

# Clean Air & Safe Routes 4 Schools

## A School Travel Plan

### North Glenmore Elementary School



North Glenmore 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 November 2024

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# Project Overview

In 2021, the Regional District of Central Okanagan (RDCO), in coordination with the City of Kelowna, started implementing the Clean Air and Safe Routes 4 Schools program at North Glenmore Elementary School. The Clean Air and Safe Routes 4 Schools program uses the “School Travel Plan (STP)” Toolkit created by Green Communities Canada in combination with the “Cleaner Air 4 Schools” toolkit developed by the City of London, England.

The development of the School Travel Plan and the implementation of school programming have been shown to reduce vehicle traffic and increase the number of students using active transportation. School Travel Planning involves collaborative work with multiple stakeholders to produce a plan that addresses safety concerns and necessary infrastructure improvements specific to each school. The STP objectives were expanded to include tools to identify areas of poor air quality around the school, promote student understanding of the causes and impacts of air pollution, and provide ideas for engaging staff, students and parents in improving air quality. The Regional Air Quality Coordinator facilitated the Plan's development and coordinated the Municipal Steering Committee. This committee was comprised of numerous collaborators who assisted in the planning process, including other City of Kelowna departments, Interior Health, RCMP, and School District 23. A school committee was also formed with school representatives and parents. By engaging various partners, the program created a greater sense of community, added broader implications for schools and neighbourhoods in adopting active transportation habits and improved air quality.

The School Travel Planning program involved baseline research through classroom and family surveys, observations, and traffic counts to establish the number of students currently using active transportation for school travel and to identify the real and perceived barriers that prevent students and parents from using active transportation. The Committees participated in a school walkabout that identified areas of concern. This information was used to develop education and community mobilization programs within the school described in the Action Plan of this document. The School Committee delivered programming within the school with the assistance of the facilitators and all partners.

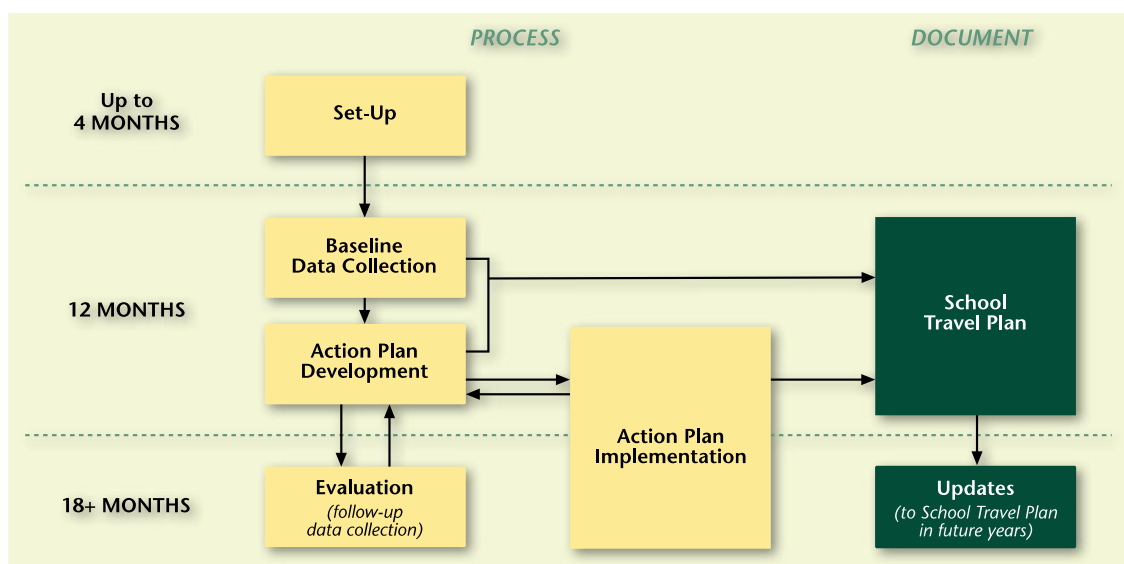
After four years, several infrastructure improvements were completed around the school; the follow-up survey results 2024 show an overall increase of 5% in sustainable transportation to and from school. More kids walk, bicycle, take the school bus, carpool, and use public transit to and from school. The school is encouraged to continue implementing the action plan and recommended actions outlined in this document.

# 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 across Canada over several years. A School Travel Plan is a living document belonging to the school. It should be revisited to update the Action Plan items' status and incorporate future evaluation findings. It is part of a complete School Travel Planning process, shown in Figure 1, successfully developed and implemented across Canada since 2007.

*School Travel Planning process*



**Figure 1. School Travel Planning Process**

The National *Children's Health, Mobility and Happiness: A Canadian School Travel Planning Model* project completed in 2012 used Active and Safe Routes to School programming combined with Transportation Demand Management principles to encourage active and sustainable school travel modes 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 to reduce the health risks to children. Even before many Action Plan items had been fully implemented, by March 2012, some provinces saw a shift towards active travel of up to 6 percent and some individual schools saw a change of over 20 percent.

Safe Routes to School programs are focused 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 per/day of physical activity recommended by the Canadian Physical Activity Guidelines.

Recent research states there has been a dramatic increase in unhealthy weight in children over the past four decades. In 1978, 15% were at an unhealthy weight; in 2007, Statistics Canada found that 29% of adolescents had an unhealthy weight. <sup>1</sup>

<sup>1</sup> [Healthy Families BC](#)



- Most adolescents have trouble outgrowing this problem, and in fact, many continue to gain weight.
- Children and youth spend almost eight hours a day in front of screens, and 63% of free time, after school and on weekends, is spent being sedentary.
- If current trends continue, by 2040, up to 70% of adults aged 40 years will be either overweight or obese.

There are many benefits to walking or cycling to school:

- Health- Active transportation contributes to children's physical activity participation and improves 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 reduce greenhouse gas emissions.
- Economic - Walking or cycling to school saves money on gas.
- Education- Physical activity before the school day helps to 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 students' neural activity during a test following sitting and walking for 20 minutes. Blue represents lower neural activity, while the colour 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. Also, following physical activity, children completed learning tasks faster and more accurately and were likelier 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 Walks makes coordination of efforts and knowledge transfer between and among these organizations possible. This national website provides a wealth of resources with links to international and provincial/territorial organizations and their curriculum, as well as to campaigns that can benefit and complement a school's efforts for health promotion and environmental awareness: [www.saferoutestoschool.ca](http://www.saferoutestoschool.ca)
  - Toolkit resources and flexible templates are available to use in every phase of the STP process: [School Travel Planning Toolkit](#)
- The London Sustainability Exchange (LSx) developed Cleaner Air 4 Primary Schools Toolkit. This organization works to support London to become a sustainable city. It provides businesses, governments, communities and people 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)

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

<sup>2</sup> [Active Living Research](#)

# Introduction

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

North Glenmore Elementary School was invited to participate and signed the School Agreement on **June 3, 2021**. The facilitator delivered a presentation to the Parent Advisory Committee (PAC) and administrative personnel to explain the scope of the project and their role in the process on **May 18, 2021**. An introductory document to parents and terms of reference for the school committee were presented for their review, acknowledging their vital contribution.

A City of Kelowna municipal committee was integrated in the past, and partners' collaboration was reaffirmed to support this school. All members previously signed a statement of support, which is included in *Appendix 1*.

With the school and municipal committees established, a general project timeline was presented to both committees for consideration and approval.

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

The following sections comprehensively overview 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 4 Schools program. It reflects our collective efforts and the positive changes we are making together.



## School Profile

North Glenmore's Principal provided the school profile on July 7, 2021, and contained general information on the school's primary concerns and issues.

Table 1. North Glenmore's Profile

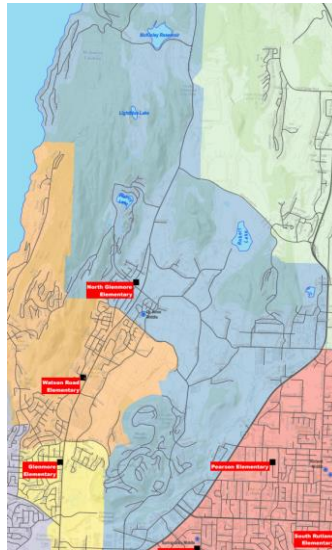
Profile	Description
School Name	North Glenmore Elementary School
School Type, e.g. public, separate, private	Public
Age of School / Year Opened	1964
Name of School Board	Central Okanagan School District #23
Number of Students	630
Number of Families	400
Grades, e.g. K-6, K-8	K – 6, community pre-school program, afterschool day care, & new on-site daycare to open 2022.
School Bell Times	8:25 am 2:30 pm
Number of Parking Spaces, staff/visitor	2 handicapped, 39 regular uses
Description of Location, e.g. District centre/suburban/rural	Urban
Is the school in a Neighbourhood Watch or Block Parent Community?	No
% Bussed Students	3 Buses, 1 SPED bus, for a total of approximately 120 students (18%)
Socio-Economic Description of Families	Mix – some families, low income, some middle class, some upper middle class.
Any local programs e.g. French immersion, fine arts, special needs, before and afterschool day care etc.	<ul style="list-style-type: none"> <li>- Onsite daycare</li> <li>- After school day care for about 12 students, 6 after school daycares that pick children up from our site.</li> </ul>
High-Level Description of Any Major School Travel Problems e.g. catchment size, driver behavior, on local or connector road, traffic speed, heavy trucks, bussing wait times	<ul style="list-style-type: none"> <li>- We are growing every year – next year increasing by approximately 30 students = 630 total FTE</li> <li>- Buses that arrive at least 30 minutes before school starts,</li> <li>- A large percentage of students are driven to school daily.</li> <li>- Many complaints about turning lanes and lights at Union and Snowsell</li> <li>- Many complaints about parent pick up from Henkel street</li> <li>- Illegal u-turns in front of school regularly</li> <li>- Cars parking in our Kiss and drop zone</li> </ul>

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	<ul style="list-style-type: none"> <li>- 3 bike racks – approximately 60 spots – not usually full</li> <li>- Yes – kiss and go drop off zone</li> <li>- We do have a bus drop off zone – we are considering a change to this</li> <li>- Crossing guards have been stopped due to aggressive drivers and driver conduct toward the students.</li> <li>- We do not have any students using public transit that we know of.</li> <li>- All of our after school programs want to use our Kiss and drop area – which does not allow for flow of traffic – they are too big to park on the road</li> </ul>
Existing Safety Policy & Education, e.g. school safety policy and rules, current safety education programs	<ul style="list-style-type: none"> <li>- Description of our kiss and drop and how to use is on our website. Through our school behaviour matrix – we include before and after school conduct.</li> </ul>
Programs at this school that have goals similar to STP, e.g. environmental, physical activity, mental health	<ul style="list-style-type: none"> <li>- We promote bike to school week We host bike rodeos and I-Ride programs for our students.</li> </ul>
Types of school/parent committee communications used/available (i.e. newsletter, website, Facebook page)	We send a monthly newsletter to parents, school website frequently updated, PAC Facebook page
Other Information	<ul style="list-style-type: none"> <li>- HELP please!!! Frequent presence of By-law enforcement welcomed!!!!</li> </ul>

## Catchment

In 2021, there were 630 students in grades K to 6. In 2023-2024, there were 645 students and 450 families. The catchment area is shown below.

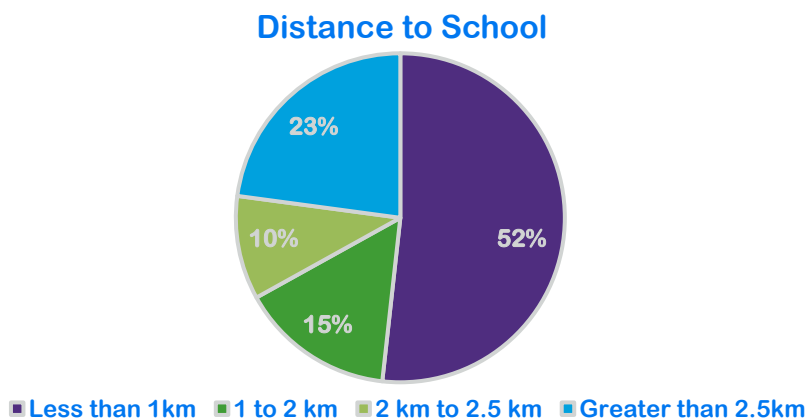
## North Glenmore Elementary Catchment



### Figure 3. North Glenmore Elementary Catchment Area

## GIS Analysis- Distance to School

The postal codes of all students attending North Glenmore Elementary School in 2020 provided general information to support some strategies and actions within the school. A GIS analysis was made using ArcInfo to calculate the distance from home to school for all students.



### Figure 4. Distance to School

- 77% of current students live within 2.5 km from school
- 23% of students require a longer walk/bike ride to reach school as they live more than 2.5 km away



Figure 5. Students within the catchment area by postal codes

- 67% of the students live within 2 km or

32 min walking

12 min cycling



**CAUTION:** ArcInfo was used to calculate the distance (in meters) from multiple points to one point, in this case, to North Glenmore School. Distances are calculated on a straight line to the reference point. Use caution regarding walk/bike distances; they do not account for walk/cycle paths that might connect roads.

# Timeline of Main Tasks

Table 2. Timeline of Main Tasks

STP/Project Timeline		2021												2022												2023			
		June	July	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb					
Activity																													
Municipal Stakeholder Committee established																													
Coordinate & Follow up activities of the 2 committees and facilitator																													
Schools chosen and invited	North Glenmore																												
Send School agreement to be signed	June 16																												
School STP Committees established	June 26																												
Prepare and deliver introduction presentation/documents to PAC and formalized School committee	June 15					Newslett er																							
Prepare surveys for data collection to STP Committee																													
Deliver online link surveys for data collection to 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				July 7																									
Inform school and parents about project						Newsletter/email/Facebook																							
Prepare and submit online surveys						1 <sup>st</sup>																							
Conduct Baseline Classroom Surveys over five consecutive days						Sep 20-24																							

[illegible]

## Baseline Data Collection

North Glenmore is composed of approximately 400 families. An [online survey](#) was set up for North Glenmore parents on September 17 and was available until October 3, 2021. Over the week, Monday, September 17 to Friday, October 24, 2021, teachers helped with 27 classroom “hands-up surveys” and reminded their students to complete and submit the Family surveys. The survey was advertised through the school website.

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

- 1 Grand Prize included 1 bicycle, a helmet, a lock, and a water bottle.

The winner of the bicycle was a grade 2 student, Huxley Crouse.



Figure 6. Facilitator Dan Glasscock delivering the bicycle



## Student Classroom Survey findings

With the teachers' support, 27 classroom surveys were completed reflecting travel "to" school of eighty-nine percent of the students, as shown in Figure 7.

