

Winter Maintenance Policy update

June 21, 2022

Presenters

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Presentation overview

- Winter highlights and challenges
- Winter maintenance policy review
- Snow route and residential road discussion
 - Past winter highlights and challenges
 - Potential improvements
- Trail and pathway discussion
 - Highlights and challenges
 - Public engagement
 - Potential improvements

Past winter highlights

NOV 16	First major snowfall
DEC 2	Freezing rain
DEC 8	Freezing rain...again
DEC 17	Snow route parking ban declared
DEC 25	Extreme cold snap starts
JAN 4	Snow route parking ban declared...again
JAN 8	Extreme cold snap ends
JAN 10	Residential street snow removal
JAN 11	Warmer temps cause melt
JAN 18	Winter storm & refreeze
JAN 27	Blading
MARCH 6	Snow route parking ban #3
MARCH 8	Residential snow clearing
MARCH 20	STILL SNOWING...

Winter Maintenance Policy review

County crews follow a priority system based on the Winter Maintenance Policy SER-009-026 to clear winter roads, trails, parking lot and transit stops.

- Winter maintenance policy was last updated in April 2017.
- Current policy is meeting needs of many of our customers across all infrastructure types.
- Based on customer feedback further review of the current policy level for trail and sidewalk clearing was needed.

Winter Maintenance Policy review

- In January, Council directed administration to review the feasibility with costs of increasing the trail and pathway clearing to 48 hours for Priority 1 and 2 and 96 hours for Priority 3 and 4.
- TAS started the update of the policy, including resident engagement on trail and pathway priorities (which we will share today).
- Plan is to present a revised policy to Council in September 2022.

Policy updates being considered

1. Review of thresholds for snow removal on:
 - Snow routes (Priority 3)
 - Residential roads (Priority 4)
2. Trail and pathway clearing
 - Assessing community needs and area of higher focus.
 - Expectations around service levels and locations of focus.
 - Provide details within the updated policy.

Snow routes and residential roads



Past winter challenges

- Challenge to remove ice build-up from roadway during extreme temperatures and multiple freezing rain events.
- Resident expectation when cleared snow routes and residential was bare pavement:
 - In order to get to bare pavement, there is a higher risk to infrastructure
 - Not exposing gutters creates ice damming and drainage problems
- Extreme temperatures and fluctuation lead to compacted ice and snow across the roadways.
- High snow accumulation led to residents shoveling snow on roadways.

Current service level

Priority 3 - Collector roads (permanent snow routes)



Min. snow depth
accumulation
15-21 cm



Within
8 days

After Priority 2 complete

Priority 4 - Residential Roads

Snow removal is based on the measurement of snow pack



Min. snow depth
accumulation
10 cm

(compacted snow)
7 cm after January 1



Within
12 days

Potential improvements

- Change snow route (Priority 3) threshold to 15 cm within six days.
- Change residential (Priority 4) threshold to 7 cm within 10 days.
- Benefits are:
 - Clear roads in a shorter timeframe
 - Reduce potential damage to infrastructure from ice build up
 - Roads cleared more frequently

Trail and pathway clearing



Trails and pathways

- TAS identified the need for resident engagement on trails and pathways.
- Opportunity to check in with community if approach to clearing trails and pathways is meeting needs.
- Previous feedback from residents and stakeholders has included concerns with the eight-day timeframe.
- During this past winter season, we have also had an increase in concerns about ongoing ice challenges.
- Sidewalk bylaw updated to 48 hours has increased expectations of County.

Current trail clearing approach

- Use a priority system (trails ranked 1-4) to clear 232.8 km of County-maintained trails and sidewalks.
- Takes approximately eight days to clear all trails.
- Clearing begins within 2 cm snowfall accumulation.
- Crews go back and restart priorities if additional snowfall occurs.



Priority 1 trails

Priority 1 trails

Includes:

- Centre in the Park
- Transit park and ride facilities, and adjacent trails



Cleared within
4hrs



3.38 km

Priority 2 trails

Priority 2 trails

Includes:

- All hard surfaced sidewalks and trails, including transit stops leading to public recreation facilities
- School parks
- School transit zones adjacent minor arterial
- Collector bus routes
- Rural hamlet roadways



Cleared within
24hrs



24.3 km

Priority 3 trails

Priority 3 trails

Includes:

- All remaining hard surfaced sidewalks along major and minor arterials, major and minor industrial roadways or in rural hamlets or public parks



Cleared within
5 days
(120 hours)



197.6 km

Priority 4 trails

Priority 4 trails

Includes:

- Pathways between residential streets and parks
- Typically narrower paths within residential neighbourhoods



Cleared within
8 days
(192 hours)



7.5 km

Ice control

- Rock chips applied for traction; this does not break down ice.
- In extreme weather (e.g., freezing rain), a mixture of rock chips and ice melt are used in high traffic areas.
- Salt/sand mixtures are used sparingly as they can be hard on pets' feet and surrounding landscaping.



Operational improvements

Winter 2021/22 looked at ways to optimize resources and equipment.

Current efficiencies being tested include:

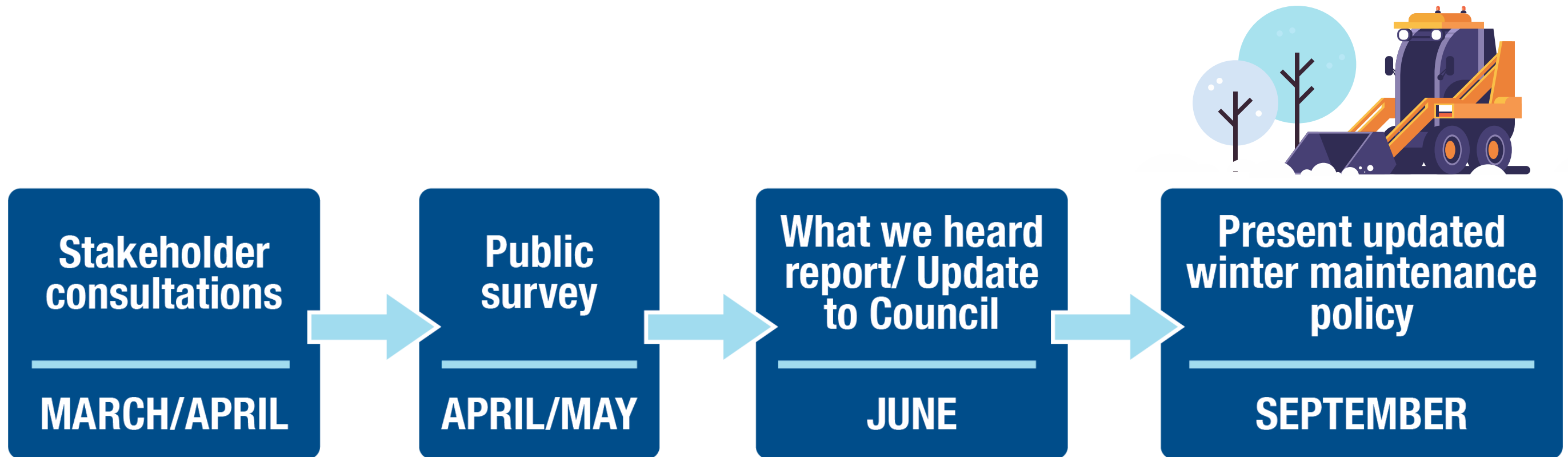
- Open up all trails and pathways first
- Return to widen out the trails and pathway and apply rock chips.
- Stage equipment at satellite locations to reduce travel time from Strathcona Public Services Yard (SPSY).
- Increase bulk rock chip locations
- Use larger equipment where appropriate

