



Economic Commission for Europe**Inland Transport Committee****Working Party on Transport Statistics****Seventy-second session**

Geneva, 9–11 June 2021

Item 2 of the provisional agenda

**Development of a global indicator framework
for the Sustainable Development Goals****Monitoring the transport-related Sustainable Development
Goal indicators in the Economic Commission for Europe
region****Note by the secretariat***Summary*

This document sets out monitoring the transport-related Sustainable Development Goal indicators in the context of member States of the Economic Commission for Europe. It the global indicators, discusses data availability and sub-indicators for specific population groups, as well as considering what regional-specific indicators may be appropriate.

I. Background

1. With seventeen goals, 169 targets and over 230 indicators, monitoring the Sustainable Development Goals requires local, national, regional and global monitoring, as well as thematic focusses. Without its own stand-alone goal, the indicators relating to transport are not always reported on in an integrated manner. The Economic Commission for Europe (ECE) is addressing this, both through its involvement in the Sustainable Mobility for All initiative, and through the Inland Transport Committee's Strategy (ECE/TRANS/288/Add.2) to 2030 that was adopted in 2019. In particular, the Working Party on Transport Statistics (WP.6) will aim to become the platform where methodology for transport-related Sustainable Development Goal indicators will be discussed.

2. With this in mind, this document briefly reports on progress on transport-related Sustainable Development Goals in the ECE region and considers strategies for expansion of regional-specific transport monitoring. As a reminder, the global indicators most relevant for transport are: 3.6.1 on halving road traffic accident fatalities; 9.1.1 on rural access to an

¹ www.sum4all.org/.

all-season road; 9.1.2 on passenger and freight volumes, by mode of transport; and 11.2.1 on convenient urban access to public transport.

3. In addition to these global indicators, a key part of the 2030 Development Agenda is the idea of national and regional ownership. This is confirmed by the Road Map on Statistics for Sustainable Development Goals², the second edition of which should be available in June 2021. Therefore, regions can choose their own indicators where appropriate, when both data availability is good and also when a certain indicator is considered to be more appropriate for measuring progress in their circumstances. To take one example from the ECE region, Eurostat defines a set of 100 Sustainable Development Goal indicators³, some of which agree completely with the global indicators, whereas others have been chosen that have strong links with the policy framework set out in the European Commission's "Next Steps for a sustainable European future – European action for sustainability." The Interstate Statistical Committee of the Commonwealth of Independent States takes a similar approach⁴.

4. The rest of this document shows progress on the transport-related Sustainable Development Goals, both using the global indicators as well as considering additional transport indicators that may be appropriate for the ECE region. When considering these, good data availability is a pre-requisite; after this, indicators need to show progress towards the different pillars of sustainable transport: safety, access and affordability, efficiency and environmental impact. The overarching theme of the 2030 Development Agenda, of Leaving No-One Behind, is addressed by suggesting indicator breakdowns.

II. Transport safety

5. On the side of road safety, the global indicator 3.6.1 (to reduce the number of road fatalities by half) has excellent data availability for ECE countries, with 55 of the 56 ECE member States reporting data at least for total fatalities in the ECE database for 2017 (or later). It is known that data comparability across countries is not always perfect, which is why the World Health Organisation publishes an adjusted fatality figure partly based on modelling, in addition to the nationally reported total⁵. ECE and other actors encourage countries to harmonise their definitions with international norms; this can be seen with road fatality data for Turkey, where for 2017 the total fatality rate approximately doubles, due to a methodology change including fatalities within thirty days of the accident, in line with international guidance.

6. Given the near-complete data availability and clear relevance to transport safety of this indicator, the only possible improvements at the ECE level may be to include additional indicators that can further measure the impact on road safety, for example breaking the data down by sex, age, and type of road user. In this regard, reporting can try to Leave No-One Behind. Figure 1 shows, for example, the trend in recent years in fatalities of passenger car occupants against vulnerable road users, showing that progress in fatality reduction does not seem to be consistent between the two groups.

² <https://statswiki.unece.org/display/SFSDG/GUIDELINES+AND+TOOLS>.

