


# Understanding Cell Phone Recycling Behaviours

CWTA Recycling Summary 2018

submitted by Nanos to the Canadian Wireless Telecommunications Association, February 2019  
(Submission 2018-1315)



# Table of Contents



Executive Summary	p.3
Section 1 - Cell phone ownership	p.12
Section 2 – Cell phone disposal	p.41
Section 3 – Cell phone storage	p.47
Section 4 – Cell phone recycling	p.53
Section 5 – Information gathering & awareness	p.59
Methodology	p.70

# Executive summary



# Research objectives

The overall objectives of this research were to:

- follow up on how Canadians deal with unused cell phones;
- understand which programs are being used by Canadians to recycle or donate their used phones;
- understand why Canadians are storing their used cell phones;
- gauge Canadians' support and awareness of cell phone recycling programs in general;
- evaluate Canadians' likelihood of using a cell phone recycling program in the future; and,
- understand what would motivate Canadians to recycle their used cell phones.


The study is of Canadian cell phone owners excluding new phone owners with no previous cell phone to store or dispose of. The results of this report are a part of a tracking study by the CWTA.

# 2017-2018 Methodology change

- Readers should note that in the 2018 wave of the survey, at the direction of the CWTA, Nanos transitioned to a full online survey (with telephone only in PEI), while previous waves were mixed mode, half online and half by RDD dual frame (land- and cell lines) telephone sample.
- The difference in methodology could lead to a potential mode impact. Of note, the tracking indicators remain consistent with previous waves with the transition to a full online survey.
- However the methodological difference does have a potential mode effect, which has not been noted where applicable throughout the report.



# SUMMARY



On average  
Canadians  
report using  
their cell  
phone for  
three years

## Cell phone ownership

Most Canadians only report having one cell phone they actively use, and report having owned four phones or more prior to their current one. Two in three Canadians report currently having a cell phone in storage.

- **A significant majority of Canadians report they actively use one cell phone** – Consistent with previous waves of research, nine in ten (90%) Canadians report they personally have one cell phone that they actively use. Nine per cent of Canadians report they actively use two cell phones, while one per cent report they use three cell phones and less than one per cent report they use four cell phones or more.
- **More than half of Canadians report they have owned four phones or more prior to their current one** – A slight increase from previous waves, 53 per cent of Canadians report they have personally owned four cell phones or more prior to their actual phone (46% in 2017, 46% in 2016; 43% in 2015). Under two in ten respectively report they have owned two (18%) or three (18%) phones prior to their current one, while 12 per cent report they have owned one. Please note these changes may be due to mode impact.
- **Canadians report they used their previous cell phone for about three years on average** – On average, Canadians report they used their previous cell phone for 36.2 months before they acquired their current one. Similarly to previous waves, older Canadians tend to hold on to their cell phones longer than younger Canadians (55 plus: 40.0 months; 18-34: 31.1 months).
- **Two in three Canadians report they have a cell phone in their possession that they are not using** – Sixty-six (up from 62% in 2017 and 2016) per cent of Canadians say they have cell phones in their possession that they are not using and are being stored, compared to 33 per cent who say they don't. Canadians report storing an average of 2.3 phones.

## Support for recycling

Support for cell phone recycling programs remains very high among Canadians. Awareness is high among Canadians that cell phones can be recycled and that carriers offer upgrades, while awareness is slightly lower that cell phones received through upgrade programs are recycled and reused. A majority of Canadians would consider recycling their cell phone if they knew where and how to do it, mentioning that cash/money/a rebate or it being easy to recycle would encourage them to recycle the most.

- **A majority of Canadians are aware that cell phones can be recycled** – Eighty-one per cent of Canadians are aware cell phones can be recycled, compared to 19 per cent who are unaware of this. This is consistent with previous waves of the research.



# SUMMARY



Nine in ten  
Canadians  
support cell  
phone  
recycling  
programs

- **Three in four Canadians are aware that most cell phone carriers allow them to upgrade cell phones** – Seventy-five per cent of Canadians are aware that most cell phone carriers have trade-in or programs that allow them to upgrade their cell phones (consistent with 76% in 2017), while 25 per cent are unaware of this.
- **More than three in four Canadians aware of trade-ins or upgrade programs are aware that cell phones received through those programs are either recycled or reused** – Seventy-six per cent of Canadians who are aware of trade-in and upgrade programs through cell phone carriers are aware that cell phones received through trade-in and upgrade programs are recycled or reused (up slightly from 71% in 2017), compared to 24 per cent who are unaware of this.
- **Over eight in ten Canadians would consider recycling their cell phones if they knew where to recycle them** – Asked whether they would consider or would not consider recycling their cell phones if they knew where to recycle them, 82 per cent of Canadians say they would consider doing this, while nine per cent would not consider recycling their cell phone(s), and nine per cent are unsure. This is consistent with the previous waves of research.
- **A majority of Canadians would consider recycling their cell phones for the environment** – The most mentioned reason for why they would or would not consider recycling their cell phones was for the environment/I recycle everything/waste to throw away/right thing to do (57%), and because they have no use for it/better than having it laying around (eight per cent).
- **More than one in four Canadians say cash, money or a rebate would encourage them to recycle their phone** – Asked what would encourage them to recycle their cell phone, just over one in four Canadians say cash/money/rebate (26%), consistent with 2017 (23%). Other top mentions included ease of recycling/returning (15%), if I was confident all my data/information had been removed (nine per cent), knowing where/how I can return it (nine per cent), and no encouragement needed/I already do (eight per cent).
- **A large majority of Canadians support or somewhat support cell phone recycling programs** – Support for cell phone recycling remains very high with more than nine in ten Canadians saying they support (85%) or somewhat support (12%) programs that encourage the recycling of old, unused or unwanted cell phones. This is consistent with previous waves of research.
- **Paper/newspaper and plastic/plastic bottles are the two top mentions when Canadians think of recycling** – Over half of Canadians say paper/newspaper (29%) or plastic/plastic bottles (26%) come to mind when they think about recycling, consistent with 2017.

# SUMMARY



Over two in five Canadians report storing old cell phones

## Cell phone disposal

Storing away an old phone was the most popular method of cell phone disposal for Canadians. Younger Canadians are more likely to give away or sell their last phone, while residents of Newfoundland are more likely to store their phone.

- **Two in five Canadians stored their previous phone away after receiving their current phone** – Asked what they did with their previous old phone after receiving their current one, 44 per cent of Canadians say they stored it away, while 15 per cent gave it away. Eleven per cent returned or traded it in to their cell phone carrier, while nine per cent recycled their old phone. This was generally consistent with the 2017, 2016 and 2015 waves.
- **Residents of Nova Scotia and Quebec are least likely to report storing their old phone(s)**– Residents of Quebec and Nova Scotia are the least likely to report storing their old phone(s) (39% each), while residents of Newfoundland are the most likely to report doing this (49%). Younger Canadians (18-34) are more likely to give their phone away (20%) than older Canadians (55 plus) (12%).


## Cell phone storage

Canadians who stored their previous phone reported having stored their phone for a year or less, most often say they stored their phone because they did not know what else to do with it or they are keeping it as a backup.

- **Canadians most often report they have been storing their old cell phone for a year or less** – Thirty-nine per cent of Canadians who stored their last phone have been storing their previous cell phone for 1-12 months, while 30 per cent have been storing it for 13-24 months, 16 per cent have been storing it for more than 36 months, and 12 per cent have been storing it for 25-36 months. This is consistent with the 2017, 2016 and 2015 waves.
- **Over two in ten Canadians have kept their previous phone for security reasons** – Over two in ten Canadians who stored their previous phone, did so for security reasons (22%), as a backup/extra (20%), or they don't know what else to do with it (16%). Fifteen per cent kept it for a future need, while 12 per cent kept their phone for the phone numbers and information on it.



# SUMMARY



Two in five  
Canadians  
report recycling  
their cell phone  
at a hazardous  
waste deposit

## Cell phone recycling

Canadians who recycled their previous phone most often report taking it to a depot for special or hazardous waste, or programs through a retail store or cellular provider, with the majority reporting they were satisfied with their recycling experience.

- **The most common approaches to recycle old phones are through a special/hazardous waste depot and cell phone recycling programs with a retail store** – Asked how they recycled their old phone, 40 per cent of Canadians report taking it to a depot for special/hazardous waste, 29 per cent recycled it through a cell phone recycling program through a retail store (17% in 2017), while 17 per cent recycled it through a cell phone recycling program with a cellular service provider (27% in 2017). Please note these changes could be due to mode impact.
- **Majority of Canadians who recycled their phone were satisfied with their cell recycling experience** – More than eight in ten Canadians who recycled their old cell phone were satisfied with their cell recycling experience, giving it at least a 5 on a 7-point scale (39% gave it 7 out of 7; 30% gave it 6 out of 7; and 14% gave it a 5). Eighteen per cent of Canadians gave it a score of 1-4 out of 7, an increase from 12 per cent in 2017. Those who gave this a score of 7 decreased from 2017 (48% in 2017). The mean score was 5.6 out of 7.

## Next steps to recycling

Nearly four in ten Canadians would turn to Google or the Internet for information if they were to consider recycling their old cell phone, followed by their cellular service provider. That being said, overall awareness of recycling programs for unused cell phones is at just over one in three at the time of the survey, with the highest unprompted awareness for programs with cell phone companies, recycling depots, and retail stores. Canadians who reported storing their phone are less likely to be aware of recycling programs for cell phones, while those who recycled their previous phone are more likely to be aware of them.

- **More than two in three Canadians would look for information on Google if they were considering recycling their old cell phone** – Asked where they would look for information if they were to consider recycling their old phone, 37 per cent of Canadians would turn to Google and 29 per cent through their cellular service provider.
- **Over one in three Canadians are aware of cell phone recycling program** – Similarly to the previous waves, 38 per cent of Canadians are aware of recycling programs for old or unused cell phones (36% in 2017, 37% in 2016, 36% in 2015), while 46 per cent are unaware. Sixteen per cent are unsure.

# SUMMARY



Canadians most often report being aware of recycling programs through cell phone companies, recycling depots, and retail stores

- **Canadians are most aware of recycling programs through cell phone companies, recycling depots, and retail stores** – Asked what cell phone recycling programs they are aware of, 26 per cent of Canadians aware of such programs mentioned cell phone company recycling programs (e.g. Bell, TELUS, Rogers, etc.), followed by recycling depot (25%), and retail stores recycling programs (e.g. Staples, Best Buy, etc.)(23%).

Nanos administered an online survey of 3,000 Canadians (300 in each province), 18 years of age or older, between December 2<sup>nd</sup> to 19<sup>th</sup>, 2018. Participants in PEI were interviewed by telephone (RDD dual frame land- and cell-line sample) using live agents. The margin of error for a random survey of 3,000 Canadians is  $\pm 1.8$  percentage points, 19 times out of 20, while the margin of error for a random survey 300 residents of a Canadian province is  $\pm 5.7$  percentage points, 19 times out of 20. Please note that longitudinal differences may be attributed to the transition to a full online survey from a mixed mode telephone and online survey.

This study was commissioned by the Canadian Wireless Telecommunications Association (CWTA) and conducted by Nanos Research.

# Detailed findings



# Products, materials and items associated with recycling

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, RDD dual frame hybrid telephone and online random survey, December 4<sup>th</sup> to 18<sup>th</sup>, 2017, n=7313 (respondents who currently own a cell phone), accurate 1.1 percentage points plus or minus, 19 times out of 20.

Responses	Frequency	
	2018 (n=5,139)*	2017 (n=7,313)*
Paper/Newspapers	28.7%	26.5%
Plastic/Plastic bottles	26.1%	25.6%
Glass	10.0%	13.4%
Tin cans/Aluminum cans/Pop cans	10.0%	8.6%
Cardboard	8.5%	9.9%
Metal	6.3%	6.8%
Compost/Food waste/Trash	2.3%	2.4%
Electronics/Batteries	2.2%	1.9%
Everything used at home/Everything that can be recycled	1.2%	1.1%
Blue bins/Green bins	0.6%	0.8%
Tires/rubber	0.6%	0.2%
Wood	0.4%	0.4%
Clothing	0.3%	0.4%
Other	2.2%	1.3%
Unsure	0.6%	0.7%

\*Based on multiple mentions

**QUESTION** – When you think about recycling, what products, materials, or items come to mind? [Open-ended]

# 1.0 Cell phone ownership



# Cell phones actively used

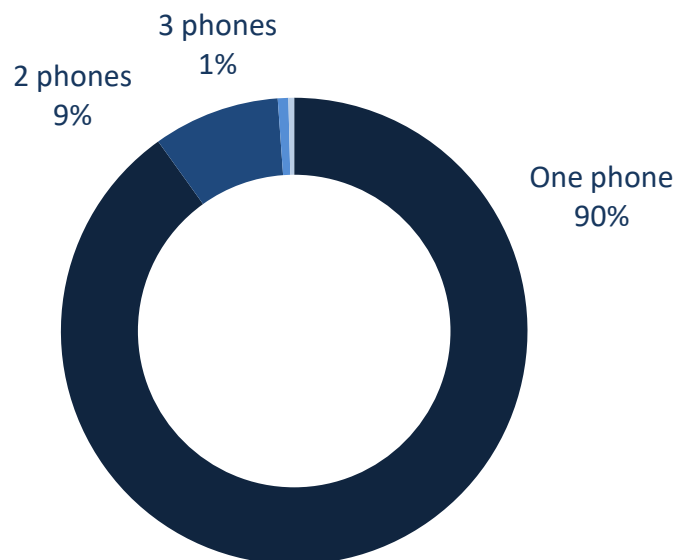
Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

**Mean # of phones**

1.1 phones

**Median # of phones**

1.0 phones



- Nine in ten respondents (90%) actively use one cell phone, and the reported mean number of active phones was 1.1. However, nine per cent indicated they actively use two phones, while one per cent actively use three phones and less than one per cent use four or more phones.

Subgroups	One phone
Newfoundland and Labrador (n=300)	88.6%
New Brunswick (n=300)	90.7%
Nova Scotia (n=300)	88.7%
Prince Edward Island (n=300)	86.1%
Quebec (n=300)	89.8%
Ontario (n=300)	91.2%
Manitoba (n=300)	90.7%
Saskatchewan (n=300)	90.3%
Alberta (n=300)	87.9%
British Columbia (n=300)	89.5%
18 to 34 (n=725)	84.0%
35 to 54 (n=1,322)	90.3%
55 plus (n=953)	94.3%
Male (n=1,535)	88.3%
Female (n=1,465)	91.8%
Urban (n=2,228)	89.7%
Rural (n=772)	92.6%

\*Weighted to the true population proportion.

\*Charts may not add up to 100 due to rounding.

**QUESTION** – How many cell phones do you personally have that you actively use?  
[Open-ended]



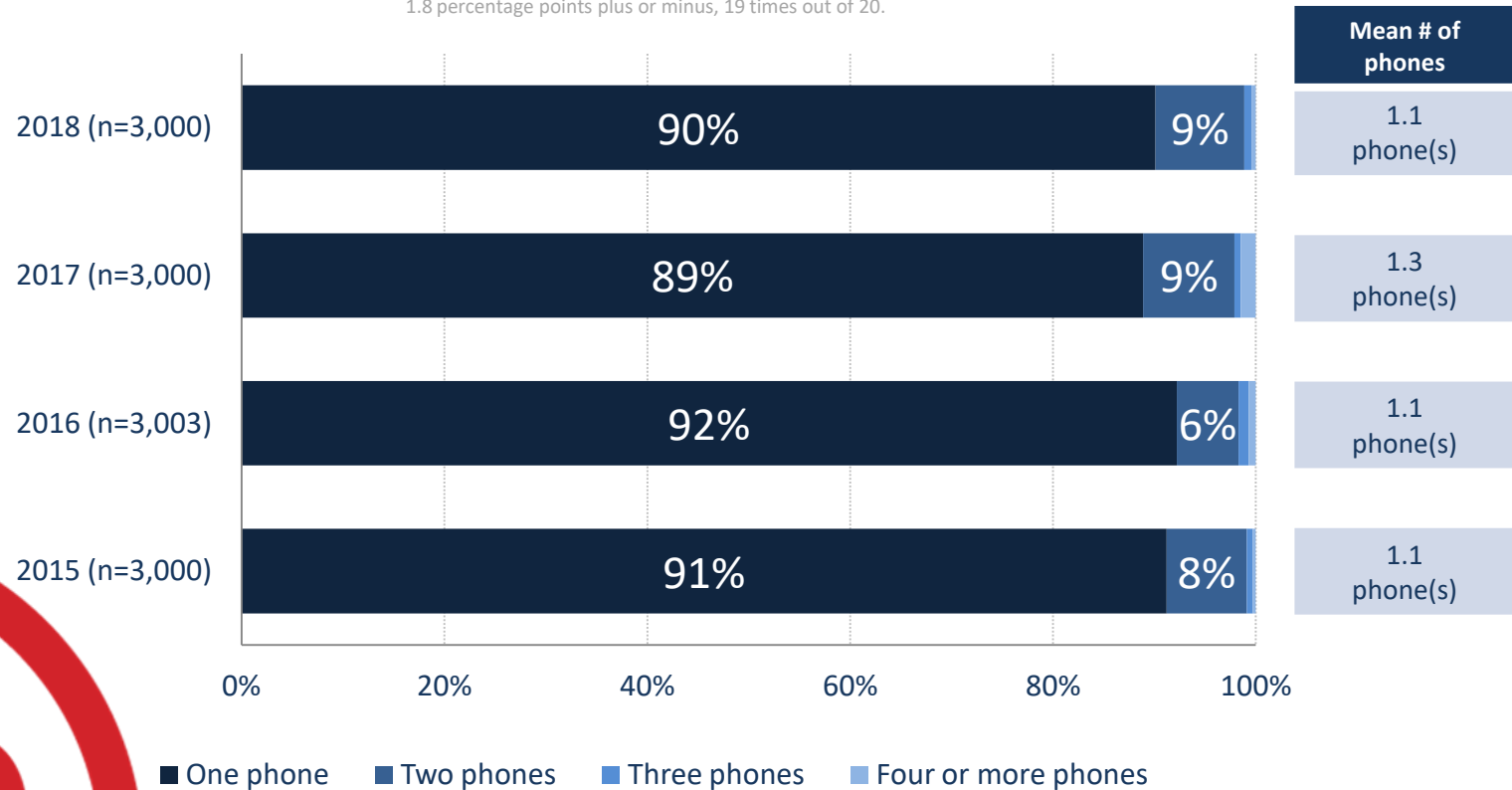
# Cell phones actively used – by year

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, RDD dual frame hybrid telephone and online random survey, December 4<sup>th</sup> to 18<sup>th</sup>, 2017, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 19<sup>th</sup>, 2016, n=3003 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Sources: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 15<sup>th</sup>, 2015, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.



**\*Note:** Charts may not add up to 100 due to rounding

**QUESTION –** How many cell phones do you personally have that you actively use? [Open-ended]

# Prior cell phone ownership – by year

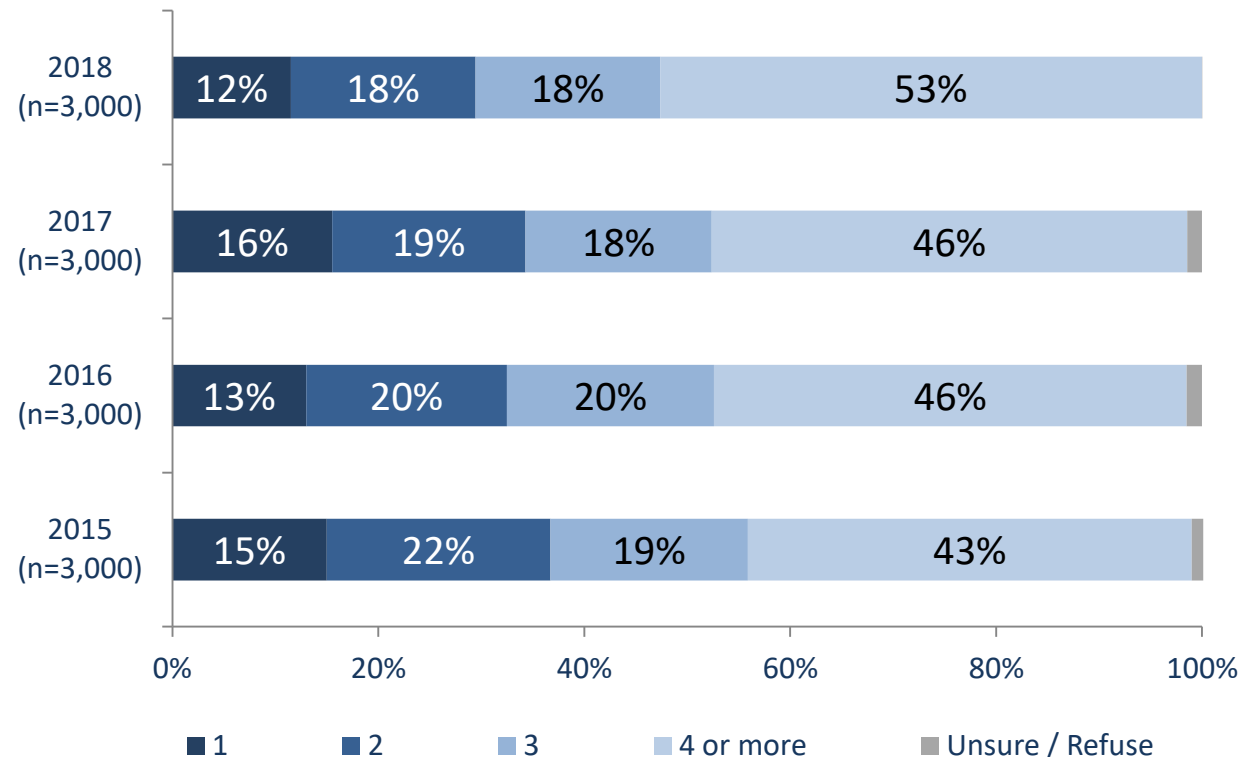
Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

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- Canadians have owned about four cell phones on average prior to their current one.
- These results are similar to those reported last year. Twelve per cent are first-time owners, and more than half of Canadians have owned at least four cell phones or more prior to their current one.

