

TERRITORY ANALYSIS

General Introduction

Territorial Scale



The **Yangtze River** is the **third largest** river in the world and the largest river in China. It supports 33% of the country's population.

The **Changsha to Hengyang** section of the mid and downstream of the Xiangjiang River was selected for this study.

Administrative Boundaries



Ancient town along the river

1 Jinggong ancient town



Over **1,400** years old
 8 ancient streets, 4 lanes and 7 piers, with **1008** ancient houses and **1275** metres of main street
 It has been developed as a **national tourist town**

2 Luokou ancient town



More than **1,400** years old
 Old wooden and masonry buildings.
 It is in danger of being abandoned due to frequent **floods** and **population loss**

3 Jielong ancient town



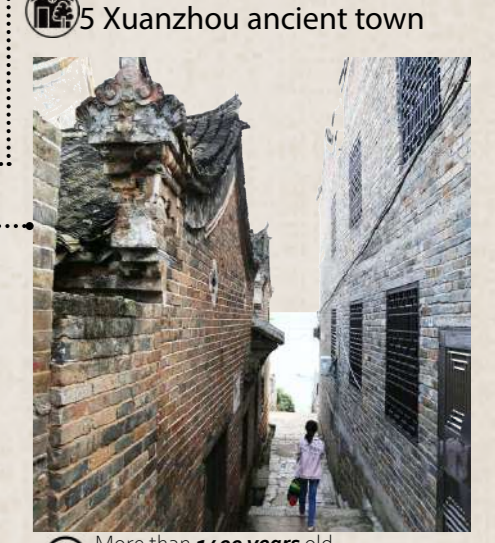
Around **1,500** years old
 It retains the **Jielongqiao wharf** and the **200 long ancient street**
 It is at risk of being abandoned due to the **loss of young people** and its ageing.

4 Zhuting ancient town



Over a **thousand** years
 It has the **most intact group of ancient wharves**, a large amount of **ancient streets, alleys and dwellings**.
 It is still in **crisis** of the historical town **being forgotten**, and many of the **old buildings** have been abandoned.

5 Xuanzhou ancient town



More than **1,400** years old
thousand-year-old trading streets and **eight historical relics**.
Tourist town with an **agricultural theme** in the future

Legend

CONNECTION

- High way
- Provincial road
- Normal town road
- Railway

HIGH-SPEED RAILWAY STATION

- 1 Changsha high-speed station
- 2 Xiangtan high-speed station
- 3 Zhuzhou high-speed station
- 4 Hengyang high-speed station

AIRPORT

- 1 Huanghua airport of Changsha
- 2 Nanyue airport of Hengyang

NATURAL HERITAGE

- 1 Yuelu Mountain & Yuelu Academy
- 2 Mount Shaojian & Former residence of chairman Mao
- 3 Mount Heng & Nanyue Temple

HISTORICAL TOWN

- 1 Jinggang town
- 2 Luokou town
- 3 Jielong town
- 4 Zhuting town
- 5 Xuanzhou town

ANCIENT WHARF

- 1 Jing wharf
- 2 Luokou wharf
- 3 Jielong wharf
- 4 Zhuting big wharf



HISTORICAL ANALYSIS

Historical map of this water route
Changsha to Hengyang

Panorama of Mount Nanyue in 1860 is exactly the view from **Changsha** to **Hengyang** along the Xiangjiang River in 1860. The **scale of the whole map is consistent with the scale of this research.**

The seventy-two peaks of Hengshan Mountain start from Changsha Prefecture and Mount Yuelu in Hunan Province pingzhang Mountain, Bixu Mountain, Huagai Mountain, Xiangguang Mountain, Furong Mountain, Jinzishan Mountain,

Tuwu Mountain, etc. to the end of Huiyan Mountain, along the way administrative areas Xiangtan County, Hengshan County and Hengyang Prefecture, as well as various temples, pagodas, water vessels, etc. The map contains detailed notes on the names of places and mountains.

Some of the **landscape resources along the way**, such as Changsha's Mount Yuelu, Hengyang's Mount Nanyue, and some of the small islands along

the way **still exist today**. The original Shuilu island is now the famous tourist attraction of Changsha, Orange Island. In this map it can also be observed that on Guanxiang Island the Wenfeng Pagoda and Wenfeng Academy existed. Unfortunately, they were exploded by the Japanese army in 1944.

The map also shows the **busy ships and wharves on the Xiangjiang River**, reflecting the **importance of water transportation** in the 1860s.



7



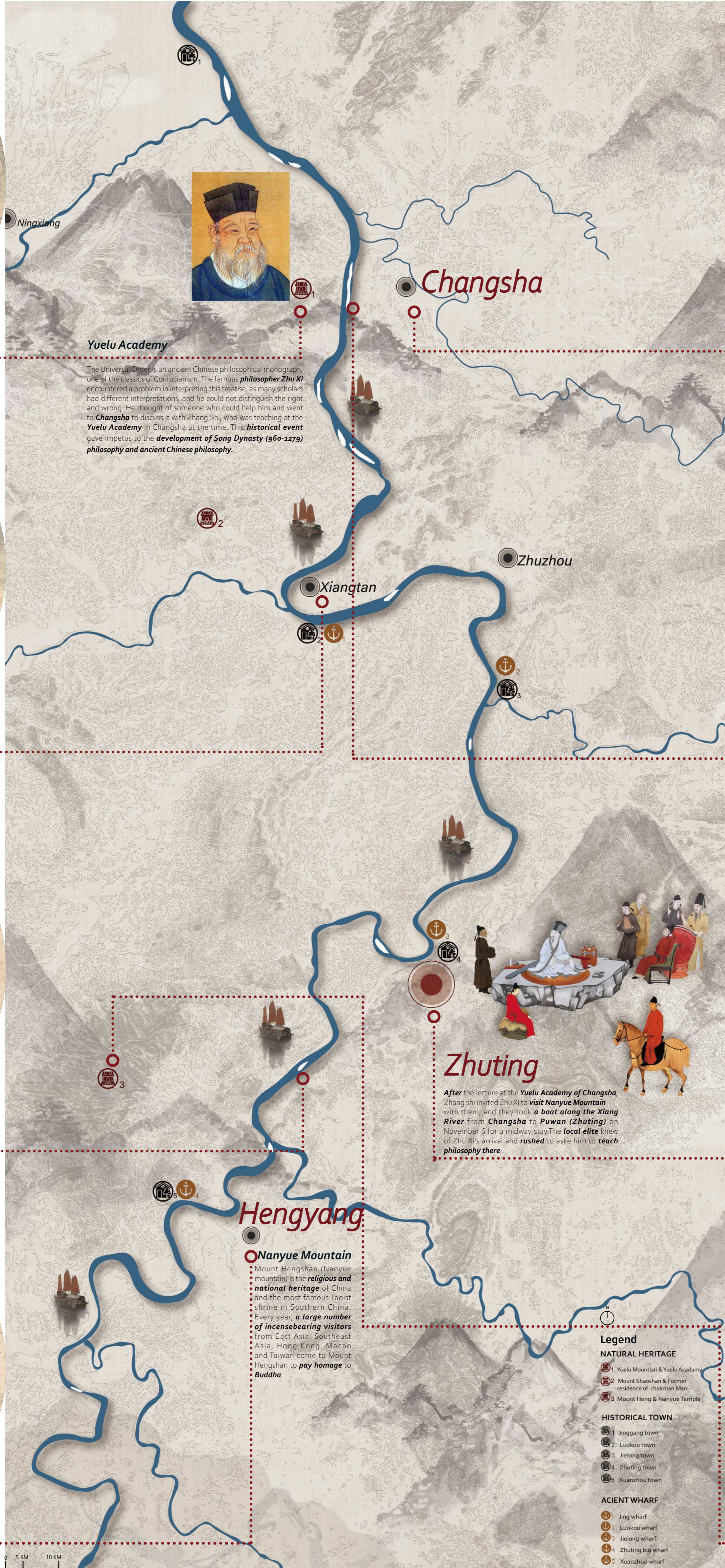
6



4



1



8



3



5



2

Panorama of Mount Nanyue in 1860

1. Hengyang Prefecture

2. Nanyue mountain

3. Hengyang county

4. Guanxiang island

5. Zhuting town

6. Xiangtan county

7. Yuelu mountain

8. Changsha Prefecture



HISTORICAL ANALYSIS

Decline of waterway transportation and urbanization

History timetable

Universal Transportation

Modernization Period

Industrialization and nationalization Period

Period of Gradual Decline

Future? Conservation?

1166

Historical events along the route
In 1166 A.D., the philosopher Zhu Xi, together with Zhang Shi, travelled up the Xiangjiang River from Changsha to Hengyang by boat, many knowledgeable people have come to retain Zhu Xi for everyone to teach philosophy.



1772

Ancient commercial and trading centers
In 1772, Zhu Ting was designated as the territory of Xiangtan County Prime Minister, and the population grew and commerce became more and more developed. Many merchants settled here, and water transport was gradually developed.

1820

Transportation along the Xiangjiang River was mainly by boat
In ancient times, transportation along the Xiangjiang River was mainly by boat, mostly small boats driven by manual oars, but motorised boats began to appear after the Industrial Revolution.



1912

A professional industry and occupation
Initially the boats were operated by private individuals, but later the number of people working in the industry grew and official approval had to be obtained.



1931

Nearly a thousand boat workers per Wharf



1945

During this period, most of the boat workers were peasants from the suburbs, who carried out both **farming and ferrying** work and used their private boats to earn a living.

1950

Officialization
After the World War II, the government unified the management of boat workers and established a special transport agency. The government also established the **National Enterprise of Ferry Company** and set up the station at the original wharves.



1972

Manual ferry on water was end in Changsha
In 1972, some ferries were cancelled when the first bridge over the Xiangjiang River was completed and opened to vehicles. A decade later, the **manual ferry as the city's main mode of transport on water was end** in Changsha city.



1991

The 1st bridge over the Xiangjiang River established
After the second bridge over the Xiangjiang River was built, the people used buses to cross the river and many ferries and wharves ceased to operate one after another.



2017

The 7th bridge established in Zhuzhou
With the opening of the **Zhuzhou Xiangjiang Seventh Bridge** on March 23, 2017, the south bank wharf will be cancelled and the ferrying of residents across the river will become history in Zhuzhou city.



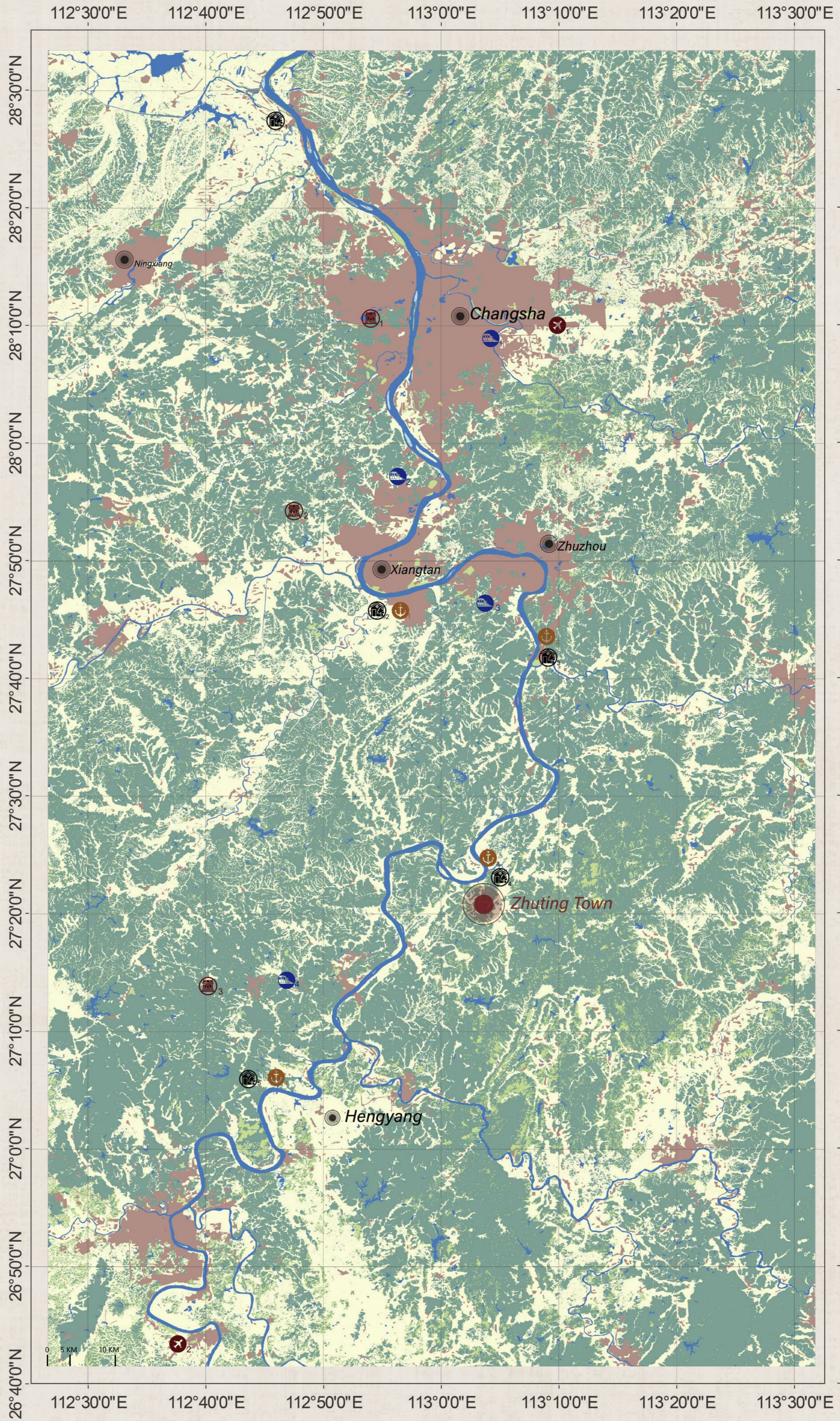
2022

The use of waterway transportation is rare
The Gusan Island Ferry, nowadays only the some **developing villages** and islands along the Xiangjiang River **retain the ferry and boat lifestyle**. The proportion of waterway transport declined sharply from 1980 to the present.

