FRENCH TRAMWAY REVIVAL
Key factors of success

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France is worldwide the country where tramway/LRT revival is the most striking

- ...but also a pioneer in tram-scrapping in the 1930s-1950s: PARIS tramways totally withdrawn as early as 1938...

- In the 1970s, only 3 short remains in Lille-Roubaix-Tourcoing, Marseille, Saint-Etienne.

- To-day, 21 systems (including the 3 modernized survivors) are in operation.
Since 1985, 18 new systems opened (one more - Le Havre - on 12.12.12)

- 1985: Nantes
- 1987: Grenoble
- 1992: Paris
- 1994: Strasbourg, Rouen
- 2000: Montpellier, Orléans
- 2001: Lyon
- 2003: Bordeaux
- 2006: Mulhouse, Valenciennes
- 2007: Le Mans, Nice
- 2010: Angers, Toulouse
- 2011: Reims
- 2012: Brest, Dijon, (Le Havre)
Plus 2 Interurbans («Tram-Trains») in MULHOUSE and LYON and 2 incursions in France of neighbouring system (SAARBRÜCKEN and BASEL)
And this trend goes on....

- 2 new systems under construction: Tours (opening 2013), Besançon (2014).
- 3 new systems approved: Avignon, Aubagne, Nîmes.
- Extensions on French territory of neighbouring Swiss systems (Geneva, Basel).
- Many extensions of existing systems (Lyon, Paris, Bordeaux, etc..)
From large urban areas to middle-sized ones

In the 1980s-1990s, tramways/LRT were considered for areas in the range of 500 000 pop. (Nantes, Strasbourg, etc..) or as a feeder to heavy rail in major cities (Paris, Lyon, Marseille).

In 2000, Orléans was the first middle-sized area (250 000 pop.) to get a new tramway.

Since then, most French cities in this range have built or are planning new tramways (even Aubagne, 100 000 pop.!).

To-day, the only major urban area having
Why such a revival?

Among many reasons (would need a special session!):

- Enlightened city-leaders (Nantes, Grenoble, Strasbourg) in the early 80s, in search of new solutions for transit.
- Tramway/LRT identified as filling the gap between heavy rail (metro) and conventional bus.
- Tramway/LRT considered as an efficient tool for enhancing urban space and reducing space allocated to private car.
- National policy in favour of public transport, providing technical guidelines and enabling local authorities to levy a payroll tax (« versement transport ») dedicated to public transport investments.
Main key factors of success

Tram/LRT revival is a success, as shown in Tom Parkinson's general overview and 5 main factors can be identified:

1. Running on segregated r.o.w. (unlike the former « streetcar » generation), combined with systematic priority at crossings.
2. Introduction of high-capacity vehicles.
3. Full accessibility thanks to low-floor vehicles.
4. Integration with the other modes, either public or individual.
5. Urban integration, enhancing the environment in city centres as well as in outlying areas.
1. Segregated r.o.w. AND priority at crossings

- Nearly 100% of r.o.w. segregated from other traffic, except at crossings.
- Trams run in city centres often through pedestrian areas.
- SYSTEMATIC PRIORITY AT TRAFFIC LIGHTS IS PROVIDED.
- Commercial speeds 18-22 km/h on street-running, 30 km/h on disused railroad alignments (Paris T2, Lyon T3)
4 practical examples:
Marseille  Montpellier
Brest Lyon
2. High-capacity vehicles

- Most French trams have a capacity of 180-250 pax (4 standees/squ.meter) = 2 or 3 articulated buses...with one driver.
- Mainly modular articulated cars 30-32 m or 42 m long.
- Multiple-units operation only in Paris (line T2).
- Extension of 5 to 7 modules to cope with growing patronage (Montpellier, Marseille, Nice)
Examples of high capacity cars (Reims, Strasbourg, Marseille, Paris)
3. Accessibility

- Grenoble in 1987 was the first system to introduce fully-accessible low-floor trams.
- Since then, all trams are low-floor, partially or 100%.
- One essential factor which made the new trams popular.
- Benefits to all passengers and shortens dwell-time at stops.
4. Integration with other modes

- New tramways not stand alone but part of a global transport system, either as trunk routes or feeder to heavy rail.
- Common fare system and scheduling.
- Cross-platform interchanges wherever possible.
- Park&Ride at outer stations, including bikes, with enticing fares.
Integration with other modes: rail, metro, private car, bikes.
5. Urban integration

- High quality of urban integration is a must to overcome public reluctance of new infrastructures in an urban environment.
- Mainly in historic centres, but also in outer densely populated areas.
- Tramways considered as a tool for rejuvenation of decaying housing areas and for sustaining new developments.
MONTPELLIER: tramway insertion in city center, high density housing area, new commercial center
THANK YOU FOR YOUR ATTENTION!

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