
ASLA
LA2017

**Annual Meeting
and EXPO**
October 20-23
Los Angeles

Common Ground

DESIGNING IN MOROCCO:

A Blend of Culture, Environment and Peoples

Presenters

Monte Wilson, ASLA, Jacobs

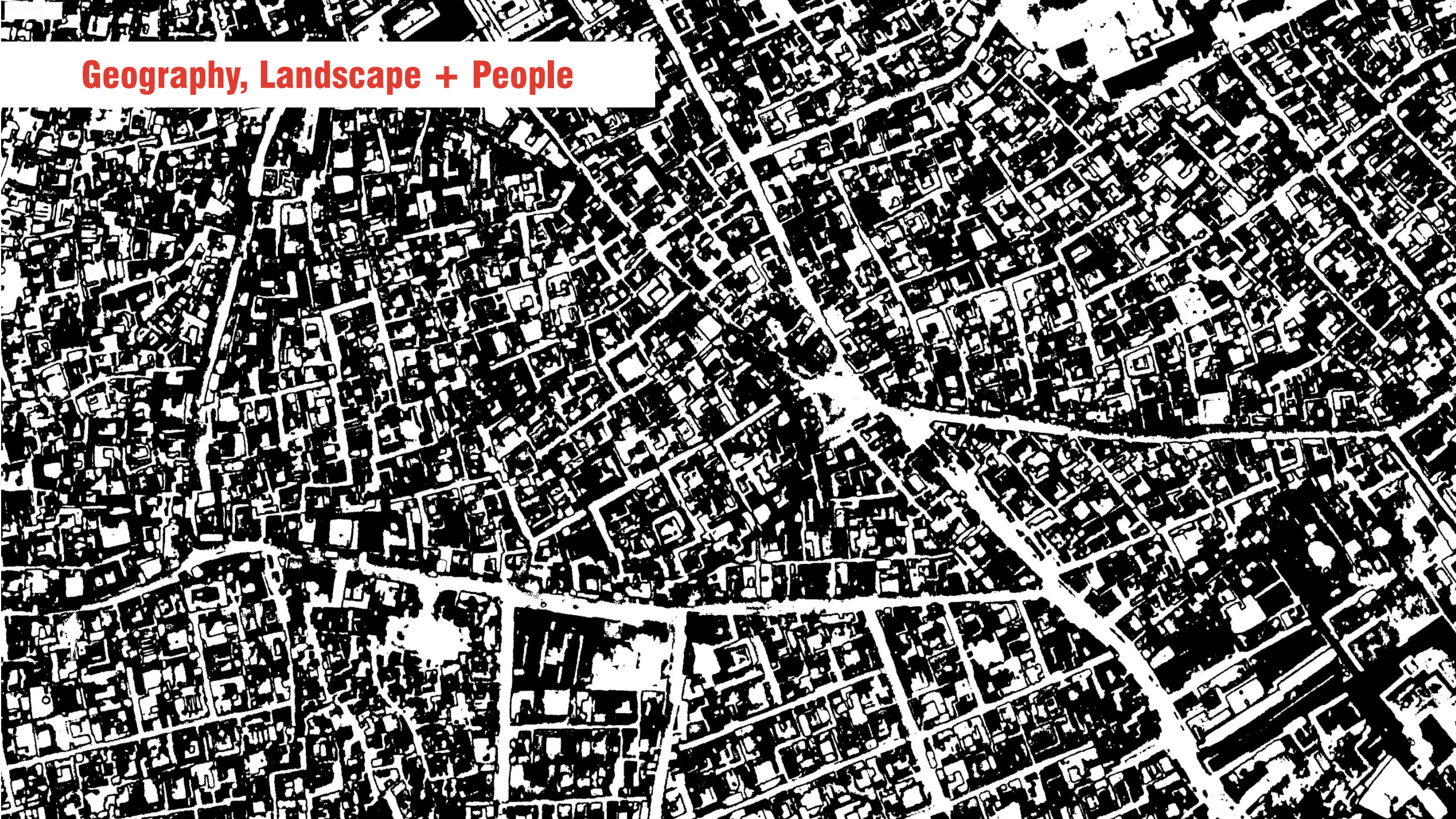
Brett Wylie, ASLA, Jacobs

Matt Friesen, ASLA, Jacobs

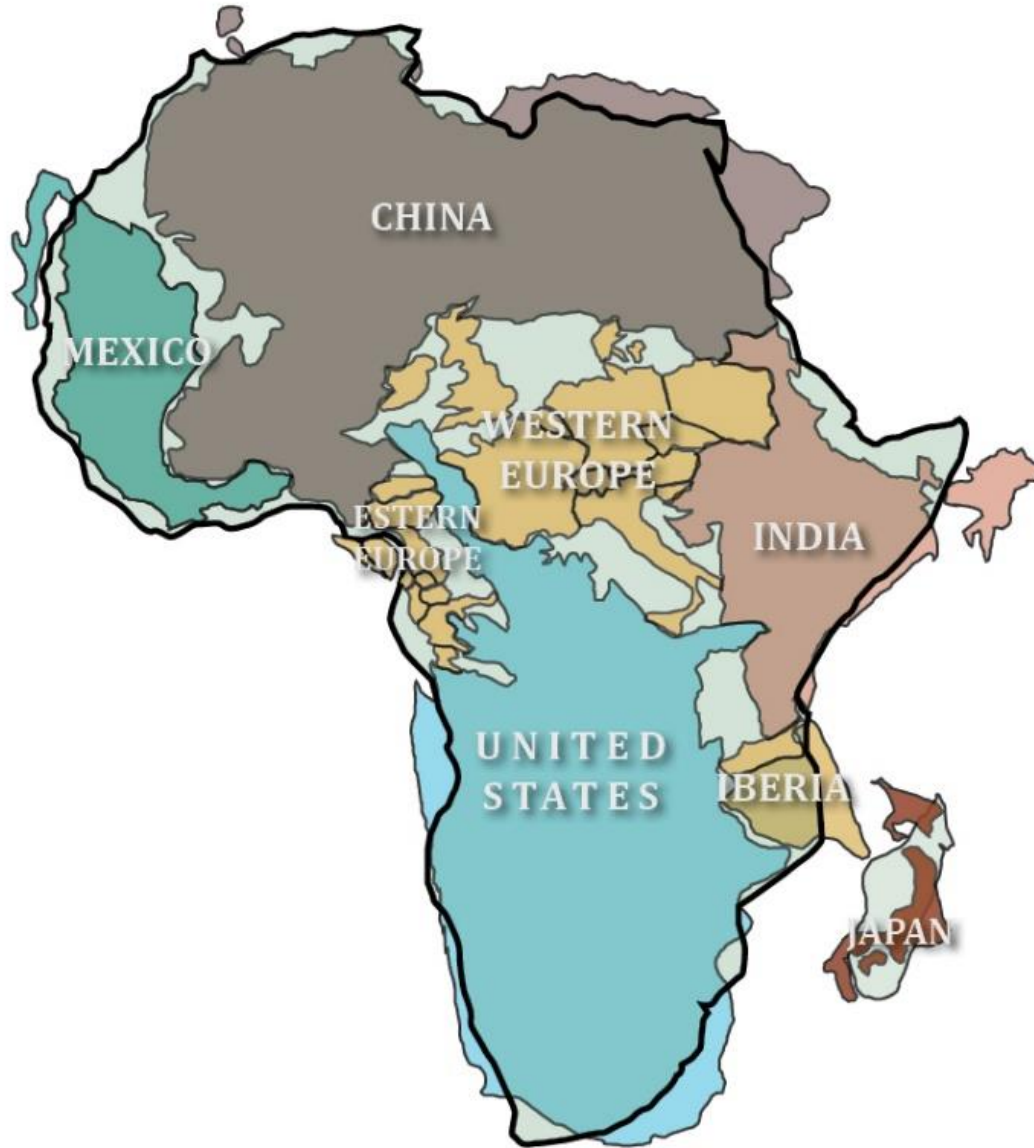
Designing in Morocco

- 1. Connectivity** – Atlanta + Hartsfield-Jackson, UGA + talent
- 2. Leadership** - Landscape architects leading - ethos and collaboration
- 3. Impact** – Capability in resilient and sustainable design
- 4. Contextual** - Balancing culture, art, science and craft

Geography, Landscape + People



Africa Geographic Scale

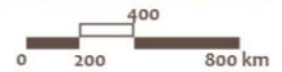


Morocco Geographic Scale

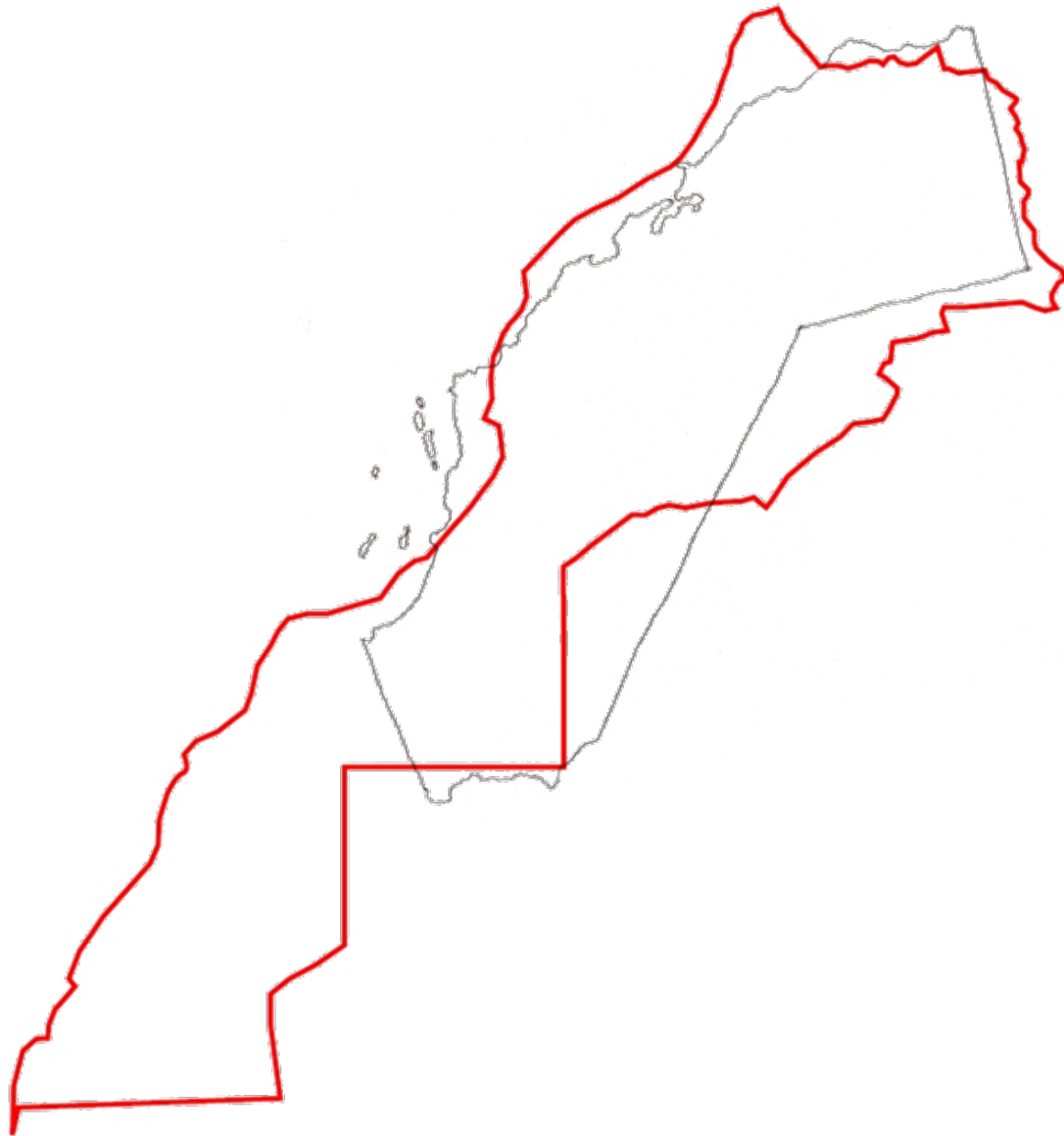
- A crossroad between Europe, Africa and Middle East
- 3500km of Coastline (Atlantic and Mediterranean)



