



VPPC 2014
IEEE Vehicle Power and Propulsion Conference
"Spreading E-Mobility Everywhere"

Mobility and SMART cities

Coimbra

Wednesday 29th October 2014



SMART cities

Mobility

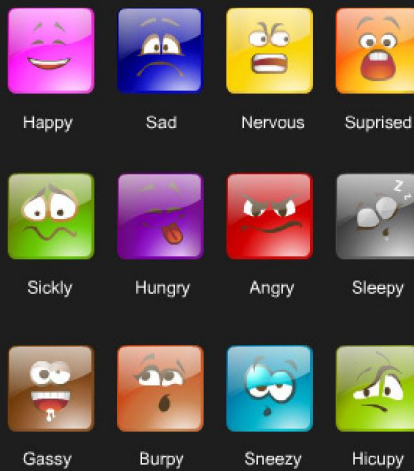
ITS+ICT



SMART solutions



HOW ARE YOU FEELING?

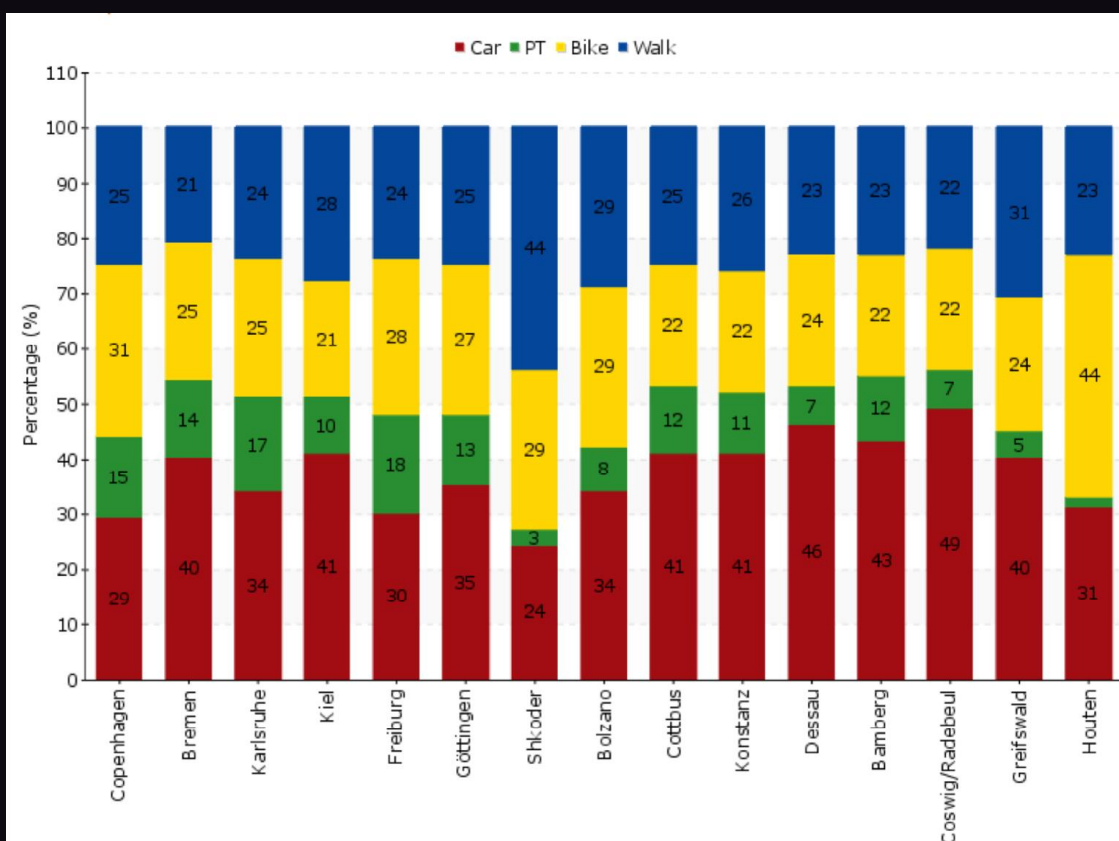


Make a donation at www.autismspectrum.com.au :)

main issues

- ✓ modal split
- ✓ peak hour

modal split (medium sized cities)



TELEWORKING
(Home)
or
satellite work centres
1-2 DAYS/ WEEK

inclusive/ accessible
accessible by walking and cycling !



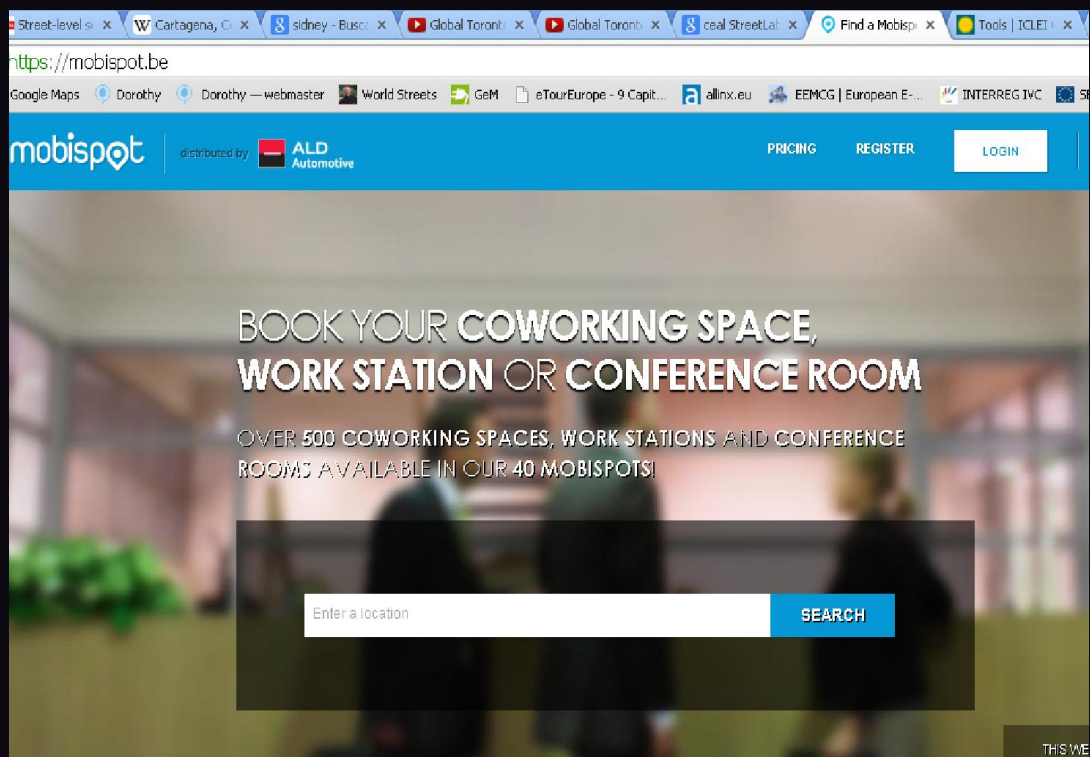
change job
with new home ?

