

Mobility Management and the Urban Transport Problem

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MMA
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INVOLVE



ERASMUS UNIVERSITY ROTTERDAM

Agenda

- Short overview of the evolution of mobility;
- The urban transport problem;
- Mobility Management;

Urban Mobility

In developed countries there have been three general eras of urban mobility:

- 1800 - 1890s: WALKING and HORSE-CAR
- 1890 – 1920s: TRANSIT
- 1930 onward: AUTOMOBILE

Transportation and Urban Form

Urban transportation is associated with a spatial form which varies according to the modes being used.

Considering commuting:

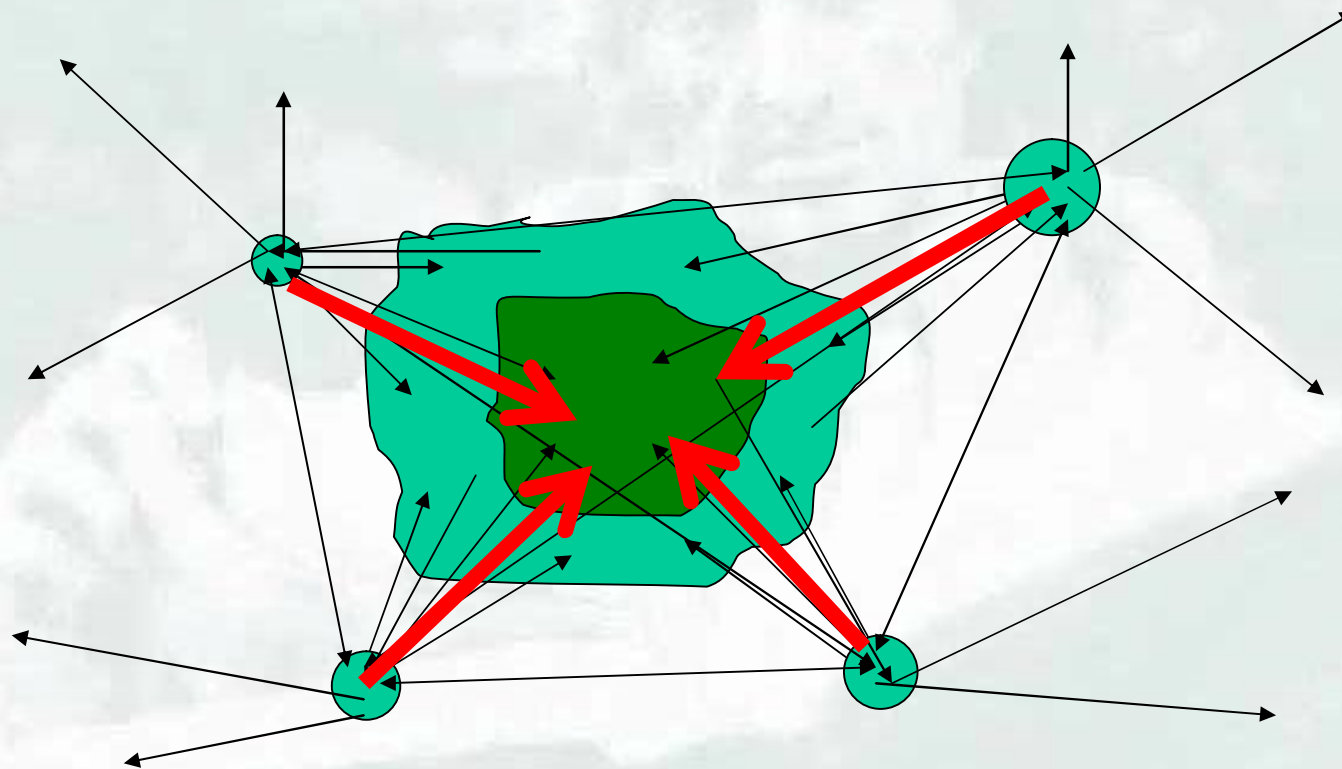
- Walking – 5 km
- Cycling – 15 km
- Driving (no freeways) – 30 km
- Driving (freeways) – 60 km

