

CONNECTIONS WITH THE HINTERLAND TO SUPPORT POPULATION, ECONOMY AND TOURISM

Pianificazione dei trasporti

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CHAPTER 1 → FRAMEWORK OF THE TERRITORY

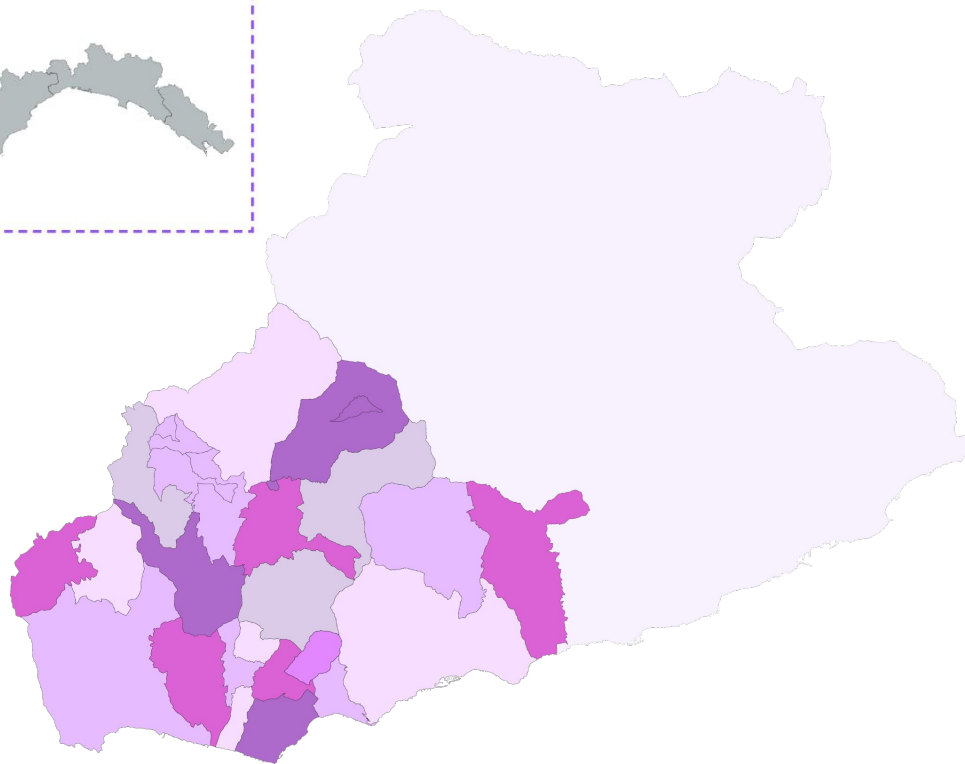
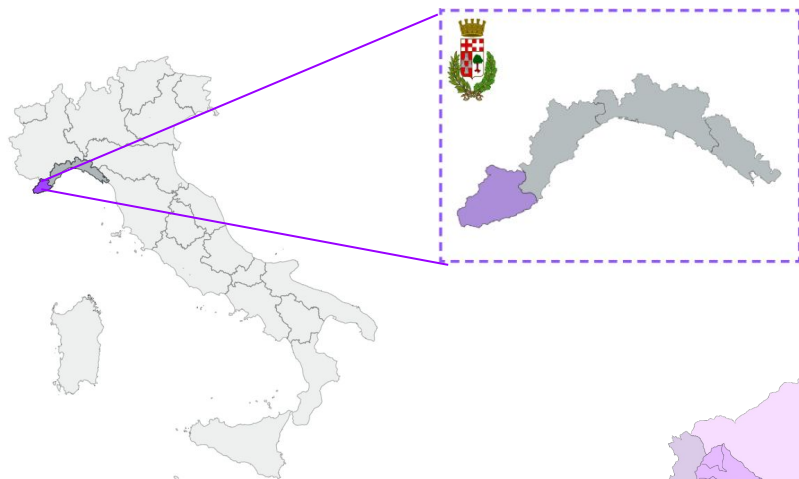
CHAPTER 2 → TRANSPORT OFFER

