Prof. Dr.-Ing. Gerd-Axel Ahrens

**Sustainable Urban Mobility Planning in Germany – Example**

Conference
Sustainable Urban Mobility Plans – Current Approaches to Mobility Planning

THE PRAGUE INSTITUTE OF PLANNING AND DEVELOPMENT

Prague, June 26, 2014
Examples Dresden in comparison with other cities

- Berlin  
- Hamburg  
- München  

- Dresden  
- Leipzig  
- Magdeburg  
- Bremen  

Google: name of city  
Verkehr and/or Mobilität  
www. [name of city] .de  
Click to Mobilität, Verkehr or VEP  

(Translation into English available in February 2015 through Prof. Ahrens)  

EU: www.mobilityplans.eu
**Co-operative planning**

**Formal planning processes:** Participants and processes are regulated by law. Further participation is possible (e.g. land-use plan, public transportation plan)

**Other informal planning processes:** Not regulated by law. How communication and participation is organized is developed by the planners (e.g. general transport plan, individual plans)

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**Conventional way of planning**
- Internal consulting
- Internal decision

**Announcement**

**Defence**

**Implementation?**

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**Co-operative planning**
- Pick up information
- Open consulting

**Poised decide**

**Implementation**
Long tradition of Transport-Master-Planning in Dresden

Dresden’s mobility strategy since 1990

City development and transport

Transport infrastructure

Transport management

Mobility management
SUSTAINABLE URBAN TRANSPORT PLAN

Clean Air Plan
Noise Action Plan
Transport measures and concepts
Public Transport Plan
Further sector plans related to traffic and transport

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Sustainable Urban Mobility Planning in Germany – Examples
Slide 6 of 24
SUMP-planning process in Leipzig

Studies and Expert’s opinions

Round table

Goals and objectives

SUMP „Transport and public spaces“

Citizen competition
Tasks in detail – SUMP Dresden 2025+

**Initial Phase**
- Determine potential - framework
- Timeline
- Participation structure/actors + stakeholders

**Working Phase**
- Problem and deficiency analysis
- European-wide tender to find a consultant
- Discussion and specification of objectives
- Political decision of objectives
- Analysis of mobility and traffic development
- Set priorities and measurable targets, develop scenarios and impact determination
- Develop a common vision (priority scenario) – political decision
- Develop effective packages of measures
- Develop the TDP draft (mobility strategy and action concept) including monitoring and evaluation concept
- Involve citizens in the “Dresden Debate”

**Concluding Phase**
- Political discussion and adoption of SUMP
- Manage plan implementation and communication
- Analysis and evaluation of involvement and participation
- Start of monitoring and evaluation

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**Steering Group**
- Round Table
- Scientific Advisory Board

**Round Table Region**

**Specific involvement of politics**

**Public relation work / inform and engage the citizen**

Source: Burggraf, Kerstin. 2012 Annual Polis conference 30.11. Perugia
SUMP Dresden 2025+ – Communication and cooperation

Steering committee led by mayor Jörn Marx
Representatives of city council groups, heads of department, City of Dresden officials, councillors, project managers, round table facilitators

Round table
Led by mayor Jörn Marx with facilitator Runder Tisch
- Transport providers (3 seats)
- Transport associations (3 seats)
- Business associations (3 seats)
- City administration SUMP project group (3 seats)
- Other social interests (6 seats)
- City council groups (6 seats)
- Spokesperson for scientific advisory board – in advisory capacity

Scientific advisory board
Representatives of transport and transport-related studies, Dresden University of Technology and other German research institutions

Region/neighbours

City administration project group

Round table with neighbouring communities in Dresden

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>External dialogues</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Goals and objectives</td>
<td><strong>Summer 2010</strong> council decision spring 2011 Round table Scientific advisory board City council <strong>Summer 2012</strong> Citizen meetings Agencies of public interest</td>
</tr>
<tr>
<td>2</td>
<td>Analysis: Chances &amp; insufficiencies</td>
<td><strong>Summer 2011</strong> Round table Scientific advisory board Internet, press and public meetings <strong>Winter 2012/13</strong> Online dialogue Regional work groups Agencies of public interest</td>
</tr>
<tr>
<td>3</td>
<td>Scenarios: Development of measures</td>
<td><strong>Autumn 2011</strong> Round table Scientific advisory group City Council (decision Sept. 2012) <strong>Late summer 2013</strong> Online dialogue Citizen meetings Regional workgroups Agencies of public interest</td>
</tr>
<tr>
<td>4</td>
<td>Effects and evaluation of measures</td>
<td><strong>2012 to Autumn 2013</strong> Round table Scientific advisory board Dresden Debate [information container + online dialogue] <strong>1st quarter of 2014</strong> Online dialogue Citizen meetings Regional workgroups Agencies of public interest</td>
</tr>
<tr>
<td>5</td>
<td>Draft SUMP-concept (Decision of city council)</td>
<td><strong>since Autumn 2013</strong> political decision since January 2014 in debate <strong>2nd quarter of 2014</strong> Online dialogue Citizen meetings Regional workgroups Agencies of public interest</td>
</tr>
</tbody>
</table>

**Dresden 2025+** **Bremen 2025**
Preamble

1. Transport is not an end in itself! Its purpose is to improve residents' mobility and support the city's economy. Both these aims require a free choice of transport mode.

