

# Heritage Hills Community Traffic Safety Review



Priorities Committee Meeting  
September 17, 2019  
Transportation Planning and Engineering

# Heritage Hills community traffic safety review

- background
- project purpose
- process/timeline
- engineering review
- public engagement
- final traffic safety plan

# Background

- several collector roads in Heritage Hills are nearing time for regularly scheduled rehabilitation
- ongoing resident concerns with traffic speed and pedestrian safety in the subdivision
- new school under construction on Heritage Drive has increased resident level of concern with traffic



# Project purpose

- to perform a comprehensive review of traffic conditions in Heritage Hills to consider what potential actions could be taken to improve safety with upcoming neighbourhood rehabilitation
- to ensure the road environment is ready to safely and efficiently manage traffic when the Heritage Hills elementary school opens in 2020



# Engineering review

- Traffic impact assessment (TIA)
  - focus on road capacity
  - projects the school will generate 1,228 two-way trips on a typical school day
  - “overall, the existing roadway network is anticipated to accommodate the traffic generated by the proposed school”
- Strathcona County assessment
  - traffic data collection
    - speed and volume
  - collision analysis

# Traffic data collection

- collected at 12 locations on collector roads
- traffic volumes collected support TIA conclusion that the roadway network is sufficient to support the additional traffic generated by the school
- the majority of locations where speed data was collected fall within the expected operating speed for a road signed at 50 km/h
- speeds recorded at all three locations on Highland Drive are of concern
  - 85<sup>th</sup> percentile > 55km/h







Collision by Type	Number	Primary Causes
Struck Object	54	Lost control, slippery road surface, unsafe speed
Right Angle	15	Failed to stop, unsafe back out of driveways
Sideswipes	4	Lost control, slippery road surface, unsafe speed
Other	3	Multiple
Run-Off-Road	1	Slippery road surface, unsafe speed
Rear End	1	Followed too closely
Pedestrians and Bicyclist	0	
<b>Total</b>	<b>78</b>	

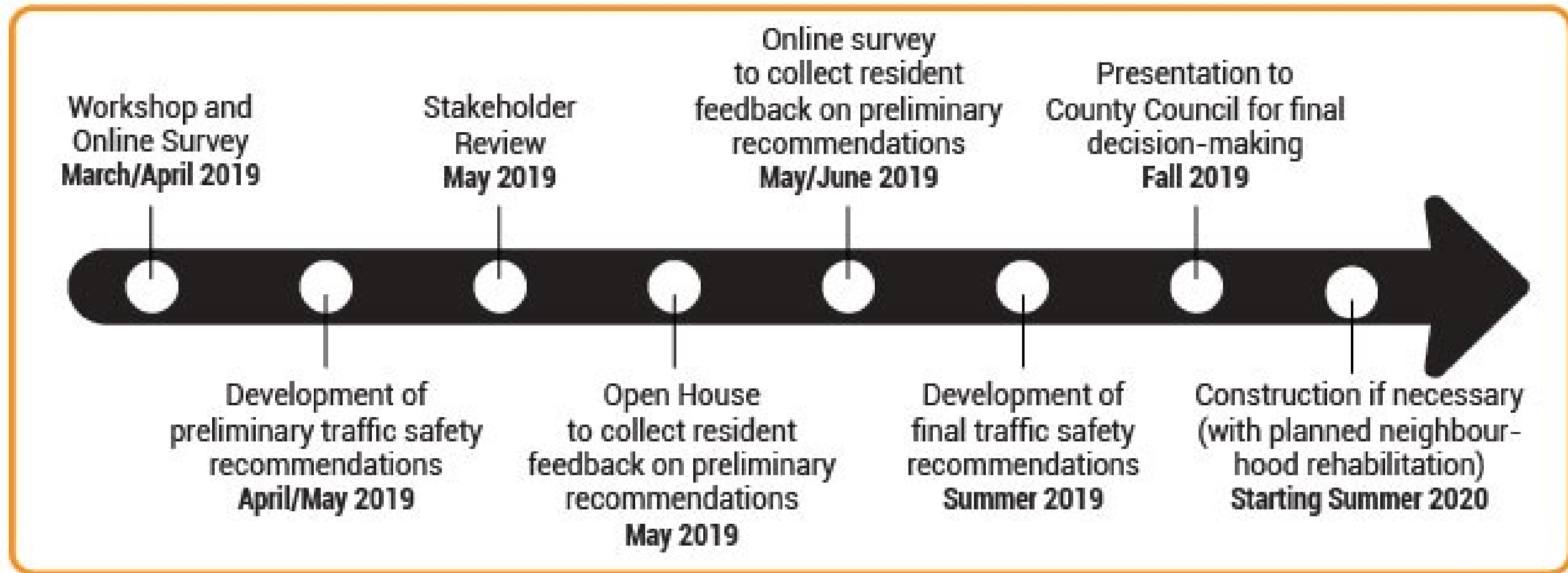
Note: 36 PDO collisions involving a driver backing into a parked vehicle are not included on the map as they are considered unrelated to general traffic operations

Disclaimer: Collision map is for display and discussion purposes only

# Collision analysis

- over the last ten years:
  - average 11 collisions/year reported to police
  - none involved a major injury
  - none involved a pedestrian or cyclist
  - 11 resulted in a minor injury
  - 90% resulted in property damage only
  - 36 involved a driver backing into a parked car or stationary object
- the two locations of concern:
  - Highcliff Road and Highland Way
  - Highland Way and Heritage Drive