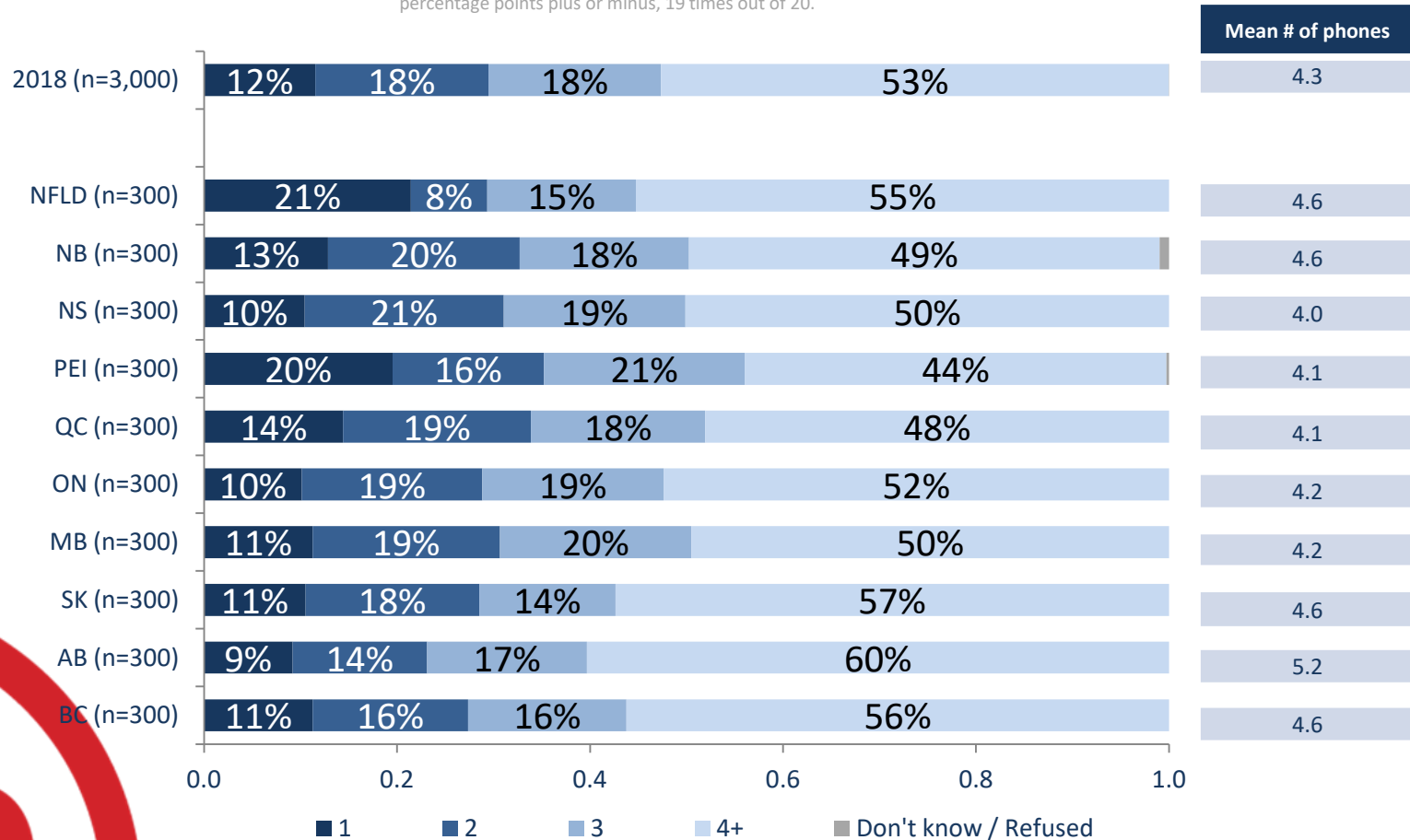


\*Note: Charts may not add up to 100 due to rounding

**QUESTION** – Approximately how many cell phones have you personally owned prior to your current phone? [Open-ended]

# Prior cell phone ownership - by province

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.



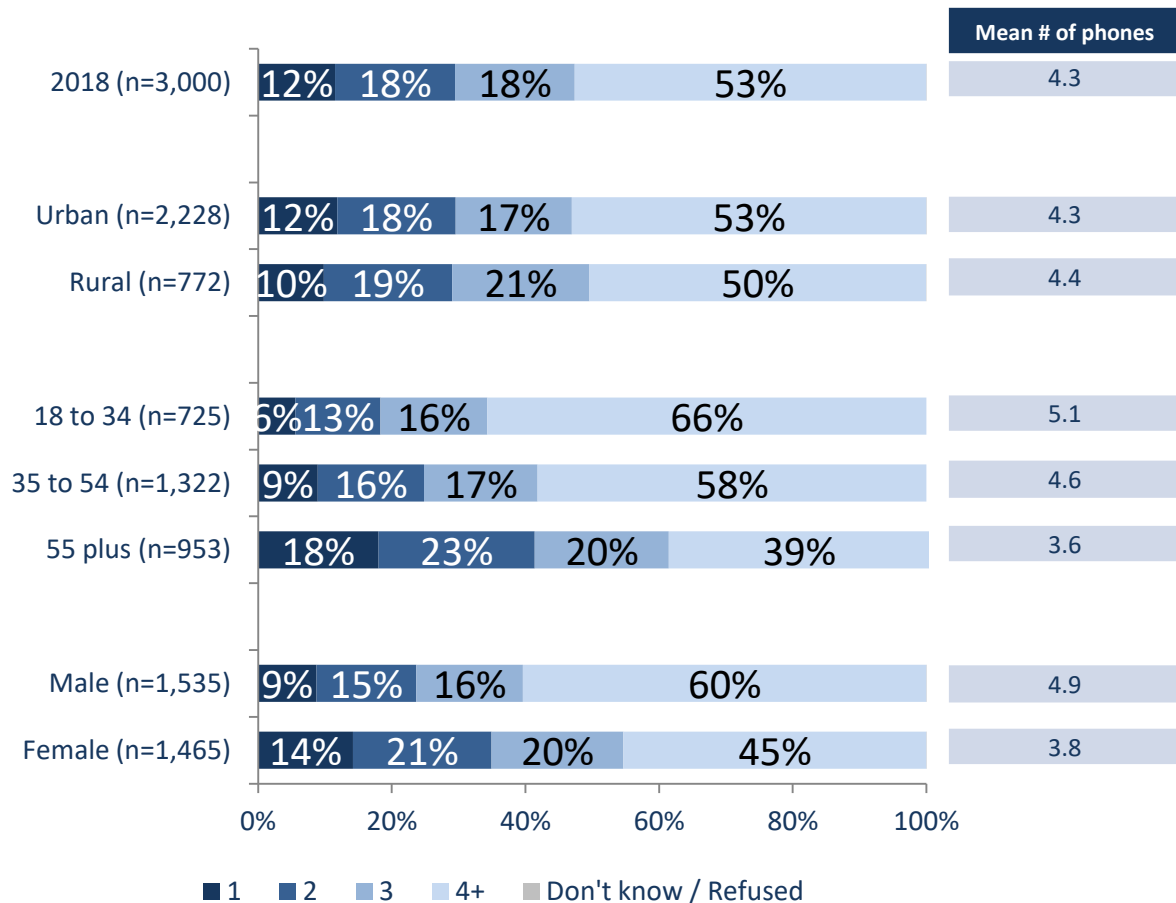
\*Note: Charts may not add up to 100 due to rounding

**QUESTION** – Approximately how many cell phones have you personally owned prior to your current phone? [Open-ended]

# Prior cell phone ownership - by demographic

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

- Older Canadians are more likely to say they only had one cell phone prior to their current one (18%), compared to younger respondents (6%). Additionally, two thirds of those under 35 (66%) and nearly six in ten of those 35 to 54 (58%) have owned at least 4 phones, while just under four in ten (38%) of those over 55 have had that number of phones.
- Men are more likely than women to say they have had at least 4 cell phones before their current one (60% vs. 45%).

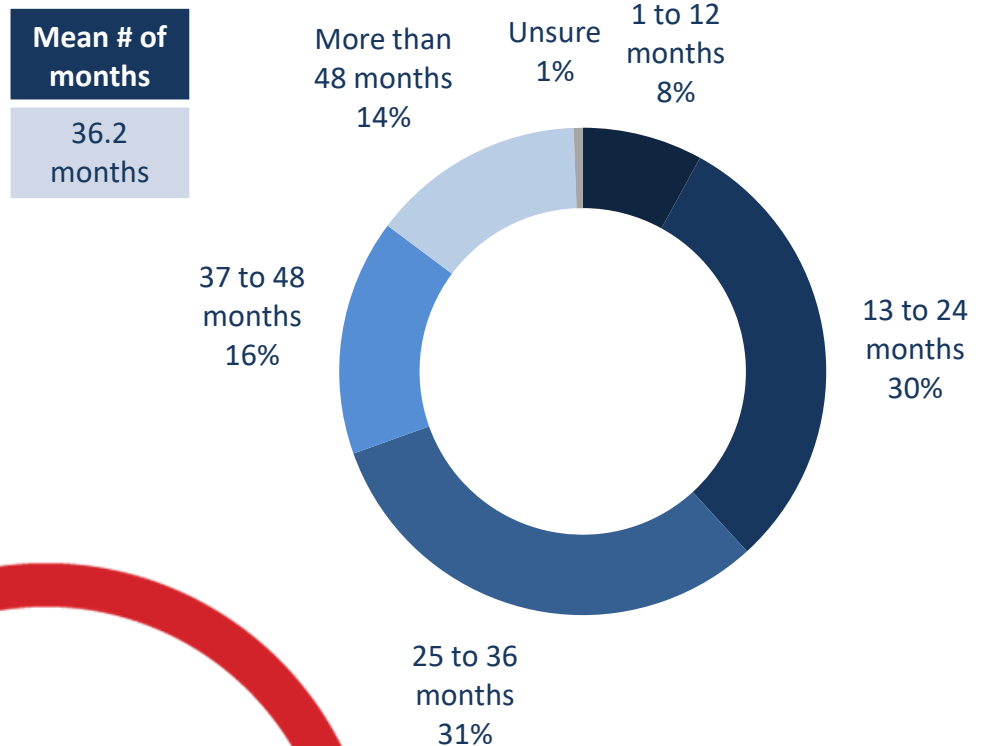


\*Note: Charts may not add up to 100 due to rounding

**QUESTION** – Approximately how many cell phones have you personally owned prior to your current phone? [Open-ended]

# Cell phone usage

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.



**QUESTION** – For how long did you use your previous phone? (enter # of months) [Open-ended]

Subgroups	25 to 36 months
Newfoundland and Labrador (n=300)	27.0%
New Brunswick (n=300)	33.8%
Nova Scotia (n=300)	31.8%
Prince Edward Island (n=300)	22.5%
Quebec (n=300)	33.4%
Ontario (n=300)	28.9%
Manitoba (n=300)	34.9%
Saskatchewan (n=300)	31.7%
Alberta (n=300)	31.7%
British Columbia (n=300)	33.6%
18 to 34 (n=725)	32.3%
35 to 54 (n=1,322)	30.4%
55 plus (n=953)	31.4%
Male (n=1,535)	30.9%
Female (n=1,465)	31.7%
Urban (n=2,228)	31.7%
Rural (n=772)	29.3%

\*Weighted to the true population proportion.

\*Charts may not add up to 100 due to rounding.

# Cell phone usage – by province and demographic

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, RDD dual frame hybrid telephone and online random survey, December 4<sup>th</sup> to 18<sup>th</sup>, 2017, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 19<sup>th</sup>, 2016, n=3003 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Sources: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 15<sup>th</sup>, 2015, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

- The observed average time of ownership for previous phones was 36.2 months.

Ownership: Average in months	Total (n=3,000)										
		NFLD (n=300)	NB (n=300)	NS (n=300)	PEI (n=300)	QC (n=300)	ON (n=300)	MB (n=300)	SK (n=300)	AB (n=300)	BC (n=300)
Prior cell phone use	36.2	35.9	35.2	37.1	40.5	37.4	36.6	33.2	36.0	36.1	33.7

Ownership: Average in months	Total (n=3,000)	Region		Age			Gender		Year			
		Urban (n=2,228)	Rural (n=772)	18 to 34 (n=725)	35 to 54 (n=1,322)	55 plus (n=953)	Male (n=1,535)	Female (n=1,465)	2015 (n=3,000)	2016 (n=3,003)	2017 (n=3,000)	2018 (n=3,000)
Prior cell phone use	36.2	36.5	34.8	31.1	36.3	39.8	34.9	37.5	33.6	34.2	36.8	36.2

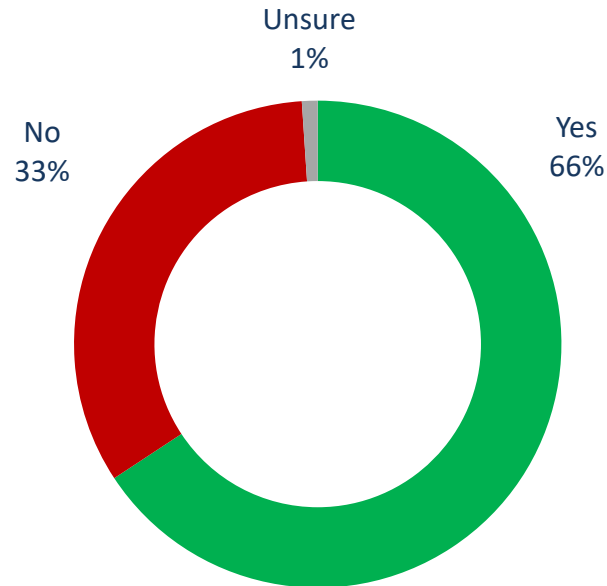
**QUESTION** – For how long did you use your previous phone? (enter # of months) [Open-ended]



# Stored cell phones

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

- Two in three respondents (66%) say they have a cell phone in their possession that is currently being stored.



**QUESTION** – Do you currently have any cell phones in your possession that you are not using, and are being stored, for example, in a junk drawer?

Subgroups	Yes
Newfoundland and Labrador (n=300)	70.1%
New Brunswick (n=300)	63.1%
Nova Scotia (n=300)	60.2%
Prince Edward Island (n=300)	52.8%
Quebec (n=300)	62.5%
Ontario (n=300)	67.1%
Manitoba (n=300)	69.5%
Saskatchewan (n=300)	68.4%
Alberta (n=300)	68.4%
British Columbia (n=300)	65.4%
18 to 34 (n=725)	72.9%
35 to 54 (n=1,322)	69.5%
55 plus (n=953)	57.4%
Male (n=1,535)	67.0%
Female (n=1,465)	64.6%
Urban (n=2,228)	65.9%
Rural (n=772)	64.5%

\*Weighted to the true population proportion.

\*Charts may not add up to 100 due to rounding.

# Stored cell phones – by year

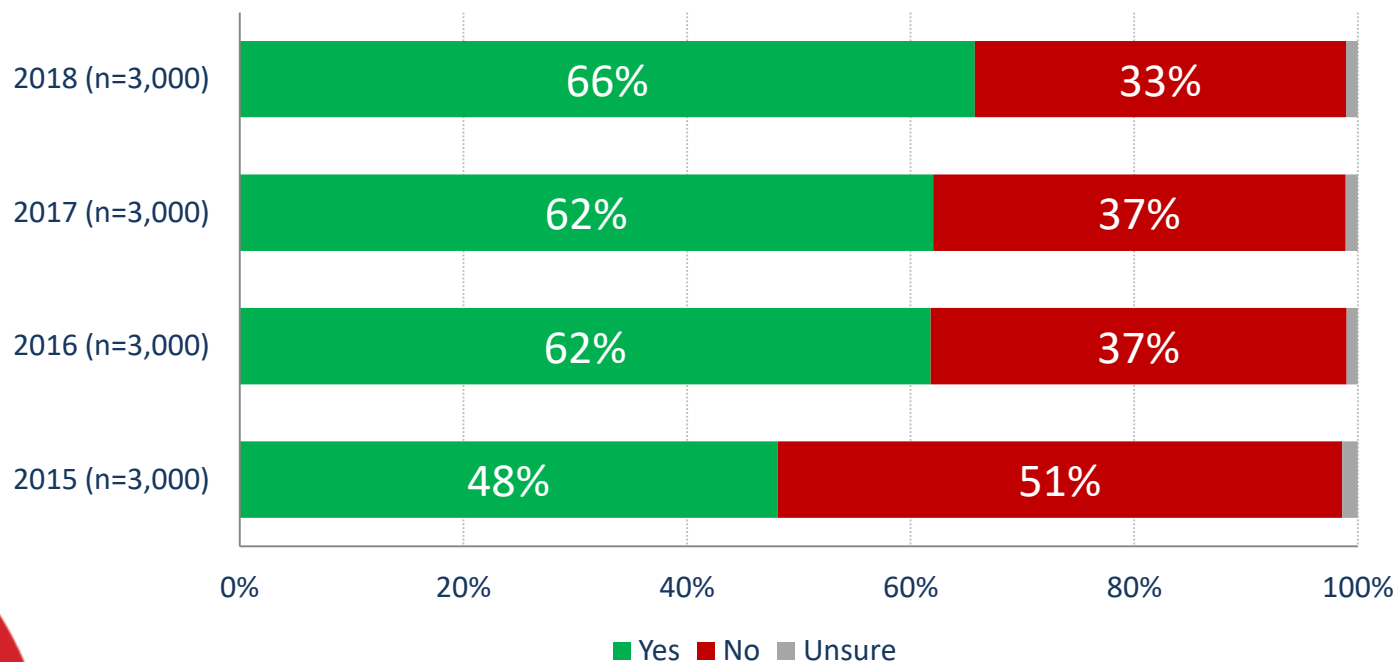
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- 2018 saw an increase in the number of Canadians who reported having cell phones they are storing (66%; up from 62% the previous two years).



\*Note: Charts may not add up to 100 due to rounding

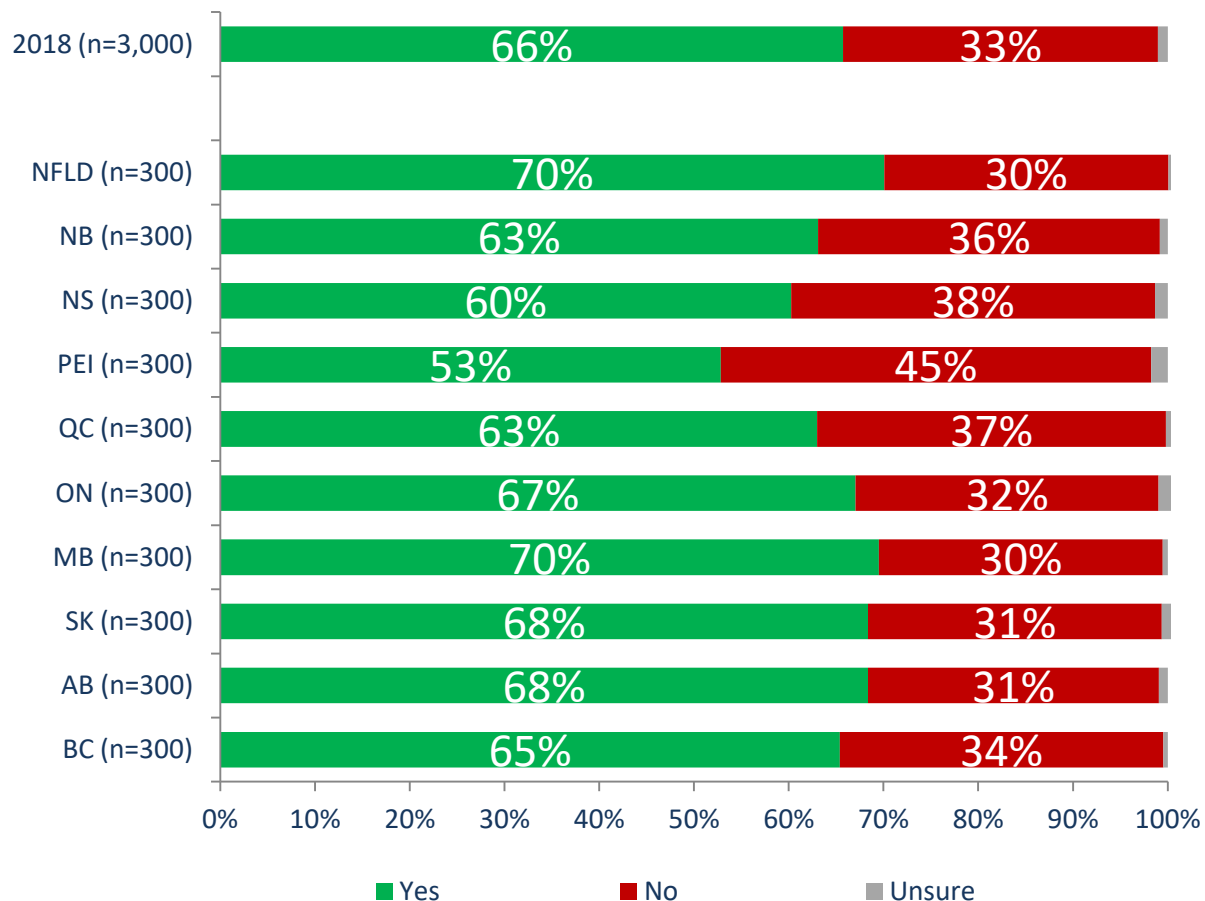
**QUESTION –** Do you currently have any cell phones in your possession that you are not using, and are being stored, **for example, in a junk drawer?** (2018, 2017, and 2016 Waves)

**QUESTION -** Do you currently have cell phones in your possession that are being stored? (2015 Wave)

# Stored cell phones - by province

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

- Overall, most provinces followed the national trend with more respondents reporting storing cell phones than not storing them.
- Residents of PEI are the least likely to report storing their cell a phone (53%), while residents of Newfoundland and Manitoba are most likely to do so (70% each).



