

UNIVERSITY OF TWENTE.



## NATIONS NEED NATIONAL LAND ADMINISTRATION INFRASTRUCTURES

ROHAN BENNETT, ABBAS RAJABIFARD, IAN WILLIAMSON, JUDE WALLACE



ITC FACULTY OF GEO-INFORMATION SCIENCE AND EARTH OBSERVATION



THE UNIVERSITY OF MELBOURNE



2001-2011  
CELEBRATING  
10 YEARS  
CSDILA  
THE CENTRE FOR SPATIAL  
DATA INFRASTRUCTURES  
& LAND ADMINISTRATION

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## CONTEMPORARY LAND ADMINISTRATION: THE IMPORTANCE OF BEING INFRASTRUCTURE

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### Question 1

Should land administration be a *national* endeavor?

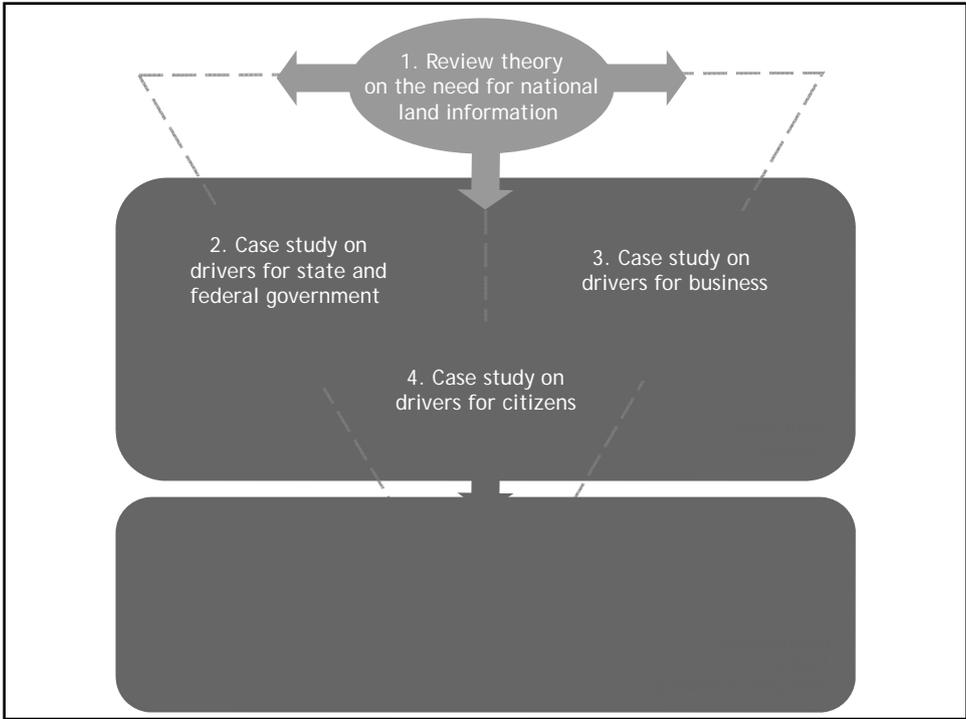
Often assumed...

