

Clean Air & Safe Routes 4 Schools

A School Travel Plan

Casorso Elementary School



Casorso 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.

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Project Overview

In 2020, 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 Casorso Elementary School. The 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 were involved 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 in 2024 show an overall increase of 8% in sustainable transportation to and from school. More kids walk, bicycle, take the school bus, 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 regularly 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

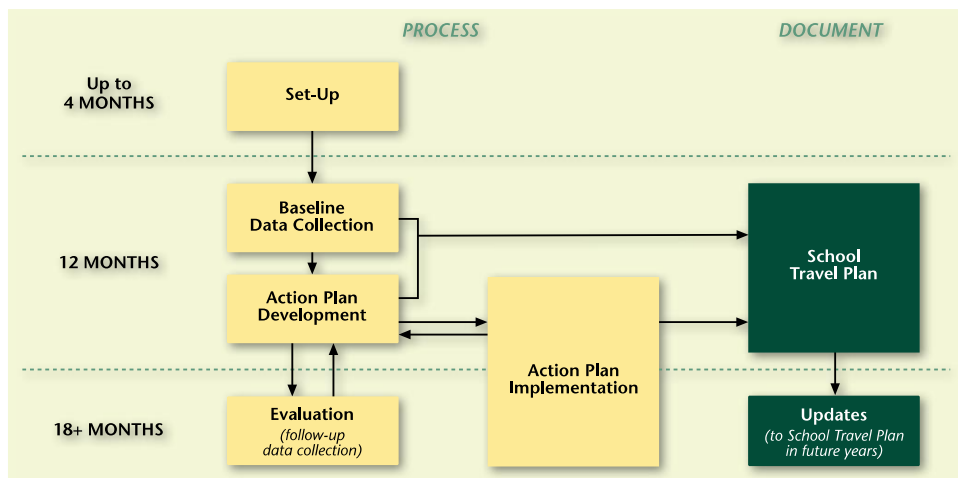


Figure 1. School Travel Planning Process

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. Children and youth aged 5 to 17 should get at least 60 minutes of moderate-to-vigorous physical activity daily. Currently, only 37.6% of this target group meets the recommendation.¹

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.²

¹ [Children and physical activity - Canada.ca](http://Childrenandphysicalactivity-Canada.ca)

² [Healthy Families BC](http://HealthyFamiliesBC.ca)

- 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 their free time, after school and on weekends, is spent on sedentary activities.
- If current trends continue, by 2040, up to 70% of adults aged 40 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 analyzed³. 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 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:
 - Toolkit resources and flexible templates are available to use in every phase of the STP process. Find the Toolkit at [School Travel Planning Toolkit](#)
- Cleaner Air 4 Primary Schools Toolkit was developed by the London Sustainability Exchange (LSx). This organization works to support London 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

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

³ [Active Living Research](#)

Introduction

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

Casorso Elementary School was invited to participate and signed the School Agreement on **June 16, 2020**. 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 June 15. An introductory document to parents and terms of reference for the school committee were provided for their review.

A City of Kelowna municipal committee was integrated in the past, and its 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 Casorso 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 behaviours 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

Casorso's principal provided the school profile on September 11, 2020, which contains general information on the school's primary concerns and issues.

Table 1. Casorso's Profile

Profile	Description
School Name	Casorso Elementary
School Type, e.g. public, separate, private	Public
Age of School / Year Opened	
Name of School Board	Central Okanagan Public Schools
Number of Students	532
Number of Families	Approx. 400
Grades, e.g. K-6, K-8	K-6
School Bell Times	8:25 – 2:30
Number of Parking Spaces, staff/visitor	50
Description of Location, e.g. District centre/suburban/rural	City, Suburban area
Is the school in a Neighbourhood Watch or Block Parent Community?	No
% Bussed Students	Approx. 2%
Socio-Economic Description of Families	Lower Mission School with diverse socio-economic needs
Any local programs e.g. French immersion, fine arts, special needs, before and after-school day care etc.	Dual Track School (French Immersion and English)
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	Very large catchment area (French Immersion side) Between very busy roads and higher-density housing

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	
Existing Safety Policy & Education, e.g. school safety policy and rules, current safety education programs	
Programs at this school that have goals similar to STP, e.g. environmental, physical activity, mental health	Physical and Social/Emotional Health
Types of school/parent committee communications used/available (i.e. newsletter, website, Facebook page)	Website, PAC communications, School Messenger
Other Information	

Catchment

In 2020, there were 532 students in grades K to 6. In 2023-2024, there were 490 students and 250 families. The catchment area is shown below.

Casorso Elementary Catchment

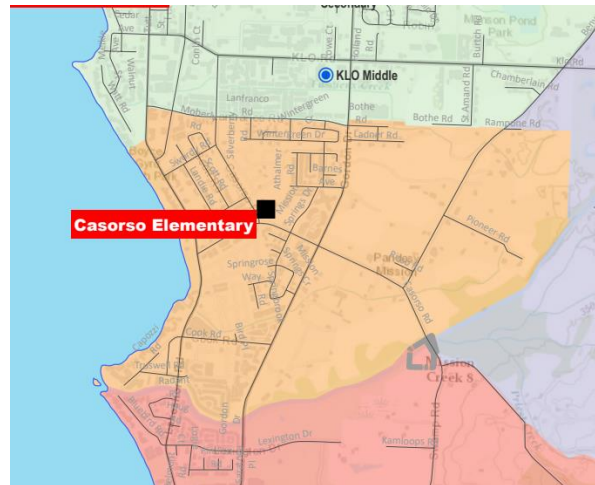


Figure 3.Casorso Elementary Catchment Area

GIS Analysis - Distance to School

Via the postal codes of all students attending Casorso Elementary School in 2019, general information was obtained to support some strategies and actions within the school. A GIS analysis using ArcInfo was completed to calculate the distance home-to-school for all students.

Distance to School

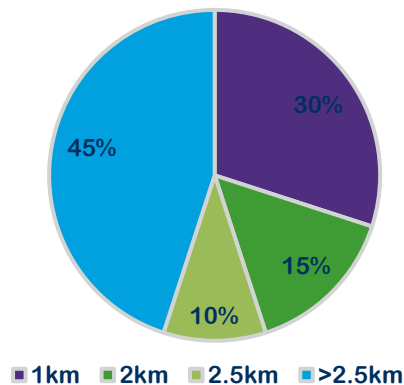


Figure 4. Distance to School

- 55% of current students live within 2.5 km from school
- 45% of students require a longer walk/bike ride to reach school as they live more than 2.5 km away

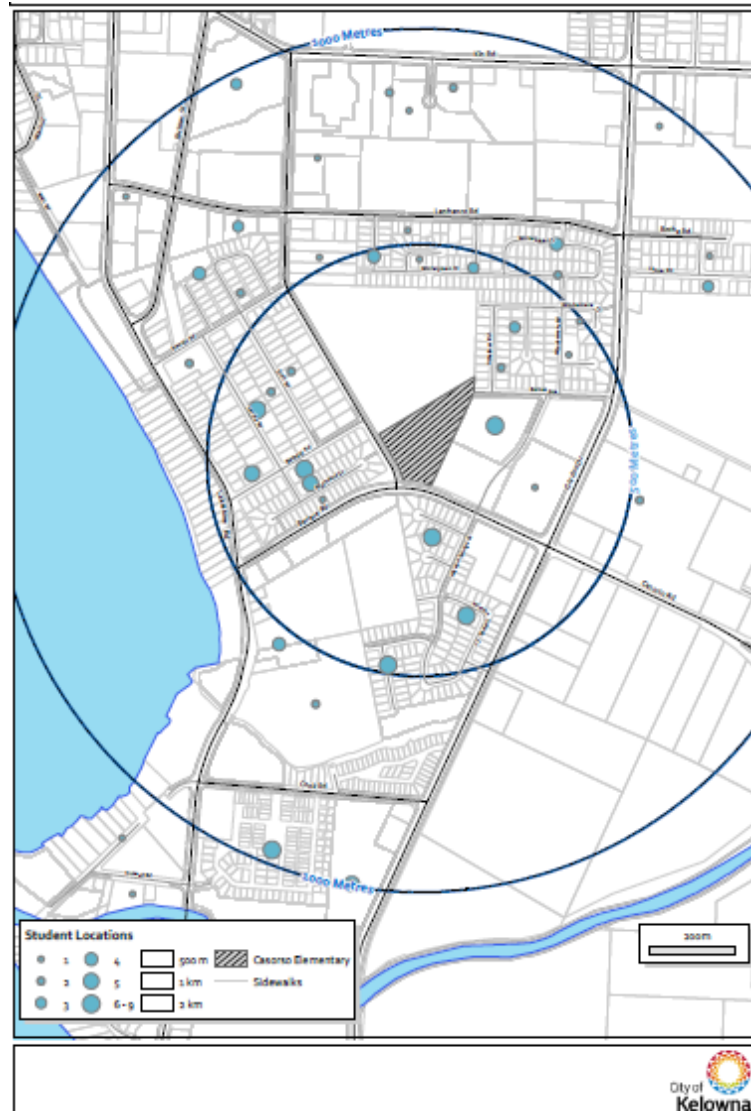


Figure 5. Students within the catchment area by postal codes

- 45% of the students live within 2 km or



32 min walking

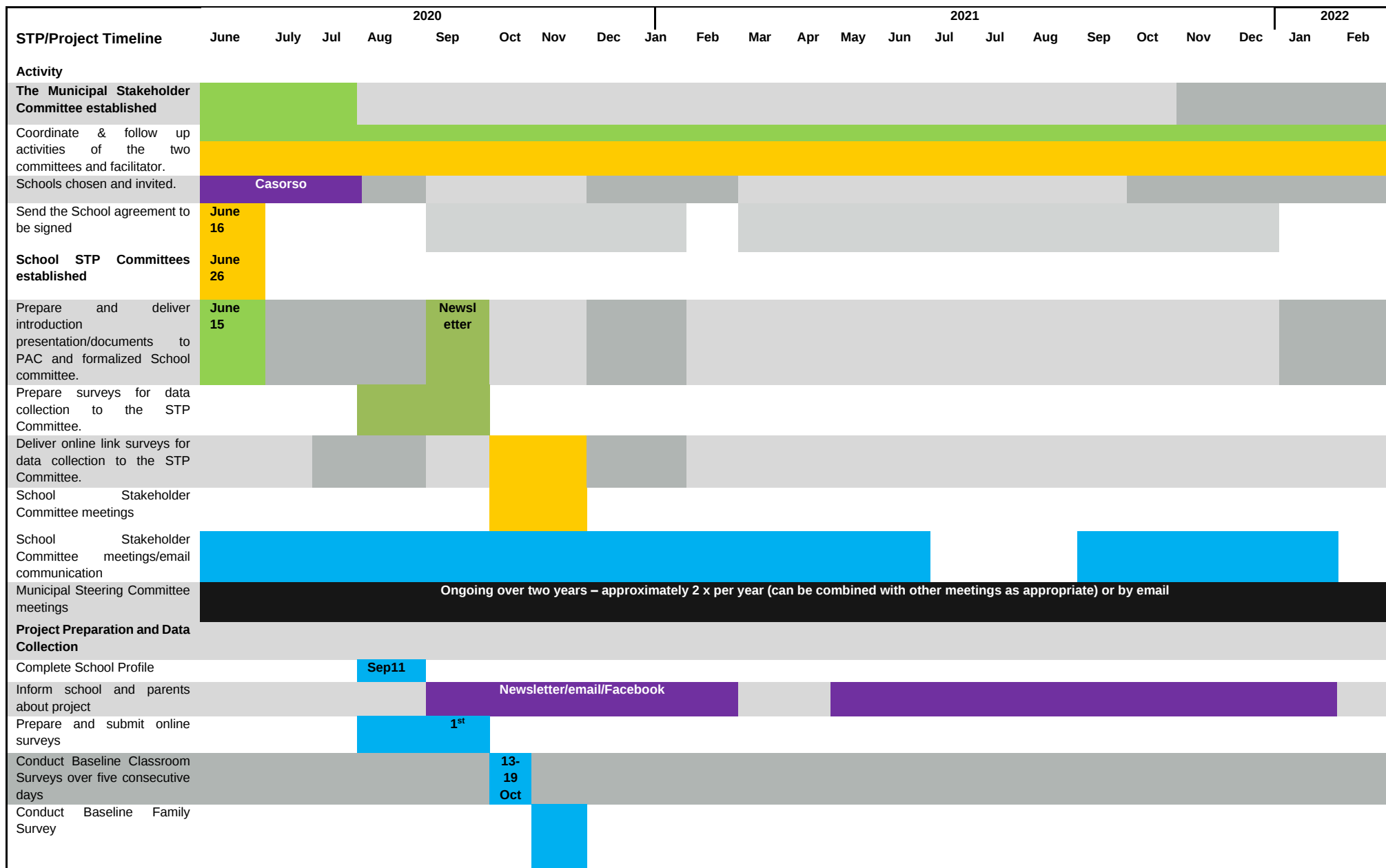
12 min cycling



CAUTION: ArcInfo was used to calculate the distance (in meters) from multiple points to one point, in this case, to Casorso 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



Baseline Data Collection

Casorso is composed of approximately 400 families. An [online survey](#) was set up for Casorso parents on October 9 and was available until October 25, 2020. From Tuesday, October 13 to Monday, October 19, 2020, teachers helped with 18 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 4 student, Cian Stratton.



Figure 6. Facilitator Dan Glasscock delivers the bicycle

Student Classroom Survey findings

Casorso Elementary has 23 classrooms, and with the teachers' support, 18 classroom surveys were received reflecting travel "to" school of sixty-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
Monday	54	58	21	1	0	8	214	15	371
Tuesday	52	47	25	4	0	12	207	15	362
Wednesday	54	46	24	4	3	9	209	16	365
Thursday	57	42	20	2	2	10	216	19	368
Friday	54	41	27	2	1	10	213	18	366
Total	271	234	117	13	6	49	1059	83	1832
Average	54.2	46.8	23.4	2.6	1.2	9.8	211.8	16.6	366.4

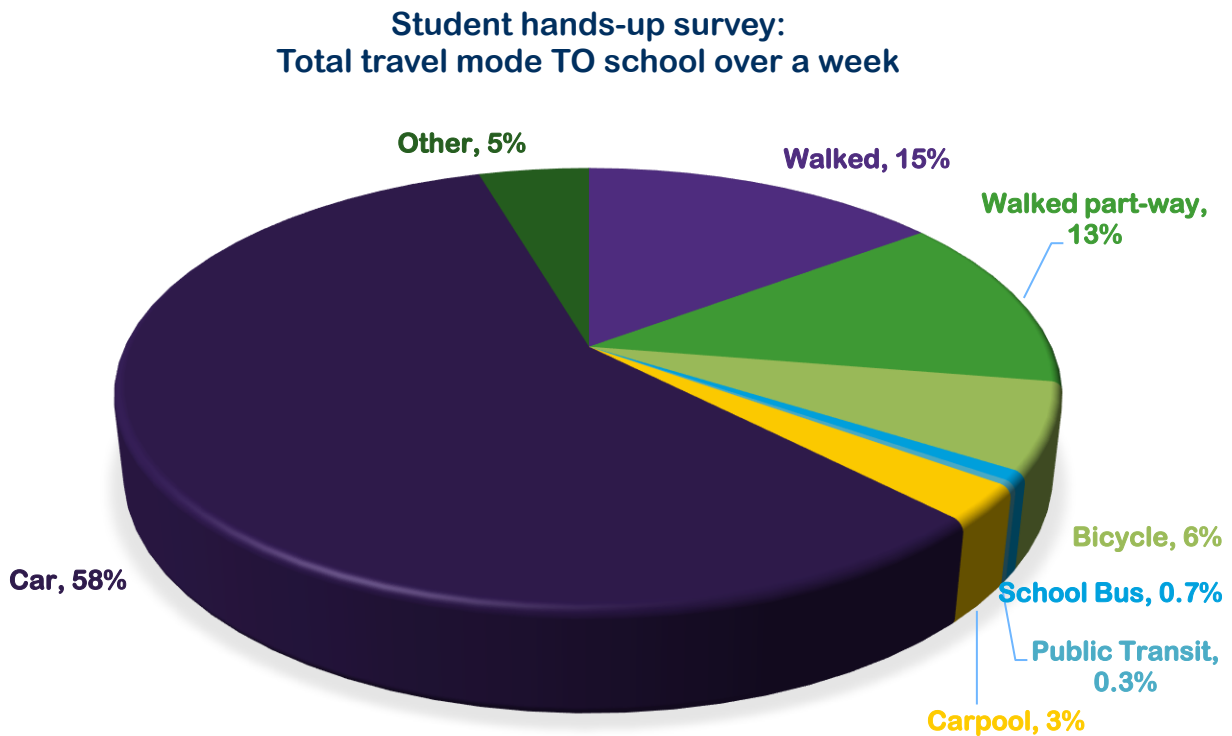


Figure 7. Total Travel Model to School over a week- Baseline 2020

We received 18 complete classroom surveys outlining "from" school results. Sixty-eight percent of the 532 students attending Casorso were tracked for 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
Monday	73	31	24	3	4	16	204	14	369
Tuesday	76	34	24	4	5	17	199	12	371
Wednesday	73	28	25	3	4	16	205	13	367
Thursday	70	28	23	2	3	17	207	13	363
Friday	66	26	24	3	3	18	189	14	343
Total	358	147	120	15	19	84	1004	66	1813
Average	71.6	29.4	24	3	3.8	16.8	200.8	13.2	362.6