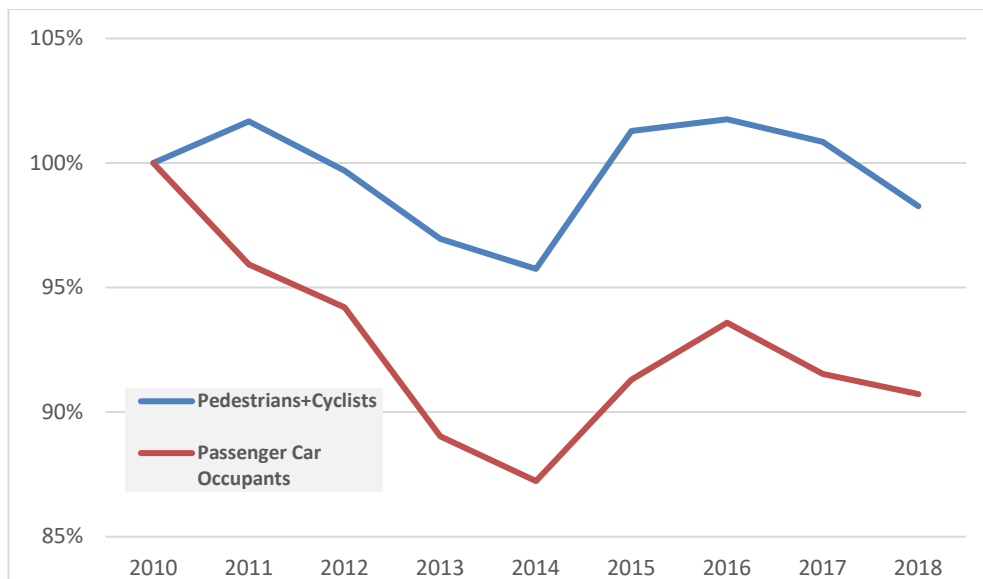
³ <https://ec.europa.eu/eurostat/web/sdi/indicators>.

⁴ www.cisstat.com/sdgs/sb-monitoring_2016-2019.pdf.

⁵ www.who.int/publications/i/item/9789241565684.

Figure 1

Index of fatalities for passenger car occupants against pedestrians and cyclists, average of ECE countries where data are available, 2010-2018



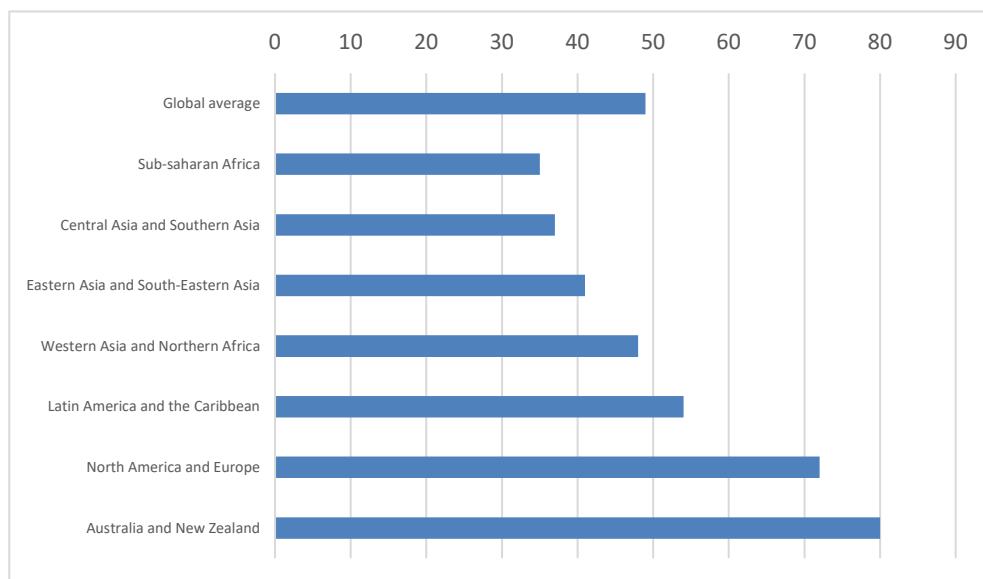
7. In terms of data availability, data are less complete than the total fatalities figure. In 2017, at least some of the breakdown of fatalities by type of road user is available for 43 ECE countries; the age breakdown is available for 41 ECE countries; and the breakdown by sex of the victim is available for 41 countries too.

8. The case for collecting this type of detailed breakdown is not always apparent, but in order to achieve the Sustainable Development Goals, targeted policies are needed. Top level figures can tell policy makers the rough direction of travel. Yet knowing for example that the majority of road fatalities are male passenger car drivers between the ages of 25-64 (a trend visible in virtually every country with data), or that pedestrian and cyclist deaths have not decreased in line with passenger car occupants (Figure 1), allows specific education and enforcement campaigns to be tailored accordingly.

III. Access and affordability

9. The most relevant Sustainable Development Goal indicators for measuring access to transport services are 9.1.1 on rural access (specifically the proportion of the rural population with access to an all-season road) and 11.2.1 on urban public transport access (specifically the proportion of the urban population that lives within 500m of a public transport stop). ECE does not collect data that directly measure either of these indicators, although the recent tram and metro dataset provides city-level figures on public transport use, which is a very useful supporting indicator when trying to understand access (see ECE/TRANS/WP.6/2021/5).