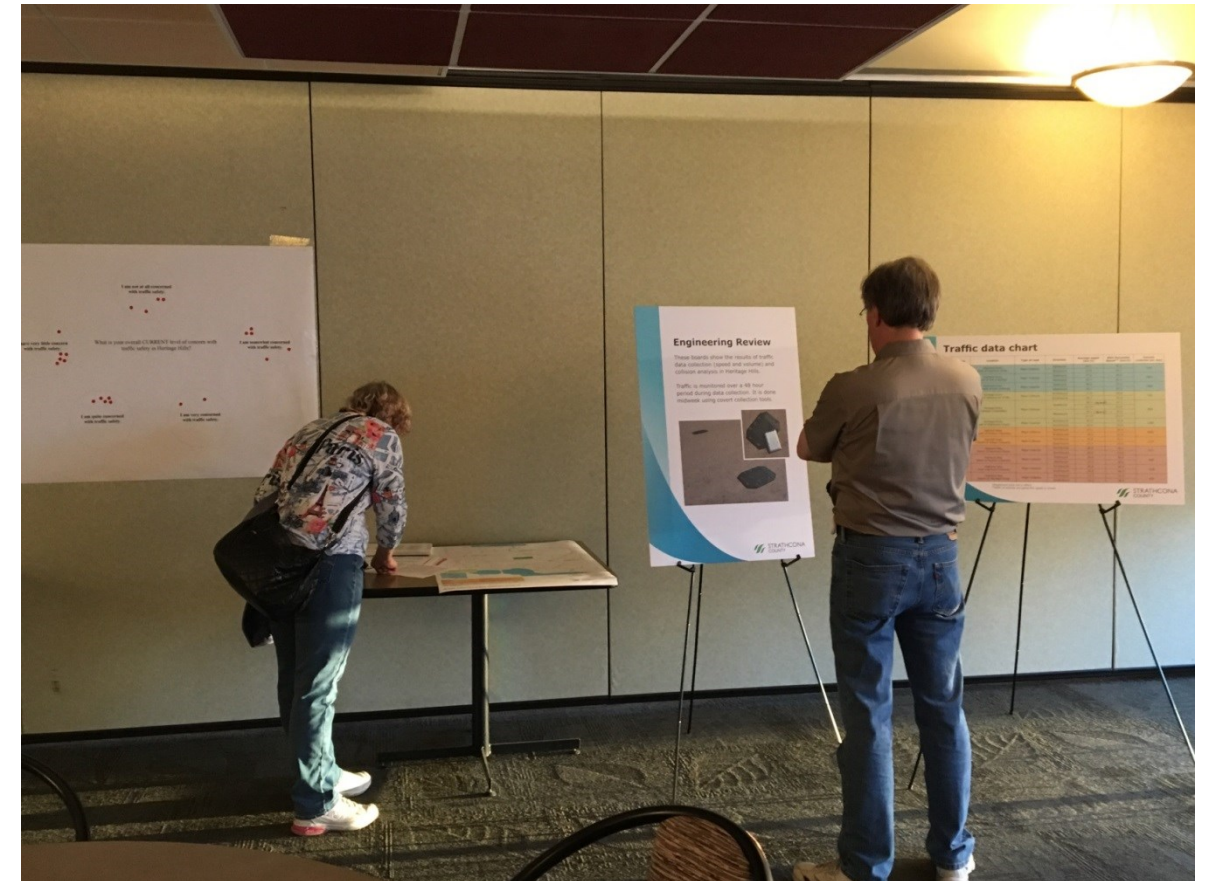
# Project process/timeline





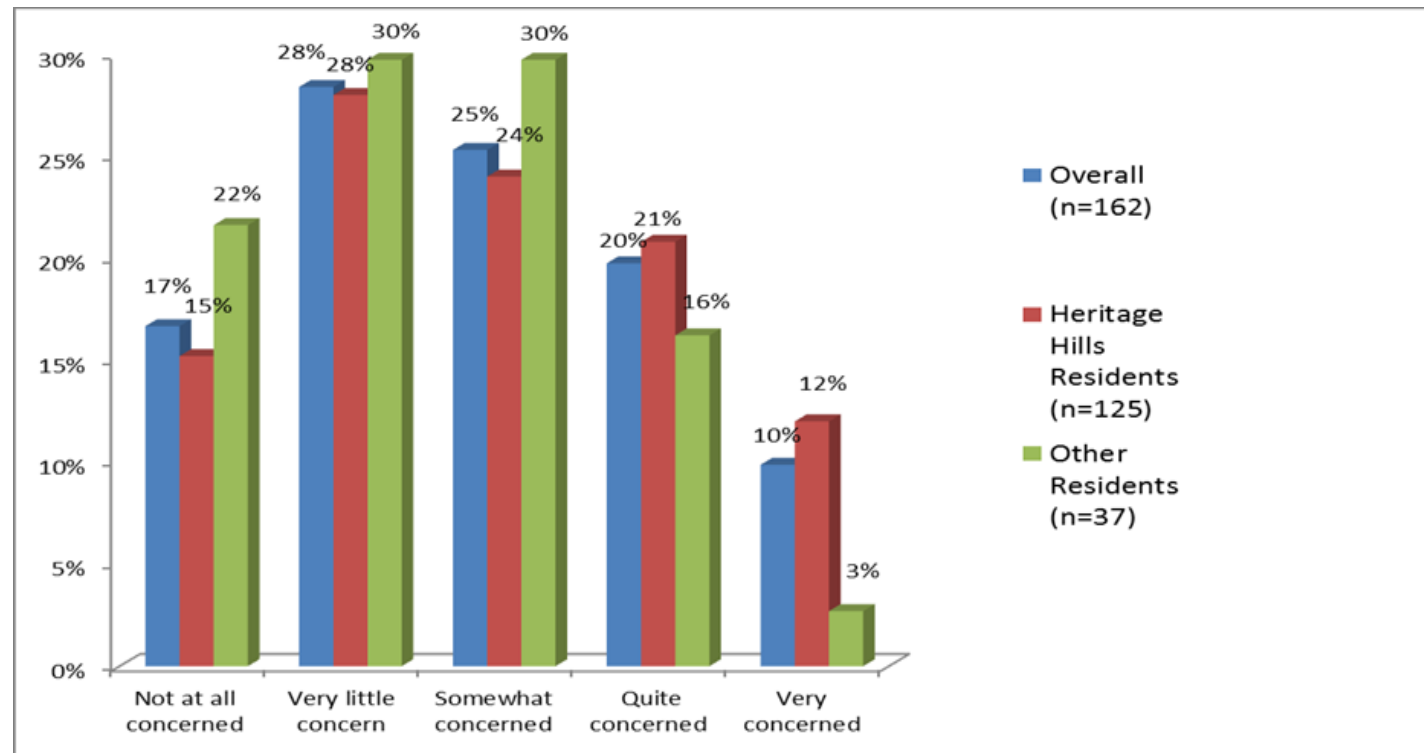
# Public engagement - phase one

- extensive communication plan to inform residents about the project and opportunities to participate
- workshop and online survey to understand resident priorities and concerns
- feedback from 164 households
  - 125 from Heritage Hills, 39 from other neighbourhoods



