### **Hawkins Crescent Traffic Study**

Priorities Committee Meeting September 18, 2018

Transportation Planning and Engineering



#### **Study Purpose**

"THAT Administration prepare a report on a traffic study of Hawkins Crescent that includes options for improvement to residential traffic flow by the end of the third quarter of 2018".



#### **Goals of the Project**

- Understand the magnitude and nature of resident concern.
- Confirm the traffic volumes experienced are consistent with the numbers projected in the Traffic Impact Assessment (TIA).
- Undertake an operational review of the road network at the schools.
- Establish the extent of compliance to the recommended traffic management plan and assess its effectiveness.
- Explore options to alternative traffic management in the area.
- Produce detailed traffic information that PDS can consider in their evaluation of applications for development permits at the schools or daycare going forward.



#### **Project Process**

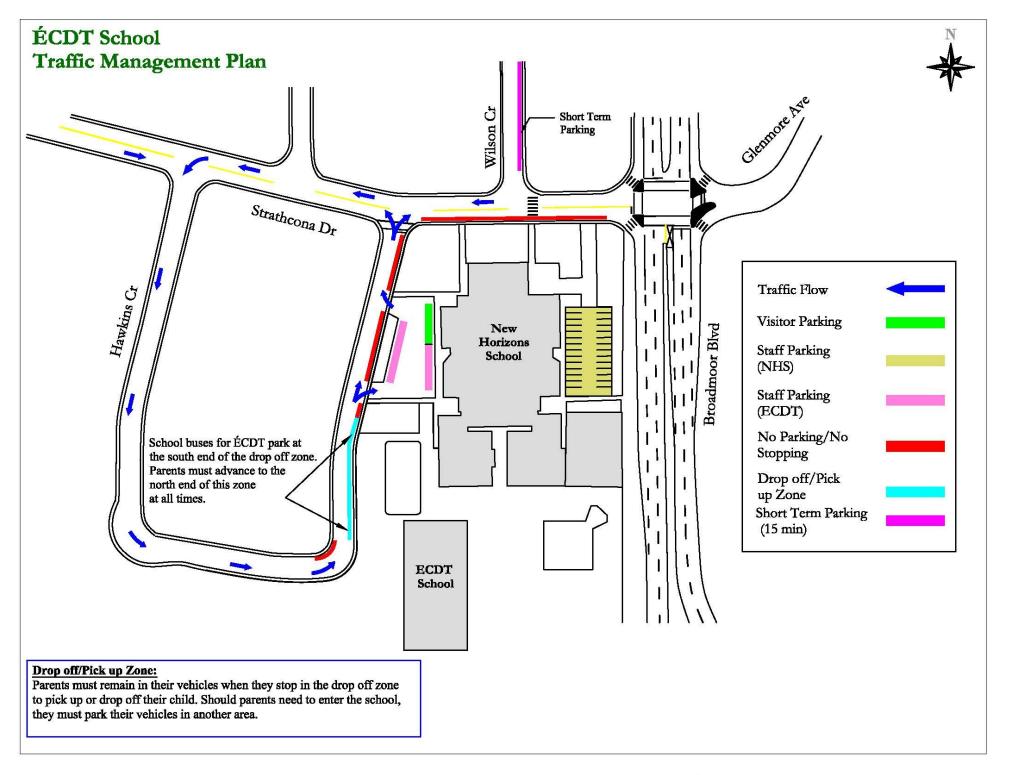
- Background review
- Public engagement
- Engineering review
- School Traffic Safety Partnership meeting
- Action Plan



