

Data for transport modeling

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International Transport Forum at the OECD

- ▶ An **inter-governmental organisation** with 54 member countries focussing on transport
- ▶ A **think tank** for global transport policy issues
- ▶ An **annual summit** of Ministers



Data collected at the ITF

- ❑ **Annual Trends (freight & passenger)**
 - ton-km, pass-km, accidents (since 1970)
 - ❑ **Quarterly Trends**
 - ton-km, pass-km, vkm, vehicles, fuel use, accidents
 - ❑ **Global Trade and Transport**
 - monthly, origin-destination, freight tonnes and values
 - ❑ **Investment in Infrastructure**
 - investment and maintenance, road, rail, ports, airports
 - ❑ **CO₂ Emissions**
 - global, key transport and greenhouse gas indicators by mode
 - ❑ **IRTAD road safety database**
 - Accident and relevant exposure data (since 1970)
 - ❑ **ITF/Eurostat/UNECE common questionnaire**
 - Around 800 variables on road ,rail, inland waterways, safety
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Data

Targeted survey

Road

Rail

IWW

Infrastructure

Safety

Vehicles



Air



Maritime



CO₂



Costs

Logistics

Economy

Urban

Supply
chains

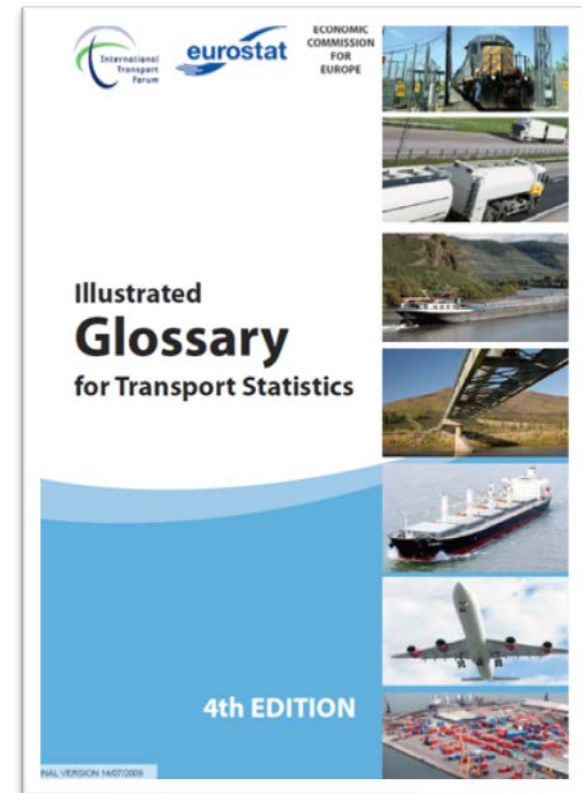
Funding

Labour



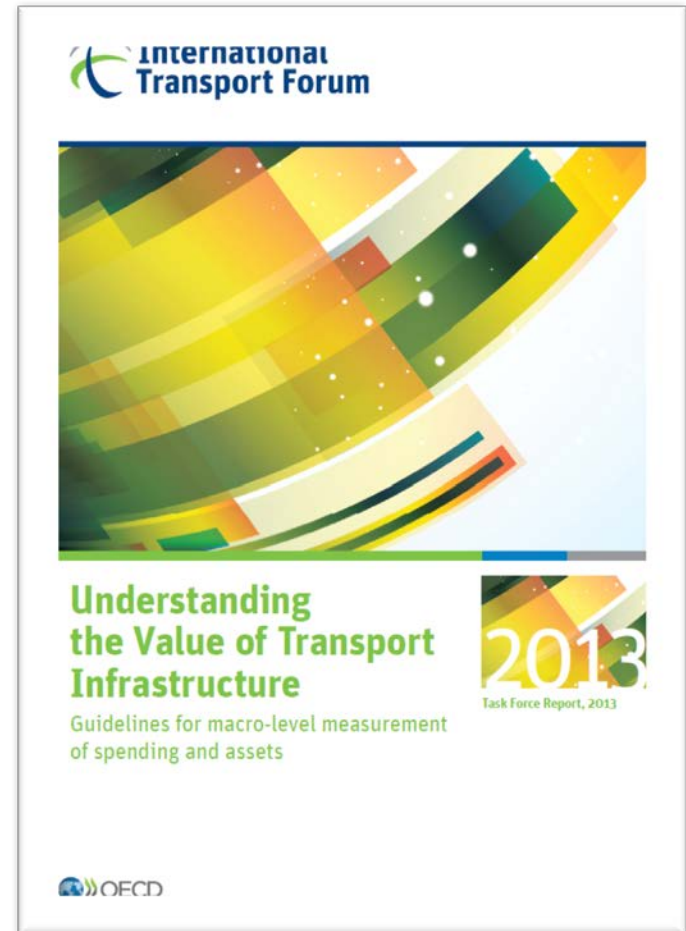
Glossary for Transport Statistics

- ❑ Basis for international comparability
- ❑ Translated to 30 languages
- ❑ Joint work with Eurostat and UNECE
- ❑ Vehicle to advance international statistics agenda
 - Harmonisation of methods and definitions
 - Development of new indicators and collections



Improving global data on infrastructure

- ❑ The quality of transport infrastructure is a key determinant of performance in the transport sector
- ❑ Our analysis is only as good as our data
- ❑ Recent report reviewed existing sources, definitions and coverage
- ❑ Identified critical data gaps
- ❑ Set priorities for future data collection
- ❑ Developed definitions and methods for measuring investment and capital stock



ITF Transport Outlook 2013

- ❑ Model development: macroeconomic context, urban module, freight
- ❑ Integration of transport statistics
- ❑ OECD outlook (length, style, formatting, Statlinks)

Chapter 1 Transport and the macroeconomy – current situation and near term expectations

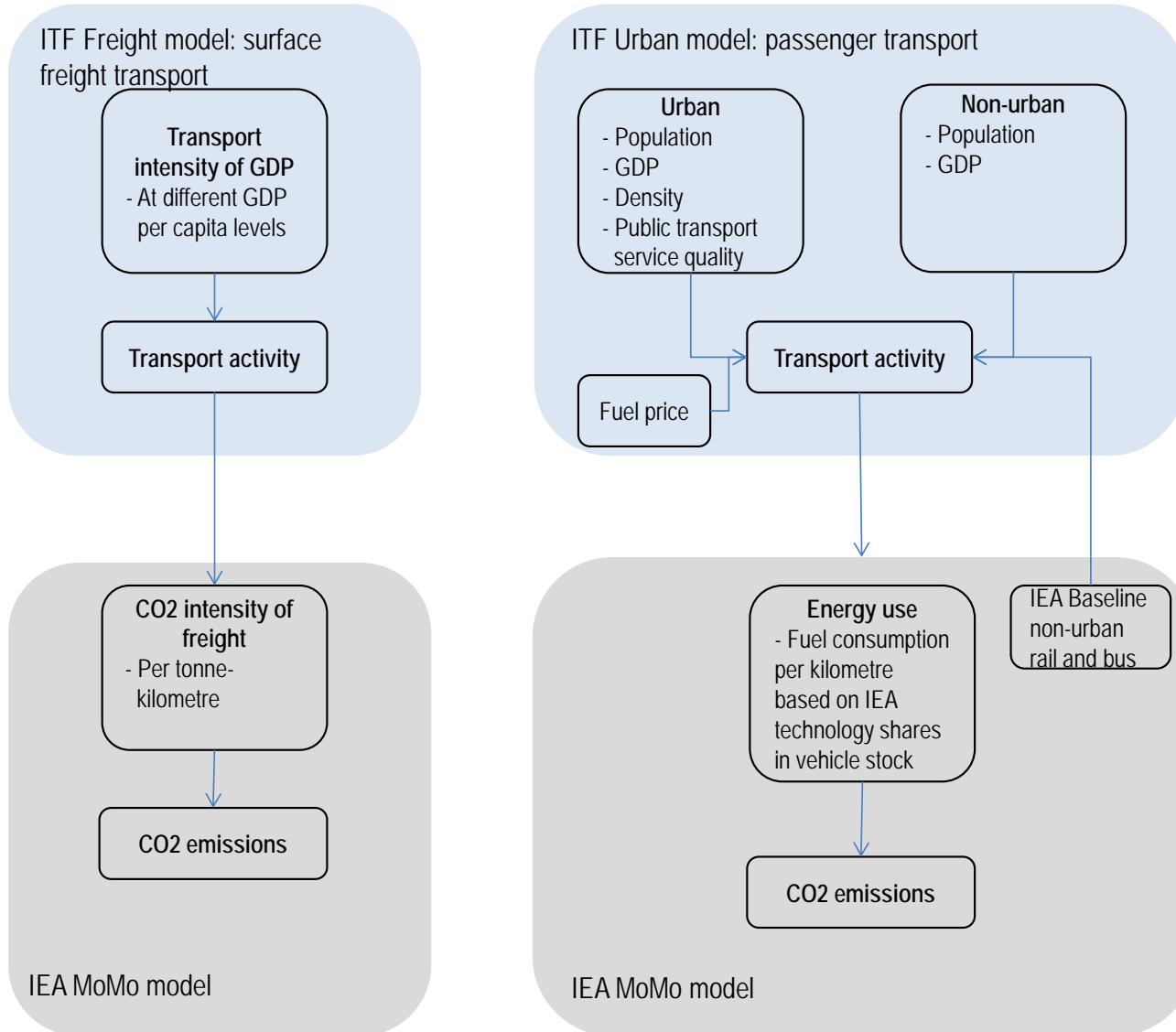
Chapter 2 Transport demand in the long run