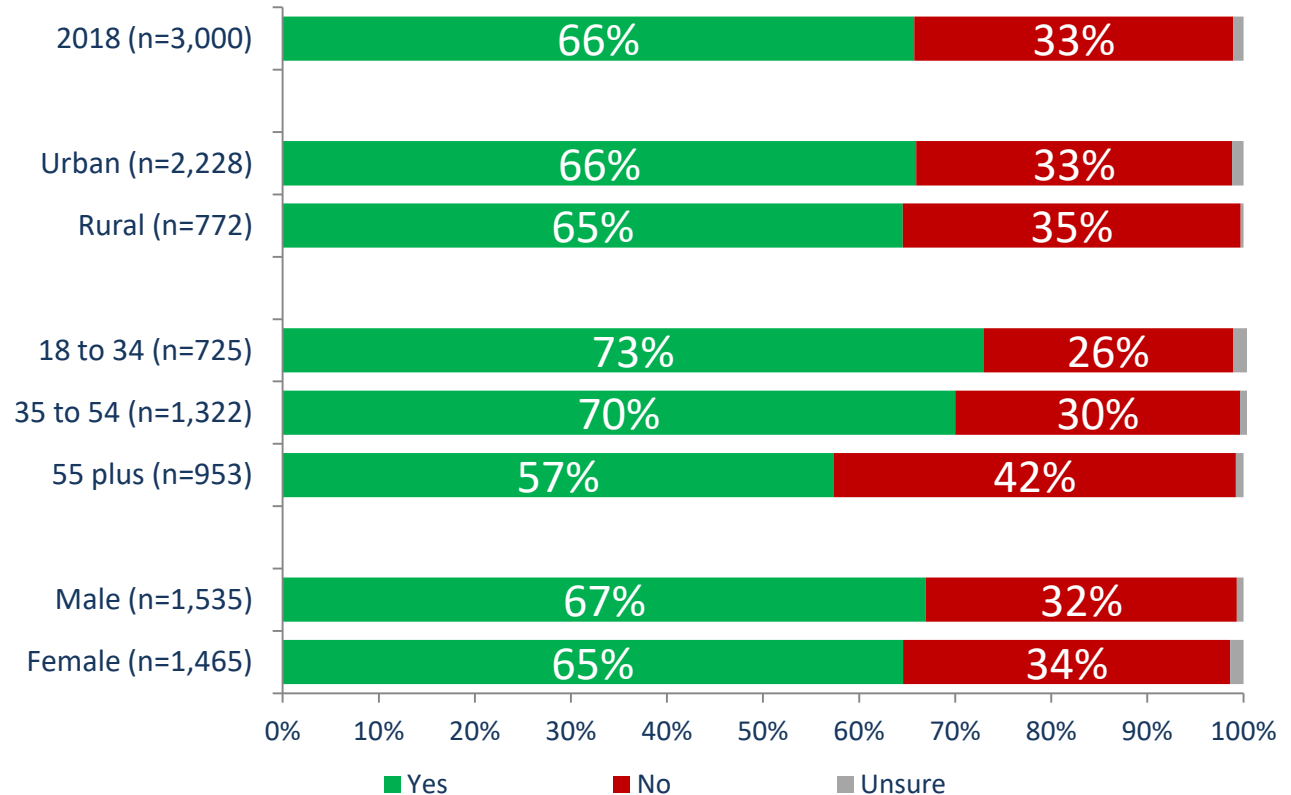
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**QUESTION** – Do you currently have any cell phones in your possession that you are not using, and are being stored, for example, in a junk drawer?

# Stored cell phones - by demographic

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

- Participants in the 55 plus age bracket were the least likely of any demographic group to have a phone in storage.



\*Note: Charts may not add up to 100 due to rounding

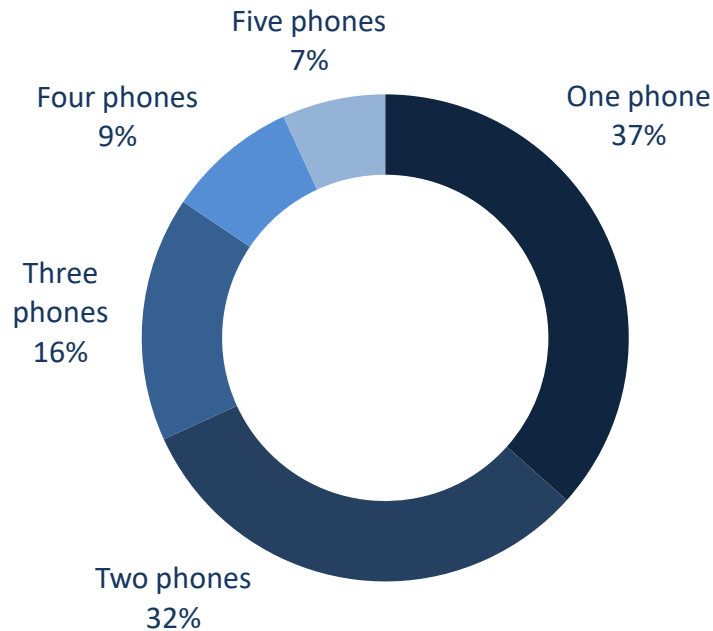
**QUESTION** – Do you currently have any cell phones in your possession that you are not using, and are being stored, for example, in a junk drawer?

# Cell phones being stored

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=1975 (respondents who currently own a cell phone), accurate 2.2 percentage points plus or minus, 19 times out of 20. IF HAS PHONE STORED

**Mean #  
phones**

2.3  
phones



- On average, Canadians have 2.3 phones in storage.
- Overall, 37 per cent of respondents had one phone in storage, while about 32 per cent had two in storage. Sixteen per cent have three phones in storage. Nine per cent have four in storage, and seven per cent have five phones in storage.

Subgroups	One phone
Newfoundland and Labrador (n=211)	34.4%
New Brunswick (n=196)	38.8%
Nova Scotia (n=191)	35.5%
Prince Edward Island (n=158)	40.3%
Quebec (n=191)	38.1%
Ontario (n=208)	35.5%
Manitoba (n=208)	34.6%
Saskatchewan (n=207)	33.7%
Alberta (n=208)	32.9%
British Columbia (n=197)	42.4%
18 to 34 (n=531)	29.1%
35 to 54 (n=914)	31.6%
55 plus (n=530)	48.7%
Male (n=1,046)	30.4%
Female (n=929)	42.7%
Urban (n=1,482)	36.5%
Rural (n=493)	37.1%

\*Weighted to the true population proportion.

\*Charts may not add up to 100 due to rounding.

**QUESTION – [IF HAS PHONE STORED]** Approximately how many cell phones do you have stored? [Open-ended]

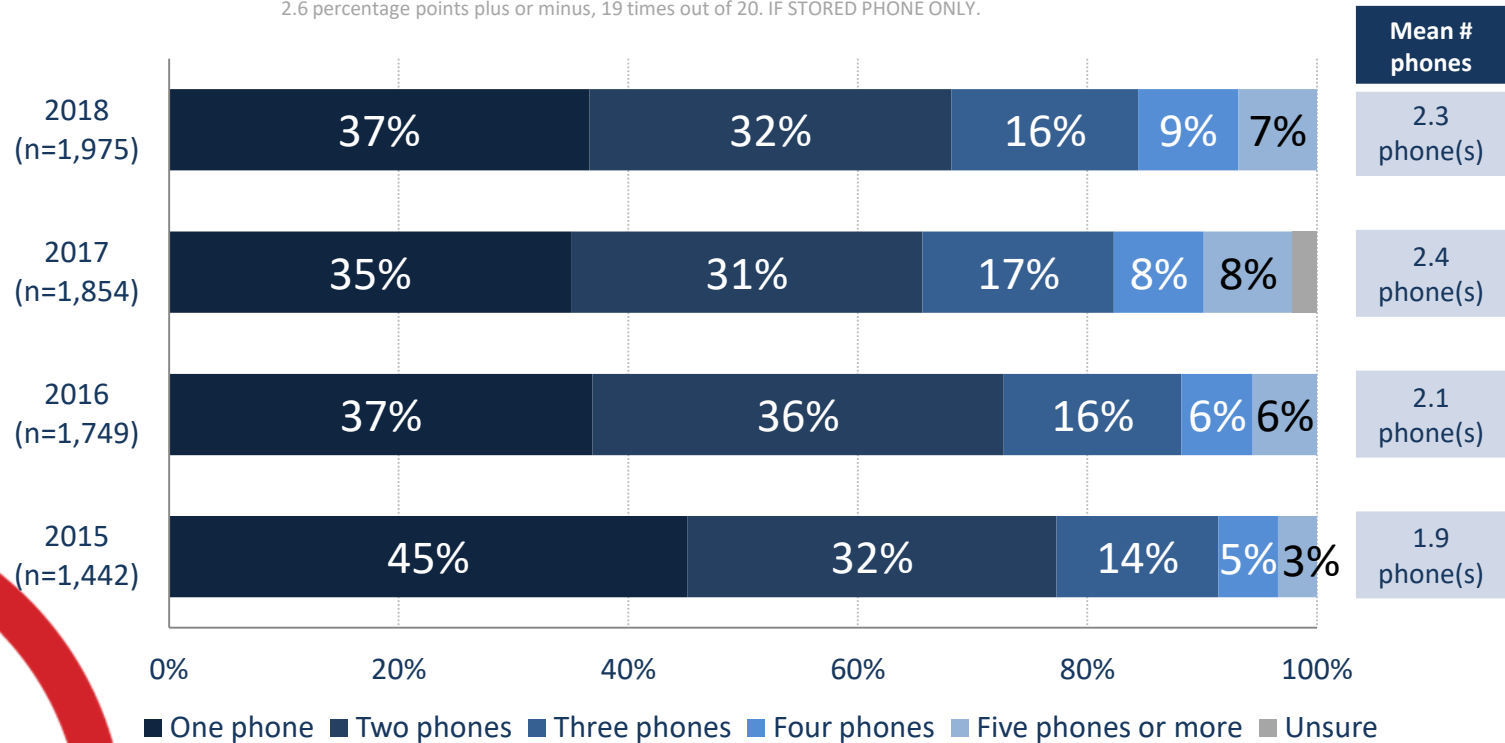
# Cell phones being stored – by year

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=1975 (respondents who currently own a cell phone), accurate 2.2 percentage points plus or minus, 19 times out of 20. IF STORED PHONE ONLY.

Source: Nanos Research, RDD dual frame hybrid telephone and online random survey, December 4<sup>th</sup> to 18<sup>th</sup>, 2017, n=1854 (respondents who currently own a cell phone), accurate 2.3 percentage points plus or minus, 19 times out of 20. IF STORED PHONE ONLY.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 19<sup>th</sup>, 2016, n=1749 (respondents who currently own a cell phone), accurate 2.3 percentage points plus or minus, 19 times out of 20. IF STORED PHONE ONLY.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 15<sup>th</sup>, 2015, n=1442 (respondents who currently own a cell phone), accurate 2.6 percentage points plus or minus, 19 times out of 20. IF STORED PHONE ONLY.



\*Note: Charts may not add up to 100 due to rounding

**QUESTION –** [IF HAS PHONE STORED] Approximately how many cell phones do you have stored? [Open-ended]



# Cell phones being stored - by demographic

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=1975 (respondents who currently own a cell phone), accurate 2.2 percentage points plus or minus, 19 times out of 20.

- The tables below show the demographic breakdown of cell phone storage.

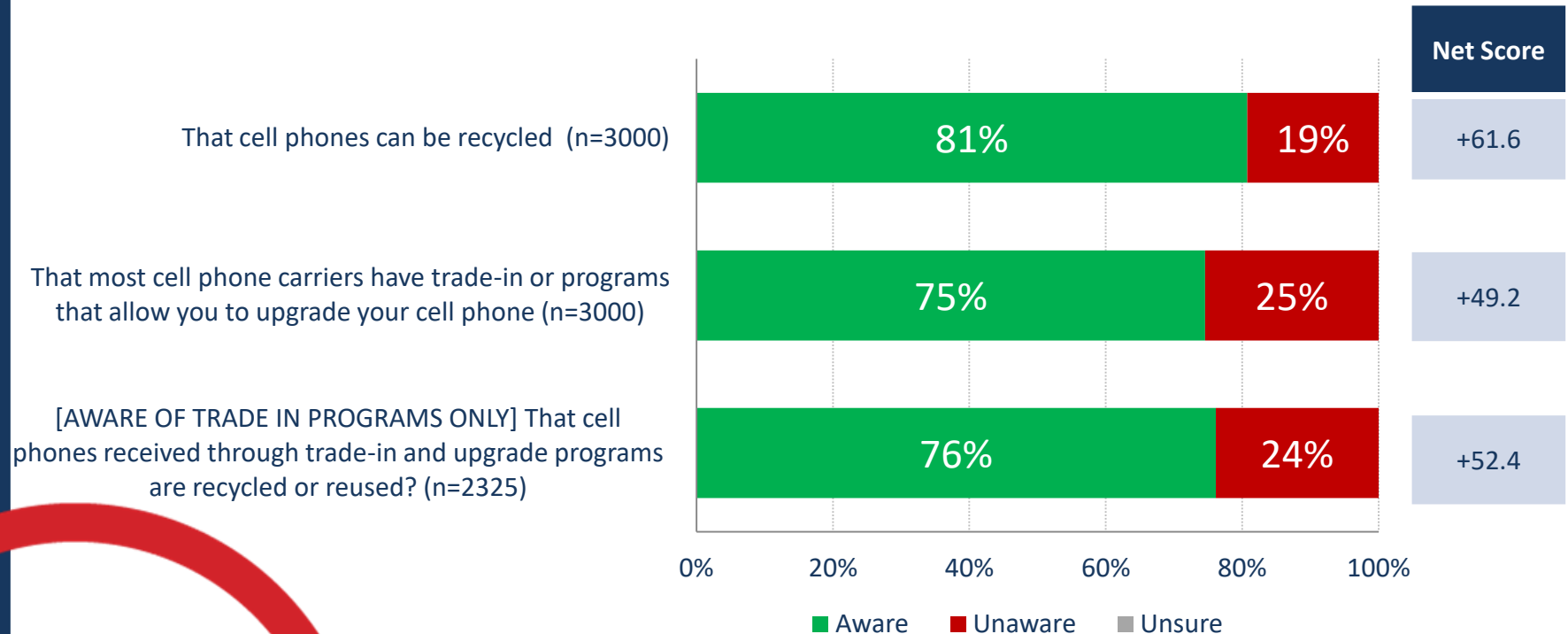
Storage: Mean	Total (n=1,975)	Province									
		NFLD (n=211)	NB (n=196)	NS (n=191)	PEI (n=158)	QC (n=191)	ON (n=208)	MB (n=208)	SK (n=207)	AB (n=208)	BC (n=197)
Number of phones in storage	2.3	2.2	2.7	2.1	3.2	2.0	2.4	2.3	2.4	2.4	2.3

Storage: Mean	Total (n=1,975)	Region		Age			Gender	
		Urban (n=1,482)	Rural (n=493)	18 to 34 (n=531)	35 to 54 (n=914)	55 plus (n=530)	Male (n=1,046)	Female (n=929)
Number of phones in storage	2.3	2.3	2.4	2.4	2.4	2.0	2.4	2.2

**QUESTION – [IF HAS PHONE STORED]** Approximately how many cell phones do you have stored? [Open-ended]

# Awareness regarding recycling phones

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.



\*Note: Charts may not add up to 100 due to rounding

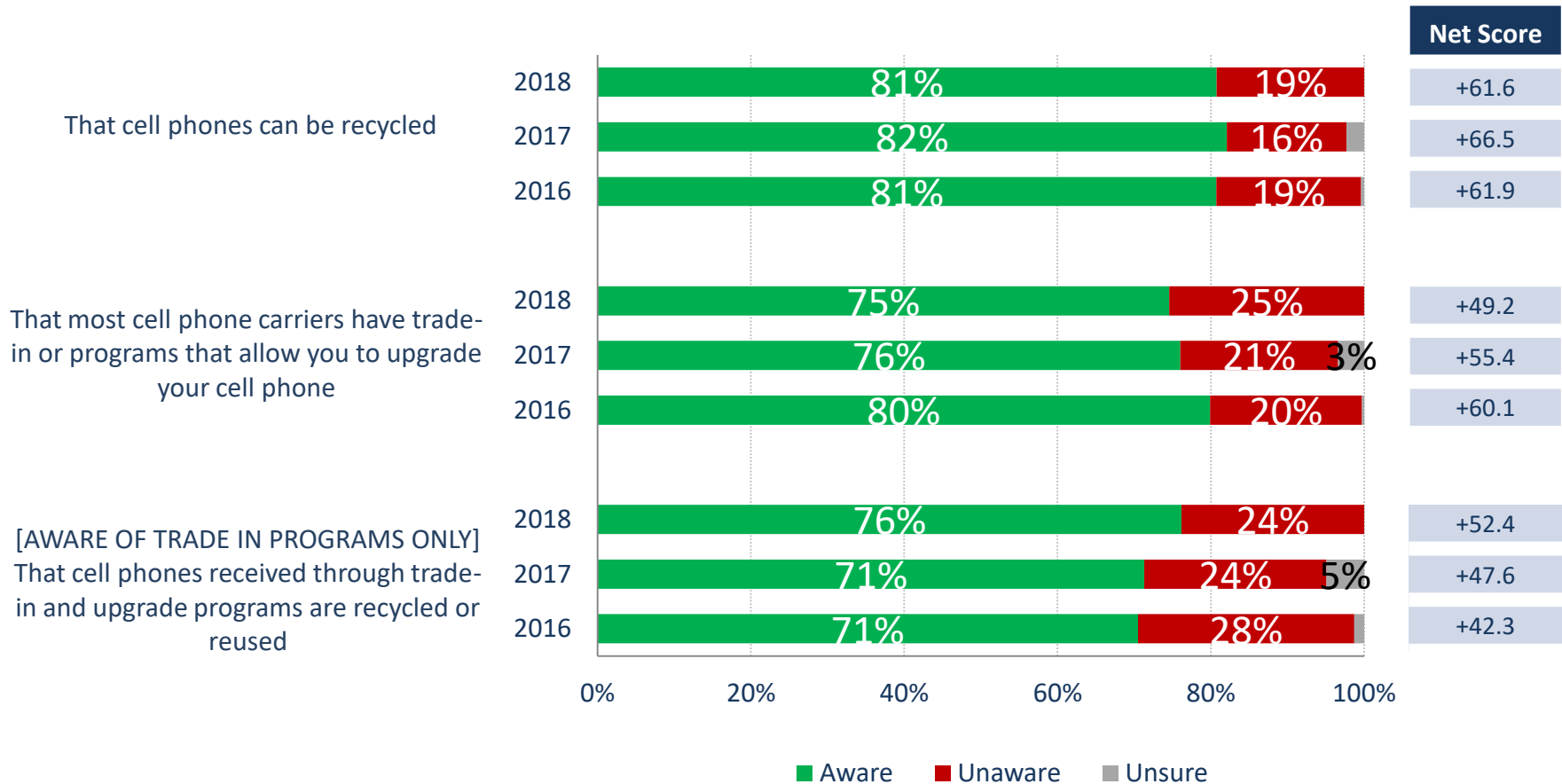
**QUESTION** – Are you aware or not aware of the following:

# Awareness regarding recycling phones – by year

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, RDD dual frame hybrid telephone and online random survey, December 4<sup>th</sup> to 18<sup>th</sup>, 2017, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 19<sup>th</sup>, 2016, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.



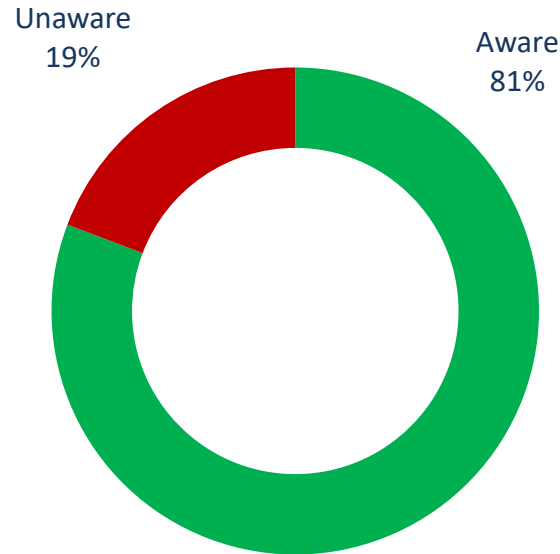
\*Note: Charts may not add up to 100 due to rounding

**QUESTION** – Are you aware or not aware of the following:

# Awareness that cell phones can be recycled

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

**Net Score**  
**+61.6**



**QUESTION – Are you aware or not aware of the following:**

**That cell phones can be recycled**

Subgroups	Aware
Newfoundland and Labrador (n=300)	79.7%
New Brunswick (n=300)	83.4%
Nova Scotia (n=300)	81.4%
Prince Edward Island (n=300)	83.2%
Quebec (n=300)	83.3%
Ontario (n=300)	77.0%
Manitoba (n=300)	83.3%
Saskatchewan (n=300)	83.5%
Alberta (n=300)	83.2%
British Columbia (n=300)	83.6%
18 to 34 (n=725)	81.5%
35 to 54 (n=1,322)	83.3%
55 plus (n=953)	78.0%
Male (n=1,535)	84.4%
Female (n=1,465)	77.3%
Urban (n=2,228)	80.9%
Rural (n=772)	80.2%

**\*Weighted to the true population proportion.**

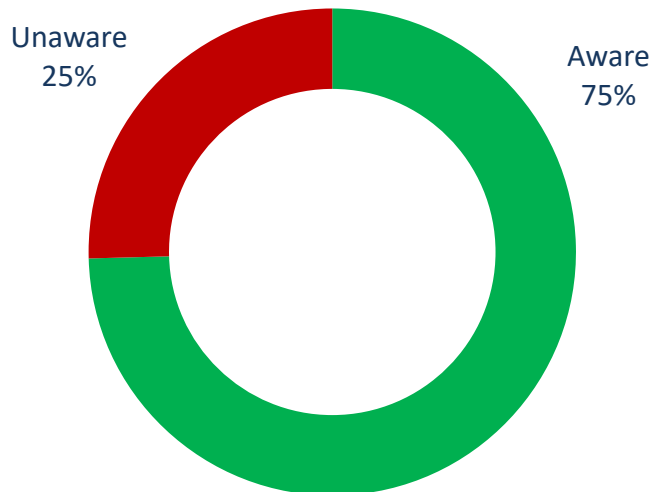
**\*Charts may not add up to 100 due to rounding.**

# Awareness of phone carrier trade-in programs to upgrade cell phone

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

**Net Score**

+49.2



**QUESTION** – Are you aware or not aware of the following:

**That most cell phone carriers have trade-in or programs that allow you to upgrade your cell phone**

Subgroups	Aware
Newfoundland and Labrador (n=300)	75.9%
New Brunswick (n=300)	77.9%
Nova Scotia (n=300)	75.3%
Prince Edward Island (n=300)	82.5%
Quebec (n=300)	63.5%
Ontario (n=300)	76.7%
Manitoba (n=300)	77.0%
Saskatchewan (n=300)	82.1%
Alberta (n=300)	78.2%
British Columbia (n=300)	82.2%
18 to 34 (n=725)	77.5%
35 to 54 (n=1,322)	76.0%
55 plus (n=953)	71.3%
Male (n=1,535)	76.0%
Female (n=1,465)	73.3%
Urban (n=2,228)	74.5%
Rural (n=772)	74.8%

\*Weighted to the true population proportion.

