

# Measuring Transport Infrastructure Investment & Maintenance

## *The French Case*

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Ressources, territoires, habitats et logement  
Énergie et climat  
Développement durable  
Prévention des risques  
Infrastructures, transports et mer

**Présent  
pour  
l'avenir**



# SUMMARY

## **1. Generalities -Sources & Methods**

## **2. Three approaches**

- Investment spending, in volume
- Investment / maintenance
- Satellite Account

## **3. Limits and developments**

# Two Major « primary » sources

## ● Public Sector Accounting (PSA)

- By kind of Government entity
- By function (COFOG – « Economic affairs »,  
---> *function transportation = 04.5*)
  - ↳ Pb the « other » Government Entities (Local)

- Current  $\neq$  Investment (*cf. nature ESA*)
- Subsidies And transfers

## ● Enterprises accounting

- All corporations Managing Tsp infrastr. (survey)
- Big public owned enterprises + ASFA (association of highway companies)
- Annual Reports



# Complementary or « secondaries » sources

- Price of civil engineering (national accounts)
- Satellite Accounts of transports (*synthesis n-1*)

# Implicit meta-information is necessary

- Juridical mode of infrastructure management
  - ↪ to keep updated each year

# Two institutional « tools » (coordination)

- CNIS (national council for statistical information)
  - To mobilise existing statistical sources (public sector accounts, enterprises accounts, ...)
  - = place where is institutionnally organized the dialogue between Demand for statistics and Supply : users (researchers, professional organizations, unions, ..), providers (administrations), producers (statistical services), under the authority of the Ministry of Economy (=ministry of Insee, the french NSO)
- Commission des comptes des transports de la Nation (CCTN)
  - Organizing statistical and economical dialogue with transport « Actors », Ministry, Insee (=NSO), and a certain validation of figures

# Three sets or visions

- All infrastructure expenses, by mode
  - Long run, value and volume
- Investment / maintenance
  - Not yet published (except through FIT) ; only public spending
- All actors : Satellite accounts
  - Investissement spending
  - Cost of infrastructures
  - Contribution of Gov to total
  - Beneficiaries

1.

# All investment spending in infrastructure by mode and actor



# All investment spending in infrastructure : by mode and actor Sources (1)

*NB Narrow Definition of the « product » infrastructure*

- **Road** : PSA + ASFA (Highway Companies)

- Pb : maintenance by highway companies
- Investment in other products by highway C<sup>ies</sup> (vehicules)
- Excluding : road « safety investments »

- **Railway** : RFF

- **Urban Collective Transport (UCT)** : RFF + RATP + dedicated survey (operators + public Authorities)

# All investment spending in infrastructure : by mode and actor (2)

## ● Seaports : 7 ex-seaports 'autonomous'

- Lacking : seaports administrate by territorial governments (15 ex-seaports of national interest, decentralized since 2007 -> (130/261 mios € in 2006) : because not separated accounts
  - ↳ Progress from PSA (Chambers of commerce)
- Without some big equipments
- Quid railways in seaports ?

## ● Inland ports and waterways : VNF

- Lacking : autonomous ports Paris & Strasbourg, CNR -> not firms & not gov. ; Infrastructure spending not isolated
- Lacking inland ports of territorial (local) authorities, because accounts not isolated

↳ Progress from PSA (Chambers of commerce)