Morocco Geographic Scale



Morocco Geographic Scale



CALIFORNIA

423,970

square kilometers

MOROCCO

710,000

square kilometers



Population Comparison

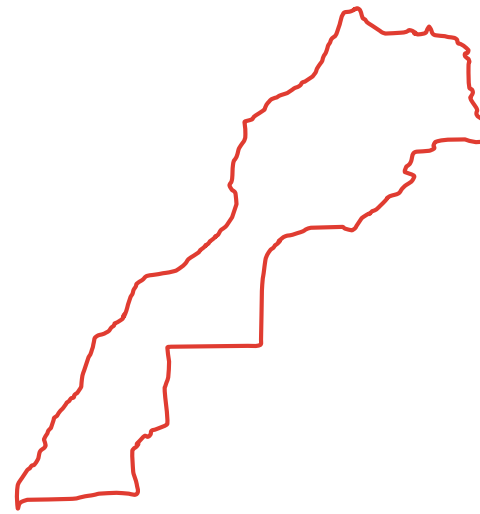
2017
POPULATION

MOROCCO

35,739,580

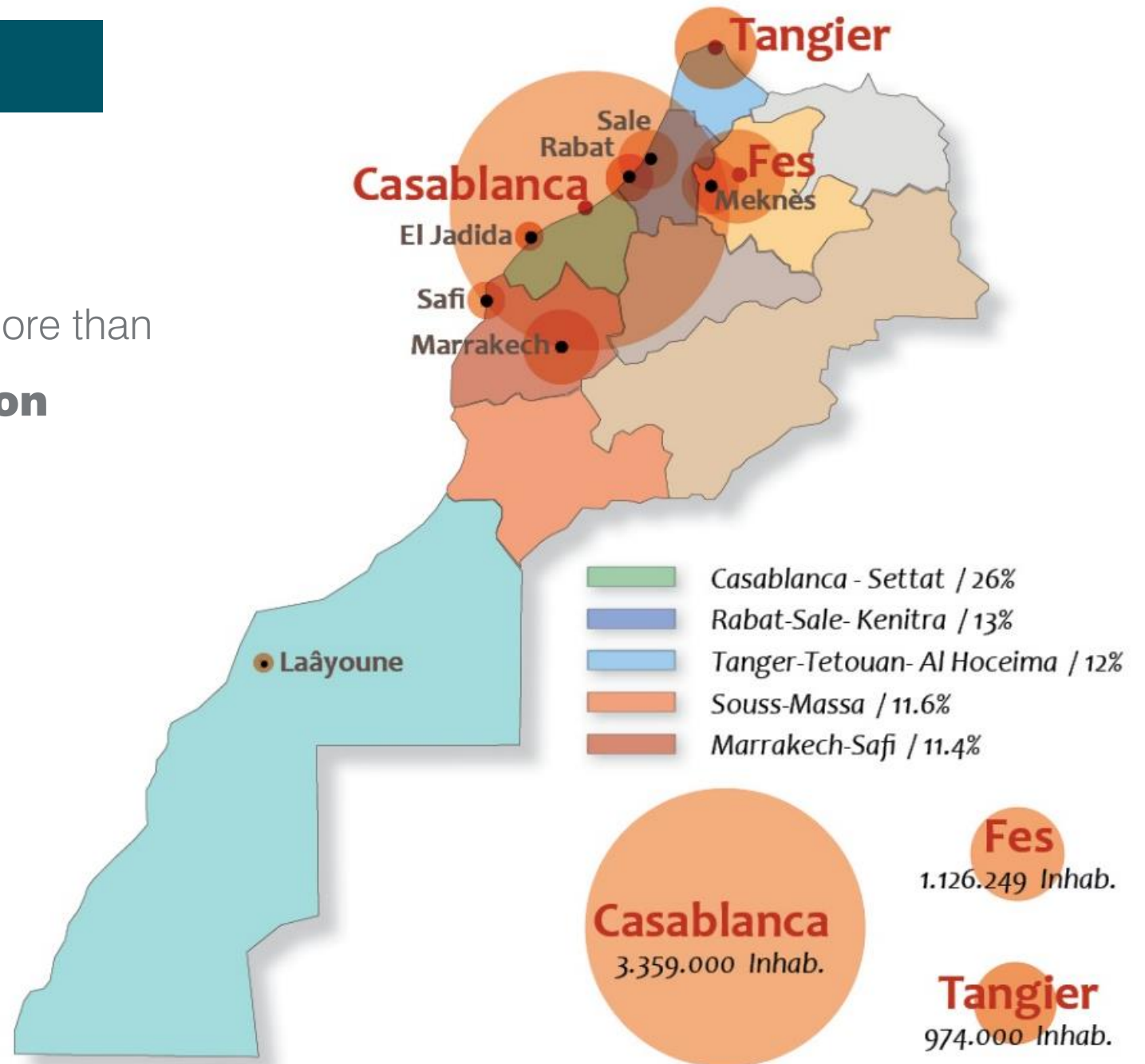
CALIFORNIA

39,849,872



Location + Demography

In 2030, the **five most populated regions** in Morocco will contribute more than **three quarters of the population growth**



Location + Demography

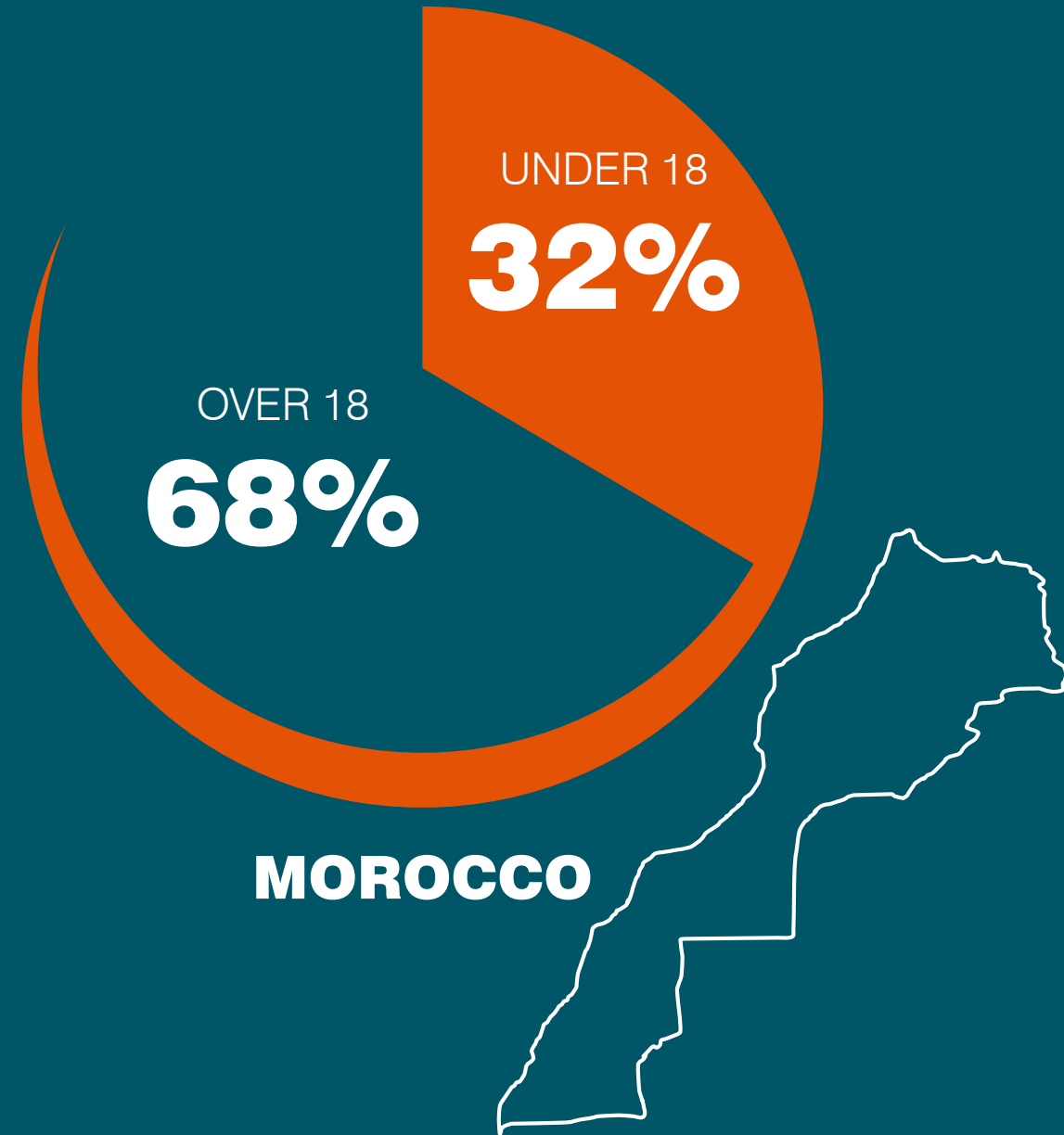
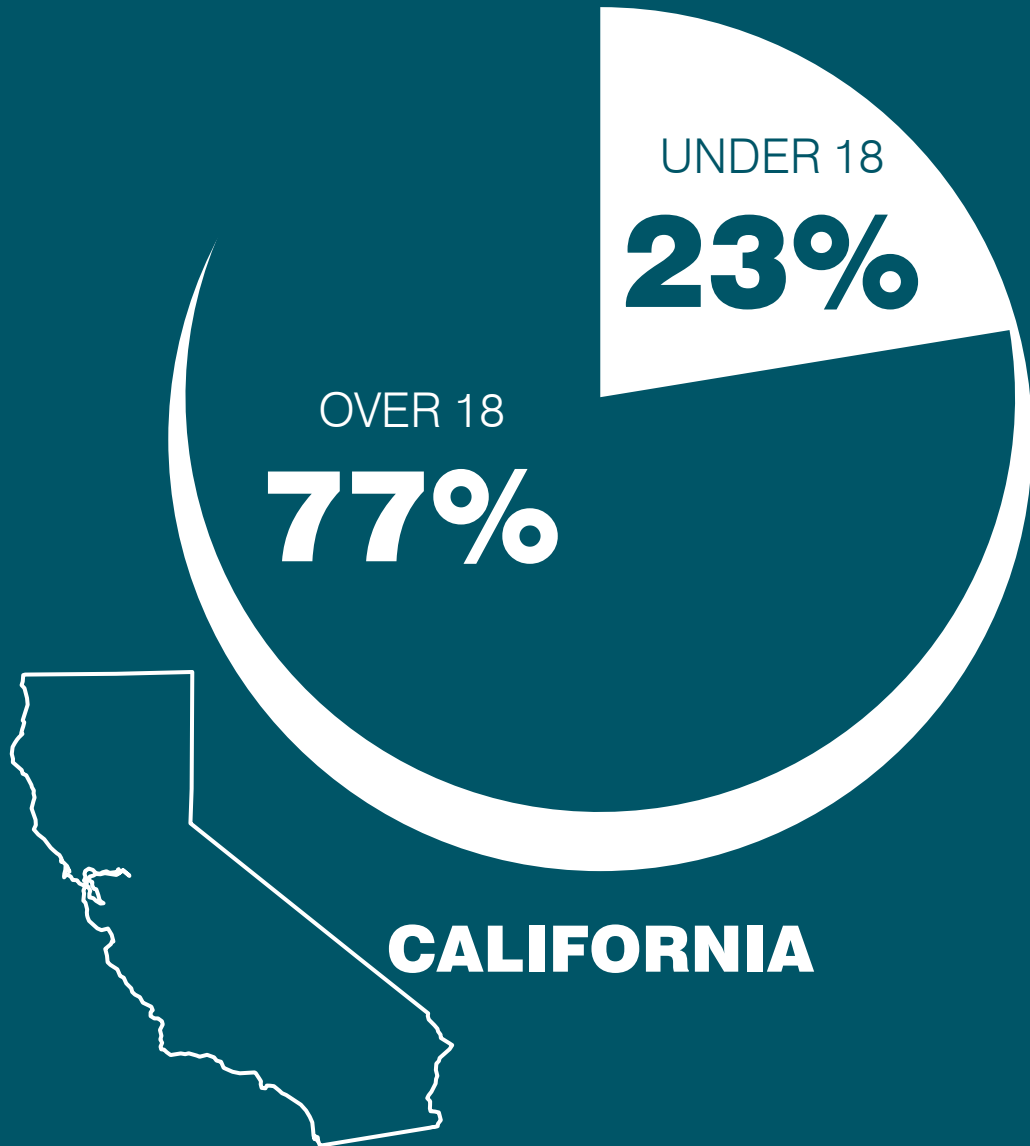
Predominantly Rural Population

- At the end of the 19th century, 90% of the total population is rural.
- Berber population located in mountainous areas
- Arab tribes in the northern regions

