

# Bridge Subcommittee Report

Chair / Presenter: Roger Till

Co-Chair: Sherif El-Tawil

EC Rep.: Tess Ahlborn

The background of the slide features several decorative elements consisting of concentric circles in various shades of blue, resembling ripples in water. These circles are scattered across the lower half of the slide, with some being more prominent than others.

# Committee Members

- Osama Abudayyeh
- Tess Ahlborn (ec rep.)
- Charles Arnold
- Steve Beck
- Glenn Bukoski
- Rigoberto Burgueno
- Craig Dashner
- Sherif El-Tawil (co-chair)
- Gongkang Fu

# Committee Members

- Nabil Grace
  - David Juntunen
  - Jerry Lynch
  - John Nekritz
  - Mukund Patel
  - Maria Szerszen
  - Roger Till (chair)
  - HC Wu
  - Sherif Yehia
- 

# Overarching Themes

## ➤ Overarching Research Need 1: Preservation

Includes: Materials; Long Lasting, Cheap, Fast; Safety and Security; Asset Management; Repair/Rehabilitation/Renewal/Preservation Technology; Monitoring and Assessment; High Risk Emerging Technology with High Payoff; IDEAS Concept; Design Methods

## ➤ Overarching Research Need 2: New Materials and Systems

Includes: Materials; Information Technology; Long Lasting, Cheap, Fast; Bridge Systems; Bridge Performance; Environmentally Friendly Materials and Construction Methods; High Risk Emerging Technology with High Payoff; Design Methods

# Overarching Themes

➤ Overarching Research Need 3: Performance and Reliability

Includes: Information Technology; Safety and Security; Reliability; Asset Management; Bridge Loading; Load Models; Bridge Performance; Monitoring and Assessment; High Risk Emerging Technology with High Payoff

➤ Overarching Research Need 4: Rapid Construction

Includes: Materials; Information Technology; Long Lasting, Cheap, Fast; Bridge Systems; Repair/Rehabilitation/Renewal/Preservation Technology; High Risk Emerging Technology with High Payoff

# Overarching Themes

➤ Overarching Research Need 5: Information Technology

Include: Cyber and Information Technology; Reliability; Bridge Systems; Asset Management; Monitoring and Assessment; High Risk Emerging Technology with High Payoff; Design Methods



# List of RPS

Title	Dur	Pri
Effectiveness of Bridge Preventive Maintenance Activities	24	H
Minimizing the Life-Cycle Cost of Bridge Structures with Corrosion-Susceptible Steel Components	36 60	H
Develop and Validate Deterioration Models for Bridge Deck Elements	18	H
Concrete Decks Resistant to Cracking	36	H

# List of RPS

Title	Dur	Pri
Advanced Technologies for Improved Planning and Execution of Bridge Inspections	30	H
Precast Elements and Systems for Rapid Construction	36	H
Design and Performance of Jointless Bridges	36	H

# List of RPS

Title	Dur	Pri
Scour Countermeasures	36	H
Development of Self-Consolidating Concrete Mixes and Design Guidelines	36	H