CONSIDERATIONS REGARDING THE DEVELOPMENT OF INDICATORS TO MONITOR THE INTEGRATION OF ENVIRONMENTAL AND HEALTH ASPECTS INTO TRANSPORT POLICIES, AND THEIR IMPACTS ON HEALTH AND THE ENVIRONMENT\(^1\)

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Note: On its fifty-third session (25-27 November 2002), the Working Party on Transport Statistics (TRANS/WP.6/143, paras. 24 and 25), encouraged delegates to prepare documents for the Ad hoc meeting on Harmonization of Sustainable Urban and Regional Transport Statistics to be held in Prague on 15 and 16 May 2003. In reply to this invitation, the Government of Denmark has prepared a document which is reproduced below.

\[^1\] This paper has been developed based on the following documents: “Review Of Implementation And Effectiveness Of Existing Policy Instruments On Transport, Environment And Health, And Of Their Potential For Health Gain”, EUR/00/5026094/2 and “Establishment Of A Set Of Indicators To Monitor The Integration Of Environmental And Health Aspects Into Transport Policies, And Their Impacts On Health And The Environment” ECE/AC.21/2003/5 - EUR/03/5040828/5
Sustainable urban transport indicators

At the Task Force Meeting on Sustainable Urban Transport Indicators, 28-29 March 2000 in Barcelona, a draft list of indicators was established (document TRANS/WP.6/2000/4). At its fifty-first session, 24-26 October 2000, the WP.6 asked the Czech Republic to draft a proposal concerning definitions relating to sustainable urban and regional transport, and the Czech Republic transmitted a draft list of definitions contained in document TRANS/WP.6/2001/4.

This document gives some reflections on the draft definitions contained in document TRANS/WP.6/2001/4.

I. Infrastructure

Urban area

It is preferable to base the statistics on administrative areas. This will facilitate the comparison to other official statistics that, in general, use the administrative units for disseminations. The administrative units may be classified according to urbanity based on the population density. However, the average size of administrative units varies between countries. Therefore, larger urban areas may be established as a contiguous set of smaller administrative units classified as urban units and including rural units surrounded by urban units. Metropolitan areas may be defined according to the population of a larger urban area.

In road accident statistics, a distinction between inside and outside built-up areas based on appropriate traffic signs is applied.

The indicators should be restricted to cover metropolitan areas with at least X (0.5 ?) million inhabitants and it should be left to the countries to delimitate the appropriate areas.

Routes and lines

The existing Glossary definitions on means of transport should be applied. A supplementary definition of a route or line of operation may be added. A route/line may be defined as a terminal-to-terminal connection according to published timetables.

The services may be classified according to speed, length or number of stops.

Roads

Indicators on length of roads by type should be added. Length of bicycle lanes may also be of interest. Parking places available (free or paying) may also be useful indicators.

II. Means of transport

In general, the definitions from the Glossary should be used.
The inclusion of indicators on household ownership of private car as an indicator should be considered. A good public transport system reduces the metropolitan inhabitants’ demand for private cars.

Commuter travels to and from the metropolitan area with the purpose of work/education may also be used as an indicator of the demand for transport.

**III. Traffic**

The general definitions from the Glossary should be used.

The traffic can be measured by the
- Road traffic intensity at selected places by type of vehicle  
  (private car, bus, lorry, bicycle average per day and in peak hours)
- Vehicle/train kilometres supplied in public transport
- Numbers of departures, average per hour and in peak hours  
  by means of transport and by type of service.

**IV. Transport**

The Glossary contains most of the relevant definitions.

For passenger transport, the number of journeys within and to/from the metropolitan area by the various means of transport and types of services may be used as indicators. The use of season tickets may also be appropriate as indicators of the link to public transportation. To illustrate the kind of transport demand, the journey purpose (commuting, leisure, shopping etc.) may be relevant indicators.

For freight transport, the number of journeys within and to/from the metropolitan area by mode of transport may be used as indicators.

Indicators referring to the use of the transport capacity may be applied. It could be:
- Average number of persons per vehicle
- Average load per freight vehicle
- Empty loads

**V. Prices**

Indicators on consumer prices for transport services may be relevant.

**VI. Environmental indicators**

Measurement of air quality and noise level may be relevant.