# Resident priorities and concerns

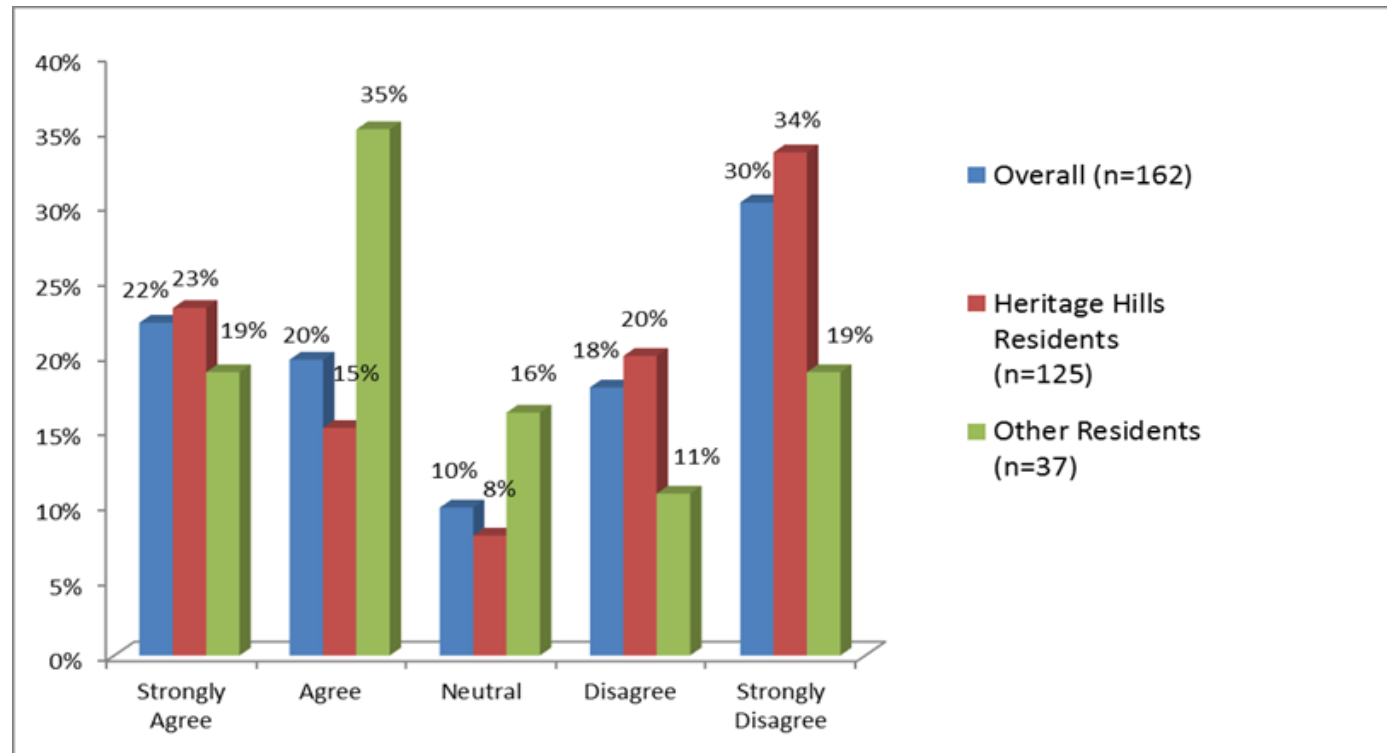
Please rate your overall CURRENT level of concern with traffic safety in Heritage Hills



What word or phrase would you use to describe a livable neighbourhood from a traffic perspective?

