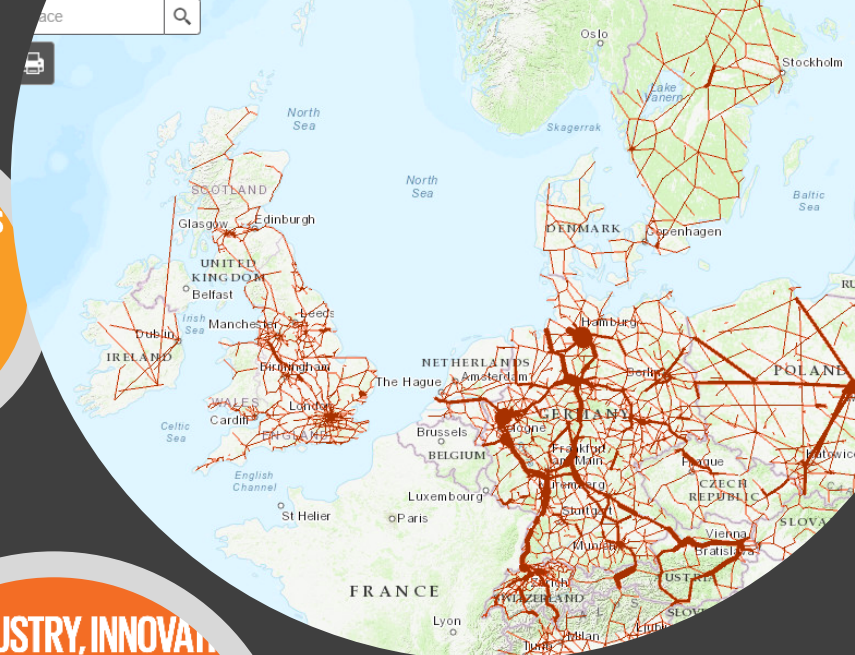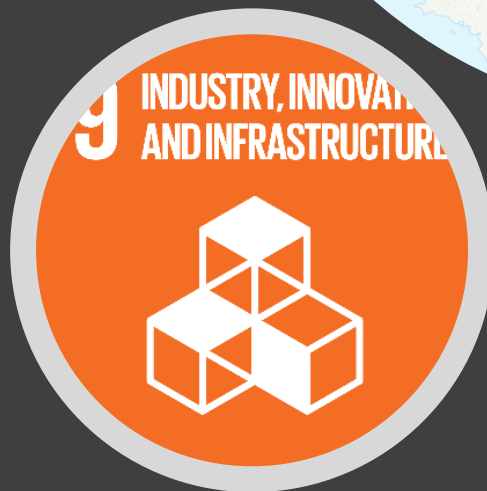# UNECE Rail Statistics

Nathan Menton and Alex Blackburn

Working Party on Transport Statistics (WP.6)