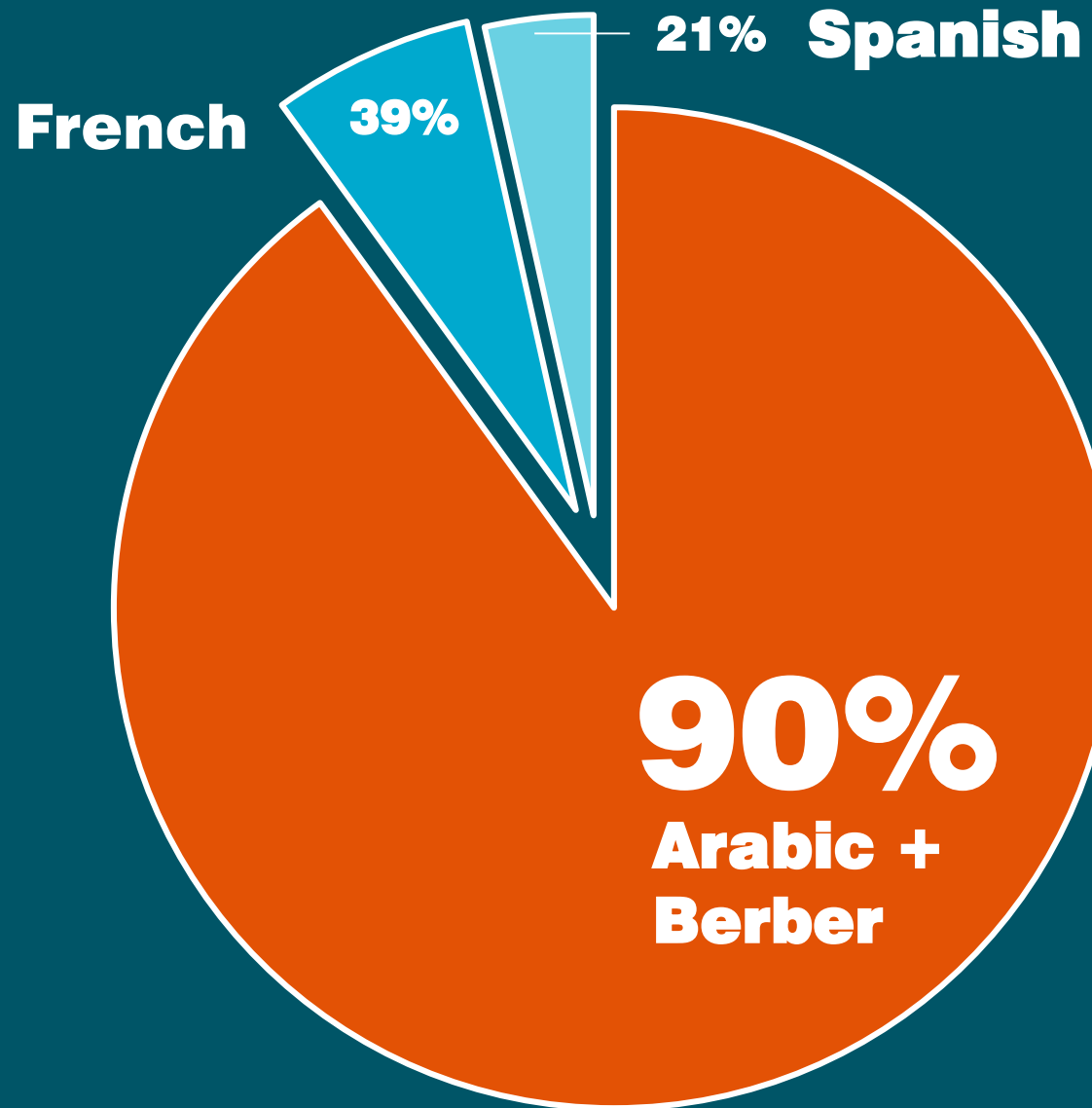
Concentrated Urban Population

- Four imperial cities: Fès, Marrakech, Meknès and Rabat
- Bourgeois and commercial cities
- Generally built on plains and valleys below mountains
- Other traditional cities : Oujda, Tanger, Tétouan, Essaouira, El Jadida

Location + Demography



Dominant Languages

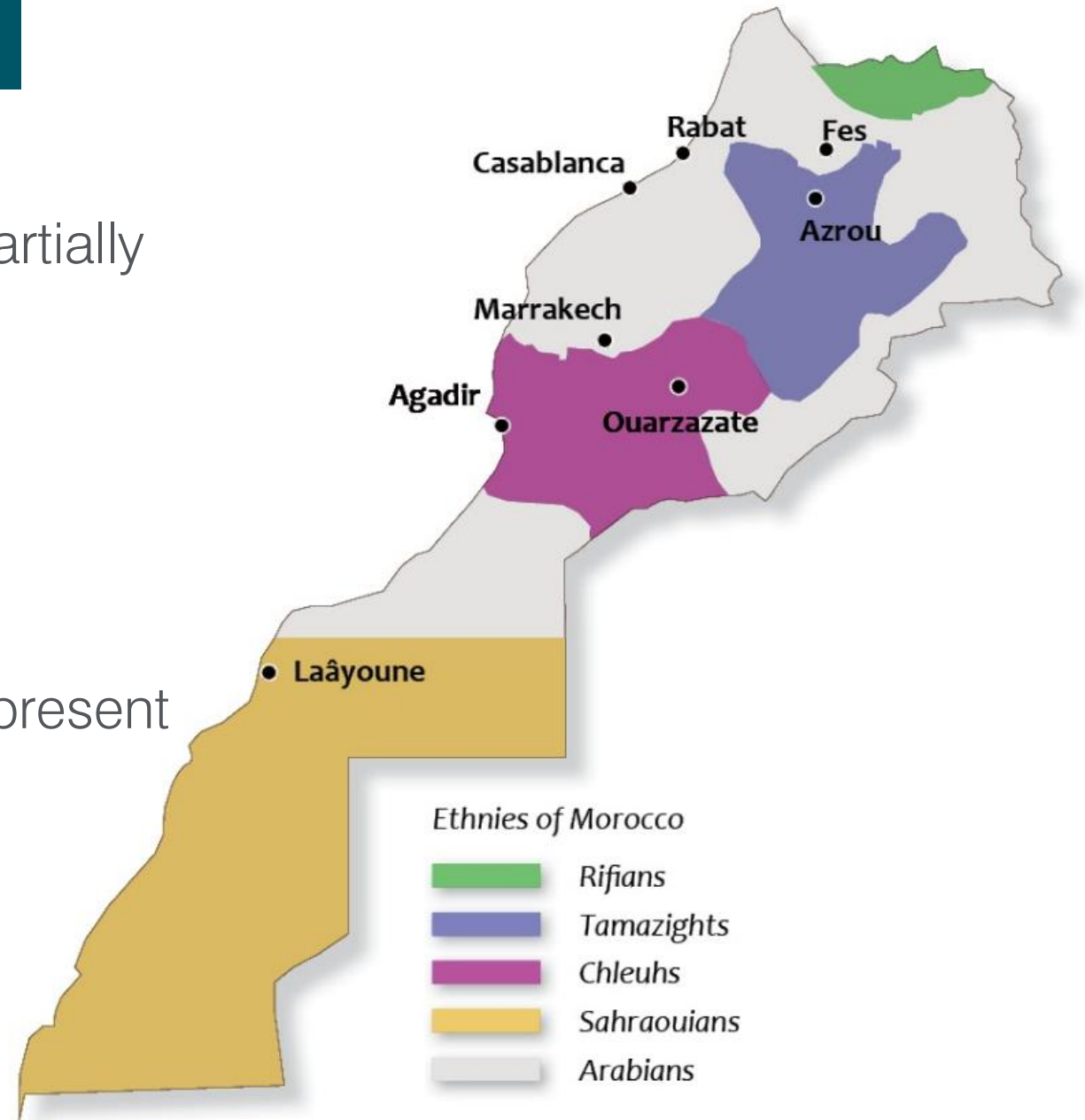


Morocco's Diverse Cultures

Settled by Berbers, Morocco was partially Arabized 13 centuries ago.

Followed by settlement and cultural influences from Spain and France.

Morocco's numerous languages represent a blending of those influences.





