

Roundtable

***Ex-post Assessment of Transport Investments and Policy
Interventions***

(15-16 September 2014, OECD, Paris)

**Permanent observatories as tools for ex-post
assessment: the French case study**



FRENCH EXPERIENCE WITH "LOTI AUDITS"

- The ex-post evaluations of major transportation projects became compulsory with passage of the "LOTI"
(*Loi d'Orientation sur les Transports Intérieurs* of December 1982).
- The sponsoring authority or project owner must prepare an ex-ante evaluation and an ex-post assessment of any publicly financed project as soon as the project cost exceeds €83 million.
- The Loti audit consists essentially of producing a critical analysis of the forecasts and assessments made prior to the decision to proceed with the project.
- The LOTI audit is published and gives rise to an official opinion from an independent reviewing authority. This opinion is also published .



Economic returns for the 7 main concessioned motorways

Motorway Segment	Ex-ante/ex-post discrepancies	Principal explanation
A49 Grenoble Valence (Opened in 1992)	Initial forecast EIRR: 14 % Initial observed EIRR: 19 %	Costs closely controlled and traffic flows higher than forecast.
A57 Cuers-Le Cannet des Maures (Opened in 1992)	Forecast EIRR: 20 % Ex-post EIRR: 14.8 %	Traffic flows higher than forecast, but very great cost overruns.
A54 St Martin de Crau-Salon de Provence (Opened in 1996)	Initial forecast EIRR: 30 % Initial observed EIRR: 15.4 %	Costs controlled but traffic flows far below forecasts.
A837 Saintes-Rochefort (Opened in 1997)	Initial forecast EIRR: 13 % Initial observed EIRR: 5 %	Traffic flows far below forecasts.
A83 Nantes-Niort (Opened in 2001)	Ex-post EIRR: 15 % Greater than forecast EIRR not specified in the audit report	Cost overruns more than offset by higher-than-expected traffic flow.
A20 Brive-Montauban (Opened in 2003)	Forecast EIRR: 8 % Ex-post EIRR: 8 %	Cost overruns offset by higher-than-expected traffic flow
A28 Alençon-Tours (Opened in 2005)	Forecast EIRR: 15.5 % Ex-post EIRR: 10 %	Cost overruns

Source: Bilans LOTI, cf. Annex 1.

Higher-than-expected traffic flows

and Cost overruns



Motorway Segment	Ex-ante/ex-post discrepancies	Principal explanation
A49 Grenoble Valence (Opened in 1992)	Initial forecast EIRR: 14 % Initial observed EIRR: 19 %	Costs closely controlled and traffic flows higher than forecast.
A57 Cuers-Le Cannet des Maures (Opened in 1992)	Forecast EIRR: 20 % Ex-post EIRR: 14.8 %	Traffic flows higher than forecast, but very great cost overruns.
A54 St Martin de Crau-Salon de Provence (Opened in 1996)	Initial forecast EIRR: 30 % Initial observed EIRR: 15.4 %	Costs controlled but traffic flows far below forecasts.
A837 Saintes-Rochefort (Opened in 1997)	Initial forecast EIRR: 13 % Initial observed EIRR: 5 %	Traffic flows far below forecasts.
A83 Nantes-Niort (Opened in 2001)	Ex-post EIRR: 15 % Greater than forecast EIRR not specified in the audit report	Cost overruns more than offset by higher-than-expected traffic flow
A20 Brive-Montauban (Opened in 2003)	Forecast EIRR: 8 % Ex-post EIRR: 8 %	Cost overruns offset by higher-than-expected traffic flow
A28 Alençon-Tours (Opened in 2005)	Forecast EIRR: 15.5 % Ex-post EIRR: 10 %	Cost overruns



