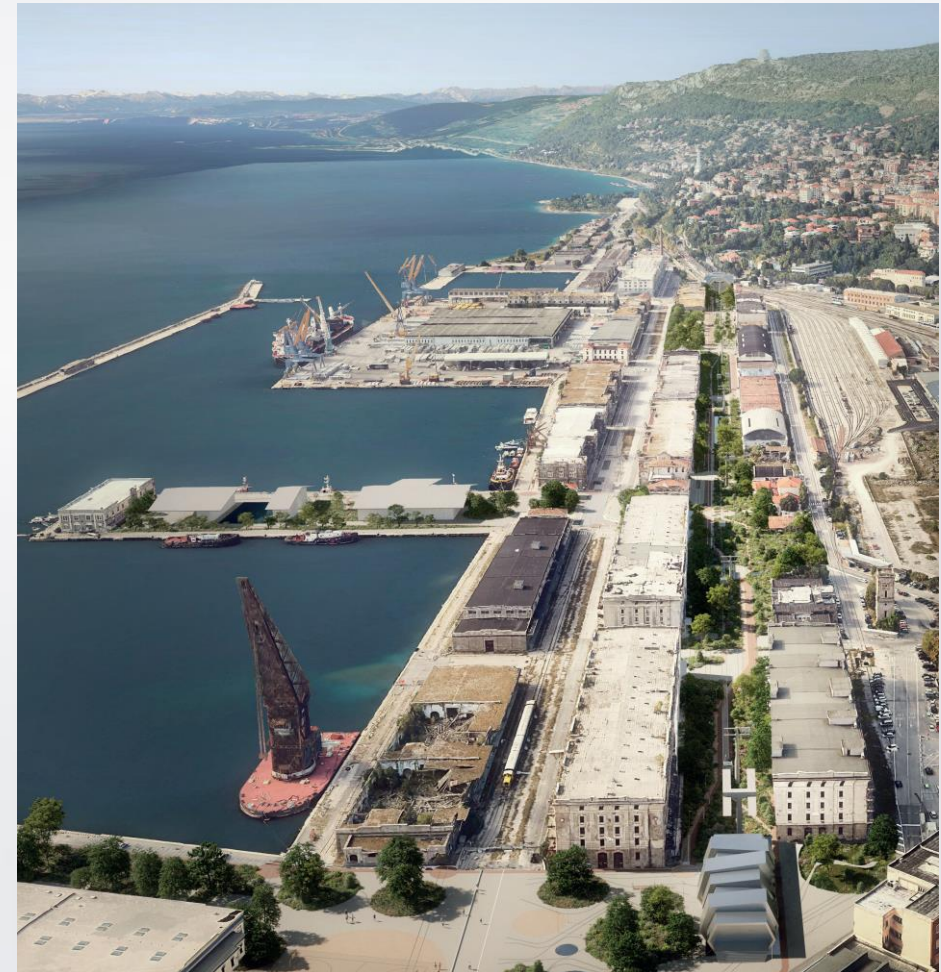


## **Improving accessibility of segregated urban areas: the new cable-car project of Trieste**

*Michele Babuder and Giulio Bernetti,  
Municipality of Trieste, Italy*



# Trieste and Friuli Venezia Giulia

POPULATION  
1,198,753

AREA  
7,932 Sq. km

- ✓ **Strategic hub** Key role linking the Mediterranean Sea to Central and Eastern Europe
- ✓ **Export propensity** First Italian region for export/GDP ratio
- ✓ **Science and Innovation System (SiS)\*** over 10,000 international researchers and employees
- ✓ **Autonomous region with a special status** Fiscal and financial autonomy, high rating
- ✓ **FVG has a lower tax burden compared to Italy** (-21.7%) (Source: Sole24Ore)
- ✓ **Trieste is the capital of Friuli Venezia Giulia**



# Trieste

Trieste, a Middle-European city, includes a medieval city center, a neoclassical neighborhood from the Austrian period and residential areas which have developed in the 20th century

High rank in Italy in 2021 for quality of life

Tourism has been growing fast in the last years.

Strategic location in the heart of Europe, at the intersection between shipping routes and the Baltic-Adriatic and Mediterranean TEN-T core network corridors.

Leading Italian port in terms of tons of handled goods with a long standing maritime tradition. Unique status of the Free Port Zones which has remained a distinctive feature of the Port of Trieste throughout its history.