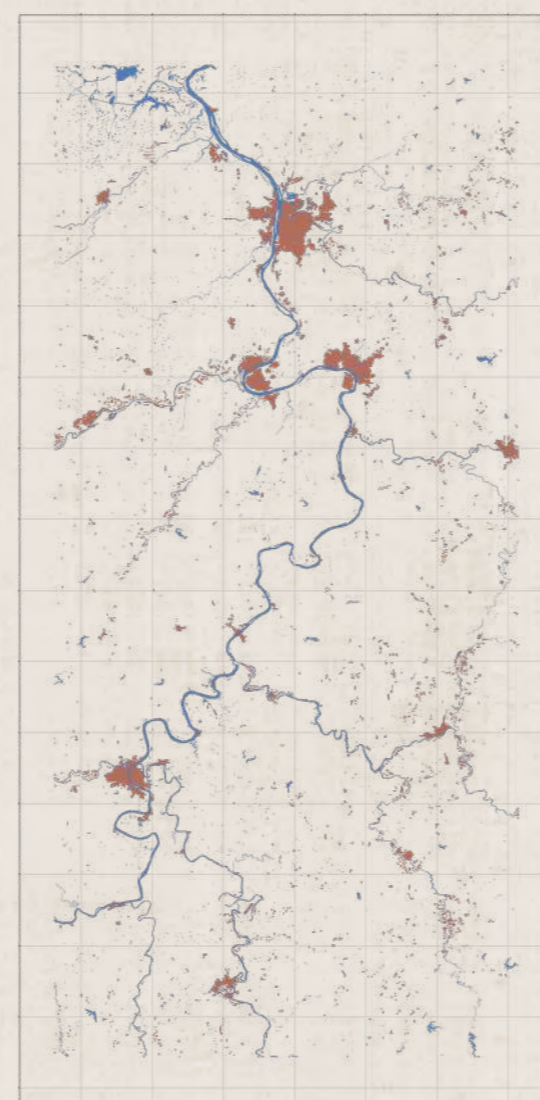


Trends in the proportion of passenger traffic by waterways

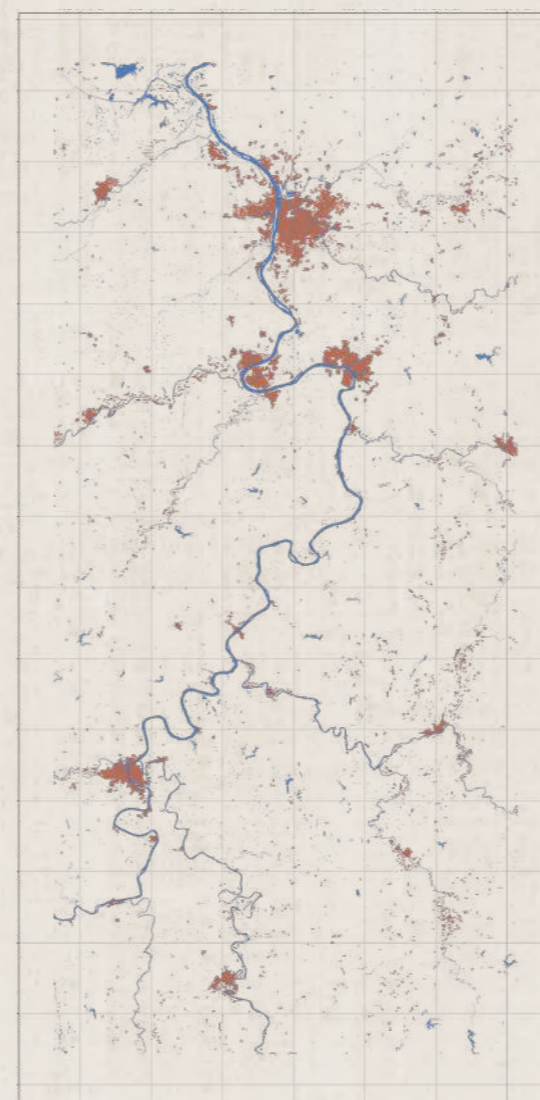
Land use in 2020



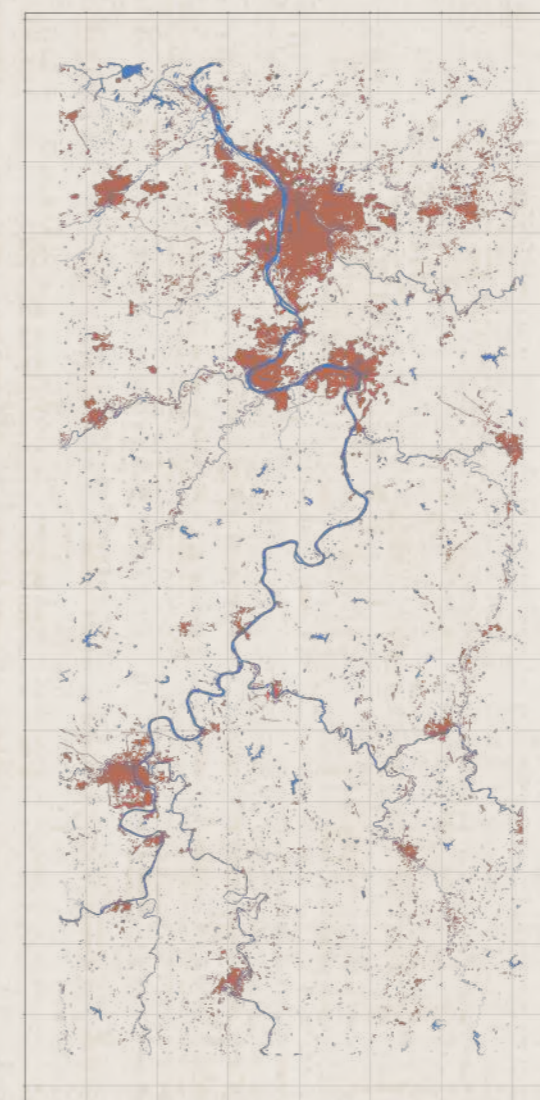
Urbanization



2000



2010

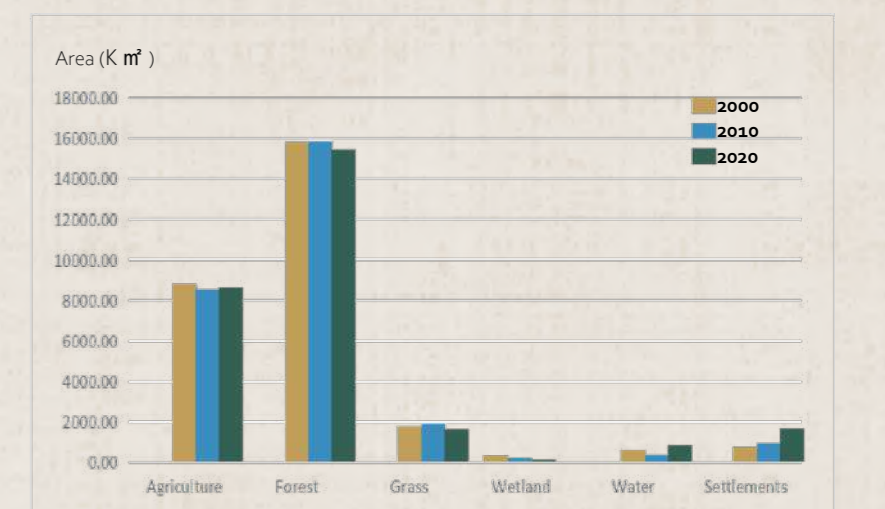


2020

Urbanization and landuse

The landuses data from **2000 to 2020** show that **urbanisation is progressing rapidly**. The **land of settlements** has expanded from 733.24 km² in 2000 to 1,977.60 km², **almost 2.7 times more than in 2000**. The trend of settlement expansion is lateral on land and there is not much change along the river banks.

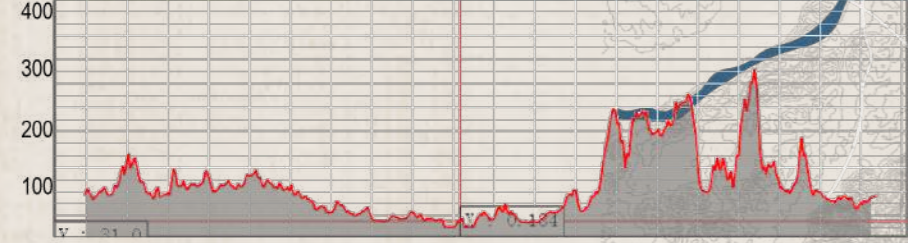
This subsequently also invades ecological land. During these two decades, agriculture, forests and grasslands have all declined slightly, except for water, which has increased, and wetlands, which have been reduced significantly by half every decade.



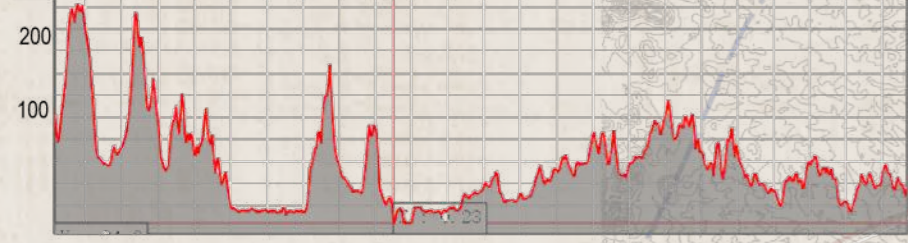
Urbanization

TERRITORY ANALYSIS

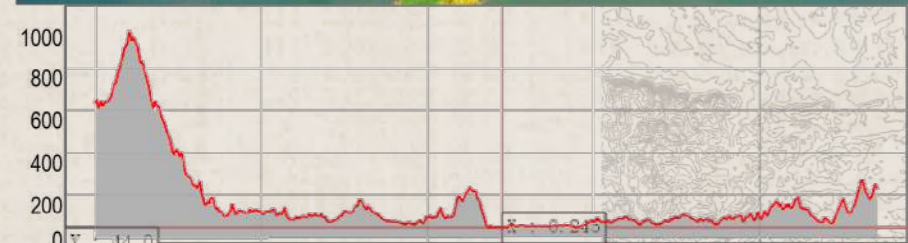
LANDSCAPE RESOURCE



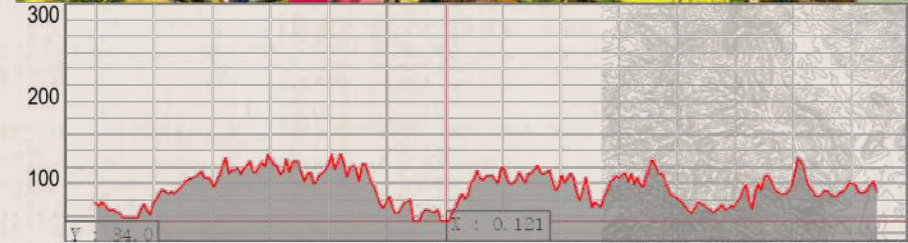
1 Hong Island, Section 1-1'