#### Background

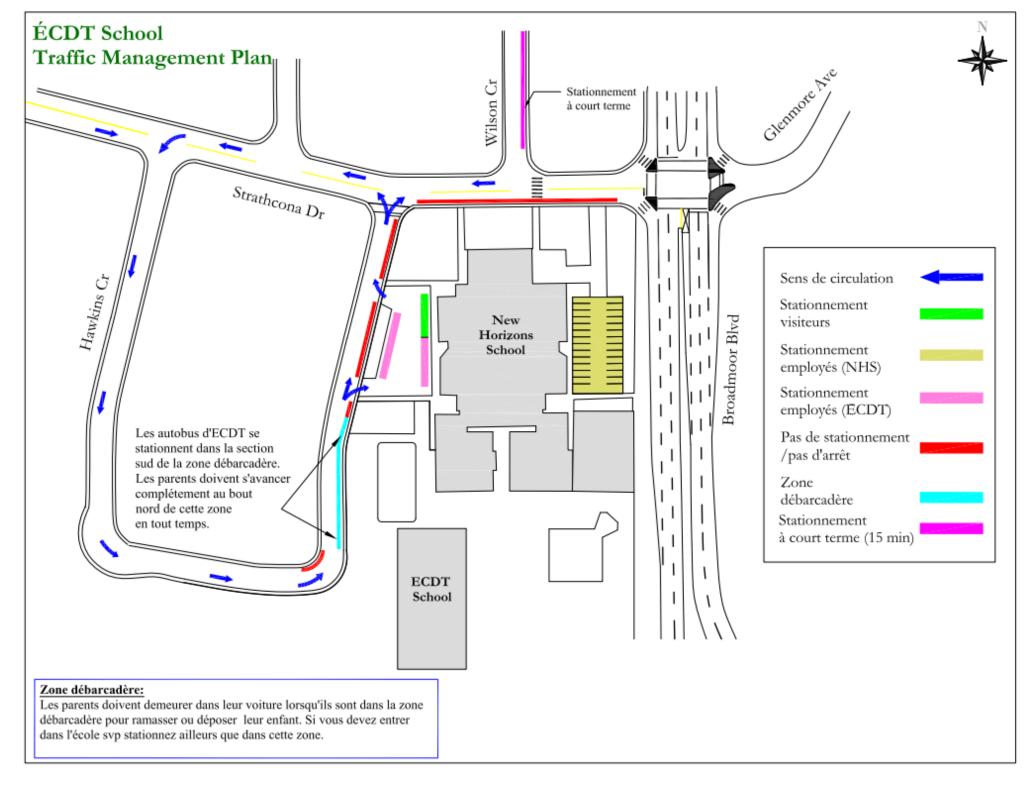
- New Horizons School (NHS) is a K-9 public charter school that serves the needs of gifted learners. Established in 1995, it is Alberta's oldest charter school.
  - Opened on Hawkins Crescent in September 2015
- École Claudette et Denis Tardif (ÉCDT) is a K-6 school offering Francophone families the opportunity for their children to be educated in French and to build and live their Francophone identity within the community.
  - Opened on Hawkins Crescent in September 2016





Through the **School Traffic** Safety Partnership, Traffic Plan Maps were developed for both schools prior to their openings.





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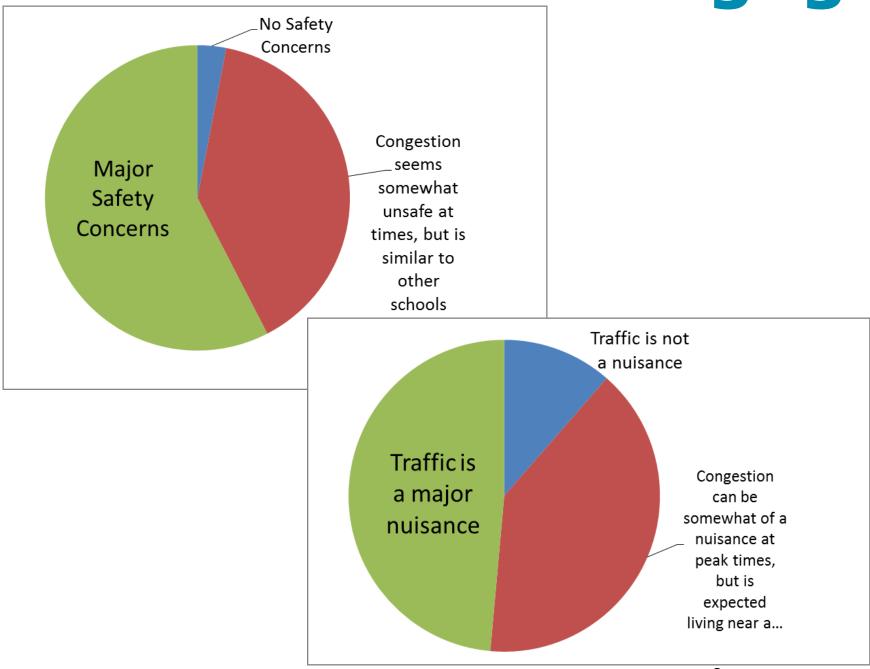
# Public Engagement



