

CNU Network Work Session  
Networks and Sustainability  
Work Group Summary

- I. Four organizing network sustainability concepts
  - a. Environmental
  - b. Economic/maintenance
  - c. Quality of life
  - d. Mobility
- II. Environmental sustainability and networks
  - a. Less VMT - Reduction in CO<sub>2</sub> emissions
    - i. More efficient auto travel
    - ii. More walking, biking
  - b. Compact form – less land consumed
  - c. Less pavement
    - i. More ‘green’ features, less pavement within the same ROW
    - ii. Facilitates multi-way, ‘green’ boulevards
- III. Economic sustainability and networks
  - a. Smaller street networks vs. singular mega-arterials
    - i. Less maintenance (\$)
    - ii. Lower cost to build
    - iii. Cost-efficient
  - b. Networks create redundancy
    - i. Weather events
    - ii. Construction/maintenance of traffic
    - iii. Incidents
- IV. Quality of life sustainability and networks
  - a. Public health
    - i. Networks = more walking
  - b. Access to goods/services
    - i. Daily needs
    - ii. Social equity
      - 1. age
      - 2. income
      - 3. ability
      - 4. gender
  - c. Families/households
    - i. Less \$ spent on transportation
      - 1. trapped in poverty
      - 2. shrinking discretionary \$
    - ii. Growing indiscretionary time
    - iii. Decline of social capital
- V. Sustainable mobility and networks
  - a. Foundation/common link for all of above
  - b. ‘Can’t build our way out of congestion’
    - i. Current arterial/freeway based approach isn’t working
  - c. Networks enable viable transportation choices
    - i. Walking
    - ii. Bicycling
    - iii. Transit (inc. walk access)
    - iv. auto