Figure 2
Share of population with access to public transport



Source: UN-HABITAT

10. Figure 2 shows the share of the total population of different sub-regions, according to UN-HABITAT⁶. The figures for parts of the ECE region are not always shown separately but show for example that North America and Europe is one of the best-performing regions. It is recognized by all that measuring access is a challenge, and so any additional indicators that are appropriate for ECE member States should be explored if data are available.

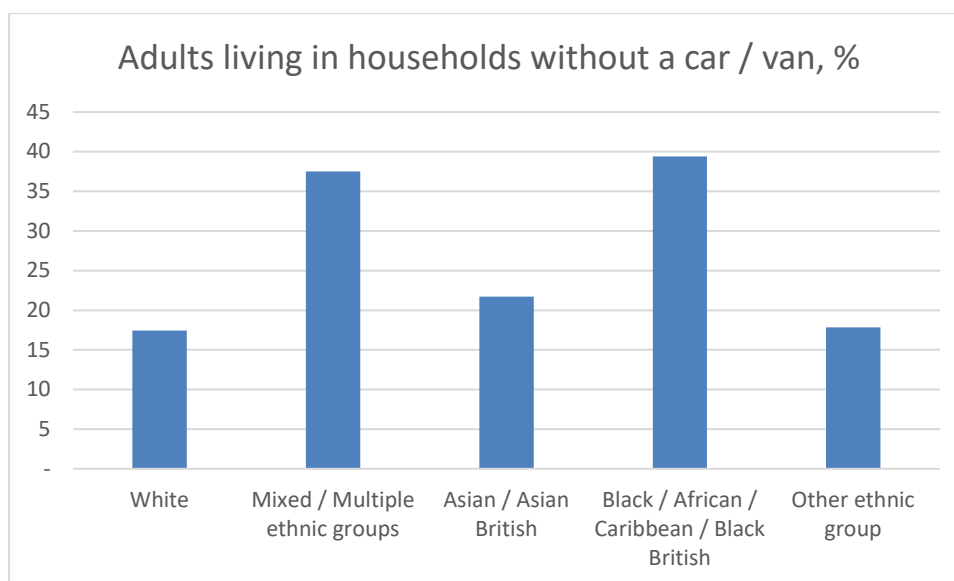
11. Member States are encouraged to provide their feedback on any additional indicators that may provide insights into transport access and affordability in the ECE region. One example for the urban environment in particular is transport costs, and specifically measuring the costs of different transport modes over time. This allows a comparison of the cost of public transport compared to private car ownership for example.

12. Another aspect of access and affordability particularly again relates to the Leaving No-One Behind concept. Measuring trip types by different population subgroups. Thus passenger-km and passenger journeys across different modes by gender, age, disability status and ethnic group allow transport access and affordability. The national travel survey United Kingdom of Great Britain and Northern Ireland has a number of data tables that allow these types of analyses. Figure 3 presents the proportion of adults in households that do not have a car or van, by ethnic background.

⁶ https://unece.org/DAM/trans/doc/2019/wp6/Presentations/UN_HABITATtransport_11.2.1_Monitoring_SDG_UNCE_workshop_V2.pdf.

Figure 3

From the UK travel survey, the proportion of adults living in households without a car or van, 2019



Source: www.gov.uk/government/statistical-data-sets/nts07-car-ownership-and-access

IV. Efficiency and environmental impact

13. The principal global indicator for measuring both efficiency and environmental impact of transport is indicator 9.1.2 on passenger and freight volumes by mode of transport. The secretariat as previously highlighted the potential importance of this indicator and its possible future utility (ECE/TRANS/WP.6/2020/1, ECE/TRANS/WP.6/2020/2, ECE/TRANS/WP.6/2020/3). At the latest United Nations Statistical Commission, this indicator was included in a list prepared by the Inter-Agency and Expert Group on Sustainable Development Goal indicators (IAEG-SDGs) as being likely to be highly affected by the COVID-19 pandemic (Fifty-second Statistical Commission session, background document for agenda item 3a⁷). This partly recognises that the modal split of transport, and not just total transport volumes, is a key metric as economies move out of the pandemic. In particular, if people are afraid to take public transport due to fears of virus transmission, and opt to take private vehicles instead, then this will have a significant impact on the efficiency and environmental impact of transport in the years to come, particularly in an urban context.

14. In terms of data availability, on the goods transport side data are quite complete, with 38 member States having recent complete modal split data. But on the passenger side, by far the biggest issue is that many countries either do not provide passenger-km data for road, or when they do the passenger-km data for cars only cover private taxi journeys, a very small percentage of total passenger car passenger-km. This remains the largest area of improvement in ECE data for measuring efficiency and environmental impact.