Marrakech Medina



Fes Medina





Jemaa el-Fna - Marrakech



↑
ملاح
Mellah

صلى الله عليه وسلم

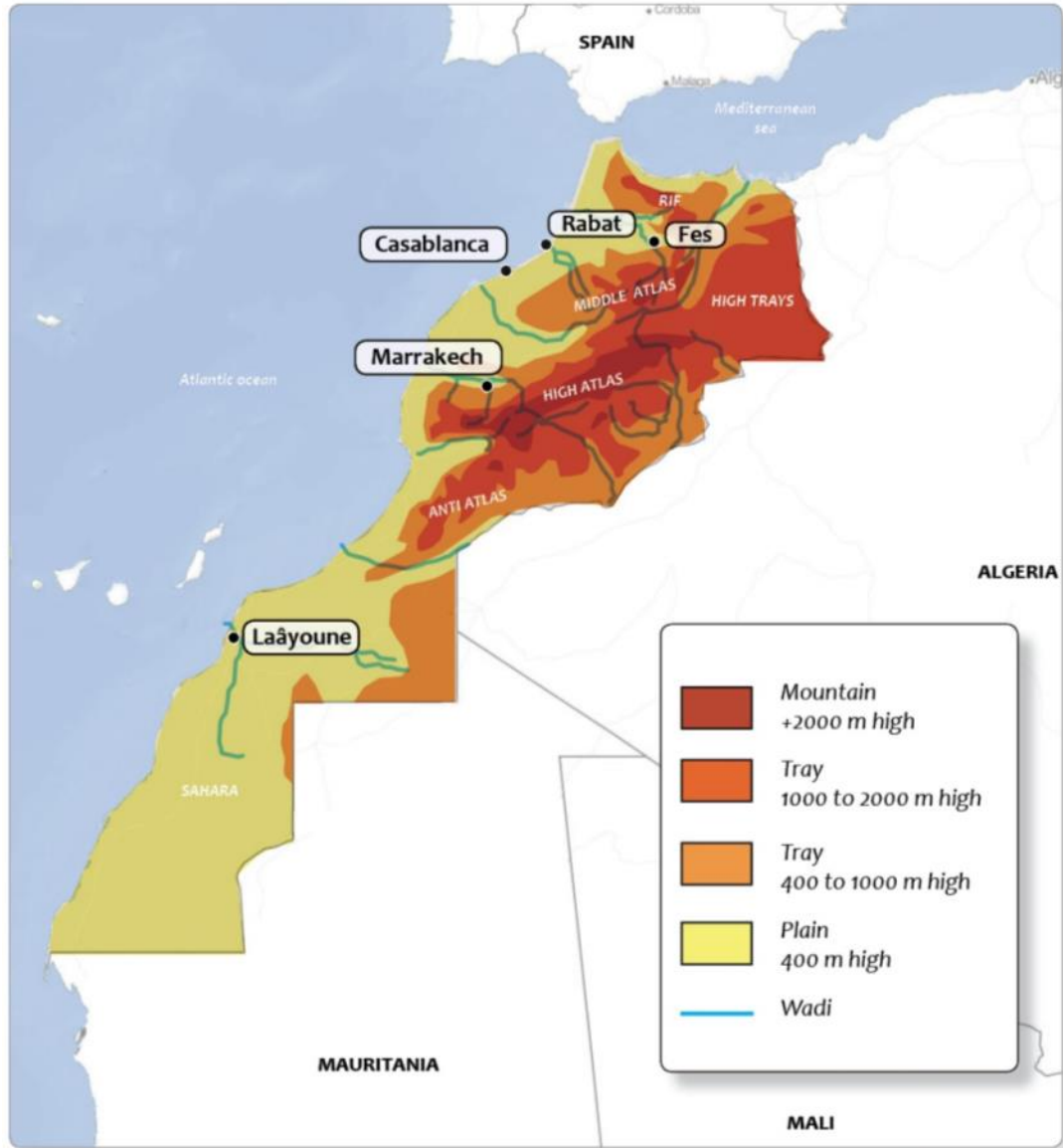
Fes Mellah



Fes Medina



Landscape + Territory



Medina of Fes



Essaouira, Sea Front



Agricultural plain



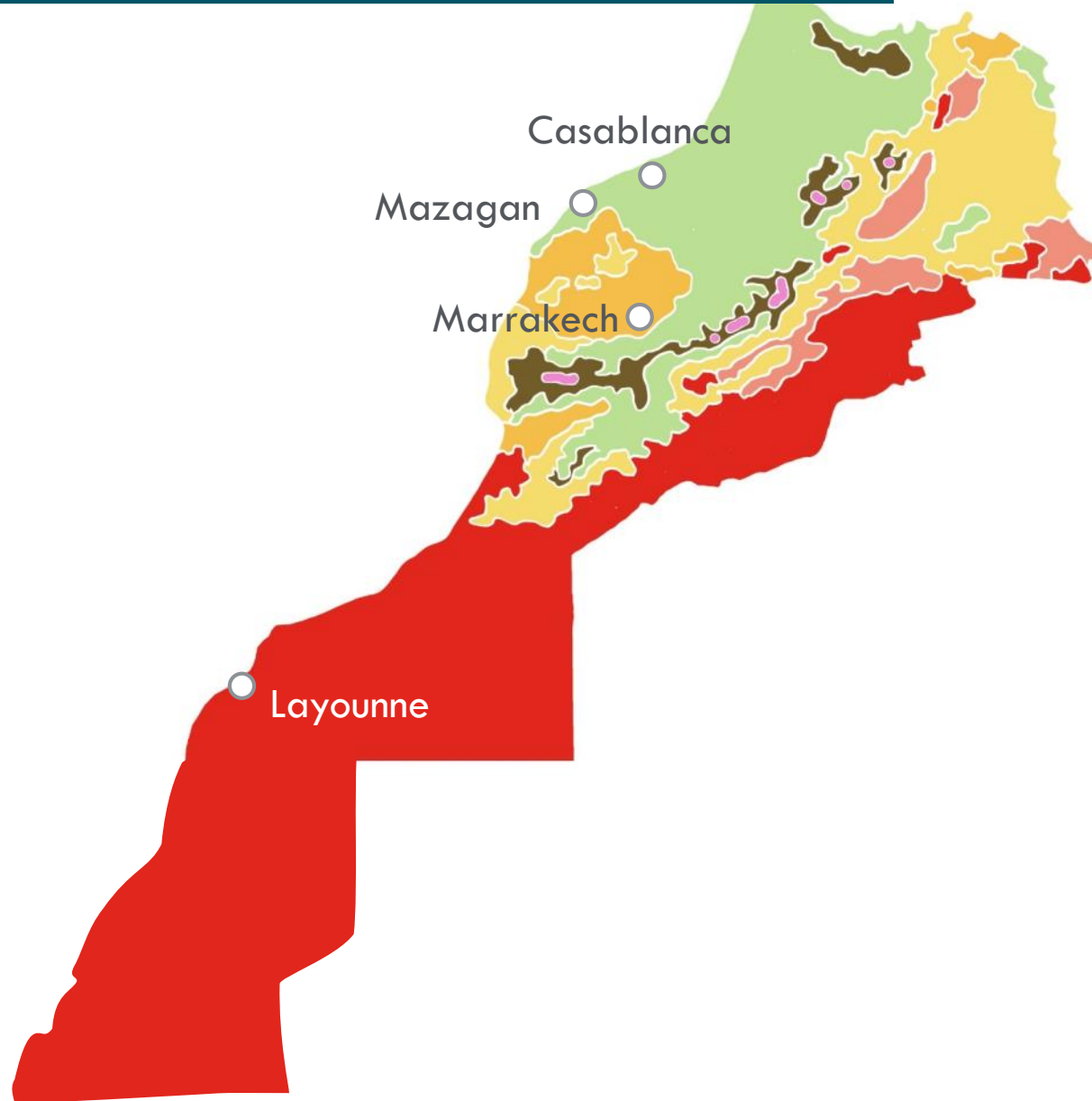
Mountain road



Laâyoune, a city in the desert



Climate Zones



Morocco shares 7 of California's 10 Climate Types

- Hot Desert
- Cold Desert
- Hot semi-arid
- Cold Semi-arid
- Hot-summer Mediterranean
- Warm-summer Mediterranean
- Dry-summer Subarctic



Fes



Ben Guerir



Kenitra



Marrakech



Marrakech



Marrakech



El Jadida



Safi



Mazagan



Dar Boaza



Laayoune



Laayoune

Marrakech





Marrakech



Casablanca



Laayoune



Above the Sahara



Jardin Majorelle - Marrakech



Mazagan

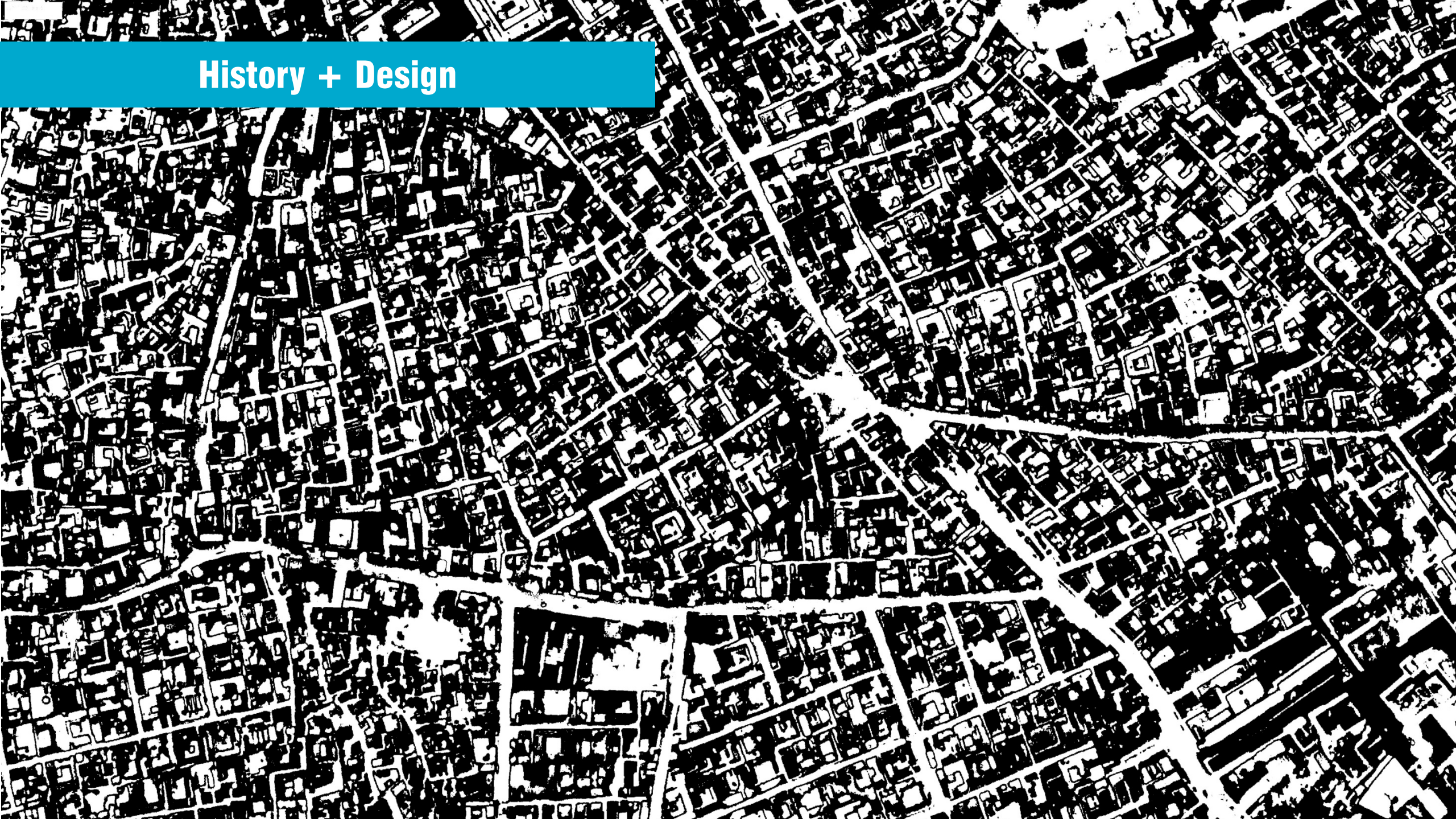


Ouarzazate



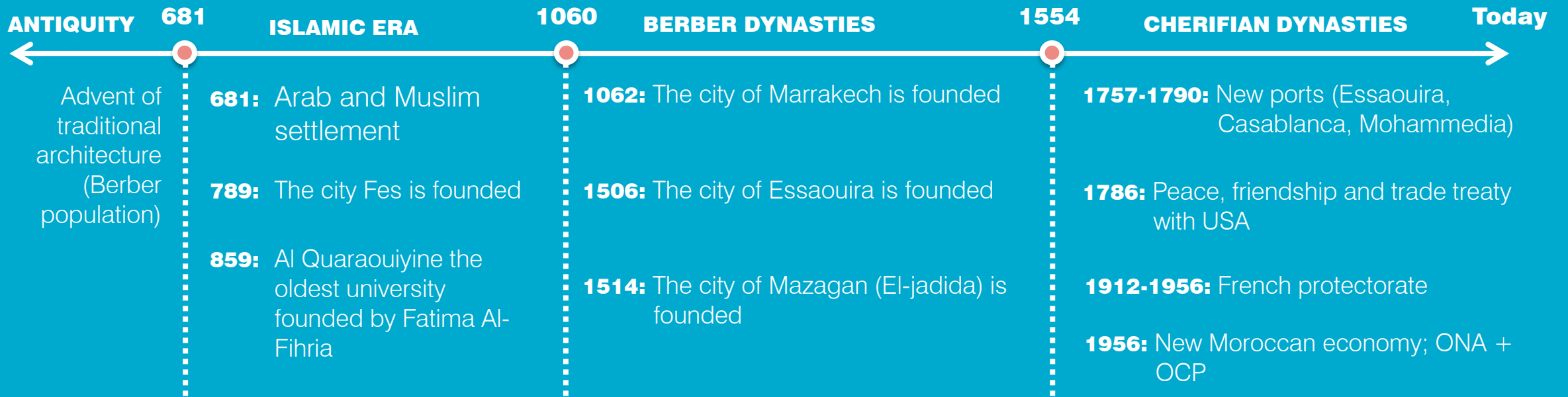
Near Ouarzazate

History + Design



History + Design

Development Schemes Of Morocco – Pre-20th Century



Fes



Fes



Fes

City of Mazagan (El Jadida)



Essaouira Mellah

Jewish population neighborhoods, encircled by fortifications

The First Mellah was established in Fès in 1438



Urban Population: Imperial Cities

- The four imperial cities succeeding themselves in the function as national capital : Fès, Marrakech, Meknès and Rabat
- They are generally built on plains and valleys below mountains
- Other traditional cities : Oujda, Tanger, Tétouan, Essaouira



Urban Population: Traditional Cities

- Organization around the large mosque surrounded by Retail souq, and then by housing. The whole is encircled by fortifications
- Highly dense urban tissue with neighbouring houses on three sides, and narrow streets
- Housing organised around a central courtyard
- Most advanced concepts of sustainable development (bioclimatic design, pedestrian area, extensible habitations...)



