

Integrating the Principles of Sustainability

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The theme of TC 2.1: Integrating Sustainability

- Environmental aspects were for a long time seen as outside the 'real process' of road transport and road management
- In the later decades of the 20th Century, <u>Environment</u> grew into <u>Sustainability</u>, but still seen as a separate concern
- But real sustainability, that is environmental, social, cultural and economical sustainability, can be achieved only through full integration into each process, be it for maintaining or developing infrastructure or for the operations and use of the infrastructure
- PIARC TC 2.1 studies the means and methodology of integration, from the global policy level to specific road management measures



Sustainable Development and Road Transport issues:

- 2.1.1 Concrete application of policies, such as those developed in the Kyoto protocol and Rio conference to road transport
 - Action 1. How have the concepts of sustainable development been applied in the transport policies of different countries.
 - Action 2. Good decision making in the road sector.
- 2.1.2 Funding levels need to be identified to inform future planning and understanding of the commitment to environmental mitigation
 - Action 1. Corporate Social Responsibility in the Road Sector
 - Action 2. Focused funding
- 2.1.3 Mitigation of the environmental impact of road transport
 - Action 1. Soil and Water Pollution
 - Action 2. The priorities of environmental mitigation
 - Action 3. Social and Community Impact Assessment.



2.1.1. Policy application

- Some conditions for applying the concept of sustainable development are
 - the objectives are set at policy, program and plan level, not only for projects
 - not simply environmental aspects; integration of environmental, economic and social aspects is essential to ensure policies and policy implementation that is viable, livable and equitable.
- We need to ensure that the transport system is an integral part of land use
 - serving the regions and regional structure
 - serving the people, users as well as neighbours
 - serving the needs of the communities financing it



Sustainability is a long-term aspect

- There are differences in the priorities of developed (or even overdeveloped) and developing countries
- but all countries need to take account of sustainability
 - always a long-term perspective
 - an essential concern for all is preserving the resources and heritage be it hydrological, cultural, archeological or something else - of the country
- The working group has looked at cases in a number of countries, illustrating
 - integrating sustainability into road infrastructure
 - transport policy development in urban areas
 - problems arising when integration has not been successful
 - transport policy for development



2.1.2 Corporate Social Responsibility

- Corporate Social Responsibility (CSR) means responding to economic, social, and ecological needs of stakeholders
- Businesses can show that they are good "corporate citizens"
- Benefits of CSR:
 - helps with strategic planning and reduces development costs
 - reduces conflict costs and helps creating sustainable solutions
 - builds reputation
- For PIARC, CSR is important because:
 - Projects in the road sector evoke a multitude of stakeholder inputs
 - Very often, there are gaps between our plans and stakeholders' expectations
 with the help of CSR, we can manage expectations in order to avoid crises
 - Political entities are calling for standards in the field of CSR.



The CSR project

TC 2.1 is conducting an international study to:

- Compare existing standards in the field concerning their theoretical foundation and practicability
- Get an overview of what the PIARC members already do in the field of CSR
- Develop recommendations for the implementation of CSR in the road sector



Funding environmental investment

- If ensuring environmental quality is seen as an expense, project cost savings will probably mean that environmental measures are left out
- A better perspective is to see environmental action as an investment in quality, for the users as well as for all the neighbors of transport projects
- A working group looked at how countries manage to focus funding on environmental investment



2.1.3 Urban fragmentation

The loss of urban integration is the result of an "outward push and bulk heading strategy" of the road planners, most of all in context with noise protection installations

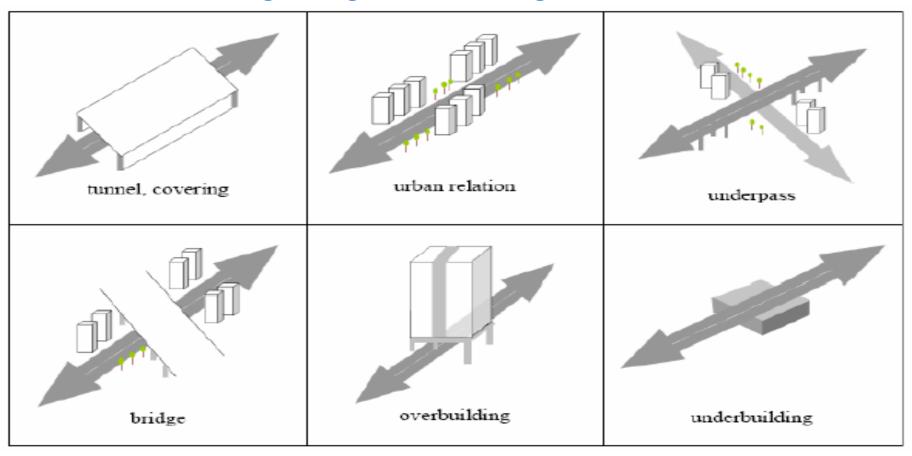








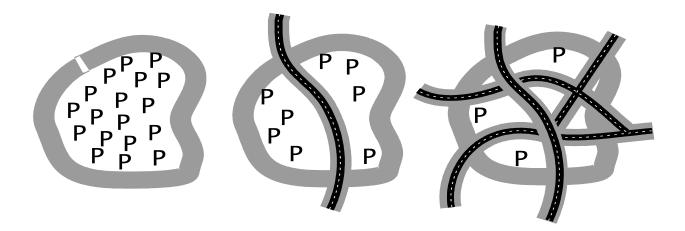
Mitigating urban fragmentation





Habitat fragmentation

Splitting of natural habitats and ecosystems into smaller and more isolated patches.



Habitat fragmentation due to transportation infrastructure can lead to local extinction of species when the patches become smaller than the minimum habitat size.



The Approach

Avoidance

Minimisation

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Mitigation



Compensation



The permeability concept

- The primary objective is to maintain the permeability of the transportation infrastructure for wildlife, to ensure the connectivity of the habitats at a larger scale.
- Both new and existing infrastructure is considered.
- Considers not only the transportation infrastructure.



Amphibian tunnel





Different contexts - different priorities

- The principles of sustainable development are general and global
- But interpreting and implementing the principles is always local
- The best way to illustrate how the principles work is through case studies, because the studies show what they mean in a concrete context
- An essential task is to try to understand one's own context
 - avoiding too simple conclusions
 - looking at the transport system as a whole, not only single links or single modes of transport
- And we need to understand that for our transport system, sustainability is a challenge we have not managed to resolve - yet.