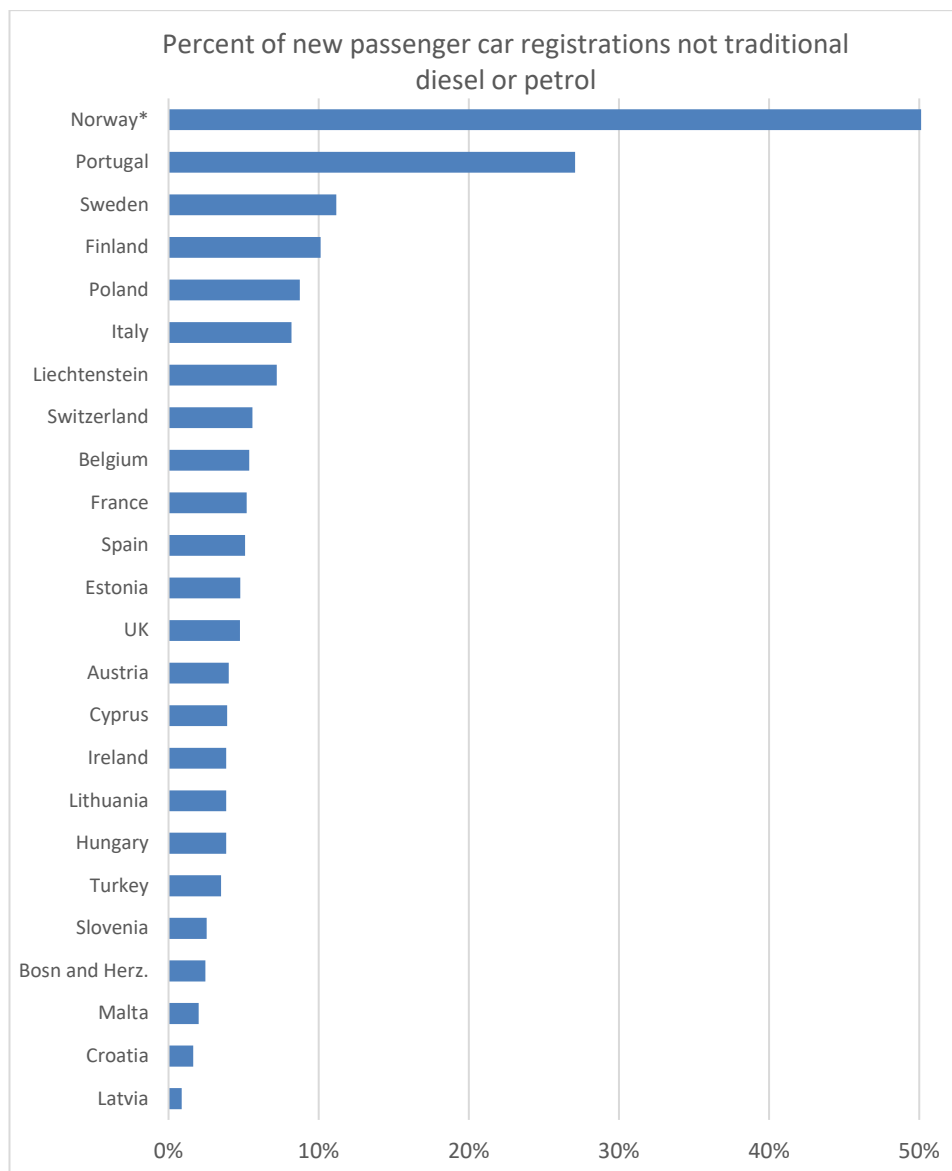
15. In addition to the global indicator, there are a number of other indicators that may be suitable for monitoring efficiency and environmental impact in the ECE region. New registrations of passenger cars by fuel type allows insights into the carbon intensity of the vehicle fleet in the years to come. This is shown in Figure 4, which shows the percentage of new passenger car registrations that are not fully petrol or diesel (thus grouping electric cars with hybrid and plug-in hybrids). As can be seen from the graph, data availability is only around half of ECE member States. This is potentially a very revealing indicator with

⁷ https://unstats.un.org/unsd/statcom/52nd-session/documents/BG-3a-COVID-19_and_the_global_SDG_indicators-E.pdf.

expected significant fleet changes in the years to come, highlighting the importance of providing detailed data through the web common questionnaire.

Figure 4

Percentage of new vehicle registrations that are not fully petrol or diesel models. Data for 2017. Note that the Norway figure is 52.4 %



16. Additional indicators that may be useful from an efficiency and environmental perspective for ECE countries include passenger car occupancy rate (derivable from passenger-km and vehicle-km data, though coverage differences with each part of the indicator often makes the indicator less reliable); and the total passenger journeys (or passenger-km) taken by public transport, or even walking and cycling.

V. Conclusions

17. This document is meant to provoke discussion about what additional transport indicators may be appropriate for monitoring sustainable transport in the ECE region, mindful of data availability. Delegates may reflect on these examples and consider proposing alternative indicators.