What are the key infrastructure issues that the Lifelines Sector would like to see researched?

Dave Brunsdon

Theme Leader, Resilient Buildings and Infrastructure

Key Success Factors

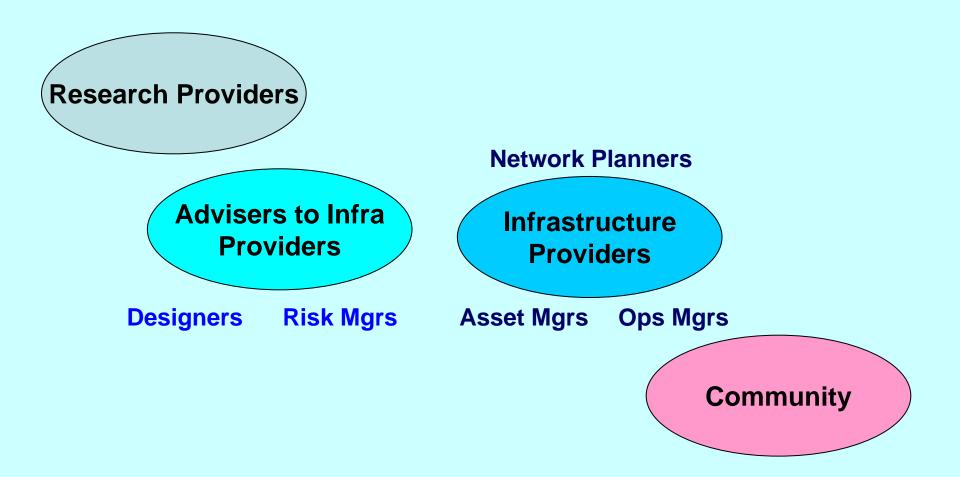
- Infrastructure providers having input into setting the research agenda
- Researchers producing material that can be applied by end users
- Research that links across themes
- Research that has a pathway through to resilience in practice



Infrastructure Resilience: The Three Key Elements

- Robust assets and flexible networks with appropriate alternative routes
 - plus adequate response arrangements it's not just about engineering and \$\$
- Effective co-ordination arrangements
 - pre and post-event
 - national and local
- Realistic end-user expectations
 - so users are better placed to have appropriate measures of backup arrangements

Who are the 'End Users' in Infrastructure?



Buildings and Infrastructure Programmes Identified (1)

(Pre- 4th September)

Resilient Coastal Infrastructure

- Tsunami effects on coastal infrastructure
- Vulnerability of Port facilities

Soil Foundation Structure Interaction

- Buildings, bridges and retaining walls
- Damage Free Bridges

Buildings and Infrastructure Programmes Identified (2)

(Pre- 4th September)

- Habitability of Post-earthquake Cities
 - Water supply restoration
- Modelling the Interdependency of Critical Lifelines
- Windflow Effects on Towers and Pylons
- Non-structural Elements in Building Seismic Performance

The Question for You ...

• What are the key questions that infrastructure end users would like to see researched?

Supplementary Questions:

- Do you feel you have a good enough understanding of international research outcomes relevant to your activities?
- What activities that you are involved with might be of interest to infrastructure research providers?

Scan of Research Projects and Relevant Activities: Resilient Buildings and Infrastructure

