Street Design and the Fire Code, 2012 and Beyond

Carl D. Wren
Background Information

Sections of the CNU Report on Fire Code Issues

- History of Fire Departments
- Fire Code Background / Current Codes
- CNU’s Involvement
- Future Code Efforts
- Focus on Overall Risk and Life Safety
- Next Steps for CNU
History of Fire Departments

- History of Organized Fire Department Easily Traceable to the Late 17th Century – Boston (1670s) (Ref. 2)
- Para-Military Organizations
- Rank Structure and Chain of Command Important
- Various Ranks of Chief Officers
- “Fire Marshal” Often a Chief Officer Rank (not always)
- Plan Review and Daily Code Enforcement May be Done by FM or by Subordinates - Captains, Lieutenants, or Other Ranks or by Fire Protection Engineers in Larger Departments
Fire and Life Safety Codes

• Some of First Fire Safety Ordinances Established By Boston (1631) and New Orleans (1796) Ref. 1 and 2
• National Building Code in 1905 by an Organization that Would be the American Insurance Association. Ref. 1
• Building Exits Code, 1931, Precursor to the Life Safety Code, NFPA 101, Ref. 3
• Consensus Fire Codes More Common Since the 1970s
Current Fire Codes

• International Fire Code by the International Code Council, 2009 Edition (Ref 4)
• NFPA 1 Fire Code, National Fire Protection Association, 2009 Edition (Ref 5)
CNU/EPA Initiative

- First Contacted Fire Service Personnel in Late 2007
- Face to Face Discussions – Austin, Charlotte, Denver
- Developed Two Code Change Proposals
- Proposals Received Mixed Reviews During ICC Fire Code Committee Hearings in Baltimore
- Proposals Defeated During Final Action Hearings in Dallas
- An Unrelated Fire Service Proposal Was Approved Could Require Fire Service Approval of all Traffic Calming Designs
Future Code Efforts

• Change Proposals Related to NFPA 1 Access Requirements
• Next Code Cycles Will Generate the 2015 editions of Both Fire Codes
• Need For Additional Collaboration
• Need For Additional Research
• Local and Regional Relationship Building
Focus on Overall Risk and Life Safety

- Fire Safety and Overall Community Risk Reduction
  - Factors Affecting Traffic Safety
  - Cardiovascular Health
  - Response Time Issues, Fire Development, Cardiac Arrest
- Realities of Current Emergency Vehicle Fleets
  - Apparatus Lifetimes, Reserve Apparatus, Costs of Replacement
- Litigation and Community Service Expectations
  - Can be 15 or More Rescue Scenarios, EMS, HazMat, Firefighting, General Public Service Calls
- Perhaps There is a Need for Broad Proactive/Prevention Efforts at Risk Reduction
Next Steps

• Relationship Building and Broader Collaboration With Multiple Fire Service Groups, Long Term and On-Going
• Participate in Functions of Code Organizations and Fire Service Organizations Including ICC, NFPA, IAFC, IAFF
• Research Impacts of Street Design on Traffic Safety, With Publication and Public Presentations
• Strive to Support Fire Apparatus Friendly Traffic Calming Whenever it is Possible
• Encourage Interaction With Fire Code Officials (or AHJs) Early in Project Schedules
• Search For Common Ground
References