

# The new development constraints of high-speed rail in France. The example of two peripheral regions (Occitanie and Bourgogne Franche-Comté)



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# Introduction

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France : an old country of HSR (40 years of HSRL in operation)

But, a lack of infrastructures for some regions (South and centre of France)

Last decades, both new development constraints and new planned developing stage

**What are the constraints for the HSR system of a mature country, especially in a context of public expenditure decline ?**

# Introduction

Field work : through examples of France and 2 regions (Occitanie and Bourgogne Franche-Comté)

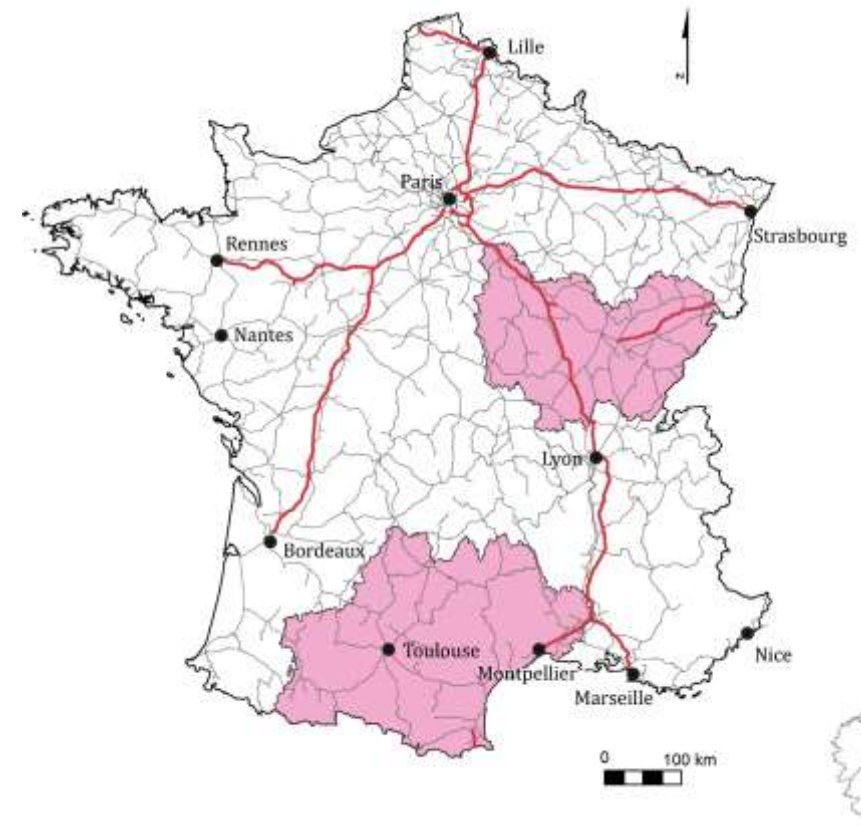
A diversified methodology : records (Transport ministry), interviews (Occitanie region, DGITM (Representative of French State) and HSR lobby located in Bourgogne Franche-Comté region)

Plan of the presentation :

