

# Indicators for Sustainable Urban Transport in Europe

## *Overview and examples*



Henrik Gudmundsson PhD., Chief Advisor, CONCITO

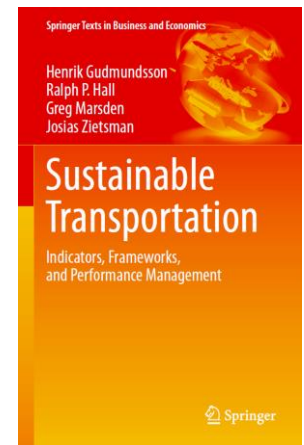
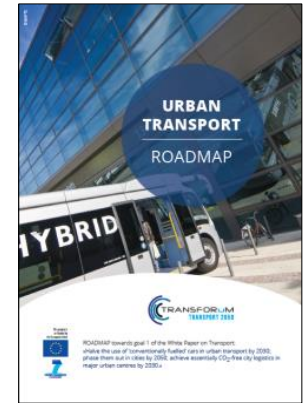
Expert Group Meeting on

Planning and Assessment of Urban Transportation Systems

22-23 September 2016, Kathmandu, Nepal

# Henrik's Background

- Chief advisor in Cities and Transport at **CONCITO** Green think tank, Copenhagen
- 10 year as Senior Researcher in transport policy at **Technical University of Denmark**
- 18 year as head of section/researcher in the **Danish Ministry of Environment**
- Contributions to several European and national projects, expert groups, scientific publications etc. on sustainable transport
- *New book: "**Sustainable Transportation - Indicators, Frameworks and Performance Management**" Springer 2016 (co-authors, Hall, Marsden, Zietsman)*



# Overview

1. The role of indicators in Sustainable Transport Assessment
2. The European Union Sustainable Transport policies
3. Examples of European assessment frameworks and indicator systems for urban transport
  - City Statistics
  - European Green Capital Award,
  - CIVITAS indicators
4. Summary

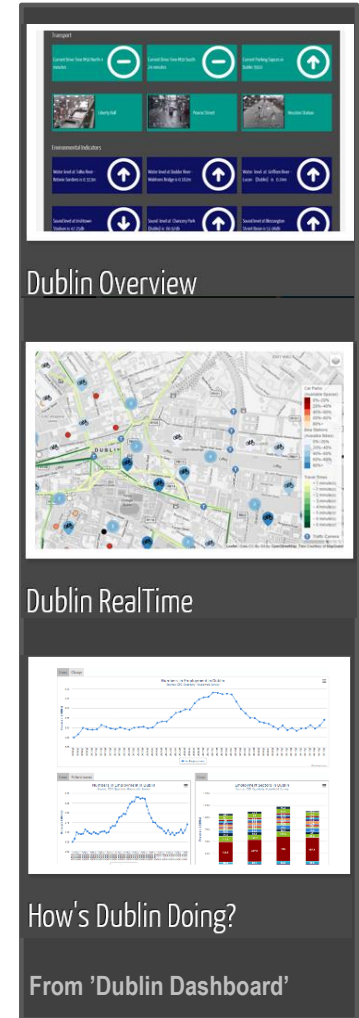
# Indicator systems are essential for Sustainable Transport Assessment

- Transport systems have **multiple impacts** of significance for Sustainable Development
- **Complete knowledge and models** of sustainable transport systems are not available; **approximations** are needed
- Policy **goals and measures for sustainable transport** need to be assessed ex ante, monitored in real-time and evaluated ex post
- What is **not measured and compared** cannot be **managed and improved**



# Definition and role of indicators

- **Indicators** are **variables** that are selected to represent key properties of systems and phenomena of policy interest
- Indicators are **measurable** using quantitative or qualitative values, but do **not provide complete information** on systems or phenomena
- Indicators are **intended and used** for descriptive, normative or prescriptive assessments of sustainable transport