Fes



Fes



Fes



Marrakech



Fes



Jemaa el-Fna - Marrakech



Marrakech Medina







Fes Medina



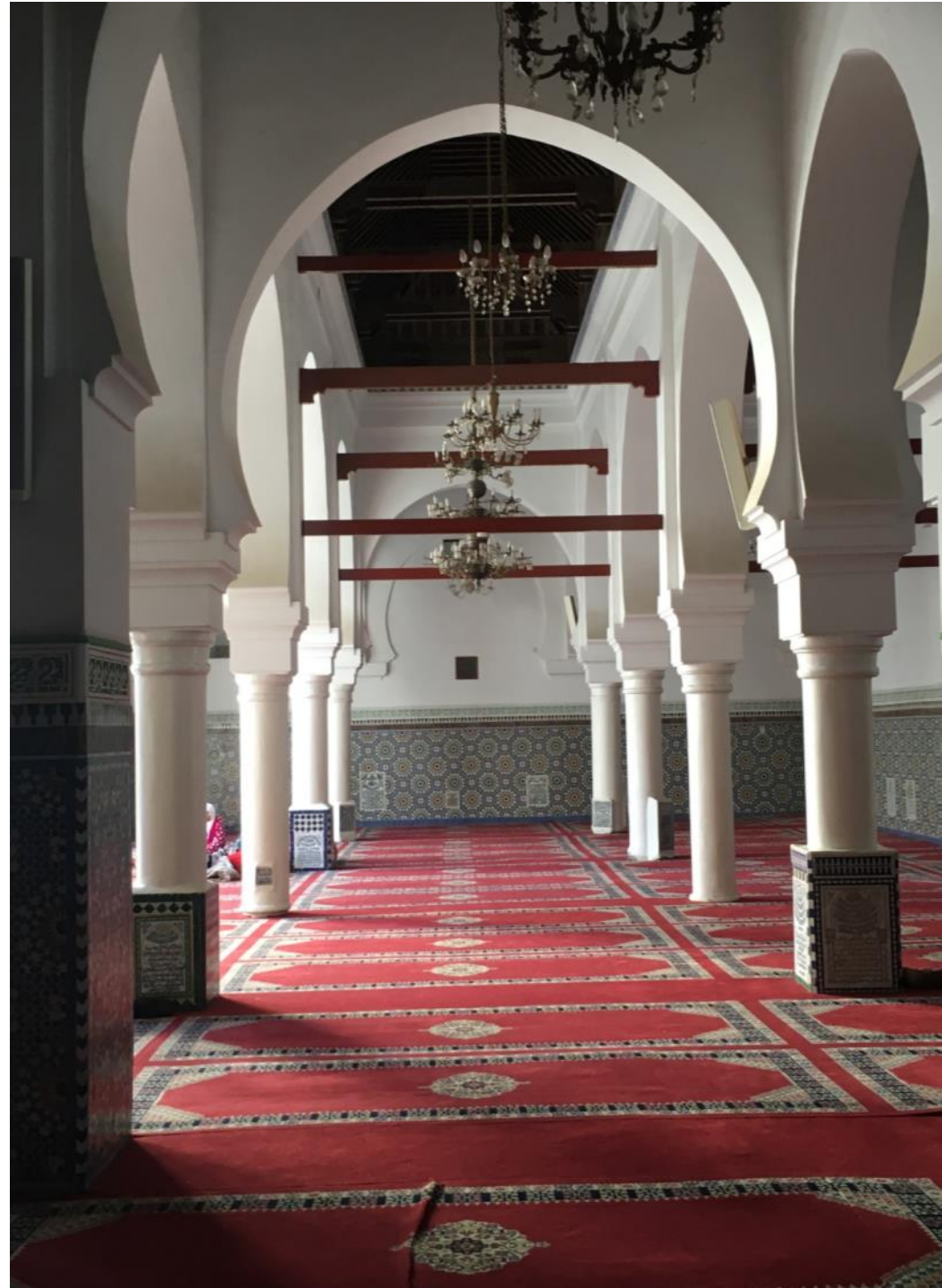


Fes Medina





Marrakech Medina



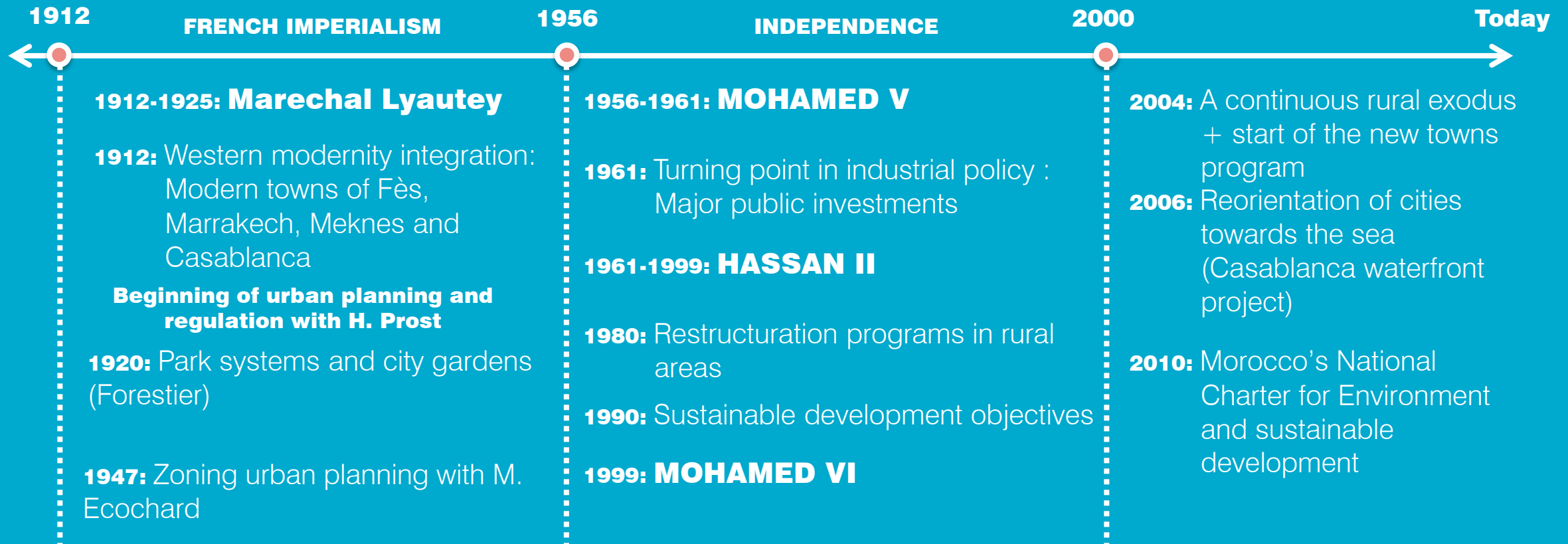


Fes Medina

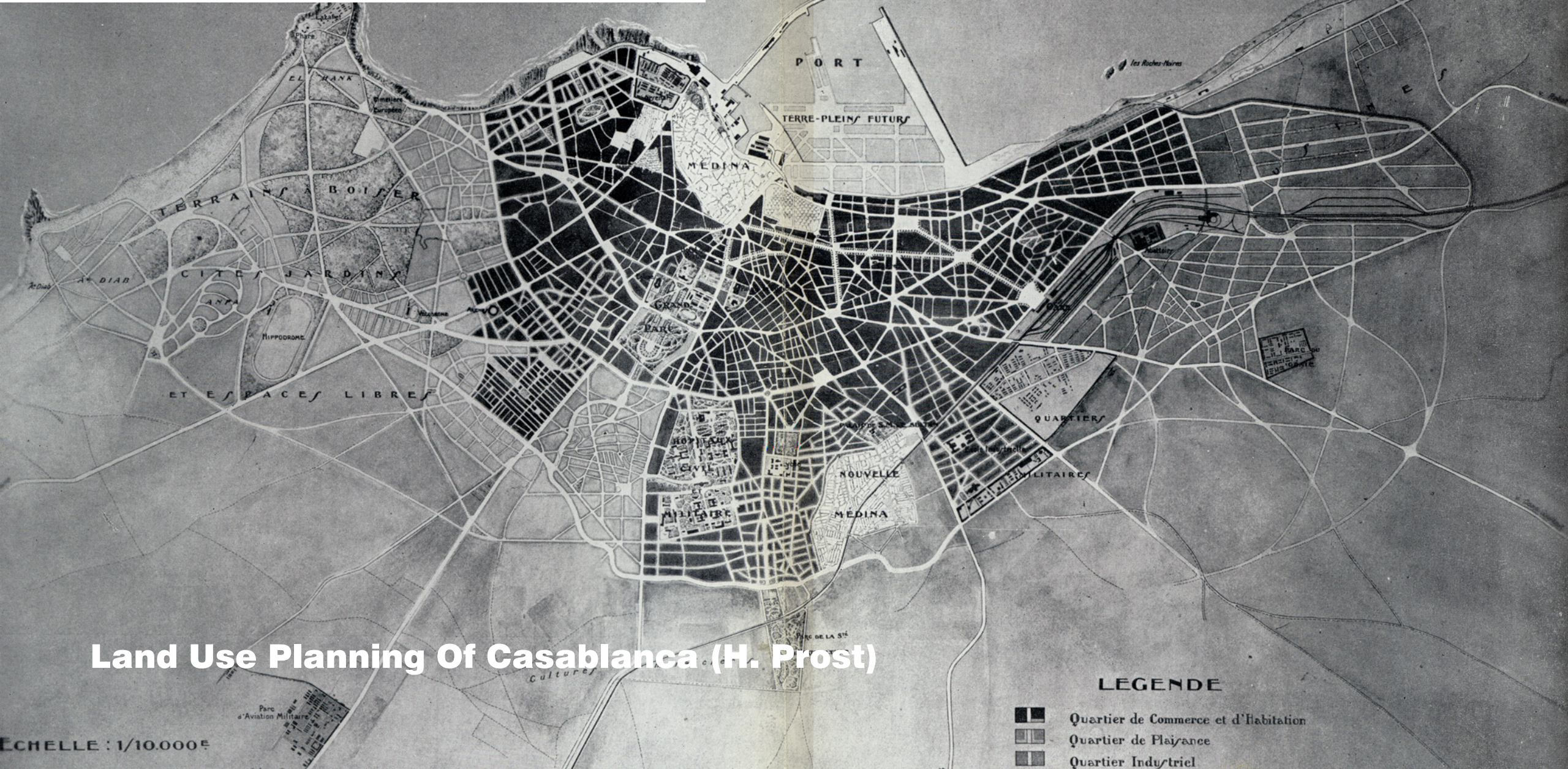


Fes Medina

Development Schemes Of Morocco –The 20th Century

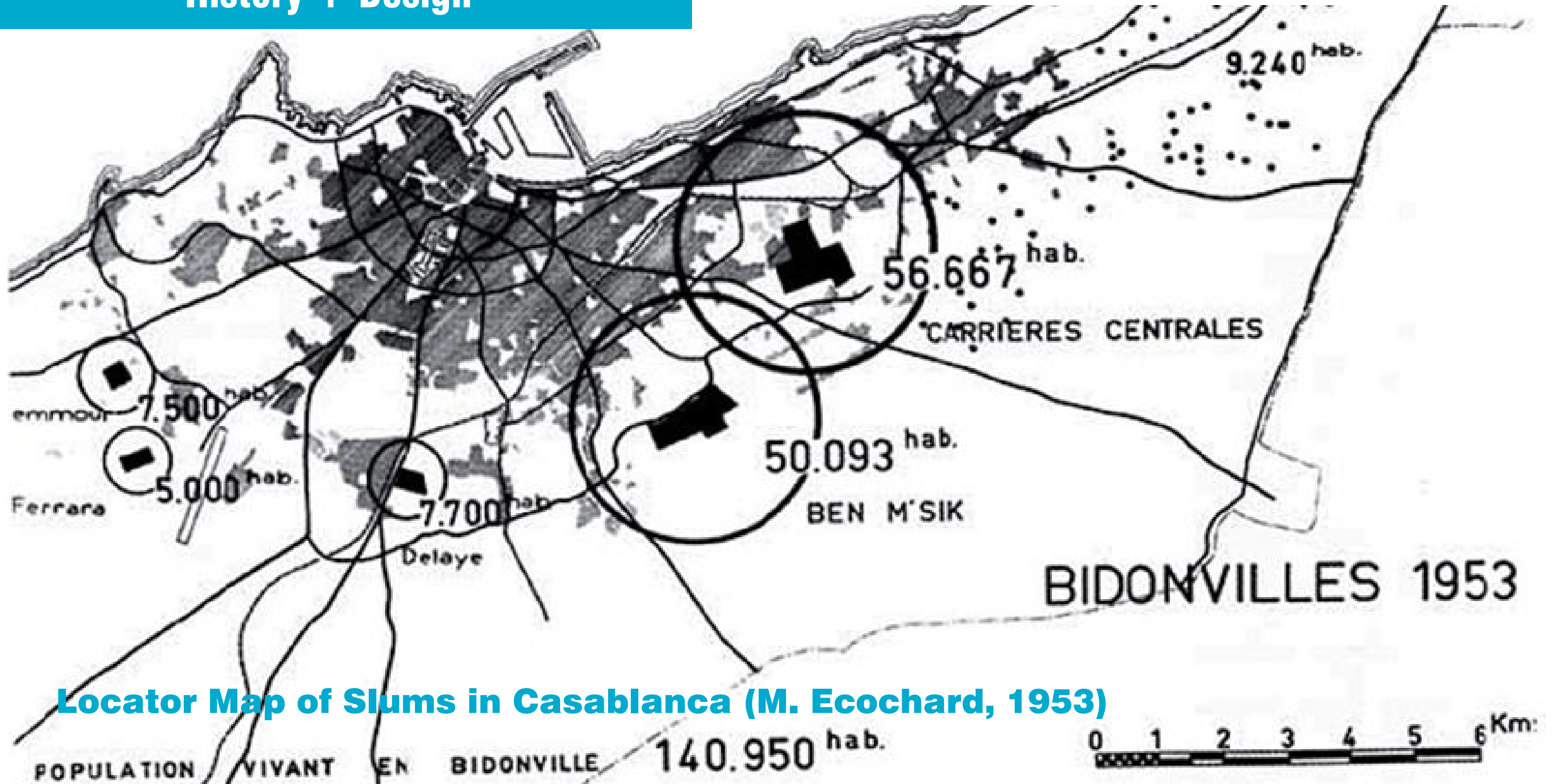


History + Design



Land Use Planning Of Casablanca (H. Prost)

History + Design



Locator Map of Slums in Casablanca (M. Ecochard, 1953)