Table 3. Summary - TO School (Frequency)

	Walked	Walked part-way	Bicycle	School Bus	Public Transit	Carpool	Car	Other	Total
<b>Monday</b>	151	22	16	56	0	8	307	3	<b>563</b>
<b>Tuesday</b>	162	27	13	61	0	8	299	6	<b>576</b>
<b>Wednesday</b>	149	36	7	69	0	9	293	7	<b>570</b>
<b>Thursday</b>	146	39	14	56	0	10	300	8	<b>573</b>
<b>Friday</b>	151	23	11	57	0	9	275	9	<b>535</b>
<b>Total</b>	<b>759</b>	<b>147</b>	<b>61</b>	<b>299</b>	<b>0</b>	<b>44</b>	<b>1474</b>	<b>33</b>	<b>2817</b>
<b>Average</b>	<b>151.8</b>	<b>29.4</b>	<b>12.2</b>	<b>59.8</b>	<b>0</b>	<b>8.8</b>	<b>294.8</b>	<b>6.6</b>	<b>563.4</b>

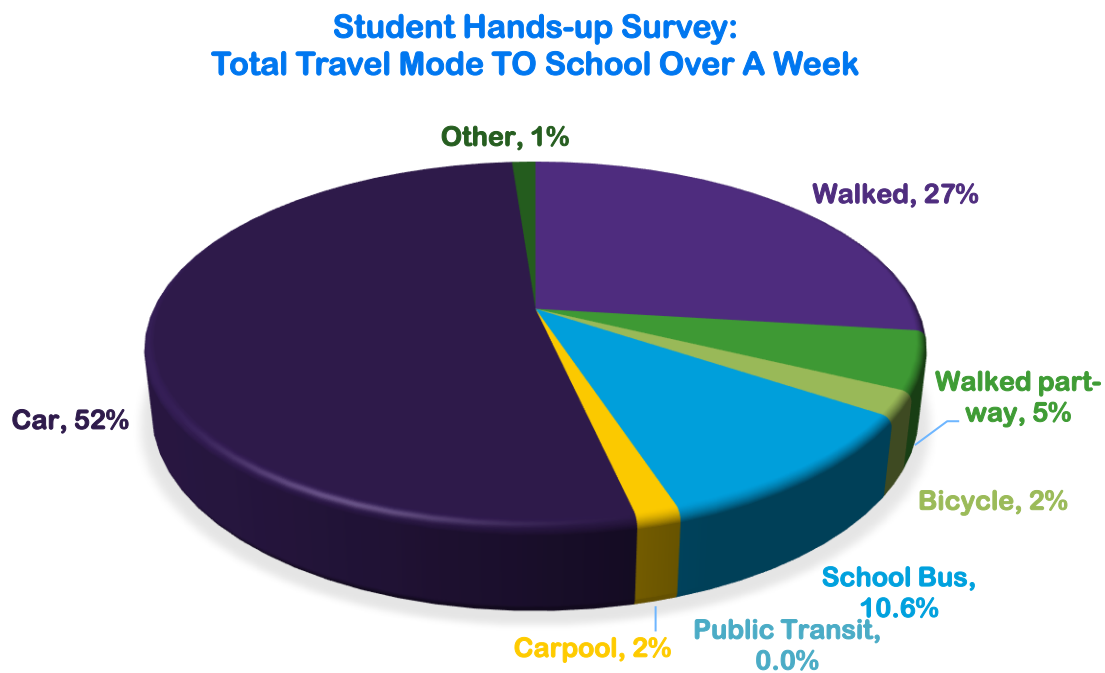


Figure 7. Total Travel Model to School over a full week- Baseline 2021

We received 27 complete classroom surveys outlining “from” school results. Eighty-four percent of the 630 students attending North Glenmore were tracked over one week. As illustrated in Figure 8, fewer kids are driven from school in the afternoon compared to the “to” school results.

Table 4. Summary - FROM School (Frequency)

	Walked	Walked part-way	Bicycle	School Bus	Public Transit	Carpool	Car	Other	Total
<b>Monday</b>	165	26	12	59	0	8	266	8	<b>544</b>
<b>Tuesday</b>	168	27	9	55	0	11	244	9	<b>523</b>
<b>Wednesday</b>	162	30	6	66	0	12	266	8	<b>550</b>
<b>Thursday</b>	154	37	12	47	0	10	236	12	<b>508</b>
<b>Friday</b>	157	25	11	62	0	14	234	14	<b>517</b>
<b>Total</b>	<b>806</b>	<b>145</b>	<b>50</b>	<b>289</b>	<b>0</b>	<b>55</b>	<b>1246</b>	<b>51</b>	<b>2642</b>
<b>Average</b>	<b>161.2</b>	<b>29</b>	<b>10</b>	<b>57.8</b>	<b>0</b>	<b>11</b>	<b>249.2</b>	<b>10.2</b>	<b>528.4</b>

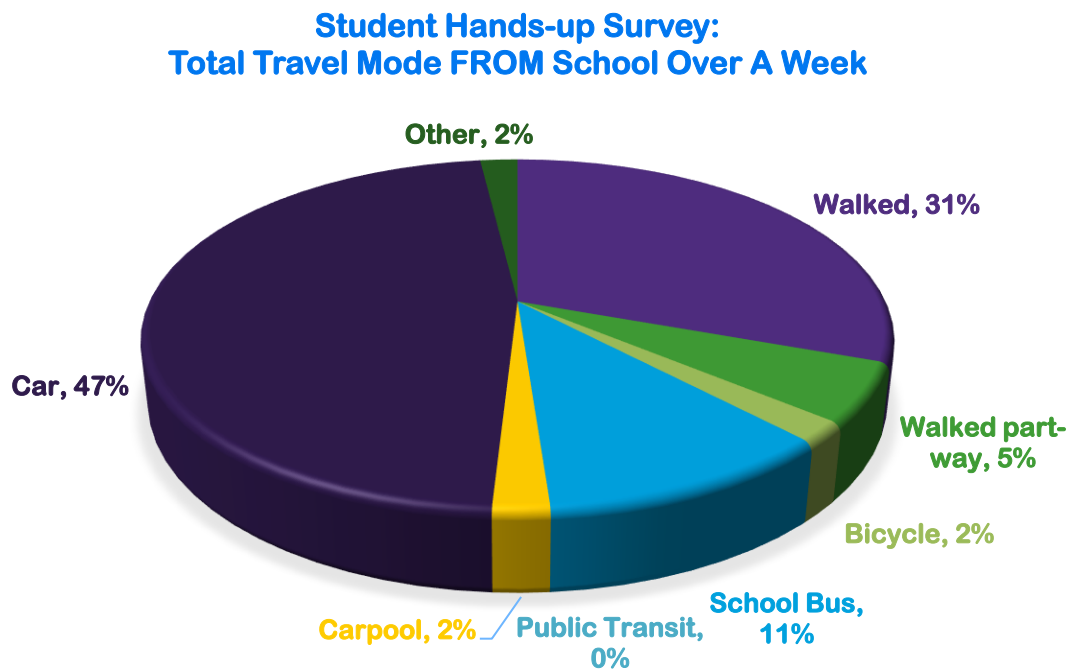


Figure 8. Total Travel Model from School over a week- Baseline 2021

# Baseline Family Survey Findings

## Obstacle Map

Through the online family survey, parents identified obstacles they encounter on their way to or from school on a map.

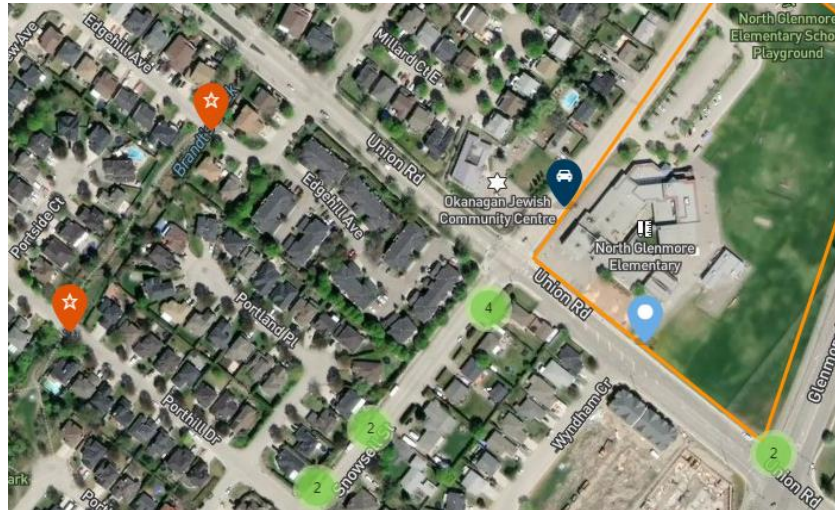


Figure 9. Traffic issues around the school

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



Figure 10. Crosswalk needed Brandt's Creek @ Edgemoor Ave and Porthill Dr





## Walkabout and Route Map

The Walkabout was on **October 21, 2021, from 8:00-10:30 am**. Six members from the Municipal Committee, four from the School Committee, and other parents attended. The following pages show a detailed overview of the walking route and key findings. The agenda, walkabout route map, and walkability checklist, which included essential observation points to consider during the route, were provided to every participant before the meeting.

City staff created the walkabout route based on the information provided by the school committee.

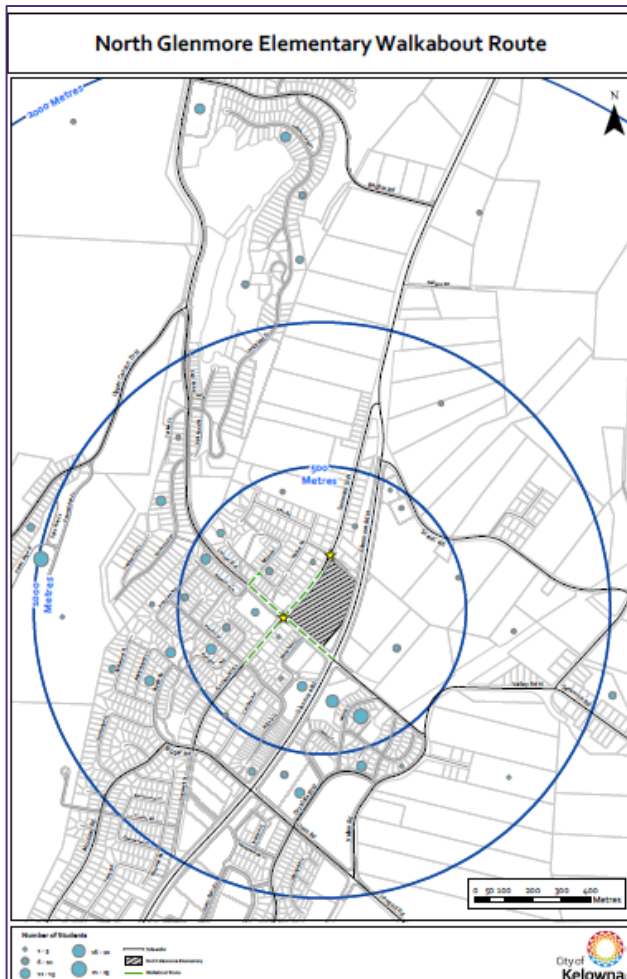


Figure 13. North Glenmore Walkabout Route Map

# Walkabout Main Findings

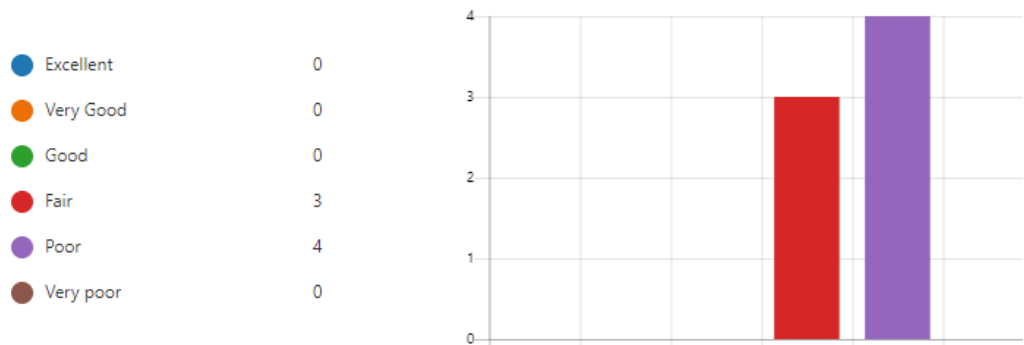
After the Walkabout, the Municipal and School Committee members discussed the main findings and issues North Glenmore faced. Attendees provided insightful information to consider in the development of the Action Plan. The following is a summary of the Walkabout findings.

