MINISTRY OF TRANSPORT AND COMMUNICATIONS OF LITHUANIA

Kurk NVLT

Sustainable mobility survey

This report analyses 2,262 survey responses collected to support development of a Sustainable Mobility Index for Lithuania. The survey examined transport choices, travel patterns, barriers (time, cost, safety, infrastructure), and satisfaction with services. While not nationally representative due to sampling methods (e.g., online-only reach, underrepresentation of older adults), the results provide strong signals of public attitudes.

The report includes: (1) quantitative analysis across geography, gender, and income, and (2) qualitative insights into motivations, dissatisfaction, and desired improvements. Overall, the findings offer valuable guidance for policies to strengthen sustainable mobility and improve infrastructure and public transport.

Quantitative analysis

Main Mode of Transport and Travel mode frequency

General trends

Private cars dominate : 42% primarily use private gas or diesel vehicles, while 20% use buses or trolleybuses, 14% walk, and 12% cycle.

Bicycles are widely available but underused: Nearly 80% of households own at least one usable bike and nearly two-thirds cycle occasionally, but only 12% use it as their main transport - showing big potential to convert occasional riders into regular ones.

Car use is polarized: 38% of respondents drive daily, while just over a quarter never use a private car. This pattern aligns with household ownership, as one in five households has no car at all.

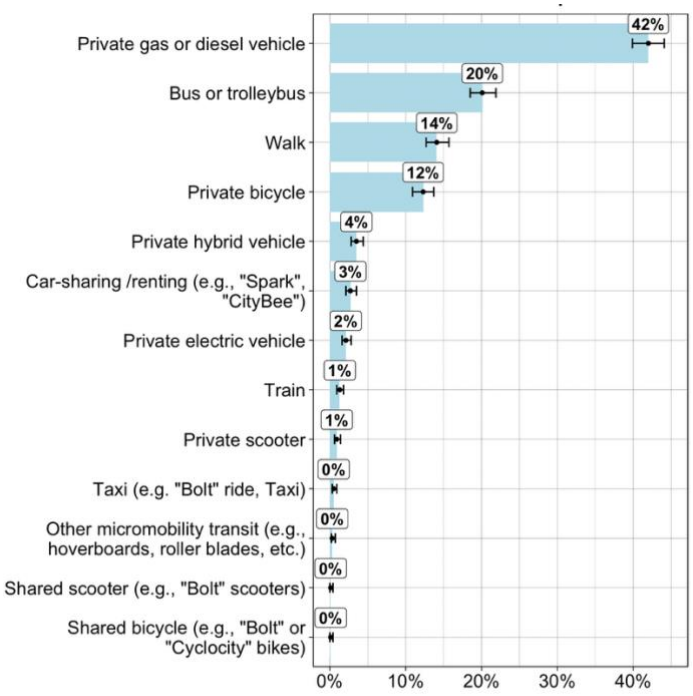
Electric and hybrid vehicles remain rare: The vast majority of respondents never use them, pointing to barriers such as limited availability, affordability, or infrastructure.

Commute distances: Average car commutes are 13 km, only slightly longer than bus trips (10 km). One in four car users travels less than 5 km, indicating strong potential to shift short trips to walking, cycling, or public transport. Trains are mainly used for long intercity trips (50 km+).

Many short car trips could shift to sustainable modes with better service, expanded routes, improved cycling infrastructure, and disincentives for short car trips (e.g., parking fees, congestion charges).

Figure 1

Main Mode of Transport



Note: Among those who responded (n = 2,071)
Non-responder sample size = 191; Non-response rate = 8.4%

Gender differences

Women are more likely to use buses or trolleybuses (25% vs. 15% of men), while men cycle much more frequently (18% vs. 6% of women).

Women are less likely to use private bicycles, shared scooters, or car-sharing services, whereas men are more frequent users of bicycles and micromobility options.

These differences likely reflect safety concerns and risk preferences, highlighting the need for safer, more accessible infrastructure to encourage broader adoption of sustainable transport among women.

Regional differences

Car use is lower in Vilnius and Kaunas (35%) vs. other municipalities (53%), where walking is slightly more common. Public transport and cycling are more popular in these cities, reflecting better infrastructure.