Part 1. Mains features of French HSR

Part 2. Constraints and challenges for French HSR

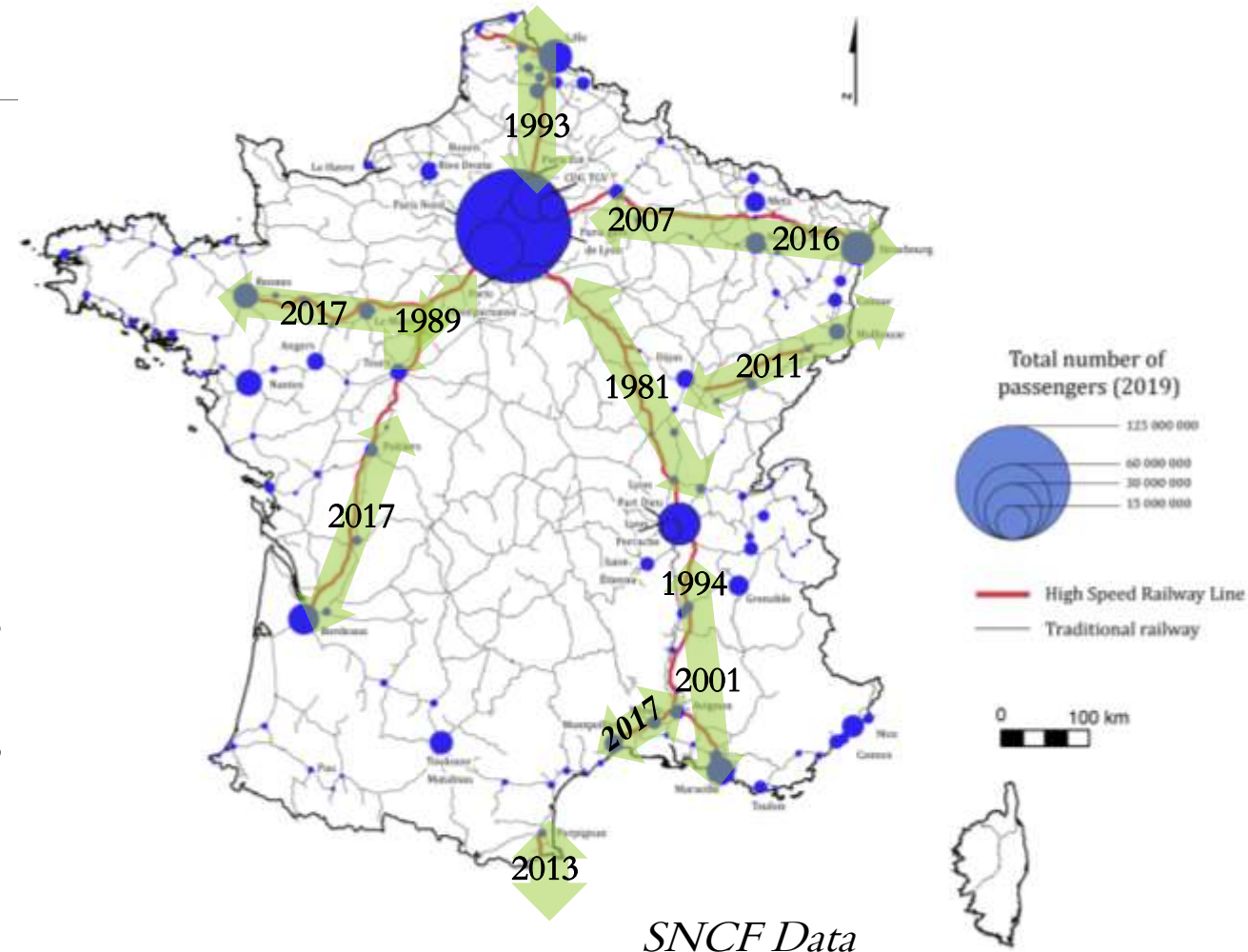
Part 3. Occitanie region and Bourgogne Franche-Comté : 2 examples HSR development stakes



*Carrouet. 2022*

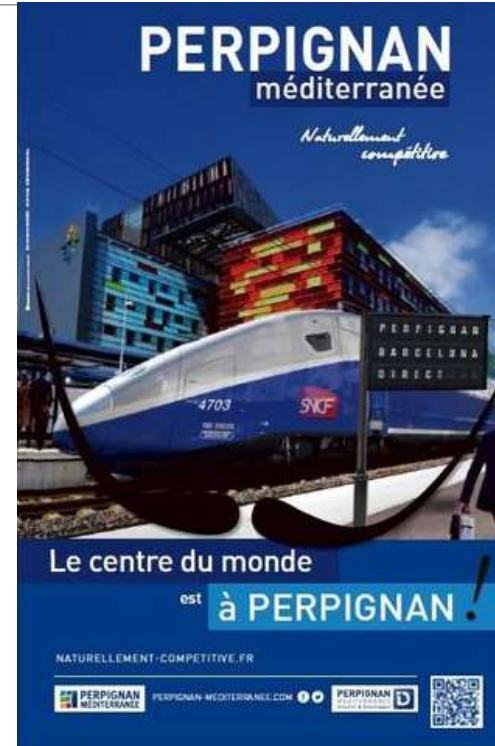
# Part 1. Mains features of French HSR

- Some figures about French (ART, 2019) :
  - 90% of long travels were made by TGV
  - Currently : 2 800 kilometers of HSR (only 10% of French railway)
  - At the beginning, the main objective: building the more profitable lines.
- The Paris-Lyon HSRL : 240 trains per day, 33% of overall railway passengers in France (44,4 millions of passengers) (SNCF réseau, 2022) .
- The French HSR network: a radial model, in shape of a star (Auphan, 2012 ; Libourel, Zembri, 2017)



# Part 1. Mains features of French HSR

- Local and regional authorities want more than accessibility
- Economic development close to railway station with :
  - Land development project
  - Marketing territorial campaigns



*Marketing-territorial*

Ad slogan : « The center of the world is in Perpignan »

ici aussi,  
on a des hipsters  
À Quimper, les entreprises du textile ont su se renouveler  
et faire d'un vêtement de mer, une pièce maîtresse de la mode.

