



ispiciwin

Industry Insights Program

ISPICIWIN MICRO-
ZEV AWARENESS AND
PERCEPTIONS SURVEY:
**UNDERSTANDING
COMMUNITY
PERSPECTIVES**

Public Report

Thank You



On behalf of The Pîsim Collective and its partners, we want to thank all supporters and respondents for their participation in the Ispiciwin Project's Industry Insights Program.

The key findings gathered through our research, outreach, and public engagement are already making a difference. Your input will help us shape future programming, research, and policy recommendations — ensuring our perspectives and guidance are grounded in real experiences and real needs. Zero-emission vehicles, regardless of size, can make a big impact, especially when supported by local data, thoughtful design, and public input like yours.

We thank you for helping us shape the future of sustainable transportation.

The Pîsim Collective



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For more information on the project, visit <http://www.ispiciwin.ca/>.

Table of Contents

Executive Summary	4
1. Introduction	5
1.1. Background: Why Micro-ZEVs Matter	5
1.2. Objectives of the Survey	6
1.3. Why Micro-ZEV Perception Data Matters	6
1.4. How the Survey Supports the Ispiciwin Project	6
1.5. Scope and Structure of the Report	6
2. Methodology	7
2.1. Survey Design	7
2.2. Response Count & Demographics	7
2.3. Limitations	8
3. Key Findings	9
3.1. Theme 1: Current Transportation Habits	9
3.2. Theme 2: Awareness & Familiarity with Micro-ZEVs	10
3.3. Theme 3: Perceived Benefits of Micro-ZEVs	10
3.4. Theme 4: Perceived Challenges & Barriers	11
3.5. Theme 5: Interest in Trying or Adopting Micro-ZEVs	12
4. Cross-Analysis: Demographic and Regional Trends	14
4.1. Age-Based Trends in Interest and Intent	14
4.2. Provincial Variations in Experience, Adoption, and Promotion	15
4.3. Encouragement Factors by Province	17
5. Discussion and Implications	18
5.1. Generational Gaps Reflect Emerging Market Opportunities	18
5.2. Local Contexts Shape Adoption Potential	18
5.3. Trial Access and Infrastructure Are Key Levers	18
5.4. Summary of Implications	18
6. Recommendations	19
6.1. Pilot Programs in High-Interest Provinces	19
6.2. Focus on Younger Demographics as Early Adopters	19
6.3. Build Infrastructure That Signals Safety and Legitimacy	19
6.4. Address Education Gaps with Targeted Programming	19
6.5. Incentivize Equity and Accessibility	20
7. Conclusion	21
8. List of Figures	22
9. List of Tables	22
10. Abbreviations	23
11. Appendices	24

Executive Summary

The **Micro-ZEV Awareness and Perceptions Survey** was conducted as part of the Ispiciwin Project to better understand how Canadians perceive, experience, and engage with micro-electric zero-emission vehicles (micro-ZEVs), including e-bikes and e-scooters. As communities across Canada seek affordable and low-carbon transportation alternatives, particularly for short trips and last-mile travel, this survey provides timely, community-grounded insights to inform education, pilot programs, and local decision-making.

Sample Highlights

The survey gathered responses from **553 participants** across multiple provinces, representing a diverse mix of ages, occupations, and community types (urban, suburban, and rural). Respondents included working professionals, delivery workers, retirees, and individuals not currently in the labour force (e.g., students). This diversity allows the findings to reflect a broad cross-section of everyday transportation experiences in Canada, rather than a narrow or purely technical user group.

Key Takeaways

Overall, the results indicate that awareness of micro-ZEVs is widespread but uneven, and hands-on experience remains limited. While the majority of respondents reported being at least somewhat familiar with e-bikes and e-scooters, only about half had ever used one, and fewer reported owning a device. This gap between awareness and use highlights the importance of exposure-based interventions, such as public outreach, test rides, and community demonstrations to build confidence and practical understanding.

Current transportation habits remain dominated by **personal vehicles**, followed by public transit and walking. However, the presence of active transportation and emerging

micro-mobility options signals a readiness for change, particularly in urban and suburban settings. Respondents identified **affordability, environmental sustainability, reduced traffic, and convenience** as the most significant benefits of micro-ZEVs. At the same time, **cold or snowy weather, safety concerns, and inadequate infrastructure** were consistently cited as the most significant barriers to adoption. These concerns mirror broader national trends in micro-mobility and electric vehicle uptake, underscoring the need for locally tailored solutions.

Importantly, the survey reveals strong future potential for micro-ZEV adoption. Nearly **two-thirds of respondents expressed interest in testriding** an e-bike or e-scooter, and over **half indicated they would consider renting or purchasing one** for commuting or recreation. Free trial opportunities, government rebates, and safer, protected bike lanes emerged as the most influential factors that could encourage greater uptake. These findings suggest that many “undecided” individuals could be converted into active users through targeted programs that reduce risk, cost, and uncertainty.

Taken together, the survey findings point to a clear opportunity: **Canadians are curious, open, and increasingly receptive to micro-ZEVs**, but adoption depends on education, practical experience, and supportive infrastructure. The Ispiciwin Project is uniquely positioned to respond to this gap by advancing community-led awareness initiatives, test-ride programs, and partnerships that center lived experience and local context. By grounding future actions in public perception data, the project can help ensure that micro-mobility solutions are inclusive, trusted, and responsive to real community needs.

1. Introduction

About the Ispiciwin Project

The Ispiciwin Project (ᐱᐃᐅᐱᐅᐃᐅ, the Project) is an educational outreach project that explores the way we travel in our modern age to promote the progressive transition our society is making towards zero-emission vehicles (ZEV). Ispiciwin, in nêhiyawêwin, means to travel, and this Project focuses on the journey we are taking as a society towards more sustainable transportation solutions. The Project, at its core, is a public and industry outreach and awareness undertaking that seeks to promote knowledge around ZEVs and their adoption.

The Project is advancing the uptake of micro zero-emission vehicles (micro-ZEVs) such as e-scooters, e-bikes, and cargo bikes through a range of pilot programs, test rides, education campaigns, and engagement efforts (under the Project's eRide Network). Micro-ZEVs, while small in size, have the power to make a big impact, especially when supported by local data, inclusive design, and public feedback.

Purpose of the Micro-ZEV Awareness Survey

The Ispiciwin Project launched the Micro-ZEV Awareness & Perceptions Survey to better understand where Canadians currently stand, what they know, how they commute, what motivates them, and what barriers they face.

The survey gathered grassroots perspectives to help guide future programming, community engagement, infrastructure improvements, and policy recommendations. In short, it provides the foundation for ensuring micro-ZEV efforts are grounded in the lived experiences and real needs of the people and places they intend to serve.

1.1 Background: Why Micro-ZEVs Matter

Micro-ZEVs refer to small, electric-powered vehicles such as e-bikes, e-scooters, and electric cargo bikes, and they play a **critical role** in decarbonizing short-distance travel. Unlike traditional cars or transit systems, micro-ZEVs offer a nimble, cost-effective, and climate-friendly alternative for **short-distance trips**, perfect for campuses, town centers, first-and-last-mile connections, and everyday errands. From **students and seniors to delivery workers and newcomers**, micro-ZEVs are a practical solution that supports local **climate action, affordability, and freedom of movement**.

Micro-ZEVs reduce greenhouse gas (GHG) emissions, require minimal infrastructure, and are often faster in congested areas. But beyond environmental gains, they provide new opportunities for **equity and accessibility**, especially for communities with limited transit options or high car dependency.



Figure 1: Micro-ZEVs offer affordable, clean, and flexible transport options for daily life, across ages, needs, and regions

1.2 Objectives of the Survey

This survey was designed with the following goals:

- **Assess baseline awareness and familiarity** with micro-ZEVs across different groups and regions within Canada.
- **Understand current transportation habits**, and how people get around their communities.
- **Identify perceived benefits** such as affordability, convenience, and environmental impact.
- **Pinpoint barriers** like weather, safety, cost, or infrastructure.
- **Measure interest in adoption**, including willingness to test-ride or purchase.
- **Inform future programming**, from test ride events to educational materials, rebates, and advocacy efforts.

By collecting this data, the Ispiciwin Project is equipped to design more responsive and inclusive micro-mobility solutions rooted in lived realities.