change home
with new job ?



Belgium

<https://mobispot.be/>



<https://mobispot.be/>

CATEGORIES OF MOBISPOTS	★	★★	★★★	NEW C O
WORK STATION RATES	from € 4 /H	from € 4.5 /H	from € 5 /H	€ 250 /MONTH
MEETING ROOM RATES	Specific to each Mobispot	Specific to each Mobispot	Specific to each Mobispot	PASSPORT CoWallonia by Creative Wallonia
WATER DISPENSER	✓	✓	✓	UNLIMITED ACCESS
SECURE WIFI	✓	✓	✓	VALID IN THE WHOLE COWALLONIA NETWORK
COLD & HOT DRINKS		✓	✓	
PUBLIC PARKING AT PROXIMITY		✓	✓	

LIBRO BLANCO

EL ABC DEL TELETRABAJO EN COLOMBIA



Premios



Galardones otorgados al Plan Vive Digital

El Plan Vive Digital, que fue considerado como el mejor plan de tecnología del mundo en la feria más importante de la industria de telecomunicaciones, el GSMA Mobile World Congress de Barcelona, puso en marcha en el año 2010, una enorme revolución del país en esa materia.

La Cumbre Mundial sobre la Sociedad de la Información en Ginebra (Suiza) a través del Premio



ajira, gracias por su visita

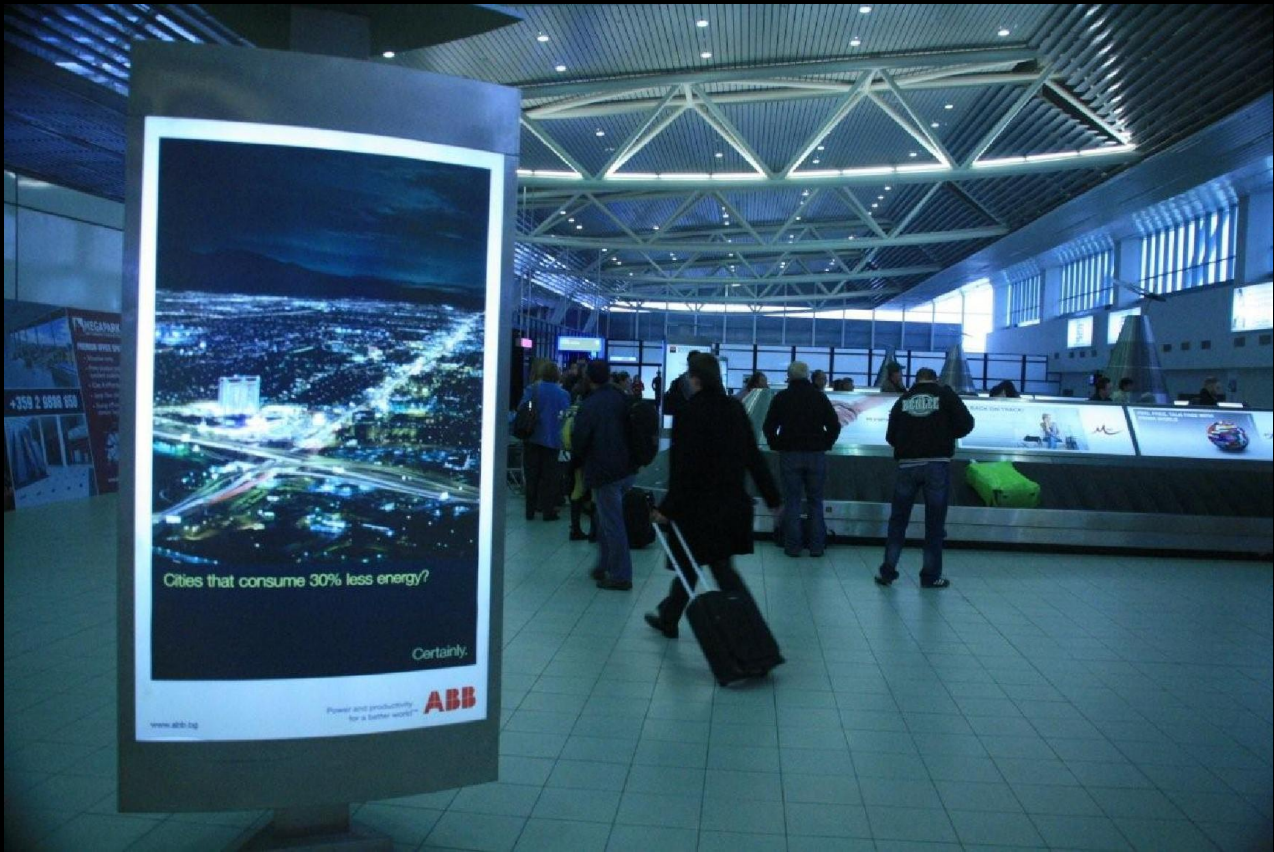


Enrique Penalosa – MoVe Forum Venice 11/20016



Buenos Aires

Encuentro Internacional sobre Movilidad y Transporte Sustentable – 16 al 18 de Octubre de 2013 - Quito
- Ecuador Arq. Fernando E. Angueira Buenos Aires



