastructure improvements by the City of Kelowna

### October 2022

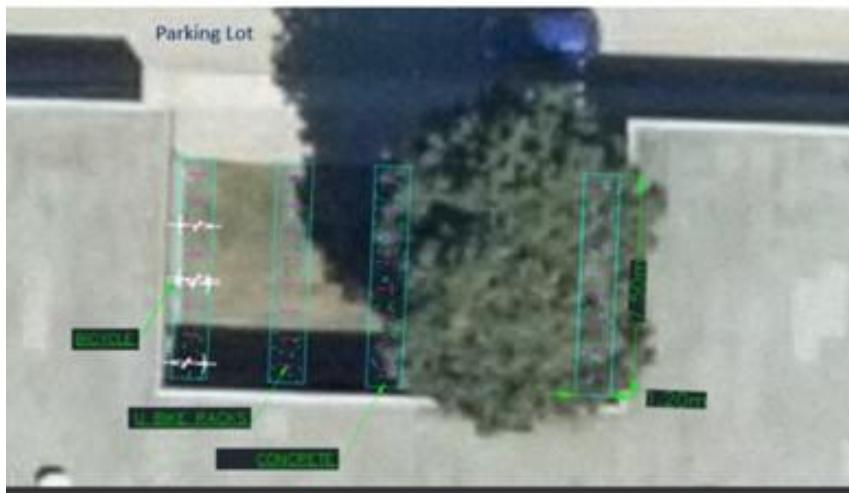
A Baseline newsletter was drafted and provided to the school committee for review and approval. This article was shared with the school community in October 2022.

### February 2023

City staff created a few preliminary bike rack options to facilitate discussion. The proposed options were sent to the school committee for approval. Some of the proposed options are shown below:



Figure 32. Proposed bike rack design-Options A and B



The school administration confirmed that their preferred option was to install bike racks in the front entrance area.

However, the bike racks could not be installed as planned through the Safe Routes program, and their potential installation will now be at the discretion of SD23.

## August - November 2023

The City performed the following infrastructure improvements in the school vicinity:



Figure 33. Conrwall Rd & Ziprick Rd.

Crosswalk shifted, curb extensions added, and asphalt fillet between the sidewalk and crosswalk



Figure 34. Cornwall Rd. Stop bar, center line, parallel bar crosswalk, and curb extensions



Figure 35. Zirpick Rd asphalt fillet to widen bike lanes and maintain parking



Figure 36. Ziprick Rd lane marking reconfiguration

This widens bike lanes and maintains parking



Figure 37. Springvalley Elementary School driveway.

A traffic calming curb was added as a midpoint to break up large crossings for pedestrians and manage turning speeds. Left turn restricted during drop off.



Figure 38. Sidewalk extended through driveway and walkway

Ziprick Rd at 355 Terai Ct driveway. New pedestrian staging area and drainage improvements. Driveway narrowed and formalized. Crosswalk curb extension on the west side.



Figure 39. Terai Ct walkway. Vegetation removed

Improvements along the fence for better lighting and pedestrian safety



Figure 40. shifting the lane markings on Ziprick Rd

Narrow travel lanes and accommodate wider bike lanes, maintaining parking on one side



Figure 41. Renfrew Rd. Stop bar, center line, parallel bar crosswalk, and curb extensions



Figure 42. Lane markings shifted

Ziprick Rd west side. Lane markings were shifted to widen the bike lane, and edge line was added to minimize parking in the bike lane



Figure 43. Ziprick Rd at 355 Terai Ct driveway and walkway. Before improvements



Figure 44. Ziprick Rd at 355 Terai Ct driveway and walkway. After improvements



Figure 45. Vegetation removed

Terai Ct walkway. Vegetation was removed along the fence for improved lighting and pedestrian safety



Figure 46. Curb extensions added

Renfrew Rd & Ziprick Rd. Curb extensions added an asphalt fillet between the sidewalk and the crosswalk for improved accessibility

In spring 2025, the Cornwall Rd sidewalk project was completed. Recognized as a key route to school, it links the eastern walkways to the Ziprick Rd crosswalk, providing access to the school on the west side. While the project was constructed under the Sidewalk Program, its implementation was recommended by the Safe Routes Program.



Figure 47. Cornwall Rd sidewalk

Boulevard street trees added after



Figure 48. Cornwall Rd concrete crosswalk

Curb extension and curb letdowns (in progress)

Although not directly tied to the Safe Routes Program, speed humps were installed along Collison Road in 2024, which is another nearby route to Springvalley Elementary.



Figure 49. Collison Rd speed hump construction



Figure 50. Collison Rd speed hump field measurement

Additional Improvements not shown above:

- Parking and stopping signage was adjusted to meet current bylaw standards and better guide motorists
- U-Turn prohibited signage was added within the school zone
- Missing school zone signs were added on the side streets
- Two new streetlights were added along the east-west walkways (connecting Cornwall Road and Renfrew Road) to improve the corridor's illumination. Located at the Gerstmar Rd and Taylor Rd accesses
- Additional bike symbols were added along Ziprick Rd in the bike lane.
- The Springfield Road and Ziprick Road signalized intersection, located south of the school, increased the walk time for pedestrians. This was implemented to accommodate better school groups accessing the Mission Park Regional Park.

### The Safe Route to School Map

City staff collaborated with the school committee to create the Best Route to School map in 2023. The routes were traced based on the available infrastructure and the feedback received through the "obstacle map" exercise from the Family surveys. The school committee helped localize possible "Park and Walk stations" and provided comments and suggestions to clarify the map to the school community.

The [Best-routes-to-school-Springvalley](#) was created by City staff.

## School GHG Emissions Reductions

Considering the classroom and family data and some average statistics, the Greenhouse gases (GHG) were estimated for Springvalley School:

- Baseline classroom survey (2022): an average of 57.4% of the kids are driven to and from school (driven + carpool + bus), and 42.6% walk and/or bike/other.
- The emission factor of 0.2296 KgCO<sub>2</sub>/km –"Average Emissions and Fuel Consumption for Passenger Cars"

Description	GHG (Tonnes/year)
Baseline (2022): Springvalley School GHG emissions due to children being driven to and from school. Average 57.4% (driven + carpool+ bus)	34
GHG that could be saved if we reach the rest of the students who live within walking or short bike distance (1.0 km or less).	44
GHG already being saved; Baseline (2022): 42.6% of the students walk and bike to and from school.	18
GHG saved: Follow-up (2025): 69% of students walk, bike, or roll to and from school.	30

The school experienced a significant increase in active transportation, rising from 42% in 2022 to 69% in 2025. With more students walking, biking, and rolling, an estimated 12 tonnes of greenhouse gas (GHG) emissions could be saved each year.

### Every tonne of CO<sub>2</sub> reduced counts!

## Air Quality

In addition to the GHG emission reduction from those who can bike or walk to school because they live nearby (less than 1.0 km), the school is encouraged to keep raising awareness campaigns about idling to achieve the potential results below:

- At least 250 families attended Springvalley in 2025. Considering that 31% of students are driven to and from school (by car, carpool, or bus), it is estimated that 78 drivers are picking up and dropping off kids around the school on average. One car per family - light –duty vehicle
- National surveys show Canadians idle between 6 to 8 minutes per day
- Emission factor-2.3 Kg CO<sub>2</sub>/litre and cost of fuel 1.643 \$/litre
- If each driver of light-duty vehicles avoided idling for 6 minute(s) a day<sup>6</sup>: each driver could save **66** litres of fuel, **\$124** in fuel costs, and contribute to reduction of **151 kg** of GHG emissions annually.
- As school community the CO<sub>2</sub> and fuel reductions could be:

	If 250 families don't idle (6 min/day)	If 78 families that usually drop off the kids don't idle (6 min/day)
Fuel savings L/year	16,425	5,092
CO <sub>2</sub> savings (Kg/year)	37,778	11,711
Cost savings (\$/year)	\$26,986	\$8,366

School resources are available on the [City of Kelowna](#) website. Parents and staff can explore this [interactive story map](#) to learn more about idling and utilize the [Idling Fuel and Money Estimator](#) to discover how much fuel and money can be saved. As of Monday, July 25, 2022, residents and visitors can no longer idle within the City of Kelowna boundaries for more than one minute. For more information, please visit [www.rdc.com/airquality](#).

<sup>6</sup> [NRCAN](#)

## Idling Awareness Campaign-Fall 2023

To gain insights into how to curb idling behaviour, the RDCO invited two schools within SD23 to participate in a new Idling Reduction Program. Springvalley was one of the participating schools in the Pollution Pit Stop Idling Awareness Campaign for two weeks during the Fall 2023.

Pollution Pit Stop aims to understand how the school community feels about idling, current idling habits and whether there is a willingness to change. As part of this work, we asked parents, staff, or caregivers to complete two separate surveys over a one-month period.



Figure 51. Idling Campaign Banner

A couple of banners were displayed around the school fences for two weeks. The Air Quality program provided 200 idling awareness packages to all families, staff and regular school buses and vans.

- The idling package includes City of Kelowna postcards, RDCO postcards, stickers and decals.
- A pizza lunch was offered as prize for a Pit Stop Pledge competition. Three split (4/5) classes enjoyed the pizza lunch on March 1, 2024.

At Springvalley, the proportion of **idling vehicles decreased** post-campaign by **four percent (4%)**.

The Idling Reduction Behavioural Insights Report helped us better understand how to reduce unnecessary idling and improve air quality in our community.

## Radon

The Air Quality program successfully applied for and received \$20,200 in funding from Health Canada for a Radon Outreach Project. The project's goal was to initiate radon level screening in selected schools in the Central Okanagan, enabling school operators to learn about the ease of testing, prioritize radon on their agenda, mitigate where necessary to reduce radon exposure to children and staff, and raise radon awareness region-wide through an online campaign.

This collaborative project, involving School District 23, Independent Schools, Interior Health, CARST, and Health Canada, helped screen 55 elementary schools for radon between 2020 and 2022. Springvalley Elementary screened several school classrooms for radon in 2021.

When testing schools for radon, Health Canada's Guide for Radon Measurement in Public Buildings should be followed, which involves testing every ground-contact occupied room. This comprehensive approach requires many radon detectors, whereas this screening program provided only a limited number of samples. According to Health Canada's guidelines, all schools that had not been thoroughly tested were provided with recommendations to purchase additional detectors to ensure thorough testing.