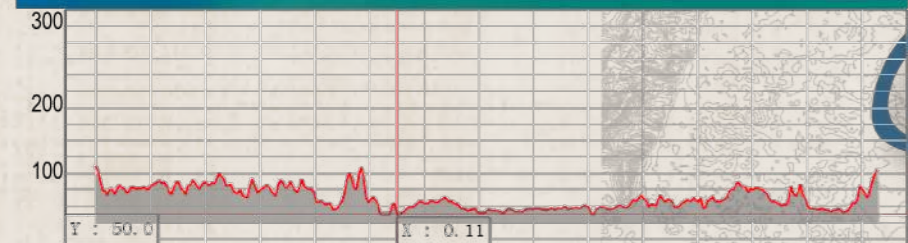
3 Baxi Island, Section 3-3'



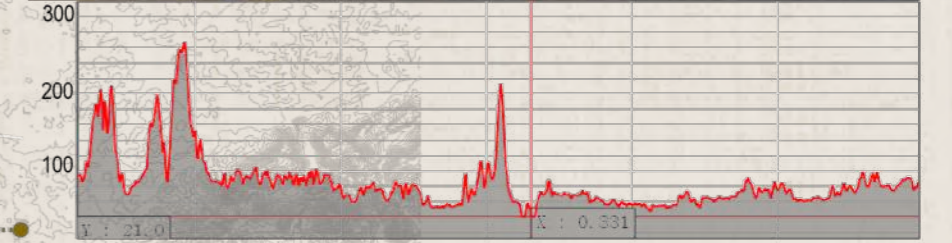
5 Gusang Island, Section 5-5'



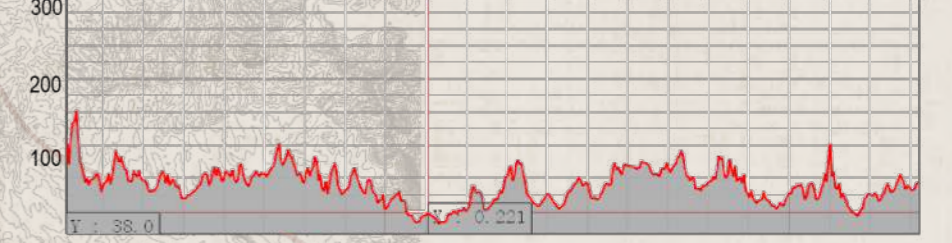
7 Wanzhou Island, Section 7-7'



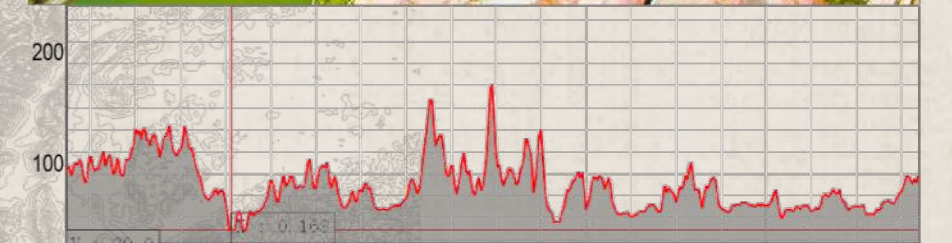
9 Dongzhou Island, Section 9-9'



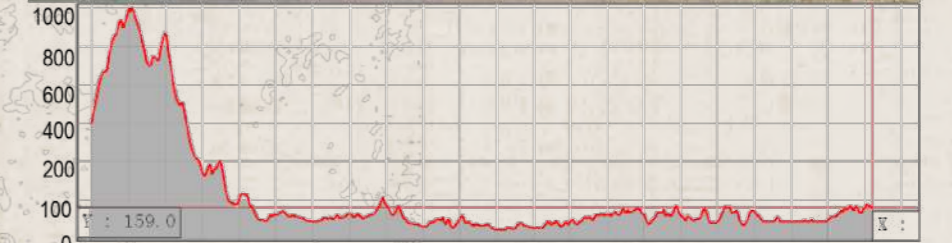
2 Orange Isle, Section 2-2'



4 Xingmazhou Island, Section 3-4'



6 Kongzhou Island, Section 6-6'



8 Guanxiang Island, Section 8-8'

THE ISLANDS

The **most typical landscape resources** on this inland waterway tour route are the **islands**, also known as river centres.

According to expert analysis, they are located on a bedrock that is more convex than the two sides, where the mainstream of the Xiangjiang River diverts to flush the two banks, and the sediment carried by the diversion falls through the back-flow on the bedrock of the river centre to form a heartland, and over time, the river centre **island is formed**, and this time, **at least 10,000 years**.

As can be seen from the pictures, if **visitors pass** these islands **by boat**, they will have a **good view of the islands**. Some of them **have been developed into parks**. While some still have **villages and inhabitants**, some islands and villages are about to be **abandoned** due to flooding and inaccessibility.

THE MOUNTAINS

Visitors can also enjoy a full view of the three mountains along the water way. The sections show several undulating areas where the landscape combines the **three layers of mountains, islands and rivers**. The merged section shows that once the visitor has followed the river, there is a **great variety of heights in the landscape**.

THE RELATIONSHIP

The ancient **town complex** and these **islands** are interconnected.

Many of the islands along the way are **in danger of being forgotten**, as are the ancient towns.

Human destruction is also a crisis. Here there was once a **disappeared** island of Scribble Island. Since the 1980s, sand dredgers have been quarrying sand from the section of the Xiangjiang River where it was located. In early **2009**, the **island disappeared forever** from the Xiangjiang River.

The mountains along the route are famous tourist attractions in Hunan Province and are attractive for reviving this tourist route.

A linear heritage preservation could well **avoid the separation** of this **architectural and landscape heritage** at the territorial scale.

Legend

- CONNECTION**
- High way
 - Provincial road
 - Normal town road
 - Railway

- HISTORICAL TOWN**
- 1 Jintang town
 - 2 Luokou town
 - 3 Jielong town
 - 4 Zhuting town
 - 5 Xuanzhou town

- HIGH-SPEED RAILWAY STATION**
- 1 Changsha high-speed station
 - 2 Xiangtan high-speed station
 - 3 Zhuzhou high-speed station
 - 4 Hengyang high-speed station

- ACIENT WHARF**
- 1 Jing wharf
 - 2 Luokou wharf
 - 3 Jielong wharf
 - 4 Zhuting big wharf
 - 5 Xuanzhou wharf

- AIRPORT**
- 1 Huanghua airport of Changsha
 - 2 Nayue airport of Hengyang

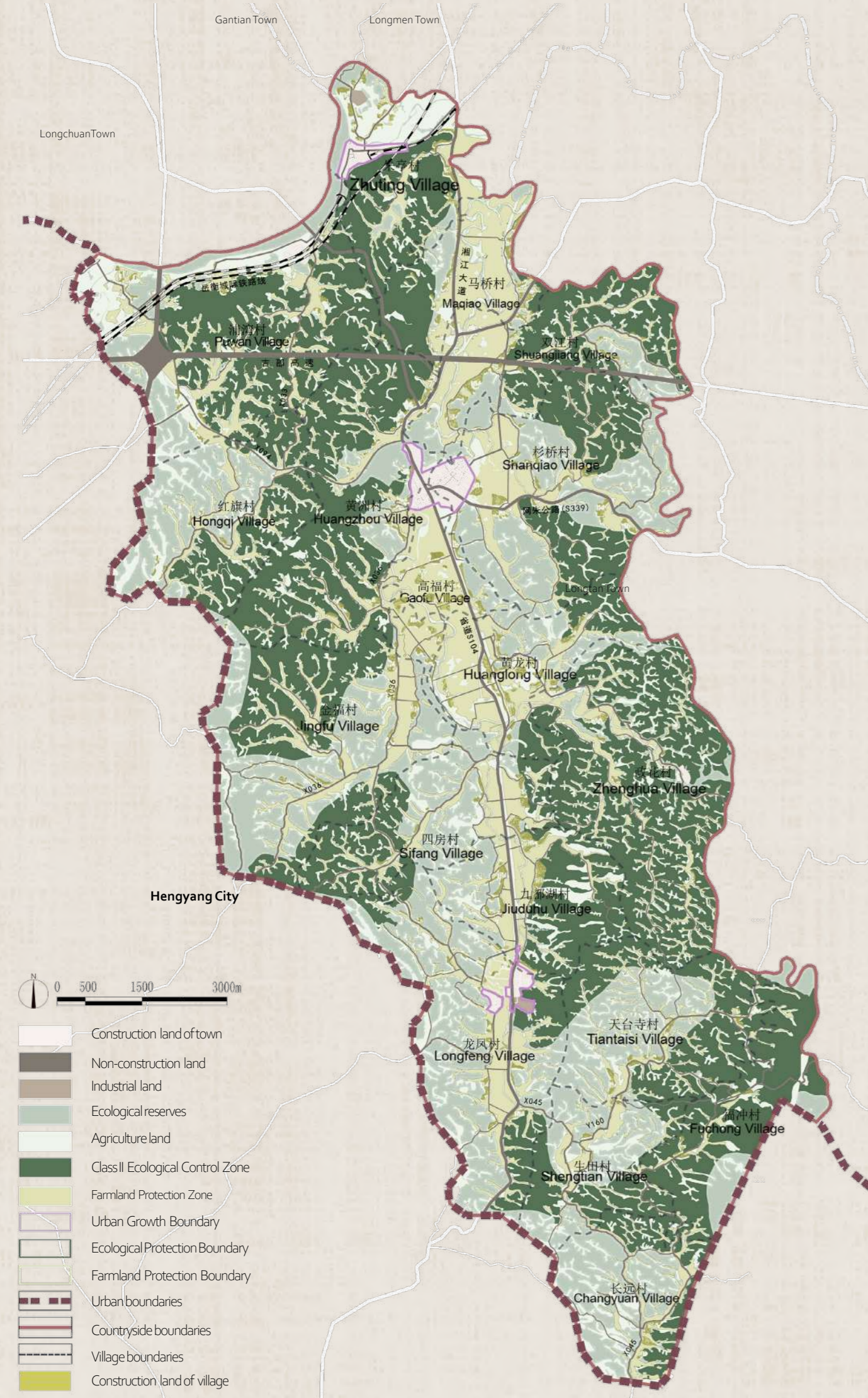
- NATURAL & CULTURAL HERITAGE**
- 1 Yuelu Mountain & Yuelu Academy
 - 2 Mount Shaoshan & Former residence of chairman Mao
 - 3 Mount Heng & Nanryue Temple
 - 4 Mt.Yuelu
 - 5 Mt.Zhao
 - 6 Mt.Heng

- THE ISLANDS**
- Abandoned Islands
 - 1 Hong Island
 - 2 Orange Isle
 - 3 Baxi Island
 - 4 Xingmazhou Island
 - 5 Gusang Island
 - 6 Kongzhou Island
 - 7 Wanzhou Island
 - 8 Guanxiang Island
 - 9 Dongzhou Island
 - Islands that have been developed