Evolution of urban mobility

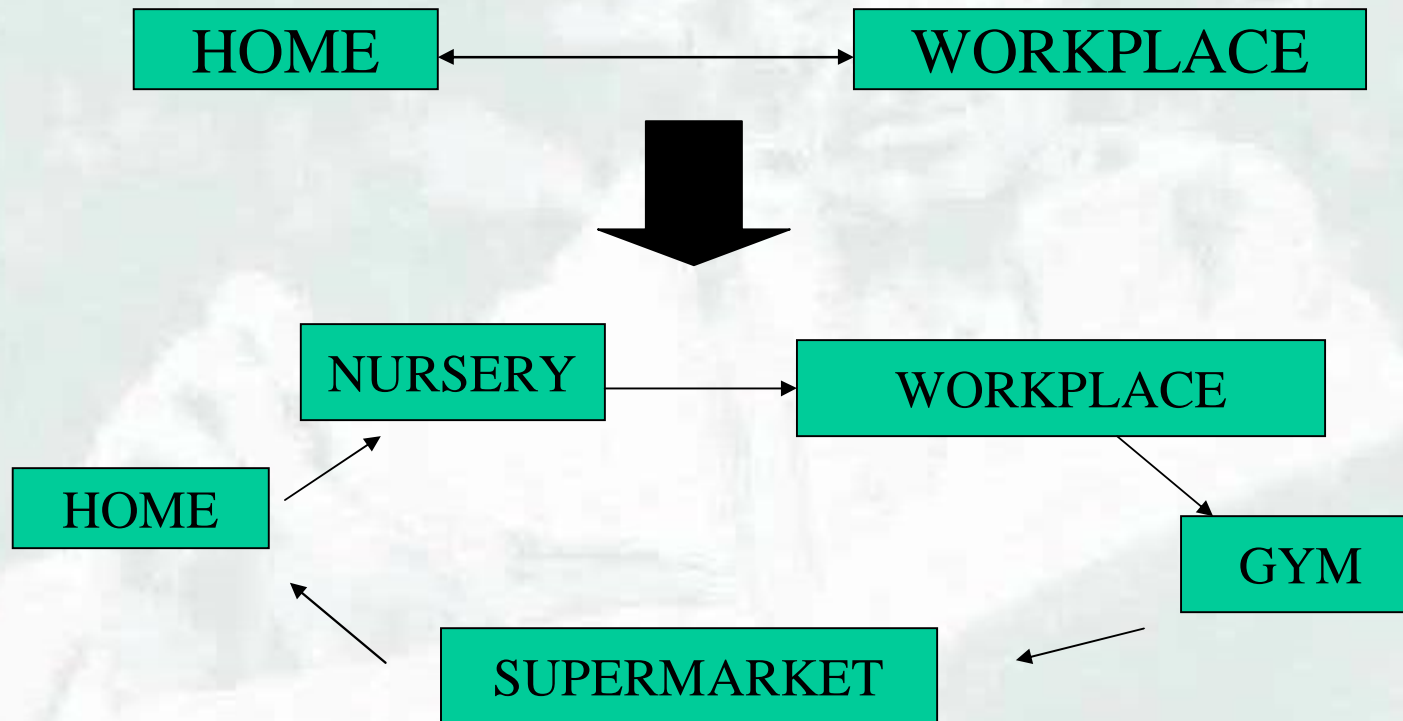
In the last decades there have been two major changes in urban mobility:

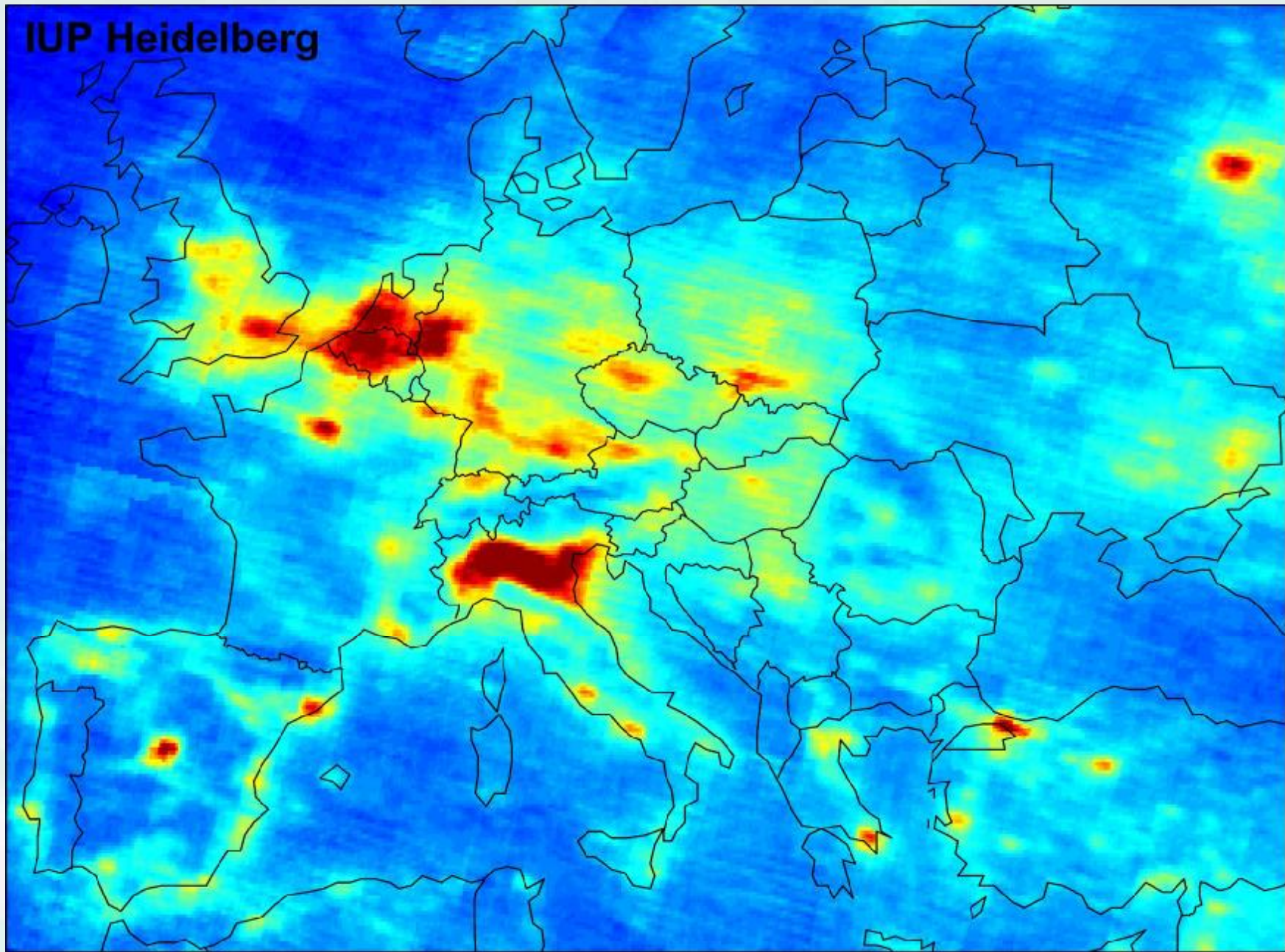
1. The matrix Origin – Destination has changed;
2. The number of activities linked to mobility has changed;

Urban Mobility



Urban Mobility





Urban Transport in the 21st century

The sense of urgency:

- Transport is responsible for 21% of total greenhouse gas emissions in the EU;
- 1990-2004: greenhouse gas emissions have been reduced in many sectors (energy, industry, agriculture,...) but not in transport;
- More than 250,000 premature deaths due to PM in EU in 2000;
- Overweight affects 30-80% of adults in EU and up to one third of children.

Urban Transport Problems

Transport problems are usually urban problems!

