SUMMARY RECORD

6th Meeting on International Transport Statistics

18-19 April 2019 OECD, Paris

Chair: Ms Patricia Hu, Director, US Bureau of Transportation Statistics

1. Welcome and objectives of the meeting

The 6th ITF International Transport Statistics meeting took place in the OECD conference centre from 18 to 19 April 2019 and was chaired by Ms Patricia Hu, the Director of the US Bureau of Transportation Statistics. The meeting was well attended, with 16 countries and 5 international organisations represented for a total of 36 attendees.

During the opening of the session, the chair reminded attendees that this is an interactive meeting that depends upon active contributions from all at the table. She also reminded that the primary goals of the meeting are to harmonise methodologies for use of transport statistics, to discuss communication and visualisation ideas for data and to share recent developments in transport statistics in countries. Mr. Jari Kauppila, Head of the ITF Quantitative Policy Analysis and Foresight Division, welcomed all participants and introduced the meeting background and expected outcomes.

The minutes of the last meeting were approved.

2. Measuring Transport contribution to the economy

Mr. Kauppila recalled the ITF Task Force Report from 2013, *Understanding the Value of Transport Infrastructure: Guidelines for macro-level measurement of spending and assets*. The report was created with the goal of improving international benchmarks and the comparability of data on the value of transport infrastructure. Furthermore, data on value and spending can be difficult to collect and harmonised methodologies and definitions can help countries in providing this data. At the ITF, there have been significant improvements in data coverage for the survey of transport infrastructure investment and maintenance since the report was published. However, there is still room for improvement. For instance, countries do not currently provide an index on construction of infrastructure, which is needed to deflate the data. The ITF uses construction indices for countries where they are available, but all countries are encouraged to develop a similar index to ensure the comparability of the data.

There were several challenges brought up as well; Ms. Hu discussed the difficulty of measuring the value of privately owned assets and Ms. Heike Link of the German Institute for Economic Research described the complexities of extracting maintenance spending figures from investment data. Ms Noreen Dorgan from the Irish Central Statistics Office suggested that countries that collect private maintenance data share their methodology with the group. Mr. Kauppila proposed that we could follow-up on this topic next year, with shared experiences from countries that are able to access private sector data.

Ms. Claudia Kemper Pacheco from Transport Malta gave a presentation on forecasting models for transport that have been developed to improve policy decisions on road congestion and climate change. The models showed the potential impacts of proposed policies on road and sustainability interventions. The models were developed by two consultants using open source data and are used by the ministry and statistical offices.

Mr. Sezai Celik of the Ministry of Transport and Infrastructure Turkey presented the work done measuring the impact of transportation and communication investment on socio-economic variables, such as GDP, employment and production. Through these input-output analyses, the press, parliament and citizens have been able to see some of the value and impact of the transport sector and the ministry hopes to continue this project by eventually developing transport satellite accounts.

3. Transport Satellite Accounts (TrSA)

Ms. Sarah Swan from Statistics Canada gave an informative summary of the Transport Satellite Account Working Meeting that took place the day before. The first point of the meeting was that it must be decided which policy related questions we plan to answer using TrSA. These questions must be clearly listed and prioritised before any country begins developing a TrSA. The ITF will draft a 4-page guide that will show the benefits of TrSA, which can facilitate the understanding of the value of TrSA and generate stronger communication and support for their development. There will also be a more technical manual drafted that will define a harmonised scope and methods for TrSA focussing on 5 main areas i.e. transport activity, infrastructure spending, environment impact, government finance and employment. (For further information, please see the minutes of the TrSA meeting).

4. Transport Connectivity for Regional Integration

Ms. Mary Crass, Head of Institutional Relations and Summit at the ITF, gave details on the 2019 ITF Annual Summit in Leipzig, Germany, which concerns “transport connectivity for regional integration”. The 2020 summit will be on the topic of innovation.

Mr. Kauppila presented on the ITF project on Central-Asia connectivity, which has the goals of measuring gaps in connectivity and the impact of policies on connectivity. The connectivity was estimated with a gravity based model that takes into account the cost of transport, speed, constraints in infrastructure and border crossing times.

