



ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

TraCE - TRANSPORTATION CENTER EPFL

09 Sep 2009

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STRC

Ascona


CATS

City Alternative
Transport System



- FP7 SST-2008.3.1.1. New mobility concepts for passengers ensuring accessibility for all
- SMSP
- 3.89 mio € (2.97 CE)

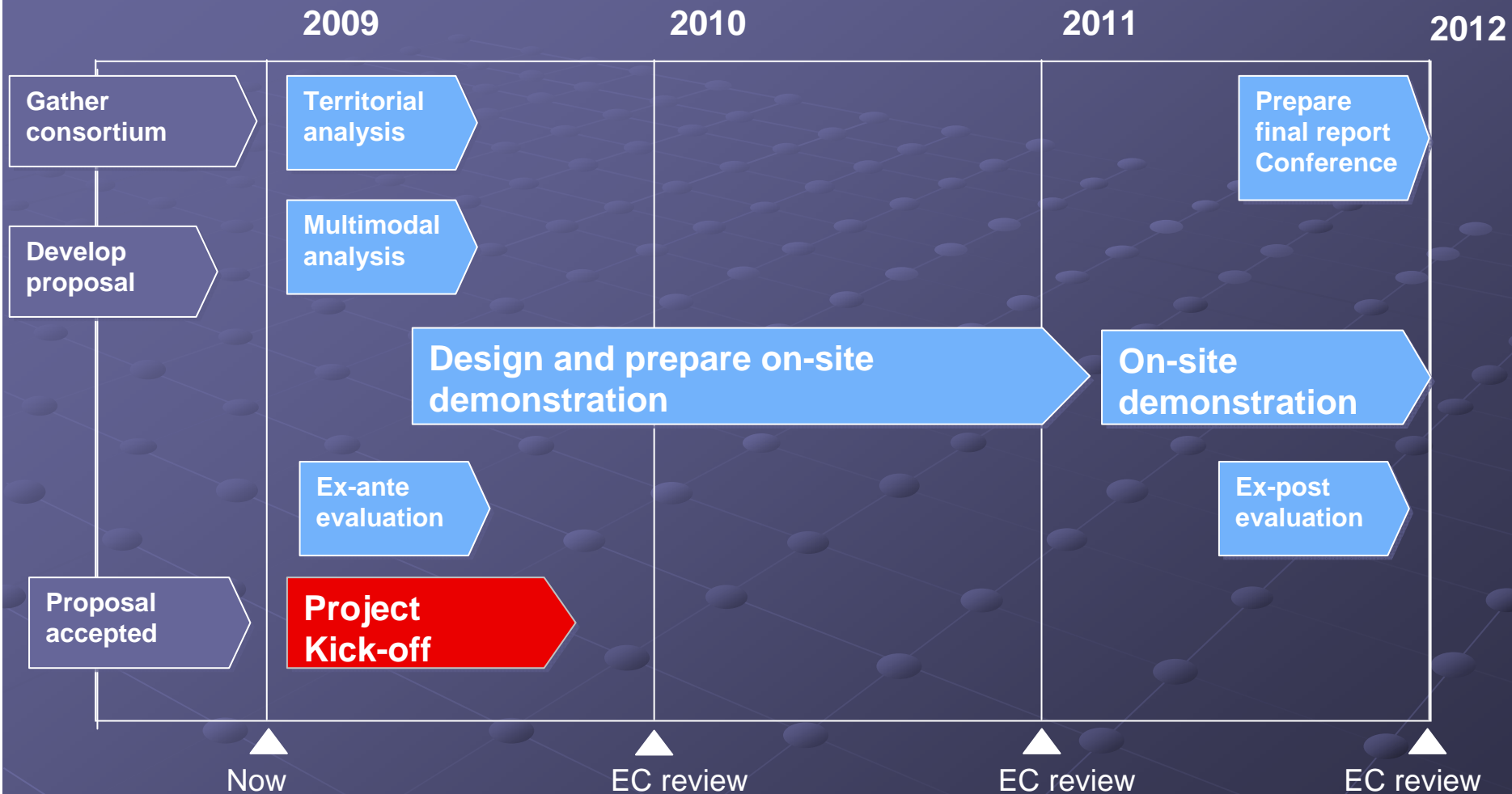
Consortium



1 (Coordinator)	LOHR Industrie	LI	France
2	Europe Recherche Transport	ERT	France
3	Communauté Urbaine de Strasbourg	CUS	France
4	GEA J-M Vallotton et T. Chanard SA	GEA	Switzerland
5	Institut National de Recherche en Informatique et Automatique	INRIA	France
6	Israël Institute of Technology	Technion	Israël
7	Centro di Ricerca di La Sapienza sul Trasporto e la Logistica	CTL	Italy
8	Ecole Polytechnique Fédérale de Lausanne	EPFL	Switzerland
9	Primaria Municipiului Ploiesti	PMP	Romania
10	Agenzia Regionale per la Mobilità-Regione Lazio	AREMOL	Italy



Timeline



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(DIS)SIMILAR PROJECTS



- F City (FAM)
- Eclectic (Venturi)
- Heuliez
- Blue Car (Bolloré)
- City car (Think)

- Autolib'

