

Western Sydney Land Release



Managing Sydney's Urban Growth

Evan Jones Multiplex Developments ACNU August 2005



Western Sydney Land Release

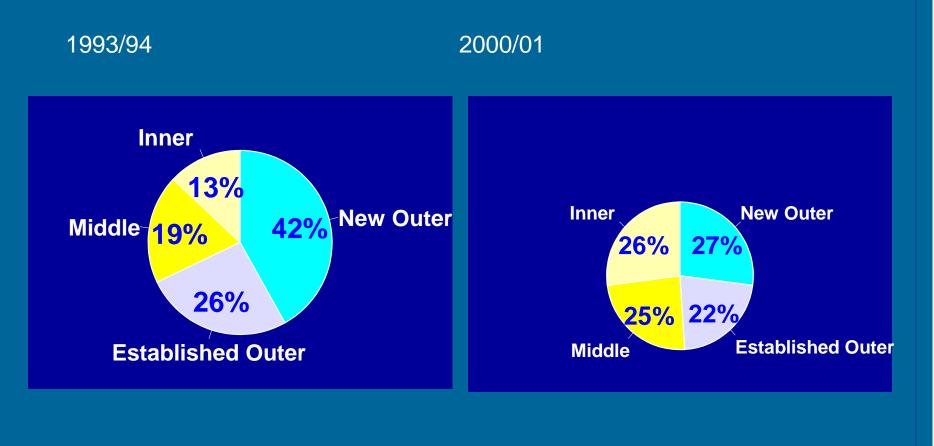


1. Background



Metropolitan Policy Settings

Managing Fringe Growth: Large drop in the share of Sydney's annual housing stock increase being built in greenfields. New outer developments **share dropped from 42% to 27%**





Land Shortage! Historically Low Stocks

Notwithstanding the success of compact city policies, Greenfields stocks dropped to historically low levels by 1998 because during the 1990s:

- few new areas released
- other areas removed
- Iot yields declined
- many areas reached over 80 percent of their development capacity
- housing prices escalated:

eg West Hoxton (edge of Liverpool releases)

Sales at \$2.5m per hectare = \$180,000 for a 300 m² unserviced lot (new lots in Sydney average 545 square metres)



Five Year Housing Supply Schedule

		02/03	03/04	04/05	05/06	06/07
Α	Dwelling Supply in Established Areas	20 765	22 940	22 825	19 410	18 875
В	Lot Supply in New Outer					
	1. Housing Forecast Forums	5 085	5 130	5 440	6 945	7 295
	2. Potential identified in Managing Sydney's Urban Growth	0	150	500	600	800
	3. Sites identified by UDIA	0	0	110	120	120
	4. Sites identified by Council Planners	0	0	100	350	400
	Total Greenfield Supply	5 085	5 280	6 150	8 015	8 615
	Overall Land and Housing Supply	25 850	28 220	28 975	27 425	27 490



METROPOLITAN GREENFIELDS LAND RELEASE PROCESS

Private Sector Identifies Potential Site

Studies, investigations and preliminary plans

Current Land Release

State Government Listing as Urban Release Site

Planning

Budgeting

Local Government Rezoning

Implementation



Western Sydney Release Areas



Existing Release Areas

Release Areas to be Rezoned

CATEGORY

Category 1

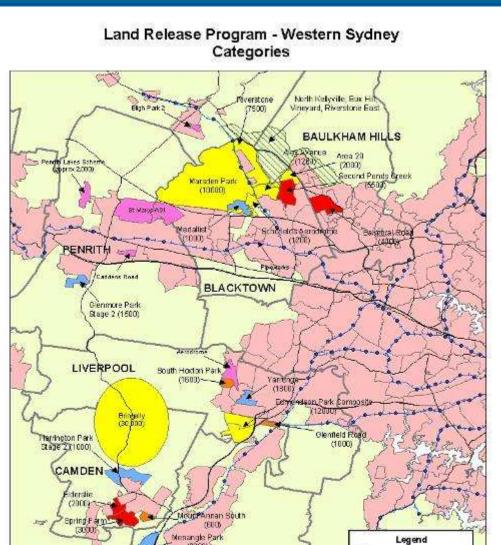
Category 2

Category 3

Category 4

Unscheduled

- 1. Not included
- 2. Interim transport levy contributions.
- 3. Transport funding under consideration by State Government.
- 4. Requires a coordinated land use and infrastructure structure planning. Transport funding under consideration by State Government.



CAMPBELLTOWN

Existing Release Areas

CATEG ORY

Category 2 Category 3

Calegory 4

Release Areas to be Record



NSW Government December 2001 Action Plan

- Restructure UDP and MUDP into a new "Metropolitan Development Program (MDP)" to apply to all major residential projects.
- The MDP to include planning for a 15 year supply schedule indicative infrastructure investment requirements, including for transport, in 0-5, 5-10, 10-15 year timeframes.
- Land included on the MDP not to be rezoned unless the infrastructure costs and funding mechanisms have been secured and projected within the 15 year framework. No sites on the MDP above 1,000 dwellings to be rezoned unless infrastructure costs and funding mechanisms have been secured.
- Investigating Bringelly in the South-west Corridor and Marsden Park in the North-West Corridor.
- Resolving 'impediments' to increasing land supply through a Ministerial Committee and a Metropolitan CEO's Group.

Private Sector Identifies Potential Site

Studies, investigations and preliminary plans

State Government Listing as Urban Release Site

Planning

Budgeting

Local Government Rezoning Implementation Investigations/Regional Plan

State Government Designates an Area for Investigation

Regional Structure Planning Budgeting Sequencing

State Government Approval Rezoning

Implementation

Land Use, Transportation, Natural Environment, Infrastructure

METROPOLITAN GREENFIELDS LAND **RELEASE PROCESS** and

Current

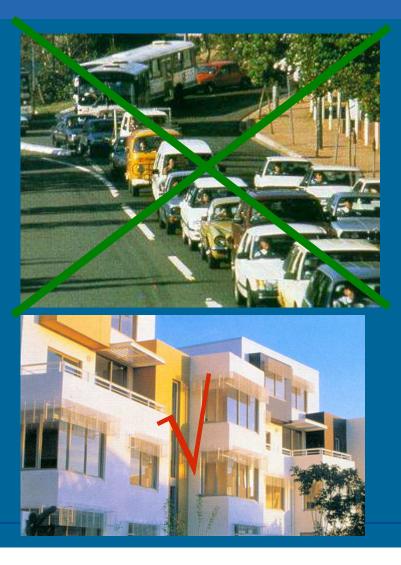
Land Release

Proposed

Process

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We can do better than Sprawl



SEPP 66 Integrating land use and transport planning to achieve:

- less traffic congestion
- increased public transport use
- mixed use communities
 By ensuring design excellence
 which means:
- better quality places
- integrating planning across government agencies
- ongoing commitment to these principles by government agencies



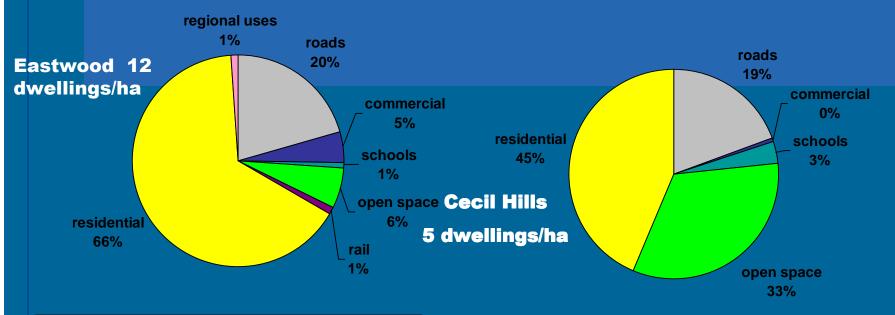
Western Sydney Land Release



2. Selected Issues



Land and Density Use



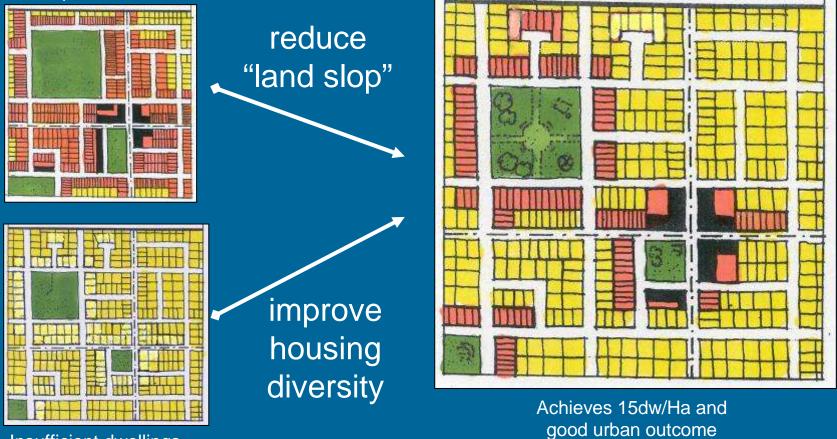


A lot of land is consumed in 'slop'- the spaces which are lest over or over-specified. This is very inefficient and does not contribute to livability.



Land Use and Density

Achieves 15dw/Ha but too many apartments and small lots – unacceptable to market

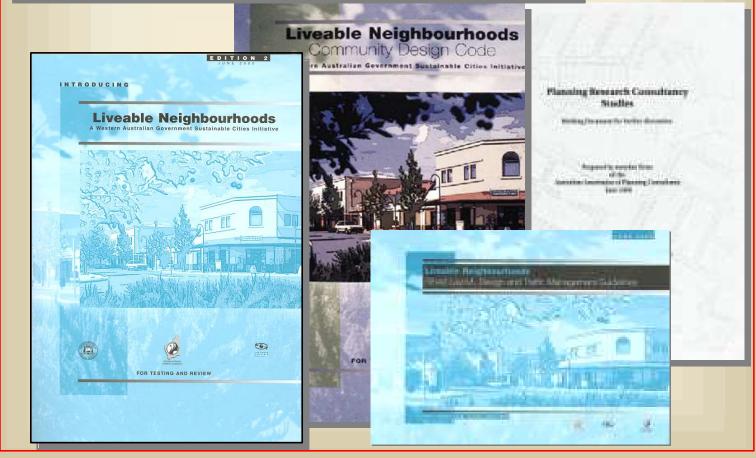


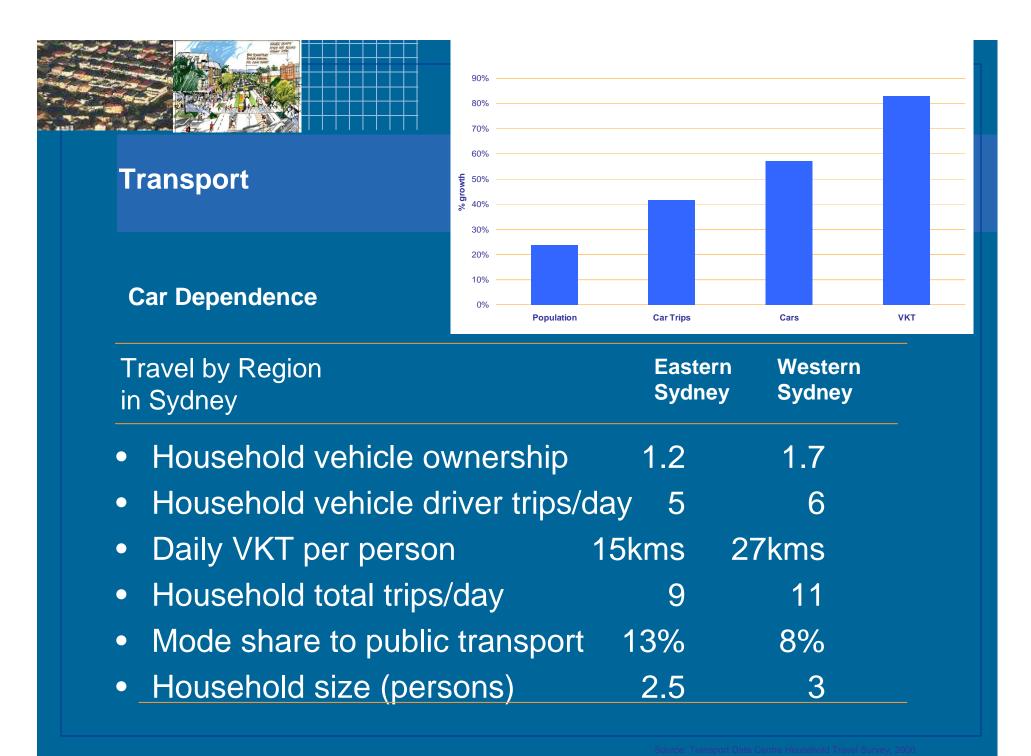
Insufficient dwellings and no diversity – does not achieve density target



