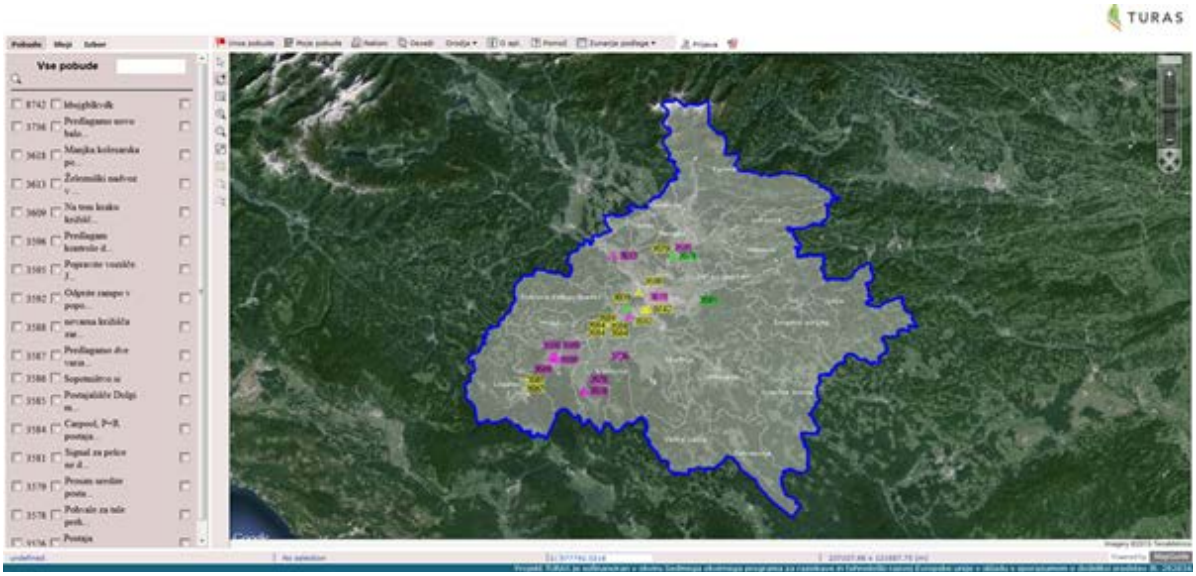
TURAS

# Urban Region Public Participation (LUR PP) webGIS - Ljubljana | Infrastructure Summary

## SEPTEMBER 2016




TURAS

SEVENTH FRAMEWORK PROGRAMME

# Urban Region Public Participation (LUR PP) webGIS - Ljubljana | Infrastructure Summary

## Introduction

Transitioning Towards Urban Resilience and Sustainability (TURAS) is an FP7 funded European-wide research and development programme. The "TURAS" project aims to bring together urban communities, researchers, local authorities and SMEs to research, develop, demonstrate and disseminate transition strategies and scenarios to enable European cities and their rural interfaces to build vitally-needed resilience in the face of significant sustainability challenges. As part of this process, the TURAS project has developed a suite of Geo-ICT tools for the project to demonstrate some of the research topic address over the lifespan of the project.

## Design Intent

The LUR PP webGIS is a GIS platform with a user webGIS interface to enable e-participation and to encourage the public to be active in improving public transport and traffic infrastructure for more sustainable mobility (Figure 45). The LUR PP webGIS is developed as part of WP4 - Climate change Resilient City Planning and Climate-Neutral Infrastructure and aims to address transport planning in Ljubljana. The objective is to enhance public participation in the public transport planning process with the goal of increasing environmental capital.

**Contact Details:** RRA LUR the Regional Development Agency of the Ljubljana Urban Region was responsible for the development and maintenance of the LUR PP webGIS. Future Analytics Consulting were responsible for the technical integration of the webGIS with the TURAS website. University College Dublin oversaw the integration of the LUR PP webGIS with the TURAS website.