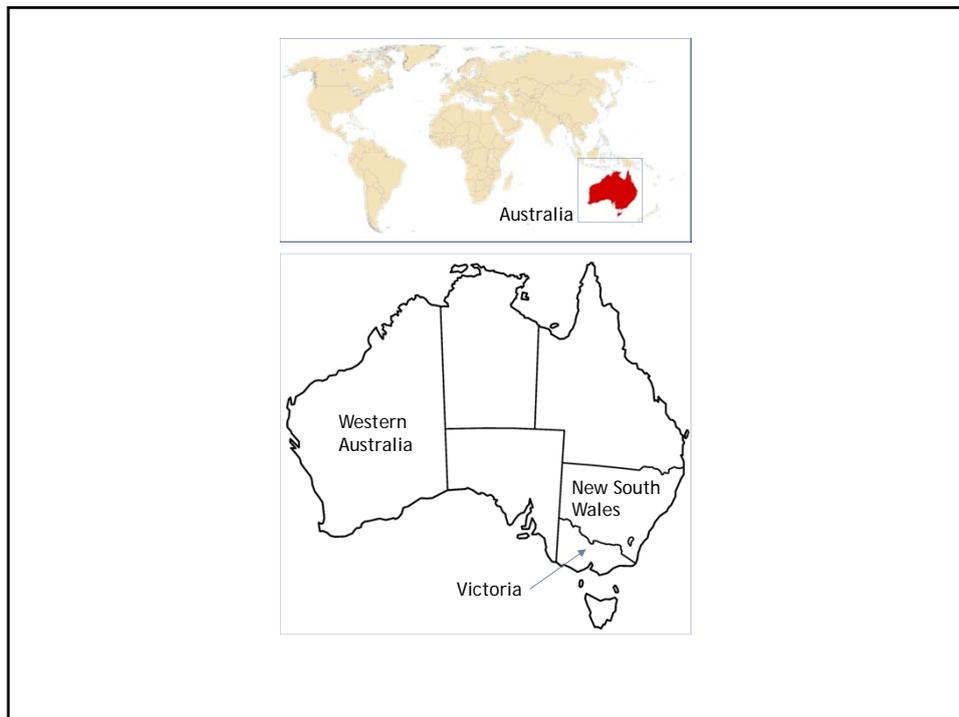
Often ignored...

Often a paradox for less developed contexts...

Often of great interest to federated countries...

Often of crucial importance for gaining support of central government...