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PERFORMANCE FACTORS



- Solves last 3 km
- Free choice OD
- Confort & sociability (volume)
- Zero CO2 emissions (electric vehicle)

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PERFORMANCE FACTORS



- Fully-fledged PT concept
- Hybrid uses
- Integrated transport and parking policy
- Vehicle redistribution



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A SINGLE mobility unit for BOTH:

- Individual mode (free-access).
Driven by a pre-identified driver. Punctual, instant, dispersed demand. Free choice of OD stations.
- Collective mode (train).
Driven by a professional driver.
Planned event, concentrated demand.



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Capacity : 6 passengers

Length : 3,4 m

Width : 1,70 m

Height : 2,35 m

Distance from ground : 15 cm

9



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- GPS positioning
- Real-time fleet management
- Real-time booking
- Network and transfer information
- Tourist information

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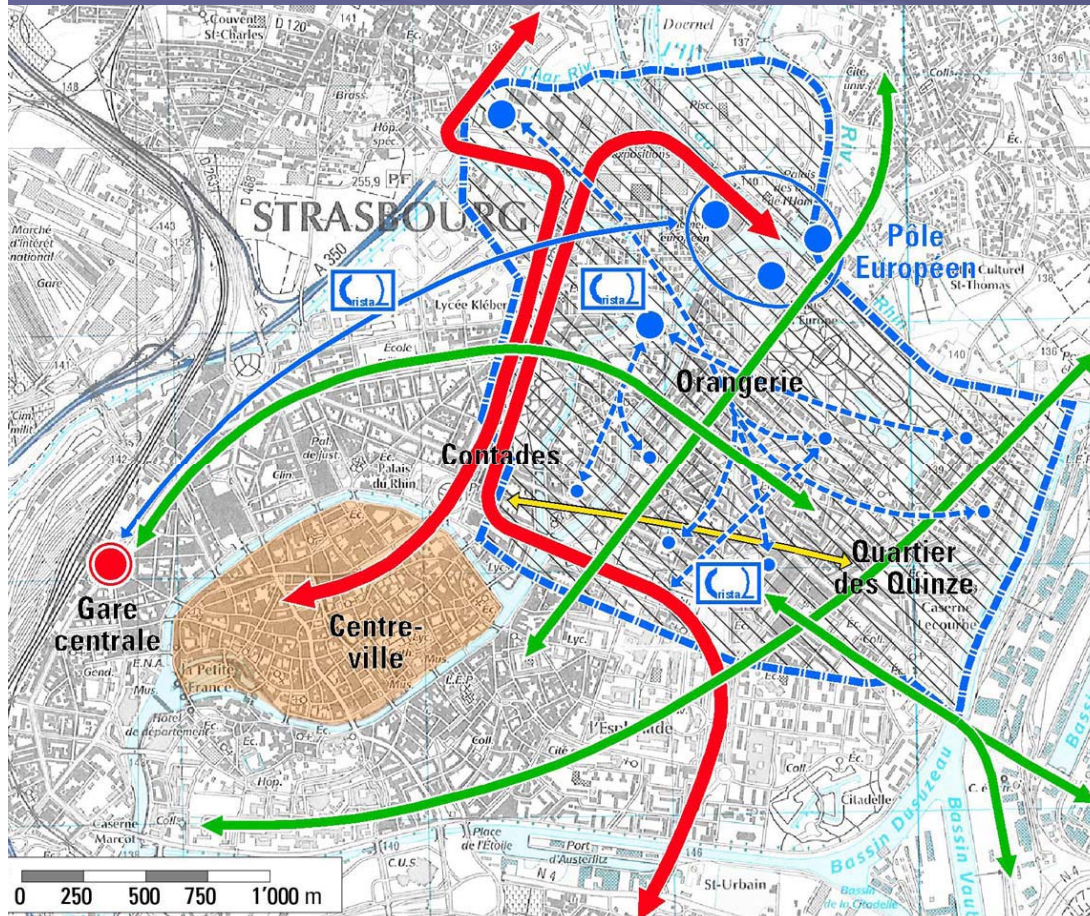
STRASBOURG

