SBEnrc
Industry, Government and Research Collaboration in the Built Environment

Keith Hampson, CEO
Sustainable Built Environment National Research Centre (SBEnrc)

Curtin University

Sustainable Built Environment National Research Centre

Growth of Collaborative Research through Australia's SBEnrc

Construction Research Alliance

CRC Construction Innovation
BUILDING OUR FUTURE

Sustainable Built Environment National Research Centre

1996

↓

2001

↓

2009
2010

↓

2012

↓

2018/21

↓

Ongoing

Keith Hampson, CEO
Sustainable Built Environment National Research Centre (SBEnrc) 1

Sustainable
Built Environment
National Research Centre

Program 1 - Greening the Built Environment

Program 2 – People, Processes and Procurement

Program 3 - Productivity through Innovation

» **Collaborative research centre with key international partners**
» **Industry, government and research partners**
» **Applied research and industry outreach across integrated themes**

Sustainable
Built Environment
National Research Centre

Our Mission

To be a world-class research and knowledge broker in sustainable infrastructure and building design, construction and management

To deliver research that adds value to our partners' businesses

Keith Hampson, CEO
Sustainable Built Environment National Research Centre (SBEnrc)

SBEnrc Core Partners

Collaborating Partners

Collaborating Partners

Collaborating International Partners
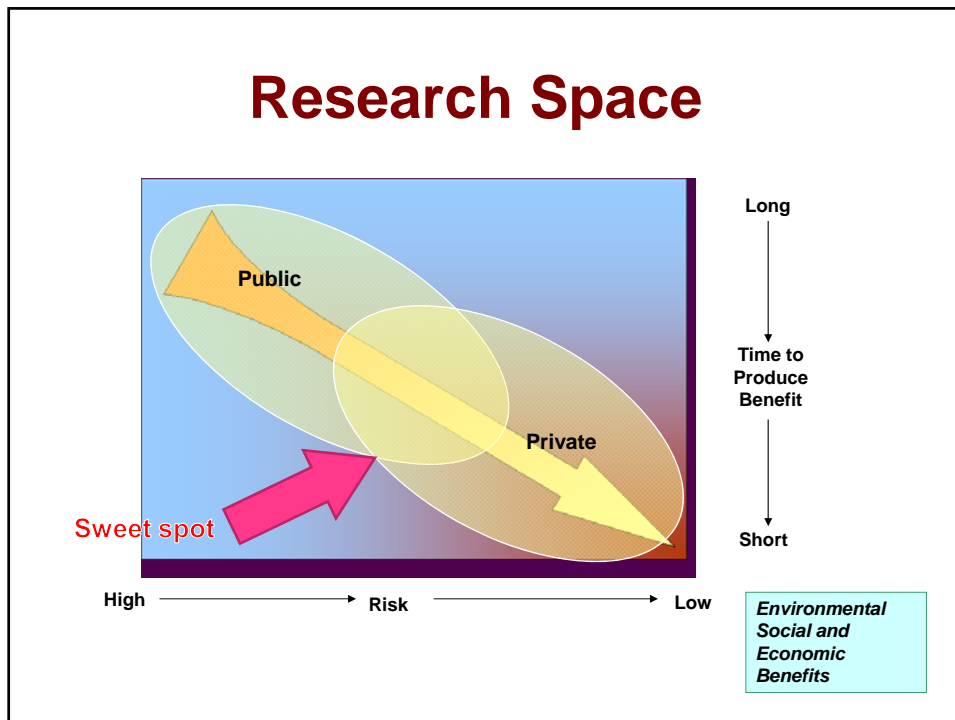
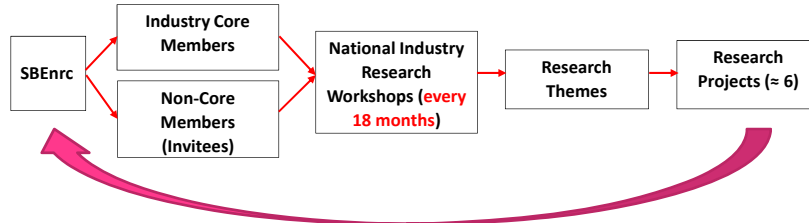## Research Space

What do we really do?