Table 5. North Glenmore Walkabout Main Findings

The Walkability Checklist	General Findings
Parking lot, or on road parking at school	Intersection of Snowsell St/Union Rd, intersection of Union Rd/Glenmore Dr, Snowsell St at Henkell Rd, Entrance/Exit points for the main parking lot/drop off area, at uncontrolled points along Snowsell St where people would be walking from parked vehicles
Facilities for walkers on the street next to the school site	Kiss and Drop then across bus lane (crossing is not patrolled). Across Snowsell/Union if parked across the street Across Snowsell if parked on side opposite to school. Depending on area of parking. North End: they use sidewalk with a crossing of school driveway or they are crossing at uncontrolled crossing to sidewalk, then across driveway to school. South End parking and walking takes you to a controlled intersection. Having to cross arterial roads.
Walking paths to the school	There might be one at the kiss and drop most days. None at Snowsell/Union. 2 per day would be great. No safety patrollers. No adult supervision was observed. Kiss 'n Ride option needs improvement. Have had in the past but volunteers have since stopped. Without a few changes to traffic flow parents are reluctant to help. Potencial conflicts: Yes, at Snowsell/Union. Yes, where students cross the bus lane from Kiss and Drop. Henkel @ Snowsell. Union @ Wyndham Union @ Snowsell. Crossing Snowsell to access the school - no crosswalks at school driveway entrance. Students jumping out of vehicles while waiting for the red light on Union (heading West).
Bicycle facilities	Yes-Bike racks are secure but NO sheltered. Bike racks are in the open, neither secured or sheltered
School Bus/After School Care Loading Zone	There is a crossing right where the busses load/unload before and after school .Buses drop off and pick up students on the lower (East) portion of the main parking lot/drop off area. Unknown what the wait times or supervision details are. Along the sidewalk and field area. The bus loading zone does not have much of an effect on walkers, as it is located within the main parking lot/drop off area. Morning 1 handicap bus 8 am, plus 2 regular buses @ 8:10 am.
Walking facilities and traffic observations	Lots of speeding through school zone. Traffic is often above school zone speed limit and very heavy before and after school. Moderate to high volume and speed issues on Union rd. Traffic volume appeared to be the major issue. Many families parking along side streets, walking children in - although limited options on where to park close by. Speed did not appear to be a big issue, however additional speed bumps along front of school could be beneficial. Cars running the yellow lights in order to turn (i.e. turning left off Union onto Snowsell) appeared to be an issue - especially since there is no advance turning light. Traffic volume appeared to be the major issue. Many families parking along side streets, walking children in - although limited options on where to park close by. Speed did not appear to be a big issue, however additional speed bumps along front of school could be beneficial. Cars running the yellow lights in order to turn (i.e. turning left off Union onto Snowsell) appeared to be an issue - especially since there is no advance turning light. Maybe some plant trimming. broken/cracked areas.
Alternative safe parking locations	Really only residential streets. West of Snowsell on Henkel. There are several vacant lots for sale in the area. The major problem however is that they are on the opposite side of Glenmore.
General Comments	Often broken glass and garbage on school grounds, especially at school entrance. School entrance is a gathering spot for teen agers on the weekends and evenings. Nearby linear park is susceptible to crime and loitering
General Suggestions	Very thin sidewalk on the opposite side of Snowsell, many cars park on the shoulder and often block the sidewalk - addition of the thick hedges make the sidewalk appear very tight in some locations. Observed U-turns - could utilize no u-turn signs. One directional road access down Snowsell during peak hours would hugely benefit safety of children. believe that PAC willingness to help in curbing these issues is a must

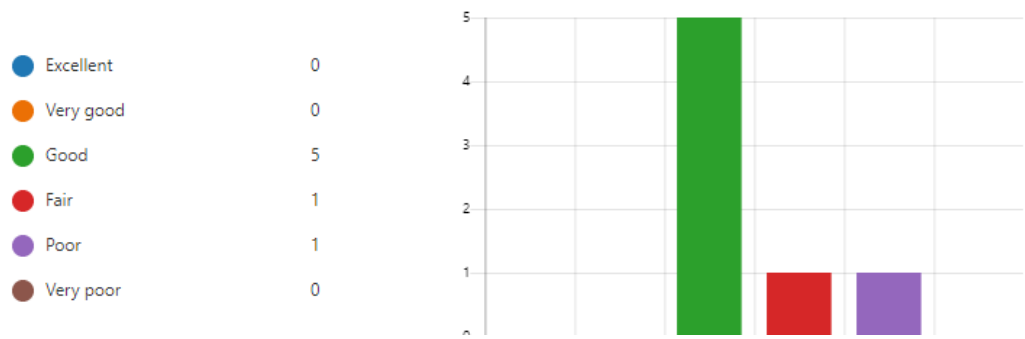
3. What is the parking and driving behaviour of driving parents and staff?

[More Details](#)



13. What is the maintenance of walkways, i.e. snow and ice removal; mud, puddles; holes needing filling?

[More Details](#)



24. Play area

[More Details](#)

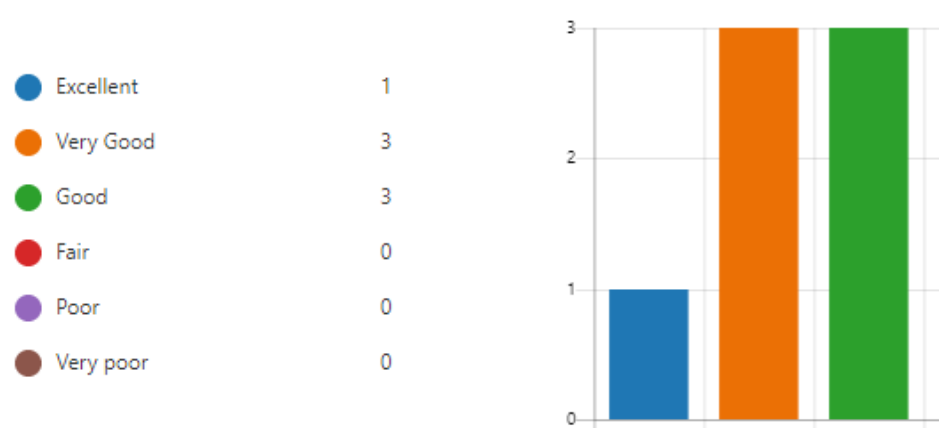


Figure 14. Other Walkabout input





Figure 17.Walkabout-Municipal and School Committees



Figure 18. Parking at no-parking zone and near Fire Hydrant



Figure 16. Pedestrian and traffic conflict-Green left arrow



Figure 19. Kiss and drop off backed-up



Figure 15. Illegal U-turns



Figure 20. Missing no parking sign.

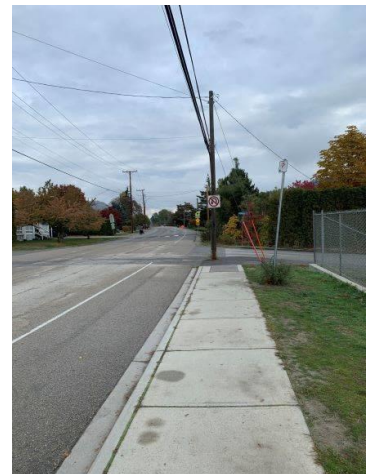


Figure 21. Poor No U-turn sign location



Figure 22. Line up of cars along Union. Some parents drop during the red light.



Figure 25. Intersection at Union and Cross looking East. Notice no advance green here.



Figure 24. Exit point from the parking. Discussion about making a “right turn” only



Figure 26. Speeding

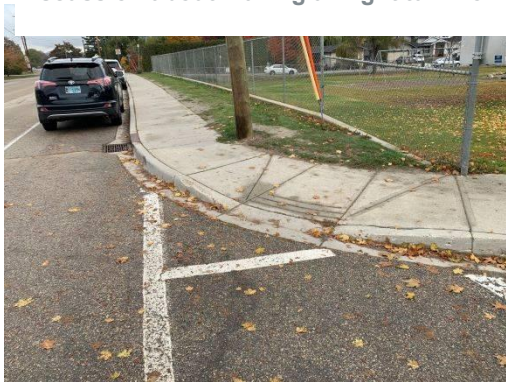


Figure 23. Lack of painted curbs



Figure 27. Parent and child about to J-walk across Snowsell.



# 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 contribute to poor outdoor air quality and climate change and give rise to poor indoor air quality. Inadequate ventilation can lead to high air pollutants in buildings, which can cause health risks.

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

## Where do emissions come from?

It is estimated that the energy consumption from school buildings will account for roughly 37% of the school's overall greenhouse gas footprint. The contribution of school buildings to local air pollution is more challenging to establish. However, we know that equipment such as boilers make a significant contribution.

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 (lawnmowers, leaf blowers, etc., running off gas)
- Other equipment, such as gas-fired water heaters

## Opportunities for Emission Reduction

In most cases, understanding and managing the school's energy consumption will also enable you to reduce pollutant emissions. Several actions North Glenmore can undertake to reduce energy consumption and pollution emissions have been identified. Those actions are described in the Action Plan.

# Indoor Air Quality

## Why is indoor air quality important?

The [British Columbia Lung Foundation](#) states that Canadians spend 90% of their day indoors, with about 70% 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 improve the air quality breathed indoors.<sup>3</sup> Control of the source, improving ventilation, and cleaning the air are three basic ways to improve indoor air quality.

SD23 and 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](#)
- In BC, [Safety measures](#) are in place to protect students and staff and reduce the spread of COVID-19.
- [The IAQ Fact Sheet Series](#) is designed to help people without a technical background understand details about indoor air quality (IAQ) so that they can make critical decisions for their schools, e.g. ventilation, HVAC filtration, in-room air cleaners, germicidal, electronic air cleaners and disinfectants.
- [Radon testing](#), mitigation and awareness.
- Implement a [sustainable procurement](#) policy; this helps make measurable progress towards sustainability goals, such as greenhouse gas emissions, zero waste goals, and social, diversity, economic, and local responsibility.

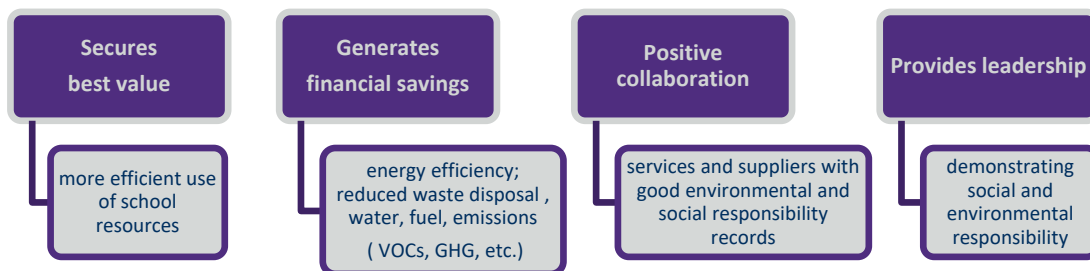


Figure 28. Benefits of Sustainable Procurement

## School Travel Planning and Clean Air Goals

Considering all data from the Family Surveys, traffic count observation, classroom surveys and the GIS analysis, the Municipal and School Committees defined the Goals and Strategies to implement the Clean Air and Safe Routes 4 North Glenmore. 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>3</sup> [Indoor Air Quality | HealthLink BC](#)

# Action Plan

This Action Plan includes short, medium and long-term measures. All measures were identified, including who is responsible for the tasks and target completion dates.

Table 6. North Glenmore 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="https://www.icbc.com/road-safety">Road safety (icbc.com)</a>	Facilitator	Spring/Fall 2022	Spring/Fall 2022-2023	No cost
Parent role modeling messaging	Provide messages for use in school and parent communications <a href="https://www.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="https://www.icbc.com/road-safety-for-your-kids">Road safety for your kids (icbc.com)</a></li> <li>Contact <a href="https://www.rcmp-grc.gc.ca/">B.C. RCMP - Speed Watch (rcmp-grc.gc.ca)</a></li> <li>Resources available for teachers and parents at <a href="https://www.missingkids.org/">KidSmartz (missingkids.org)</a></li> </ul>	STP facilitator and RCMP- will deliver the presentation (in person-virtual)	TBD	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="https://www.parachute.ca/pace-car-community-guide">Pace Car Community Guide (parachute.ca)</a></li> <li><a href="https://www.icbc.com/teach-road-safety">Teach road safety (icbc.com)</a></li> </ul>	School Committee-share information through teachers and newsletter	Spring 2022	April 2022	\$
Review signage and replace/revise as warranted	Replace, relocate, add or remove signage as warranted. Trim vegetation and/or adjust obstructed signs.	City of Kelowna	2022	2022	\$ Low
Review and adjust Union & Snowsell traffic signal	Determine if the Union & Snowsell traffic signal is warranted for an additional left turn phase. Optimize timings with up-to-date data. Review existing left turn operation and pedestrian phases. Review stop bar location.	City of Kelowna	2022	2022	\$ Low - medium
School Site Improvements	Consider: Additional bike parking near front entrance of school. Review if the Kiss and Drop configuration can be optimized. Review if any other walkway, gateway, and pedestrian routing options are beneficial and feasible	School Administration/SD23 /City of Kelowna	2022	Fall 2022	\$ Low - high
Crosswalks and Pedestrian Improvements	Determine if additional crosswalks are warranted at the school or enroute to the school. Consider if curb extensions, parking restriction, physical barriers, etc. are required. Review cost of additional sidewalk (likely infeasible and greater than budget allotted).	City of Kelowna	2022	2022	\$ Medium - high
Road marking improvements	Consider installation of new road markings to provide additional guidance for motorists and cyclists. Review current bike lane road markings are accurate and revise to improve safety and flow as required.	City of Kelowna	2022	2022	\$ Low - medium
Traffic Calming	Identify if traffic calming measures are warranted and what treatments may be appropriate. Note, Speed Humps are not permitted on Union, as it is classified as an Arterial (Council Policy 300).	City of Kelowna	2022	2022	\$ Medium - high

Action/Initiative	Tasks	Responsibility	Start Date	Completion date	Estimated Cost
Parking Behavior Improvement	Investigate strategies and possible infrastructure to improve parking behavior and minimize improper parking activity. Consider enforcement strategies.	City of Kelowna	2022	2022	\$ Low
Best Walking Routes Map brochure	Create map showing best routes and distribute to families along with walking safety information	City of Kelowna	2022	2022	No cost
Bike Rodeo	Youth learn basic rules of the road, hand signals, obstacle avoidance and scanning techniques/Cycle Education Program "Learn2Ride" for Gr. 3-6 students.	STP facilitator/School Administration	May 2023	Every two years	
Active Transportation Maintenance	Request vegetation trimming along paths and sidewalks where required. Use City of Kelowna's <a href="#">service request</a> system; bike lane maintenance, snow/ice removal, sidewalk, etc.	City of Kelowna, Private Property Owners	2022	As needed	\$
<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/ provides 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> </ul>	Air Quality/School Committee	March of every year	June of every year to 3 <sup>rd</sup> grade.	No cost
Have students create artwork for temporary/permanent outdoor signage	Run an Art contest. The theme should be Clean Air, Safety, or active transportation. The STP Program will pay to produce 6 signs (20 in height x 18 in width), and the school committee will pay to make any extra signs.	School Committee - PAC	Spring 2023	Spring 2023	\$
Have physical activity benefits messages 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="#">Online Action School (actionschoolsbc.ca)</a></li> </ul>	Interior Health/School Committee- share information through newsletters	TBD	TBD	
<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. <a href="#">Best-routes-to-school--North-Glenmore.pdf (rdco.com)</a>	School Committee with support of STP facilitator	2021	2022	\$
Walking Competition	Detail a challenge and advertise Walking Wednesdays (other days). Walking Competition. Set up a walking competition for 3-4 weeks (March-June). <a href="#">ParticipACTION - Home   ParticipACTION</a> (challenges and prizes). Add a walk/run club at school	Parents Council with support of STP facilitator-	Reminder at the PAC meeting February 15	Spring 2022	Cost per pedometer \$6-7
IWALK (International Walk to School Month – October)	Organize a Walk to School Week. <a href="#">How to set a walking competition.pdf (kelowna.ca)</a>	School Committee	2022 - October	Every year	\$
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 on Wednesdays or other specific days (March-June). <a href="#">How to set a walking competition.pdf (kelowna.ca)</a>	School Administration	May 2022	Every year	\$

