Employment in public transport: 13 million people worldwide!

This paper outlines the first findings of the UITP Observatory of Employment in Public Transport*. The purpose of this initiative is to provide key figures and quantified information to support the decision-making and advocacy work of UITP and its members. The project provides a dynamic tool to measure the evolution of recruitment and employment in the medium and long term in light of the UITP strategy for the public transport sector.

Introduction

About half of the world’s population currently lives in urban areas. The world’s urbanisation rate is growing steadily and it is set to reach 70%¹ in 2050. Cities are thus becoming ever-more crucial for economic development and job creation. The harmonious development of cities critically relies on efficient mobility and high-quality public transport. UITP has addressed this challenge by setting out the ambitious objective of doubling the public transport market share worldwide by 2025².

Figure 1: People employed by public transport operators in 2009 per UITP region (in thousands)
These developments highlight the need to quantify the volume of employment generated by public transport in cities. In developed economies, hit by the economic crisis, it is essential to show the potential of public transport for the provision of stable, green jobs that develop professional skills. In developing economies, quantified information is crucial in order to plan and to organise the challenging task of recruiting an adequately qualified workforce. In all cases, showing the significance of the public transport sector for the economy is also a priority.

This study is based on a combination of desk research (local and national sources) and a questionnaire survey (about 80 questionnaires completed). Data refer to the year 2009. The study covers all modes of urban and suburban public transport. It excludes interurban and long-distance transport. Although the distinction is sometimes difficult to make, this study focuses on formal public transport and tends to exclude informal public transport. It also excludes taxi services, even if they are formally considered as public transport in some regions.

Public transport jobs worldwide

In total, the public transport sector employs about 13 million people worldwide in 2009.

Operators

Urban public transport operators provide employment to about 7.3 million people worldwide (full time equivalent). Figure 1 shows the distribution of these jobs by UITP region. Eurasia has the highest density of employment in public transport (6.8 jobs for 1,000 urban residents), while Sub-Saharan Africa has the lowest (0.25 jobs for 1,000 urban residents).

Authorities

Public authorities in charge of public transport employ about 300,000 people worldwide. It should be noted that this estimation covers mostly public authorities at the local level.

Supply chain

The number of jobs in the public transport supply chain worldwide, that is, jobs involved in the provision of goods and services to public transport operators and authorities, is estimated at about 5 million. This is a conservative estimation and it excludes jobs induced through spending by sector employees as well as jobs created by catalytic impact on the economy.

Empowering the economy

The number of people employed in the public transport sector worldwide is similar to the population of The Netherlands or Equator. To make comparisons within the wider transport sector, the air transport sector employs about 12 million people worldwide (airlines, airports and supply chain, for both passengers and freight)³.

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Figure 2: Evolution of the number of employees of public transport operators (EU-27) index: 2007=100; based on 27 observations

![Graph showing the evolution of the number of employees of public transport operators (EU-27) index: 2007=100; based on 27 observations. The graph shows increased productivity and increased production over the years 2000 to 2010.](image-url)
The public transport operator(s) is (are) the largest employer(s) in cities such as Amsterdam, Barcelona, Brussels, Genoa and Dublin. The public transport operator(s) is (are) within the top 5 employers in cities such as Paris, Budapest, Porto, Madrid, Turin and Tallinn.

Research into transport investment as part of the recovery plan in the USA provides evidence that investing in public transport produces twice as many jobs per dollar as investing in roads. Per billion dollars, about 16,000 job-months were created from public transport investment, while only 8,500 were created from road building.

Evolutions in the last decade (EU-27)
The number of employees of public transport operators in the EU-27 decreased by just under 4% between 2000 and 2010 (as shown in Figure 2), which corresponds to a loss of about 45,000 jobs. However, a closer look reveals that the number of employees started increasing again in 2007, rising by about 3% between 2007 and 2010.

The overall decrease in employment is largely due to labour productivity gains during the decade: for instance, the number of employees per kilometre produced decreased by about 20% in Germany between 2000 and 2009, and by about 10% in Italy between 2002 and 2009. The increase in employment between 2007 and 2010 reflects the increase in the number of kilometres produced, which is due for its part to the growth in demand since the middle of the decade.

Figure 3 shows that, between 2007 and 2009, the number of kilometres produced increased more quickly than the number of employees, which clearly indicates that public transport is currently creating new jobs while also continuing to improve its labour productivity.

The expected relative decrease in volumes of employment in 2011 reflects the decrease in the production of kilometres due to lower ridership in 2010 in the wake of the economic crisis.

It is plausible that part of the decrease in the number of employees of operators is due to an increase in volumes of subcontracting. However, although public transport operators usually confirm that volumes of subcontracting are tending to increase, it has not been possible to quantify the extent of this effect at this stage.

It is also interesting to note that the volume of employment at public transport operators, although affected by the economic crisis, has proved more stable than the overall level of employment in many sectors and countries since the beginning of the economic crisis.

The volume of employment at public transport organising authorities in the EU-27 increased steadily between 2000 and 2010, rising by almost 20%, reaching about 60,000 employees in 2009. This reflects the increasing number of organising authorities and the diversification of their missions.
Occupations offered by public transport operators (EU-27)

About 55% of the total number of employees of public transport operators are drivers. The remaining 45% is shared between management, technical/maintenance, ticket inspectors, customer advisors, and other tasks. In the case of bus-only operators, the share of drivers is 70%.

Although a number of operators subcontract a part of their transport services, it seems that the increase in subcontracting is mostly due to the subcontracting of support activities, such as maintenance.

Drivers’ age and turnover (EU-27)

The average age of drivers is similar for all modes, at about 43 years. However, the amplitude between the minimum average age and the maximum average age varies significantly within the sample (46 observations). While the deviation is pretty limited for bus drivers (4 years), it is wider for metro drivers (10 years) and tramway/LRT drivers (13 years). This probably reflects the active development of tramway lines in European cities to complement existing networks.

Labour turnover of drivers is the sum of drivers entering and leaving the organisation during one year divided by the total number of drivers at the beginning of the year. This definition is identical to the Organisation for Economic Co-operation and Development’s (OECD) definition of labour turnover. Labour turnover of drivers is similar for all public transport modes, at about 12%. This relatively low figure denotes the stability of the driver’s job.

Conclusion

Public transport is a fast-growing sector which plays an active role in the development of the urban economy. While green growth is tagged as a major factor of economic recovery in developed economies, and a condition for sustainability in developing economies, the potential of public transport to provide green, stable jobs that develop professional skills is one of its key assets.

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For more information, see: http://www.uitp.org/advocacy/public_transport.cfm
3 Source: Air Transport Action Group.
4 Source: ‘What we learnt from the stimulus’, 2010, Centre for Neighbourhood Technology (et al.).

* The Observatory of Employment has been created under the patronage of the Commission on Business and Human Resources Management, at the initiative of its chair Sylviane Delmas, Inspectrice Générale, RATP, Paris, France and in cooperation with the Transport Economics Commission.

Contact:
Jérôme Pourbaix, jerome.pourbaix@uitp.org and Cécile Sadoux, cecile.sadoux@uitp.org