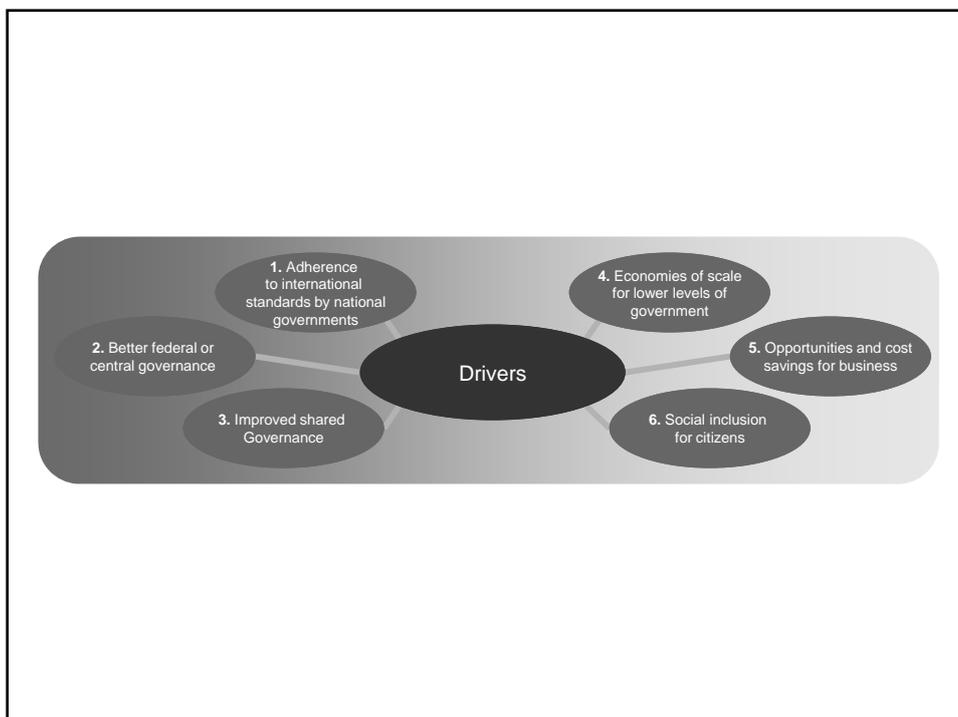




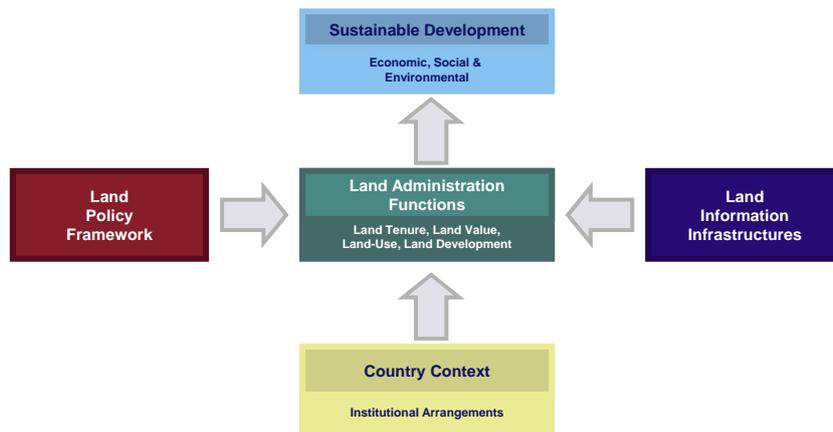
- Adherence to the Kyoto Protocol: disclosing the energy efficiency of buildings
- Development of better national statistics for adherence
- Enhanced monetary policy: setting the national cash rate
- Improved fiscal management: collecting national property taxes
- Enablement of federal land administration
- Provision of national assessment and responses to climate change
- Contributing to effective national property markets
- Facilitation of national law enforcement, disaster management and emergency response
- ePlan standards
- Harmonized Data Model
- Assisting disaster relief and management on a national scale
- Aiding infrastructure decisions for cities of national significance
- Support for an authoritative approach to street addresses
- Measuring food security
- Survey Accurate Cadastres
- National Address Management Framework
- Framework for managing property rights, restrictions, and responsibilities
- Creation a seamless or harmonized economy
- Implementation of a national eConveyancing systems
- Delivery of a national market for retail leases
- Simplification of the land development process for national businesses
- Generation of value added products and services
- Generation of 'Social Inclusion': The CSDI Pilot Project

Drivers	Examples	Requirements (core data and/or services needed)			
		Tenure	Value	Use	Development
1. Adherence to international treatise by national governments	- Adherence to the Kyoto Protocol: disclosing the energy efficiency of buildings	X		X	X
	- Development of better national statistics for adherence	X	X	X	X
2. Better federal or central governance	- Enhanced monetary policy: setting the national cash rate	X	X		X
	- Improved fiscal management: collecting national property taxes	X	X		
3. Improved shared governance	- Enablement of federal land administration	X	X	X	X
	- Provision of national assessment and responses to climate change	X	X	X	X
	- Contributing to effective national property markets	X	X		X
	- Assisting disaster relief and management on a national scale	X	X	X	X
	- Aiding infrastructure decisions for cities of national significance	X	X	X	X
	- Support for an authoritative approach to street addresses	X			
	- Measuring food security	X	X	X	
4. Economies of scale for lower levels of government	- Facilitation of national law enforcement, disaster management and emergency response	X			
	- ePlan standards	X			X
	- Harmonized Data Model	X			
	- Survey Accurate Cadastres	X			
	- National Address Management Framework	X		X	
5. Opportunities and cost savings for business	- Framework for managing property rights, restrictions, and responsibilities	X		X	
	- Creation a seamless or harmonized economy	X	X	X	X
	- Implementation of a national eConveyancing systems	X	X		
	- Delivery of a national market for retail leases	X	X	X	
	- Simplification of the land development process for national businesses	X		X	X
7. Social inclusion for citizens	- Generation of value added products and services	X	X	X	X
	- Generation of 'Social Inclusion': The CSDI Pilot Project	X		X	