Public engagement approach

The overall purpose of the public engagement was to:

- Ensure trail and pathway clearing approach meets the needs of the community and stakeholders.
- Provide opportunities for residents and stakeholders to give feedback on the current priority system.
- To better understand trail use, both frequency and purpose.
- Educate residents on the current priority system.
- Create better awareness of winter maintenance services and priorities.

Public engagement approach



Stakeholder feedback

The purpose of the stakeholder meetings was to:

- Understand if current maintenance approach is operationally aligned with internal/school stakeholders.
- Understand the feedback groups hear from their stakeholders.
- Understand stakeholder perspectives on what is working and what is not working with our current priority approach.
- Understand stakeholder priorities.
- Identify where more information is needed from the community to guide the development of survey questions.

Stakeholder groups

- During the first phase of engagement, we conducted internal and external stakeholder meetings.
- Internal groups included:
 - Recreation, Parks and Culture
 - Transportation Planning and Engineering
 - Transit
- External groups included:
 - School Stakeholders (Elk Island Public and Catholic Schools)
 - Accessibility Advisory Committee
 - Traffic Safety Advisory Committee

Themes from stakeholders

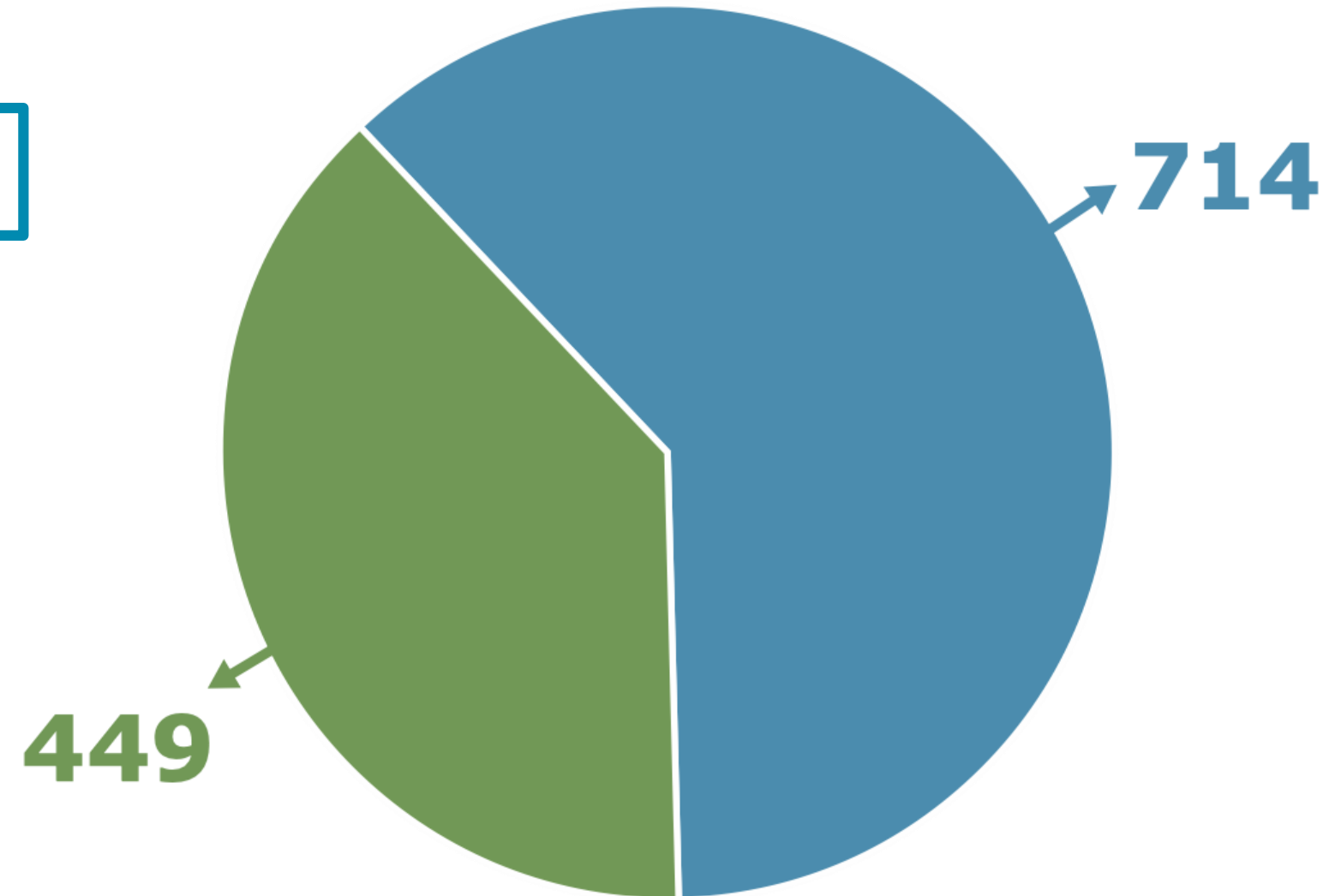
- Connectivity/Accessibility - trails and pathways do not exist in isolation/need to consider whole system
- Roles - lack of understanding on who is responsible to clear which trails/how do I find out the status of clearing?
- Trail use - need to understand trail use to evaluate our priorities
- Ice Management - how to operate in new cycle of freeze/thaw
- Service level - What level of service is right for our community?
- Trails/pathways maintenance supports many stakeholder groups and County Strategic Plans (ITMP, Trails strategy, RPC Master Plan etc.)