BRETAGNE  
PASSEZ À L'OUEST

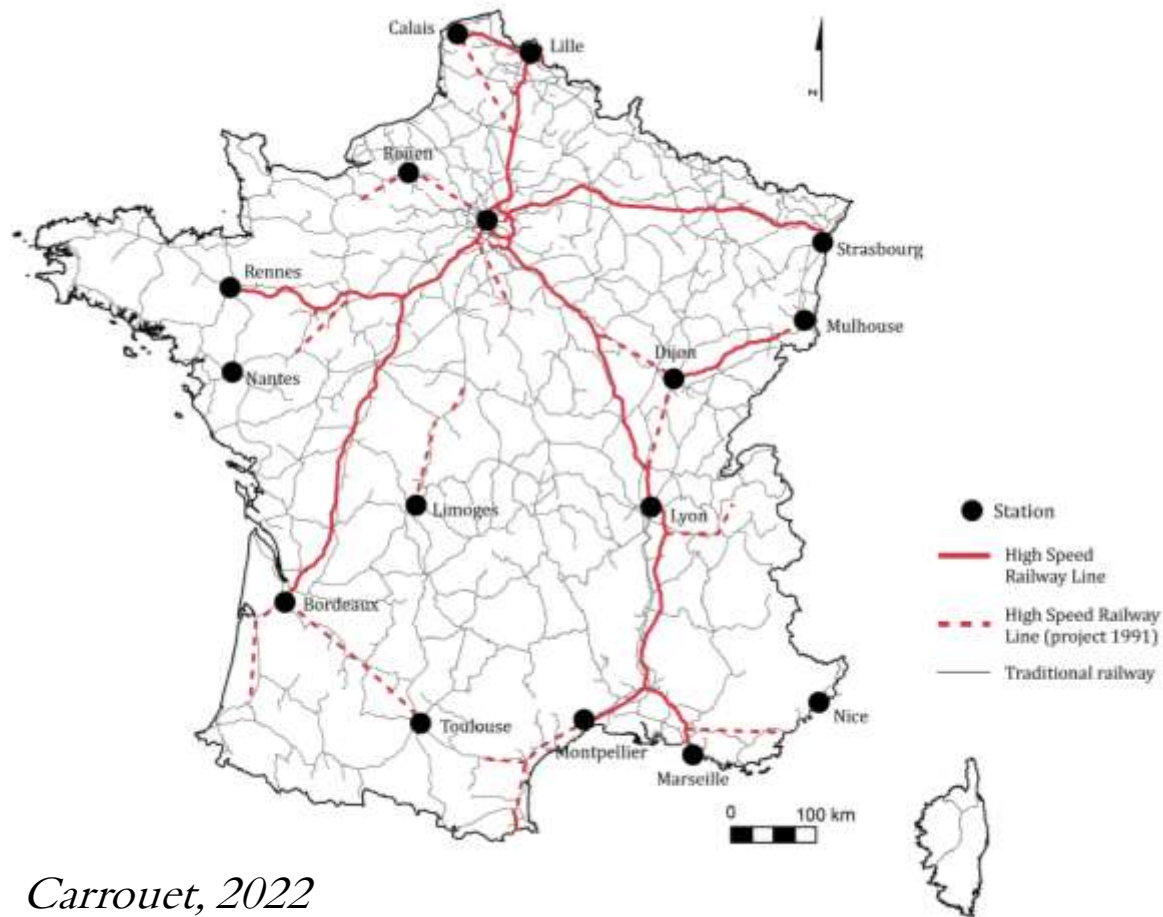


*Geoconfluences*

Ad slogan : « Here too, we are hipsters »