Most notable urban transport problems:

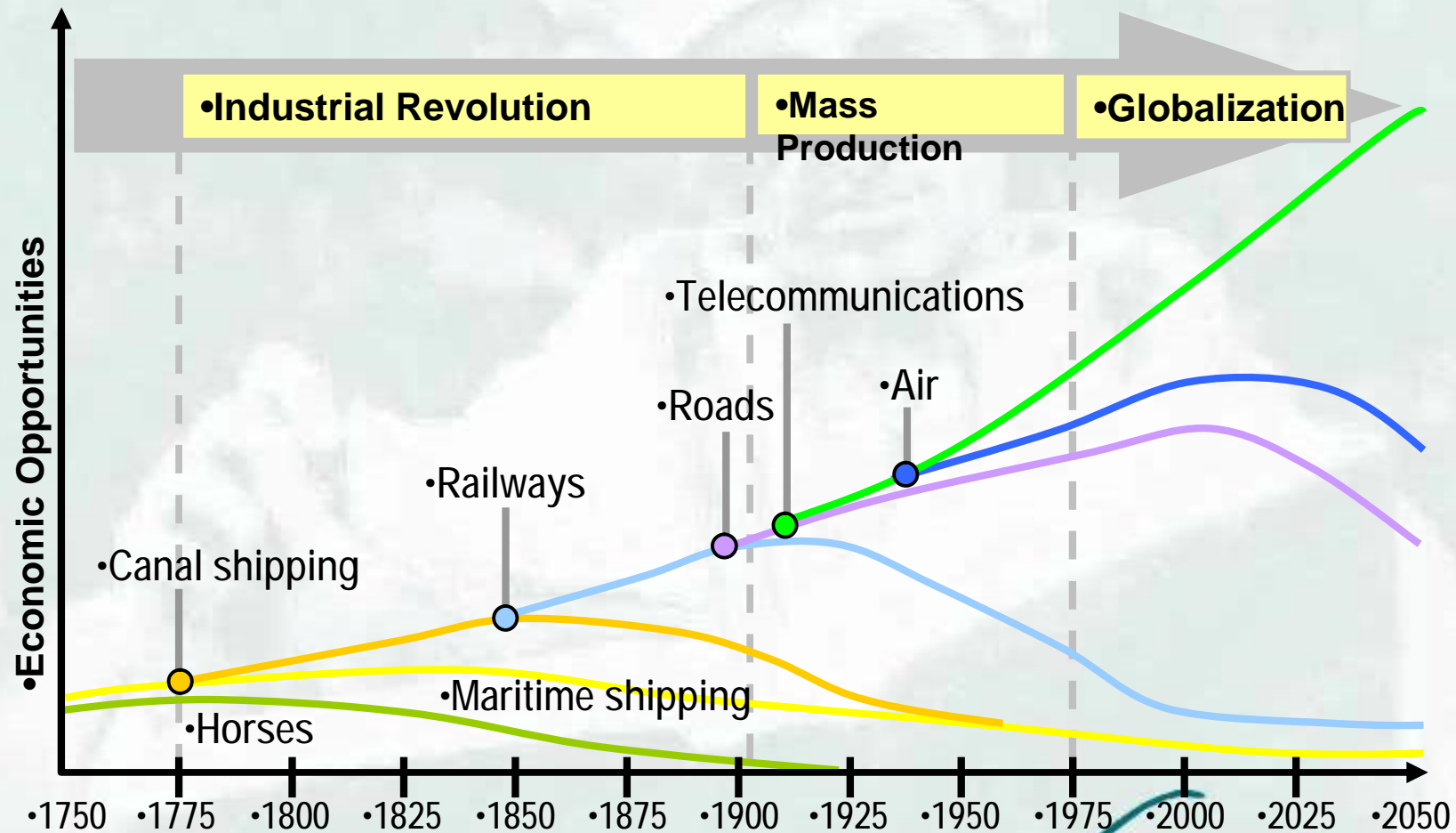
- Traffic congestion and parking difficulties;
- Public transport inadequacy;
- Difficulties for pedestrians;
- Loss of public space;
- Environmental impacts and energy consumption;
- Accidents and safety;
- Land consumption;
- Freight distribution;

Urban Transport Challenges

The major urban transport challenges are:

- Get people out of their cars?
- Convince people to use cleaner vehicles?
- Get more people walking and cycling?
- ...?
- ...?
- ...?

Cumulative Modal Contribution to Economic Opportunities



Why is mobility changed in the last decennia?

Which factors have contributed to change urban and regional mobility in the last decennia?

