

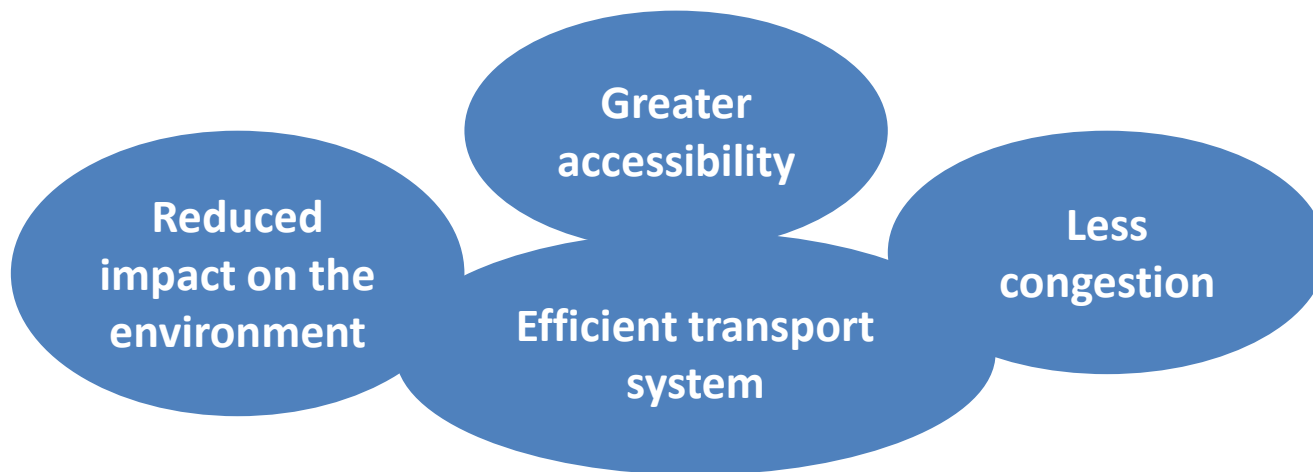


NODES

The Next
Generation of
Urban Interchanges
Caroline Hoogendoorn (UITP)

Why NODES?

The efficient urban trip is intermodal. An integrated urban transport system enables efficient movements of persons and goods.



The NODES project

- FP7 Collaborative project
- Total budget: **4.2 million €** (EC cont.: 2.8 million €)
- Project duration: **3 years** (start date: 1 October 2012)
- Coordinated by 
- **17 partners**

Local Government Administrations:

Madrid, Birmingham,
Toulouse, Reading,
Budapest, Thessaloniki

Public Transport Operators:

Rome, Osnabrück, NS,
Cityway

Research centre and consultants:

TU Delft, Berends,
DTV, FIT

3 European associations:

UITP, Polis, EPF

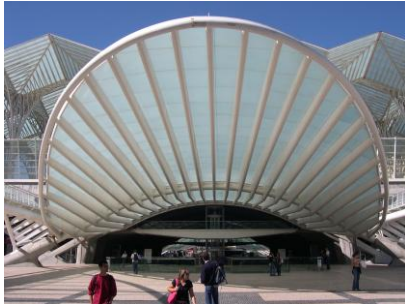
Key interchange functions



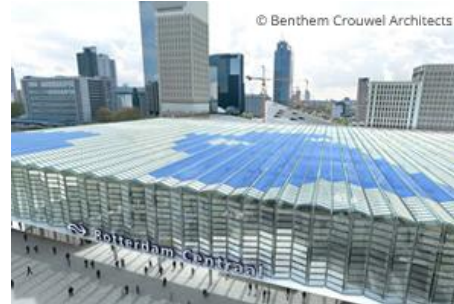
Land use &
infrastructure



Business models



Design



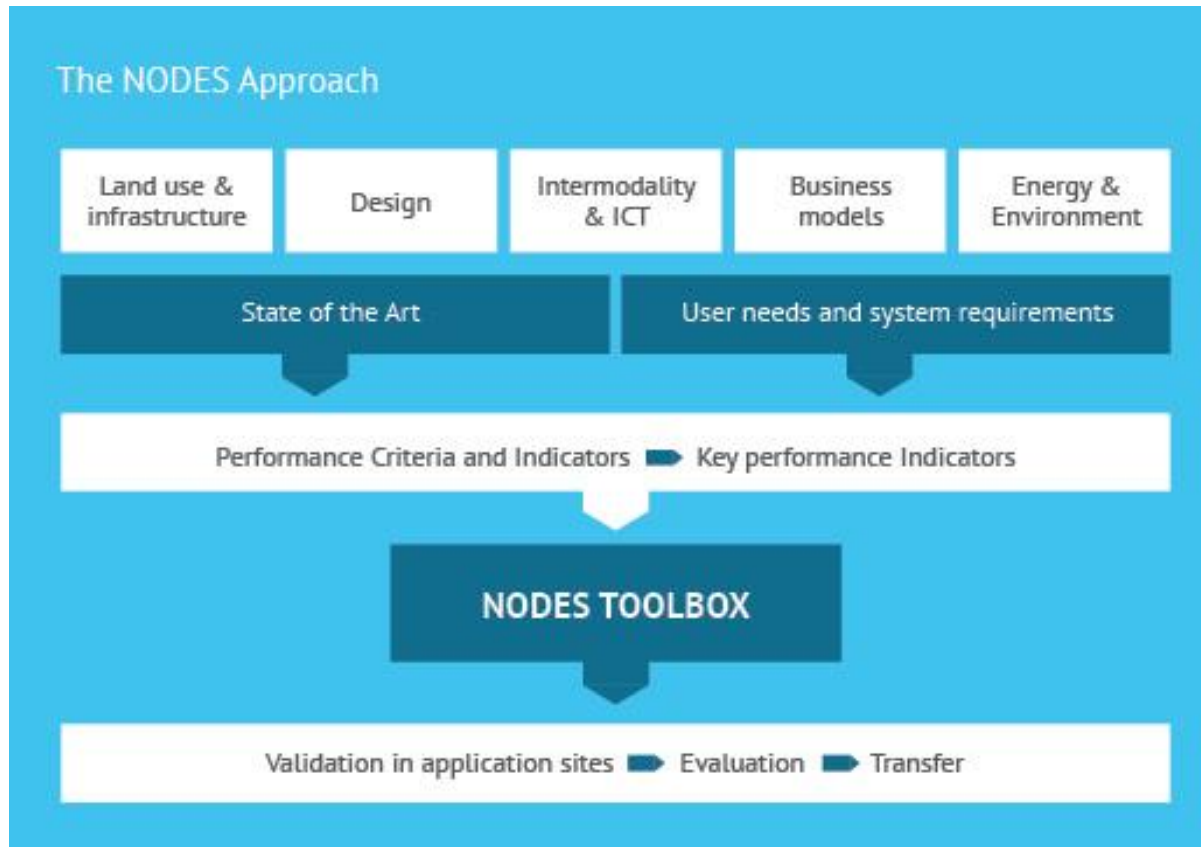
Energy and
Environment



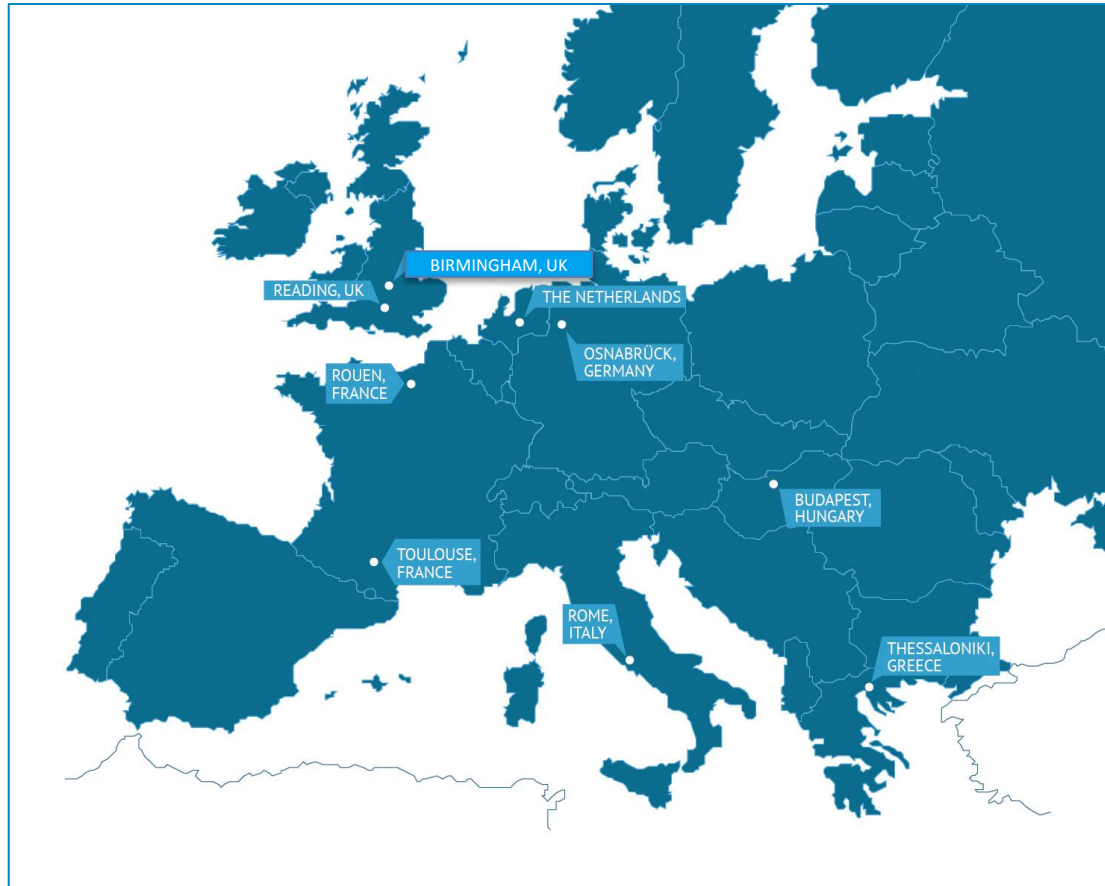
Intermodality and
ICT

NODES

NODES approach



Application sites



NODES Toolbox

- Build a **Toolbox** to support European cities, transport authorities and operators, in the design and operation of new or upgraded public transport interchanges
- Web-based

Search

Enter keywords

Filter

Nature of the tool

- Physical (14)
- Organisational (12)
- Economic financial (9)
- Energy and Environment (7)
- Societal/ Cultural (6)

Tool type

- Method (21)
- Technique (11)
- Law/ Regulation (6)
- Software (6)
- Model (5)
- Material (4)

Interchange type
(Mouseover type for specifications)

- Large size (25)
- Intermodal areas (24)
- Long distance (24)
- Second level (20)
- Small city (17)
- Connection point (15)

Lifecycle stage

- Large upgrade (25)
- Newly build (24)
- Refurbishment (24)
- Management change (12)

Objective

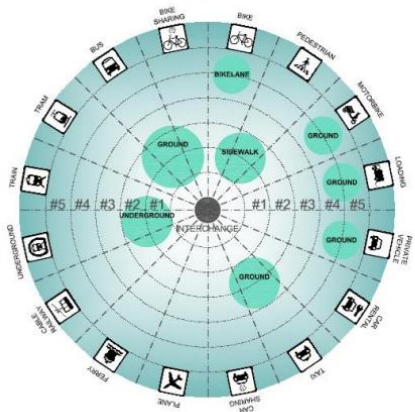
- Liveability (19)
- Comfort and Experience (16)
- Speed/ ease of transfer (14)
- Local Economics (12)
- Safety and security (11)
- Social Responsibility (9)
- Finance (8)
- Climat (2)

Main beneficiary

