

Accessibility For All

A Tool Toward Sustainable Mobility

Focus on Cycling Measures



VELO-CITY 2017
THE FREEDOM OF CYCLING
ARNHEM-NIJMEGEN, JUNE 13-16



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Mobility for All Consultancy



French humorists motto as media adviser for politicians

« Don't consider people as silly ... but don't forget they
are! »

I prefer:

« Don't consider people as silly, but don'y forget they are not you! »

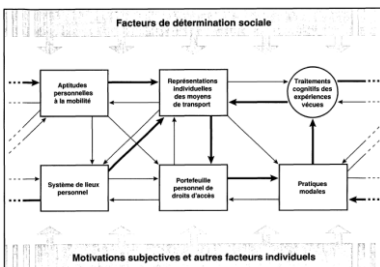
Please stand up, and people sit who:

- Think cars have to be deleted and forbidden?
- Never cycle before 18 years old?
- Have a mobility budget higher than 2 000 euros/years?
- Let 12 years old children ride alone?
- Could not cycle temporary because of a cycling injury?
- Have refused a job because it was too difficult to cycle to work?

People Modal choice criteria

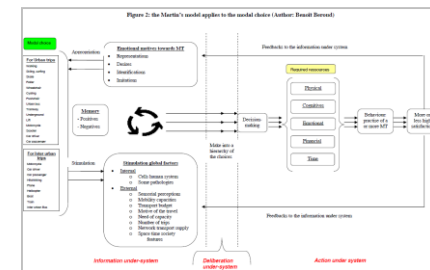
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- Social representation
- Modal practise
- Mobility budget
- Cognitive perception
- Individual mobility skills
- Activities location



Source : M. FLAMM, (2004), Comprendre le choix modal : les déterminants des pratiques modales et des représentations individuelles des moyens de transport, EPF Lausanne (Suisse), 307p.

Source : BEROUD B., FAIVRE D'ARCIER B., MARTIN R., (2007), Model of human mind process adapted to the modal choice, article written for the MAX EU project 2007, 5 p.





Humans

Potential handicap situations

Equipment aids

Means of transport

Travellers

(Demand)

Citizens, Employees, Visitors

Profils, needs, preferences, skills, budget, ...



