

Inserting streetcars in pedestrian areas : French examples

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Key Presentation Take Aways

- The French “*Streets for all*” concept
- Why make streetcars cross pedestrian zones !
- Key factors for a good insertion
- Relevant locations for cohabitation between streetcars & pedestrians
- Advantages & limits

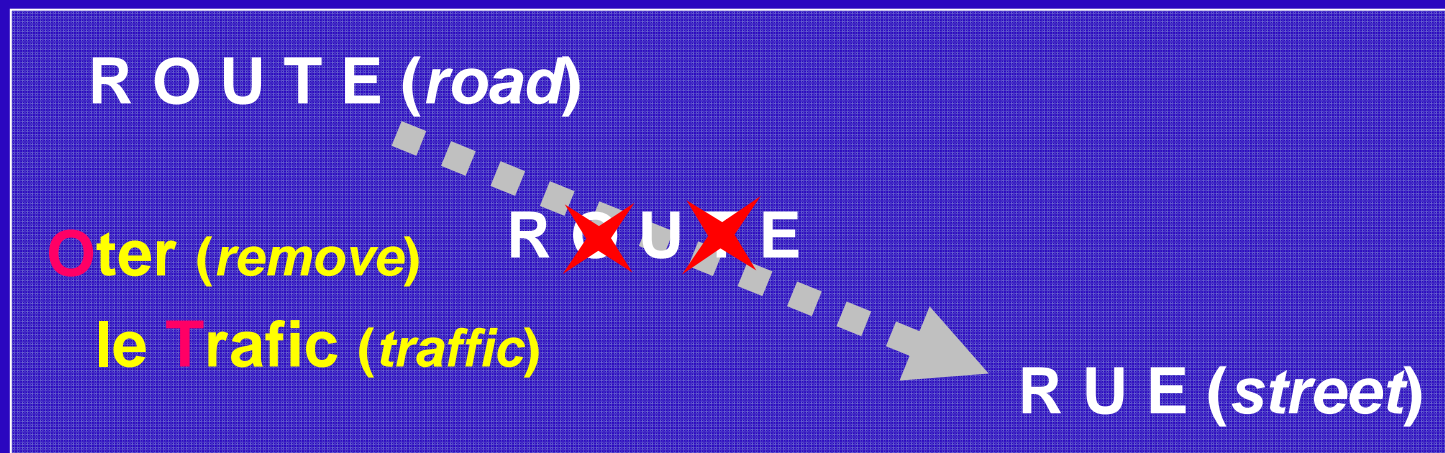
The French “*Streets for all*” concept

⇒ a more balanced use of public space...

- Promotion of active modes
- Reduction of car’s prominence









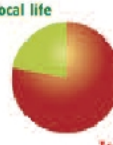

• a main regulatory tool :

The “street use code” process (*start 2006*)



