



UNIVERSITÀ DEGLI STUDI DI MILANO

Dipartimento di Scienze Agrarie e Ambientali



The Greenways Heritage tourism GIS (Geographical Information System), promoting greenways across Europe

Giulio Senes

The Greenways Heritage Project

Call Objective. “*Diversifying* and increasing the visibility of *Europe's transnational tourism offer* - supporting the promotion and development of transnational thematic tourism products linked to *Cultural and Creative Industries (CCI)*”

Objective. The development and diversification of the European touristic offer, through:

- ✓ the creation and dissemination of a **new touristic product** related to **UNESCO sites** and **greenways**, in order to **attract more tourists** and to **generate an economic impact** on territories which have both resources;
- ✓ the **use of innovative technologies** applied to greenways and UNESCO sites to **better inform tourists** and so enhance their experience.

8 partners from 5 countries: Belgium, Spain, Italy, Latvia, and Portugal

Implementation period. May 2018 – October 2019



The Greenways Heritage Project



"Burgos Cathedral" (Spain)



Vía Verde del Ferrocarril Vasco Navarro



"Historic Centre of Riga" (Latvia)

The Greenways Heritage Project



Tourism product

- ✓ Creation of **tourism product package** through **collaboration agreements**.
- ✓ Improving the competitiveness of SMEs:
 - improving skills and raising awareness;
 - strengthening public-private cooperation.

Technologies in Cultural and Creative Industries

- ✓ Creation of a **multiplatform web-application**, containing all the information on Greenways Heritage itineraries.

360° virtual tour

- ✓ **Best practices guide** - new technologies used on Cultural UNESCO sites and greenways

Promotion & Communication

- ✓ **Declaration** for UNESCO and greenways as common destination
- ✓ **Workshops and conferences**;
- ✓ **Valorisation strategy**
- ✓ **Best practices guide**
- ✓ **Special GWH award**

Activities

1. **Detailed mapping** of all the information related to UNESCO and heritage sites and the connected greenways
2. Creation of a touristic **Geographical Information System (GIS)** containing all the data collected and mapped.
3. Development of a multiplatform **Web-GIS based application** to share “via-Web” the data of the GIS
4. Development of the "Heritage Greenways" brand in order to promote this new transnational thematic tourism product
5. Raise "Heritage Greenways" brand awareness
6. Produce a **360 VR tour** with 360 movies, 360 tours and 3D imaging in the green outdoor area of Mechelen
7. Better know **Best practices** regarding the use of CCI at cultural sites and on greenways



Activity 1: detailed mapping

This activity consists of **gathering and mapping** (at 1:10.000/1:25.000 scale) all the **information** related to the territories characterized by:

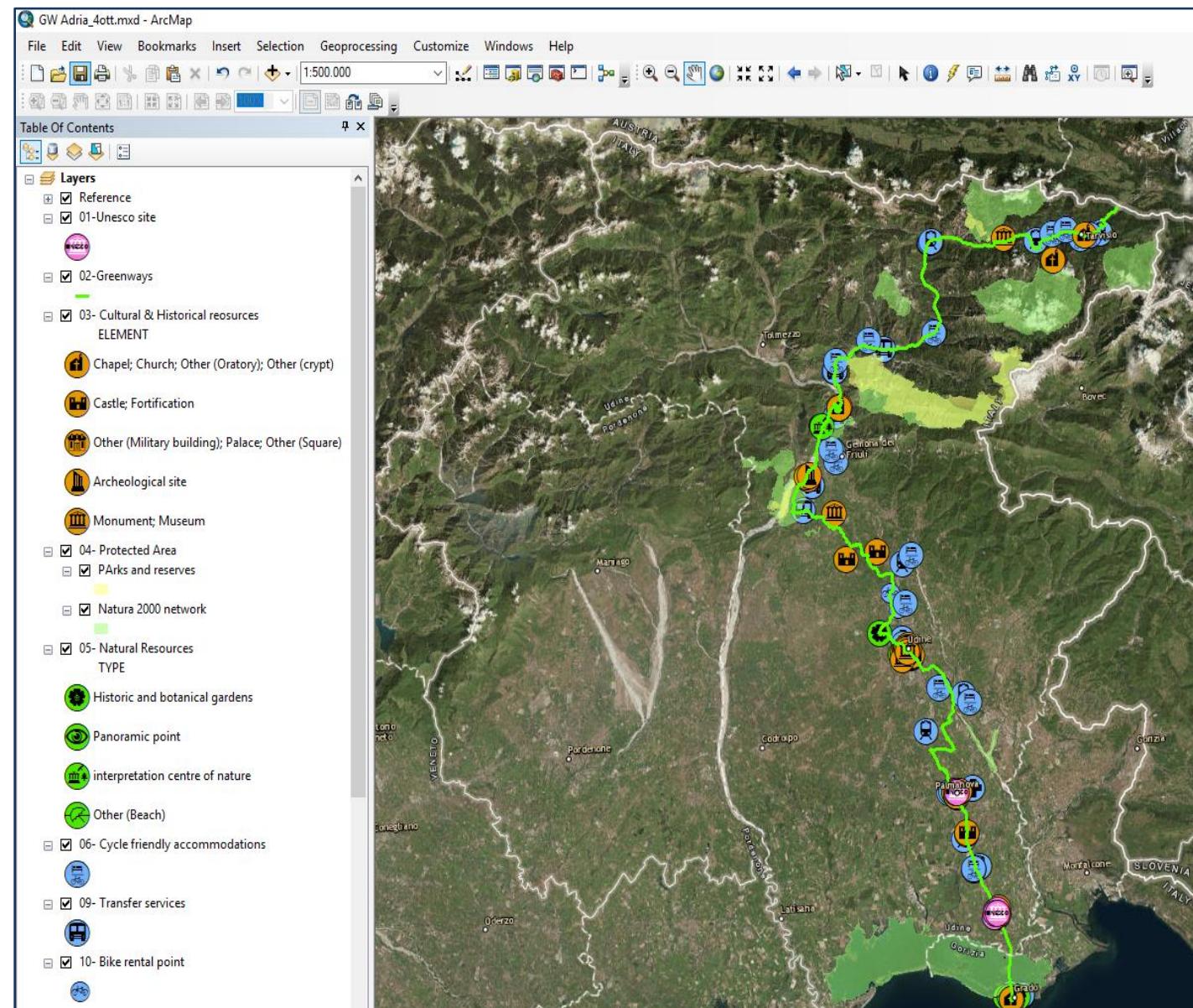
- the presence of a **UNESCO site**
- and the presence of a **greenway**.

The information to gather are related to:

- natural, cultural and historical resources,
- touristic attractions,
- accessibility,
- services.

Activity 2: Greenways Heritage Touristic GIS

The information collected and mapped in activity 1 will be organized in a GIS database, that will contain data related to **attractions, sites, destinations and tourism related services**.



Activity 2: Greenways Heritage Touristic GIS

Information collected

- a) The information collected have been organized in **14 entities or layers**.
- b) The data for each layer have been collected from *official sources*, when possible (e.g: UNESCO organization, national and regional touristic agencies, etc.).
- c) Different **buffer zones** have been defined, in order to identify the resources and touristic services to be mapped (on the base of *the literature related to pedestrian and cycle touristic activities*).



Activity 2: Greenways Heritage Touristic GIS



Layers, criteria and sources of the information				
Layer ID	Layer	Geometry type	Source	Criteria for selection
01	UNESCO sites [UNESCO]	Point	UNESCO web site	Max 10 km from a greenway
02	Greenways [GW]	Polyline	Partner knowledge	Max 10 km from a UNESCO sites
03	Cultural-Historical resources [CHR]	Point	Official touristic Information	Max 2,5 km from a greenway
04	Protected Areas [PA]	Polygon	Official list of national protected area	Max 2,5 km from a greenway
05	Natural Resources (NR)	Point	Official touristic Information	Max 2,5 km from a greenway
06	Cycle friendly accommodations (CA)	Point	Official cycle friendly certification; ex. Bed and Bike (DE)	Max 5 km from a greenway
07	Generic Accommodations (GA)	Point	National/regional touristic databases	Max 2,5 km from a greenway
08	Food & Beverage (bar, restaurant, etc.) [F&B]	Point	Partner knowledge	Max 1 km from a greenway
09	Transfer Services [TS]	Point	Partner knowledge	Max 2,5 km from a greenway
10	Bike Rental points [BR]	Point	Official touristic Information; partner knowledge	Max 2,5 km from a greenway
11	Rail Stations [RS]	Point	Railway company	Max 2,5 km from a greenway
12	Public Navigation Services [PNS]	Point	Navigation Company	Max 2,5 km from a greenway
13	Emergencies [EM]	Point	Official Information	Max 2,5 km from a greenway
14	Touristic Information points [TI]	Point	Official touristic Information	Max 1 km from a greenway

Activity 2: Greenways Heritage Touristic GIS



01 - UNESCO sites



02 - Greenways



03 - Cultural & Historical resources:

Religious buildings (chapels, churches, monasteries, etc.)



