



Transport Satellite Accounts

A Tool for Transport Policy Makers

What

are Transport Satellite Accounts?

A Transport Satellite Account (TrSA) provides a single consistent **framework to measure the full physical and monetary contribution of all transport activity** across all sectors of the economy. It enables measuring transport activity undertaken by all industries and households, including their costs, capital expenditure, income, employment, hours worked, as well as volume data such as vehicle stocks, emissions and so on.

Transport Satellite Accounts (TrSAs) are generally built with Supply and Use Tables (S/U Tables) from the System of National Accounts (SNA) as their main data sources. However, **TrSAs can integrate a variety of data sources** to make implicit transport activity observable, depending on the scope and coverage of the analysis and the availability of data.

Transport impact assessment in various economic sectors is one of the immediate benefits of TrSAs for policy makers:



TrSAs allow better modelling of transport activities by including "own account" transport outputs in the production of transport services.



TrSAs consider ancillary transport activities and so help to better understand how the transport industry contributes to the whole economy.



TrSAs link transport activities with GDP to provide a credible and comprehensive measure of the contribution of overall transport to the economy and allow comparisons across countries.



TrSAs combine monetary and volume data, thereby creating an integrated framework for informed policy development and decision making.



TrSAs assess existing transport infrastructure assets, providing important information for prioritising infrastructure investment and maintenance expenditures.



TrSAs provide a single value for the whole transport activity, making it possible to analyse changes in transport services themselves (as products) and their relationships to other industries.

A TrSA brings many of these benefits, but regular updates are required to evaluate and refine policy impacts on transport activity across the whole of the economy over time. Regular updates also allow for maintaining skills and the know-how required to build a TrSA.

Why

are Transport Satellite Accounts important?

The System of National Accounts provides a broad picture of the economy, but separately enumerates **only a fraction of all transport activities**. Household transport operations and transport for own account can represent **more than 50% of a country's transport activity**, but they are either not reflected in the calculation of Gross Domestic Product (GDP) or hidden within the contribution of other sectors. This can lead to major misinterpretations planning transport investments and developments.

Generally **TrSAs can answer several policy questions**. They provide missing data critical for evidence-based decisions. They support transport planners and also help the private sector to better calculate transport productivity and costs of their businesses, as well as comparing them to other industries.

Steps

to build a Transport Satellite Account

1

Define the scope of the TrSA: Select from the S/U Tables the related breakdown of economic activities, products, taxes (less subsidies) on products, value added components according to the TrSA area of focus.

2

Include own account transport services produced by enterprises and by households for own private use.

3

Compile additional relevant data on employment, investment and capital stock.

4

Complement information with physical indicators relevant for TrSA, such as vehicle stock, emissions ...

The International Transport Forum is working on common guidelines and methodologies to build a harmonised and internationally comparable TrSAs. Each country will then have the possibility to further develop this core basis according to their priority policy questions.

Building an initial Transport Satellite Account

Building an initial Transport Satellite Account typically requires resources of around EUR 300 000 depending on the area of focus and the amount of data already available. This includes

two to three persons over a period of nine to twelve months. More resources are then required to maintain and develop the TrSA .



EUR 300 000



2 to 3 persons



9 to 12 months

Questions

that Transport Satellite Accounts can answer

- How much does transport activity contribute to the overall economy?
- What is the share of each transport mode?
- How much does each economic sector rely on transport services?
- What impacts do specific transport policies have?
- What is the share of “own account” transport by industry?
- How much employment is generated by the transport activity?
- What are the economic and social costs of transport safety?
- How much transport do households consume?
- What is the value of transport infrastructure assets?
- What is the size of ancillary transport activities?

Findings

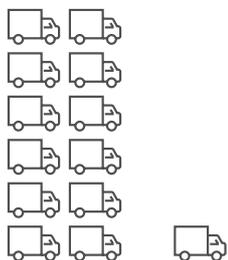
from existing Transport Satellite Accounts

The benefits of TrSAs for understanding the importance of transport by industries are increasingly being recognised. The United States and France have published TrSAs for several years. Other countries, for instance Canada and

Australia, have recently created their own TrSAs. Additional countries are looking into introducing TrSAs. Examples of important findings from existing TrSAs include the following:



In Canada, most industries produced more own-account trucking than purchased trucking services. For example, retail trade used almost **12 times** more own-account than purchased trucking services.



Own-account trucking

Purchased trucking services



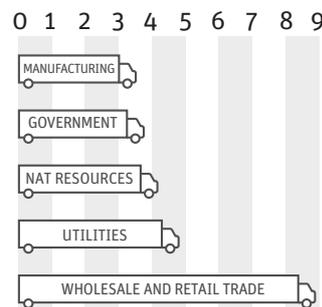
In France, total transport expenses in 2018 amounted to EUR 425.1 billion or **18.1% of GDP**.



Total transport expenses



In the United States, the wholesale and retail trade sector requires more transport services (cents per US dollar of output) than any other sector.



Cents per US dollar of output



In Australia, 1.1 million jobs are transport-related; this represents almost **9% of all jobs**.



Transport-related jobs