Presentation to Working Party on Rail Transport, 73rd Session

Geneva, 25-27 November 2019

Overview

- WP.6 Introduction
- Glossary for Transport Statistics
- E-Rail Census and potential for modal shifting
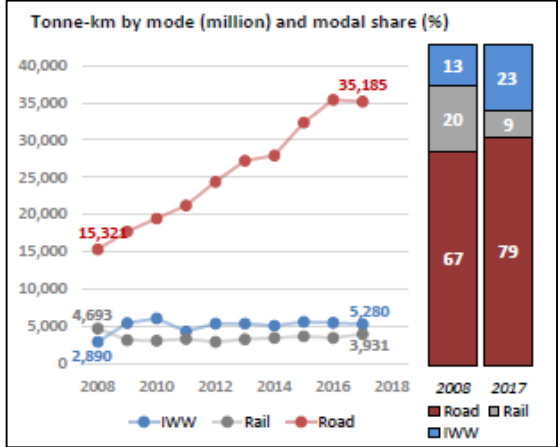- Rail Data for SDG Monitoring
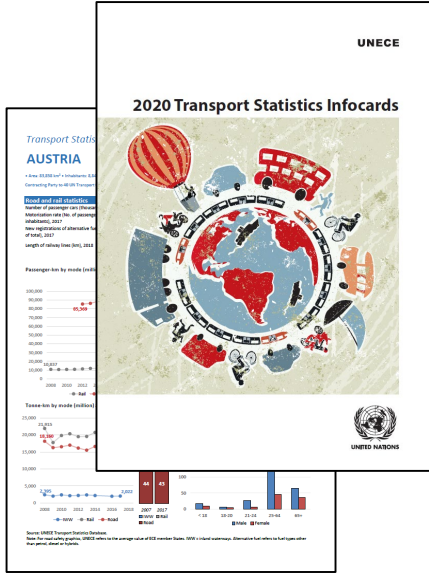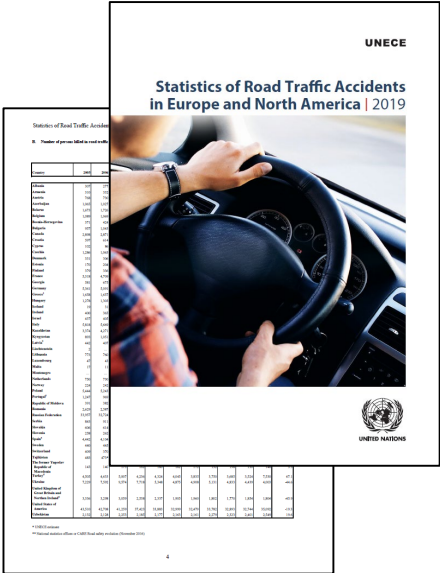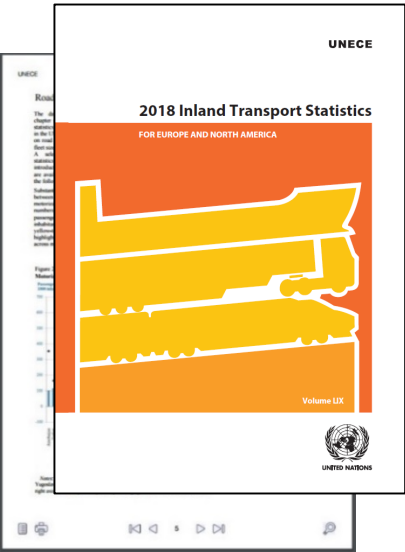- New collection on tram and metros

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Transport Statistics at UNECE

- WP.6 is a forum for inland transport statistics, covering:
    - Rail, road, inland waterways, pipeline
    - Infrastructure, vehicle fleet, traffic, transport measurement, safety.
- For rail this means:
    - lengths of tracks and lines;
    - number, power and capacity of rail vehicles;
    - train-km, passenger numbers, passenger-km, tonne-km;
    - number of accident fatalities and injuries.
- Majority of UNECE data from common questionnaire with ITF and Eurostat
    - minimizes reporting burden
    - improves international comparability

TRANSPORT

- **Inland Transport Statistics**: published end-2018

- **Road Accident Statistics**: to be published end-2019

- **Infocards**: produced annually for the ITC (February)
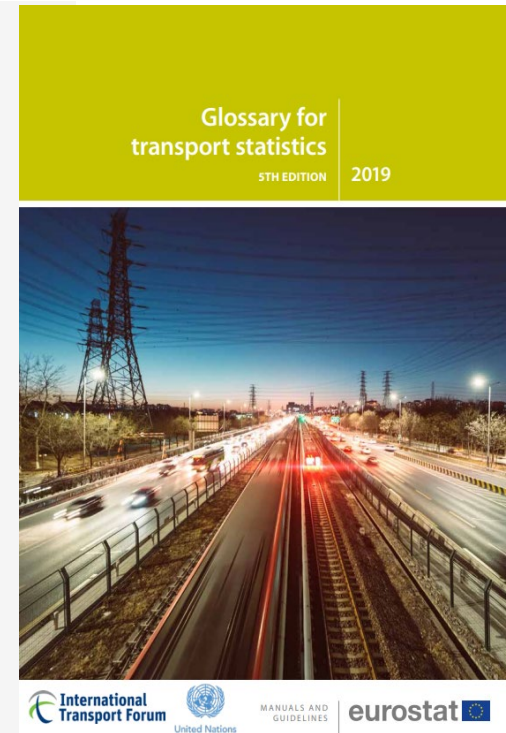