Chapter 3 Transport for growth

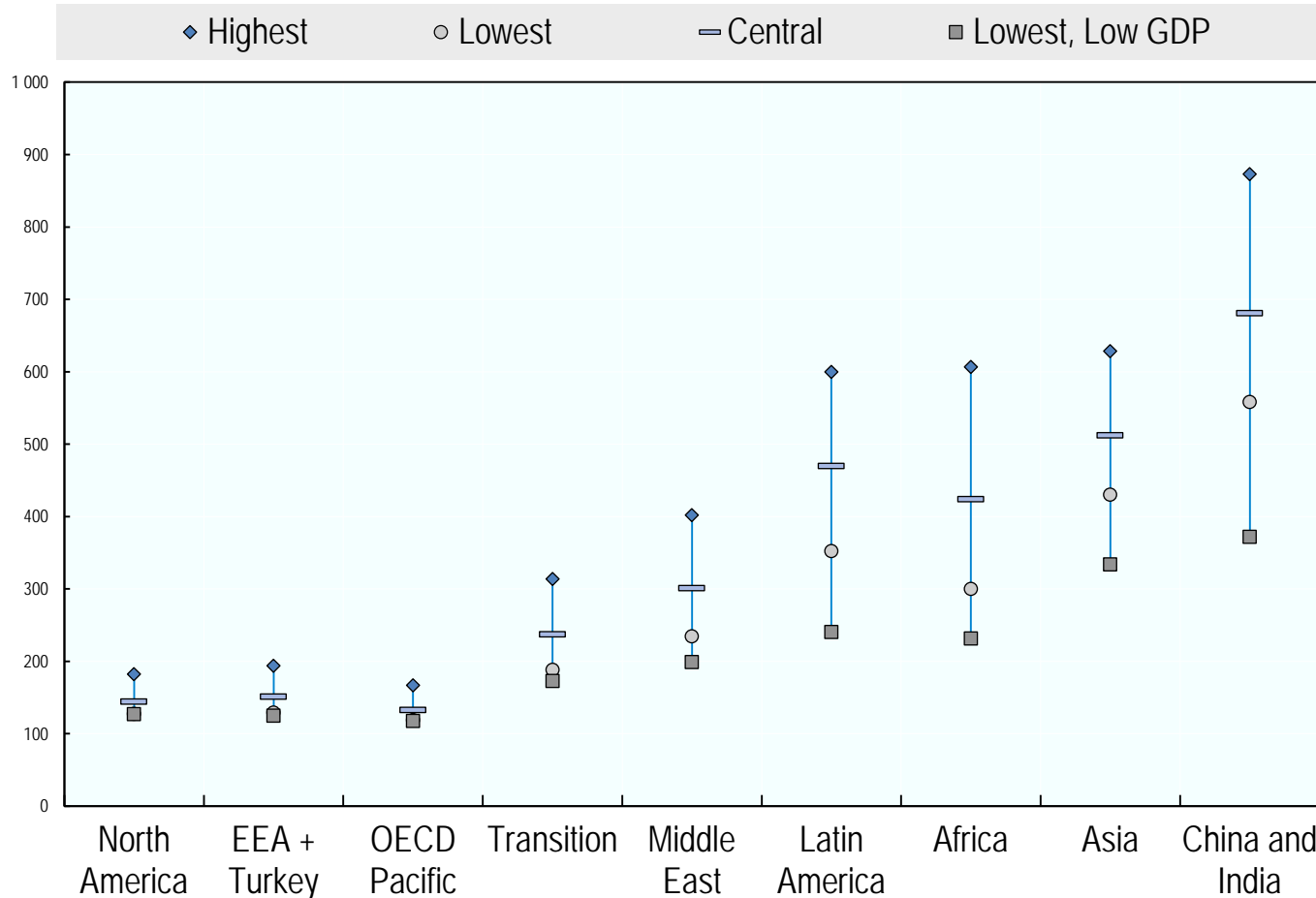
Chapter 4 Funding and financing transport