- Welfare;
- Technological development;
- Transition from an “industrial economy” to a “service economy”, to a “knowledge economy”;
- Higher participation of women on the job market;
- Spatial planning;
- New location factors for companies;
- ...

The future of mobility

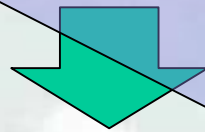


designthinkers

The future of mobility

Supply of mobility

- Suppliers of a transport mode (Railways, Car manufacturer, Bike, ...)



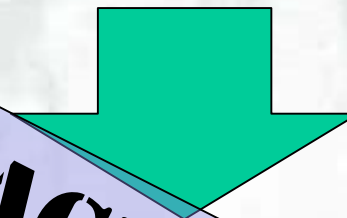
- Suppliers of more transport modes (Mobility Mixx, Dutch Railways, ...)



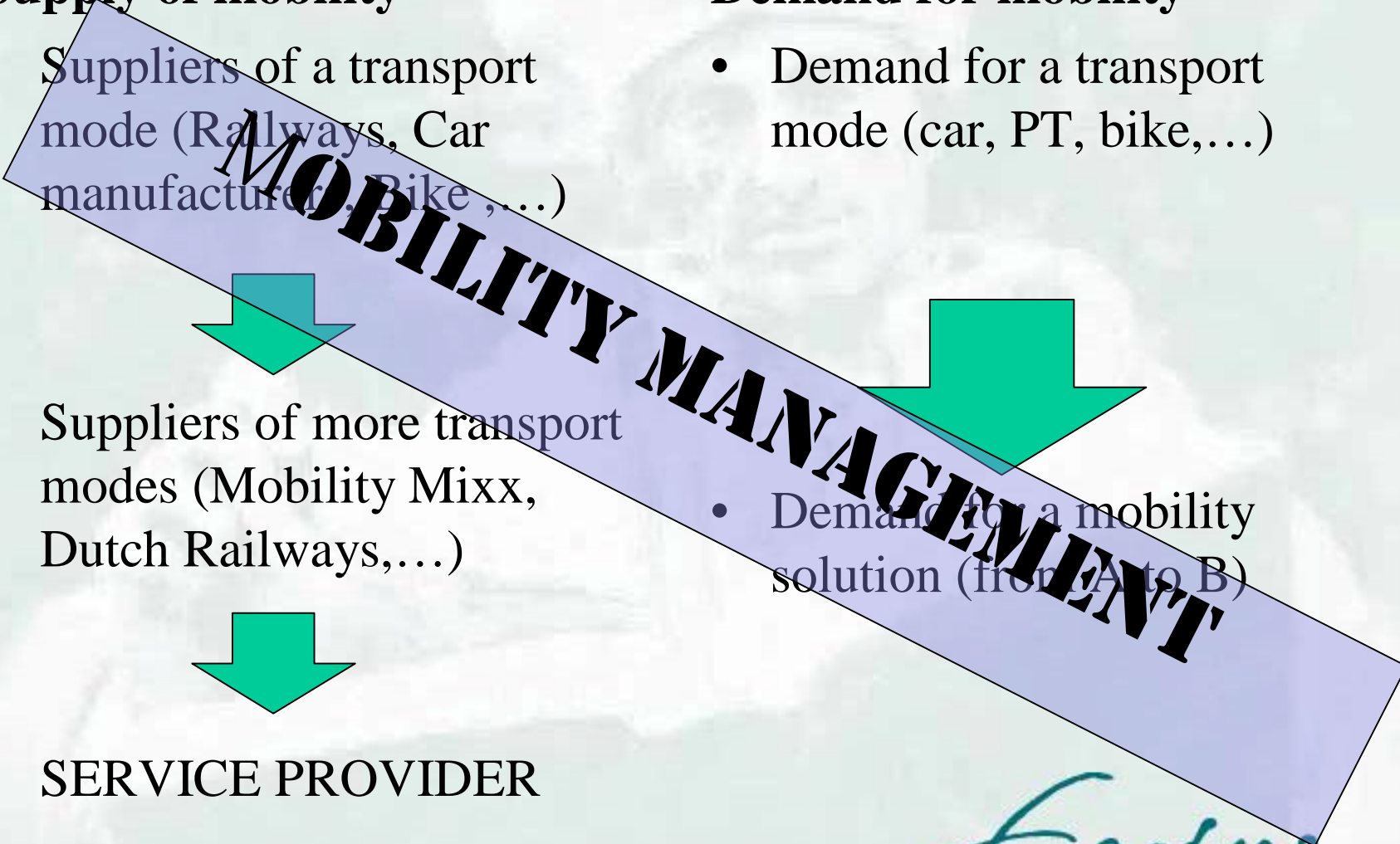
- SERVICE PROVIDER

Demand for mobility

- Demand for a transport mode (car, PT, bike, ...)



- Demand for a mobility solution (from A to B)





**Op Rotterdam Centraal
is nu veel meer
te halen dan je trein.**

Geniet van een heerlijk kopje koffie, een gezond broodje, een snack tussendoor of lekkere maaltijd op weg naar huis. Op Rotterdam Centraal kan het nu allemaal. En ontdek bovendien de winkels met hippe modeaccessoires, originele en verrassende cadeau's of winkels met de laatste trends op het gebied van persoonlijke verzorging. Het fijne is bovendien dat de passage van je vroege tot late trein geopend is. Voordelig kennismaken? Kijk op pagina 2.



In Rotterdam
Central station
there is more to
catch/get than
your train



MOBILITY MANAGEMENT

TDM vs MM

- Transportation Demand Management (TDM) and Mobility Management (MM) are synonymous
- **TDM** (US) = strategies and programs that encourage more efficient use of transport resources
- **MM** (EU) = ‘soft’ measures (e.g. information or coordination of existing user services), which enhance the effectiveness of "hard" measures of traffic planning (e.g. new tram lines)
- **SMART TRAVEL** (UK)

Mobility Management

