



4 years demonstrating Automated Road Transport Systems in Europe

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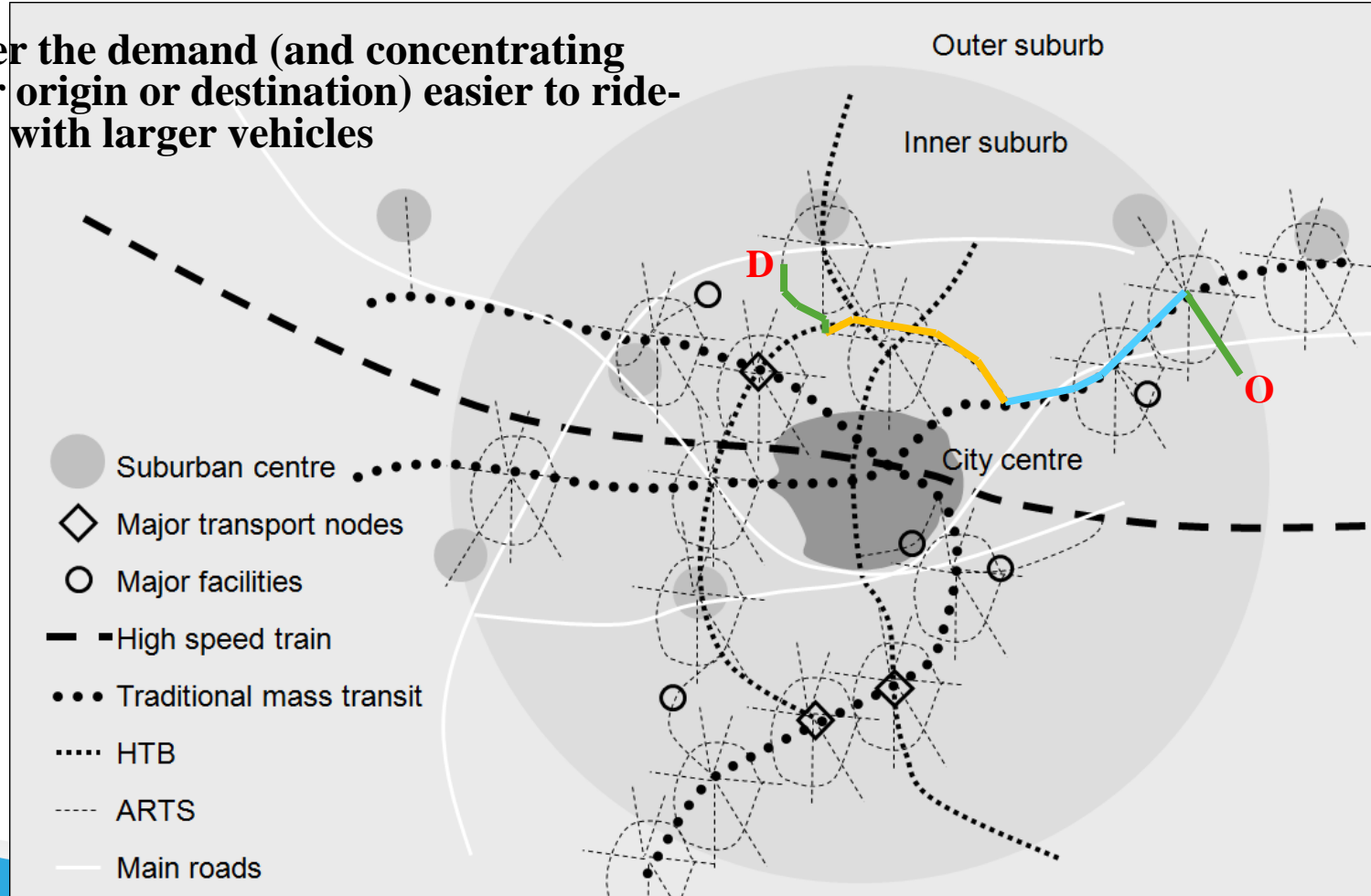
www.citymobil2.eu

What did we demonstrate

<http://www.citymobil2.eu/en/About-CityMobil2/Overview/>

The original idea solving the last mile problem

Denser the demand (and concentrating either origin or destination) easier to ride-share with larger vehicles



What CityMobil2 is

- A major European funded demonstration project
- 45 partners (7 universities and research centres, 8 technology providers, 12 cities)
- Which:
 - Demonstrated Automated Road Transport Systems for 4 years in European cities
 - Proposed a safety assessment procedure which can be applied in national legal frameworks for certification
 - Foresaw long term socio-economic effects of different automation scenarios

Selected demo sites



How many passengers have we carried so far?