2. Fringe Growth Management





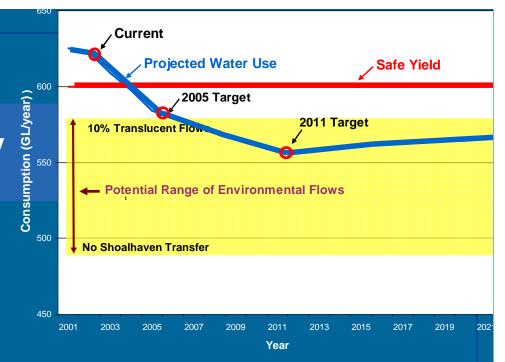




Environment: Water Supply from Storage

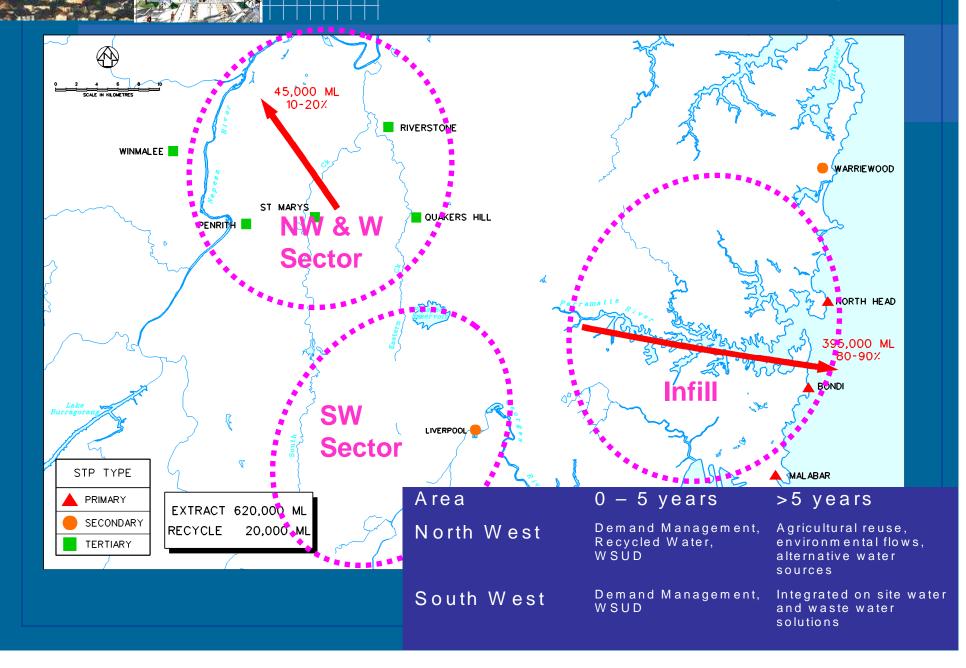


- Water demand outstripping supply
- Water supply for Sydney at its limit and reliability of supply is diminishing;
- New strategies for urban release are needed.
- Water is needed both for water supply and environmental flows in already stressed rivers
- Groundwater management (salinity)



- 1. Reduce potable water demand
- 2. Protect and enhance water quality; reduce diffuse source pollution, contribute to environmental flows, support effluent reuse, protect riparian corridors
- 3. Consider cumulative impacts within and between growth areas

Environment: Wastewater Management



Environment: Air Quality

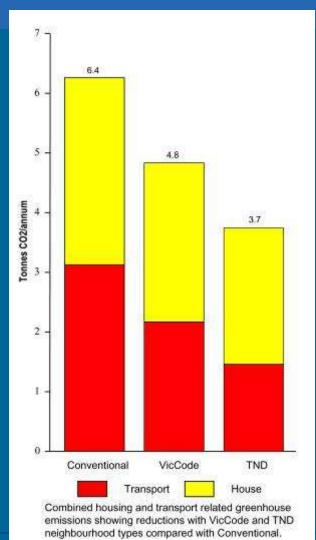




- 1. Air quality is a significant problem in Western Sydney, and is largely influenced by the wider Sydney metropolis.
- 2. Previous modelling indicated that a population of 130,000 plus employment showed only small scale changes in regional air quality (but the results were at the model's sensitivity limits)

Outcomes Needed

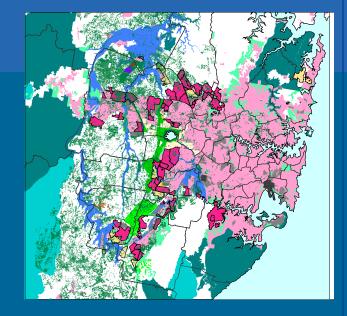
- 1. Urban form that reduces car dependency with an efficient urban structure, has a viable public transport system, and good solar orientation
- 2. New significant point sources of pollution should not be introduced wherever possible

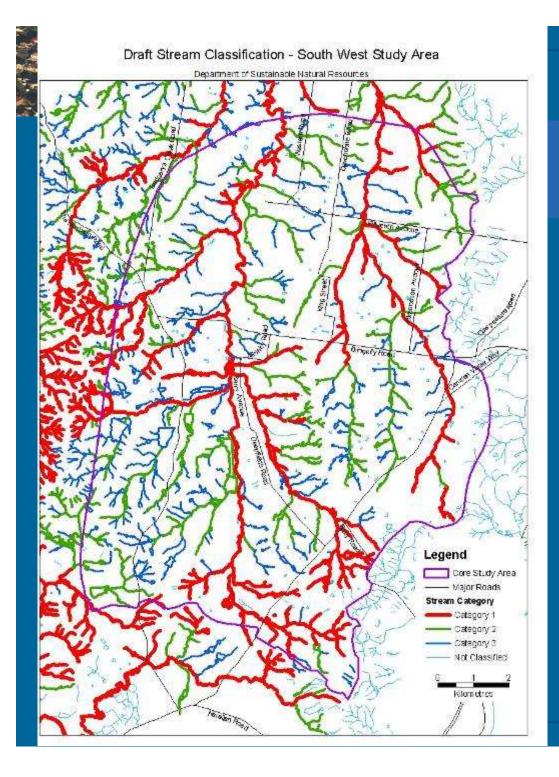


Environment: Biodiversity

Cumberland Plain

- 1. All of the vegetation communities on the Cumberland Plain have less than 30% of their pre 1750 distribution remaining, and some have less than 10% that is left in good condition.
- 2. The draft Cumberland Plain Endangered Ecological Communities Recovery Plain aims to reverse degrading processes and trends of loss of fragmentation of the Cumberland Plain EEC so as to achieve no net loss, and eventual increase, in extent, quality and ecological integrity of the communities.
- 3. A regional scale assessment and connectivity study by Eco Logical Assessments has been undertaken as an planning tool for the scenario workshops.





Riparian Corridors

Legend

Category 1:

Bed & bank stability and water quality; Maintenance of viable riparian vegetation; Provide continuity and connectivity; Rule of thumb: 40 m minimum vegetated setback from top of each bank.

Category 2:

Bed & bank stability and water quality; Maintenance of riparian vegetation & habitat; Rule of thumb: 20-30 m minimum veg setback from top of each bank.

Category 3:

Bed & bank stability and water quality; Rule of thumb: 10 m minimum veg setback from top of each bank.

Local Government Perspective

Characteristics of Recent Growth

- Significant population increases along with surrounding LGAs
- High number of residents work outside LGA
- Greater reliance on private transport
- Downstream pressure on public infrastructure and services from urban release areas outside LGA

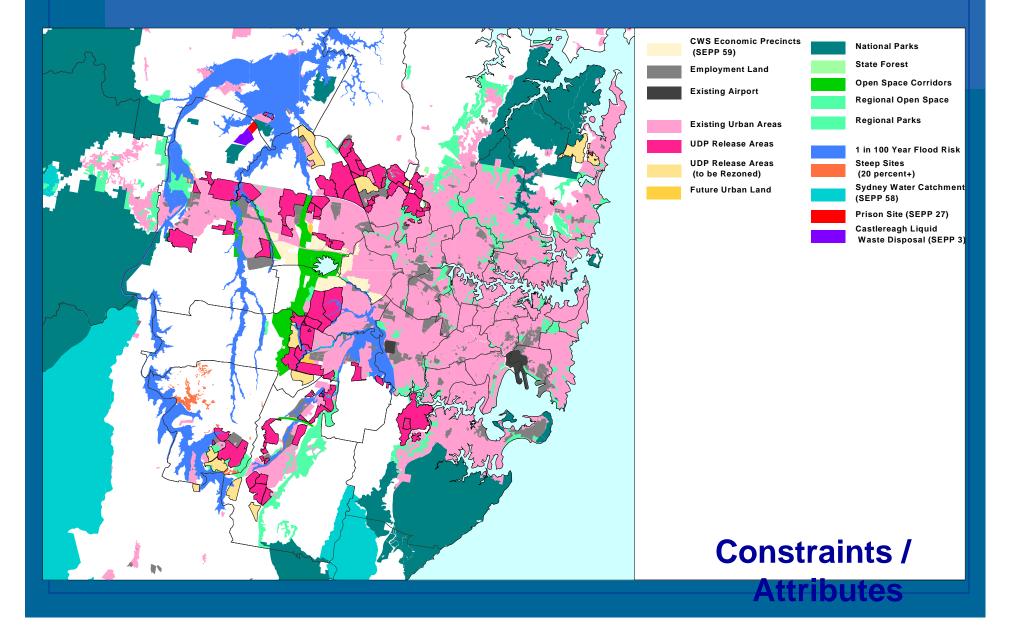
Growth Management Needs

- Integrated decision making by all levels of government
- Adequate resources to implement regional plan
- Public transport infrastructure and funding sources for regional infrastructure for new & expanding communities