Castles, towers and fortifications



Archeological sites and ruins



Museums and monuments



Palaces, villas and other civil buildings



04 - Protected areas



05 - Natural Resources:

Historic and botanical gardens



Panoramic points



Interpretation centers of nature



Other natural resources



06 - Cycle friendly accommodations



07 - Generic Accommodations



08 - Food & Beverage



09 - Transfer services



10 - Bike rental points



11 - Rail stations



12 - Public Navigation Services



13 - Emergencies



14 - Touristic Information points



Activity 2: Greenways Heritage Touristic GIS

Resources and services mapped (work in progress)

- ✓ **14** UNESCO sites
- ✓ **7** greenways connected to the UNESCO sites (651 km):
 - *Vía Verde de la Sierra de la Demanda (Spain)*: 54 Km;
 - *Vía Verde de los Montes de Hierro (Spain)*: 43 km;
 - *Vía Verde del Ferrocarril Vasco Navarro (Spain)*: 127 Km.
 - *Vennbahn (Germany, Belgium, Luxembourg)*: 125 Km;
 - *Alpe Adria (Italy)*: 183 Km;
 - *Beghina (Belgium)*: 40 Km;
 - *Rīga - Ērgļi (Latvia)*: 79 Km.
- ✓ **210** cultural-historical resources;
- ✓ **74** natural resources;
- ✓ **114** cycle friendly accommodations and + **380** generic accommodations;
- ✓ **+ 1800** Food & Beverage;
- ✓ **31** bike rental points and **18** transfer services;
- ✓ **54** rail stations and **1** public navigation services;
- ✓ **5** emergencies;
- ✓ **34** touristic information points.

Activity 2: Greenways Heritage Touristic GIS



UNESCO site "Palmanova the Fortress City" (Italy)

Opere di difesa veneziane tra XVI e XVII secolo: Stato da Terra-Stato da Mar o... x

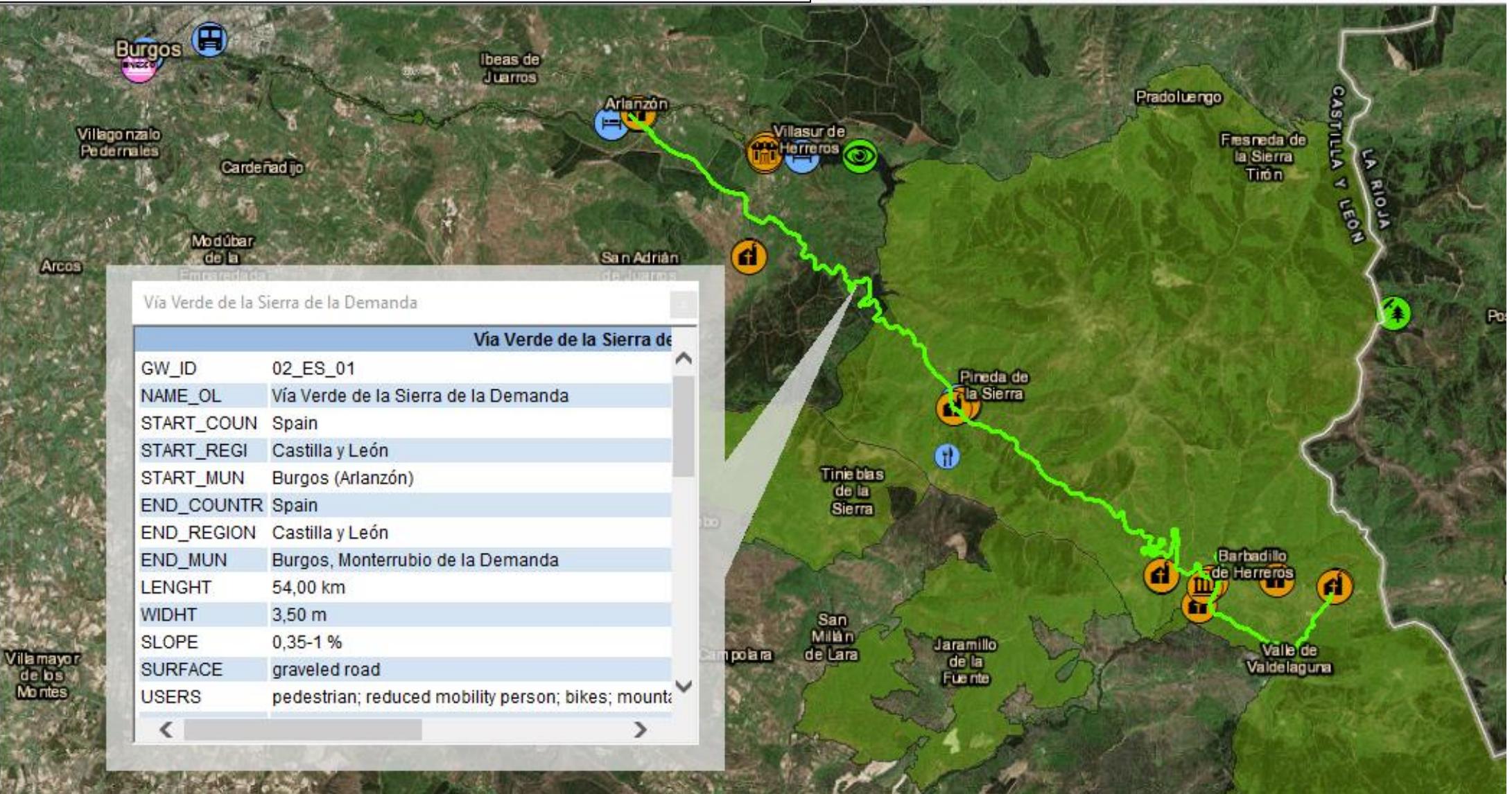
Opere di difesa veneziane tra XVI e XVII secolo: Stato da Terra-Stato da Mar occidentale: la città-fortezza di Palmanova

UNESCO_ID 01_IT_07

NAME_OL	Opere di difesa veneziane tra XVI e XVII secolo: Stato da Terra-Stato da Mar occidentale: la città-fortezza di Palmanova
NAME_EL	Venetian Works of Defence between the 16th and 17th Centuries: Stato da Terra – Western Stato da Mar: City Fortress of Palmanova
COUNTRY	Italy
REGION	Friuli Venezia Giulia
ADDRESS	
MUNICIPALI	Palmanova
POST_CODE	33057
WEB	whc.unesco.org/en/list/1533
DESCRIPTION	Palmanova represents the strategic centre for neutralising Ottoman attacks from the East and attacks from Austria. From a typological point of view, it is the only new town; an urban nucleus recognised globally, the "ideal fortified city" of Palmanova
PHOTO_1	01_IT_07_01