All available at unece.org/trans/resources/publications/transport-statistics.html

Glossary for Transport Statistics – 5th edition

- International standard for transport statistical definitions

  - Joint publication – UNECE / ITF / Eurostat

  - Covers all transport modes

  - Infrastructure and transport equipment, safety, passenger mobility, etc.

  - Promotes consistent collection and dissemination of transport statistics across countries and modes.

- **Fifth edition released in July 2019**

  - Open consultation with countries and relevant international organizations

  - New sections on passenger mobility, environmental impact of transport, maritime accidents

  - Consolidated chapters on energy consumption and intermodal transport.

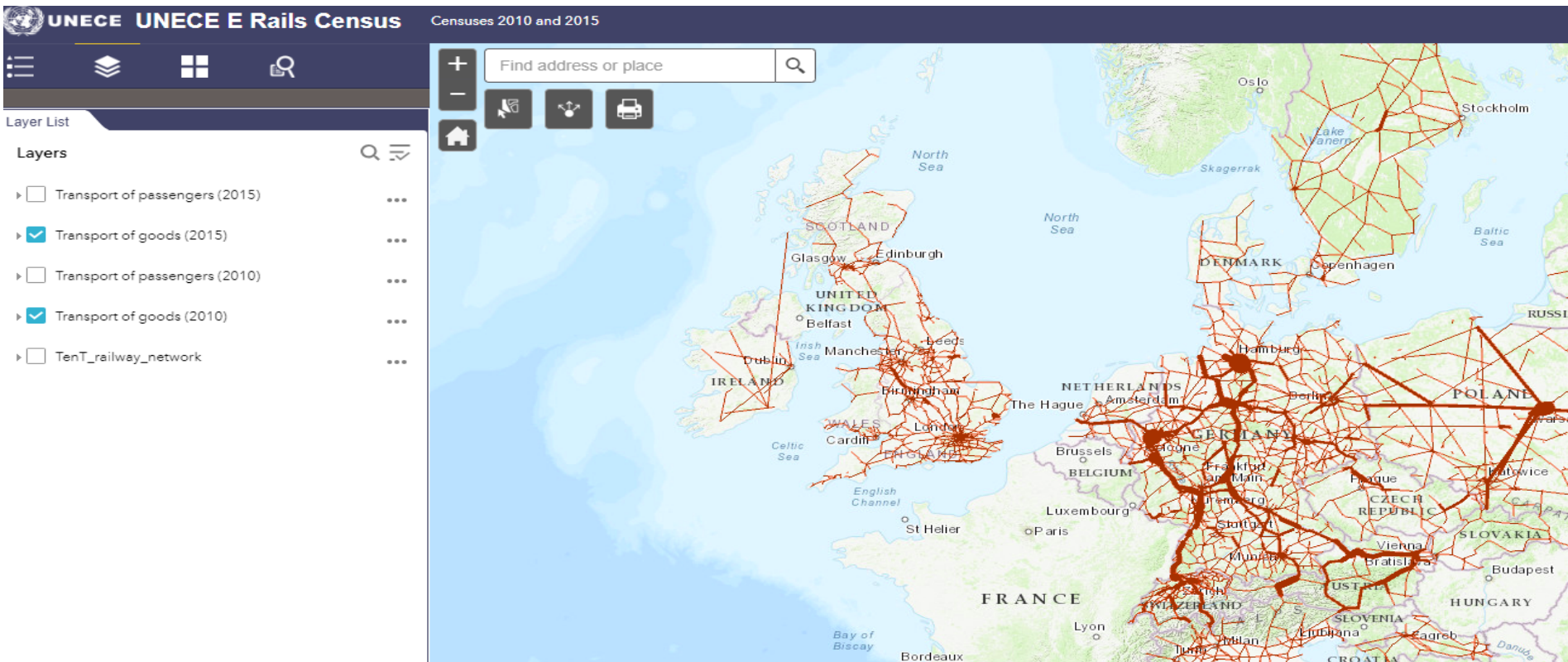- **Versions in all EU languages available, Russian forthcoming**