CHAPTER 3 → “DESIRE LINES”

CHAPTER 4 → MASTERPLAN

CHAPTER 1: TERRITORIAL FRAMEWORK

Italy, Liguria → Imperia → 22 MUNICIPALITIES



1. Pigna
2. Isolabona
3. Castelvittorio
4. Baiardo
5. Apricale
6. Rocchetta Nervina
7. Airole
8. Dolceacqua
9. Perinaldo
10. Ceriana
11. Taggia
12. Sanremo
13. Seborga
14. Ospedaletti
15. Vallebona
16. Soldano
17. Bordighera
18. Vallecrosia
19. Campososso
20. San Biagio
21. Ventimiglia
22. Olivetta San Michele

CHAPTER 1: POPULATION ANALYSIS

To understand how the population lives in a territory, it is important to first ask ourselves and investigate in quantitative terms how many people live in the municipalities under investigation. Starting from this, the analysis relating to the question is developed:

“What are the characteristics of the population living in these places?”

COMUNI	TOTALE POPOLAZIONE RESIDENTE
Airole	370
Apricale	612
Bajardo	364
Bordighera	10203
Camporosso	5611
Castel Vittorio	249
Ceriana	1075
Dolceacqua	2148
Isolabona	677
Olivetta San Michele	197
Ospedaletti	3174
Perinaldo	807
Pigna	741
Rocchetta Nervina	283
San Biagio della Cima	1238
Sanremo	53039
Seborga	278
Soldano	974
Taggia	13766
Vallebona	1207
Vallecrosia	6751
Ventimiglia	22927
TOTALE	126691

Most of the population residing in the province of Imperia is concentrated in the coastal municipalities, where the urbanized fabric is more developed and work, tourism and service opportunities are more present.

It is essential to identify, in relation to each municipality of analysis, the number of employees in the different economic working sectors of each municipality.



In the coastal municipalities:

The economy is supported by a highly developed tertiary sector, based on tourism and trade, which attracts manpower and hours of a wide variety of jobs.

In the Hinterland municipalities:

The economy is mainly based on small agricultural and artisan businesses, which despite having a high cultural and territorial value, are unable to guarantee sufficient job opportunities.

COAST

The coastal municipalities such as Sanremo, Ventimiglia, Bordighera and Ospedaletti are those with the greatest number of hotels and accommodation facilities.