2. Maintaining mobility in a way that is affordable, safe and eco-friendly is an issue of primary importance for all of society. The process should be implemented by consensus and with as little dirigisme as possible.

3. Equality and the right to physical integrity are laid down in the German Constitution. The duty to strive towards achieving equal living conditions is also established in the Constitution of the Free State of Saxony. Both are essential guidelines for modern and future transport development.

4. The development of mobility and transport is subject more than ever to global influences: economic fluctuations, limited fossil fuel resources, rising energy prices and climate change. Transport development planning needs to find answers to this.

5. The same is true of the effects of demographic change, producing new demands when it comes to the necessities of life, transport and mobility.

6. The transport infrastructure needs to be maintained and developed in a way that pays particular attention to the cost-value ratio.

7. National and European laws and directives set out the fundamental conditions for transport development planning. The City of Dresden will actively shape these conditions.
## SUMP Dresden 2025+ – Developed goals of Round Table

<table>
<thead>
<tr>
<th>Criterion 1</th>
<th>1.1</th>
<th>Setting standards for accessibility and development on a city district level – especially district hubs – taking all modes of transport into account</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.2</td>
<td>Attaining high-quality development and accessibility for ecomobility transport within the entire city area</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>Ensuring that social and cultural institutions and everyday destinations are accessible</td>
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<td></td>
<td>1.4</td>
<td>City-friendly transport development which is conducive to business and tourism</td>
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<td></td>
<td>1.5</td>
<td>Giving precedence to ecomobility in central areas</td>
</tr>
<tr>
<td></td>
<td>1.6</td>
<td>Improving the situation, accessibility and design of interfaces between motorised and non-motorised private transport, local public transport</td>
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<td></td>
<td>1.7</td>
<td>and long-distance passenger rail services</td>
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<td></td>
<td>1.8</td>
<td>Barrier-free adaptation of links between local public and private transport (cycle, car, pedestrian traffic), taking into consideration the</td>
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<tr>
<td></td>
<td></td>
<td>needs of people with restricted mobility</td>
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<tr>
<td></td>
<td>1.9</td>
<td>Ensuring that there are sufficient short-stay cycle and car parking facilities at the main access points to local public transport</td>
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<td></td>
<td>1.10</td>
<td>Improving regional rail and bus connections (DB, DVB, VVO) by extending networks and raising frequencies</td>
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<td></td>
<td>1.11</td>
<td>Optimising access to Dresden for long-distance travellers by improving interregional transport connections (air and rail transport) and</td>
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<td></td>
<td></td>
<td>integrating them into European transport corridors, taking into account regional development planning</td>
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<td></td>
<td>1.12</td>
<td>Supporting innovative transport solutions and technologies, such as electromobility</td>
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<td></td>
<td>1.13</td>
<td>Improving information and signage system for compatible ecomobility transport and tourism in the Dresden metropolitan area</td>
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<td></td>
<td>1.14</td>
<td>Developing and perpetuating quality-based transport management</td>
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<td></td>
<td>1.15</td>
<td>Ensuring that both existing and new commercial locations can be accessed on defined routes</td>
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<td></td>
<td>1.16</td>
<td>Directing long-distance road goods traffic along specially selected routes by means of indicators on higher-order access roads</td>
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<td></td>
<td></td>
<td>Promoting cooperation between transport providers in the field of business transport; developing the goods transport centre by adding</td>
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<td></td>
<td></td>
<td>modules for road and rail transport, IWT and logistics</td>
</tr>
<tr>
<td>Criterion 2</td>
<td>2.1 Guaranteeing access to transport networks and means of transport for people with restricted mobility and on low incomes, including improving the options available for their use</td>
<td></td>
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<tr>
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<tr>
<td>2.2 Ensuring that stops are accessible and access to local public transport is barrier-free; providing necessary information on means of transport, especially for people with restricted mobility</td>
<td></td>
<td></td>
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<tr>
<td>2.3 Promoting independent and safe mobility for children, young people and the elderly</td>
<td></td>
<td></td>
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<tr>
<td>2.4 Raising the safety of all transport users by adapting or redesigning transport facilities which are critical to safety (aiming to halve the number of injuries and avoid traffic deaths)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Criterion 3</th>
<th>3.1 Improving living quality in city districts by reducing disturbances caused by traffic, for instance by traffic calming measures.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2 Improving city image, making streets and squares more pleasant to use and improving the usability of the living environment</td>
<td></td>
</tr>
<tr>
<td>3.3 Creating closer connections between sustainable transport and city development planning, taking into account local climate goals</td>
<td></td>
</tr>
<tr>
<td>3.4 Giving precedence to development within the city, putting everything within easy reach</td>
<td></td>
</tr>
<tr>
<td>3.5 Reducing the burden of through traffic on the city centre and residential areas, instead shifting traffic onto the high-quality network of thoroughfares</td>
<td></td>
</tr>
<tr>
<td>3.6 Space-saving construction and conversion, deconstruction and unpaving on transport areas which are no longer required; developing best practice models</td>
<td></td>
</tr>
<tr>
<td>3.7 Cross-linking private and public passenger transport when putting through new transport plans</td>
<td></td>
</tr>
<tr>
<td>3.8 Striving to further raise the percentage of the modal share taken up by ecomobility (local public transport, cycle traffic, pedestrians)</td>
<td></td>
</tr>
</tbody>
</table>
### SUMP Dresden 2025+ – Developed goals of Round Table

