Materials: Questions to Explore

Questions to Trigger Exploration and Learning
• What sorts of materials do we consume in Nebraska? Where do these materials come from? Where do they go after we’ve used/consumed them?
• What effect does material consumption have on a sustainable environment in Nebraska? Related to other NE resources?

Questions to Trigger Ideas for Change, New Action
• What actions can I take today to reduce the amount of materials I consume?
• What practices can I initiate where I work, and in my community, that could reduce material consumption?
• What recommendations for action can we formulate today, to be shared with whom, when, and how best that could influence:
  • Material consumption practices among everyday citizens of Nebraska?
  • City, state and federal policies that impact material consumption practices?

Background Reference Questions
• What educational opportunities can we encourage/initiate that would serve to inform everyday citizens, including children and youth, as well as professional service providers about sustainable material consumption in Nebraska?
What kinds of policy changes would move us toward more efficient use of materials in building design and construction (and redesign/reconstruction), community design and construction (redesign and reconstruction) and other forms of collective human activities?
• What kinds of city ordinances, and actions, could Lincoln and Omaha adopt that would help to reduce material consumption? E.g.
  • Require waste management plans for each new construction, remodeling/retrofits and building removals project?
  • Require minimum LEED construction standards are met for each new construction projects?
  • Conduct a thorough analysis of Building and Safety Codes to remove barriers to “green and sustainable” construction? (For instance, when will we have permitting options for the reuse of certain building materials in both new and retrofitting construction?)
  • Institute Incentives; e.g., green construction credits and other incentives provided for using construction systems that are repairable and reusable rather than planned for obsolescence and disposable?
• What kinds of federal laws would help to reduce material consumption? E.g.,
  • Labeling information about origin, content and embodied energy conditions?
• What educational opportunities can we influence? Programs that enable everyday citizens and professional service providers to reduce material consumption by operating from a more informed base of knowledge. E.g.,
  • Programs/classes U.S. schools of architecture teaching how to design buildings that can easily be deconstructed and the principal components reused? Passive survivability design to create buildings that will maintain livable conditions if vital services (power, HVAC and water) are interrupted?

continued
• Knowledge of materials specifications and systems can most economically and most efficiently accommodate the retrofitting of the nation’s and the cities’ existing building stock?
• How will the rising cost of energy, and the corollary rising costs of manufacturing and transportation, impact Nebraska’s need to import almost all of its new materials for construction?
• Both Omaha and Lincoln are projected to experience long-term potable water shortages. What steps can be taken to move citizen thinking/action toward “grey water” systems of second uses for water, or major rain water collection systems to offset sewage and landscaping uses of fresh ground water?