

“It’s the access, stupid!”

**Time to re-define the discourse
on urban mobility**

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Velo-city Global 2016 - Taipei

1. A global failure on urban mobility

“It’s the economy, stupid!” - Clinton US Presidential campaign 1990

Despite widespread Agreement on the:

Problems

- Congestion
- Pollution
- Accidents
- Use of public space
- Noise

and on the solutions

- Best practice
- Demonstrations
- Policy recommendations
- Research papers

Problem = Widespread lack of implementation

Policy co-ordination?

Administrative capacity?

Lack of regulatory frameworks?

Finance?

Point 1 – Lack of consistent local political support

2. Time to redefine the discourse

Positive discourse on urban mobility

- Pollution
- Accidents
- Loss of public space
- Delays
- Noise

~~Reducing car use~~

**Point 2 – Positive discourse on
“maximising urban access”**

Velo-City 2016 opening plenary:

Taipei Vice Mayor **Charles Lin**

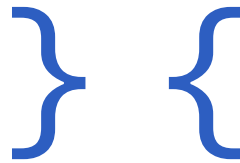
“Mobility defines the place where you live”

Access is WHY you live there!

Cities are machines for accessibility

Access to:

People,
Goods,
Services
Experiences



Physical

Digital

Point 3 – Ensure Mayors understand that access is the determining feature of successful cities”

Transport system is NOT just another type of urban infrastructure.

Transport

**It's the
defining
urban
infrastructure**

Water

Energy

IT

Waste

Social

Increased political attention:

A positive discourse - access is central to the success of cities →

Consistent political attention →

Resources / drive →

Implementation →

Change

Access is political:

Who gets access?

What conditions?

e.g.

Young, under educated and unemployed person

Business person

Isolated older person

Correctly define the problem:

- Not a lack of cars or roads
- Not a lack of transport
- **Lack of access to X for Group Y**

“Don’t sell a product – sell a solution to a problem” – Richard Branson

Point 4 – Problem is a “lack of access”

Redefining the debate:

Minimising negative effects

- Avoid (A)
- Shift (S)
- **Improve (I)**

Maximizing Urban Access

- **Digitize (A)**
- **Localize (A)**
- Socialize/share (S)
- **Mobilize**
 - Optimize (trip planning, synergies) (I)
 - Improve (vehicles, fuels) (I)

3. What needs to be done?

Measuring accessibility

$$A_1 = \frac{1}{\lambda} \ln \sum_{k=1}^n \exp(a_k T_k^\beta \exp(-\lambda t_k))$$

$$A_2 = \sum_{k=1}^m b_k$$

where:

$b_k = 0$ if $a_k = 0$ or $T_k \leq 0$

$$\exp\left[\lambda \left(\frac{\alpha}{\lambda} \ln a_k + \frac{\beta}{\lambda} \ln T_k - t_k\right)\right]$$