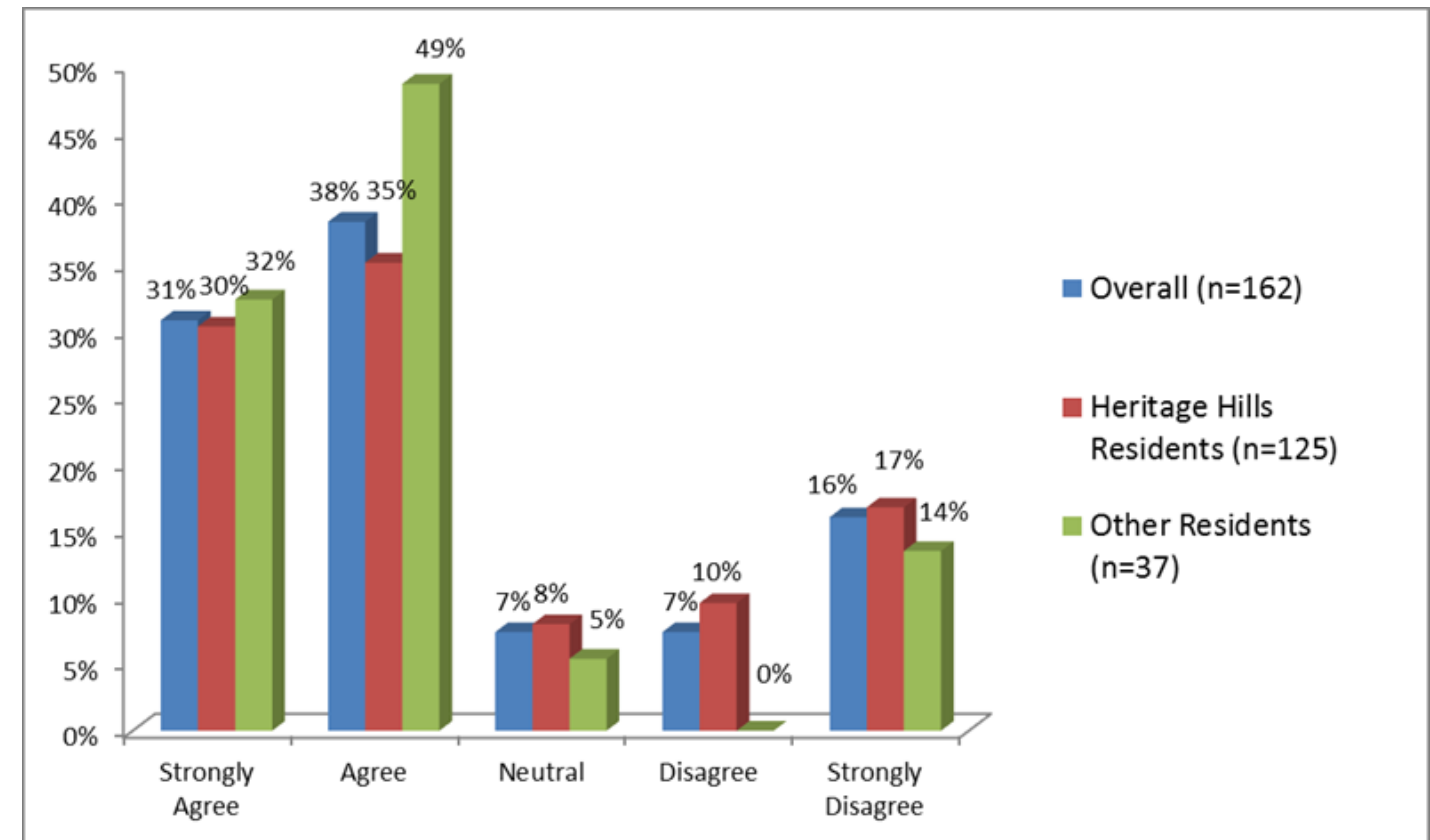


# Support for physical traffic calming



I support the use of physical measures on the road to manage traffic speed concerns

I support the use of physical measures to improve pedestrian safety at key crossing points





# Public engagement – phase two

- options were developed based on engineering and engagement results using a safe routes to school lens
- extensive communication plan to inform residents about the opportunity to give input on the traffic safety options
- 122 responses were received from households in Heritage Hills



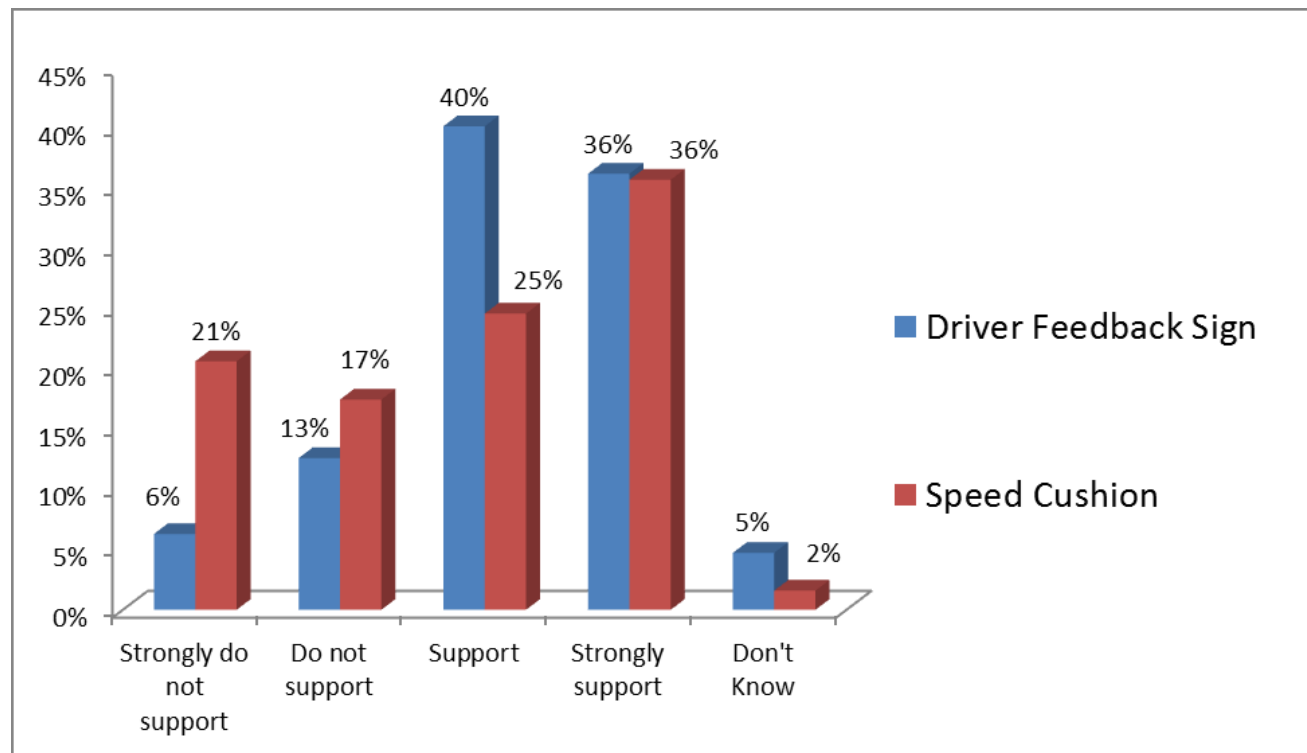
# Final traffic safety plan

- developed based mainly on open house/survey results, informed by engineering data where community directive is not clear
- comprehensive plan including 5Es- engineering, education, enforcement, engagement and evaluation
- includes physical upgrades to pedestrian infrastructure at key crossing points
  - consistent with Neighbourhood Traffic Safety Action Plan requirements
- the estimated implementation cost of the engineering and education features of the project is \$178,500
  - this cost is captured and contemplated in the annual traffic and pedestrian safety budgets