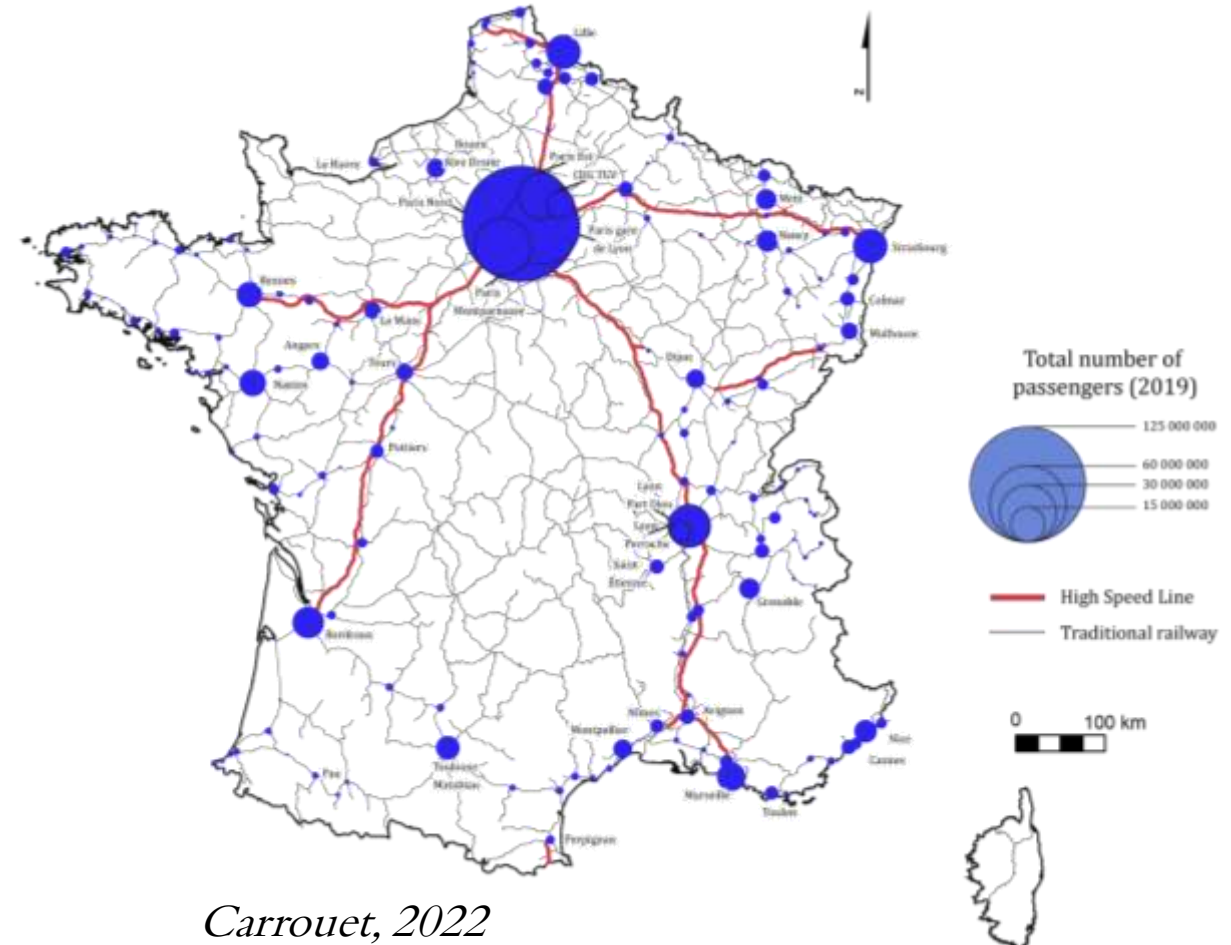
# Part 2. Constraints and challenges for French HSR

HSRL programme (1991)



*Carrouet, 2022*

HSRL network (2022)



*Carrouet, 2022*

# Part 2. Constraints and challenges for french HSR

- In 2017, the French State decided to stop projects of HSR.

E. Borne (Transports Minister) in 2018 : « We will end the addiction to big HSRL project »

3 mains reasons:

- the building of HSRL is too expensive,
- the plan of 1991 and 2007 were based on clientelism (Frémont, 2019),
- the traditional railway had not been maintained during several years. (Zembri, 2020)

ÉCONOMIE

## Transports : « Nous allons en finir avec l'addiction aux grands projets », assure Elisabeth Borne

La ministre détaille la philosophie et les arbitrages de la première loi de programmation pluriannuelle des infrastructures.

Propos recueillis par Eric Béziat

Publié le 12 septembre 2018 à 09h42 - Mis à jour le 12 septembre 2018 à 12h39 · Lecture 6 min.

Article réservé à



La ministre des transports, Elisabeth Borne, dans son bureau, en 2017. ALEXANDRE TABASTE POUR LE MONDE

Le Monde

# Part 2. Constraints and challenges for French HSR

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- Recently (September 2021), the French President and his government announced a new plan in the post-pandemic context
- The main objectives :
  - Continue to invest in the traditional railway
  - Keep the debt of railway sector
  - Plan the construction of new HSL. Examples of new HSL : Bordeaux-Toulouse and first part of Montpellier-Perpignan



*Les Echos*

« It's an industrial, environmental and regional planning, gamble »  
(President Macron, september 2021)



# Part 2. Constraints and challenges for French HSR

- Another significant element of context : the opening of competition in 2023 for the French HSR sector. New competitors should start on most profitable lines.