Trolley Metro Bus Quito Ecuador



Autocarros híbridos

Peter Danielsson - Manager – BRT- VOLVO





Medellin





JUAN ESTEBAN MARTÍNEZ RUIZ
Subdirector de Movilidad - , Medellín, Colombia
Encuentro Internacional sobre Transporte Sustentable
I Reunión del Comité Sectorial de Movilidad Urbana de la UCCI
Quito, 16 al 18 de octubre de 2013



Train station Utrecht - Netherlands



Bicycle station at
Train station Utrecht - Netherlands



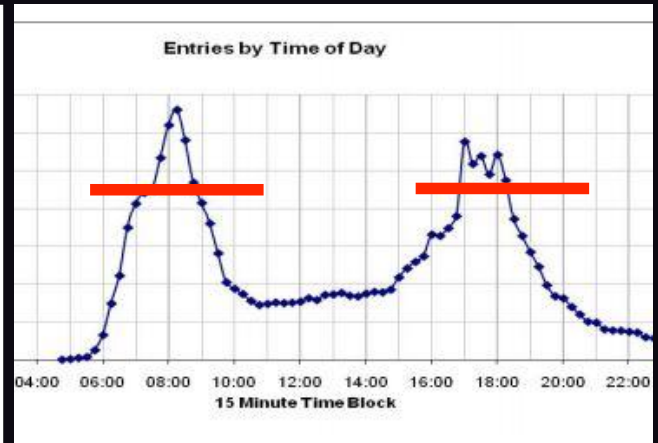
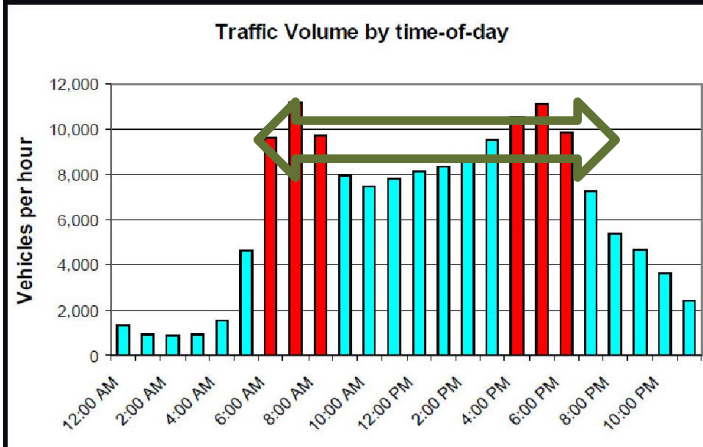
main issues

✓ peak hour

transport demand by time of the day

traffic

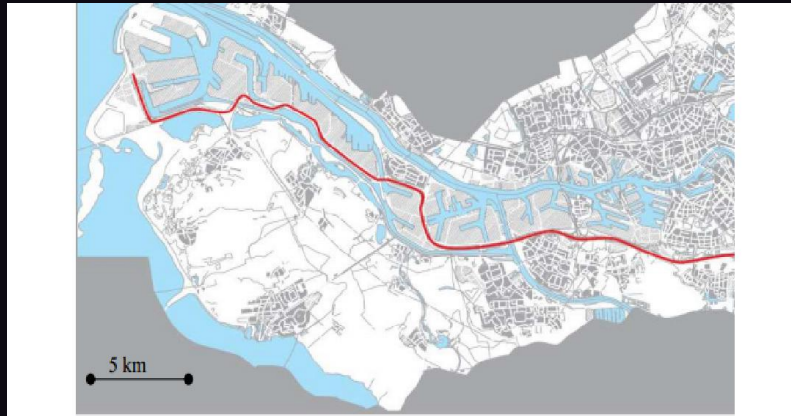
public transport



deferred travel time ?
(flexible working time)
does not really work!



peak hour avoidance charging (port of Rotterdam - Netherlands)