Fully accessible or
potential mobility handicap situations



Hard: Infrastructures, equipment,

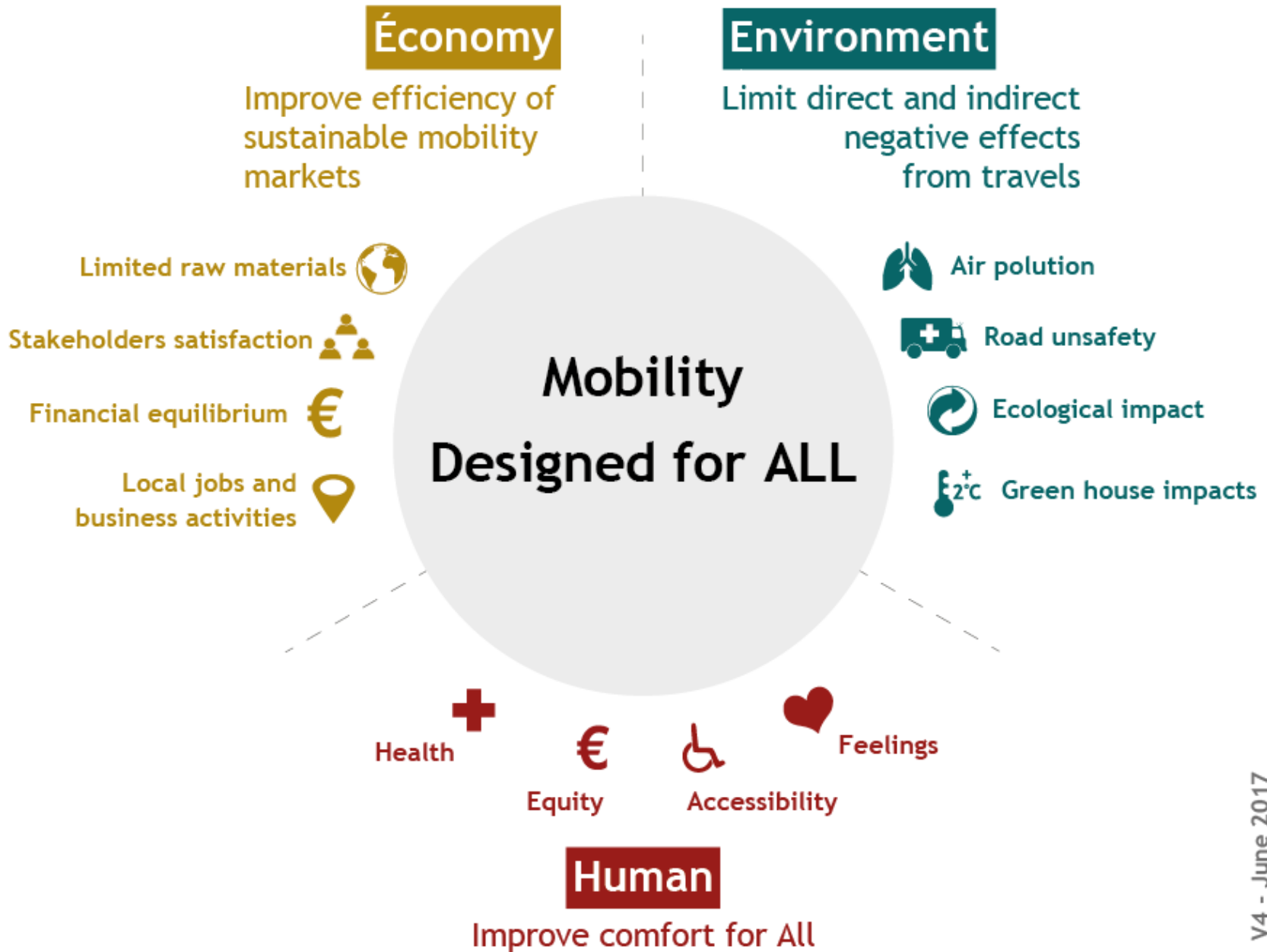
Soft: Informations, services, training, rules



Governments, Operators, Employers, Public access building

Transportation modes

(Multimodal and intermodal supply)



Environment	Air pollution	No emissions
	Road unsafety	Less speedy, so lower crash impact
	Ecological impact	No energy consumption than animal one
	Green house impacts	No emissions
Human	Health	Physical activity
	Equity	Cheaper to buy, to access and to practise
	Accessibility	Born to death
	Feelings	Walking is the natural way of moving
Economy	Limited raw materials	Few worldwide raw materials
	Stakeholders satisfaction	The best compromise?
	Financial equilibrium	Lower public investment
	Local jobs and activities	Promotion of short distance trips

Active modes are accessible to a wider population than other means and contribute to more egalitarian and inclusive societies

On the assumption that governments act for 100 % of their citizens, UN, European Commission, States, Region and Local governments should :