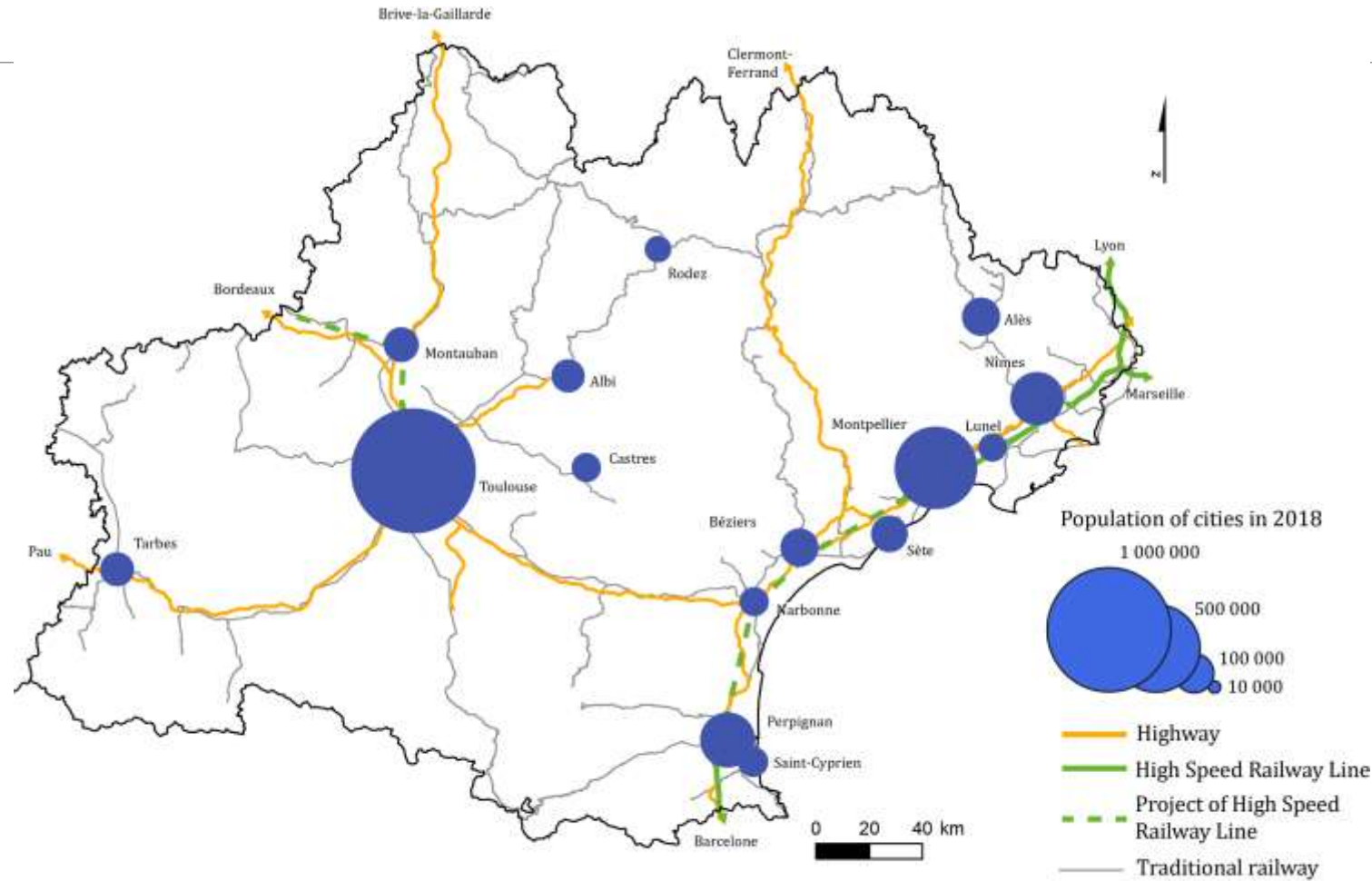
E. g. HSRL Paris-Lyon : the busiest HSRL in Europe

HSRL Paris-Lyon service



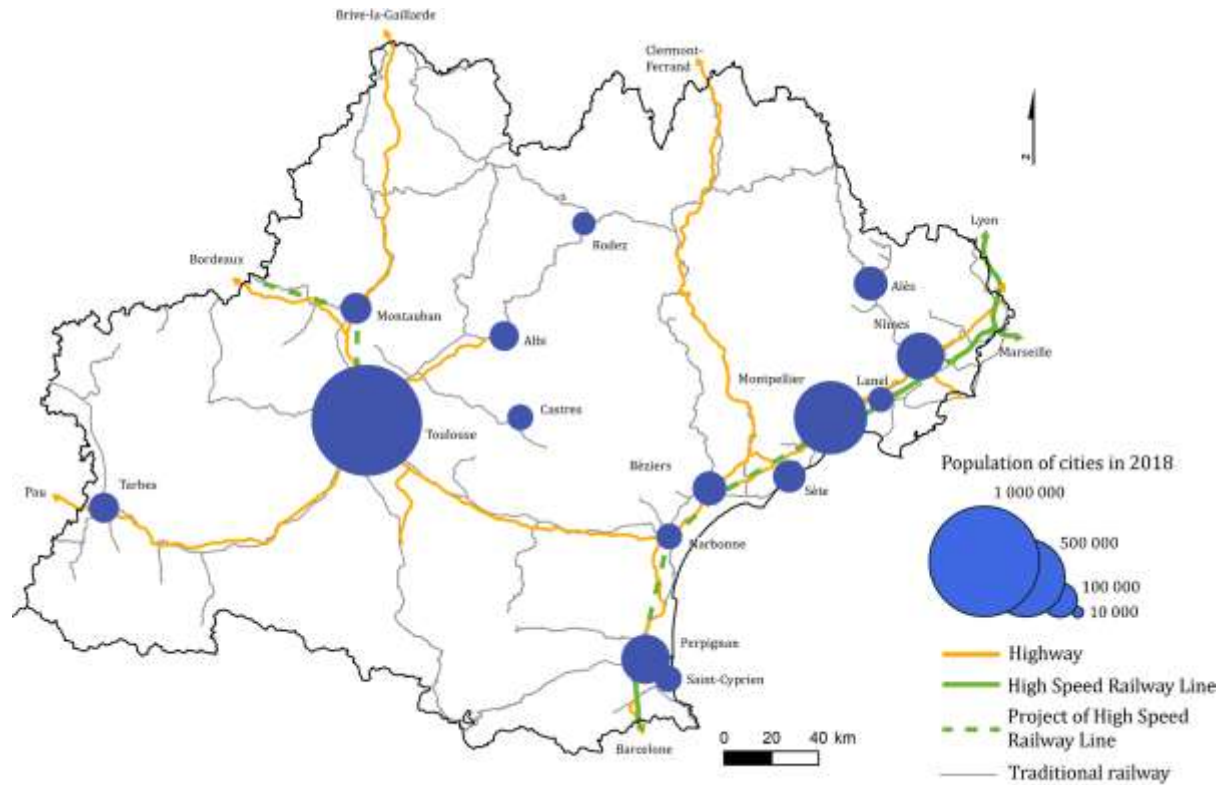
# Part 3. Occitanie and Bourgogne Franche-Comté : 2 examples of HSR development challenges