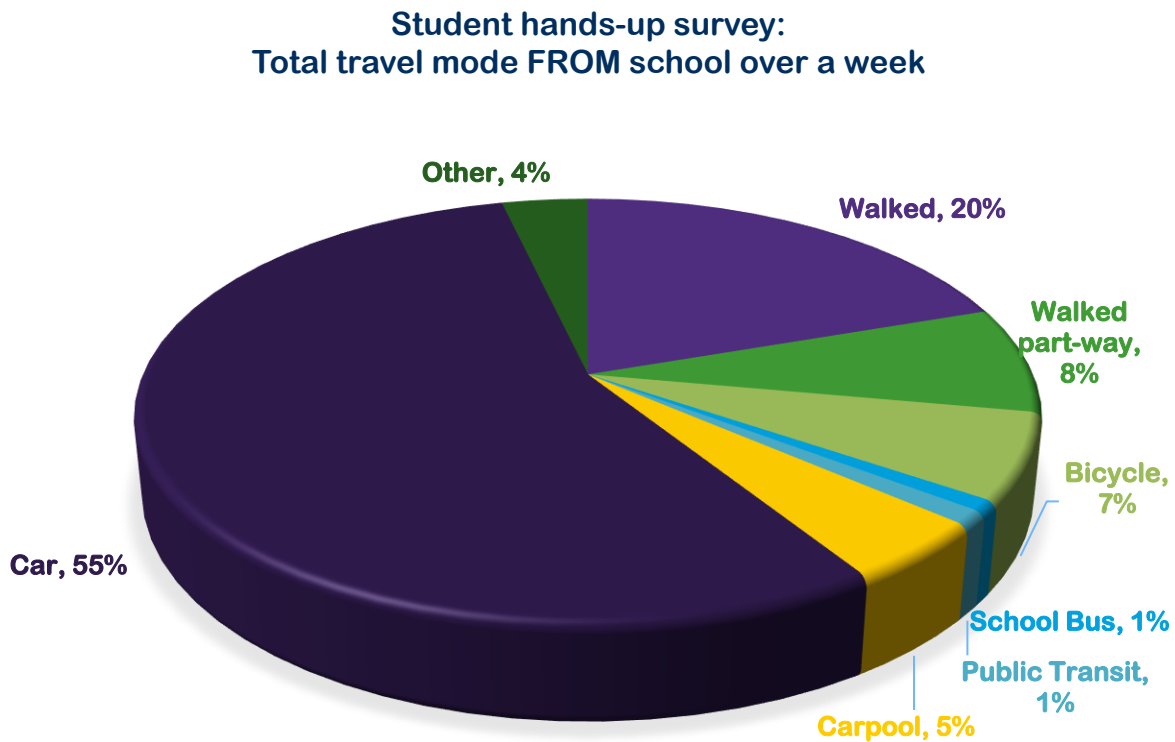


Figure 8. Total Travel Model from School over a week- Baseline 2020

Baseline Family Survey Findings

Obstacle Map

In 2020, through the online family survey, parents identified obstacles they encountered on their way to or from school on a map.

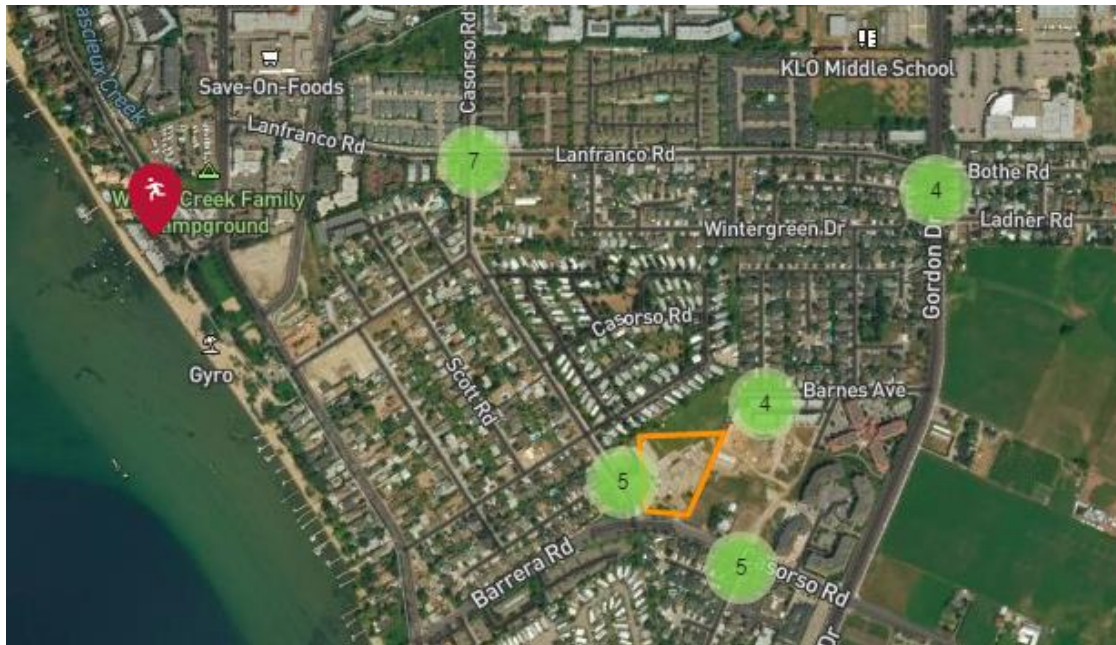


Figure 9. Traffic issues around the school

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



Figure 10. Rear field area of Casorso Elementary

- Barnes Ave. is clogged with cars dropping children off in the morning or picking them up in the afternoon, which can be dangerous for pedestrians and cyclists due to the congestion.
- Drivers park here, idling cars. Drivers reverse out of this spot or do u-turns adjacent to school yard exit at peak times

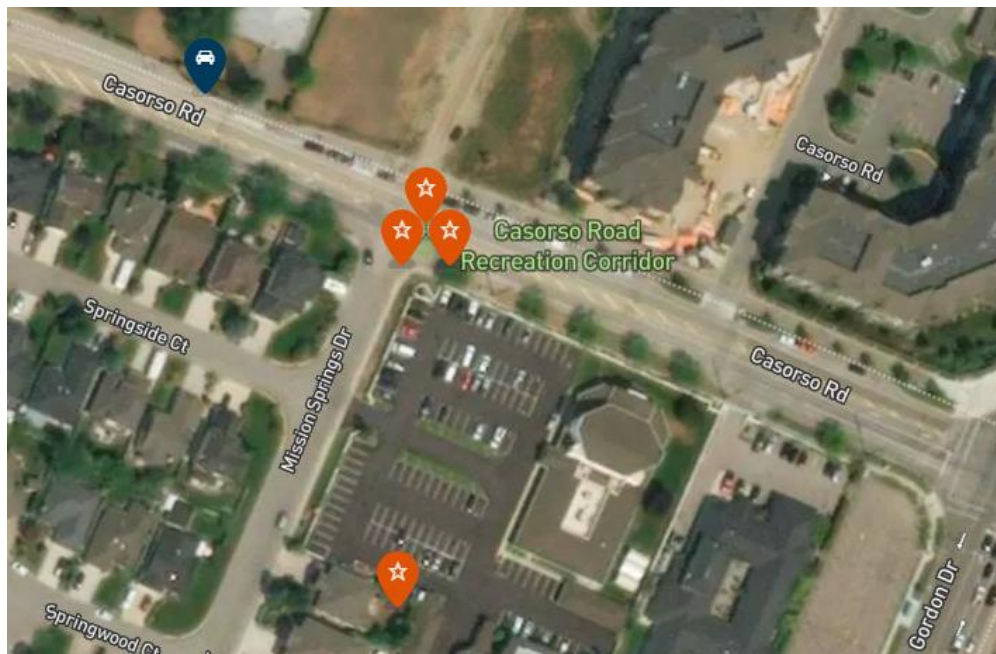
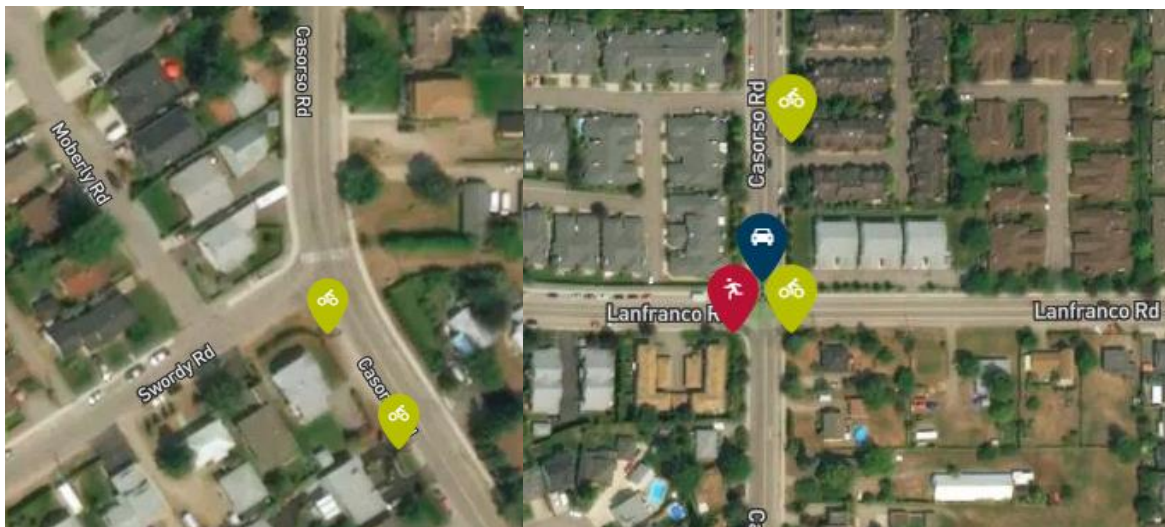


Figure 11. Unmarked Crosswalk at Mission Spring Dr and Casorso Rd.

- Schoolchildren of all ages use this unmarked crosswalk to travel to Casorso, KLO and KSS.



- Drivers park in the bike lane before and after school.
- Create a kiss and go lane in this parking spots
- Enforce the right turn only rules, no double line of cars, and no sidewalk blocking.
- Open this gate so students and parents can use the crosswalk to cross the street, then use this walkway to avoid the kiss and go lane exit.
- Make this reserved parking for parents of kindergarten (maybe include grade 1 students)





Other traffic issues, bike lines and sidewalk missing were identified at:

- Lanfranco Rd and Gordon Dr
- Lanfranco Rd and Casorso Rd
- Swordy Rd and Casorso Rd

Walkabout and Route Map

The Walkabout was performed on **November 6, 2020, from 8:00-10:30 am**. Six members from the Municipal Committee, eight from the School Committee, and other parents attended. The following pages show a detailed overview of the walking route and critical findings. The agenda, walkabout route map and walkability checklist with specific points of observation to consider during the route were provided by the program coordinator to every participant before the meeting.

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

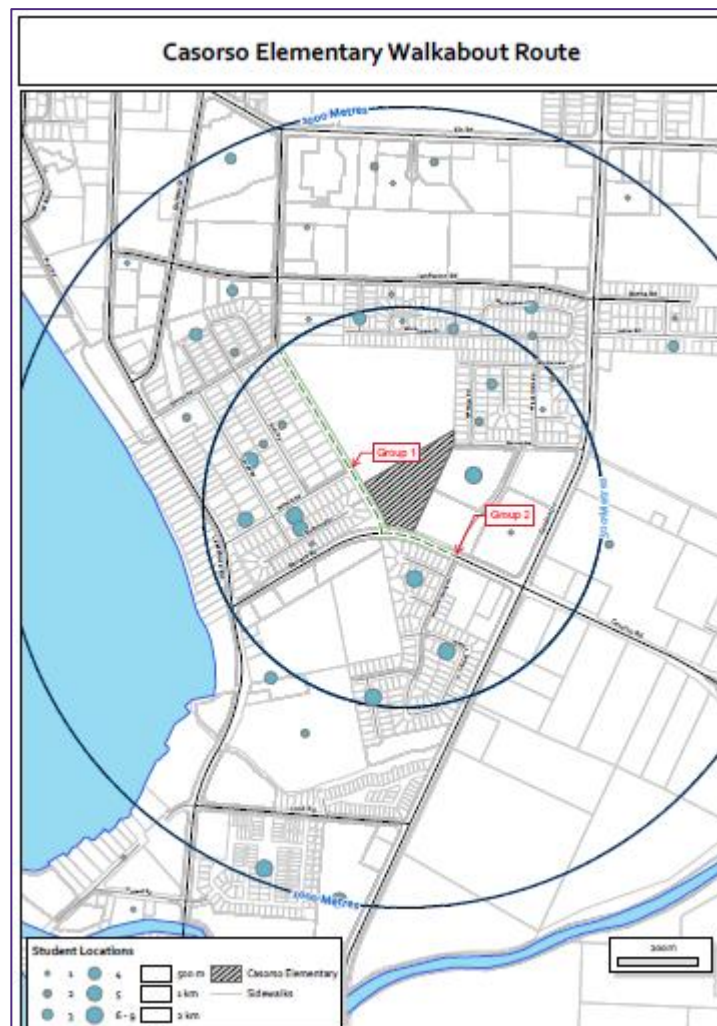


Figure 12. Casorso Kelowna Walkabout Route Map

Walkabout Main Findings

After the Walkabout, the Municipal and School Committee members discussed the main findings and issues Casorso was facing. Attendees provided insightful information to consider in the development of the Action Plan. The following is a summary of the Walkabout findings. The complete list is in Appendix 2.

Table 5. Casorso Walkabout Main Findings

The Walkability Checklist	General Findings
Parking lot, or on road parking at school	Double park at Casorso-eastside of Casorso, vehicles double parking reducing visibility of vehicles and pedestrians; vehicles entering school from exit- Casorso @ Barrera cars parked at yellow zone; request crosswalk at church & Bechard crossings.
Facilities for walkers on the street next to the school site	Safety patrol would be helpful-needed; Bechard & Barrera families cross mid-block-no painted crosswalks; Sight constraint to north from Bechard; overgrowing shrubbery leaning on sidewalks.
Walking paths to the school	Back of the school by the field-Front of the school and driveway-Several access points-quite narrow opening through fence; Vehicles exiting from parking lot-at all entry to school property; the buses are in the way so conflict with bike scooters and pedestrians
Bicycle facilities	not secured-not sheltered-very hot in summer; Narrow park between gate post & fence-narrow point of entry to both spots with for traffic and bikes
School Bus/After School Care Loading Zone	bus comes through parking lot lane, concerns-parking sign
Walking facilities and traffic observations	High volume during school drop-off & pick up; neighbors unhappy with parking-speed problem at Lanfranco; Speed zone indicator/electronic would be helpful at Barrera/Casorso.
Alternative safe parking locations	church and side streets-Church has large parking lot that can be used -Parking lot at Barrera (towards Lakeshore) works well
General Comments	Drivers park here idling cars. Drivers reverse out of this spot or do U-turns adjacent to school yard exit at peak times.
General Suggestions	-Create a kiss and go lane in these parking spots; Need a bike lane along Casorso Rd from KLO to Casorso Elementary



Figure 13. Walkabout-Municipal and School Committees



Figure 14. Observed poor driving behavior by parents-dropping off on bike lane



Figure 15. Kids crossing at unmarked crossing walk- Mission Spring @ Casorso Rd



Figure 16. Kids dropped off at the entrance of the parking lot

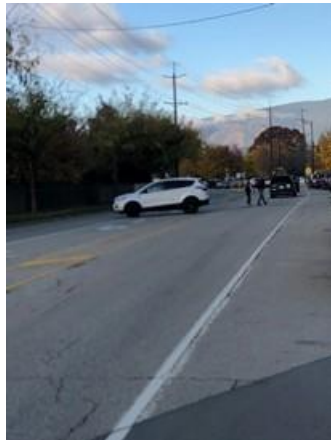


Figure 17. Illegal U-turns



Figure 18. Speeding within School Zone



Figure 19. Municipal and School Committee during Walkabout and previous concerns

- Existing conditions:
- Long pedestrian routes, constrained access
 - Pedestrian congestion
 - Vehicle / door hazards
 - Poor signage & markings
 - Vehicle idling
 - Auto oriented site design
- Hazard Points:
- a. Dooring
 - b. Parking over crossing
 - c. Crossing misalignment, poor sightlines, no crosswalk, steep let down
 - d. Dooring, pedestrian congestion, car exhaust, insufficient width & cycling infrastructure. Snowbank hazards.
 - e. Restricted access
 - f. Double parking
 - g. Doors open in travel lane
 - h. Congested & constrained access
 - i. Inconvenient bicycle parking
 - j. Storage, congestion point
 - k. Driveway crossing
 - l. Jaywalking short cut
 - m. Hazardous parking stall
 - n. No crosswalk
 - o. Congestion, dangerous vehicle movements, dooring



Figure 20. Other Pick up / Drop off safety hazards identified by PAC members

Other PAC observations:

-Bechard & Casorso: Sidewalk ends creating jay walking. Let down from outside of the road crosswalk area. Parking is too close to curb & blocking crossing. Parking on the sidewalk, door hazard. Jaywalking in absence of crosswalk

-Casorso along the west side of school: Congested. Insufficient space for pedestrians, forced off sidewalk. Car doors opening into sidewalk, vehicle exhaust. No safe path for bikes or skateboards. Restricted access lengthens walking distance, funnels traffic creating congestion and exposes pedestrians to greater hazards. Causes unsafe behaviour like jay walking for shorter route to one access point.