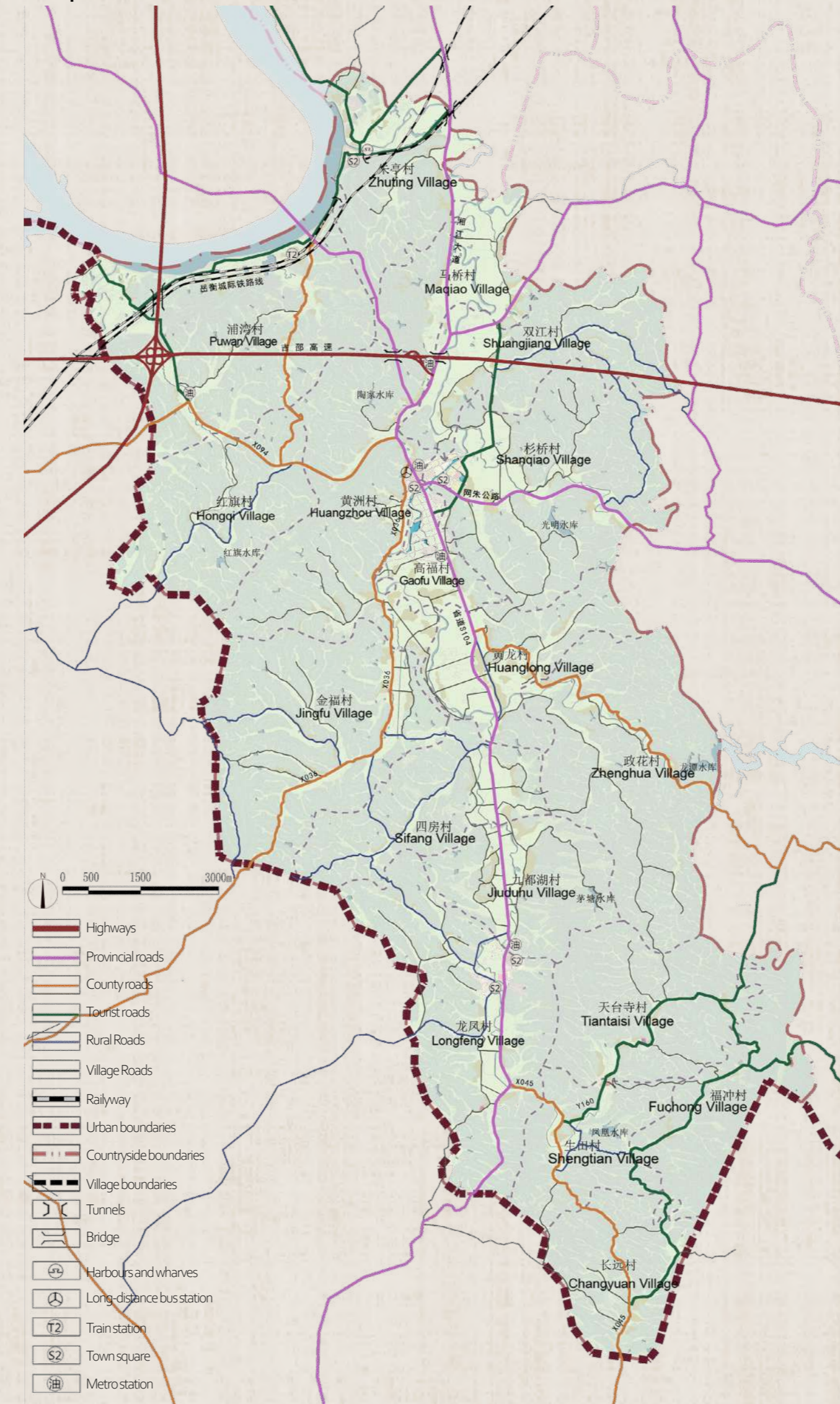
MUNICIPALITY ANALYSIS

Current condition of Zhuting Town

Land use



Transportation



Accessibility

Land use and terrain

The **terrain** of the town of Zhuting is **mostly hilly** and most of it is a nature reserve zone. There is **no ecological degradation**.

Transportation

The whole community **lacks direct public transport**. The only **railway station** has been **cancelled**. There are **no petrol stations** or **charging stations**.

Population

There are many **outgoing workers**, there is **serious population loss** and many buildings are abandoned.

Historical Relics

In the **south town**, the Tiantai Temple has already developed a **periodicity of visitor activity**, which is **split from the northern** ancient town district. But there are **no visitor's services**.

Infrastructure

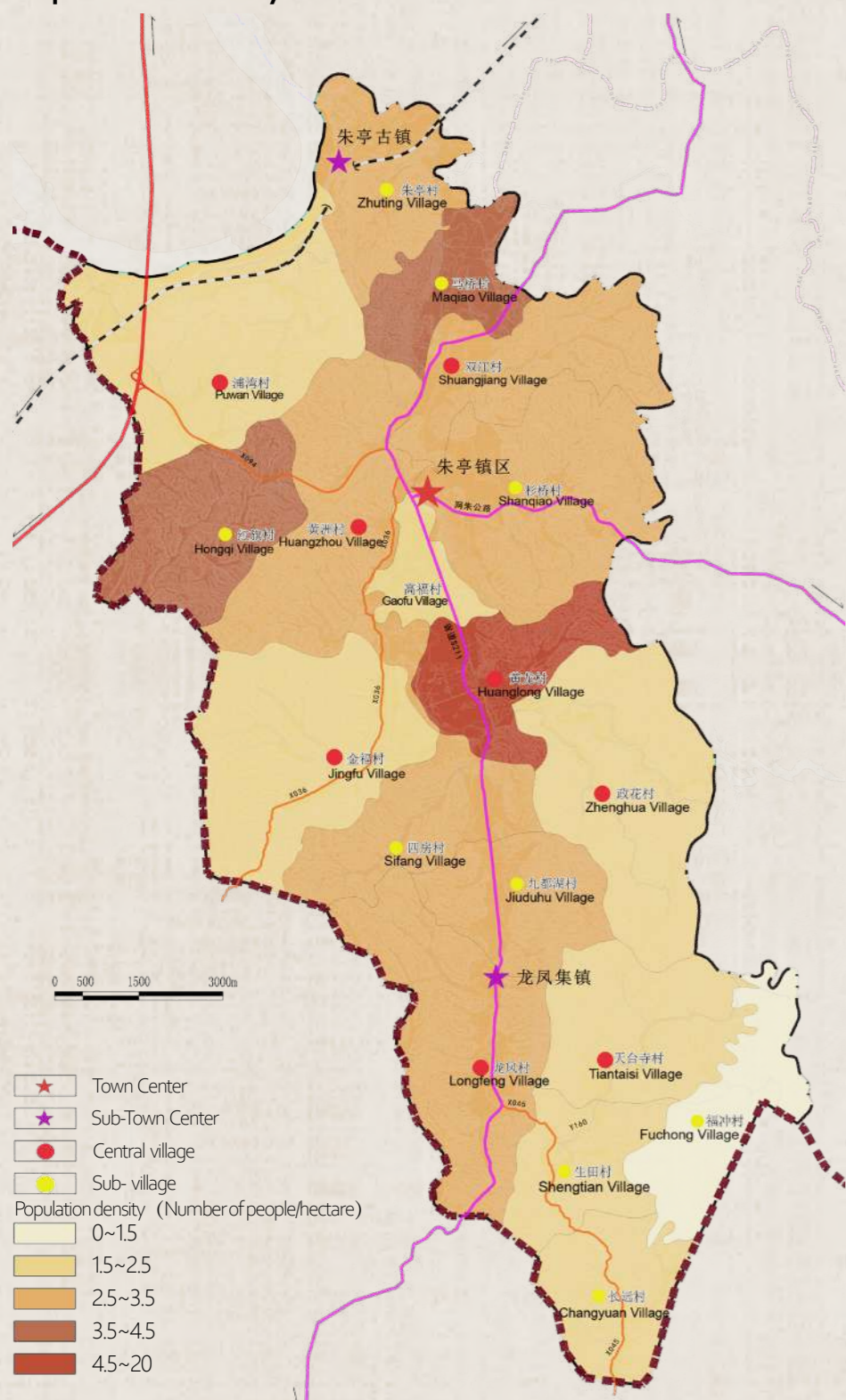
No **public sports** facilities.

Boundaries of Zhuting Town and Zhuting Ancient Town

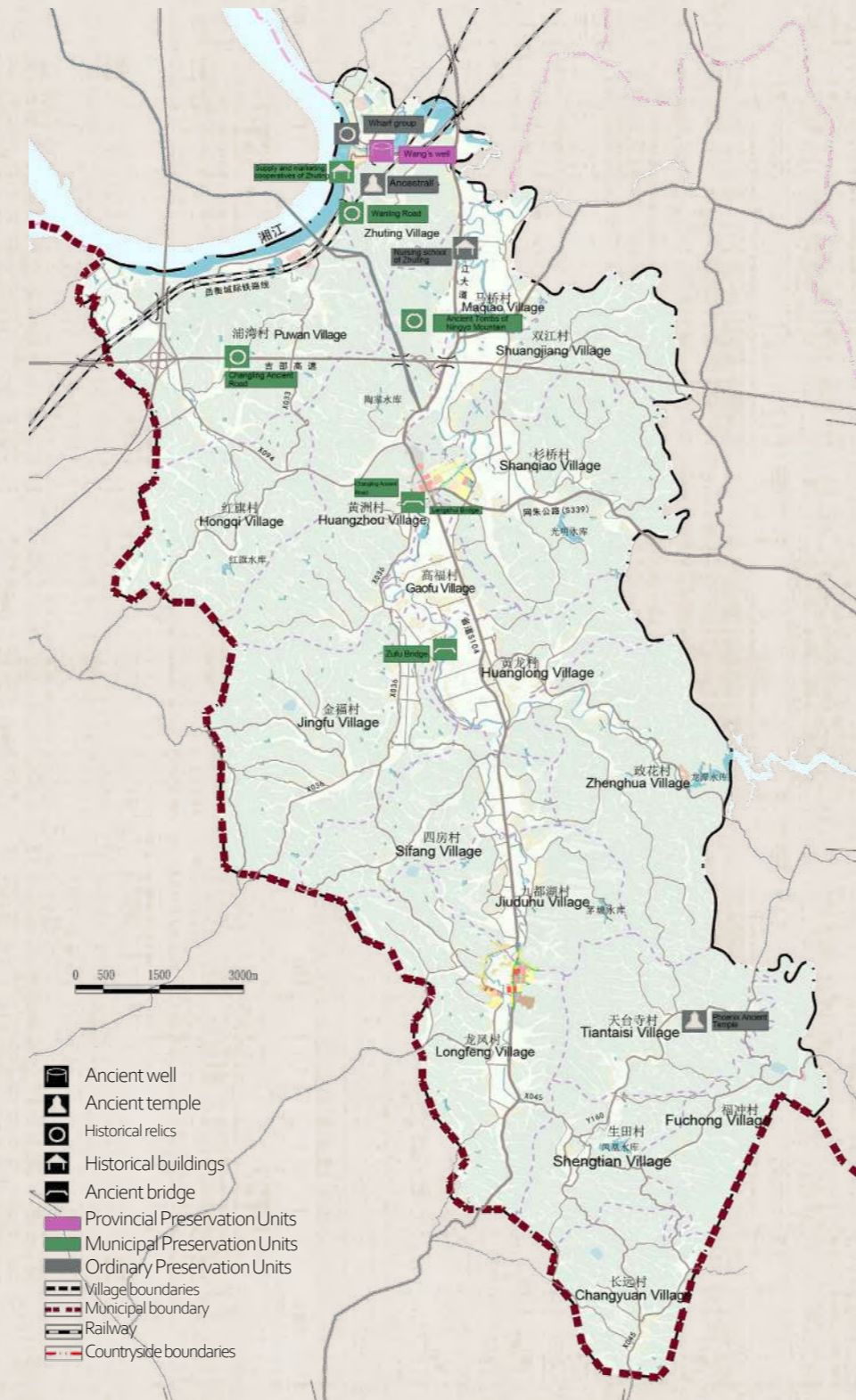
The core preservation area of Zhuting Ancient Town occupies an area of approximately 67.91 hectares. The **core conservation area** of Zhuting Ancient Town covers an area of approximately **67.91 hectares**.