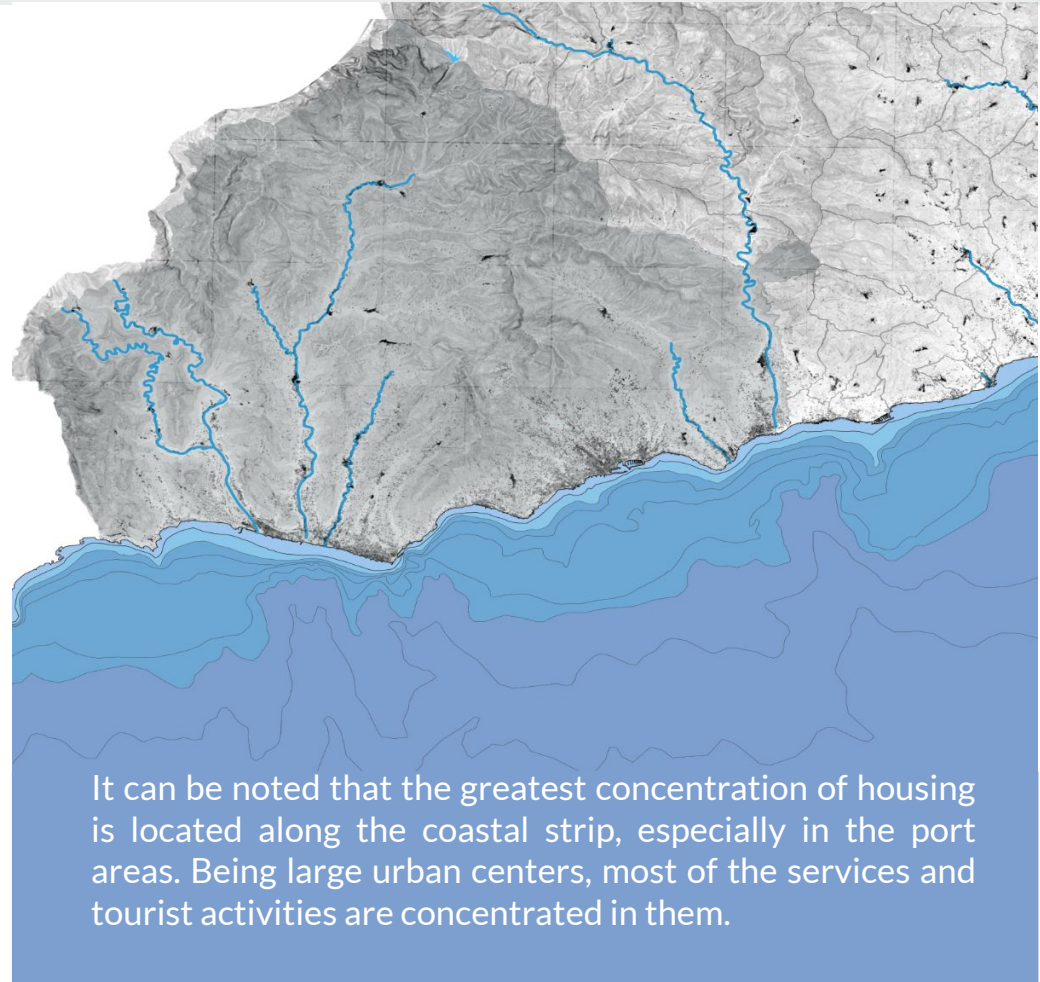
The Ligurian coast is known for being a very popular tourist destination for its mild climate, beaches and sea, attractions that attract Italian and international tourists throughout the year, but especially in the summer months

HINTERLAND

The hinterland benefits from slower and more sustainable tourism, with visitors often interested in local gastronomy, wine tourism and naturalistic experiences. Visitors are generally lovers of trekking, nature walks, and cultural and historical excursions to medieval villages.

CHAPTER 1: MORPHOLOGY OF THE TERRITORY

- mountainous morphology and narrow valleys characterizing the hinterland
- the historic villages are often isolated from each other and connected only by small roads that follow the profiles of the valleys or mountains
- Transport planning for these areas therefore tends to favor improving connections towards the coast, rather than strengthening connections between small inland centres.



It can be noted that the greatest concentration of housing is located along the coastal strip, especially in the port areas. Being large urban centers, most of the services and tourist activities are concentrated in them.

CHAPTER 2: TRANSPORT OFFER

Analysis of the highway system

The road elements with the greatest impact on the territory and which act as connection elements with the inland municipalities, available to the population are:

- 1) The Genoa-Ventimiglia motorway infrastructure (A10) which continues from Italy towards France (A8)
- 2) The State Road (SS20)
- 3) Provincial roads such as: SP 92, SP68, SP62, SP63, SP55, SP70 and, finally, SP64.