Ms. Hu discussed connectivity databases recently developed using BTS geospatial data. The intermodal passenger connectivity database analyses showed that rural Americans are losing intercity access. The intermodal freight connectors database has allowed a new perspective on how freight is moving through the country; the existing commodity flow survey administered every 5 years in the U.S. does not give information on freight flows by mode. The development of these two databases was costly since it had to be done through manual data scraping, so they are currently looking into web scraping options that could be used to update the databases in the future.

During a tour de table, Mr. Mario Lapointe from Transport Canada mentioned the roundtable on connectivity that will take place in Ottawa (September 23-24) as part of the ITF Research Program of Work. Since Canada is one of the least densely populated countries in the world, distance and weather conditions can be non-negligible challenges to connectivity. They are currently working on analysing passenger and freight movements to better understand how to improve connectivity, with the hopes of eventually extending the study to include all of North America. Additionally, Ms. Apolonija Oblak Flander of the Statistical Office of the Republic of Slovenia voiced that connectivity data for freight is challenging to estimate even in smaller countries. Ms. Pacheco reiterated this idea, saying that it is difficult to obtain freight data from ports in Malta. They currently only have embarking and disembarking data and would like more information on estimation methods of freight flows. Ms. Hu responded that the U.S. is currently looking into machine learning and web scraping methods to estimate freight flows.

5. Data and support of decision making

Mr. Lapointe discussed the use of Earth Observation data that is being used to facilitate better decision making in Canada. For maritime, this data allows for vessel detection and pollution monitoring. For land movements, EO data can sense infrastructure stability (i.e. predicting rock slope failure using LiDAR), which can indicate if a railway needs protection, if a bridge needs to be reinforced, etc. Data scientists are responsible for this work, using GeoServer and Spaceborne AIS data. The satellite circulates twice a day, allowing for near real-time data. Mr. Georgios Xenellis of EC Eurostat added that European Maritime Safety Agency has AIS data and is using it to estimate tonne-kilometres. They are currently extending this work to cover inland waterways as well.

After the presentations, Ms. Hu asked all attendees what decisions are made with their data (what data is most often requests of them). The responses were centred on the following topics: safety, modal shift, climate change, energy use, environmental sustainability and investment planning.

6. Lightning talks on visualisation methods

To begin the discussion on visualisation, Mr. Markus Sigismund of the Federal Ministry of Transport and Digital Infrastructure presented on a triple frame survey developed in Germany on the daily use of vehicles for more than 100 000 households. The study showed that most cars are sitting at home for over 20 hours a day on average and used 2 hours a day for short trips, which is a strong argument for car sharing.

Mr. Alexander Blackburn of UNECE presented an interactive map tool for European railways, using rail census data collected every 5 years by Eurostat. This project is a continuation of a similar road infrastructure tool that was developed last year. There remains challenges with consistency in the data collected across countries and for the moment countries that only have origin destination data have their rail network represented by straight lines. The map shows the number of trains per day, which can be used to identify bottlenecks and specific corridor analysis. It also combines rail and heavy road vehicle traffic to highlight modal shift possibilities. Passenger-kilometres and tonne-kilometres data cannot yet be viewed with this tool.

Ms. Hu mentioned the “Solving for Safety” visualisation challenge that was created by the U.S. Department of Transportation to find creative solutions to reduce serious crashes on the nation’s roads and railways. The challenge began in June 2018 and Stage II prizes were awarded in April 2019.

7. Innovation in transport measurement

Mr. Yoshihiro Nemoto of the National Land Transport Agency of Brazil presented on the Canal Verde Brazil project (CVB), which is an intelligent national network for monitoring and mapping transport flow on logistic corridors. The project uses sensor cameras fixed on portals across roads to monitor and regulate truck traffic and congestion at ports. The objective of the project was to stops trucks that do not comply with the regulation and improve waiting time of lorries at ports. The result of CVB was that 95% of trucks changed behaviour which improved safety, reduce congestion and increased competitiveness in the logistics sector. Indeed, trucks arrive much more consistently on time because they each have a preassigned time when they are allowed to arrive at a port.