Action/Initiative	Tasks	Responsibility	Start Date	Completion date	Estimated Cost
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 2022	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. Advertise in the monthly newsletter for families and staff): <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 things you can do to help <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> </ul>	School Committee-share information through newsletters	1st week June 2022	Every year	
<b>Objective 4: To facilitate safe bicycling to and from school</b>					
Cycle Storage	If additional bike racks are needed/secure location on school site. The principal should request it from the Director of Operations. Add work to Annual Facilities Grant and/or Capital Plan) <a href="#">Bike registration to reduce theft and help recovery   529 Garage (project529.com)</a> A secure scooter and skateboard storage are needed.	SD23/ School Committee	Depending on priority	TBD	\$ review
<b>Objective 5: Reducing Emissions from School Buildings</b>					
Understanding Energy Use, and Improving Monitoring and Measurement	Monitor usage over a period of time, e.g. a week, 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	•Reduce energy waste (switching off appliances when not in use, installing occupancy sensors for lights, installing Thermostatic Radiator Valves to control temperature etc.) • 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>	SD23	Ongoing		\$
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	• Source supplies locally where possible - reducing emissions from transport and delivery (e.g. food/stationery supplies) • Use sustainable products (i.e. recycled paper and stationery, cleaning products with low environmental impacts, energy efficient kitchen/office equipment – Energy Star Label)	SD23	Ongoing		\$



Action/Initiative	Tasks	Responsibility	Start Date	Completion date	Estimated Cost
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 obvious areas of concern, especially in areas testing high.</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> </ul> <p>Resources available:</p> <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 Step-By-Step Manual for Radon Reduction, by Douglas L. Kladder, <a href="#">Protecting Your Home From Radon in Canada : a Step-by-step Manual for Radon Reduction   Okanagan Regional Library   BiblioCommons</a></li> <li>• <a href="#">School Resources - Take Action on Radon</a></li> <li>• <a href="#">Radon and Energy Efficiency   BC Lung Foundation</a></li> </ul> </li> </ul>	SD23/School Committee  Air quality As part of the <a href="#">RDCO school radon screening</a> .	2020-2022	2020-2022	
<b>Objective 6: To monitor the effectiveness of initiatives and revise School Travel Plan annually</b>					
Monitor transportation mode	Conduct Follow-up Classroom Survey. <a href="#">BikeWalkRoll   How Did You Get to School Today?</a>	STPCO/ School Committee	Fall 2022	Fall 2024	
Monitor behaviour changes	Conduct Follow-up Family Survey	STPCO/ School Committee	Fall 2022	Fall 2024	\$
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.	STPCO	Fall 2022-2023	October 2024	\$
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 performed every second year.	School Committee	Fall 2024	October 2024	\$

## Follow-up activities 2022-2024

### School Committee Activities-May-June 2022

The school organized walking Wednesdays; below the school advertisement and tracking sheet for teachers:

#### NGE Walking Wednesdays



Each Wednesday in May (May 4, 11, 18, 25)

- Walk, bike, scooter to school – support our Clean Air and Safe Routes to School focus
- If you must drive – park a block or two away and walk
- Hands up survey each Wednesday
- The class with the most students walking will win a class prize to go to the H2O Waterpark

#### Tracking sheet

##### NGE Walking Wednesdays for the Month of May

Clean Air and Safe Routes School Challenge



- Please tally how many students in your class walk, bike, or scooter to school on each Wednesday of May. The class with the best percentage of students walking will win a class prize to go to the H2O Centre. Please note that students who live too far from school can ask their parents to park a block or two away from the school and then walk the rest of the way. Students who take a school bus should be encouraged to walk around the school several times once the bus drops them off to qualify for "walk to school Wednesday". (Use "other column" to track).

	Walk	Bike	Scooter	Other Including (walk after Bus)	Daily Total:
Wed. May 4					
Wed. May 11					
Wed. May 18					
Wed. May 25					
Month Total					

Please return completed form to office by Friday, May 27, 2022.

The class with the most total steps won a swimming field trip to the H2O Adventure+ Fitness Centre on June 21, courtesy of the air quality program.

## Walking Competition- April 2023

A Walk to School Week was arranged from April 17 – 21, 2023 – in honour of Earth Day. Two classes with the most kids walking to school, one from a primary class and an intermediate class set, won a field trip to H2O Adventure+ Fitness Centre on May 23, courtesy of the air quality program.

50 students enjoyed the field trip to the aquatic Centre:

- Shandra Bowen's class-28 grade 5/6 students
- Jennifer Hamilton-Smith class- 22 grade 3 students

## Art Contest

As part of ongoing efforts to improve and address the unique traffic safety challenges around the school, an Art Contest was completed with the support of city staff and the school. On April 17, 2023, enthusiastic Kindergarten to grade 6 students participated with more than 100 drawings. A group of City staff voted on the top ten drawings. The digital images were colour-scanned, printed on vinyl, and mounted (signs size 20 inx18 in). The school installed the signs around the school. The winners are below.



## City of Kelowna- 2022

The City of Kelowna completed several infrastructure improvements around the school during the summer and fall of 2022.

- The school entrance was narrowed with traffic-calming curbs to shorten the crossing distance for pedestrians, and the crosswalk paint was renewed.



Figure 29. NGE driveway entrance

- Delineator posts were installed south of Union Rd to prevent parking in the “No Parking” area and preserve the bike lane space.



Figure 30. Snowsell St, south of Union Rd. Delineator posts protecting bike lane space



- The existing cross section along Snowsell St was reconfigured to include bike lanes in both directions while maintaining existing on-street parking. The work also included new bike lane symbols.



Figure 31. Snowsell St, north of Union Rd. New bike lanes

- A new on-street bus loading zone was installed in front of the school entrance in the previously unused no parking area. This shift relocated the Kiss and Drop to the bottom parking lot area.



Figure 32. Snowsell St, in front of NGE. New on-street bus loading zone

- The Kiss and Drop morning student drop off area was relocated to the lower parking lot area. This provides longer queuing space for drop off to help minimize queues spilling onto Snowsell. The shift also added approximately 16 parking spaces within the school's parking lot.



Figure 33. NGE parking lot. Reconfigured parking spaces and Kiss & Drop relocated to bottom area

- The crosswalk at the NGE driveway exit was repainted. Traffic calming curbs were also installed in the on-street parking area to prevent parking too close to the driveway. This preserves sightlines and helps vehicles exit the parking lot safely onto Snowsell St.



Figure 34. NGE driveway exit on Snowsell St. New crosswalk paint and traffic calming curbs



- A new crosswalk was installed at the driveway entrance to the school. Traffic calming curbs help shorten the crossing distance for pedestrians and protect the pedestrian staging area.



Figure 35. NGE driveway entrance on Snowsell and traffic calming curbs

- The centerline was shifted to accommodate bike lanes along Snowsell St in both directions while maintaining the existing on-street parking. Travel lane widths were reduced, which helped manage vehicle speeds.



Figure 36. Snowsell St north of Union Rd. Shifted centerline



- The Snowsell St southbound left turn phase max time was increased by 5s to help traffic flow during peak periods. The southbound left turn stop bar was shifted back to facilitate larger vehicle and school bus movements from Union Rd onto Snowsell St.



Figure 37. Snowsell St southbound left turn

- The road shoulder was expanded to reduce parking in the bike lane.



Figure 38. Snowsell St at Henkel Rd facing south

- No U-Turn signs were installed on streets with a school zone.
- Missing school zone signage was installed.
- Old signage that was no longer applicable was removed.
- Delineator posts were installed on the approach to the bus loading zone to discourage stopping in the bike lane and bus loading zone
- Vegetation maintenance is ongoing and can be performed as needed.

## The Safe Route to School Map

City staff worked with the school committee to create the Best Route to School map. 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 route to the school map for North Glenmore](#) was created by City staff and is included in Appendix 3. It has been uploaded to the RDCO website.

## Post-Project Follow-Up

Based on recommendations from the NGE Safe Routes project, additional projects were completed through other City programs in the following years. In 2023, a crosswalk near the school was updated to include pedestrian-activated flashing beacons through the Crosswalk Program. It is located on Union Rd west of Millard Pl and serves Brandts Creek Linear Park. In 2024, a 115 m sidewalk gap was completed on Snowsell St south of Union Rd through the Sidewalk Program.

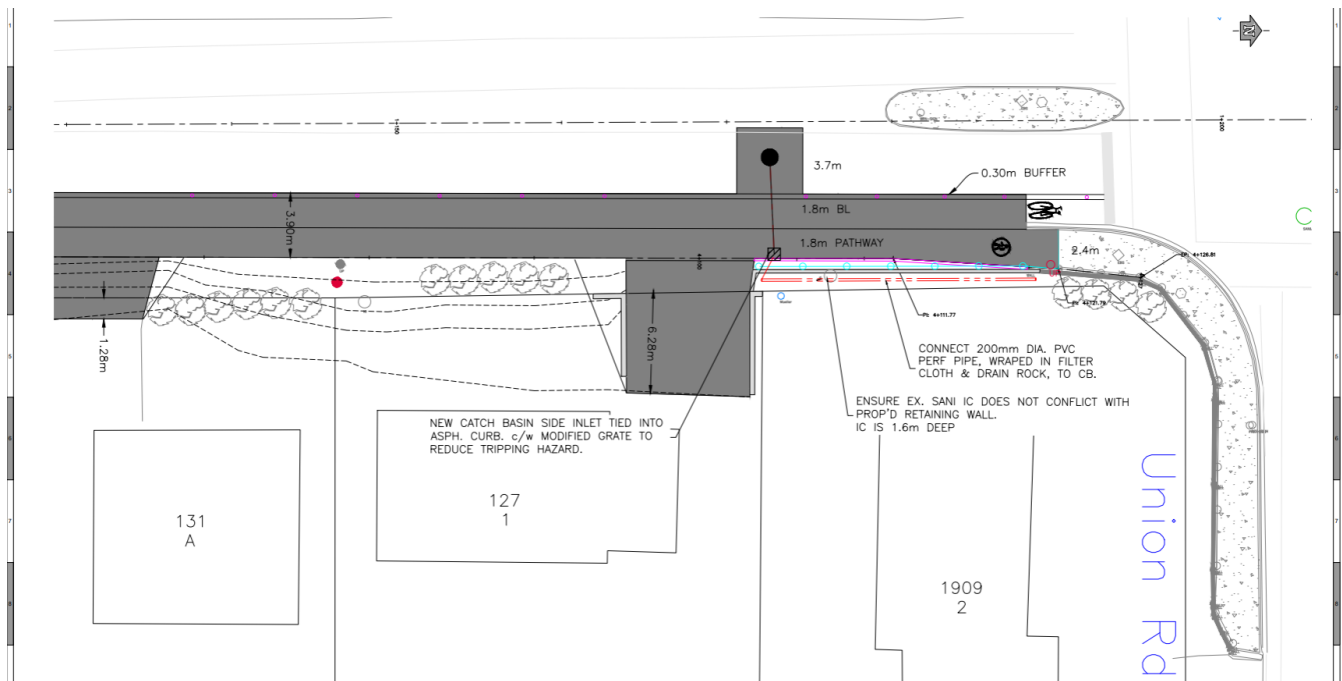


Figure 39. Proposed design for Snowsell St sidewalk gap closure.

This is planned for construction in the fall of 2024.



Figure 40. Crosswalk on Union Rd west of Millard Pl.

Crosswalk on Union Rd west of Millard Pl. Pedestrian-activated rectangular rapid flashing beacons were installed in 2023.

## Traffic Count

### Baseline

Traffic count data is available at numerous locations near North Glenmore Elementary. It consists of peak hour turning movement counts (TMC) at intersections, weeklong traffic counts, and speed data. Pedestrian volume is also included in the TMCs at intersections. Primarily, the following locations were used for North Glenmore analysis:

- Union Rd & Snowsell St
- Union Rd & Glenmore Rd
- Edgehill Ave/Millard Pl & Union Rd
- Porthill Dr & Snowsell St
- Snowsell St
- Porthill Dr
- Brandt's Creek Linnear Park
- More 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 are given by the Transportation Association of Canada and other Transportation industry agencies. Basic information about some of the streets surrounding basic North Glenmore is shown below:

- The 2021 TMC performed at Union Rd & Snowsell St indicates that the average weekday traffic volume on Snowsell St N fronting the school is 2,150 vehicles. This aligns with typical volumes observed for minor collector classification roads. Union Rd experiences approximately 7,500 vehicles per weekday.



- Union Rd & Glenmore Rd is a key intersection along the Glenmore corridor. It experiences approximately 26,000 vehicles entering the intersection per day. Busy intersections such as this are usually less comfortable for pedestrians. Opportunities for pedestrian improvements are often limited and challenging.
- Speed and weeklong traffic count data was previously collected on surrounding roads. Relevant locations are listed below:
  - Porthill Dr (between Portside Ct and Portland Ave)
    - Average speed = 34 kph
    - 85% of drivers travel at 43 kph or less
    - Weekday average traffic volume = 522 veh
  - Snowsell St (between Porthill Dr and Cross Rd)
    - Average speed = 46 kph
    - 85% of drivers travel at 54 kph or less
    - Weekday average traffic volume = 1482 veh
  - Wyndham Cr (between Union Rd and Ritchie Ct)
    - Average speed = 32 kph
    - 85% of drivers travel at 39 kph or less
    - Weekday average traffic volume = 268 veh
  - Pedestrian count data is currently being recorded along Brandt's Creek Linneart Park



Figure 41. Intersection vehicle and pedestrian counts indicated by dots.

Active transportation infrastructure shown as follows: Orange line (sidewalk), Green line (bike lane), Purple line (multi-use path), Dotted lines (future planned).

