bushfire&natural HAZARDSCRC

INTEGRATED URBAN PLANNING FOR NATURAL HAZARD MITIGATION

Alan March

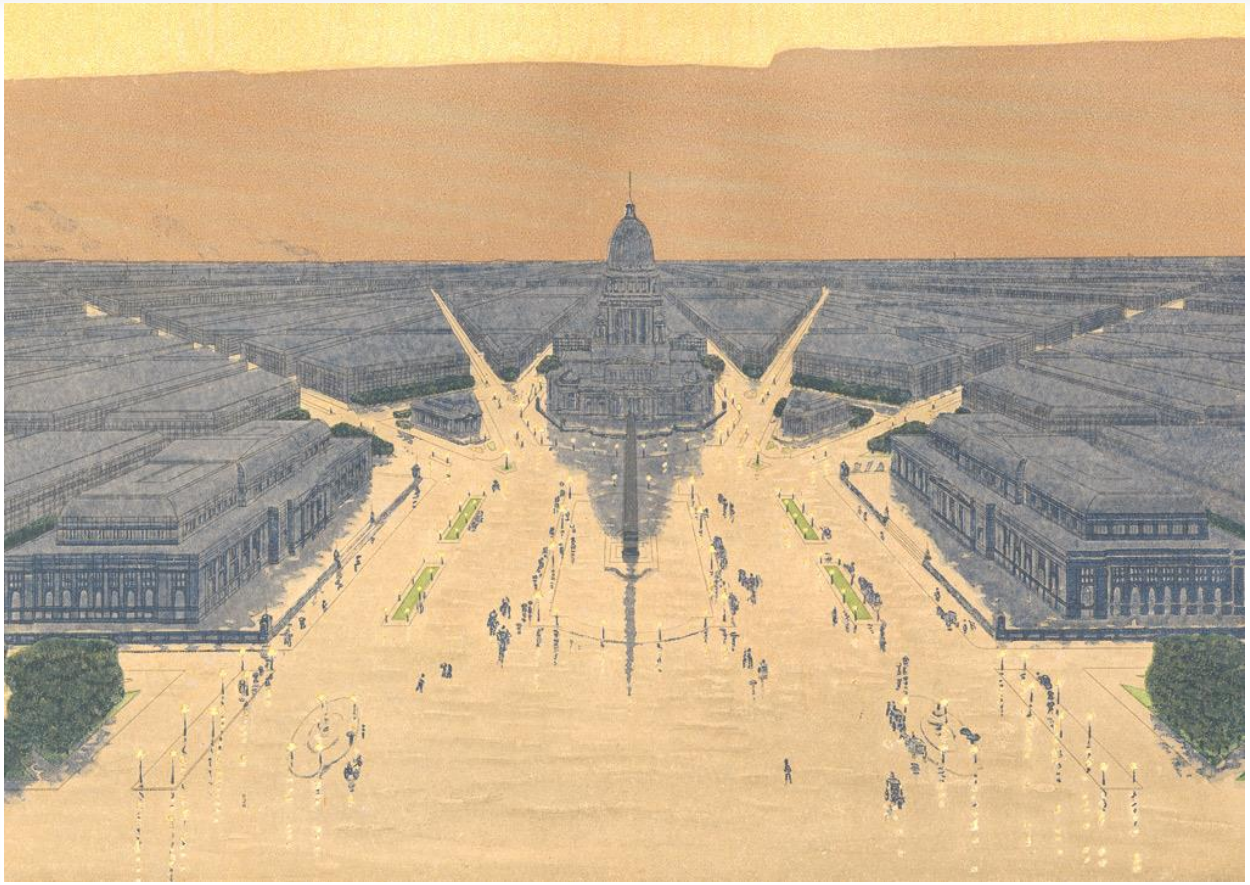
Faculty of Architecture, Building and Planning, University of Melbourne, Victoria

Australian Government
Department of Industry, Innovation and Science
Business Cooperative Research Centres Programme

THE UNIVERSITY OF MELBOURNE
Australian National University
THE UNIVERSITY of ADELAIDE