\*Charts may not add up to 100 due to rounding.

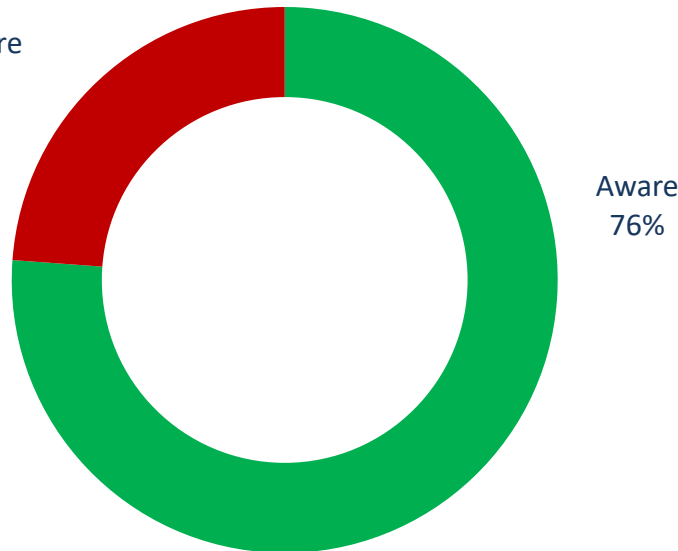
# Awareness that cell phones received through trade-in programs are recycled or reused

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=2325 (respondents who currently own a cell phone), accurate 2.0 percentage points plus or minus, 19 times out of 20.

## Net Score

+52.4

Unaware  
24%



**QUESTION** – Are you aware or not aware of the following:

**[AWARE OF TRADE IN PROGRAMS ONLY]** That cell phones received through trade-in and upgrade programs are recycled or reused

Subgroups	Aware
Newfoundland and Labrador (n=232)	78.2%
New Brunswick (n=236)	78.8%
Nova Scotia (n=227)	78.5%
Prince Edward Island (n=244)	71.1%
Quebec (n=197)	76.6%
Ontario (n=233)	72.3%
Manitoba (n=231)	80.2%
Saskatchewan (n=244)	82.2%
Alberta (n=235)	80.2%
British Columbia (n=246)	79.8%
18 to 34 (n=586)	76.9%
35 to 54 (n=1,025)	76.7%
55 plus (n=714)	75.1%
Male (n=1,192)	80.5%
Female (n=1,133)	72.0%
Urban (n=1,722)	76.5%
Rural (n=603)	74.1%

\*Weighted to the true population proportion.

\*Charts may not add up to 100 due to rounding.

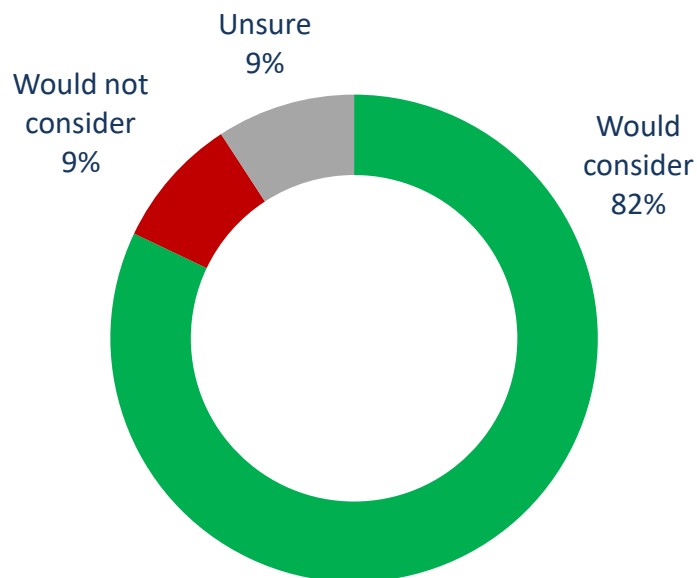


# Considering recycling cell phone

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

## Net Score

+73.4



**QUESTION** – If you knew where to recycle your cell phone, would you consider or not consider recycling it?

Subgroups	Would consider
Newfoundland and Labrador (n=300)	85.3%
New Brunswick (n=300)	84.7%
Nova Scotia (n=300)	83.7%
Prince Edward Island (n=300)	84.2%
Quebec (n=300)	80.2%
Ontario (n=300)	83.3%
Manitoba (n=300)	80.4%
Saskatchewan (n=300)	77.9%
Alberta (n=300)	80.6%
British Columbia (n=300)	83.4%
18 to 34 (n=725)	78.2%
35 to 54 (n=1,322)	84.5%
55 plus (n=953)	82.6%
Male (n=1,535)	84.5%
Female (n=1,465)	79.8%
Urban (n=2,228)	82.1%
Rural (n=772)	82.2%

\*Weighted to the true population proportion.

\*Charts may not add up to 100 due to rounding.

# Reasons for considering recycling cell phones - Tracking

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, RDD dual frame hybrid telephone and online random survey, December 4<sup>th</sup> to 18<sup>th</sup>, 2017, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 19<sup>th</sup>, 2016, n=3003 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Top mentions	2018 (n=3,000)	2017 (n=3,000)	2016 (n=3,003)
For the environment/I recycle everything/Waste to throw it away/Right thing to do	56.5%	55.7%	55.8%
There is important information on my phone (messages, pictures)/security reasons/work phone	8.5%	6.4%	5.7%
No use for it so can recycle it/better than having it laying around/de-clutter/get rid of it	8.4%	12.5%	7.8%
Need it as a backup/I like to keep my phone/Still useful	8.3%	6.1%	6.3%
Give to people who can use it (friends, family, donation)/My children use it as a toy	3.3%	5.2%	6.1%
I would sell it, trade or exchange it to a phone company/Would rather get money out of it	3.1%	2.8%	3.8%
Depends on how convenient it is for me/No time/No recycling center near me	1.9%	2.1%	1.2%
I never thought about recycling before/If I knew what to do with it	1.8%	1.6%	1.5%
Phone is worn out/too damaged/too old	0.4%	0.8%	-
I don't know where the recycled phones are going/shipped to another country	0.4%	0.2%	-
I don't want to recycle/waste of money	0.2%	0.8%	-
Other	2.7%	3.9%	4.9%
Unsure	4.4%	1.7%	1.1%

# Reasons for considering recycling cell phones

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Mentions	Would consider (n=2,464)	Would not consider (n=262)	Unsure (n=274)	Total (n=3,000)
For the environment/I recycle everything/Waste to throw it away/Right thing to do	68.7%	0.4%	0.7%	56.5%
There is important information on my phone (messages, pictures)/security reasons/work phone	3.0%	29.0%	38.3%	8.5%
No use for it so can recycle it/better than having it laying around/de-clutter/get rid of it	9.9%	3.1%	-	8.4%
Need it as a backup/I like to keep my phone/Still useful	2.0%	38.2%	36.1%	8.3%
Give to people who can use it (friends, family, donation)/My children use it as a toy	2.0%	11.5%	7.7%	3.3%
I would sell it, trade or exchange it to a phone company/Would rather get money out of it	2.1%	8.0%	7.7%	3.1%
Depends on how convenient it is for me/No time/No recycling center near me	2.2%	0.4%	1.1%	1.9%
I never thought about recycling before/If I knew what to do with it	2.0%	0.8%	-	1.7%
I don't want to recycle/waste of money	0.1%	1.1%	0.7%	0.2%
Phone is worn out/too damaged/too old	0.4%	-	0.4%	0.4%
I don't know where the recycled phones are going/shipped to another country	0.2%	1.9%	-	0.3%
Other	2.7%	2.7%	2.6%	2.7%
Unsure	4.5%	3.1%	4.7%	4.4%

**QUESTION** – Why do you have that opinion? [Open-ended]

# Encouraging cell phone recycling

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, RDD dual frame hybrid telephone and online random survey, December 4<sup>th</sup> to 18<sup>th</sup>, 2017, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 19<sup>th</sup>, 2016, n=2859 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 15<sup>th</sup>, 2015, n=1215 (respondents who currently own a cell phone), accurate 2.8 percentage points plus or minus, 19 times out of 20. IF STORED PHONE ONLY.

Reasons that encourage cell phone recycling	Year			
	2018 (n=3,000)*	2017 (n=3,000)*	2016 (n=2,859)*	2015 (n=1,215)**
Cash/Money/Rebate	25.7%	22.6%	21.3%	19.7%
Ease of recycling/returning	14.5%	14.5%	17.0%	7.2%
If I was confident all my data/information had been removed	8.8%	6.7%	3.7%	7.6%
Knowing where/how I can return it	8.5%	9.2%	8.3%	13.1%
No encouragement needed/already do	8.4%	9.1%	7.1%	-
Environmental reasons/avoid landfills	6.5%	8.4%	12.6%	5.7%
No longer needing/wanting the phone	5.1%	7.6%	10.0%	15.4%
Nothing	4.6%	5.3%	5.4%	7.1%
Advertisement/reminder/awareness campaign	3.7%	1.4%	1.2%	-
If I knew/approved of where it was going	3.1%	3.1%	5.2%	3.1%
If I need room/need to clear up clutter	0.9%	2.8%	1.4%	2.1%
Other responses	2.6%	2.5%	2.0%	11.1%
Unsure	7.7%	6.6%	5.0%	7.9%

\*Asked all participants \*\*Asked only those who reported storing their phone

**QUESTION –** What would encourage you to recycle **your cell phone**? [Open-ended] (2017 and 2016 Waves)

**QUESTION –** [IF Storing phone only] What would encourage you to recycle or return it? [Open-ended] (2015 Wave)

# Encouraging cell phone recycling - by demographic and province

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Top-5 Mentions	Total (n=3,000)	Region		Age			Gender	
		Urban (n=2,228)	Rural (n=772)	18 to 34 (n=725)	35 to 54 (n=1,322)	55 plus (n=953)	Male (n=1,535)	Female (n=1,465)
Cash/Money/Rebate	25.7%	26.2%	22.9%	36.8%	22.9%	20.4%	32.0%	19.7%
Ease of recycling/returning	14.5%	14.3%	15.9%	15.3%	16.6%	12.1%	14.6%	14.5%
If I was confident all my data/information had been removed	8.8%	8.4%	10.8%	9.3%	9.4%	7.9%	7.5%	10.0%
Knowing where/how I can return it	8.5%	8.2%	9.8%	4.9%	8.6%	10.8%	6.4%	10.4%
No encouragement needed/already do	8.4%	8.1%	9.7%	4.3%	8.3%	11.3%	6.0%	10.6%

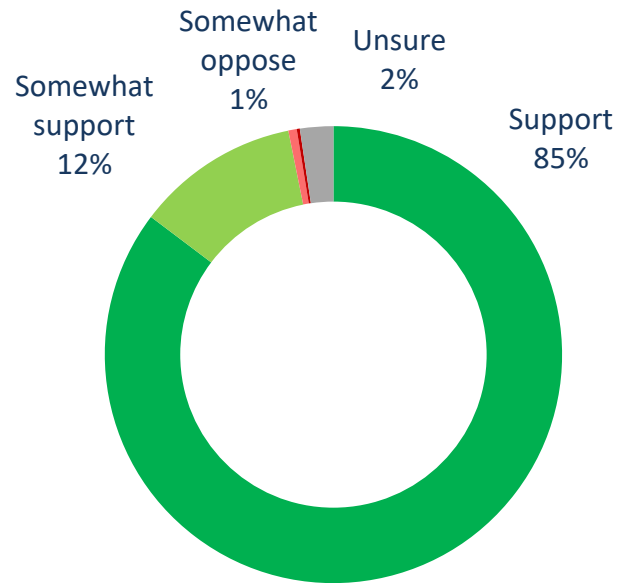
Top-5 Mentions	Total (n=3,000)	Province									
		NFLD (n=300)	NB (n=300)	NS (n=300)	PEI (n=300)	QC (n=300)	ON (n=300)	MB (n=300)	SK (n=300)	AB (n=300)	BC (n=300)
Cash/Money/Rebate	25.7%	30.5%	23.9%	21.9%	17.0%	20.2%	29.3%	26.6%	29.9%	29.1%	21.6%
Ease of recycling/returning	14.5%	13.4%	13.6%	17.1%	8.7%	10.0%	17.7%	17.2%	10.6%	12.1%	15.4%
If I was confident all my data/information had been removed	8.8%	8.6%	6.7%	5.7%	7.8%	5.8%	9.9%	7.8%	10.4%	9.6%	11.2%
Knowing where/how I can return it	8.5%	7.9%	6.3%	8.8%	5.3%	7.7%	9.2%	8.6%	7.8%	7.5%	9.0%
No encouragement needed/already do	8.4%	5.1%	9.2%	9.1%	6.8%	7.2%	7.4%	7.7%	9.4%	10.4%	11.9%

**QUESTION** – What would encourage you to recycle your cell phone? [Open-ended]

# Support for cell phone recycling

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

- Canadians support or somewhat support programs that encourage the recycling of old, unused or unwanted cell phones (85% support; 12% somewhat support).



**QUESTION** – Do you support, somewhat support, somewhat oppose or oppose programs that encourage the recycling of old, unused or unwanted cell phones?

Subgroups	Support/ Somewhat support
Newfoundland and Labrador (n=300)	97.4%
New Brunswick (n=300)	95.5%
Nova Scotia (n=300)	98.1%
Prince Edward Island (n=300)	92.4%
Quebec (n=300)	97.6%
Ontario (n=300)	96.5%
Manitoba (n=300)	98.1%
Saskatchewan (n=300)	96.0%
Alberta (n=300)	96.0%
British Columbia (n=300)	97.4%
18 to 34 (n=725)	96.3%
35 to 54 (n=1,322)	97.5%
55 plus (n=953)	96.7%
Male (n=1,535)	97.6%
Female (n=1,465)	96.1%
Urban (n=2,228)	97.0%
Rural (n=772)	95.6%

\*Weighted to the true population proportion.

\*Charts may not add up to 100 due to rounding.

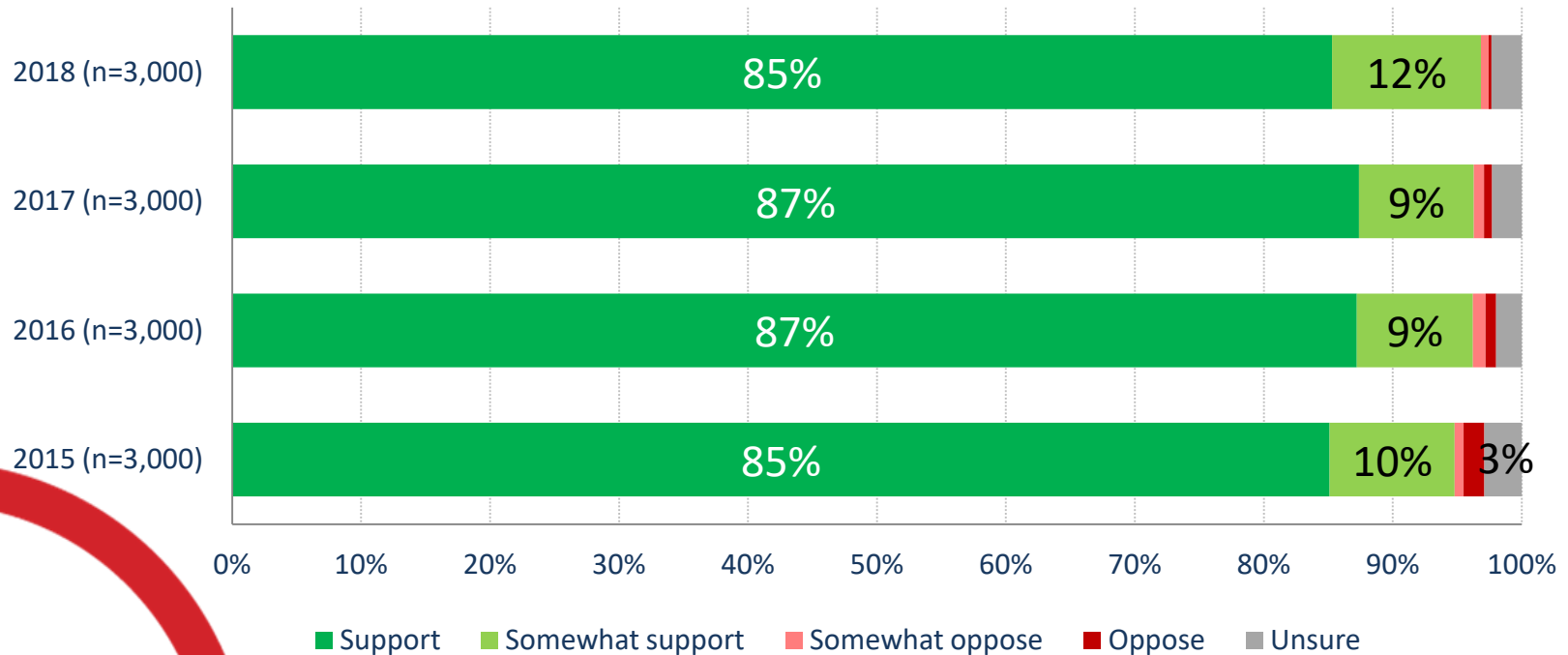
# Support for cell phone recycling – by year

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, RDD dual frame hybrid telephone and online random survey, December 4<sup>th</sup> to 18<sup>th</sup>, 2017, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 19<sup>th</sup>, 2016, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 15<sup>th</sup>, 2015, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.



\*Note: Charts may not add up to 100 due to rounding

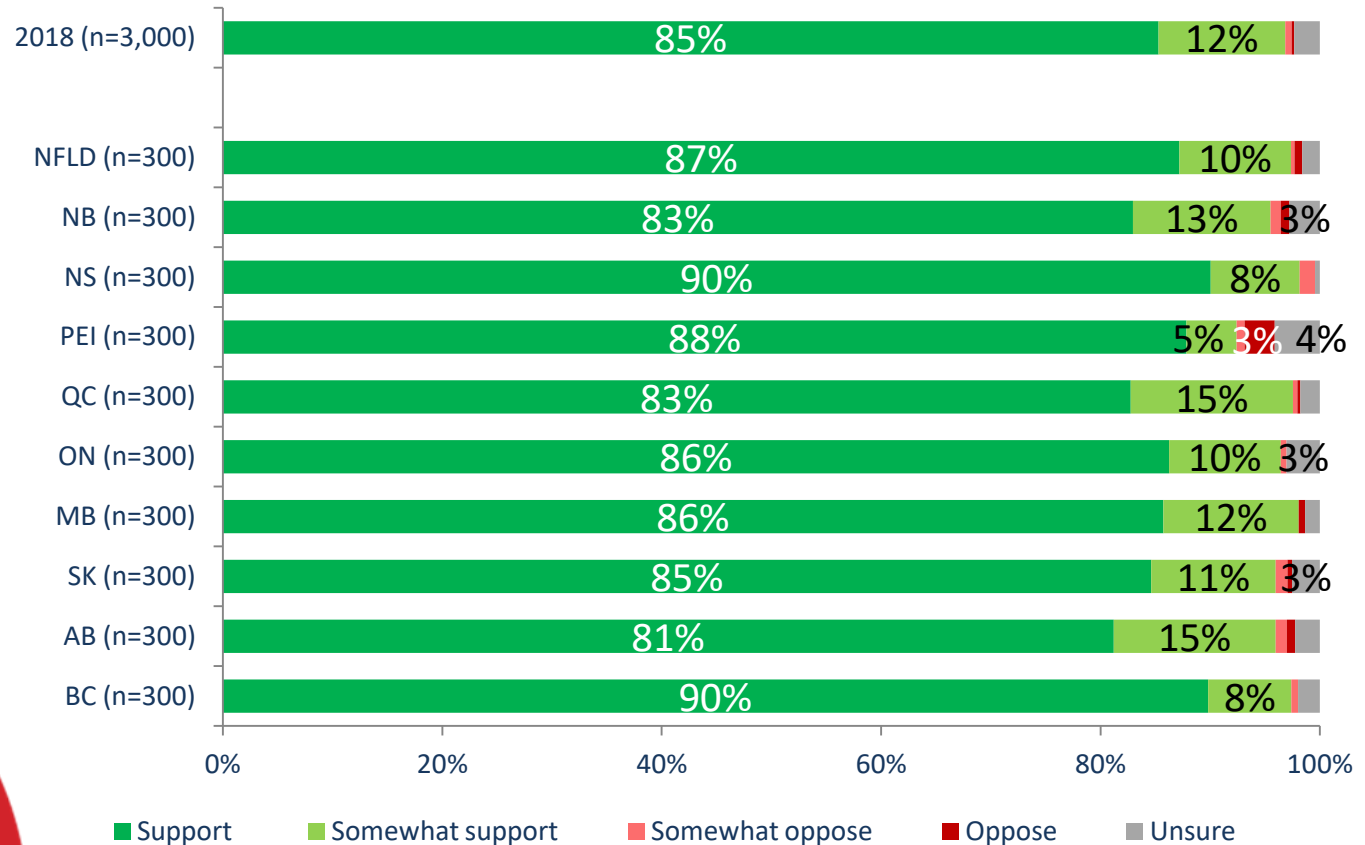
**QUESTION** – Do you support, somewhat support, somewhat oppose or oppose programs that encourage the recycling of old, unused or unwanted cell phones?