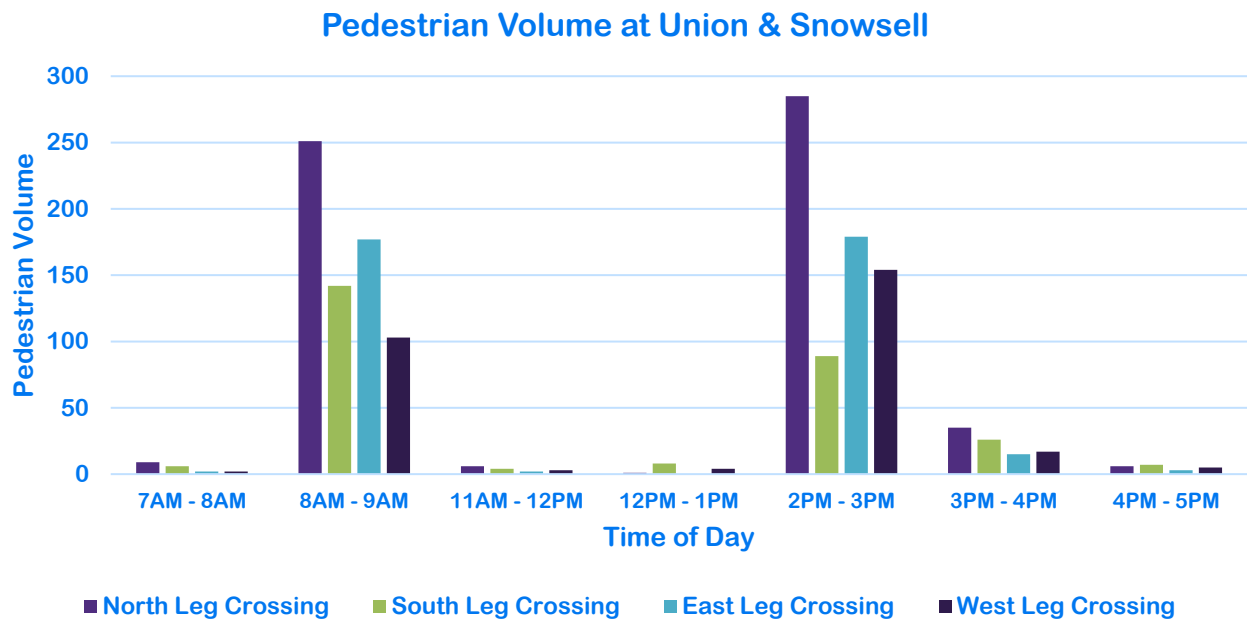


Figure 42. Intersection pedestrian volume at Union & Snowsell from a Sept 2021 count

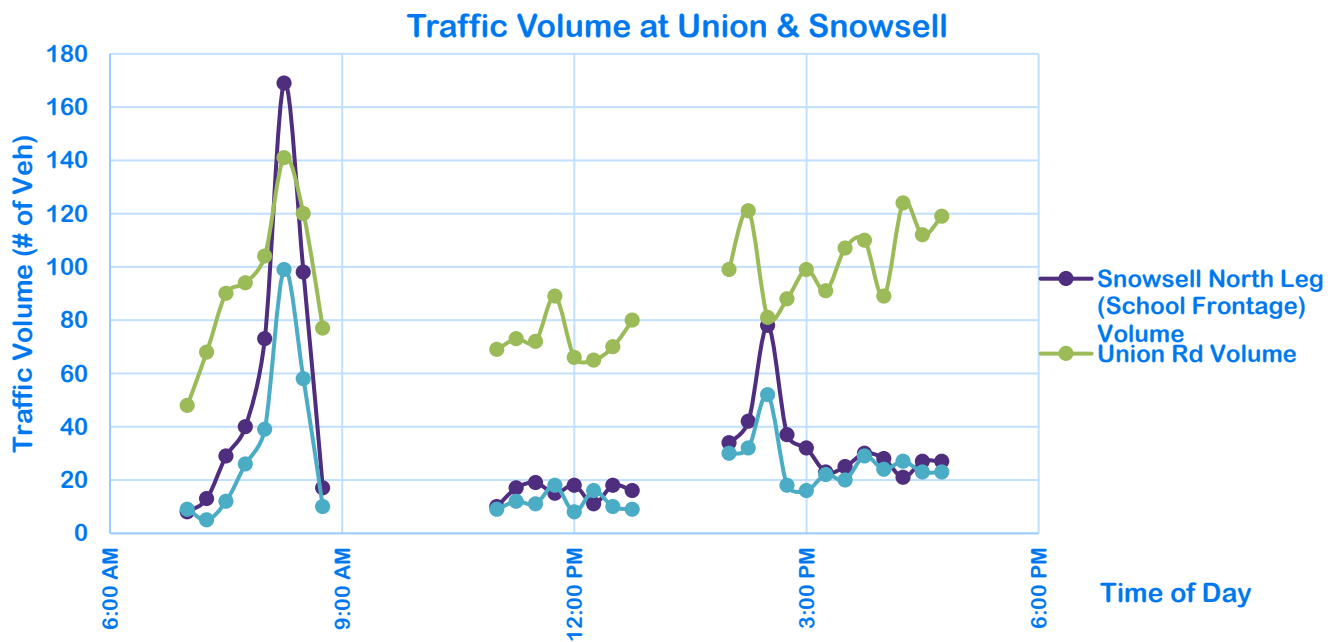


Figure 43. Intersection vehicle volume at Union & Snowsell from a Sept 2021 count

## Air Quality

### Winter 2020-2021

In September 2020, 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 Central Okanagan schools. Hence, school operators learn how easy it is to test for radon, get radon on their agenda, mitigate where necessary to lower radon exposure to children and staff, and raise radon awareness region-wide through an online campaign.

This collaborative project with School District 23, Independent Schools, Interior Health, CARST and Health Canada helped 55 elementary schools screened for radon in 2020-2022. North Glenmore screened several school classrooms for radon in 2020.

When testing schools for radon, [Health Canada's Guide for Radon Measurement in Public Buildings](#) is to be followed, which involves testing every ground-contact occupied room. This comprehensive approach requires many radon detectors, whereas this screening program provided only a sample number. According to Health Canada's guidelines, all schools that were not thoroughly tested were provided with recommendations to purchase additional detectors to ensure the school was tested entirely.

[A project report was created:](#)

- [School screening results 2021-2022](#)

### Spring 2023

- [The Cleaner Air Program](#) was shared with the school committee. This program is part of the Action Plan and is recommended to be delivered to grades 3 to 6 by the teachers. The activities, presentation and materials are ready to print and use and can be modified if needed.
  - The Cleaner Program 4 Schools (word document)
  - Four appendices: "Things you can do to improve Air Quality", "Let's Talk air pollution", "Air Pollution facts," and the Air pollution Lesson (PowerPoint presentation)
- Provided instructions and the link to set up [Walking competitions](#):
  - October International Walk&Wheel to School Month
  - or Earth Day April 22 each year
  - Environment Week – First week of June every year



## Spring and Fall 2024

### School GHG Emissions by Transportation

Considering the classroom and family survey data and average statistics, some sources of Greenhouse gases (GHG) were identified and estimated for North Glenmore:

The postal codes of 599 students attending North Glenmore

- Based on the classroom survey, an average of 62.3% of the kids are driven to and from school (driven + carpool + bus) and 39.8 % 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: North Glenmore School GHG emissions due to kids being driven to and from school. Average 62.3% (driven + carpool+ bus)	115
GHG could be saved if reaching the rest of the students who live longer walking / short bike distances (less than 2.5 km or 3 min drive time).	106
GHG already being saved; Baseline: 39.8% of the students walk and bike to and from school.	31.5
GHG saved: Follow-up: 44% of the students walk, bike and roll to and from school.	35.4

The school increased active transportation from 39.8% to 44% from 2020 to 2024; more kids walk, bike, and roll, and around 3.9 tonnes of GHG/year are estimated to be saved.

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

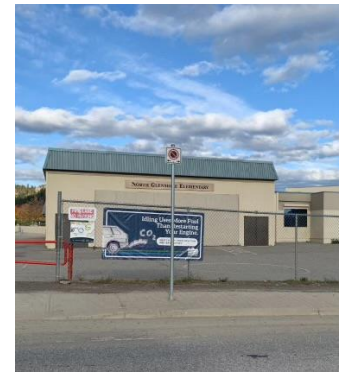
### Idling Awareness Campaign

- The school participated in a [Pollution Pit Stop Idling Awareness Campaign](#) for two weeks, from September 20 to October 6, 2024, and completed the follow-up surveys on progress made.
  - A pizza lunch was offered as a prize for a [Pit Stop Pledge](#) competition.
  - Two grade -6 classes enjoyed the pizza lunch on November 1, 2024.
  - 11 idling pledges were received from the school community



- A couple of idling banners were displayed around the school fences.
- The Air Quality program provided 531 idling awareness packages to all families and staff.

The package includes City of [Kelowna postcards](#), [RDCO postcards](#), [stickers](#) and [decals](#). The school is encouraged to continue promoting and sharing online idling resources every year, as more GHG could be saved with parents' and teachers' participation:



- At least 450 families are attending North Glenmore in 2024. Considering 44% of students use active transportation, it is estimated that 252 is the average drivers picking up/dropping off kids around the school. 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 1.68 \$/litre
- If each driver of light-duty vehicle avoided idling for 6 minute(s) a day<sup>4</sup>: each driver could save **66** litres of fuel, **\$111** 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 450 families don't idle (6 min/day)	If 252 families that usually drop-off the kids don't idle (6 min/day)
Fuel savings (L/year)	29,565	16,556
CO <sub>2</sub> savings (Kg/year)	68,000	38,080
Cost savings (\$/year)	\$49,776	\$27,874

School resources are available on the [City of Kelowna](#) website. Parents and staff can check out this [interactive story map](#) to learn more about idling and use the [Idling Fuel and Money Estimator](#) to learn 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.rdco.com/airquality](http://www.rdco.com/airquality).

<sup>4</sup> Source: [Factors that affect fuel efficiency \(canada.ca\)](http://factors.that.affect.fuel.encyclopedia.ca)  
RDCO.COM | SCHOOL TRAVEL PLAN NORTH GLENMORE

# Follow-up Classroom Survey results: 2021-2024

Over the week, from Monday, September 17 to Friday, October 24, 2021, teachers helped with 27 “hands-up surveys”; 27 classrooms responded, accounting for 65% of the students.

During the week of September 23 to 27, 2024, a follow-up online classroom survey was sent out; North Glenmore Elementary-STP Follow up - BikeWalkRoll providing the mode of transportation “To” and “From” school. On average 11 classrooms completed the "To" survey, accounting for 47% of the students.

The results below reflect changes in the transportation mode share "To" and "From" school, considering confidence level and margins of error.

	Baseline 2020 To School	Follow-up 2024 To School
Population size (expected number of trips tracked TO school over 5 days)	630x5= 3150	645x5=3225
Number of respondents (actual trips TO school tracked over 5 days)	2,817	1,516
Confidence level	95%	95%
Margin of error	0.60%	1.83%

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

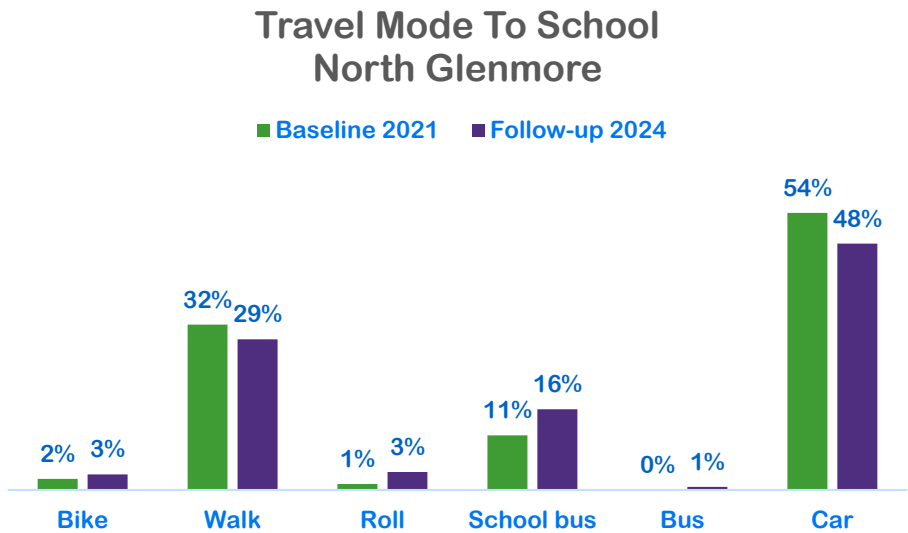


Figure 44.Travel Mode To School- Follow-up 2024

Before implementing the School Travel Plan, data shows, with a margin of error of ±0.60% and 95 % confidence level, that 53.3% to 54.5% of the kids travelled "To" school by car in 2021.

After the School Travel plan implementation, data shows, with a margin of error ±1.83% and 95% confidence level, that 46.1% to 49.7% of the kids travel "To" school by car. That means, on average, 6% fewer kids travel "To" school by car in 2024.

	Baseline 2020 To School	Follow-up 2024 To School
Population size (expected number of trips tracked TO school over 5 days)	630x5= 3150	645x5=3225
Number of respondents (actual trips TO school tracked over 5 days)	2642	854
Confidence level	95%	95%
Margin of error	0.77%	2.88%

In 2021, eighty-four percent of the 630 North Glenmore students were tracked over one week. In 2024, we tracked 26% of students. The travel mode comparison “from” school over an entire week is shown below.

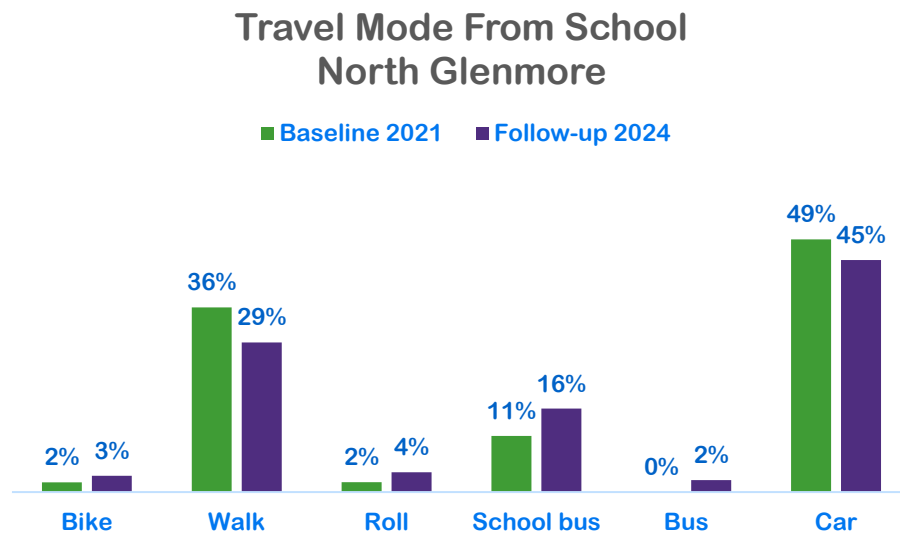


Figure 45. Travel Mode From School- Follow-up 2024

Before implementing the School Travel Plan, data shows, with a margin of error of  $\pm 0.77\%$  and 95 % confidence level, that 48.5% to 50% of the kids travelled "From" school by car in 2021.

After the School Travel plan implementation, data shows, with a margin of error  $\pm 1.83\%$  and 95% confidence level, that 42.3% to 48.1% of the kids travel "From" school by car. That means, on average, 4% fewer kids travel "To" school by car in 2024.

On average, a 5% increase in the use of other sustainable modes (walk, bike, roll, school bus, and public transit) "To" and "From" school is observed.