- Real conditions on-site demonstration in 2011
- 2 stations, 4 vehicles for 6 months



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City Alternative Transport System



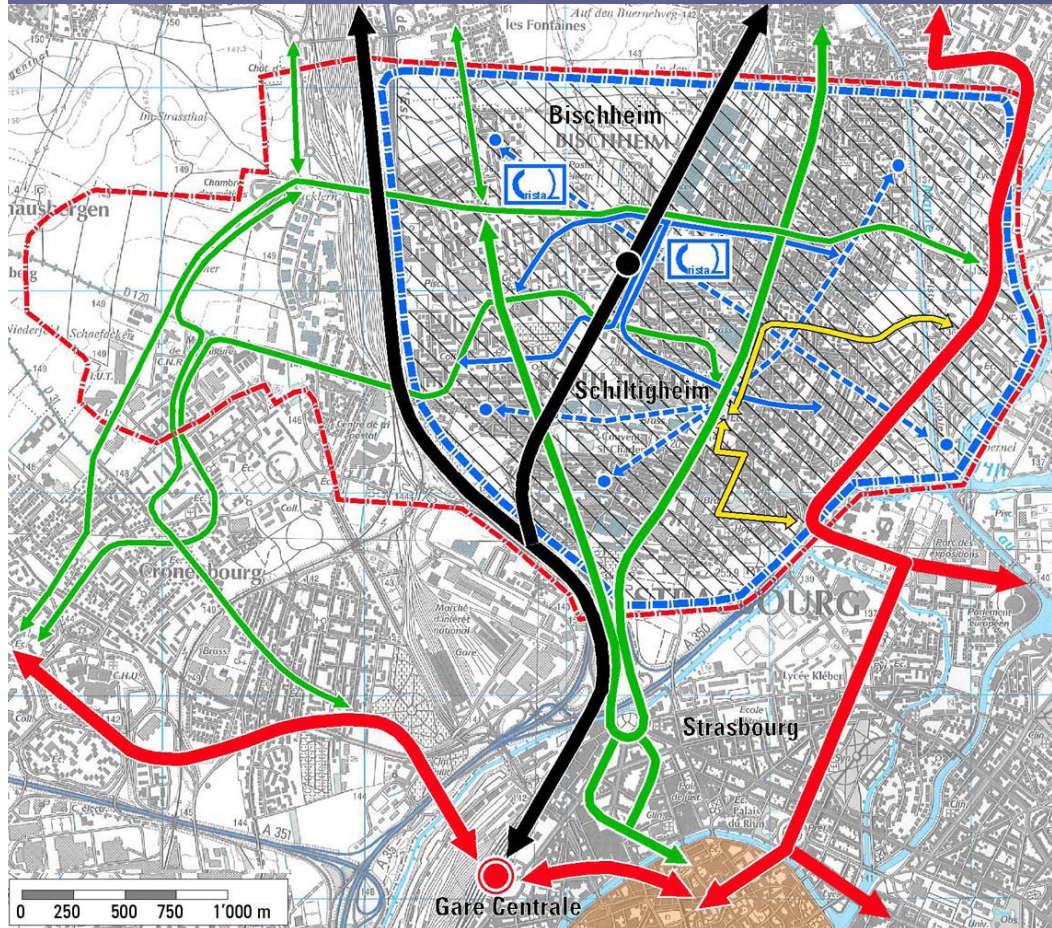
WACKEN

- 110-145 VEHICLES
- 25-35 STATIONS



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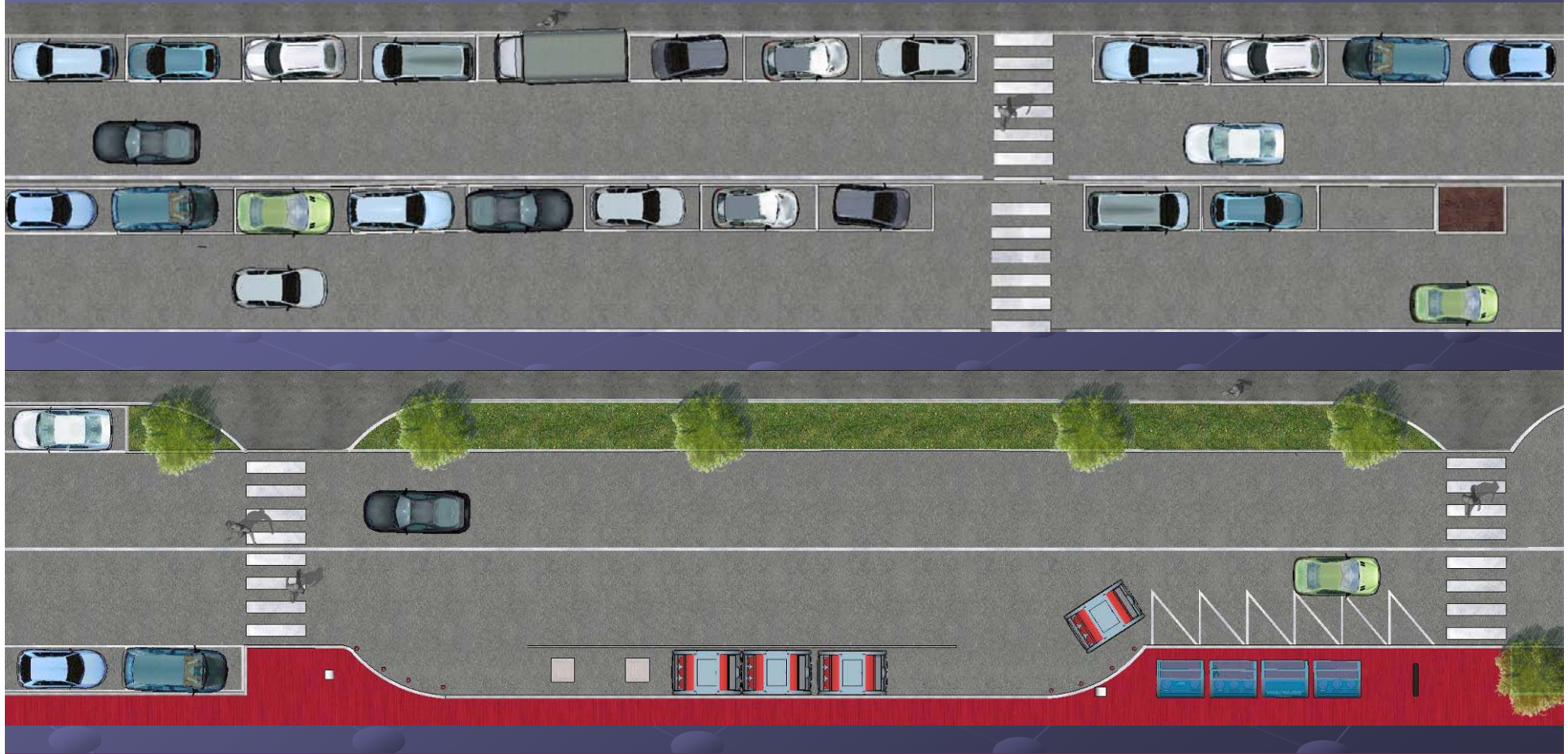