1.3 Why Micro-ZEV Perception Data Matters

Transitioning to sustainable transportation isn't just about building new bike lanes or buying new gear, it is about understanding people. What are their concerns? What excites them? What stops them from trying? This data matters because it provides the human lens needed to make informed decisions. It shines a light on **gaps in access, awareness, and infrastructure**, helping us avoid one-size-fits-all approaches and builds supports that truly fit the public's needs.

This survey tells us where the opportunities and friction points lie, whether someone is curious about e-bikes but unsure where to start, or whether a rural community wants more test-ride events. **It's not just numbers, it's insight.**

1.4 How the Survey Supports the Ispiciwin Project

The findings from this survey directly support the Ispiciwin Project's commitment to **bottom-up, people-first solutions**. It helps identify:

- Where and for whom test rides could have the biggest impact;
- What kinds of education or policy supports are most needed;
- How to prioritize infrastructure upgrades or incentive programs; and
- Which communities are ready to move, and which need more information or support.

The survey also provides baseline metrics to measure progress over time and compare across communities.

1.5 Scope and Structure of the Report

This report provides a comprehensive but accessible overview of the Micro-ZEV Awareness and Perceptions Survey, including:

- A summary of the survey's purpose, sample, and approach;
- Key themes across **awareness, habits, benefits, barriers, and interest**;
- Visual figures to highlight major findings;
- Cross-analysis of subgroups such as age, gender, and location;
- Actionable recommendations for future Ispiciwin programming; and
- Appendices with detailed tables and methodology.

Each section is designed to support partners, municipalities, researchers, and community leaders in making data-driven decisions toward a more sustainable, equitable, and empowered mobility future.

2. Methodology

2.1 Survey Design

The survey was crafted with clarity and accessibility in mind, ensuring it could be completed by individuals across diverse backgrounds and digital literacy levels.

The survey contained **13 questions** and was structured into four key sections:

1. **About You:** Demographic and background information.
2. **Transportation Habits:** Current commuting modes and lifestyle.
3. **Awareness & Perceptions:** Familiarity with micro-ZEVs, perceived benefits, and barriers.
4. **Looking Ahead:** Interest in test-rides, purchase intent, and encouragement factors.

2.2 Response Count & Demographics

In total, the survey gathered **553** valid responses across multiple provinces and territories. Key demographic breakdowns included:

- **Geographic distribution:** Responses included both urban and rural settings, reflecting diverse mobility needs.
- **Age groups:** Ranged from 16 to 65+, with a notable cluster in the 25–34 age range.
- Figure 2 shows the provincial distribution of respondents, where they live (urban, suburban, rural), and their age group. Ontario (ON), Quebec (QC), and New Brunswick (NB) were the top participating provinces.

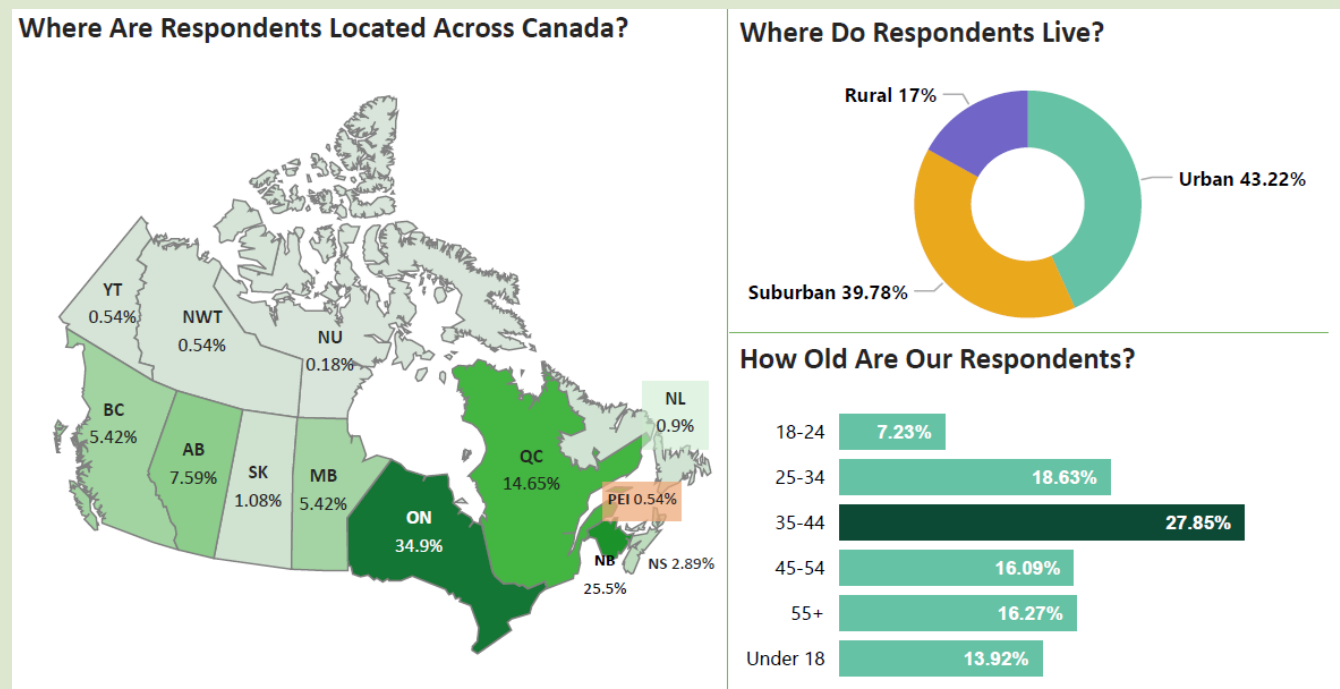


Figure 2: Geographic and Demographic Distribution of Respondents

- Roles:** Figure 3 shows a breakdown of current occupations, highlighting the diverse backgrounds of survey participants, from public service professionals to students and tradespeople. The sample included **students, office workers, delivery riders, tradespeople, and retirees**, among others.

What Do Respondents Do for Work?

Understanding the demographics and daily roles of micro-ZEV users across Canada



Figure 3: Employment Status of Respondents

2.3 Limitations

While the survey yielded valuable insights, several limitations should be considered:

- Non-random sample:** As an open public survey, results may not represent the entire Canadian population.
- Self-selection bias:** Participants may have stronger opinions about micro-ZEVs, either positive or negative.
- Geographic concentration:** There may be over-representation from regions where the Ispiciwin Project has higher visibility.
- Self-reported data:** All responses are based on participants' own accounts and may include recall or interpretation bias.

Despite these limitations, the survey provides a rich snapshot of public sentiment and readiness, especially in regions where micro-ZEV adoption could play a transformative role.



3. Key Findings

The Micro-ZEV Awareness and Perceptions Survey revealed rich insights about current commuting habits, knowledge levels, interest in micro-electric vehicles, and perceived barriers and benefits. These findings inform both the strategic direction of pilot programs and the community engagement needed to promote equitable adoption.

This section presents the major insights from the Micro-ZEV Awareness & Perception Survey, organized around five core themes. The findings reflect a diverse and evolving transportation landscape, revealing public preferences, barriers, and readiness to embrace micro-mobility in Canada. Each theme is supported by quantitative data and interpretation to inform future planning and awareness-building under the Ispiciwin Project.

3.1 Theme 1: Current Transportation Habits

The survey revealed that Canadian respondents continue to rely heavily on traditional modes of transportation. Figure 4 presents that personal vehicles remain the dominant modes of transportation among respondents followed by public transit.

- The most commonly used method of daily travel is the **personal vehicle**, accounting for nearly half (47.6%) of all responses.
- **Public transit** follows as a secondary mode (24.9%), while **walking or running** is chosen by 11.4% of respondents.
- However, **micro-mobility options remain underutilized**, only **12.5%** of respondents reported using bicycles, e-bikes, or e-scooters regularly.

Encouragingly, early signs of micro-mobility adoption are present:

- **4.8% of respondents use e-bikes** and **2.6% use e-scooters** as part of their regular transportation.
- The use of **bicycles (5.1%)** also reflects a preference for active, lower-emission commuting.