## Follow- up Family Survey Results: 2021-2024

In 2021, fifty-seven family surveys responses were received out of 400 families, which means 14% of North Glenmore School families provided insightful information to help us understand the issues and barriers that prevent students from using active transportation. In 2024, the school was integrated by around 450 families, and we received twenty-three responses through the online survey: [School travel planning program](#), which means only 5% of parents provided feedback. Additional comments from parents are included in Appendix 2.

Due to the minimal number of follow-up family surveys received, **data samples are 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 still presented, considering confidence levels and margins of error below.

	Baseline 2021	Follow-up 2024
School population (number of families)	400	450
Number of respondents (surveys received)	57	23
Confidence level	95%	95%
Margin of error	12.03%	19.93%

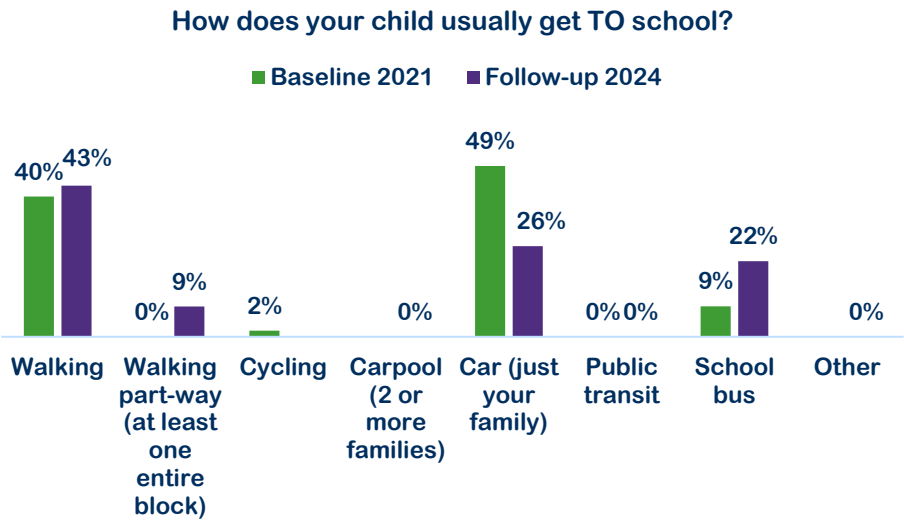


Figure 46. How does your child get To school? – Follow-up

Other: Daycare at North Glenmore, afterschool program bus, grandparents pick them up.

### How does your child usually get FROM school?

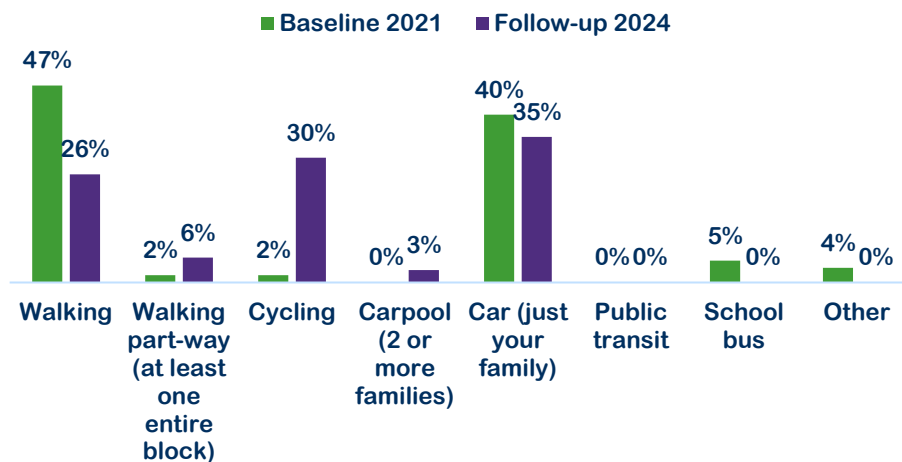


Figure 47. Figure 43. How does your child get From school? – Follow-up

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

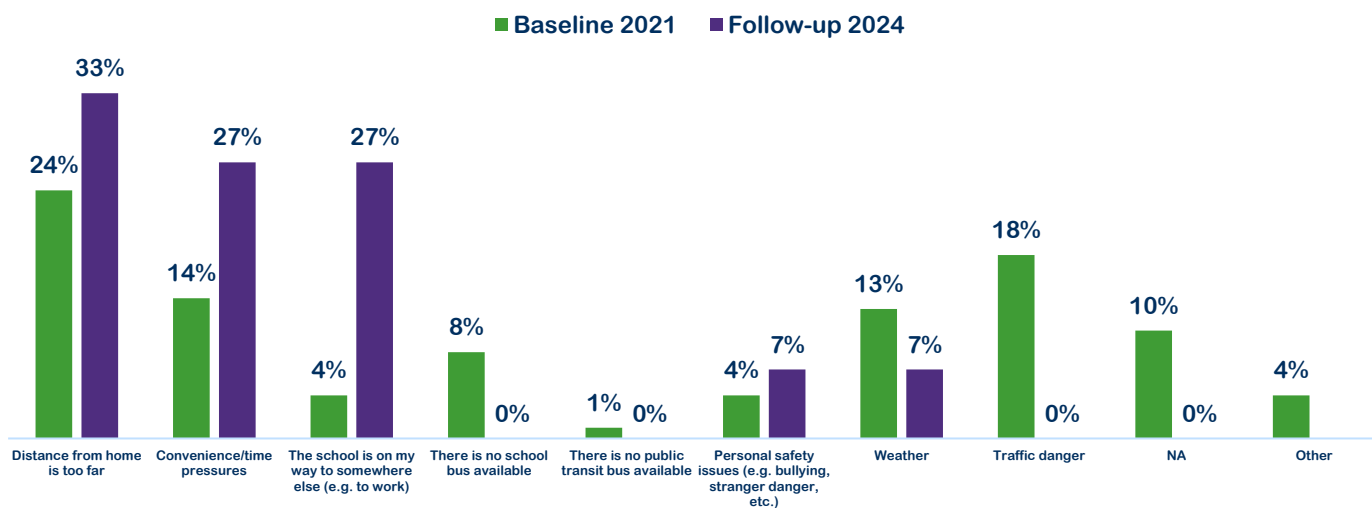


Figure 48. Main reasons given for driving kids to school- Follow-up

Reasons provided in “Other”: After school program picks her up. Daycare bus.



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

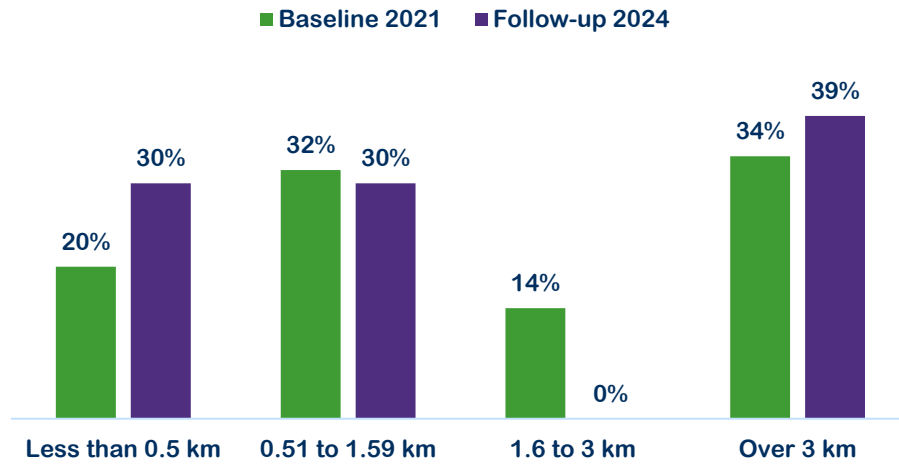


Figure 49. How far away from the school do you live? - Follow-up

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

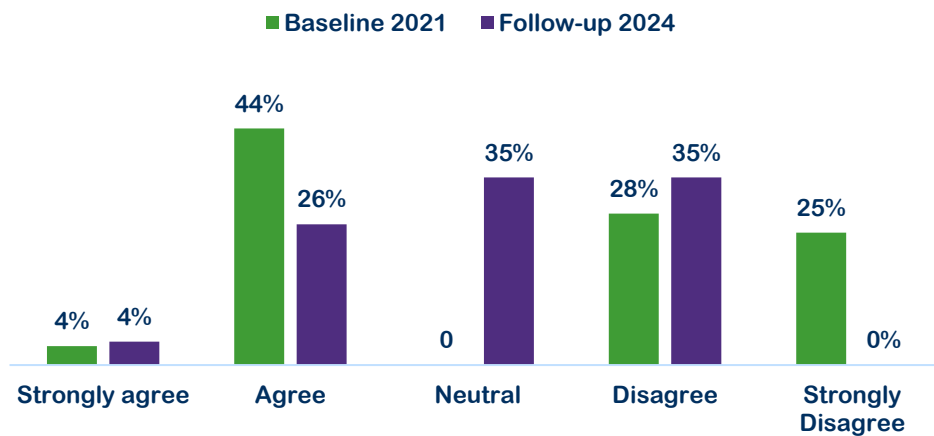


Figure 50. The route we take to and from school is safe for children to walk- Follow-up

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

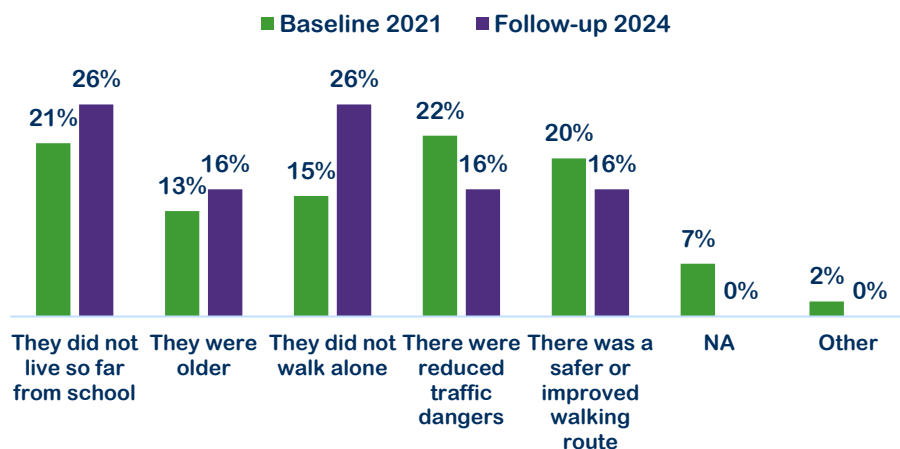


Figure 51. I would allow my child to walk to school if. Follow-up

“Other” included: We did not live at the top of a hill. There is no way for them to walk that far distance straight down or uphill. If the sidewalks were a bit wider.

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

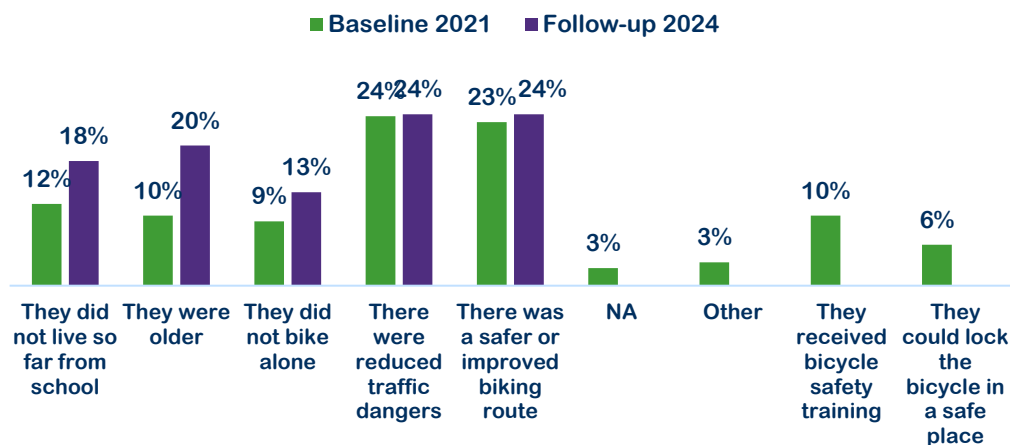
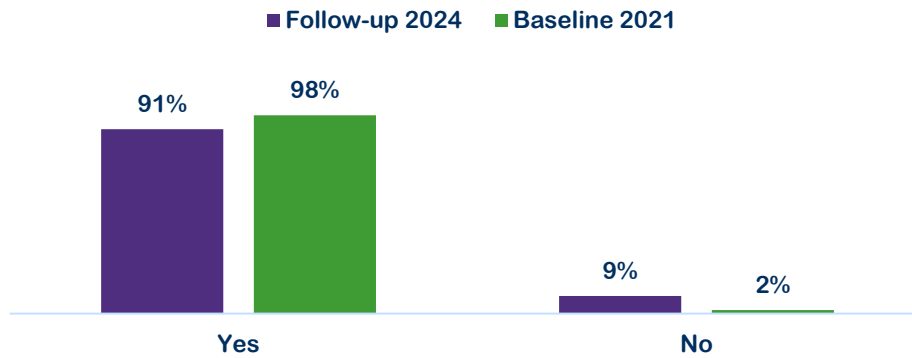


Figure 52. I would allow my child to cycle to school if. Follow-up

“Other” included: If it we did not live at the top of Dilworth Mountain. We live up Wilden, and I worry about my son riding down the hill plus traffic concerns once near the school. They cannot bike up the large hill on the way home.

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



Additional comments from family surveys are included in Appendix 2.

The following graphs show the sentiments of **5% 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?

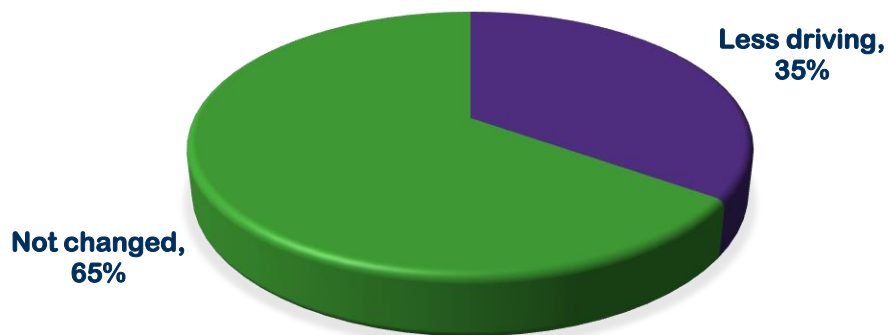


Figure 53. In what ways have your family's school travel habits changed since the project began?

