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SMART CITY CHALLENGE 2025

City Challenge

Max 3 pages

send to smartcity@taltech.ee by Sept 30, 2025

Challenge Title – (max 5 words, no acronyms) **Safer and Smarter School Mobility**

City/county and country: Cēsis Municipality, Latvia

Main contact from your city/county – name, organization, job title, e-mail, phone **Madara Jenerte**,
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1. What is the future urban challenge that would need a solution to?

- Please describe the challenge of your city / county neighboring a city?

Every morning, parents driving their children to school create congestion and safety risks near school entrances. While Cēsis Municipality has already introduced drop-off zones and speed bumps, these measures alone have not solved the issue. The long-term challenge is to change mobility habits and encourage children to reach school independently by walking or cycling.

Traditional infrastructure alone cannot solve the issue. What is missing is real-time data, digital incentives, and smart monitoring tools that enable the municipality to actively manage school mobility and create safer, more attractive conditions for children.

Smart technologies could play a key role in this transition: intelligent bike parking with access control and weather protection, gamified apps that reward active trips, or sensor-based systems that make crossings safer and more visible when children approach. Such solutions would not only reduce risks and congestion but also motivate children and reassure parents, creating a safer and healthier daily routine.

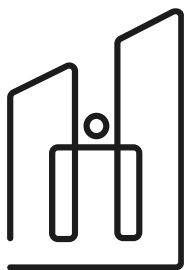
- Which category your challenge is primarily in: safe city, happy city, and climate resilient city?

The challenge lies at the intersection of safe city, happy city, and climate resilient city. It combines traffic safety, air pollution reduction, and quality of life for children and families.

- Why is it important for your city to solve it? How big priority it is for you and why?

School mobility is a high priority because in small cities like Cēsis, school areas are practically the only real sources of daily congestion. The way children get to school directly affects traffic flow, air quality, and safety, with long-term implications for health, sustainability, and parental stress.





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Is this a unique challenge/problem of your city, why or is this by your knowledge a challenge/problem that many cities have – which kind of other cities?

This is not unique to Cēsis — many medium-sized European cities face the same issue of car-dominated school travel, especially in towns where public transport is limited and active mobility routes are not widely used.

2. Innovation.

- How have you solved that issue so far? Why aren't the present solutions good enough? Are there legal obstacles, which ones?

Although the municipality has already introduced drop-off zones and traffic-calming measures, these solutions have not been enough to change behavior. Legal restrictions limit how strictly car access around schools can be regulated, which makes it difficult to reduce car dependence by traditional means. This is why Cēsis sees the need for smart, technology-driven solutions that can both increase safety and motivate children and families to shift towards independent, active mobility.

What should be the main features, characteristics of the future solution to be potentially best for that challenge or problem?

The future solution should combine smart technologies with behavioral change. It needs to provide real-time monitoring of traffic conditions near schools, identify congestion and safety risks, and support data-driven adjustments to infrastructure and traffic management. The system should integrate safe school route planning, smart bike and scooter parking with access control, and digital tools that motivate children through gamification and rewards for walking or cycling. At the same time, it should be easy for municipal staff to operate without advanced technical knowledge, scalable to multiple schools, and compliant with legal restrictions on traffic regulation. Ideally, it would also include communication features that keep parents informed, reduce anxiety, and build trust in active mobility as a safe, reliable alternative.

3. Expected impact of your pilot solution.

- What is the expected impact to your city environment you expect to see if the challenge gets solved?

Reduced morning congestion, lower emissions, safer crossings, improved air quality in school areas, and better-targeted investments in mobility infrastructure.

- What is the expected impact to your citizens you expect to see if the challenge gets solved?

More accessible and safer school routes, increased independence for children, reduced parental stress, climate-friendly habits, higher satisfaction, and a stronger sense of safety in public space.

- What is the expected impact to your city governance you expect to see if the challenge gets solved?

Data-driven decision-making on school mobility, transparent communication with parents and schools and more effective planning of traffic management and active mobility infrastructure around educational institutions.



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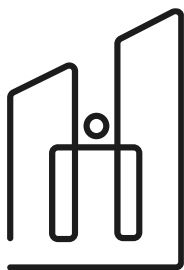


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4. Piloting

- Why would you be interested to become a piloting partner of a proposed solution to the challenge you are describing here? Describe shortly your capability to participate.

Cēsis would be a strong piloting partner because it is a small-sized city with diverse mobility needs, active in European networks, and open to testing smart city solutions. The municipality has a track record of implementing infrastructure projects, engaging residents through public campaigns, and collaborating with local schools and NGOs.

We can provide:

- **Access to school communities and pilot areas.**
- **Strong political and administrative support for sustainable mobility.**
- **Technical capacity in data collection and mobility planning.**

Piloting this solution in Cēsis would allow us to test smart technologies at a manageable scale while creating a replicable model for other municipalities in Latvia and beyond.



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