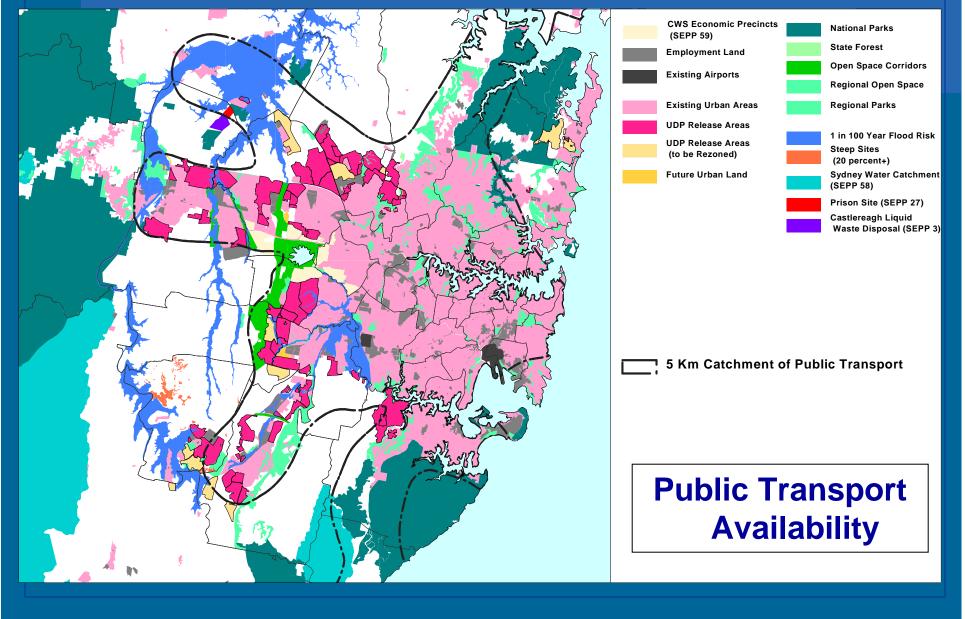


- Timing for provision of public infrastructure to align with urban releases
- Regional economic development and employment opportunities
- Protect natural environment and maintain biodiversity
- Water cycle management
- Affordable housing higher density housing