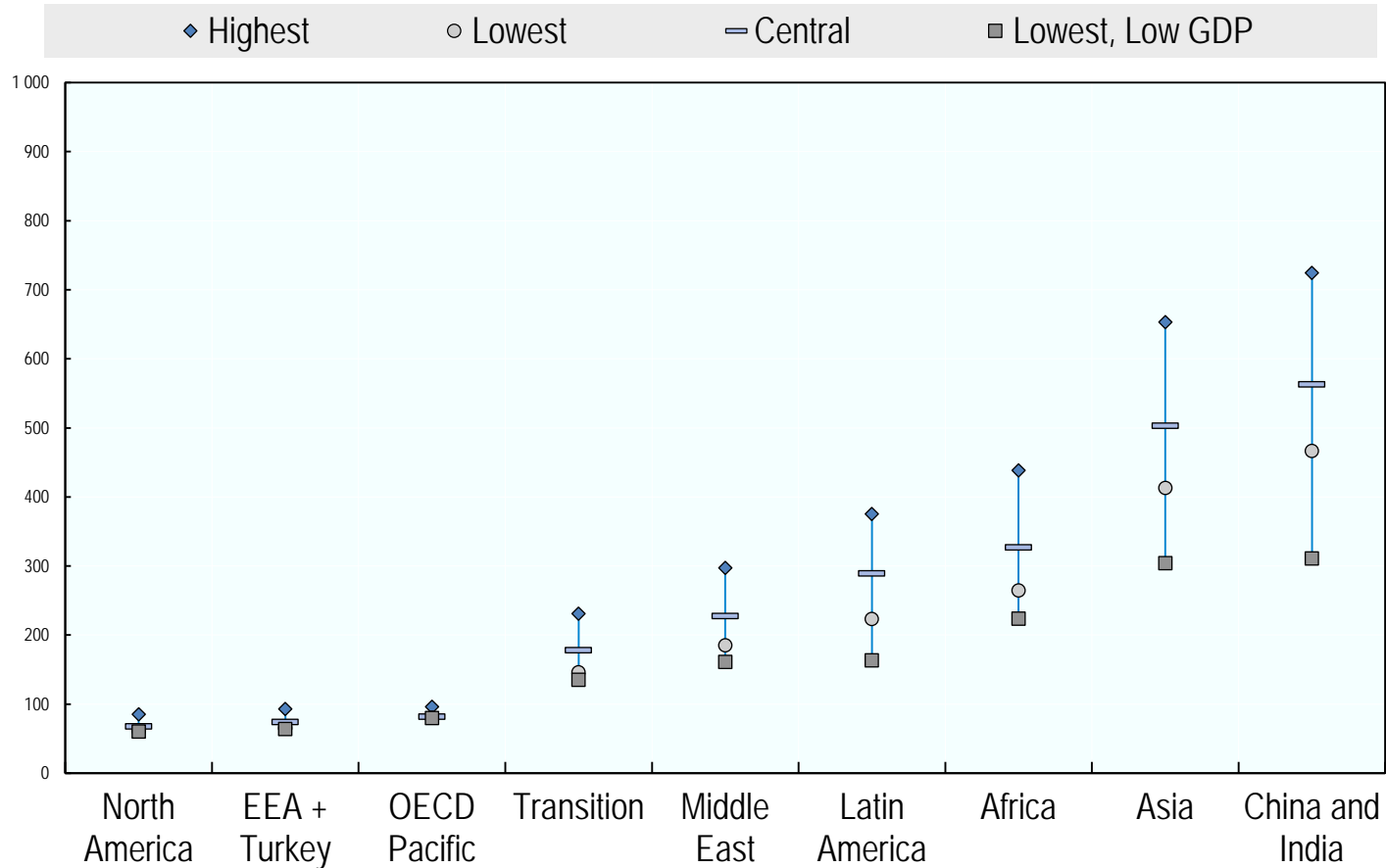
Schematic description of the ITF model