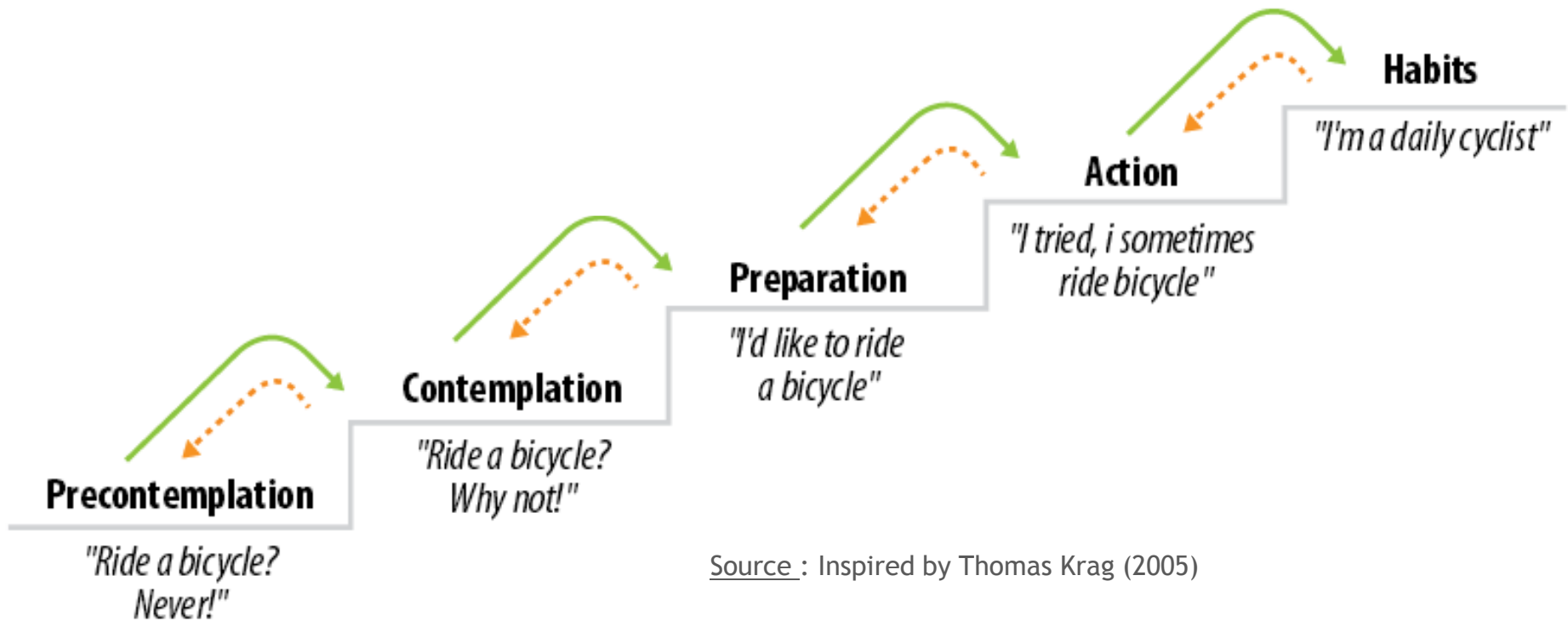
1. Plan short distance urbanism

2. Strongly regulate car use and car parking



3. Promote Multi/intermodality





First time

Need to

- Have relevant alternative to each reasons they drive a car
- Feel reassured by other testimonial, confident and at ease