## The case of Occitanie region

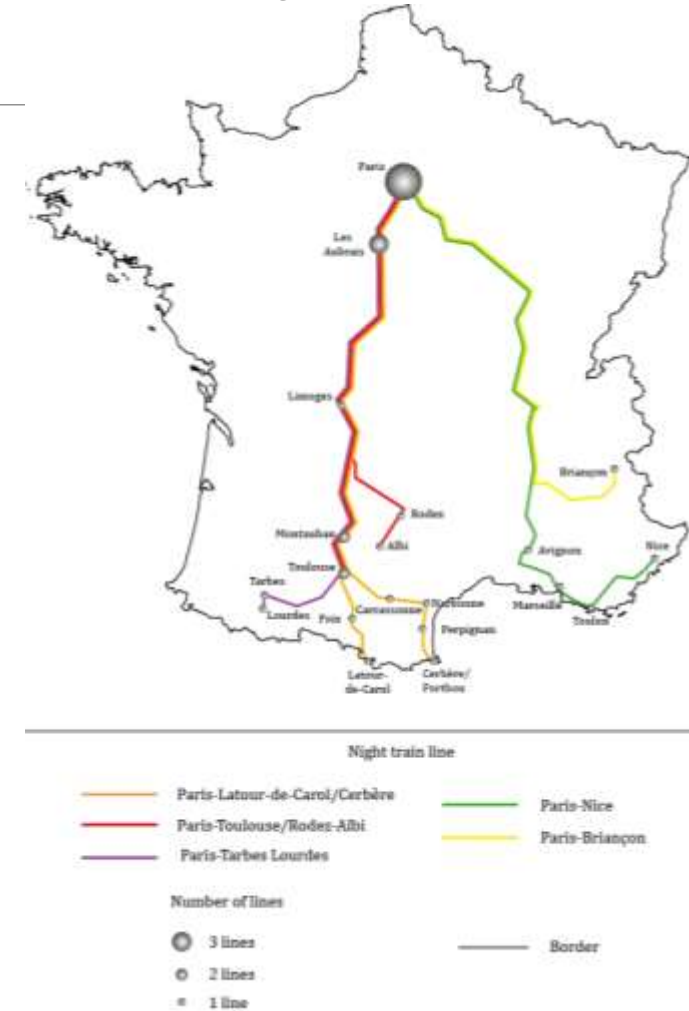


# Part 3. Occitanie and Bourgogne Franche-Comté : 2 examples of HSR development challenges

## The case of Occitanie region



Night train line (2022)



# Part 3. Occitanie and Bourgogne Franche-Comté : 2 examples of HSR development challenges

## The case of Occitanie region

TGV ride and air flight between some cities of Occitanie region and Paris

	Number of TGV	Travel time	Direct flights
Toulouse-Paris	8	4h15	29
Montpellier-Paris	5	3h15	9
Perpignan-Paris	12	5h	2