- Oristano (Italy) 2 580
- La Rochelle (France) 14 660
- Lausanne (Switzerland) 7 000
- Vantaa (Finland) 19 000
- Trikala (Greece) 12 150
- Antibes (France) 4 000
- San Sebastian (Spain) 3 500

- Total 60 000+

What did we learn?

- Full-automation is feasible today
 - Not by progressively aiding the drivers
 - Not with Google cars which pretend to rely entirely on the technology on board
 - With an integrated approach which uses a simple automation technology and careful consideration of the environment
- It opens unprecedented market possibilities
 - Last mile transport services can become profitable
 - Personalization of mobility transforms last mile transport services in service enablers

ARTS Demonstrations: the tip of the iceberg

ARTS public operation

Staff training

System operational tests

System/vehicle setup

Infrastructure building/adaptation

Legal authorization

Risk assessment/certification

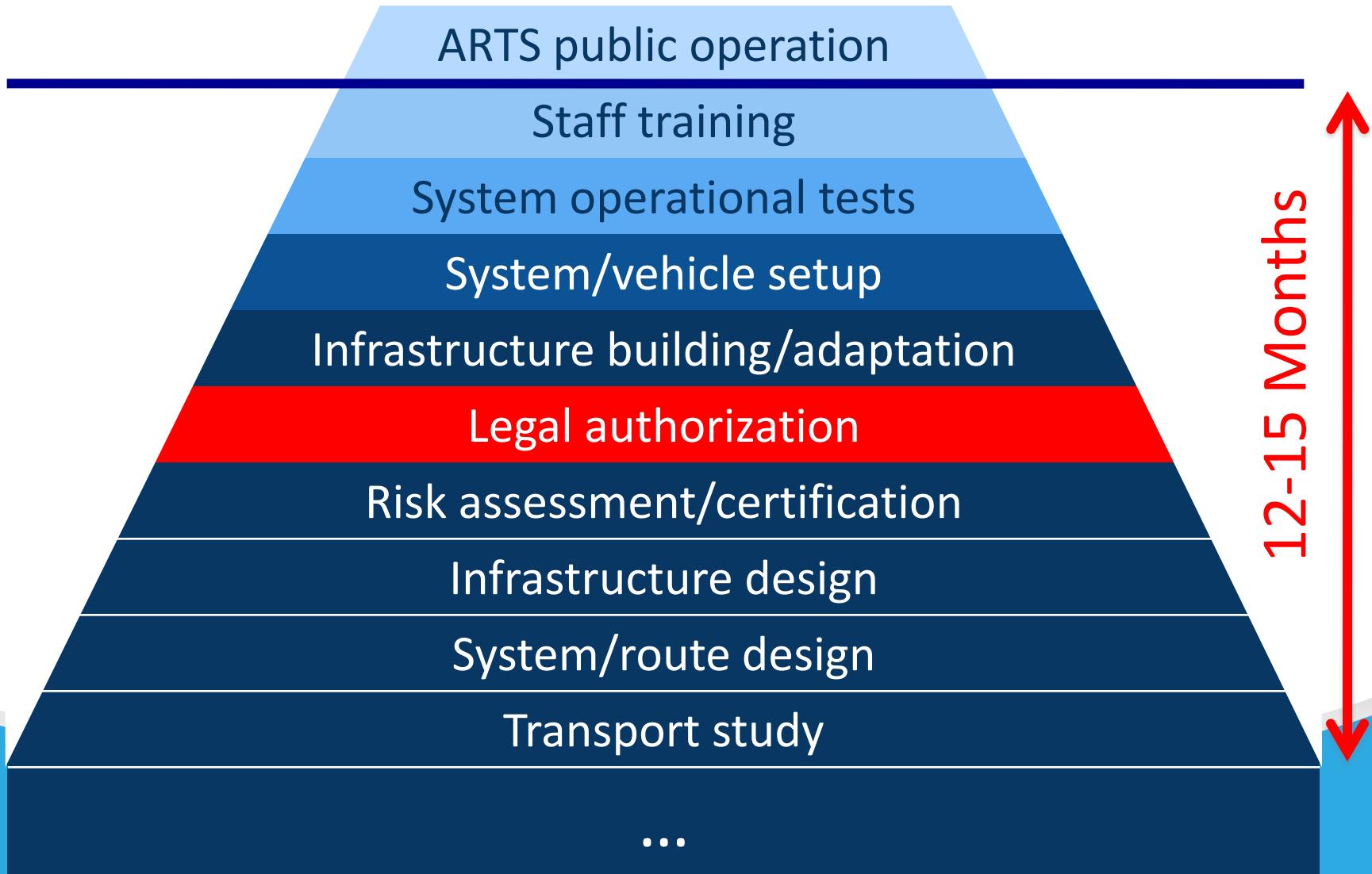
Infrastructure design

System design

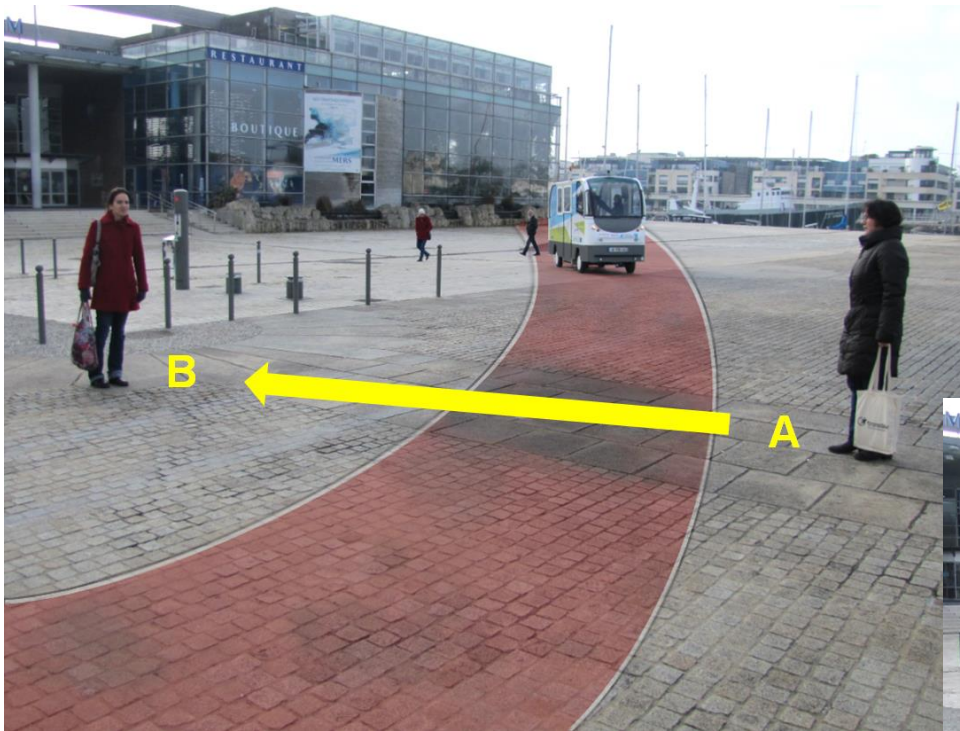
Transport study

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ARTS Demonstrations: the tip of the iceberg



Few examples of what we learned: Safety and Priority?