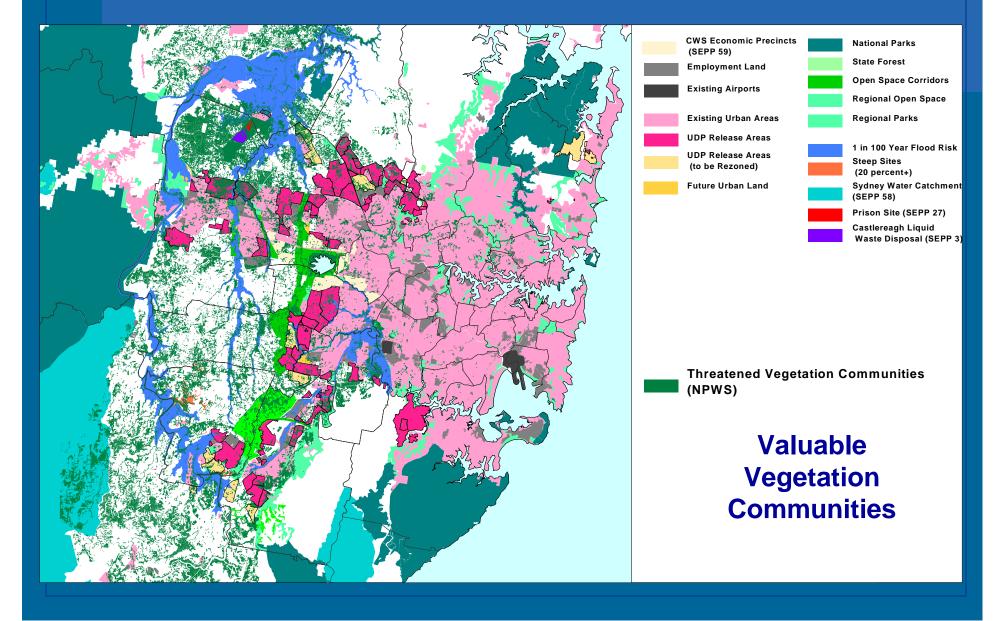




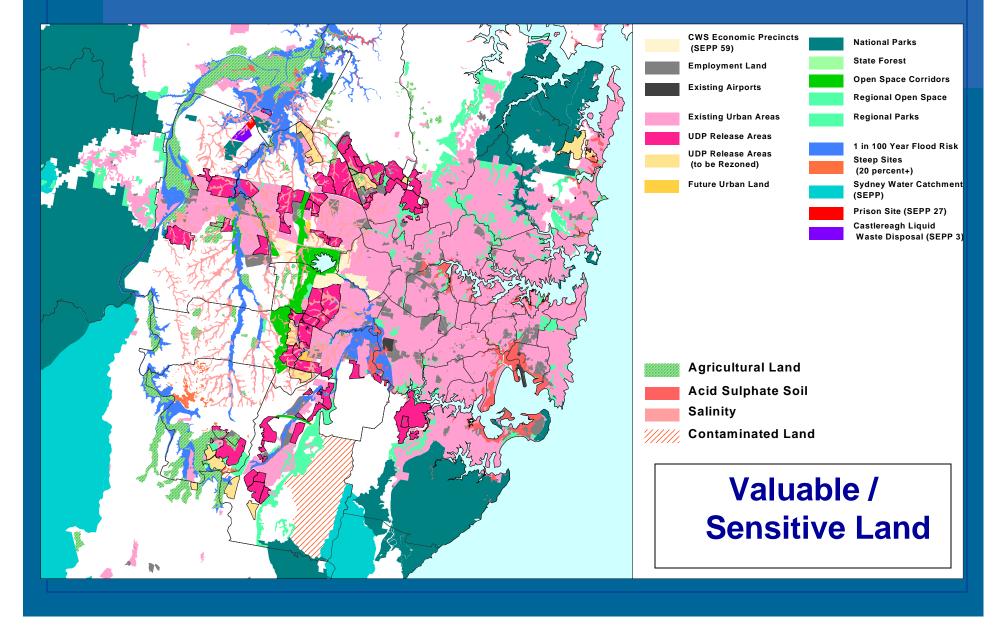




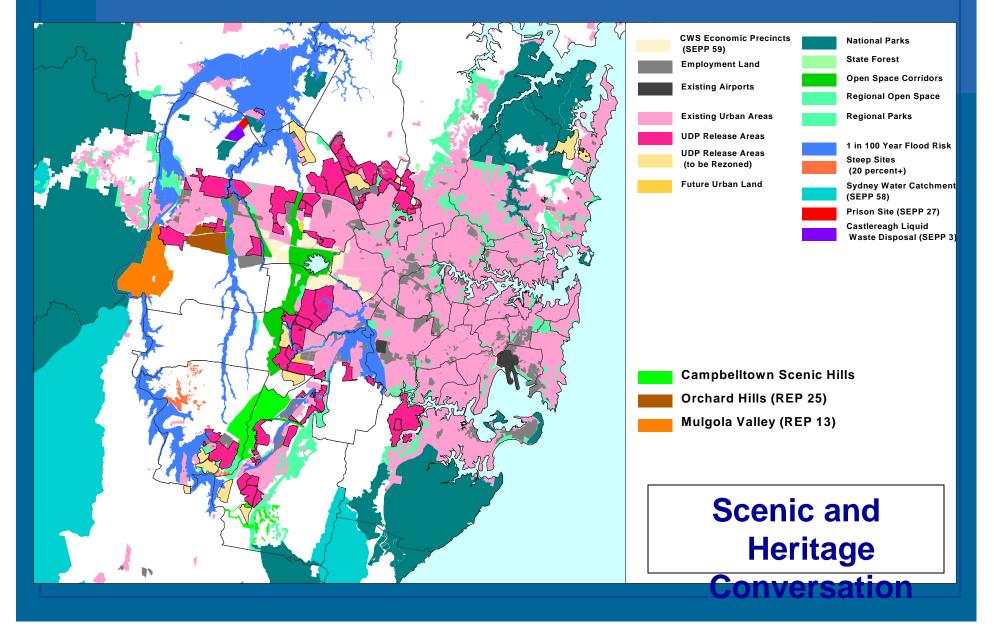




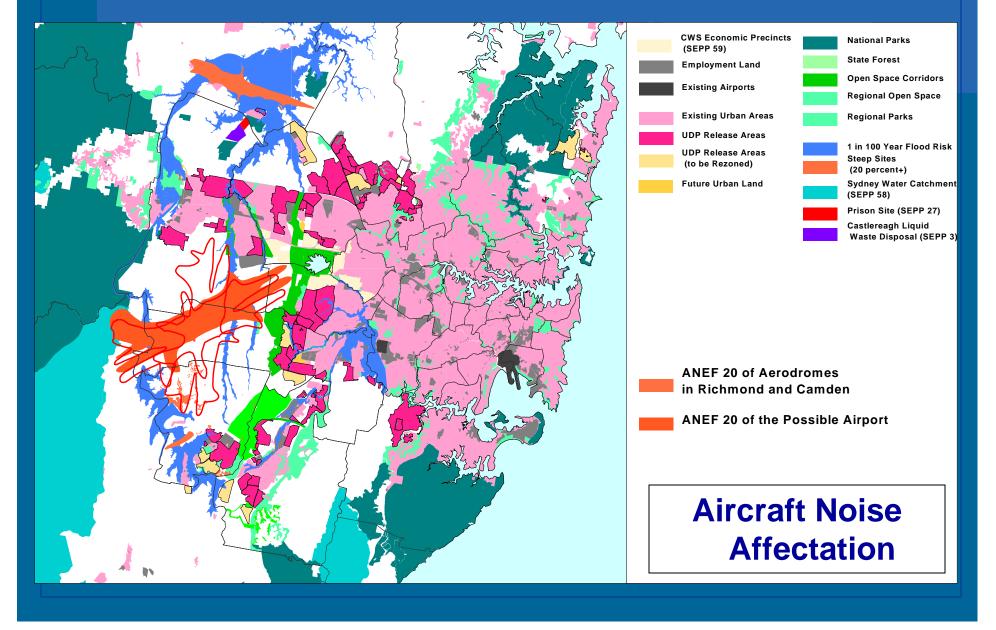




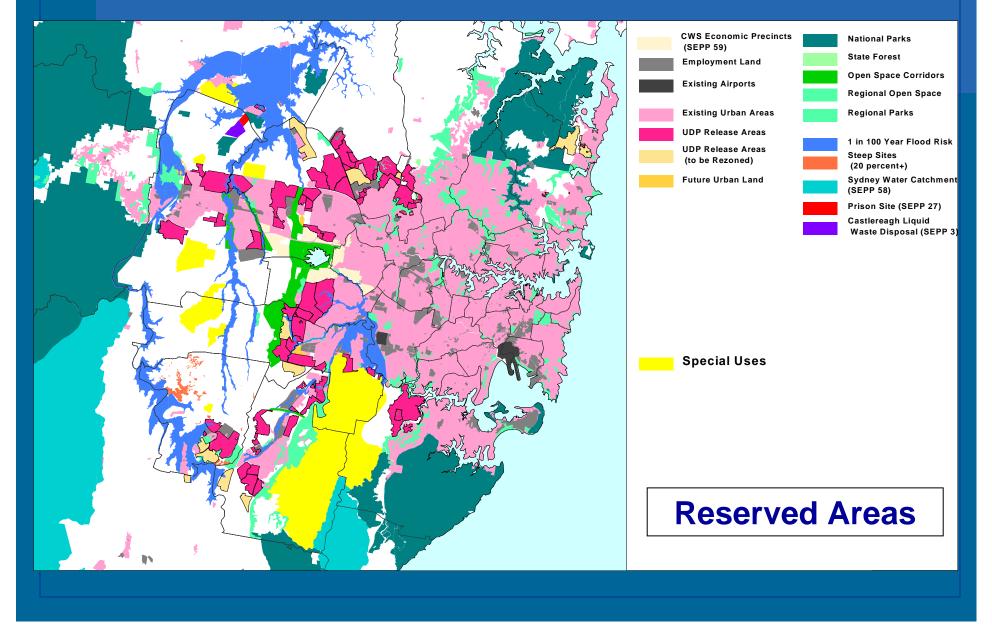




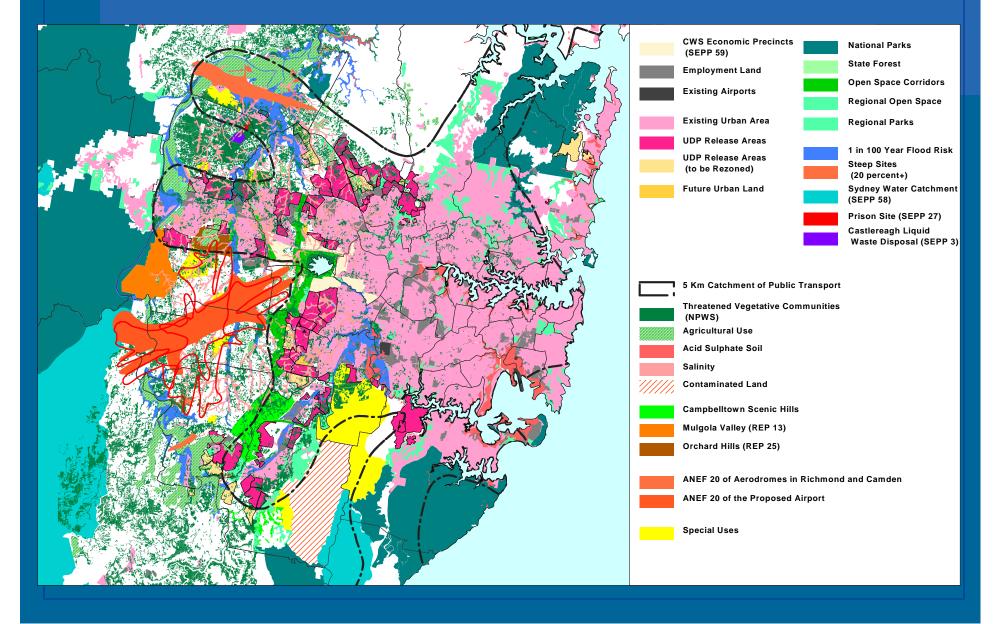














Regional Structure Planning

What items to consider ?



The challenge - to integrate items with good urban structure



Regional Structure Planning– Preliminary Scenarios for Testing

	1.Plan for Only 30,000 Dwellings	2. Maximise Conservation / Water with Good Urbanism	3. Balanced Conservation with Good Urbanism	4. Optimum Urbanism and Public Transport
Conservation Estate	This scenario will test multiple fronts to find the most	This scenario will test urban structure, density, public transport within a context of maximising the retention of vegetation under the Recovery Plan.	This scenario will test urban structure, density, public transport within a context of retaining most Core and Support for Core Habitat, but rationalising when in important locations for urbanism such as	Public Transport Oriented Development with possible significant modification of conservation.
Employment	effective locality/ies for 30,000			
Public Transport	dwellings			
City Structure	conservation and public transport			
Housing	priorities	setbacks for streams.	station precincts	

We can do better: Challenges

- The achievement of sustainable green-fields urban development will require a new approach to land release with significant commitment of resources, efforts and political and organisational capital.
- 1. Agree to a set of objectives, standards and to a physical form model at regional, district and local scales
- 2. Carry out planning at a regional scale first and integrate land use with transport, employment, and natural resource management
- 3. Revamp the assessment, release and approvals processes

- 4. New planning arrangements for the regional scale
- 5. New infrastructure funding and provision

What is the best process to:

- achieve sustainable urban development through regional structure plans
- bring transport planners to the table
- hold developers from progressing sites politically



Workshop Processes



Scenarios developed and tested and structure plan options developed Planning / design processes:

- Rigorous and comprehensive, commensurate to the complexity of the problem
- Brings stakeholders together interactively
- Produces practical options for testing



South West Workshop – April 2003

Program

Monday	Strategy Session: Urban Growth,
28 April	Employment, Transport, Environment and Visions
	Information Session for Designers
Tuesday	Design development for scenarios
Wednesday	Design session
30 April	Review & reporting 3.30 - 6.00pm
Thursday	Design refinements
Friday	Design finalising for South West options
2 May	Final presentation 3.30 – 6.00pm

Daily recording for the post workshop "Evaluation" period Additional briefings (eg special interest groups) as required



Western Sydney Land Release



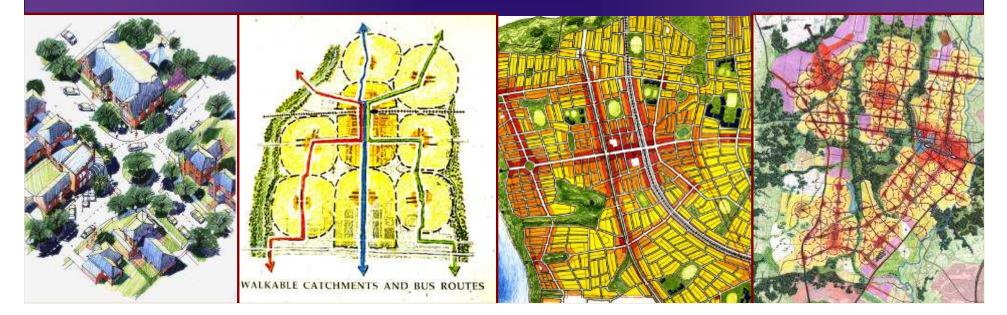
3. Integrated Urban Structuring

New Urban Structuring in Australia

Integrated Urban Structuring Principles under way in Western Australia, Western Sydney and elsewhere

Work in Progress

Chip Kaufman, Ecologically Sustainable Design Pty Ltd, Melbourne, <u>esdesign@netspace.net.au</u>



'The Long Emergency' James Howard Kunstler Atlantic Monthly Press, New York, ISBN 0-87113-888-3

"The industrialized world is built on cheap energy. Over the past century, we have used the stored energy of millions of years of sunlight in the form of oil, coal and natural gas, to create the marvels and miracles essential to modern life. But now the cheap fossil fuels fiesta is ending, climate change is upon us, and our models of global industry, commerce, food production, and transportation may not survive. Industrial civilization is in big trouble, and the Americqn people are sleepwalking into a future of hardship and turbulence."

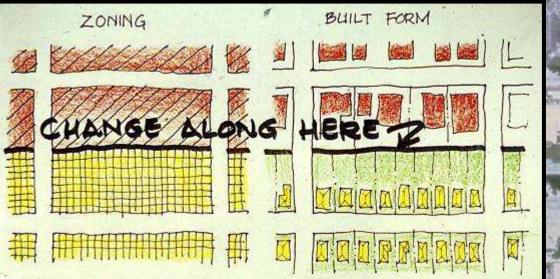
Policies Necessary but not Sufficient

Integrated Urban Structuring is Required to enable the policies to succeed on the ground

Enquiry by Design has been nexus to achieving the Integrated Urban Structuring, in projects shown here



Compatibly Mixed Uses



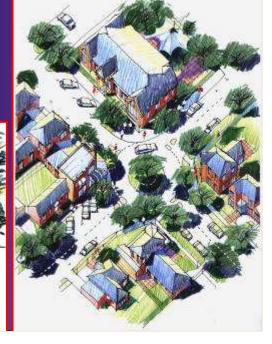






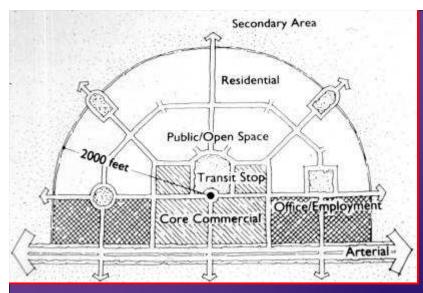
Neighbourhood = the basic unit Feasibility requires sufficient catchment, movement economy, bus stop and co-location of key uses at the Centre. Able to mature into something more. Strand Neighbourhood Centre, Point Cook, western Melbourne Now operating

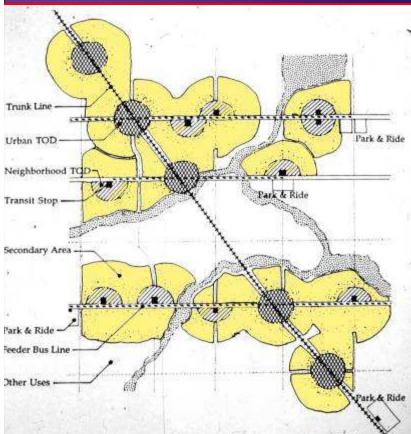
> Design by ES<u>D</u>







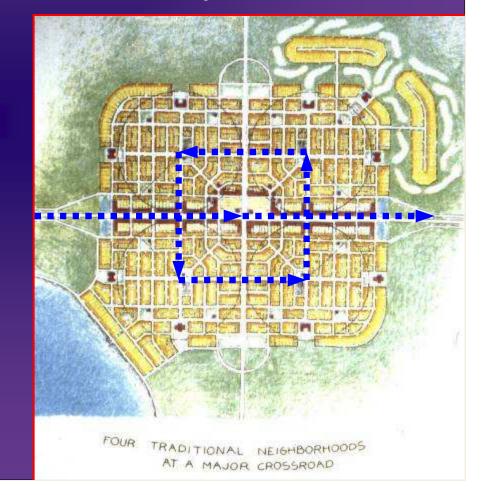




Town and Neighbourhood Structuring by DPZ and Calthorpe in early 90's

Calthorpe 'Secondary Areas' (single use res) too large, and accepts 'Divider Arterials' or 'Dual Couplets' as result of limiting residential streets to 2000 vehicles per day (vpd).