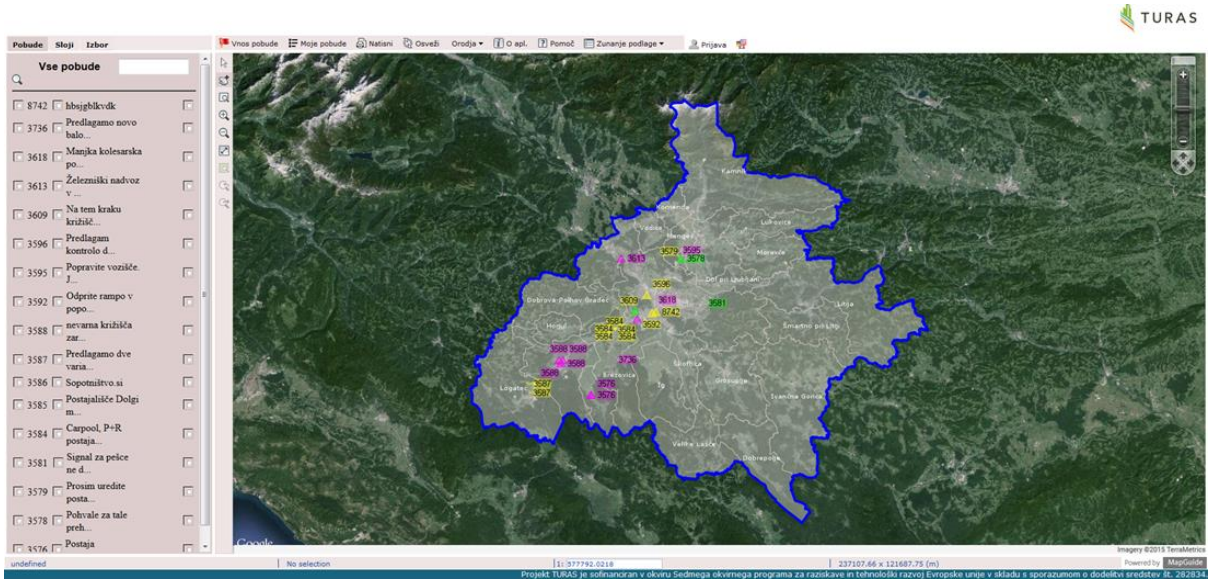
**Link to Existing Application:** http://www.pti.fgg.uni-lj.si/turas/

## Principal Elements

The application has 8 here main functions: Data layers, Add initiative, My initiatives, External layers, Help, Tools, Refresh, and Print.

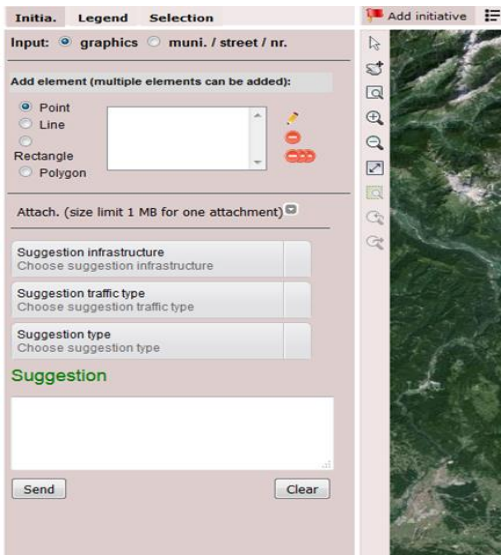
Data layers: The application has a number of data layers relating to transport, flooding and nature. The user can toggle the layers on and off and overlay different layers (Figure 1).

