



# 2013 ANNUAL POLIS CONFERENCE

European cities and regions for a more sustainable mobility

**4-5 December  
in Brussels**

[www.polisnetwork.eu/2013conference](http://www.polisnetwork.eu/2013conference)



**The parking policy observatory  
of Nantes Métropole :**  
**an essential tool to feed the sustainable  
mobility strategy**



# Why a monitoring centre ?

## > In 1993, unreliable indicators

- Irregular data reporting
- Data reported on a declarative basis by the developers



## > In 2007, a need for relevant analysis

- Reliability of the data collection
- Precision of indicators



## Evolution of indicators

for a better assessment of public policies



# CarPark Monitoring in Nantes Métropole

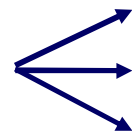
- Collection, processing and analysis of data
- Realization of thematic and sectorial studies
- Electronic library (Studies, Publications, Press articles, Reviews, Pictures...)

## AIM



Objective knowledge of the supply and use of car parks

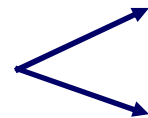
## STAKES



- Assessment of public policies
- Support for decision-making
- Prospective



## SCOPE



### • Data :

- Parking garages and enclosed car parks in the city center and the railway station
- P&R on the public transport network

### • Studies :

- On the whole territory of Nantes Metropole (24 towns)

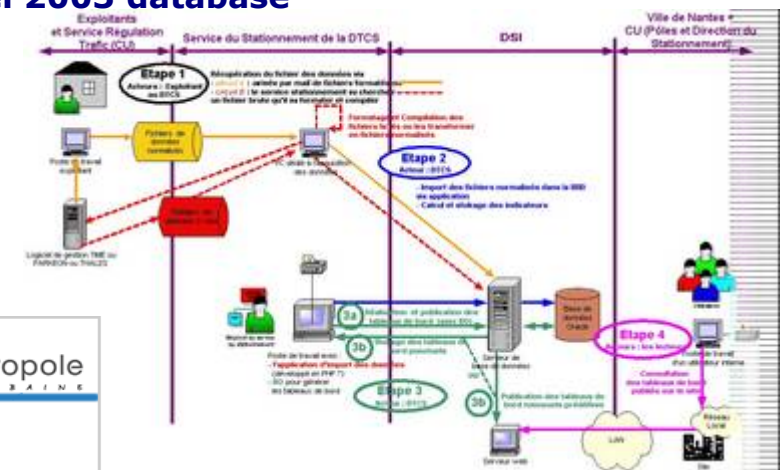


# The monitoring centre in a few dates

- ▶ **1993** : creation of the observatory by the City of Nantes
- ▶ **1995** : Implementation of a software called ANASTA (application under Access)
- ▶ **2000** : The Greater Nantes is created (including the Parking Department)
- ▶ **2004** : Studies related to the Parcobs Application are launched
- ▶ **2005** : Definition of specifications
- ▶ **2006** : repatriation of the ANASTA database under an Excel 2003 database
- ▶ **2007** : birth of the Parcobs Application



- ▶ **2009** : Technical evolutions of Parcobs





# PARCOBS adventure

Centralization of data related to the use of car parks with access control

**Principle :** Data is uploaded from the paypoint equipment

## Stakes :

- Data centralization
- Data reliability
- No loss of information
- Time saved for the developers & Nantes Metropole

## Obstacles:

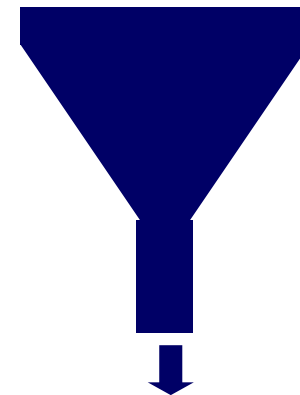
- Questioning of the suppliers of access control equipments
- Close collaboration with the suppliers and the developers
- Need to build a relation of trust

The feeding of the observatory is imposed in all operating contracts :

→ Framework for the standards and the sending on a monthly basis



*tan*

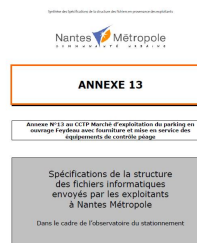


PARCOBS



## In concrete terms:

- Definition of the specifications
- Tendering of the operation of the observatory
- Adaptation of access control equipment