-West side of Casorso Road: Double parking, no defined parking width. Parking on the opposite side of road and restricted access to school encourages jay walking. No defined buffer from sidewalk poses door opening hazard, Parking close to travel lane, doors opening and children existing into traffic. No lines define travel lanes make road wider encouraging speeding.

-Pedestrian Entrance along West side of Casorso School: Single access point, funnels pedestrian traffic and concentrates vehicle traffic. One-way loop does not provide active transportation access from this side. One access point creates long walking distance from drop-off on the opposite side inducing jaywalking. Access point not meeting minimum standards, no safe route for active transportation. Access points very narrow concentrate most pedestrian movements onto congested sidewalks filled with pinch points like storage structures, fences, and transformers. Parking stalls pose avoidable hazards and an opportunity to enhance pedestrian and cycling access. One site parking demand should be managed with a Transportation Demand Management Plan.

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 concentrations of 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 makes 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

Understanding and managing the school's energy consumption will usually also enable you to reduce pollutant emissions. Casorso can undertake several actions to reduce energy consumption and pollution emissions, which 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 you improve the quality of the air you breathe indoors.⁴ 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.

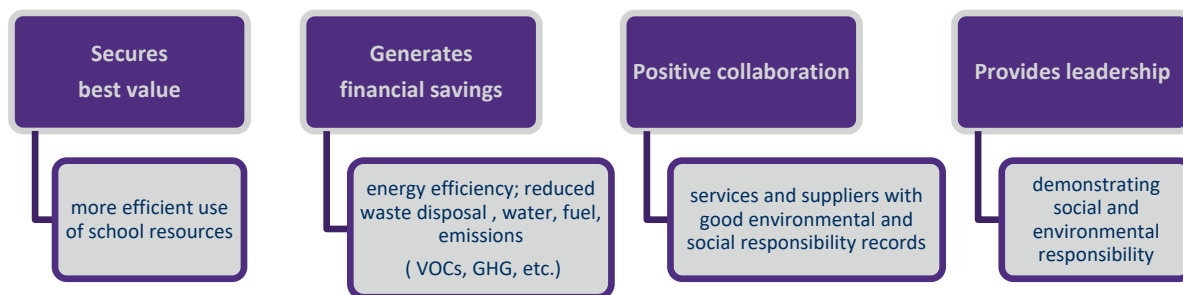


Figure 21. Benefits of Sustainable Procurement

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 Casorso. 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

⁴ [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. Casorso Action Plan

Action/Initiative	Tasks	Responsibility	Start Date	Completion date	Estimated Cost
Objective 1: Improve the safety of children on the active school journey					
Pedestrian and bike safety presentations	Seek road safety curriculum resources for classroom teaching. ICBC road safety teaching resources: Road safety (icbc.com)	Facilitator	Spring/Fall 2021	Spring/Fall 2021	No cost
Parent role modeling messaging	Provide messages for use in school and parent communications Parents as Role Models - SCAN of Northern Virginia (scanva.org)	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 Road safety for your kids (icbc.com) - Contact B.C. RCMP - Speed Watch (rcmp-grc.gc.ca) - Resources available for teachers and parents at KidSmartz (missingkids.org)	RCMP	Spring/Fall 2021	Spring/Fall 2021	\$
School speed zone awareness	Seek road safety curriculum resources for classroom teaching. ICBC road safety teaching resources: Pace Car Community Guide (parachute.ca) Teach road safety (icbc.com)	School Committee- share information through teachers and newsletter	TBD	TBD	\$
Improve access points for students	Identify potential options to improve conditions and motorist behavior at the NE access near Barnes & Athalmer.	City of Kelowna	2021	2021	\$
Improve access points for students	Discussion with the City Parks Department to determine if a gate can be installed in the fence on the east side of the school. Requires approval from School Administration as well.	City of Kelowna/School Administration	2021	2021	\$
School Site Improvements	-School Administration to consider: Opening the gate on the NW corner of the property during admittance and dismissal times. SD23- This would be the school responsibility and depend on school logistics -Review additional gateway openings and fence placement to determine if pedestrian access can be widened to improve pedestrian flow. SD23- This can be a discussion with the Operations Department, and if necessary, a work order would be required by the school -Removing 2 parking stalls at the school's south driveway to improve the existing connection to the sidewalk on the school site. SD23- Would like to explore this option further (TBD) -Review bike parking on site. SD23- This would be a discussion with the Operations Department, and the bigger picture of bike parking is needed -Consider widening pathways or removing pedestrian obstacles at pinch points on the school site.	School Administration/SD 23	TBD	TBD	\$

Action/Initiative	Tasks	Responsibility	Start Date	Completion date	Estimated Cost
	SD23– This can be a discussion with the Operations Department, and if necessary, a work order would be required by the school				
Crosswalks and Pedestrian Improvements	Consider installation of a crosswalk at Casorso & Mission Springs. Identify additional improvements to be installed at existing crosswalks and intersections. This may include markings, signage, curb extensions, barriers to protect pedestrian space, etc. Review requests for additional crosswalks.	City of Kelowna	2021	2021	\$
Signage and road marking enhancement	Consider installation of new signage and road markings to better direct motorists. This may include bike lane symbols, U-Turn restriction signage, etc. Review requests to modify various existing signage and adjust if warranted.	City of Kelowna	2021	2021	\$
Kiss and Drop Program	Investigate reimplementing the Kiss and Drop Program. Rectify past issues with additional materials to create a well-defined drop off area. City of Kelowna to consider the installation of physical barriers to restrict left outs from the school driveway exit to improve traffic flow. Consider MUTCD compliant signage to better inform existing motorists.	School Administration/ City of Kelowna	TBD	TBD	\$
Bike Lane Connection	The City is currently designing the Casorso Active Transportation Corridor between Raymer and Barrera. This includes protected bike lanes and sidewalks. Constructions completed in 2023.	City of Kelowna	2020	2023	\$
Traffic Calming	Identify if traffic calming measures are warranted and what treatments may be appropriate. Note, Speed Humps are not permitted on Casorso, as it is classified as a major collector (Council Policy 300).	City of Kelowna	2021	2021	\$
Parking Behavior Improvement	Investigate strategies and possible infrastructure to improve parking behavior and minimize improper parking activity. Consider enforcement strategies.	City of Kelowna	2021	2021	\$
Best Walking Routes Map brochure	Create map showing best routes and distribute to families along with walking safety information	City of Kelowna	2020	2021	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 2021	Every two years	
Active Transportation Maintenance	Request vegetation trimming along the multi-use path and sidewalk where required. Use City of Kelowna's service request system; bike lane maintenance, snow/ice removal, sidewalk, etc.	City of Kelowna, Private Property Owners	2021	As needed	\$
Objective 2: Raise the awareness of the environmental and health benefits of active travel					
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. - Air Quality/ provided ready-to-use materials - Parents Council shares info through newsletter - School Administration supports delivering at least one lesson (around 30 min) a year through teachers grades 3-4 - Check this Cleaner Air Program in the Resources section at kelowna.com/airquality .	Air Quality/School Committee	March of every year	June of every year to 3 rd grade.	No cost
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	February 2021	April 2021	\$
Have physical activity benefits messages in newsletters/health presentations.	Review information on the Public Health Agency of Canada website. http://www.interiorhealth.ca/YourHealth/SchoolHealth/HealthPromotion/Pages/default.aspx http://www.interiorhealth.ca/sites/Partners/SchoolDistricts/Pages/HealthPromotionResources.aspx Online Action School (actionschoolsbc.ca)	Interior Health/School Committee- share information through newsletters	TBD	TBD	

Action/Initiative	Tasks	Responsibility	Start Date	Completion date	Estimated Cost
Sustainable Happiness lesson plans	Review information on the Public Health Agency of Canada website. http://www.interiorhealth.ca/YourHealth/SchoolHealth/HealthPromotion/Pages/default.aspx http://www.interiorhealth.ca/sites/Partners/SchoolDistricts/Pages/HealthPromotionResources.aspx - Online Action School (actionschoolsbc.ca)	School Committee - share information	TBD	TBD	\$
Objective 3: To encourage more students to walk to school					
Drop & Go / Walk a Block or Two	Identify suitable locations for students to be dropped off outside the school zone. Best-Routes-to-Casorso-Map-2021.pdf (rdco.com)	School Committee with support of STP facilitator	TBD	2022	\$
Buddy Scheme	Set up a scheme to encourage students to walk and cycle with others	Parents Council with support of STP facilitator	TBD	TBD	\$
Walking Competition	Detail a challenge and advertise Walking Wednesdays (other days). Walking Competition. Set up a walking competition for 3-4 weeks (March-June). STPCO could provide pedometers for each participant class and the pool entry fee to the H ₂ O Aquatic Centre for one winner class. School committee pays for class transportation to H ₂ O ParticipACTION - Home ParticipACTION (challenges and prizes)	Parents Council with support of STP facilitator	TBD	TBD	Cost per pedometer \$6-7
IWALK (International Walk to School Month – October)	Organize a Walk to School Week. How to set a walking competition.pdf (kelowna.ca)	School Committee	2021 - 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 Wednesdays or other specific days (March-June). How to set a walking competition.pdf (kelowna.ca)	School Administration	May 2021	Every year	\$
Appropriate dress	Organize a fashion show for Be Seen, Be Warm.	School Committee	TBD	TBD	
Bike and Walk to School Week	Encourage students and their families to walk, scooter, skateboard or ride their bikes to and from school. Homepage - GoByBike BC	School Committee	May 2021	Every year	
Carpool month	Promote Carpooling as a simple way for individuals to participate in the climate change challenge while saving money, reducing congestion, and conserving energy. Communicate in the monthly newsletter for families and staff). Resources: Free Carpool and Rideshare Listings (carpoolworld.com) Carpooling Software for Schools (carpoolworld.com) Carpooling and Car Sharing - Province of British Columbia (gov.bc.ca) Rideshare in Kelowna (shareyourride.net)	School Committee	October 2021	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 improve local air quality . Okanagan Regional Library Introduces Air Quality Monitor Kit to Help Patrons Breathe Easy (orl.bc.ca)	School Committee-	1 st week June 2021	Every year	
Objective 4: To facilitate safe cycling to and from school					
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) Bike registration to reduce theft and help recovery 529 Garage (project529.com)	SD23/ School Committee	Depending on priority	TBD	\$ review
Objective 5: Reducing Emissions from School Buildings					
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 are the emissions 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		\$

Action/Initiative	Tasks	Responsibility	Start Date	Completion date	Estimated Cost
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). School IAQ Fact Sheet: Overview U.S. Green Building Council (usgbc.org)	SD23	Ongoing		\$
Investigating 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		\$
Test for radon gas and ensure lowest levels reasonably achievable, with all space below the Canadian Guideline of 200 Bq/m ³	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 >4 hours/day • Implement interim and permanent radon reduction measures in obvious areas of concern, and especially in areas testing high. • Test buildings per the Health Canada Guide for Radon Measurements in Public Buildings, Workplaces, Schools, Day Cares, Hospitals, Care Facilities, Correctional Centres. • 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 • Be transparent with radon test results to staff and parents, along with promotional material encouraging staff and parents to test their indoor environments. • Educate students about radon, health effects and testing. Resources available: - o IH Healthy Community Development team at HBE@interiorhealth.ca Information and links on the Interior Health Radon Page • A Step-By-Step Manual for Radon Reduction, by Douglas L. Kladder, Protecting Your Home From Radon in Canada: a Step-by-step Manual for Radon Reduction Okanagan Regional Library BiblioCommons • School Resources - Take Action on Radon • Radon and Energy Efficiency BC Lung Foundation	SD23/School Committee Air quality As part of the RDCO school radon screening.	2020-2022	2020-2022	
Objective 6: To monitor the effectiveness of initiatives and revise the School Travel Plan annually					
Monitor transportation mode	Conduct Follow-up Classroom Survey. BikeWalkRoll How Did You Get to School Today?	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	October 2022	October 2024	\$
Oversee the implementation of Action Plan items and track changes over time	The follow-up hands-up classroom survey could be conducted at the end of every school year. If possible, a family survey should be conducted every second year.	School Committee	October 2023	October 2024	\$

Follow-up activities 2021-2024

School Committee Activities

The PAC started a new Kiss and Drop right after the intersection of Barrera and Casorso. It seems to be well received by parents.



Figure 22. New Kiss and Drop

Spring 2024

The school started a Walk to School Pedometer Challenge from April 29 to May 3. They set an individual goal of 10,000 steps a day. Each class calculated the total number of steps taken.

The class with the most total steps won a swimming field trip to the H2O Adventure+ Fitness Centre on June 4, courtesy of the Air Quality Program.

The winning grade 6 class was proud of their achievement and enjoyed their time at the swimming pool. The school made a great effort in this walking challenge, with 19 classrooms participating.



Figure 23. Walking competition winner

The combined total steps from participating students was 4,132,065. Considering each step is approximately 55.5 cm long, this means 2,293 km; that distance is comparable to walking 8 round trips from Kelowna to Vancouver!



Art Contest 2022

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 January 24, 2022, enthusiastic Kindergarten to grade 6 students participated with 256 drawings. A group of City staff voted on the top fourteen 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 fences. The winners are below.



Figure 24. Casorso Art Contest winners

City of Kelowna

August 2021

The City of Kelowna completed several infrastructure improvements around the school during the summer and fall of 2021.

- Parking curbs were installed on Casorso Road to stop double parking.



Figure 25. Parking curbs were installed on Casorso Road

- The gateway accessing the field at the rear of the school on Barnes Ave was relocated to the existing sidewalk. It now encourages pedestrians to use the sidewalk. Previously, it was in the middle of Barnes Ave and pedestrians mixed with vehicles as they used the road to enter/exit the field.



Figure 26. Gateway was relocated

- No U-Turn signage has been installed on Casorso Rd (north and east of the school), Barrera Rd, and Bechard Rd.
- Additional bike symbols have been installed in the bike lanes on Casorso Rd.
- No Parking symbols have been installed in the bike lane on Casorso Rd near the school driveway. They aim to remind motorists not to park in the bike lane or double park.



Figure 27. No Parking symbols installed in the bike lane on Casorso Rd

- Traffic calming curbs, stop bar, centerline, and parallel bar crosswalk road markings were installed on the west leg of the Bechard Rd & Casorso Rd intersection. The configuration creates a curb extension to increase pedestrian safety and lines up the crosswalk straight across the road.



Figure 28. Traffic calming curbs, stop bar and centerline on the Bechard Rd.

- Parallel bar crosswalks were installed at the Lanfranco Rd & Casorso Rd all-way stop intersection. Traffic calming curbs on corners were also included to shorten pedestrian crossing distances.