**Figure 1: LUR PP webGIS Data layers function**



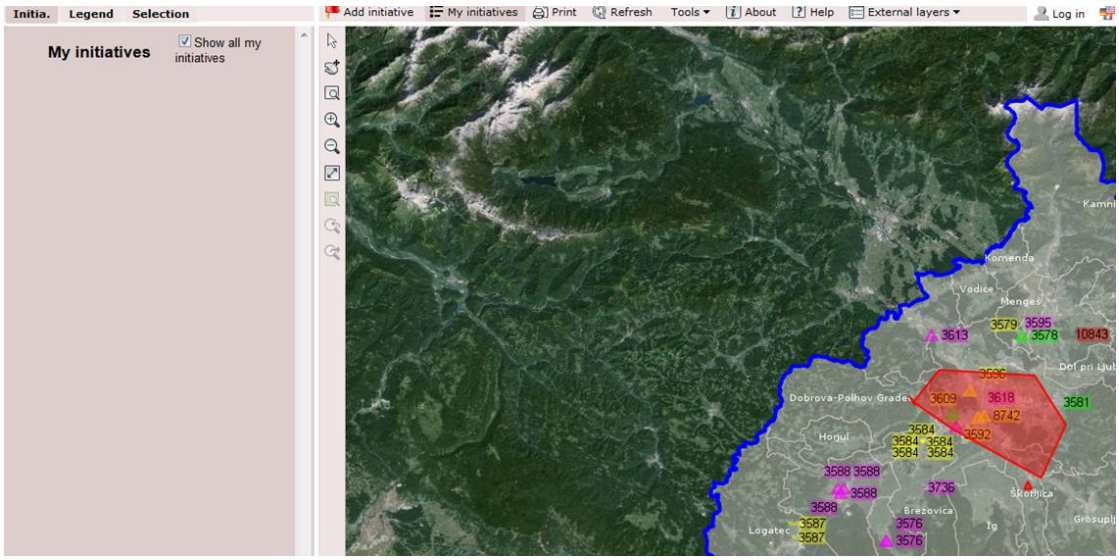

Add initiative: LUR PP webGIS Add initiative function allows the users to ask questions, comment, suggest or respond to relevant themes such as transportation and flooding for different areas (Figure 2). The users can locate the area they want to discuss by drawing a polygon or placing a point or line on the webGIS interface.

**Figure 2: LUR PP webGIS Add initiative function**



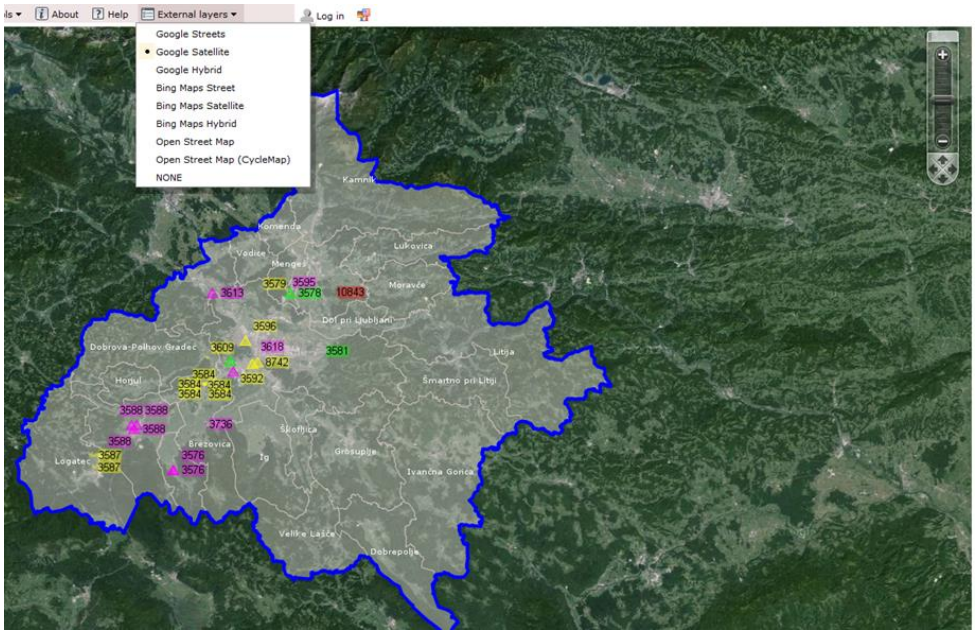
My initiatives: When the user adds initiatives to the map the “my initiatives” function allows the user to view all previous initiatives added (Figure 48). This allows the user to keep track of their interactions with the webGIS on the different issues.