higher charge in peak hour

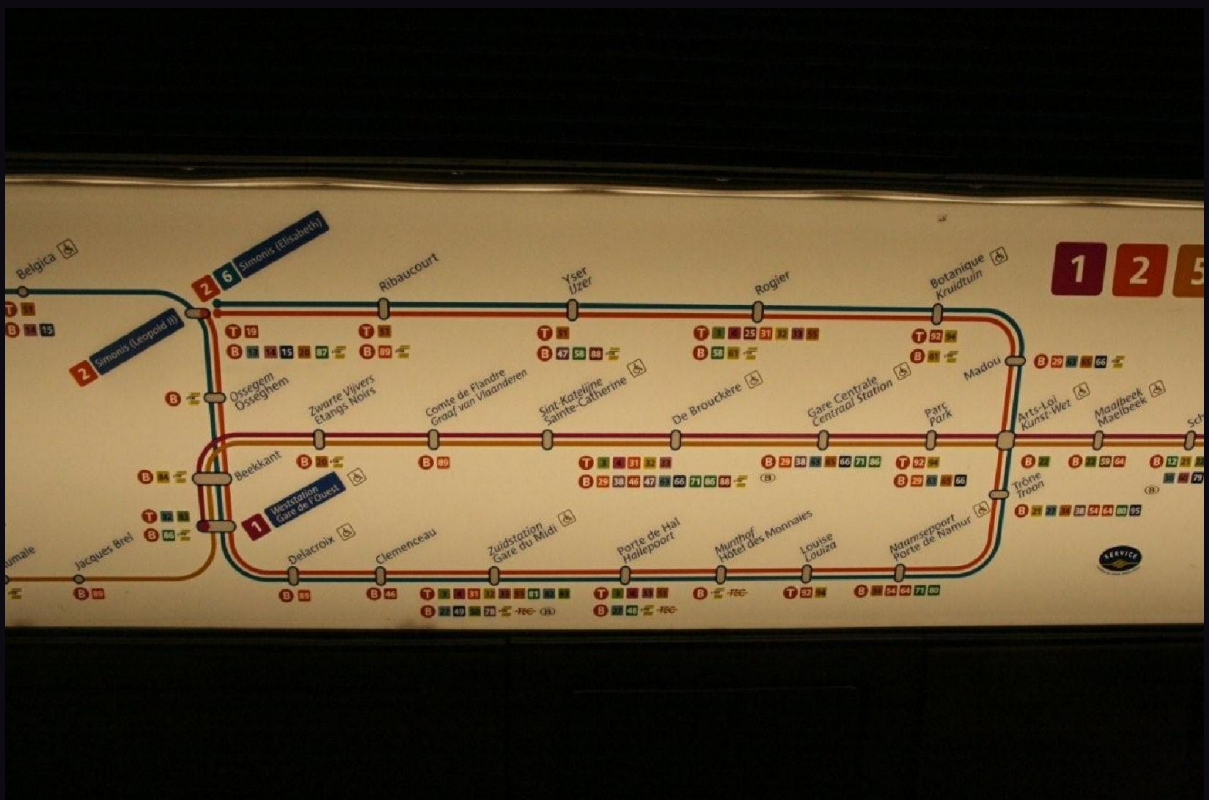


ICT makes it possible !