# Trieste – Infrastructures and Services



- 3 stations connected to the main railway line, 2 currently active.
- Main transport gateway to Eastern Europe (Slovenia and Croatia).



- Central position between Venice (1h40'), Ljubljana (1h) and Zagreb (2h40').
- Torino-Trieste A4 Motorway.



- 4 airports within 150km.
- *Ronchi dei Legionari Airport* at 20Km



- 3 Cruise terminals
- 8 Commercial Terminal Operators
- The terminals are equipped with modern technology for handling, transportation and storage of all types of traffic



- 3 hospitals, 54 units, 922 beds.
- Centre of excellence for pediatric care (Burlo Garofolo Hospital).
- Trieste Mental Health Department has been included by WHO as a Collaborating Centre (CC) for Research and Training in Mental Health.



- In 2020, Trieste has been elected European Capital of Science.
- Trieste is the European city with the highest density of researchers (37.1 research workers for ever 1,000 workers)



- Long sailing tradition, i.e. a high number of international boat races (Barcolana), sailing schools and sailing companies.
- 2 Touristic marinas and 8 yacht clubs on a population of 200k.
- 24 sailing associations in the Gulf of Trieste with 13,400 members.

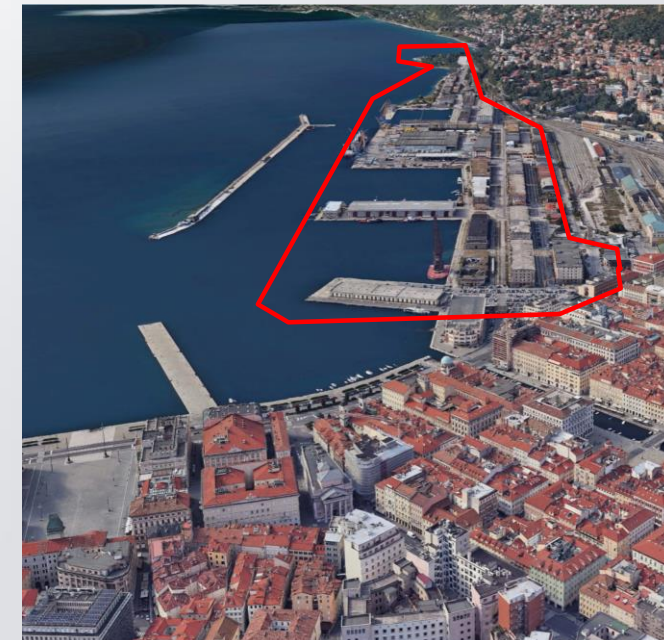
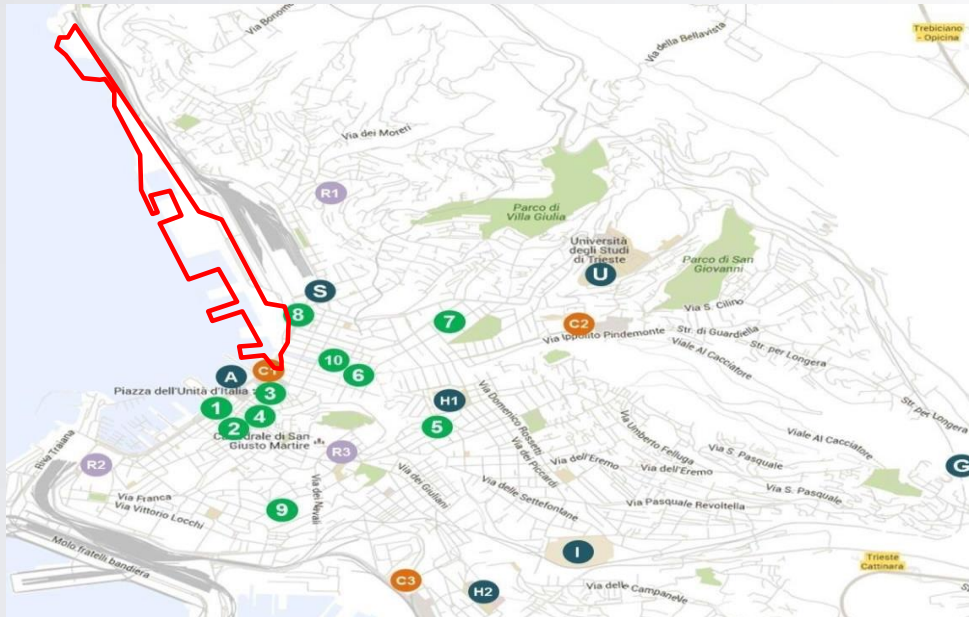
# Trieste – The Old Port