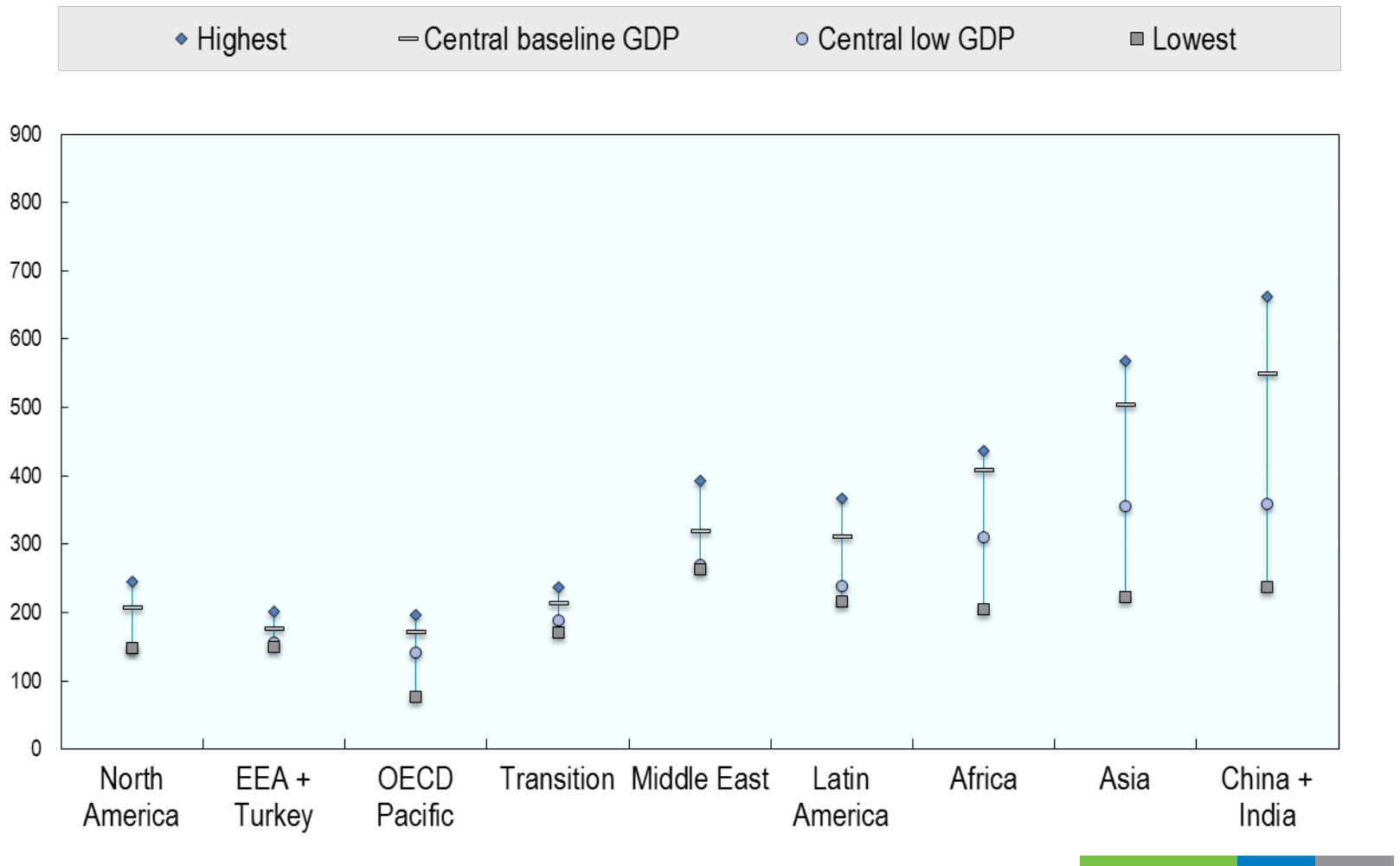
Vehicle-kilometre growth for passenger transport by region, 2050