A project report for Central Okanagan Schools was created:

- School screening results 2021-2022

## Traffic Count Baseline

This section includes baseline information; however, **no follow-up data is currently available**. Post-project evaluations were not conducted, which limited our ability to assess any changes in traffic around the school. Tentative plans are in place to collect additional data in 2026 or 2027 to determine whether further crosswalk upgrades are warranted.

### Baseline

Traffic count data is available at numerous locations near Springvalley Elementary. It consists of peak-hour turning movement counts (TMC) at intersections, weekly traffic counts, and speed data. Pedestrian volume is also included in the TMCs at intersections. Primarily, the following locations with existing data will be used for Springvalley analysis:

- Renfrew Rd & Ziprick Rd
- Cornwall Rd & Ziprick Rd
- Baron Rd & Ziprick Rd
- Renfrew Rd, Woods Rd, Terai Rd
- Collison Rd
- Additional locations to be determined as part of the walkabout and Obstacle Identification Map

Traffic count data is used for engineering analysis according to the methodologies and standards given by the Transportation Association of Canada and other Transportation industry agencies. Basic information about some of the streets surrounding Springvalley is shown below:

- Pneumatic road tubes recorded the speed and volume of vehicles on Ziprick Rd in the week of May 31, 2022– June 6, 2022. The data below lists the average volume and speed recorded in that week. The data indicated an average weekday traffic volume of 4,155 vehicles, which aligns with typical volumes observed for collector classification roads. It should be noted that the data represents the average of 24-hour counts during the week. Figure 55. Average speeds on Ziprick Rd below represents the weekday speed averages during the school-zone period.
- The travel patterns on Ziprick show an increase in activity during the morning peak hour, a levelling off during the midday period, and the heaviest traffic volume during the afternoon peak hour. This is typical of commuter traffic patterns and areas near schools due to drop-off and pick-up behaviour.
- Both Renfrew Rd & Ziprick Rd, and Cornwall Rd & Ziprick Rd TMCs, revealed heavy use of the crosswalks during school pick-up and drop-off periods, with minimal activity outside of these times. The crossing guard observed during the count date was effective at managing traffic and helping students access the school safely.
- Speed and weeklong traffic count data were previously collected on some of the surrounding roads. Relevant locations are listed below:

- Ziprick Rd- Weekday data
  - Average speed = 47 kph
  - 85% of drivers travel at 63 kph or less
  - Weekday average daily traffic volume = 4155 veh
- Renfrew Rd – Weekday data
  - Average speed = 34 kph
  - 85% of drivers travel at 43 kph or less
  - Weekday average daily traffic volume = 352 veh
- Terai Rd – Weekday data
  - Average speed = 41 kph
  - 85% of drivers travel at 52 kph or less
  - Weekday average daily traffic volume = 1232 veh
- Collison Rd – Weekday data
  - Average speed = 38 kph
  - 85% of drivers travel at 47 kph or less
  - Weekday average daily traffic volume = 573 veh

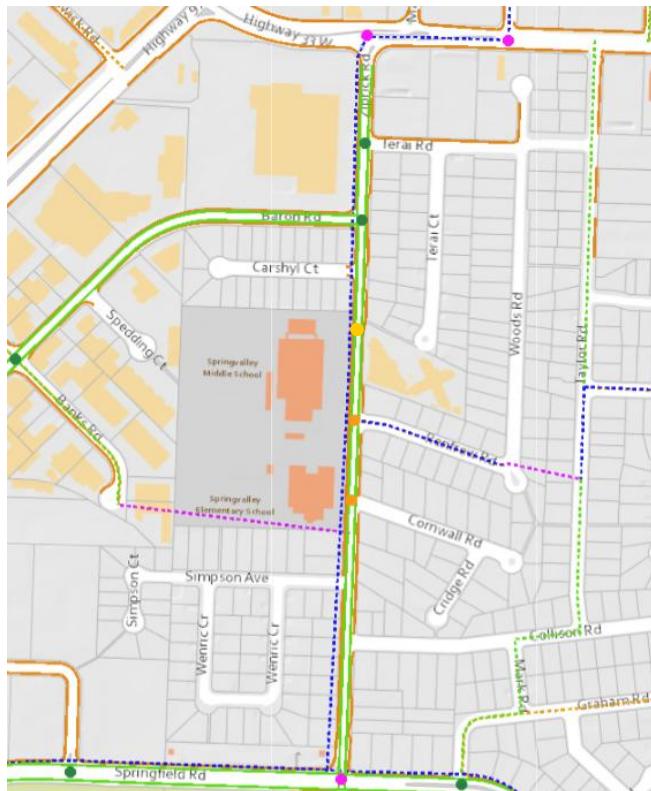


Figure 52. Vehicle and pedestrian intersection counts

Coloured dots indicate vehicle and pedestrian intersection counts. Active transportation infrastructure shown as follows: orange line (sidewalk), Green line (bike lane), Purple line (multi-use path), Blue line (cycle track), Dotted lines (future planned).

### Pedestrian Crossing Volume at Cornwall Rd & Ziprick Rd From Sept 2021 TMC

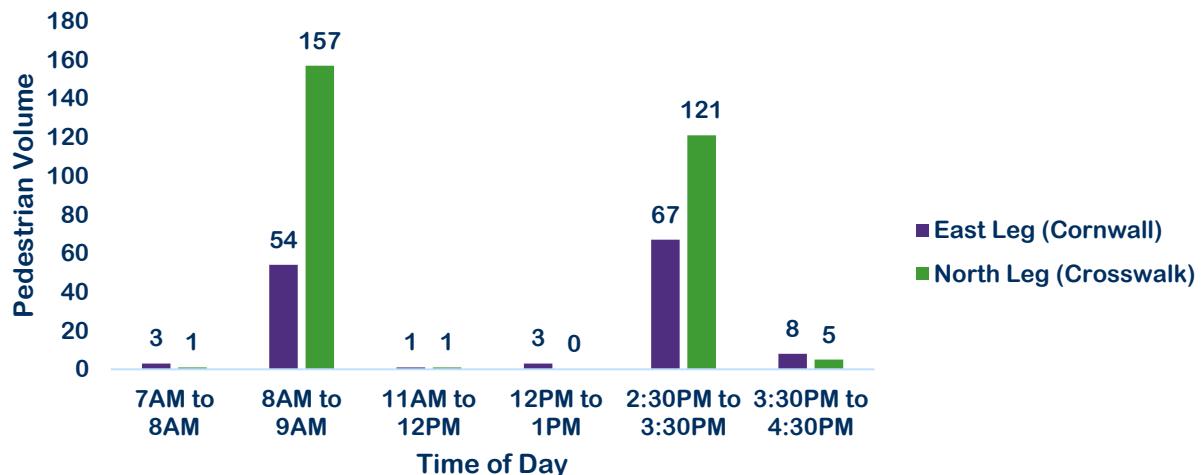


Figure 53. Pedestrian volume at Cornwall Rd & Ziprick Rd

### Peak Hour Traffic Volume at Cornwall Rd & Ziprick Rd From Sept 2021 TMC

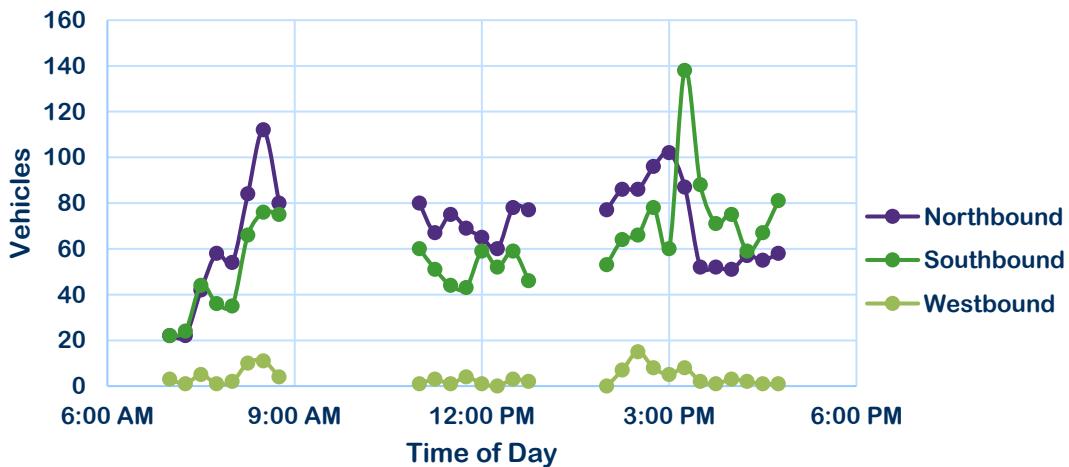


Figure 54. Traffic volume at Cornwall Rd & Ziprick Rd.

**Average Speeds During School Hours On Ziprick Rd (Between Carshyl Ct & Renfrew Rd) (Week of May 31-June 7 2022)**

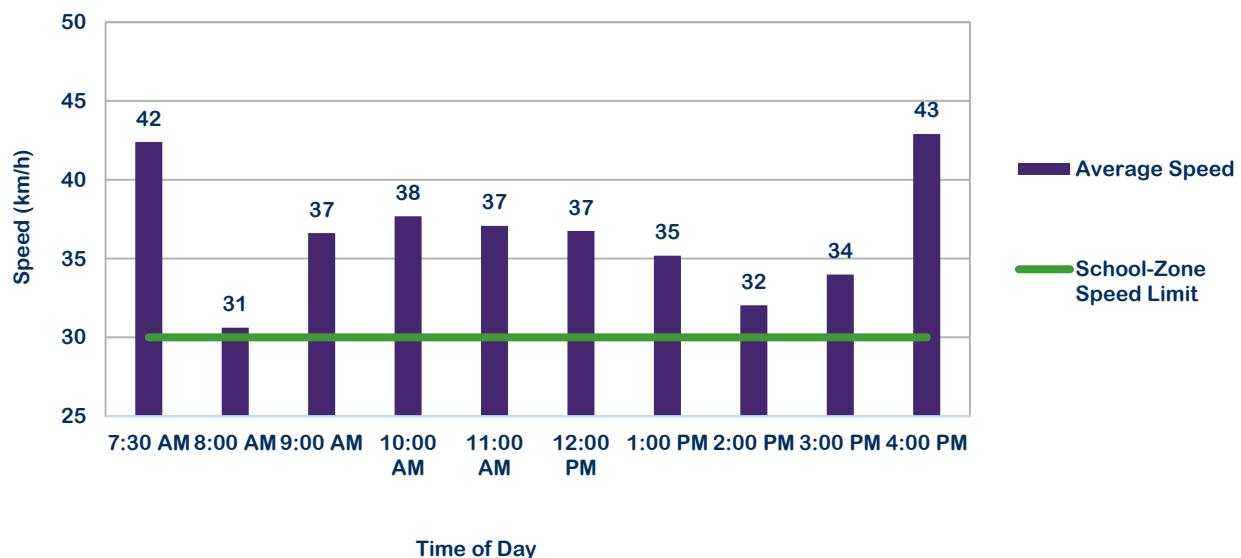


Figure 55. Average speeds on Ziprick Rd

# Follow-up Classroom Survey results: 2022-2025

Springvalley Elementary had 12 classrooms, and during the week of Monday, May 2, to Friday, May 6, 2022, teachers conducted the Hands-Up classroom survey. Twelve classrooms responded, accounting for 77% of the students. The online classroom surveys were completed at two schools:

- [Springvalley Elementary- STP Follow up - June 2 to 6, 2025,](#)
- [Springvalley Middle School- STP Baseline – June 4 to June 10, 2025](#)

## Springvalley Elementary

The results below reflect changes in the transportation mode share "To" and "From" school, considering confidence level and margins of error. In 2025, thirteen classrooms completed the "to" survey, accounting for 65% of the students at Springvalley Elementary.

