MODERN PUBLIC TRANSPORT: EVOLVING TRENDS & CHALLENGES

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International Association of Public Transport
UITP

UNECE/TRANS Working Party on Transport Trends and Economics (WP.5)
28th session | Geneva | 7-9 September 2015
UITP: A GLOBAL ASSOCIATION
UITP: DIVERSE MEMBERSHIP

1300+ member companies
- Operators
- Authorities
- Public transport supply and service industry
- Research centers and universities

99 countries
Europe: 490 cities involved

Our mission: Knowledge | Advocacy | Business
August 2014
UN Secretary-General Ban Ki-moon invites UITP Secretary General Alain Flausch to seat on the High-level Advisory Group on Sustainable Transport

September 2014
Climate Summit NYC: UITP’s Declaration of Climate Leadership
350+ actions pledged
110 public transport organisations

December 2015
COP21 Paris: UITP highly involved
1. PUBLIC TRANSPORT SECTOR: OVERVIEW & STRATEGY
UITP’S
PTx2 STRATEGY

→ Doubling the market share of public transport worldwide by 2025

→ Galvanise the PT sector (56.8bn journeys/year)
→ Safeguard liveability of cities

→ Five strategic axes:
  ‣ Develop visionary urban governance
  ‣ Create a favourable business environment
  ‣ Secure stable funding and investment
  ‣ Focus on customer needs, lifestyle and innovation
  ‣ Resort to demand management measures

WHERE ARE WE NOW?
MCD 2015
MOBILITY IN CITIES DATABASE

- 60 metropolitan areas worldwide (data for 2012)

- Evolution of urban mobility patterns in the past 20 years

- Comparable data using detailed definitions and harmonisation methods
GROWTH IN URBAN DENSITY

Average number of inhabitants per urban hectare in developed cities

<table>
<thead>
<tr>
<th>Year</th>
<th>1995</th>
<th>2001</th>
<th>2012</th>
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<tbody>
<tr>
<td>Prague</td>
<td>68</td>
<td>64.5</td>
<td>68.2</td>
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<tr>
<td>Vienna</td>
<td>+16%</td>
<td>+12%</td>
<td></td>
</tr>
<tr>
<td>Oslo</td>
<td>+11%</td>
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<tr>
<td>Munich</td>
<td>+11%</td>
<td></td>
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<tr>
<td>London</td>
<td>+8%</td>
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</table>

Percentage change 1995-2012

UITP
EVOLUTION OF MOTORISATION

- London: -10%
- Geneva: -8%
- Glasgow: +27%
- Delhi: +88%
- Beijing: +111%

Percentage change 1995-2012

Average number of cars per 1000 inhabitants
GROWTH IN PT SUPPLY

Percentage change 1995-2012

Beijing +367%
Geneva +48%
Oslo +38%
London +37%
Hong Kong +36%
Paris +28%

Average evolution of public transport vehicle x km produced
MODAL SHARE EVOLUTION

Oslo +61%
Geneva +35%
Stockholm +32%
Singapore +28%
Vienna +26%
Paris +22%
Budapest -29%
Casablanca -22%

Percentage change 1995-2012

Developed cities
Developing cities

Average share of public transport out of motorised and mechanised trips
LOCAL PT JOURNEYS (2012)

EU average of 132 journeys per urban inhabitant in 2012

- More than 150 journeys per urban inhabitant
- More than 100 journeys per urban inhabitant
- Under 100 journeys per urban inhabitant
- No data available

Figure 3 Local public transport journeys by bus, tram, metro, per urban inhabitant in 2012
LOCAL PT JOURNEYS: EVOLUTION (2000-2012)

Change in local public transport journeys by bus, tram, metro between 2000 and 2012.
URBAN MOBILITY TRAJECTORIES: PT SUPPLY PER INHABITANT

Vienna
Geneva
Berlin
Tokyo
Helsinki
Prague
Paris
Munich
Barcelona
Tehran
Casablanca
SUCCESSFUL MODAL SHIFT: DRIVERS