# All investment spending in infrastructure : by mode and actor (3)

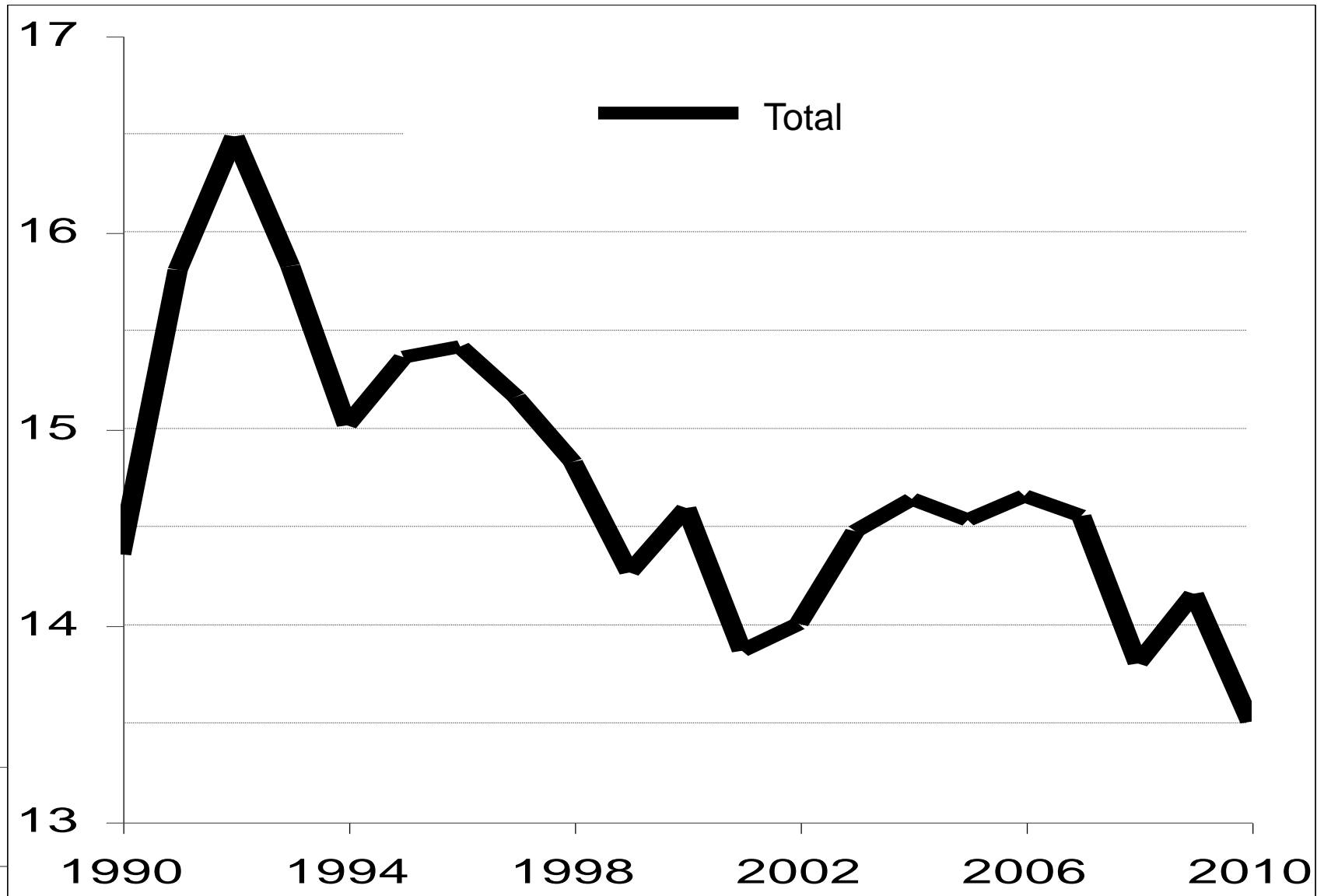
## ● Airports : PSA + Incorporated Airports

- Annex Budget (*traffic control spendings*)
- Lacking : territorial authorities (non incorporated airports)
  - ↳ Progress from PSA
- Excluded : meteo investments = not infrastructure