These numbers indicate that while micro-ZEVs are not yet mainstream, they have carved a niche in Canada's transportation mix, especially in urban or campus environments. This provides a foundation for future growth through community outreach and supportive infrastructure.

Everyday Travel Habits Across Respondents

Personal vehicles lead, but micro-mobility makes an entrance.

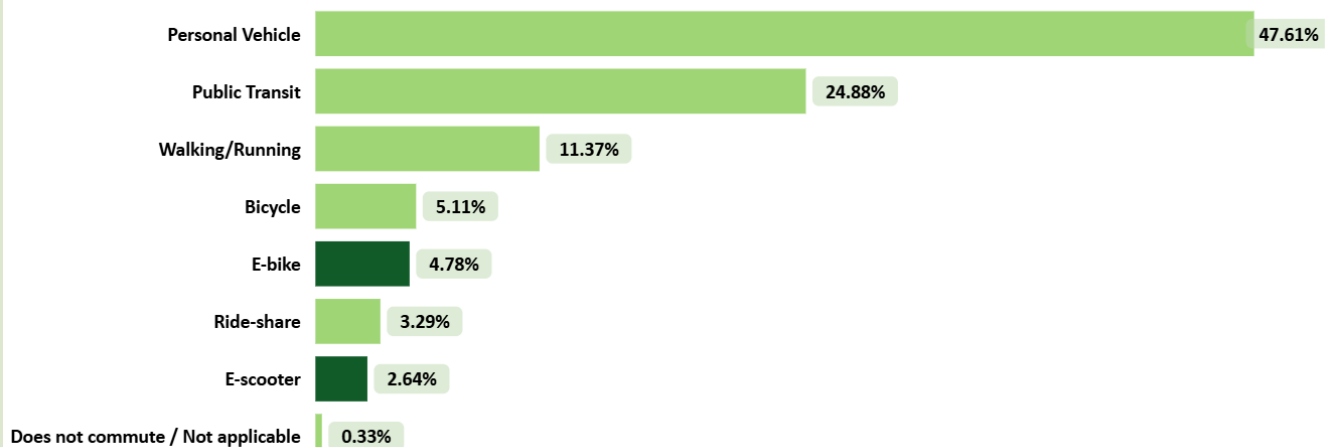


Figure 4: Everyday Travel Habits Across Respondents

3.2 Theme 2: Awareness & Familiarity with Micro-ZEVs

We observed that public knowledge of micro-ZEVs is growing, but familiarity is still uneven as shown in Figure 5:

- **49.4% described themselves as “somewhat familiar”**, with micro-ZEVs, indicating strong general awareness.
- Another **30.6%** consider themselves **“very familiar,”** suggesting knowledge gaps remain.
- However, nearly **20% of respondents had limited to no familiarity** with e-bikes and e-scooters.

Despite this, micro-mobility is spreading. **About 50% of respondents reported having tried an e-bike or e-scooter**, with **31.5% renting or borrowing** and **18.8% owning one**. This signals a significant base of early users who can help drive peer adoption. However, **48.46% have never used a micro-ZEV**, showing that while interest exists, hands-on experience is still limited (Figure 6).

Knowledge is a key driver of usage. Awareness campaigns and community demonstrations are vital to expanding micro-ZEV understanding, especially among older adults and rural populations.

How Well Do You Know E-Bikes & E-Scooters?

From total pros to total newbies, here’s how familiar Canadians are with Micro-ZEVs.

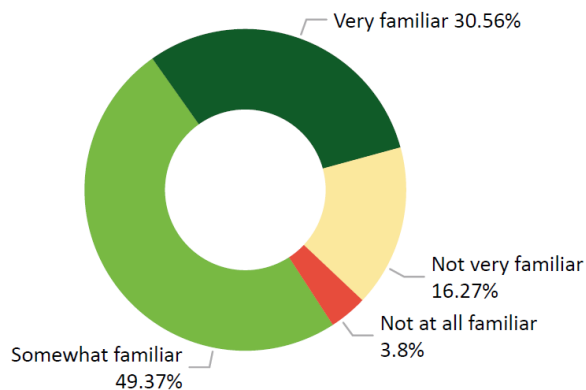


Figure 5: Familiarity with Micro-ZEVs

How Many Have Actually Tried Micro-ZEVs?

While 50% have ridden one, half the population is yet to plug in.

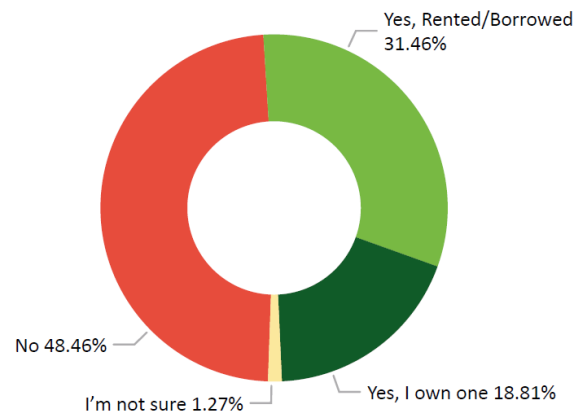


Figure 6: Experience with Micro-ZEVs

3.3 Theme 3: Perceived Benefits of Micro-ZEVs

Respondents were enthusiastic about the potential benefits of micro-ZEVs. Environmental impact, affordability, and convenience were the most cited advantages. Many also appreciated their potential to reduce traffic congestion and promote physical activity. Micro-ZEVs are not just seen as trendy or novel, they are viewed as practical and sustainable:

- **Affordability**, 55.2% of respondents say micro-ZEVs are cheaper than personal vehicles.
- **Environmental impact** was the second most selected benefit, noted by 53.5% of the respondents. This implies that over half of the respondents value their environmental sustainability, reflecting alignment with national and local climate goals.
- Other top benefits include being **fun to ride** (42.3%), **reducing traffic** (35.4%), and **easy parking/storage** (34.7%).

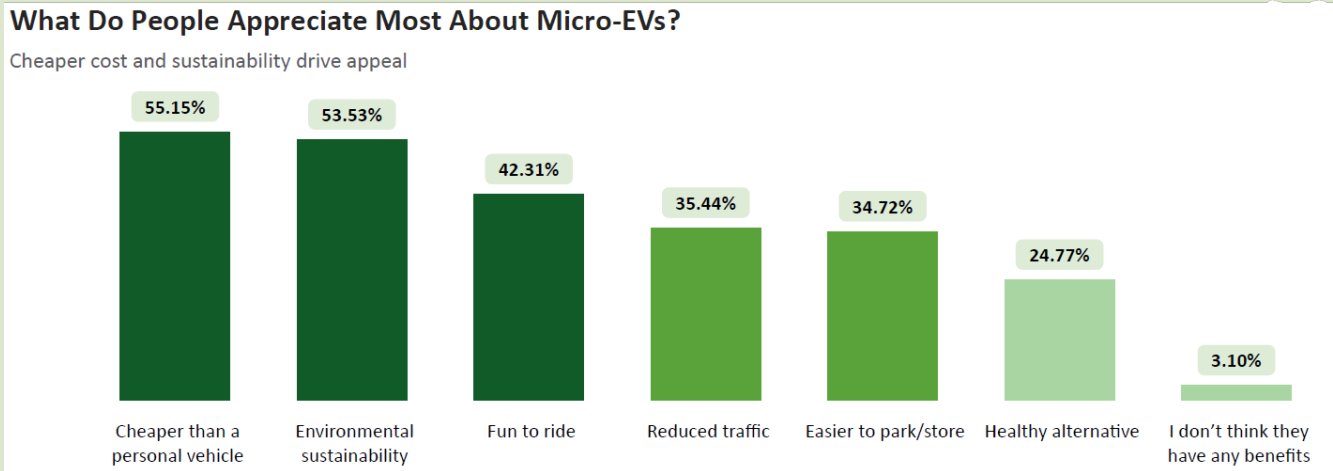


Figure 7: What People Appreciate Most About Micro-ZEVs

These insights align well with Canada’s broader climate goals and highlight the importance of **positioning micro-ZEVs as practical, fun, and environmentally responsible alternatives.**

3.4 Theme 4: Perceived Challenges and Barriers

Despite the benefits, several key concerns prevent broader adoption:

- **Cold or snowy weather** was the top concern (32.39%), particularly relevant in Canadian winters.
- **Safety concerns** (22.31%) and **poor bike lane infrastructure** (16.8%) were also frequently cited.
- Other obstacles include **lack of charging/docking, high costs, unclear regulations**, and a small share of users (3.2%) who simply see micro-ZEVs as impractical.