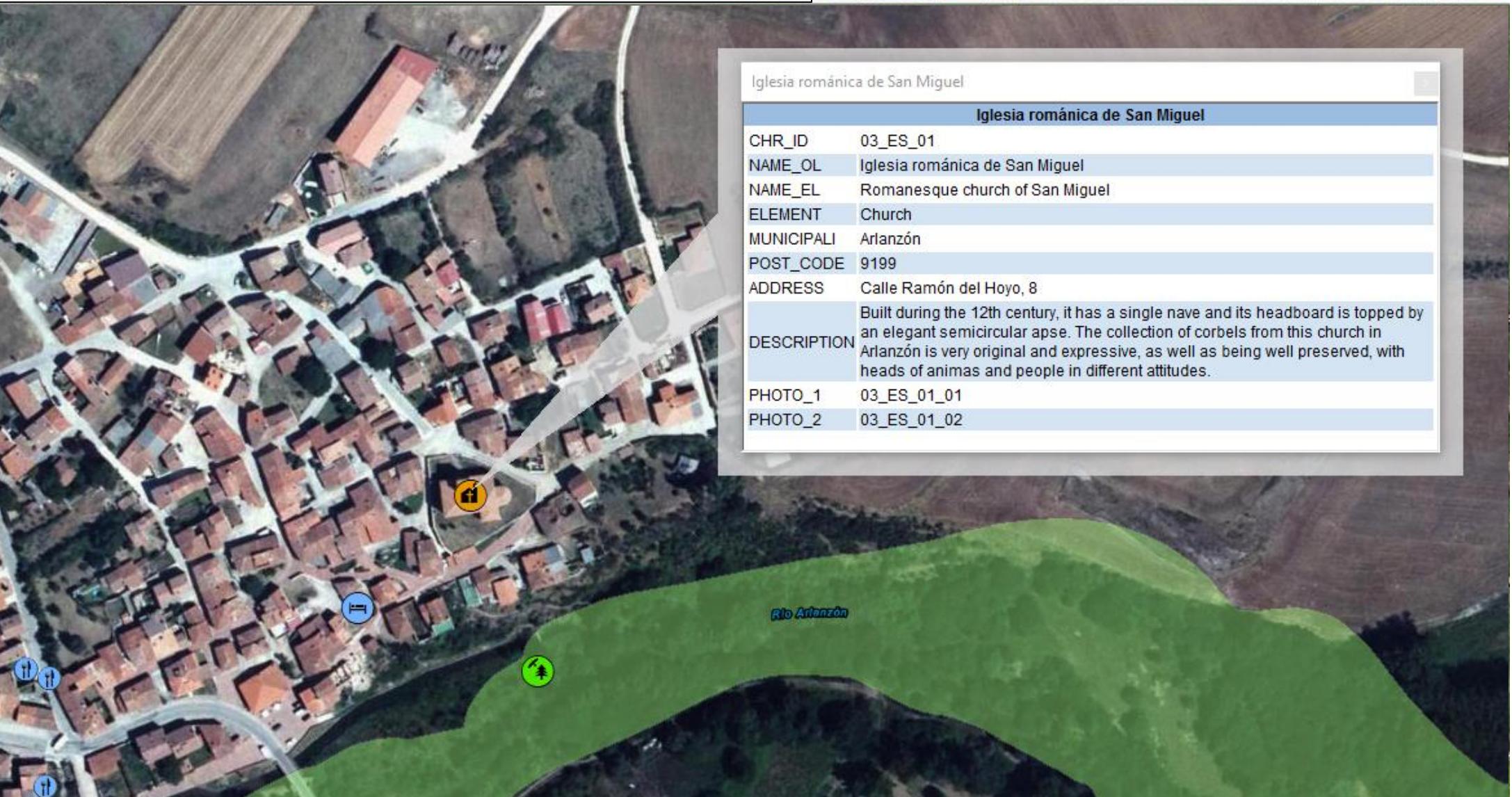
Activity 2: Greenways Heritage Touristic GIS

Greenway "Via Verde de la Sierra de la Demanda" (Spain)



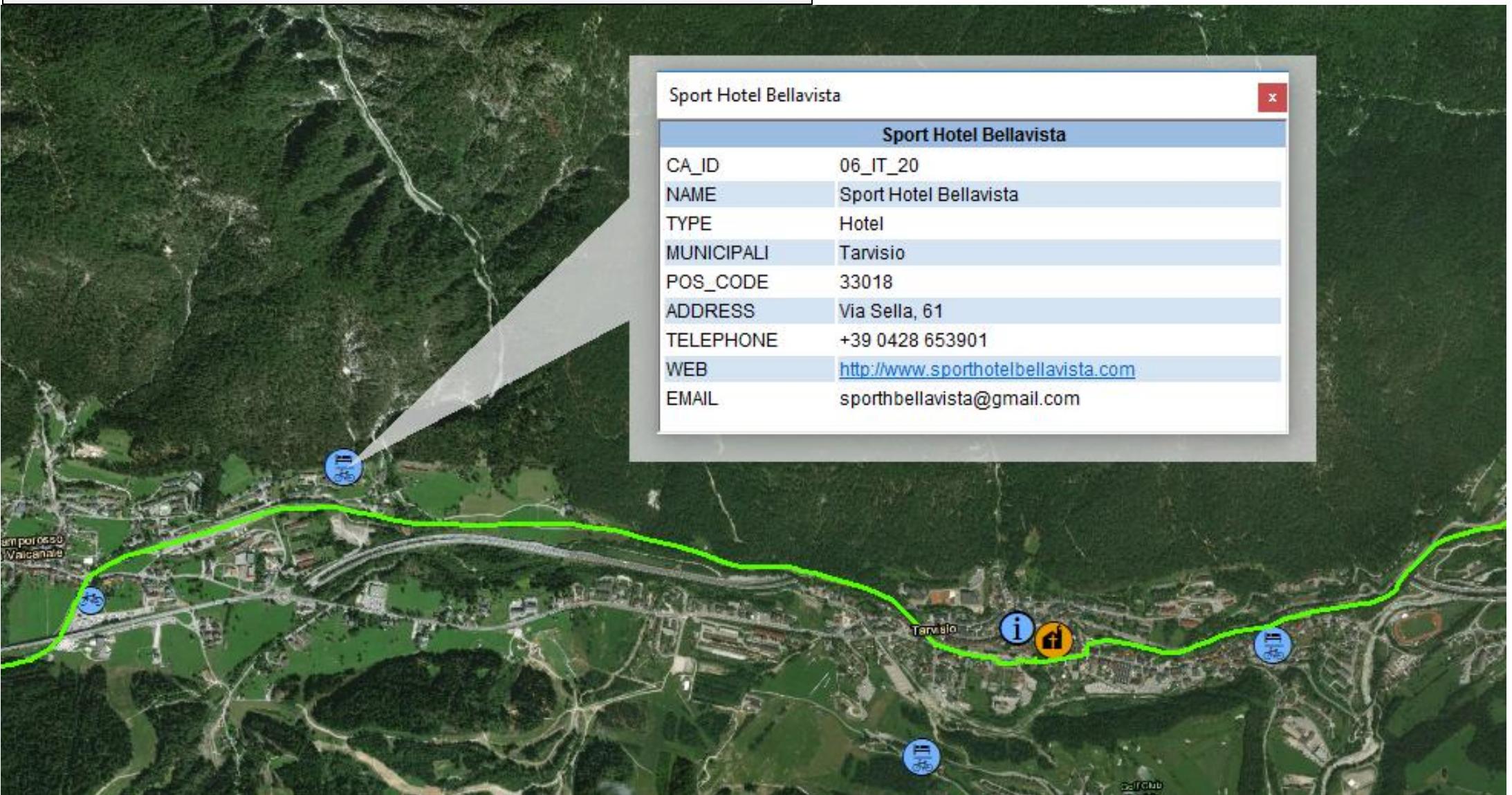
Activity 2: Greenways Heritage Touristic GIS

Cultural-historical resource (Spain)



Activity 2: Greenways Heritage Touristic GIS

Cycle friendly accommodation (Italy)

