



Bus Rapid Transit, opportunities in the Netherlands

Open podium presentation
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Outline

1. History and definition of BRT
2. Experiences world-wide
3. Opportunities in the Netherlands
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An abstract graphic consisting of several white, wavy, vertical lines of varying thicknesses that originate from the bottom left and flow upwards, creating a sense of movement and organic form. The lines are set against a solid, vibrant green background.

1. History and definition of BRT

History



- Traditional rapid transit systems (metros, subways, rapid rail) are heavy rail.
- In the 1990s two new concepts became popular: (modern) light rail and Bus Rapid Transit (BRT).
- Advantages: comparable passengers capacity, speed and comfort but easier and cheaper to construct.
- Curitiba had already a BRT system (1972) before the word was invented.

Definition: the 7 features of BRT

1. Segregated busways (bus-only)
2. Good quality bus stops (stations)
3. Clean, modern vehicles
4. High frequency
5. Attractive product name (branding)
6. Ticketing on stops / station (not in bus)
7. Use of Intelligent Transport Systems (ITS)



Transmilenio (Bogotá)





2. Experiences world-wide

Bus Rapid Transit world-wide

- World-wide around 40 BRT systems in operation.
- Another 80 or so are in planning or construction phase.
- BRT is very popular in cities in South-America and Asia (esp. China) where few cities have rail based urban transit systems.
- Bogotá in Colombia has the most extensive BRT system: Transmilenio.
- Transmilenio = 84 kilometer free bus infrastructure (partly 2 x 2), 114 stations and 1.2 million passengers per day (2007).



Bus Rapid Transit in Europe

- BRT very much used in small-sized cities (no rail) or in cities (with rail) as a second tier transport
- France has good systems (e.g. in Nantes, Rouen and Douai)
- BHLS = EU research program (Buses with High Level of Service)





3. Opportunities in the Netherlands

Opportunities in the Netherlands

Zuidtangent (= 'heavy' BRT):

- Amsterdam ZO – Amstelveen – Schiphol – Hoofddorp – Haarlem
- 1.5 million inhabitants
- network = 56 km
- 30-35 km. of this 56 km. is segregated busway (= longest busway in Europe)
- 10 buses p.h.p.d.
- plans for conversion into Light Rail



Zuidtangent (Amsterdam-Haarlem)



Opportunities in the Netherlands

Three light BRT systems:

- Amsterdam CS – Purmerend (1.5 million inh., 48 buses p.h.p.d.)
- Utrecht (420,000 inh., 24 buses p.h.p.d.)
- Almere (190,000 inh., 8 buses p.h.p.d.)



Opportunities in the Netherlands

Four potential BRT systems:

- Eindhoven (440,000 inh. – 8 buses p.h.p.d.)
- Enschede (160,000 inh.)
- Etten-Leur-Breda (170,000 inh. – 9 buses p.h.p.d.)
- Ede – Wageningen



Volans (Breda – Etten-Leur)





4. More info

More info

Interesting websites:

- www.bhls.eu (European research program: Buses with a High Level of Service).
- www.gobrt.org
- www.uitp.com
- www.itdp.org
- www.balancia.com (references → BRT)