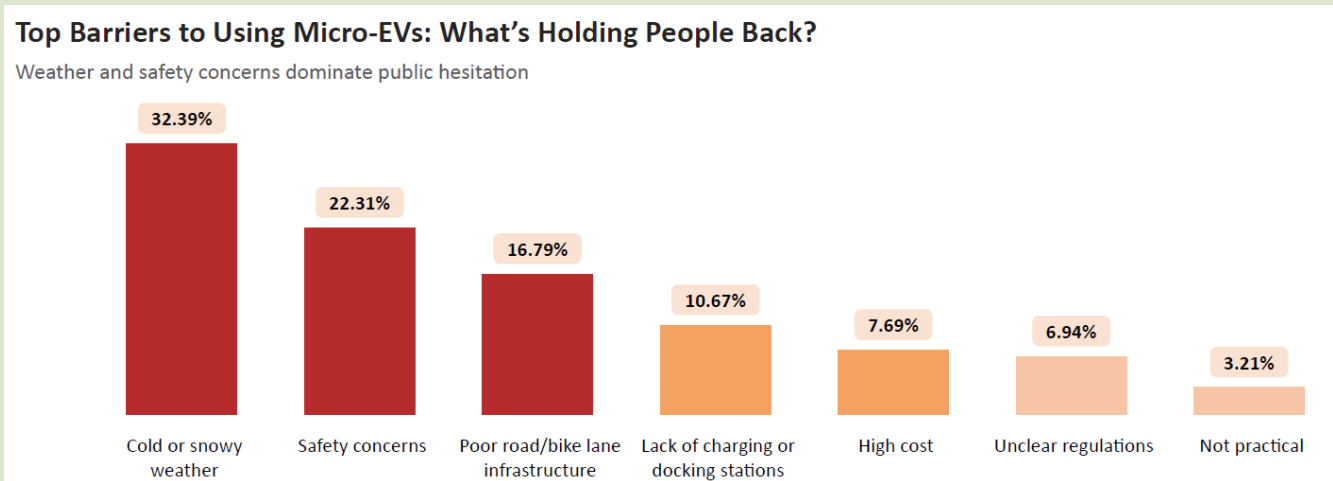


Figure 8: Top Barriers to Using Micro-ZEVs

These findings highlight the importance of addressing safety, accessibility, and environmental compatibility in micro-ZEV program design. Weather-resistant gear, education campaigns, and expanded protected bike lanes could help ease many of these concerns.

3.5 Theme 5: Interest in Trying or Adopting Micro-ZEVs

While barriers exist, the outlook for future adoption is highly promising:

- Encouragingly, **66.91% of respondents said they were interested** in trying or test-riding an e-bike or e-scooter.
- **53.35%** said they would “definitely” consider buying or renting one, with another **24.05% open to the idea**.

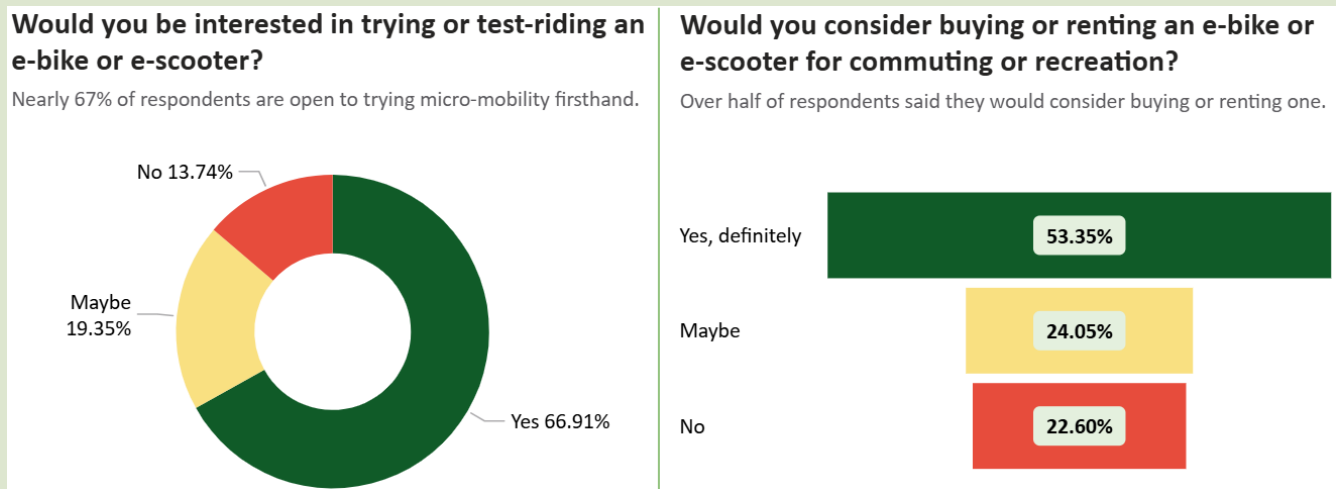


Figure 9: Interest in Trying or Adopting Micro-ZEVs

Figure 10 answers, what would motivate Canadians to try or adopt micro-mobility?

- Free trial or test rides (28.6%);
- More protected bike lanes (21%);
- Government rebates or tax credits (16%); and
- Additional motivators include **better weather gear, education on safe use, and charging/storage access**.

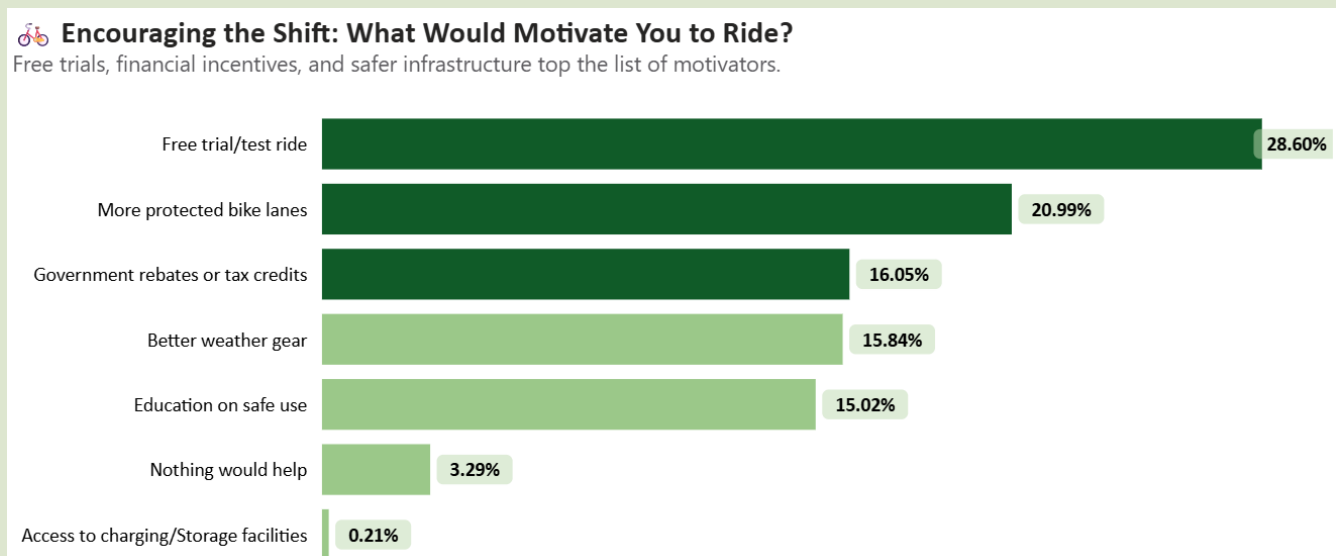


Figure 10: Key Motivators for Micro-ZEV Adoption

Should Micro-EVs Be Promoted in Communities?