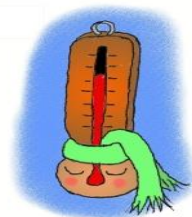


# Different applications of indicators



**Describe and Inform – What is going on ?**

**Review and Explore – How are we doing?**



**Diagnose and Explain – How did we get here?**

**Plan and Decide – What should we do?**



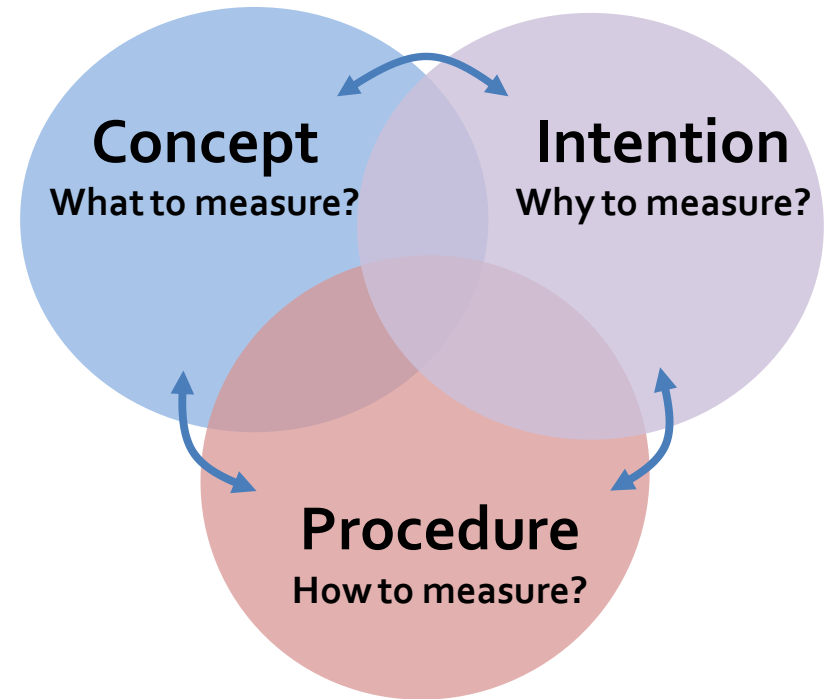
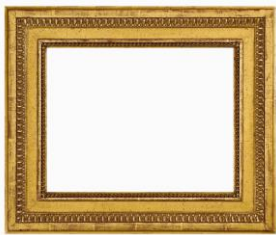
**Account and Compare – Who accomplished what?**

**Improve and Learn – How can we do better?**



# Frameworks are essential

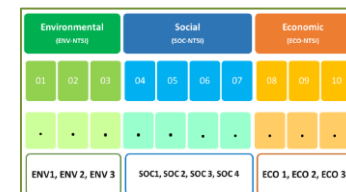
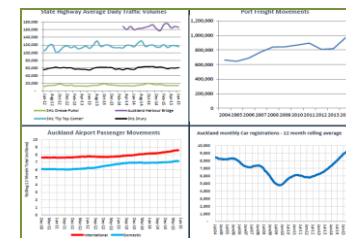
- Indicators are embedded in **frameworks** that are conceptual and procedural constructs
- Frameworks **organize** how indicator systems are designed, managed, and applied
- Frameworks provide **focus** and **structure**





# Some indicator framework types

Type	Features
<b>System</b>	<ul style="list-style-type: none"> <li>Measuring transport system conditions and performance,</li> <li>'State of repair', 'Traffic vol.', 'Mode split'</li> </ul>
<b>Pillar</b>	<ul style="list-style-type: none"> <li>Measuring according to Environmental, Economic, and Social impacts of transport</li> <li>'Emissions', 'Costs', 'Access'</li> </ul>
<b>Goal</b>	<ul style="list-style-type: none"> <li>Performance compared to specified goals and performance targets,</li> <li>'reduce delay 10%'. '0 fatalities'</li> </ul>



	Safety	Mobility
Goal	Ensure High Standards of Safety in the System	Provide for efficient movement of people and goods
Objective	Reduce Rate of Motor Vehicle Crashes	Decrease travel times for commuting
Performance Measures	Crashes per VMT Crashes per Capita	Hours of delay Travel time index
Performance Targets	Reduce Crashes per VMT by One Percent per Year	Reduce delay by two percent per year travel time index < 1.25

预览已结束，完整报告链接和二维码如下：

[https://www.yunbaogao.cn/report/index/report?reportId=5\\_2303](https://www.yunbaogao.cn/report/index/report?reportId=5_2303)



云报告  
<https://www.yunbaogao.cn>

云报告  
<https://www.yunbaogao.cn>

云报告  
<https://www.yunbaogao.cn>