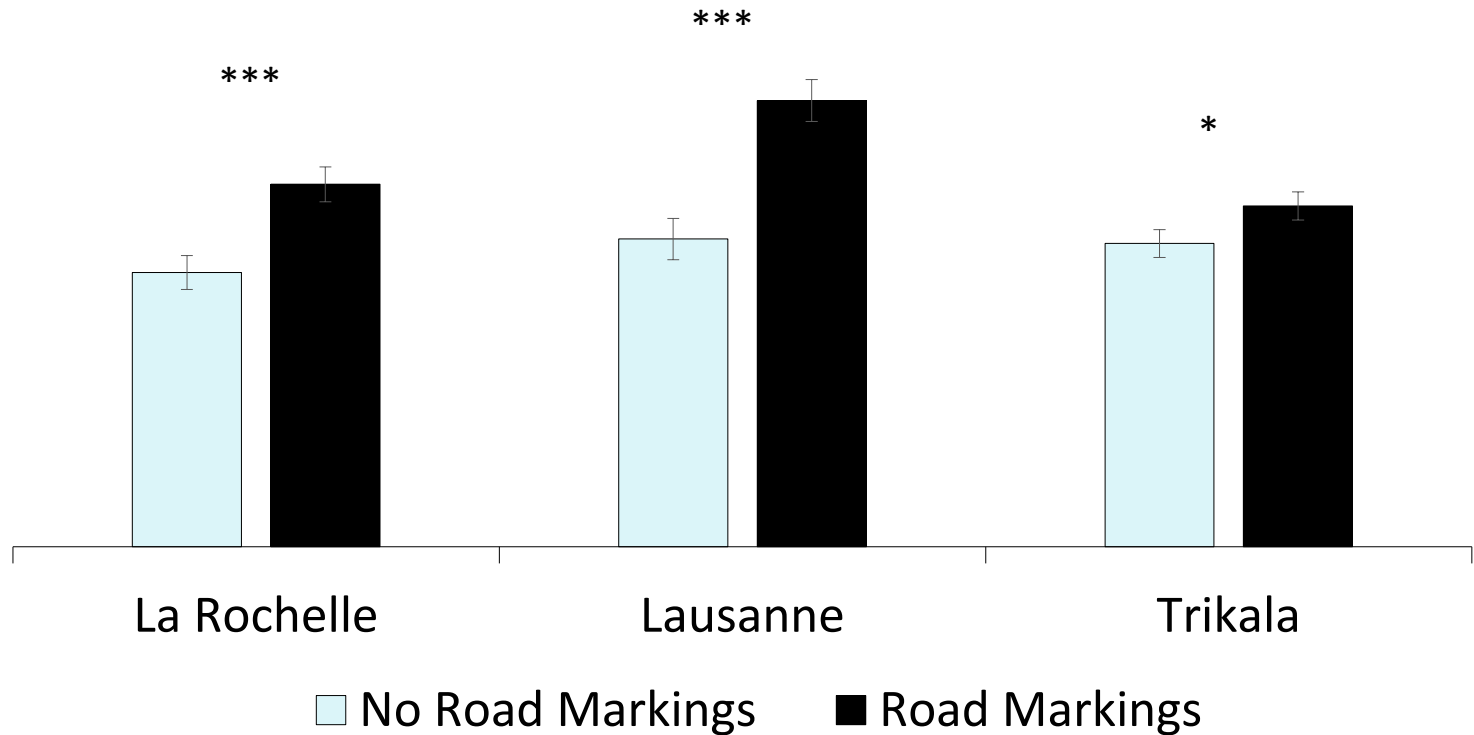


Do you feel safe?