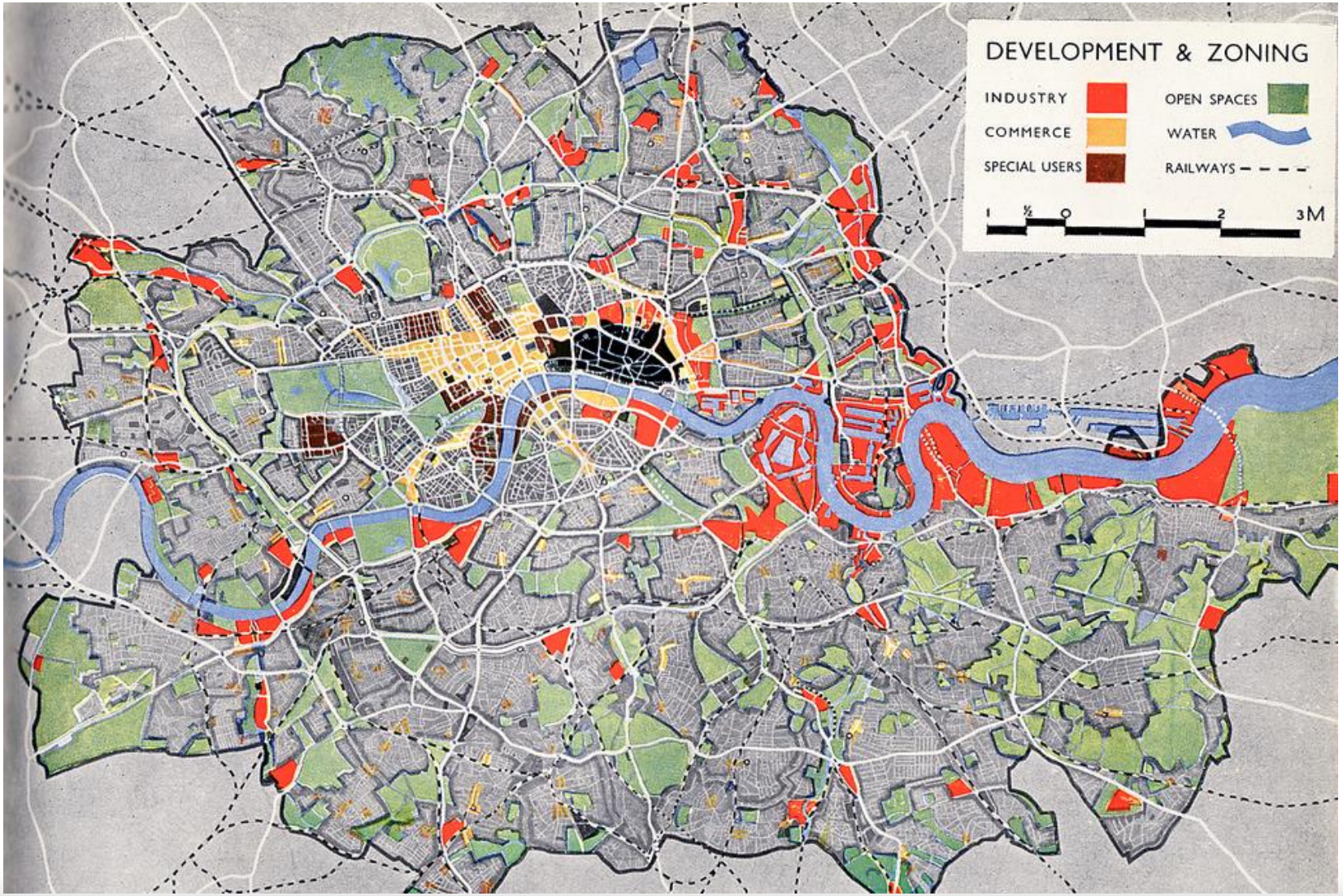
PLANNING?

Advantageous arrangement of the physical features, activities and connections between element of settlements and natural systems to achieve desired outcomes and to avoid problems (Hall , 2007).



Make no little plans; they have no magic to stir men's blood and probably themselves will not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will never die… (Daniel Burnham, Plan for Chicago 1909)

In reality plans and planners typically have little success with this type of planning.



In 2015 the World Economic Forum identified urban **planning failures as a distinct risk factor**. The significance of this risk is underlined by the fact that in 2012, more than 60% of the area projected to be urban in 2030 was yet to be built. (UN Habitat, 2015)

City regions are becoming increasingly exposed and are creating **new patterns of intensive risk**; at the same time, poorly planned and managed urban development has **generated new hazards and extensive risk** (UNISDR, 2013)

Whether or not disaster risk is factored into investment decisions in urban development will have a decisive influence on the future of disaster risk reduction (UNISDR, 2013)

PLANNING'S CHALLENGES

Lismore after Cyclone Debbie

- Predetermined settlement patterns
- Governance disconnects
- Competing demands
- Strong urban population growth
- Incomplete or unused data
- Tendency to statutory planning, rather than strategic
- Lack of understanding between EM and Planning personnel.
- Dynamic, changaeable risks
- A lack of learning and translation from past events
- Bureaucracy, democracy and politics.