The French “*Streets for all*” concept

Synthesis of running conditions in towns

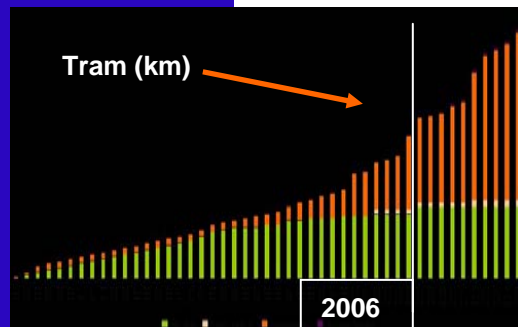
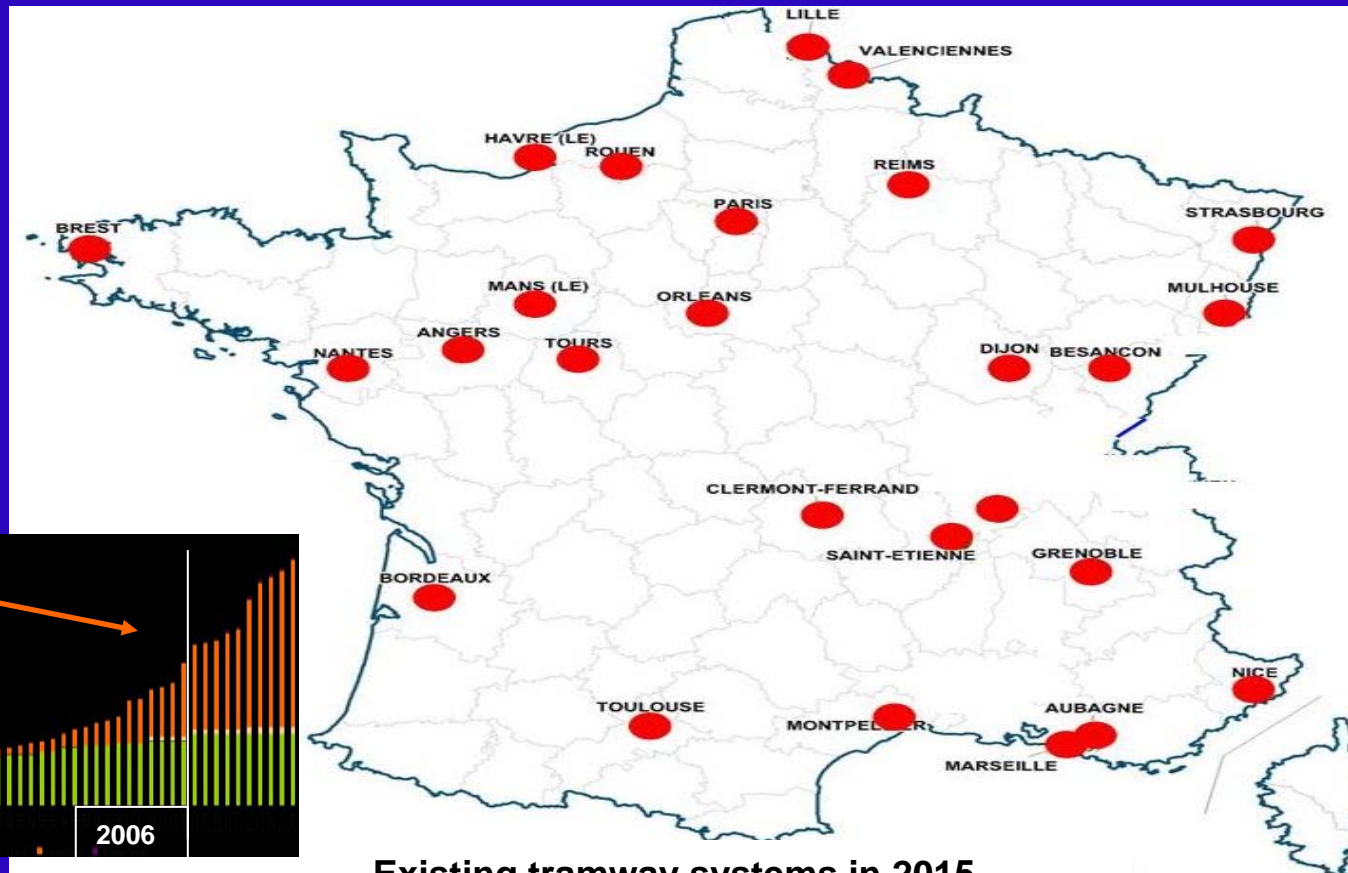
Status of the zone or road	 pedestrian area	 pedestrian-priority zone	 30 zone	 urban area	 70 section
<i>Speed limit</i>	<i>Walking pace</i>	<i>20 km/h</i>	<i>30 km/h</i>	<i>50 km/h</i>	<i>70 km/h</i>
Balance between local life / traffic function	 Local life	 Local life	 Local life	 Local life	 Local life
% of the road network desired in the long term	0 % - 10 %	2 % - 15 %	60 % - 90 %	10 % - 40 %	0 % - 5 %

Decree 2008-754, modifying the Road code (30/08/2004)

- **Pedestrian priority zone** : < “meeting zone” > no particular limitation of traffic, but sharing without any segregation and avoid transit (pass through)
- **Pedestrian area** : (strong) limitation of cars
- In both cases :
 - Cyclists allowed
 - **Public transport allowed, as they participate in serving the zone**

Why make streetcars cross pedestrian zones !

