City of Tampere, Finland

STREETLIFE pilot promotes public transport and sustainability

The City of Tampere conducted the STREETLIFE pilot project to make public transport a faster, more convenient and sustainable alternative to car travel. Tampere engaged CGI and Aalto University to create personalized, real-time services for transport system users, and smart tools to help the transport authority better visualize and guide the flow of passengers.

The challenge
Tampere sought to reduce traffic-related emissions and improve its traffic infrastructure system to allow people to move about the city more efficiently and quickly. The STREETLIFE pilot project was developed to test new intelligent public transport applications with real users. It was an initiative that grew from Tampere’s ITS Factory, an innovation test bed and community for government, academic and business institutions.

The solution
The City, CGI and Aalto University partnered to apply for European Union (EU) funding for the Tampere STREETLIFE pilot to test and evaluate an experimental multi-modal journey planner using real-time digital tools and gamification to make public transport more efficient and convenient. The Tampere pilot was funded as one of three European projects designed to share knowledge throughout the EU.

Journey planner
The STREETLIFE journey planner application, based on CGI’s Navici Trip Planner solution, automatically accounted for public transport conditions as they occurred and provided real-time updates to system users. It also calculated the carbon footprint of any proposed trip so travelers could consider greener alternatives. In addition, the planner helped the transport authority to manage passenger flows to lessen congestion in primary bus route corridors. That capability, in tandem with a map-based control panel showing available parking spaces in an area, confirmed the viability of park and ride location choices for system users.

Gamification
To promote STREETLIFE services, a user participation game called Zone Hunter, integrated into the journey planner, was developed to attract both

CASE STUDY
GOVERNMENT
Tampere is Finland’s second-largest city, and its fastest growing. It is active in promoting smart city initiatives to benefit citizens and attract business investment and jobs. Tampere’s ITS Factory is an innovation community and testbed for universities, city authorities and companies of all sizes, from start-ups to large corporations.

“The City of Tampere is a pioneer in smart city development. The STREETLIFE project is a good example of an initiative which grew from Tampere’s ITS Factory innovation community and testbed, where the City acts as enabler and companies can pilot and test new intelligent transport applications with real users. Everybody benefits from this co-operation—the citizen, authorities and the companies.”

Mika Kulmala, Project manager
City of Tampere

The STREETLIFE project has received research funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement No. 608991.
frequent and beginning users of public transport services. Players could earn points and virtual trophies by exploring different parts of Tampere. They also could compete for a prize drawing (e.g., monthly transport tickets, bicycle, etc.) by answering a survey about their experience.

“With the help of CGI and Aalto University in the STREETLIFE project, Tampere citizens experienced faster travel, reduced traffic congestion and greater convenience with real-time information at their fingertips. Based on the pilot results, we believe the experimental methods can have an impact on changing users’ mobility behavior.”

Mika Kulmala, Project manager, City of Tampere

The results

During the STREETLIFE pilot project from 2014-2016, 19,000 unique users employed the real-time journey planner with more than 50,000 user sessions. The Zone Hunter game held March 14-April 30, 2016, elicited a huge popular response, drawing 5,800 unique users with almost 14,000 user sessions.

Of the 242 participants in the STREETLIFE survey:

- 96.28% said the real-time information made travelling easier and reduced their stress
- Two-thirds saved 5 minutes or more in travel time every day, with more than one-third saving 10 minutes or more
- 84.7% said they enjoyed the game and promotional campaign
- More than 60% said the experience made them consider using public transport instead of their private car
- While three-quarters already used public transport frequently, 12% said they switched to public transport because of the game, with 80% of them putting aside a car, motorcycle or moped in favor of public transport

Because STREETLIFE has been so successful, Tampere and CGI hope and expect to make its information services available to citizens on a lasting basis. Another beauty of the system is that it can be implemented in other cities, too.