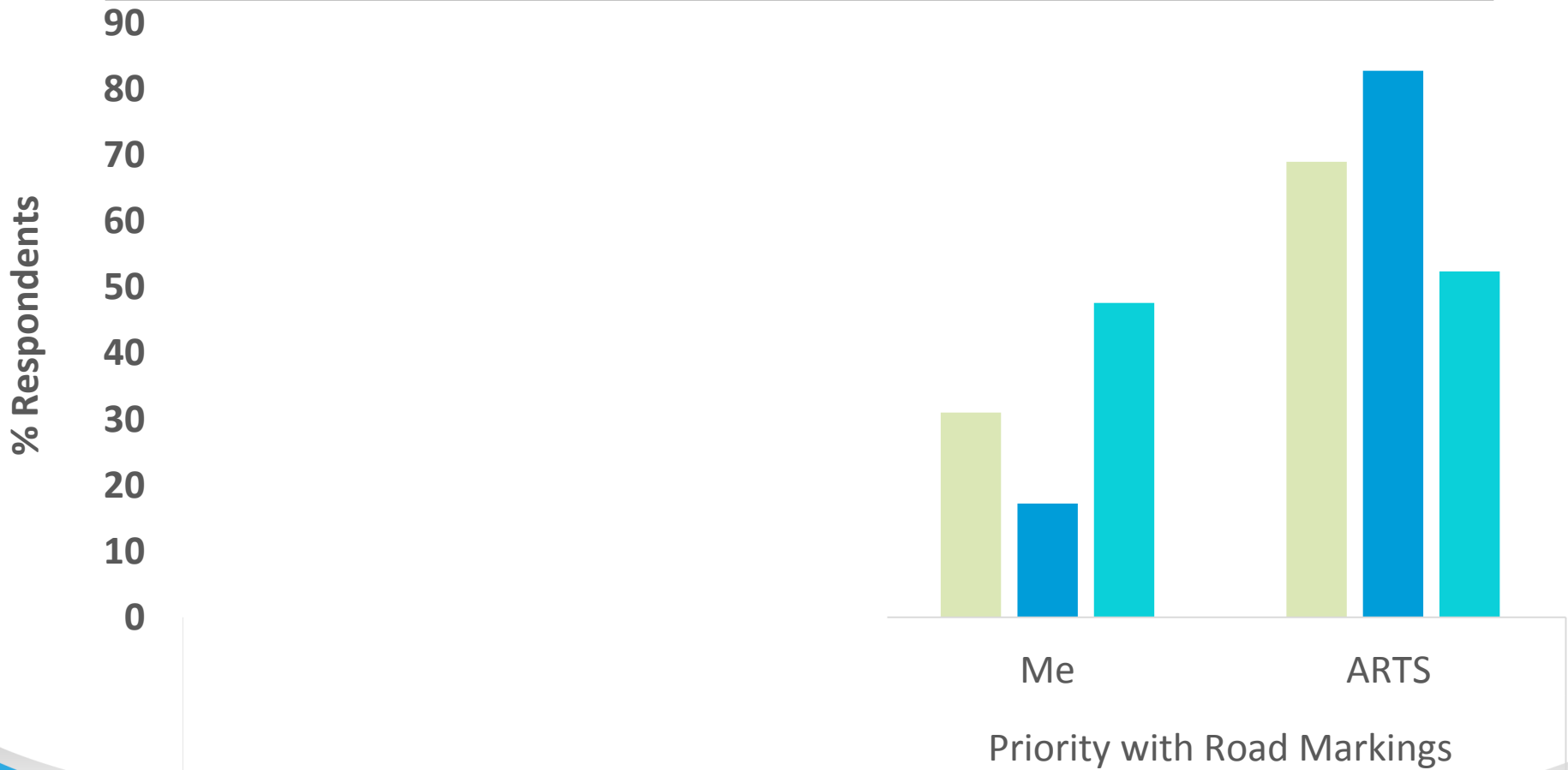
More safe

As Safe

Less Safe

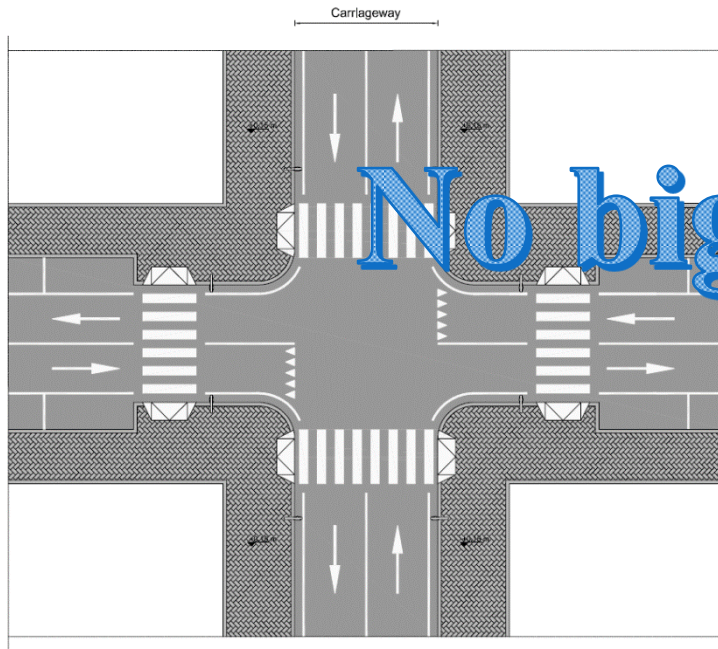


Who has priority?