In the meantime, France re-discovers streetcars...



Existing tramway systems in 2015

Why make streetcars cross pedestrian zones !

Several causes, in relation with those 2 trends:

- radial structure of most of tram networks, serving downtown
 - streetcars go and meet existing pedestrian areas
- extension of pedestrian areas in hearts of towns
 - pedestrians areas cover existing tramway paths
- insertion of tramways in (more & more) dense urban context
 - remove some functions in narrow streets :
car now is the logical choice !

but not always in the past... =>



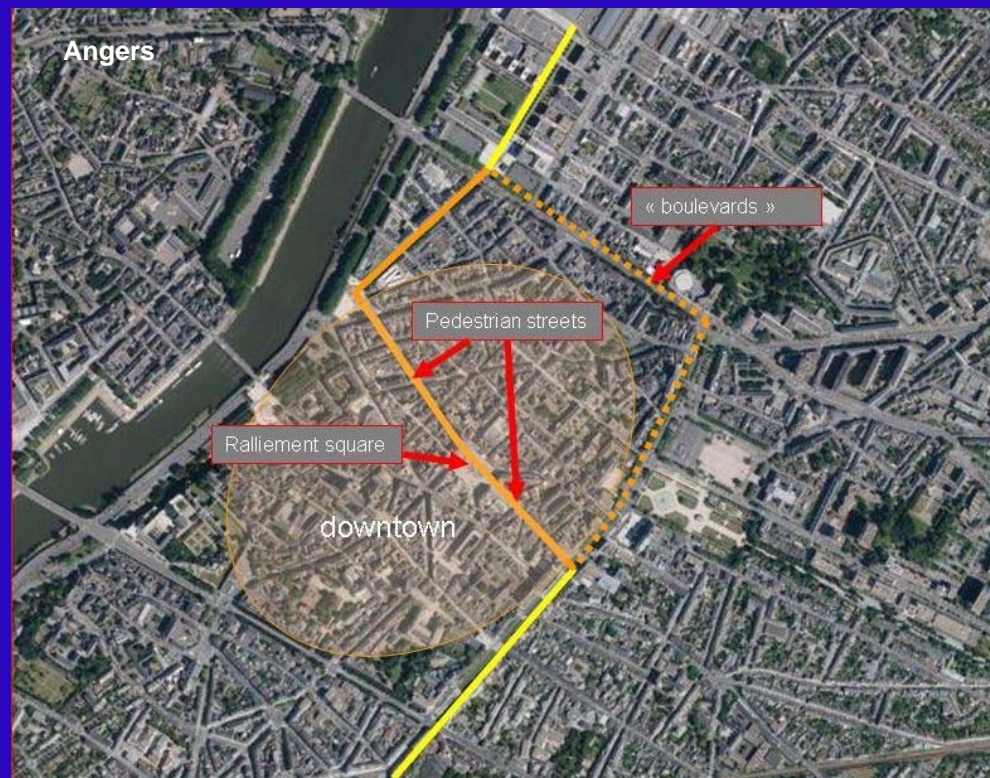
Why make streetcars cross pedestrian zones !

Tramway lines in downtown areas

- Skirt around or cross pedestrian zones ?

a technical and political choice !

- level of service
- impact on local life
- residents' wishes
- symbolic locations



Key factors for a good insertion

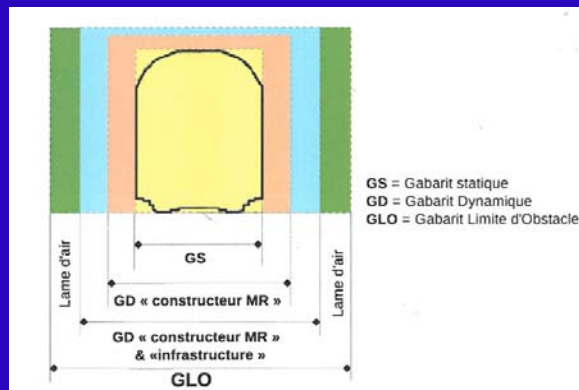
The regulatory context : tramway and road rules