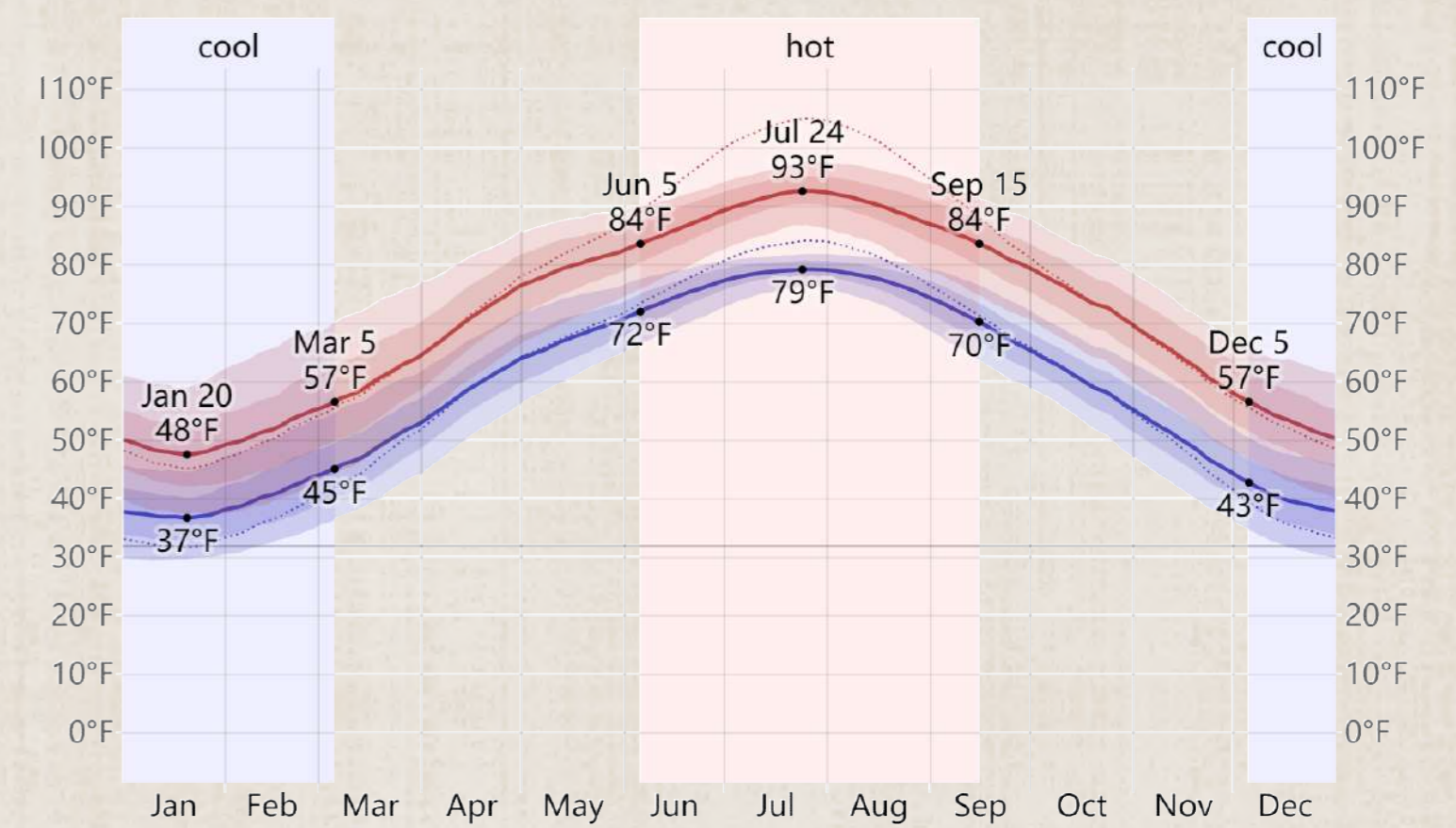
Population density



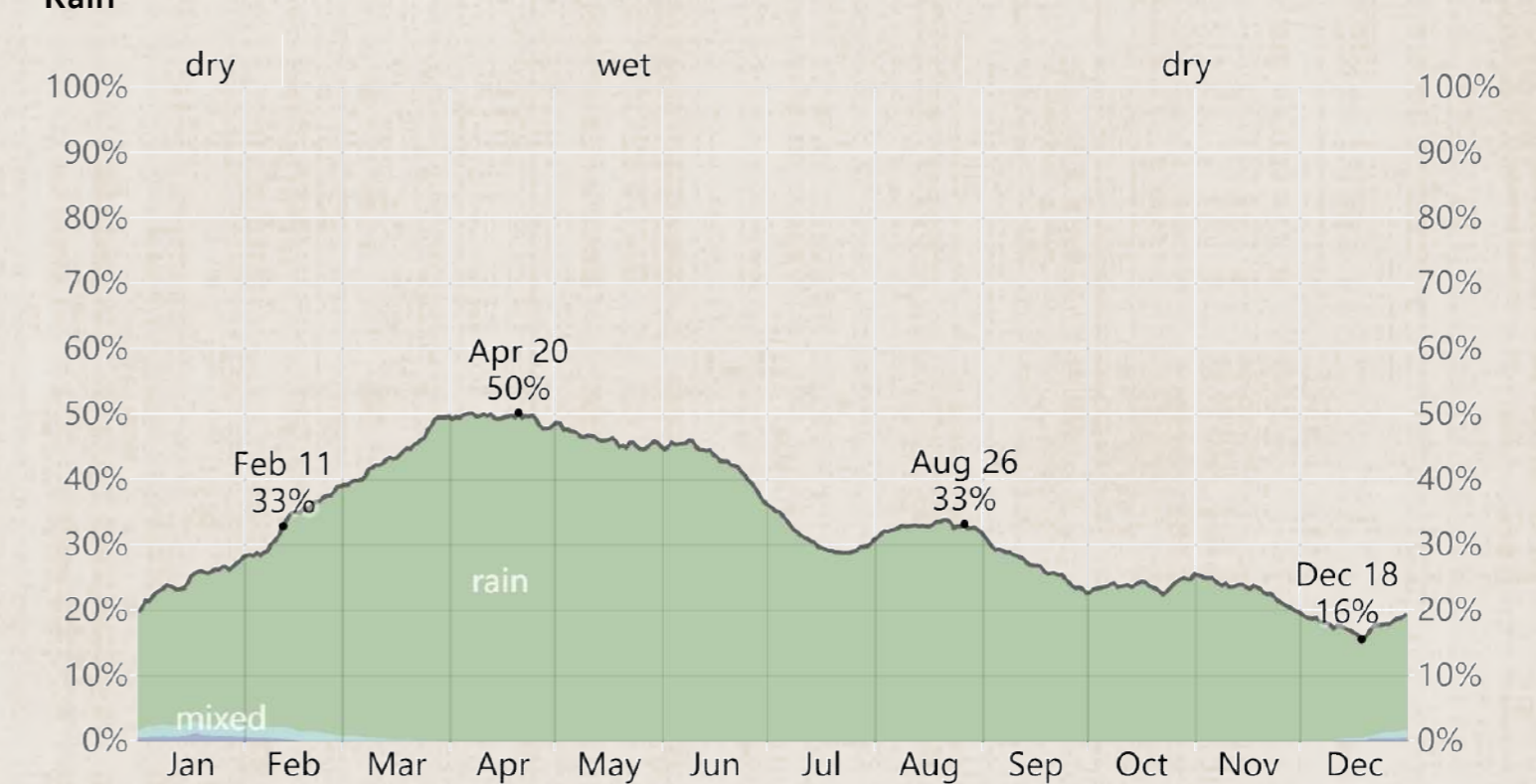
Historical relics



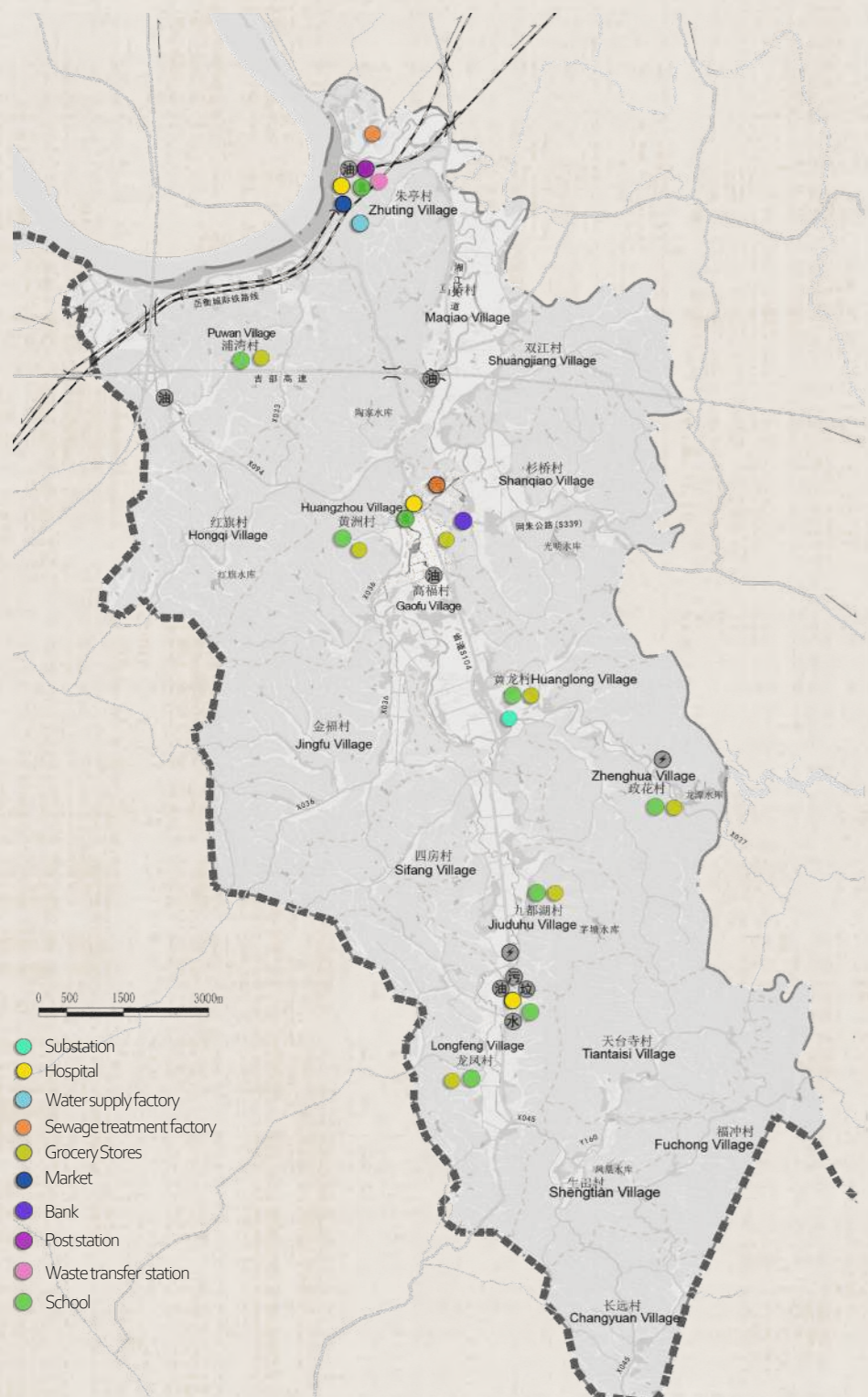
Temperature



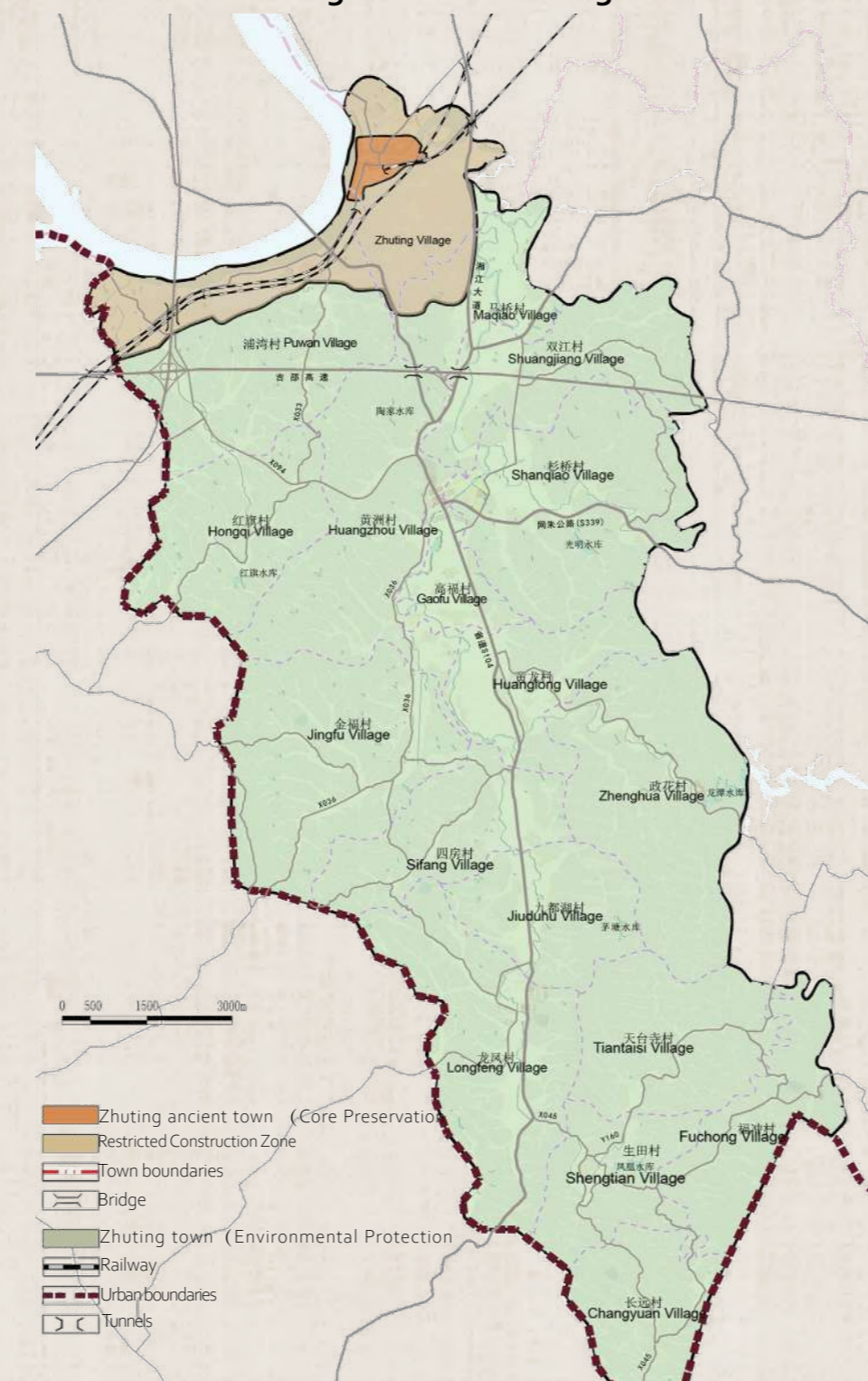
Rain



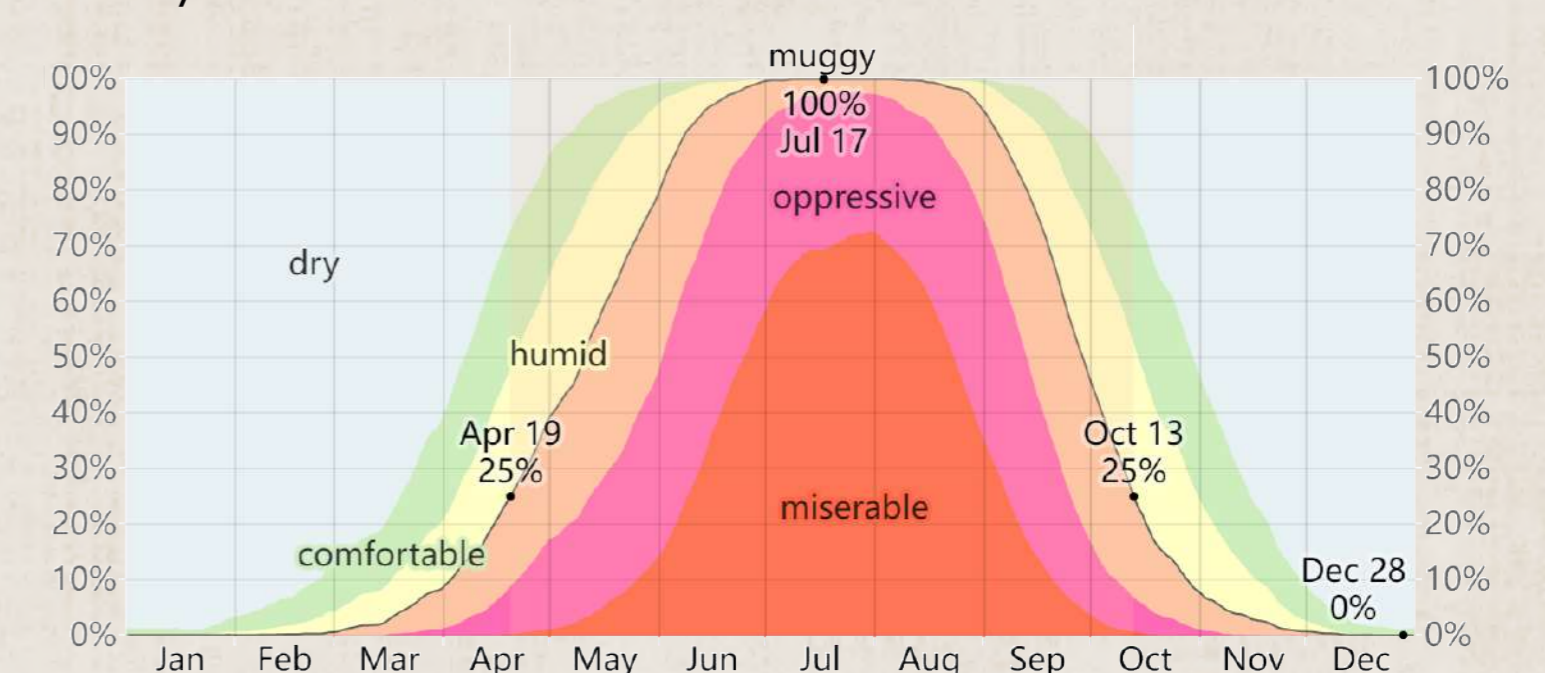
Infrastructure



Boundaries of Zhuting Town and Zhuting Ancient Town



Humidity



The **hot season** lasts for **3.3 months**, from June 5 to September 15, with an average daily high temperature