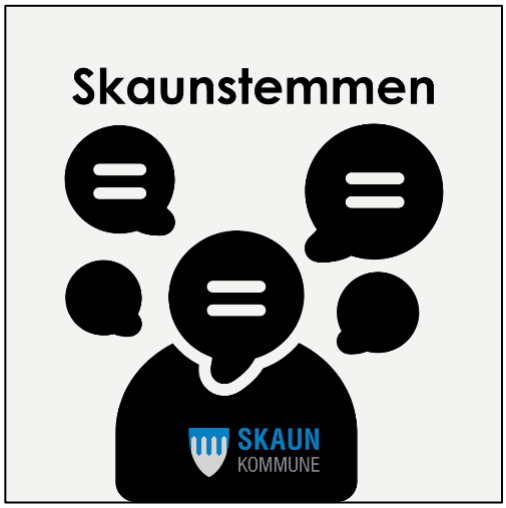
Unlocking citizen surveys for sustainable mobility transition



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SUMMARY

Trøndelag aims to achieve its zero-growth target by 2030. But in many rural areas, residents remain deeply attached to their car-dependent lifestyles. Municipalities use citizen surveys as part of their solutions, but high resident satisfaction with the status quo can slow the transition to sustainable mobility. Different strategies are needed.

How do you plan for sustainable mobility in areas where most people are happy driving?

That's the challenge facing Norwegian municipalities in Trøndelag like Skaun, Melhus, Malvik and Stjørdal. As part of the Urban Growth Agreement, they have assumed new responsibilities for transport and land-use planning. One tool they control is the municipal plan, based on answers from citizen surveys. Citizen surveys collect various feedback, ranging from satisfaction with local services to overall satisfaction with people's daily lives.

In car-dependent areas, understanding what residents value and what they're willing to change is crucial for supporting more sustainable mobility options.

However, there's limited knowledge about how satisfaction data is utilized in mobility planning.

This article unlocks Skaun's citizen survey, Skaunstemmen, to identify its potential, challenges, and shows strategies for action. Skaun, with one of the highest car-use rates in the region, is an example. But it's not alone: similar surveys are conducted across Norway. The question is what we do with them.

INTRODUCTION

Making the data speak: a way to unlock citizen surveys

To understand residents' views on municipal services and their connection to sustainable mobility, we used revised importance-performance analysis. This method identifies which services are most valued and how well they are performing in relation to residents' overall satisfaction. We categorized the results into four groups: areas where the municipality should continue to perform well, areas that require additional attention, lower-priority topics, and areas where resources may not be sufficient.

METHOD

Our analysis of Skaunstemmen identifies the following key areas for improving resident satisfaction and supporting sustainable mobility transition:

- Keep up the good work: Residents highly value easy access to hiking trails and a strong sense of safety in their neighborhoods. These strengths contribute to a high overall satisfaction.
- Focus here: Improvements are needed in providing a greater variety of housing options, better access to cultural events, and safer routes for commuting.
- Lower priority: Access to jobs, availability of building land, social meeting places, and the municipality's economic health are currently less urgent areas for investment.
- Possible overkill: Broadband access, mobile connectivity, and collaboration with voluntary organizations appear sufficient for now.

Focusing on local amenities, enhancing safe commuting options and housing diversity can further boost satisfaction and encourage sustainable mobility.

RESULT

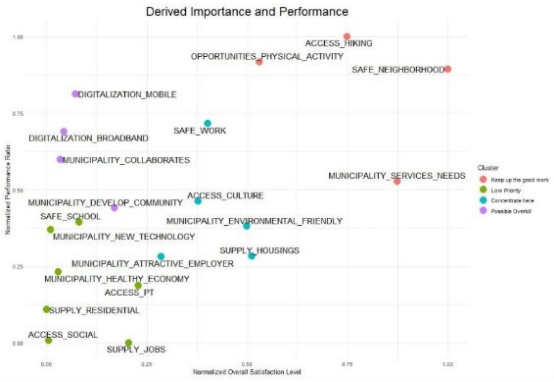

Figure 1: Derived importance and performance

Stuck in satisfaction: why change feels hard

One of the biggest challenges to sustainable mobility is that many residents are satisfied with their car-dependent lifestyle. In our survey, 67% of respondents have lived in Skaun for 4 to 10 years, making them accustomed to using cars and feeling little motivation to change their habits. Even issues like poor public transport accessibility don't affect their overall satisfaction.

Additionally, the community highly values access to nature, which conflicts with municipal plans for housing and infrastructure needed for sustainable mobility. Lastly, current surveys lack sufficient transport-related data to understand travel habits. Adding questions about travel patterns could help guide the shift towards greener mobility.

From satisfied but stuck to moving forward: mobility solutions that work

To address these challenges, municipalities should implement context-sensitive strategies tailored to their communities' specific needs, rather than replicating successful measures from bigger cities. By prioritizing alternative infrastructure and promoting sustainable mobility as a lifestyle improvement, community perceptions can be transformed.

Smart land-use planning should focus on denser neighborhoods while preserving green spaces, involving residents early to enhance acceptance.

Enhanced data collection is also essential. Future surveys should gather detailed travel and location data, such as cellular tower data. A two-step survey process could be effective: starting with satisfaction questions and followed by targeted surveys about mobility. With richer data, planners can use advanced tools like simulation models to understand travel behaviors and barriers. This goes beyond simple monitoring; it helps identify the strategies that truly support a shift towards sustainable mobility.

CONCLUSION

These strategies lay a foundation for creating sustainable mobility solutions and improving current planning methods. The next step is to test and adapt these ideas in various municipalities to identify best practices.

The full paper will be presented at the Sustainable Built Environment Conference in Trondheim 2025 and published in their proceedings.

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