



FINAL CONFERENCE

Genoa case study

Activities in promoting walking in urban areas

March 6th, 2024



ILS Research gGmbH



COMUNE DI GENOVA



UNIVERSITY
OF GÄVLE



ERA-NET Cofund Urban Accessibility and Connectivity



European
Commission

URBAN EUROPE



Accessibility measures in Genoa

P.E.B.A. Removal Architectural Barriers Plan

AI4PP «ARTIFICIAL INTELLIGENCE 4 PUBLIC POLICY» Project
Genoa pilot case study: Citizens and Business Services Optimization

Improvement of pedestrian crossings in the municipal territory
Program

Road safety interventions for the protection of pedestrians projects



Goal:

increase accessibility and safety
to walk in urban areas of Genoa



P.E.B.A. Removal Architectural Barriers Plan

P.E.B.A. is a tool aimed at identifying, planning and monitoring interventions to remove architectural barriers in urban public space and in public buildings

- The Plan carries out an analysis by the point of view of physical and sensorial accessibility
- The Municipality identified on maps some areas under observation, dividing them in 94 areas highlighted with four different colors depending on the accessibility level:
 - green: accessible
 - yellow: partially accessible
 - orange: partially inaccessible
 - red: inaccessible



Inside the areas are identified the paths investigated for the presence or absence of architectural barriers for disables.

Furthermore, the maps identify the parts of the city of interest and in which the accessibility interventions will be realized





P.E.B.A. Removal Architectural Barriers Plan

Interactive maps available on <https://smart.comune.genova.it/notizie/la-mappa-comunale-l%E2%80%99eliminazione-delle-barriere-architettoniche-peba>
(open data) with georeferenced information

P.E.B.A. - Piano di Eliminazione delle Barriere Architettoniche

In questa sezione del Geoportale puoi visionare la mappa inerente le informazioni riguardanti il Piano di Eliminazione delle Barriere Architettoniche del Comune di Genova.

1. Il Territorio Comunale è stato suddiviso in Ambiti di Accessibilità (Raggruppamento di funzioni).

- In Arancione gli Ambiti di Accessibilità rilevati.
- In Bianco gli Ambiti di Accessibilità che verranno progressivamente rilevati.

Accessibilità

- Abbattimento Barriere
- PE.B.A.
- Contributo Abbattimento Barriere in edifici privati
- Formazione
- Segnalazione barriere architettoniche
- Servizio online**