Economic and financial returns for high-speed rail lines

LGV Project	Ex-ante/ex-post differentials		Principal explanation
	EIRR	FIRR	
LGV Atlantique (Opened in 1992)	Expected: 23.6 % <i>Ex-post:</i> 14 %	Expected: 12.9 % <i>Ex-post:</i> 8,5 %	Traffic and revenues higher than forecast, but heavy cost overruns (more than 20%).
LGV Nord-Europe (Opened in 1993) (extended to Belgium in 1996)	Expected: 20.3 % <i>Ex-post:</i> 5 %	Expected: 12.9 % <i>Ex-post:</i> 2.9 %	Traffic below forecasts; revenues close to forecast thanks to increased fares, but 20% infrastructure cost overrun.
Interconnexion Ile-de-France (Opened in 1994)	Expected: 14.1 % <i>Ex-post:</i> 6.9 %	Expected: 22.3 % <i>Ex-post:</i> 15 %	Traffic increases below forecast and overruns on rolling stock and operating costs.
LGV Rhône-Alpes (Opened in 1994)	Expected: 14 % <i>Ex-post:</i> 10.6 %	Expected: 9 % <i>Ex-post:</i> 6.1 %	Benchmark traffic below forecast and overruns on rolling stock and operating costs.
LGV Méditerranée (Opened in 2001)	Expected: 11 % <i>Ex-post:</i> 8.1 %	Expected: 8 % <i>Ex-post:</i> 4.1 %	Benchmark traffic close to forecast but lower traffic increases and overruns on rolling stock and operating costs.
LGV Est (Opened in 2007)	Expected: 8.5 % <i>Ex-post:</i> 4.2 %	Expected: 7.2 % <i>Ex-post:</i> 5.9 %	Cost overruns (+20.2 %) partially offset by higher-than-expected traffic



Higher-than-expected traffic flows

and Cost overruns

LGV Project	Ex-ante/ex-post differentials		Principal explanation
	EIRR	FIRR	
LGV Atlantique (Opened in 1992)	Expected: 23.6 % <i>Ex-post:</i> 14 %	Expected: 12.9 % <i>Ex-post:</i> 8,5 %	Traffic and revenues higher than forecast, but heavy cost overruns (more than 20%).
LGV Nord-Europe (Opened in 1993) (extended to Belgium in 1996)	Expected: 20.3 % <i>Ex-post:</i> 5 %	Expected: 12.9 % <i>Ex-post:</i> 2.9 %	Traffic below forecasts; revenues close to forecast thanks to increased fares, but 20% infrastructure cost overrun.
Interconnexion Ile-de-France (Opened in 1994)	Expected: 14.1 % <i>Ex-post:</i> 6.9 %	Expected: 22.3 % <i>Ex-post:</i> 15 %	Traffic increases below forecast and overruns on rolling stock and operating costs.
LGV Rhône-Alpes (Opened in 1994)	Expected: 14 % <i>Ex-post:</i> 10.6 %	Expected: 9 % <i>Ex-post:</i> 6.1 %	Benchmark traffic below forecast and overruns on rolling stock and operating costs.
LGV Méditerranée (Opened in 2001)	Expected: 11 % <i>Ex-post:</i> 8.1 %	Expected: 8 % <i>Ex-post:</i> 4.1 %	Benchmark traffic close to forecast but lower traffic increases and overruns on rolling stock and operating costs.
LGV Est (Opened in 2007)	Expected: 8.5 % <i>Ex-post:</i> 4.2 %	Expected: 7.2 % <i>Ex-post:</i> 5.9 %	Cost overruns (+20.2 %) partially offset by higher-than-expected traffic



Some methodological lessons

There is a real problem with cost control and excessive overruns, particularly for LGV rolling stock and operating costs.

strengthen the risk assessments by taking cost uncertainties more thoroughly into account.

The traffic forecasting errors are mainly explained by:

-faulty macroeconomic assumptions,

-mistaken assumptions about the competitive context,

-errors in traffic modal distribution resulting from faulty modelling

in the two cases the data are missing for a proper analysis and continued data collection would have been necessary.

-For direct and indirect effects alike, these ex-post assessments have the greatest difficulty in reconstructing the statistics or the facts needed to identify them.



The permanent observatories as methodological response to the main difficulties

An investigation that could be conducted in real time so as to catch information before it disappeared could be an effective response:

- To the disappearance of data.**
- To the loss of stakeholder memory (particularly for in depth investigations).**
- More generally to fleeting phenomena.**



THE NEW EXPERIENCE WITH THE LGV SEA

- **Given the scope of the project (overall cost of €7.8 billion) and the expectations of the local governments co-financing the project, there is a clause in the concession contract obliging the concessionaire to establish and finance a socioeconomic observatory for the effects of the new line.**
- **This contractual provision thereby ensures permanent financing for the observatory, which is to function for 10 years after the line comes into service, i.e. until 2027.**
- **The fact that the observatory was put in place when the works had barely begun helped to prevent any loss of information on the "construction phase effects".**
- **This implementation served to identify, early on, the potential questions and expectations of some of the key players.**