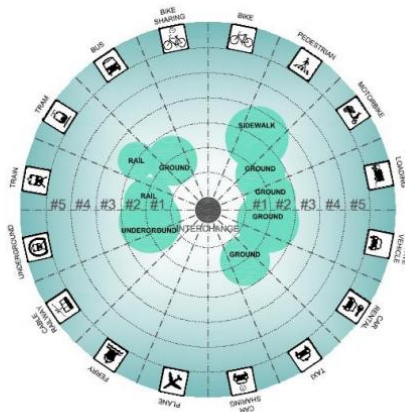
- Infrastructure manager (20)
- Public authority (17)
- Public transport operator (15)
- Traveler (7)

NODES Toolbox: examples

URBAN CORE



SUBURBS



Interchange Typology
Diagrammatic Representation

Progressive disclosure of information, linking pedestrian information systems and public transport information



Conclusion

Employment

The **public transport** sector is amongst the **largest employers** at local level, employing **2 MILLION PEOPLE**

i.e. **20%** of the **10 million people** employed in the overall transport industry



2 to 2.5 indirect jobs typically exist for each direct job in the public transport sector.

Contribution to the economy

Public transport services contribute between **€130- 150bn** per year to the economy i.e. **1-1.2%** to GDP

Road congestion costs the economy **1%** of the GDP

Annual investment in public transport accounts for **€40bn** i.e. **0.5%** of cities' GDP



Ridership



The **total number of passenger journeys made by public transport every year** is almost **60bn**.

In comparison, long distance rail accounts for **1 billion** passenger journeys and commercial aviation for **800 million**.



Out of this figure, buses account for 32bn passenger journeys, tram & light rail for 8bn, metro for 9bn and regional and suburban rail for 8bn.

More information?

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