Zone	Red	Blue	Yellow	Total
# Homes in Zone	18	33	41	92
# Responses in Zone	7	15	13	35
% Responding from Zone	39%	45%	32%	38%



## Public Engagement



~20% of residents living in the study area have major concerns about traffic nuisance or safety.

- ✓ Road user behaviour
- ✓ Volumes
- ✓ Parking/Sightlines
- ✓ Signal timing at Broadmoor/Strathcona



### **Engineering Review**

- Review of Collision History (September 2015- present)
  - No serious collisions, none involving pedestrians or cyclists
- Video Review
- Operational Review/TIA Comparison
- Traffic Signal Timing Review- Broadmoor Boulevard/Strathcona Drive (south)



#### Video Review

- A video study was conducted over a three day period in March 2018:
  - The majority of the parents do not follow Traffic Management Plan
  - Parents are picking up and dropping off students on both sides of the road, resulting in congestion, U-turns and jaywalking.
  - The majority of parents are from NHS
  - Afternoon pick up time is more congested than morning rush.
  - Schools have staggered start and end times
  - Parents start arriving as early as 2:30pm for pick-up activity
  - Congestion is very effective in managing speed



#### **Operational Review/TIA Comparison**

Actual traffic volumes observed versus those projected in TIA

#### AM Peak

• Site generated traffic is about 60% higher than anticipated. There are about 50% more vehicles turning left onto Hawkins Crescent (east) than projected.

#### - PM Peak

• Site generated traffic is slightly lower than anticipated. There are about 30% fewer vehicles turning left turn onto Hawkins Crescent (east) than anticipated, and quadruple the number of vehicles turning left onto Hawkins Crescent (west)



Level of Service (LOS)

- For approximately 15 minutes at each peak, drivers experienced increased delay at intersections 1 and 2. The greatest impact of this delay was borne by parents.
- Even with the higher than anticipated volumes experienced at the school site, the LOS remained well within an acceptable range at the intersections 3 and 4.





#### Signal Timing Review

- In 2015, the wait on Strathcona Drive at Broadmoor Boulevard was increased to facilitate better traffic flow on Broadmoor Boulevard.
- The signal operates on a "half cycle" from 8:15-9:00 am and 3:00-4:00 pm.
- During this study, the option to extend the half cycle time to include the 8-8:15 am time period was evaluated. This change is not recommended.
  - not warranted by queues
  - > would create two additional stops for northbound traffic on Broadmoor Boulevard during this time (approximately 250 vehicles).



# School Traffic Safety Partnership Meeting

- Information sharing regarding school populations and bus usage
  - NHS: Projected 70% bus usage on TIA → Actual 55%
  - ÉCDT:Projected 90% bus usage on TIA → Actual 83%+
    - >Information will be used to inform future development applications

 Discussed education/engagement/enforcement/engineering solutions and collaborated on an action plan to address traffic concerns



#### Resident Suggestions for Improvement

"Create more parking and drive through lanes on the school grounds which can easily accommodate and redirect the traffic flow."

"Enforce the plan."

"More children should be taking buses."

"Make the red light shorter."

"Parents parking in the Kinsmen Park Parking lot" "Enforce the existing bylaws (u turns, double parking, fire hydrant parking, jaywalking, driveway blocking, etc.)"

"Have an alternate pick up location or staggered pick up times."