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Income differences

Lower-income households use buses more and cars less, while higher-income households drive more, including some hybrids/EVs - though overall EV use is still low.

Perception of satisfaction

Positive perceptions: Air quality, real-time transit info, and public transport safety are generally well-rated. Around 75% aren't deterred from walking by pollution or noise, most don't see missing schedules/maps as a barrier, and a majority (60%) disagrees with feeling unsafe on transit or at stops, though concerningly, a non-trivial minority (14%) agrees.

Key Barriers: Cycling is often seen as unsafe due to motor traffic, poor surface quality, and incomplete or disconnected bike lanes.

Public transport is perceived as too time-consuming, suggesting a need for increased frequency and efficiency.

Walking safety is limited by poor street lighting, high vehicle speeds, and a lack of pedestrian crossings, particularly after dark.

Gender differences

Key gender differences have to do with safety. Women report more safety concerns on public transport, at stops, and walking after dark, while men are more likely to disagree with statements about safety of cycling lanes and infrastructure.

Income Differences

Lower-income households perceive more barriers, including perception of unaffordable public transport fares and greater safety concerns when walking at night or using bikes and e-scooters.

Regional Differences

Outside Vilnius and Kaunas, public transport is seen as inconvenient, cycling lanes unsafe, and walking less safe due to lighting, traffic, and pollution - highlighting the need for targeted mobility improvements in smaller municipalities.

This indicates low availability and usage of these services, but also highlights a major opportunity - particularly in **multimodal integration**, which is standard elsewhere in Europe.

Perceived Quality of Services and Infrastructure

Public Transport: Low satisfaction with both frequency and coverage of routes.

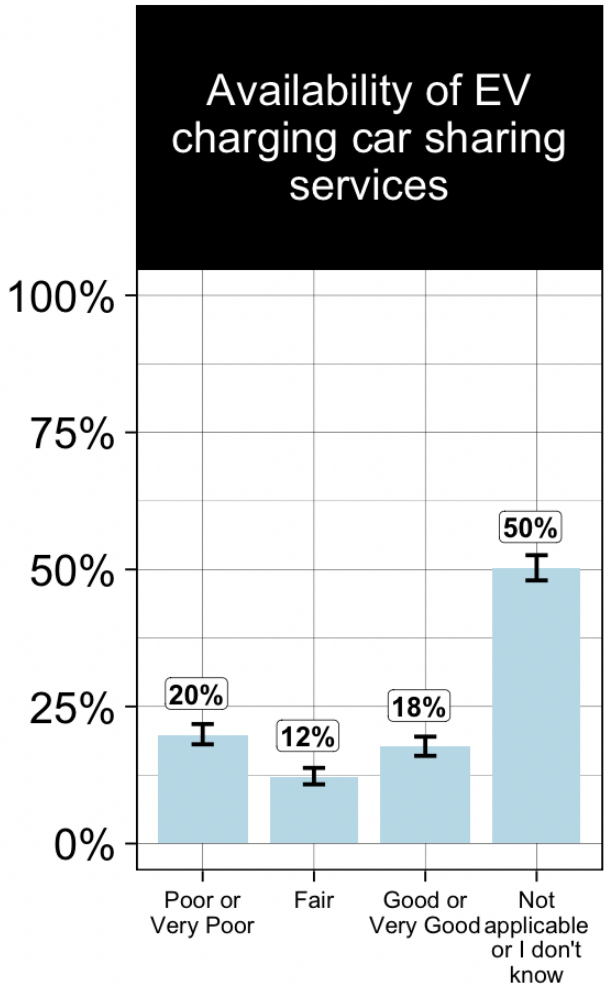
Cycling: A majority rate secure bicycle parking as poor or very poor. Most rate cycle lanes and paths as poor, very poor, or fair; only about one-third view them positively.

Walking (Sidewalks & Crossings): 43% rate sidewalk continuity and condition as poor or very poor, nearly another third as fair. Only 22% give positive ratings. By contrast, nearly 50% rate pedestrian crossings positvely, while 21% rate them poorly.