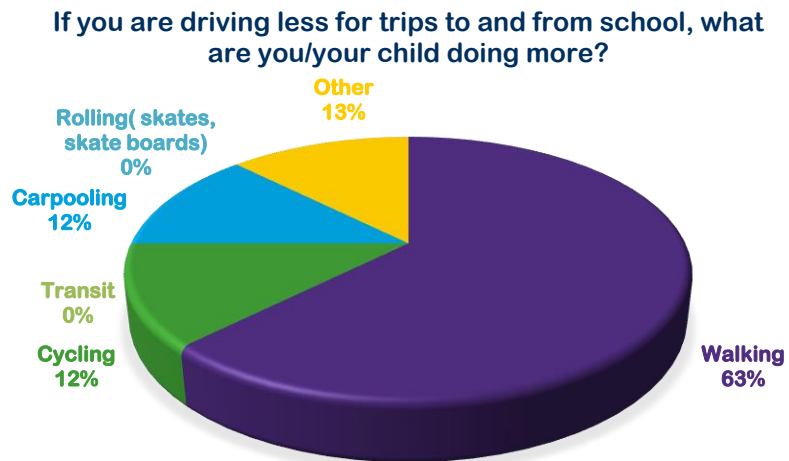


Figure 54. If you are driving less for trips to and from school, what are you/your child doing more?

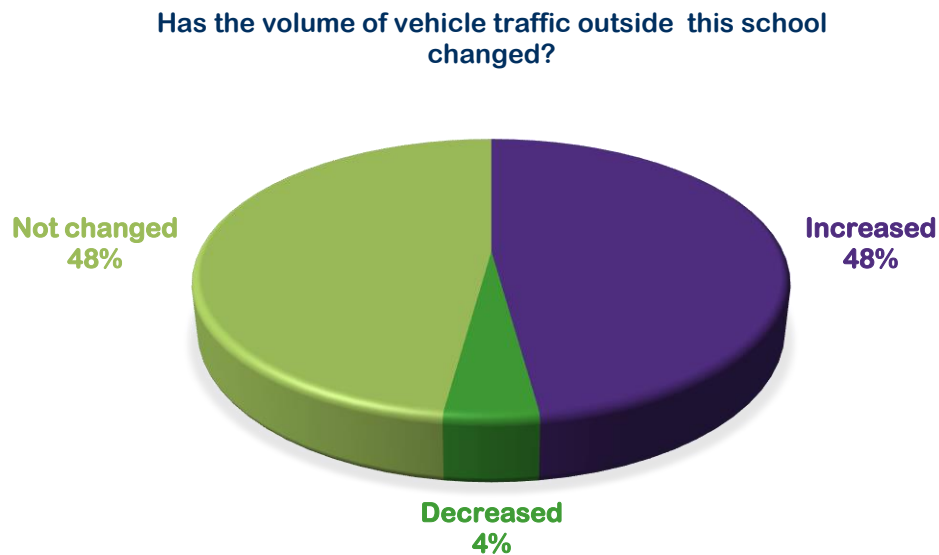


Figure 55. Has the volume of vehicle traffic outside this school changed?

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

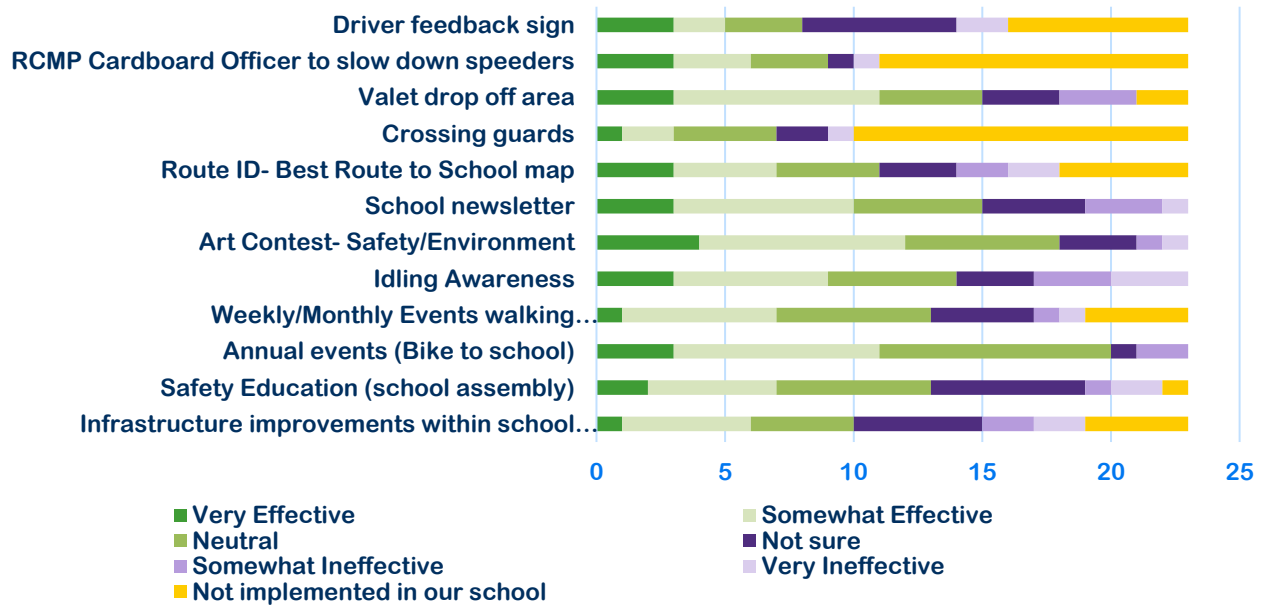


Figure 56. Which school programming activities were implemented, and how effective were they?

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

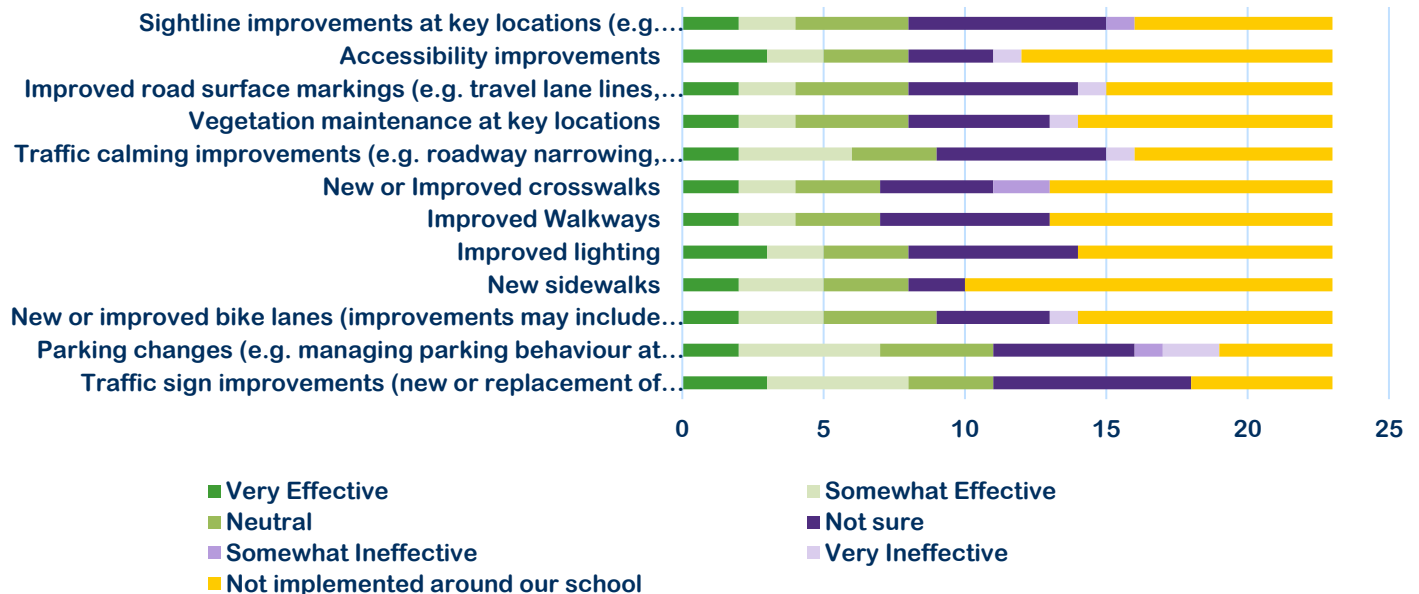


Figure 57. What infrastructure improvements were implemented by the City, and how effective were they?

## Conclusions and Recommendations

- After a few years of activities and infrastructure improvements around the school, there was a 5% positive shift in active transportation as more kids walked, bicycled, or rolled. In 2024, 55% did not travel in personal vehicles. North Glenmore Elementary has done a fantastic job so far and is encouraged to continue its efforts to increase sustainable transportation modes.
- The main issues preventing parents from allowing their kids to walk or bike to and from school are “the distance from home is too far”. As traffic in front of the school is still a concern, more emphasis on carpooling and park-and-walk activities could be considered in the following years.
- Delivering the Cleaner Air Program each year to students in grades 3 or 4 may support the efforts to encourage sustainable transportation over time. This program, developed in collaboration with Interior Health, contains information on idling, air pollution, and health facts that can be shared periodically with the school community through the school newsletter. The program aims to raise awareness about the environmental and health impacts of transportation choices and promote sustainable alternatives.
- Some parents' concerns, such as snow removal on a road, sidewalk, pathway, or tree/ bush trimming, can be quickly resolved through the Service Request System at [www.kelowna.ca](http://www.kelowna.ca). We encourage the school community to report any issues as soon as they identify them to keep the [best routes to school](#) safe and clear of obstacles. The City's system is designed to address the various problems promptly.
- We recognize parents' crucial role in shaping their children's travel habits. As newsletters are the most effective way to reach out to parents, reinforced regular parent role model messaging can be a powerful tool for encouraging behaviour change. We suggest the school committee explore incentivizing responsible parents who follow traffic rules, e.g., providing gift certificates. By knowing and adhering to traffic laws, parents can help ensure the safety of all road users, including their children.
- Due to the limited number of family survey responses, future family surveys could provide better insight into parents' sentiments and accurately reflect changes or improvements related to real or perceived barriers in travelling to and from school.
- The continuation of School Travel Planning has the support of 98% of the parents who answered the surveys in 2024. At the beginning of every school year, a new school committee is encouraged to be integrated with the new Parent Advisory Committee (PAC) to continue implementing the outlined annual actions. This process involves reviewing the previous year's activities, setting new goals, and planning or scheduling the Action Plan activities for the coming year.



## Endorsement

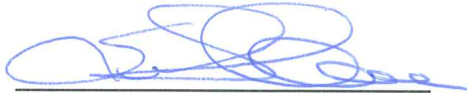
In April and September 2024, through the follow-up family and classroom surveys, follow-up data was collected after substantial work was completed. The results were compared to the baseline data gathered in October 2021.

The results have been shared with the STP municipal and school Committees. The school is encouraged to share the results with parents/caregivers.

Principal

Municipal Lead

< November 2024 >



Sue Stevenson



Nancy Mora

# 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. An introductory document of the School Travel Planning and the Terms of Reference of the Municipal and School Stakeholder Committee was sent 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 education of parents and students regarding health, wellness, air quality and safety benefits
- Agreed with improvements recommended in the Action Plan

Table 7. Members of the School STP Committee

Stakeholder	Staff	Roll	Contact information
North Glenmore Elementary School	Description		Contact information
School Administration			
	Sue Stevenson	Principal	<a href="mailto:Sue.Stevenson@sd23.bc.ca">Sue.Stevenson@sd23.bc.ca</a>
	Jill Voros	Vice Principal	<a href="mailto:jill.voros@sd23.bc.ca">jill.voros@sd23.bc.ca</a>
	Maggie Ringguth	Teacher	<a href="mailto:maggie.ringguth@sd23.bc.ca">maggie.ringguth@sd23.bc.ca</a>
Parents			
	Jamie Zecchel	Main Contact	
	Randi Futter	Parent	
	Christa Jenn	Parent	

Table 8. Members of the Municipal Stakeholder Committee

Stakeholder	Staff	Roll	Contact information
	Name	Description	Contact information
City of Kelowna	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 Parrette	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>
RCMP	George Minshull	Law Enforcement	<a href="mailto:George.Minshull@rcmp-grc.gc.ca">George.Minshull@rcmp-grc.gc.ca</a>
School District	David Widdis	Planning Manager	<a href="mailto:david.widdis@sd23.bc.ca">david.widdis@sd23.bc.ca</a>
Interior Health	Tanya Osborne	Community Health Facilitator, Healthy Communities	<a href="mailto:Tanya.Osborne@interiorhealth.ca">Tanya.Osborne@interiorhealth.ca</a>

Acknowledgements

Thanks to the following organizations for their valuable information:



City of Kelowna  
City of West Kelowna  
District of Lake Country  
District of Peachland  
Westbank First Nation  
Regional District of Central Okanagan



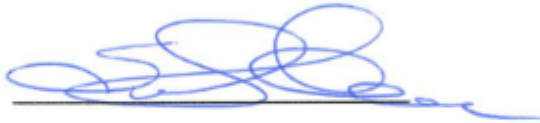
## Endorsement

Principal Sue Stevenson has endorsed the School Travel Plan for North Glenmore Elementary on behalf of the school and by one representative of the Municipal Stakeholder Committee.

School Principal

Sue Stevenson

Signature



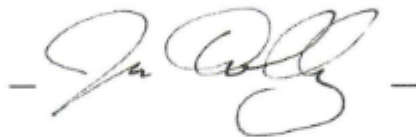
Date

March 18, 2022

Lead representative of  
Municipal Stakeholder Committee

Jerry Dombowsky

Signature



Date

March 18, 2022

## Statement of Support

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

### *School Travel Planning*

### *School Agreement*

I, Sue Stevenson, Principal, agree on North Glenmore 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 Principal:***

Sue Stevenson  
Name

North Glenmore Elementary School  
School Name

  
Signature

June 3, 2021  
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

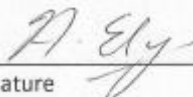
## ***School Travel Planning Municipal Stakeholder Committee Statement of Support***

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.