**Criterion 4**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Taking into account and integrating both regional and national plans in this field</td>
</tr>
<tr>
<td>4.2</td>
<td>Regularly checking and adjusting goals; monitoring and evaluation as fixed elements of this process</td>
</tr>
<tr>
<td>4.3</td>
<td>Providing continual information about important transport parameters (e.g. traffic pollution, number of users of different modes of transport, number of accidents)</td>
</tr>
<tr>
<td>4.4</td>
<td>Providing information and balancing interests at an early stage when planning and implementing transport interventions</td>
</tr>
<tr>
<td>4.5</td>
<td>Greater cooperation on a local and regional level</td>
</tr>
<tr>
<td>4.6</td>
<td>Interdepartmental and interdisciplinary linking of transport-relevant spheres of action (e.g. transport/urban/environmental/open area planning)</td>
</tr>
</tbody>
</table>

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Sustainable Urban Mobility Planning in Germany – Examples

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Modal split in Dresden

In 2008 37% of Dresden's households had no private car!
Traffic volumes on Labe-bridges in Dresden

Landeshauptstadt Dresden, Straßen- und Tiefbauamt

Traffic volumes on Labe-bridges in Dresden

- Autobahnbrücke A 4
- Flügelwegbrücke
- Marienbrücke
- augustusbrücke
- Carolabrücke
- Albertbrücke
- Blaues Wunder

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Changes of travelled km by mode

- Car
- Public transport
- Car passenger
- Bike
- Pedestrians

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SUMP Dresden 2025+ – results of scenarios

Passenger-km car/PT/bicycle in Dresden

Quelle: Szenarienberechnungen VEP Dresden, Pkm/d im Stadtgebiet Dresden, Annahmen für Besetzunggrad/ Rad-km/d)

- **Car**
- **PT**
- **Bike**

<table>
<thead>
<tr>
<th>Year</th>
<th>Scenario</th>
<th>Car (Pkm/day)</th>
<th>PT (Pkm/day)</th>
<th>Bike (Pkm/day)</th>
<th>Total (Pkm/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Without measures</td>
<td>12,800,000</td>
<td>2,800,000</td>
<td>2,029,800</td>
<td>17,629,800</td>
</tr>
<tr>
<td>2025</td>
<td>With already decided measures</td>
<td>11,500,000</td>
<td>3,200,000</td>
<td>1,012,800</td>
<td>15,712,800</td>
</tr>
<tr>
<td>2025</td>
<td>Scenario A</td>
<td>11,600,000</td>
<td>3,500,000</td>
<td>1,108,000</td>
<td>16,208,000</td>
</tr>
<tr>
<td>2025</td>
<td>More roads</td>
<td>12,500,000</td>
<td>3,200,000</td>
<td>1,152,000</td>
<td>17,852,000</td>
</tr>
<tr>
<td>2025</td>
<td>Scenario B</td>
<td>10,500,000</td>
<td>3,800,000</td>
<td>1,392,000</td>
<td>15,792,000</td>
</tr>
<tr>
<td>2025</td>
<td>More PT &amp; cycling</td>
<td>10,000,000</td>
<td>3,900,000</td>
<td>1,723,500</td>
<td>15,623,500</td>
</tr>
<tr>
<td>2025</td>
<td>Additional behaviour changes</td>
<td>10,000,000</td>
<td>3,900,000</td>
<td>1,723,500</td>
<td>15,623,500</td>
</tr>
</tbody>
</table>
SUMP-process

Data, modelling, reporting
Process evaluation
Evaluation of measures and strategies

Analysis
Goals
Scenarios
Strategies
Measures
Monitoring

Information of policy, administration and public
Participation of policy, administration and public
Lessons learned

- Allow much time for discussion and elaboration
- Transparency and target orientation
- External experts are helpful but involvement and identification of administration and decision makers is more important
- Internal and external cooperation need organisation
- Public relations is a continuous task
- Consensus oriented processes need the involvement of politicians and leading administrators
- SUMP is a continuous process
- Clear goals and strategies
- Use of scenario techniques
- Integration of soft measures
- Quality management: Evaluation and control of success