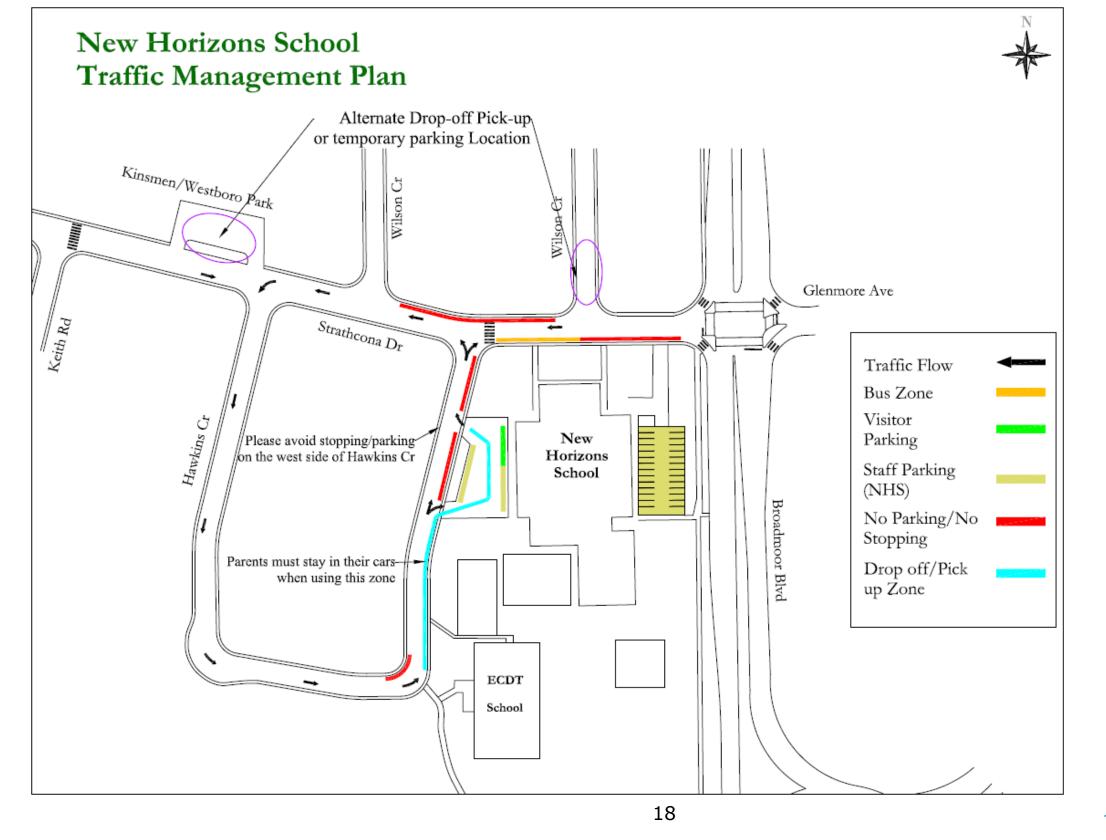
"Traffic should move in a circular way and stop only to let your child out. No sitting and waiting blocking traffic and causing congestion." "It is unlikely that this situation can be improved."