*The **Old Port of Trieste** is an area of more of 66 hectares located at the city center. It's one of the most important examples of maritime industrial archaeology in the Mediterranean.*

It consists of a succession of **large buildings**, originally used as **warehouses** for goods in transit under the regime of the Free Port of Trieste. It includes: **5 piers and 23 large buildings (Warehouses and Other structures)**

*The area is subject to a project of renovation and urban regeneration.*

**Ownership:** Municipality of Trieste



# The Old Port

## ✓ Projects and infrastructures for public areas

Bovedo Parking  
(0,5 millions)

Contaminated area  
(5 millions)

Sport  
(4,7 millions)

Infrastructures -  
first lot (5 millions)

Infrastructures -  
second lot (9 millions)

Linear Park  
(23,1 milion)

Viale Monumentale  
(19 millions)



# The Old Port

## ✓ Public and Private Investors for Warehouses

Congress Center  
(9+9 millions)



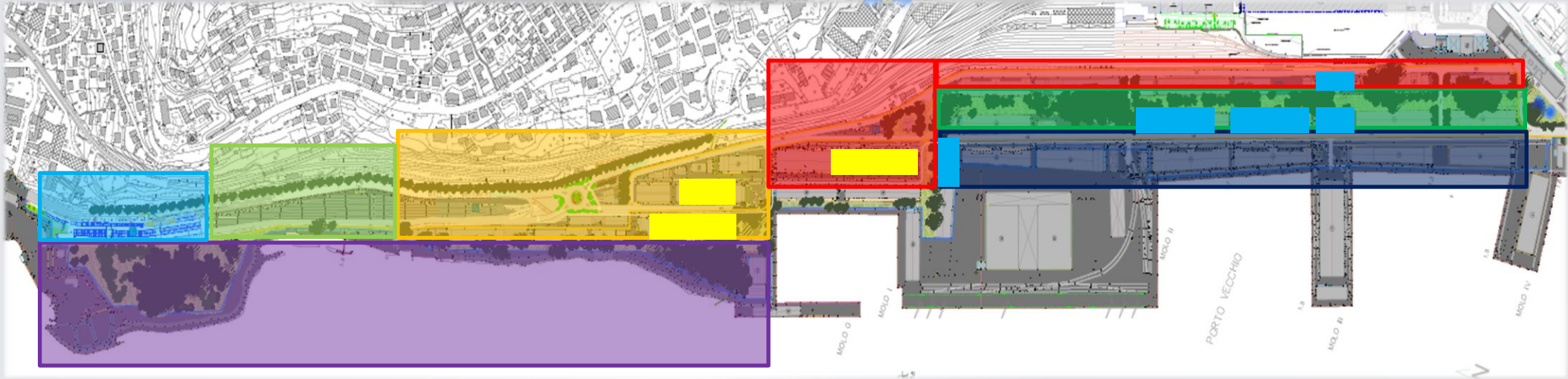
Museum of the Sea  
(33 millions)



Regional Administration  
Offices



Private Investors



# The Old Port

- ✓ *All the old warehouses will become Offices, Hotels, Shops, Museums, Residences...*
- ✓ *More than 1 million of m<sup>3</sup>: more than 20.000 movement/days are expected*