Intercity train ride between 2 cities of Occitanie region and Paris

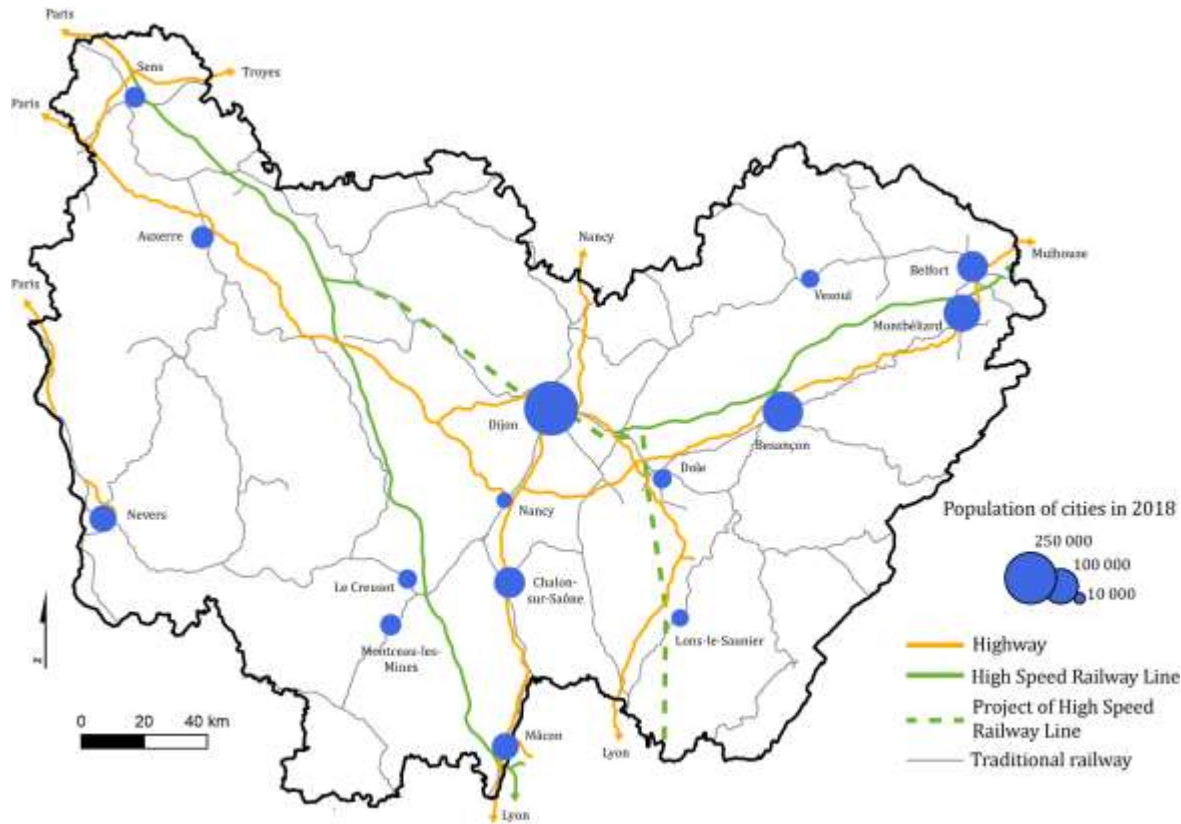
	Number of trains	Travel time
Toulouse-Paris	3 day trains + 1 night train	Day trains (6h45) ; Night trains (8h30)
Perpignan-Paris	1 night train	11h15