#### Action Plan - September 2018

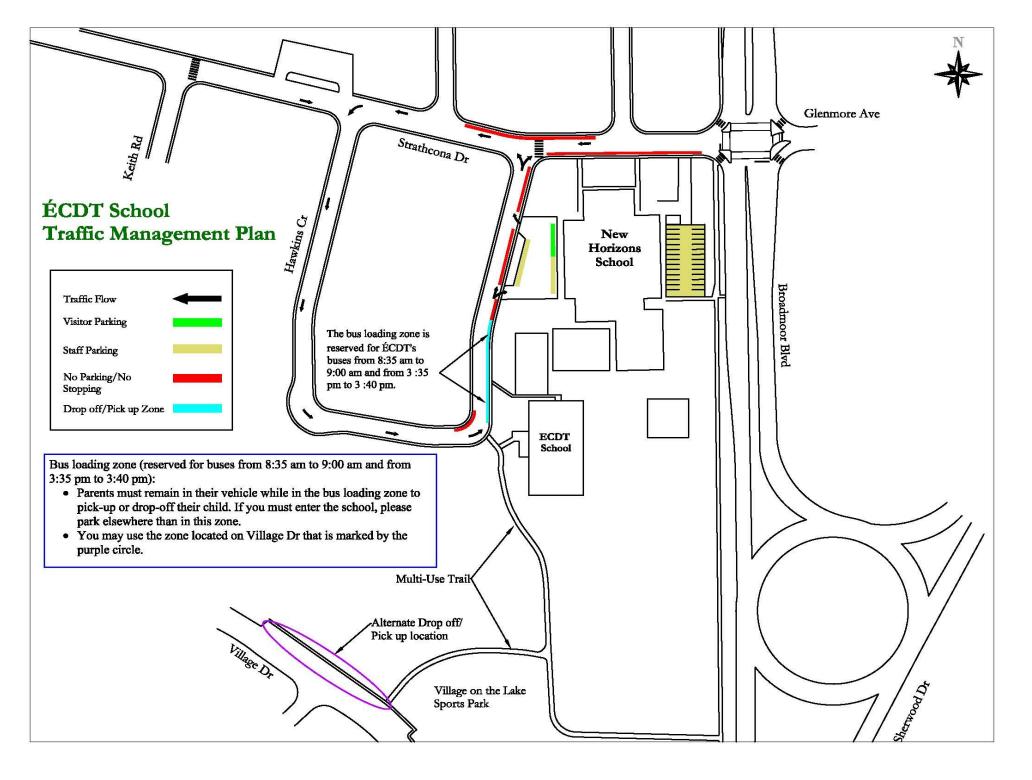
- Eliminate peak time drop off/pick up and parking on the north side of Strathcona Drive
- > Relocate the crosswalk on Strathcona Drive to Hawkins Crescent.
- > NHS:
  - > move bus zone to south side of Strathcona Drive
  - extend drop off/pick up zone through the school parking lot.
- ÉCDT will queue buses in Kinsmen parking lot
- Encourage alternate drop off/pick up locations