**Potential Data Skewing.** It is worth noting that the follow-up data collection took place during the annual Bike to School Week event, which may have inflated cycling rates during the study period.

Springvalley Elementary	Baseline 2022 To School	Follow-up 2025 To School
Population size (expected number of trips tracked TO school over 5 days)	$260 \times 5 = 1,300$	$295 \times 5 = 1,475$
Number of respondents (actual trips TO school tracked over 5 days)	1,005	966
Confidence level	95%	95%
Margin of error	1.47%	1.85%

The figure below compares the travel mode before and after the implementation of the School Travel Plan.

### Travel Mode To School Springvalley Elementary

■ Baseline 2022 ■ Follow-up 2025

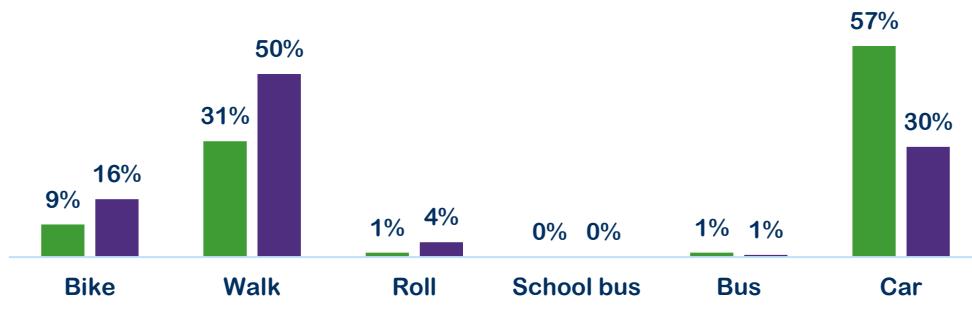


Figure 56. Travel Mode To School- Follow-up 2025

Before implementing the School Travel Plan, data shows, with a margin of error of  $\pm 1.47\%$  and 95% confidence level, that 55.8% to 58.8% of the kids travelled "To" school by car in 2022.

Following the implementation of the School Travel plan, data indicate, with a margin of error of  $\pm 1.85\%$  and a 95% confidence level, that 28.1% to 31.7% of the kids travel to school by car. That means, on average, 27% fewer kids travel "To" school by car in that week of 2025.

Springvalley Elementary	Baseline 2022 From School	Follow-up 2025 From School
Population size (expected number of trips tracked TO school over 5 days)	260x5= 1,300	295*5=1,475
Number of respondents (actual trips TO school tracked over 5 days)	870	968
Confidence level	95%	95%
Margin of error	1.91%	1.85%

In 2022, 67% of Springvalley's 260 students were tracked over one week. By 2025, we observed a similar participation rate of 66%. The comparative weekly travel mode data for trips from school is presented below.

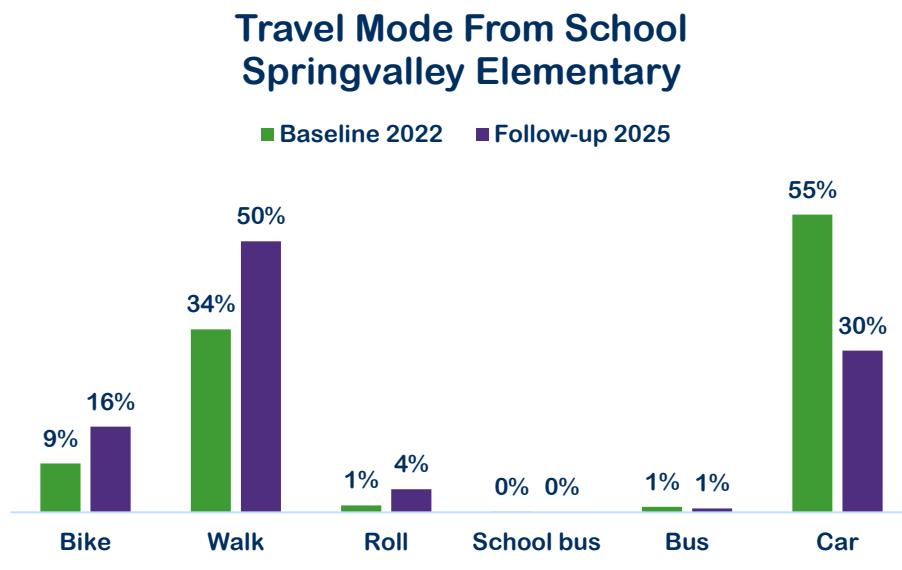


Figure 57. Travel Mode From School- Follow-up 2025

Before implementing the School Travel Plan, data shows, with a margin of error of  $\pm 1.91\%$  and 95 % confidence level, that 52.7% to 56.5% of the kids travelled "From" school by car,

After implementing the School Travel plan, data show, with a margin of error of  $\pm 1.85\%$  and a 95% confidence level, that 27.8% to 31.5% of the kids travelled "From" school by car. That means, on average, 25% fewer kids travel From school by car in 2025.

On average, there is a 26% increase in the use of other sustainable modes (walking, biking, rolling, school buses, and public transit) "To" and "From" school.

## Springvalley Middle

Springvalley Middle School did not participate in the baseline classroom data collection in 2022. However, they requested support to establish a Travel Mode baseline in 2025. A survey link was provided, and 44% of the school's 600 students were tracked over a five-day period; [Springvalley Middle School- STP Baseline](#)

Table 7. Summary TO School- Springvalley Middle (Frequency)

	Bike	Walk	Roll	School bus	Bus	Car	Total
<b>Wednesday</b>	31	33	9	69	29	98	269
<b>Thursday</b>	22	42	8	84	29	113	298
<b>Friday</b>	19	35	9	79	20	119	281
<b>Monday</b>	15	36	7	69	26	132	285
<b>Tuesday</b>	8	23	2	49	17	76	175
<b>Total</b>	<b>95</b>	<b>169</b>	<b>35</b>	<b>350</b>	<b>121</b>	<b>538</b>	<b>1308</b>
<b>Average</b>	<b>18</b>	<b>34</b>	<b>7</b>	<b>70</b>	<b>24</b>	<b>109</b>	<b>261</b>

**Student Hands-up Survey:  
Total Travel Mode TO School Over A Week  
Springvalley Middle**

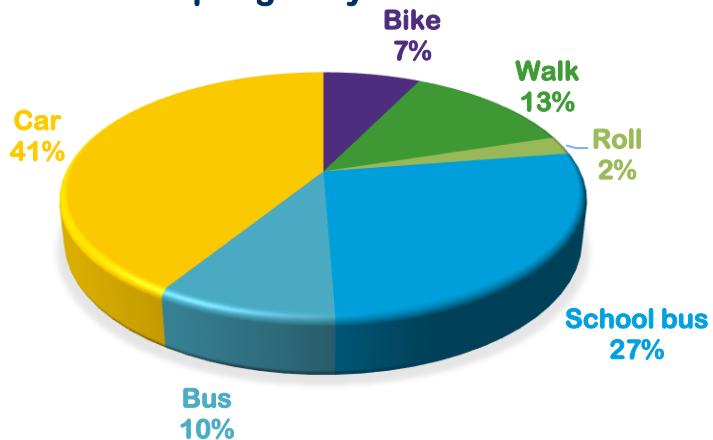


Figure 58. Travel Model TO School over a week- Springvalley Middle- Baseline 2025

Springvalley Middle	Baseline 2025 To School	Future Follow-up To School
Population size (expected number of trips tracked TO school over 5 days)	600x5= 3000	Future
Number of respondents (actual trips TO school tracked over 5 days)	1308	Future
Confidence level	95%	
Margin of error	2.04%	

Baseline data shows, with a margin of error of  $\pm 2.04\%$  and 95 % confidence level, that 39 to 43% of the students travel "To" school by car in 2025.

Table 8. Summary - FROM School- Springvalley Middle (Frequency)

	Bike	Walk	Roll	School bus	Bus	Car	Total
<b>Wednesday</b>	35	37	9	72	31	102	286
<b>Thursday</b>	22	42	8	84	29	113	298
<b>Friday</b>	19	35	9	79	20	119	281
<b>Monday</b>	15	36	7	69	26	132	285
<b>Tuesday</b>	8	23	2	49	17	76	175
<b>Total</b>	<b>99</b>	<b>173</b>	<b>35</b>	<b>353</b>	<b>123</b>	<b>542</b>	<b>1325</b>
<b>Average</b>	<b>21</b>	<b>35</b>	<b>8</b>	<b>73</b>	<b>25</b>	<b>112</b>	<b>273</b>

**Student Hands-up Survey:  
Total Travel Mode FROM School Over A Week  
Springvalley Middle**

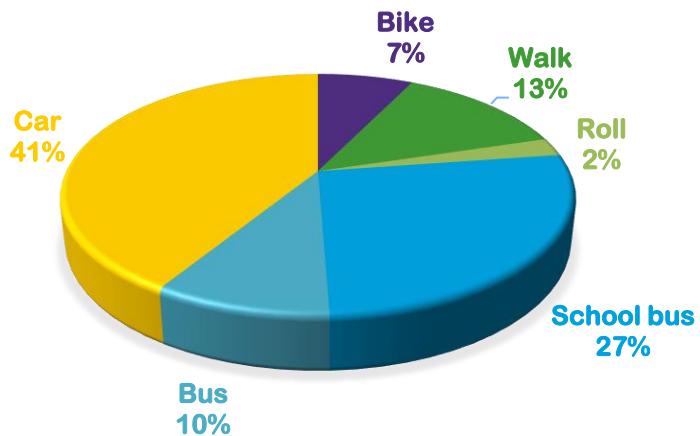


Figure 59. Travel Model FROM School over a week- Springvalley Middle- Baseline 2025

Springvalley Middle	Baseline 2025 From School	Future Follow-up From School
Population size (expected number of trips tracked FROM school over 5 days)	600x5= 3000	Future
Number of respondents (actual trips FROM school tracked over 5 days)	1325	Future
Confidence level	95%	
Margin of error	2.01%	

Baseline data, with a margin of error of  $\pm 2.04\%$  and a 95 % confidence level, indicates that 39 to 43% of students travel "From" school by car in 2025.