**Figure 3: LUR PP webGIS My initiatives function**



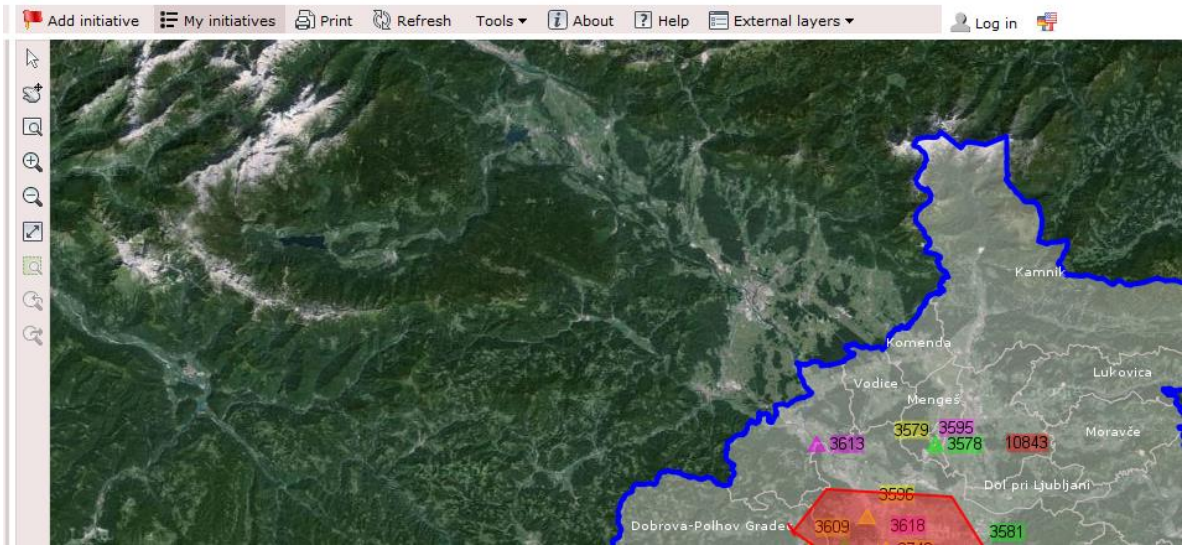

External Layers: This function provides the user with a list of external map layers they can use as the base map such as; Google Streets, Google Satellite, Google Hybrid, Bing Streets, Bing Satellite, Bing Hybrid and OpenStreetMap and OpenStreetMap Cycle Map.

**Figure 4: LUR PP webGIS External Layers function**



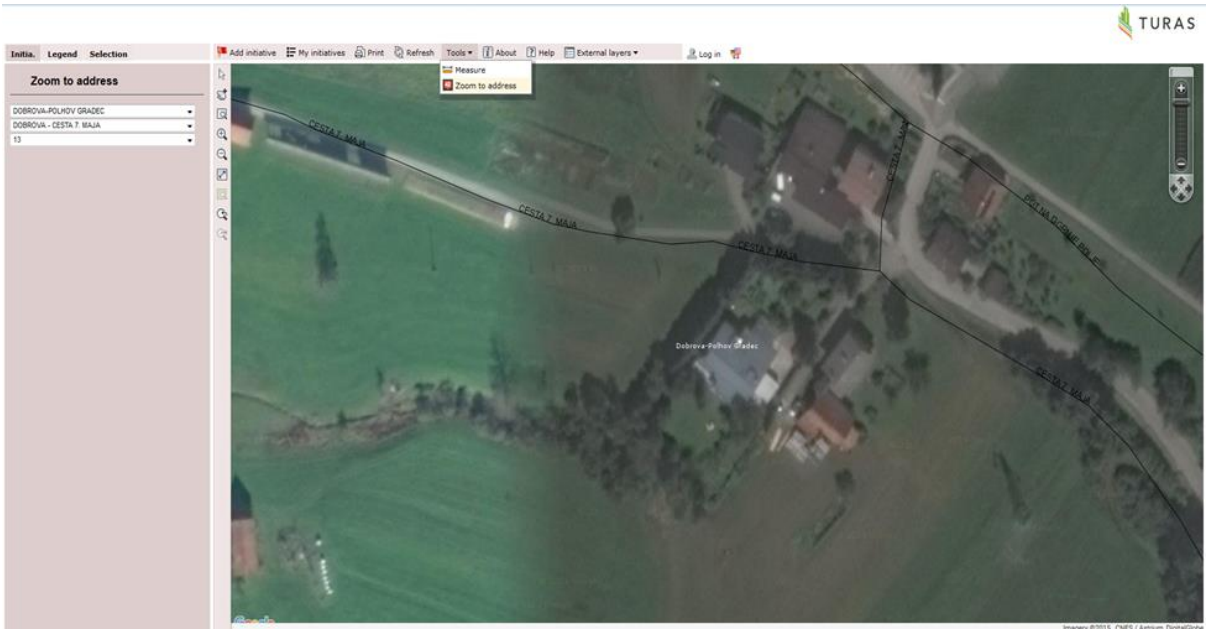
Help: The help function provides a link to an external help page that the user can access (Figure 5).

