

PATREC Research Program

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FREIGHT AND LOGISTICS COUNCIL OF WESTERN AUSTRALIA

27 April 2017

PATREC

- A new Collaborative Agreement signed on 8 Dec 2016 with three-year rolling funding arrangement
- Purpose
 - *conducting collaborative, applied research and teaching*
 - *in support of policy*
 - *in the connected spaces of transport and land use planning*
- Governance
 - Hosted by UWA
 - Board comprising independent chair (new!) and each partner
 - Research Advisory Committee
 - Project Steering Committees

Key activities

4 doctoral candidates on PATREC top-up scholarships

\$1M of additional funding sourced from non-subscription income

22 seminars
Research Forum
26 conference papers
27 academic papers
1 book - 28 chapters
17 Technical Report

Proportional Value Contribution



Commenced 24 research projects;
Completed 17

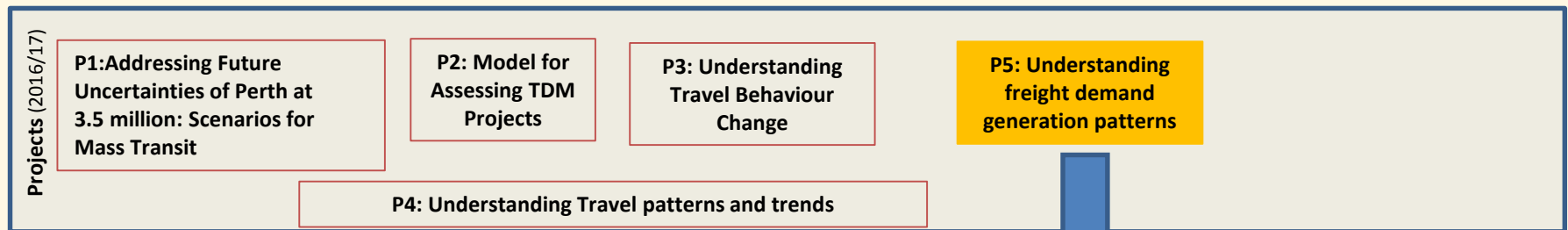
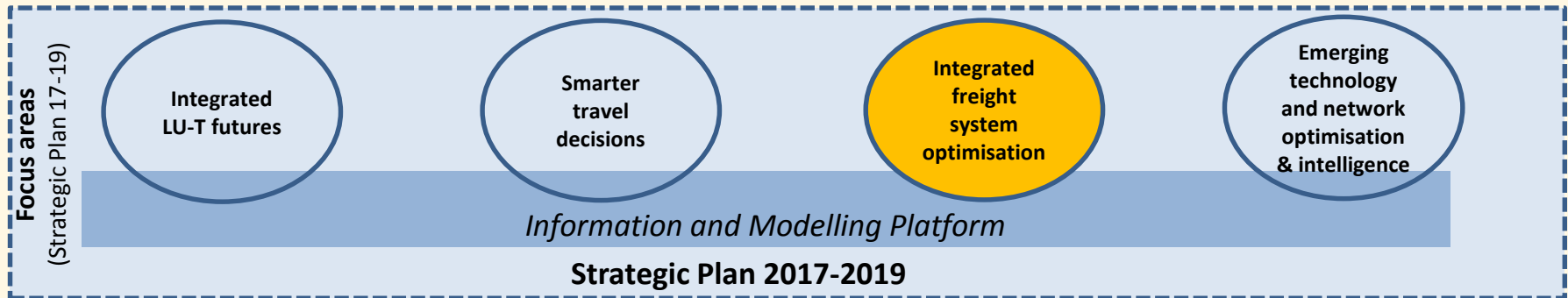
Resourcing

- Academics
- Consultants
- Government Agencies

PATREC Research Assoc.	Faculty/School/Centre	Uni.	PATREC Research Assoc.	Faculty, Dept, School	Uni.
Mike Ridout	Spatial Sciences	Curtin	Dr Wei Liu	Computer Science	UWA
Dr Ulanbek Turdukulov	Spatial Sciences	Curtin	Dr Jianxin Li	Computer Science	UWA
Dr Simon Moncrieff	Spatial Sciences	Curtin	Tim Perkins	Centre for Planning	ECU
Tristan Reed	Spatial Sciences	Curtin	Dr Cath Ferguson	Business and Law	ECU
Dr S Zhang Nau	Information Systems	Curtin	Dr David Lamb	Business and Law	ECU
E/Prof Geoff West	Spatial Sciences	Curtin	Prof Craig Standing	Business and Law	ECU
Jake Schapper	Planning & Geog.	Curtin	Dr Susan Standing	Business and Law	ECU
Dr Courtney Babb	Planning & Geog.	UWA	A/Prof Trudi Cooper	Arts and Humanities	ECU
Dr Chao Sun	Geography & Env. Sc.	UWA	Dr David Blake	Science	ECU
A/Prof Doina Olaru	Business School	UWA	Gary McCarney	Hon Research Fellow	UWA
Dr Brett Smith	Business School	UWA	Laura Gladstone	Consultant	-
Ying Huang	Business School	UWA	Tim Hoffman	THAdvisory	-
Hendrik Braun	Business School	UWA	Paul McLeod	Adj Prof UWA	UWA
A/Prof Paul Bergey	Business School	UWA	John Taplin	E/Prof UWA	UWA
A/Prof Rachel Cardell-Oliver	Computer Science	UWA	Darryl Patterson	ARUP	-