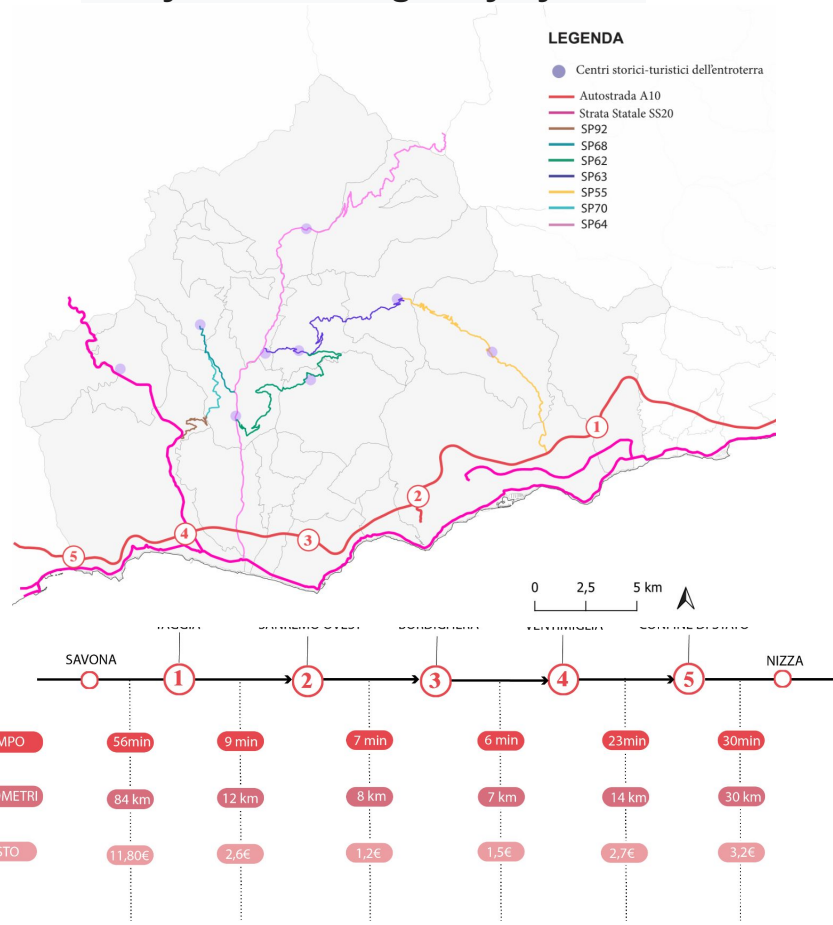
Analysis of the railway system

The Genoa-Ventimiglia railway line is one of the main Italian railway lines and crosses three provincial capitals: Genoa, Savona and Imperia, up to the border with France, extending for approximately 147 km.

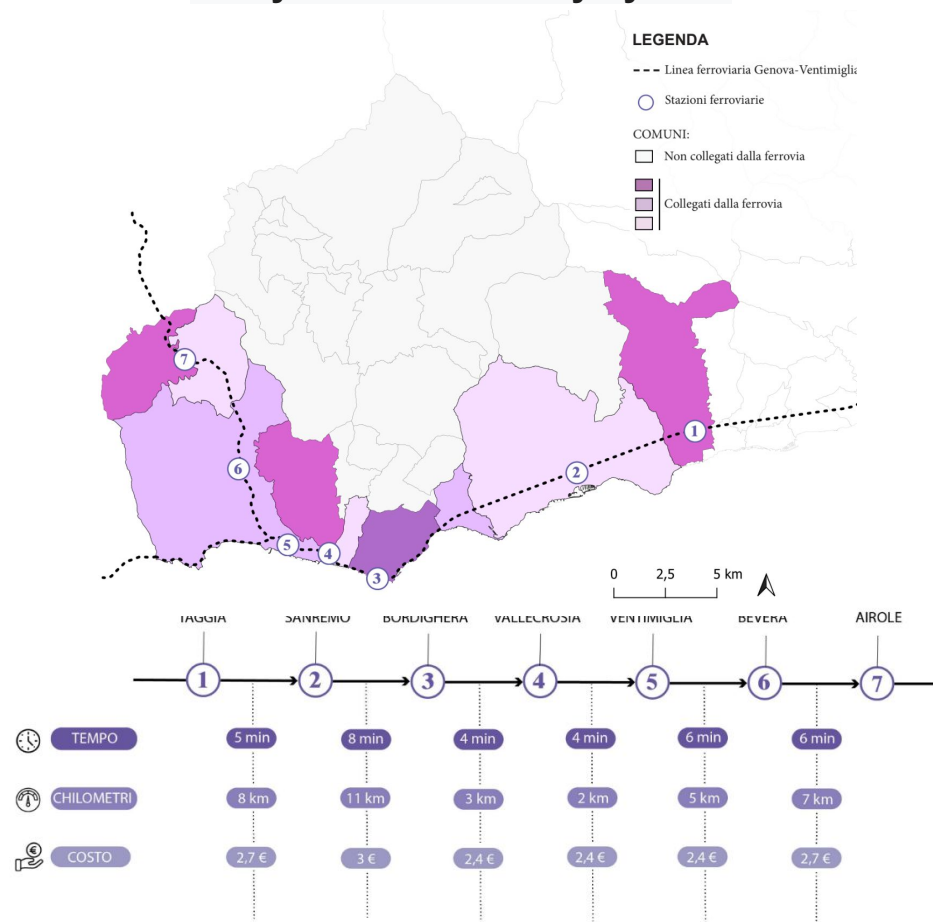
- 1) The Nice-Ventimiglia railway line is the most frequented, thanks to the possibility of having on average a train every half hour.
- 2) The Ventimiglia-Imperia line is the one with the most traffic, having approximately one train per hour
- 3) The Ventimiglia-Cuneo line is the least frequented, having the fewest trains per day.