Resident feedback

- Used the themes from stakeholder groups to develop a public survey.
- Key themes were:
 - Gather specific feedback on clearing of transit stops and pathways to access transit stops from transit users.
 - Are destination trails or pathways of interest to the community?
 - Understanding use of trails – what do residents use them for?
 - Understanding accessibility issues and barriers to trail use.
 - Assessing trail clearing expectations – timing, sequence and quality.

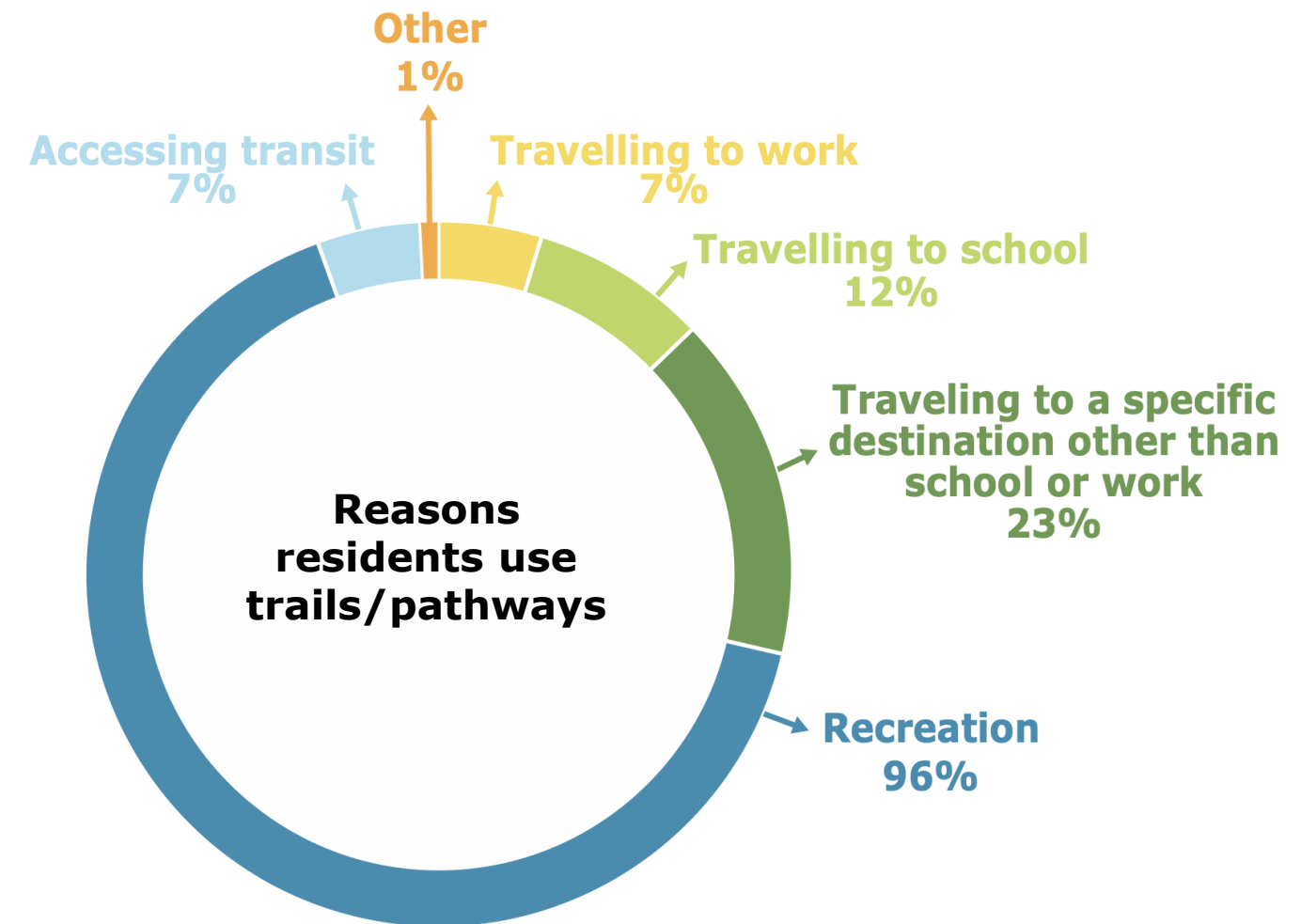
Resident survey

1163 responses in total



What we heard – trail/pathway usage

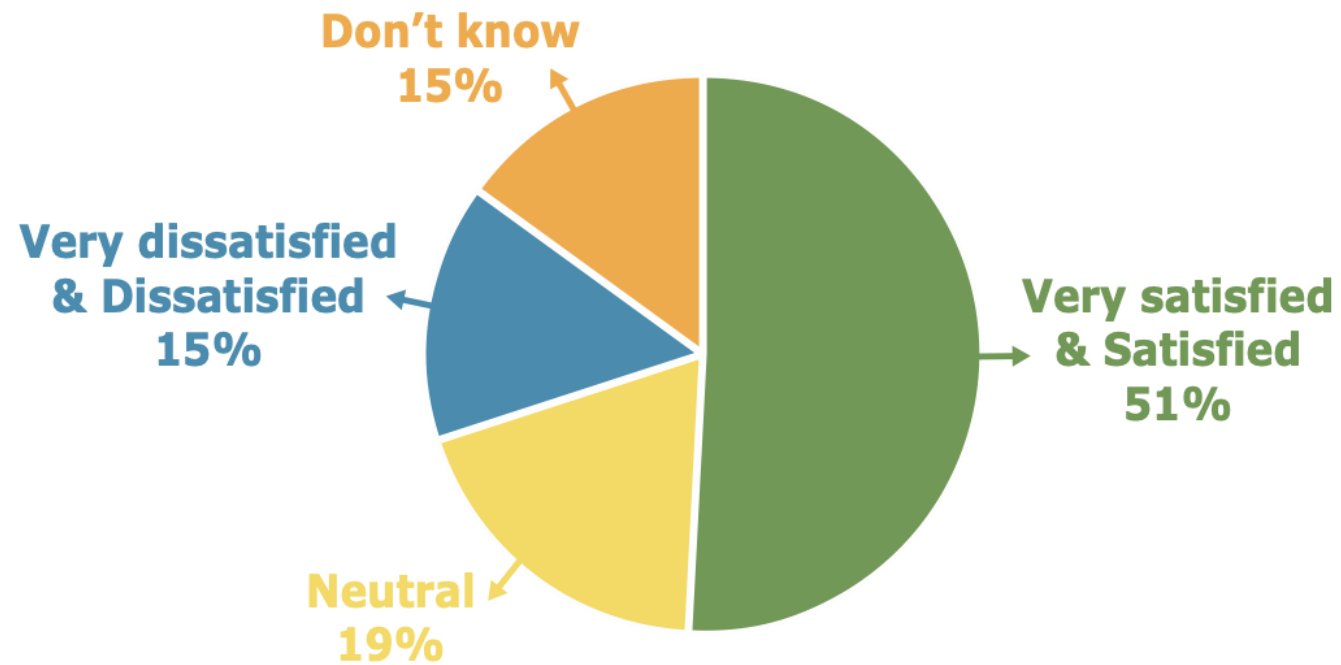
- 83% of respondents use County maintained trails/pathways at least a few times a month through the winter
- 96% use the trails/pathways for recreation (including dog walking)
- 73% use pathways that connect in "my neighbourhood"
- 74% have used the pathways less in winter because of ice/snow
- 58% say they would use destination trails in the winter if the County created more