# Support for cell phone recycling - by province

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

- Support for programs that encourage the recycling of old, unused or unwanted cell phones is strong across all provinces.



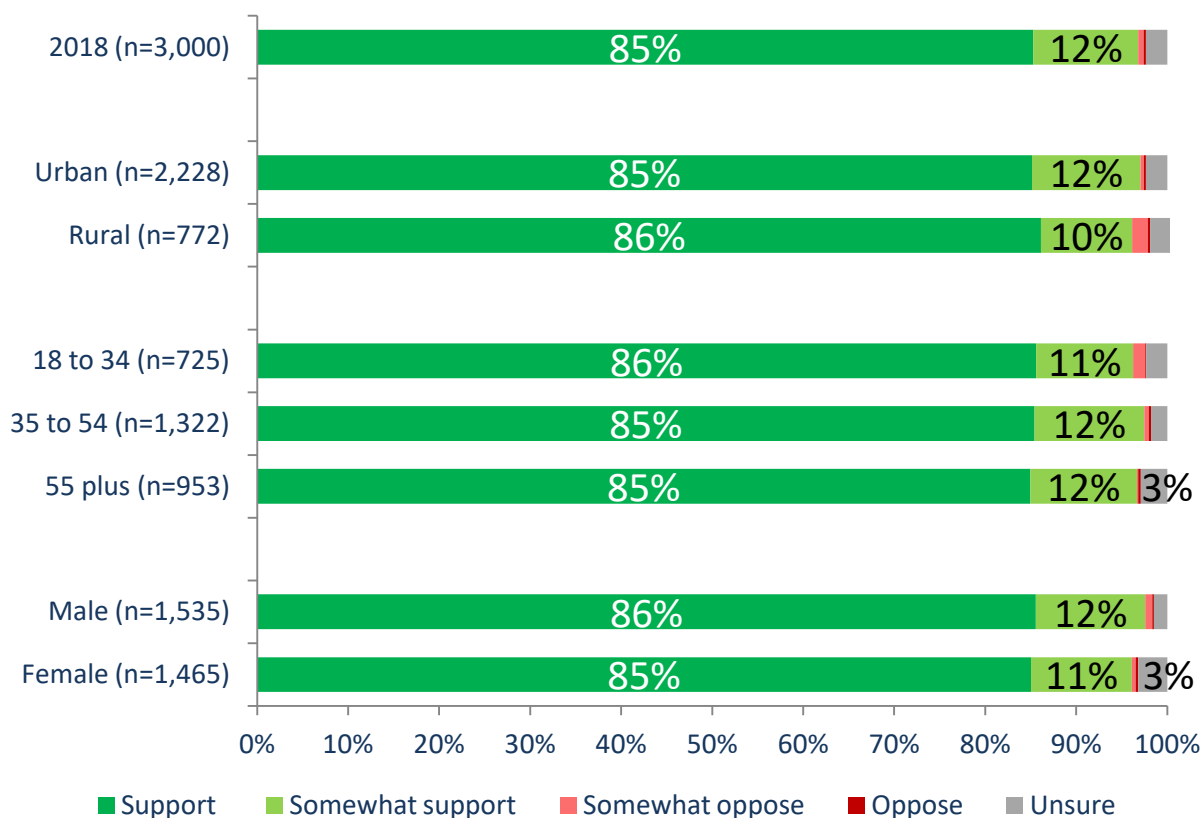
\*Note: Charts may not add up to 100 due to rounding

**QUESTION** – Do you support, somewhat support, somewhat oppose or oppose programs that encourage the recycling of old, unused or unwanted cell phones?

# Support for cell phone recycling - by demographics

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

- Support for programs that encourage the recycling of old, unused or unwanted cell phones is strong across all demographics.



\*Note: Charts may not add up to 100 due to rounding

**QUESTION** – Do you support, somewhat support, somewhat oppose or oppose programs that encourage the recycling of old, unused or unwanted cell phones?

## 2.0 Cell phone disposal



# Previous cell phone: storage vs disposal

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

	Frequency (n=3,000)
Store it away	44.1%
Give away the last cell phone you owned	15.4%
Return or trade in to your cell phone carrier	10.9%
Recycle it	8.7%
Sell the last cell phone you owned	4.8%
I use it for other purposes/as a backup	4.6%
Return it to a store/retailer	4.6%
Donate it to charity	1.2%
Throw it away in the garbage	0.9%
Gave it back to my employer	0.8%
I lost it/broken/stolen	1.1%
Other mentions	0.5%
Unsure	2.4%

**QUESTION** – After receiving your current phone what did you do with your old one?  
Did you... [RANDOMIZE]

Subgroups	Store it away
Newfoundland and Labrador (n=300)	48.9%
New Brunswick (n=300)	44.5%
Nova Scotia (n=300)	39.0%
Prince Edward Island (n=300)	42.7%
Quebec (n=300)	38.7%
Ontario (n=300)	46.6%
Manitoba (n=300)	46.5%
Saskatchewan (n=300)	47.4%
Alberta (n=300)	45.1%
British Columbia (n=300)	44.8%
18 to 34 (n=725)	46.7%
35 to 54 (n=1,322)	46.3%
55 plus (n=953)	40.3%
Male (n=1,535)	44.4%
Female (n=1,465)	43.9%
Urban (n=2,228)	44.1%
Rural (n=772)	44.4%

\*Weighted to the true population proportion.

\*Charts may not add up to 100 due to rounding.

# Previous cell phone: storage vs disposal - by year

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, RDD dual frame hybrid telephone and online random survey, December 4<sup>th</sup> to 18<sup>th</sup>, 2017, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 19<sup>th</sup>, 2016, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 15<sup>th</sup>, 2015, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

- Over two fifths of participants stored away their previous cell phone (44%), while 15 per cent gave away their phone and 11 per cent returned or traded it in to their cell phone carrier. Nine per cent recycled their cell phone.
- Consumer behaviour regarding their old cell phone status has remained consistent overall.

After receiving your current cell phone, what did you do with your old one? Did you...	Year			
	2018 (n=3,000)	2017 (n=3,000)	2016 (n=3,000)	2015 (n=3,000)
Store it away	44.1%	42.9%	43.4%	41.2%
Give away the last cell phone you owned	15.4%	15.9%	14.2%	15.9%
Return or trade in to your cell phone carrier	10.9%	10.5%	9.0%	10.1%
Recycle it	8.7%	11.5%	11.9%	12.4%
Sell the last phone you owned	4.8%	3.0%	4.5%	3.2%
Return it to a store/retailer	4.6%	3.8%	3.8%	2.2%
I use it for other purposes (alarm clock, music, kids toy, Wi-Fi)	4.6%	2.6%	3.1%	2.3%
I lost it/broken/stolen	1.1%	1.8%	1.9%	2.3%
Donate it to charity	1.2%	1.3%	1.8%	2.0%
Throw it away in the garbage	0.9%	1.0%	1.8%	4.0%
I returned it to my employer	0.8%	1.5%	1.6%	1.2%
Unsure	2.4%	3.8%	2.7%	3.2%

**QUESTION** – After receiving your current phone what did you do with your old one? Did you...  
[RANDOMIZE]

# Previous cell phone: storage vs disposal - by length of ownership

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

After receiving your current cell phone, what did you do with your old one? Did you...	Length of Previous Phone Ownership				
	1-12 months (n=276)	13-24 months (n=902)	25-36 months (n=926)	37-48 months (n=429)	More than 48 months (n=432)
Store it away	38.3%	42.4%	45.4%	40.2%	54.1%
Give away the last cell phone you owned	24.3%	16.3%	17.6%	10.0%	9.8%
Return or trade in to your cell phone carrier	6.4%	10.8%	10.7%	15.0%	9.4%
Recycle it	5.1%	8.8%	8.5%	12.4%	6.6%
Sell the last phone you owned	8.4%	5.0%	4.5%	6.0%	1.7%
Return it to a store/retailer	3.8%	5.3%	4.5%	3.7%	5.2%
I use it for other purposes (alarm clock, music, kids toy, Wi-Fi)	4.2%	4.8%	5.2%	4.3%	3.3%
I lost it/broken/stolen	3.7%	0.7%	0.9%	0.5%	1.1%
Donate it to charity	0.3%	1.8%	0.3%	2.4%	1.4%
Throw it away in the garbage	1.3%	1.2%	0.4%	0.9%	0.9%
I returned it to my employer	0.7%	0.6%	0.6%	-	2.0%
Unsure	3.5%	1.7%	1.0%	4.3%	4.5%

**QUESTION** – After receiving your current phone what did you do with your old one? Did you...  
[RANDOMIZE]

# Previous cell phone: storage vs disposal - by province

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

After receiving your current cell phone, what did you do with your old one? Did you...	Total (n=3,000)	Province									
		NFLD (n=300)	NB (n=300)	NS (n=300)	PEI (n=300)	QC (n=300)	ON (n=300)	MB (n=300)	SK (n=300)	AB (n=300)	BC (n=300)
Store it away	44.1%	48.9%	44.5%	39.0%	42.7%	38.7%	46.6%	46.5%	47.4%	45.1%	44.8%
Give away the last cell phone you owned	15.4%	13.3%	14.9%	14.8%	14.9%	20.1%	13.2%	12.9%	14.1%	17.5%	12.5%
Return or trade in to your cell phone carrier	10.9%	9.9%	9.4%	14.1%	11.7%	9.9%	10.1%	15.4%	13.3%	11.7%	12.0%
Recycle it	8.7%	5.7%	6.3%	7.9%	9.2%	9.6%	8.5%	6.7%	6.6%	9.5%	9.0%
Sell the last phone you owned	4.8%	5.0%	4.7%	3.8%	5.4%	6.8%	3.8%	3.3%	3.6%	3.8%	6.2%
Return it to a store/retailer	4.6%	4.4%	5.6%	6.8%	2.3%	6.0%	4.5%	1.9%	4.9%	4.1%	3.2%
I use it for other purposes (alarm clock, music, kids toy, Wi-Fi)	4.6%	5.1%	4.1%	4.2%	3.5%	4.3%	5.2%	3.2%	4.0%	3.5%	4.3%
I lost it/broken/stolen	1.1%	1.1%	0.9%	1.6%	2.2%	0.8%	0.9%	1.2%	1.2%	0.6%	2.0%
Donate it to charity	1.2%	0.5%	0.8%	2.2%	2.5%	1.0%	1.3%	1.8%	1.3%	0.9%	1.6%
Throw it away in the garbage	0.9%	2.3%	3.3%	1.8%	1.0%	0.7%	0.7%	1.8%	0.8%	0.3%	1.3%
I returned it to my employer	0.8%	0.5%	1.9%	0.7%	0.8%	-	0.9%	1.1%	0.8%	1.0%	1.2%
Unsure	2.4%	2.9%	3.1%	2.8%	3.4%	1.7%	3.6%	2.3%	0.8%	1.0%	1.8%

**QUESTION** – After receiving your current phone what did you do with your old one? Did you...  
[RANDOMIZE]

# Previous cell phone: storage vs disposal - by demographic

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

After receiving your current cell phone, what did you do with your old one? Did you...	Total (n=3,000)	Region		Age			Gender	
		Urban (n=2,228)	Rural (n=772)	18 to 34 (n=725)	35 to 54 (n=1,322)	55 plus (n=953)	Male (n=1,535)	Female (n=1,465)
Store it away	44.1%	44.1%	44.4%	46.7%	46.3%	40.3%	44.4%	43.9%
Give away the last cell phone you owned	15.4%	14.5%	19.8%	20.2%	15.4%	11.9%	14.3%	16.3%
Return or trade in to your cell phone carrier	10.9%	11.4%	7.9%	7.1%	10.6%	13.8%	9.9%	11.8%
Recycle it	8.7%	8.8%	8.2%	6.1%	9.2%	10.1%	9.8%	7.6%
Sell the last phone you owned	4.8%	5.0%	4.1%	7.1%	4.2%	3.8%	5.5%	4.2%
Return it to a store/retailer	4.6%	4.9%	3.3%	3.4%	3.7%	6.4%	4.6%	4.7%
I use it for other purposes (alarm clock, music, kids toy, Wi-Fi)	4.6%	5.0%	2.0%	5.3%	3.9%	4.6%	4.6%	4.5%
I lost it/broken/stolen	1.1%	1.0%	1.2%	0.4%	1.5%	1.0%	0.8%	1.3%
Donate it to charity	1.2%	1.2%	1.5%	1.1%	1.4%	1.2%	1.4%	1.1%
Throw it away in the garbage	0.9%	0.6%	2.3%	0.9%	0.8%	1.0%	1.2%	0.5%
I returned it to my employer	0.8%	0.8%	0.6%	0.4%	0.9%	0.9%	1.4%	0.2%
Unsure	2.4%	2.1%	4.4%	0.8%	2.0%	4.0%	1.7%	3.1%

**QUESTION** – After receiving your current phone what did you do with your old one? Did you...  
[RANDOMIZE]



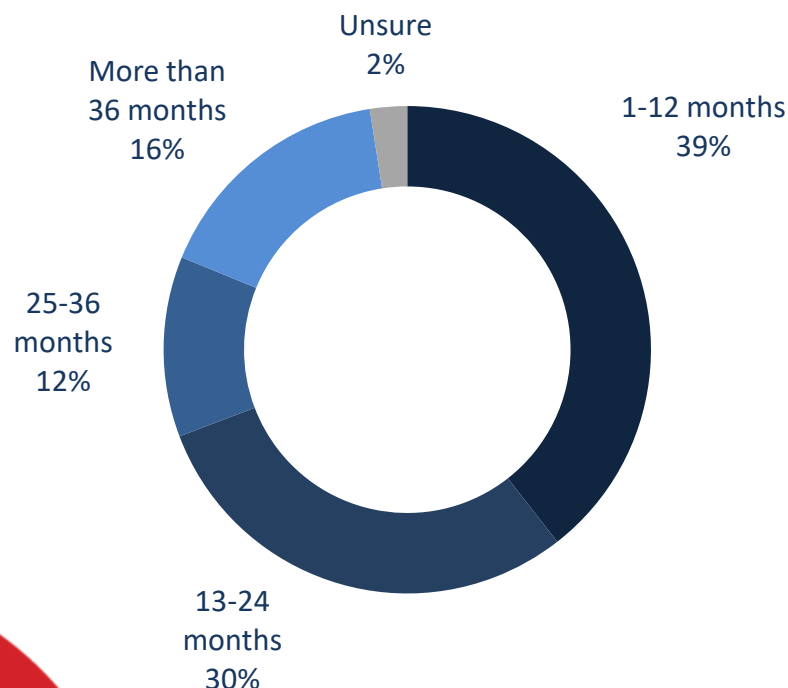
## 3.0 Cell phone storage



# Storage period

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=1349 (respondents who currently own a cell phone), accurate 2.7 percentage points plus or minus, 19 times out of 20. IF STORED PHONE ONLY.

**Mean # months**  
24.3 months



**QUESTION – [IF STORED PHONE]** For how long have you been storing your old cell phone? (enter # months) [Open-ended]

Subgroups	1-12 months
Newfoundland and Labrador (n=146)	33.9%
New Brunswick (n=135)	44.0%
Nova Scotia (n=122)	33.3%
Prince Edward Island (n=129)	33.6%
Quebec (n=116)	59.7%
Ontario (n=142)	33.3%
Manitoba (n=139)	35.6%
Saskatchewan (n=144)	31.4%
Alberta (n=137)	31.6%
British Columbia (n=139)	37.6%
18 to 34 (n=335)	47.1%
35 to 54 (n=621)	40.0%
55 plus (n=393)	32.7%
Male (n=711)	38.4%
Female (n=638)	40.4%
Urban (n=1,000)	39.8%
Rural (n=349)	37.5%

\*Weighted to the true population proportion.

\*Charts may not add up to 100 due to rounding.

# Storage period

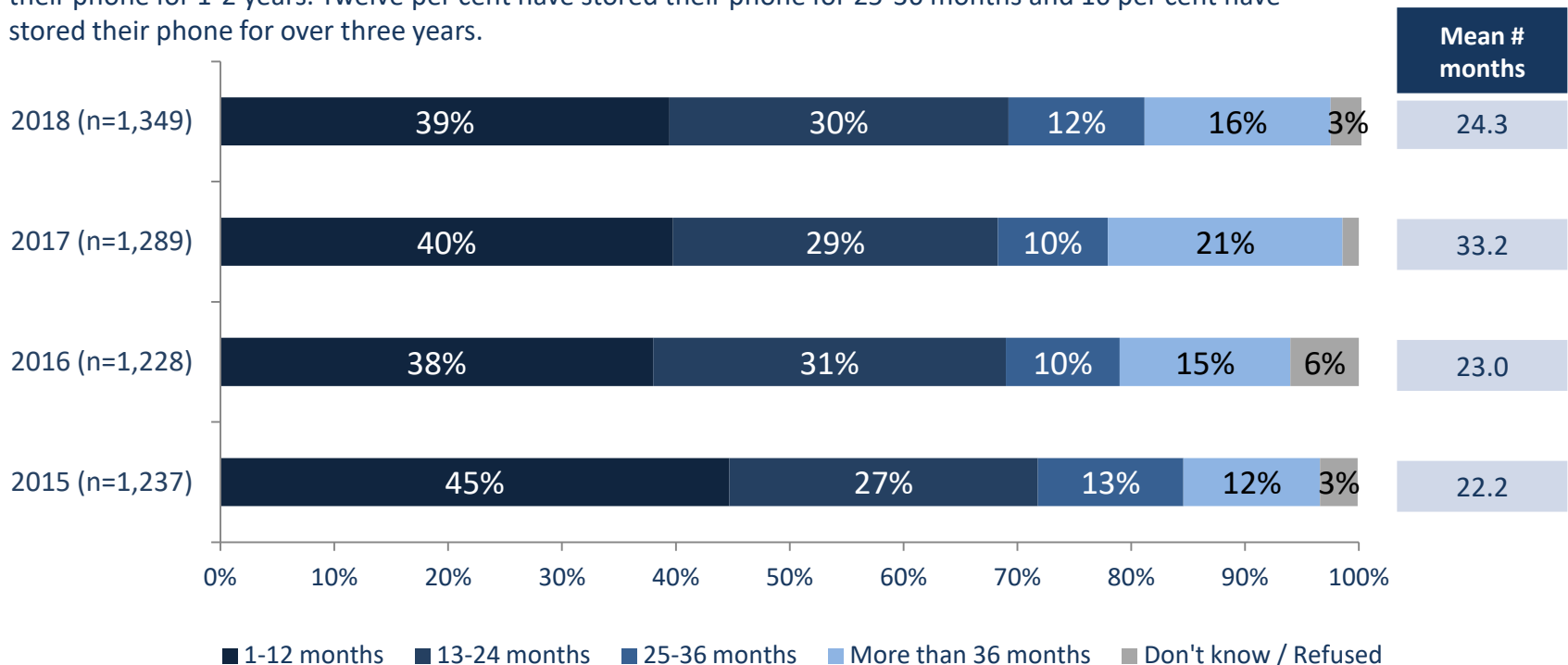
Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=1349 (respondents who currently own a cell phone), accurate 2.7 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, RDD dual frame hybrid telephone and online random survey, December 4<sup>th</sup> to 18<sup>th</sup>, 2017, n=1289 (respondents who currently own a cell phone), accurate 2.7 percentage points plus or minus, 19 times out of 20. IF STORED PHONE ONLY.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 19<sup>th</sup>, 2016, n=1228 (respondents who currently own a cell phone), accurate 2.8 percentage points plus or minus, 19 times out of 20. IF STORED PHONE ONLY.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 15<sup>th</sup>, 2015, n=1237 (respondents who currently own a cell phone), accurate 2.8 percentage points plus or minus, 19 times out of 20. IF STORED PHONE ONLY.

- Thirty nine per cent of participants have stored their phone for a year or less, while 30 per cent have stored their phone for 1-2 years. Twelve per cent have stored their phone for 25-36 months and 16 per cent have stored their phone for over three years.