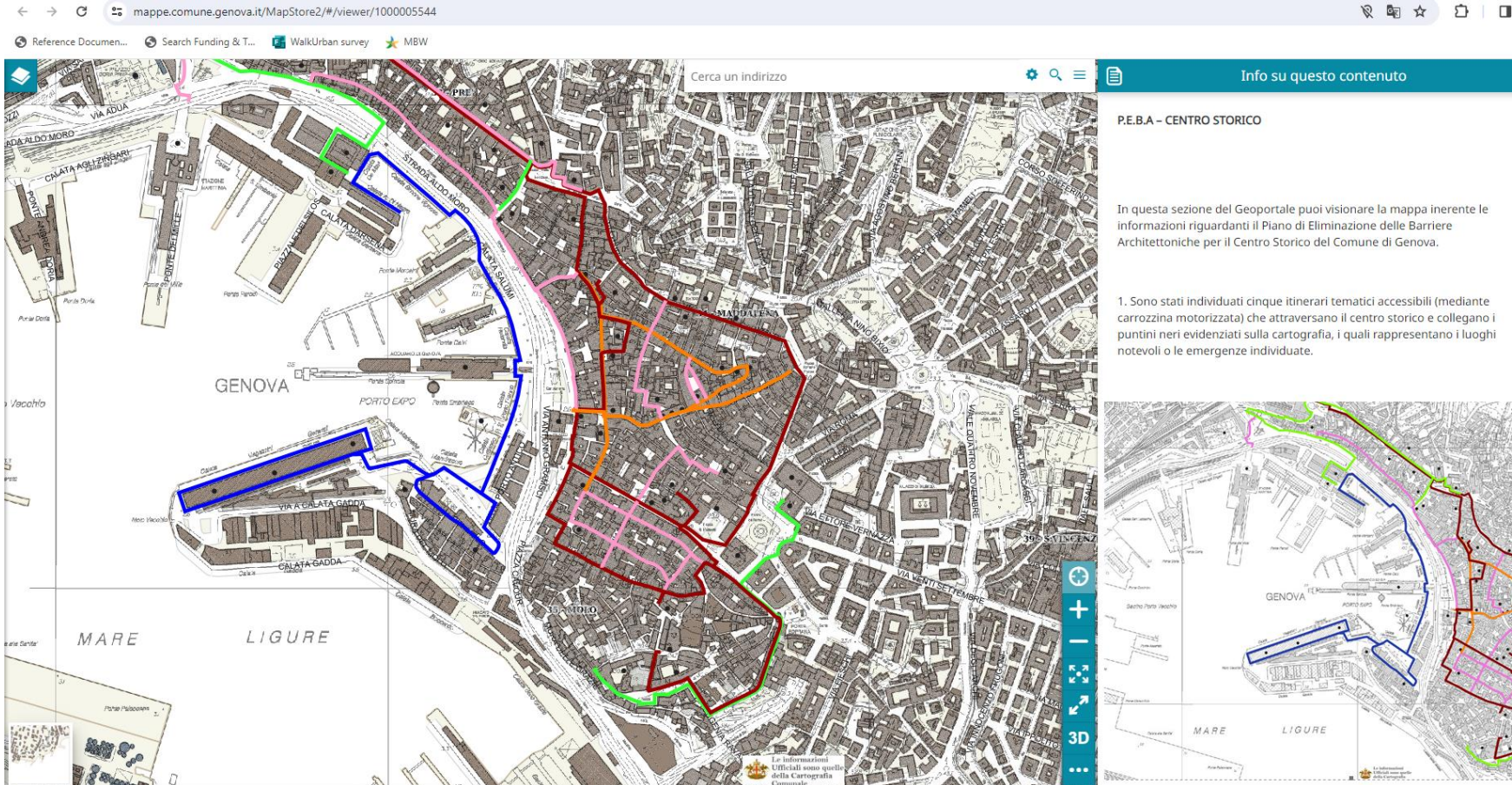
Documenti

- Relazione Generale
- Allegato A - Sintesi
- Allegato B - Sintesi
- Tavola 1 - Analisi
- Tavola 2 - Piano di Eliminazione
- Tavola 3 - Analisi
- Tavola 4A - Sintesi
- Tavola 4B - Sintesi
- Tavola 5 - Interventi
- Tavola 6 - Sintesi

Genoa is the first city in Italy with a P.E.B.A. totally georeferenced and with free and accessible data on a dedicated website



P.E.B.A. Removal Architectural Barriers Plan



Focus on the historical center
Five accessible "thematic itineraries" identified:

- Art and culture
- Instruction
- Free time
- Shops
- Other Routes

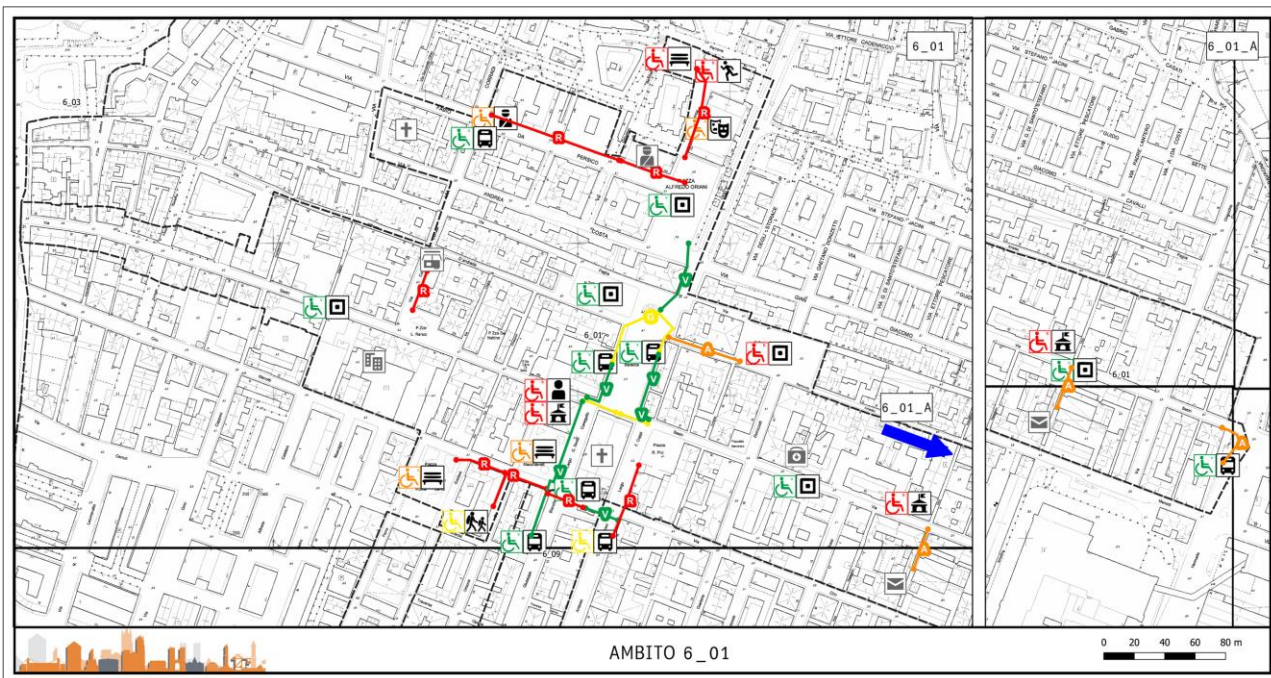
in which the main points of interest are located (i.e. monuments, museums, historical shops etc, with indication of level of accessibility)