above 84°F. The **hottest month** of the year in Zhuting is **July**, with an average high of 92°F and low of 79°F.

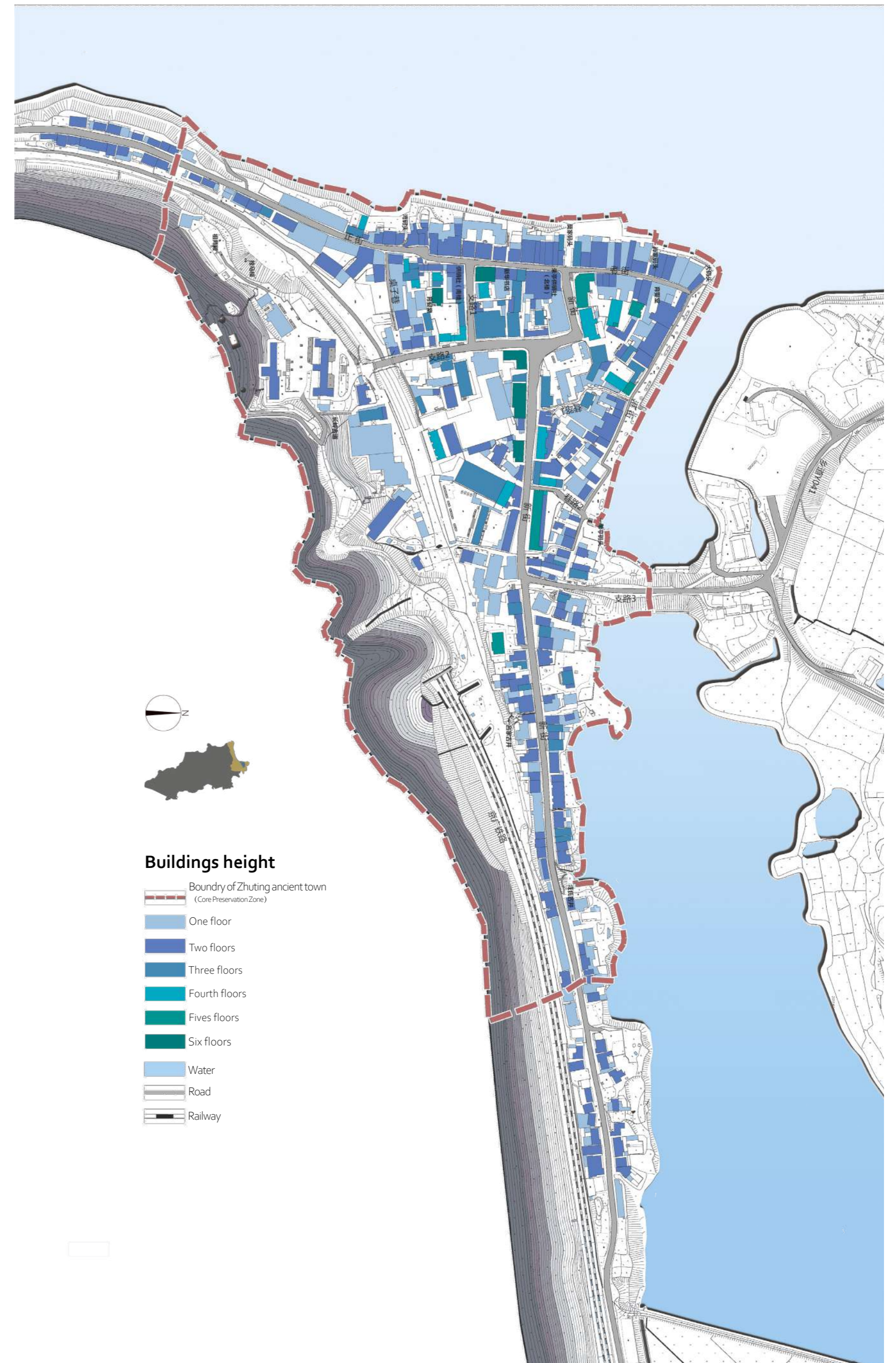
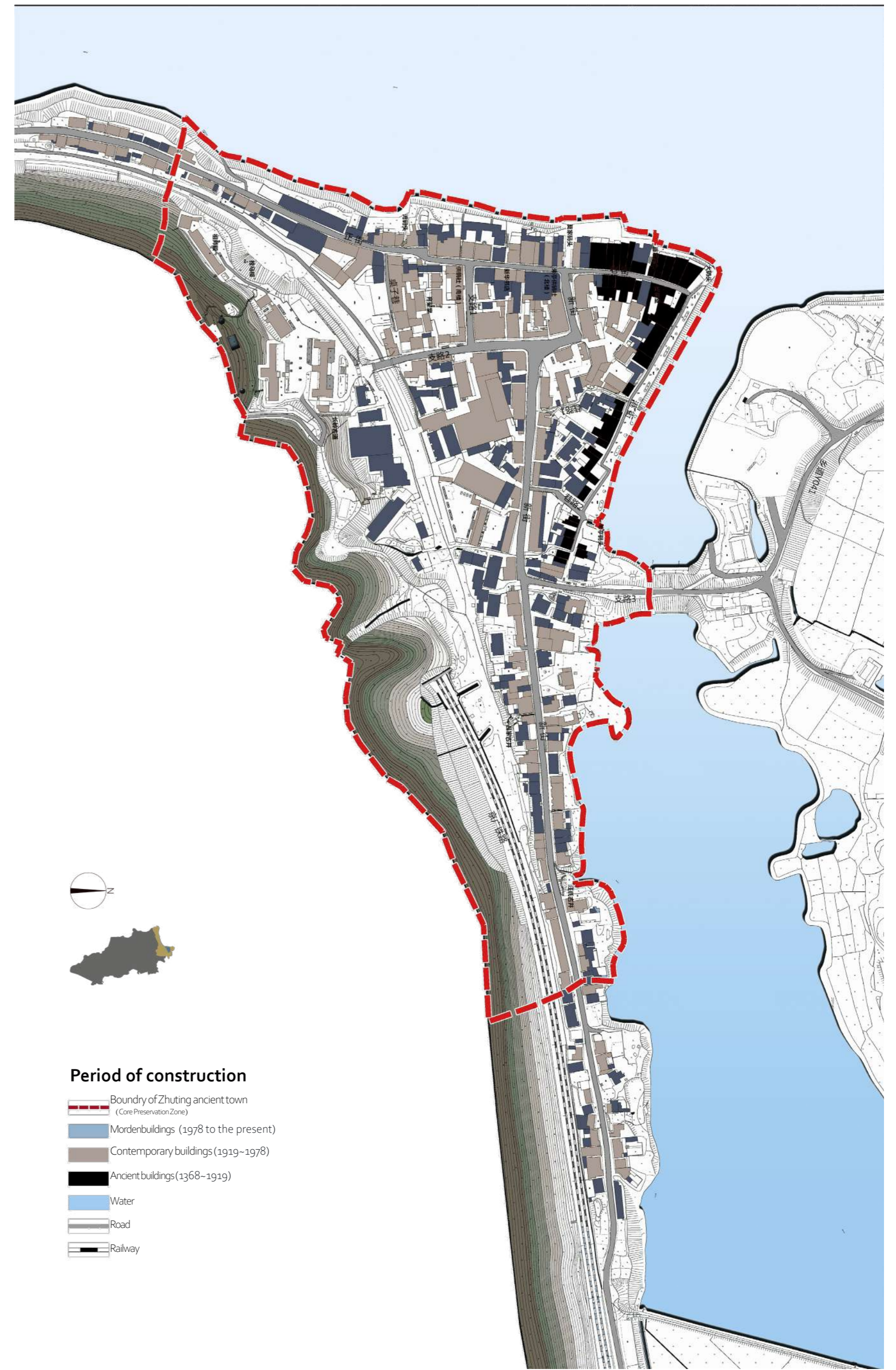
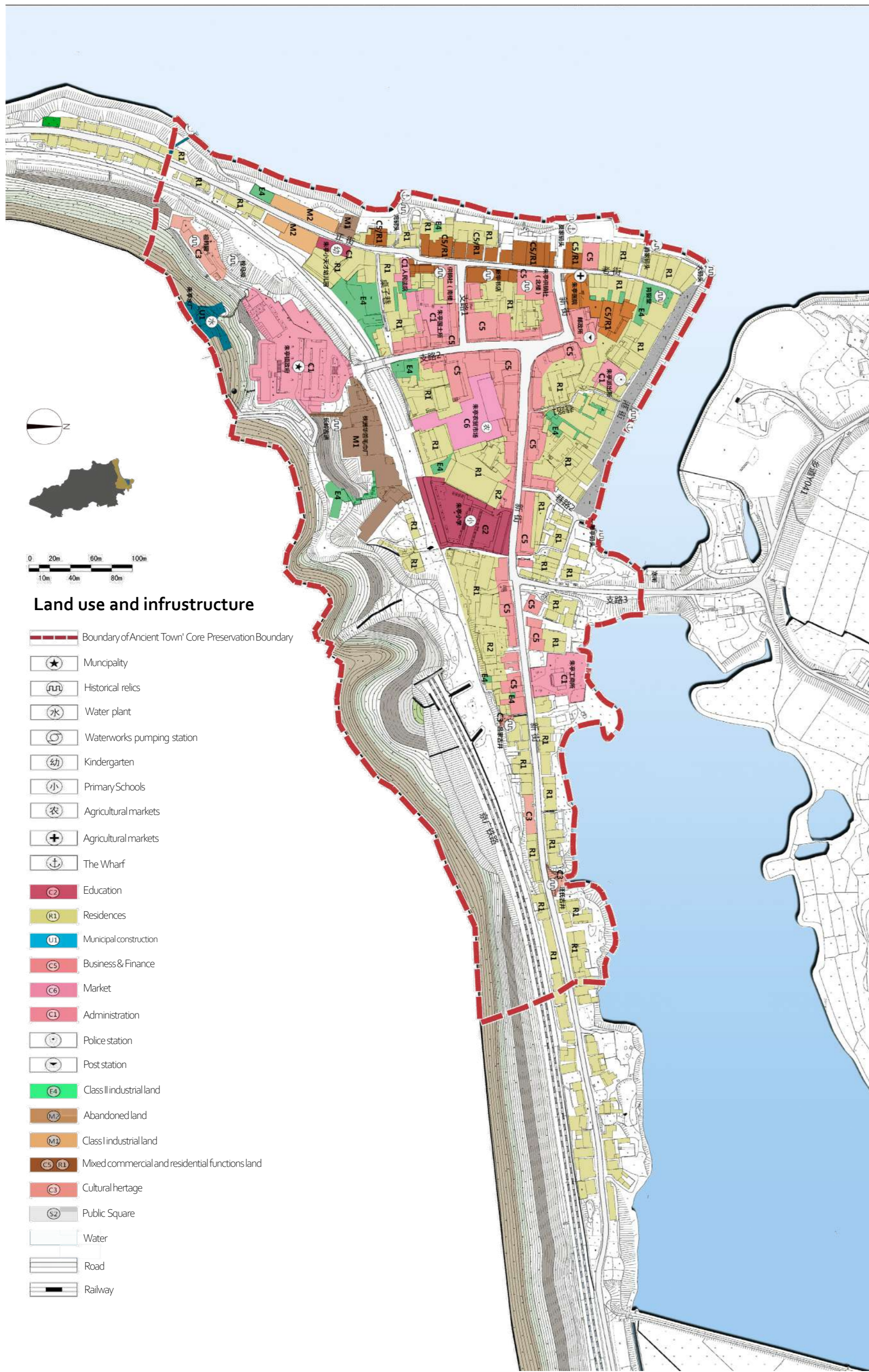
The **cool season** lasts for **3.0 months**, from December 5 to March 5, with an average daily high temperature below 57°F. The coldest month of the year in Zhuting is **January**, with an average low of 37°F and high of 49°F.