CHAPTER 2: TRANSPORT OFFER

Analysis of the highway system



Analysis of the railway system



Analysis of local public transport

Local public transport within the province of Imperia is made up of 38 lines that connect the different areas of the province.

In our area of interest there are 4 main lines that connect the coast to the hinterland:

- **Line 3**
- **Line 7**
- **Line 8**
- **Line 15**

The local public transport system represented allows an efficient connection between the coast and the hinterland, adapting to the different mobility needs of residents and visitors.

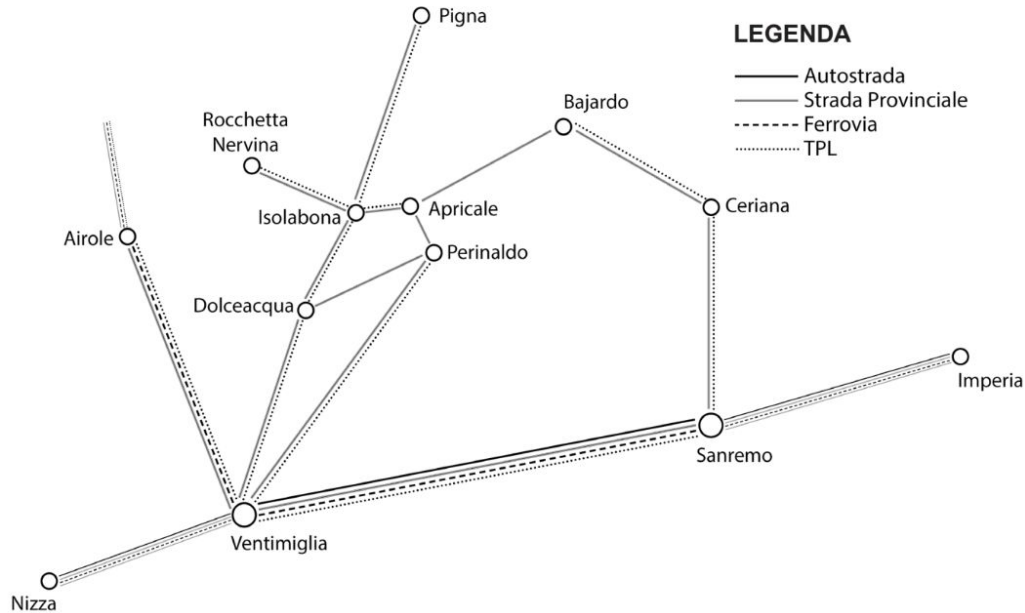
Analysis of private transport

Private transport within the province of Imperia presents various solutions: the province is characterized by a road network that allows you to explore coastal and inland areas, through services such as taxis, NCC and car rental.