<table>
<thead>
<tr>
<th>City</th>
<th>Public transport modal share</th>
<th>Public transport supply per inhabitant</th>
<th>Urban density</th>
<th>Motorisation</th>
<th>Car use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vienna</td>
<td>Strong growth</td>
<td>Strong growth</td>
<td>Growth</td>
<td>Decrease</td>
<td>Strong decrease</td>
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<tr>
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<tr>
<td>Barcelona</td>
<td>Stable</td>
<td>Strong growth</td>
<td></td>
<td>Stable</td>
<td>Increase</td>
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<td>Berlin</td>
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<td>Stable</td>
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<td>Decrease</td>
<td>Increase</td>
<td>Strong increase</td>
<td>Strong increase</td>
</tr>
<tr>
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<td>Increase</td>
<td></td>
<td></td>
<td></td>
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<td>Delhi</td>
<td>Strong increase</td>
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UITP
2. PUBLIC TRANSPORT TRENDS: CHOSEN FINDINGS
COMBINED MOBILITY is public transport in synergy with car-sharing, bike-sharing, taxis, etc.
Car-sharing and public transport: an evolving interaction

“One car-sharing car replaces up to 12 privately owned cars.”

FIGURE 7: CAR-SHARING DEVELOPMENT IN GERMANY IN THE LAST YEARS
Source: BCS Germany (Bundesverband Car Sharing)
Restructuring: Operator’s Side

Traditional public transport industry vs. newcomers and large transnational passenger transport operators

Liberalisation encouraged new entrants to develop a mix of improved service quality and better price (contracting)

Big data: a source of efficiency gains, new services, integration, a better understanding of travellers

Individualised information on customers by operators
TRENDS IN FUNDING: PT FINANCING MODEL

- Fares are becoming more sophisticated
- Development of commercial revenue
- Private sector taking the lead through PPPs
- Contribution of direct and indirect beneficiaries (e.g. land value capture)
FIGURE 10: SPECTRUM OF DIFFERENT PUBLIC PRIVATE PARTNERSHIP MODELS  

**Public**
- Restructuring incorporation
- Civil works contracts: DBB*, and DB*
- Service contracts

**Public-Private Partnership**
- Management and operating contracts
- Lease
- Concession
  - BOT*
  - DBO*
  - DBFO*
- Joint venture
  - Partial divestiture

**Privatization**
- Full divestiture

**Public ownership and finance**

**Mix of public and private ownership and finance**

**Private operations**

**Public operations**

**Extent of private participation**

* DBB: Design-Bid-Build, DB: Design-Build, BOT: Build-Operate-Transfer, DBO: Design, Build, Operate, DBFO: Design-Build-Finance-Operate
COMMERCIAL PROPERTY DEVELOPMENT

**Figure 11: Range of UK property premiums compared to station distance**
Source: Nationwide, 2014

- **500m**
  - Manchester: 4.6%
  - Glasgow: 6.0%
  - London: 10.5%

- **750m**
  - Manchester: 3.2%
  - Glasgow: 4.2%
  - London: 7.6%

- **1,000m**
  - Manchester: 2.0%
  - Glasgow: 2.6%
  - London: 4.9%

Land lies at the heart of the most successful urban transport networks.
UITP FINANCING TOOLBOX

GROW with PUBLIC TRANSPORT

HOME
ABOUT
BENEFITS
RECOMMENDATIONS
TOOLS & PROJECTS
AWARDS
ALL TOGETHER
FRIENDS

WHAT CAN I DO?
› Policy makers
› Transport community

SCENARIOS 2025

FINANCING TOOLBOX

REVENUE STRATEGY   EARMARKING
COST MANAGEMENT   NEW PARTNERSHIP

PUBLIC TRANSPORT FINANCING

Ensuring adequate funding for public transport is crucial in a context of growing demand and increasing quality expectations from customers. However, there is rising tension between the costs incurred by these trends and the traditional revenue streams for public transport.