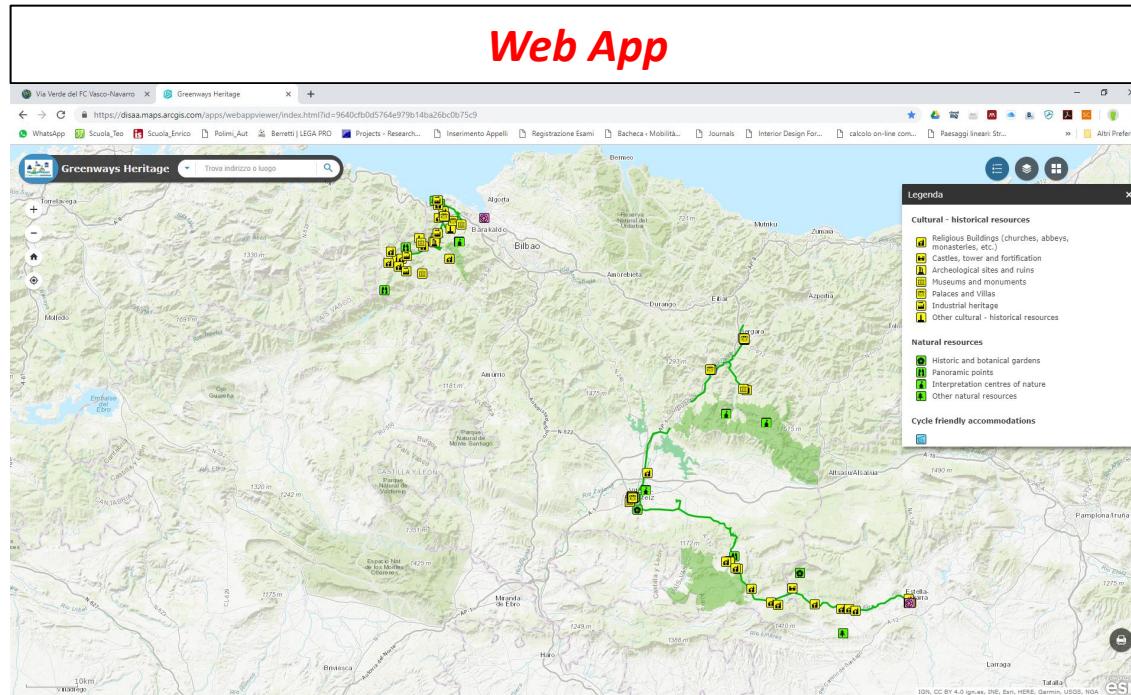


Activity

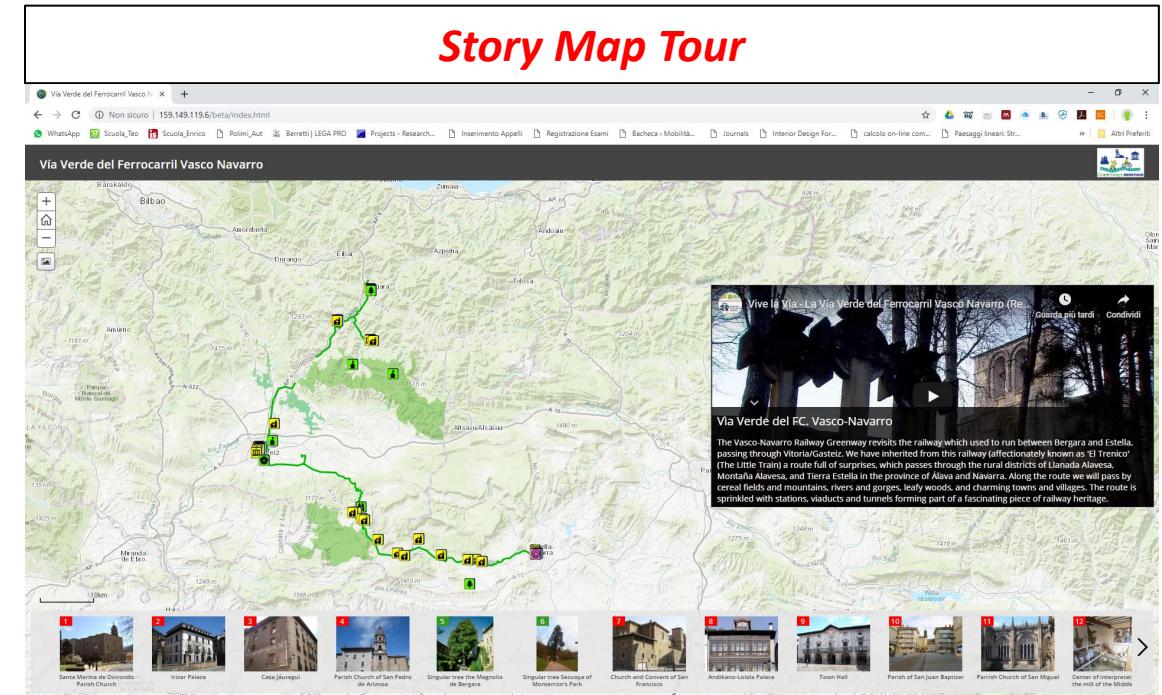
The Database will be **shared with tourists and stakeholders** through the development of a **multiplatform Web-GIS based application** that will run on **any device** and **Operation System**.

The application will be based on the integration of **two tools**:

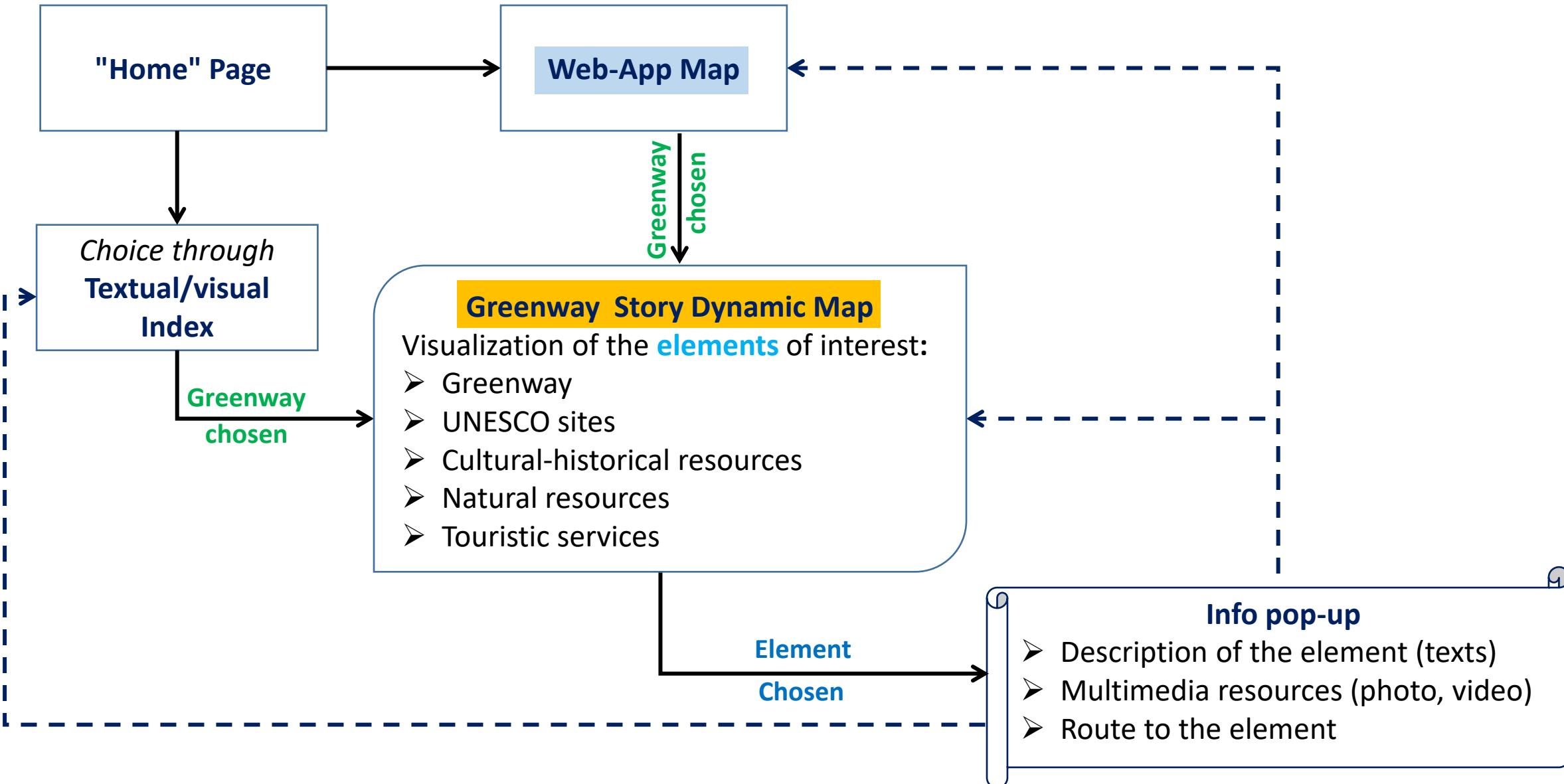
Web App



Story Map Tour

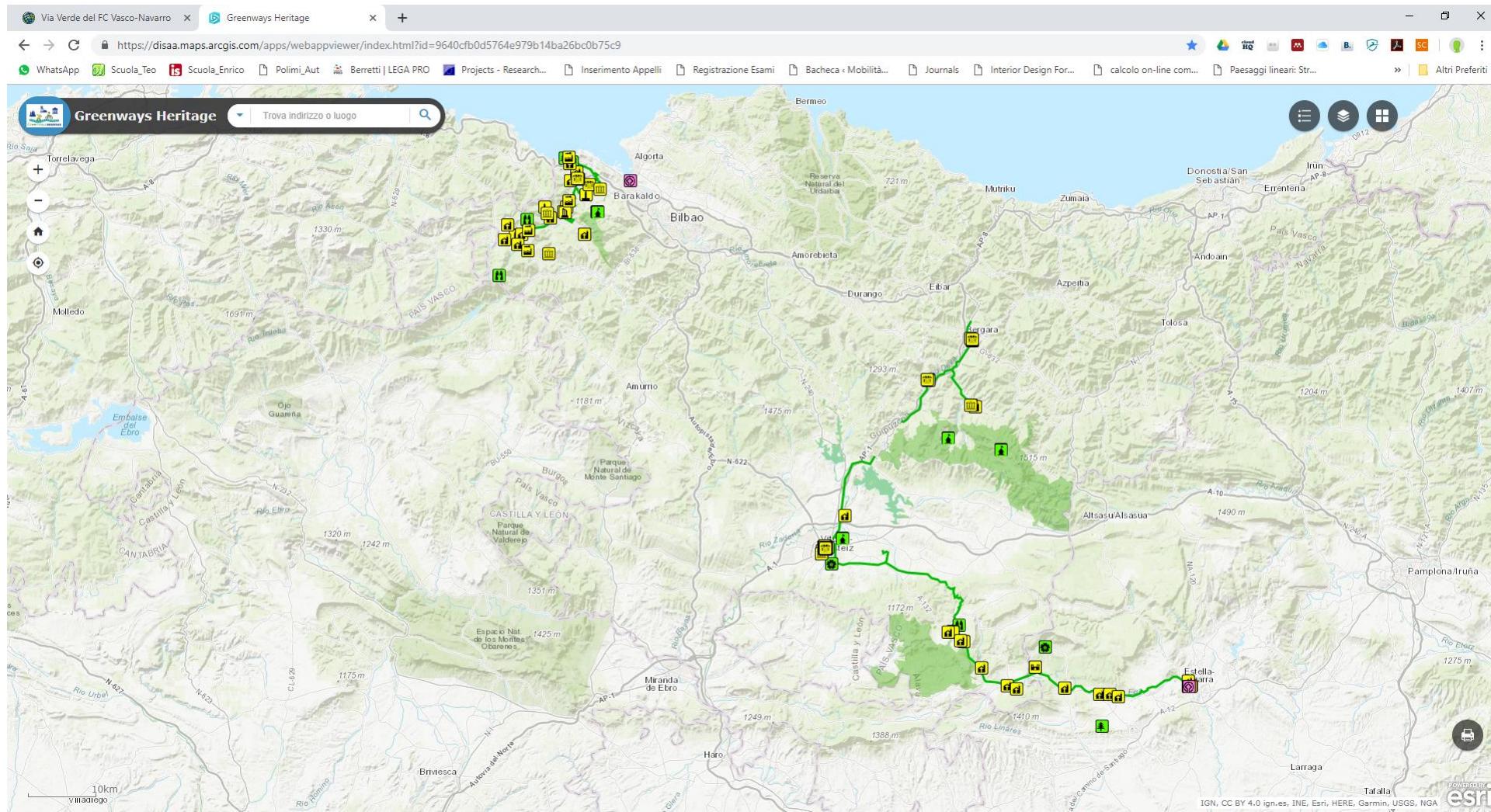


Activity 3: Web-GIS based Multiplatform application



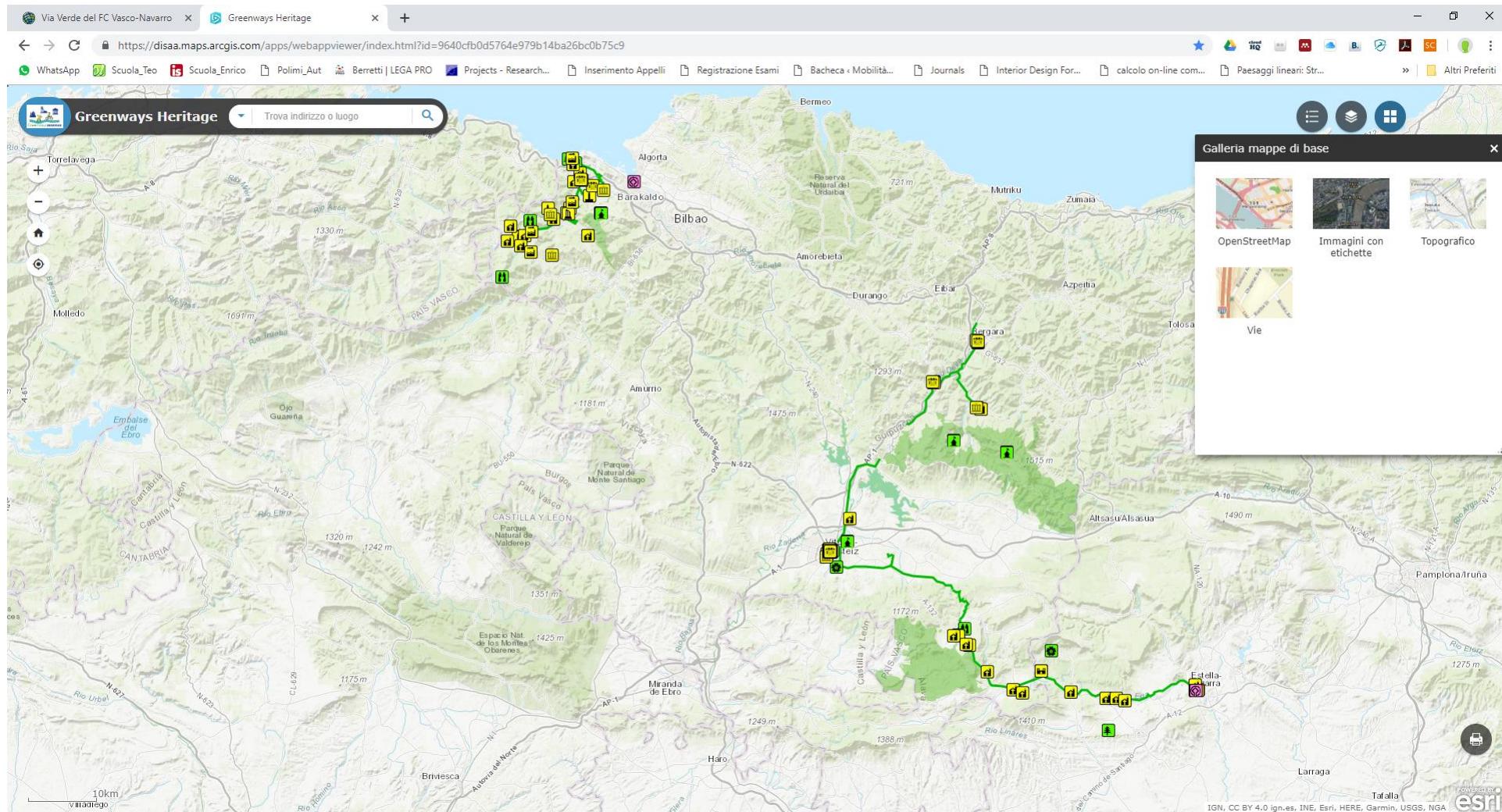
Activity 3: Web-GIS based Multiplatform application

The GIS will be shared to tourists and stakeholders through the development of a Web-GIS based application that will run on any device and OS using the ESRI GIS technologies.