Quartier California - Casablanca



Casablanca



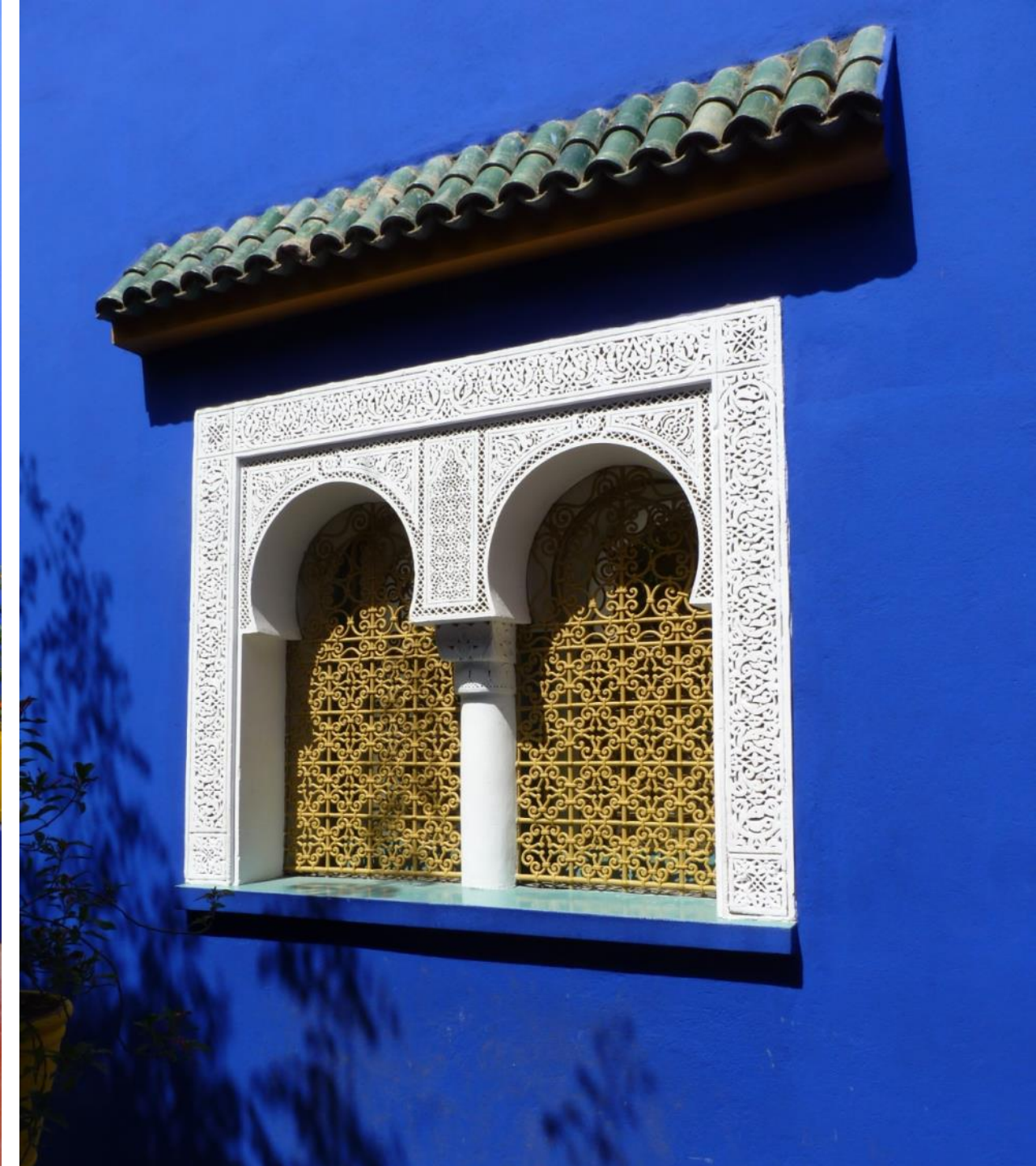
Casablanca



Casablanca



Casablanca



Marrakech



Essaouira

The Advent of Independence



Investments On The Coast



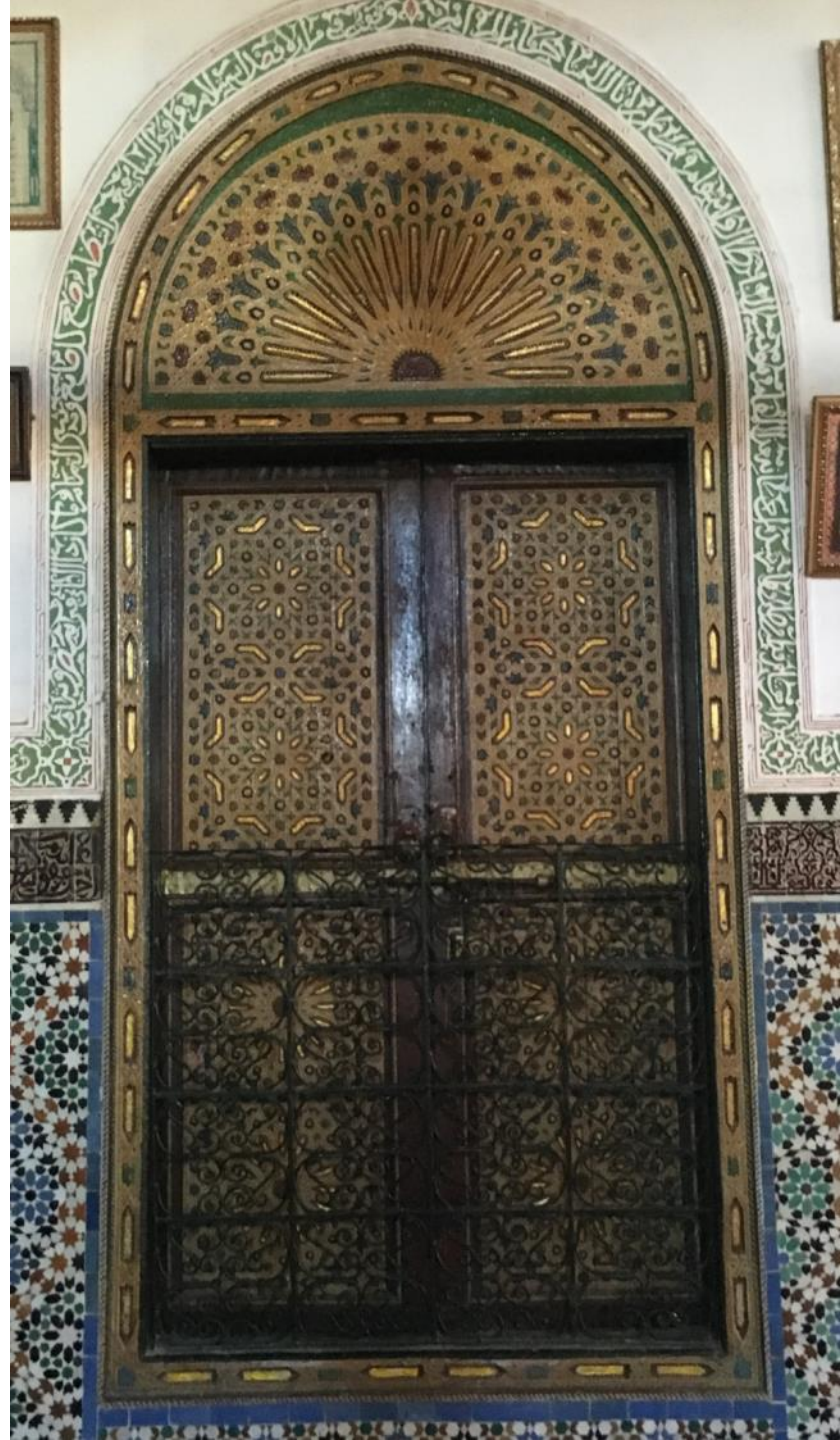
The Last 15 Years

- **Electrification Program**
- **Water Alimentation Program**











بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
مَنْ كَانَ فِي حَرْبٍ مَعَنَا فَانصُرْنَا
مَنْ كَانَ فِي حَرْبٍ مَعَنَا فَانصُرْنَا
مَنْ كَانَ فِي حَرْبٍ مَعَنَا فَانصُرْنَا



Fes Medina



Suggestions du jour

- + Tartare de saumon à la mangue 86
- + Salade d'asperges, œufs mollets 86
- + Andouillette - montarde frite 170
- + Filet de saumon grillé 160
- + Pain perdu, beurré 45





Rabat

Economics, Design + Community Planning

- Rising Middle Class
- Growth in need for adequate housing
- Expanding communities
- Need for Access to education/higher learning



Economics, Design + Community Planning

Welfare
Demand Economics
Human-Scale for Bio-Inspired Streets Public Value
Technology Infrastructure Open
Housing Energy Food Accountability Air Safety
Billions Commerce Density Jobs Market-Based
Health Space Culture Biodiversity Flexibility
Data Atmosphere Logistics
Ecosystem Urban Water Feedback Market
Shelter Population Community Education Transit
Governance
Materials

A real need for systems thinking





ECOPLAN

JACOBS



ECOPLAN

JACOBS

ECOPLAN LENS - WATER

ENVIRONMENTAL

- ♻️
- 💧
- ☁️
- ♻️
- ☀️
- 🍴



SOCIAL

- 👤
- 🎵
- +
- 🎓
- 🏛️
- 🚌
- 🏠



ECONOMIC

- 🌐
- 💰
- 🏢

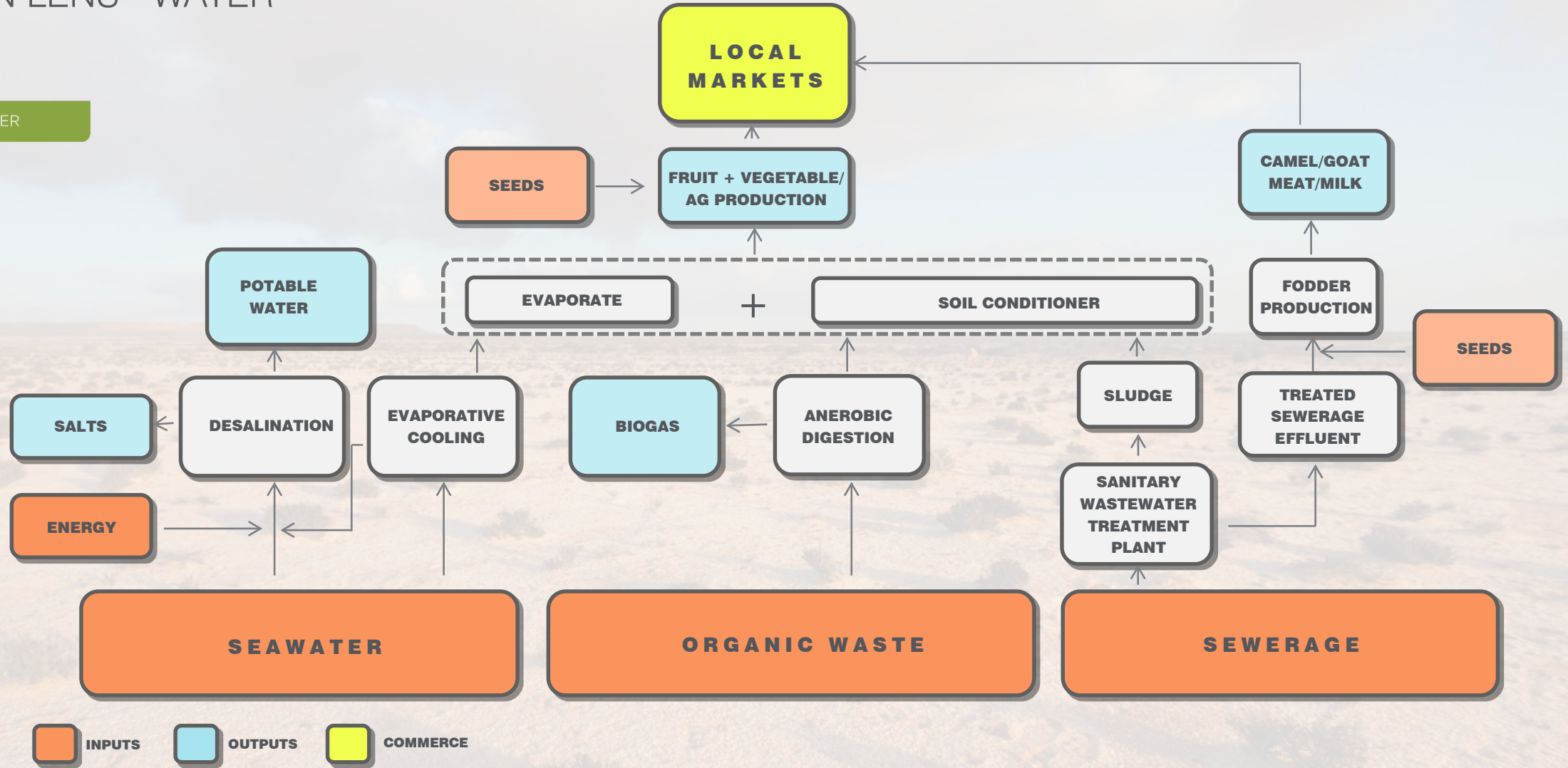
ECOPLAN LENS - WATER

ENVIRONMENTAL

- WATER

SOCIAL

ECONOMIC





ENVIRONMENTAL



SOCIAL



ECONOMIC



WATER



ENVIRONMENTAL

- ECOSYSTEM
- WATER
- ATMOSPHERE
- MATERIALS
- ENERGY
- FOOD

SOCIAL

- COMMUNITY
- CULTURE
- HEALTH
- EDUCATION
- GOVERNANCE
- TRANSPORT
- SHELTER

ECONOMIC

- COMMERCE
- VALUE
- JOBS

Case Study Locations



Design Case Study 1: Laayoune

Technopole De Laayoune
Smart campus / mini-city
Desert Eco-type

*Improving ecosystem with a view to
resolving economic, social, and
physical problems in a small scale*



Design Case Study 1: Laayoune



Design Case Study 1: Laayoune



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Design Case Study 1: Laayoune