# Heritage Drive (near Clover Bar Road)

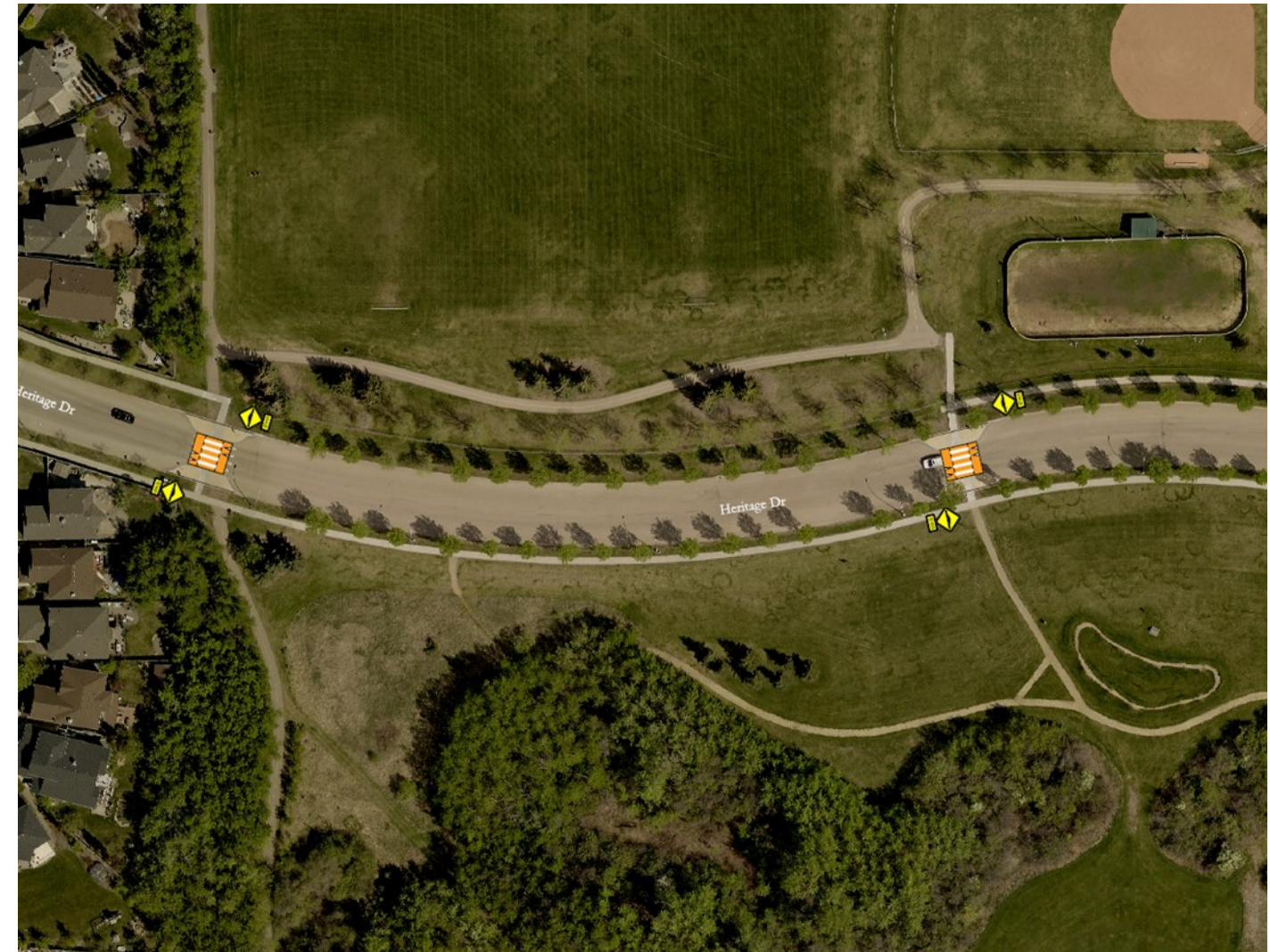
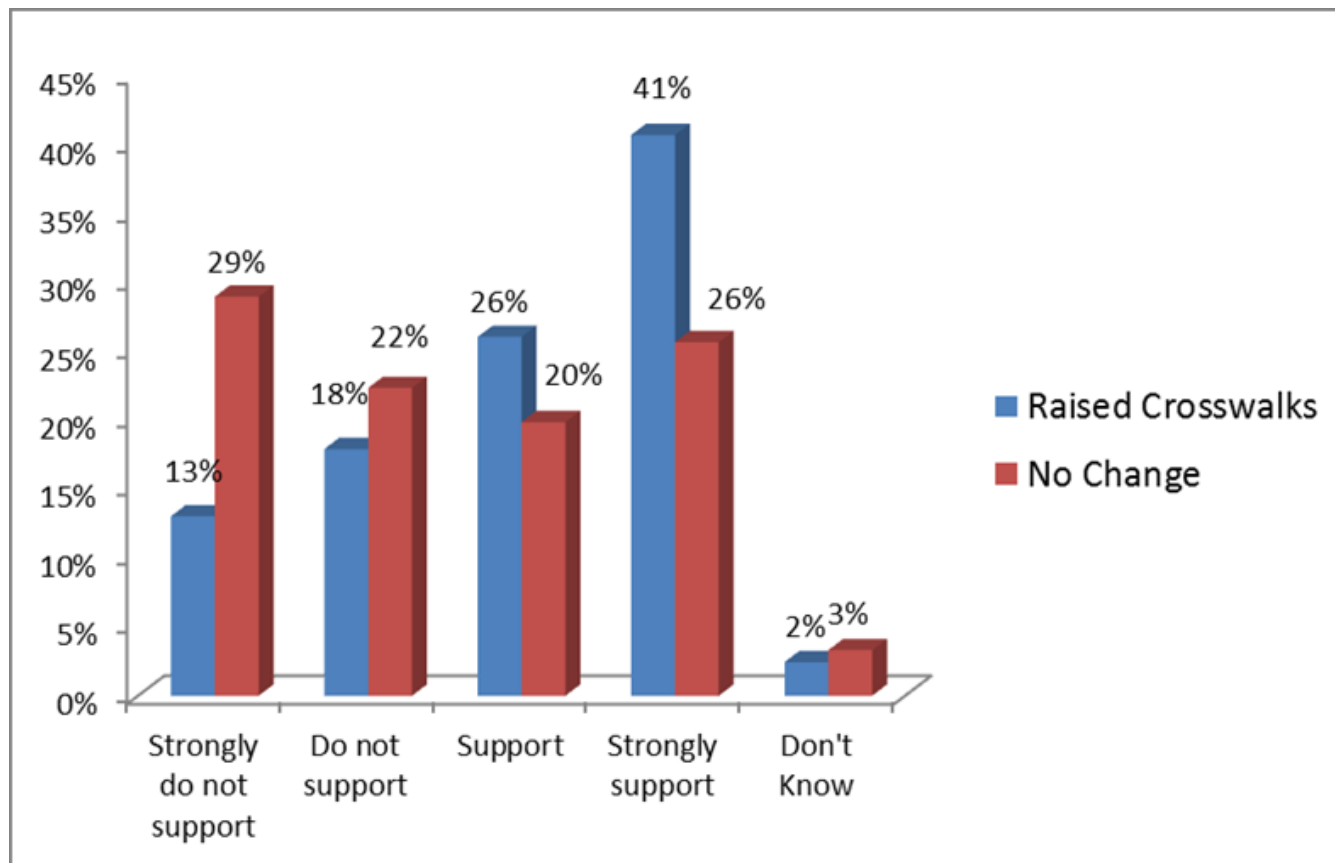
- a speed cushion will be installed on Heritage Drive west of Highgrove Court/Highgrove Terrace
- estimated cost: \$5,000