**Sometimes/
Frequent**

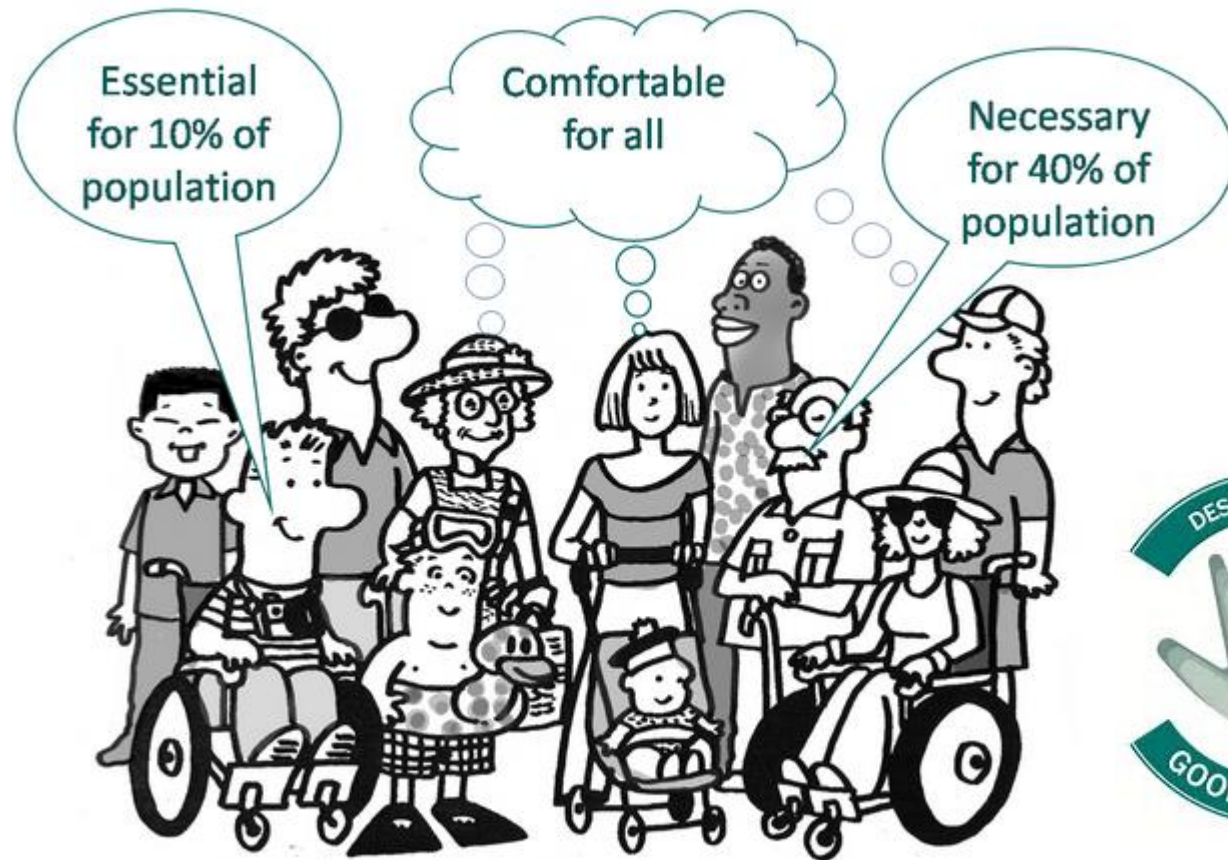
Need a positive first experience because it has been intuitive, easy, fluent, funny, comfortable, without supporting cycling breaks

Daily use

You want people to shift from car?

Provide them attractive and qualitative options through 3 concepts:

- 1. Universal Design**
- 2. Quality management**
- 3. Mobility Management**



© Design for All Foundation

To reach the largest target groups,
Consider the most strict and
challenging needs of people for who it is essential

1. **Respectful** of diversity of users and access to all
2. **Flexible** (preferences, skills)
3. **Simple and intuitive function** (whatever experience, concentration, knowledge)
4. **Comprehensible** by anyone in live condition with clear and coherent information
5. **Safe** allowing unintended and unvolunteer use
6. **Affordable** with minimum efforts (ergonomy, intuitive) and pricing
7. **Healthy** use without impacting the user and others
8. **Sustainable** for futures generation
9. **Appealing** emotionally and socially



BYPAD is the quality process of cycling policy (www.bypad.org) implemented in 200 cities, regions in 24 countries