P.E.B.A. Removal Architectural Barriers Plan

USEFUL TO:

- **Public administration** to plan interventions to remove architectural barriers
- **Designers** as instrument and database for future actions
- **Citizens**, that have free access to “Geoportale” maps to verify and also report critical issues along a path to access to a public infrastructure






AI4PP ARTIFICIAL INTELLIGENCE 4 PUBLIC POLICY



Project Title: Automated, Transparent Citizen-Centric Public Policy Making based on Trusted Artificial Intelligence

- Duration: 36 months (from March 2021)
- Program: Horizon 2020
- Consortium: 16 Partner

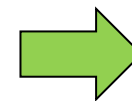
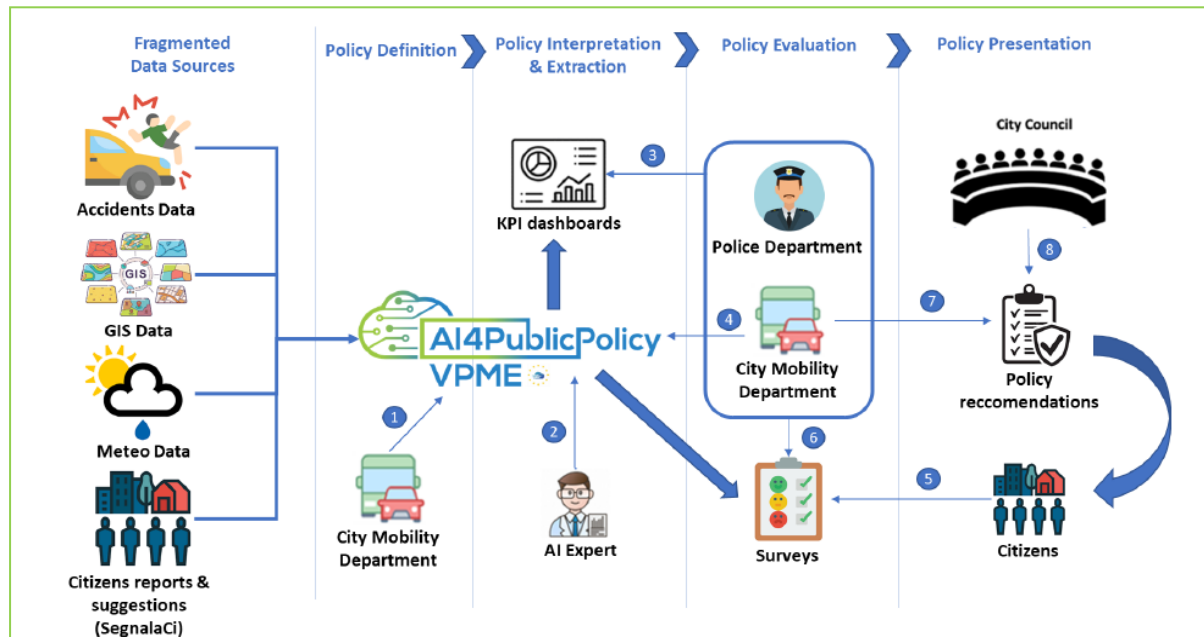
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AI4PP ARTIFICIAL INTELLIGENCE 4 PUBLIC POLICY

