Smart Mobility

Dynamic accessibility-equity and affordability indicators?

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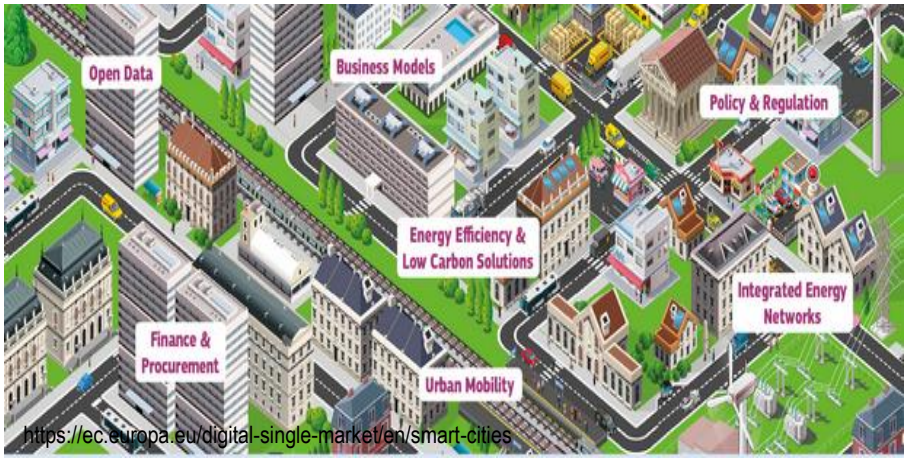
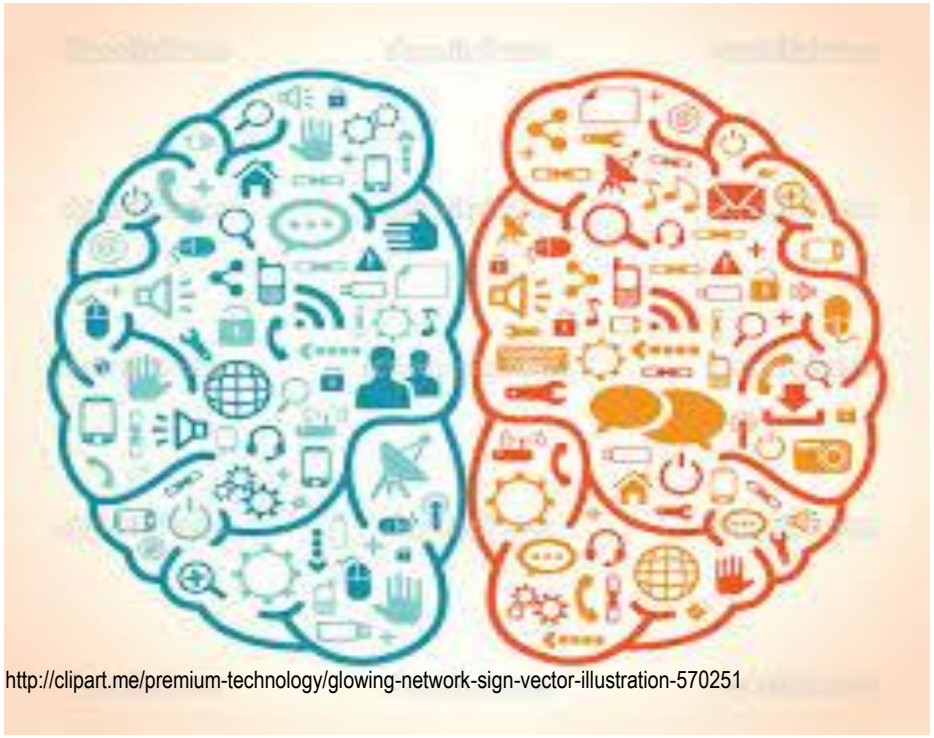
COMMON SOCIETAL CHALLENGES FOR A GLOBAL >NEXT.MOV



- Around **75%** of the European **energy consumption** takes places in cities;
- Around **80% of the GHG** are emitted by cities;
- The transport sector is the only main European economic sector for which GHG emissions have increased since 1990: **over the last 15 years, transport emissions increased by 19.4%** (EEA, 2015).