One of the recommended routes for private transport is the one by camper which includes the towns of Airole, Dolceacqua and Seborga. This route allows you to discover three hinterland villages, each with its own characteristics.

There is also shared but organized private transport, the tourist shuttles which connect some of the main tourist destinations.

CHAPTER 2: Hinterland transport offer graph



Each node indicates an attractor center in the hinterland connected by the coast or by other attractor centers, while the lines represent different types of transport infrastructures:

- **Motorway**
- **Provincial Road**
- **Railway**
- **Local public transport**

The graph represents the transport offer between various locations in the province of Imperia, connected by different means of transport and different infrastructures.

Thanks to this articulated transport network, it is possible to easily reach both the main urban centres of the coast and the internal mountain areas, even if some connections between municipalities are connected only by the provincial road, intensifying private transport.

Population Movement Analysis:

According to the Istat survey data, it is clear that the municipalities with the greatest flow of mobility for reasons such as work and study outside the municipality correspond to the municipalities in the hinterland of the analysis area.

This is because the municipalities in the hinterland not only provide the population with a smaller amount of services and activities compared to the coastal municipalities, but they are also less accessible; which affects people's choice to live and work only in those places.

Places that centralize tourism:

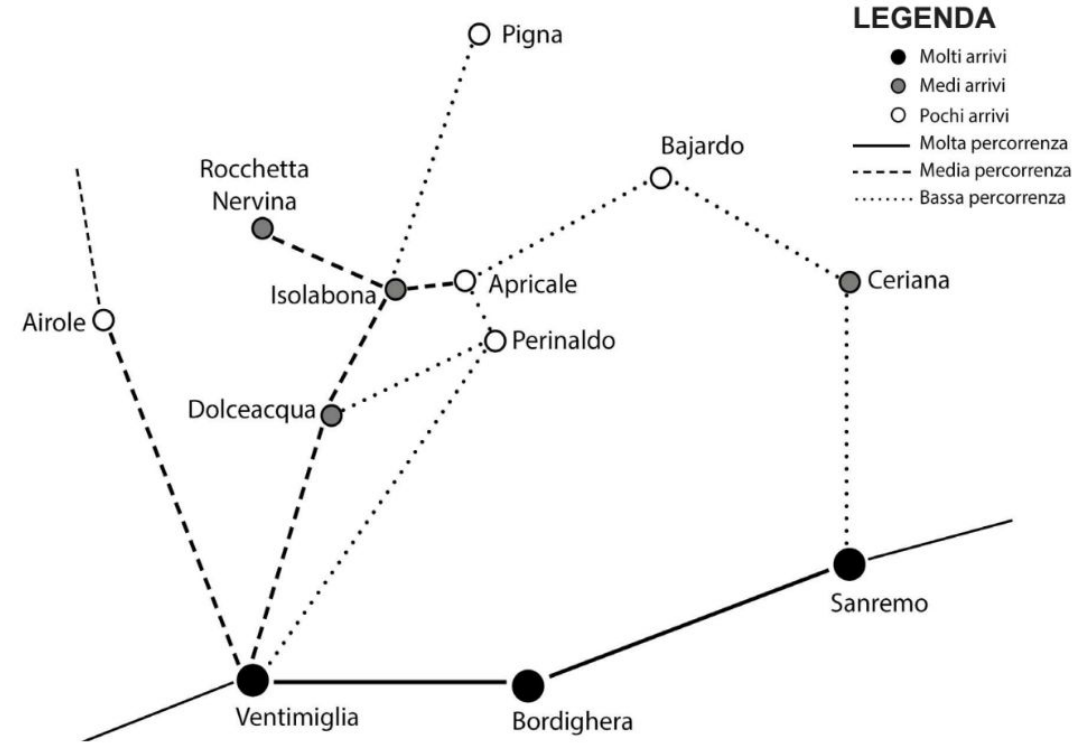
The coast of the province of Imperia, with its municipalities overlooking the sea, attracts many visitors from both Italy and abroad, daily and with stays of several days. The coast has direct access to the sea and offers a much more developed tourist infrastructure than the hinterland with numerous hotels, restaurants, night clubs and shops.