Most say yes, but a quarter remain undecided

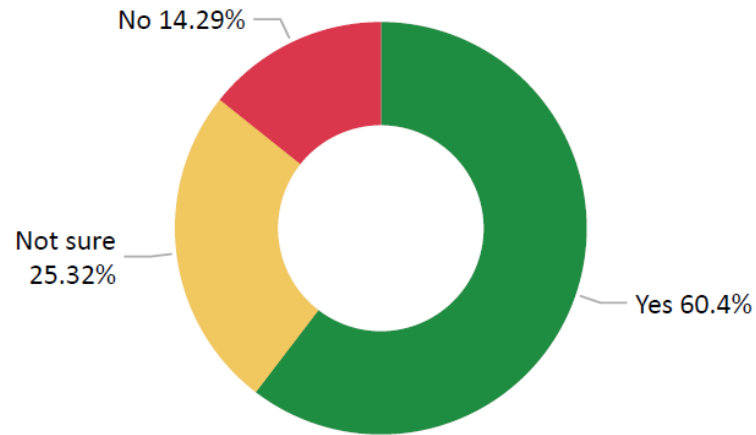


Figure 11: Interest in Trying or Adopting Micro-ZEVs

Figure 11 shows a significant majority (60.4%) of respondents believe that micro-electric vehicles (Micro-ZEVs) should be promoted in their communities. This demonstrates a strong baseline of public support. However, 25.32% remain undecided, and 14.29% are opposed—signaling that further education, exposure, and dialogue may be necessary to build broader consensus around micro-mobility adoption.



4. Cross-Analysis: Demographic and Regional Trends

To complement the thematic analysis, a series of cross-tabulations and visualizations were created to explore patterns across demographic and geographic segments, focusing particularly on age, and province/territory of residence. This section highlights key insights derived from these comparisons, emphasizing where interest, and motivators vary by group.

4.1 Age-Based Trends in Interest and Intent

The relationship between age and openness to micro-ZEVs was one of the clearest demographic patterns observed.

- **High Enthusiasm Among Youth:** A remarkable **93% of respondents aged 18–24** expressed interest in trying an e-bike or e-scooter as shown in Figure 12. This segment demonstrated the strongest alignment with micro-ZEV adoption, highlighting its potential as a target demographic for promotional campaigns or pilot programs.
- **Working-Age Adults Are Open But Varied:** Respondents in the **25–34 and 35–44 age groups** also showed considerable interest, with **78% and 75% respectively** indicating a positive attitude toward trying these vehicles. These groups may balance recreational interest with practical commuting considerations.
- **Older Adults Remain Cautiously Curious:** Among respondents aged **45–54 and 55+**, interest remained relatively high (around **68%**), though the proportion of “Maybe” responses increased in these groups. This suggests conditional openness — likely influenced by factors such as perceived safety, physical ability, or community infrastructure.

Interest in Trying Micro-ZEV by Age Group

Younger adults show the highest interest in trying micro-EVs, but openness remains strong across all age groups.

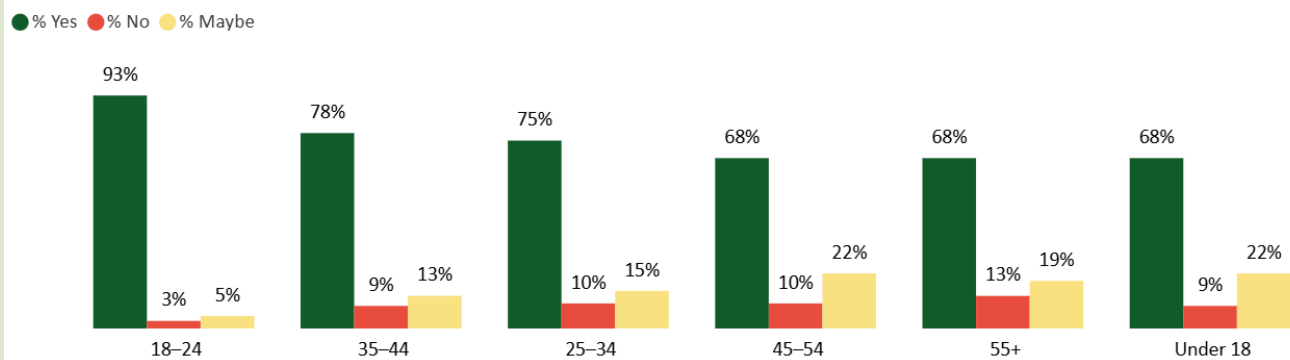


Figure 12: Interest in Trying Micro-ZEVs by Age Group

Overall, these patterns suggest that while micro-ZEVs appeal across all age groups, younger respondents are more decisively positive, whereas older adults may require clearer assurances, demonstrations, or infrastructure support to move from interest to action.

4.2 Provincial/Territorial Variations in Experience, Adoption, and Promotion

Provincial comparisons revealed meaningful geographic differences in both sentiment and potential for adoption. Regional analysis revealed notable variation in experience with micro-ZEVs, willingness to promote them locally, and readiness to adopt them through ownership or rental. As shown in Figure 13, provinces differed significantly in how residents have engaged with micro-ZEVs:

- **Highest Ownership Levels** were reported in **Ontario (ON) (43 respondents)**, followed by **Quebec (15)** and **Alberta (AB) (8)**. **Ontario** recorded the highest absolute levels of ownership and rental experience, reflecting greater availability, population size, and urban infrastructure.
- These provinces are more urbanized and likely have greater access to e-bike and e-scooter vendors or shared mobility services.
- **Strong Rent/Borrow Preferences** were observed in **Alberta (43%)** and **British Columbia (BC) (37%)**, indicating openness to flexible use models, possibly due to climate, cost, or convenience.
- In contrast, **New Brunswick (NB), Nova Scotia (NS), and Newfoundland & Labrador (NL)** had higher proportions of respondents indicating they had never used a micro-ZEV, highlighting exposure and access gaps rather than outright rejection.
- These differences suggest that experience with micro-ZEVs is strongly shaped by local availability and urban form, rather than interest alone.

Rent, Own, or Reject? Micro-ZEV Preferences by Province

Canada's provinces reveal diverse attitudes toward electric micro-mobility — with surprises along the way.

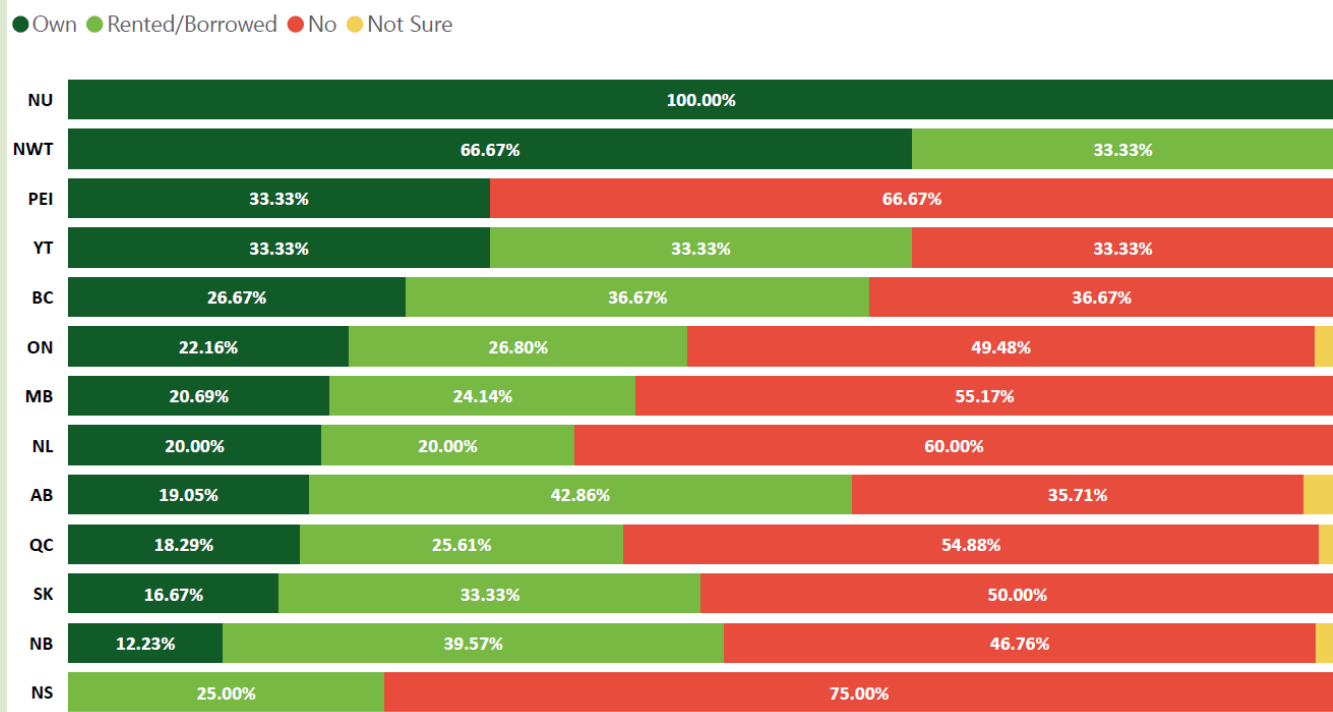


Figure 13: Rent, Own, or Reject? Micro-ZEV Preferences by Province/Territory

Support for Micro-ZEV Promotion

Provincial support for promoting micro-ZEVs in local communities is presented in Figure 14:

- **Ontario** led in absolute support, with **129 individuals (66%)** agreeing, suggesting readiness for broader adoption initiatives.
- **New Brunswick** presented a more nuanced case: while **75 respondents** supported promotion, a significant **32% were unsure**, indicating a need for education, exposure, and discussion about feasibility and safety.
- Smaller provinces and territories such as **PEI, Yukon (YT), and the Northwest Territories (NWT)** showed high support rates, but small sample sizes warrant cautious interpretation.

Provincial Opinions on Promoting E-Bikes & E-Scooters

What Canadians think about increasing e-bike and e-scooter access in their communities

● Yes ● No ● Not Sure

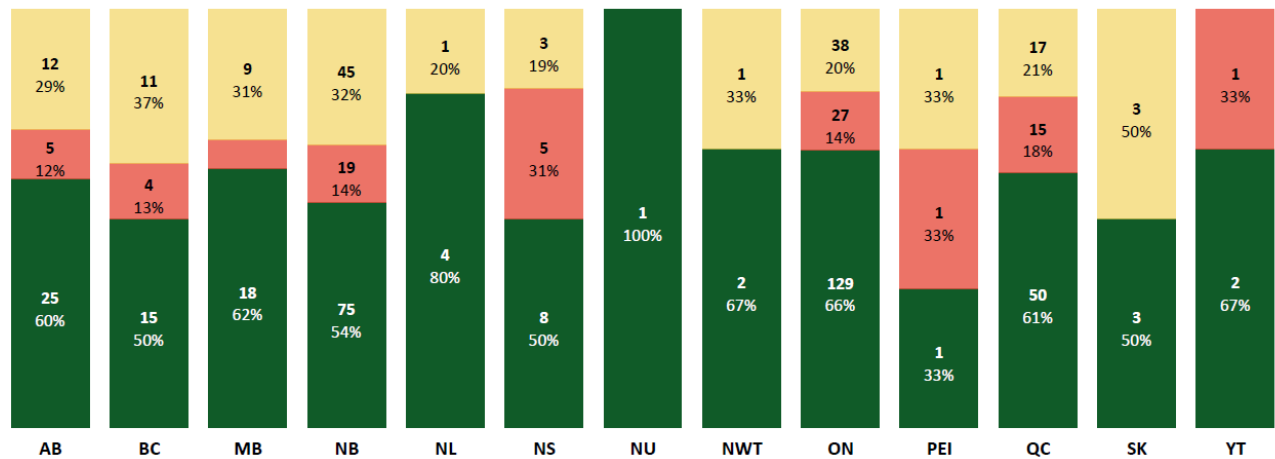


Figure 14: Should Micro-ZEVs Be Promoted More? (Provincial/Territorial-Level Results).

This pattern suggests that promotion efforts are broadly welcomed, but in some regions, particularly Atlantic Canada, greater public engagement and education may be needed to convert uncertainty into support.

Purchase or Rental Intent

Interest in acquiring micro-ZEVs, shown in Figure 15, either through renting or purchasing, also varied across provinces:

Province-Wise Willingness to Rent or Buy Micro-EVs

How likely are respondents in each province to consider e-bikes or e-scooters for commuting or recreation?

● Yes ● Maybe ● No

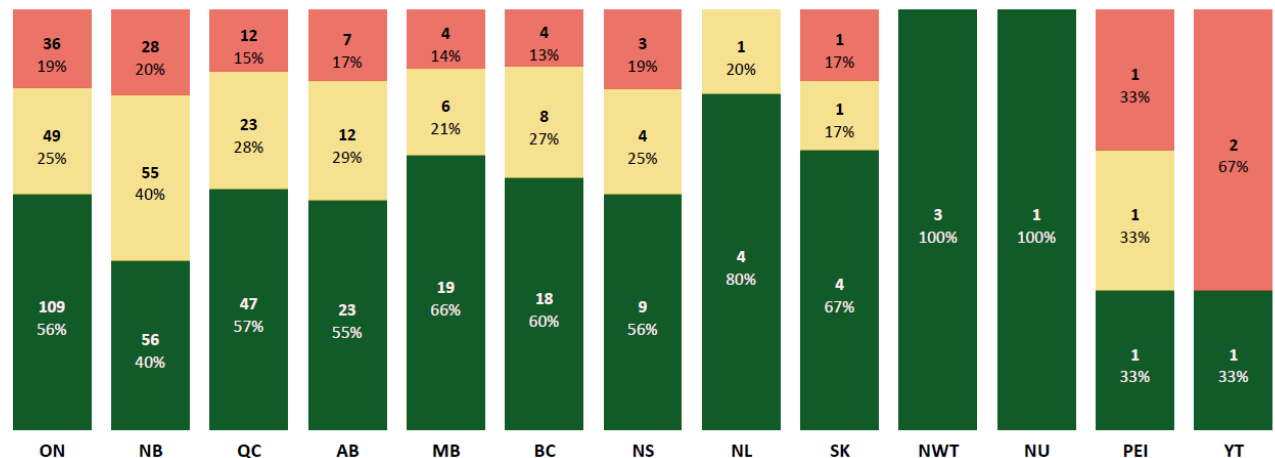


Figure 15: Would You Consider Buying or Renting a Micro-ZEV?

- **High Intent Rates** were observed in **Manitoba (MB) (66%), NWT (100%), and NL (80%)**, possibly due to novelty or a desire for improved mobility options. Again provinces with small sample sizes warrant cautious interpretation.
- **NB** once again showed **moderate interest (40%)** and a large share of undecided responses, signaling opportunity for awareness campaigns.

This reinforces the importance of trial-based exposure and risk-reducing strategies (e.g., rentals, pilots, incentives) in regions with high uncertainty.

4.3 Encouragement Factors by Province

Results for motivational factors are explored through Table 1: What Encourages Micro-ZEV Adoption? Provincial Breakdown of Key Factors. Responses regarding what would motivate individuals to consider micro-ZEVs varied considerably:

Province	Free Trial	Tax Credits	Protected Bike Lanes	Weather Gear	Safe Use Education	Charging Infra	Not Interested
AB	9	4	6	4	6	0	2
BC	7	5	4	5	3	0	2
MB	3	5	3	4	3	0	1
NB	48	17	37	28	20	1	3
NL	1	0	1	0	1	0	0
NS	4	1	4	1	2	1	0
ON	45	30	33	26	27	2	8
PEI	1	1	2	1	1	0	0
QC	19	12	11	6	8	1	0
SK	1	2	0	1	0	0	0
YT	1	1	0	1	0	0	0

Table 1: What Encourages Micro-ZEV Adoption? Provincial/Territorial Breakdown of Key Factors

- **Free Trials or test-ride opportunities** were the most frequently cited motivator across provinces, with **NB (48) and ON (45)** leading. This reinforces the importance of hands-on experience to build comfort and curiosity.
- **Protected Bike Lanes** were especially valued in **NB (37), ON (33), and QC (11)**, indicating that infrastructure investments could directly translate into increased adoption.
- **Safe Use Education** and **Weather Gear** were frequently cited in colder or less bike-friendly regions, reflecting contextual barriers that could be overcome with proper equipment and awareness.
- Surprisingly, **Charging Infrastructure** was less of a concern, perhaps due to the perception that e-bikes and scooters can be charged at home with less complexity than electric vehicles.