■ La Rochelle ■ Lausanne ■ Trikala

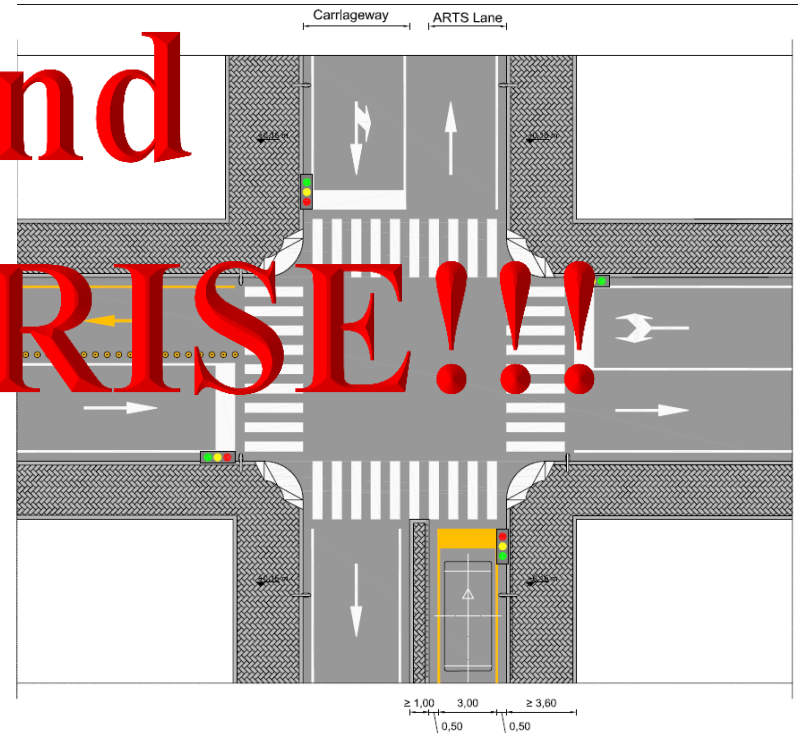
How to safely integrate ARTS in cities



No big deal, is it?

and

SURPRISE!!!



CURRENT STATE: AT-GRADE INTERSECTION BETWEEN AN URBAN NEIGHBOURHOOD ROAD WITH ONE LANE PER DRIVING DIRECTION AND AN URBAN LOCAL ROAD

INTEGRATION PROJECT: AT-GRADE INTERSECTION BETWEEN AN URBAN NEIGHBOURHOOD ROAD WITH ONE LANE PER DRIVING DIRECTION WITH SEGREGATED ARTS LANE AND AN URBAN LOCAL ROAD WITH DEDICATED ARTS LANE

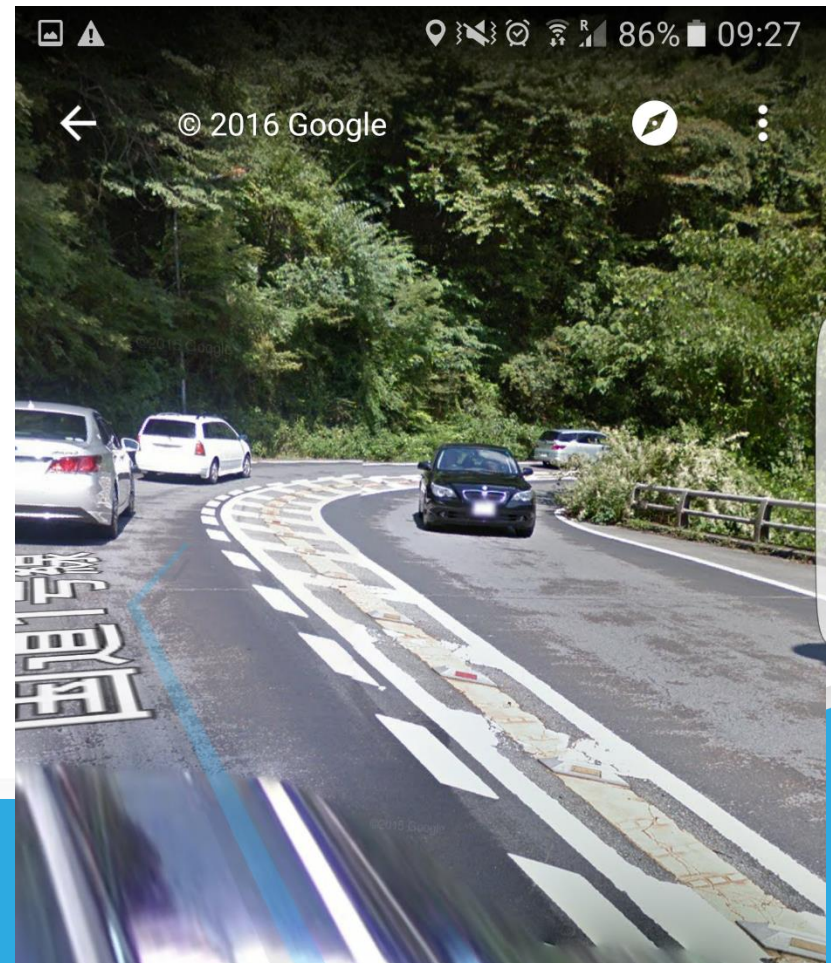
In The Netherlands these safety measures are already in place