The inland municipalities of Imperia struggle to compete with the coast. The hinterland is characterised by wild and uncontaminated nature and offers activities linked to rural tourism, such as trekking, visits to medieval villages (such as Dolceacqua, Apricale and Rocchetta Nervina) and food and wine tours linked to Ligurian tradition. However, these experiences mainly attract niche tourism.

CHAPTER 3: REPRESENTATION OF “DESIRE LINES”

The graph represents between various locations in the province of Imperia, highlight identifying the different travel frequencies and the levels of arrivals in the various centres. Every line describes the intensity of the “desire lines” between two locations, while the nodes represented not inhabited centers with different levels of arrivals.

The distribution of demand flows highlights a strong gap between the coast and the hinterland: while three coastal centers such as Ventimiglia and Sanremo they attract many arrivals and are characterized by a high frequency of travel, the villages interiors are less frequented and serviced.



CHAPTER 4: Masterplan

VISION → **“SUPPORT THE POPULATION, ECONOMY AND TOURISM OF THE HINTERLAND”**

MACRO OBJECTIVES:

1. ENHANCE EXISTING ROAD TRANSPORT (TPL)
2. INTEGRATE THE TPL WITH THE RAILWAY CONNECTIONS EXISTING
3. REDUCE THE DEPOPULATION OF HISTORICAL CENTERS OF THE HINLAND
4. PROMOTE THE DEVELOPMENT OF TOURISM BY INCREASING TOURISM MOVEMENTS BETWEEN HINTERLAND MUNICIPALITIES

STRATEGY:

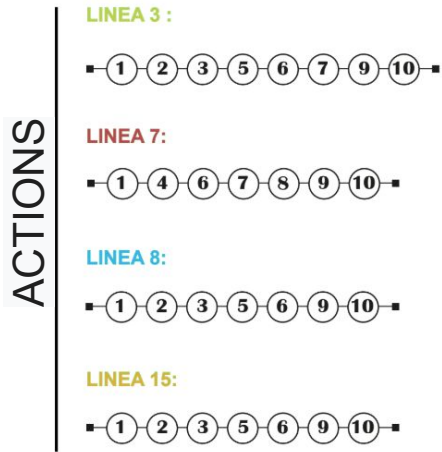
- MAKING THE TARIFF SYSTEM FAIRER TICKETS
- INCREASE THE NUMBER OF BUS ROUTES FROM THE COAST TO THE HINLAND
- INCREASE THE NUMBER OF BUS ROUTES BETWEEN HINLAND MUNICIPALITIES
- ENHANCE CONNECTIONS DIRECT WITH FRANCE
- PROMOTE TOURISM BY INCREASING MOVEMENTS BETWEEN HISTORICAL CENTERS

ACTIONS:

1. N° 15 RUNNINGS PER DAY FOR EACH HISTORICAL CENTER OF THE HINLAND
2. INCREASE “ARTICULATED” BUSES FOR INCREASE TRANSPORT CAPACITY OF PASSENGERS
3. USE OF LOW MEANS OF TRANSPORT EMISSIONS (ELECTRIC BUSES)
4. MONTHLY/ANNUAL SUBSCRIPTIONS A REDUCED PRICE
5. PROMOTE SUBSCRIPTIONS INTERMODAL AT SINGLE PRICE
6. QR CODES LOCATED AT EVERY STOP TO FACILITATE THE PURCHASE OF TICKETS
7. DISCOUNTS ON THE TICKET RATE FOR FAMILIES WITH CHILDREN UNDER 12 YEARS OF AGE
8. DISCOUNTS ON THE TICKET RATE FOR TOURIST GROUPS (MIN 10 PEOPLE)
9. STRUCTURED STOP PLATFORMS FOR THE FRAGILE SEGMENTS OF THE POPULATION (ELDERLY AND PEOPLE WITH DISABILITIES)
10. PLACE CHARGING SYSTEMS FOR ELECTRIC BUSES