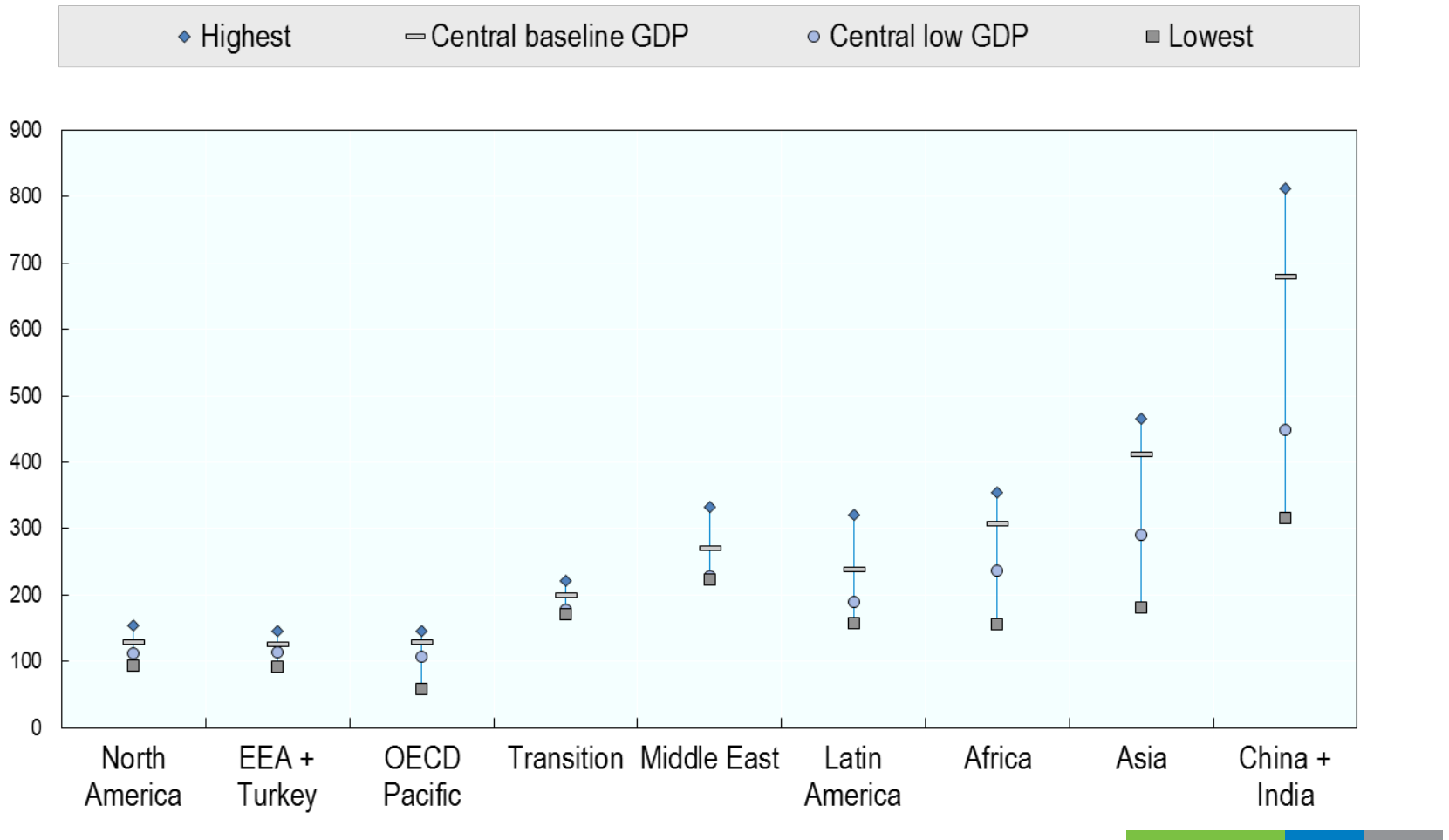
CO2 emission growth for passenger transport by region, 2050