Public-Private Partnerships in R&D

- **Build innovative networks of industry, government and researchers for applied research**
- **Research skills training for industry**
- **Respond to global challenges with national and international partnerships**

How? Developing New Projects

- Industry-led themes
  - Existing and future partners lead the agenda
- National process (Sydney, Melbourne, Brisbane and Perth)
- 3 questions:
  - What keeps you awake at night?
  - What is the research that could make a difference?
  - How will you implement outcomes in your business?
- RUC recommends => Board invests
- February Workshops => October commencement

Completing Projects

- 1.41: Valuing Social Housing

- 1.42: Innovative Industrialised Buildings

- 1.43: Retrofitting Public Buildings for Energy and Water Efficiency

- 1.44: Scenario Planning Transport Futures

- 1.45: Big Data, Technology and Transportation

- 3.48: Sustainable Asset Management

Current Projects

- 1.54: Procuring Social and Affordable Housing: Improving Access and Delivery
- 1.53: Resilient Buildings: Informing Maintenance for Long-term Sustainability
- 1.55: Integrated Cities: Procuring Transport Infrastructure through Integrating Transport, Land Use and Finance
- 1.52: Tech-enabled Transport: Informing the Transition to Technology-enabled Transport Vehicles and Infrastructure
- 2.51: Developing a Cross-Sector Digital Asset Information Model Framework for Asset Management

Transport Focused Projects

1.3 The Future of Roads: Reducing Environmental Pressures, Sustainability Reporting, and Considering Future Scenarios

Project 1.3 Final Industry Report – Dec 2012 (998.99 Kb) Project 1.3 Industry Brochure

Environment   Completed

1.35 Transport Network Resilience: Disaster Logistics and Infrastructure Vulnerability

Transport Network Resilience: Disaster Logistics and Infrastructure Vulnerability – Information Sheet A number

Environment   Completed

1.22 Strategies and Solutions for the Future of Roads

The Future of Roads – Information Sheet The coming decades will see a great

Environment   Completed

3.28 National BIM Guidelines and Case Studies for Infrastructure

Information Sheet (472Kb, March 2015) Mechanisms that improve collaboration and communication in the

Productivity   Completed

Transport Focused Projects

1.55 Integrated Cities: Procuring Transport Infrastructure through Integrating Transport, Land Use and Finance

Project Fact Sheet Cities in Australia and globally find it difficult to integrate
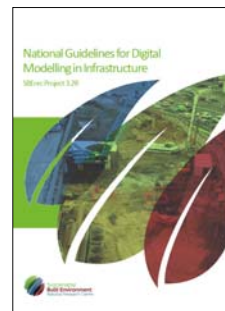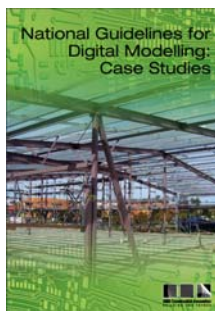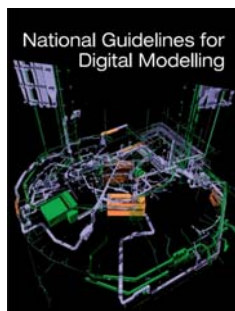
Environment — Current

2.51 Developing a Cross Sector Digital Asset Information Model Framework for Asset Management

Project 2.51 Fact Sheet Asset management in the built environment has been the

Processes — Current

1.52 Tech-Enabled Transport: Informing the Transition to Technology Enabled Transport Vehicles and Infrastructure

Project Fact Sheet The coming decades will see a significant increase in the level

Environment — Current

1.44 Scenario Planning Transport Futures: Improved Road and Transport Planning using Digital Scenario Planning Tools

Project Fact Sheet New data suggests Perth and Brisbane are likely to reach a

Environment — Completed

1.45 Big Data, Technologies and Transportation

Project Fact Sheet A key focus for the management of main roads is to

Environment — Completed

Two National BIM/DE Guidelines

National Guidelines for Digital Modelling

National Guidelines for Digital Modelling: Case Studies

National Guidelines for Digital Modelling in Infrastructure

Adopting BIM for Facilities Management

Australian Research Council (ARC)

ARC Project 1: Scaffold Life Cycle Management

ARC Project 2: Bridge Performance Assessment

Topic 1: Multi-Criteria Optimisation for Sensor Deployment
Topic 2: Reserve Capacity Estimation Based on Error Domain Structural Identification
Topic 3: BIM Integrated Decision Support System

P2.51: Asset Information Delivery Manual

Housing

Building

Transport Infrastructure

www.sbenrc.com.au

Building a safer and more productive industry