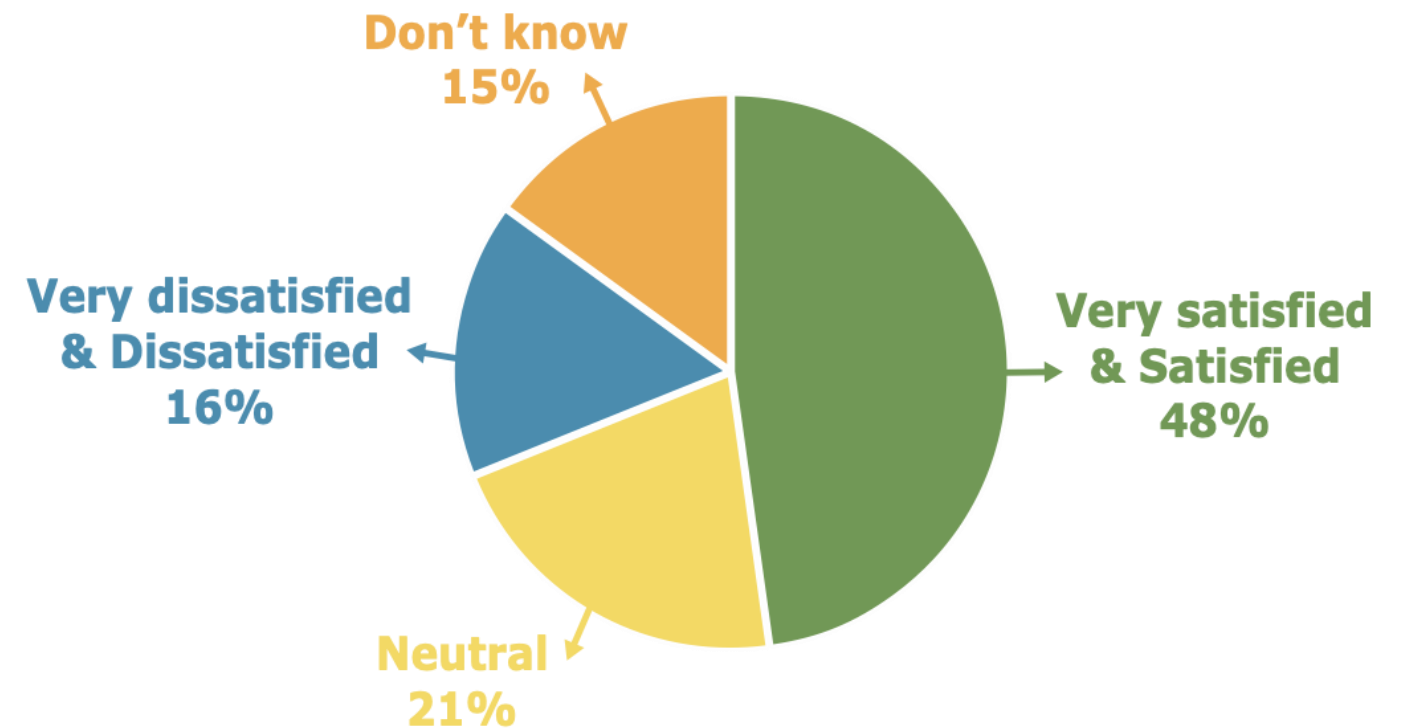
What we heard - satisfaction

Trails next to major roads

Timeframe



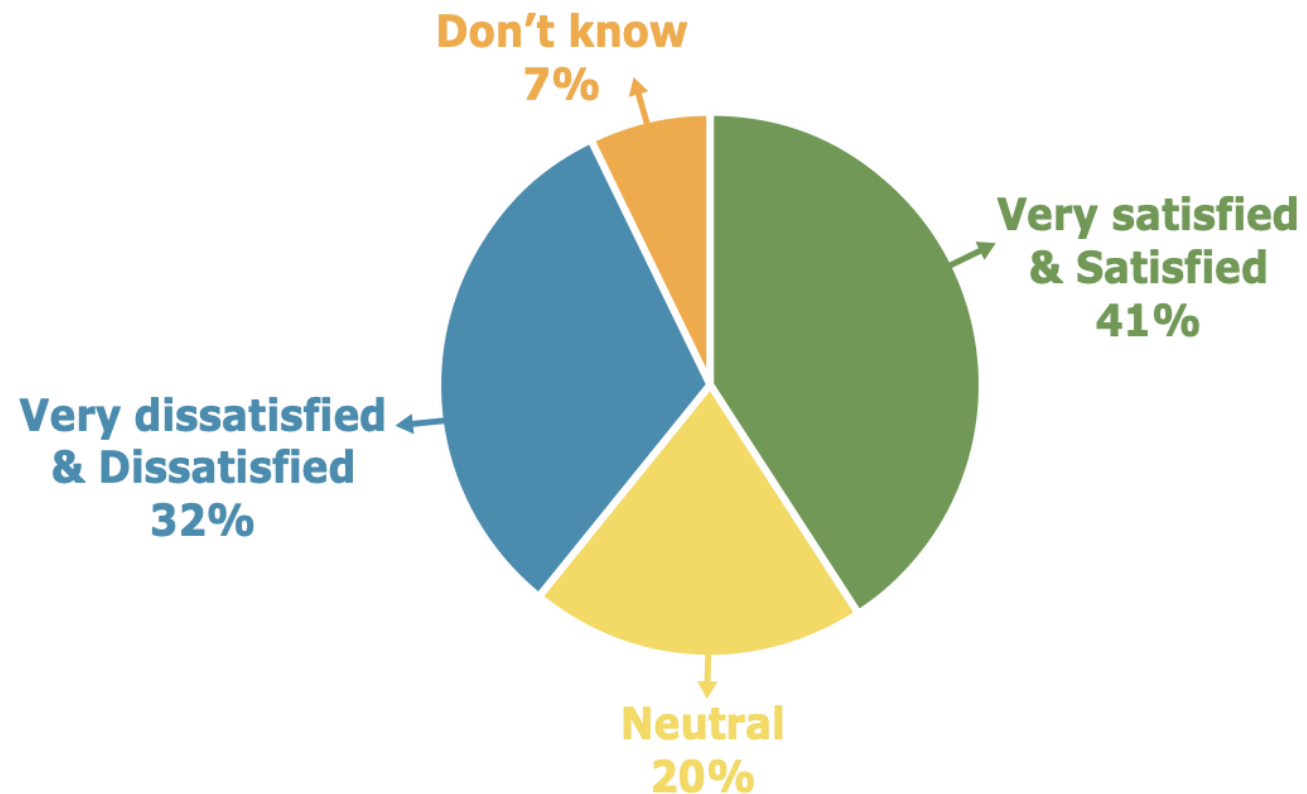