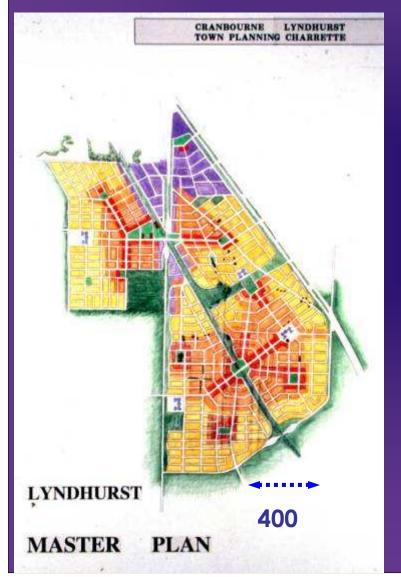
DPZ Neighbourhoods too close to Town Centre, and Public Transport hard to work well

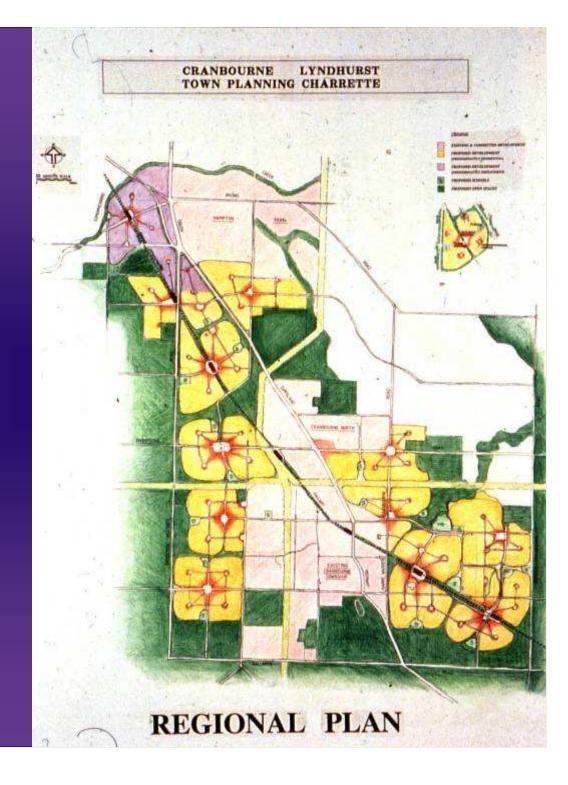


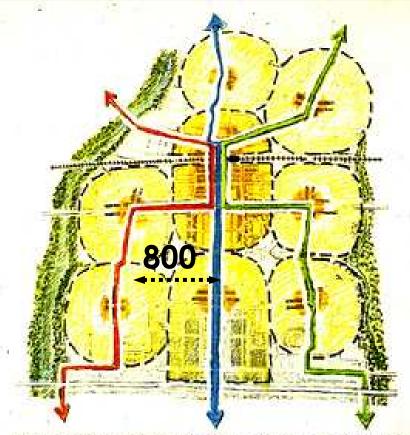
Cranbourne Charrette

Southeast Growth Corridor Melbourne 1992

DPZ-inspired Urban Structuring







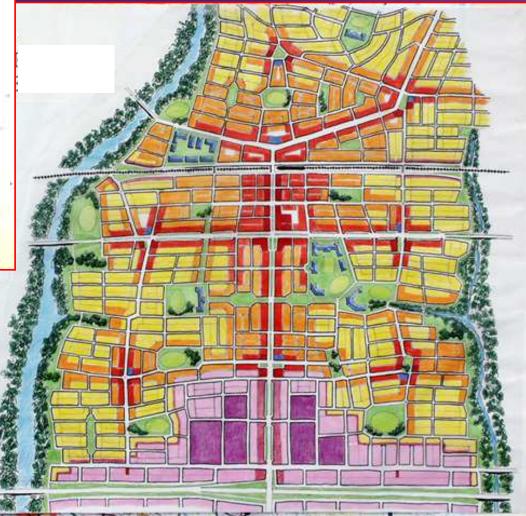
WALKABLE CATCHMENTS AND BUS ROUTES

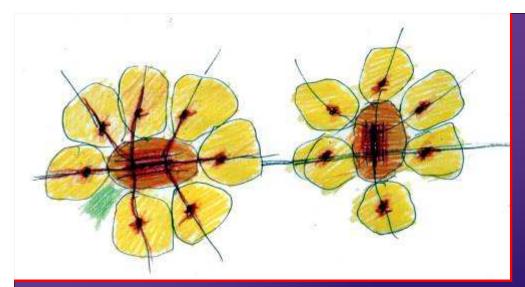
About 18K population to support 2 supermarkets and wide range of businesses, to optimise local town centre jobs and community services.

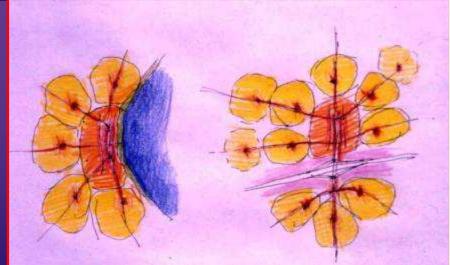


Neighbourhoods clustering to form a Mixed-Use Town

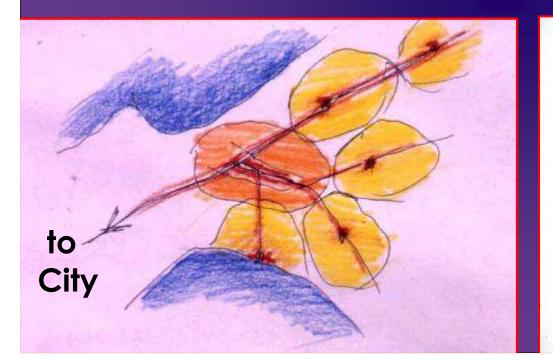
Wide range of jobs compatibly integrated. Public transport routes through NC's and TC, spaced properly.







Town & Neighbourhood Structures should adapt to their own Contexts and Movement Economies





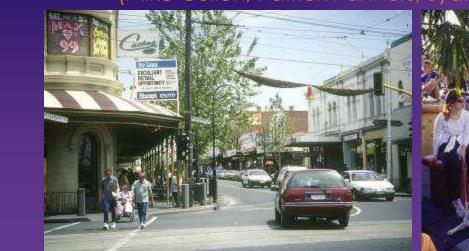
Mixed-Use Town Centres for walkability, community & jobs

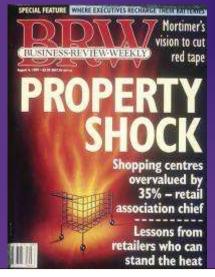


Car-orientated shopping centre Only about 3 new starts in US this year



Pedestrian-based town centre 5 times as many non-retail jobs (Mike Cullen, Patrick Partners, Sydney)



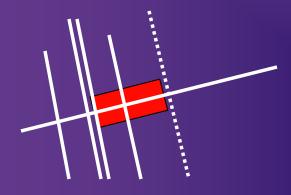


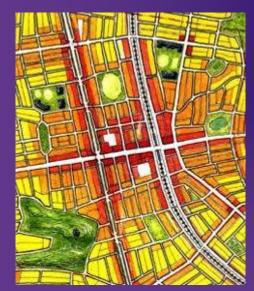
Capitalise on specific Context and Movement Economy

A. Main Street at right angles to big arterial, often with rail station

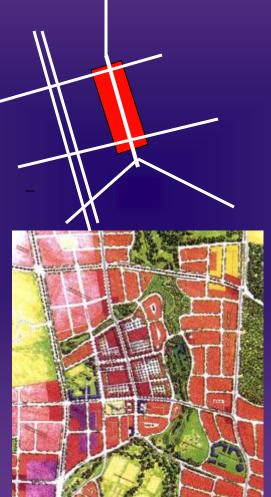


C. Main Street across corner of two big arterials

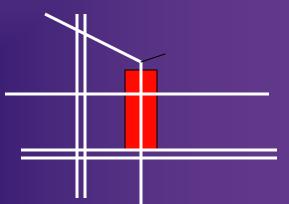


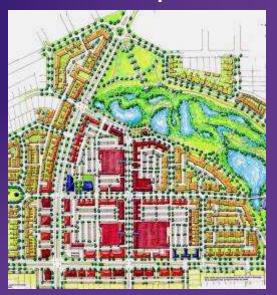


Jindalee TC



Mungarie Park TC





Point Cook TC

Case Studies of Integrated Urban Structuring

Perth's Northwest Growth Corridor Western Sydney Urban Land Release TullaMick (Melbourne)

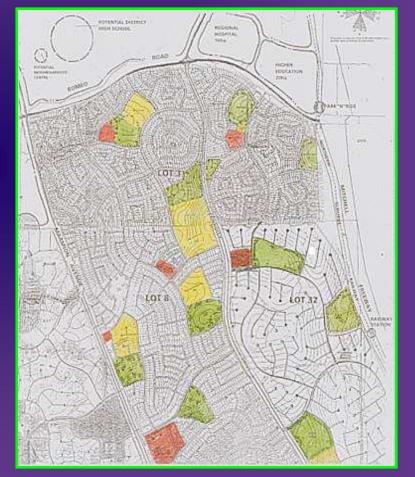
Perth's Northwest Growth Corridor

In 1996, the right policies but the wrong planning...a rigorously-planned and cardependent 'sprawl' in ever-extending corridors - and an urgent need to change as existing road capacities are predicted to fail.

The Jindalee Enquiry by Design Workshop opens the way to the Liveable Neighbourhoods Community Design Code, 1997

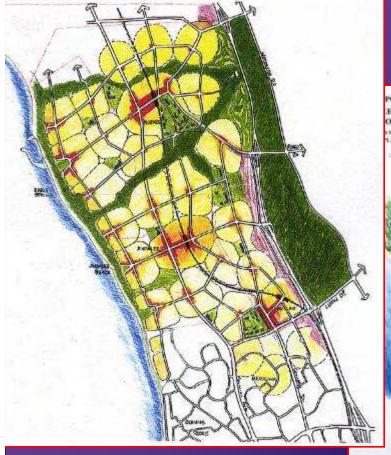


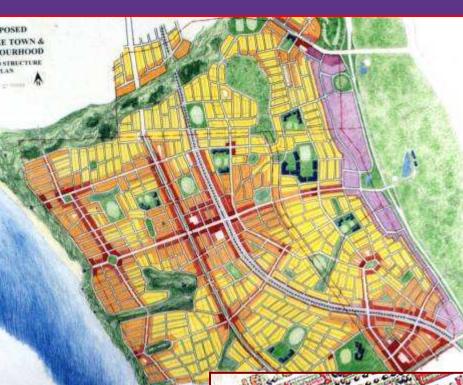
Perth's Northwest Corridor



Existing Sprawl Design for Jindalee Area

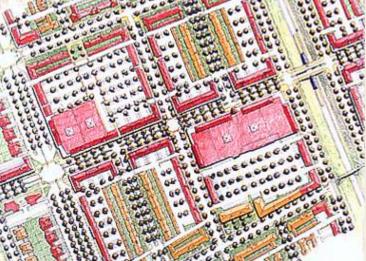
1996 Indicative Designs by ESD and Taylor Burrell



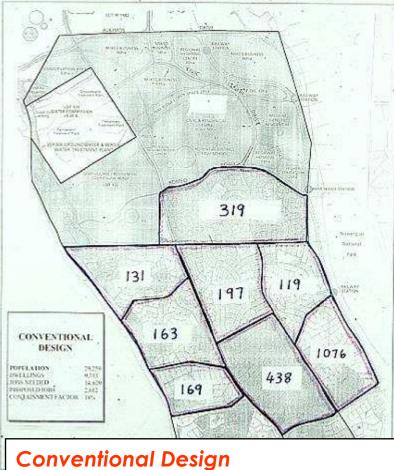


Jindalee Town and Neighbourhood Structure, and Detailed Indicative

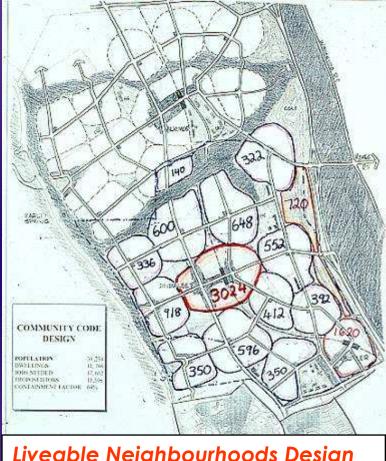
Plans...now being refined and implemented for Northern Growth Corridor of Perth, and the basis of WA Liveable Neighbourhoods Community Design Code