Doubling the market share of public transport worldwide critically relies on the capacity of the sector to combine considerations on funding with the development of a new business model and the integration of public transport with other urban policies.

There is, indeed, no silver bullet for the funding of public transport and successful approaches combine the development of a proper revenue strategy, the earmarking of local charges for public transport, and the establishment of partnerships with private investors.

THE TOOLBOX

The purpose of the public transport Financing Toolbox is to provide inspiration on innovative revenue sources, critical analysis of existing and emerging practices, best practice case studies.

http://growpublictransport.org/tools-and-case-studies/financing-toolbox/
UITP FINANCING TOOLBOX

Fare Strategy
- Revenue Management
- Revenue Regulation
- Secondary Revenue

Earmarking
- Employers
- Private car users
- Property owners and land developers
- Transport funds

Joint Partnerships
- Debt Financing
- Public Private Partnerships
- Joint Development Projects

Cost management
3. STANDARDIZATION: CASE OF TICKETING
WHY DO WE NEED PAN-EUROPEAN TICKETING SCHEMES?

• Deregulation and competition

• Passengers are increasingly left to consult several operators rather than one

• The deregulated airline industry: strong alliances and an abundance of price comparison websites

• The rail market: lack of the basic standardization and interfaces

• It is just too complicated to go by rail!
WHAT IS THE ISSUE?

- Local public transport is a local responsibility all over Europe. Each city or region has its own information and ticketing system.

- The Ticketing industry lives well with it!

- The bulk of PT ridership is local; Is the market for national or pan-European solutions large enough? Is there a business case?

- And there is still strong resistance against Open data within our sector...
COLLABORATIVE TICKETING INITIATIVES

• STA-"Smart Ticketing Alliance". Non-commercial cooperative body for standardisation and interoperability: IT, Calypso, VDV e-TS and AFIMB.

• The White paper, Shift2Rail IP4, and EP 4th Railway package initiatives, all focus on establishing a pan-European ticketing and information system by 2020.

• Important ongoing work in IT2Rail project and FSM project. Roadmap advice from AWT and Transforum.

• OMTA-"Open Mobile Ticketing Alliance" (LTA Singapore; Scheidt & Bachmann, Thales, VeriFone Mobile Money, Nokia).
• OSPT-Cipurse-"Open standard" (Infineon G&D mfl industry actors)
• ETC-"European Travellers Club". Account-Based Travelling across Europe (VDV, UL, NXP, Trans Link).
• FSM "Full service Model"- railway companies with DB in lead.
• ASCAN in Sweden (Cubic customers; vendor specific interoperability).
• iPSI "Interoperable Product Service" in Germany: a solution that ties together the app-based ticket and info solutions and allows the sale of each other's tickets.
4. CONCLUSIONS
WE NEED A MIX OF SOLUTIONS

→ Increase in public transport supply necessary but not sufficient to improve modal share

→ It must be complemented by policies that manage the demand for private vehicle travel (e.g. parking restrictions, congestion charging)

→ It must encompass integrated urban planning and design aimed at increasing density and reducing urban sprawl
UNECE: CALL FOR ACTION

UITP calls for the support of government at all level to develop attractive and efficient public transport!

→ **Earmark more resources** for the development of sustainable urban mobility

→ Use **contracting/tendering** with operators as proactive tools towards gradual decarbonisation

→ Use life-cycle **carbon footprint analysis** to select optimal transport infrastructure projects

→ Raise effectiveness and **utilization** of PT infrastructure and projects (CoA report 2014)
UNECE SECRETARIAT: CALL FOR ACTION

UITP is eager in the exchange of ideas and practices within the UNECE framework!

→ UITP-UNECE joint urban mobility events and technical visits

→ Common position papers and publications (statistics; best practices analyses and dissemination; guidelines)

→ UITP’s expertise support to various UN and UNECE’s working groups and initiatives (e.g. THE PEP, post 2015-SDGs)

→ UITP’s permanent support to a potential Working Group on Urban Mobility (information exchange, joint projects)
Thank you for your attention!

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