http://clipart.me/premium-technology/glowing-network-sign-vector-illustration-570251

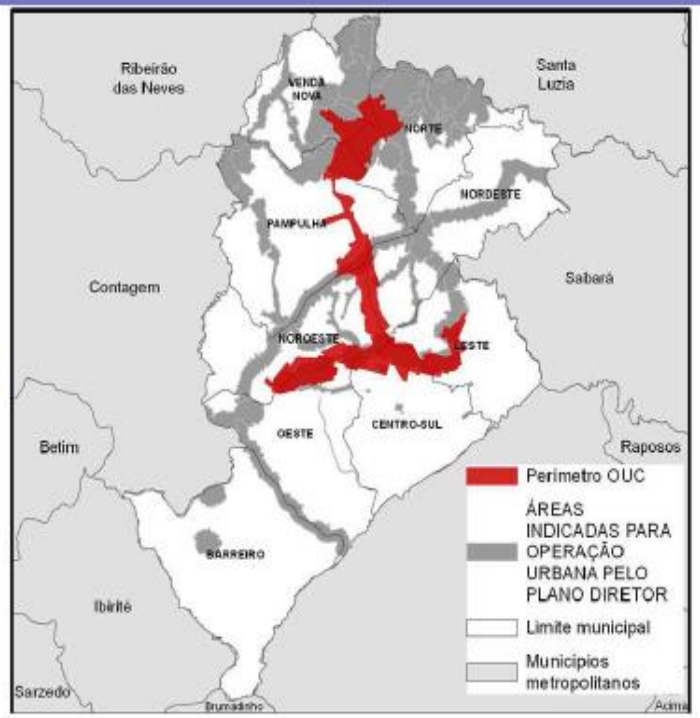
- **New Organizational models** for low carbon, healthier, integrated and intelligent mobility
- Multimodal transport consumption, flexible/"on-demand", last-mile services by "new mobility" providers
- **Dynamic and Collaborative Planning and "New" Evaluation Toolsets** (hardware + actors' mindset framework)

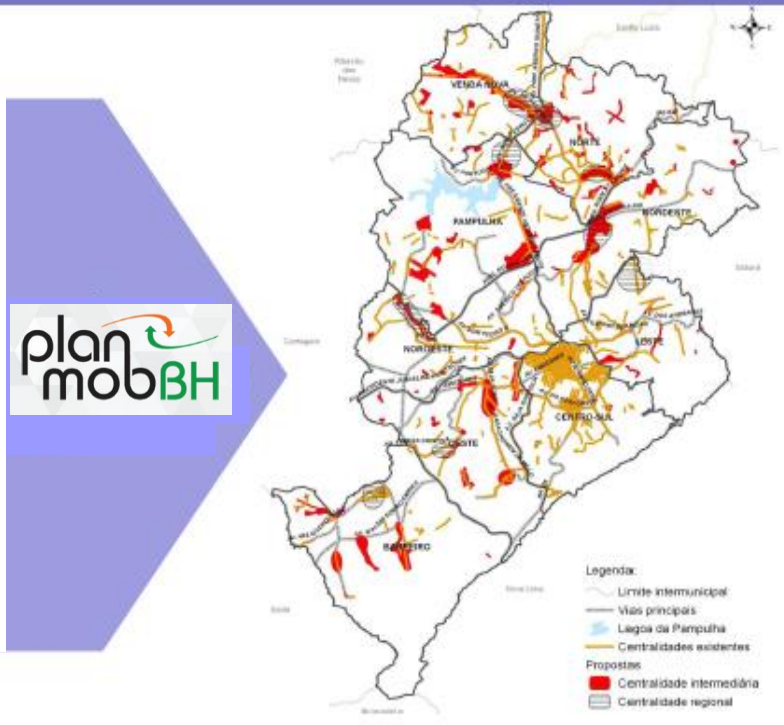
SOLUTIONS
Sharing opportunities for low carbon urban transportation

Source: ICLEI partner in SOLUTIONS

www.urban-mobility-solutions.eu

SUSTAINABLE URBAN MOBILITY PLANS





"*The smart city concept goes beyond the use of ICT for better resource use and less emissions*". [EC, 2017]