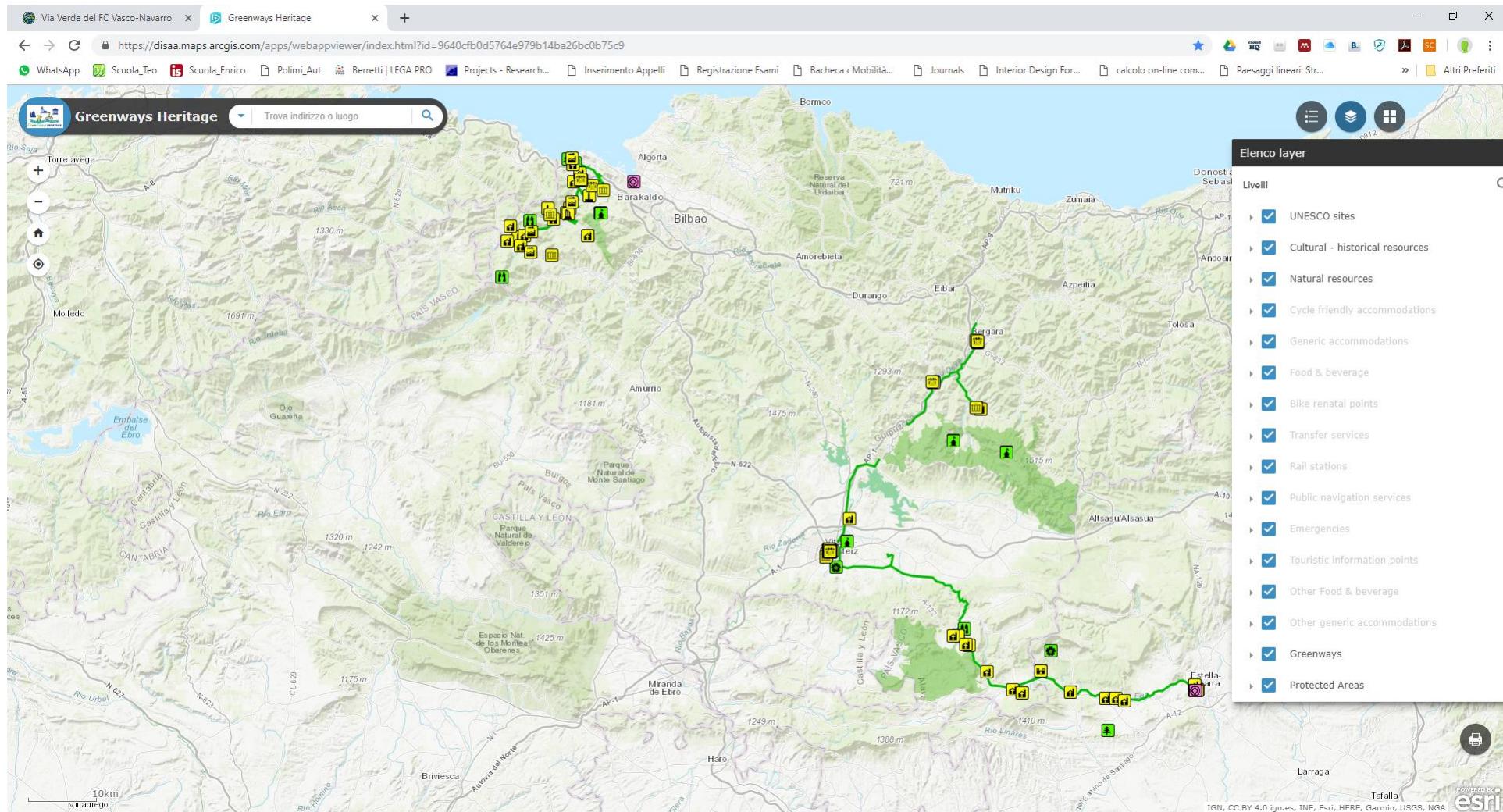
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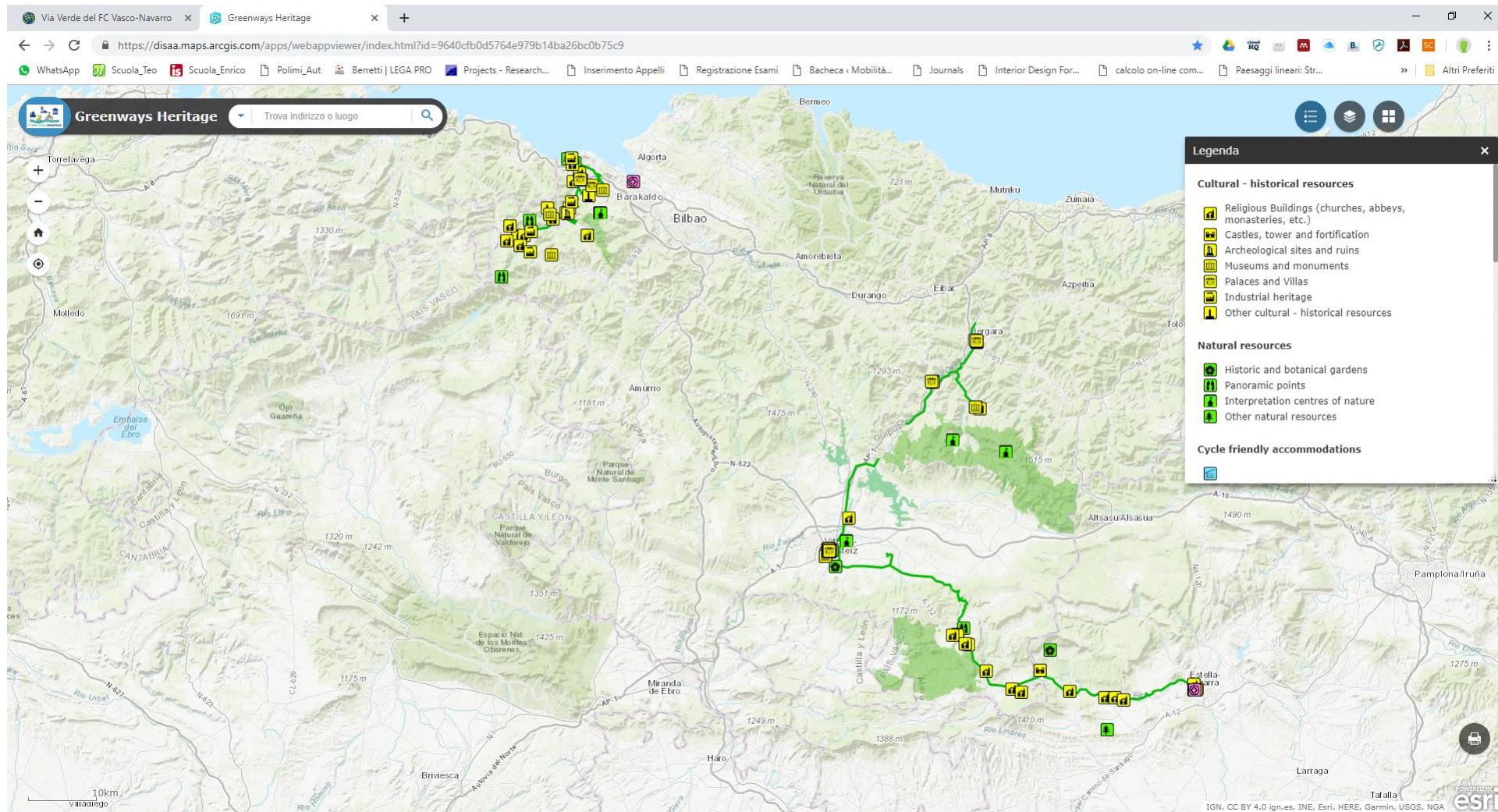
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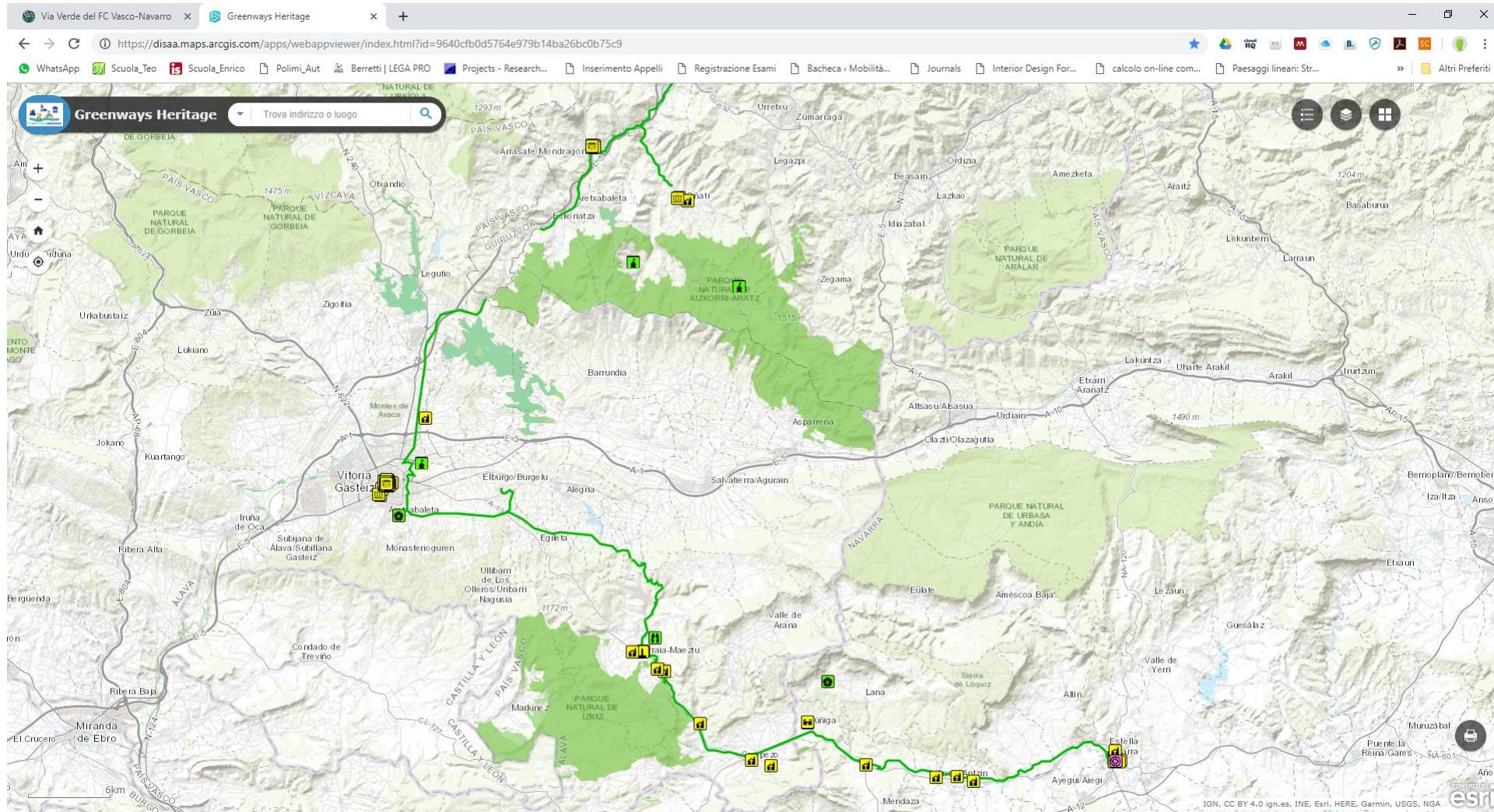
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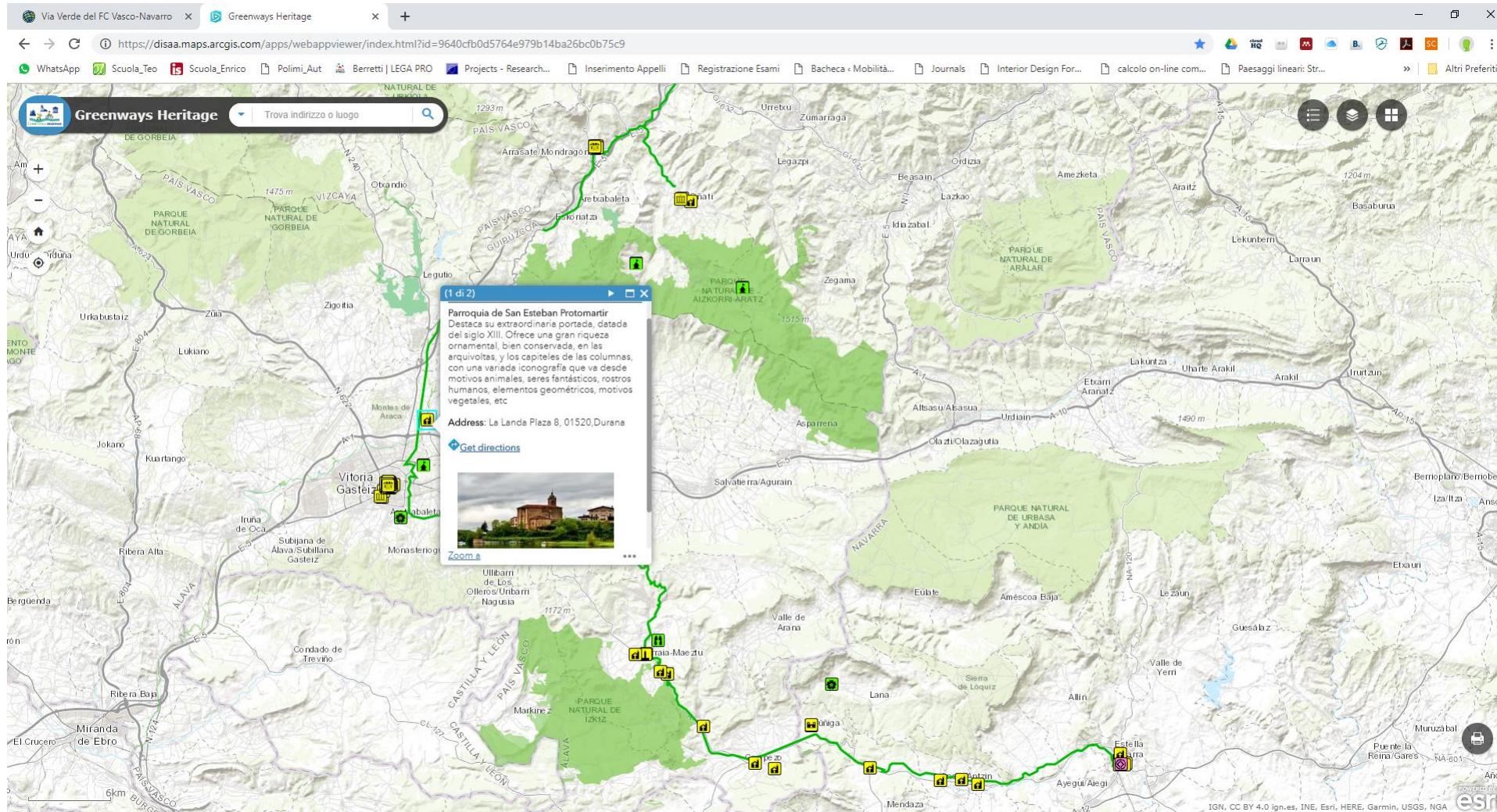
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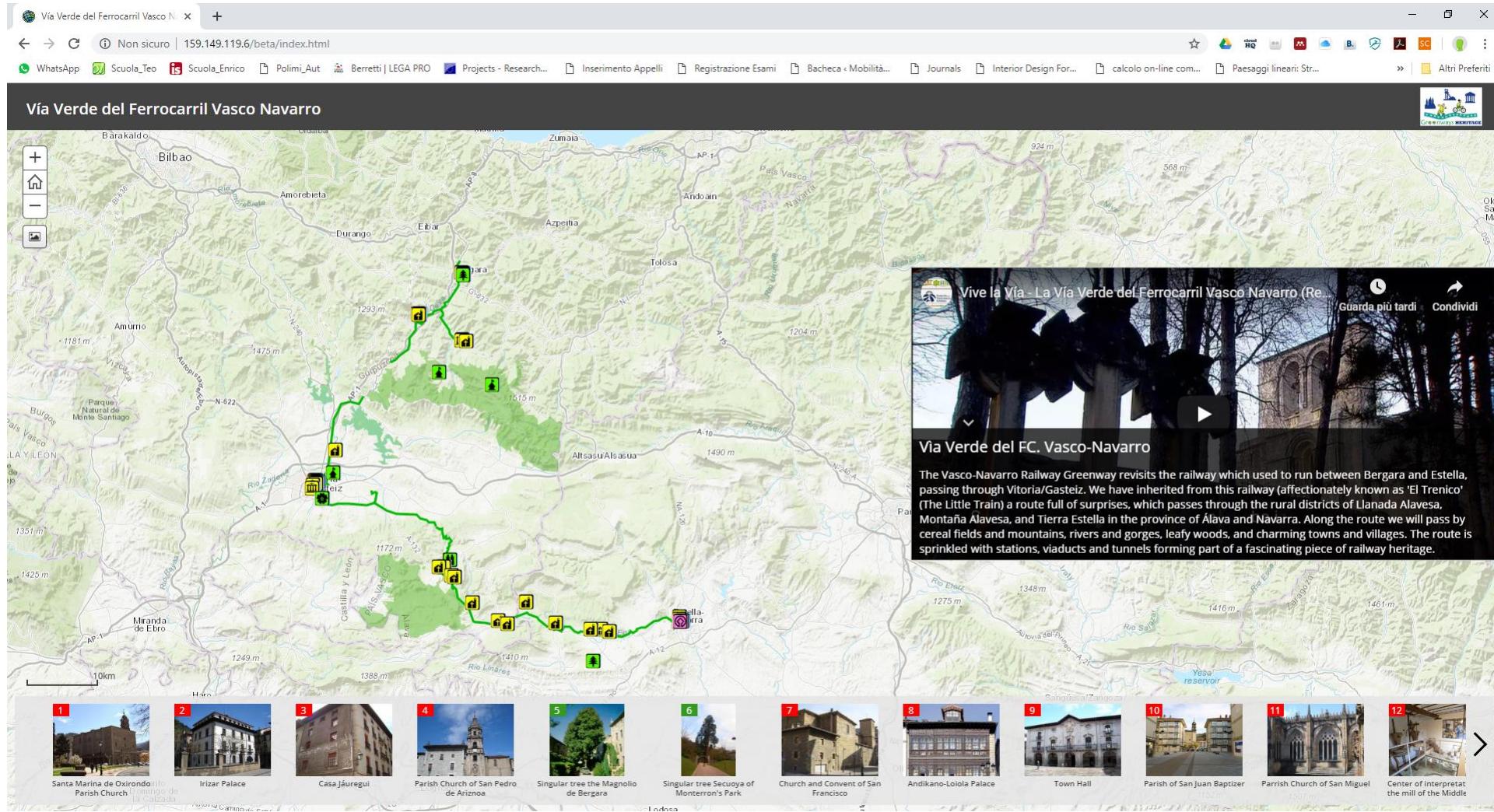
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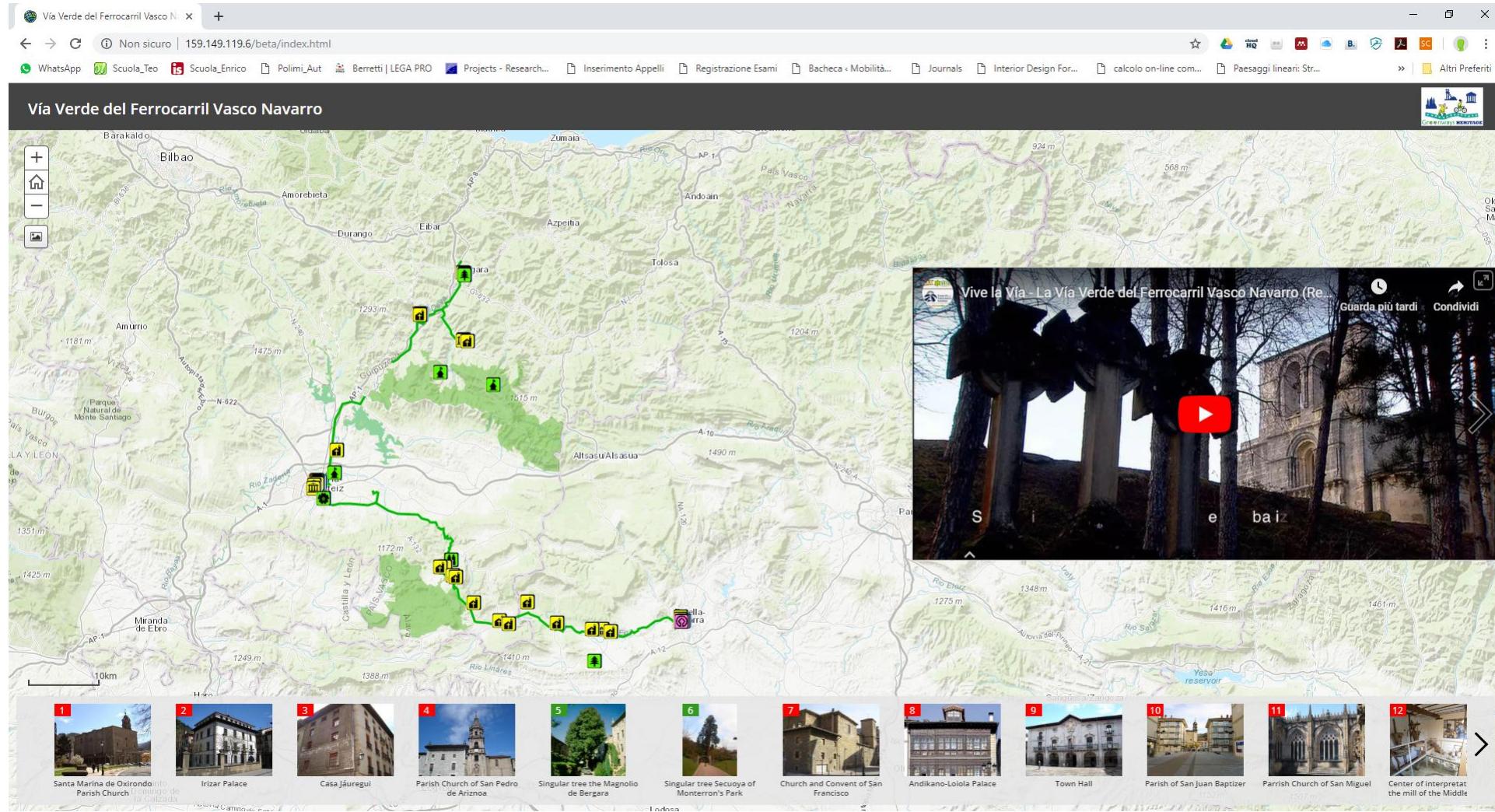
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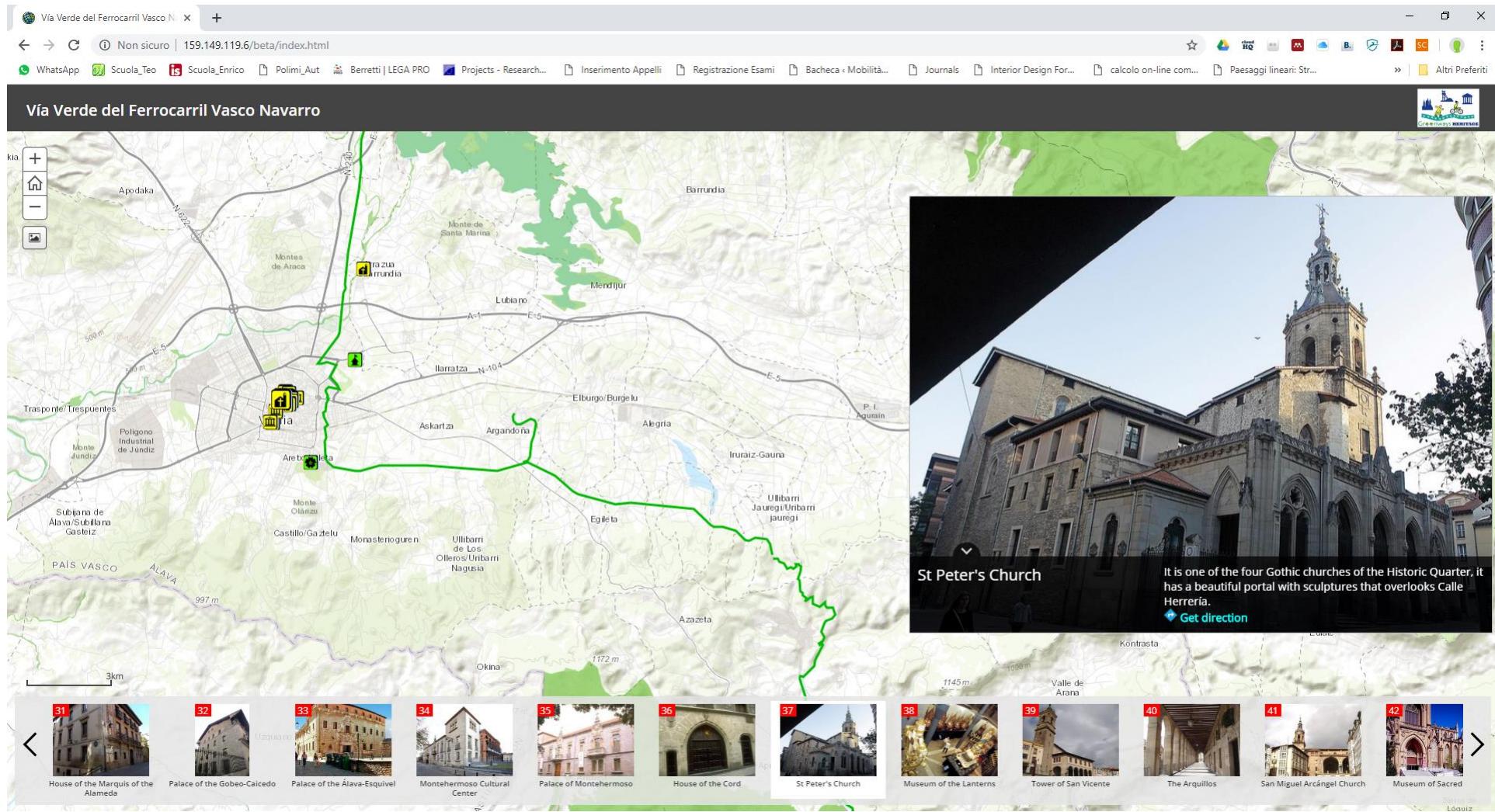
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The screenshot shows a web-based Geographic Information System (GIS) application. The main view is a satellite map of a town and surrounding agricultural fields. A green line highlights a path or route. On