**Figure 5: LUP PP Help function**




Tools: The tools function provides links to two tools; the “measurement tool” and the “Zoom to address tool”. The “measurement tool” allows the user to measure distances on the map and the “zoom to address tool” allows the user to select an address on the map based on municipality, street and house number.

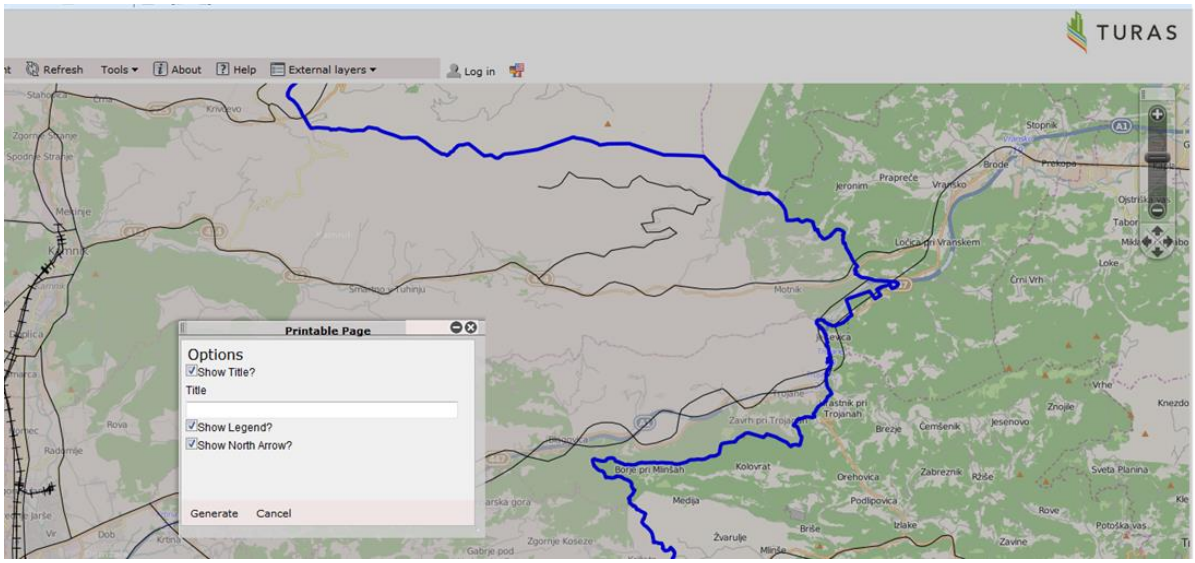
**Figure 6: LUP PP webGIS Tools function**



Refresh: This function allows the user to refresh the screen.

Print: The print function allows the user to print the webGIS as a map (Figure 7). It offers the functionality of being able to print with or without map elements such as the north arrow, legend and the title.

**Figure 7: LUR PP webGIS Print function**




**Technical development**

The application was developed by Regionalna razvojna agencija (RRA) LUR the Regional Development Agency of the Ljubljana Urban Region based on a schematic design presented in Figure 53. The LUR PP webGIS was developed using the following software:

Software

- Access software: Database
- Arc Map: GIS software
- HTML - Hypertext markup language, used to develop web pages
- CSS - cascading style sheet, formats design of web pages
- Javascript - web scripting language

## *Wider Application Dissemination*

In order to create the best environment for re-use, modification and visibility of the TURAS Geo-ICT tools we package all code and documentation for each application and have made them directly available to the public in zip file or available on GitHub @ https://github.com/UCDTURAS.

**Compressed Archive File**

- To make the development and coding accessible to the public and researchers interested in using, adapting, or further developing the TURAS tools, we have packaged the information (code, development operations and documentation) into a single compressed file which can be downloaded from the final TURAS interface. This package will contain a computer program as well as necessary metadata for its deployment.

**GitHub Repository**

- The aim of the TURAS project is to bring urban communities and businesses together with local authorities and researchers to collaborate on developing practical new solutions for more sustainable and resilient European cities. Following this, we recognise the importance of having a dedicated modern interface with which to disseminate all the Geo-ICT tools developed as part of the project. TURAS has created a GitHub account to allow end-users, technical developers etc to push/pull data code from the TURAS account.