- Mobility Management tools do not necessarily require large investments and have a high potential to change mobility behavior.
- The objective of Mobility Management is to reduce single car use.

Mobility Management

- It's very cost effective (large results with little resources);
- Short-term results;
- Taylor-made solutions: MM is a very flexible instrument;



Metro regio Rotterdam



Walking bus



Walk on Wednesday

- In London approx. 500,000 children walk to school every Wednesday.
- This policy costs approx. £2 per child per year.



KEY FACTS

- More than 1.5 million children now take part in the National Walk to School campaign. 'Walk on Wednesdays' or 'Walk Once a Week' (WoW) is the next step to keep them walking regularly.
- Two thirds of local authorities in England now take part.
- In London WoW has increased the number of children walking to school by 30%.
- This year we've got new designs, new stickers and new badges to get children interested.
- Walking to school is good for children's health, it relieves traffic congestion and it's good for the environment.
- **It's great fun!**



**uups,
du bist
schon
da?**

U4
Messe - Bornheim
10 Minuten

so schnell kann's gehen **traffiQ**
Frankfurt am Main



**wie, du bist
schon da?**

Linie 14
Zoo -
Sachsenhausen
8 Minuten

so schnell kann's gehen **traffiQ**
Frankfurt am Main

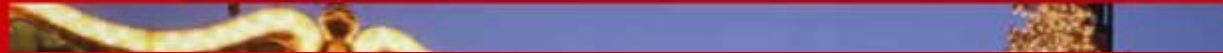


**huch, ihr seid
schon zurück?**

U6
Westend -
Ostbahnhof
8 Minuten

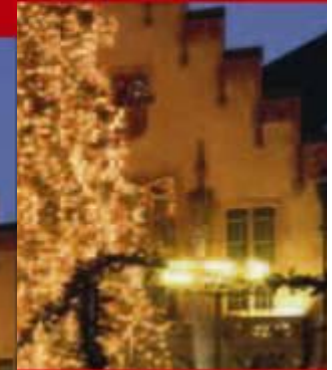
so schnell kann's gehen **traffiQ**
Frankfurt am Main

Von hier aus der Nase nach



Von hier

Von hier aus 2 Minuten



zum Glühwein

 11 -> Römer/

traffiQ
Frankfurt am Main

zum Glühwein

 11 -> Römer/Paulskirche

traffiQ
Frankfurt am Main



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THANKS

Any question?

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