# Heritage Drive at the School

- raised crosswalks will be added to the curb extensions already in place
- estimated cost: \$10,000





# Intersection of Heritage Drive and Highland Way

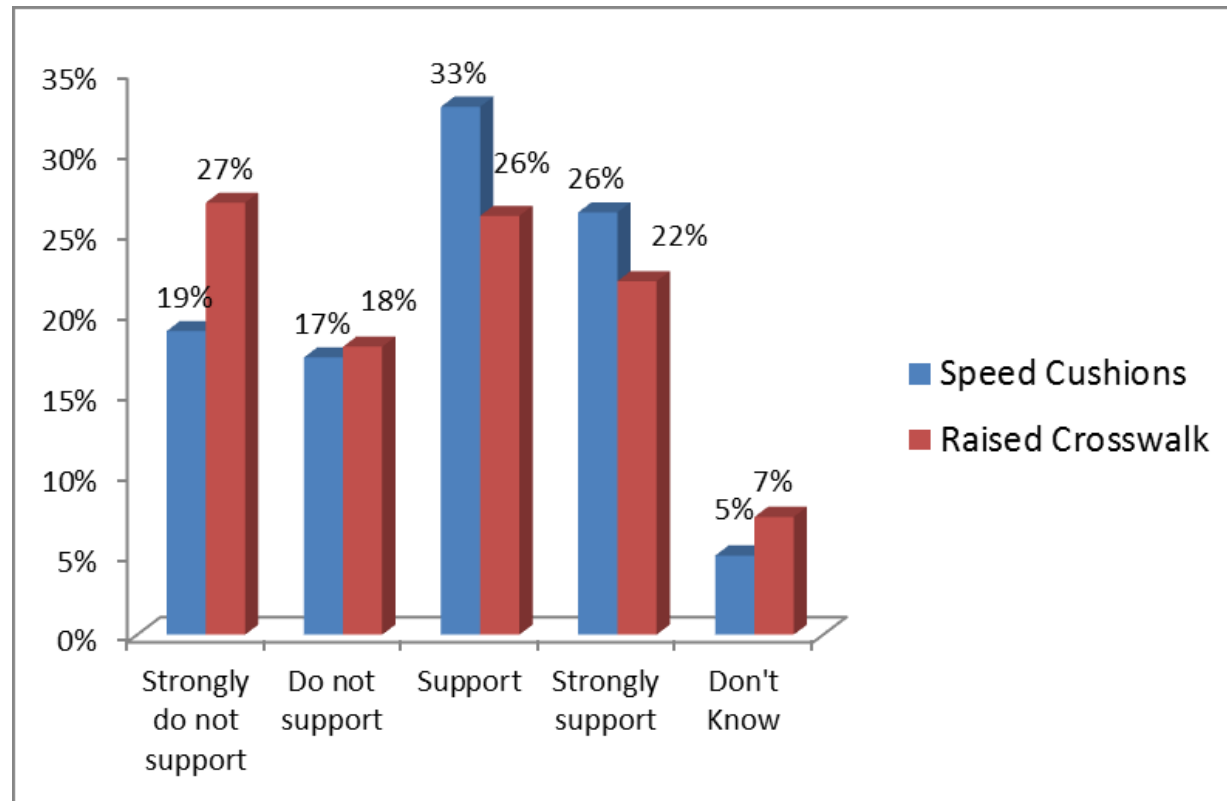
- all-way stop control will be implemented one month prior to the school opening
- estimated cost: \$1,000
- the TIA estimates 257 additional vehicles travelling through this intersection each school day
- adding the stop along Heritage Drive will also help manage speeds and improve safety for students crossing to school





# Highcliff Road at the school access

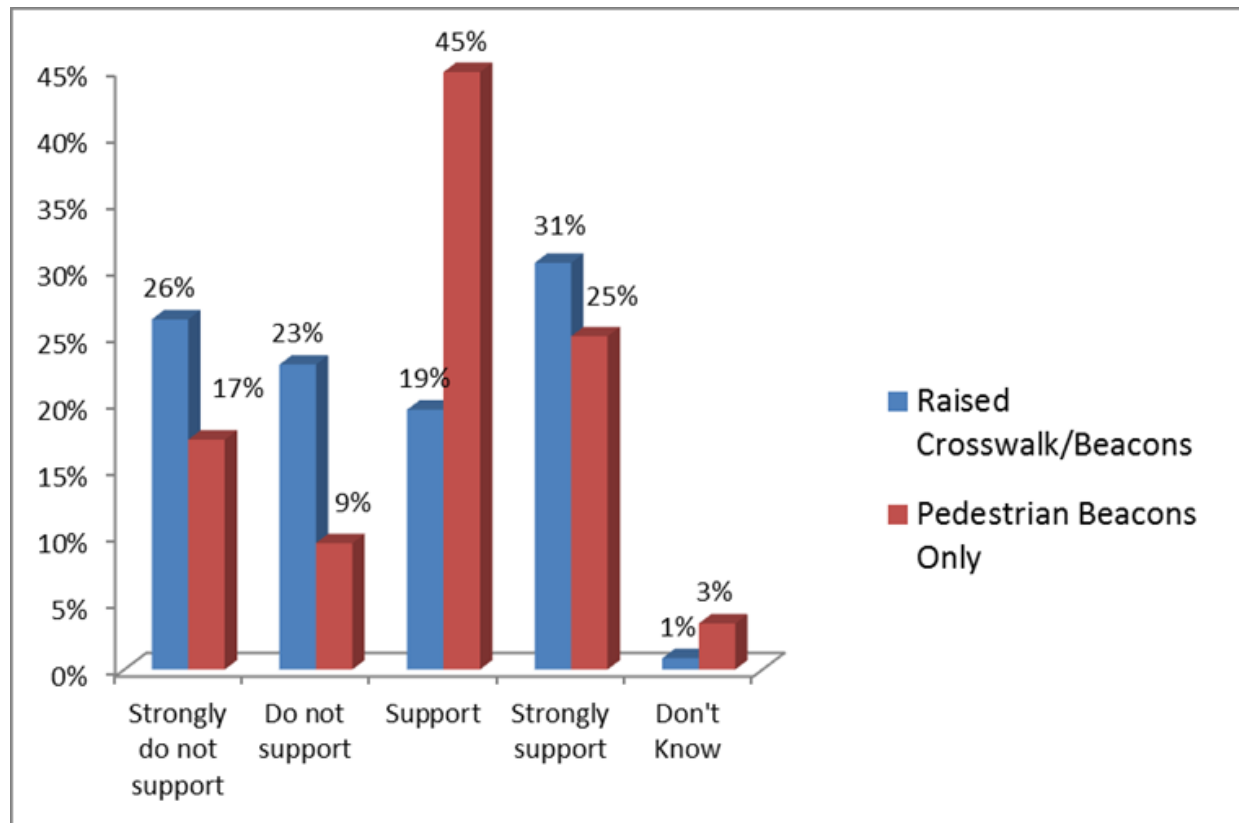
- two speed cushions will be installed near the park/school access
- estimated cost: \$10,000