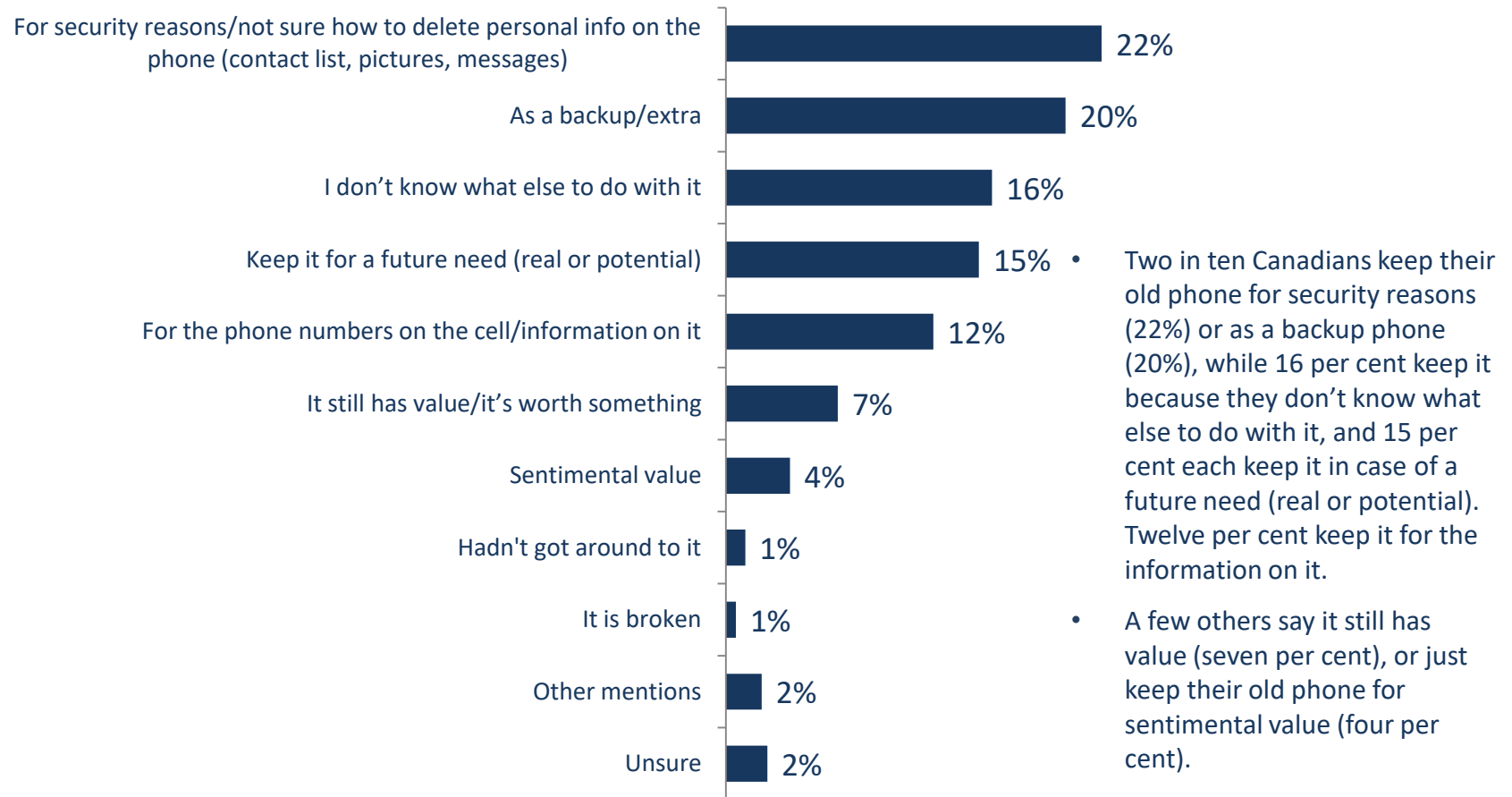


**\*Note:** Charts may not add up to 100 due to rounding

**QUESTION – [IF STORED PHONE]** For how long have you been storing your old cell phone? (enter # months)  
[Open-ended]

# Reasons for keeping prior cell phone

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=1349 (respondents who currently own a cell phone), accurate 2.7 percentage points plus or minus, 19 times out of 20. IF STORED PHONE ONLY



\*Note: Charts may not add up to 100 due to rounding

\*Based on multiple mentions

**QUESTION – [IF STORED PHONE] Why did you keep your old phone? [Open-ended][Select all that apply]**

# Reasons for not recycling prior cell phone – by year

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=1349 (respondents who currently own a cell phone), accurate 2.7 percentage points plus or minus, 19 times out of 20. IF STORED PHONE ONLY

Source: Nanos Research, RDD dual frame hybrid telephone and online random survey, December 4<sup>th</sup> to 18<sup>th</sup>, 2017, n=1289 (respondents who currently own a cell phone), accurate 2.7 percentage points plus or minus, 19 times out of 20. IF STORED PHONE ONLY.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 19<sup>th</sup>, 2016, n=1228 (respondents who currently own a cell phone), accurate 2.5 percentage points plus or minus, 19 times out of 20. IF STORED PHONE ONLY.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 15<sup>th</sup>, 2015, n=1237 (respondents who currently own a cell phone), accurate 2.8 percentage points plus or minus, 19 times out of 20. IF STORED PHONE ONLY.

- Participants in 2018 most frequently reported that they kept their old phone for security reasons (22%), as backup/extra (20%), because they don't know what else to do with it (16%), keep it for a future need (15%), or for the phone numbers/information on it (12%).
- However, they are less likely keep it because it is still worth something (7%) or because of sentimental value (4%).

Why did you keep your old phone?	Year			
	2018 (n=1,349)*	2017 (n=1,289)*	2016 (n=1,228)*	2015 (n=1,237)*
For security reasons/Not sure how to delete personal info on the phone (contact list, pictures, messages)	21.5%	17.6%	10.6%	7.7%
As a backup/extra	19.9%	18.0%	23.1%	17.6%
I don't know what else to do with it	15.6%	19.5%	26.3%	24.8%
Keep it for a future need (real or potential)	14.8%	10.4%	14.7%	10.9%
For the phone numbers/information on it	12.1%	13.1%	15.6%	12.0%
It still has value/it's worth something	6.6%	6.3%	5.3%	3.2%
Sentimental value	3.7%	4.0%	4.8%	3.6%
I use it for other purposes (alarm clock, music, kids toy, Wi-Fi)	0.4%	3.1%	7.1%	6.3%
Other responses	2.8%	4.3%	6.3%	6.7%
Unsure	2.4%	3.7%	2.8%	3.3%

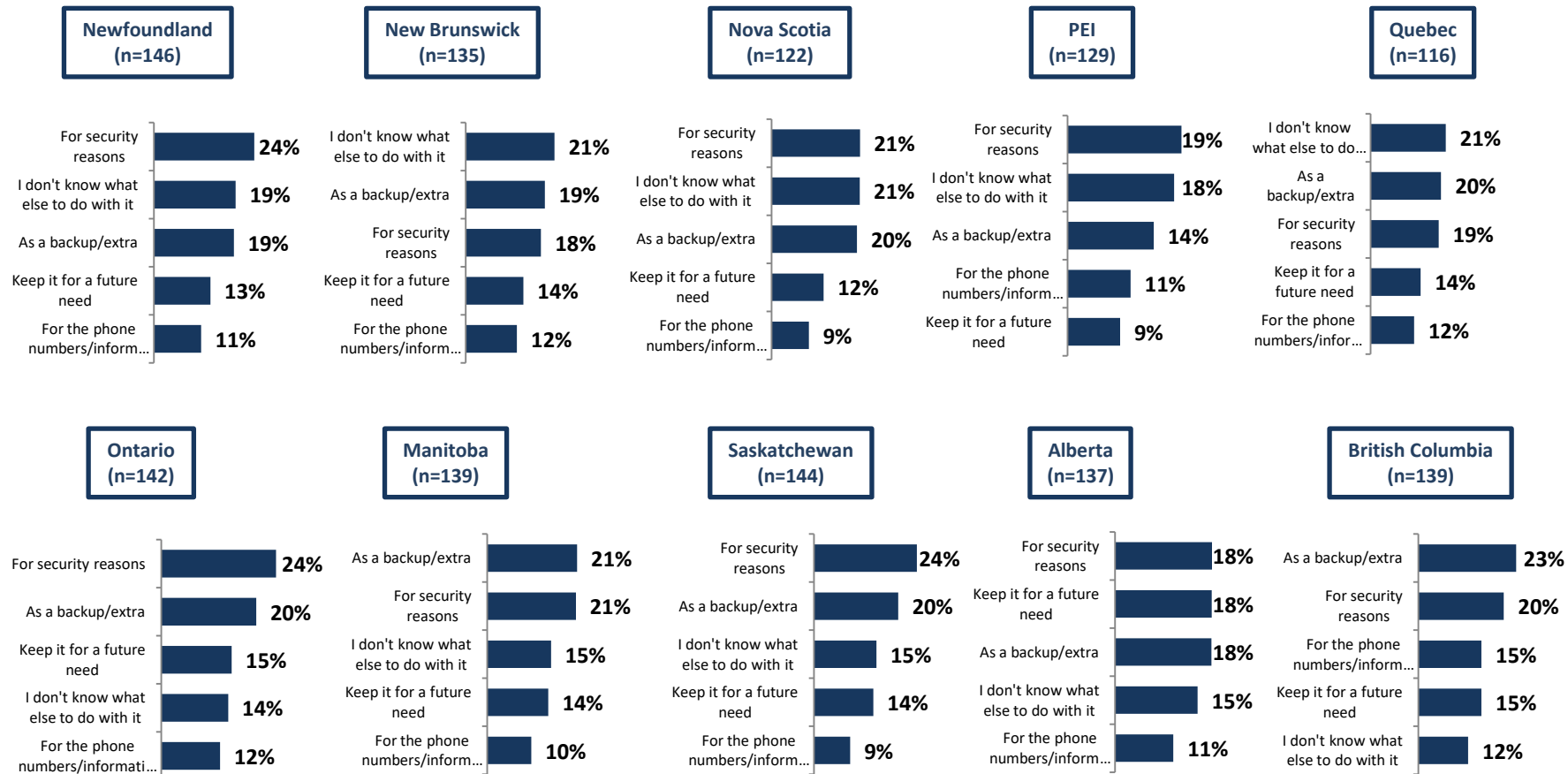
\*Based on multiple mentions

**QUESTION – [IF STORED PHONE] Why did you keep your old phone? [Open-ended] [Select all that apply]**

# Reasons for not recycling prior cell phone – top responses by province

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=1349 (respondents who currently own a cell phone), accurate 2.7 percentage points plus or minus, 19 times out of 20. IF STORED PHONE ONLY

- Due to the small sample sizes, no significant differences can be noted.



## 4.0 Cell phone recycling



# Approaches used for cell phone recycling

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=245 (respondents who currently own a cell phone), accurate 6.3 percentage points plus or minus, 19 times out of 20. IF RECYCLED PHONE ONLY.

	Frequency (n=245)
Took it to a depot for special/hazardous waste	40.3%
Cell phone recycling program through a retail store, e.g. Staples, Best Buy, etc.	28.6%
Cell phone recycling program with a cellular service provider (e.g. Bell, Rogers, TELUS, SaskTel, MTS, Virgin, Fido, Wind)	17.4%
Recycle My Cell Program	5.1%
Curbside recycling box (e.g. blue box or green box)	3.3%
Local waste management program	2.3%
Used a mail back program	1.0%
Donated to charity	0.9%
Returned to employer	0.7%
Gave it to family/friend to recycle	0.3%
Unsure/don't recall	0.1%

Subgroups	Took to a depot
Newfoundland and Labrador (n=19)*	
New Brunswick (n=17)*	
Nova Scotia (n=25)*	
Prince Edward Island (n=33)	27.5%
Quebec (n=30)	17.1%
Ontario (n=25)*	
Manitoba (n=22)*	
Saskatchewan (n=20)*	
Alberta (n=28)*	
British Columbia (n=26)*	
18 to 34 (n=41)	19.9%
35 to 54 (n=105)	35.1%
55 plus (n=99)	53.2%
Male (n=129)	42.8%
Female (n=116)	37.4%
Urban (n=183)	38.8%
Rural (n=62)	49.5%

**QUESTION – [IF RECYCLED PHONE]** How did you recycle your old phone? [Open-ended]

\*Weighted to the true population proportion.

\*Charts may not add up to 100 due to rounding.

\*Shaded due to small sample size



# Approaches used for cell phone recycling

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=245 (respondents who currently own a cell phone), accurate 6.3 percentage points plus or minus, 19 times out of 20. IF RECYCLED PHONE ONLY.



- The most common approaches to recycle old phones are through a special/hazardous waste depot (40%) and those through programs led by retail stores (29%) and cellular service providers (17%).
- Other approaches to recycling phones include the Recycle My Cell program (five per cent), a curbside recycling box (three per cent), and a local waste management program (two per cent).

**\*Note:** Charts may not add up to 100 due to rounding

**QUESTION – [IF RECYCLED PHONE]** How did you recycle your old phone? [Open-ended]

# Approaches used for cell phone recycling - top responses by year

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=245 (respondents who currently own a cell phone), accurate 6.3 percentage points plus or minus, 19 times out of 20. IF RECYCLED PHONE ONLY.

Source: Nanos Research, RDD dual frame hybrid telephone and online random survey, December 4<sup>th</sup> to 18<sup>th</sup>, 2017, n=336 (respondents who currently own a cell phone), accurate 5.4 percentage points plus or minus, 19 times out of 20. IF RECYCLED PHONE ONLY.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 19<sup>th</sup>, 2016, n=319 (respondents who currently own a cell phone), accurate 5.6 percentage points plus or minus, 19 times out of 20. RECYCLED PHONE ONLY.

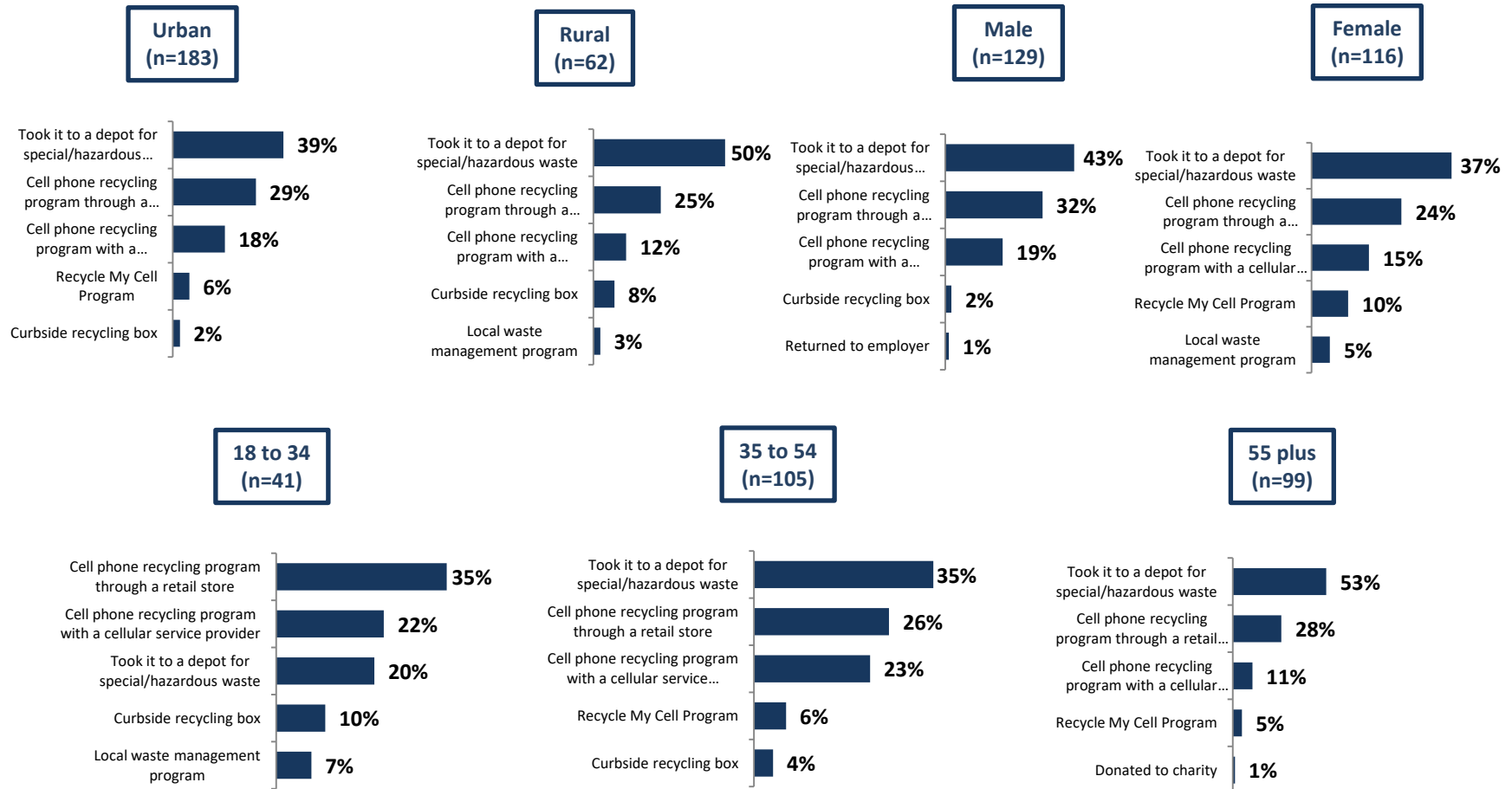
Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 15<sup>th</sup>, 2015, n=376 (respondents who currently own a cell phone), accurate 5.2 percentage points plus or minus, 19 times out of 20. RECYCLED PHONE ONLY.

Mentions for keeping old phone	Year			
	2018 (n=245)	2017 (n=336)	2016 (n=319)	2015 (n=376)
Took it to a depot for special/hazardous waste	40.3%	35.3%	25.6%	27.0%
Cell phone recycling program through a retail store (e.g. Staples, Best Buy, etc. (This does not include cell phone service provider stores)	28.6%	16.6%	22.3%	20.8%
Cell phone recycling program with a cellular service provider (e.g. Bell, Rogers, TELUS, SaskTel MTS, Virgin, Fido, Wind, Koodo, Videotron, TBayTel)	17.4%	27.4%	23.0%	26.6%
Recycle My Cell Program	5.1%	10.1%	7.9%	-
Curbside recycling box (e.g. blue box or green box)	3.3%	5.4%	5.4%	6.9%
Local waste management program	2.3%	-	-	-
Through a charity drive	0.9%	1.4%	2.4%	3.3%
Other mentions	2.0%	3.7%	0.3%	4.3%
Unsure	0.1%	-	5.2%	6.3%

**QUESTION – [IF RECYCLED PHONE]** How did you recycle your old phone? [Open-ended]

# Approaches used for cell phone recycling - top responses by demographic

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=245 (respondents who currently own a cell phone), accurate 6.3 percentage points plus or minus, 19 times out of 20. IF RECYCLED PHONE ONLY.



**QUESTION – [IF RECYCLED PHONE] How did you recycle your old phone? [Open-ended]**

# Satisfaction with cell recycling experience – by year

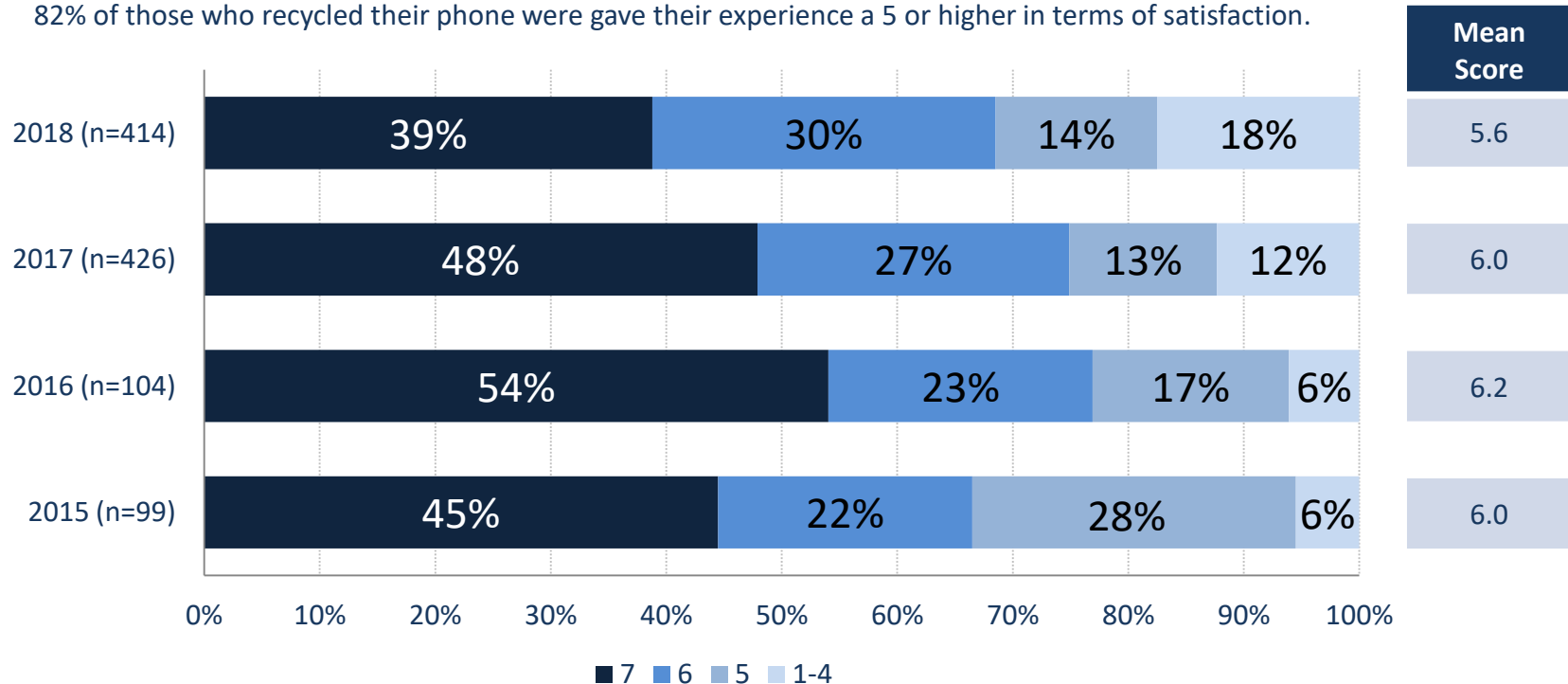
Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=414 (respondents who currently own a cell phone), accurate 4.9 percentage points plus or minus, 19 times out of 20. IF USED CELLULAR PROVIDER, RECYCLE MY CELL, OR MAIL BACK TO RECYCLE CELL PHONE.

Source: Nanos Research, RDD dual frame hybrid telephone and online random survey, December 4<sup>th</sup> to 18<sup>th</sup>, 2017, n=426 (respondents who currently own a cell phone), accurate 4.8 percentage points plus or minus, 19 times out of 20. IF USED CELLULAR PROVIDER, RECYCLE MY CELL, OR MAIL BACK TO RECYCLE CELL PHONE.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 19<sup>th</sup>, 2016, n=104 (respondents who currently own a cell phone), accurate 9.8 percentage points plus or minus, 19 times out of 20. IF USED CELLULAR PROVIDER, RECYCLE MY CELL, OR MAIL BACK TO RECYCLE CELL PHONE.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 15<sup>th</sup>, 2015, n=99 (respondents who currently own a cell phone), accurate 10.0 percentage points plus or minus, 19 times out of 20. IF USED CELLULAR PROVIDER, RECYCLE MY CELL, OR MAIL BACK TO RECYCLE CELL PHONE.