ISEMOA

Improving seamless energy-efficient mobility chains for all



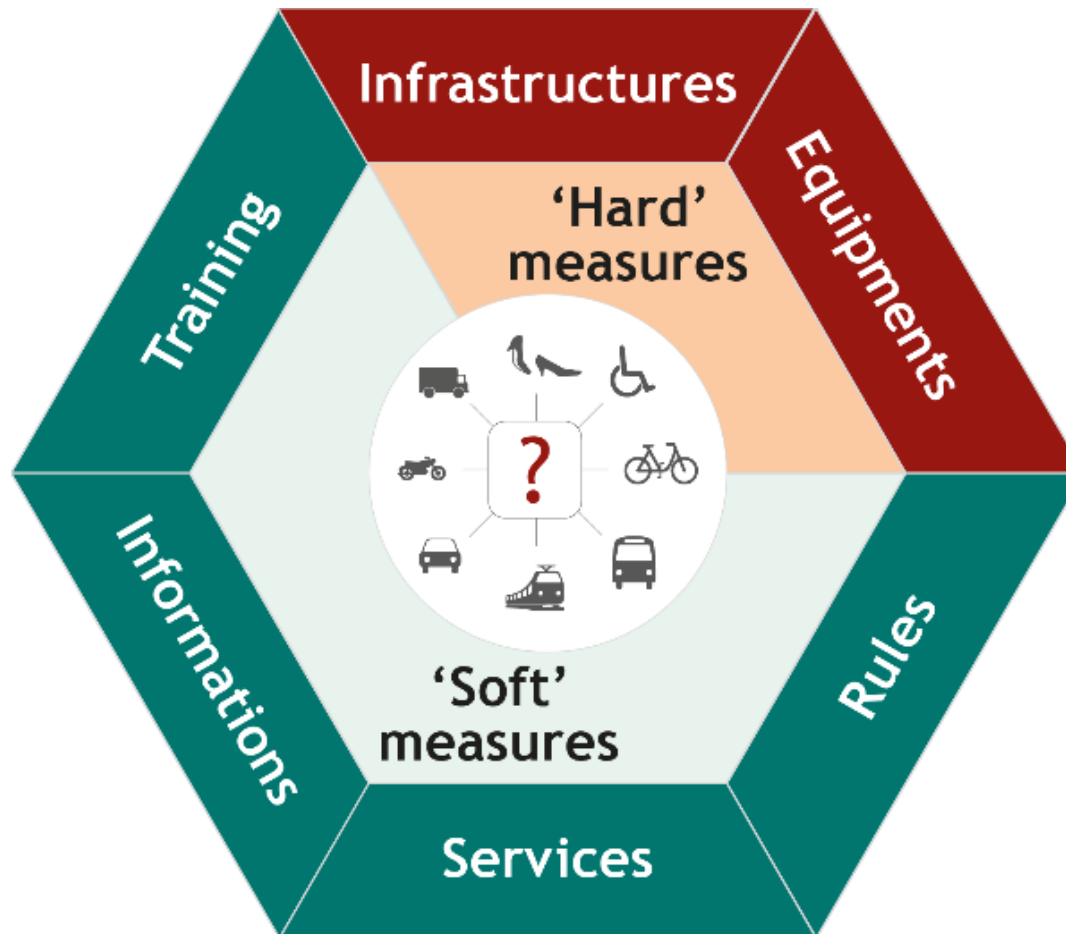
EU project that aims to provide better walking, cycling and public transportation conditions through accessibility



→ **PRECONDITIONS**
User needs and involvement,
Legal/administrative context, Current state



Provide them both hard and soft measures



More about Mobility management on www.epomm.eu

Example Contrast colors for cycling spaces



- Colored cross-roads/cycle paths enable people with visual impairments to perfectly identify directions and networks
- ⇒ First time skill cyclists feel more confident
 - ⇒ First time cyclists here better understand the network
 - ⇒ Car-drivers are more aware of cyclists, increasing safety

Example Cargobikes rental



Source: Metrovelo, Grenoble



Enable carrying goods and people

- ⇒ Avoid to buy a new car, particularly after getting the first child
- ⇒ Time to time solution to carry goods rather using a car
- ⇒ Avoid car drivers to justify their habits because they potentially once a month would may need it which generate wrong habits.

Example Flat areas

Source: Actuelo



Wheel chair users can move freely on the public space without steps
⇒ Cyclists can move freely, as well as pedestrians, trolley users.



