

Map and validate mobility solutions

Youth engagement and pilot testing in Gotland



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Gathering good examples
in sustainable mobility and
safe transport to and from schools



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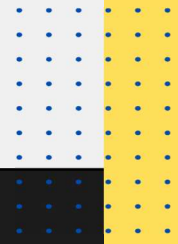
Youth engagement and pilot testing in Gotland

About this example

This example highlights a way of engaging young children to understanding and addressing the transportation habits. It uses, both quantitative and qualitative data analysis, as well as travel simulations to compare different modes of transport. Moreover, it speaks to the powers of testing alternatives and learning from experiences.

Context and Challenge

Gotland is the most car-dense in Sweden and the car is used for relatively short distances with the shortest mileage in Sweden per person and year. This pattern is one of key emission in the region, and for this reason a logical starting point for working towards sustainable development goals in relation to CO2 emission.



General Process

The project FAKTUM focus on improving active mobility for young people traveling to school and leisure activities in Gotland, Sweden. The project is a collaboration between Region Gotland and KTH (Royal Institute of Technology), and children's right consulting contributed by gathering input from children and ensuring the project aligns with children's rights.

The first analysis was done by KTH and it aimed to highlight the travel habits of children commuting to schools and sports venues, exploring conditions for independent, car-free commuting in Gotland, Sweden. Global and local emission goals were considered and a rate 8% reduction per year was set as a guiding indicator of success.

To evaluate the efficiency of different transport modes, a mapping of commuting patterns was conducted. The data was gathered through questionnaires completed by 606 students regarding school travel and 181 students concerning travel to sports venues. The patterns identified were the input for an analysis tool based on GIS mapping and travel simulations to assess emissions and commuting times between residential areas and schools/sports venues of different mobility options: public transport, cycling, and private cars.

The analysis was followed by in-depth conversations with children from three schools. These conversations supplemented previous survey data and aimed to gather more detailed insights. A total of 48 children participated in the initial conversations.

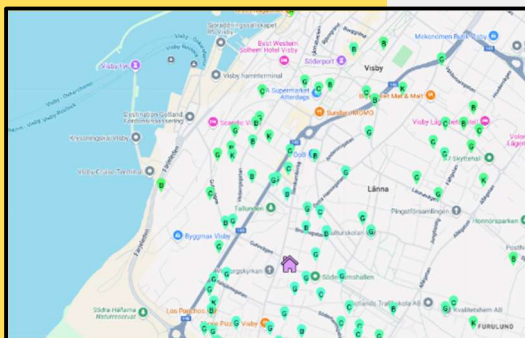
A follow-up session was held in Visby, involving two of the three schools and it included warm-up activities, collaborative exercises, and focused discussions around specific themes. Children also had opportunities to provide feedback on preliminary findings and suggest improvements.

The collected data was analyzed to identify key themes, challenges, and potential solutions related to children's transportation habits. As a result, 17 pilots were suggested, and tests are current underway in several places.

The most meaningful tests have been made possible through collaboration between several of the Gotland Region administrations, here are some examples: Cycling-friendly design of schoolyards. Free bus trips in city traffic. Temporary "meeting stops" for carpooling and cycling. Increased safety, clearer pedestrian crossings.

The project's final products is a set of recommendations based on test results both in terms of reducing emissions and a process description for how children can be included in transport issues of this kind. In addition, a learning package is being developed so that other municipalities and regions can also take part in the work.

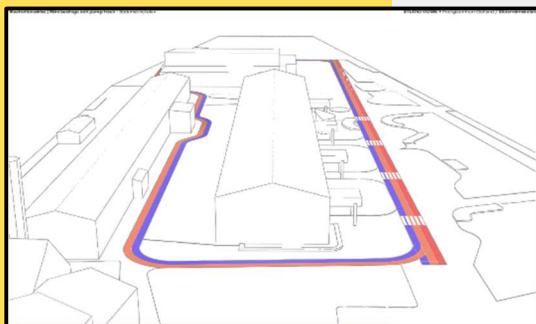
Results and Benefits



Simulation analysis - the lighter the green the faster is to take the bike rather than the car by CERO



Photo workshop facilitators by Emelie Knifström



Planned bicycle circuit in school yard by Studio DOMS

Faster by bike

The simulation analysis shows that in many cases taking the bike would be (actually) faster. This result helps to leverage engagement by nudging people to try out something based on a “requirement” that they value.

Inconvenient schedule and delays:

Analysis show that bus schedules often don't align with school or activity times (like in sport arena) decreasing the likelihood of being a viable option.

17 different pilots suggested

The pilots were identified and key lessons can be taken from their success as good practices, as well as from the reason which those pilots which are perceived as a good option and yet they don't work as expected.

Validated results

The process allows to validate the efficiency of suggested initiatives both for commuting as well as in relation to CO2 emissions.

Lessons Learned

Change of transport mode 6-9 children reduces 1% emission

Collected data shows that it only takes six children to start taking the bus to school, or nine children to start carpooling, to achieve a one percent reduction in their carbon dioxide emissions

Coordinate policy and infra-structure development

As a way to promote active mobility, students are not entitled to school transport (school bus) if they live closer than 3km from the school. However, valid safety concerns like high-speed traffic, no clear signs in pathways, prevent parents from allowing children to choose active mobility alternatives. The unintended consequence is that families resort to their private car as primary mobility option.

Diffuse topic owner

As mobility is a complex and multistakeholder topic, there isn't a single topic owner who is responsible to drive the question. Hence requires effort and time to have all the conversations and synchronize the different actors.

The gap between intention and understanding

Lack of engagement in a few of the suggested pilots highlights a common challenge on behavior change, that good ideas and logical understanding is overrun by habits. We need to work on the intention and momentum for engagement.