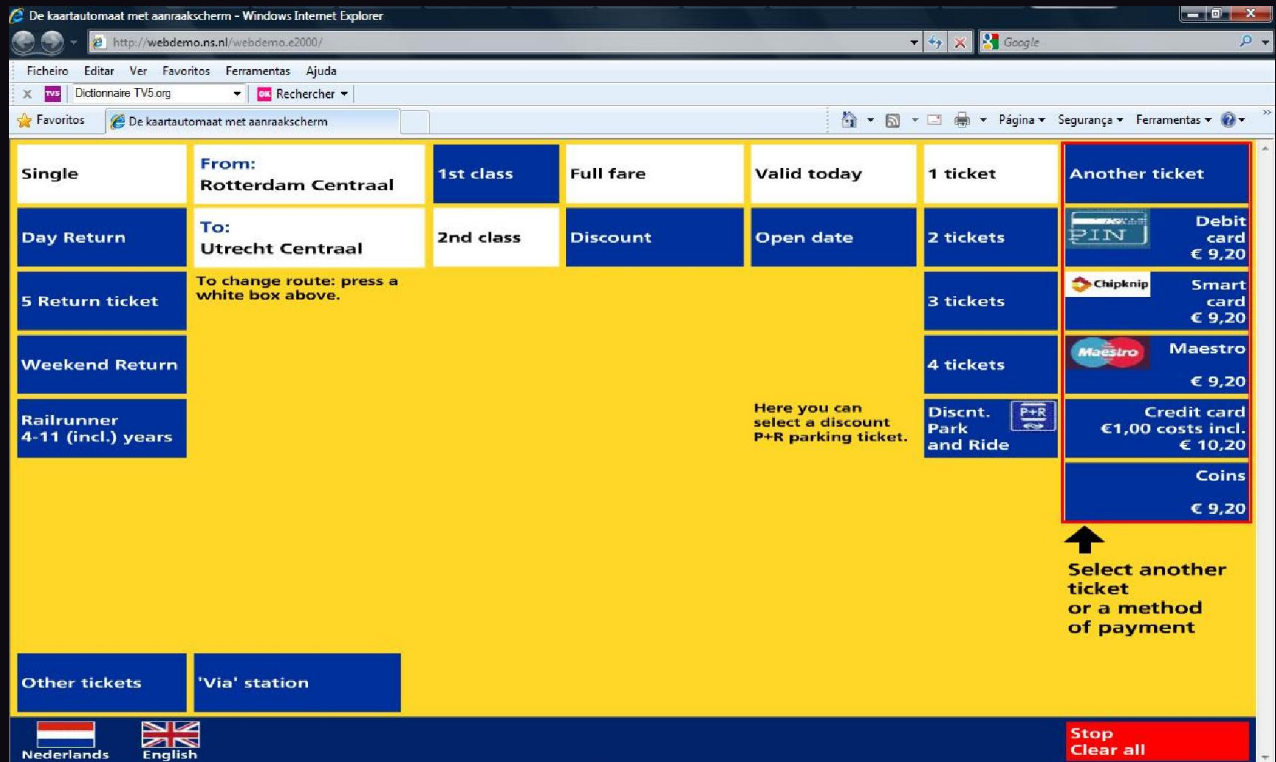
✓ seamless travelling

complex transfers

Brussels metro

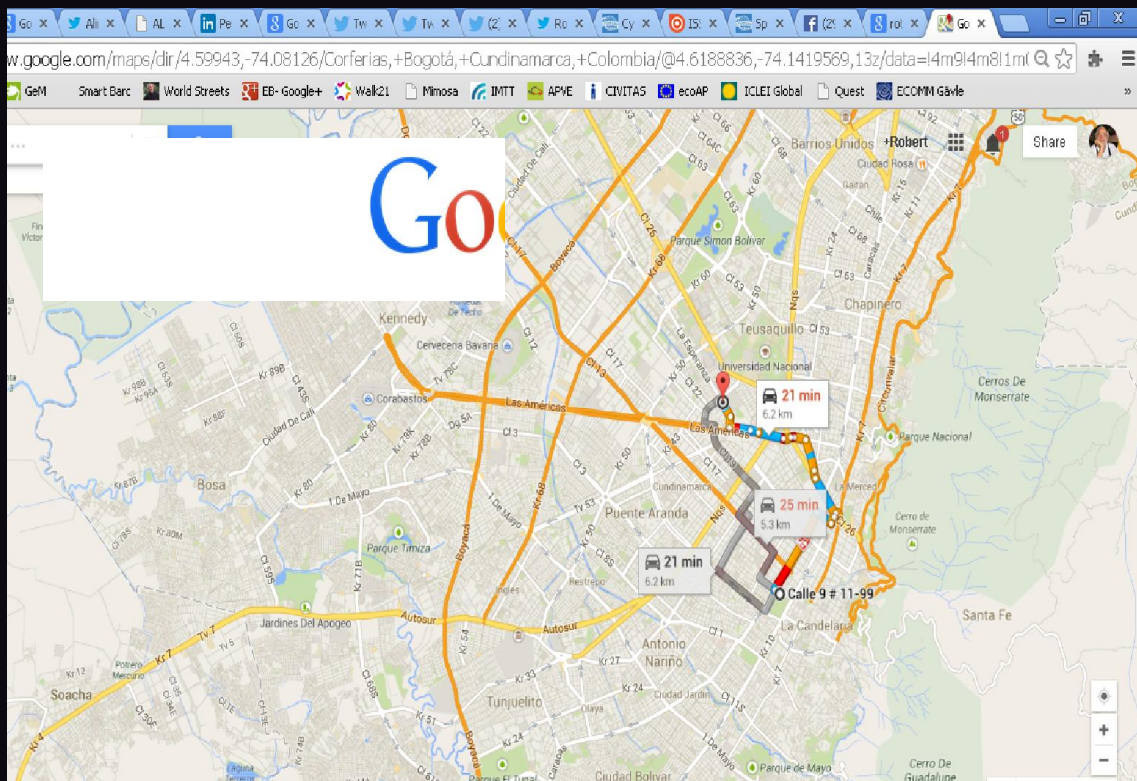


tutorial for ticket machines



Dutch railways

journey planners



Bogotá

journey planners

The screenshot shows the BBBike@Bogotá website interface. At the top, there's a browser window with the URL www.bbbike.org/en/Bogota/. Below the browser, there's a language selector with options like da, de, en, es, fr, hr, nl, pl, pt, ru, zh, and local. The main heading is "BBBike@Bogotá" with a bicycle icon. Below this, there's a welcome message: "Welcome to BBBike - your cycle journey planner! We'll help you find a nice, safe and short bike route in Bogotá and around." There's a form to enter start and destination street names, with a "Go on >>" button. The background features a map of Bogotá with various cycling routes highlighted in different colors (red, green, blue, orange). The map includes labels for various neighborhoods like Fontibón, Kennedy, Bosa, and Chapinero. At the bottom, there's a footer with copyright information: "(©) 1008-2014 BBBike.org by Wolfram Schneider & Slaven Ruzic // Map data (©) OpenStreetMap.org contributors".

Bogotá Bicycle trip planner



repairing, visiting villages, banking



rstussi@gmail.com

Ngakou and friends - Yaoundé

ICT makes it possible !

✓ urban logistics

micro logistics



micro logistics

DUBAI United Arab Emirates



micro logistics

Bogotá Colombia



consolidation centres

= TELETRABAJO



electric urban goods delivery “train” Utrecht (NL)

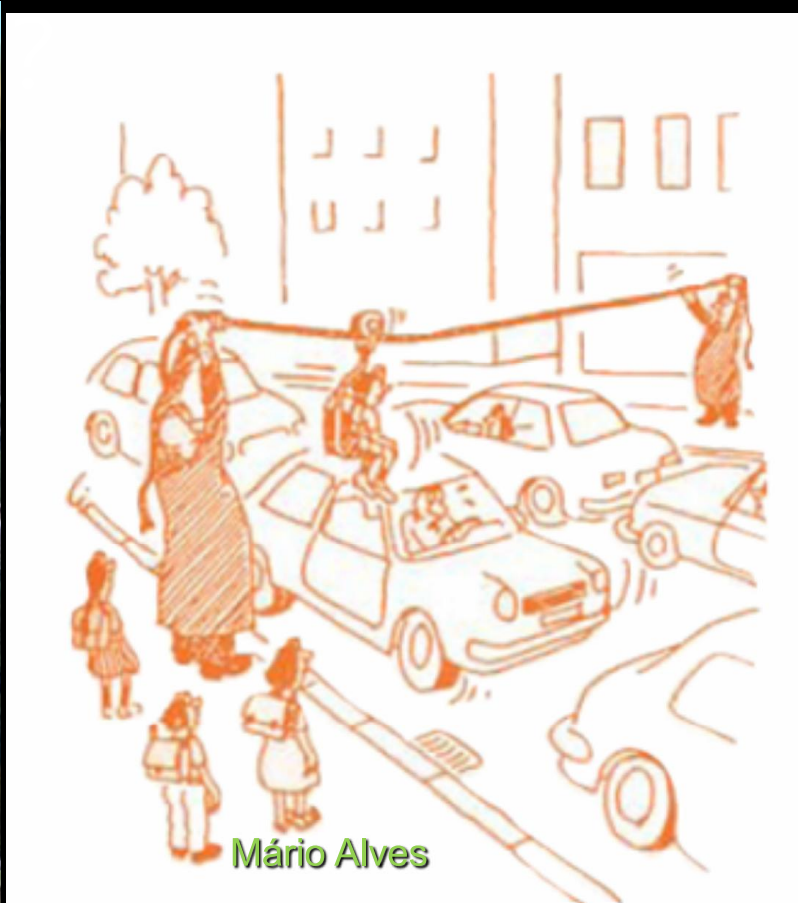
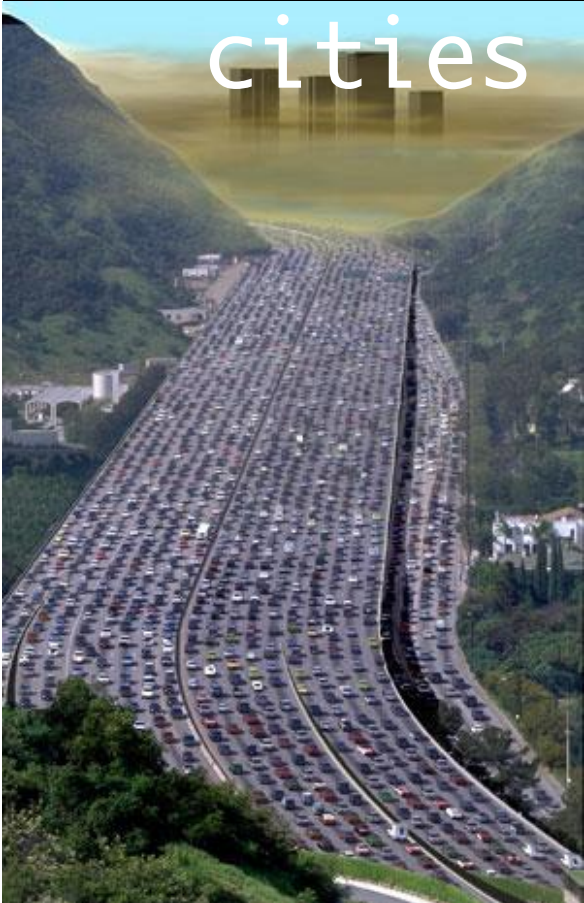


