

Summary of Day 2

Q11: Heat Island Effect

- The heat island effect is the result of a pavement's albedo and emissivity properties
 - Impact is increased electricity consumption due to cooling demand and increased temperature for stormwater runoff
- How and when should the heat island effect be included within a pavement LCA
- Are the current models adequate? Are they scalable to project-level analyses?

Q11: Summary

- Unclear as to whether heat island fits within the pavement LCA system boundary
- Scalability not agreed upon between groups

Group 4

Heat island effect

- Heat island should be an effect at regional level
 - Regional specific
 - Do sensitivity analysis
- Time dependent
 - Albedo change
 - Time of day
 - Seasonal effect
- Current model adequate, scalable

Group 5

How and when should the heat island effect be included within a pavement LCA?

- The boundary of impacts of the urban heat island need to be clarified as being the effects on electricity consumption, or something else more exact
- Works for network level, but questionable for project level