Agency	Project 1	Project 2	Project 3	Project 4	Project 5
DoP	Craig Shepherd		Craig Shepherd	Damien Martin	Craig Shepherd
	Damien Martin				
DoT	Renlong Han	Simon Grieve	Sue Hellyer	Renlong Han	Anne-Marie Brits
	Sue Hellyer	Renlong Han	Alison Bunbury	Sue Hellyer	Caroline Elliott
			Andrew Wilkinson		
PTA	Louise Howells	Tom Pacy	Simon Cox	Tom Pacy/ Martin White	
	Jamie Mullins		Louise Howells		
MR		Kamal Weeratunga	Mehdi Langroudi	Wes Soet	Wes Soet
Treasury	Coan Harvey		Coan Harvey	Laura Cook	
			Vivian Pinter		

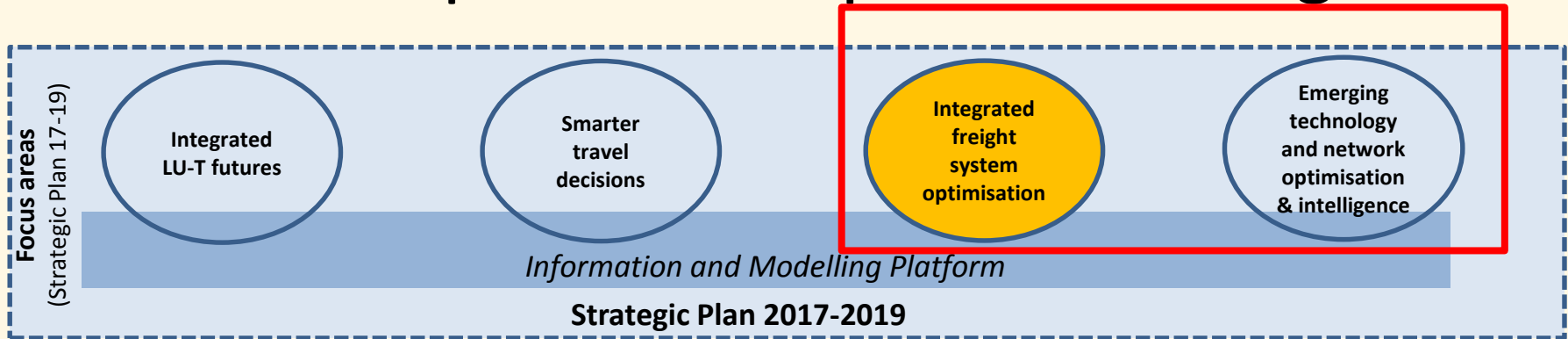
Research focus



Understand industrial location decision-making by firms in Perth, with a focus on development of new intermodal hubs:

- scale of the road freight task
- generation rates per industry type and location
- factor affecting location choice per firm type and location
- predict types of industry most likely to be attracted to existing and new industrial zones being planned especially those co-located with proposed intermodal rail freight terminals

iMOVE CRC provides impetus for Freight



- Bid successful (6 March 2017)
- Commonwealth funding - \$55M over 10 years
- Industry cash (\$38M) and Research (\$17M)
- PATREC/WA – DOT, MRWA, UWA, ECU, also RAC
- Expand the industry funding in WA
- Collaboration with Qld priority

Freight project proposal to iMOVE

- Aim for 1 July 2017 start
- Initial 2-year project
- With project steering committee – industry/government and research
- Building on outcomes of
 - Freight Policy Workshop held with DOT on 21 March 2017
 - A Review of Freight Research Topics (Paul McLeod)
- Research connected to freight may be categorised by:
 - mode (rail, road, sea) – multi-modal (road, rail, intermodal terminals and ports (air and sea), and interactions
 - by industry and commodity (grain, minerals, groceries etc.) – initial focus on 1-2 supply chains – cold chain?
 - by region (urban, regional) - urban
 - by decision framework (operational, infrastructure, policy, planning) – strategic – supportive of land use and transport policy and planning.

iMOVE project option

- Evaluating the impacts of a range of integrated land use and transport policy and planning initiatives to improve supply chain productivity and sustainability including:
 - Effective intermodal centres, inland port – location and design
 - Data - detailed data base documenting the pattern of goods movements by route, goods, time of day etc.
 - Modelling and simulation to capture all relevant relationships in such a way that various pricing, investment and planning options and scenarios can be tested

Council involvement?

- Links to “freight issues”
 - Fremantle Port Development and Intermodal Networks
 - Supply Chain Enhancement
- Update Council as project proposal develops
- Data
- Project Steering Committee involvement