Figure 29. Parallel bar crosswalks were installed at the Lanfranco Rd

- The field east of the school (3715 Casorso) was investigated for additional pedestrian access. It is still being used for agriculture purposes and is planned to have future construction on a portion of the site. Therefore, pedestrian access is not an option and should not be travelled within.
- The school zone sign on the Casorso Rd WB approach near Mission Springs Dr was reviewed. According to the TAC School and Playground Areas and Zones manual, it cannot be placed further east of the Casorso & Mission Springs intersection. Therefore, it was left in place.

- A Zebra crosswalk was installed at the intersection of Casorso & Mission Springs. It includes a new curb letdown and concrete landing area on the north side of the crossing.



Figure 30. New crosswalk at Casorso & Mission Springs

- Passenger Loading Zone Signage has been installed along the west frontage of the school to facilitate efficient pick-up and drop-off behaviour.



Figure 31. Passenger Loading Zone Signage

- A service request was issued to cut the rebar so it doesn't stick out at the Bechard & Casorso intersection.



Figure 32. Photo of rebar to be trimmed down

- Vegetation maintenance was performed along the multi-use path
- Delineator posts were installed to protect bike lanes from vehicles parking or stopping



Figure 33. Delineator posts adjacent to the bike lane

In 2023, the city completed the Casorso active transportation corridor (ATC) on Casorso Road between K.L.O. Road and Barrera Road. This project replaced interim materials from the 2021 project with permanent infrastructure. This new corridor (Casorso 3 ATC) closed the final gap in the existing north-south network by extending the Ethel/Casorso ATC, linking Downtown and Capri-Landmark to Pandosy and Lower Mission. It gives people biking and walking better access to major destinations like Okanagan College, Casorso Elementary School, and Pandosy Urban Centre.

Key features of the ATC project from the project page include:

- Extension of protected bike lanes for over 1 kilometre to close the gap between the Ethel ATC and the Barrera multi-use path, completing a North-South connection from Downtown to the Lower Mission and the Mission Creek Greenway.
- Renewal of existing infrastructure, such as repaving Casorso Road, reconstructing sidewalks where necessary, and replacing old streetlights.

- New infrastructure, including:
 1. Concrete curb on Casorso to separate bicyclists from motor vehicles
 2. New markings and signage on Casorso
 3. New street lighting along Casorso
 4. Safety and accessibility improvements at all intersections, such as curb extensions to reduce crossing distance for pedestrians and yellow tactile walking surface indicators (TWSI)
 5. Formalized drop-off & pick up areas at Casorso Elementary School, including a new crosswalk at the school entrance and broader sidewalks to create a safer environment for school users
 6. Speed limit reduction to 40 kph due to the narrowed travel lanes and increased pedestrian and bike facilities
 7. 35 future street trees planned along the corridor from K.L.O. Road to Barrera Road



Figure 34. Casorso ATC fronting Casorso Elementary School access.

Includes separated bike path, sidewalk, streetlighting, accessibility improvements such as TWSI, and a new boulevard with future vegetation



Figure 35. Casorso ATC near Casorso Elementary School.

This includes new crosswalks, sidewalks, separated bike paths, signage and markings, TWSI for accessibility, and a pick-up drop-off area.



Figure 36. Casorso ATC between Swordy Rd and Bechard Rd.

A new bike path separated from the street with concrete curb and delineator posts.



Figure 37. Lanfranco Rd & Casorso Rd intersection.

Includes green paint and cross-ride markings for the Casorso ATC, new curb and curb letdowns on each corner, and TWSI for accessibility.



Figure 38. Bechard Rd & Casorso Rd intersection.

This includes curb extensions, TWSI, new curb letdowns for accessibility, separated bike paths, new markings and signage, and a tree boulevard.

Safe Route map

City staff collaborated 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 Casorso map](#) was created by City staff and is included in Appendix 3. It has been uploaded to the RDCO website.

Air Quality

Winter 2020

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 screening of radon levels in selected schools in Central Okanagan so school operators would learn how easy it is to test, 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. Casorso 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 fully 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](#)

Fall 2021

The PAC set up a walking competition and provided a few pedometers for the school.

- [The Cleaner Air Program](#) link was shared with the school committee. This program is part of The School Travel 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 edited. The school administration and teachers may schedule its delivery during the school year.
 - 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)

Winter 2023

- Provided instructions and the link to set up [Walking competitions](#):
 - October International Walk&Wheel to School Month
 - 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 Casorso School:

- Based on the students' postal codes and classroom survey, 61.7% of the kids are driven to and from school (driven + carpool + bus), and 38 % walk and/or bike/other.
- The emission factor of 0.2296 KgCO₂/km – "[Average Emissions](#) and Fuel Consumption for Passenger Cars"

Description	GHG(Tonnes/year)
Baseline: Casorso School GHG emissions due to kids driven to and from school. Average 61.7% (driven + carpool+ bus)	154
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).	70.5
GHG saved; Baseline: 38% of the students walk and bike to and from school.	18.5
GHG saved: Follow-up: 46% of the students walk, bike and roll to and from school.	22.3

The school increased active transportation from 38% to 46% from 2020 to 2024. As more kids walk, bike, and roll, around 3.8 tonnes of GHG/year are estimated to be saved.

Every tonne of CO₂ reduced counts!

Idling Awareness Campaign

The school participated in a [Pollution Pit Stop Idling Awareness Campaign](#) for four weeks, from May 28 to June 16 and September 13 to 29, 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-3 classes enjoyed a pizza lunch on October 31, 2024.
 - 18 idling pledges were received from the school community.



- A couple of idling banners were displayed on the school fences.
- The Air Quality program provided 290 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 250 families are attending Casorso in 2024. Considering 46% of students use active transportation, it is estimated that 135 is the average driver 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 CO₂/litre and cost of fuel 1.68 \$/litre
- If each driver of light-duty vehicles avoided idling for **6 minutes** a day⁵: Each driver could save **66** litres of fuel, **\$111** in fuel costs, and contribute to reducing **151 kg** of GHG emissions annually.
- As a school community, the CO₂ and fuel reductions could be:

	If 250 families don't idle (6 min/day)	If 135 families don't idle (6 min/day)
Fuel savings (L/year)	16,425	8,870
CO ₂ savings (Kg/year)	37,778	20,400
Cost savings (\$/year)	\$27,653	\$14,933

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.

⁵ [Idling Wastes Fuel and Money \(nrca.gc.ca\)](#)
RDCO.COM | SCHOOL TRAVEL PLAN CASORSO

Traffic Count Baseline Vs Follow-up

Baseline

Traffic count data was available at numerous locations near Casorso Elementary. This consisted of peak hour turning movement counts (TMC) at intersections and speed and weeklong traffic counts along road segments. Pedestrian volume is also included in the TMCs at intersections. Note that many side streets and parallel roadways to Casorso also have traffic count data available and can be used, if needed, for analysis. Primarily, the following locations were used for Casorso traffic count analysis:

- Barrera & Casorso intersection
- Casorso & Mission Springs intersection
- Casorso & Gordon intersection
- Bechard & Casorso intersection
- Swordy & Casorso intersection
- Lanfranco & Casorso intersection
- KLO & Casorso intersection
- Casorso road segment between Swordy and Bechard

Traffic count data is used for engineering analysis according to the methodologies and standards of the Transportation Association of Canada and other Transportation industry agencies. The following map displays the available traffic data surrounding the school:



Figure 39. Intersection vehicle and pedestrian counts indicated by dots

The Casorso tube count, located between Swordy and Bechard, was performed in 2016 and shows that:

- 85% of vehicles travel at 60 kph or less along this section of road (the speed limit is 50 kph)
- Morning volume increases sharply from 7AM to school start time at 8:30AM, then plateaus between 9 and 10AM
- Midday volume increases and decreases around the start and end of Lunch time, 10AM to 12PM
- Afternoon volume increases moderately from the end of lunch at 12PM to 4PM, thus encompassing the typical peak PM travel period.
- The travel trends and 3 daily peaks noted above are typical for the City of Kelowna and other cities
- From the intersection turning movement counts performed along Casorso between Swordy Rd and Barrera Rd:
 - The average daily traffic fronting the school's main entrance is approximately 2,700 vehicles during weekdays.

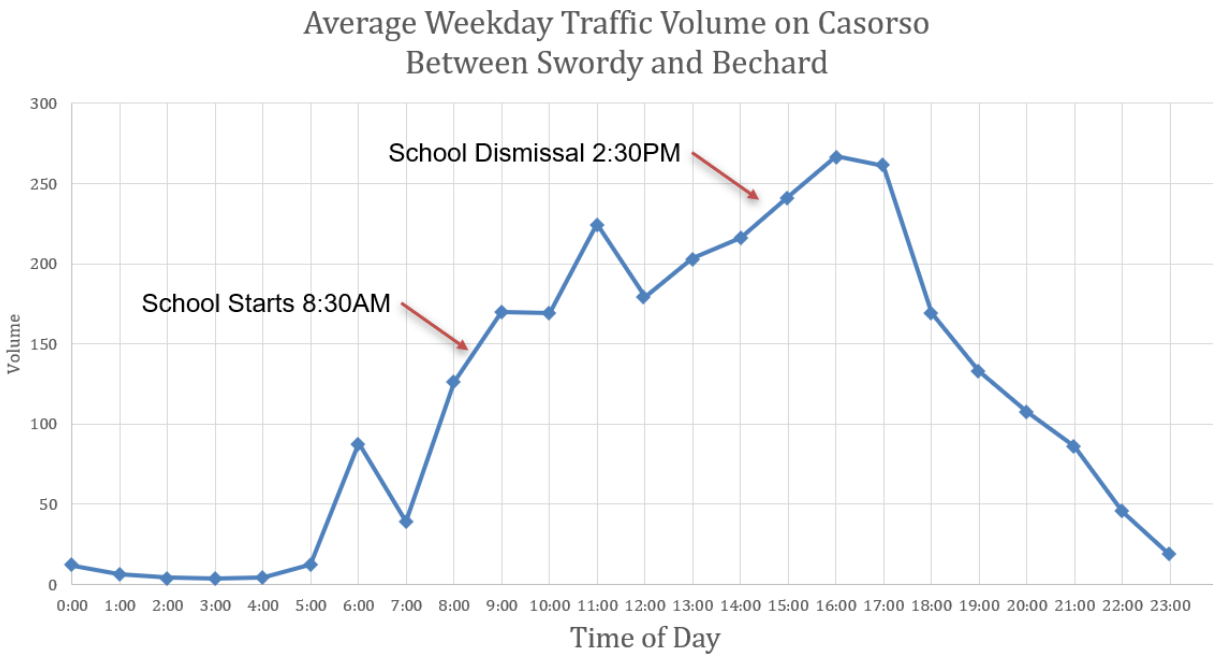


Figure 40. Average weekday traffic volume on Casorso between Swordy and Bechard

Follow Up

In 2023, the 1 km long Casorso active transportation corridor (ATC) was completed, connecting Casorso Rd to the Ethel ATC to the north and the Barerra Rd multi-use path to the south. The Casorso ATC fronts the school and the design incorporated pedestrian and cyclist access to/from it. Traffic count data was collected in 2024 to review traffic volumes along the corridor.

Traffic counts were conducted in May 2024 at the intersection of Barerra Rd & Casorso Rd and Bechard Rd & Casorso Rd, capturing the section of Casorso Rd fronting the school. The following results were determined:

- 2024 Average daily traffic (ADT) = 2,500 vehicles
 - a. A slight reduction from 2,700 vehicles recorded before the ATC project
- The AM and PM peak hour around school admittance (8:30 AM) and dismissal (2:30 PM) time experienced a small decrease in traffic compared to the 2021 before volume:
 - a. am
 - i. 2024 volume = 261 vehicles
 - ii. 2021 volume = 291 vehicles
 - b. pm
 - i. 2024 volume = 217 vehicles
 - ii. 2021 volume = 246 vehicles

Overall, the traffic volume in this section of Casorso is relatively low-moderate. The slight decrease in traffic after the ATC opened still benefits pedestrians and cyclists accessing the school.

Follow-up Classroom Survey results: 2020-2024

Casorso Elementary has 23 classrooms, and during the week of October 13 to 19, 2020, teachers performed the hands-up classroom survey, 18 classrooms responded, accounting for 69% of the students.

During the week of May 6 to 10 and September 23 to 27, 2024, follow-up online classroom surveys were completed; [Casorso Elementary School-STP Follow up - BikeWalkRoll](#), providing the mode of transportation "To" and "From" school. Twelve classrooms completed the "to" survey, accounting for 68 % 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)	532x5= 2660	490x5=2450
Number of respondents (actual trips TO school tracked over 5 days)	1,832	1,672
Confidence level	95%	95%
Margin of error	1.28%	1.35%

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

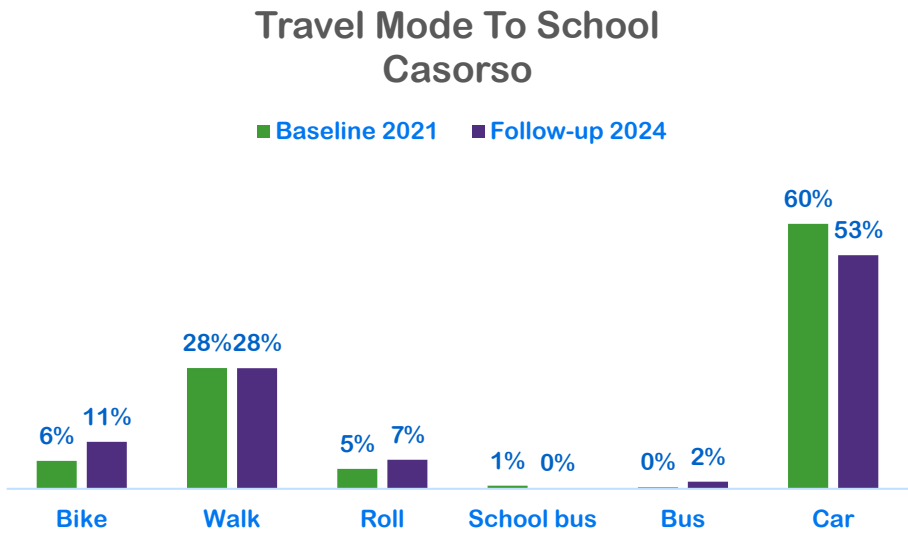


Figure 41. Travel Mode To School- Follow-up 2024

Before implementing the School Travel Plan, data shows, with a margin of error of $\pm 1.28\%$ and 95 % confidence level, that 59.2% to 61.8% of the kids travelled "To" school by car in 2020.

After the School Travel plan implementation, data shows, with a margin of error $\pm 1.35\%$ and 95% confidence level, that 52.1% to 54.8% of the kids travel "To" school by car. That means, on average, 7% 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)	532x5= 2660	490x5=2450
Number of respondents (actual trips TO school tracked over 5 days)	1,813	1,574
Confidence level	95%	95%
Margin of error	1.30%	1.48%

In 2020, sixty-eight percent of the 532 students attending Casorso were tracked over one week. In 2024, we tracked 64% of students. The travel mode comparison "from" school over a week is shown below.

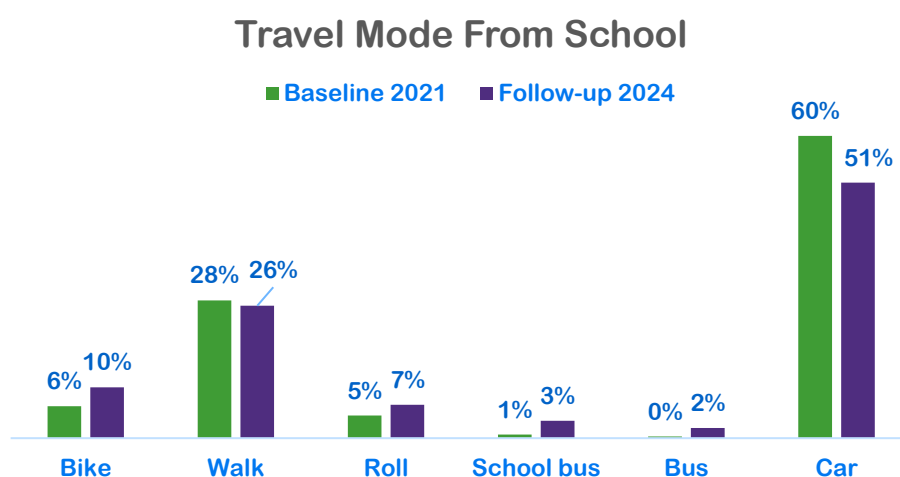


Figure 42. Travel Mode From School- Follow-up 2024

Before implementing the School Travel Plan, data shows, with a margin of error of $\pm 1.3\%$ and 95 % confidence level, that 58.7% to 61.3% of the kids travelled "From" school by car,

After implementing the School Travel plan, data shows, with a margin of error $\pm 1.48\%$ and 95% confidence level, that 49.7% to 52.6% of the kids travelled "From" school by car. That means, on average, 8.9% fewer kids travel From school by car in 2024.