Jindalee - Comparing Employment



Population	29,259
Dwellings	9,753
Jobs Needed	14,629
Proposed Jobs	2,612
Containment Factor	18%

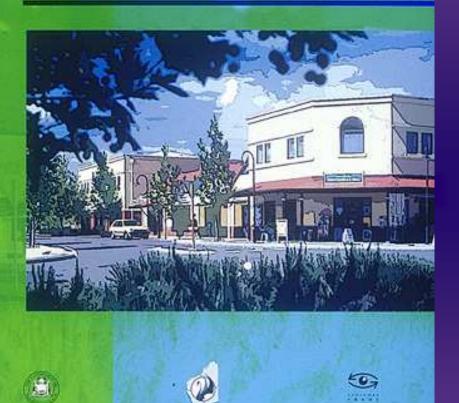


Liveable Neighbourho	oods Desigi
Population	30,234
Dwellings	11,768
Jobs Needed	17,652
Proposed Jobs	11,306
Containment Factor	64%

INTRODUCING

Liveable Neighbourhoods Community Design Code

A Western Australian Government Sustainable Cities Initiative



FOR TESTING AND REVIEW

WA Liveable Neighbourhoods Code, 1997

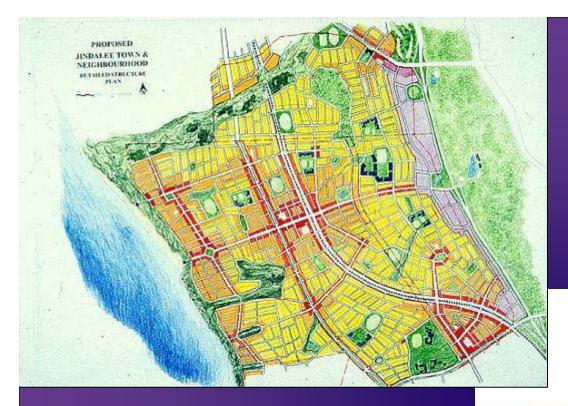
Well over 100,000 lots in WA already designed under, or substantially influenced by, the Code.

Used widely outside WA.

Nearing conversion from optional to mandatory for State.

www.planning.wa.gov.au

Written for State by ESD, Taylor Burrell, TTM et al



JINDALEE (ideal, targeted)

Rail station anchors the main street in the town centre

BRIGHTON (under construction by Satterly)

About 8 du's/acre = less area and population to support town centre and its retail

BRIGHTON

(under way, no rail yet)

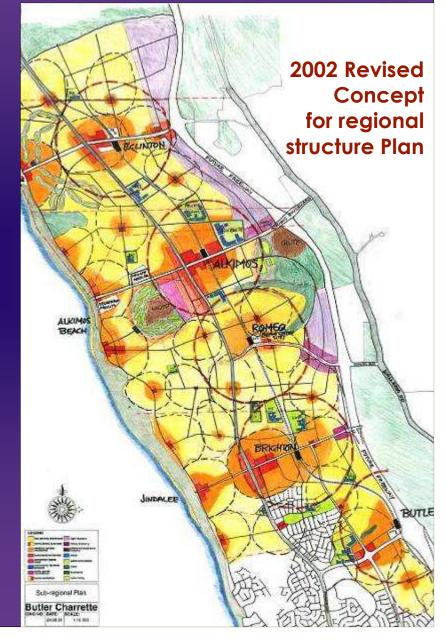
Rail station moved 400m east of town centre (still works)

Charrette Plan by State, Chappel Lambert, ESD, et al

Northwest Growth Corridor of Perth, WA

The Jindalee plan is essentially now being implemented as 'Butler/Brighton' project, but with some modifications to density, diversity and rail alignment





Western Sydney Urban Land Release

2005 CNU Charter Award Winner www.metrostrategy.nsw.gov.au



NSW Dept of Infrastructure, Planning and Natural Resources

Two main remaining large growth areas totaling 26,000ha in the Sydney Basin, population 380,000

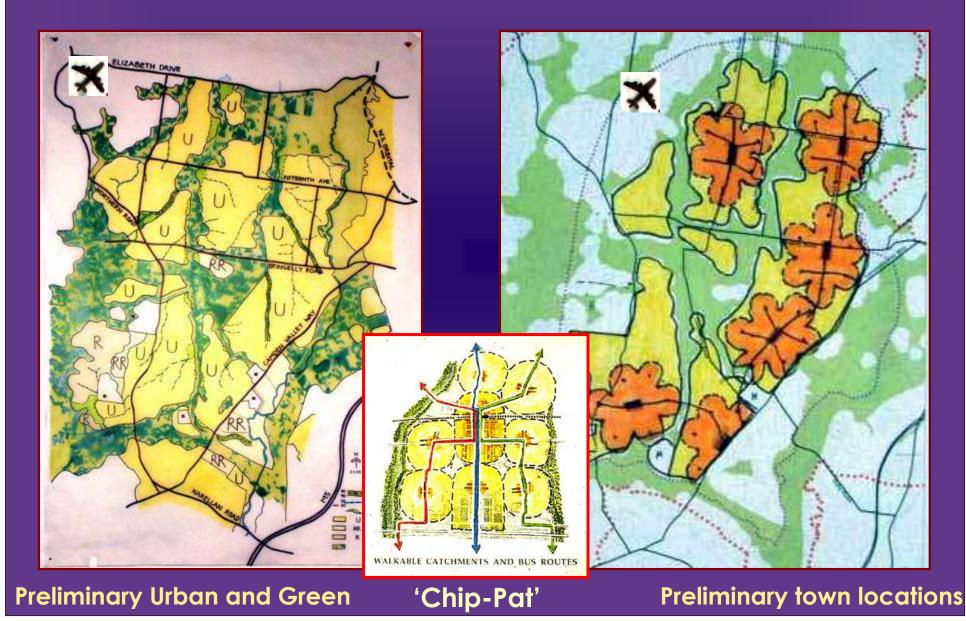
Joint public/private funding of \$7.8 billion of infrastructure

State setting up Growth Centres Commission (GCC)

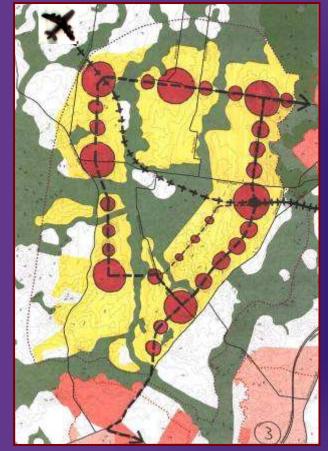
Regional structure now set, detailed design to be administered by GCC and local Councils, as per an adaptation of the WA Liveable Neighbourhoods Code

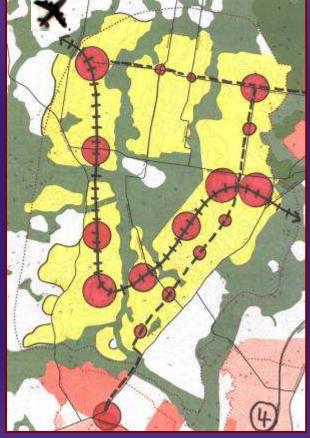


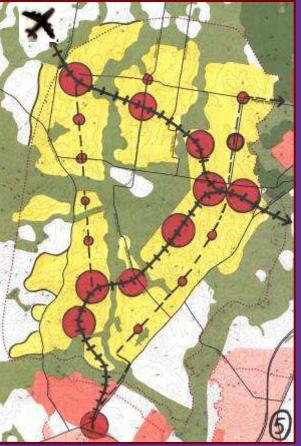
Consolidate key viable habitat fragments, remove others. Investigate spacing and linking of Town Catchments. Green network generally between *towns*, <u>not</u> neighbourhoods



Some Preliminary Options for Balancing Public Transport Modes, Routes, Rider Appeal and Infrastructure Costs...Holding costs for public transport infrastructure, to be delivered concurrent with development, were a key and challenging parameter to the design. Project needed to catch up with 20 years of limited infrastructure provision.







Future heavy rail to possible airport. Bus transit-ways (initially). Moderate density. Maximum conservation, but railway impact

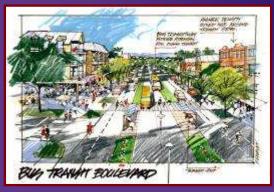
U-shaped heavy rail to airport. Higher densities along line. Maximum conservation.

Y-shaped heavy rail. Higher densities overall. Maximum conservation.

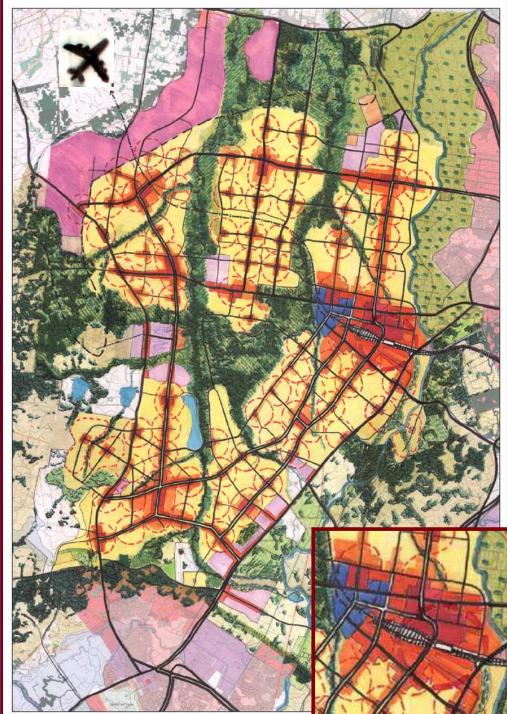
Southwestern Sector Structure Plan Public Transport Approach







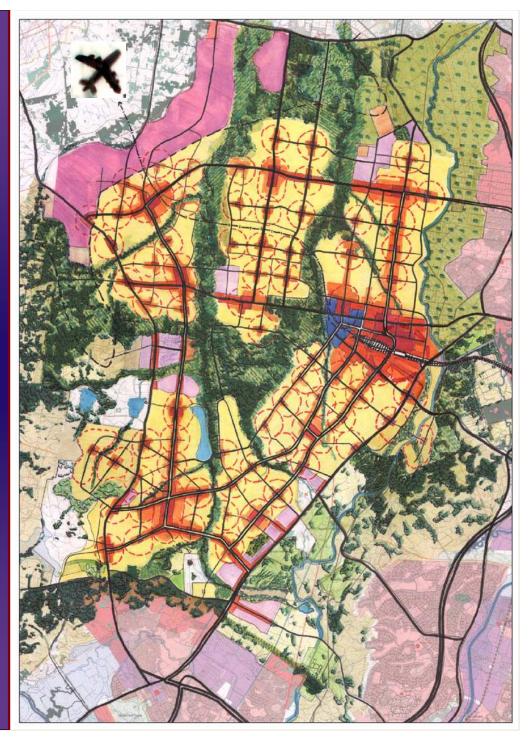
Leppington Regional Centre, Bus transit boulevards, Future LRT and/or high speed rail to possible airport.