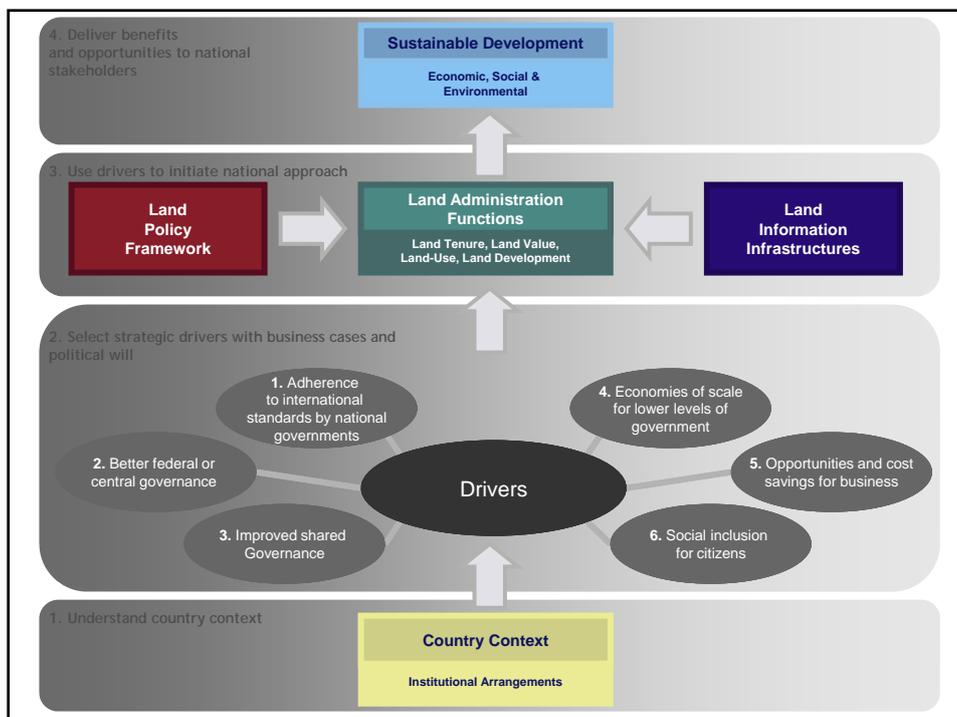
Bennett, Rajabifard, Williamson, and Wallace, (2012), On the need for national land administration infrastructures, Land Use Policy, In press.

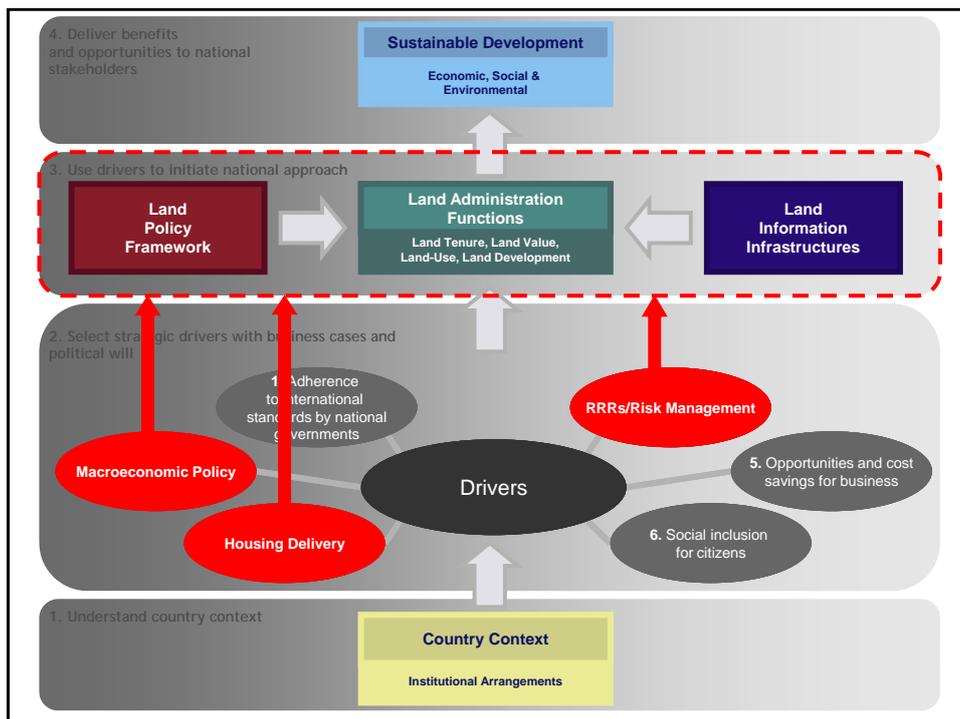


## How does this apply to the Land Management Paradigm?



Williamson, Enemark, Wallace, and Rajabifard (2011)