Data collection at the two schools over a similar period shows a difference in travel Mode, as shown below:

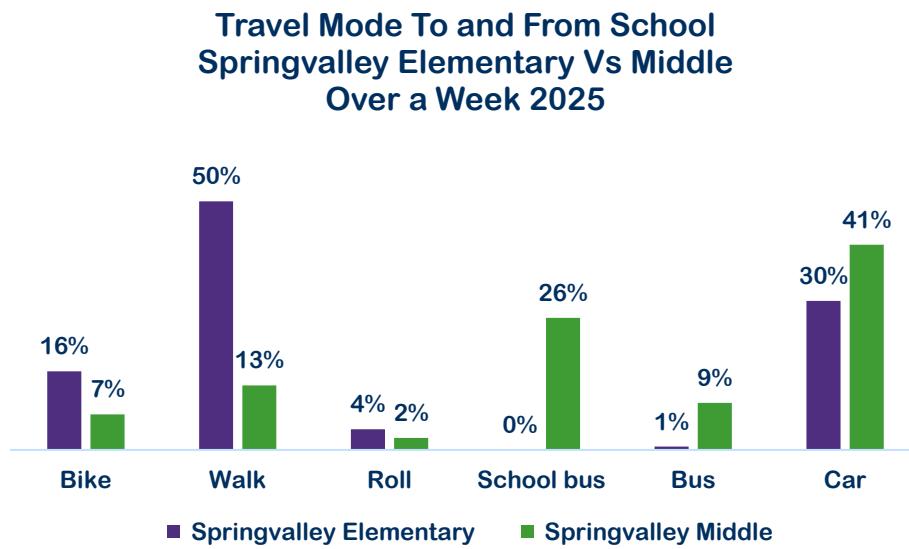


Figure 60. Travel Mode To and From Elementary Vs Middle- 2025

# Follow-up Family Survey Results: 2022-2025

In 2022, we received 99 completed family surveys out of 200 distributed to Springvalley School families—a 50% response rate. These valuable responses provided key insights into the challenges and barriers preventing students from using active transportation. Through our collaboration with Springvalley Middle School, parents from both schools were able to share their perspectives.

In 2025, the school community included approximately 225 families. Through the online [School Travel Planning program](#) survey, we received just 10 responses – representing a **4% parent participation rate**. Additional feedback from parents can be found in Appendix 2.

Due to the minimal number of follow-up family surveys received, **data samples were not large enough to reflect improvements related to barriers, real or perceived**, "To" and "From" school. Nevertheless, a comparison between the limited baseline and follow-up data is presented, considering confidence levels and margins of error below.

	Baseline 2022	Follow-up 2025
School population (number of families)	200	225
Number of respondents (surveys received)	99	10
Confidence level	95%	95%
Margin of error	7.02%	30.36%

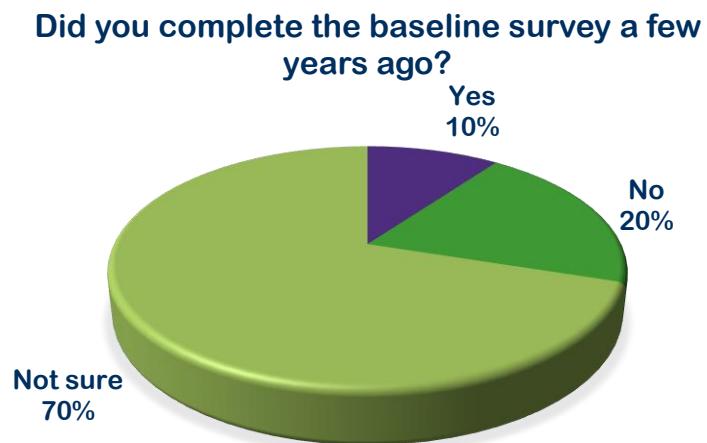


Figure 61. Did you complete the baseline survey a few years ago?

## Which school does your child attend?

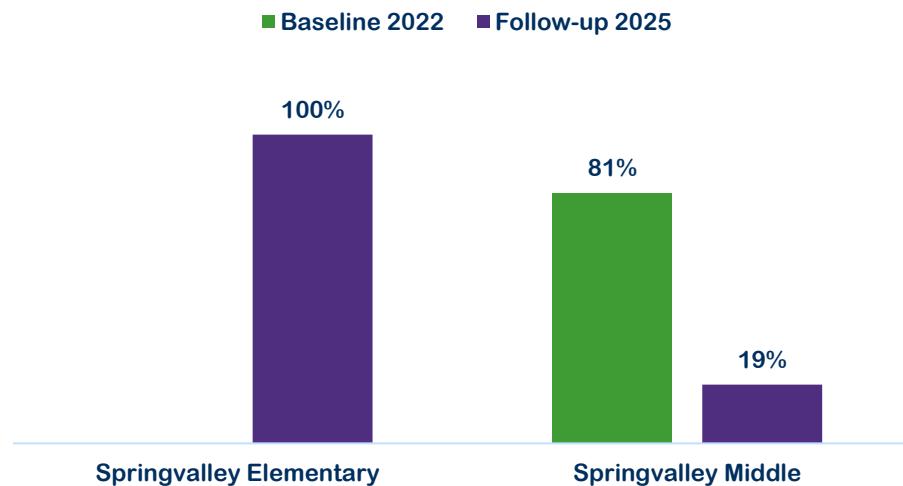


Figure 62. Which school does your child attend?

In the 2022 survey, parents from Springvalley Middle School represented the majority of respondents. However, the follow-up survey only captured participation from parents of elementary school students.

## How does your child usually get TO school?

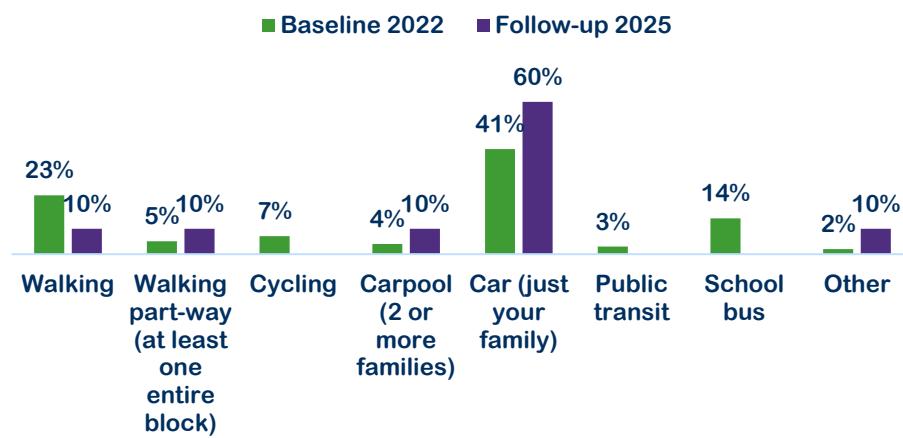


Figure 63. How does your child get To school? - Follow up

Other: I walk or run and then use my mobility scooter for travel. Walk part way and take a transit bus, then walk part way and skateboard.