Town sizes and locations to serve available catchments defined by surrounding habitat, with (ideally two 4,000sm) supermarkets and maybe DDS as main street anchors, and with Retail <u>located and</u> <u>controlled</u> for Complementarity instead of Predation



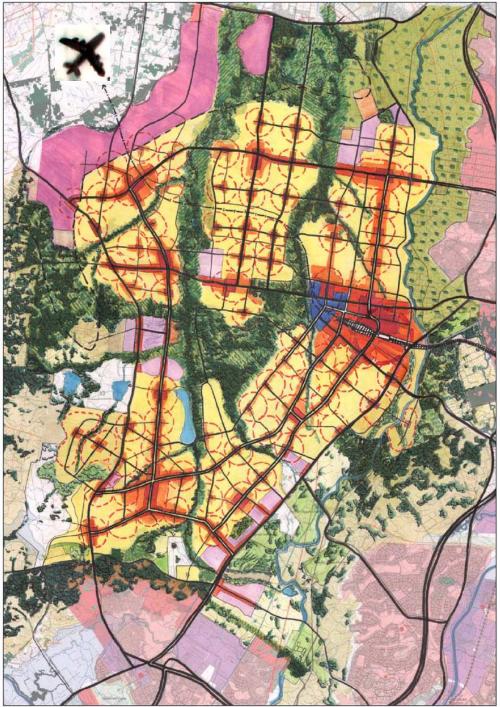






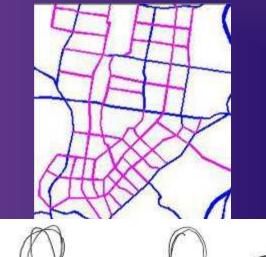
Urban Structure 'feeds' <u>every</u> neighbourhood with both 'through' and 'to' traffic, and minimises underserved car-dependent areas.

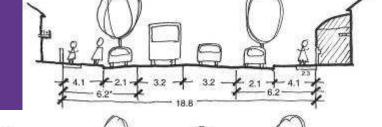


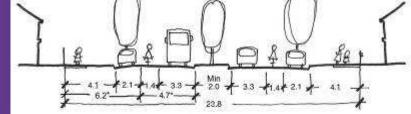


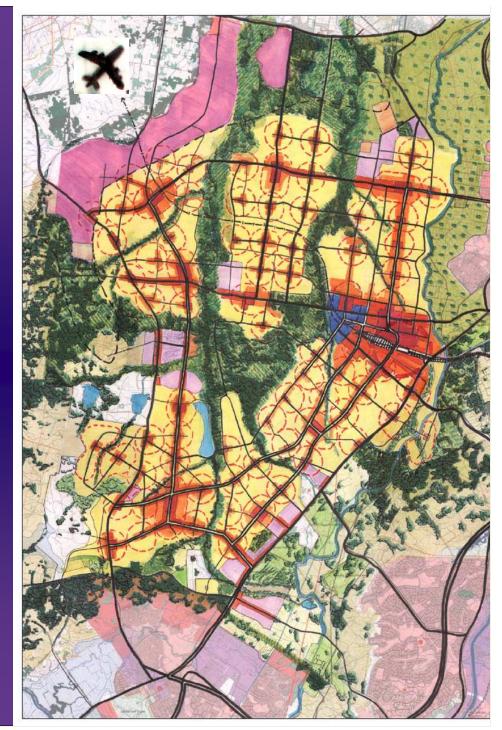
Movement network minimises giant arterials/intersections, and resultant over-sized retail

800m-spaced arterials feed all neighbourhood centres, parallel routes either side town centre main streets, and up to 7,000 vpd in Neighbourhood Connectors







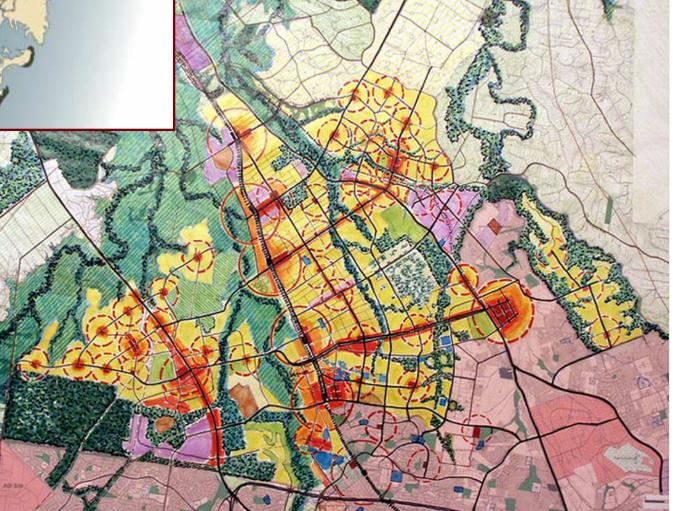




Widely spaced country roads

Multiple complex ownerships

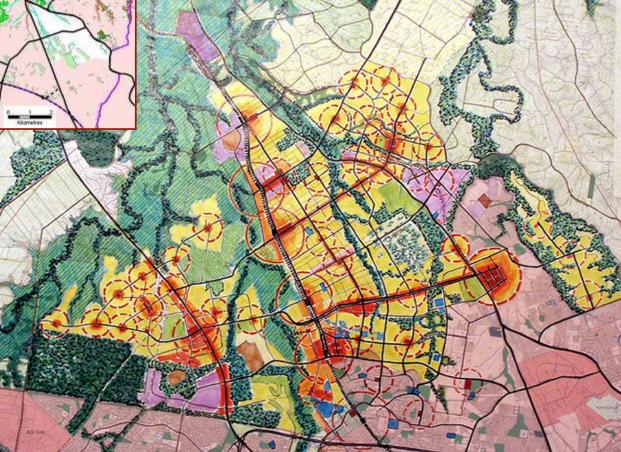
Northwest Sector Existing Constraints Hawkesbury-Nepean Floodplain Rouse Hill Regional Centre Windsor Railway Extensive habitat constraints



Northwest Sydney Configuring <u>both</u> urban and natural habitats

to function optimally as one interdependent ecosystem.

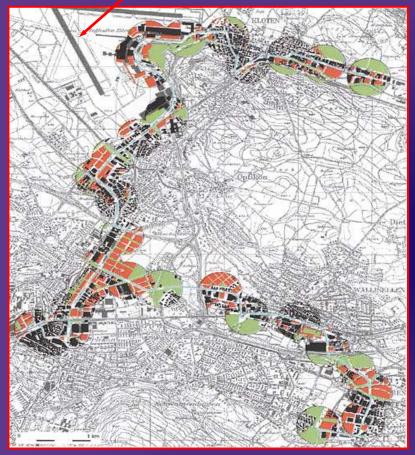






From Airport to Airport City, Guller & Guller, ISBN 84-252-1905-1

Airport runways



Amsterdam Airport and Business Corridor Local as well as distance access via LRT "Now, in many airports most of the people are not taking a plane at all. Airports have become major centres of employment and sites for business contacts, as well as vital logistic and distribution centres"...Jack Short, European Conference of Ministers of Transport.

"If public transport initiatives are limited to AiRail interchange alone, more than 50% of the traffic movements to and from the airport -that is, those movements not generated by air passengers -- will be disregarded. The interchange has to be complemented by adequate public transport distribution to the airport city as a whole."

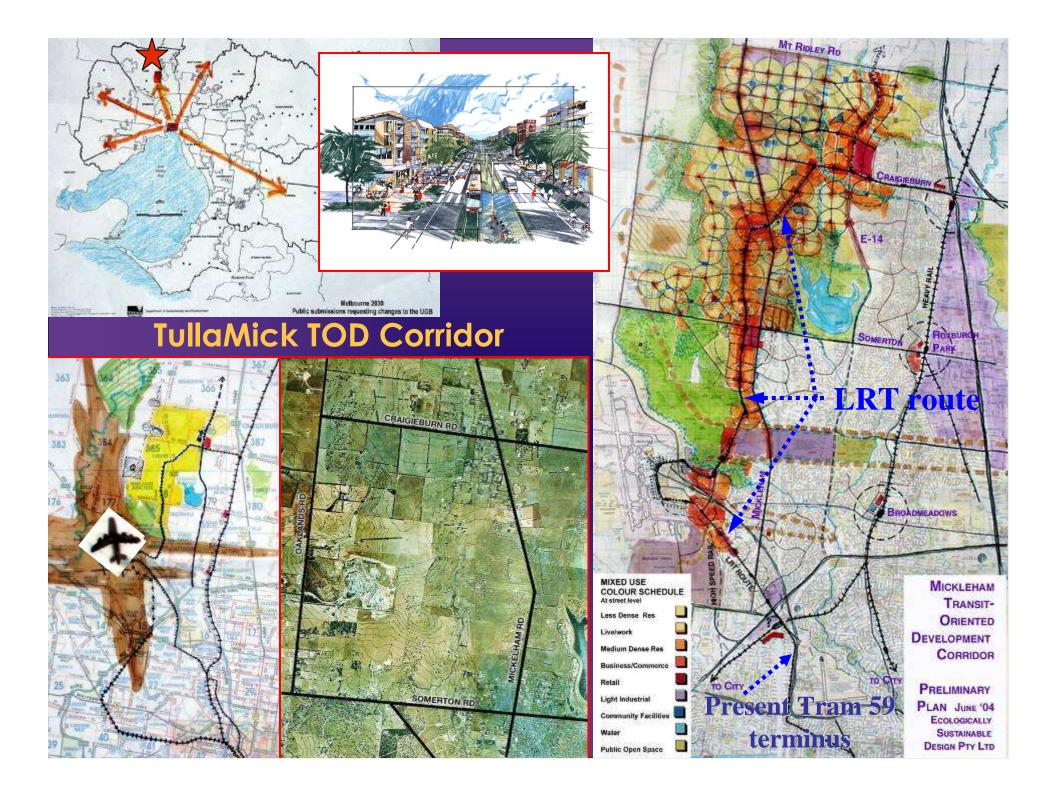
'TullaMick' (Tullamarine-Mickleham) TOD Corridor and LRT Airport Link Into Melbourne



A TOD Proposal to the State, as part of Melbourne 2030's Investigation into Expanding its Urban Growth Boundary

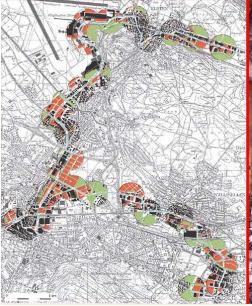
Initiated and designed by Ecologically Sustainable Design Pty Ltd, Melbourne esdesign@netspace.net.au

To be developed in large part by Multiplex, if approved by the State



HOW THE SOUTHERN AREA WORKS LRT extends up Melrose Drive serving intensified and expanded Tullamarine Business Corridor, then serves 'ultimate' Terminal layout, then through existing Freeway underpass, past Cleanaway, crosses Moonee Ponds Creek to north across Attwood, then alongside Woodlands Park.











Proposed Tram Route through the Airport Terminal, with route choices to cross Creek







In conclusion...

Key Components of this Integrated Urban Structuring Movement Network

800m Arterial spacing and neighbourhood connectors carrying up to 7K vpd enable generally smaller arterials and higher amenity. Public transport routes designed for local and regional feasibility. Permeability and Parallel Routes at Town Centres.