On average, there is an 8% increase in the use of other sustainable modes (walk, bike, roll, school bus, and public transit) "To" and "From" school.

Follow-up Family Survey Results: 2020-2024

In 2020, one hundred and fifty-nine family surveys were received out of 400 families, which means 40% of Casorso School families provided insightful information. In 2024, the school was integrated by around 250 families, and we received ninety-four responses through the online family survey: [School travel planning program](#), which means only 38% 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 2020	Follow-up 2024
School population (number of families)	400	250
Number of respondents (surveys received)	159	94
Confidence level	95%	95%
Margin of error	6.04%	8.00%

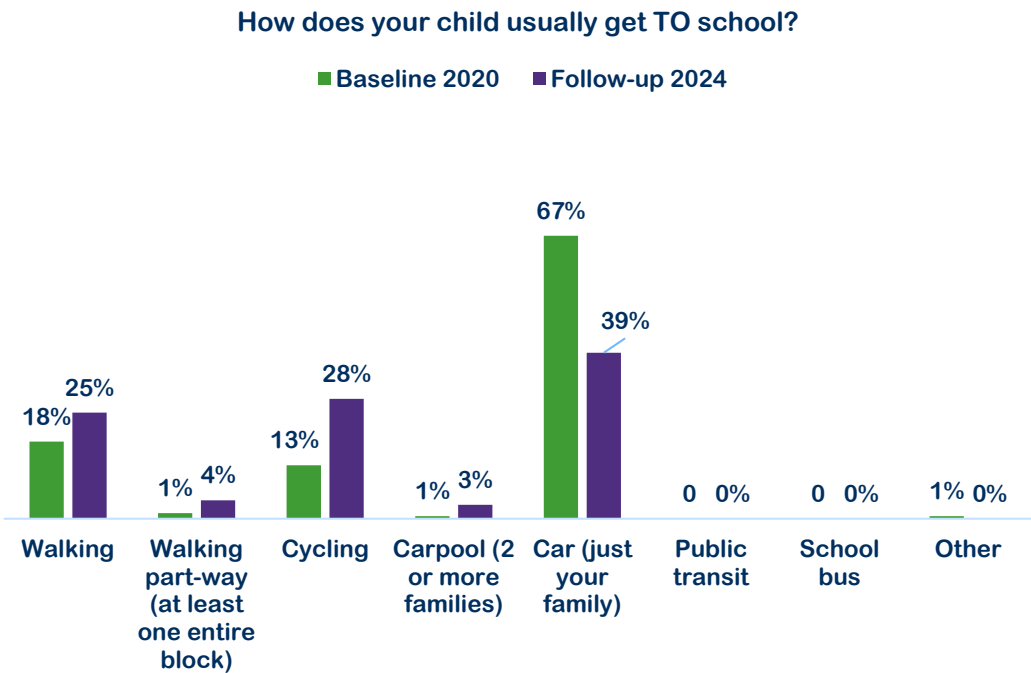


Figure 43. How does your child get To school? - Follow up

Other: Daycare at Casorso, after-school program bus, and grandparents pick them up. Drive to a safe bike lane, and then bike 3 blocks. Scooter

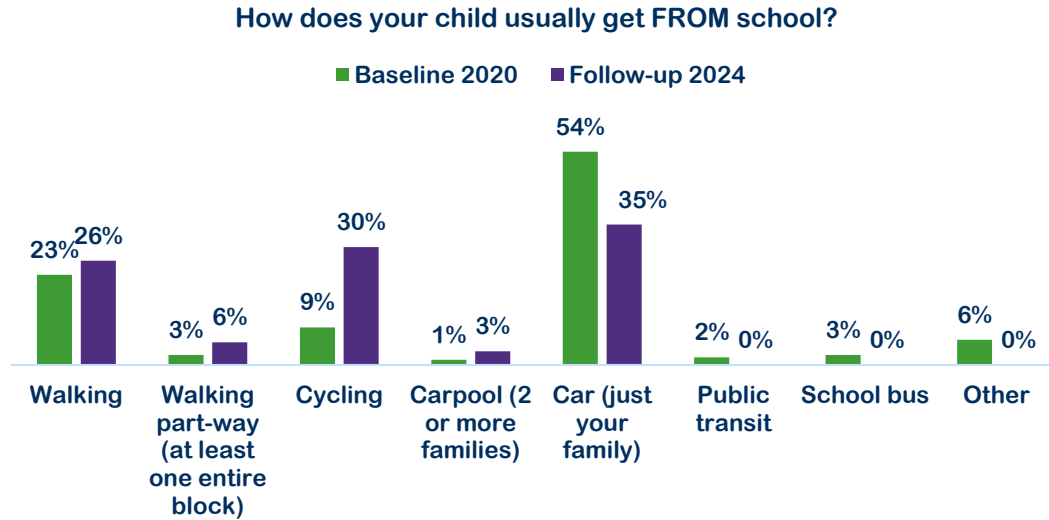


Figure 44. How does your child get From school?- Follow up

Other: After-school care bus, Mix of school to after-school care and car (single family).

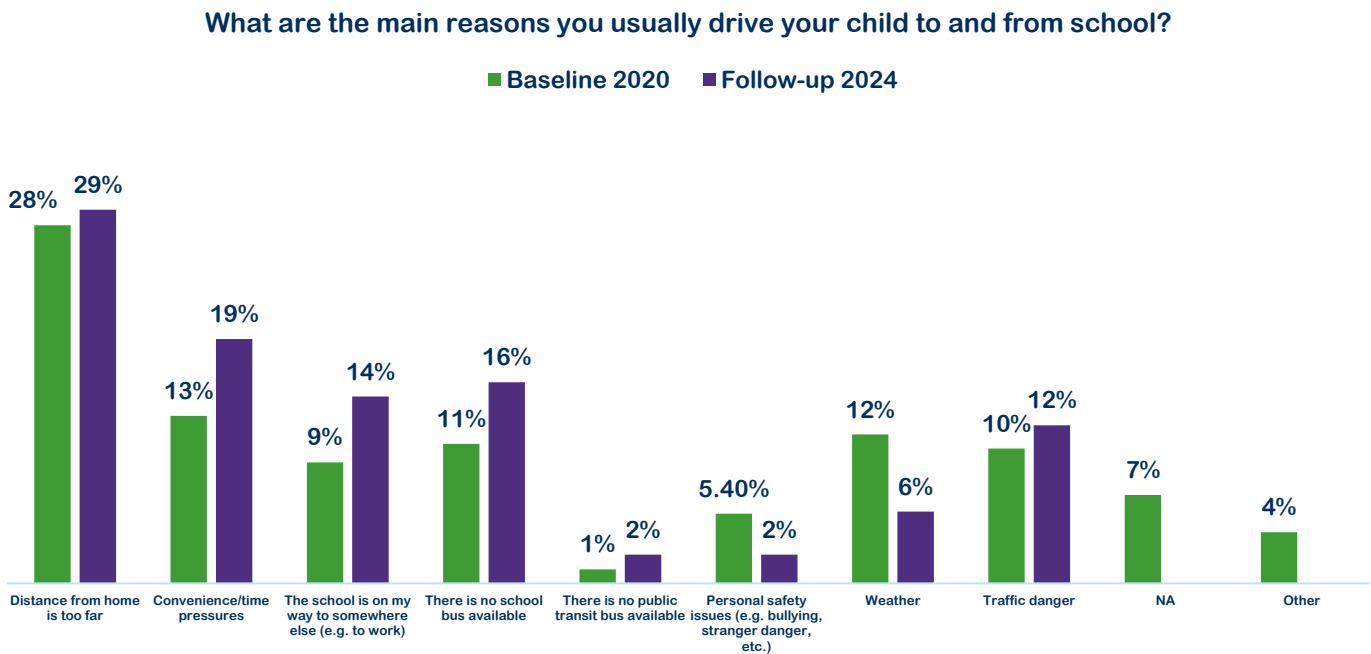


Figure 45. Main reasons given for driving kids to school- Follow-up

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

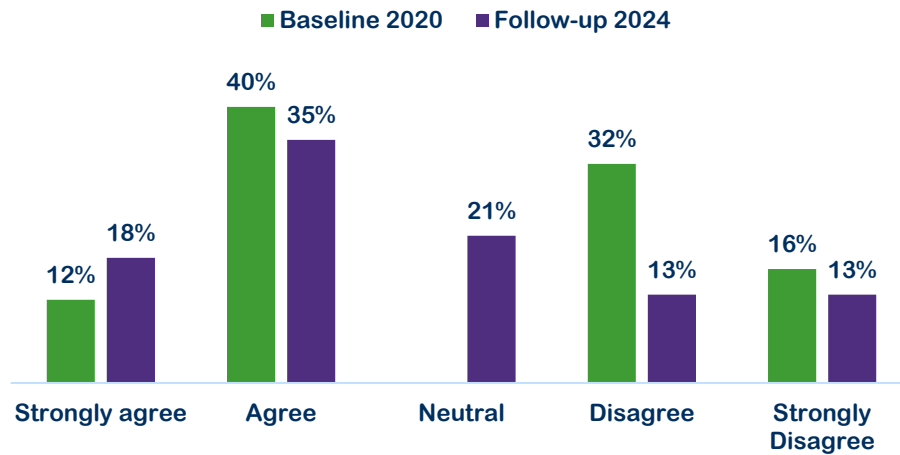


Figure 46. The route we take to and from school is safe for children to walk

Reasons provided in "Other": They could take the bike to their after-school program. If the weather was agreeable to biking Nov through March, but it is too cold, snow and other weather concerns; the afterschool care pick-up does not have a bike rack; they ride to school in fall/spring.

I would allow my child to walk to school if

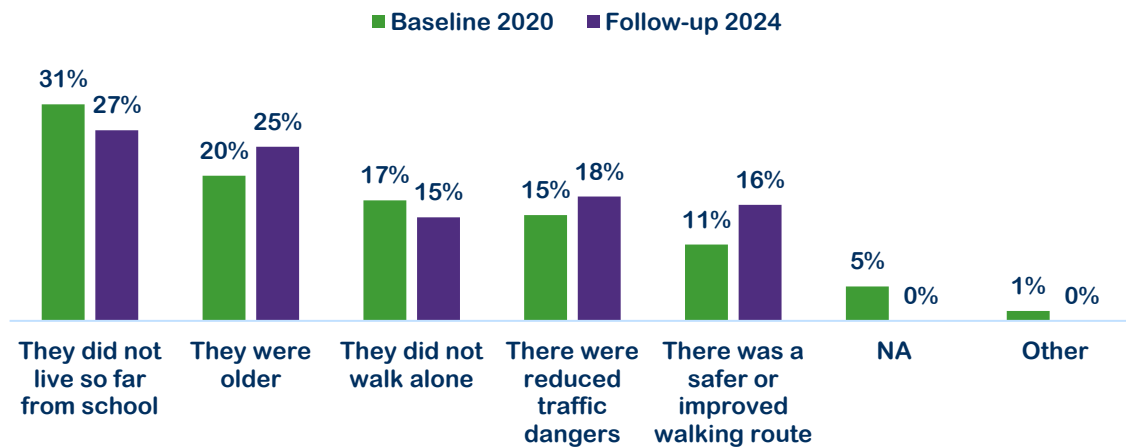


Figure 47. I would allow my child to walk to school if..

"Other" included: I will let them walk alone when they are a little older, but for now, I walk with them; There was a safer or improved walking route; There were reduced traffic dangers, they need another crosswalk, on mission springs / Casorso; My boys do walk to school. And will walk alone once the younger is more comfortable and a bit older. She does, but it's 3km, and she prefers to bike. They bike, and walking takes 30 minutes (twice the time). A continuous sidewalk on each of Landie Road and Bechard Road. Sidewalks were installed. There are no sidewalks on my street or Lanfranco.

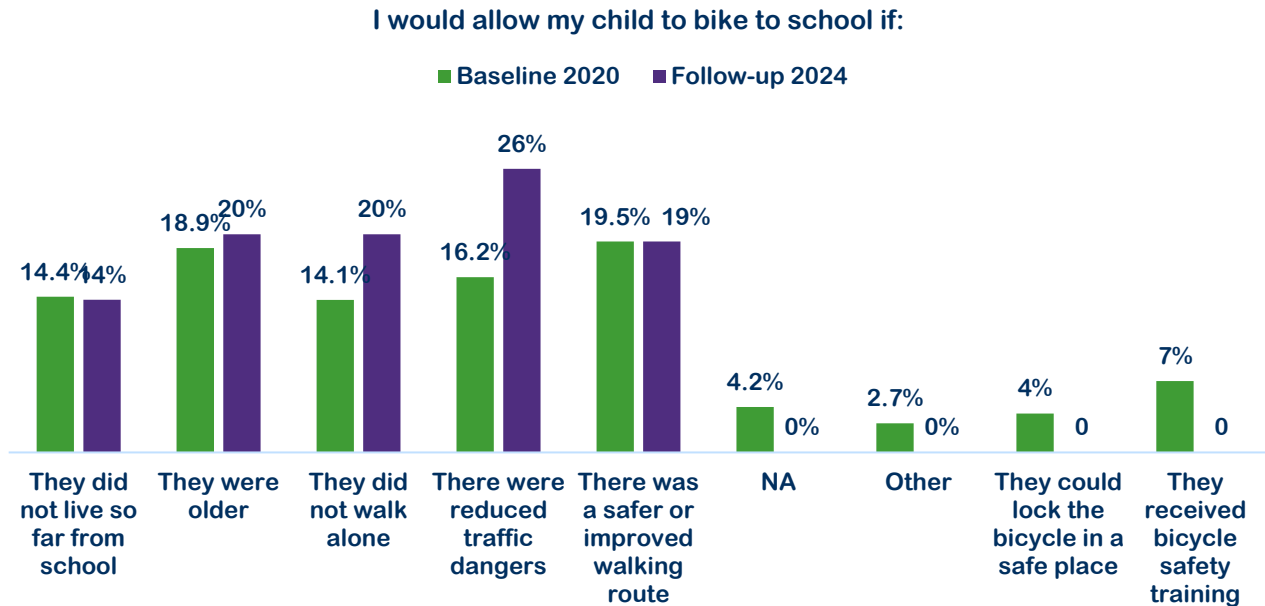


Figure 48. I would allow my child to cycle to school if..

"Other" included reduced traffic dangers and they received bicycle safety training. They could lock the bicycle in a safe place; There was a safer or improved bicycling route. There were reduced traffic dangers, Crosswalk needed. I bike my kid in (Chariot attachment) when it's not too cold. It's too far in winter. We bike with them when we can (usually fall/late spring). The biggest reason is traffic does not pay attention. Cars often ran red lights at KLO/Casorso while my kids biked on the crosswalk. More flashing lights or something needs to be done here as kids often cross here (from either direction) to get to their schools. We need traffic calming in front of the school zone from Gordon and Lakeshore. I have no problem with my kid biking to school. There are amazing bike paths now.

How does your child feel on the trip To and From school?