## How does your child usually get FROM school?

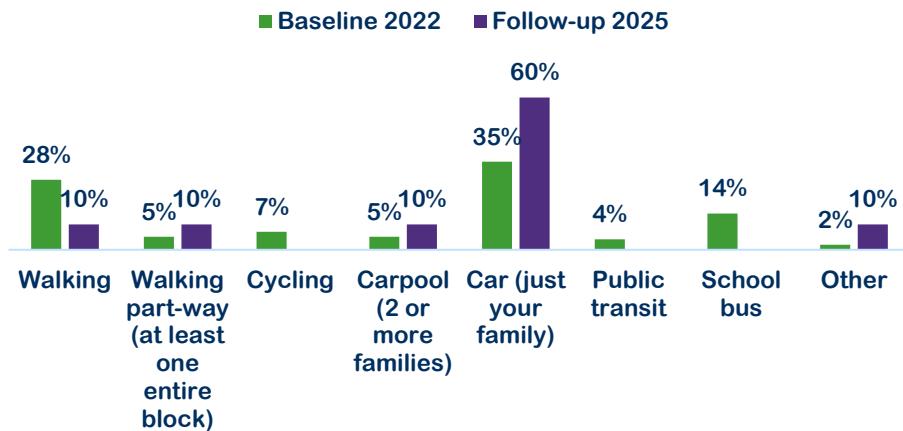


Figure 64. How does your child get From school?- Follow up

## What are the main reasons you usually drive your child to/from school?

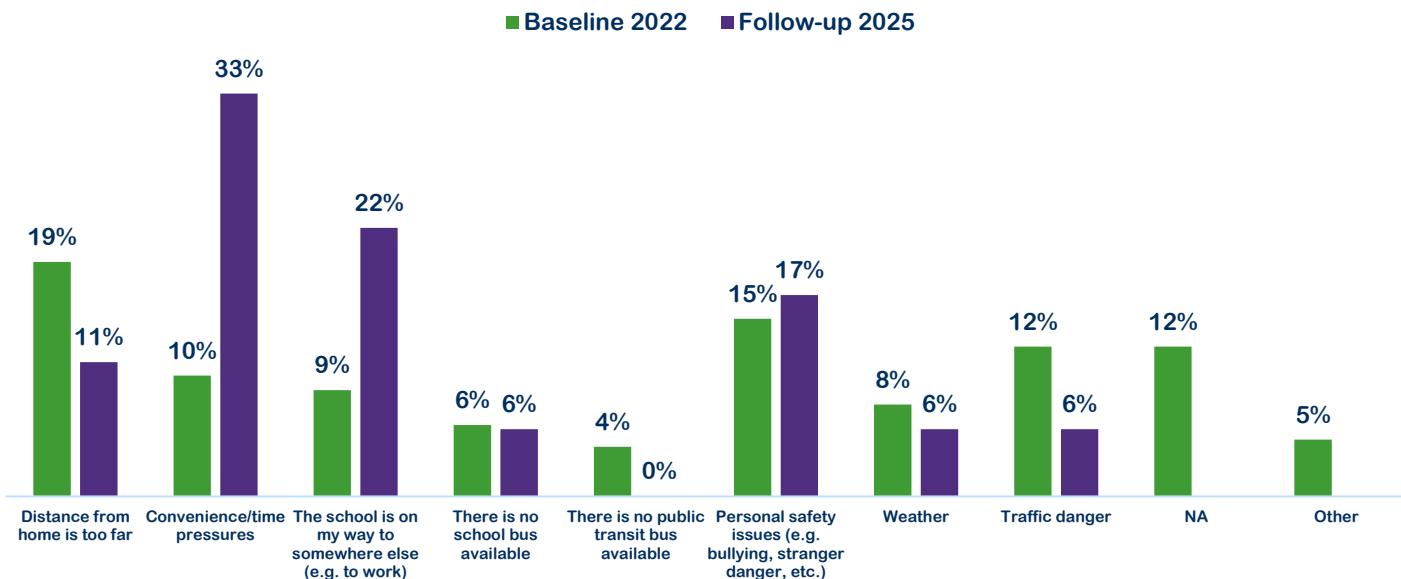


Figure 65. Main reasons given for driving kids to school- Follow-up

Reasons provided in "Other": Special needs child cannot walk alone to school. Sometimes it is slow to get up and get going in the morning. Student is on an IEP so he doesn't follow the regular schedule. Only when she has an injury, or we need go to somewhere downtown after school. If they miss the school bus, if they have sports or activities afterschool done. Someone else drops them off. There were reduced traffic dangers. They did not live so far from school. Autism needs special care. After school appointments.

## I would allow my child to walk to school if

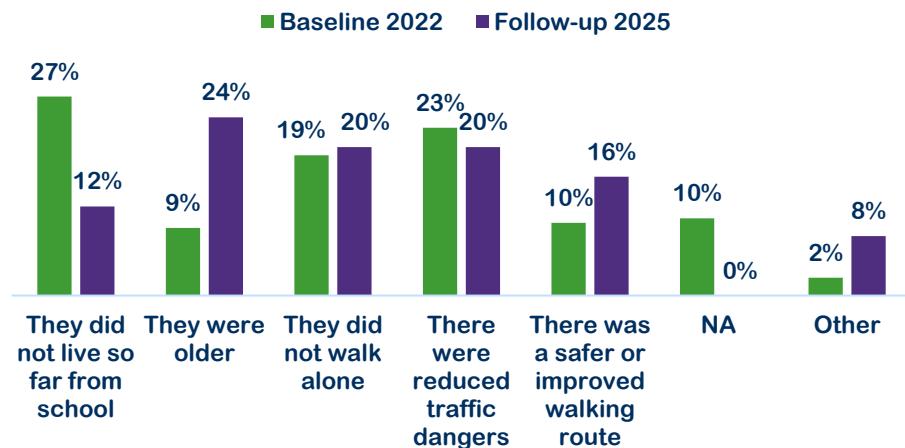


Figure 66. I would allow my child to walk to school if

"Other" included: uses a wheelchair, too far. My daughter gets anxious about the homeless population. There was a safer or improved bicycling route. There were reduced traffic dangers. They did not live so far from school. The parked, parking and leaving cars did not make it so dangerous. Walking alone, I don't want to unless with someone else.

## I would allow my child to bike to school if

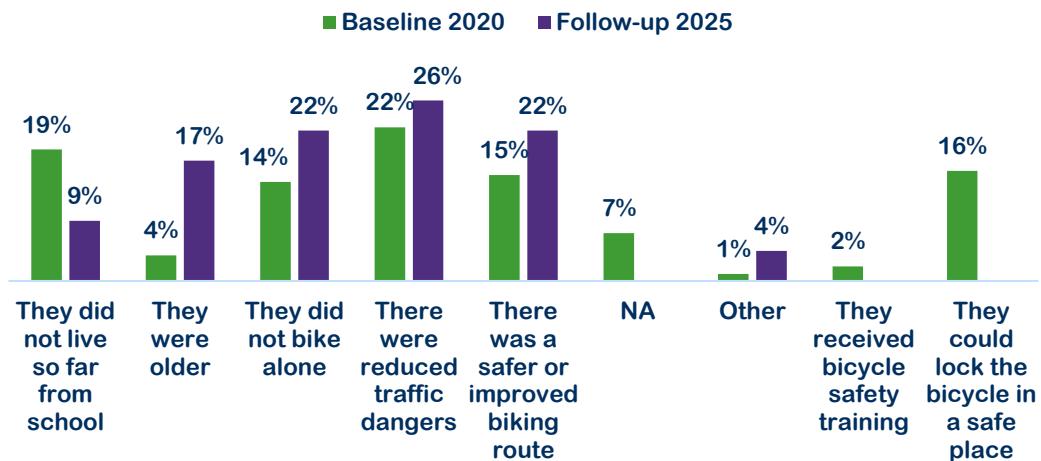


Figure 67. I would allow my child to bike to school if

"Other" included:

Improved infrastructure: Safer bicycling routes and reduced traffic dangers

Proximity advantages: Families living closer to school

Safety measures: Children not cycling alone and having secure bicycle storage

Weather-dependent participation: Walking/biking when conditions permit

Seasonal adjustments: Occasional driving during winter (e.g., for 12-block distances)

## The route you take to and from school is safe for children to walk

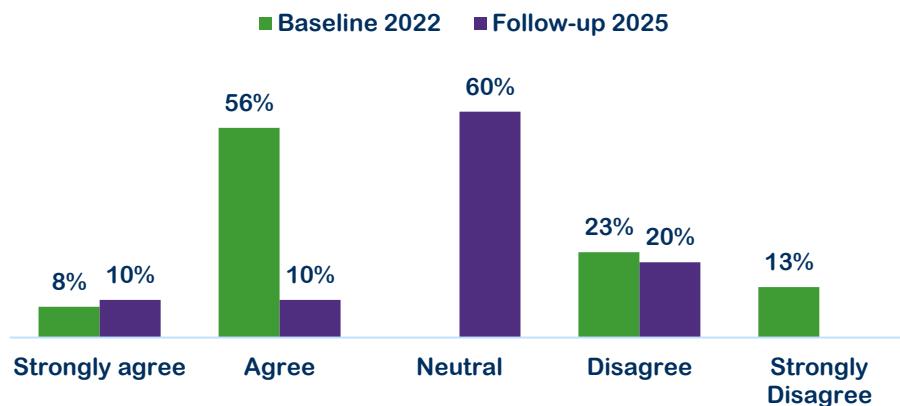


Figure 68. The route you take to and from school is safe for children to walk

## What is the gender of your eldest child?

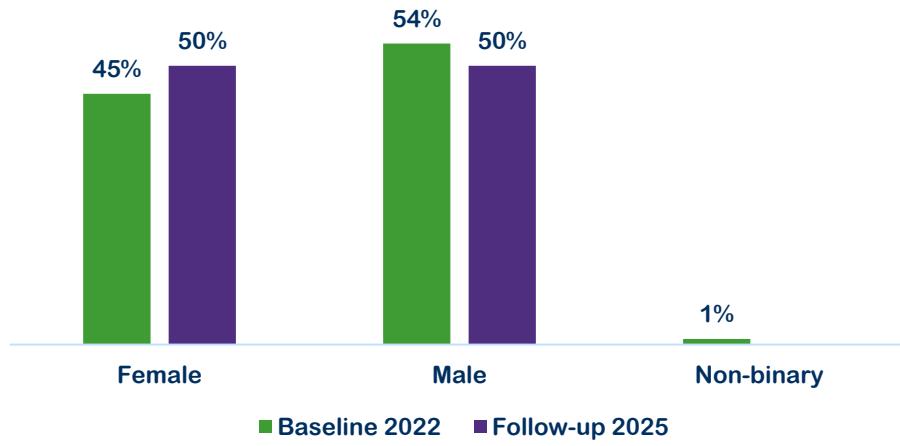


Figure 69. What is the gender of your eldest child?

## How does your CHILD feel on the trip TO and FROM school?

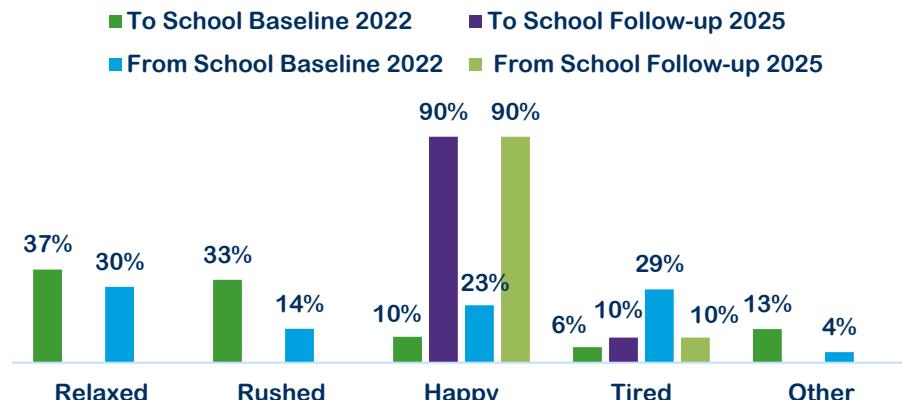


Figure 70. How does your CHILD feel on the trip TO and FROM school?

"Other" included:

Safety anxieties: Worries about bullies, strangers, and traffic congestion

Logistical challenges: Parking shortages and time constraints

Emotional factors: Stress, indifference, or mixed feelings (both anxiety and excitement)

Separation concerns: Children's anxiety about leaving their parents or having difficult days

Positive anticipation: Excitement about special events.

