

FinEst Centre
for Smart Cities

SMART CITY CHALLENGE 2025

City Challenge

Max 3 pages

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

Challenge Title – Real-time tourist tracking

City/county and country – Liepāja, Latvia

Main contact from your city/county –Sintija Pusaudze, Liepāja Region tourism information office, member of a board, manager@liepaja.travel, +37125535112

1. What is the future urban challenge that would need a solution to?

Liepāja, as a coastal tourism destination, faces growing visitor numbers with highly seasonal and uneven flows. We lack real-time data about where and when tourists move around the city. This limits our ability to manage crowding, plan mobility solutions, ensure safety, and balance tourism with resident quality of life. The challenge is to develop a real-time, privacy-respecting system for tourist flow measurement and analysis.

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

Liepāja is the third largest city in Latvia, located on the Baltic Sea coast, serving as a regional hub for culture, music festivals, seaside tourism, and sports events. Visitor numbers fluctuate strongly, especially during weekends and summer. Without real-time insights, it is difficult to direct flows to less crowded areas, avoid bottlenecks in transport or heritage sites, and support local businesses across the whole city. Neighbouring municipalities also face similar tourism pressures, but the data is fragmented.

- Which category your challenge is primarily in: safe city, happy city, and climate resilient city? Primarily Happy City, with links to Safe City (crowd management, safety in events) and Climate Resilient City (optimising transport and reducing unnecessary emissions).

- Why is it important for your city to solve it? How big priority it is for you and why? Tourism is a major driver of Liepāja's economy. However, unmanaged flows can harm resident well-being, degrade heritage, and stress infrastructure. Real-time data would allow us to design better mobility solutions, spread visitors more evenly, and improve experiences for both tourists and residents. It is a high priority, linked with Liepāja's Smart City strategy and sustainable tourism goals.

- 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?



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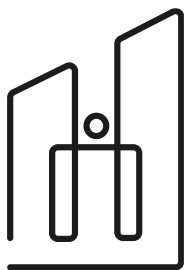


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This is not unique to Liepāja – many medium-sized European cities with seasonal tourism (seaside, heritage, or festival-driven) face the same challenge. Cities in the Baltics, Northern Europe, and coastal regions share this problem. However, as a smaller city, Liepāja often lacks resources for large-scale monitoring systems, making this challenge especially pressing.

2. Innovation.

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

Currently, we rely on indirect data: accommodation statistics, manual counts at events, and occasional surveys. These are delayed, fragmented, and not useful for real-time decision-making. There are no legal barriers if privacy and GDPR compliance are ensured. The challenge is the technological capacity and cost-efficiency of solutions adapted to a small city.

- What should be the main features, characteristics of the future solution to be potentially best for that challenge or problem?
 - Real-time or near-real-time tracking of flows.
 - Anonymised and GDPR-compliant.
 - Integration with transport and event data.
 - Scalable to cover both central and peripheral attractions.
 - Easy visualisation dashboard for city management and tourism office.
 - Cost-efficient and adapted to a city of ~70,000 inhabitants with high seasonal peaks.

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?
 - Balanced visitor distribution, less congestion in sensitive zones.
 - Reduced environmental pressures through optimised mobility.
 - Improved use of under-visited attractions and neighbourhoods.
- What is the expected impact to your citizens you expect to see if the challenge gets solved?
 - Higher resident satisfaction with tourism balance.
 - Safer, smoother mobility during events and peak seasons.
 - Better perception of tourism as a benefit, not a burden.
- What is the expected impact to your city governance you expect to see if the challenge gets solved?
 - Evidence-based decision-making.
 - Stronger collaboration across departments (tourism, mobility, culture, safety).
 - Positioning Liepāja as a pioneer in smart, sustainable tourism in the Baltics.



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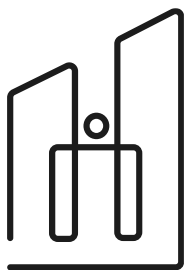


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4. Piloting

- 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.

Liepāja has a strong capacity to host pilots:

- The Liepāja Tourism Information Office actively manages visitor flows and has direct contact with tourism businesses.
- The city has experience in EU and smart city projects.
- Infrastructure for digital innovation (city-wide Wi-Fi, smart mobility projects) already exists.
- Local universities and IT companies are engaged in applied research.

We are motivated to test and demonstrate innovative solutions that can be scaled to other medium-sized coastal cities.