New / Less Common Services: Nearly half responded "not applicable/don't know" for EV charging points, Car-sharing services, and Multimodal integration (e.g., park & ride, bike & ride).

Figure 2

Availability of EV charging car sharing services



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Gender Differences:

Men are more dissatisfied with the availability of secure bicycle parking, while women are more likley to rate the quality of cyclying lanes as poor or very poor. Women see safety as poorer, while men are more positive, mirroring gendered safety perceptions.

Regional Differences:

Respondents outside Vilnius and Kaunas consistently rate quality of services and infrastructure lower across almost all dimensions (public transport, sidewalks, crossings, cycling infrastructure). The only exception: availability of secure bike parking.

These results highlight a gap in sustainable mobility infrastructure between major cities and the rest of the country, raising challenges for investment in areas experiencing population decline.

Top Improvements to Encourage Walking and Cycling

2. Safe, wider, and better maintained/dedicated cycling & walking paths.

3. Improved winter maintenance (snow/ice removal) – highlighting untapped potential for year-round cycling if conditions are improved.

Gender differences

Women are nearly twice as likely as men to prioritize better lighting and CCTV in their top 3 improvements (20% vs. 12%), reflecting stronger safety concerns.

Top Improvements to Encourage Public Transport Use

2. Faster, more direct routes / fewer transfers

3. Lower fares or subsidized passes

No significant gender or regional differences: Across the board, respondents want more frequent, faster, and cheaper public transport

Qualitative insights

As part of the survey, participants could voluntarily share their views on satisfaction and perceptions of different transport modes (e.g., bus/trolleybus, cycling, walking, driving) through an open-ended question. We analyzed the responses using sentiment analysis and phrase extraction with Large Language Models (LLMs) via the ChatGPT OpenAI API. Instead of full performance testing or formal validation, we reviewed 5% of the sample outputs, which showed results that were generally consistent and reliable.

Distribution of the sentiments

Most open-ended responses expressed negative sentiment, as participants used this section to share criticism and dissatisfaction - offering valuable insights into areas needing improvement.

- **Negative**: ~69% of responses
- **Positive**: ~18% of responses
- **Neutral**: ~5% of responses (mixed feedback without a clear sentiment)

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- **Unknown**: ~7% of responses (too brief, unclear, or one-word answers, making sentiment identification difficult)

Most themes except Motivation, which addresses what motivates respondents to choose sustainable mobility options, were linked to negative sentiment. Infrastructure and Accessibility & Usage were the most discussed, making them key concerns.

Insights from Comments by Topic

Usage

Although public transport, walking and cycling are used, service gaps, safety concerns and poor infrastructure limit their practicality. As a result, most people, especially families, see private cars as the most convenient and reliable option.

Affordability

Although many open question respondents are from medium and higher income groups, public transport is still widely seen as expensive for its quality. There is strong support for lower fares, free travel or incentives, and more subsidies for EVs and bikes. Some also suggest car taxes to promote greener mobility.

Safety

Respondents reported feeling unsafe due to poor infrastructure - such as inadequate pedestrian and cycling paths, insufficient lighting, heavy traffic, and unsafe driver behavior - with children's safety a key concern. Public transport was also seen as unsafe, especially during peak hours and flu season. Additional risks include weak speed limits and limited enforcement, with drivers overtaking unsafely, ignoring safe distances, and showing hostility toward cyclists.

Accessibility and Infrastructure

Cycling and pedestrian infrastructure is often disconnected, incomplete, or poorly maintained, making active travel unsafe and inconvenient. Public transport is seen as overcrowded, infrequent, and poorly connected, with distant stops. Respondents call for longer service hours, more frequent schedules, dedicated bus lanes, better intercity links, and expanded shared mobility options like car-sharing and e-bikes.

Satisfaction

Respondents acknowledged recent cycling path expansions and public transport improvements but noted these remain insufficient.

Motivation

Respondents are motivated by environmental, health, and cost factors and show willingness to adopt sustainable modes like cycling, walking, public transport, and EVs.

Contacts

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More about the program: www.kurklt.lt