## How far away from the school do you live?

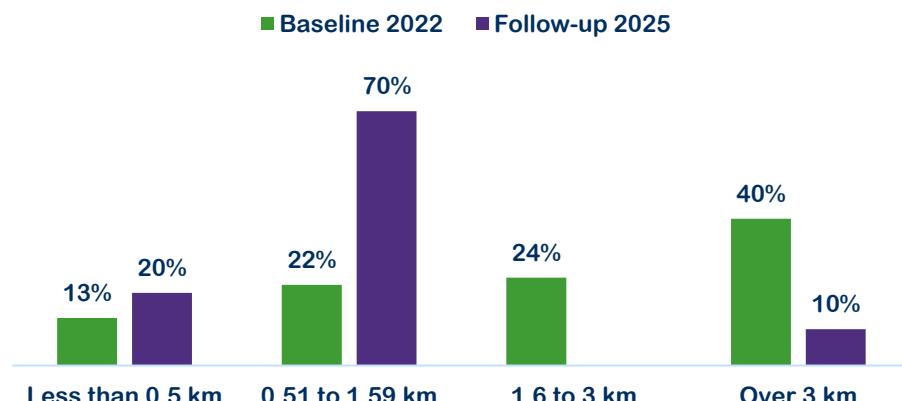


Figure 71. How far away from the school do you live?

## Do you support ongoing School Travel Planning efforts to make the school area safer, healthier and better connected?

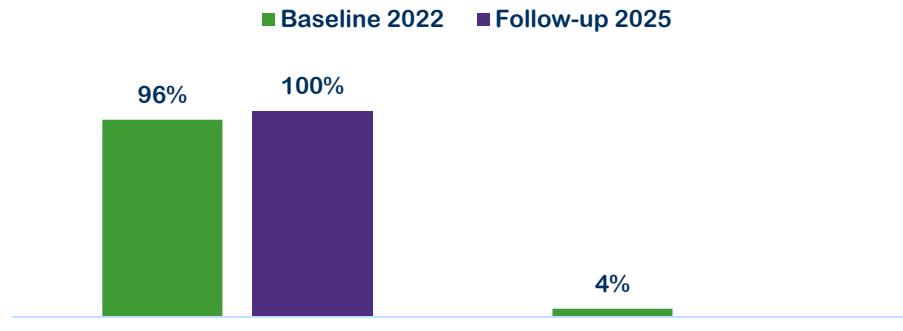


Figure 72. Do you support ongoing STP efforts?

Additional comments from family surveys are included in Appendix 2.

The following graphs show the sentiments of **4% of the parents** who provided feedback related to the actions performed around the school since the School Travel Planning project began.

### In what ways have your family's school travel habits changed since the project began?

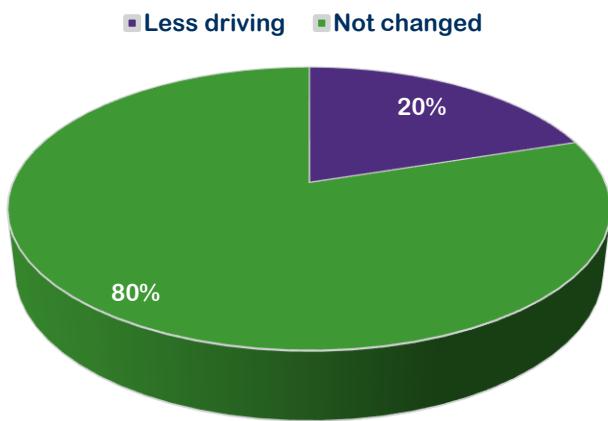


Figure 73. In what ways have your family's school travel habits changed?

Comments: She has been increasing her running on our less busy side road. She ran about 0.20 km recently.

## Has the volume of vehicle traffic outside this school changed?

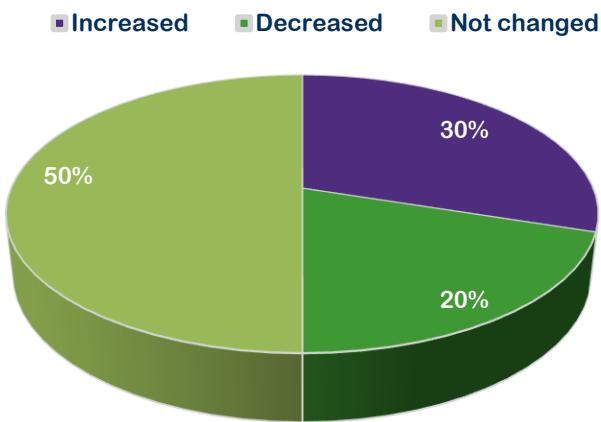


Figure 74. Has the volume of vehicle traffic outside this school changed?

## Which school programming activities were implemented, and how effective were they for your family?

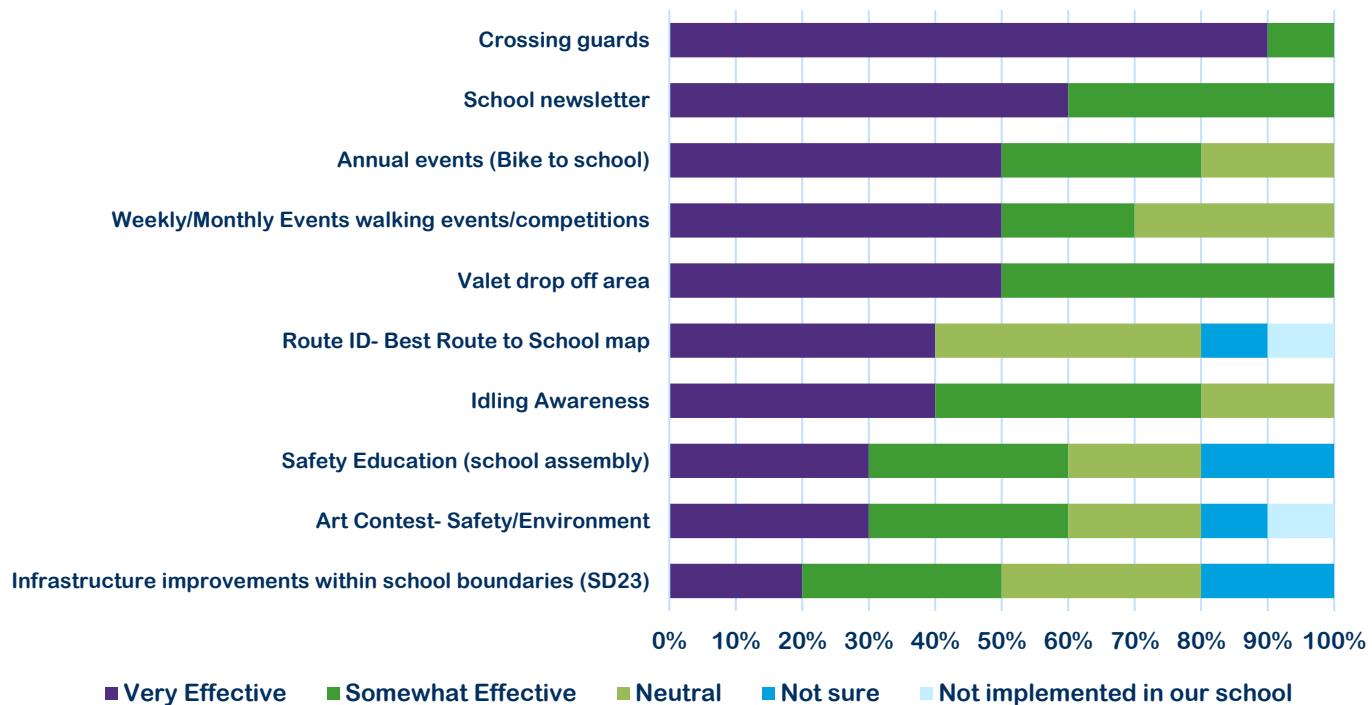


Figure 75. Which school programming activities were implemented, and how effective were they?

## What infrastructure improvements were implemented by the City/District around your school, and how effective were they for your family?

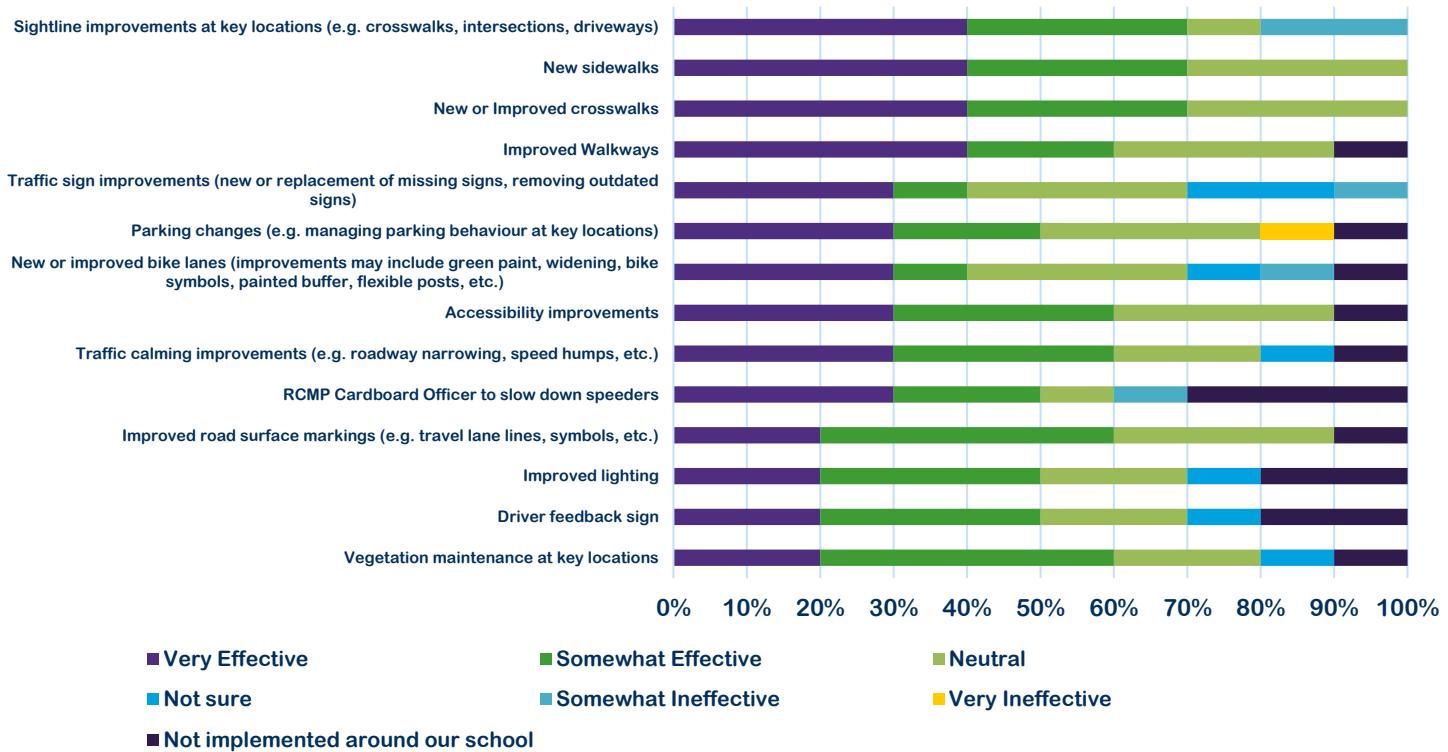


Figure 76. What infrastructure improvements were implemented by the City, and how effective were they?