Mr. Lapointe discussed new methodology developed in Canada for Trucking Commodity Origin-Destination survey. The business registry was linked with vehicle registries to survey in-house trucking, since it accounts for much of trucking in large companies. Electronic data reporting and GPS data was used then to model freight statistics. This method simplifies OD data collection and is also much less costly than traditional surveys.

8. Glossary for transport statistics

Mr. Mario Barreto, from the ITF along with Mr. Xenellis and Mr. Blackburn gave updates on the status of the fifth edition of the *Illustrated Glossary for Transport Statistics*, a key reference document for transport statistics. This was a major project that lasted for 2 years including not only Eurostat, UNECE and the ITF but also a consultant, various experts, international organisations and Member States. The 5th edition updates definitions that were previously ambiguous and ensures a better consistency of terms between chapters. It also includes new definitions, new illustrations and 4 new chapters (Maritime Accidents, Energy Consumption, Environment Impact and passenger mobility). The English edition has been finalised and will be presented at the next UNECE WP6 meeting (12-14 June, Geneva). It is currently being translated into all 33 EU languages plus Russian.

9. ITF statistics activities

Ms. Ashley Acker, from the ITF, gave updates on the three ITF data collections (annual trends, short-term trends and infrastructure investments), including their coverage and response rates. Particular attention was given to the recent country level trends in spending on transport infrastructure. Attendees were reminded of the vast ensemble of transport performance indicators that are calculated by the ITF using the collected data, and that are accessible on the OECD data portal. There was also mention of plan to further develop the use of these KPIs by developing country level analyses to be published on the statistics page of the ITF website.

Mr. Kauppila gave an overview of the key findings in the 2019 ITF Transport Outlook, which is to be published in May. This ITF flagship publication describes predictions of global transport volumes and emissions through 2050, based on in-house models for all modes of freight and passenger transport at the global, national and city level. The focus of the 2019 Outlook is assessing the potential impact of an ensemble of disruptions to the transport sector (autonomous driving, teleworking, 3D printing, E-commerce, etc.). The topic of autonomous trucks was discussed further since Ms. Hu pointed out that the U.S. and other countries are struggling with employment shortage in the trucking industry.

Mr. Alexandre Santacreu, from the ITF, discussed a recent report entitled “Safer City Streets: the global traffic safety network for liveable cities”. The Safer City Streets database includes statistics on crashes and on urban mobility for 31 cities. They have used household travel surveys to estimate data on urban mobility. There are very different methods and variable definitions/mode groupings used by each country, which makes comparability challenging. However, it is currently one of the only sources for such data. Recent analyses of this data show that two key factors to ensuring a city is safe are: speed limits and setting up the infrastructure so that a city is not car dependent.

Ms. Wei-Shiuen Ng gave a presentation on existing ITF publications and future plans to work on the subject of gender in transport, as it is one of the new identified priority workstreams of the ITF Secretary General. The ITF has been a platform for policy dialogue on the subject in recent years, with a related event organised each year at the annual ITF Summit. Additionally, there are already five ITF reports published examining gender differences in mobility, travel behaviour, and safety and security in transport systems. In order to expand this body of work, the ITF needs to better understand the related policy areas of interest in our member countries, as well as the availability of gender segregated transport data. Ms. Ng opened up the floor to the floor to get inputs from attendees. Mr. Blackburn spoke of a recent road safety study by gender done by UNECE showing that the most countries with the most accidents also have the greatest gender gaps. He mentioned that there is rail employment data broken down by gender, and that he would be interested in collecting passenger-kilometre data by gender. Ms. Hu mentioned that the U.S. has transport data available by gender, but not for air travel. Ms. Oblak Flander described how challenging is in Slovenia to estimate passenger-kilometre data as such and that at present from the available data sources and surveys

it is not possible to prepare these estimations by gender. In Slovenia, data on passengers for all modes of transport are namely available only for the total passengers and it is not possible to get these data by gender. The only source that at present enables the analysis of gender by the modes of transport in Slovenia is the Passenger mobility survey (in the past such source was the population census). She expressed interest to learn about the methods to collect data by gender in regular data collection of passengers for all modes of transport. Mr. Nikesh Lad of the United Kingdom Department for Transport said that many of their travel surveys include gender and that variable is analysed to a certain degree, although they are looking into developing the gender analysis further. Ms. Alice Favre said that the International Union of Railways (UIC) has employment data by gender.