# Highland Drive (trail crossing and Highland Way intersection)

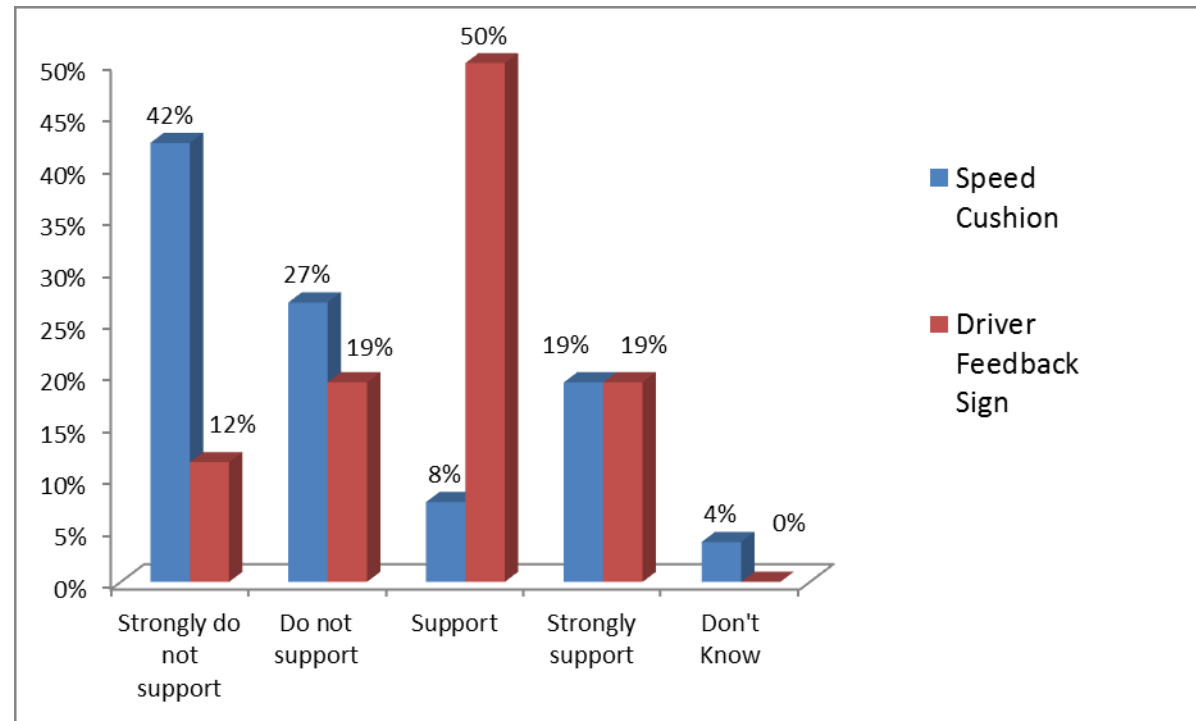
- the crosswalk at the trail crossing will be realigned and have curb extensions and flashing beacons added
- a crosswalk with curb extensions will also be added at the intersection of Highland Drive and Highland Way
- estimated cost: \$65,000





# Highland Drive (east of Highland Way)

- no physical changes to the road are planned for Highland Drive east of Highland Way. Instead, education will be used at this location (DFBS)

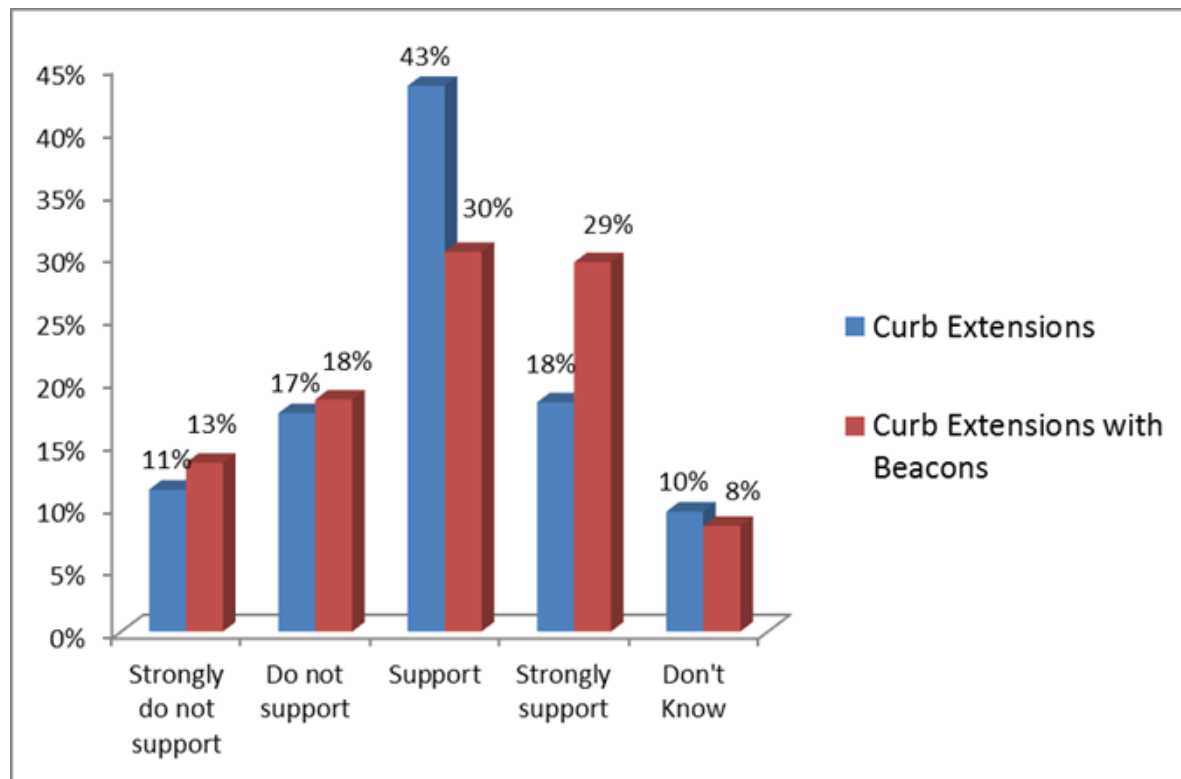


Support for Highland Drive East  
Options: Affected Residents (n=28)



