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