- *tram* has **not to respect general rules** of the “Road code”

→ **streetcars** do **not** have to **yield priority** to **pedestrians**

→ **all users**, including **pedestrians** **have to let a free path** for up-coming **tramways**

→ adapt the layout to make the tram perceptible

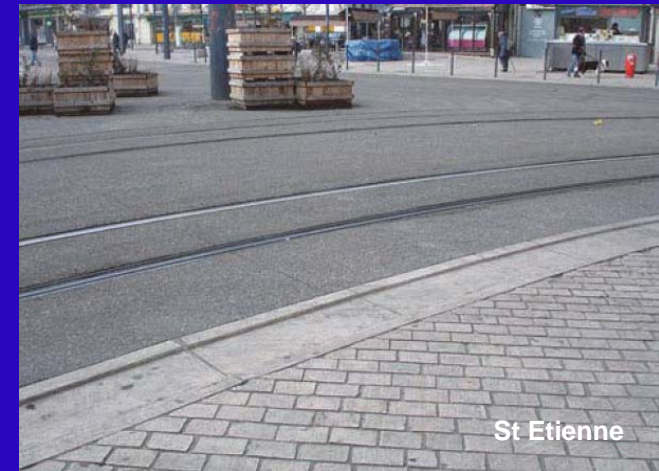


**Materialization of
the Gauge limit
(« GLO »)**



Key factors for a good insertion

- adapt the layout to make the tram perceptible
 - choice of contrasting materials
 - borders and whole surface of the GLO



- facilitate pedestrians' life (must easily walk/get out of the GLO)
 - no too "sealed" separating device
 - comfortable walking facilities out of GLO
 - sufficient width
 - remove obstacles



Key factors for a good insertion

- adapt the operating conditions and ways
reduction of speed and high concentration of drivers...
to be balanced by
 - limited length of such sections
 - simplification of their functioning
(pure pedestrian areas are preferable to “meeting zones”)
 - right of way and efficient priority management out of these zones

- handle an active traffic management in and around
pedestrian zones
 - access control device (but maintenance issues)
 - traffic plans to minimize car flows

Key factors for a good insertion

- adapt the operating conditions and ways
 - set up running on single tracks to keep enough places for pedestrians
 - one way track with return on a parallel street
 - alternate running in one street
 - Set up simplified maneuvers zones