## Parcobs was born and the first data collected in Octobre 2007

### • Export of 6 files .csv from the access control equipment

- File 1 : Attendance
- File 2 : Occupation
- File 3 : Number of users of the hourly price rate
- File 4 : Revenue from users of the hourly price rate
- File 5 : Monthly receipts from the subscriptions
- Fichier 6 : Statistics per user

- Archiving of files = data security
- Load toward the Parcobs application = automation
- Overnight uploading of data

### Mémo fichiers « Parcobs »

#### Fichier 1 : Fréquentation

Année	Mois	Code Parc	Jour	Heure Début	Heure Fin	Type Usager	Nombre Entrées	Nombre Sorties
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01 : Usager tarif horaire  
02 : Cartes à décompte  
99 : Abonnement tout type

#### Fichier 2 : Occupation

Année	Mois	Code Parc	Jour	Heure	Type Usager	Nombre de Véhicules
-------	------	-----------	------	-------	-------------	---------------------

→ Nombre de véhicules présents à l'heure « H »

#### Fichier 3 : Nombre de stationnement tarif horaire

→ Paiement par ticket, Carte à Décompte, Chèques Parkings, Dépassements d'Abonnement

Année	Mois	Code Parc	Jour	Durée Borne Inférieure	Durée Borne Supérieure	Nombre de Paiement
-------	------	-----------	------	------------------------	------------------------	--------------------

#### Fichier 4 : Recettes des usagers au tarif horaire

Année	mois	Code Parc	Jour	Type de Paiement	Nombre de Paiement	Montant Correspondant
-------	------	-----------	------	------------------	--------------------	-----------------------

01 : Carte à décompte  
99 : Autre (chèque, espèce, CB, Monéo, ...)

#### Fichier 5 : Recettes mensuelles des abonnements

→ par type de véhicule et type d'abonné

Année	Mois	Code Parc	Code Abonnement	Code Véhicule	Code Périodicité d'Abonnement	Nombre d'Abonnement	Montant
-------	------	-----------	-----------------	---------------	-------------------------------	---------------------	---------

#### Fichier 6 : Statistiques par usager

Année de Sortie	Mois de Sortie	Code Parc	Jour de Sortie	Heure de Sortie	Année d'Entrée	Mois d'Entrée	Jour d'Entrée	Heure d'Entrée	Montant Payé	Type d'Usager	Type de Paiement
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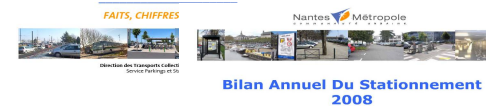
## In parallel :

- **Monthly dashboards from the developers** (to check the conformity of data with Parcobs)
- **Monthly or quarterly statement of the occupation of the P+r by Nantes Métropole decentralized offices (Pôles de proximité)**
- **Private car park watch**
- **Inventory of the controlled parking zones**

### *Interlocutors:*

- *Towns*
- *Pôles de proximité*
- *Public space department*

- **Since 2002, every year**
- **Synthesis and analysis of the facts and striking figures of the past year**