10. International co-operation

The recent activities of Eurostat were presented on by Mr. Xenellis. In addition to the regular statistics collected through five legal acts, new legal acts on rail and inland waterways in 2018 allowed for data to be collected on rail accidents and passenger transport by inland waterways. The 2018 edition of *Energy, transport and environment indicators* and the *Eurostat regional yearbook* focusing on road transport have been published. He also provided links to the databases and to an air passenger visualisation tool, and the 2019-20 schedule of working groups.

Mr. Blackburn updated attendees on the UNECE Working Party on Transport Statistics in 2018 and 2019. He also discussed the work done to monitor Sustainable Development Goals, with examples of indicator platforms and proposed improvements for measurements for SDG 9.1.2 (Passenger and freight volumes, by mode of transport). Four transport-related SDG papers have been published (see link in slides). Furthermore, UNECE has a new visualisation tool for e-rail traffic, which compliments the e-road traffic tool developed last year.

Ms. Iuliana Lupu of DG Move Europa, gave an overview of recent developments in EU transport policy. In 2019, the European Commission is working on a SDG Monitoring Report for goals 3, 7, 9, 11, and 13. There will be a reflection paper published this year covering three possible scenarios for climate and sustainability actions taken, entitled “Towards a Sustainable Europe by 2030”. There is also a study this year evaluating the strategy of the 2011 White Paper “Roadmap to a Single European Transport Area”, with results expected by the end of 2020. An extensive data collection was launched this year entitled ‘New Mobility Patterns in European Cities’. It will include city level data on passenger mobility, urban logistics, fleet composition, transport activity and traffic in the EU (first results available Q1 2021). In March 2019, “Transport in the European Union: Current Trends and Issues” was published; it assess the performance of EU countries and explores policy levers to address identified challenges.

Ms. Favre of UIC gave updates on the latest data publications, which can be viewed and visualised using the Railisa web-based application. Railisa has recently been redone to make it more user-friendly, and the benefits of the latest version were outlined by Ms. Favre. The 2018 UIC Safety Report is published and available online.

11. Conclusion and next steps

In the concluding remarks, Ms. Hu suggested that we aim to make the meeting agenda more strongly linked to questions of policy makers so that the lessons shared can be relevant and of most value. In particular, she suggested choosing the topics so that they feed into the ITF Summit. The 2021 Summit will be on inclusiveness (inclusive societies, sustainable economies, decarbonising, etc. for the transport sector). Additionally, as there are more and more disruptions in transport that have the potential to shift or even transform the sector, it was proposed that we focus on a new disruption for each future meeting (e.g. ecommerce, 3D printing).

During the meeting, it was decided that there should be a focus the following year on methods to estimate freight and passenger movements and connectivity. It was also decided that there should be lightning talks on a topic other than visualisation methods.

The topics suggested by attendees for the following ITF transport statistics meeting are as follows:

Mr. Lapointe (Canada) - Connectivity, innovation and transport measurements

Mr. Yanar (Turkey) – Accessing mobility for reduced mobility people

Mr. Jacques Lavertu (France) - Internet based surveys to measure daily passenger mobility

Mr. Sigismund (Germany) – Updates on big data analysis

Ms. Oblak Flander (Slovenia) – Gender differences in the transport sector

Mr. Pieter Arie Vlag (Sweden) - Commodity flow and intermodal freight surveys

Mr. Xenellis (EuroStat) - Innovation in measuring new mobility patterns

Mr. Mohamed El Hadraoui (Morocco) - Efficiency in infrastructure investments

Mr. Lukas Jankovic (Slovakia) – Shared mobility platforms

Mr. Nemoto (Brazil) - Decision making tools and measuring the contribution of the transport sector the economy