These findings point to a consistent message: **people are more likely to adopt micro-ZEVs when they feel safe, informed, and able to try them without commitment.**

Overall, the **cross-analysis reveals that interest in micro-ZEVs is widespread but unevenly activated** across demographic and regional lines. Younger respondents exhibit strong enthusiasm, while older groups show cautious openness that could be unlocked through education and infrastructure improvements. Provincially, regions with greater exposure and urban density show higher adoption and experience, while Atlantic provinces, particularly New Brunswick, display high curiosity paired with uncertainty. Across all segments, free trials, protected infrastructure, and safety education emerge as the most powerful levers for encouraging adoption. Together, these findings suggest that **targeted, place-based strategies, rather than one-size-fits-all approaches**, will be essential for advancing micro-ZEV awareness and uptake across Canada.

5. Discussion and Implications

The cross-analysis of the Micro-ZEV Awareness & Perceptions Survey reveals clear demographic and regional patterns that should guide future outreach, infrastructure development, and policy support. Understanding who is most likely to adopt micro-ZEVs, what encourages or deters adoption, and where targeted efforts are most needed provides a valuable roadmap for action.

5.1 Generational Gaps Reflect Emerging Market Opportunities

Younger age groups (especially 18–34) showed the highest interest in trying micro-ZEVs and the strongest openness to owning or renting these vehicles. This generational trend suggests a ripe opportunity to **design promotional campaigns and trial programs that align with younger adults' commuting habits and recreational preferences**. As early adopters, their enthusiasm could catalyze broader social acceptance.

However, interest levels tapered with age, with limited engagement from older demographics. This generational gap may stem from concerns around **physical ability, weather exposure, safety, or unfamiliarity with e-mobility**. Addressing these barriers with **safer design features, senior-friendly education, and inclusive communication** could widen the base of potential users.

5.2 Local Contexts Shape Adoption Potential

Provinces like **New Brunswick and Ontario** repeatedly emerged as high-interest regions across multiple variables: support for promotion, willingness to try, and openness to ownership or rental. This consistency signals a **favorable environment for pilot initiatives, incentives, or municipal integration of micro-ZEVs** in these provinces.

In contrast, interest and engagement were notably lower in **rural or northern regions**, where residents often perceived micro-ZEVs as impractical due to **distance, infrastructure gaps, or seasonal weather conditions**. This reinforces the need for **region-specific planning**, ensuring that provincial campaigns don't apply a one-size-fits-all strategy but instead reflect **local transportation realities**.

5.3 Trial Access and Infrastructure Are Key Levers

Across provinces, **free trials, tax credits, and protected bike lanes** consistently ranked as top encouragement factors. These findings emphasize that **reducing financial and experiential barriers can accelerate adoption**. Offering free access to try micro-ZEVs, coupled with visible and safe infrastructure, may convert curiosity into real use.

The demand for **education on safe use**, especially in New Brunswick and Ontario, highlights a trust and confidence gap that can be addressed through **community workshops, signage, or school programs**. These non-financial measures are just as vital in fostering comfort and legitimacy around micro-ZEVs.

5.4 Summary of Implications

- **Young adults** are primary early adopters, while older demographics may need targeted support.
- **New Brunswick and Ontario** show high potential for pilot programs, infrastructure investment, and awareness campaigns.
- **Trialability, affordability, and visible infrastructure** are key factors in converting interest to action.
- Future initiatives should be **hyper-localized**, accounting for varying geographic, demographic, and cultural factors that influence micro-ZEV adoption.

6. Recommendations

Based on the survey findings and cross-analysis, several strategic recommendations are proposed to guide community planning, policymaking, and stakeholder action in support of micro-ZEV adoption across Canada.

6.1 Pilot Programs in High-Interest Provinces

Given the strong engagement and openness to micro-ZEVs in **New Brunswick and Ontario**, these provinces are ideal candidates for launching:

- **Free ride trials** and pop-up rental stations in urban centers and campus areas
- **Pilot rebate or tax credit programs** for first-time buyers or renters
- **Public feedback loops** to assess and adapt programs based on usage and sentiment

These initiatives can serve as test beds and models for expansion into other regions.

6.2 Focus on Younger Demographics as Early Adopters

Since **18–34-year-olds** are the most open to trying and owning micro-ZEVs, tailor outreach accordingly:

- **Social media campaigns** showcasing eco-friendly lifestyle and cost savings
- **Campus and workplace partnerships** offering discounted rentals or incentives
- **Gamified challenges** (e.g., “Micro-ZEV Month”) to promote adoption and peer sharing

This segment can act as the tipping point for broader public normalization.

6.3 Build Infrastructure That Signals Safety and Legitimacy

Key physical investments, especially **protected bike lanes and visible charging stations**, not only address safety concerns but also increase public trust. Cities and municipalities should:

- Integrate micro-ZEV lanes in urban planning and road redesigns
- Install visible charging hubs near transit points, campuses, and parks
- Include micro-ZEVs in broader **active transportation and climate action plans**

6.4 Address Education Gaps with Targeted Programming

Survey results showed consistent interest in safe-use education, especially in higher interest provinces. Develop and promote:

- **How-to-ride workshops** in community centers, schools, and campuses;
- **Digital guides and short videos** on safety, etiquette, and laws; and
- Partnerships with **retailers, community ambassadors, and local influencers** to spread awareness.

6.5 Incentivize Equity and Accessibility

Not all respondents found micro-ZEVs practical, especially in **rural, remote, or winter-affected regions**. Ensure efforts are inclusive by:

- Supporting **community-based micro-ZEV sharing co-ops** in underserved areas;
- Offering **subsidies or loan programs** to remove financial barriers; and
- Co-designing programs with residents to ensure cultural and practical alignment.



7. Conclusion

The Micro-ZEV Awareness and Perceptions Survey has uncovered valuable insights into the attitudes, knowledge, and behavioural intentions of Canadians regarding micro-ZEVs such as e-bikes and e-scooters. Through both thematic and demographic analysis, the results clearly indicate that while general awareness and openness to micro-ZEV adoption are promising, several systemic, infrastructural, and societal barriers continue to hinder broader uptake.


Across provinces, respondents expressed strong interest in trying and using micro-ZEVs, particularly for commuting and recreation. However, adoption is significantly influenced by regional infrastructure (e.g., protected bike lanes), safety considerations, and supportive incentives such as free trials or tax credits. Younger respondents and those in urban settings were particularly responsive to these factors, highlighting the importance of targeting outreach efforts by demographic and geographic profiles.

This report also illustrates that while micro-ZEVs are increasingly recognized as a sustainable, affordable alternative to traditional vehicles, significant gaps remain in charging infrastructure, public education, and perceived safety. The role of government programs, local infrastructure, and community-led initiatives will be essential in overcoming these barriers.

Ultimately, the findings support a growing demand for equitable, climate-aligned mobility options in Canada. Micro-ZEVs represent a powerful tool for reducing emissions, enhancing transportation equity, and promoting healthier lifestyles—especially if future planning is informed by the needs, preferences, and lived experiences of the diverse communities they aim to serve.



8. List of Figures

Figure	Description
Figure 1	Micro-ZEVs offer affordable, clean, and flexible transport options for daily life, across ages, needs, and regions
Figure 2	Geographic and Demographic Distribution of Respondents 
Figure 3	Employment Status of Respondents
Figure 4	Everyday Travel Habits Across Respondents
Figure 5	Familiarity with Micro-ZEVs
Figure 6	Experience with Micro-ZEVs
Figure 7	What People Appreciate Most About Micro-EVs
Figure 8	Top Barriers to Using Micro-ZEVs
Figure 9	Interest in Trying or Adopting Micro-ZEVs
Figure 10	Key Motivators for Micro-ZEV Adoption
Figure 11	Interest in Trying or Adopting Micro-ZEVs
Figure 12	Interest in Trying Micro-ZEVs by Age Group
Figure 13	Rent, Own, or Reject? Micro-ZEV Preferences by Province
Figure 14	Should Micro-ZEVs Be Promoted More? (Province-Level Results).
Figure 15	Would You Consider Buying or Renting a Micro-ZEV?