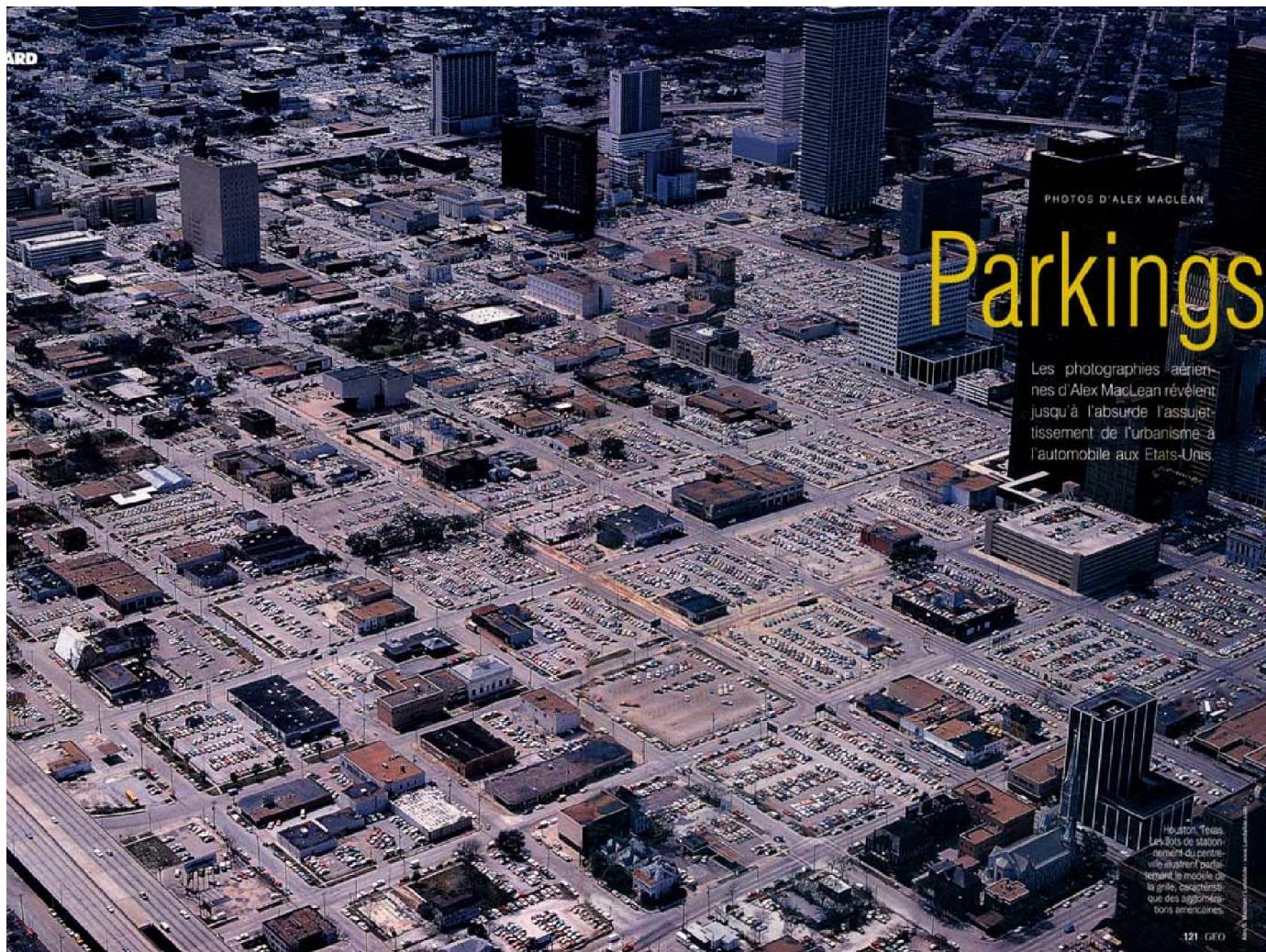
electric ‘beer’ boat Utrecht (NL)

new paradigms

✓ what city do we want?

retrofitting cities





ARD

PHOTOS D'ALEX MACLEAN

Parkings

Les photographies aériennes d'Alex MacLean révèlent jusqu'à l'absurde l'assujettissement de l'urbanisme à l'automobile aux États-Unis.

Hollywood Bowl, Los Angeles. Les lieux de stationnement du centre-ville illustrent parfaitement le modèle de la ville américaine qui des agglomérations américaines.

new (vertically integrated and smart) cities ?



Masdar, UAE (Foster and Partners):

- Zero Carbon city
- 200 inhabitants / ha
- carfree - high-tec mobility
- traditional construction styles (city and buildings)

PRT
Mgar city -United Arab Emirates



what is wrong with urban and
transport planners ?