- ✓ *The Old Port is restricted between the sea and the railways*

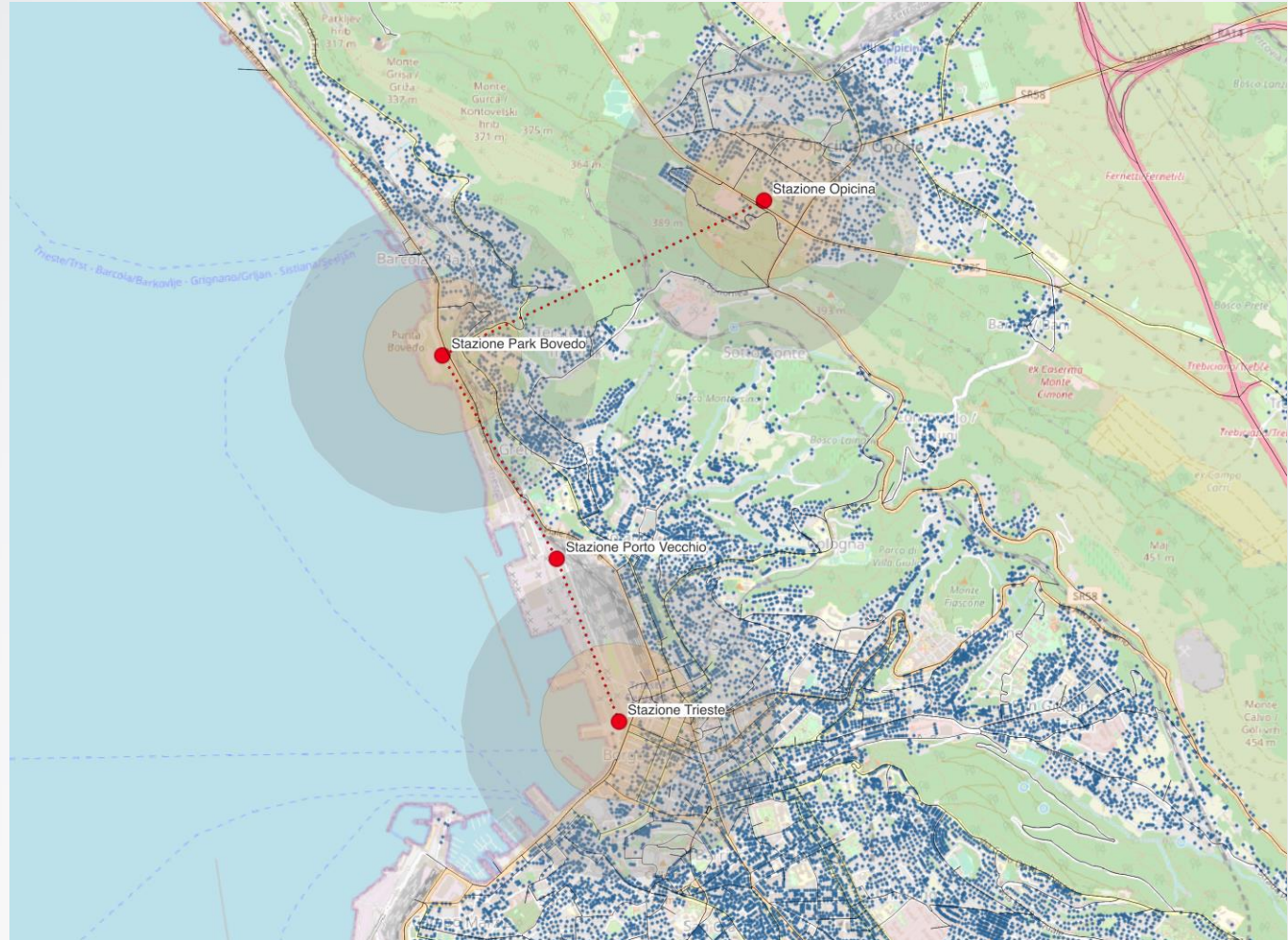


# The Old Port

✓ We can try to get it by flying... A new Cable Car System

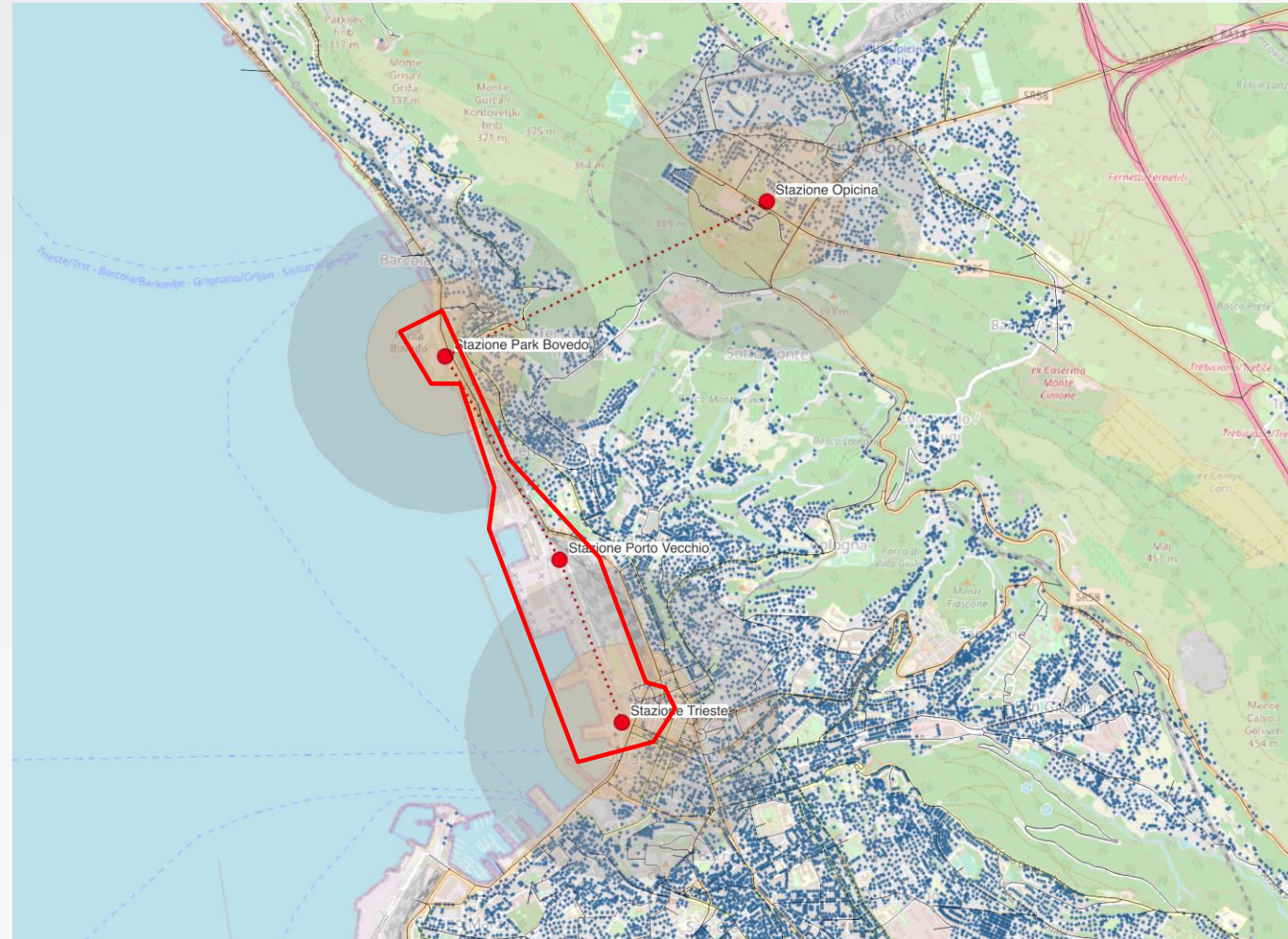


# The Cable-Car system: 62 millions (Recovery Fund)



# The Cable-Car system: many goals

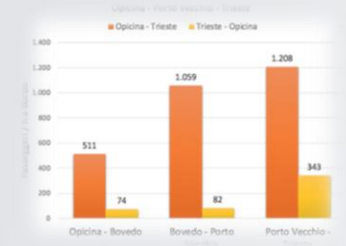
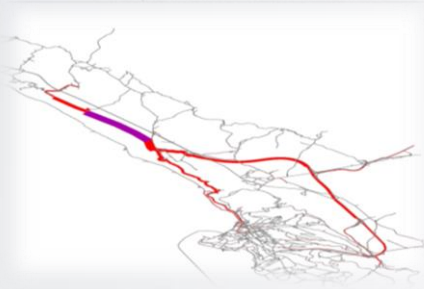
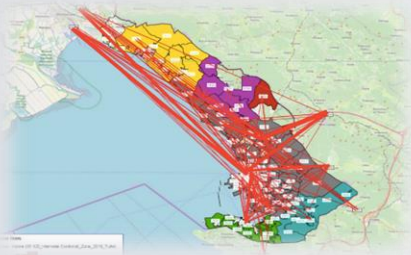
The Old Port