SCHILTIGHEIM

- 225-275 VEHICLES
- 50-65 STATIONS

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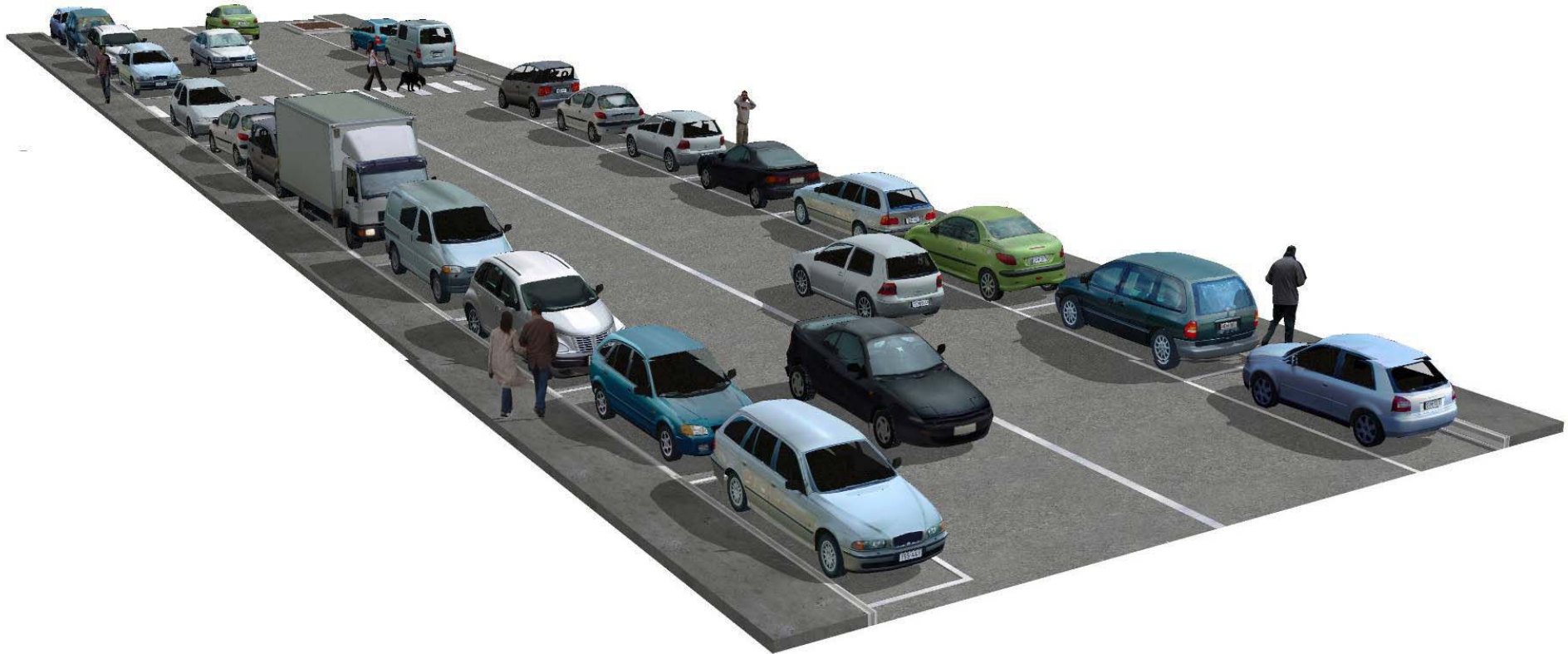
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POTENTIAL FRANCE

- 40 MIO CITY DWELLERS
- 130 MIO MOTORISED TRIPS/DAY 2/3 URBAN = 90 MIO
- 1 TRIP OUT OF 3 COULD BY CRISTAL MADE
- 1 CRISTAL FOR 400 INHABITANTS

- 100'000 VEHICLES & 21'000 STATIONS FOR FRANCE
- 7'000 VEHICLES & 1'500 STATIONS FOR PARIS

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EFFECTS FRANCE

- 3,5 KM PER TRIP, 12 TRIPS PER DAY (PER UNIT)
- 1 MIO TRIPS AND 4 MIO KM DAY
- CO2:
MINUS 625 TONS PER DAY
228'000 TONS PER YR





Your comments & expectations regarding CATS

<http://transport.epfl.ch>

