Benefits of High Speed Rail in France

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Dominique DEAU
Table of contents

1. The different HSL since 1981
2. Impact on the traffic
3. Other impacts
4. Conclusion
The different HSL since 1981 in France

- **Total HSL length (Dec. 2016):** 2130 km
- **Number of HS trainsets:** above 400 trainsets
- **Network operated by HS trainsets (HSL and conventional):** about 10 000 km
- **Number of stations served by HS trainsets:**
  - 250 stations,
  - among which 19 built for HSL services.
2 Impact on the traffic
2.1 Total of all high speed services

120 M pass./ year (highest HS traffic in Europe, but 350 M in Japan and 800 M in China)
2 Impact on the traffic
2.2 Detail by high speed service

Impact of the commercial policy

Opening of HSL5

Increase of journey times

Build-up of TGV traffic
2 Impact on the traffic
2.3 Example of Eurostar traffic (1/2)

Eurostar traffic through the Channel Tunnel

- Trend (12 month moving average)

Monthly traffic in thousands of passengers

- Nov.-94 to Nov.-16
2 Impact on the traffic
2.3 Example of Eurostar traffic (2/2)

**Eurostar traffic through the Channel Tunnel**

- Change of commercial policy
- Sept. 2001: check-in times increased from 20 to 30 min
- 28 Sept. 2003: journey time reduced by 20 min (CTRL1)
- Nov. 1996: 1st fire in the Channel tunnel
- Nov. 2007: journey time reduced by 20 min (CTRL2)
- Sept. 2008: 2nd fire in the Channel tunnel
- Nov. 2015 / July 2016: terrorist attacks in Paris, Brussels and Nice
- Summer 20015: terrorist attacks in London

**Trend (12 month moving average)**
2 Impact on the traffic
2.4 Lessons to be learnt

- The elasticity of the traffic to journey time is strong
- The elasticity of the traffic to price is also strong
- The market reacts up or down very quickly (you never “control” a market)
- The traffic between 2 cities located in 2 different countries is lower than what would be the traffic between these 2 cities if they were in the same country (border effect)
- If you try to internalise all the time saving through the fare policy, you jeopardise the future growth of the traffic
2 Impact on the traffic
2.5 Economic approach of a high speed project
3 Other impacts

3.1 Example of Paris – Lyon OD

On the Paris – Lyon OD between 1980 and 1985:

- the railway journey time has been divided by 2 (4 hours to 2 hours),
- the railway traffic has been multiplied by 2.4 (5 M pass. with TGV).

The study carried out to assess ex post the TGV impact has shown that:

- among TGV passengers between Paris and Lyon, there was the same number of people living in Paris than people living in Lyon. As Lyon is 10 times smaller than Paris (1 M inhabitants vs 10 M), it means that in proportion the effect on Lyon has been 10 times bigger,
- as it became so easy to travel from Paris to Lyon by TGV, some big companies have decided to remove their local or regional offices in Lyon,
- on the other hand some skilled professionals living in Lyon (barristers, architects, etc.) have taken advantage of TGV to sell their services in Paris.
3 Other impacts

3.2 Continuous development around Lyon Part-Dieu railway station

2016 vision
A: delivered
B: works ongoing
C: works decided

- Railway station
- Incity
- Terralta
- Bricks
- Orange
- Sky 56
- Garibaldi
- Le Dolet
- Commercial centre
- Wintech
- 107 Servient
- Silex1
- Silex2
3 Other impacts
3.3 Example of HSL Rhin-Rhône (HSL7)

HSL Rhin-Rhône has been in service since December 2011.

The study carried out to assess ex post the TGV impact has shown in particular that the number of nights spent in the hotels around the HSL area:

• has decreased from Monday to Thursday (business travellers can now achieved a return trip in the same day),
• has increased on week-ends (positive impact thanks to leisure traffic).
3 Other impacts
3.4 Preparing the opening of HSL Bretagne (July 2017)

Public and private stakeholders have been preparing this opening for several years. Among the actions undertaken:

• city of Rennes is involved in the development of Rennes station to facilitate intermodality with local transport (buses and automatic underground line),

• Region of Bretagne is pushing hard to make sure that the benefits of the HSL will go beyond Rennes towards Brest and Quimper; achieving such a result necessitates a remodelling of regional railway services,

• private undertakings have reserved offices around Rennes railway station to facilitate co-working.
4 Conclusion

• The market reacts up or down very quickly depending on:
  ➢ the journey time,
  ➢ the fare policy
  ➢ the economic environment (including competition)

• The key point for the economic assessment of a high speed project is the consistency between:
  ➢ the traffic forecasts (the demand)
  ➢ the operating programme (train timetable, rolling stock roster, etc.)

• The effects of a high speed project beyond the traffic are not automatic; they have to be prepared well in advance with all stakeholders:
  ➢ public sector
  ➢ private sector
Thank you for your attention
Appendix
A1 Impact of Eurostar on air traffic

Air travel between London and Paris

Traffic in thousands of passengers

Trend (12 month moving average)

Monthly traffic