- 82% of those who recycled their phone were gave their experience a 5 or higher in terms of satisfaction.



**\*Note:** Charts may not add up to 100 due to rounding

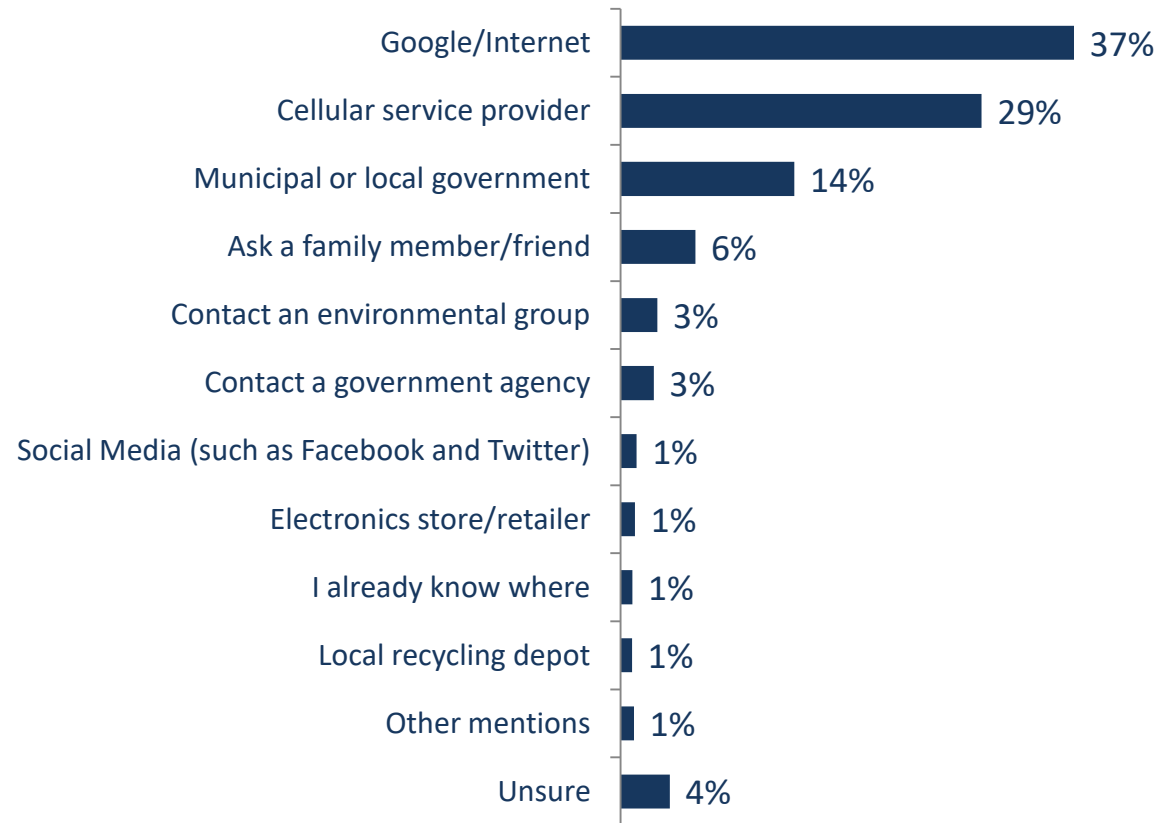
**QUESTION –** [IF USED cellular provider, Recycle My Cell or mail back program] How satisfied were you with this experience? Please use a scale from 1 to 7, where 1 is extremely dissatisfied and 7 is extremely satisfied.

## 5.0 Information gathering & awareness



# Information about recycling – top mentions

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.



- More than one in three Canadians (37%) would first turn to Google for information if they were to consider recycling their old cell phone.
- More than one in four (29%) would go to their cellular service provider, while 14 per cent would ask their municipal or local government.
- The remainder would seek information from a family member or friend (six per cent), an environmental group or a government agency (three per cent each).

**\*Note:** Charts may not add up to 100 due to rounding

**QUESTION** – If you were to consider recycling your old cell phone, where would you look for information?

# Information about recycling – by year

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, RDD dual frame hybrid telephone and online random survey, December 4<sup>th</sup> to 18<sup>th</sup>, 2017, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 19<sup>th</sup>, 2016, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

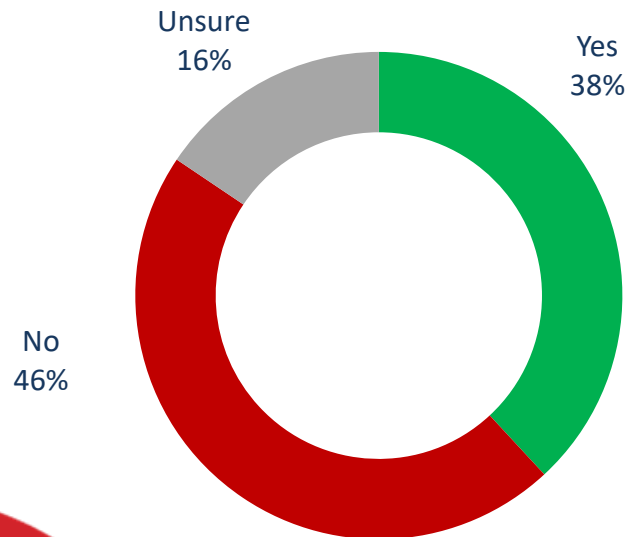
Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 15<sup>th</sup>, 2015, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Mentions	Year			
	2018 (n=3,000)	2017 (n=3,000)	2016 (n=3,000)	2015 (n=3,000)
Google/Internet	36.5%	39.6%	44.6%	45.0%
Cellular service provider	29.1%	27.7%	26.2%	22.3%
Municipal or local government	13.5%	9.4%	8.6%	8.9%
Ask a family member/friend	6.0%	4.4%	4.1%	5.1%
Contact an environmental group	3.0%	1.8%	2.1%	1.8%
Contact a government agency	2.7%	0.7%	1.6%	1.6%
Social Media (such as Facebook and Twitter)	1.3%	0.6%	1.4%	-
An electronics retailer	1.2%	1.4%	1.9%	1.5%
Local recycling depot	0.9%	2.4%	1.9%	2.3%
Local waste management program/notifications	-	1.5%	-	-
Other responses	1.8%	2.3%	2.0%	4.3%
Unsure	4.0%	8.2%	5.7%	7.2%

**QUESTION** – If you were to consider recycling your old cell phone, where would you look for information?

# General awareness of recycling programs

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.



**\*Note:** Charts may not add up to 100 due to rounding

**QUESTION** – Are you aware of any recycling programs for old or unused cell phones?

Subgroups	Yes
Newfoundland and Labrador (n=300)	38.2%
New Brunswick (n=300)	38.9%
Nova Scotia (n=300)	37.1%
Prince Edward Island (n=300)	41.4%
Quebec (n=300)	35.5%
Ontario (n=300)	33.9%
Manitoba (n=300)	42.3%
Saskatchewan (n=300)	50.9%
Alberta (n=300)	39.3%
British Columbia (n=300)	50.7%
18 to 34 (n=725)	39.7%
35 to 54 (n=1,322)	39.6%
55 plus (n=953)	35.7%
Male (n=1,535)	40.0%
Female (n=1,465)	36.3%
Urban (n=2,228)	39.0%
Rural (n=772)	33.1%

**\*Weighted to the true population proportion.**

**\*Charts may not add up to 100 due to rounding.**



# General awareness of recycling programs – by year

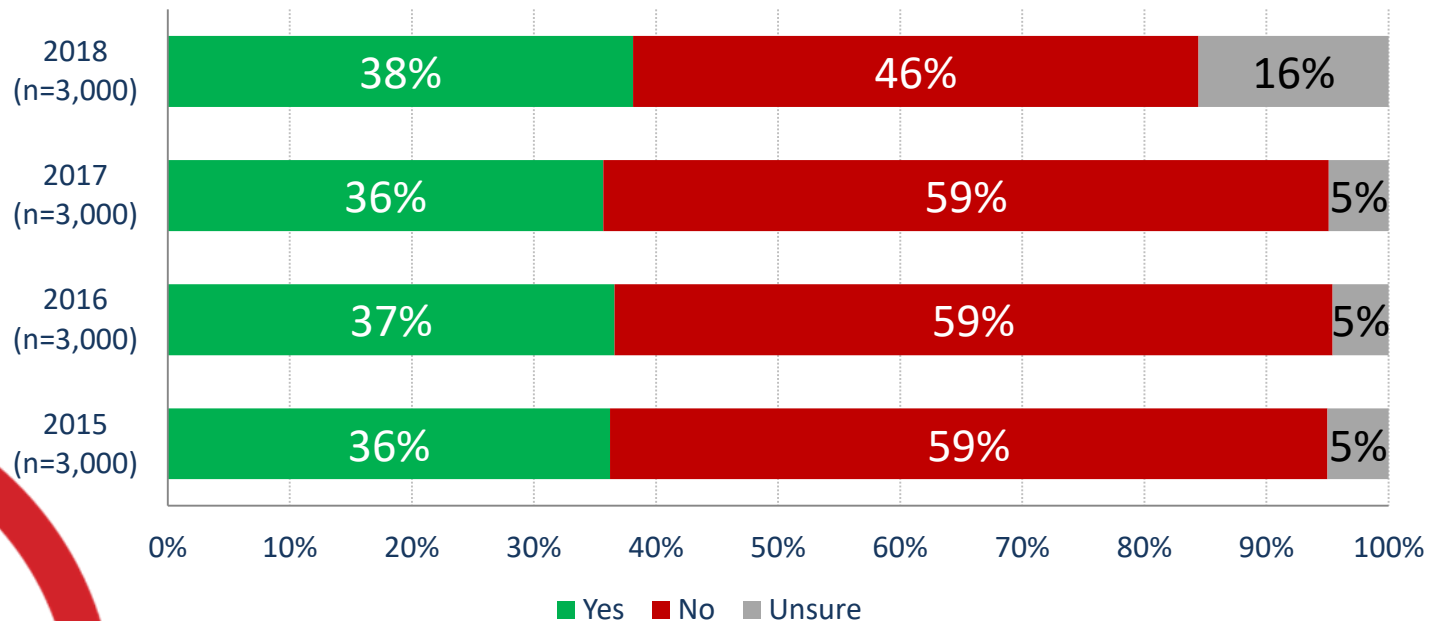
Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, RDD dual frame hybrid telephone and online random survey, December 4<sup>th</sup> to 18<sup>th</sup>, 2017, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 19<sup>th</sup>, 2016, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 15<sup>th</sup>, 2015, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

- 38% of respondents are aware of recycling programs for unused cell phones, consistent with previous years.



\*Note: Charts may not add up to 100 due to rounding

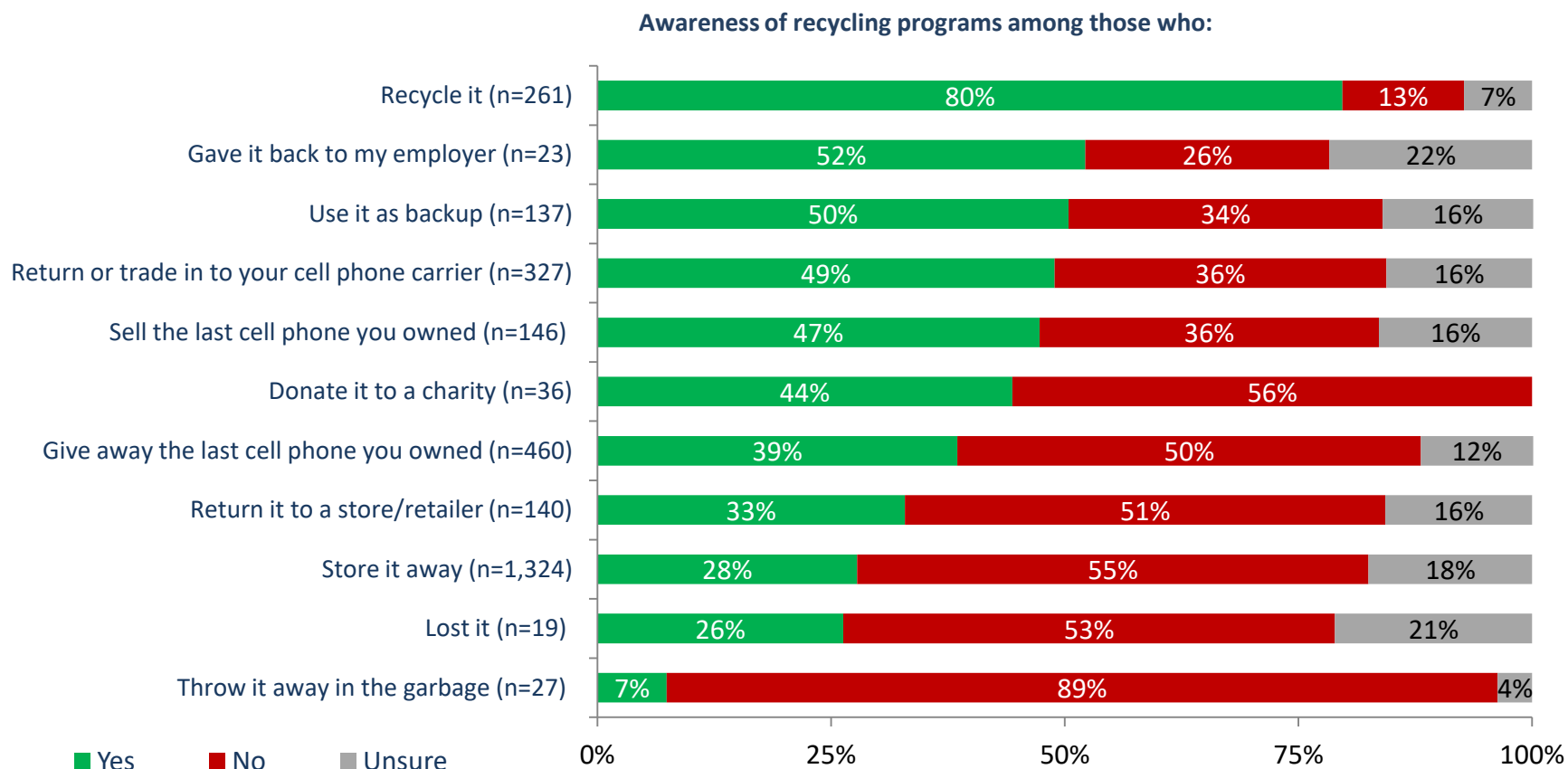
**QUESTION** – Are you aware of any recycling programs for **old or** unused cell phones?

**QUESTION** – Are you aware of any recycling programs for unused cell phones? (2015 Wave)

# General awareness of recycling programs - by behaviour

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

- Awareness is higher among those who have recycled their phone (80% aware). Only 28 per cent of those who are storing their cell phones are aware of recycling programs.

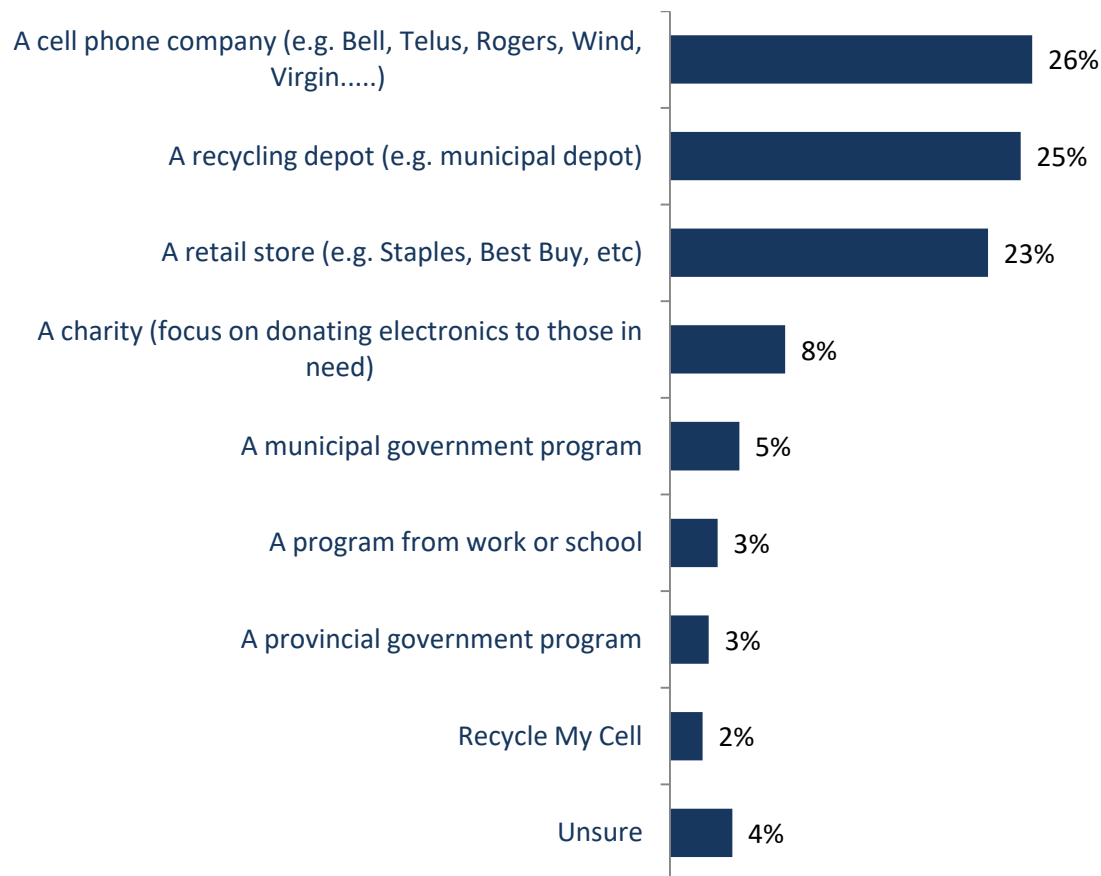


\*Note: Charts may not add up to 100 due to rounding

**QUESTION** – Are you aware of any recycling programs for **old or** unused cell phones?

# Unaided awareness of recycling programs in area

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=2892 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20. HEARD OF RECYCLING PROGRAMS ONLY



- Top mentions among those who could name programs in their area include a cell phone company (26%), recycling depots (25%), a retail store (23%), and a charity (eight per cent).

\*Based on multiple mentions

\*Note: Charts may not add up to 100 due to rounding

**QUESTION – [IF AWARE OF PROGRAMS ONLY]** What cell phone recycling programs are you aware of in your area?  
[Open-ended]

# Unaided awareness of recycling programs in area - by year

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=2892 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20. HEARD OF RECYCLING PROGRAMS ONLY

Source: Nanos Research, RDD dual frame hybrid telephone and online random survey, December 4<sup>th</sup> to 18<sup>th</sup>, 2017, n=1812 (respondents who currently own a cell phone), accurate 2.3 percentage points plus or minus, 19 times out of 20. HEARD OF RECYCLING PROGRAMS ONLY.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 19<sup>th</sup>, 2016, n=1271 (respondents who currently own a cell phone), accurate 2.8 percentage points plus or minus, 19 times out of 20. HEARD OF RECYCLING PROGRAMS ONLY.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 15<sup>th</sup>, 2015, n=1250 (respondents who currently own a cell phone), accurate 2.8 percentage points plus or minus, 19 times out of 20. HEARD OF RECYCLING PROGRAMS ONLY.