# Conclusions and Recommendations

## Survey Results & Infrastructure Impact

- Observed 26% increase in sustainable transportation modes (walking, cycling, school bus, transit) after 3 years of infrastructure improvements.
  - Note: Surveys conducted during 2025 Bike to School Week may have temporarily inflated participation. Monitor transportation patterns during non-event weeks to assess long-term trends.

## School-Specific Strategies

- Spring Valley Middle School shows distinct mode-share differences vs. Elementary:
  - Prioritize carpooling programs and park-and-walk initiatives for older students, given their distinct travel patterns.
  - For younger students, encourage active travel through initiatives like "Drop & Go / Walk a Block or Two" programs, which allow them to walk a safe, shorter distance to school, supported by the [Best Routes to School Map](#) to guide families on safe and accessible routes.

## Parent Engagement

- Strengthen parent engagement by consistently utilizing newsletters for role-model messaging and providing incentives for safe practices (e.g., gift certificates).

## Educational Programs

- Deliver the Cleaner Air Program annually to Grades 3–4, covering:
  - Idling reduction, air pollution, and health impacts.
  - Reinforce awareness through school newsletters.

## Infrastructure Maintenance

- Encourage parents and school administration to proactively address concerns like snow removal and overgrown vegetation through the City's Service Request System, ensuring safe routes year-round:
  - Kelowna's Service Request System [City of Kelowna](#)

## Future Family Surveys

- Increase family survey participation to gain a more comprehensive understanding of parent sentiments and evolving real or perceived barriers to sustainable transportation.

## Ongoing participation

- 100% of parents surveyed support continuing School Travel Planning.
- Annual Action Plan integration:
  - Align the new School Committee with the Parent Advisory Council (PAC).
  - Review past goals, set new targets, and schedule yearly activities.

# Endorsement

Following the completion of significant active transportation improvements, follow-up family surveys were conducted in June 2025. These results demonstrate notable progress when compared to our baseline data collected in May 2022.

The findings have been:

- Presented to both the School Travel Plan (STP) municipal and school committees
- Recommended for sharing with parents and caregivers through school communications

**September 2025**

Vice Principal



Maria Cicchelli

Municipal Lead



Nancy Mora

**September 2022**

School Principal

Maria Cicchelli

Signature



Date

September 16, 2022

Lead representative of  
Municipal Stakeholder Committee Jerry Dombowsky

Signature



Date

September 16, 2022

# Appendix 1. Collaborators

## Committee members

In coordination with the City of Kelowna, Regional Services invited the institutions described below to participate in the Municipal and School Stakeholder Committee. The coordinator sent an introductory document on School Travel Planning and the Terms of Reference for the Municipal and School Stakeholder Committee for their review.

The Municipal and School committee members were aware of their activities in advance and provided their input in the following manner:

- Participated in the Walkabout
- Contributed ideas for the Action Plan
- Participated in the education of parents and students regarding health, wellness, air quality and safety benefits
- Agreed with improvements recommended in the Action Plan

Table 9. Members of the School STP Committee

Springvalley		470 Ziprick Rd, Kelowna, BC V1X 4H4	
	Name	Description	Contact information
School Administration			
	Maria Cicchelli	Vice Principal Elementary	<a href="mailto:Maria.Cicchelli@sd23.bc.ca">Maria.Cicchelli@sd23.bc.ca</a>
	Thomas Gruenwald	Principal Middle	<a href="mailto:thomas.gruenenwald@sd23.bc.ca">thomas.gruenenwald@sd23.bc.ca</a>
	Darlene Vereb	Teacher	<a href="mailto:Darlene.Vereb@sd23.bc.ca">Darlene.Vereb@sd23.bc.ca</a>
	Melaney Stutters	Teacher	<a href="mailto:Melaney.Stutters@sd23.bc.ca">Melaney.Stutters@sd23.bc.ca</a>
Parents			
	Breanna Kelly	Main Contact	
	Erin Menzies	Parent	
	Jammie Paterson	Parent	

Table 10. Members of the Municipal Stakeholder Committee

	Name	Description	Contact information
<b>City of Kelowna</b>	Jerry Dombowsky	Transit and Programs Manager	<a href="mailto:jdombowsky@kelowna.ca">jdombowsky@kelowna.ca</a>
	Dan Glasscock	STP Facilitator/Traffic Safety officer	<a href="mailto:Dan.Glasscock@sd23.bc.ca">Dan.Glasscock@sd23.bc.ca</a>
	Nancy Mora	Project Coordinator	<a href="mailto:nmoracastro@kelowna.ca">nmoracastro@kelowna.ca</a>
	Samantha Parrett	Communications Advisor	As needed basis <a href="mailto:sparrett@kelowna.ca">sparrett@kelowna.ca</a>
	Jasen Sackmann	Traffic Technician	<a href="mailto:JSackmann@kelowna.ca">JSackmann@kelowna.ca</a>
<b>*RCMP</b>	Federico Angulo	Law Enforcement	<a href="mailto:Federico.ANGULO@rcmp-grc.gc.ca">Federico.ANGULO@rcmp-grc.gc.ca</a>
<b>School District</b>	David Widdis	Planning Manager	<a href="mailto:david.widdis@sd23.bc.ca">david.widdis@sd23.bc.ca</a>

\* RCMP staff involvement is minimal at schools because staff have been reassigned to General Duty for the rest of the school year.

## Acknowledgements

Thanks to the following organizations for their valuable information:



## Statement of support

City of Bellingham  
City of Everett  
Bellingham School District  
Bellingham Parks and Recreation  
Whatcom County  
Whatcom Council of School Districts



### **Clean Air and Safe Routes 4 Schools**

#### **School Travel Planning**

#### **School Agreement**

I, Maria Cicchelli, Vice Principal, agree on Springvalley Elementary School's behalf, that we will participate in the School Travel Planning. I understand that the School Travel Planning process will begin immediately and continue on an ongoing basis—the first year being the most intensive with implementation continuing in year two and beyond. We have secured the support of the Parent Advisory Council to participate in this project.

I understand that our school will have the following responsibilities:

- Participate fully in the five-step School Travel Planning process.
- Contribute in-kind staff time for data collection, meetings and implementation tasks.
- Allow select students to participate in meetings and assist with implementation.
- Provide meeting space as needed.

#### **School Vice Principal:**

Maria Cicchelli  
Name

Springvalley Elementary School  
School Name

  
Signature

March 10, 2022  
Date

**School Travel Planning**  
**Municipal Stakeholder Committee**  
**Statement of Support**

I, David Widdis, representing the Central Okanagan School District No. 23, agree to participate as a member of the Municipal Stakeholder Committee for the City of Kelowna. This commitment will begin immediately and continue on an ongoing basis.

I understand that as a member of the Municipal Stakeholder Committee, my role in this project may include the following responsibilities:

- Consider the *Child and Youth Friendly Land Use and Transport Planning Guidelines* found at [www.kidsonthemove.ca/documents.htm](http://www.kidsonthemove.ca/documents.htm) when making decisions about Action Plan items.
- Contribute in-kind staff time for meetings, data collection and implementation tasks that are relevant to my organization's existing responsibilities in the community, e.g. transportation engineering and planning departments will oversee infrastructure, police and/or bylaw officers will oversee safety and traffic enforcement, public health and school districts will guide education opportunities, etc.

David Widdis  
Name



Signature

Central Okanagan School District No. 23  
Organization Name

April 10, 2015  
Date

**Witness:**

Jennifer Pearson  
Name



Signature

Central Okanagan School District No. 23  
Organization Name

April 10, 2015  
Date

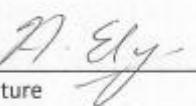
**School Travel Planning**  
**Municipal Stakeholder Committee**  
**Statement of Support**

I, Anita Ely, representing the Interior Health Authority, agree to participate as a member of the Municipal Stakeholder Committee for the City of Kelowna. This commitment will begin immediately and continue on an ongoing basis.

I understand that as a member of the Municipal Stakeholder Committee, my role in this project may include the following responsibilities:

- Consider the *Child and Youth Friendly Land Use and Transport Planning Guidelines* found at [www.kidsonthemove.ca/documents.htm](http://www.kidsonthemove.ca/documents.htm) when making decisions about Action Plan items.
- Contribute in-kind staff time for meetings, data collection and implementation tasks that are relevant to my organization's existing responsibilities in the community, e.g. transportation engineering and planning departments will oversee infrastructure, police and/or bylaw officers will oversee safety and traffic enforcement, public health and school districts will guide education opportunities, etc.

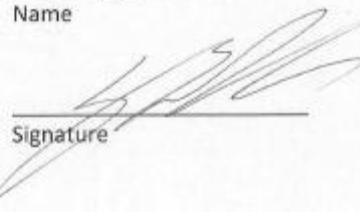
Anita Ely  
Name

  
Signature

Interior health Authority  
Organization Name

September 26, 2017  
Date

Witness:

J. Wor Norlin  
Name  
  
Signature

Interior health Authority  
Organization Name

September 26, 2017  
Date

## School Travel Planning Municipal Stakeholder Committee Statement of Support

I, Jerry Dombowsky, representing the Sustainable Transportation Partnership of the Central Okanagan, agree to participate as a member of the Municipal Stakeholder Committee for the City of Kelowna. This commitment will begin immediately and continue on an ongoing basis.