# Highland Way (at the trail crossing and Highcliff Road intersection)

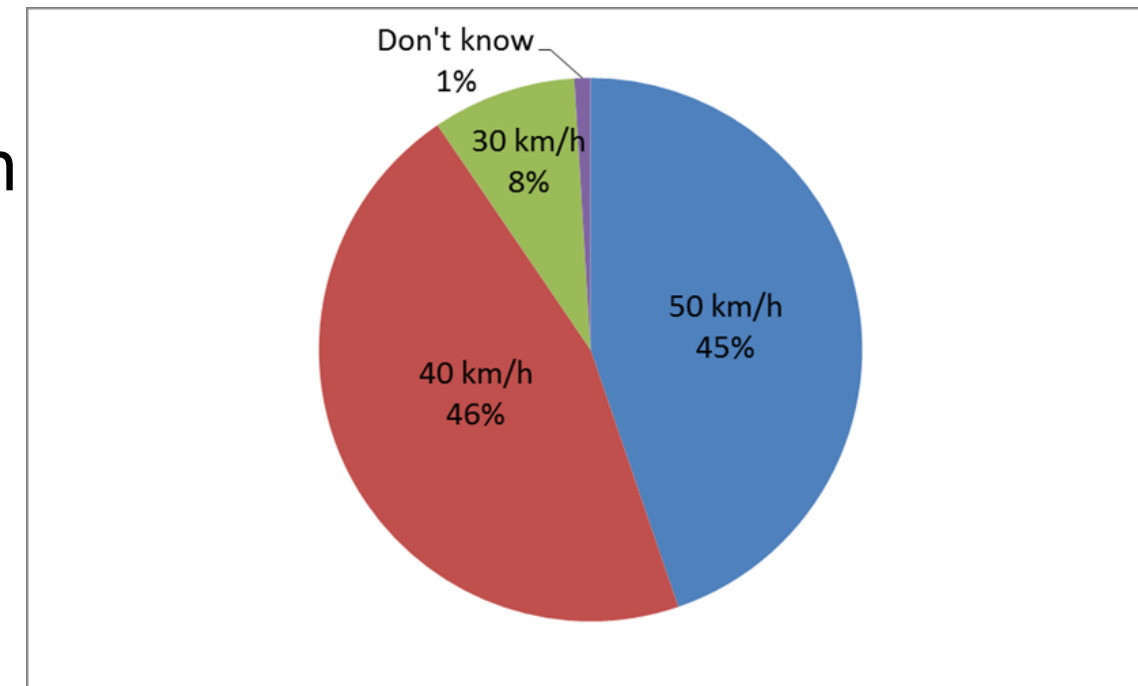
- curb extensions and flashing beacons will be added at the trail crossing
- curb extensions will be added on the east corners of the intersection of Highland Way and Highcliff Road
- estimated cost: \$75,000





# Speed limits

- the playground zone on Heritage Drive will be revised to a school zone just prior to the school opening. Estimated cost: \$500
- no change will be made in the short-term to the default residential speed limit of 50 km/h in Heritage Hills
- defer decision-making on this until after the County decides on a course of action



# Education

- door hangers will be distributed to every home in Heritage Hills to inform residents about the outcomes of this project
- a permanent DFBS will be installed on Highland Drive east of Highland Way in the westbound direction
- advanced warning signs will be added for trail users at the Highland Drive crossing
- temporary DFBS will be posted on Heritage Drive for the first three weeks of the school opening
- estimated cost of all education actions is \$12,000

# Enforcement

- Heritage Hills School will be assigned a School Resource Officer (SRO) from the RCMP and a Community Peace Officer (CPO)
  - help manage traffic concerns near the school and add to the police presence in the neighbourhood
- speed data collected in the neighbourhood is shared with the police to help them focus their enforcement efforts
- RCMP and Enforcement Services will continue to undertake routine patrols in Heritage Hills and address any resident concerns as they emerge



# Engagement and evaluation

- The Strathcona County School Traffic Safety Partnership (STSP) will be working with administrators at Heritage Hills Elementary School to develop a site specific traffic management plan for the school
- The STSP also acts as an ongoing resource for parent councils, should concerns arise
- Strathcona County will continue to monitor traffic speed, volumes and operations after the new school opens to evaluate the effectiveness of the traffic safety plan
  - will include traffic speed and volume data, continued monitoring of traffic management at the school site, arterial intersections and the new all-way stop at Heritage Drive/Highland Way

# Implementation plan

Year	Action(s)
2019	<ul style="list-style-type: none"><li>• construct speed cushions on Highcliff Road</li><li>• install driver feedback sign on Highland Drive east of Highland Way</li><li>• door hangers delivered with project outcomes and safety messages</li><li>• install warning signs for trail users at the Highland Drive crossing</li></ul>



# Implementation plan

Year	Action(s)
2020	<ul style="list-style-type: none"> <li>• construct speed cushion and raised crosswalks on Heritage Drive</li> <li>• implement all-way stop at Heritage Drive/Highland Way (July 2020)</li> <li>• revise Heritage Drive playground zone to a school zone</li> <li>• review signal timings at arterial access points to Heritage Hills</li> <li>• construct Highland Way trail crossing pedestrian upgrades</li> <li>• construct curb extensions at Highland Way and Highcliff Road</li> <li>• create school traffic management plan with School Traffic Safety Partnership</li> <li>• assign School Resource Officer (RCMP) and Community Peace Officer responsible for enforcement at school site</li> </ul>
With scheduled rehabilitation	<ul style="list-style-type: none"> <li>• construct pedestrian upgrades at the Highland Drive trail crossing and the intersection of Highland Drive and Highland Way (tentatively scheduled for 2020)</li> </ul>

# Heritage Hills community traffic safety review



Questions?