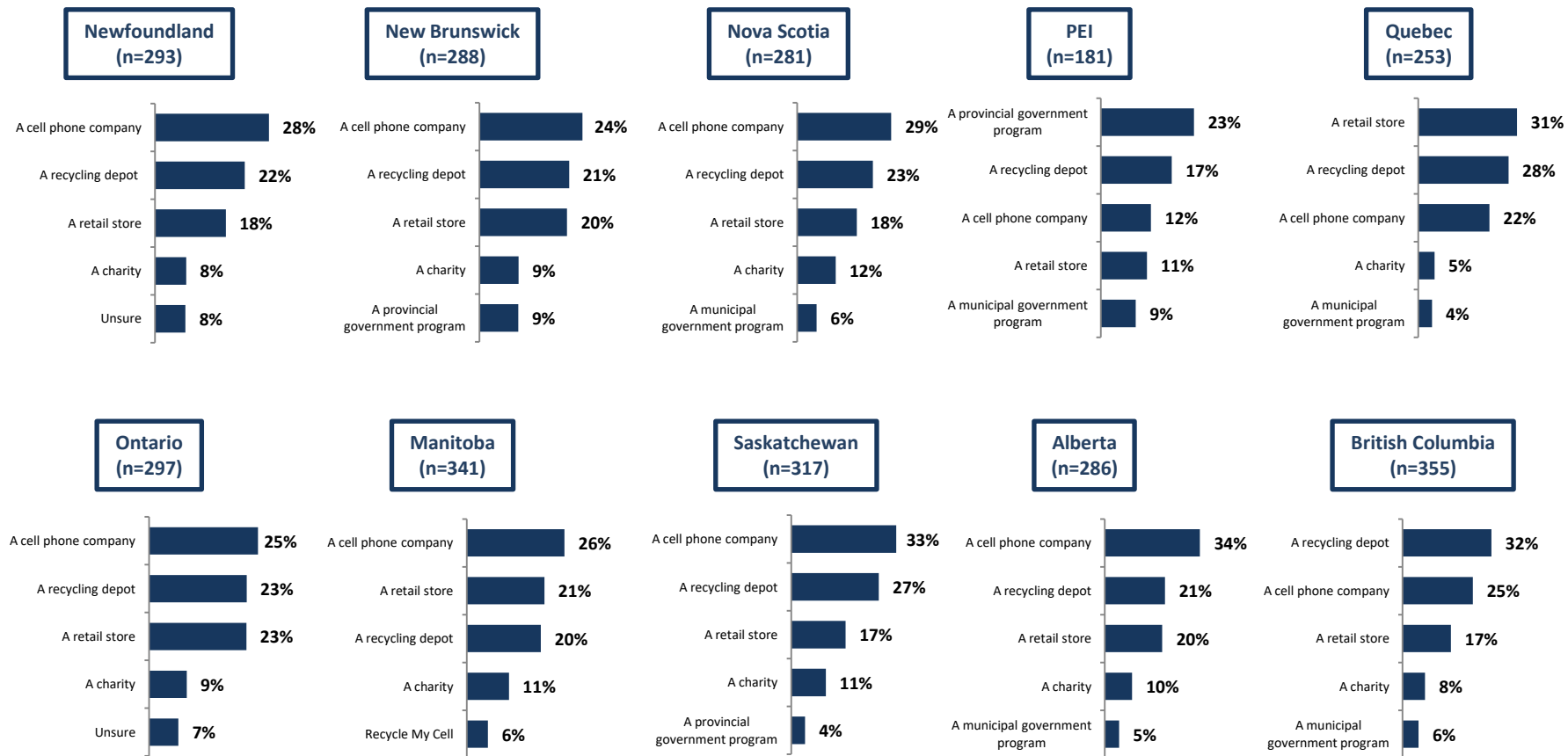
Mentions of cell phone recycling programs	Year			
	2018 (n=2,892)*	2017 (n=1,812)*	2016 (n=1,271)*	2015 (n=1,250)*
A cell phone company (e.g. Bell, TELUS, Rogers, Wind, Virgin, Fido, Koodo, Sasktel, MTS, TBayTel, Videotron, etc.)	25.9%	24.7%	21.0%	19.0%
Recycling depot (e.g. municipal depot)	25.1%	22.9%	17.5%	13.6%
A retail store (e.g. Staples, Best Buy, etc)	22.7%	18.6%	23.9%	23.3%
A charity (focus on donating electronics to those in need)	8.2%	8.7%	8.4%	5.9%
A municipal government program	4.9%	7.5%	11.8%	14.3%
A program from work or school	3.4%	2.8%	7.3%	5.3%
A provincial government program	2.8%	3.2%	5.8%	2.4%
Recycle My Cell	2.3%	3.3%	4.5%	2.4%
Other	0.2%	2.3%	0.6%	4.3%
Unsure	4.4%	6.1%	6.1%	1.2%

\*Based on multiple mentions

**QUESTION – [IF AWARE OF PROGRAMS ONLY]** What cell phone recycling programs are you aware of in your area? [Open-ended]

# Unaided awareness of recycling programs in area - by province

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=2892 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20. HEARD OF RECYCLING PROGRAMS ONLY



**QUESTION – [IF AWARE OF PROGRAMS ONLY]** What cell phone recycling programs are you aware of in your area? [Open-ended]

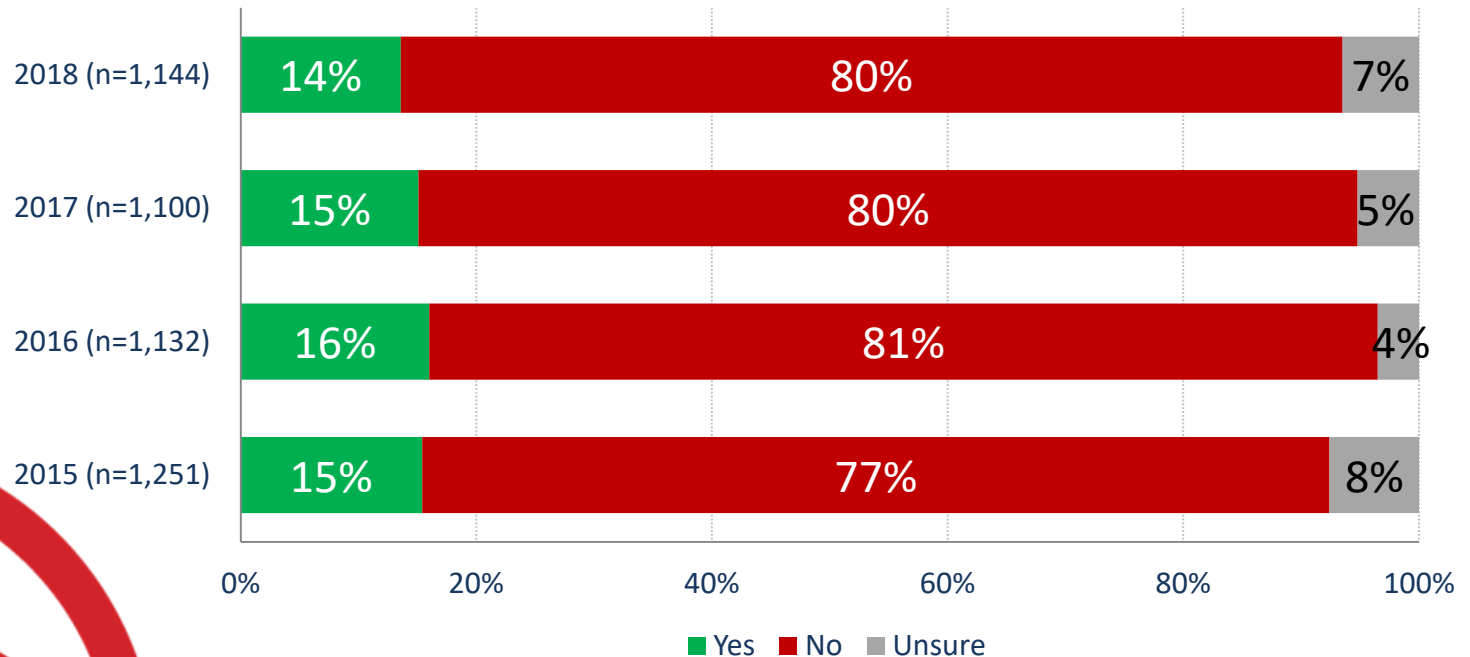
# Awareness of Recycle My Cell program – by year

Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=1144 (respondents who currently own a cell phone), accurate 2.9 percentage points plus or minus, 19 times out of 20. HEARD OF RECYCLING PROGRAMS ONLY

Source: Nanos Research, RDD dual frame hybrid telephone and online random survey, December 4<sup>th</sup> to 18<sup>th</sup>, 2017, n=1100 (respondents who currently own a cell phone), accurate 3.0 percentage points plus or minus, 19 times out of 20. HEARD OF RECYCLING PROGRAMS ONLY.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 19<sup>th</sup>, 2016, n=1132 (respondents who currently own a cell phone), accurate 2.9 percentage points plus or minus, 19 times out of 20. HEARD OF RECYCLING PROGRAMS ONLY.

Source: Nanos Research, dual mode telephone (RDD dual frame) and online probability sample random survey, December 2<sup>nd</sup> to 15<sup>th</sup>, 2015, n=1251 (respondents who currently own a cell phone), accurate 2.8 percentage points plus or minus, 19 times out of 20. HEARD OF RECYCLING PROGRAMS ONLY.



**\*Note:** Charts may not add up to 100 due to rounding

**QUESTION – [IF AWARE OF PROGRAMS ONLY]** Have you heard about the Recycle My Cell program?

# Awareness of Recycle My Cell program – by province and demographic

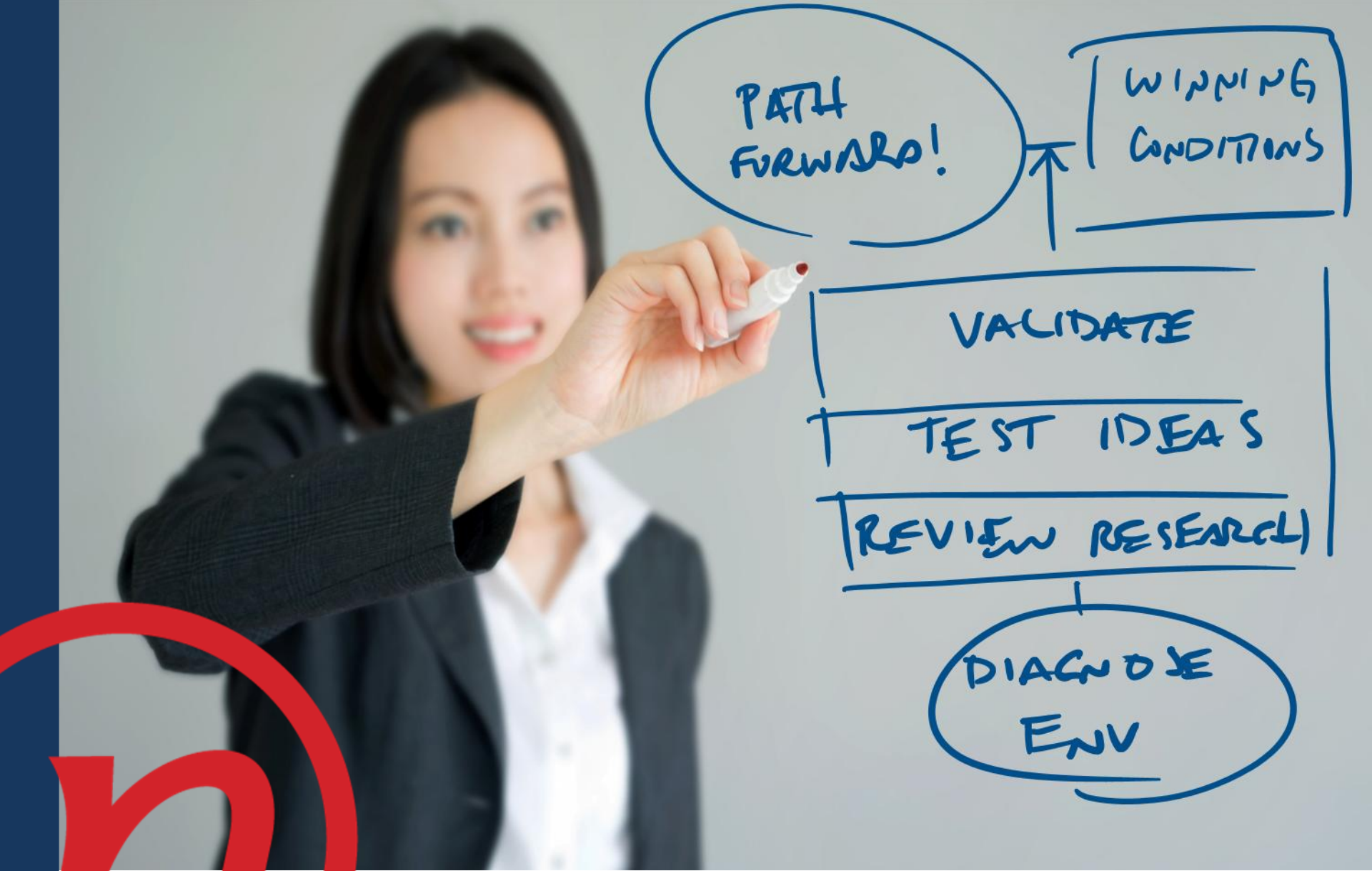
Source: Nanos Research, online random survey (RDD dual frame random telephone survey in PEI), December 2<sup>nd</sup> to 19<sup>th</sup>, 2018, n=3000 (respondents who currently own a cell phone), accurate 1.8 percentage points plus or minus, 19 times out of 20.

- National awareness of the Recycle My Cell program among those who have heard of recycling programs remains steady with 2017 and 2016 results at 14 per cent aware (15% aware in 2016 and 15% in 2015).

% AWARE	Total (n=3,000)	Province									
		NFLD (n=300)	NB (n=300)	NS (n=300)	PEI (n=300)	QC (n=300)	ON (n=300)	MB (n=300)	SK (n=300)	AB (n=300)	BC (n=300)
Recycling programs in general (n=3000)	38.1%	38.2%	38.9%	37.1%	41.4%	35.5%	33.9%	42.3%	50.9%	39.3%	50.7%
Recycle My Cell (n=1226)	13.6%	17.9%	9.0%	5.0%	8.1%	16.1%	14.7%	16.4%	11.5%	14.1%	9.0%

% AWARE	Total (n=3,000)	Region		Age			Gender	
		Urban (n=2,228)	Rural (n=772)	18 to 34 (n=725)	35 to 54 (n=1,322)	55 plus (n=953)	Male (n=1,535)	Female (n=1,465)
Recycling programs in general (n=3000)	38.1%	39.0%	33.1%	39.7%	39.6%	35.7%	40.0%	36.3%
Recycle My Cell (n=1226)	13.6%	13.3%	15.1%	10.8%	17.2%	12.1%	15.3%	11.8%

**QUESTION – [IF AWARE OF RECYCLING PROGRAMS]** Have you heard about the Recycle My Cell program?



# Methodology



# Methodology

Nanos administered a dual mode survey (telephone and online) conducted with an online probability sample, where individuals were recruited by land- and cell-line sample but administered a survey online, while participants in PEI were interviewed by telephone (RDD dual frame land- and cell-line sample) using live agents, 3,000 Canadians (300 in each province), 18 years of age or older, between December 2<sup>nd</sup> and 19<sup>th</sup>, 2018. The results were statistically checked and weighted by age and gender using the latest Census information and the sample is geographically stratified to be representative of Canada.

The margin of error for a random survey of 3,000 Canadians is  $\pm 1.8$  percentage points, 19 times out of 20, while the margin of error for a random survey 300 residents of a Canadian province is  $\pm 5.7$  percentage points, 19 times out of 20.

The research was commissioned by the Canadian Wireless Telecommunications Association (CWTA).

In previous waves Nanos administered a dual mode survey (telephone and online) with one half of the sample conducted by telephone (RDD dual frame land- and cell-line sample) using live agents and one half of the survey conducted with an online probability sample, where individuals were recruited by land- and cell-line sample but administered surveys online. For details on the potential mode impact please see “2017-2018 Methodology Change” slide.

## **Previous wave (2017):**

Nanos administered a dual mode survey (telephone and online) with one half of the sample conducted by telephone (RDD dual frame land- and cell-line sample) using live agents and one half of the survey conducted with an online probability sample, where individuals were recruited by land- and cell-line sample but administered surveys online, 3,000 Canadians (300 in each province), 18 years of age or older, between December 4<sup>th</sup> and 18<sup>th</sup>, 2017. The results were statistically checked and weighted by age and gender using the latest Census information and the sample is geographically stratified to be representative of Canada.

The dual mode random telephone (land- and cell-line) sample with the parallel online sample provides for a very high level of confidence in the Nanos data compared to other research techniques because in effect it is a double verification of independent samples within each jurisdiction. Testing suggests that the two streams on major indicators are generally consistent within acceptable statistical norms. Individuals randomly called using random digit dialling with a maximum of five call backs.

The margin of error for a random survey of 3,000 Canadians is  $\pm 1.8$  percentage points, 19 times out of 20, while the margin of error for a random survey 300 residents of a Canadian province is  $\pm 5.7$  percentage points, 19 times out of 20.

The research was commissioned by the Canadian Wireless Telecommunications Association (CWTA).

# Methodology contd.

## **Previous wave (2016):**

Nanos administered a dual mode survey (telephone and online) with one half of the sample conducted by telephone (RDD dual frame land- and cell-line sample) using live agents and one half of the survey conducted with an online probability sample, where individuals were recruited by land- and cell-line sample but administered surveys online, 3,000 Canadians (300 in each province), 18 years of age or older, between December 2<sup>nd</sup> to 19<sup>th</sup>, 2016. The results were statistically checked and weighted by age and gender using the latest Census information and the sample is geographically stratified to be representative of Canada.

The dual mode random telephone (land- and cell-line) sample with the parallel online sample provides for a very high level of confidence in the Nanos data compared to other research techniques because in effect it is a double verification of independent samples within each jurisdiction. Testing suggests that the two streams on major indicators are generally consistent within acceptable statistical norms. Individuals randomly called using random digit dialling with a maximum of five call backs.

The margin of error for a random survey of 3,000 Canadians is  $\pm 1.8$  percentage points, 19 times out of 20, while the margin of error for a random survey 300 residents of a Canadian province is  $\pm 5.7$  percentage points, 19 times out of 20.

The research was commissioned by the Canadian Wireless Telecommunications Association (CWTA).

## **Previous wave (2015):**

Nanos administered a dual mode survey (telephone and online) with one half of the sample conducted by telephone (RDD dual frame land- and cell-line sample) using live agents and one half of the survey conducted with an online probability sample, where individuals were recruited by land- and cell-line sample but conducted surveys online, of 3,000 Canadians (300 in each province), 18 years of age or older, between December 2<sup>nd</sup> to 15<sup>th</sup>, 2015. Due to the small size of the province, in the province of Prince Edward Island only the random live agent telephone survey was conducted. The results were statistically checked and weighted by age and gender using the latest Census information and the sample is geographically stratified to be representative of Canada.

The dual mode random telephone (land- and cell-line) sample with the parallel online sample provides for a very high level of confidence in the Nanos data compared to other research techniques because in effect it is a double verification of independent samples within each jurisdiction (excluding PEI due to size). Testing suggests that the two streams on major indicators are generally consistent within acceptable statistical norms. Individuals randomly called using random digit dialling with a maximum of five call backs.

The margin of error for a random survey of 3,000 Canadians is  $\pm 1.8$  percentage points, 19 times out of 20, while the margin of error for a random survey 300 residents of a Canadian province is  $\pm 5.7$  percentage points, 19 times out of 20.

The research was commissioned by the Canadian Wireless Telecommunications Association (CWTA).

# Research Methodology

- The provincial distribution of the interviews, along with their associated margins of error, are outlined to the right.
- It is important to note that the margins of error outlined in this section should be considered the maximum margins associated with affirmative responses of 50%. The margins of error will vary based on a variety of factors from question to question based on sample size and the actual percent to which the margin of error is being associated.
- It is also important to note that results associated with population sub-groups are based on smaller sample sizes and will therefore have a higher margin of error.

Province	Interviews Completed	Margin of Error
Newfoundland and Labrador	300	±5.7%
Prince Edward Island	300	±5.7%
Nova Scotia	300	±5.7%
New Brunswick	300	±5.7%
Quebec	300	±5.7%
Ontario	300	±5.7%
Manitoba	300	±5.7%
Saskatchewan	300	±5.7%
Alberta	300	±5.7%
British Columbia	300	±5.7%
<b>Total</b>	<b>3,000</b>	<b>±1.8%</b>

# Demographic Profile of Respondents

Province	Unweighted base	Weighted base
Newfoundland and Labrador	300	47
New Brunswick	300	68
Nova Scotia	300	84
Prince Edward Island	300	13
Quebec	300	715
Ontario	300	1,165
Manitoba	300	110
Saskatchewan	300	94
Alberta	300	331
British Columbia	300	373
Total	3,000	3,000

		Unweighted base size	Weighted base size	% of total (weighted)
Region	Urban	2,228	2,537	85%
	Rural	772	463	15%
Age	18-34	725	818	27%
	35-54	1,322	1,023	34%
	55+	953	1,160	39%
Gender	Male	1,535	1,456	49%
	Female	1,465	1,544	51%
Income	Less than \$45K	380	-	-
	\$45K - <\$75K	812	-	-
	\$75K +	1,103	-	-
	Refuse	704	-	-

# Technical Note

Element	Description	Element	Description
Organization who commissioned the research	The Canadian Wireless Telecommunications Association (CWTA)	Weighting of Data	The results were weighted by age and gender using the latest Census information (2016) and the sample is geographically stratified to ensure a distribution across all regions of Canada. See tables for full weighting disclosure
Final Sample Size	3,000 Randomly selected individuals. 300 per province.		
Margin of Error	National: $\pm 1.8$ percentage points, 19 times out of 20. Provincial: $\pm 5.7$ percentage points, 19 times out of 20.	Screening	Screening ensured potential respondents did not work in the market research industry, in the advertising industry, in the media, a political party, or the telecommunications industry prior to administering the survey to ensure the integrity of the data.
Mode of Survey	Dual mode survey (telephone and online) conducted online, while participants in PEI were interviewed by telephone (RDD dual frame land- and cell-line sample) using live agents.		
Sampling Method Base	The survey was conducted using an online probability sample, while in PEI the sample included both land- and cell-lines RDD (Random Digit Dialed).	Excluded Demographics	Individuals younger than 18 years old; individuals without land or cell lines could not participate; individuals without a cell phone; new cell phone owners without a previous cell phone to dispose of.
Demographics (Captured)	Atlantic Canada, Quebec, Ontario, Prairies, British Columbia; Men and Women; 18 years and older. Six digit postal code was used to validate geography.	Stratification	By age and gender using the latest Census information (2016) and the sample is geographically stratified to be representative of Canada.
Demographics (Other)	Age, gender, education, income	Estimated Response Rate	Eleven per cent consistent with industry norms.
Fieldwork/Validation	Live interviews with live supervision to validate work (PEI only).	Question Order	Question order in the preceding report reflects the order in which they appeared in the original questionnaire.
Number of Calls	Maximum of five call backs (PEI only).	Question Content	All questions asked are contained in the report.
Time of Calls	Individuals were called between 12-5:30 pm and 6:30-9:30pm local time for the respondent (PEI only).	Question Wording	The questions in the preceding report are written exactly as they were asked to individuals.
Field Dates	December 2 <sup>nd</sup> to 19 <sup>th</sup> , 2018.	Survey Company	Nanos Research
Language of Survey	The survey was conducted in both English and French.	Contact	Contact Nanos Research for more information or with any concerns or questions. <a href="http://www.nanosresearch.com">http://www.nanosresearch.com</a> Telephone:(613) 234-4666 ext. 237 Email: info@nanosresearch.com.

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Nanos is one of North America's most trusted research and strategy organizations. Our team of professionals is regularly called upon by senior executives to deliver superior intelligence and market advantage whether it be helping to chart a path forward, managing a reputation or brand risk or understanding the trends that drive success. Services range from traditional telephone surveys, through to elite in-depth interviews, online research and focus groups. Nanos clients range from Fortune 500 companies through to leading advocacy groups interested in understanding and shaping the public landscape. Whether it is understanding your brand or reputation, customer needs and satisfaction, engaging employees or testing new ads or products, Nanos provides insight you can trust.



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## **Nanos Research**

North America Toll-free

1.888.737.5505

[info@nanosresearch.com](mailto:info@nanosresearch.com)