## ● Pipelines : not yet treated

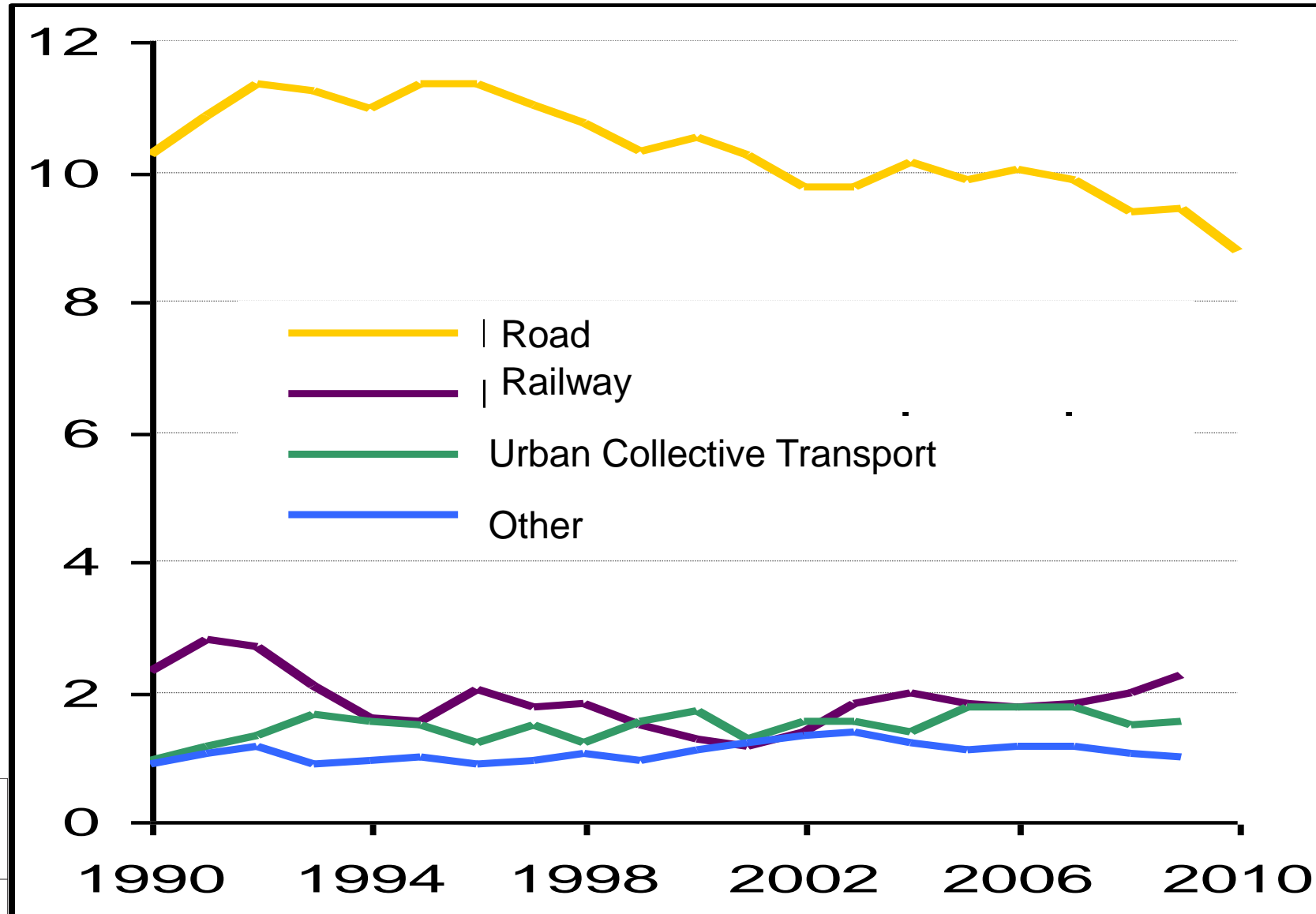
# Investissement Infrastructures – Volume Total