Surface freight tonne-kilometres by world region, 2050 (2010=100)



Surface freight CO2 emissions by world region, 2050 (2010=100)




Transport data: categories

- Transport mode related data
- Transport infrastructure
- Transport activity
- Data on fuel and energy use
- Emissions, accident and other externalities



Challenges in transport data collection and analysis

Primary data collection

- ❑ Common understanding: *What* data should be collected and *how*?
 - ❑ Origin/destination data
 - ❑ Non-motorized transport
 - ❑ Differentiation between rural, inter-urban, urban (and aggregation)
 - ❑ Fragmented responsibility for collecting different data
 - ❑ Data initiatives and projects not integrated with domestic data collection mechanism
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Challenges in transport data collection and analysis

Secondary data collection

- ❑ Tendency to use global top-down data
- ❑ Intergovernmental organisations not necessarily with global mandates (coverage by region or mode)
- ❑ Different organisations collect different data
- ❑ Lack of shared data collection criteria and definitions (comparability)
- ❑ Many projects ad-hoc and under-resourced (continuity)



Way forward

Improving the availability and quality of transport data
a long term process

- Broaden the scope and quality at primary level
- Use of other public data not originally processed for transport use
- Improve urban and environmental data

Coordinated effort needed (SLoCaT: ITF, IEA, UN-DESA)

- Develop recommendations for collection and processing of data
- Reduce fragmentation
- Better integration of datasets being collected by different groups
- Joint database of secondary data – open access

ITF has a global mandate and ready to take role in
coordinating efforts



What is our goal?

- Producing statistics; or
- Answer user needs by helping them solve problems with analytical data?



- [Data]* variable or set of variables
- [Statistics]* data **collected** and **organised** regularly using harmonised methods and classifications
- [Information]* stats become information when it is **analysed rigorously**
- [Knowledge]* to become knowledge, information needs to be **disseminated**
- [Action]* caused by **user needs** and knowledge available
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Thank you

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