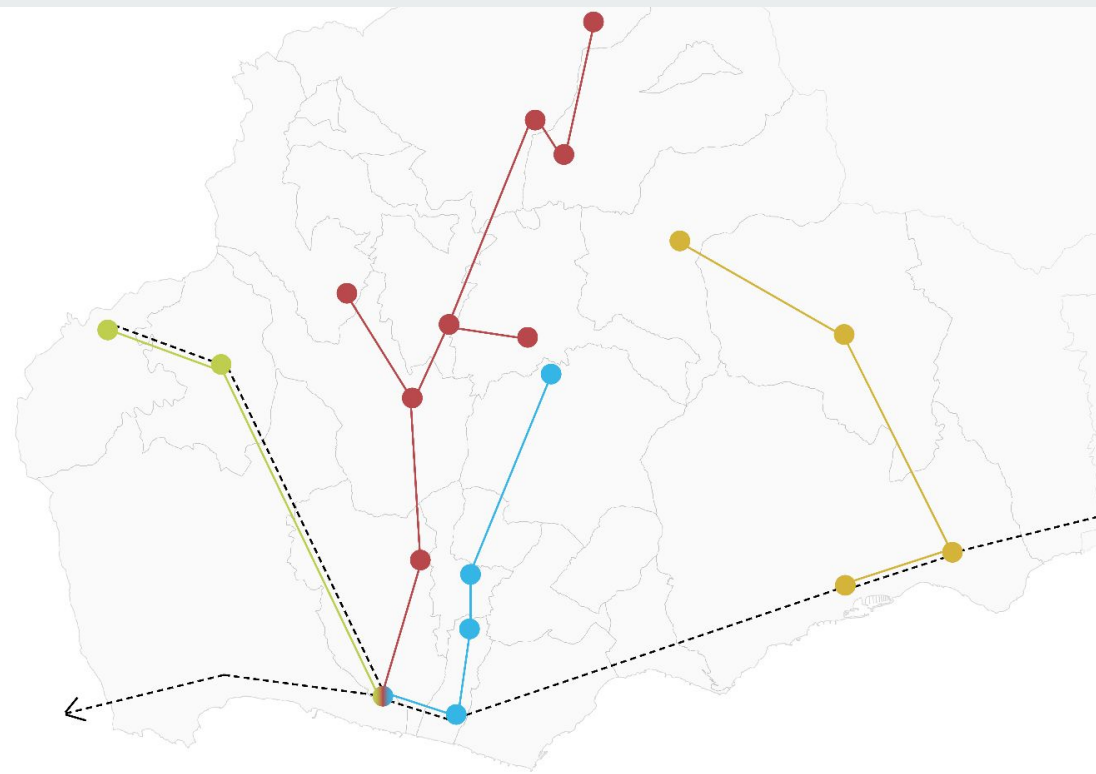
CHAPTER 4: Masterplan

LOCAL PUBLIC TRANSPORT LINES SUBJECT TO TRANSFORMATIONS:



It's important think not just in terms of how many lines and how many trips per day are made for each historic village, but also how many vehicles they circulate for each line during the day.

→42 trips made per day →therefore, 8 vehicles, buses, which specifically mind circulate in this territory.



→ To implement this project vision, electric buses will be used to also achieve a reduction in the emissions of the existing buses that will be replaced, while keeping additional emissions low.

thanks for your attention!

merci pour votre attention!