Montpellier



Angers

Relevant locations for cohabitation between streetcars and pedestrians

- Major historical roads in commercial and service districts



Relevant locations for cohabitation between streetcars and pedestrians

- Forecourts of railway stations

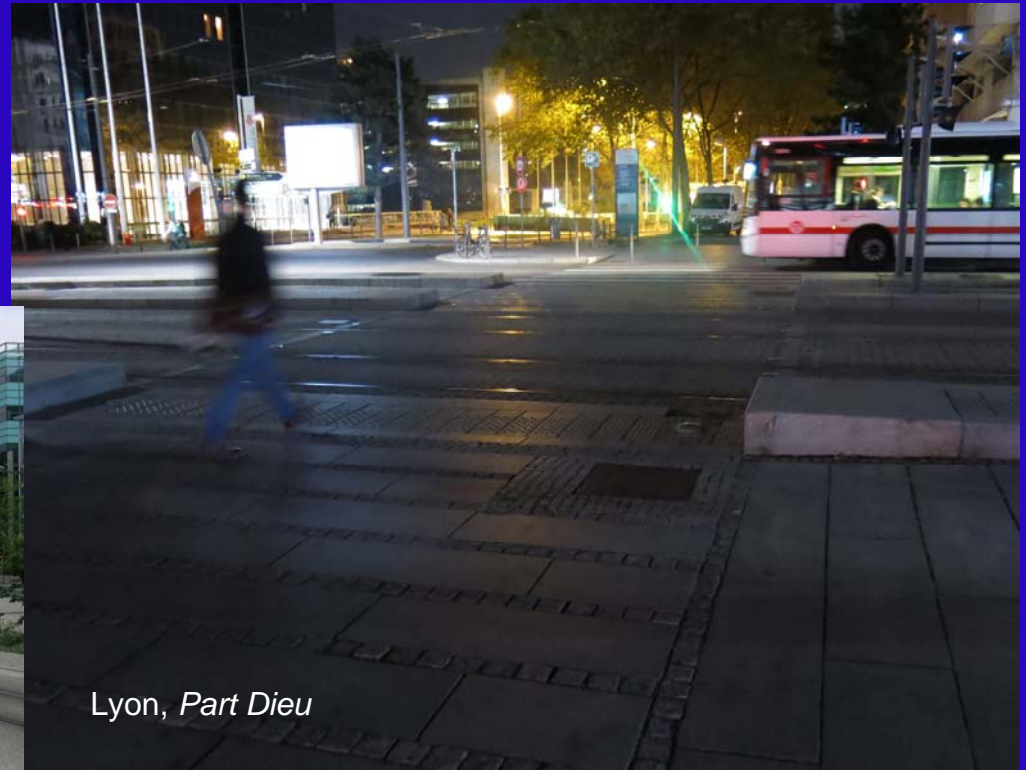


Relevant locations for cohabitation between streetcars and pedestrians

- Multi-modal connections centers



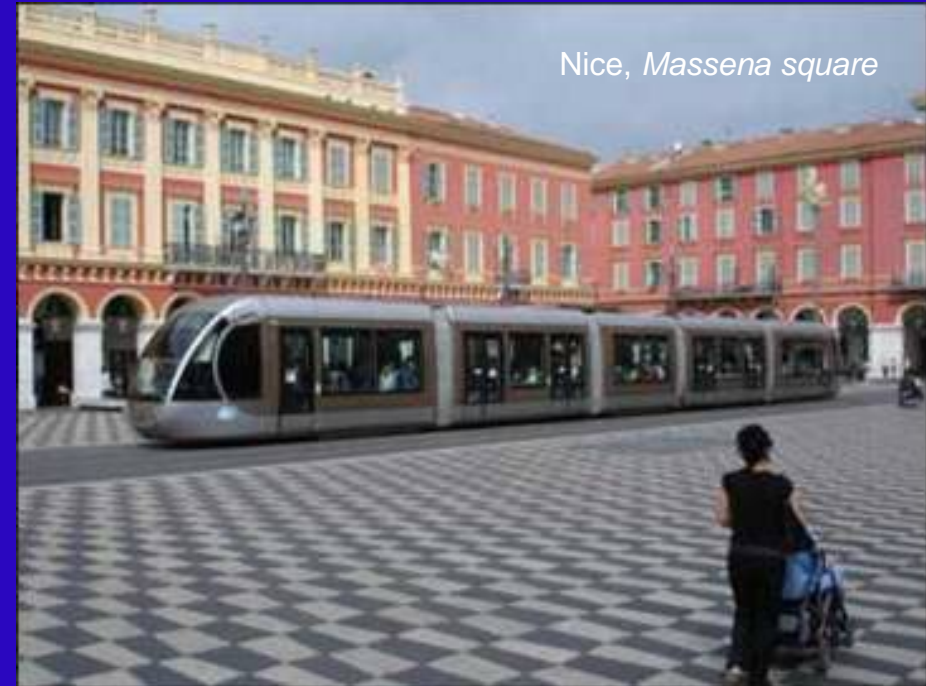
St Etienne, Chateaucieux.



Lyon, Part Dieu

Relevant locations for cohabitation between streetcars and pedestrians

- Downtown plazas



Relevant locations for cohabitation between streetcars and pedestrians

- Narrow streets



Relevant locations for cohabitation between streetcars and pedestrians

- Lateral location of tracks in wide streets



Advantages and limits

→ Advantages

- good image of the tram (/ Bus)
 - less noisy and polluting
 - soft and friendly
 - smooth running
- calmed traffic
 - bicycles moderated by pedestrians
 - few motorized traffic
 - low speed for all



⇒ No big safety issue

→ Limits

- high frequency of tramways
 - a wall in the street
 - risky behaviors
 - bad regularity



- Any question ?...



Thank you for listening

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