# A few examples of the use of Parcobs

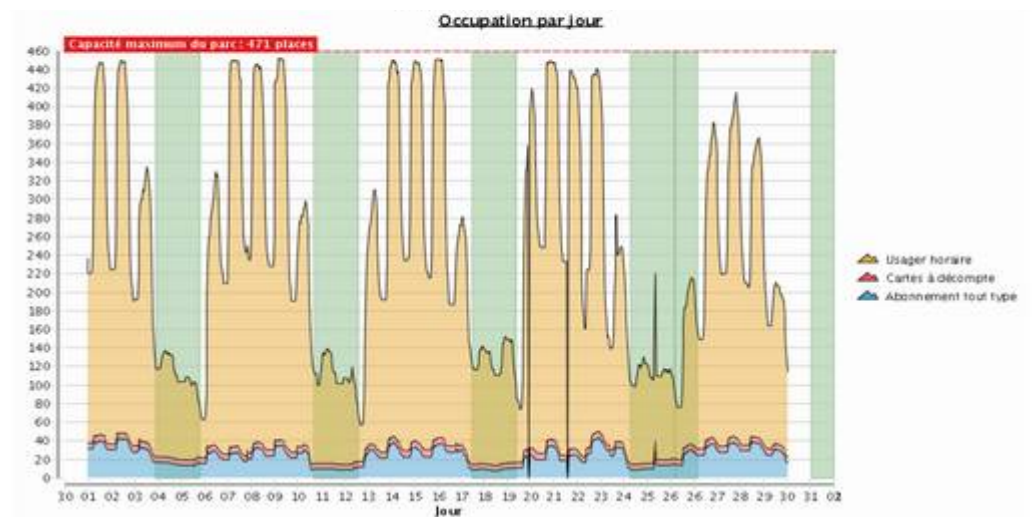
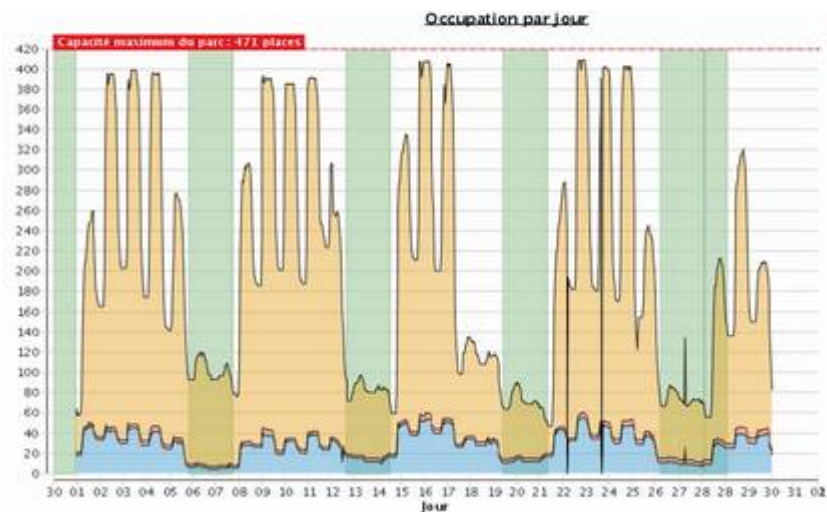
## Optimizing the operation of car parks