A need for an improved palate of tools and approaches
For better **decisions**

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PROJECT TEAM

Assoc. Prof. Alan March - University of Melbourne – Melbourne School of Design. (Project Lead, Integration of Urban Planning and Disaster Risk Reduction)

Prof. Holger Maier (Risk Management, Modelling & Decision Support) *University of Adelaide*

Prof. Stephen Dovers (Disaster Governance and Policy) *Australian National University*

Prof. Ruth Beilin (Resilience in changing communities, landscapes and disaster)

Adjunct A/Professor Hedwig van Delden (Natural Resources and Risk Management, Modelling and Decision Support) University of Adelaide,

Prof. Janet Stanley (Integrated Planning, Disaster Management and Arson, Transport and Social Exclusion) *University of Melbourne*

Graeme Riddell (Researcher Spatial Systems and Engineering) University of Adelaide

END USERS

John Schauble (Emergency Management Victoria)
Rolf Fenner (Australian Local Government Association)
Ed Pikusa (Department of the Environment, Water and Natural Resources, South Australia)
Mike Wouters (DEWNR) South Australia
Aidan Galpin (DEWNR) South Australia
Stephen Dredge (Principal, MWH)
Roy Thompson (Assistant Chief Fire Officer, SA Metropolitan Fire Service)
Jo Brooks (Emergency Management Officer, SA State Emergency Service)
Greg Nettleton (Chief Officer, SA Country Fire Service)
Steve Boverman (Manager Development Planning & Policy) NSW
Julie Hoy (Inspector General for Emergency Management) Victoria
Andrew Andreou (Executive Manager Community Infrastructure Country Fire Authority) Vic

PLANNING'S EM/DRR POTENTIAL

Consistently recognised as key to reducing natural hazard risks, particularly at policy level.

Urban planning can:

- examine and assess future scenarios (including DSS)
- integrate spatial understandings of hazards with built environment improvements
- modify *activities* and *use* of land
- avoid, reduce and remediate
- integrate and coordinate
- develop and apply new tools
- account for human behaviours, physical, social, economic, and ecological matters…

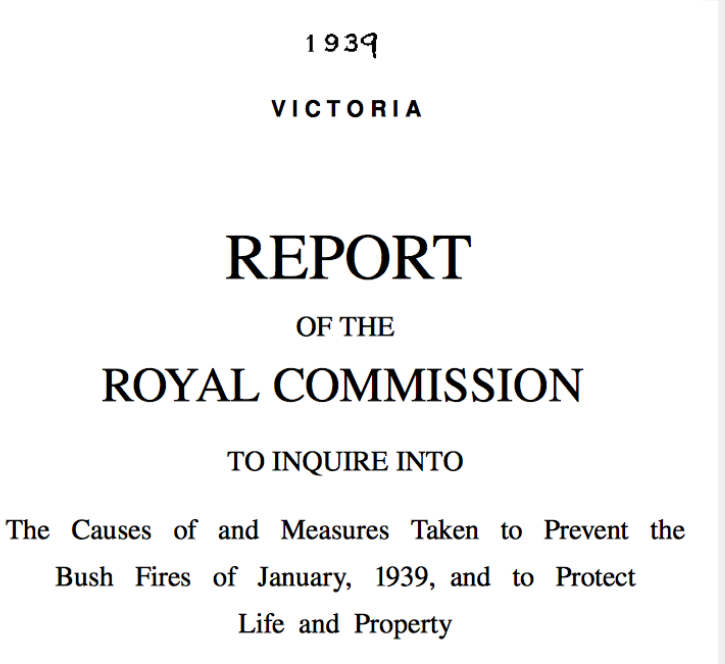
PRIMARY QUESTIONS

1. What are the limits and potentials of integrated urban planning for natural hazard mitigation in Australia?

2. Can key cases be used as a way to make practical improvements that generate practical lessons?

STAGE 1 – DEVELOPING THE THEORETICAL BASE

- Learning from the Past
- Best Practice in Australia and Internationally
- How do current practices in Australia compare?
- Issues and Potentials



1939

VICTORIA

REPORT

OF THE

ROYAL COMMISSION

TO INQUIRE INTO

The Causes of and Measures Taken to Prevent the Bush Fires of January, 1939, and to Protect Life and Property

STAGE 2 – APPLICATION TO AUSTRALIA

- EM and Planning practitioner views and understandings of preliminary findings

- Identification of Australian cases and or typologies that can highlight best practice or ability to be significantly improved

STAGE 3 – TRANSLATION AND APPLICATION

- Preliminary application to cases with guidance from practitioners
- Identification of appropriate application to particular circumstances and cases
- Development of range of transferrable approaches and understandings
- Summary communication documentation, model processes and manual