



CRC Construction Innovation
BUILDING OUR FUTURE

**THIS EVENT IS PART OF
THE AUSTRALIAN
INNOVATION FESTIVAL**



*Industry Seminar
Tuesday, 26 April 2005
Brisbane City Hall*

Bringing Innovation to Facility Management



Ebsworth & Ebsworth LAWYERS

'yes'
OPTUS



Where to?

Dennis Hogan
Maryanne Diamond

26 April 2005



CRC Construction Innovation
BUILDING OUR FUTURE



Project

Way finding in the built environment

Phase 1 objective:

To identify alternative way-finding systems and/or technologies that may assist people with a sensory impairment to integrate with society.





Next steps

- **Phase 2** - Evaluation and recommendation of a preferred system to be trialed
- **Phase 3** - Install, trial & evaluate at the Melbourne 2006 Commonwealth Games or other selected location





Key research findings

- **Way-finding systems group into three areas:**
- **Passive systems** – provide feedback
- **Dynamic systems** – provide audio/tactile feedback
- **Infrastructure based systems** – require installation and maintenance of built-in systems within buildings





Passive systems

Tactile ground indicators





Passive systems

Raised tactile (embossed) and Braille signage





Dynamic systems

- Infrared / Ultrasonic Obstacle Locator





Infrastructure based systems

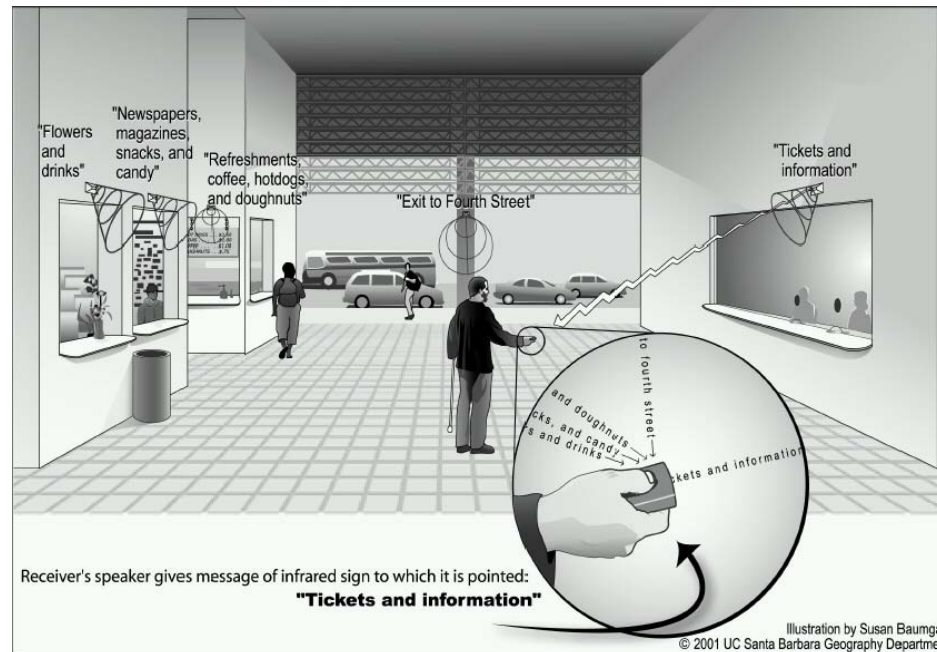
Directional sound evacuation





Infrastructure based systems

Remote Infrared audible signage





Research conclusions

- Immediate actions:
 - Consider Building Code requirements
 - Priority to standards & codes related to passive and active systems
 - Develop international standard or protocol
- Medium term actions:
 - Tailored information for users of in-built location specific transmitters
 - Portable devices modified for building users
- Long term:
 - ‘Virtual reality’ devices
 - Advanced ‘smart clothing’
 - ‘Robotic guides’





A user perspective

- Putting the research in a blind perspective
- Lessons from the research
- Emergency evacuation





Way-finding in the built environment



CRC Construction Innovation
BUILDING OUR FUTURE

Project Partners:

Building Commission, Victoria
Australian Building Codes Board
Queensland Department of Public Works
Queensland University of Technology - Department of
Construction Property Maintenance
CSIRO MIT

Reference Group:

Blind Citizens of Australia (Vic)
Office of Commonwealth Games Coordination (Vic)
Human Rights and Equal Opportunity Commission (NSW)
Disability Council of Queensland
Innovative Access Systems P/L