## United Nations Committee of Experts on GGIM...

*Patrick Meier – iRevolution*

*"In ten years, there will be a clear dividing line between winning and losing nations, dependent upon whether the appropriate legal and policy frameworks have been developed that enable a location-enabled society to flourish."*

<http://irevolution.net/2012/04/25/future-trends-in-geo/>

## United Nations Committee of Experts on GGIM...

*Patrick Meier – iRevolution*

*"The role of National Mapping Agencies as an authoritative supplier of high quality data and of arbitrator of other geospatial data sources will continue to be crucial."*

<http://irevolution.net/2012/04/25/future-trends-in-geo/>

There is a strong case for national approaches

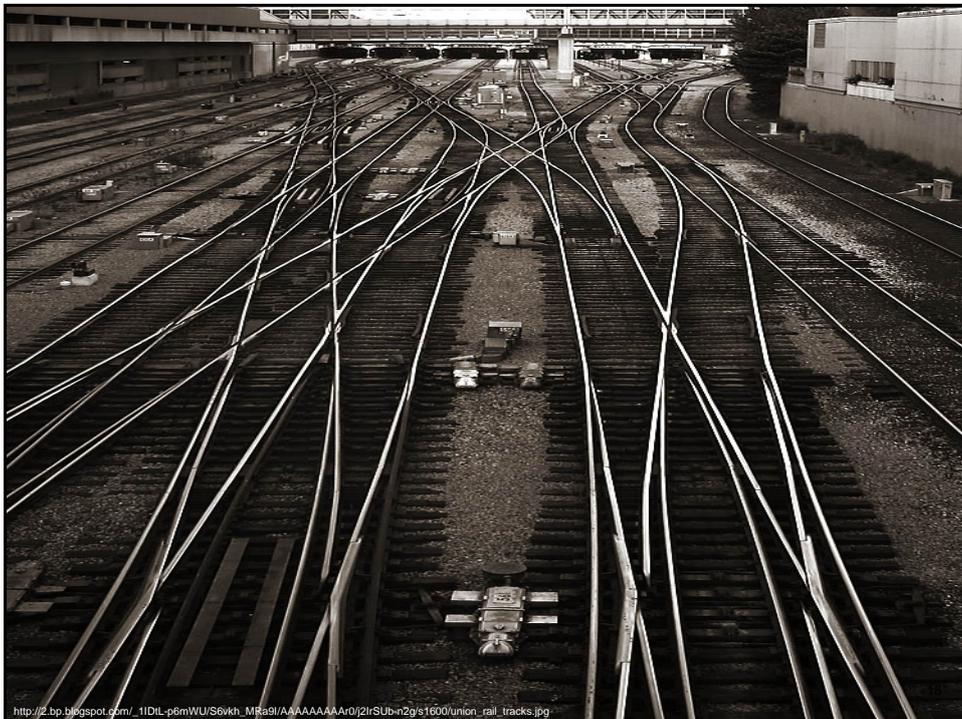
We might need to start local

There is no 'silver bullet' – context matters

Land professionals must be lobbyists

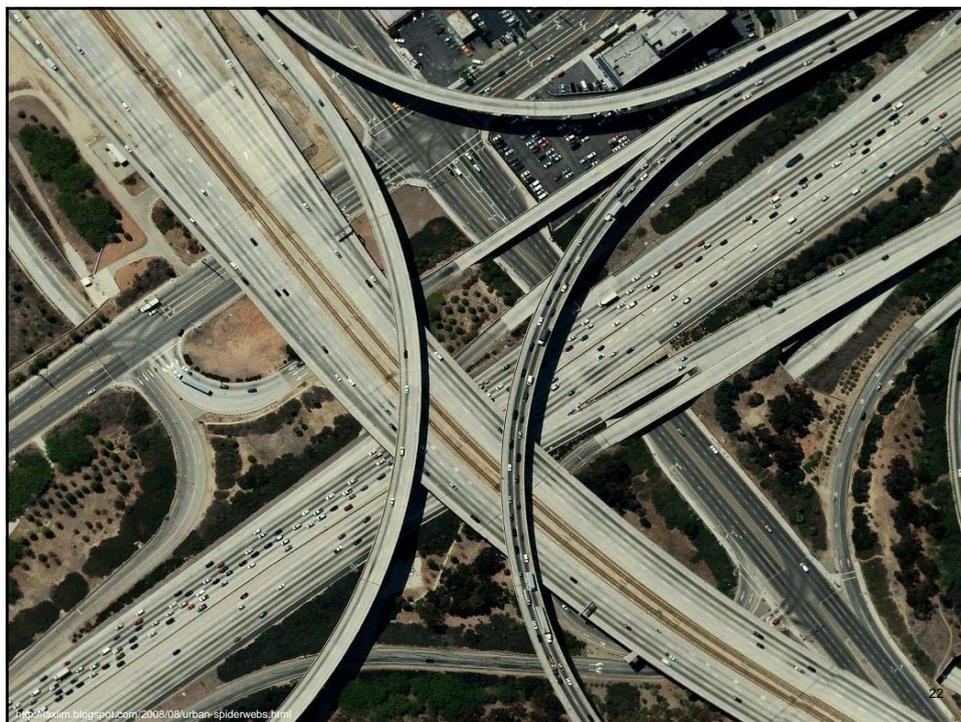
## Question 2

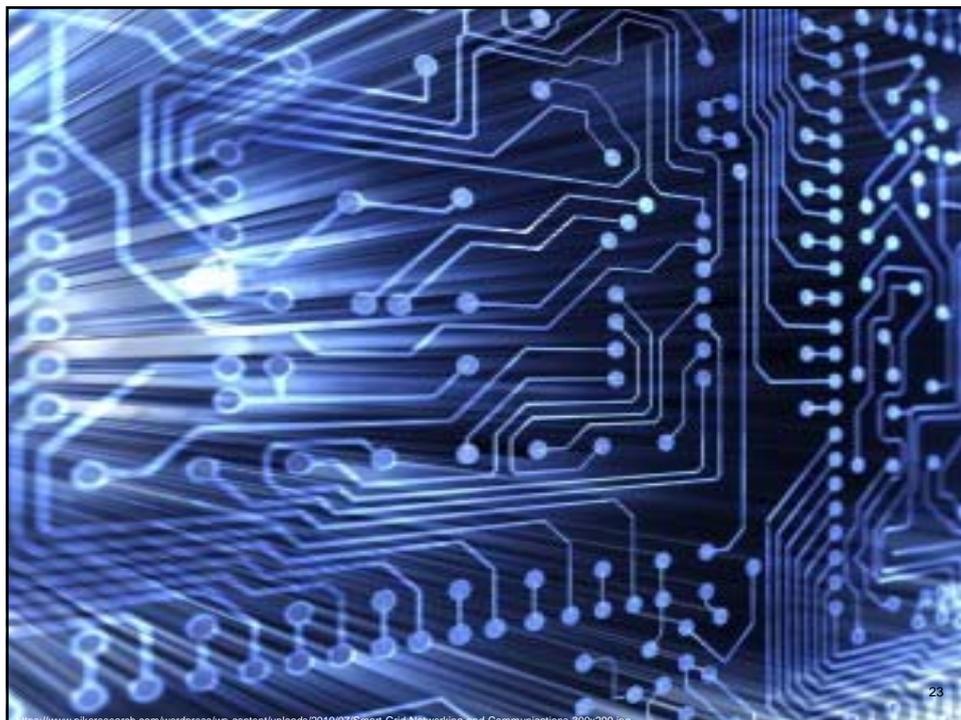
Is land administration an infrastructure and why is it important that it be considered so?