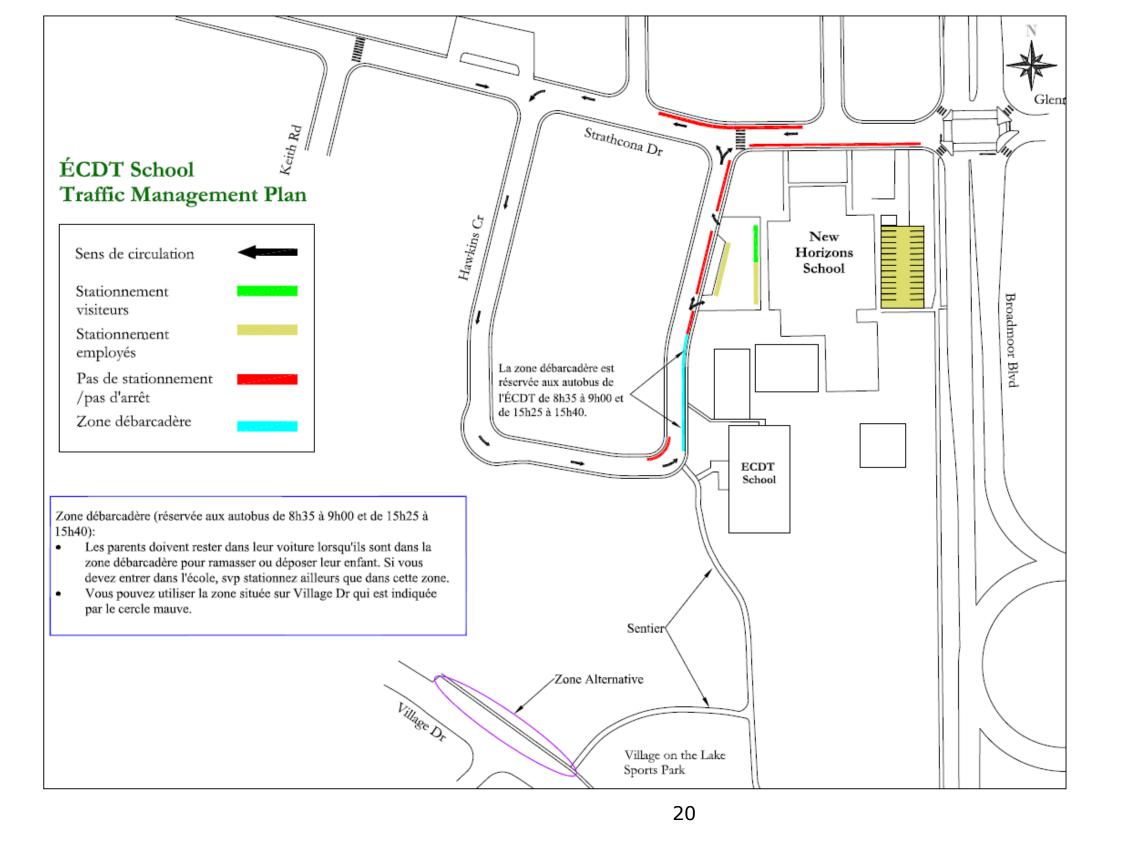
New Traffic Management Plan- NHS 2018





New Traffic Management Plan- ÉCDT 2018





#### New Traffic Management Plan- ÉCDT 2018





Traffic safety starts with you. Model safe and respectful behaviour for others.



Follow the messages on traffic, road, and parking lot signs.



Encourage others who show they care about traffic safety too.

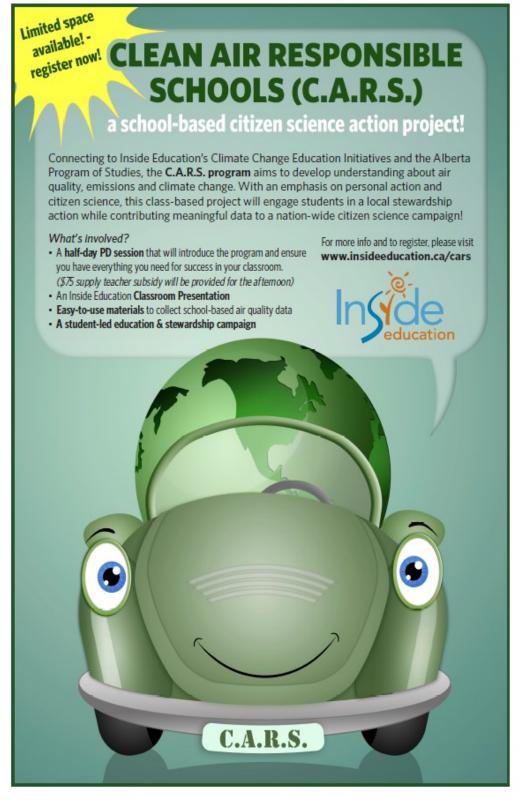
#### **Education/Engagement**

Schools will work with Parents/Students/Staff/Bus Drivers to promote the updated traffic management plans.

#### How can you Be Respectful?

Looking for more ideas?
You can find them in all our Way to Be! <u>Activities</u> and <u>Be Messages</u>.







#### **Evaluation**

- School Traffic Safety Partnership will meet in January 2019 to evaluate the success of these changes to the traffic management plans.
  - Parking restrictions on the west side of Hawkins Crescent could be considered.
  - With the next scheduled rehabilitation of Strathcona Drive (tentatively 2019) construction of a layby could be considered if concerns persist and NHS is willing to enter a cost sharing arrangement. No design plan or budgets are recommended at this time.



#### **Communication Plan**

- Follow up letters have been sent to all residences on Hawkins Crescent, Wilson Crescent and Strathcona Drive who were invited to participate in the survey to inform them of the outcome of this project.
- Residents have been encouraged to contact TPE to provide their feedback on the success of these measures to add to our January 2019 evaluation.



# Questions?