otherwise

$$A_3 = \max_{[k]} [b_k]$$

A = accessibility measure

a_k = attraction of activity location

T_k = flexible time available for activity participation

t_k = travel time required

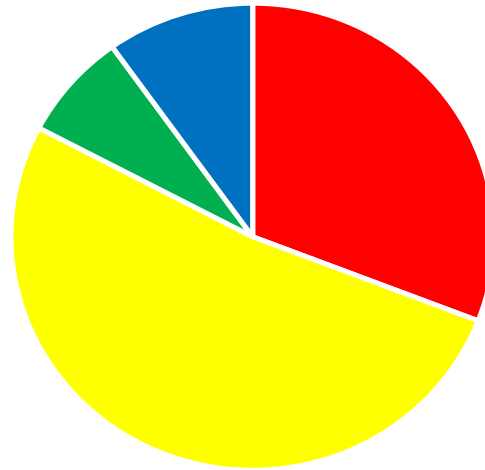
n = number of flexible activities

b_k = benefit

α, β, λ = parameters ≥ 0

Measuring transport - 20th Century

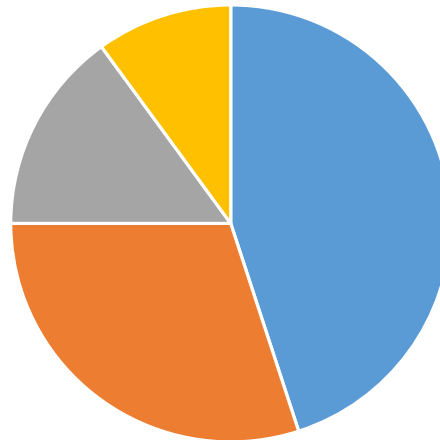
Mode Share



■ Public Transport ■ Car ■ Cycling ■ Walking

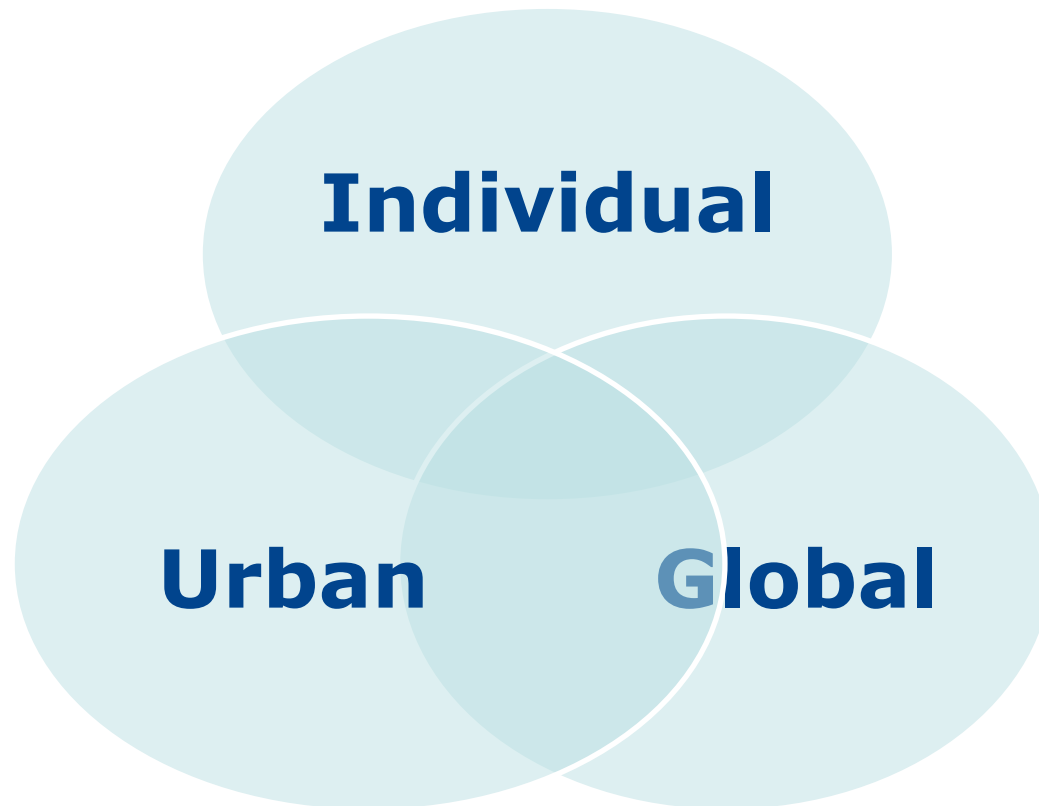
Measuring accessibility – 21st Century

Accessibility profile



■ Local ■ Digital ■ Social Modes ■ Private Modes

Target Mayor self interest - Focus on benefits at the urban level



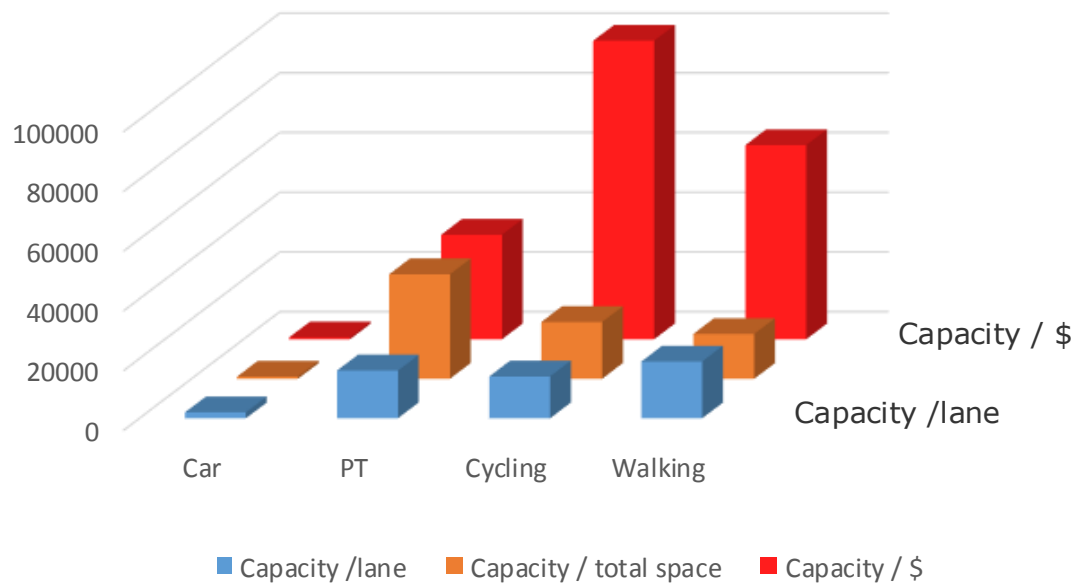
Key issue – access capacity

- **people / hour**

Scarce urban resources - Space and money

- **people / hour / total m²**
(operation + parking + maintenance)
- **people / hour / \$**
(infrastructure + vehicle + operation + maintenance)

Bikenomics to Accessanomics:



Capacity, space and cost

Access is valuable!

~~**Location, Location, Location**~~

Access, Access, Access

Value of access:

- Doubling the number of services available locally?**
- e-access?**
- More local space to play?**

Point 5 – New language and metrics for describing and valuing access

Managing urban access

- **Define access rules/regulations**

(London: LEZ, Congestion Charge, Lorry Ban, Ultra LEZ, parking schemes, “pedestrian” areas, low speed zones....)

- **Dynamic management of space / access**

(deliveries, commuting, leisure, special events)

Point 6 – Coherent policies and management of urban access

- 1) Lack of consistent local political support
- 2) Positive discourse on maximising urban access
- 3) Ensure all Mayors understand that “Access is the determining feature of successful cities”
- 4) Problem is a “lack of access”
- 5) New language and metrics for describing and valuing access
- 6) Coherent policies and management of urban access

Conclusion

Redefine debate from “minimising negative effects” to “**maximising urban access**”

Put “access” at the heart of the debate on **successful cities**

Appeal to the “**unconvinced**” mayors

Logistics too!

Don't let incumbent lobbies (vehicle, fuel or infrastructure suppliers) define or control the debate

Broader political appeal  **consistent support**
 **implementation and change.**

Thank you for your attention.

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