Design Case Study 1: Laayoune



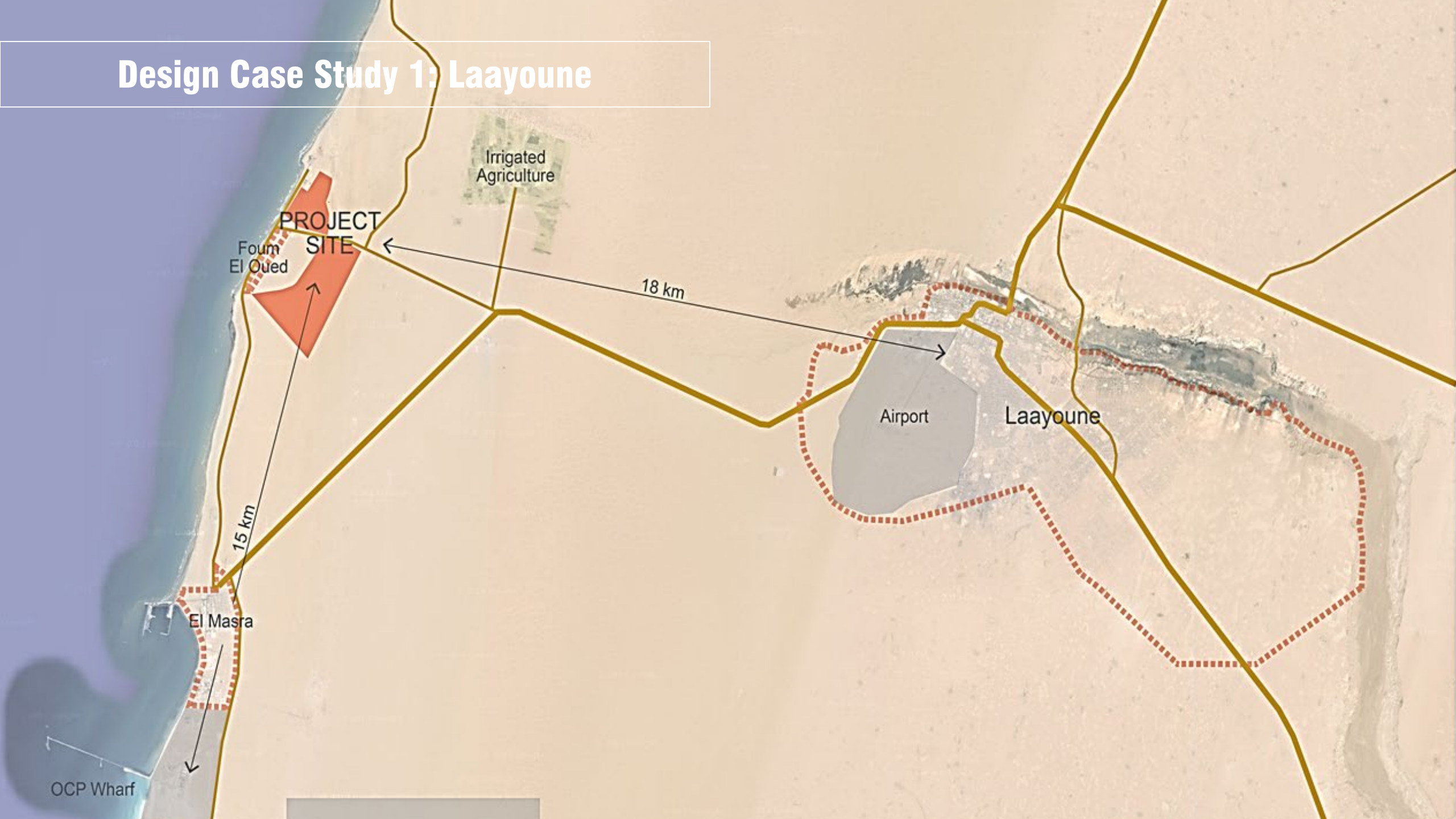
Design Case Study 1: Laayoune



Design Case Study 1: Laayoune



Design Case Study 1: Laayoune



Design Case Study 1: Laayoune



Design Case Study 1: Laayoune

ENVIRONMENTAL



SOCIAL



ECONOMIC



WATER

SURFACE SEA WATER

SURFACE SEA WATER

COOLED HUMIDIFIED AIR

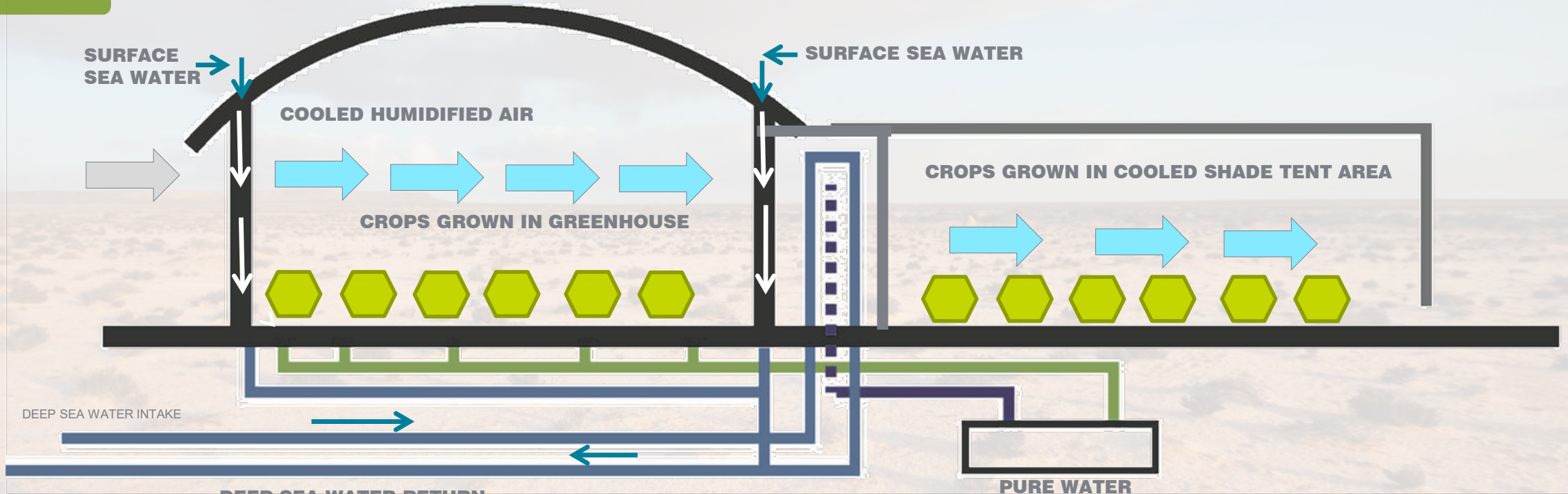
CROPS GROWN IN GREENHOUSE

CROPS GROWN IN COOLED SHADE TENT AREA

DEEP SEA WATER INTAKE

DEEP SEA WATER RETURN

PURE WATER STORAGE



Design Case Study 1: Laayoune



Design Case Study 2: Royal Ranches

Royal Ranches Marrakech

Souk replication

Client's marketing desire for
"Green"

Integration (or not) with existing
communities

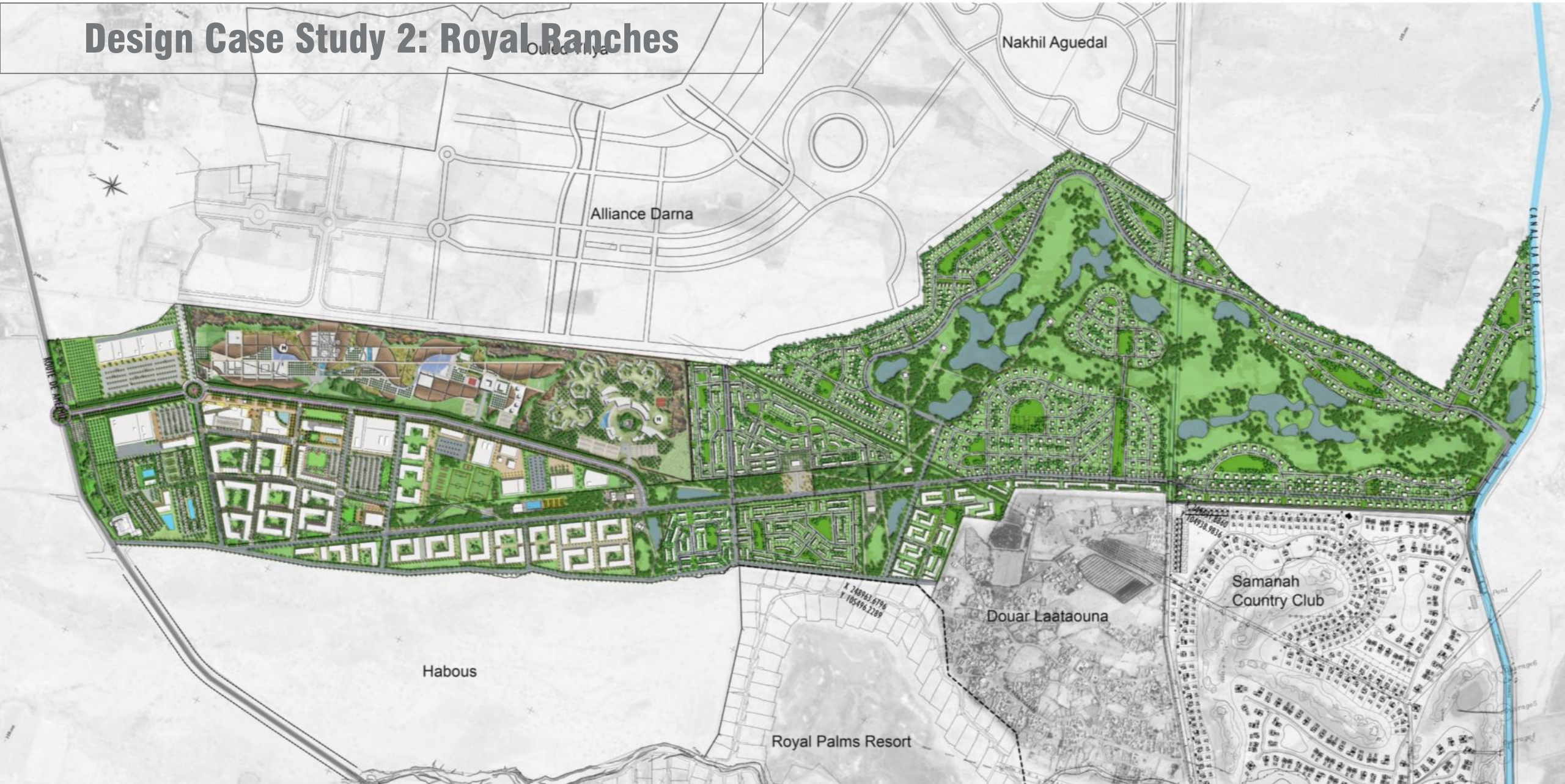
Economic Strategy for Regional
Media Industry



Design Case Study 2: Royal Ranches



Design Case Study 2: Royal Ranches



Design Case Study 3: Mazagan

Pole Urban De Mazagan
Technology-based Smart City
Temperate Eco-type
Smart-city objectives
Smart housing, adapted to the
climatic conditions
Sustainable economy
Smart mobility
Engaged citizens



