

A Study of Failures of Property Development and Construction Industry Structures and Systems in the Tall Building Sector.

Summary:

This research explores the systemic historic deterioration of property development and construction practices, their structures and regulatory systems to explain and deter the tragic life threatening events that have arisen in our tall building commercial building sector (see inset).

The research draws on previous studies (Drane PHD 2014,2015-6) of property development, which focused on property development history, typologies, dynamics and structures in the Australian context. Dr Drane has been involved in OFT workshops related to the Developer Bond and has also attracted media interest in this work and after the intensity that the Bankstown incident brought to the public eye. The study will focus on a sample of high rise multi-apartment developments in a selection of dense pre-sales marketplaces in the Sydney Basin e.g. Green Square, Alexandria, Mascot. The models and analytical tools arising from Dr Drane's existing work will be applied to undertake a micro-study of these key development zones. The results will provide further reinforcement of a Defects Scenario Matrix for project risk analysis that will help at policy, regulatory and professional levels.

Study Objectives

A (pilot) micro-study of the systemic causes behind the deterioration of industry practices and structures in the NSW construction and property development industry with a focus on multi-apartment dwellings.

Relevance

The study enhances our understanding of how current systems and practices have led to the deterioration of safety and quality in construction outcomes and defines a new regulatory and systemic structure for future property development and construction. The study will inform policy makers, regulators and professionals about the systems, dynamics and drivers that precipitate the creation of faulty property developments that have a potential to cause fatal outcomes.

Study Method

Survey, Case Study, Historical Analysis, Semi-structured interview reinforcing the author's existing Defects Scenario Matrix which provides an analytical project risk framework. The pilot will inform and frame further substantial research of overall Australian systems with the view to securing defined and effective outcomes for implementation in the future.

For further details

See our research web site- www.jondrane.net go to Research Page Contact Dr Jonathan Drane: j.drane@westernsydney.edu.au August 2017

WESTERN SYDNEY UNIVERSITY

Sydney Graduate School of Management

The research project is undertaken in keeping with the university's ethics processes and policies.

Tower Tragedies

Bankstown Fire 2012

The Bankstown incident involved a fire in a multi -apartment tower which saw two young women jump from the fifth floor to escape the intense fire and flames. Tragically one of the women did not survive the fall. Fire brigade commentary noted that a fire door burned down in a matter of minutes instead of having a one to two hour rating.

Docklands Lacrosse Fire 2014

This 20 storey apartment tower saw 500 residents evacuated as the fire climbed the external balconies and engulfed seven floors. Later studies showed the façade materials to have contributed.

Grenfell Tower UK 2017

The greatest tragedy in the era of tragedies, the Grenfell apartment tower was engulfed with rapidly ascending fire to see many people not survive.

Torch Tower Dubai 2017

This high rise tower set fire and saw damage to 34 apartments over 64 floors. The residents thought it was a false alarm.

See http://www.jondrane.net/research/the-state -of-contemporary-property-developmentstructures/