The wetter season lasts 6.5 months, from February 11 to August 26, with a greater than 33% chance of a given day being a wet day.

The **best time** of year to **visit Zhuting** for warm-weather activities is **from mid September to late October**.

URBAN ANALYSIS

Current condition of Zhuting Ancient Town



URBAN ANALYSIS

Population

The Citizens

When people walk through the streets of Zhuting Town, the **elderly and children** can be seen everywhere.

But middle-aged and young people are rare.

The town of Zhuting now has 1,853 registered residents, but more than 1,000 of them are working and living outside.

In addition, there is a **risk of intangible cultural heritage wood carving** being lost.



1



2



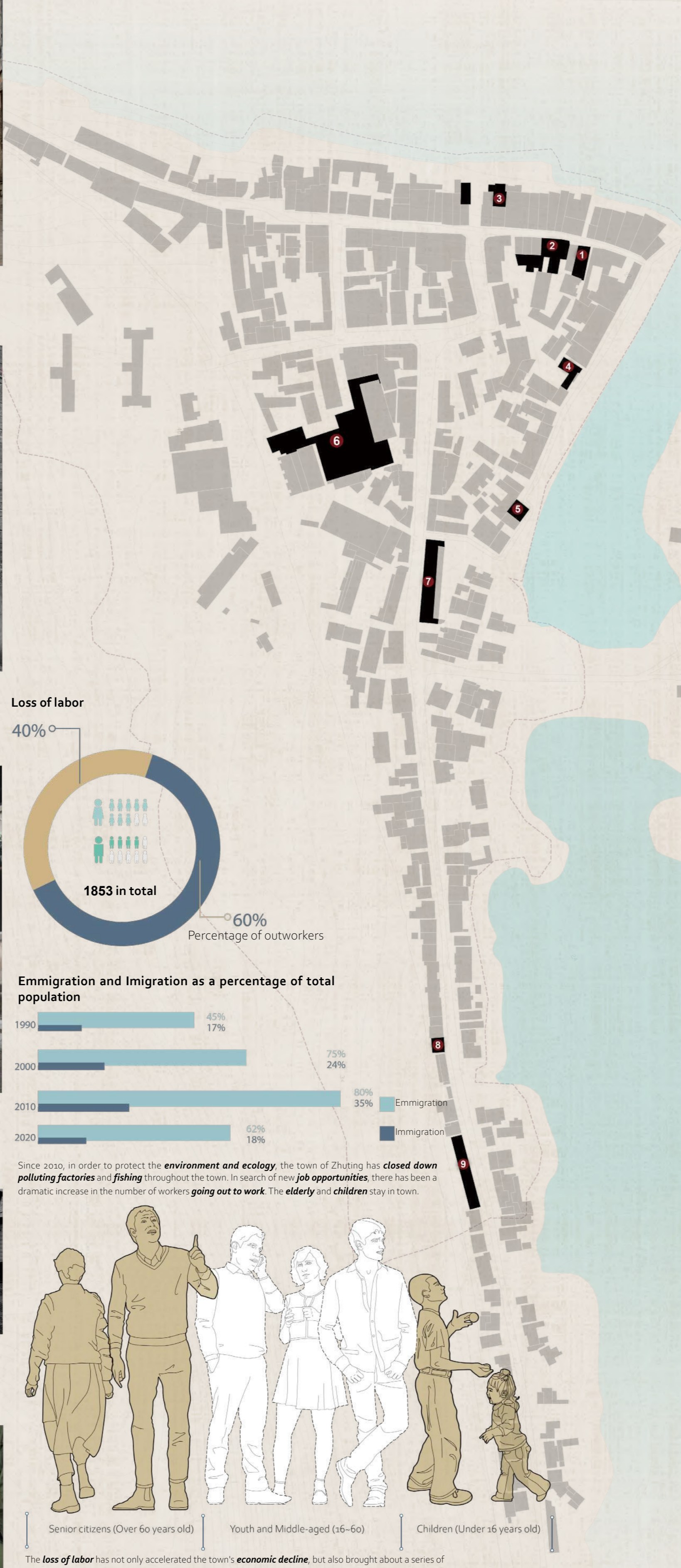
5



7



9



3



4



5



6



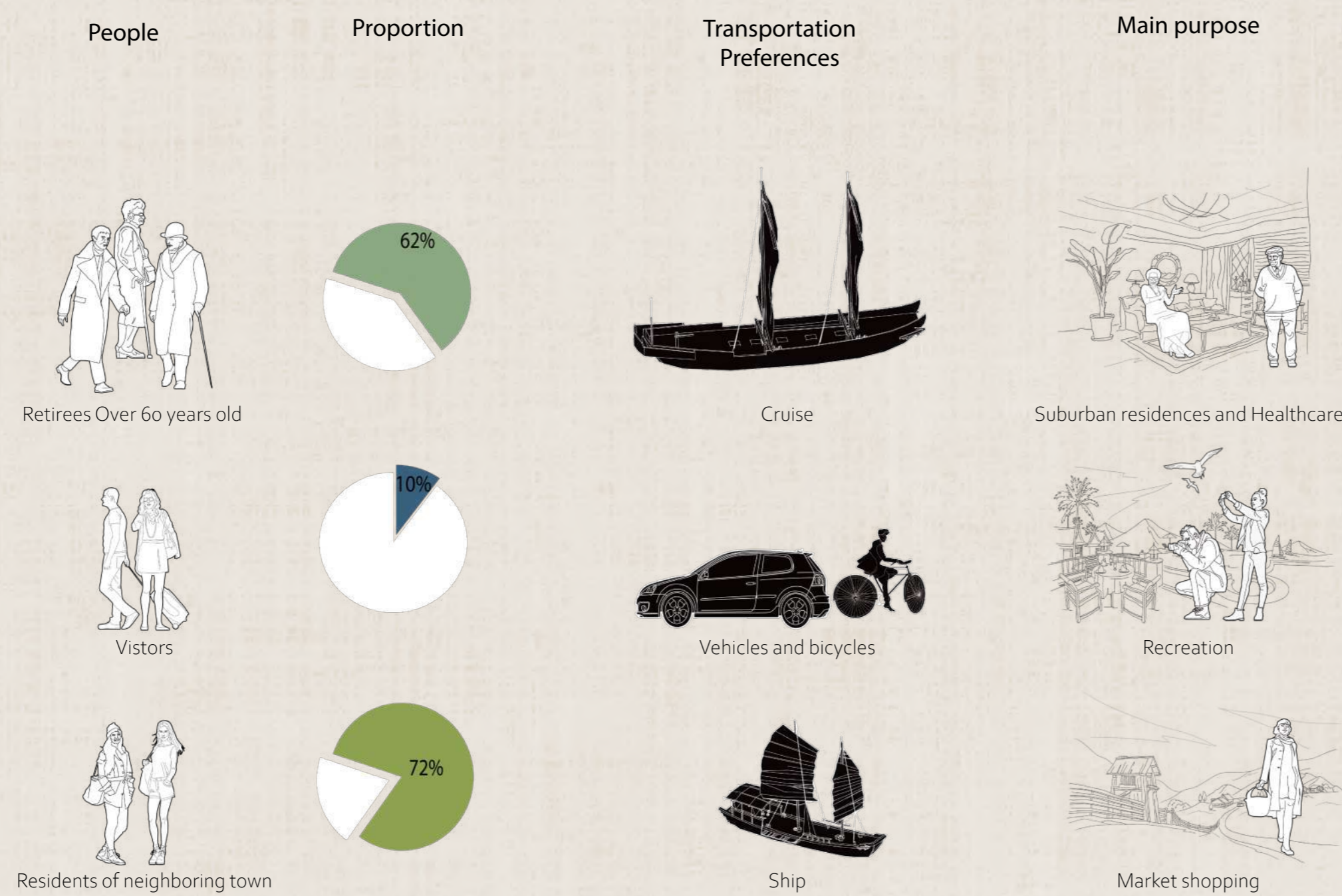
9



8

The Potential Visitors

Through the statistics of China's largest travel website Ctrip, **more than 62%** registered members are **retired people** over 60 years old. The most popular programs are **ancient town tours** and suburban residences for the elderly.