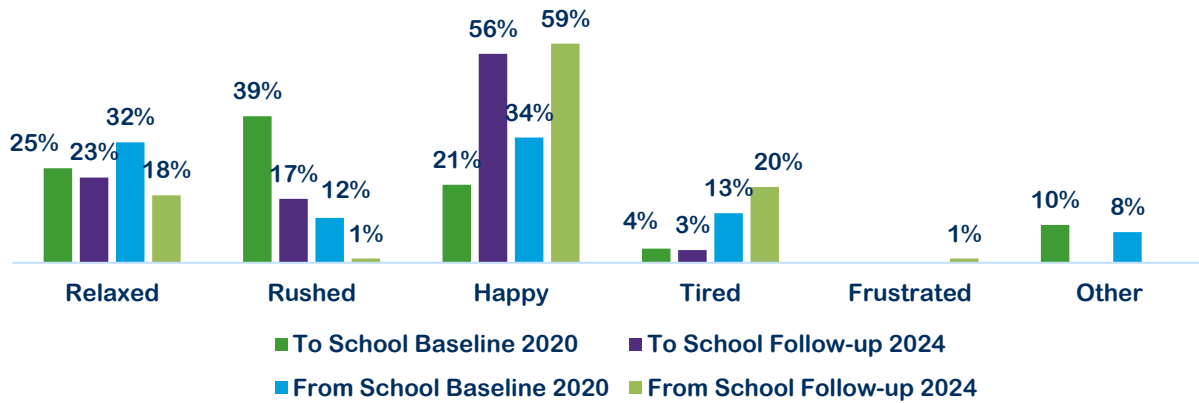


Figure 49. How does the child feel on the trip to and from school? Follow-up

Other: Depends on the day :). Frustrated by traffic. Stressed by all the traffic, car doors opening, crowded sidewalk, idling and narrow funnelling of pedestrians to the school. My son independently goes (After school) from Casorso to my school, KSS. I feel a little nerve-racking sometimes until he gets there. Just knowing that he does cross the street and stranger danger. But he's in grade 6 now, so I definitely feel better he's been doing this since kindergarten. It wasn't till grade four that he started doing it part-time on his own he always had a great six buddy walk him.

How far away from the school do you live?

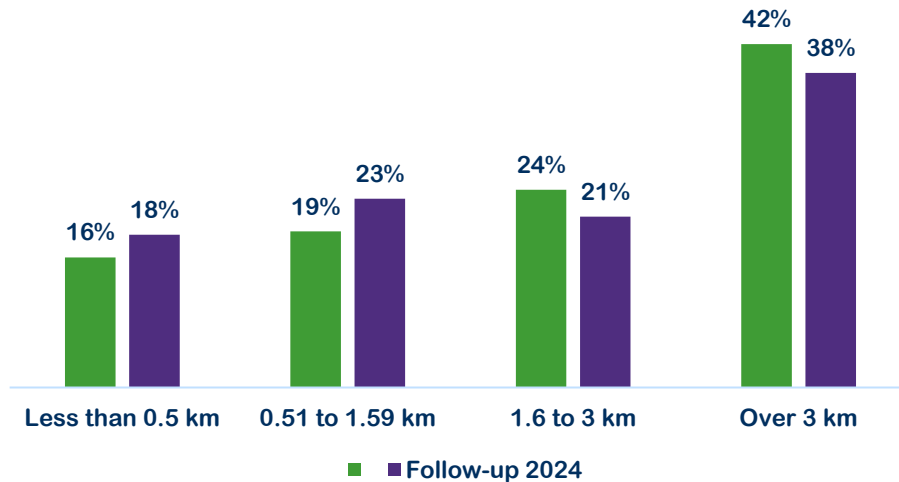
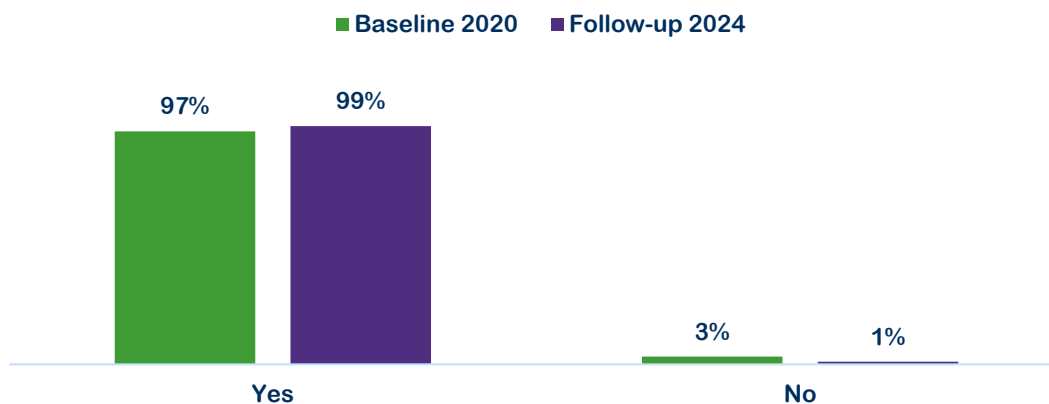


Figure 50. How far away from the school do you live? - Follow-up

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 **38% 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?

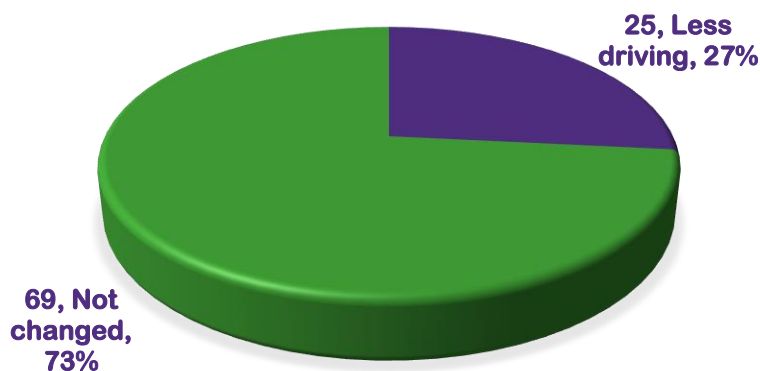


Figure 51. In what ways have your family's school travel habits changed since the project began?

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

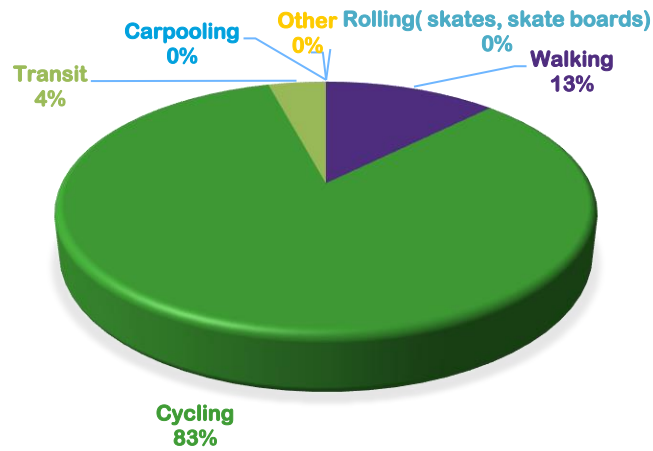


Figure 52. If you drive less for trips to and from school, what are you/your child doing more?

Has the volume of vehicle traffic outside this school changed?

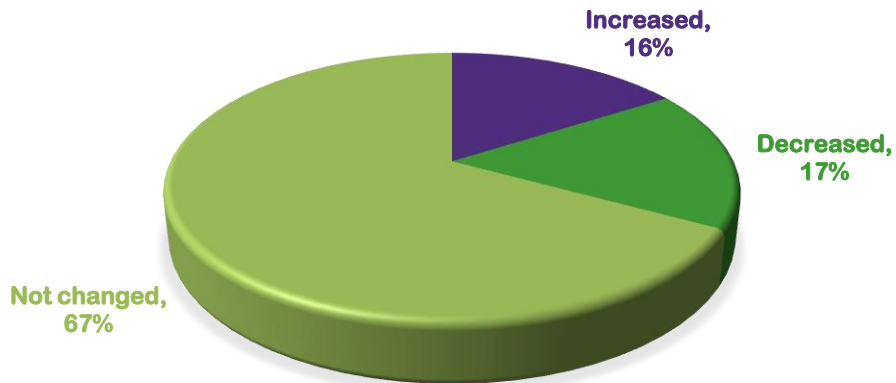


Figure 53. Has the volume of vehicle traffic outside this school changed?

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

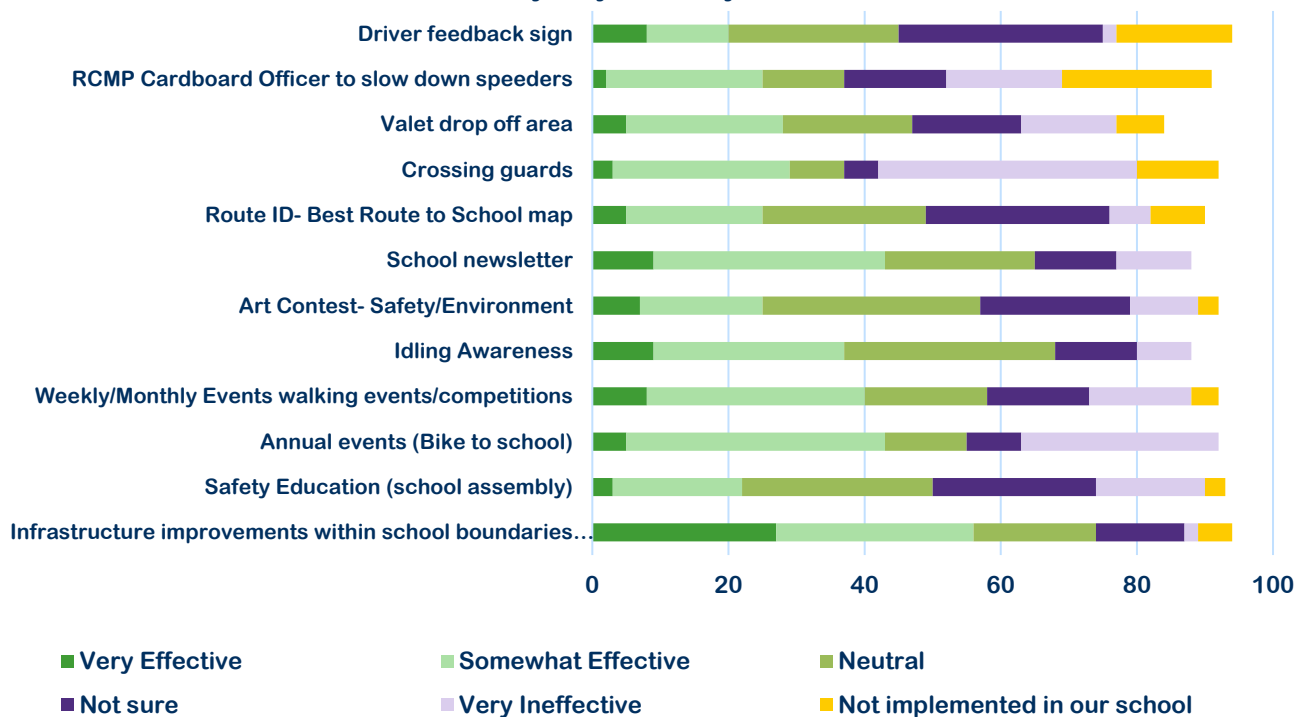


Figure 54. Which school programming activities were implemented, and how effective were they?

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

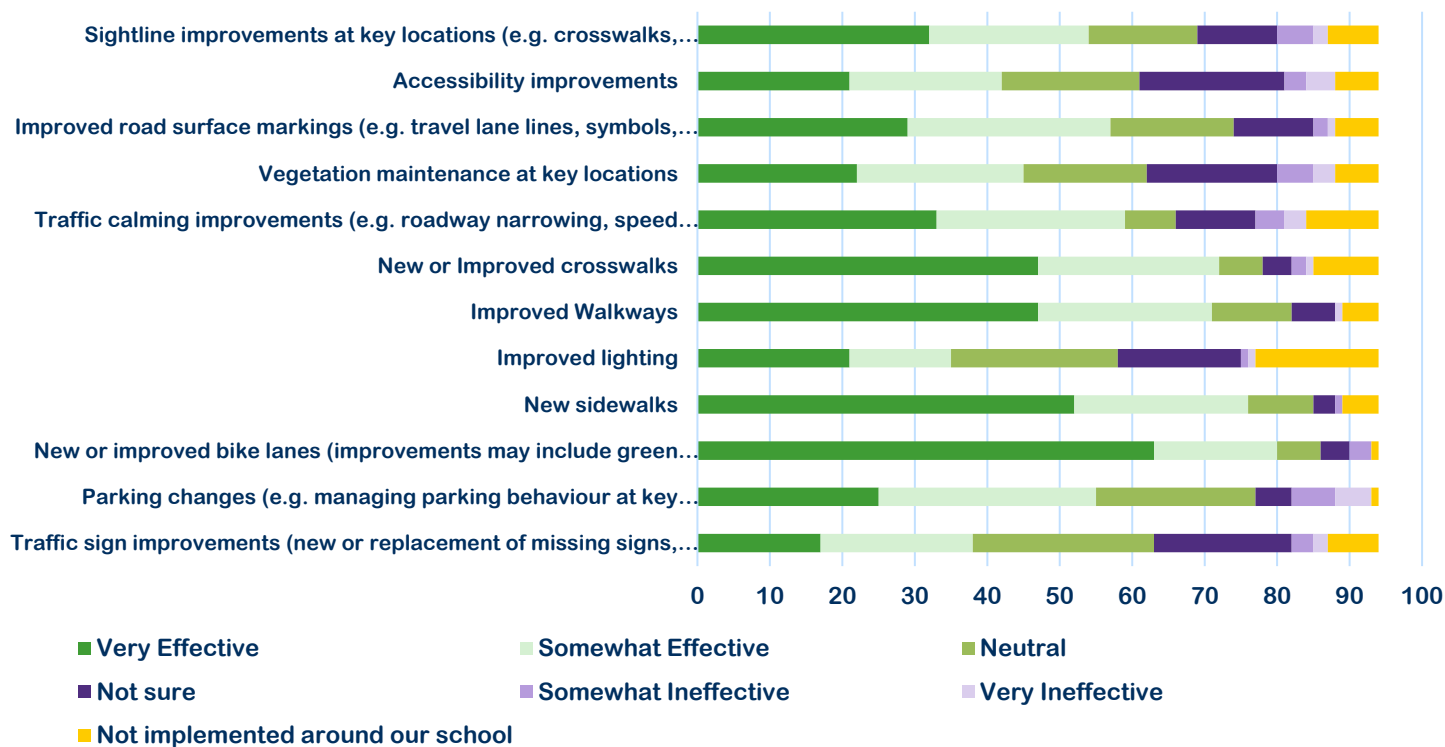


Figure 55. What infrastructure improvements were implemented by the City, and how effective were they?

Conclusions and Recommendations

- After a few years of activities and infrastructure improvements around the school, there was an 8% positive shift in sustainable transportation as more kids walked, bicycled, rolled or used transit. In 2024, 48% did not travel in personal vehicles. Casorso Elementary has done a great 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” and “if kids were older.” 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 options over time. This program 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 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. 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 99% 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 some Action Plan activities for the coming year.

Endorsement

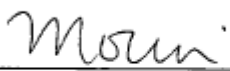
In May and September 2024, the follow-up family surveys collected data after completing substantial work. The results were compared to the baseline data gathered in October 2020.

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

Vice-Principal

Municipal Lead

< November 2024 >



Natalie Morin



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. The committees received an introductory document of the School Travel Planning and the Terms of Reference of the Municipal and School Stakeholder Committee for their review. The Municipal and School committee members were aware of their activities in advance and provided their input in the following manner:

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

Table 7. Members of the School STP Committee

Stakeholder	Staff	Roll	Contact information
Casorso Elementary School		Description	Contact information
School Administration	Natalie Morin Bryce Owens (Former)	Vice-Principal	Natalie.Morin@sd23.bc.ca Bryce.Owens@sd23.bc.ca
Parents	Carolina Restrepo	Main Contact	
	Tanya Miles	Parent	
	Kirk Penton	Parent	
	Miriam Desjardins	Parent	
	Ali McMillan	Parent	

Table 8. Members of the Municipal Stakeholder Committee

Stakeholder	Staff	Roll	Contact information
	Name	Description	Contact information
City of Kelowna	Mike Kittmer Jerry Dombowsky (Former)	Transit and Programs Manager	mkittmer@kelowna.ca jdombowsky@kelowna.ca
	Dan Glasscock	STP Facilitator/Traffic Safety officer	Dan.Glasscock@sd23.bc.ca
	Nancy Mora	Project Coordinator	nmoracastro@kelowna.ca
	Jayde Hiemstra	Communications Coordinator	As needed basis jhiemstra@kelowna.ca
	Jasen Sackmann	Traffic Technician	JSackmann@kelowna.ca
RCMP	Federico Angulo	Law Enforcement	Federico.ANGULO@rcmp-grc.gc.ca
School District	David Widdis	Planning Manager	david.widdis@sd23.bc.ca
Interior Health	Tanya Osborne Katrina Lehenbauer Mike Adams	Environmental Health Officer Team Leader, Healthy Communities	tanya.osborne@interiorhealth.ca Katrina.Lehenbauer@interiorhealth.ca Mike.Adams@interiorhealth.ca

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

The School Travel Plan for Casorso Elementary has been endorsed by Vice-Principal Nadia Piasentin on behalf of the school, and by one representative of the Municipal Stakeholder Committee.

