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# Pavement Sustainability (CCA-02)

## Course Outline

### 1st Session (2 hours)

- Definitions, issues, metrics of sustainability (10 m)
- Impacts of the pavement life cycle on the environment and finite resource use (10 m)
- Basics of Life Cycle Assessment (LCA) [*note this is different from Life Cycle Cost Analysis (LCCA), which is the subject of another CCPIC class*] (40 m)
- How LCA is being used now, and expected further tools; further development and implementation over next several years (20 m)
- Pavement life cycle and life cycle thinking and how to use now (15 m)
- Overview of social and financial sustainability indicators and approaches for qualitative and quantitative consideration (20 m)
- Summary and questions (15 m)

### 2nd Session (2 hours)

- Specific considerations and strategies for local government for improving environmental sustainability in each stage of the pavement life cycle (70 m)
- Use of LCA and life cycle cost information to help quantify and prioritize alternative approaches to improve sustainability (20 m)
- Expected trends in improving the sustainability of pavement (15 m)
- Questions and discussion (15 m)