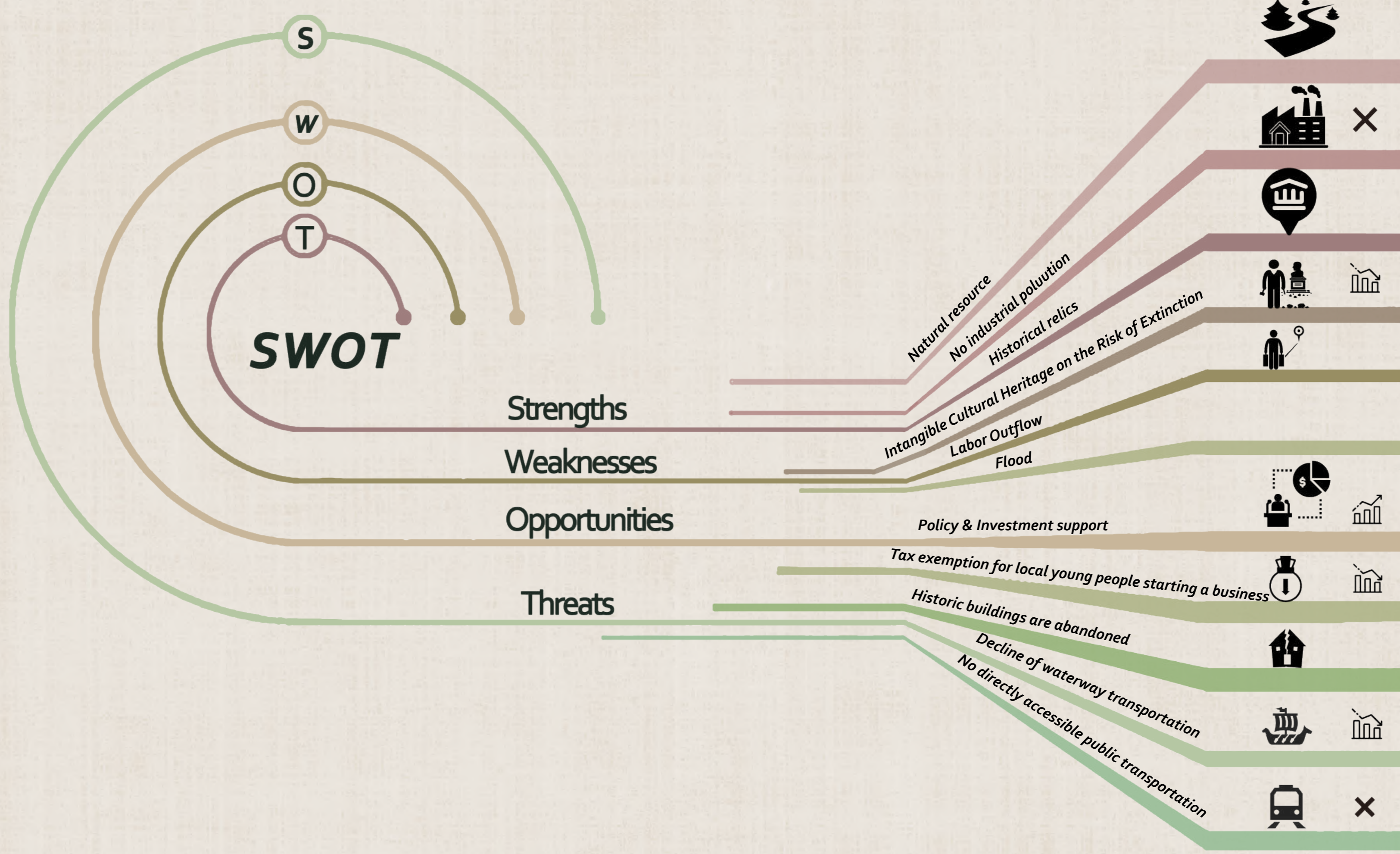
By the end of 2020, China's population **over 60 years old** has exceeded **250 million**. About **62%** of customers in Ctrip's offline stores are **retirees**.

Ancient town tourism is less attractive to young people, who generally believe that the **homogenization** of ancient town projects is serious.

The town of Zhuting has a large bazaar once a month, and more than **72%** of the visitors and sellers are residents of the **neighboring villages and towns**.

SWOT ANALYSIS AND STRATEGIES

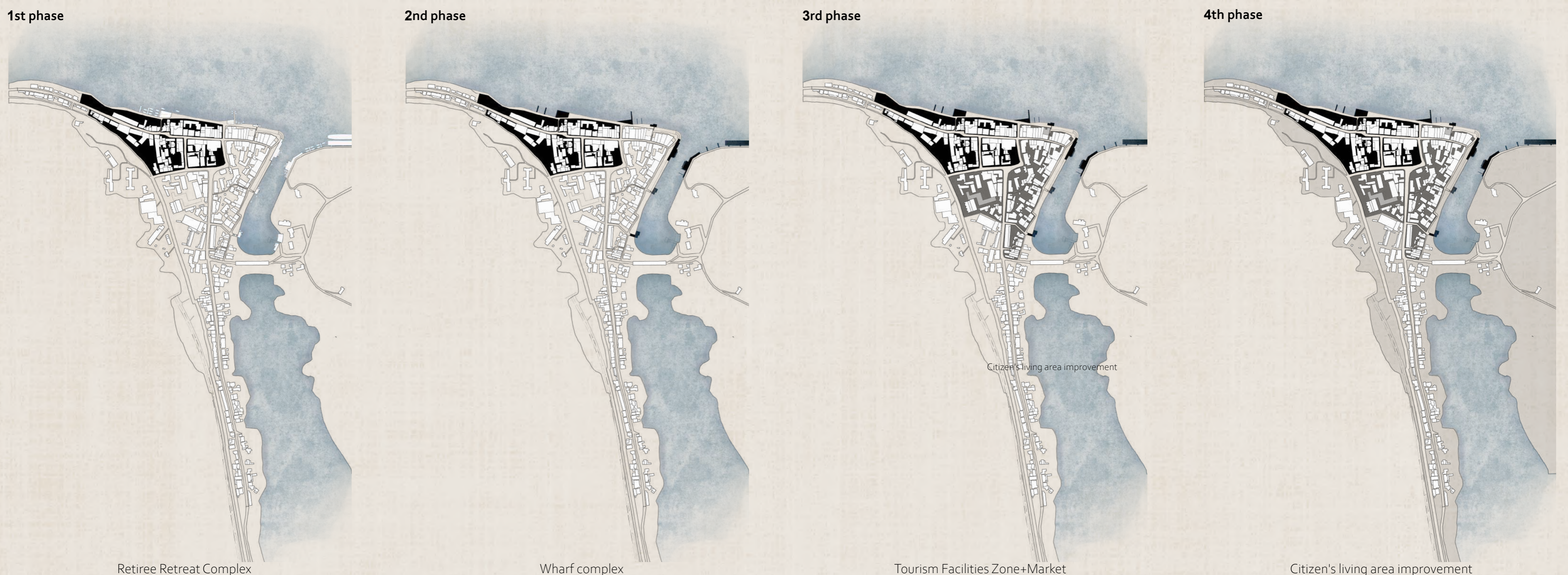
SWOT Analysis



Strategies



Phased construction plan



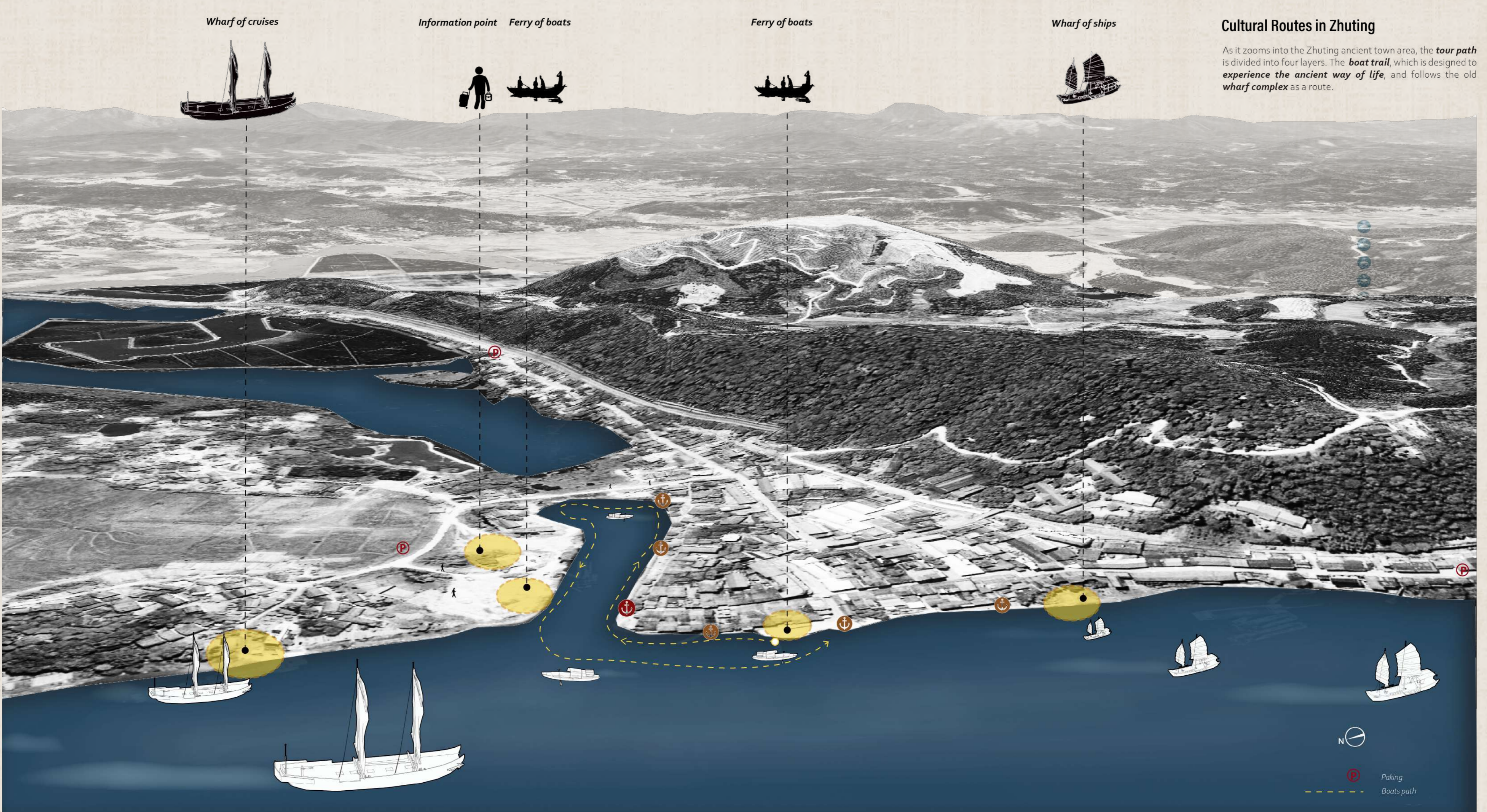
PROPOSAL

Cultural routes along the river

Cultural Route along the river

The **cruise route** along the river mainly connects the **two cities** of **Changsha** to **Hengyang**, and then **stops at five ancient towns** on the way. A total of **7 stations**. The purpose is to **revitalise the ancient towns** and islands along the road that will be abandoned.

The entire **voyage** covers **277.41 km**. The journey takes **5.33 hours** each way, excluding stopping times. It is therefore recommended that the **entire tour schedule** is **two days** with an **overnight stay in Zhuting**.



PROPOSAL

Masterplan for Zhuting pilot project



Preservation
Historical buildings

Adaptive reuse
Diffused house
Public space

Renovation
Residential house
Commercial & Residential mixed function
Administration

New construction
Market

Existing Infrastructure

- Municipality
- Police station
- Hospital
- Primary School
- Tourist Attractions
- Parking
- Hotel
- Trade administration
- The Court
- Post station
- Kindergarten
- Restaurant
- Water supply plant

New Infrastructure

- ATM
- Gym
- Pharmacy
- Parking
- Bar
- Substation
- Restaurant
- Grocery
- Toilet
- Bicycle rental
- Senior Citizen Canteen
- Market
- Water Source Heat Pump

Visitors' Facilities

- Information point
- Retirement Apartments
- Wood Carving Workshop
- Wharf
- Dogs park
- Physical Therapy

PROPOSAL

Reference for intervention



1. Wood Carving Workshop



2. Canteen of Senior Citizens



3. Physical Therapy



4. Deffusion house



5. Hotel (Renovation of existing hotel)



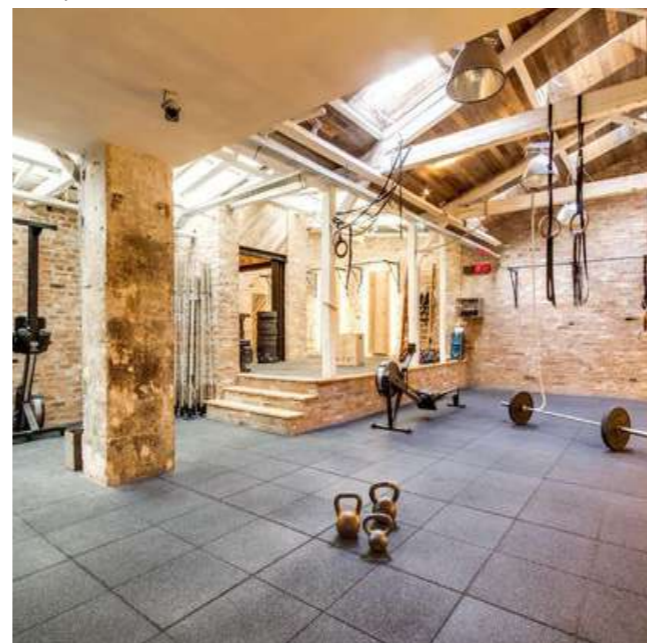
6. Yoga and Taiji studio



7. Dog park



8. Gym



9. Market



10. Restaurant



PROPOSAL

Axonometry of Zhuting

Both the **harbor** and the **wharf** serve boats of different sizes. By studying and classifying the **citizens and visitors** of the town, the interference of different people's **circulation** is avoided, and **different people have different arrival and tour routes**.

Tour paths for different people