unece.org/fileadmin/DAM/trans/main/wp6/pdfdocs/Glossary_for_Transport_Statistics_EN.pdf
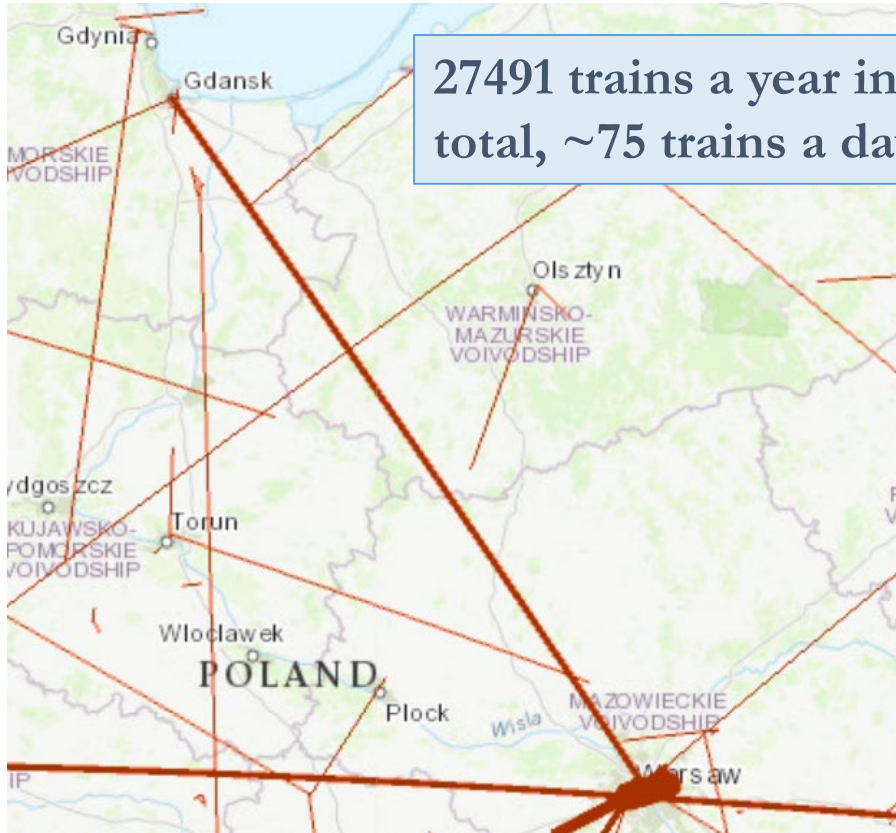
E-Rail Census

- E-Road and E-Rail censuses ask for infrastructure information and traffic volumes on the AGR and AGC networks every 5 years

- Since 2017 the E-Road census interactive map has been available; Rail map was published end-2018.