*In volume 2000 (value deflated par civil engineering price)*



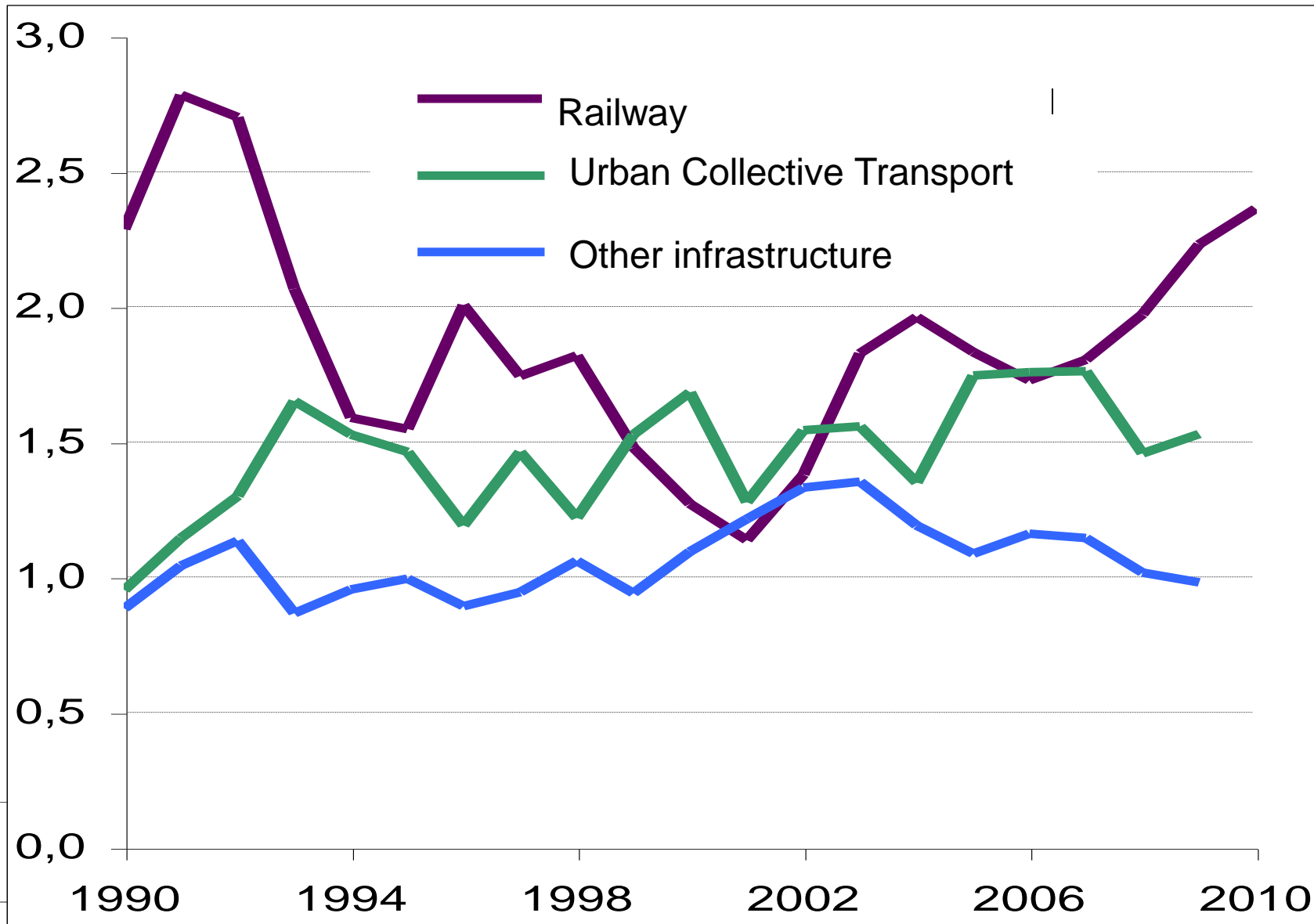
# Predominance of Road, but decreasing

*In volume 2000 (value deflated par civil engineering price)*



# Urban Collective Transport : increase

## Railway infrastructure: Middle of cycle?



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Ministère  
de l'Écologie, de l'Énergie,  
du Développement  
durable  
et de la Mer

## 2. Investissement *versus* Maintenance



# Investissement *versus* Maintenance

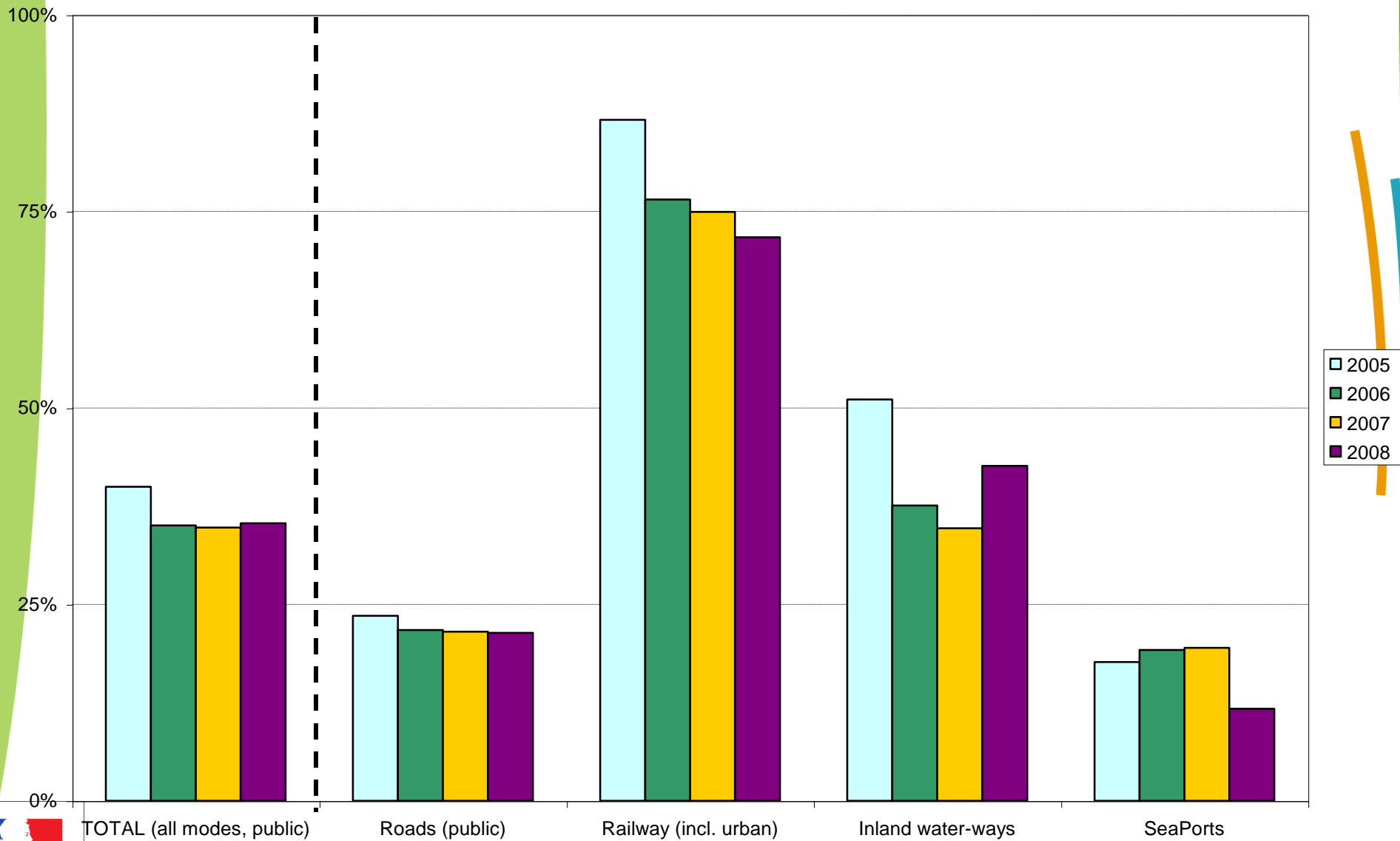
- **Investissement** = new construction, extension, reconstruction and heavy restoring
- **Maintenance expenditures** = only those financed by Public Administrations  
(*State, regional and local authorities*)
  - ↳ Pb of « territorial » authorities : not available before 2005 by detailed function (PSA)