the left, there's a zoom control panel with icons for zoom in (+), zoom out (-), and location (home). Below the map is a scale bar indicating 0.4km. In the top right corner, there's a logo for "Get today's HERITAGE". To the right of the map, there's a large image of a botanical garden with trees and a detailed description text. At the bottom, there's a row of thumbnail images showing various landmarks and a navigation bar with arrows and numbers (45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56).

Vía Verde del Ferrocarril Vasco Navarro

Botanical garden of Olarizu

In its more than 120 hectares, the garden houses different collections of plants, among which stands out a representation of the main forests of Europe, besides other vegetable formations, housing more than a thousand different species. It is an ideal place for walking and learning about the world of plants. The best starting point for visiting the Garden is the Casa de la Dehesa, from where you can also access other nearby places of interest, such as the Vitoria Mountains or the Estibaliz Hill, through the many trails that run there, such as the Vuelta al Arillo Verde, the Vía del Vasco de la Vasco, Betonía de la Lloño de la Lloño de la Navada, la Llanada.

Get direction

45 Botanical garden of Olarizu 46 Caves of Obi and El Gueso 47 Church of the Invention of the Holy Cross 48 Fountain of the eight pipes 49 Hermitage of the Virgen del Campo 50 Hermitage of the Loneliness 51 Church of the Assumption of Our Lady 52 Walls 53 Church Santa María de Zúñiga 54 Parish Church of San Vicente Martir 55 Basilica of El Puy 56 Church of San Juan





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Grazie per l'attenzione

Giulio Senes