- much analysis
- they stick to their profession
and look for solutions

they forget about TELETRABAJO!

Super Blocks

Ideal location for intermediate workstations for
TELETRABAJO!!



<http://bcnecologia.net/>



SMART solutions

✓ inclusive and safe

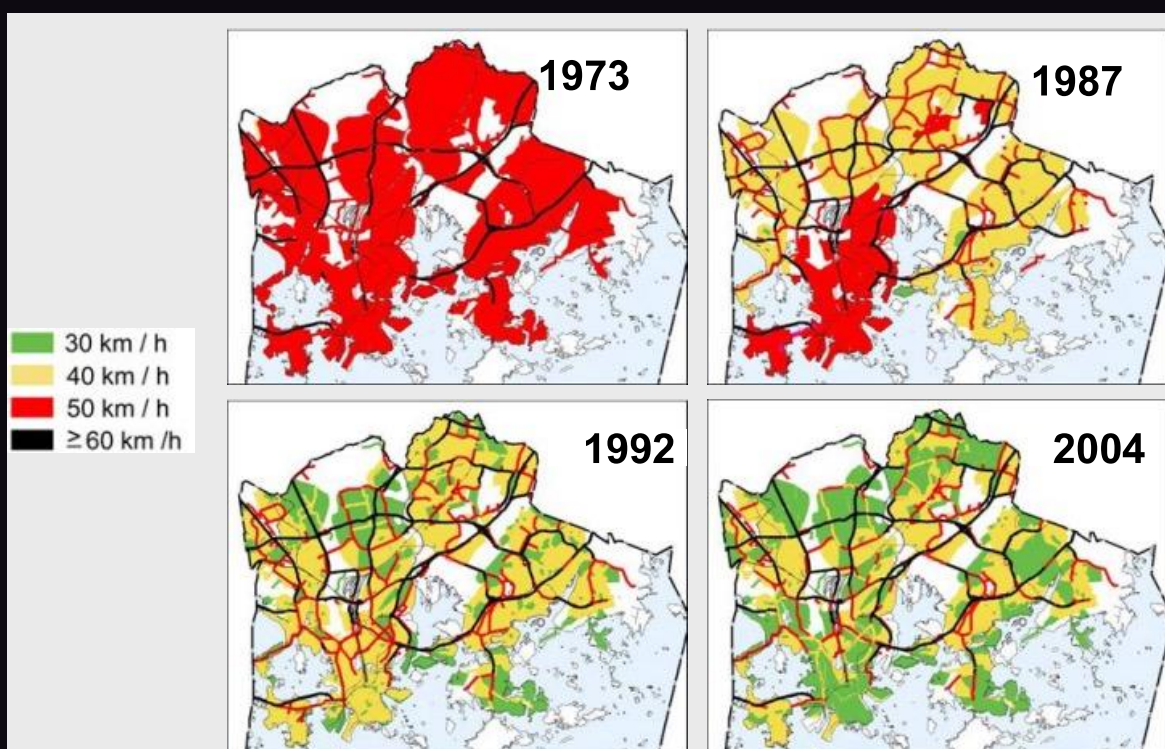


www.30kmh.eu

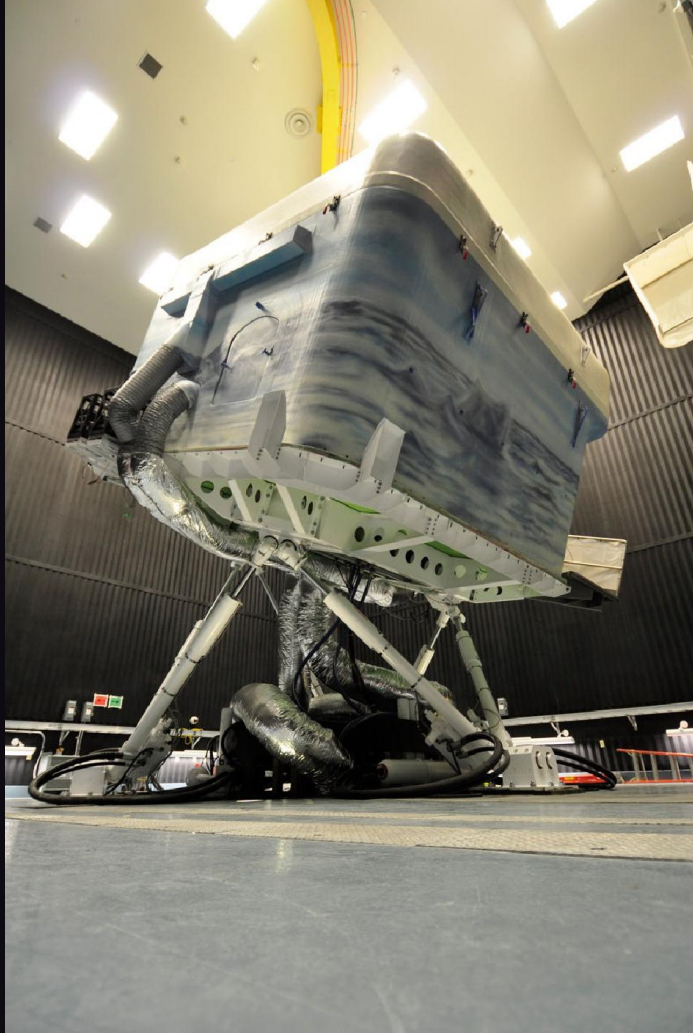
Walk21
MUNICH

walking connects!
#Walk21Munich

Speed limits in Helsinki

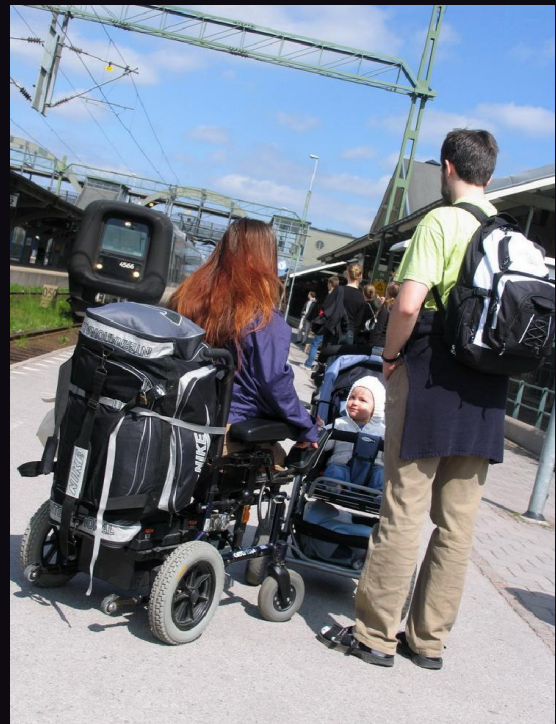
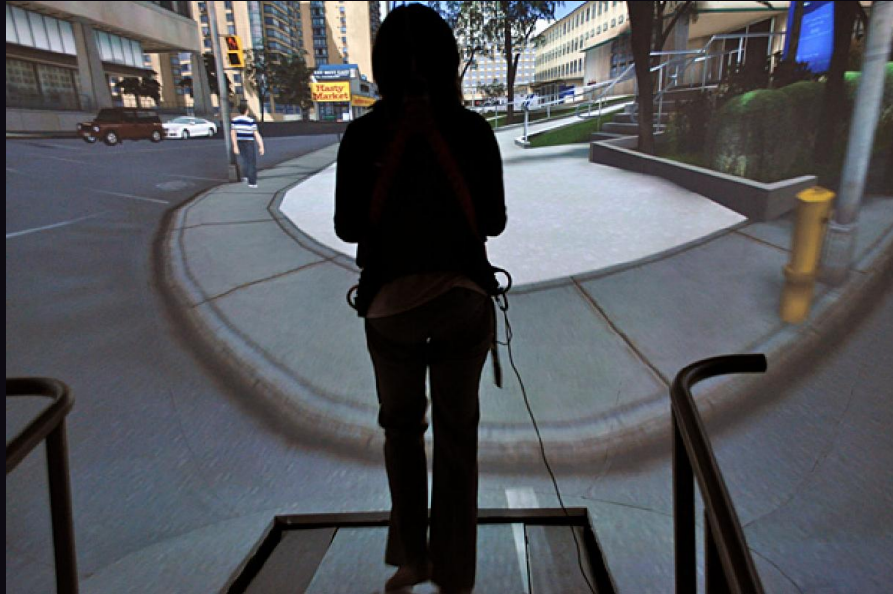


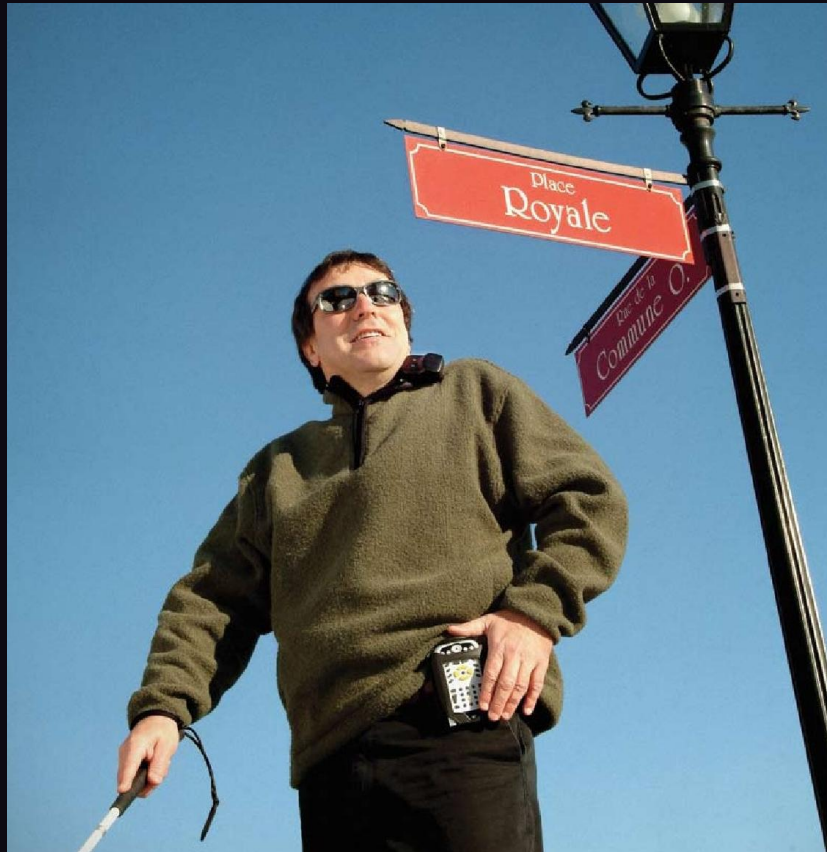
street lab
stair lab
www.cealidapt.com



street lab

Environment Assessment Laboratory





Canada www.humanware.com



**everything is
possible**

Municipality of Torres Novas - Portugal



Umbrella Sky project - Águeda - Portugal



put your
city on
the map!

put your city on the map!

Águeda - Portugal	Sky project	electric bikesharing
Quito	Trolley Metro Bus	Bike sharing
London	Congestion charge	Barkley bike
Paris	Velolib	Autolib
Zürich - Switzerland	Tramway system	MM for shopping centres
Vitoria Gasteiz	Super block	Escalators
Milan	Ecotax	
Oslo - Norway	Electric Mobility	
Hamburg	Hydrogen vehicles	

Medellin	MetroCable	mobility revolution
Bogotá	Transmilenium	TELETRABAJO

new paradigms

✓ mobility mindset



hopscotch
Himmel + Hölle
Macaca - Rayuela - Xarranca







Every morning I take my
bike to go to work