# Sources maintenance

- **Road** = Intermediate Consumption Of Territorial Authorities + Action « road maintenance » (PSA)
- **Railway** = Payments Manager of Infrast. (RFF) to SNCF acting as « delegated manager of infrast. » + Direct Maintenance by RFF
- **Saeports** = seaports accounts
- **Inland ports and waterways** = VNF (maintenance spending)

**Pipelines** = not yet treated

# % Maintenance / Investment (infrast.)



Source SOeS



# Remarks maintenance

- Only public funding maintenance

==>Pb by-mode comparability

Solution ? *How to use Private Accounting ?*

- Linked employment : not taken into account in certain cases (inland, because internal), taken into account in other cases (because « realized-by-a-third party »: Railway)
- Definition of infrastructure : ex. GPS...
- *Quid* of intangible assets

# 3. Satellite Account



# Principles

- Synthesis in common framework (GDP)
- Financing / Beneficiaries  
(spending / income)
- Product = « enlarged transport function » (including own account) ==> larger definition also for infrastructure
  - ↳ Statistical repartition (ex : inland spending out of VNF)
- By institutional sector (National accounts)
- All sectors, agents
- By Mode
- One limit : not endebtment flows

# Consequences

- Current Spending for Transport / Investment  
Spending for Transport
- All investments (including own account)
  - Equipments + infrastructure + Others
  - All financing
- All costs (use of infrastructure)

# Infrastructure Investissement / Total Investissement

- 18,3 billions € / 51,4 billions € transport investment (36% of transport GFCF ; 1% of GDP)
- 6,8% of total GFCF (all sectors, exclud. Households)
- 10,9 billions € = Government itself
- +1,7% year ; +2,7% year for all (2005-2009)

# Current Spending in Transport Infrastructure

- 33,5 billions € / 327,1 billions € of Current Transport Spending (=10%)
- Capital Consumption : 6,2 billions €
- Toll : 7,2 billions € (including non resident)
- iK : (imputation) 4 billions € = 36% x 11,2 billions

# Conclusion

## Limits & possible Developments

- Principal Limit : employment spendings ( $\neq$  treatments)
- Near term Developments : enrichment by local government (seaports, airports, inland ports), PPPs
- Maintenance spending by private companies
- Spending in other capital (vehicules, ..) to be discounted from infrastructure spending
- Intangibles (softwares...), Land,
- Satellite Acc.: Monetary Beneficiaries & tracing effects
- To distinguish public owned companies
- Stock of Assets , Endebtmnt (flows)

Thank you