- **Digital city** (connected communities, ICT) → → **Intelligent City** (the knowledge society with the digital city/use of IT to transform QoL) →→ …

- **Smart city with smart mobility** where institutions, stakeholders (including citizens), vehicles, etc. are **connected and share** data/information/services to achieve common societal goals while accounting for the **social equity and distributional impacts** of the "new mobility"→

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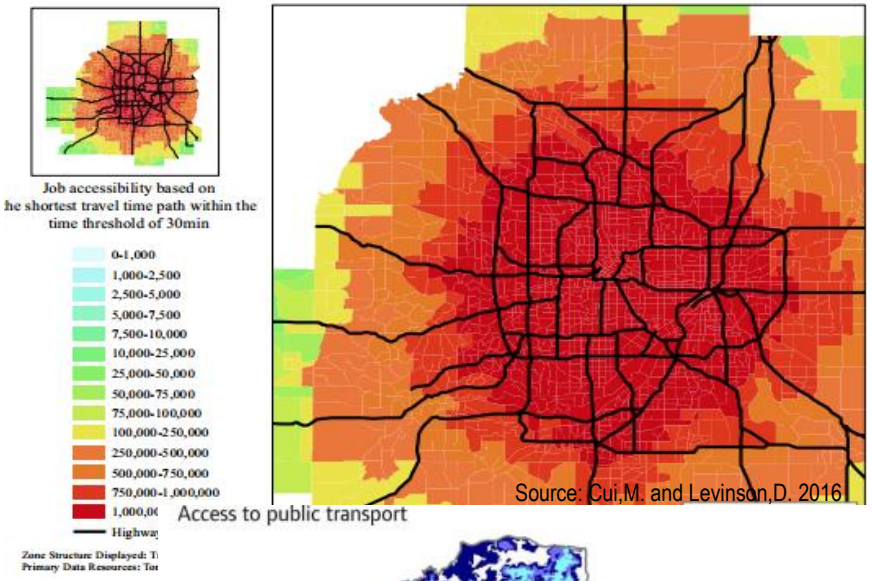
TEA

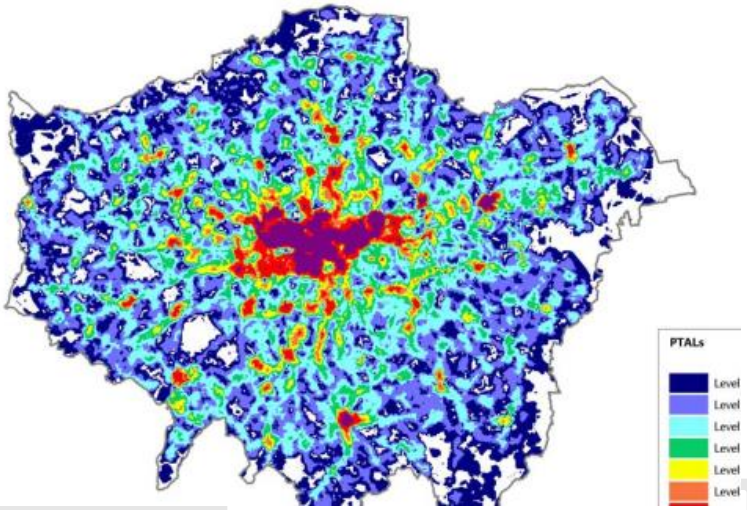
TRANSPORT EQUITY ANALYSIS

Assessment and Integration of Equity Criteria in Transportation Planning (2013-2017)

http://teacost.eu/index.php/2013-07-15-14-28-13/working-groups

EVALUATION OF SMART MOBILITY STRATEGIES: SUMPS, Big Data and Social Equity Evaluation Tools





- **Accessibility-equity indicators** and mode/service **affordability** (time and cost budgets)
- **Utilitarianism, Rawls, Market-based, …→ Needs approach**
- Micro Mobility/Accessibility data (**Diagnosis of access by mode x to activity y**, equity indicators, target groups/ref. groups, distributional equity measures... Progressive policy targets? Vertical equity)
- Exposure indicators to transport externalities→ **costs (internal and external) of accessibility analysis by mode/service**