### Example of an enclosed car park

→ Highlighting of the existence of an unsuitable profusion

→ Adjustment of profusion

↪ Optimization of the supply in the railway station district

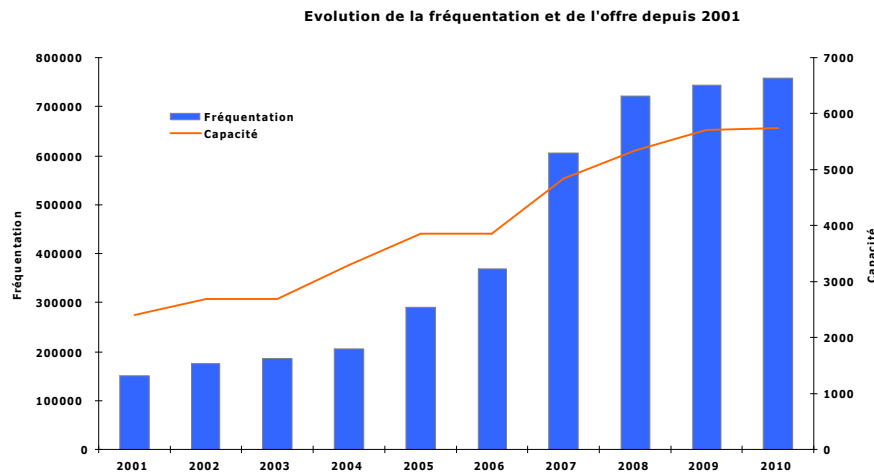




## P&R policy assessment

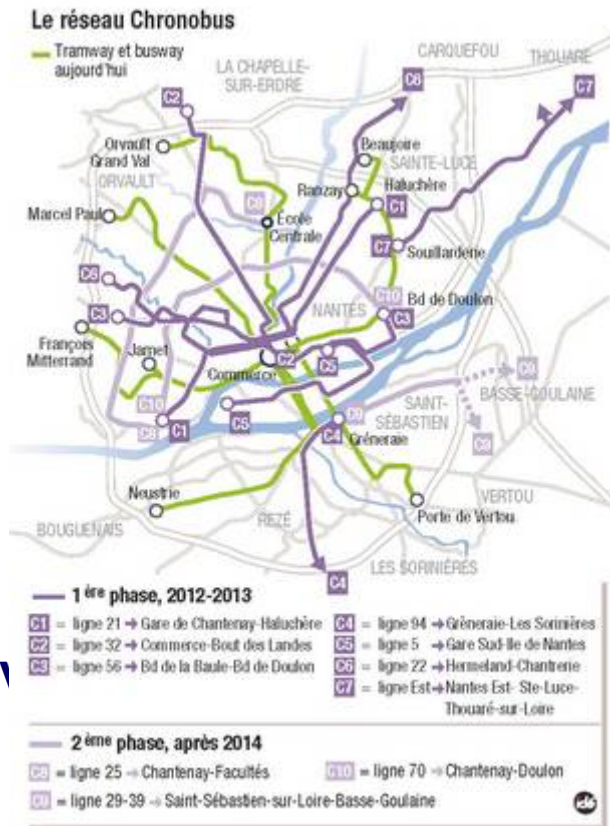
Via the monitoring of the monthly data

→ The evolution of attendance is stronger than the capacity



👉 Project of adaptation of the supply to the demand in accordance with the SUMP!

## Support for decision-making



→ preliminary evaluation of the implementation of chronobus lines :

- Impact of the removal of on street parking
- building of extra P&Rs



## A tool in the service of the financial prospective

- Data on attendance and revenue is modelized, with specific tools created by the financial department
  - > an excel spreadsheet of the estimated attendance and the revenue to be collected
    - ✓ estimation of the evolution of attendance
    - ✓ impact of the tariff increases

		2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>Les Machines</b>		<b>0</b>	<b>0</b>	<b>18 922</b>	<b>56 555</b>	<b>82 178</b>	<b>103 833</b>	<b>123 594</b>	<b>126 992</b>	<b>131 305</b>
A Briand		0	20 323	22 129	23 913	24 870	25 733	27 404	28 343	28 343
<b>Gare Total</b>			<b>1 059 198</b>	<b>1 285 904</b>	<b>1 392 206</b>	<b>1 616 340</b>	<b>1 283 746</b>	<b>1 308 024</b>	<b>1 318 603</b>	<b>1 344 200</b>
Gares	fixe		1 059 198	780 300	795 906	811 824	828 061	844 622	861 514	878 745
	complémentaire			352 231	391 560	450 996	455 685	463 402	457 089	465 456
	recettes			86 888	166 230	353 520	0	0	0	0
	gestion			66 485	38 510	0	0	0	0	0
<b>Commerce</b>		<b>-208 859</b>	<b>-161 367</b>	<b>-221 275</b>	<b>-114 628</b>	<b>22 401</b>	<b>-60 217</b>	<b>-79 773</b>	<b>-96 619</b>	<b>-140 541</b>
Cathédra	Redevance	0	2 993	3 829	4 158	4 092	4 068	4 134	4 031	4 088
Cathédra	Subvention d'exploitation	-436 549	-408 044	-365 974	-341 205	-303 362	-280 411	-256 513	-225 872	-200 814
Cathédra	résultat									
<b>Centre Total</b>			<b>282 358</b>	<b>261 385</b>	<b>651 128</b>	<b>681 421</b>	<b>691 776</b>	<b>693 912</b>	<b>426 953</b>	<b>689 208</b>
centre	fixe	268 064	282 358	372 872	455 853	549 877	680 547	810 344	900 000	900 000
	recettes			-111 487	163 000	131 544	11 229	-116 432	-473 047	-210 792
	dépenses			0	32 275	0	0	0	0	0
parcs enclos		1 253 057	1 171 460	1 517 979	1 620 148	1 690 961	1 718 584	1 719 658	1 745 108	1 772 429
<b>TOTAL</b>		<b>875 714</b>	<b>3 308 477</b>	<b>2 522 898</b>	<b>3 292 274</b>	<b>3 818 902</b>	<b>3 487 112</b>	<b>3 540 439</b>	<b>3 327 540</b>	<b>3 628 219</b>

- > an excel spreadsheet on the budget prospective [synthesis of financial data]



## The Observatory and its projects ...

- ❑ **Evolution of the PARCOBS application [parking garages and enclosed car parks]**  
(automated mappings, dashboards, ergonomics, ...)
- ❑ **The creation of a PARCOBS application for on-street parking**
- ❑ **The continuation of the qualitative studies in addition to the PARCOBS data**
- ❑ **The Parking observatory also feeds the mobility monitoring center of Nantes Métropole**
- ❑ **Intercity cooperation, sharing of tools and methods**



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# Thank you for your attention

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