I understand that as a member of the Municipal Stakeholder Committee, my role in this project may include the following responsibilities:

- Consider the *Child and Youth Friendly Land Use and Transport Planning Guidelines* found at [www.kidsonthemove.ca/documents.htm](http://www.kidsonthemove.ca/documents.htm) when making decisions about Action Plan items.
- Contribute in-kind staff time for meetings, data collection and implementation tasks that are relevant to my organization's existing responsibilities in the community, e.g. transportation engineering and planning departments will oversee infrastructure, police and/or bylaw officers will oversee safety and traffic enforcement, public health and school districts will guide education opportunities, etc.

Jerry Dombowsky

Name



Signature

Sustainable Transportation Partnership of the Central Okanagan

Organization Name

April 10, 2015

Date

**Witness:**

Ron Westlake

Name



Signature

Sustainable Transportation Partnership of the Central Okanagan

Organization Name

April 10, 2015

Date

## Appendix 2. Walkabout and Family Survey Comments

Additional comments from Baseline Family Surveys 2022
I wish there were sidewalks to separate him from car traffic
The bus routes need to be better. The bus drives by our house yet she has to get off up at black mountain; one km away. Last year she was able to get off 4 blocks away from our house.
we have about 5 kms to travel and a large part of it is on Springfield Road. It's a VERY busy street and I feel too busy for a 10-year-old to be navigating...especially the way people drive here
As of now, I still drop off and pick up my son to/from school, but he wants to go by himself using his bicycle, but I still not allowed him because I'm worried for his safety!
Her mother goes to gather with kids that's better to reduce accident
Where spring valley elementary is located is very dangerous. So much traffic and often people speed right through the school zones. Too much traffic congestion. There needs to be more parking for parents. A full-time crossing guard and/or a blinking light
speed traps should be in place, flashing cross walks, anything and everything to protect these kids. not enough is done and it ridiculous. Time spending the funds on your kid's safety. People are reckless and someone will be hurt if nothing improves.
The route is safe & live very close to school. Concern with parking around the school areas. No sidewalks on side streets. Ziprick is a main route, during & after school hrs. many speeders. More & + transients in area also drug paraphernalia
Eldest generally walks and youngest who goes to SVE rides a bike
The kids cannot lock their bikes up at the school. Homeless steal the bikes.
Many drug addicts and vagrants rooming the streets. No sidewalks or bike paths either.
I fear for my child travelling alone because of the way she is treated by other kids in school and the lies being said about her. I worry one of the bullies will retaliate when no one is watching.
People illegally parking find frustrating and hazard to get around
I not normally drive her but our bus picks her up and drops her off at the school late, and she has to wait after school for 45-50 minutes for her bus to come pick her and take her home. I do not feel this is acceptable at all.
It's fine. They walk to school.
My daughter is being bullied on the bus; therefore, I drive her every morning. She is afraid of repercussions if I bring it to someone's attention. She is also being bullied by the same girl at school. It makes for a very anxious girl attending school.
Ziprick road is BUSY
I walked this route with my child for 4 years before he could do it alone. He knows road safety and most of the people that live on that route know us and would intervene if they saw suspicious persons.
PT she rides the bus to/from my house and is sometimes picked up, PT is dropped off and picked up at school when she's at dad's
Going to school feels safe as we drop our daughter off right in the parking lot. Coming home from school is a bit more nerve wracking as she walks down to Simpson Ave. We chose to use this as our meet up spot as Ziprick is so busy at this time.
I find it safe for him because he is using the walkway and other students is with him also.
I like spending time with my child to and from school so it's no big deal to drive. But I know not all families have that luxury. So I just want it to be safe for all families.
It is very difficult families with working parents. We live 3 km away and is too far and too dangerous for them to walk or bike but there is no school bus route for them to take
She walks to and from school with friends
Noticed to many children from elementary are walking alone without parents
She feels mostly safe, however there have been instances of people approaching her. They appear transient. The bus can be late or not show up at all which can be very stressful for her.
Mother-son time
Wish there was cameras and seatbelts on the bus
My kids prefer to bike to school, but my son's bike was stolen from the school. We have learned that this happens a lot. Why aren't the locks in a safer location? Under lock and key? We all want them to ride, invest in protection. Bikes are expensive
The marked cross walks in front of the middle schools are often ignored by drivers. Often while my daughter is waiting to cross, cars will go through the cross walk completely oblivious of their surroundings and fail to stop for kids
He travels on residential streets then crosses Ziprick Rd which is busy at the crosswalk

### Additional comments from Follow-up Family Surveys 2025

The cars coming in and out go through the bike lane, and people don't always look before opening doors, stepping out to get to their door, or when coming in to park or leave. Many park around the corner on Simpson and come around the corner too sharply or fast or back up without looking.

I feel like speed bumps, more signage and having enforcement more often would really help set the safety tone for all the people driving through the crosswalks. Also, having speed bumps and weaves might remind the drivers who don't have kids to drop off how to treat Ziprick Road with two school zones in effect and park access throughout the year.

We live close to our school, nice neighbourhoods, but when he is old enough, hopefully the following year, he can go on His own. I'd rather be with him and people than alone. I trust him to be ok on his own. I'd just feel better. I love seeing kids walking to school and or riding their bikes but have to make sure to follow the rules and safety of the road. If I didn't have to go to work right after we would walk more, we do halfway, he rides his scooter or bike. Which he still gets to be involved with.

I can't on Mondays, Wednesdays, and Fridays. My youngest goes to preschool across town, but other days depend on the weather and how I'm physically feeling.

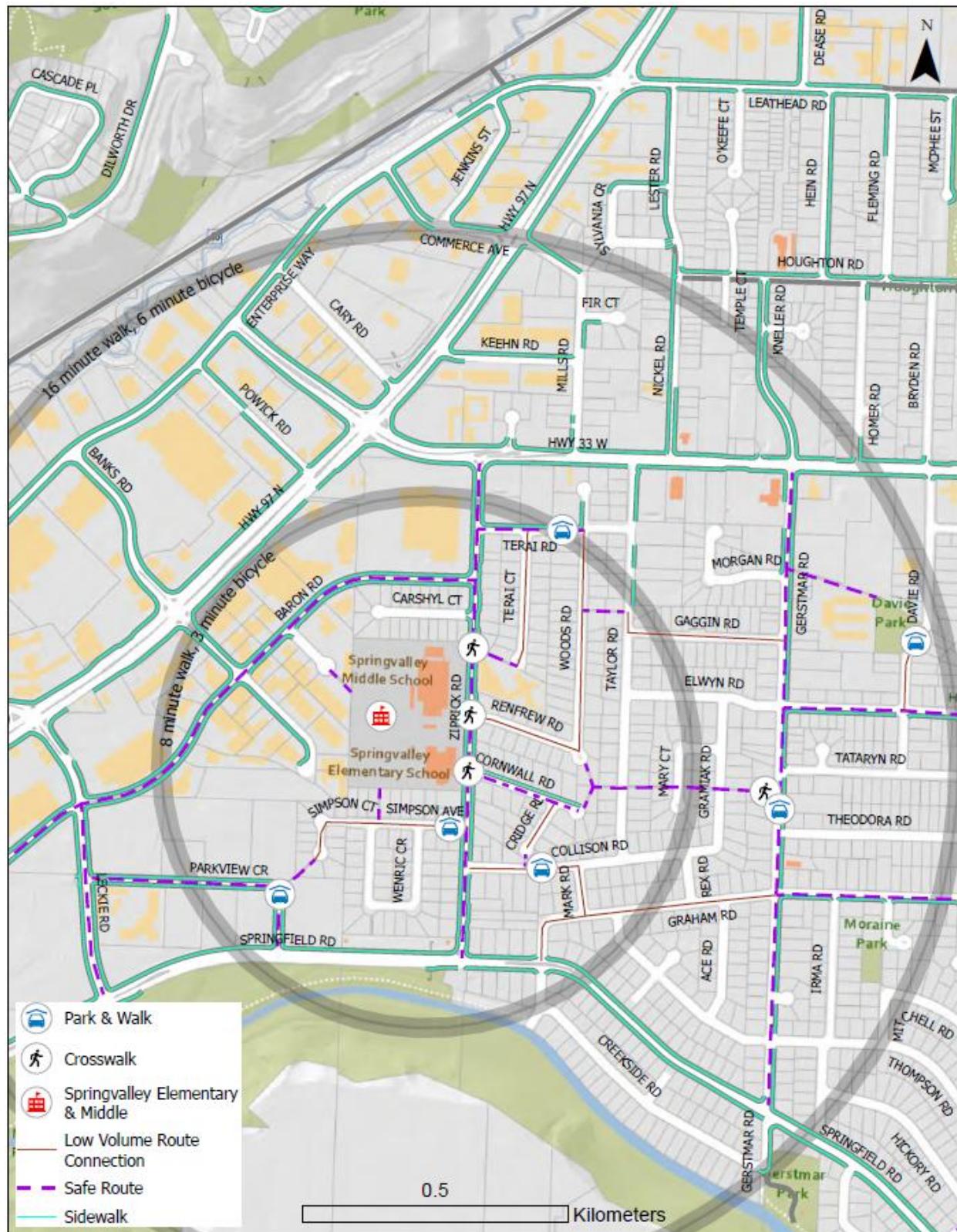
The homeless and drug addicts around are my biggest safety concern, not sure how that even gets fixed.

Parents need to be better aware. I see too many parents who speed in the school area, fail to stop at stop signs, fail to signal for turns, and park poorly. I saw a mom who picked up her daughter, almost backing over 2 children, and their mom, without looking around before moving. The same mom flipped me off as I slowed down to go over a speed bump and a child crossing the road. I feel the school has done quite well in having bike to school days and teaching children safety, but I feel a lot of parents don't have the same knowledge of road safety in school areas.

I believe that more police officers should patrol the school zones to catch people speeding. Every single day I see someone going fast past the school. They used to have a cardboard police officer, and I haven't seen it in a long time.

## Appendix 3. Safe Routes to Springvalley

Safe routes 4 schools - Regional District of Central Okanagan



## **Clean Air and Safe Routes 4 Schools**

**For inquiries, please contact:**

**Regional Air Quality Program**

**Website: [www.rdco.com/airquality](http://www.rdco.com/airquality)**

**Email: [airquality@kelowna.ca](mailto:airquality@kelowna.ca)**

**Phone: 250-469-8408**

**September 2025**

**This revised plan, a living document, reflects ongoing progress and recommendations that are subject to continuous adaptation based on community needs and new findings. The information herein is provided for informational purposes only and is subject to change without prior notice.**