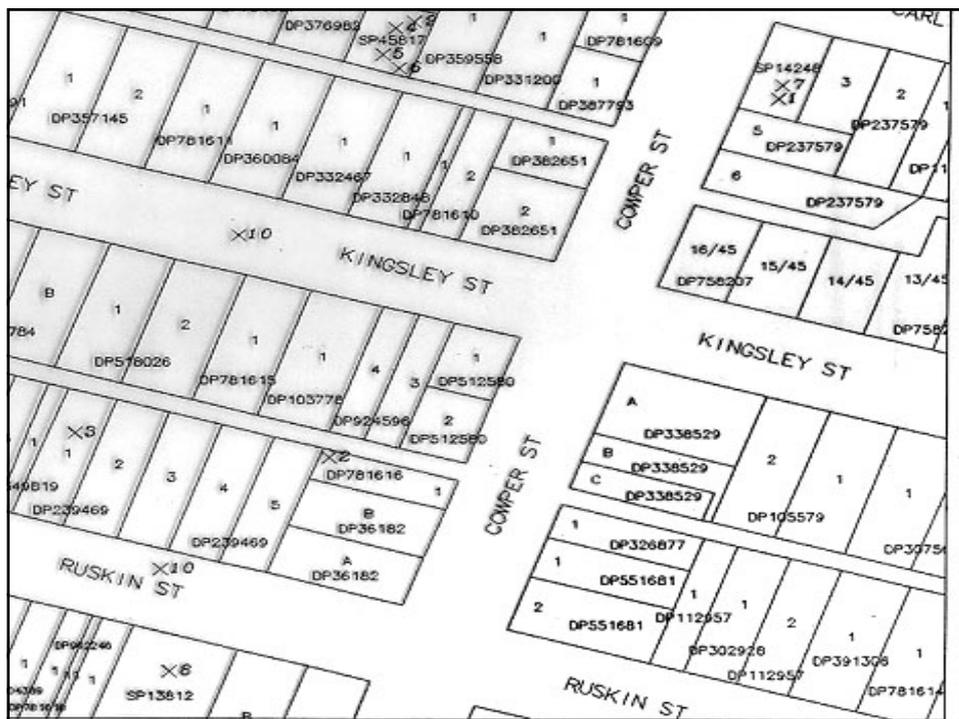


[http://2.bp.blogspot.com/\\_1DIL-p6mWU/S6vkh\\_MBa9I/AAAAAAAAAr0j2lrSub-n2gs1600/union\\_rail\\_tracks.jpg](http://2.bp.blogspot.com/_1DIL-p6mWU/S6vkh_MBa9I/AAAAAAAAAr0j2lrSub-n2gs1600/union_rail_tracks.jpg)