# The Cable-Car system: many goals

The Old Port

The North Access



Probabilità uso mezzo privato

$$P_{tpr} = \frac{e^{U_{tpr}}}{(e^{U_{tpr}} + e^{U_{tpl}})}$$

Utilità uso mezzo privato

$$U(TPR) = \beta_{1,TPR} * T_{TPR} + \beta_C * C_{TPR}$$

Probabilità uso mezzo tpl

$$P_{tpl} = \frac{e^{U_{tpl}}}{(e^{U_{tpr}} + e^{U_{tpl}})}$$

Utilità uso mezzo tpl

$$U(TPL) = \beta_{1,TPL} * T_{TPL} + \beta_C * C_{TPL} + \beta_{TR} * T_{PL}$$

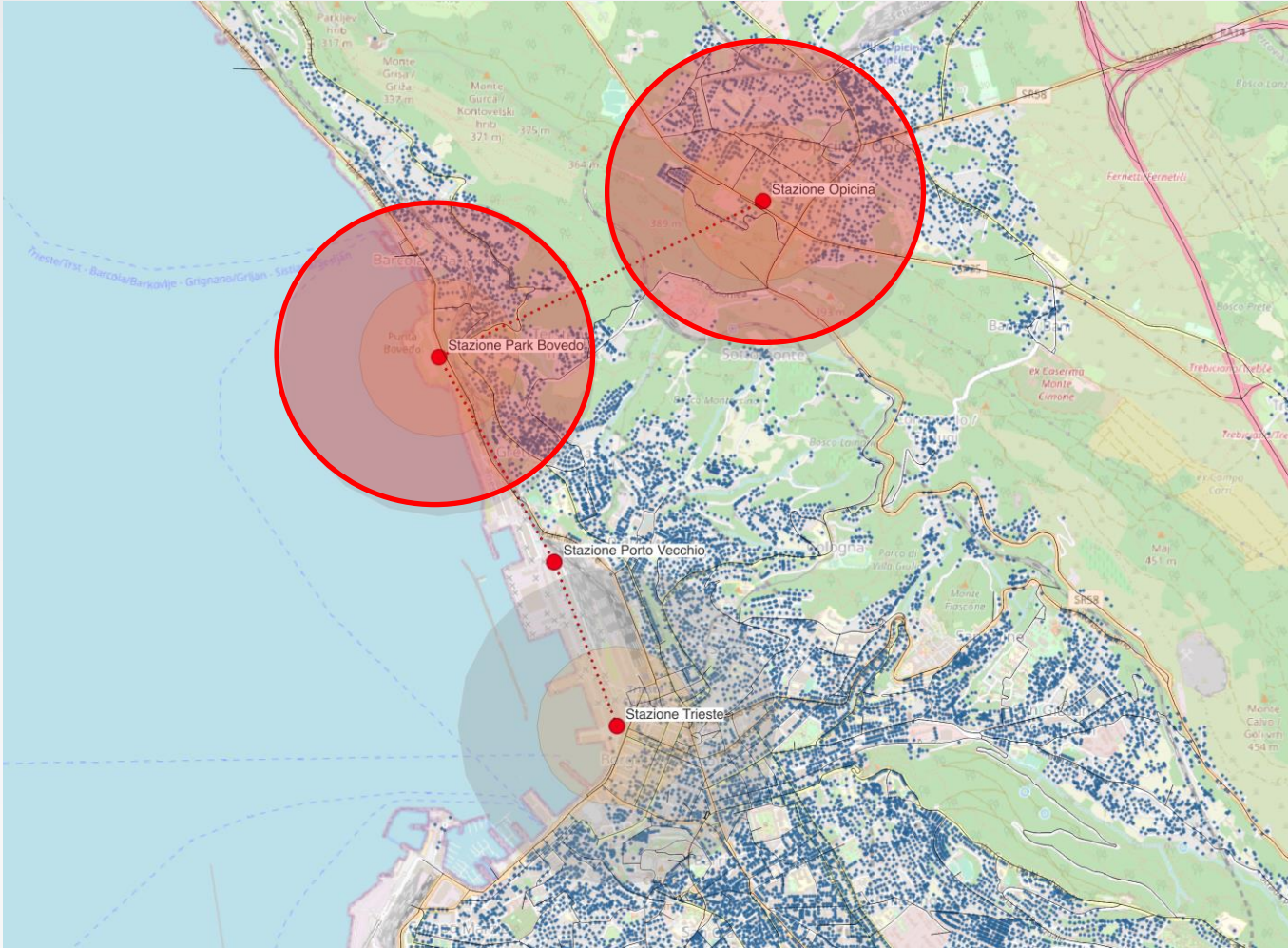


# The Cable-Car system: many goals

The Old Port

The North Access

Barcola-Opicina



# The Cable-Car system: many goals

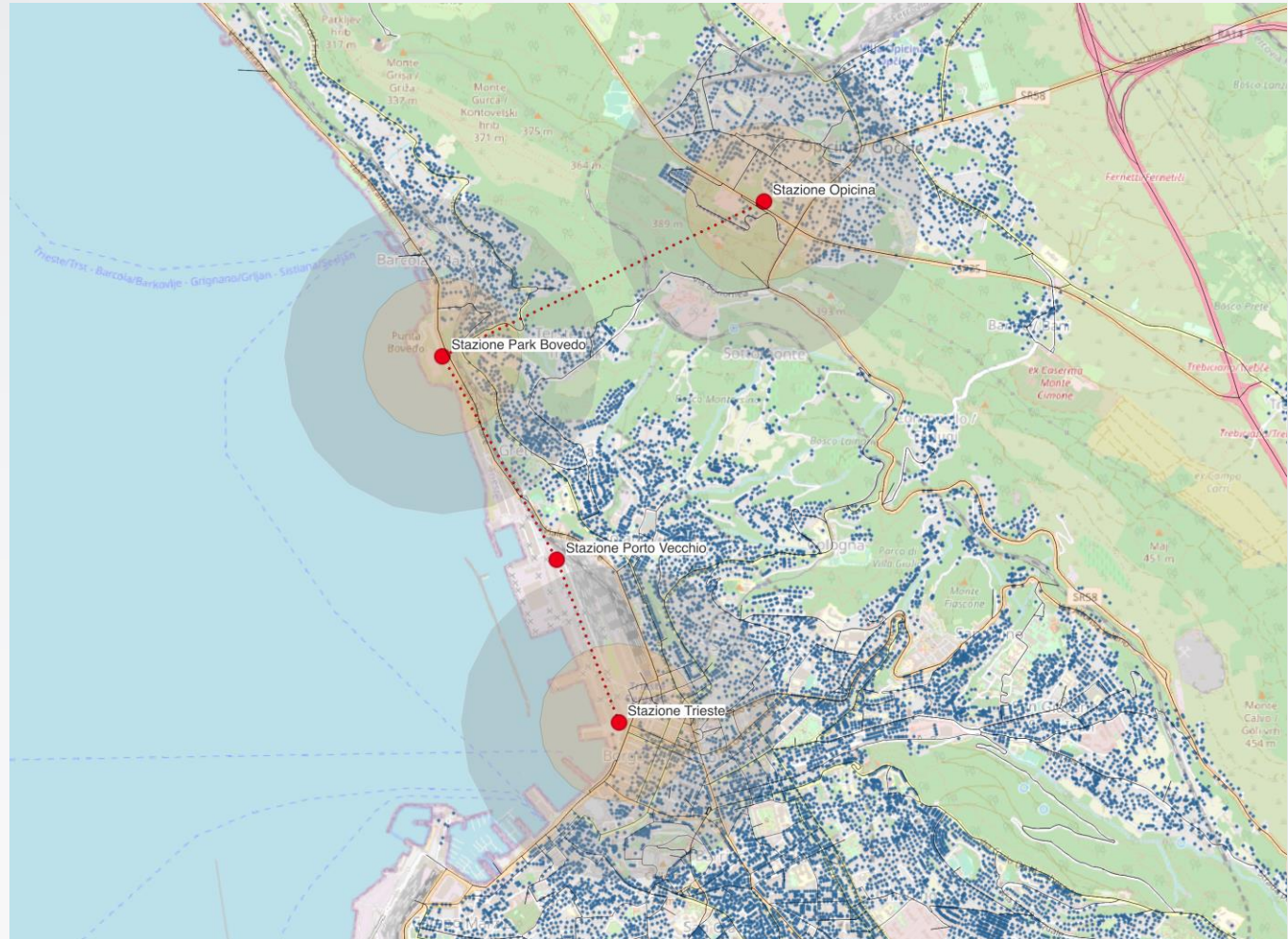
The Old Port

The North Access

Barcola-Opicina

Tourism

- ✓ *Cyclist*
- ✓ *Coach and Bus*
- ✓ *Tourist attraction*



# The Old Port: a new full multimodal system



# Thank You for Your Attention

Municipality of Trieste

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