PIARC International Best Practice Guide for Road Agencies on Air Quality Assessment and Management

CASANZ Transport Special Interest Group and NZ Transport and Environment Knowledge Hub Emissions Group Workshop

NIWA, Wellington
6th December 2018

Rob Hannaby
English Speaking Secretary
Technical Committee E.2

Lead Advisor – Environment
NZ Transport Agency
rob.hannaby@nzta.govt.nz
PIARC Technical Committees

➢ Strategic Theme A - Management and Finance
➢ Strategic Theme B - Access and Mobility
➢ Strategic Theme C - Safety
➢ Strategic Theme D - Infrastructure
➢ Strategic Theme E - Climate Change, Environment and Disasters
Strategic Theme E
Climate Change, Environment and Disasters

➢ TC E.1 Adaptation Strategies/Resiliency
➢ TC E.2 Environment Considerations in Road Projects and Operations
➢ TC E.3 Disaster Management

The goal of Strategic Theme E is to ‘increase resiliency and protect investments in transportation infrastructure from impacts of climate change events while lessening the impact of road transportation on the environment’.
Technical Committee (TC) E.2
Environment Considerations in Road Projects and Operations

<table>
<thead>
<tr>
<th>Issue E.2.1</th>
<th>Strategies</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air quality</td>
<td>Identify approaches and methodologies applied in selected countries to conduct air quality analyses. Investigate how road administrations and other authorities monitor air quality and how information is used in road traffic management. Including mitigation policies and measures such as photocatalytic pavements.</td>
<td>State-of-the-art report and recommendations.</td>
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<td>Noise mitigation</td>
<td>Evaluate and document traffic noise impacts; examination of potential mitigation measures; reasonable and feasible noise mitigation measures, including regulations and guidance setting noise levels.</td>
<td>Report on successful practices with case studies.</td>
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</tbody>
</table>
Australia and NZ TC Members

Chair
➢ Helen Murphy: Principal Advisor - Major Transport Projects, Department of Environment, Land, Water and Planning, Victoria

English Speaking Secretary
➢ Rob Hannaby: Lead Advisor - Environment, NZ Transport Agency

Air Quality Working Group
➢ Frank Fleer: Helix Environmental, Victoria
➢ Andrew Mattes: NSW Roads and Maritime Services

Noise Working Group
➢ James McIntosh: Transport for Victoria
➢ Stephen Chiles: Chiles Ltd, NZ
➢ Marc Buret: EPA Victoria
TC Work Programme

➢ Road Agency Air Quality Assessment and Management Best Practice Guide

➢ Road Agency Noise Management Best Practice Guide

➢ International Road Traffic Noise Criteria Database

➢ Auralisations to raise awareness about the impact of road traffic noise
Air Quality Assessment and Management Guide

➢ Working Group Lead: Stephen Thomson - Transport Scotland

➢ Content
  • Public health effects
  • Impact assessment
  • Stakeholder and public engagement
  • Air quality management measures available to road agencies

➢ Extensive range of international case studies, e.g.
  • Vegetation barriers in the Czech Republic to reduce roadside air pollution
  • Photocatalytic pavements and barriers to reduce levels of nitrogen dioxide in various parts of the world

➢ Topical issues, e.g.
  • Merits of Low Emission Zones and urban access controls to improve air quality

➢ Conclusions and recommendations, e.g.
  • Importance of adopting an integrated approach to land use and transport planning
  • Working collaboratively with key stakeholders to achieve optimal outcomes
Échanger connaissances et techniques sur les routes et le transport routier / Exchange knowledge and techniques on roads and road transportation
Thank You

Questions?

Rob Hannaby
English Speaking Secretary
Technical Committee E.2

Lead Advisor – Environment
NZ Transport Agency
rob.hannaby@nzta.govt.nz