Quality



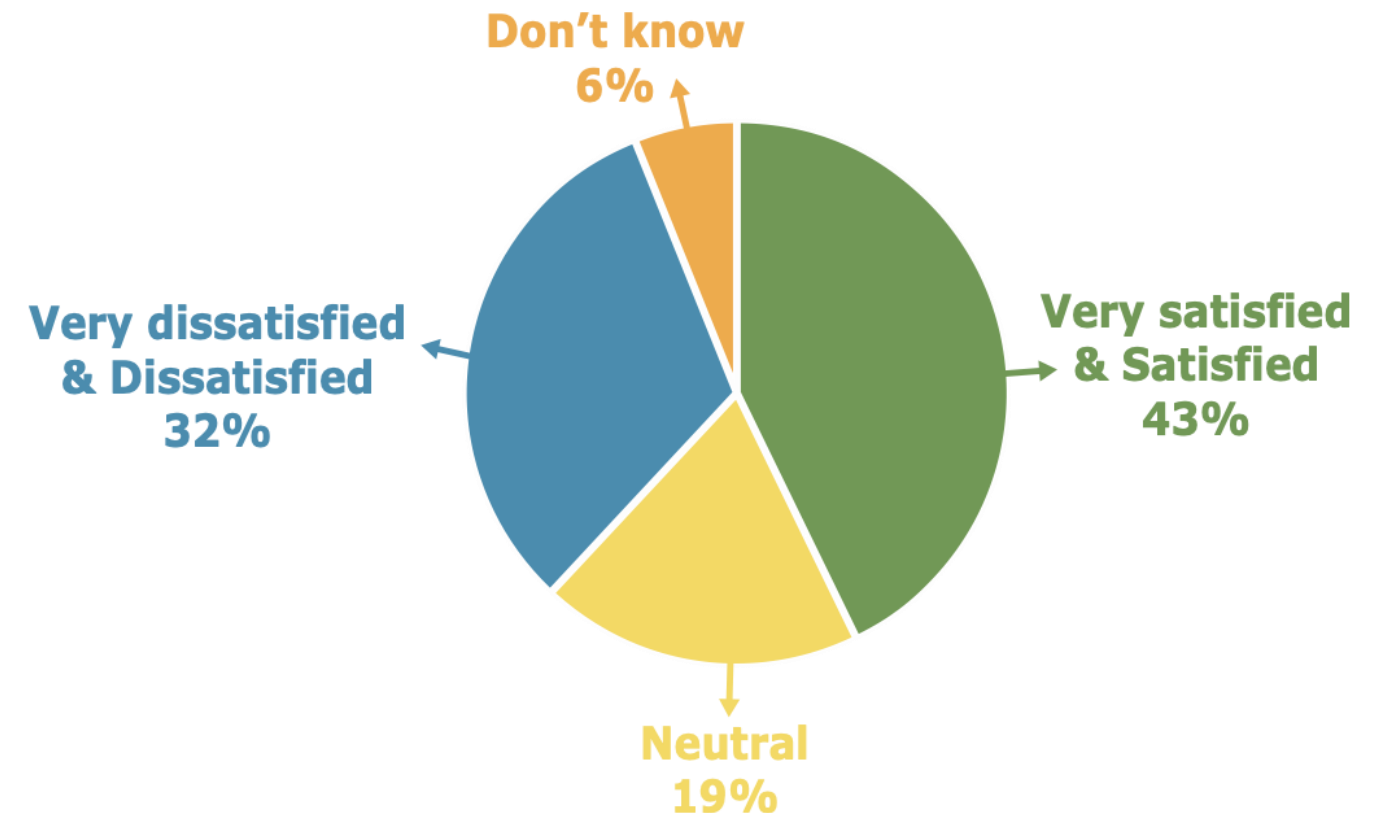
What we heard - satisfaction

Neighbourhood trails/pathways

Timeframe