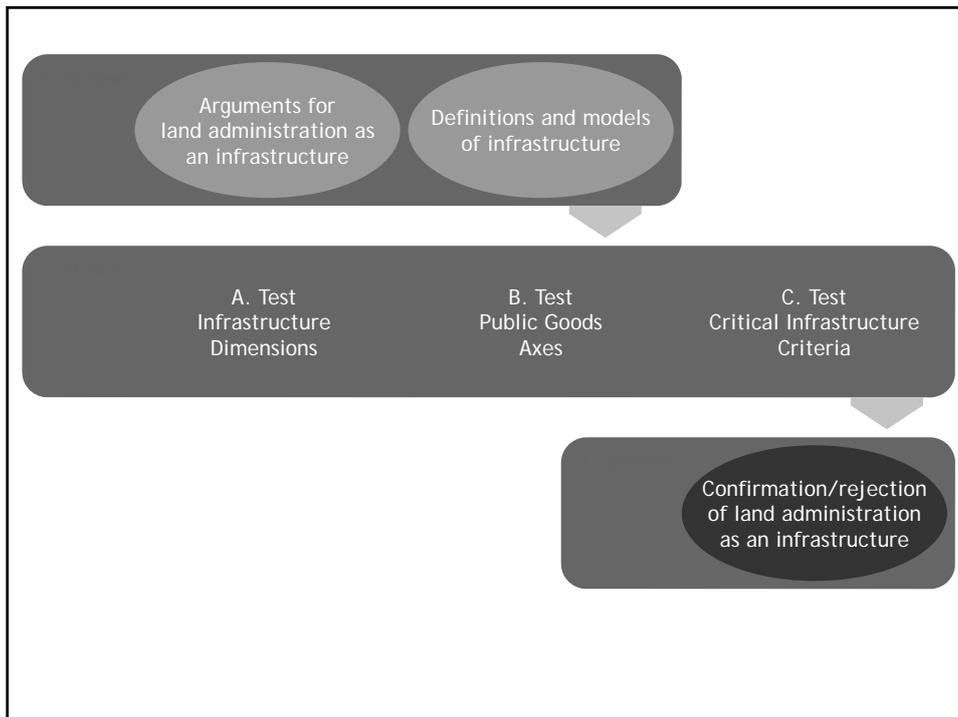






Funding channels available to other infrastructure become difficult to access

The need for adaptive systems of management of management is not recognized

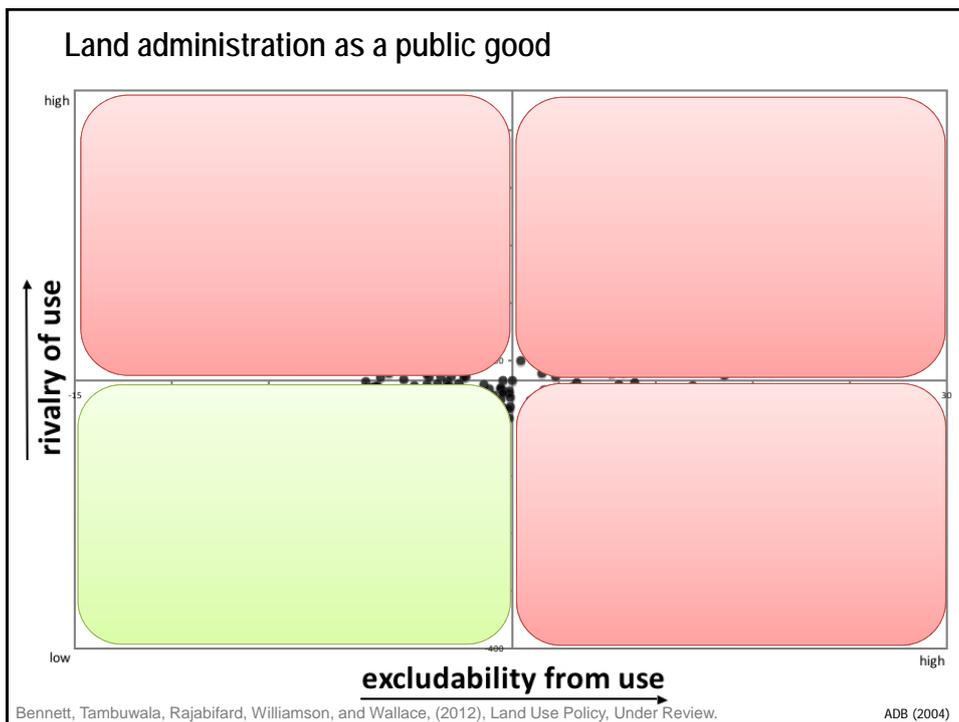


### Land administration as infrastructure

Country	Embeddedness	Transparency	Reach/Scope	Learned as part of membership	Links with conventions of practice	Embodiment of standards	Built on an installed base	Becomes visible upon breakdown			
East Asia & Pacific											YES
Indonesia											
Philippines											
Thailand											
Eastern Europe & Central Asia											
Armenia											
Latin America & Caribbean											
Bolivia											
Middle East & North Africa											
Iran											
OECD											
Switzerland											
United States											
England											
Australia											
South Asia											
India											
Sub-Saharan Africa											
South Africa											
Ghana											
Namibia											

Bennett, Tambuwala, Rajabifard, Williamson, and Wallace, (2012), Land Use Policy, Under Review.

Star and Ruhleder (1996)



### Land administration as a critical infrastructure

Country	Criteria for being considered Critical. Vital to...			
	national defense	economic security	public health and safety	national morale
East Asia & Pacific			✓	
Eastern Europe & Central Asia		✓	✓	
Latin America & Caribbean			✓	
Middle East & North Africa		✓	✓	
OECD	✓	✓	✓	✓
South Asia		✓	✓	
Sub-Saharan Africa			✓	

Bennett, Tambuwala, Rajabifard, Williamson, and Wallace, (2012), Land Use Policy, Under Review. Moteff (2003)

Land administration is an infrastructure

'Infrastructure' needs to be depoliticized

The voice of land administration must be heard  
outside land administration