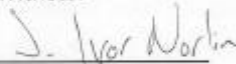
Anita Ely  
Name

  
Signature

Interior health Authority  
Organization Name

September 26, 2017  
Date

Witness:

  
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

Sustainable Transportation Partnership of the Central Okanagan  
Organization Name

  
Signature

April 10, 2015  
Date

**Witness:**

Ron Westlake  
Name

Sustainable Transportation Partnership of the Central Okanagan  
Organization Name

  
Signature

April 10, 2015  
Date

## Appendix 2. Additional Family Survey Comments

Additional comments from Baseline Family Surveys 2021
The kiss and drop needs to be managed at this point there has been heavy congestion.
I wish they had the option of the school bus or city bus. We have sidewalks to school which makes it safe.
Glenmore and Union road crossings are not always safe
We live up the hill on Union Road, so it's a bit of a walk. But the main obstacle is getting to school on time by foot. Too rush in the morning.
Glenmore road is too busy. my kids need to cross it to reach school. If there was a school/traffic person near the lights (glenmore & union), I would feel more safe for the kids to go by themselves. Even with the 'walk' signal, cars try to cross the road.
It's a safe route that my child feels good about and so do I
My child asked about biking, and the bike lane is full of gravel. vehicles travel too fast on Sexsmith/Valley road.
Congested
We live fairly close to the school, so our children have walked to and from for years.
The only stress is finding parking as the kids aren't quite content with kiss-and-drop. We would love to walk or bike but Sexsmith rd isn't safe to walk or bike on for kids and I would say even union isn't great until you cross Glenmore
For the most part it is great just seems to be a lot of traffic at the union intersection and the turning light is frustrating
Two route options: one is very high traffic with no sidewalk; two is safer, but further distance with larger hill for travel safely
I would like to see speed bumps on Biggar, especially since kids of all school ages are crossing it.
There is a severe lack of parking, adding to the hazards and rushing to get to the school.
There are not enough signs around North Glenmore to indicate there is a school nearby and people speed way to often!
Many parents park along snowsell, making it more dangerous for kids to walk and bike. Bikes have to go on road for some points which is dangerous for our young kids. Especially worrying when drivers may not see kids.
She would feel safer if more kids were walking down the same road.
We live on Dilworth Mountain and the steep terrain I think would make it very difficult for a young child.
Garbage cans and grit in the cycle path can cause problems. Many people like to put out garbage cans on the cycle path, and there is a serious amount of grit along Sexsmith Rd, especially down a steep hill for kids.
Sometimes he likes to walk, but he finds abike faster for him
Sidewalks on both sides of snowsell and trimming The traffic coming from Wilden down the hill travels far too quickly making the crosswalk near edgehill Ave dangerous to cross. Speed humps could be a viable solution to help slow traffic before the school
My son goes down Union hill and sometimes cars are going to fast i would like something done about that.
There are many kids adults at crosswalks at union and snowsell with lots of traffic and if feels very unsafe.
I only allow him to walk as a group of three of them (buddy system) walk to school. I arranged with a few other parents on our street for our kids to walk together.
I avoid the kiss and drop due to the traffic light and congestion. I drop the kids at a safe place for them to walk crossing at a cross walk
There is not enough room on the sidewalks do to foliage extending over half way across. Traffic flow is not well managed, causing back up and drivers in a rush. There should be no left turns on Snowsell during drop-off/pick-up. Us an X-crossing at lights.
One road he has to cross has no crosswalk and cars fly by, but it is a main route for children and community members.
We live on a mountain, so even if he biked to school, when he comes home, I would have to pick him up somewhere with his bike.
I think that the catchment planning assumed that if you live on a hill you want to drive or have your kids take the bus. We live on Dilworth, just up the hill from Glenmore (walking distance). But we drive by it and Watson to get to N Glenmore.
We very much wish our children could walk/bike/scooter to school. The fastest route to the school is via Glenmore Rd (at Begbie) and it's far too busy, with no sidewalk, to use for walking. The route down Union is farther and too steep for younger kids.
The sidewalk on Snowsell between Porthill and Union Rd. Is overgrown by shrubs etc. It's distracting and kids run into the road to pass ppl add there's not enough room. That strip is a common place to park and it's am accident waiting to happen.

Crossing Porthill at Snowsell isn't safe; there isn't good visibility for cars turning West off Snowsell and onto Porthill. There are always overgrown plants along the West sidewalk of Snowsell. The cars parking along that side pose additional risk.
so far he's enjoying the bus ride and love the short walk to bus stop
Cars in the neighborhood drive fast
We live about 10 min walking to the school. The road (sexsmith) does not have proper sidewalks and people speed.
Very few cars follow the school zone speed limit signs and come flying down the hill at all times of day at dangerous speeds. This is very unsafe for the children! A sidewalk on both sides of Snowcell is needed for safety. Please consider these!
My concern is the Union/Snowsell intersection. It is so busy with traffic and there is not enough room on the curb for all the pedestrians.it scares me when kids are trying to cross and cara are trying to turn before the light changes.
It is fairly easy for them to get to school down the hill, but the elevation of the hill makes it difficult to return home

#### Additional comments from Follow-up Family Surveys 2024


If the SD23 actually cared about idling/C02 emissions, they wouldn't have sent 3 pages of colourful paper flyers home in a paper envelope to say so. Waste of paper....and especially hilarious given that the papers centred around a "green" initiative. Omg.
We live too far away to walk. Over 4km. We park a block or more away in the morning and walk to school. The cost of the school bus for kids that live too far away is \$450. There should be no cost. My child is too young to take transit alone. Most of the issues of too much traffic around schools is because of the cost of a school bus. If it was free, my child would be on it. The district should not be burdening parents with bussing cost when we cannot walk to school.
Better bike lanes
The sidewalks and school grounds are not well maintained during snowy, icy weather. Causing unsafe paths, I fell as well as my children on the sidewalk at snowsell and porthill dr.
The construction equipment along snowsell makes it difficult to see at the corner of snowsell and union. Hopefully this asphalt pathway will be completed soon.
I believe the cost of sending families these forms and stickers on a mass scale is the most ineffective thing possible to focus on in our school district. Using these funds towards more extra school care or hot lunch programs would be a much better use of money.
Parents are over worked and tired, and already KNOW and find the best transportation to school for their child. We live out of catchment over 3km away. The school is overflowing and overwhelmed with students, thus creating more vehicles.
Only suggestion is bussing in out of catchment kids like ours, who are not eligible for the bus.
Sidewalk overgrowth blocks the sidewalk in multiple locations along the route, unsafe to cross from Wyndham/snowsell to get to the sidewalk in the other side of the road
The biggest issue for us is the vehicles speeding on union rd.
Cycling along Glenmore Road from the north of the school is very dangerous and should not be encouraged, until property bike lanes or multi-use path is constructed.
I think it would be great if there was a central parking lot somewhere and a safe place for all the kids to scoot or bike or walk from there. At North Glenmore, union Road is very busy as it is the main route to get to Glenmore. in an ideal world, the school would be surrounded by a pedestrian only ring pathway to protect the kids. The school bus out to Mckinley does not come by until after 4pm which is too long of a ride for elementary students that get off at 230.



## Appendix 3. Safe Routes to North Glenmore

[Best-routes-to-school--North-Glenmore.pdf \(rdco.com\)](#)

# BEST ROUTES TO SCHOOL



North Glenmore

**KIDS, BE STREET S.M.A.R.T.**

**SIDEWALKS:**  
Use sidewalks! Stay on the inside edge and stand away from the edge when you want to cross the street. If there is no sidewalk, walk facing traffic so that you can see oncoming vehicles.

**MUSIC:**  
If you are listening to music, remove one earpiece before crossing the street or walking in an unfamiliar neighbourhood.

**ATTENTION:**  
Watch out for moving vehicles backing out of driveways, back alleys and in parking lots.

**ROAD CROSSING:**  
Always cross at an intersection or crosswalk. To cross safely, make eye contact with the drivers in all lanes to make sure they are stopped.

**TEAM UP:**  
It's safer and more fun to walk to school with family or friends and good exercise too.

SmartTRIPS  
1435 Water Street  
Kelowna, BC V2Y 1J4  
info@smartTRIPS.ca

### Neighborhood safety tips

**TRANSIT**  
Transit can be fun. Parents and children can take the bus route together a few times before the kids go solo. Ask the bus driver if you have questions.

**SAFETY IN NUMBERS**  
Team up with another parent or neighbour to share the responsibilities of walking to and from school. If students are older, encourage them to walk with friends or older siblings.

**AWARENESS AND INDEPENDENCE**  
Teach your children how to stay safe by identifying friendly neighbours, friends, or safe public places. Warn them about high traffic areas or corners that might hide hazards.  
Exploring and learning about your community and city at a young age are lessons that will last a lifetime.

- When you are out with your family, identify safe places at which you can ask for help. It might be a neighbour or a friend's house or maybe a safe place you can go.
- If your family uses a safety password, practice and remember that special word.
- Don't ever go anywhere with a stranger.

### Park and walk

Families who are unable to walk all the way can still contribute to improved traffic safety and healthy schools. Park at your school's designated area or park legally on another street away from the school. Walk the last few blocks with your children, allowing them to enjoy a little extra active time outdoors.

North Glenmore has five suggested park and walk stations within 8 minutes' walk to school.

1. Naito Park: Southview Ave and Naito Ct
2. Ritchie Ct/Wyndham Cr: Southeast side of the street without driveways
3. Snowsell St: Between Cross Rd and Wyndham Cr/ Porthill Dr
4. Brandt's Creek Linear Park: Applebrooke Cr and Portland Ave
5. Millard Glen Park: Millard Ct W

Watch [the Pedestrian Safety tips](#) with your kids!

### S.U.P.E.R bike safety

Practice these bike safety tips at all times when riding your bike!

**Signs:** Use your hand signals when riding your bike and obey traffic signs.

**Use caution:** Leave space when riding next to parked cars and watch out for doors swinging open. Wear light or bright coloured clothing, bike lights and reflectors, so you can be easily seen.

**Protection:** Wear your helmet when riding your bike - it's the law.

**Eye contact:** Make eye contact with other road users (drivers and pedestrians) to improve safety for everyone.

**Right hand side:** Ride your bike single file and as far to the right-hand side of the road as possible. Use bike lanes if they are available.

### Driving Awareness

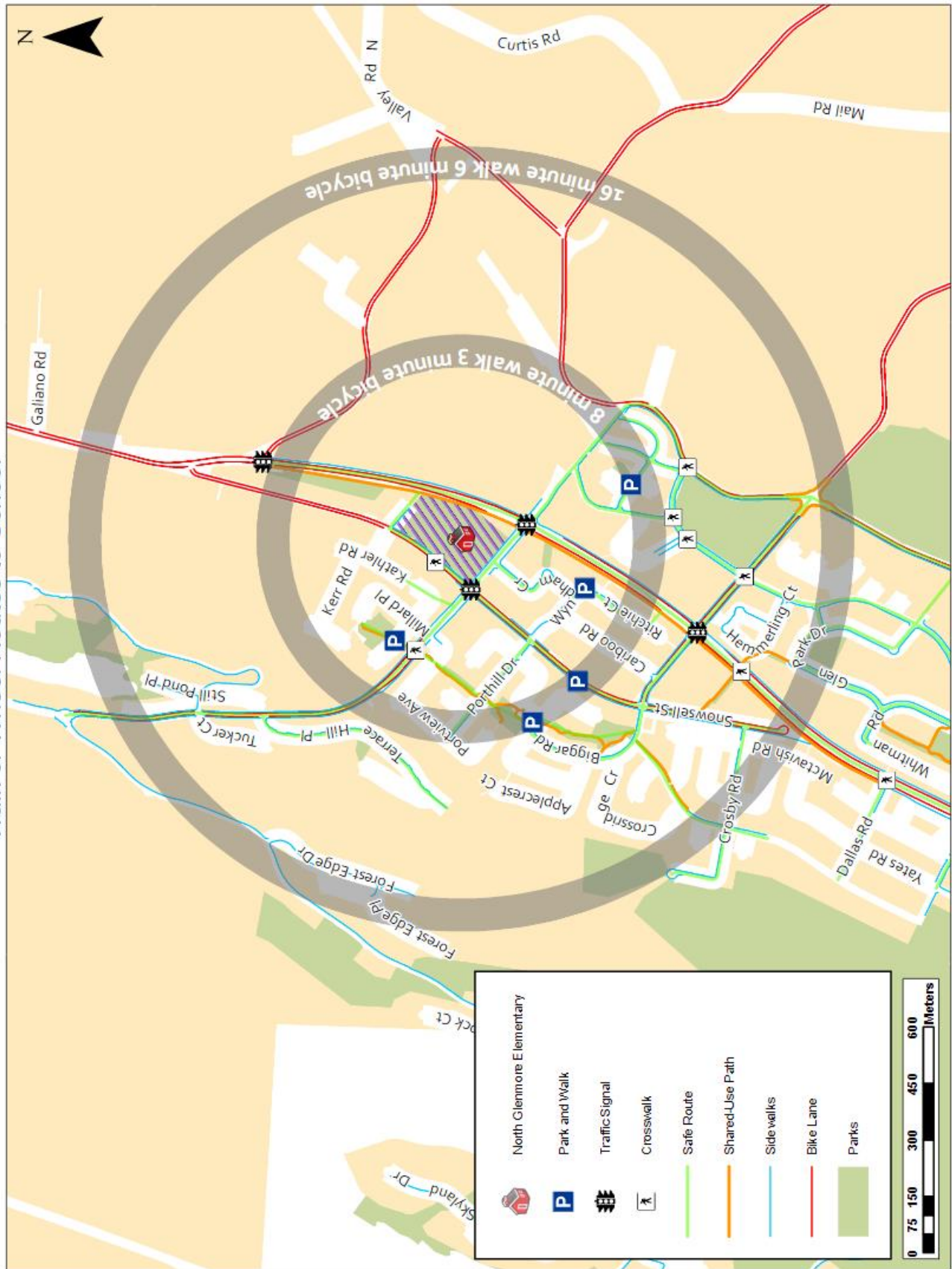
- Drive lawfully, safely and without distraction. Parents have a valuable part to play as role models for their children's future driving behaviour.
- U-turns are illegal in a school zone. They are dangerous too as they cause many blind spots in an area that may be filled with young walkers and cyclists.
- Don't idle your vehicle. It contributes to poor air quality which negatively impact young lungs. City of Kelowna is the only city in the Central Okanagan with a [one-minute Idling Control Bylaw](#) in place, effective as of July 25, 2022.
- Avoid parking in bike lanes and obey parking signage. Disconnected cycling routes and obstructed bike lanes can discourage people from choosing cycling as a safe alternative travel mode.
- Use the **Kiss & Drop lower loop**. This loop is only available in the mornings. Pull all the way to the end of the lower loop prior to having learners exit the vehicle. Parents must park and walk when picking children up at the end of the school day. Our parking lot is always dedicated for staff parking only.

### Safe Route

Use the proposed Safe Route map on the next page and get to school safely by walking, cycling, in-line skating, riding a skateboard or a scooter!

smartTRIPS.ca

# Walk or Wheel Routes to School



**Clean Air & Safe Routes 4 Schools  
A School Travel Plan  
North Glenmore Elementary School**

**Revised November 2024**

Questions or concerns should be directed to:

Regional Air Quality Program

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

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

ph. 250-469-8408

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