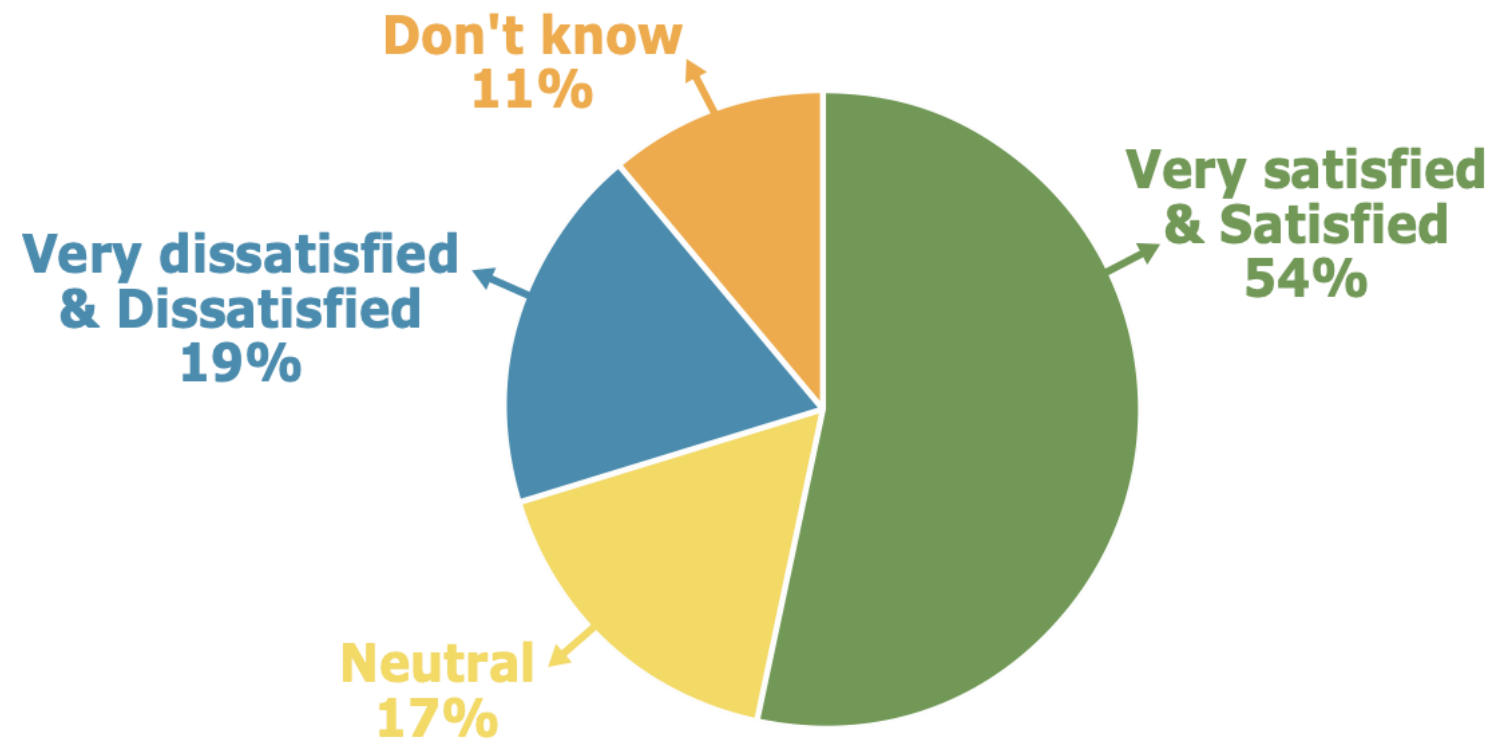
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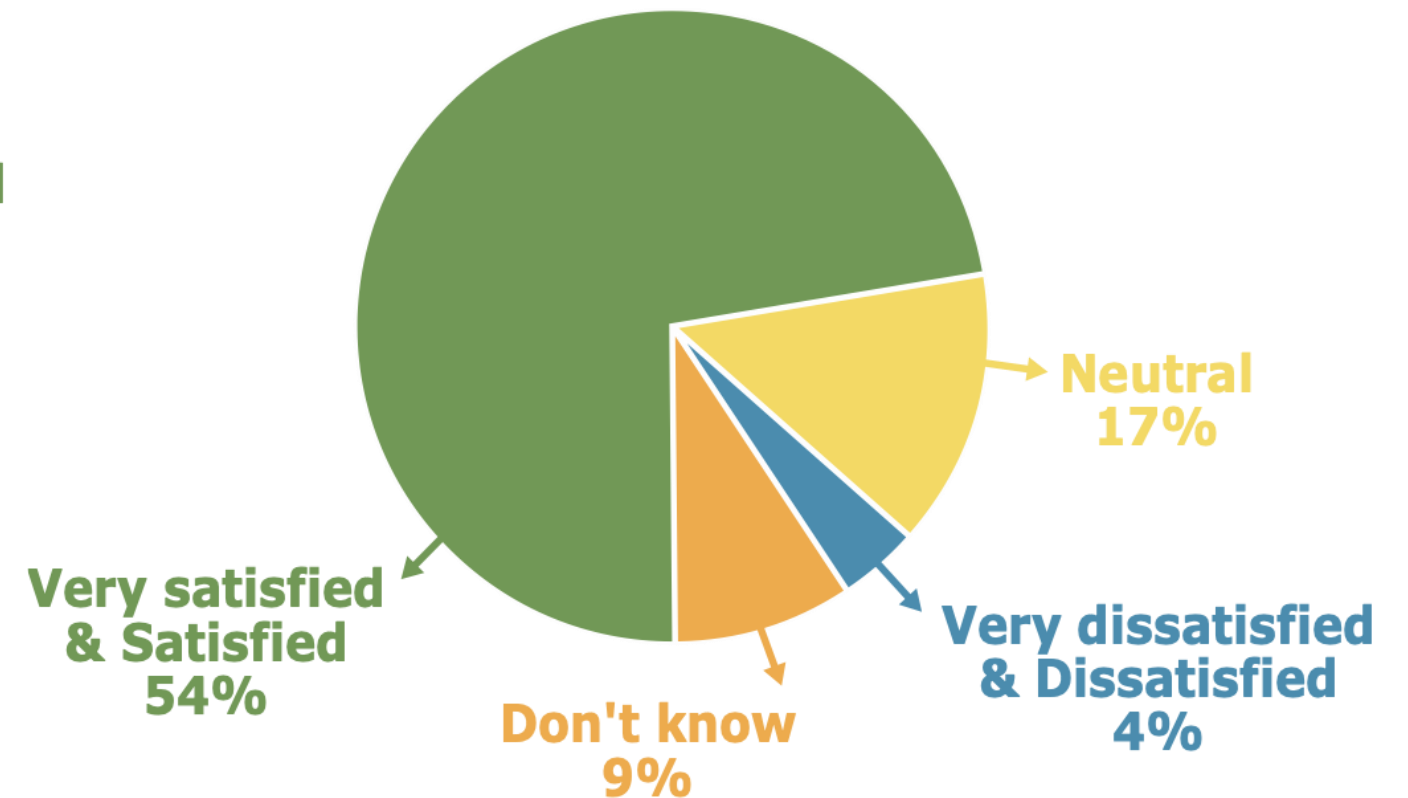
What we heard – transit