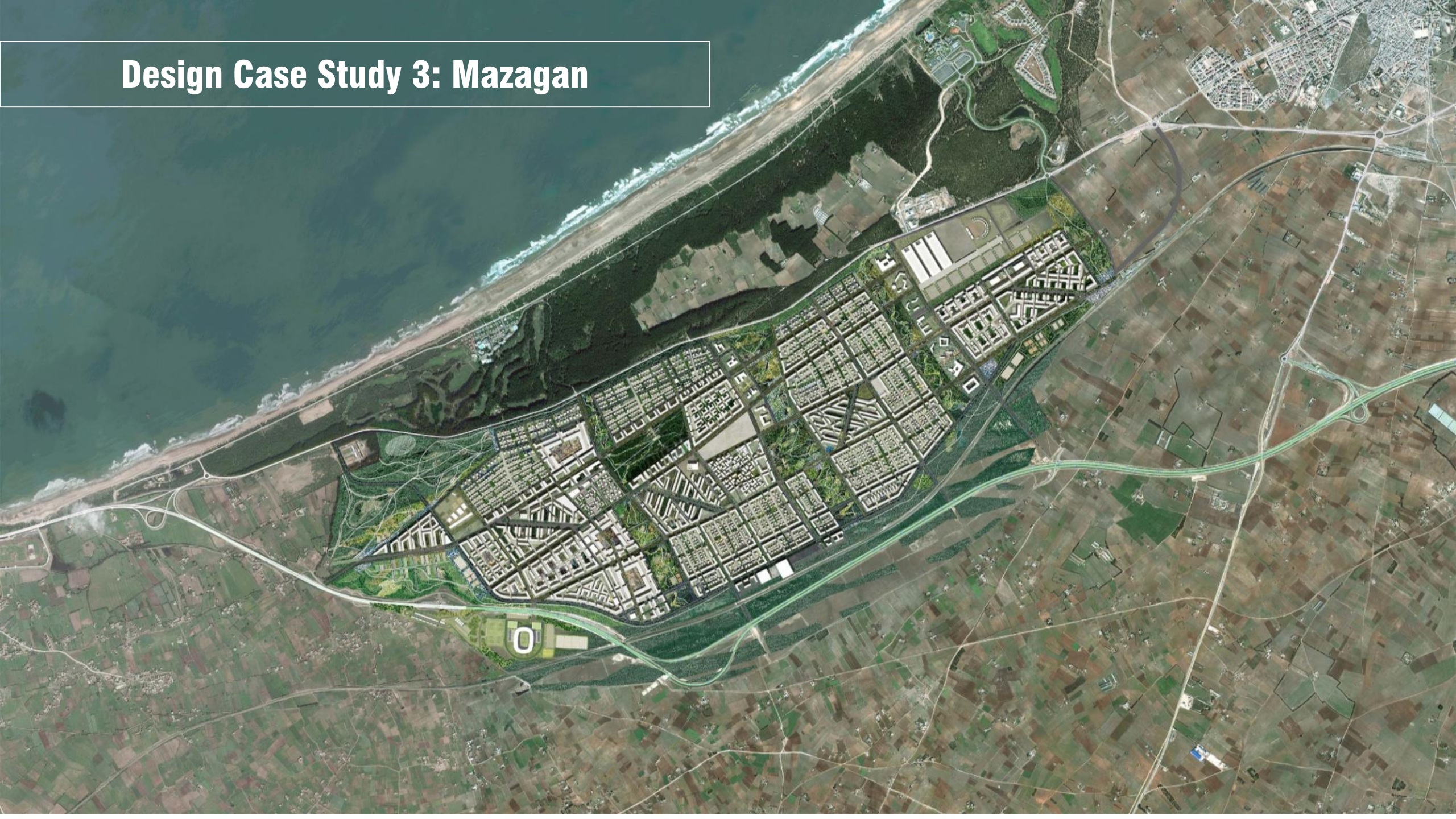
Design Case Study 3: Mazagan



Design Case Study 3: Mazagan



Design Case Study 3: Mazagan



Design Case Study 3: Mazagan



Design Case Study 3: Mazagan



Design Case Study 3: Mazagan



Design Case Study 3: Mazagan



Design Case Study 3: Mazagan



Design Case Study 3: Mazagan



Design Case Study 3: Mazagan



Design Case Study 4: Casa

Casablanca Waterfront
Urban infill
Temperate Eco-type

Raising the historical and
strategic relationship
between the City and the sea



Design Case Study 4: Casa



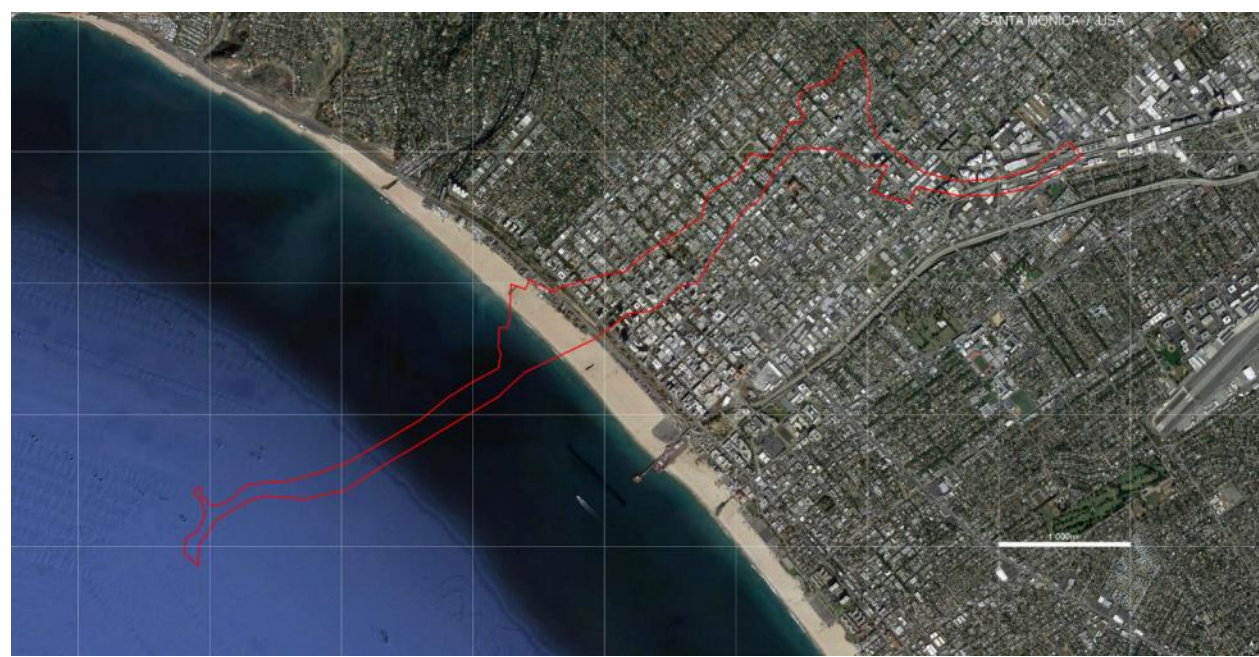
Design Case Study 4: Casa



Design Case Study 4: Casa



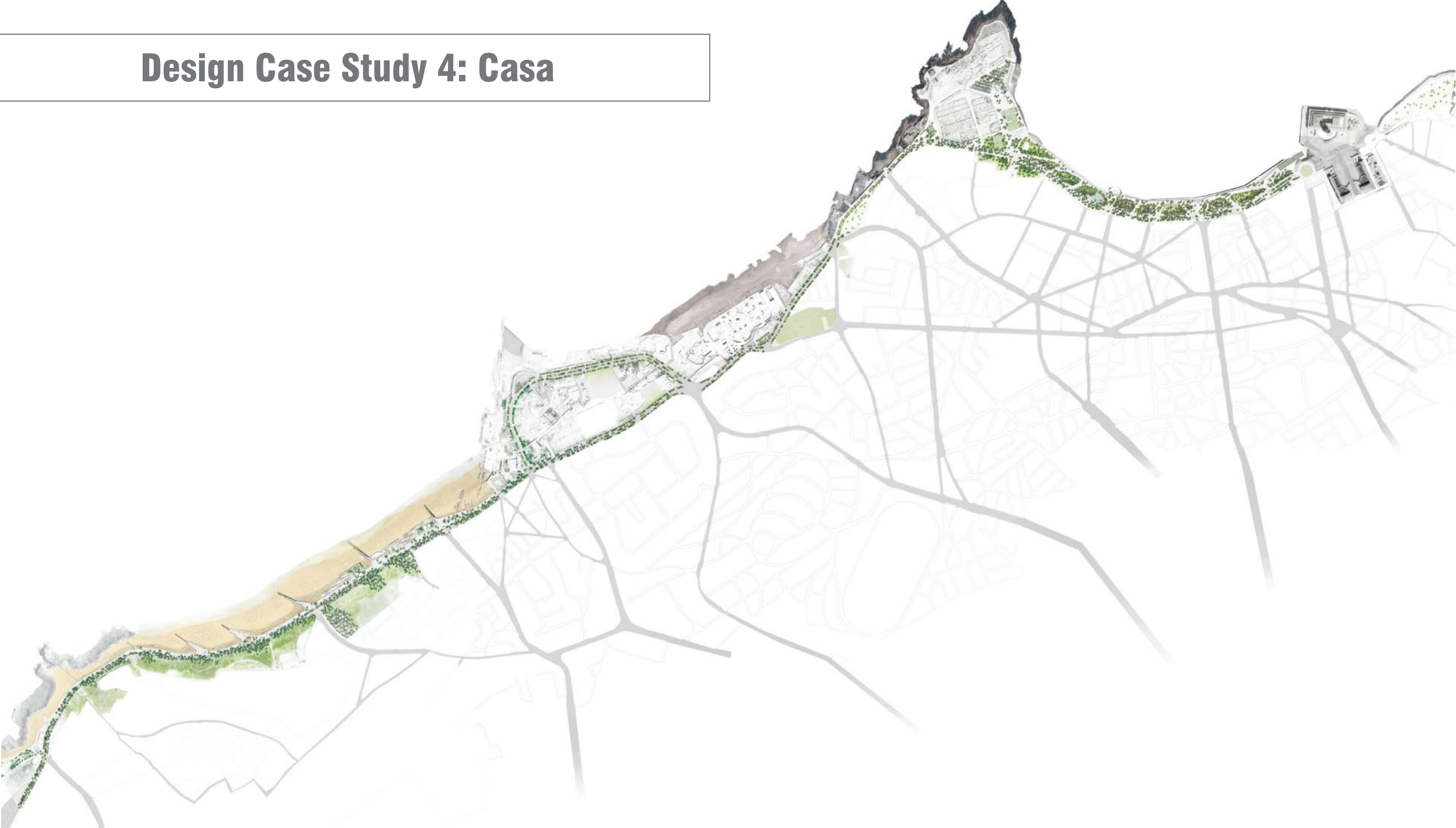
Design Case Study 4: Casa



Design Case Study 4: Casa



Design Case Study 4: Casa



Design Case Study 4: Casa



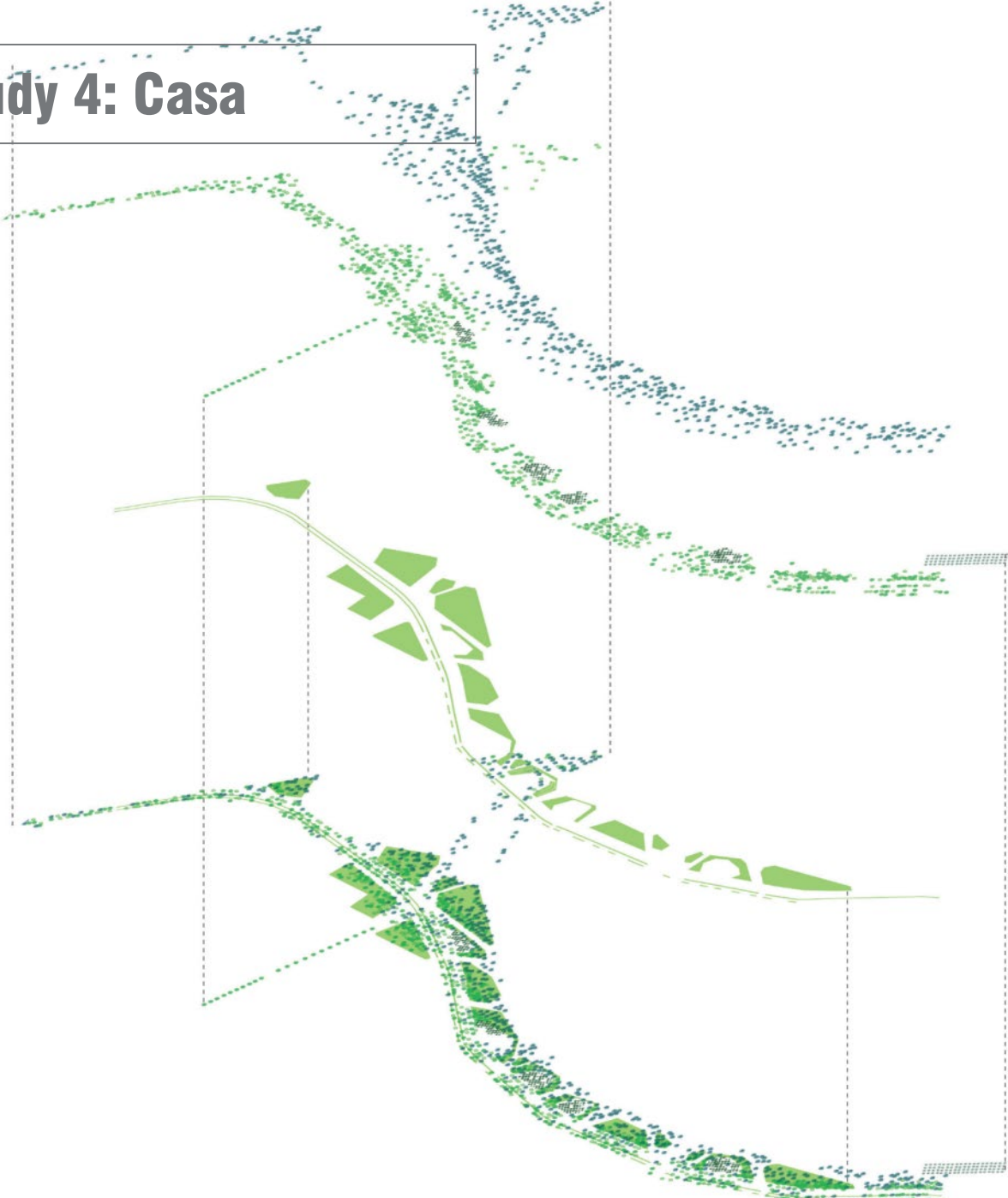
Design Case Study 4: Casa



Design Case Study 4: Casa



Design Case Study 4: Casa



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Design Case Study 4: Casa



Design Case Study 4: Casa



Design Case Study 4: Casa



Design Case Study 4: Casa



Design Case Study 4: Casa



Design Case Study 4: Casa



Design Case Study 4: Casa



Successes + Challenges

- Designing in Morocco as a Moroccan
- Designing in Morocco as an American
- How do we work together?
- How do we get our teams working together as partners?
- How do we as Americans work sensitively in diversity rich country like Morocco?
- Why do Moroccans want us there? Do they? Why do WE want to work there?

Q & A