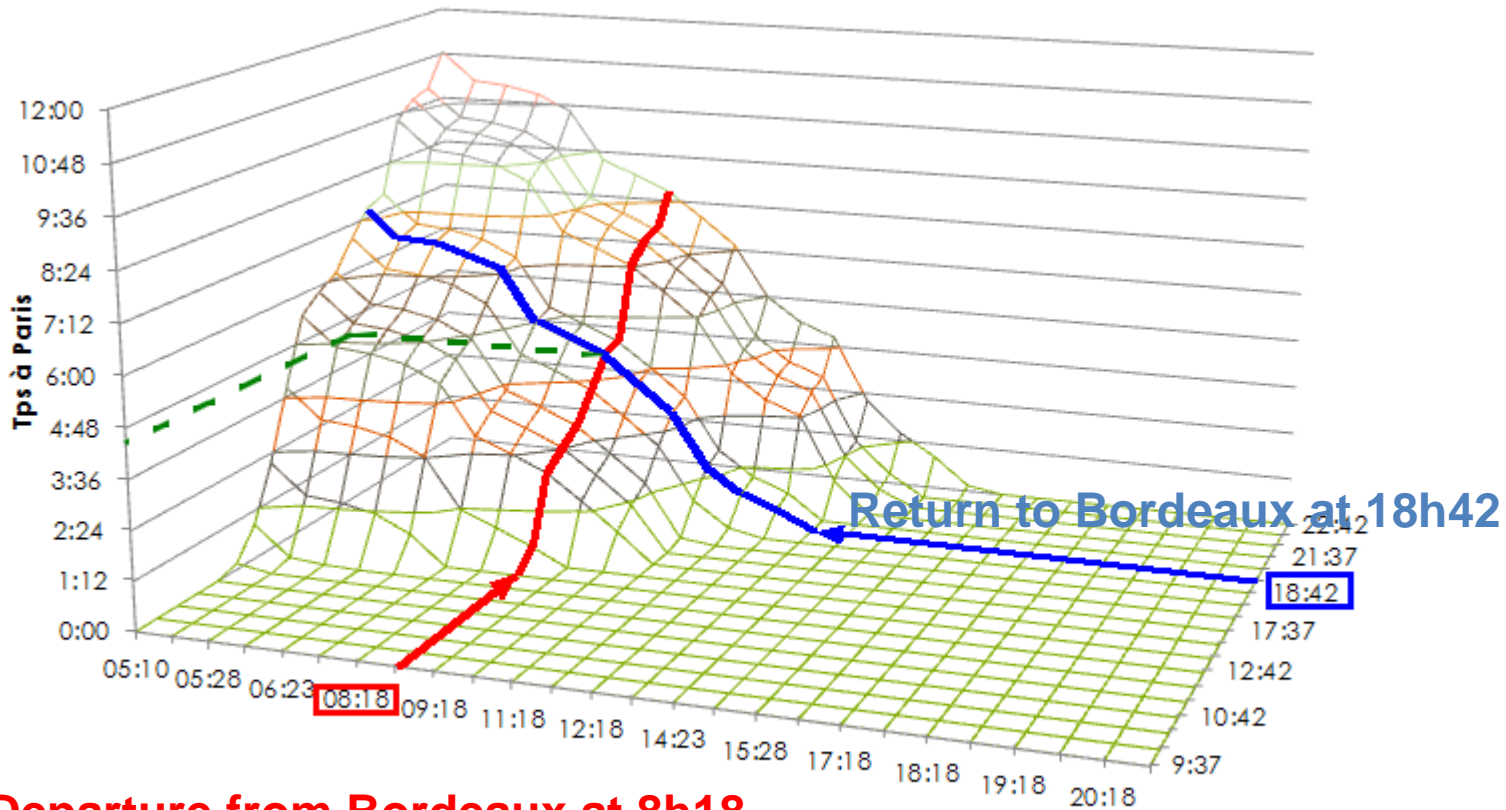


The two main methodological challenges

- The need to synthesize complex information into a limited number of indicators, the relevance of which can pose a problem in the long term.
- The fleeting nature of information, which can disappear if it is not compiled promptly.