Combining freight data (with a few assumptions)

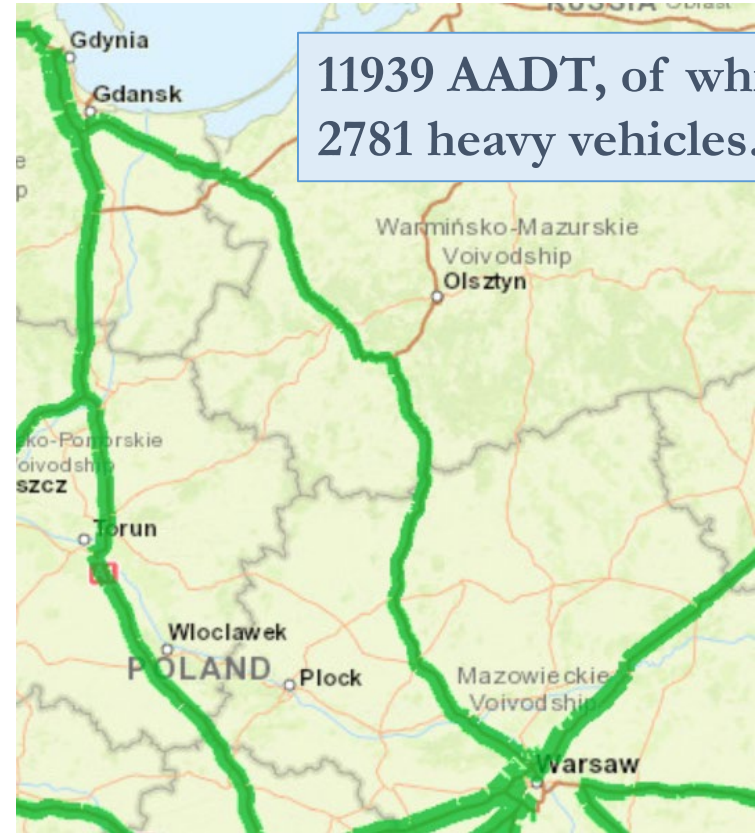**Rail**

27491 trains a year in total, ~75 trains a day

Road

11939 AADT, of which 2781 heavy vehicles.

Two extra 60-container trains on the route each day both ways would reduce HGV traffic by ≈8%.

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E-Rail census: future improvements

- Standardized coordinates and better data verification would improve data quality.

- Shapefiles rather than start/end coordinates would match the real network.

- Number of TEUs, wagons or weight, and passenger numbers (or at least size of passenger trains) would allow a much richer analysis.

- Data **for key transit countries** would allow tracking of Euro-Asian transport links.

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Transport-related SDGs

- 3.6   Halving the number of road accident fatalities by 2020. TIER 1.

- 9.1.2   Passenger and freight volumes (passenger-km and tonne-km) by mode. TIER I.

- 11.2.1   Proportion of urban population with convenient access to public transport. TIER II

  - *Current indicator: proportion of population within 500m of a transport stop.*

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How to Report on Indicator 9.1.2

How to calculate passenger-km and tonne-km? Guidelines on compilation?

Include Inland waterways? Pipeline? Road breakdown? Active modes?

Meaningful comparison of inland modes with maritime and aviation?

Residency or territoriality principle (make adjustments?)

Goal to increase passenger and freight volumes? Modal split analysis?

SDG 9 is for resilient infrastructure. What about "Sustainable transport"?

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Improving measurement of 9.1.2

- Currently reported global data available from UN Statistics Division
  - unstats.un.org/sdgs/indicators/database/

- Collated national reporting available on UNECE wiki
  - statswiki.unece.org/display/CESI9/National+Experiences+in+Monitoring+SDG+9.1.2
  - Includes additional indicators that countries feel are relevant to national circumstances.

- Guidance on how to measure 9.1.2 at the national level under development. First draft disseminated to NSOs in 2020
  - *What rail transport indicators should be considered for measuring resilient infrastructure or sustainable transport in the national context?*

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

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Tram and Metro Statistics

- Not currently collated in an international database, despite being the principal form of public transport in many big cities.

- UNECE collecting pilot data, with the aim of keeping the city breakdown.

- Data would have uses for monitoring multiple SDG indicators, e.g. 9.1.2 and 11.2.1