*Region Occitanie*

# Part 3. Occitanie and Bourgogne Franche-Comté : 2 examples HSR development challenges

## Case of Bourgogne Franche-Comté region

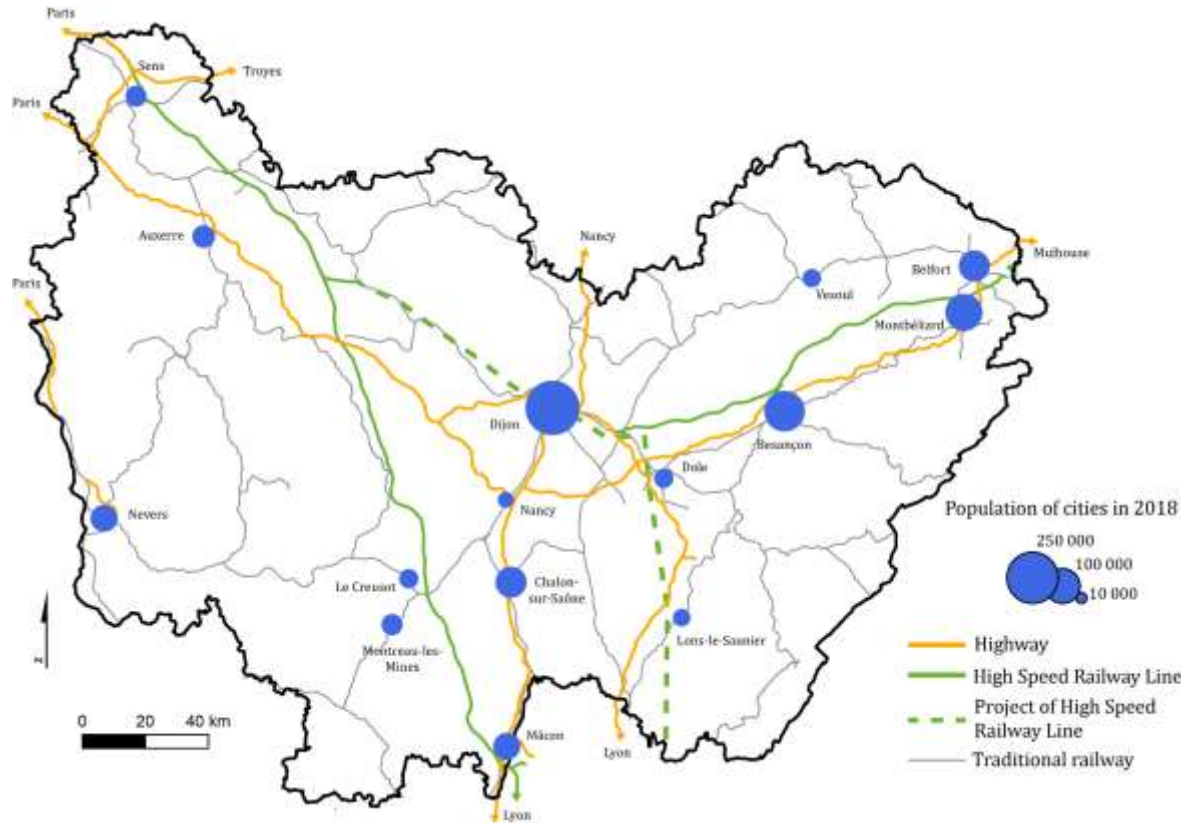


Train ride (TGV, TER) between some cities of Bourgogne Franche-Comté region and Paris

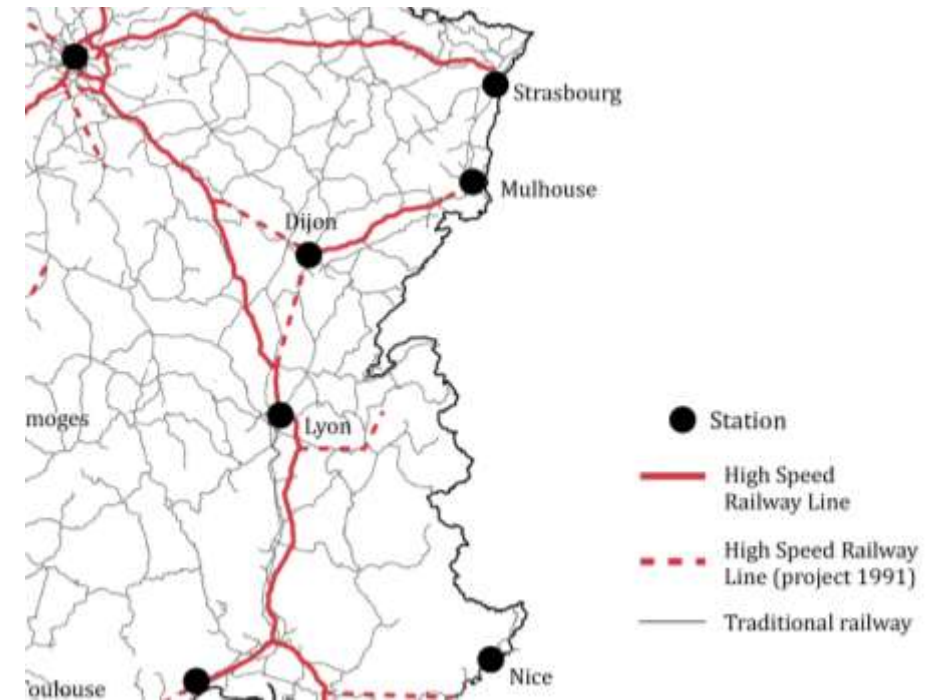
	Number of TGV	Regional Express Train	Travel time
Dijon-Paris	14	5	TGV (1h40), TER (3h)
Besançon-Paris	8	-	2h10
Belfort-Paris	8	-	2h30

# Part 3. Occitanie and Bourgogne Franche-Comté : 2 examples HSR development challenges

## Case of Bourgogne Franche-Comté region



## HSRL Rhin-Rhône project



# Reflection about HSR

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A stage of development or a stage of rupture for the French HSR ?

- Yes, a new decade of HSR development in the context of global warming.
  - According to President Macron's new decision
  - According to local and regional authorities : need of accessibility, economic development and equity
- No, ambitions are currently lower than in the previous last decades
- In railway domestic transport, France is going to apply a mix of solutions for long distance travel :
  - Some new HSRL (Bordeaux-Toulouse, Montpellier-Perpignan)
  - An optimization (Debrie, Lesteven, 2021) of the busiest HSRL like Paris-Lyon (ERTMS, improving flow management).

# Reflection about HSR

Ouigo Intercity train operate by SNCF



*SNCF Connect*

A stage of development or a stage of rupture for the French HSR ?

- The building of new HSRL for both freight and passengers. The example of Lyon-Turin.
- The redeployment of Intercity train (night train in particular) in France.

The SNCF company is developing new services on conventional railway line, following the example of Ouigo TGV.

- The reduction of the number of inland flight under 2h30





A TGV in front of the Pyrénées (Canigou Massif, near Perpignan)



*L'Indépendant*

Thank you for your attention