Accessibility For All

A Tool Toward Sustainable Mobility

Focus on Cycling Measures
French humorists moto 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! »
People Attendees contribution

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

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


Our common point? We are all different!

Humans  Potential handicap situations  Equipment aids  Means of transport
## Accessibility is the Mobility Equilibrium

<table>
<thead>
<tr>
<th>Travellers (Demand)</th>
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<td>Citizens, Employees, Visitors</td>
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### Profils, needs, preferences, skills, budget, ...

### Fully accessible or potential mobility handicap situations

**Hard**: Infrastructures, equipment,

**Soft**: Informations, services, training, rules

<table>
<thead>
<tr>
<th>Transportation modes (Multimodal and intermodal supply)</th>
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<tr>
<td>Governments, Operators, Employees, Public access building</td>
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Why Sustainable mobility stakes

**Économy**
- Improve efficiency of sustainable mobility markets

**Environment**
- Limit direct and indirect negative effects from travels

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**Mobility Designed for ALL**

- Limited raw materials
- Stakeholders satisfaction
- Financial equilibrium
- Local jobs and business activities
- Air pollution
- Road unsafety
- Ecological impact
- Green house impacts

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**Human**
- Improve comfort for All

**Feelings**
- Equity
- Accessibility
- Health
### Active modes compared to motorised modes

<table>
<thead>
<tr>
<th>Environment</th>
<th>Air pollution</th>
<th>No emissions</th>
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<tr>
<td></td>
<td>Road unsafety</td>
<td>Less speedy, so lower crash impact</td>
</tr>
<tr>
<td></td>
<td>Ecological impact</td>
<td>No energy consumption than animal one</td>
</tr>
<tr>
<td></td>
<td>Green house impacts</td>
<td>No emissions</td>
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<table>
<thead>
<tr>
<th>Human</th>
<th>Health</th>
<th>Physical activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Equity</td>
<td>Cheaper to buy, to access and to practise</td>
</tr>
<tr>
<td>Accessibility</td>
<td></td>
<td>Born to death</td>
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<tr>
<td>Feelings</td>
<td></td>
<td>Walking is the natural way of moving</td>
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</table>

<table>
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<tr>
<th>Economy</th>
<th>Limited raw materials</th>
<th>Few worldwide raw materials</th>
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<tr>
<td></td>
<td>Stakeholders satisfaction</td>
<td>The best compromise?</td>
</tr>
<tr>
<td>Financial equilibrium</td>
<td></td>
<td>Lower public investment</td>
</tr>
<tr>
<td>Local jobs and activities</td>
<td></td>
<td>Promotion of short distance trips</td>
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</table>

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 cityzens, 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
Goal
Change daily behaviour and modal practice

Source: Inspired by Thomas Krag (2005)

First time

Need to
• Have relevant alternative to each reason 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
A qualitative user approach

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
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.
EU project that aims to provide better walking, cycling and public transportation conditions through accessibility.
2. Toward continuous improvements

Ad-hoc approach: Problem solving, individual initiatives, single projects

Isolated approach: start of limited cooperation and visions

System-oriented approach: Cooperation

Integrated approach: continuity, coordination

Total quality management: exemplary
3. Mobility management

Provide them both hard and soft measures

More about Mobility management on www.epomm.eu
Contrat 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
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.
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
Self training with assistance

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.

Source: Benoit Beroud / Le Chat Perché
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 shift
Elderly cyclists suffer of generalised decrease of their skills, senses and muscles. Let them benefit of their cinetic energy.

⇒ Competitive advantages to cyclists compare to car drivers
If 12 years old children can bike alone in traffic, almost anyone can feel safe 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.
People with cognitive disabilities or analphabets can recognise images
⇒ Foreigners understand better pictograms than foreign alphabets
⇒ Babies and children understand well draws.
Mobiped
Mobility for All Consultancy
French Consultancy in Sustainable Mobility Designed for All

- BtoB guidance to improve the pleasure of moving
- Multimédias contents creation 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
Mobiped, internationally acknowledged
# Great diversity of clients

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<th>Clients</th>
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<td>MAIRIE DE PARIS, Région de Bruxelles-Capitale, AMIENS Métropole, GRANDLYON, Nantes Métropole, Strasbourg.eu.</td>
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<tr>
<td>Local governments networks</td>
<td>Lyon Confluence.fr, Le Cycle et les Territoires.</td>
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<td>Public ministries</td>
<td>dgcis, Québec Ministère des Transports.</td>
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<td>Public technical institutions</td>
<td>Cerema, Certu, Cité.</td>
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<tr>
<td>Projects financed by the European Union</td>
<td>ISEMCA, TOGETHER ON THE MOVE, ABIS, MOX.</td>
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<tr>
<td>Innovation hubs</td>
<td>Moveo.</td>
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<tr>
<td>Training and research centers</td>
<td>Tongji University, Feng Chia University, UNIVERSITÉ LUMIÈRE LYON 2, Ports Formation Conseil.</td>
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<td>AXU, Rosinak &amp; Partner, Vélocity, Mobiel 21.</td>
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<td>Concerts</td>
<td>Cité, La Poste, Urbaccess.</td>
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<td>Event organisers</td>
<td>CCI, Miss Vicky.</td>
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<tr>
<td>Mobility generators</td>
<td>Aéroports de Paris, CNRS, Inria.</td>
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