OBJECTIVE

Development of public policy as result of a decision-making process based on data analysis through Artificial Intelligence tools and with the involvement of citizens



SOLUTION

A cloud application provides to public administrators resources and tools to develop public policies in cooperation with AI experts, citizens and in synergy with other administrations

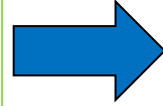
Case studies to demonstrate the potential of the solution



AI4PP ARTIFICIAL INTELLIGENCE 4 PUBLIC POLICY

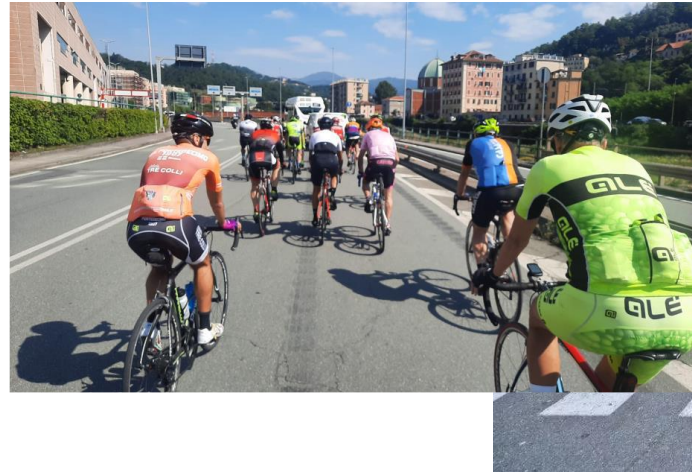
Genoa pilot: Citizens and Business Services Optimization

Analysis of pedestrian and road accidents with a particular focus on vulnerable users (pedestrians, cyclists, children and teenagers)



Define a model to compute the danger index of city areas for vulnerable categories in relation to different events (meteo, environmental, morphological, traffic, ...) in order to provide information and predictive analysis to define interventions aimed at reducing danger for the users

Input Data:
Road accidents
Meteo
Citizen reports
GIS





AI4PP ARTIFICIAL INTELLIGENCE 4 PUBLIC POLICY

Focus on Genova pilot

Policy 1: Identification of the most urgent pedestrian crossings to improve

- Automatic collection of input data requested by model
- Classification of crossings
- Possibility to modify the characteristics of the crossings already classified to assess the impact the interventions

Policy 2: Identification and reduction of the danger index of city areas for vulnerable subjects

- Automatic collection of input data required by the model
- Estimated accident risk
- Subdivision in sub-areas to facilitate analysis
- Visualization with respect to the city districts and Urban Planning Units

Policy 3: Evaluation and increase of the safety level of pedibus routes

Intervention not implemented but useful for possible future developments

- Visualization of pedibus routes
- Evaluation of danger level of involved crossings and areas
- Simulation of the impact of possible risk reduction actions



Improvement of pedestrian crossings in the municipal territory Program

Program started in 2020, in order to carry out interventions in Genoa urban road network to:

increase visibility of pedestrians and improve the infrastructural characteristics of the crossings to decrease the risk factors of accidents:

10 crossings to be upgraded identified

Subject of interventions:

- ❑ Crossing lighting system improvement (luminous signage poles and road signs)

Method to define priority of interventions:

Evaluation of 4 parameters:

1. Frequency of accidents
2. Pedestrian flow
3. Technical critical issues
4. Reports from users and city districts (neighborhoods)

Each parameter has a weight based on the risk level → priority of implementation of the interventions





Road safety interventions for the protection of pedestrians

The projects, funded by the Italian Infrastructure and Transport Ministry (starting from spring 2024 until June 2025), will be implemented in the areas of the municipal territory identified as most critical in terms of accidents:

The 30 interventions divided in 3 macro categories:

- traffic lights for pedestrian crossings (activated by pedestrian button crossings with special devices for blind and physically disabled)
- creation of new pedestrian crossings or improvement of existing ones (visibility and brightness increase)
- creation of stretches of extended pavement (guarantees shorter pedestrian crossings and removal of architectural barriers)





Thank you for your attention!

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