Transit user satisfaction with snow clearing/ice control

At County transit stops



At County transit centres

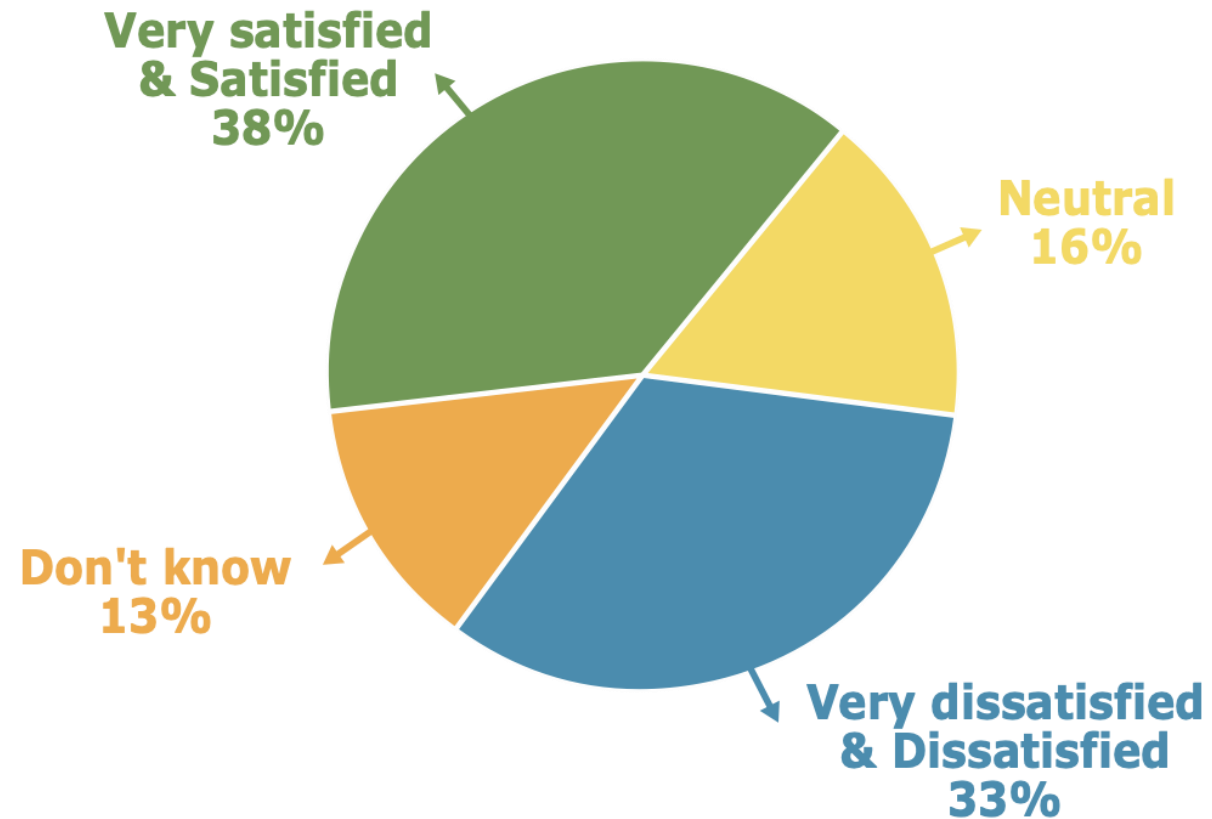


What we heard – accessibility

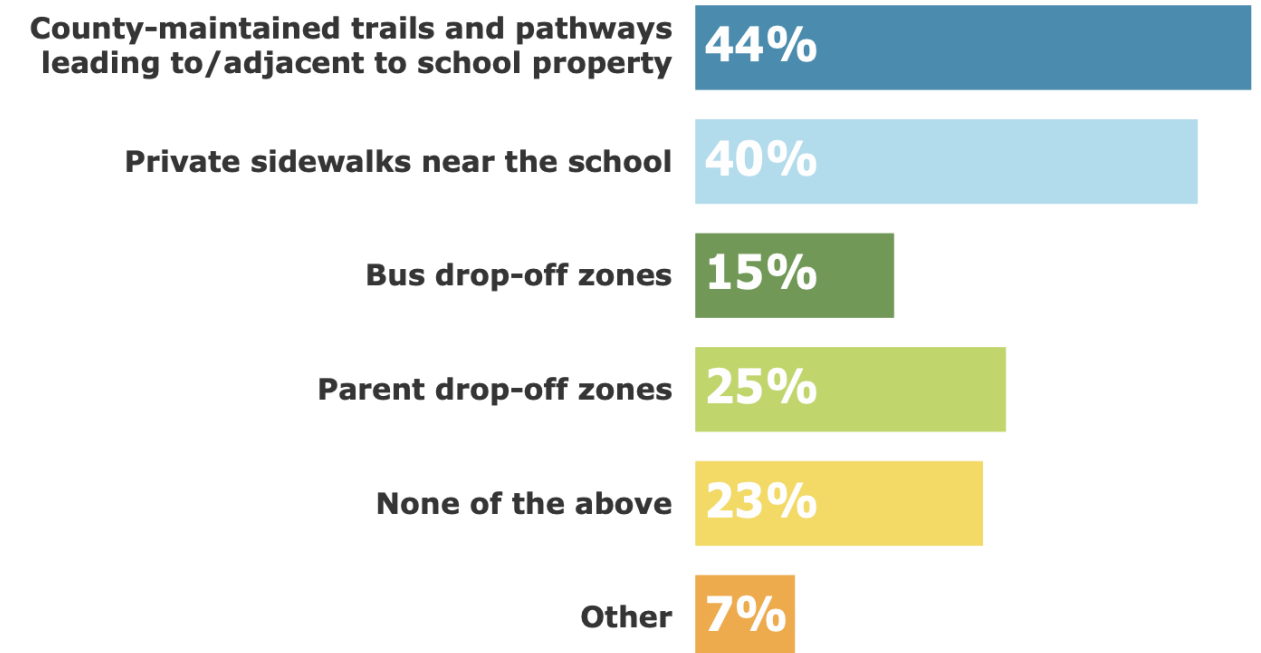
- Asked open ended question about barriers encountered that limit access to County trails and pathways.
- 171 said that someone in their household was living with a disability that restricts or limits access resulting from uncleared trails and pathways.
- Most common theme was ice on trails and pathways.
- Other comments – how icy conditions affect them, fear of falling, bare pavement is only way can use them.
- Ensuring ongoing access to trail features (i.e., garbage cans, benches)