School Principal

Nadia Piasentin

Signature



Date

March 11, 2020

Lead representative of
Municipal Stakeholder Committee

Jerry Dombowsky

Signature



Date

March 11, 2020

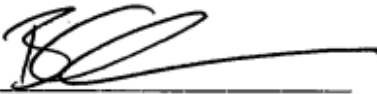
Endorsement

The School Travel Plan for Casorso Elementary has been endorsed by Vice Principal Bryce Owens on behalf of the school, and by one representative of the Municipal Stakeholder Committee.

School Principal

Bryce Owens

Signature



Date

April 2, 2021

Lead representative of
Municipal Stakeholder Committee

Jerry Dombowsky

Signature



Date

April 2, 2021

Statement of support

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

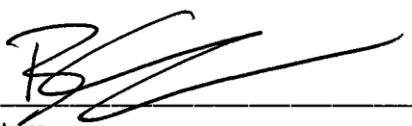
I understand that our school will have the following responsibilities:

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

School Vice Principal:

Bryce Owens
Name

Casorso Elementary School
School Name


Signature

June 16, 2020
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 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

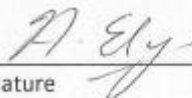
School Travel Planning Municipal Stakeholder Committee Statement of Support

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 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.

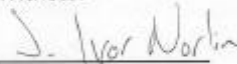
Anita Ely
Name


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 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. Walkabout Findings and Family Survey Comments

The Walkability Checklist	Findings by School and Municipal Committees
At the School Site	
Parking lot, or on road parking at school	
Is there potential for vehicle and pedestrian conflict?	Along Casorso Rd heading north-The crosswalk needs markings, sidewalks and a specific entry/exit area-Double park at Casorso-eastside of Casorso, vehicles double parking reducing visibility of vehicles and pedestrians-Doors opening into sidewalks-Cars blocking crossing Casorso @ Bechard-Yes, mostly because not proper driver behavior/parking in forbidden areas-physical barriers needed- people standing in traffic-some still use kiss and go- girls got out in through lane-Lack of cross at Casorso and June Springs- too many vehicles for too few spots-vehicles entering school from exit- Casorso @ Barrera cars parked at yellow zone
Is traffic flow clearly signed? (on ground and on signs)	No-Right turn only sign at parking lot exit-Yes, but could use newer grand signs-Crosswalk paint chipped-no crosswalk paint @ Bechard crossing-The school zone signs need to be moved to include new possible crosswalk at Casorso and Mission Springs-vehicles speeding up into school zone- No U-turns signs could help- painting school zone-stopping longer than needed in drop off areas- U-turns on Casorso
What is the parking and driving behaviour of driving parents and staff?	Crowds-getting kiss & go operational-speeding-double parking-running across street-narcissistic-parents in rush-since kiss and go was removed has been a rush of traffic-double parking on Casorso-opening doors into traffic-vehicles idling-parking in inappropriate areas-Chaotic, unsafe-idling until closer to drop off time-parking in yellow zones (near crosswalks or fire hydrants)-cars driving 50km/h, U-turns- cars on bike lanes-from 8:20 to 8:30 is like a cage match-not mindful of flow at crosswalk intersection, blocking visibility by parking in yellow zone-
How do children access the school from parked vehicle? (do they use a crosswalk, is one available?)	Yes-Bottleneck-request crosswalk at church & Bechard crossings- A good portion of kids walk to school, usually appropriate crosswalks. Some cross in non- marked areas, very dangerous- Some jump out in through lane-lots of kids jaywalking-yield to pedestrians- students walking between parked cars- after bell congested at 8:34 all quiet-
Is there parking lot supervision?	None-no crosswalk near entrance-pedestrian access is too narrow from sidewalk-concerns about snowbanks affecting safety crossing road & narrowing sidewalks- School parking lot closed-
Facilities for walkers on the street next to the school site	
Number and position of safety patrollers, adult and/or student, if any. If they are not currently organized, are they needed?	None- In the past we have 6 graders helping at the crosswalk- not organized safety patrollers, could use 2 groups- There are needed for sure-Safety patrol would be helpful-needed
What are the sight distances from school crossing to road curves, blind corners, or school and transit bus zones?	Sight constraint to north from Bechard- very hard to see children crossing-parents park close to the crossings and create blind spots for drivers and pedestrians-lighted crosswalk, difficult to see- add curb on south side of Casorso
How is the placement of the school crossing in relation to driveways and bus loading zones?	Bechard & Barrera families cross mid-block-no painted crosswalks-crosswalks not aligned @ Casorso and Bechard-Bad sightlines-many children not using crosswalk across Casorso on westside of school-the road from Green Square is difficult for vehicles to turn and kids to use the crosswalk-
Are there sidewalks?	No sidewalks on Bechard where students are crossing Casorso-Sidewalks on Casorso are very close to doors opening-Yes, there are two, but probably more are needed-narrow-lots of street walking some with Mission Springs Community-overgrowing shrubbery leaning on sidewalks
Walking paths to the school	
Where are the access points for students?	One with restriction to fence& gate post-Back of the school by the field-Front of the school and driveway-Several access points-quite narrow opening thru fence-end of field- remove fence panel at exit to increase walkway
Is there potential conflict with vehicles?	Yes-Vehicles exiting from parking lot-at all entry to school property-intersections-narrow access by bus loop-next to the parking lot-always a conflict at driveway entrance- Yes, when people use the kiss and go lane. - Yes, increase pedestrian walkways into school
Is the lighting adequate along walkways?	Yes-Likely needs more to meet TAC levels- It is pretty dark
What is the maintenance of walkways, i.e. snow and ice removal; mud, puddles; holes needing filling?	Yes, the buses are in the way so conflict with bike scooters and pedestrians-walkways appeared well maintained-Outside the school is ok, but inside not very good. -need proper snow clearing-along north Casorso puddling occurs- Good, although access though the field becomes treacherous in winter when it turns to ice

Can routes from backfields, adjacent parks, be used year-round?	Yes-back field gate? - possibly-Yes, but backfield causes conflict with neighbors-Yes, but dangerous in winter
Bicycle facilities	
Bike racks: do they exist? Are they secure, sheltered?	Behind basketball court, fenced; not secured-not sheltered-very hot in summer-bikes hot to sit on-they are secure
Is there potential for conflict with vehicles to access the bike storage area?	Narrow park between gate post & fence-narrow point of entry to both spots with for traffic and bikes-no conflict-potential conflict between bikes, cars and pedestrians- Sort of, bikes use one of the two driveways entrances- considering widening entrance to avoid conflict with bikes and pedestrians
School Bus/After School Care Loading Zone	
Where do students wait for busses, and for how long? What type of supervision is employed?	Not observed-Now there is not much to wait because of COVID protocols-bus comes thru parking lot lane, concerns-parking sign-
How many busses, vans and special needs transportation vans/busses access the school?	Once short-term small Bus and one for special needs (1 student) - more cars are driving thru parking lot lane
Are there ramps, any special entrances or accommodations for students with diverse abilities?	Several entrances to classes-fully accessible
Further items to look for	
Emergency vehicle access	Yes, every entrance-Drive thru area
Location of garbage dumpsters and other school maintenance equipment	Off the path-Right in the middle of walk in area @ entry doors-Entrance of Casorso quite cluttered with storage container, transformer and narrow fencing-dumpsters in main entrance west of school-
No-idling signage	Yes, plenty of signage-Sing on Casorso-Kiss and go lane- more needed- on street-place along school fencing
For waiting students and families	
Shelter from inclement weather/shade	None -tree by Casorso (north) willow tree-minimal- needed-some trees on some sides of school
Play area	Play structures
Natural landscape	Plenty of natural landscape-none-not really- needs more
In Areas Surrounding School Site	
Walking facilities and traffic observations	
How far do sidewalks extend around the school and into the surrounding community?	To KLO on one side-all around-there are wider sidewalks on the south side of the school, but on the west side are quite narrow-plenty of sidewalks-most of the way around-
What is the type, volume, speed, noise and pollution of traffic on surrounding streets—perceived and real (the municipality might have volume and speed counts).	High volume during school drop-off & pick up-Vehicle turnover slow-speeding-neighbors unhappy with parking-speed problem at Lanfranco. Low traffic during the day-Casorso Rd low, Barrera medium- lots of speeding from non-parents- Good, but noisy, busy during drop off/pick up
Are there heavy trucks? Are there problem areas where a heavy truck might mount the sidewalk to turn at an intersection?	No, not a truck route- Only during construction projects- there are lots of developments going on around the school-a few-there are heavy trucks, but there are wide roadways
Are there on-street signs that indicate to drivers they are approaching a school zone? Are they visible?	Yes- not visible-last year city trimmed the trees- visible but commonly not followed-Yes, they are visible-need to be moved before Mission Spring Rd-Is there a way maybe some lighting on them?- Speed zone indicator/electronic would be helpful at Barrera/Casorso
Timing of traffic lights? Do they allow enough time for small children to cross safely?	NA- we need more light in other pedestrian crossings
Alternative safe parking locations	
Is there an area away from the school to suggest for distant driving families to safely park to take part in a walk-a-block-or-two scheme?	Yes, church and side streets-Church has large parking lot that can be used -Parking lot at Barrera (towards Lakeshore) works well
Bicycle facilities	
Are bike paths or lanes suitable for families?	Non existing on Casorso, kids use sidewalks-not enough bike lines-Not yet, Casorso road "bike path" is really needed-on Casoroso to KLO , narroe sidewalk and pathway not safe for children during drop off/pick up- Yes, up Barrera, use this daily and feels very safe-some bushes need to be cut back as they overgrown-not sufficient

Are best cycle routes identified?	No- often in the morning vehicles double parking in bike lanes
Non-traffic related items to consider	
Types of buildings surrounding school: residential, recreational, commercial, industrial	Residential-trailer park-dense building residential area-parks close by
Location of other public spaces near school: parks, community centres, libraries, churches	Church nearby
Number of shade trees on streets	Trim bushes at Lanfranco-needs street trees at sidewalk to extend north of Casorso-
Green space vs. concrete space	none- more concrete than green
Graffiti on buildings	None
Physical state of the sidewalks	good state-sidewalk could be wider
Size of the sidewalks	Narrow park between gate post & fence-narrow point of entry to both spots with for traffic and bikes- no conflict-
Garbage along the routes to school	Not observed-garbage at school entrance for pedestrians
Obstructions on the sidewalks	None- Yes bushes overgrown on both sides- narrow at north parking lot exit-congestions for cyclists and pedestrians
Block Parent or Neighbourhood Watch community—if so, where are Block Parents located?	Unknown
Potential or known areas where crime, bullying, loitering or intimidation is possible	None near school

Additional comments from Baseline Family Surveys	
This corner is more accidents waiting to happen.	
There should be a pedestrian controlled crosswalk on all four corners of this intersection. (Lanfranco/Gordon) Cars blow through this stop sign turning onto Gordon nearly missing students coming and going to Casorso and KLO. Presently, there is only pedestrian controls going across Gordon.	
Cars roll through stop signs. Long lines of traffic, which is intimidating for younger students to cross at this intersection.	
this side of the intersection' stop sign and crosswalk is not overtly visible and needs repair.	
need a bike lane that goes all the way to Casorso	
Parents drop and pick up kids at rear field area of Casorso Elementary and it can get very congested and dangerous when they are turning around at dead end street while cars are parked, and kids are exiting the field area.	
Enforce the right turn only rules, and no double line of cars and no blocking the sidewalk.	
Make this reserved parking for parents of kindergarten (maybe include grade 1 students), as the Kindergarteners need to be walked to the classroom door and picked up from the classroom door. make this section of road in front of Casorso a crosswalk.	
Open this gate up so students and parents can use the crosswalk to cross the street, then use this walkway to avoid the kiss and go lane exit.	
Now that Mission Springs Drive connects all the way through to Casorso many parents are parking and dropping kids off here. While construction continues and many more occupants are filling the new condos the number of vehicles traveling have soared. Vehicles are rushing to/ from work, signs reminding occupants of school zone or speed bumps would be helpful as this is new road students are walking and biking to school.	
Create a kiss and go lane in this parking spots	
Cars often speed through this crosswalk or are impatient as children are crossing with bikes or as pedestrians.	
This intersection is confusing and can be dangerous as a result. It should be a proper traffic light versus a pedestrian controlled flashing light. Cars speed along Gordon and Lanfranco and don't always stop fully or see pedestrians or bikers waiting for it to be safe to cross	
The speed of traffic along Gordon between KLO & Casorso should be reduced during school commute times. Traffic speed is never at the limit and even if it was, 60km an hour is too fast close to children who are on bikes or walking to school. Speed limits are not enforced at the best of times and are way over the limit on this stretch of Gordon.	
The address is really the dead end of Barnes where kids enter the Casorso field - this street is clogged with cars dropping children off in the morning or picking them up in the afternoon and can be dangerous for pedestrians and cyclists due to the congestion.	

The road quality and absence of a bike lane along Casorso between KLO & the school is problematic. There is gravel, sidewalk and poorly marked road lines which can be difficult for cyclists to navigate especially with the volume of traffic coming across Lanfranco.
This should be a stop sign not a yield sign. Too tempting to blow through this intersection and roll around the corner. Cars often turn left off of Gordon and right on Charolais from Cameron to avoid the light at Gordon & Guisachan which results in traffic and higher than desirable speeds in the neighbourhood.
Add crosswalk at the walkway to Southwind Dr., or just to the south by the exit from the school parking lot. In addition to being used by kids living on Southwind, it would be used by parents and kids that park on the west side of Casorso Rd.
From a two house hold opinion, we need to drive to school, As I am the primary person to drop off and pick up my child from school.
No bike lanes all along Casorso Rd from KLO to the school
No bike lanes
Need a bike lane along Casorso Rd from KLO to Casorso Elementary. Kids have very little space to bike in between moving cars and parked cars. If they swerve left they can be struck by a moving car while if they bike too close to the parked cars on the right, an opening door can knock them over.
A bit dark in the morning along this busy road.
Crosswalk needed across Casorso at Mission Springs
No sidewalk along east side of Lakeshore between Cook Road and Barrera Road. Kids have to cross Lakeshore twice and it is a very busy street.
Cedar to Gyro along Walnut has no bike lane
The creek bridge does not have a bike lane or walk way on the right-hand side of the road, nor does it provide a safe option for crossing to use the pedestrian walk way on the left side of the road
Lots of need for a crosswalk from Mission Springs subdivision.
Very busy intersection with advance green lights and only one side of road having a pedestrian crossing
School children of all ages use this unmarked crosswalk to travel to Casorso, KLO and KSS.
Drivers park in the bike lane before and after school.
Drivers park here idling cars. Drivers reverse out of this spot or do u-turns adjacent to school yard exit at peak times.
Controlled intersection required due to traffic volume, speed and pedestrian traffic.
Crosswalk urgently required

Additional comments from Follow-up Family Surveys

It is still very chaotic and crowded in front of the school for drop off. I need to park and walk my youngest to the door, however most of the areas are for "drop and go".

The bike lanes and sidewalks near the school are amazing now, but some of the roads leading up to it are lacking in safe lanes for kids to bike or walk. Also adding a spot for kids to stash their scooters safely would be good for those that prefer scootering over biking.

School is still too busy with cars in front of the school and so making parents drop off at a distance away would be better.

Education and encouragement for families to not walk in the bike lanes

The rules and systems are in place but there are always a few people in a rush (parents and general public), not following procedures, too fast, aggressive, on their phones - through the school zone at drop off and pick up times. Without enforcement, some people do not seem to realize the dangers/impact that they have.

New bike lanes are amazing! We use them a lot with the kids. Not just to and from school, but after school, on weekends, etc

The Abbott active transportation corridor abruptly and without warning ends at Cedar Avenue. This is the worst part of our bike ride to school because of the exposure to cars.

This also occurs at Rotary Park, where the separated active transportation corridor disappears and you have to bike through the busy beach parking lot. We have been almost hit by cars here multiple times.

There are still a lot of cars congested into a small road. Perhaps make it one way there?

My daughter has only attended this school for a couple of weeks now, so I am unaware of the changes that were made.

Added bike security to ensure bikes are not getting stolen on school grounds. A flashing crosswalk at Raymer and Ethel to link ATC corridors at the 3 way stop. Flashing lights at the 4 way stop at Casorso and Lanfranco, it's a lot to navigate for kids on bikes and drivers

The protected bike lanes that were built on Casorso are AMAZING! Please build more protected bike lanes just like that, and signs to help direct cyclists to the back roads would be super helpful.

