BusWay and Chronobus
How to develop the BHLS concept in Nantes
Nantes Métropole
- Created in 2001
- 24 cities

Nantes Métropole
- 590,000 inhabitants
- 300,000 jobs

PT network
- 25 million km
- 115 million passengers

10 fields of competence
- Urban planning
- Transport - mobility
- Public space - roads
- Environment
- Water
- Economy, universities, research
- International
- Social development
- Waste management
- Energy

The Public Transport Authority
Transport and mobility

Mobility services

Public Transport

Parking

Roads

Bicycles

Pedestrians
The *BusWay* in 2006

« The rolls of the BHLS »

« The tramway with a bus »
The BusWay in 2006
The BusWay: figures

- 7 kms
- 15 stations
- 4 P+R (1100 parking spaces)
- 1 main transfer station
- 8 transfer stations with other network lines

- 20 dedicated vehicles
- 50 M€ VAT excl. for infrastructure
- 9,3 M€ VAT excl. for vehicles
The BusWay: conception

Using the features that made the tramway a success:
A dedicated lane along virtually the entire route

Dedicated central lane with and without central island
The BusWay: conception

- Crossroads: priority given to the BusWay with specific signal system
The *BusWay*: conception

- The creation of actual stations (optimisation of passengers interchanging time, shelters, equipments, …)

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*Nantes Métropole*

*Communauté Urbaine*
The *BusWay*: conception

- Accessibility with no guidance system: the issue of station docking and the station/vehicle interface with specific granite curbstones
The BusWay: the rolling stock

- Based on a standard low-floor articulated bus running on CNG
- Animated line diagrams
- Screens providing connection times with the other lines
- A closed area for the driver
- Comfortable seats
- Soft and indirect lighting
- Tram-like sliding doors
- Mini exit ramp doors 2 and 3
- Insulation with double-glazed windows
The **BusWay**: operation & results

### Operation

- A frequency of 3 mn at peak times and (4 mn at beginning) 6 mn otherwise
- Operating hours from 5 AM to 0h30 AM (2H30 AM on saturdays)
- Boarding by all doors

### Results (2010)

- 28 500 passengers/day
- Saturation of P+R
- Tram-like modal shift (25 % from cars to BusWay – surveys in 2007)
- In the future: increased vehicle capacity (24 m ?) then compatible to tramway implementation (layout, platform,...)
The Chronobus concept

The need to find something between regular bus and tramway/busway network because:

- Problem of capacity of main network
- Adapt the system to the needs and the money we get
- Don’t have the space for 100% right of way (10-20 meters large)
The Chronobus concept

The Chronobus label will offer:

- A guaranteed travel time similar during and off peak hours
- Improved frequencies: 6-8 minutes peak hours, 10-12 min. off peak
- Operating hours similar to the Tram’s and BusWay’s (5h -> midnight)
- A continuous supply throughout the year
- Accessibility for all
Chronobus: a pragmatic approach

- Bus lane (33 km)
- Crossroads treated as roundabout
- Traffic calming bus station

- Positioning and accessibility of stops
- Road enlargements
- Prioritizing at intersections (radio system)
  - Include soft modes improvements
  - Removal of parking spaces (1200)
Chronobus: the system approach

1. Rolling stock

2. Infrastructure adapted to the needs

3. On/Off board information

4. Operating

5. Identity
Chronobus : overview of improvements

- Couloir bus existant ou en projet
- Station apaisée (en ligne sur voirie)
- Zone à trafic limité
- Création de giratoire
- Priorité bus carrefour feux
Chronobus: a meshing network
Chronobus : figures

- 10 Chronobus = 100 km = 100 000 passengers.
- 7 first lines will be commissioned between September 2012 and September 2013 and the 3 remaining lines after 2014.
- 400 000 inhabitants around the Chronobus (< 500 m)
- 55 M€ (VAT incl., rolling stock excl.) for the 7 lines
BusWay and Chronobus: 2 new systems for a hierarchical network (2010)
BusWay and Chronobus: 2 new systems for a hierarchical network (2030)
Thank you for your attention

Visit the Busway:
28th March
25th April

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