✓ The main routes of the TU Delft



And in Japan

✓ The mountain route to Hakone



Overview of the results: Impact of extra-fare on the ARTS and Minibus preference shares

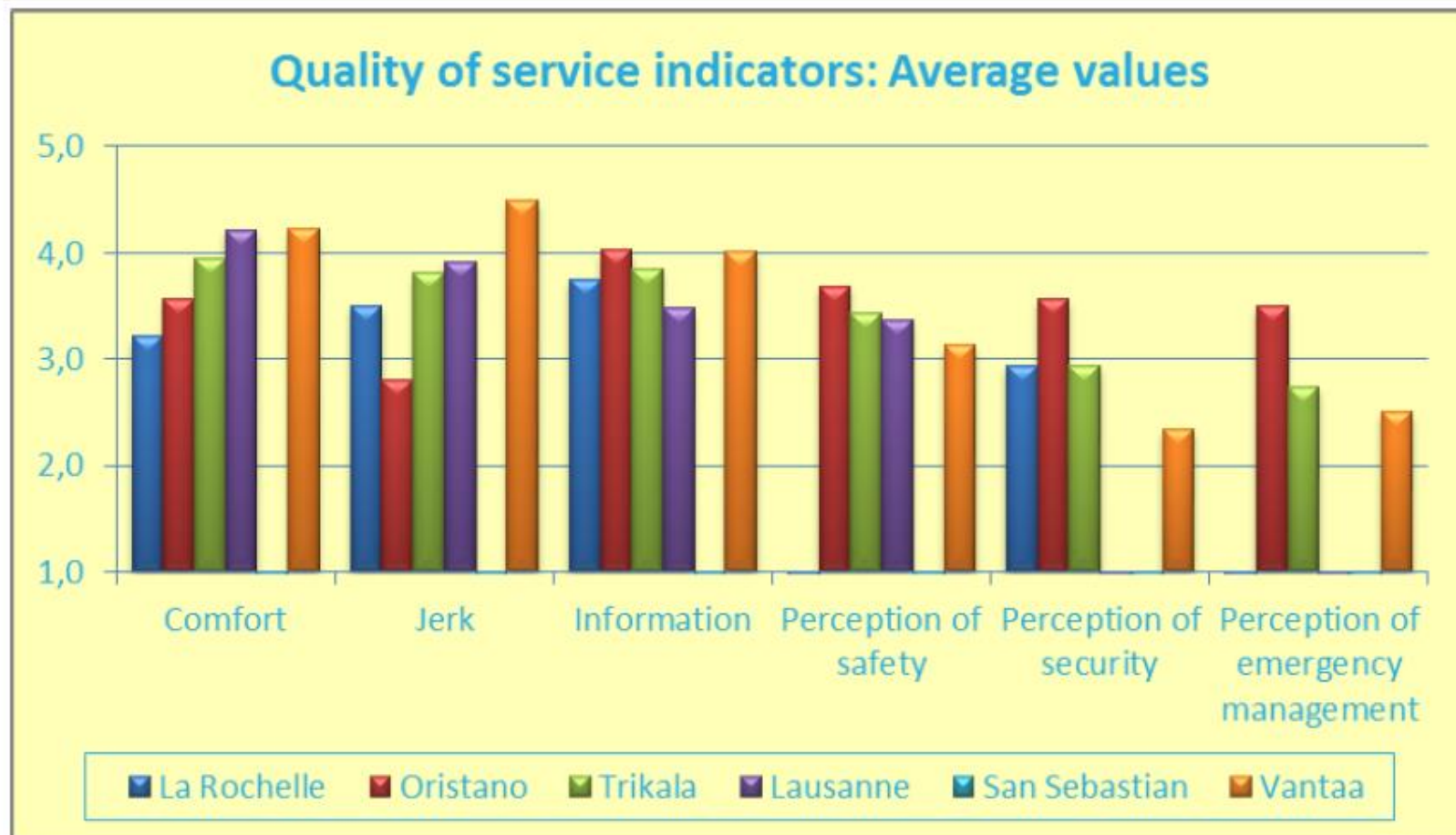
		<i>No extra-fare</i>		<i>Extra-fare</i>	
		ARTS	Minibus	ARTS	Minibus
A1	La Rochelle (FR)	63%	37%	30%	70%
	Trikala (GR)	78%	22%	51%	49%
A2	Lausanne (CH)	78%	22%	26%	74%
	San Sebastian (ES)				
A3	Vantaa (FI)	30%	70%	17%	83%