A synthesis example of a complex information

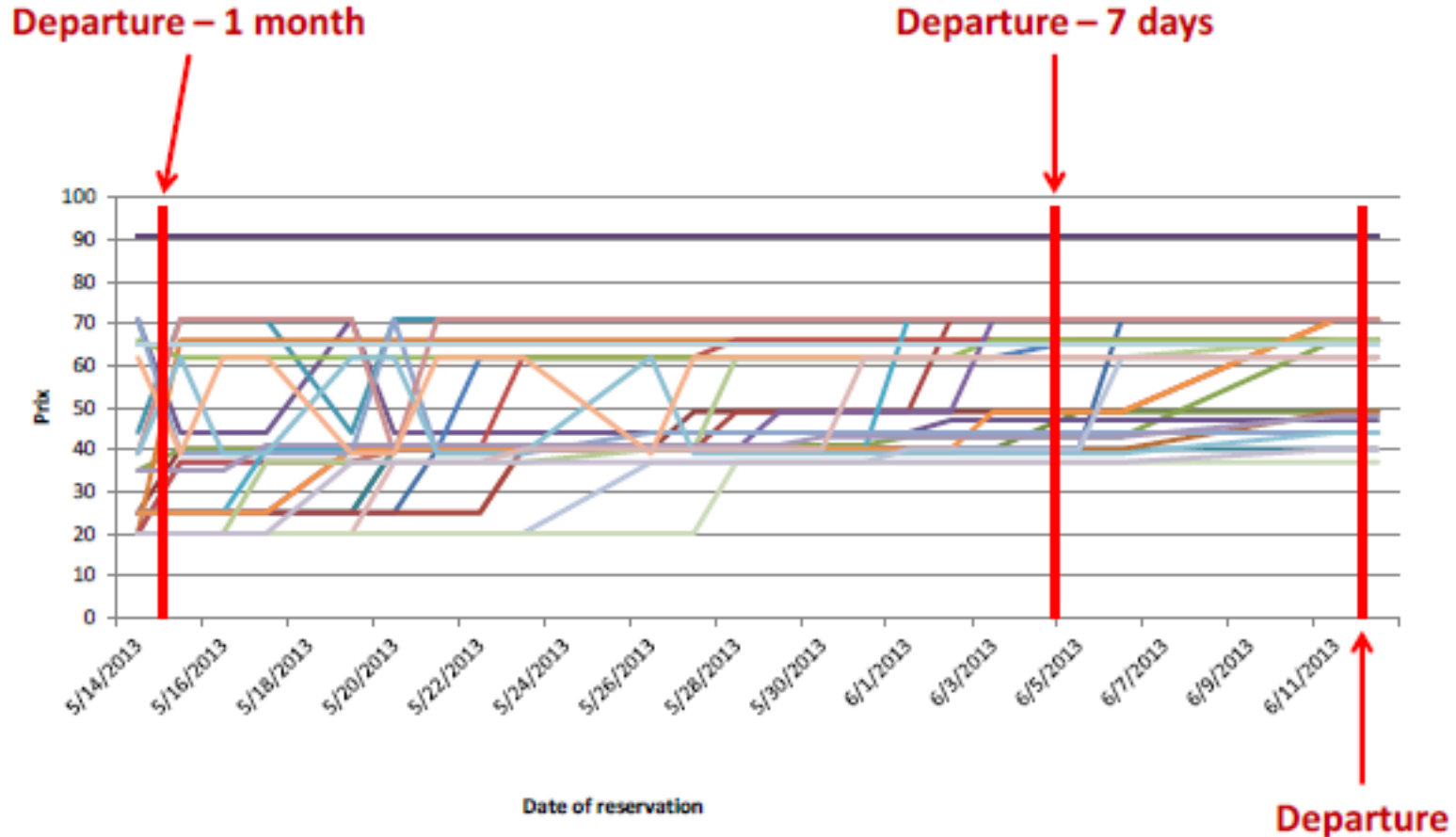


Departure from Bordeaux at 8h18

Available time at destination (Paris), with a departure constraint (after 8 a.m.) and a return constraint (before 7 p.m.)



An exemple of the fleeting nature of information



Minimum fare for all Bordeaux-Paris trains, based on length of time elapsed since reservation to departure date



MERCI