9. List of Tables

Table	Description
Table 1	What Encourages Micro-ZEV Adoption? Provincial Breakdown of Key Factors

10. Abbreviations

Abbreviation	Full Term
EV	Electric Vehicle
ZEV	Zero-Emission Vehicle
Micro-ZEV	Micro Zero-Emission Vehicle (e.g., e-bikes, e-scooters)
PEI	Prince Edward Island
NB	New Brunswick
NS	Nova Scotia
NL	Newfoundland and Labrador
ON	Ontario
QC	Quebec
MB	Manitoba
SK	Saskatchewan
AB	Alberta
BC	British Columbia
NWT	Northwest Territories
YT	Yukon
GHG	Greenhouse Gas

10. Appendices

Appendix A: Survey Questionnaire

Section 1: About You

1. Age Range *

- Under 18
- 18–24
- 25–34
- 35–44
- 45–54
- 55+

2. Which best describes the area where you currently live?

- Urban
- Suburban
- Rural

3. What best describes your current role?

- Information Technology & Tech Services
- Skilled Trades & Construction
- Manufacturing & Industrial Operations
- Transportation & Logistics
- Public Service, Healthcare & Education
- Finance, Banking & Professional Services
- Wholesale, Retail & Customer Service
- Natural Resources (e.g., agriculture, forestry, fisheries, mining)
- Arts, Culture, Food & Personal Services
- Not Currently Employed / Retired / Not in Labour Force
- Currently a student

4. Province or Territory

- Prince Edward Island
- Nova Scotia
- Newfoundland and Labrador
- Quebec
- Ontario
- Saskatchewan
- Manitoba
- Alberta
- British Columbia
- Northwest Territories
- Yukon
- Nunavut
- New Brunswick

Section 2: Your Transportation Habits

5. How familiar are you with e-bikes or e-scooters?

- Very familiar
- Somewhat familiar
- Not very familiar
- Not at all familiar

6. How do you usually travel to work, school, leisure activities, etc..?

- Walking/Running
- Bicycle
- E-bike
- E-scooter
- Public Transit
- Personal Vehicle
- Ride-share (Uber/Lyft or ride from others)
- Does not commute / Not applicable

7. Have you ever used an e-bike or e-scooter? *

- Yes, I own one
- Yes, I've rented one or borrowed one
- No
- I'm not sure

Section 3: Awareness & Perceptions**8. What do you think are the biggest benefits of e-bikes and e-scooters? (Select up to 3)***

- Cheaper than a personal vehicle
- Environmental sustainability
- Reduced traffic
- Easier to park/store
- Fun to ride
- Healthy alternative
- I don't think they have any benefits

9. What do you think are the biggest challenges to using e-bikes or e-scooters in your area? (Select up to 3)*

- Cold or snowy weather
- Safety concerns
- Poor road/bike lane infrastructure
- High cost
- Lack of charging or docking stations
- Unclear regulations
- Not practical

10. Do you think e-bikes and e-scooters should be promoted more in your community?

- Yes
- No
- Not sure

Section 4: Looking Ahead**12. Would you be interested in trying or test-riding an e-bike or e-scooter?***

- Yes
- No
- Maybe

13a. Would you consider buying or renting an e-bike or e-scooter for commuting?*

- Yes, definitely
- Maybe
- No

13b . What would encourage you to try an e-bike or e-scooter for commuting? (Select all that apply)*

- Free trial/test ride
- Government rebates or tax credits
- More protected bike lanes
- Better weather gear (e.g., heated handlebars, waterproofing)
- Education on safe use
- Access to charging and storage infrastructure
- Nothing would encourage me / Not interested

Appendix B: Demographic Tables

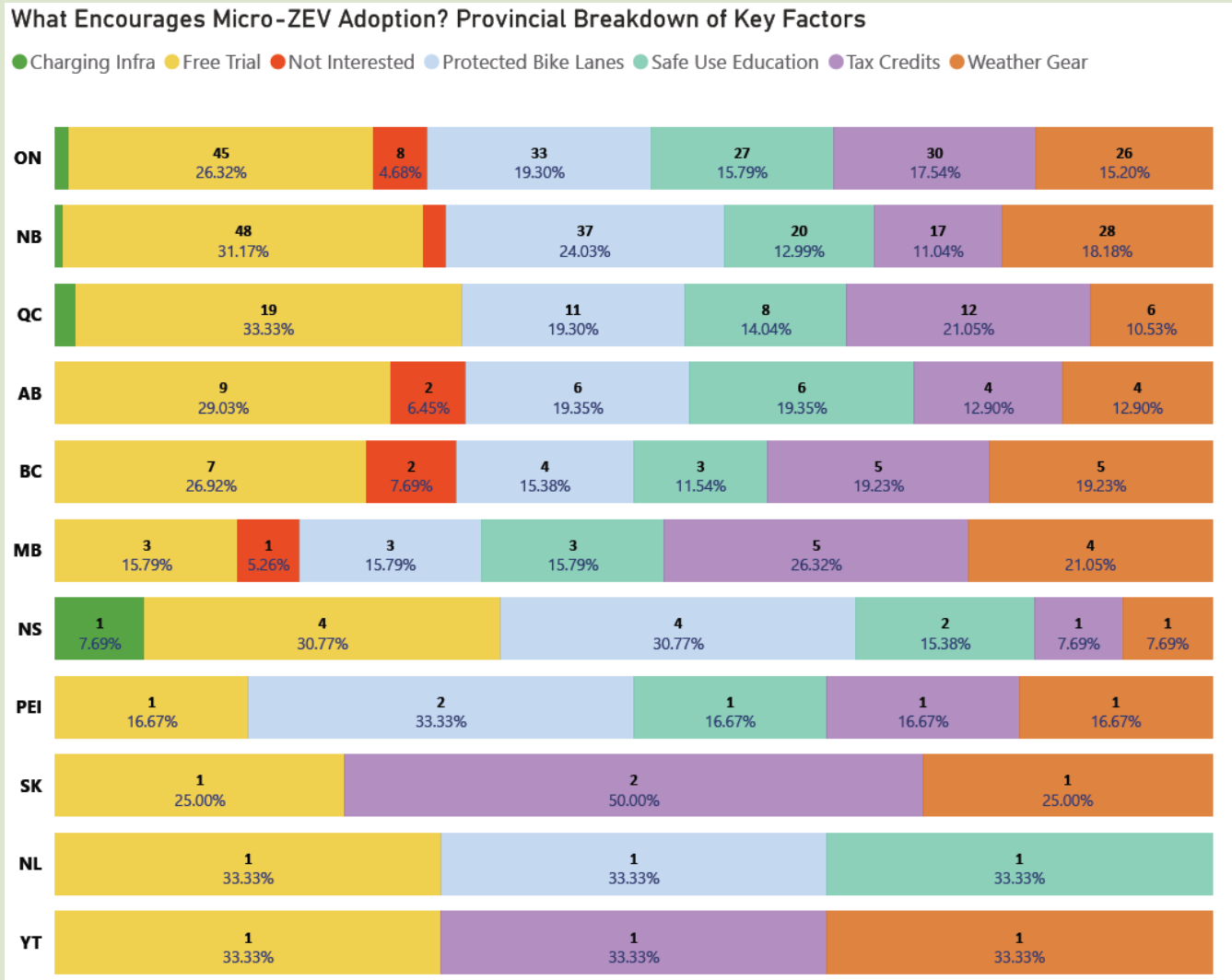
A. Respondents by Province or Territory

Province	Count	Count %
Prince Edward Island (PEI)	3	0.54%
Nova Scotia (NS)	16	2.89%
Newfoundland and Labrador (NL)	5	0.90%
Quebec (QC)	81	14.65%
Ontario (ON)	193	34.90%
Manitoba (MB)	29	5.24%
Alberta (AB)	42	7.59%
British Columbia (BC)	30	5.42%
Nunavut (NU)	1	0.18%
New Brunswick (NB)	141	25.50%
Saskatchewan (SK)	6	1.08%
Northwest Territories (NWT)	3	0.54%
Yukon (YT)	3	0.54%

B. Respondents by Age Group

Age Range	Count	Count %
Under 18	77	13.92%
18-24	40	7.23%
25-34	103	18.63%
35-44	154	27.85%
45-54	89	16.09%
55+	90	16.27%

Appendix C: Additional Figures





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