We watch the YouTube series Not Just Bikes, and love following The Netherlands culture around city and town planning, and how - "if you build it - they will come" mindset. Meaning - build more protected bike lanes, and green banks, and people with start using it. (the same would be true of squares surrounded by coffee shops, ice cream parlours, and carless areas for more walkability, which would make Kelowna more accessible friendly for those in wheelchairs, and mobility scooters).

If city and town planning understand the benefits of mixed use - journey's to local shops and coffee shops would be walkable and bikeable. And if bike lanes and side walks are available, and these mind centres are available - people will come, people will get more active, and people will spend their money.

Our family were so fortunate to be able to use these protected bike pathways built on Casorso Rd since the start of them being built - all the way through the winter, spring and summer.

We are all in a better state of wellbeing, more fit, and even when there was loads of snow for one week last winter - we decided walking made more sense because we were used to being out and about in the mornings. We also noticed that snow and ice was removed from these pathways, so it made more sense to continue to cycle than it did to drive.

Our neighbours across the road, and others that live nearby often comment on how inspired they are that we bike to and from school so much, and I see more have joined the movement - in particular those with younger kids (approx 6 years old)

Please keep building more protected and separated bike paths for more people to get around by bikes. Please build them so that they allow access to machinery that can work on clearing snow and ice as a priority over the winter - so that more people choose to use them (walking and cycling). And more lightning for the darker winter afternoons/evenings along clearly defined routes.

Another thing to consider is projected lights/ signs on streets so that if snow/ ice/ grit covers these - we can still see the lines, and signs that are covered by snow and grit during the winter season.

Keep prioritizing cycling and walking! Our society needs it and loves it! (more safe spaces, more 'foot fall' past shops, more bikes sold, more users, more fun, more love for cycling/ walking, more health, and vitality!

Please run this survey again in a couple years time. Unfortunately I don't have extra time to feed into this now, but I would be interested in a year or two time.

It's disappointing that French Immersion does not have bus option. Even a central drop point would make it more convenient. We live in East Kelowna and my son would love to ride his bike, which we did last year during bike to work/school week from various locations which only made me realize how dangerous the route is outside the new improved Casorso bike path. The school is very busy for drop and pickup as the whole school doesn't have busing.

Great, new bike lanes opened last fall!

Bike to school week should be weeks long with much much more conversation, signage, new letters, posters and overall awareness and celebration of biking to school

Landie and Bechard Roads are wide with plenty of room to add sidewalks.

4 way stop sign and cross walk at Bechard and Landie should also be considered. Many speed along Bechard. Definitely not child friendly currently.

We bike every day of the school year. the separated bike lanes are great but the interruptions in those separated bike lanes are decreasing the safety on our route. specifically the lack of bike lane from cedar park to gyro beach. when will this portion be completed?
the people at the cross walks really helps with the safe crossing

increasing the bike parking areas will create an easier experience for the cyclists help celebrate those that are already biking, with hopes that the idea will spread to others
Over the last three years I have requested everyone of the items above that have yet to be implemented! Why are you sending out a survey about items you have refused to improve or repair? I have been told each time I submit a request that these are not issues in front of this school. Meanwhile we are missing sidewalks, crosswalks, bike lane bollards, raised crosswalks, traffic calming so folks actually stop at the stop sign in front of the school, not to mention dropping kids off in the bike lane, idling when leaving vehicle to take kid into school, speed feedback signs or even better, speed cameras. Can we prioritize this area for the people who go to school here and those who live near. The current plan has this school zone in the middle of your speedway between Benvoulin and Lakeshore. Why is a two lane road such as Barrera 16 meters wide in a 30km/h school zone? All you are doing is encourage driving at high speed! With all of the development in this area we need far better infrastructure, not speedways. I witness people driving in excess of 100kph and not stopping almost daily.
We have been wanting to move closer to the school to enable walking, biking and bussing as an option. This should finally be happening in December 2024!
Vehicles still drive very fast along Casorso Road, much higher than 30 km. There should be a "know your speed" sign going both ways on Casorso. The crosswalk should be raised up so that people slow down more when turning the corner in front of the school. Kiss and Go lane does not work, as cars still sit there idling.
The little details in implementation have been overlooked and as a result, most of the added infrastructure fails on a regular basis. There is no way to cross safely for a bike on Casorso, without taking a roundabout way. Adults and kids do not observe the differences between bike lanes and sidewalks, and are often in the wrong spot (particularly pedestrians in bike lanes). Traffic congestion is just as bad if not worse; the kiss and ride lane needs to be permanently removed. Accessibility for people with impairments is done incorrectly and not overly helpful. The eight-way stop at Lanfranco is dangerous... it is only a matter of time before a kid is hit going through that intersection.
Walking and biking buses should be supported, and all vehicle parking immediately in front of school property should be eliminated. The SD needs to finish the connections on school property to make it safer.
Add safety parking places for bike.
we live ~3km from casorso. the new casorso bike lane + ethel + raymer are a game changer for safety. we're biased as both parents ride bikes. i think a major hurdle for many parents (in addition to time) is their own comfort level with riding - the earlier we can get people riding safely the better. the city of kelowna summer riding camp was great a few years back - perhaps that could be offered the last week of August, focused around "the safe route to school", and offered in regions of the different elementary schools around town.
Sight lines at the swords / casorso intersection should be improved by removing the parking close to the crosswalk. The bend doesn't allow for traffic to see kids about to cross.
We love the new bike lanes and use them daily. Would like to see a sidewalk on the west side of Casorso that extends to the school.
The multi use pathways and cross walks are great around our school and make the trip for the kids to school much safer . Added bonus is that it makes biking and walking in the neighborhood safer for other trips too like going to Camp at okanagan college or going to a friends house.
More pedestrian controlled illuminated (flashing lights) signage at crosswalks within the 30 km/hr zone and just outside would greatly help. Or crossing guards to assist both managing traffic flow and safe passage across streets.
I don't want my child walking alone
The school corridors are only good if the city has extensive corridors throughout. We commute from the Abbott area. The Abbott area has excellent bike lines. However, there are no bike lanes at either Walnut or Watt Street. These two streets Are very dangerous because they lack bike lanes.
The prizes during bike to school week were great, I saw a big jump in the number of bikers. Educating people not to walk in the bike lane by Casorso would be helpful as there is almost always someone (usually kids and parents walking) who isn't supposed to be there as we bike to and from school. There is a sidewalk next to the bike lane. Love the new protected bike lane on Casorso, we take it every day!
Schools are still jam packed with cars. There should be a ~ 300m radius within the school where parents cannot stop, park or drop off their kids. Covered and more bike racks. More cross walk guards and traffic control. More frequent speed traps in school zones.
Having a crossing guard at nearby crosswalks would improve safety. They are there intermittently. The school should do an annual bike safety course for kids (teaching hand signals and basic road safety).
We do ride our bike about 30-40% of the time. We don't ride in the rain, and we don't ride when it gets cold. So basically Sept and some of Oct, and then again starting when it warms up, maybe April? So there is nothing you can do for us except change the weather. We have a bike lane form our door step right to the school.
There are not near enough non-vehicular transportation routes throughout the city.
- More accommodations need to be made for French immersion families. Casorso has a large population of French Immersion whereby kids travel 3+ kms each way. Asking them to walk or cycle when improvements only go for 1 or 2 blocks is not that effective in reducing vehicle traffic.
Without school buses, there will always be major congestion at schools like Casorso with much larger catchments for French Immersion.
We have a pedestrian walkway on Southwind Drive that intersects with a bike lane. This is HIGHLY dangerous with the increase of electric scooters and bikes using the lane. I cannot advocate strongly enough for the city to put in a gate (two metal bars) to the pedestrian walkway and a mirror. Its only a matter of time before a small child runs in front of an adult and gets run over by a bicycle. PLEASE - we commend all of these bike lanes, but there needs to be gates and mirrors when they intersect with pedestrian lanes. Speed bumps should be implemented along Bechard - so many kids walk to school on that road and cars are absolutely careless. It's again, highly dangerous. The more traffic calming the better. We all want our kids to be able to walk to school independently.
We bike down the Abbott corridor through Gyro beach to Casorso school, following the bike paths. The lack of protected bike path from Pandosy Park to Gyro Beach (on Walnut Street and Watt Road) is VERY unsafe. There is parking on both sides of the street and no bike lane. This is extremely risky. I don't understand why the protected bike lane ends at Pandosy Park. This needs to be fixed. It definitely impacts our bike ride every day. I know it impacts many other families as well.
There needs to be actual RCMP officer presence and ticketing in school zones, traffic calming and speed bumps along Barrera Avenue.
We didn't bike to school previously because there were no protected bike lanes and insufficient controlled traffic crossings. Since completion of the protected bike line corridor connecting the Ethel bike path to Casorso we bike most days when weather is nice.
We enter Casorso from the back of the field (off Barnes), lots of other families do too. There is a small cul de sac like area there at the back of the field backing onto Barnes and people are not supposed to park there but they do. They also drive in there fast. Otherwise the kids could walk themselves. I don't trust that area for traffic, it would probably be better to block it, there's a small crowd of kids coming in through that field every morning and plenty of street parking elsewhere in that residential area if people just walked a tiny bit.

I am not a fan of the bike lanes and how vehicles have to cross over the bike lane to measure a right hand turn. (you would not see a vehicle cross over two vehicle lanes to make a right hand turn... You should always go to the nearest lane... Now you can't because of the bike lane abs the concrete slabs and the plastic poles at certain intersection. And those stop areas in the bike lanes are hard to clean and rockets and dirt builds up there, making it hard for bikes to stop safely. Vehicles should be allowed in the bike lane and all bikes and vehicles using/sharing the road should follow traffic rules and patterns... If a vehicle is in the bike lane to turn right, the bikes agile just queue up behind it like vehicles do. And drivers and cyclists should airways do shoulder checks and drive defensively... That flow of traffic pattern, now, with with bike leaves have screwed that up.
We would take the city bus if it was a more direct route but from where we live on Lake Ave to Casorso Elementary there's a detour to the college that adds 15 minutes to the commute.
The bike lanes down Casorso in the multi-use paths are great to encourage kids/families to bike to school. However, the traffic is the most concerning and scary part of the trip. Cars often run red lights at KLO/Casorso (has happened 3 times this school year already to my family alone). The timing of the bike light to cross at Casoros and KLO is also too short for kids to get across KLO road in time. The 4 way stop at Casorso and Lanfranco often has cars going ahead of kids on bikes. Cars going along Swordy towards Casorso often impede the bike lane as they can't see traffic, but then kids can't ride along the path safely. Cars at Berrara and Casorso often block the bike path as they are in a rush to get their kids to school. The traffic flow around Casorso doesn't leave options if you are needing to drive a particular route, so cars pull U-turns, speed along in the school zone, don't watch in crosswalks - all because they need to get somewhere and the easiest/only route is through Casorso school zone. (only other through roads are Gordon or Lakeshore and traffic along lakeshore for the past year has been insanely busy due to construction closing roads, it being an only option for people to get out of the mission area, etc). Lowering the posted speed limit along Casorso between Swordy and Berrara hasn't done anything to actually protect kids riding on the bike path -there hasn't ever been any enforcement around that area.
The biggest reason I hesitate to ride with my kids to school is the traffic that is unsafe along the protected bike route at intersections and major street crossings. The route is much safer now that prior to the protected bike lane, but there are still some major safety concerns.
Many of the items you list in this survey aren't known to me - what has been done around our school? And more importantly, why? Educating parents on why routes or changes have occurred may help them encourage kids to ride as they will see the safety reasoning. A lot of parents complain about the traffic and routes and why roads are so narrow, yet only see how it negatively impacts their route, not why it would be a positive for the school or more safe for kids etc.
Additionally, this survey is only about Casorso or North Glenmore schools - but what about Raymer Elementary? The protected bike path ends half a block from their school. I live in the area and see kids having to ride on the sidewalk as soon as the protected path ends or riding in the small bike lane that exposes them to traffic. Seems like a huge missed opportunity to get more kids to school safely by extending that multi-use, protected path to Raymer.
It doesn't really matter if the area directly around the school is safe for biking if the entire route isn't safe. I currently live on Walnut st and there is no bike lane and poor visibility around parked cars. The sidewalks also don't connect continually and the only way to get to the sidewalk on Watt is by j-walking.
I wish there was a way for my child to avoid Gordon or Lakeshore completely when going to school.
Getting majority of kids to walk or bike is assuming that every household wants to bike or walk and has the time to. I wouldn't bike when it's raining, cold or snowing. Plus families with multiple drop off locations don't necessarily find it ideal to bike or walk. Especially with a kid at daycare. Daycare will call you if your child sneezes. You have to be ready to pick up your child in those cases. Personally I'm for safer routes and traveling for children but I'm not a fan of the extreme actions of the city that reduces road width and takes away parking for the cause of reducing emissions. The budget for some of these bikeways doesn't support the return on investment. I'd rather have some of that money spent on sidewalk repairs.
My oldest child attends KLO and can bike. My comments are about Casorso. The sidewalk developments around Casorso are very good, and the school seems very supportive of this project. They have made biking to school more appealing. We sometimes bike to school, but our youngest child is too young in our view to bike on her own. We aim to bike to school when work routines allow for it. In our case, the bike corridor can only be accessed by crossing Gordon. It is too busy in the morning for us to leave her to ride on her own. We have seen too many drivers cell phones in hand as they drive, and had two close calls with crosswalks. When she is older, she will bike. I think that one way to motivate biking to school reduce worries about bike theft from the school grounds. While it may be unfeasible, a pedestrian overpass over Gordon somewhere between Casorso and KLO on Gordon would make it easier for parents to let their kids bike to school on their own.
Could the city subsidize or do long term rental of cargo ebikes? I have a regular bike and pull 85 lbs of kids (2 kids) to school and daycare in the mornings but drive in the afternoon because I'm too tired. A cargo ebike with a tailfin for 2 kids would cost 3k. If cargo ebikes were more affordable, I'd be biking my kids both ways every day.
In class competitions, creating school streets, having after school care and sport activities at the school. More anti idling messaging. Busing for students. Engage kids in trip planning and car pooling with colleagues at start of the year.
I think additional enforcement by RCMP on speeders makes a significant impact. As soon as people start getting ~\$200 tickets they dont forget about the school zones. I also think bylaw could ticket for parking in bike lanes would be helpful as it creases a risk when kids need to bike out into busy traffic lanes to go around cars.
This is our first year at Casorso. So far we find drop off and pick up easy. Our child is in Kindergarten so we park and walk to the school to drop off and pick up. We are 2.7 km from the school so too far to walk.
For us, it's the KLO and Richter intersection that's dangerous as well as the Casorso and Lanfranco intersection. There are many cars drive fast and crazy at the KLO x richter one, and we have seen many accidents. The 4-way stop at Casorso x Lanfranco is concerning as drivers don't often stop or wait for bikers. I would love to be able to send kids to go to school on bikes, but I don't trust other drivers.
I LOVE the bike lanes!!!! I like that when I am driving I feel less comfortable...ie, narrow shoulders mean I have to pay close attention and I want to drive slower, this is good. We often cycle, and I cant tell you how great the protected lanes are!!! It's a total joy to bike with my daughter and I feel perfectly safe with her. Thank you!!
Not related to this survey but please, please, please don't hand out giant stickers to every family - a small sticker for the kids, maybe, but the big stickers, guaranteed, are headed straight to the landfill
The roads are too narrow now as people do not know how to park properly to let other safely pass.
Have crossing guards.

Appendix 3. Safe Routes to Casorso

[Best-Routes-to-Casorso-Map.pdf \(rdco.com\)](#)

BEST ROUTES TO SCHOOL



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.

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.

Beware of strangers!

- 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. Be stranger aware!

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.

Casorso Elementary is well connected and has several parks and walk station options within an 8-minute walking distance:

1. North of Casorso Elementary
 - a. Casorso Rd between Swordy Rd and Bechard Rd
2. South of Casorso Elementary
 - a. Mission Springs Dr between Springrose Way and Casorso Rd
3. East of Casorso Elementary
 - a. Mission Springs Dr between Barnes Ave and Casorso Rd
 - b. Barnes Ave
4. West of Casorso Elementary
 - a. Barrera Rd between Lakeshore and Casorso Rd

Please note a passenger loading zone now exists fronting the school on the east side of Casorso Rd, north and south of the school's driveway.

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.



Driver 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. If you're going to be stopped for more than 60 seconds-except in traffic-turn the engine off.

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.

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

Revised January 2025

Questions or concerns should be directed to:

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