What we heard – schools

Quality of snow and ice control near your child/children's schools

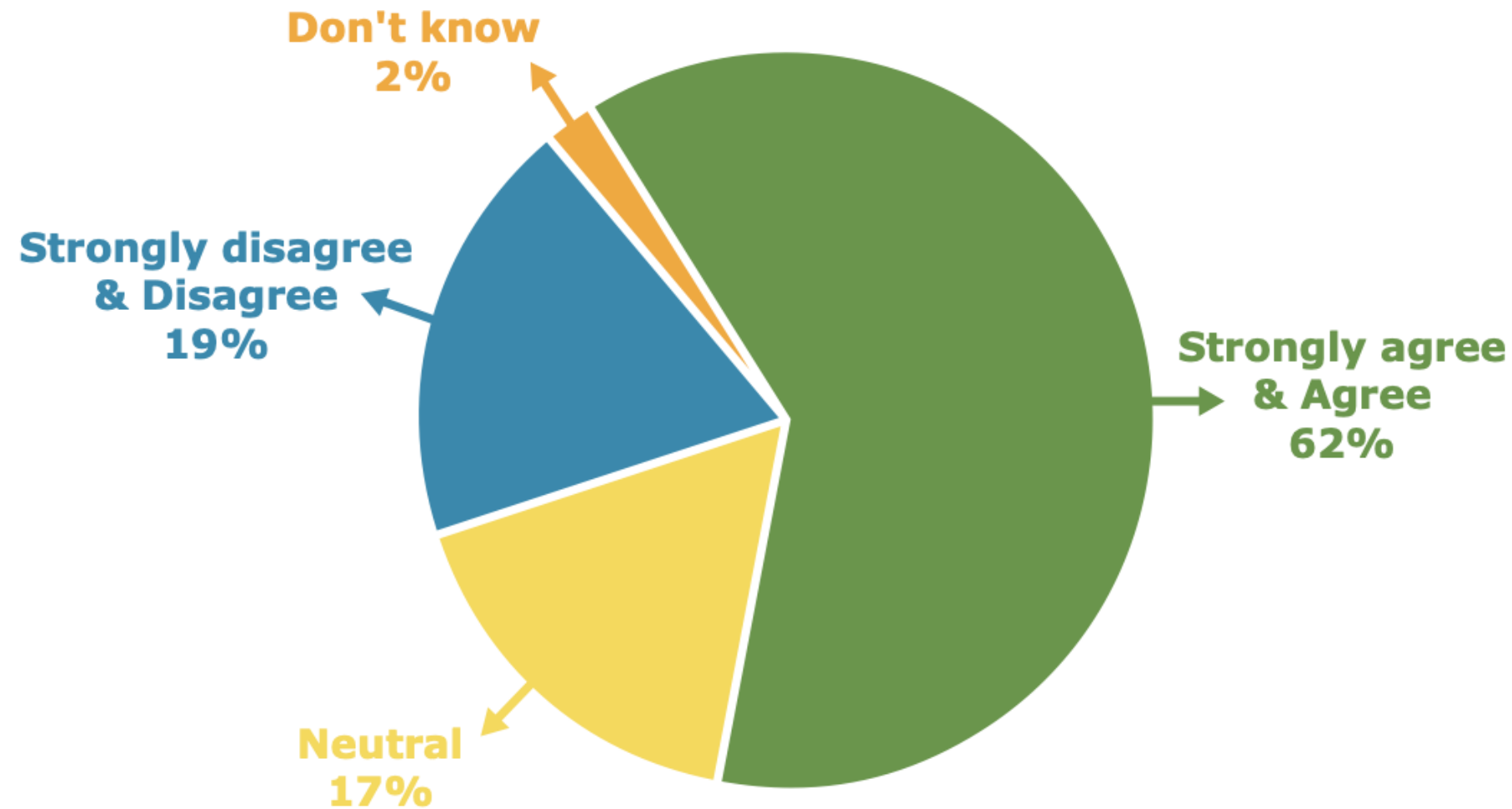


Location of snow/ice concerns when travelling to school



What we heard – priority approach

Does the current priority approach make sense for our community?



What we heard – future priorities

Asked to rank future priorities to help us identify where to focus efforts.

Top 3 noted in order of highest preference:

1. Educate / encourage clearing of privately-maintained sidewalks
2. Clear trails and pathways in a shorter timeline
3. Improve quality of ice control

Key takeaways

- Primary trail use is for recreation, not commuting.
- Overall satisfaction is fairly high or neutral with timing and quality of clearing.
 - No strong indication that community needs are not being met
- Residents think our current order of priorities makes sense for the community but would like timelines to be shorter (less than eight days).
 - Not supportive of tax increase (58% said no)

Key takeaways continued

- Private sidewalks were a common concern.
 - Residents want increased education on importance of clearing sidewalks
 - Complaints that residents have 48 hours, but the County has eight days
- Connectivity is important – connector pathways and private sidewalks are key
- General support for destination trail as an option for "ice-free" areas.
- Mixed support for use of deicer because of pets / use for dog walking

Potential improvements

1. Update our current priorities

- Reduce the total time to complete trail clearing to five days.
- Continue with current priority approach but target higher traffic locations first.
- Increase school sites to Priority 1 and include trail connections from neighborhoods to the schools.
- Include remaining neighbourhood connector trails to Priority 3.

Potential improvements

2. Operational improvements

- Clean all trails in and around school sites within 24 hours.
 - include key connector trails at school sites with the higher priority
 - Work with schools for higher priority locations based on student/user needs
- Improve clearing on pararamps and removing windrows at bus stops.
- Increase trail ice control response in major ice events.
- Increase ice control in County parking lots for accessibility needs.
- Continue with existing improvements from past winter.
 - Open up all trails and pathways first
 - Use larger equipment where appropriate

Potential improvements continued

3. Communications and education

- Focus on importance of private sidewalk clearing.
- Communicate the updated trail clearing standards and revised priority approach with updated policy.

Potential improvements continued

4. New initiatives

- Explore adding more destination trails similar to Broadmoor Lake Park.
- Review potential for trail clearing status tools and technology.

New trail priorities

Priority 1 (within 24 hours)

- School sites including parent drop zones
- School bus zones
- School parks and connector sidewalks from residential areas

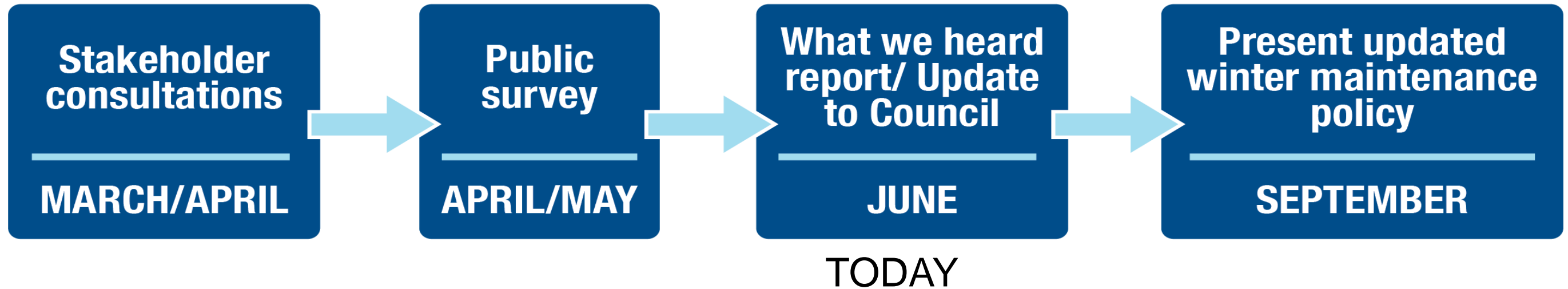
Priority 2 (within 48 hours)

- All hard surface sidewalks and trail leading to public recreation facilities

Priority 3 (within 120 hours/5 days)

- All remaining hard surface trails
- Pathways between residential streets

Next steps



- Detailed implementation plan – what we heard, improvements underway, shifting priorities to be brought back in Q3.

Questions?