Color and material contrast enable to better understand the space
=> Less conflicts between users



Colour Contrast Analyser

Example Self training with assistance

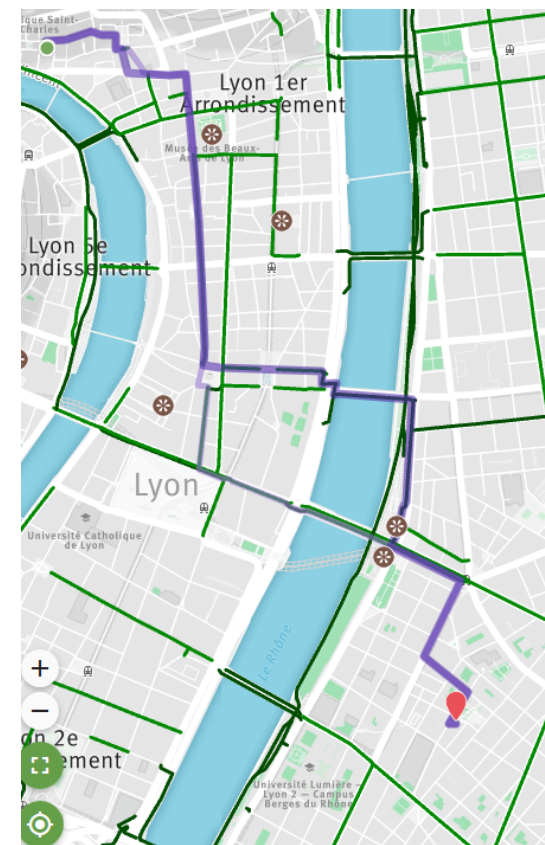


Source: Benoit Beroud / Le Chat Perché



- Low income can maintain their bike for a cheap price
- ⇒ Other cyclists can customise their bicycle and develop their cycling culture.
- ⇒ People gather around the bicycle and contribute to social inclusion

Example Signs and wayfinding



Reassure people who could be anxious about losing their way or who have communication issues
⇒ Other can optimise their planing and travel time



Active modes direction signs size are smaller than car signs, making more difficult to read by end-users, notably by car drivers toward a potential modal shift⁸⁰

Example Turn-on-right at traffic lights



Elderly cyclists suffer of generalised decrease of their skills, senses and muscles. Let them benefit of their kinetic energy.
⇒ Competitive advantages to cyclists compare to car drivers

Example Enable children riding safe



Source : Danish Cycling Embassy



If 12 years old children can bike alone in traffic, almost anyone can feel save by bike.

- ⇒ Parents could not justify taking their car because they have to drop their children at school.
- ⇒ Car drivers are likely more cyclists respectful.

Example Pictograms



People with cognitive disabilities or analphabets can recognise images

- ⇒ **Foreigners understand better pictograms than foreign alphabets**
- ⇒ **Babies and children understand well draws.**



Mobility for All Consultancy

French Consultancy in Sustainable Mobility Designed for All

- BtoB guidance to improve the pleasure of moving
- Multimédias contents creatio to invite sustainable mobility behaviors

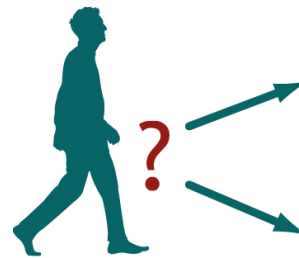
Expertise Fields



Modal choice



Design for All



Way finding



Active modes



Road Safety

Founder: Benoît Beroud



- Mobility management expert and EU certified auditor of cycling policy (BYPAD), Accessibilité policy (ISEMOA) and SUMP (ADVANCE)
- Swiss-knife social business innovator, information designer



Who

Great diversity of clients

Profile	Clients
Local governments	
Local governments networks	
Public ministries	
Public technical institutions	
Projects financed by the European Union	
Innovation hubs	
Training and research centers	
Mobility conferences	

Profile	Clients
Mobility operators	
European consultancies	
Think tank	
Publishers	
Concerts	
Event organisers	
Mobility generators	



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