Legend:

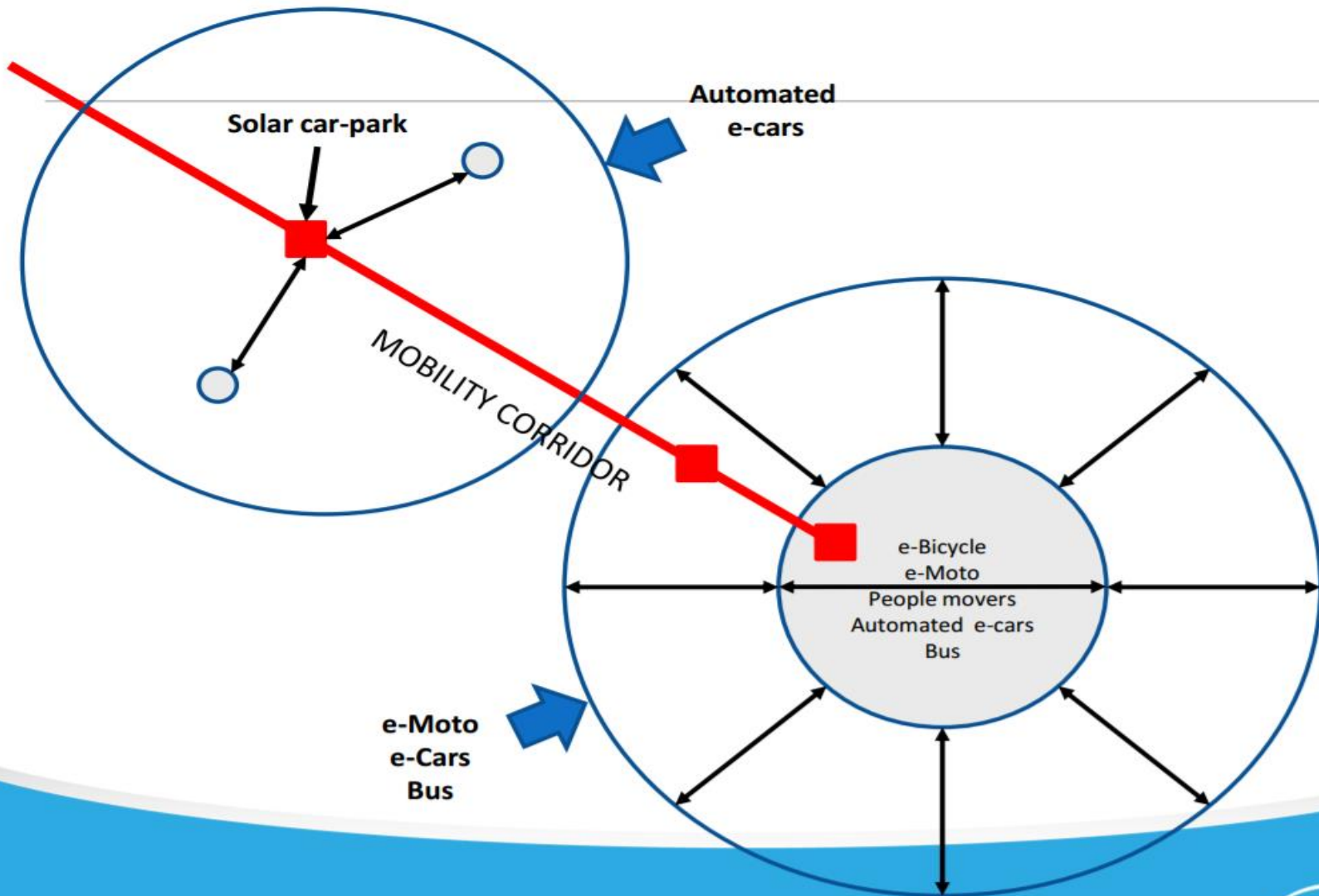
A1 = within city centre; A2 = within major facility; A3 = from public transport node to major facility

The city in bold character hosted a large scale demonstrator

Results: Level of satisfaction with quality of service indicators chart



After all this learning, what can we do TODAY; what is it the «next generation transport» we can deliver?





THANKS FOR LISTENING
FOR YET ANOTHER BUT
LAST TIME

