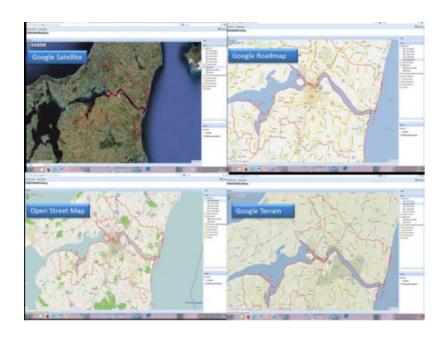




# TURAS City Viewers (Web-GIS) | Infrastructure Summary SEPTEMBER 2016







# TURAS City Viewers (webGIS) | 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 TURAS City Viewer provides layers of city wide data and information, supplied by local authorities, academic institutions and SME's. The purpose of the TURAS city viewer is to provide the context for the TURAS case study areas and to view, interpret and visualize relevant spatial data. Using the city viewer, you can also add comments / text / photographs to the map using the Geowiki tool. Current datasets include land use, land zoning, boundaries, socio-economic data, built environment, ecosystems and transportation and street network.

**Contact Details:** University College Dublin were responsible for the technical development and integration of the webGIS portal for the various city viewers.

### **Link to Existing Application:**

- <a href="http://www.turas-cities.org/urban regions/1/geodata">http://www.turas-cities.org/urban regions/1/geodata</a>
- http://www.turas-cities.org/urban\_regions/2/geodata
- http://www.turas-cities.org/urban\_regions/3/geodata
- <a href="http://www.turas-cities.org/urban\_regions/4/geodata">http://www.turas-cities.org/urban\_regions/4/geodata</a>
- <a href="http://www.turas-cities.org/urban\_regions/5/geodata">http://www.turas-cities.org/urban\_regions/5/geodata</a>
- http://www.turas-cities.org/urban\_regions/6/geodata
- http://www.turas-cities.org/urban\_regions/7/geodata
- http://www.turas-cities.org/urban\_regions/8/geodata
- http://www.turas-cities.org/urban\_regions/9/geodata
   http://www.turas-cities.org/urban\_regions/9/geodata
- http://www.turas-cities.org/urban regions/10/geodata
- http://www.turas-cities.org/urban regions/11/geodata





# **Principal Elements**

Central to the concept of TURAS is the principle of engaging with communities in these case study areas and establishing a working partnership between these communities and local authorities, academic partners and industry in order to develop new solutions for sustainability and resilience in each city. In order to increase communication, engagement and interaction with the wider public the TURAS webGIS will host a range of interactive tools customised for different purposes and users.

The standard GIS tools are complimented with interactive tools for uploading, downloading and exchange of various contents photographs and textual information (comments, ideas and records). Due to the access restrictions outlined in table, it was not feasible to provide the facility to upload and download spatial data.

The first tool to be added to the TURAS webGIS is the geowiki. A Geowiki is considered a geographically contextualized wiki. Central to the geowiki is its ability to be edited by not only official partners of the TURAS project but it is open to the wider public to contribute comments, ideas and photographs.

Users can navigate to a specific area on the webGIS using the navigation tool. They can then add a point to the map. It is then possible to write a description of the point, upload photos or documents and add related links. The Geowiki also allows users to comment and attribute data to other points which are on the map.

Google Satellite

Google Satel

Figure 1: webGIS Data layers function





# 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 @ <a href="https://github.com/UCDTURAS">https://github.com/UCDTURAS</a>.

### **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.