Movement Economy

Catchment Size, Centre Location and concentration of features,

fed by Movement Network

Both town and neighbourhood centres

Town Centre Sizing to fit own Catchments

Retail Complementarity versus Predation

Configure both Urban and Natural Habitats to function as one Ecosystem.

Feasible Neighbourhood Centres*



Western Sydney Land Release



4. Implementation of Sydney's Growth Centres

	1. Inputs	2. Implementation Issues	3. New Approaches
Place Studies & Investigation into issues &tradeoffs Process Enquiry by Design		Ensuring delivery of the overall regional plan	
	Orderly sequence of development		
	Funding 'gaps' in infrastructure Provision at State level		
	 Brokerage of Issues State Government Local Government Private Sector 	Coordinating new State & local infrastructure with development sequencing •E.g. Bus, rail, community	
State & Local Regional Land Use & Infrastructure Plans	Perional Land Lise	Ensuring improved environmental outcomes	
	Encouraging Private Sector Participation		



A New Approach to Land Release

In December 2004, the NSW Government announced a new plan for land releases in the NW and SW of Sydney. These included the development of approximately \$7.8 billion of infrastructure, including roads, rail and bus networks, educational and health services, linked to staged release of land.

The plans reflect the workshop aspirations for:

- Better public transport
- A range of land uses with a mix of houses, jobs and open spaces
- Jobs available locally and within the region
- Streets and suburbs planned for walking and cycling
- A wide range of housing choices
- Conservation lands around development areas

	1. Inputs	2.	Implementation Issues	3. New Approaches
State & Local Leadership	Place Studies & Investigation into issues &tradeoffs Process Enquiry by Design		Orderly sequence of development	+ Assessment & release of land
			Ensuring delivery of the overall regional plan	
		Funding 'gaps' in infrastructure Provision at State level		
	Brokerage of Issues State Government Local Government Private Sector 	•	Coordinating new State & local infrastructure with development sequencing •E.g. Bus, rail, community	
	Regional Land Use & Infrastructure Plans	Ensuring improved environmental outcomes		
		Encouraging Private Sector Participation		

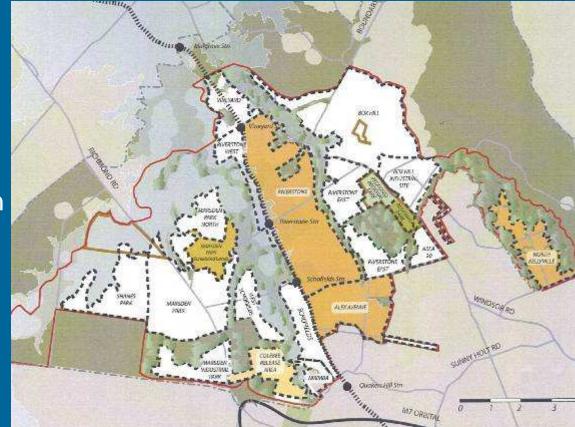


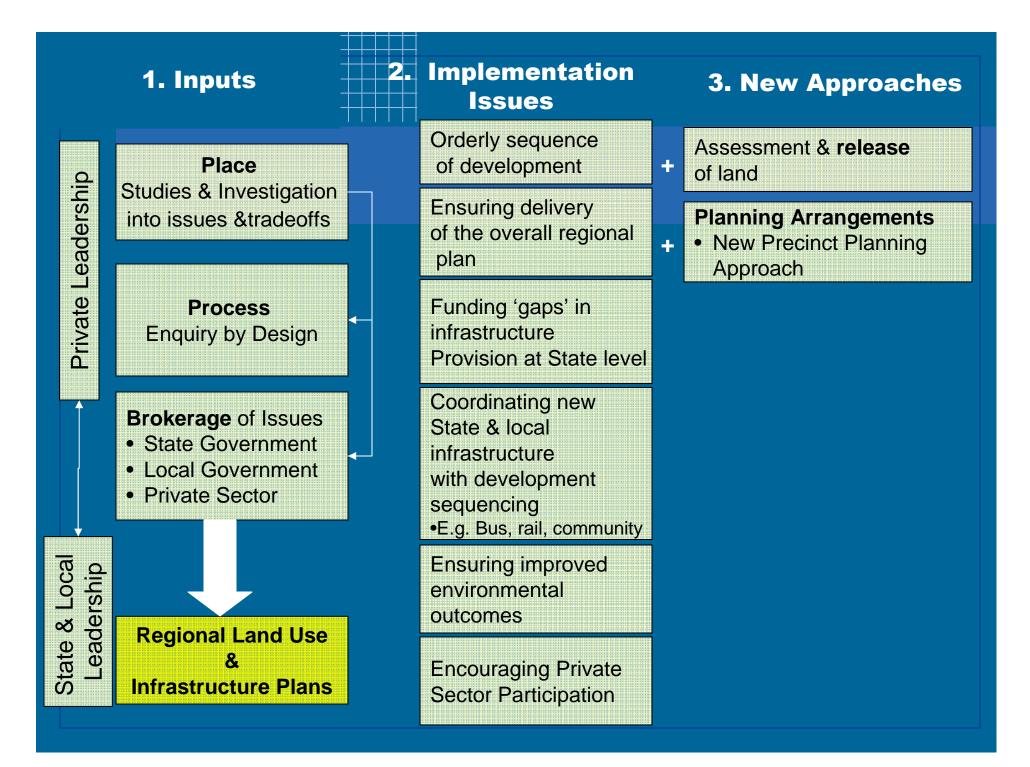
The Assessment, Release and Approvals Process

New arrangements for land release:-

- Release precincts reflect regional structure plans
- Growth Centres Commission to initiate land release in accordance with long term spatial and infrastructure plans assessed against market demands

 an Independent Land Release Advisory Committee



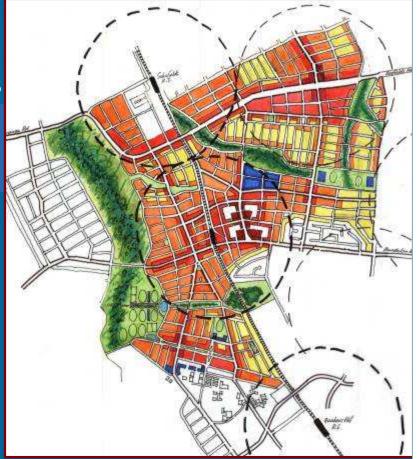




New Land Release SEPP

- A State Environmental Planning Policy will zone the released precincts for urban use; other zones include future urban, industrial, landscape and rural lifestyle
- A new development code will be introduced and concurrence arrangements will be removed

Planning for Released Precincts



- The Growth Centres Commission + Council will develop and advertise a Precinct Plan for each release area
- The Precinct Plan will amend or replace the LEP for the release area and new zoning and development controls will apply
- Local Councils will approve all development applications for subdivision and building

	1. Inputs	2.	Implementation Issues	1	3. New Approaches
0	Place		Orderly sequence of development	+	Assessment & release of land
Private Leadership	Studies & Investigation into issues &tradeoffs		Ensuring delivery of the overall regional plan	+	 Planning Arrangements New Precinct Planning Approach
	Process Enquiry by Design	-	Funding 'gaps' in infrastructure Provision at State level	+	Urban Finance
	Brokerage of IssuesState GovernmentLocal GovernmentPrivate Sector		Coordinating new State & local infrastructure with development sequencing •E.g. Bus, rail, community	+	Infrastructure Provision
& Local dership			Ensuring improved environmental outcomes		
State & Lead	Regional Land Use & Infrastructure Plans	Encouraging Private Sector Participation			



Infrastructure Costs

Regional infrastructure to support the new communities totals \$7.8 billion over 30 years, including:-

 Roads 	\$3.3 billion
– Rail	\$688 million
– Buses	\$488 million
- Education	\$1.75 billion
 Health 	\$380 million



Infrastructure to be Provided

New Funding for Regional Infrastructure

The NSW Government will provide 25% of the funding required for infrastructure, the rest will be funded through new regional developer contributions

Infrastructure Coordinated with Land Use and Funded

- Local facilities and utilities funded under existing delivery arrangements
- Roads, rail access, bus-ways, schools, health and emergency services, parklands and conservation of bushland and waterways are all planned, costed and financed up-front.
- Staged delivery of infrastructure coordinated with staged land release over 25-30 years

Conservation

 Protection of 38,000 acres of vegetation through landscape corridors + a new conservation fund



Encouraging Private Sector Participation

- A purchaser-provider model has been introduced to 'balance' the power of servicing agencies – allowing the introduction of new standards (e.g. an 'integrator arterial' as well different construction techniques (e.g. not all big pipe sewerage systems).
- The Growth Centres Commission will identify opportunities for private sector involvement



	1. Inputs	2.	Implementation Issues		3. New Approaches
و	Place		Orderly sequence of development	+	Assessment & release of land
State & Local Leadership	Studies & Investigation into issues &tradeoffs Process Enquiry by Design		Ensuring delivery of the overall regional plan	+	 Planning Arrangements New Precinct Planning Approach
		_	Funding 'gaps' in infrastructure Provision at State level	+	Urban Finance • Guaranteed State Funding • New 'value-capture' levy • Developer contributions
	Brokerage of Issues State Government Local Government Private Sector 		Coordinating new State & local infrastructure with development sequencing •E.g. Bus, rail, community		 Developer contributions linked to works Infrastructure Comprehensive Plan Coordinated with Land Use Funded all infrastructure including Conservation
	Regional Land Use & Infrastructure Plans		Ensuring improved environmental outcomes		Purchaser-Provide Model Governance Growth Centres Commission
			Encouraging Private Sector Participation		 Planner Infrastructure Coordinator Water and Sewerage Authority



Governance

New Growth Centres Commission

- A Growth Centres Commission will be established under the Growth Centres (Development Corporations) Act 1974
- It will coordinate the orderly roll out of land release and infrastructure by:-
 - Developing land use and infrastructure plans
 - Managing funding with infrastructure plans
 - Recommend land sequencing to Government
 - Coordinate small land holders
- It will work with local government on precinct planning
- The Growth Centres release will be co-ordinated over a 25-30 year period so that the delivery of lots is optimised with the provision of critical infrastructure.



Western Sydney Land Release



5. Sustainability Assessment

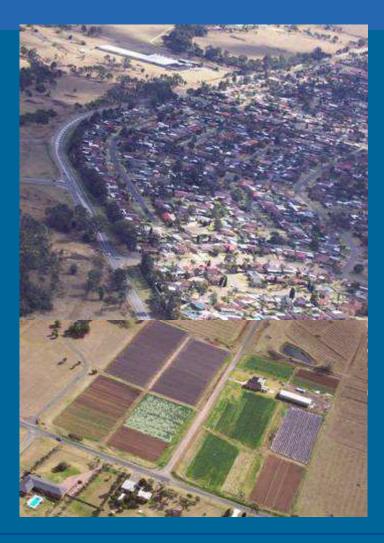


CRITERIA 1: NATURAL RESOURCES – To live within natural resource limits & minimise ecological footprint

NSW Sustainability Commissioner Professor Peter Newman

- WATER Manage total water cycle to keep water extraction levels within sustainable yields
- LAND Minimise urban footprint and disruption
- ENERGY/GREENHOUSE Use energy efficiently and reduce Greenhouse Gases
- MATERIALS Use appropriate materials and recycle waste
- WASTE Minimise, reduce and recycle waste

Peter Newman: Close to world 'BEST' practice as water, energy and land are significantly more conserved than in average developments

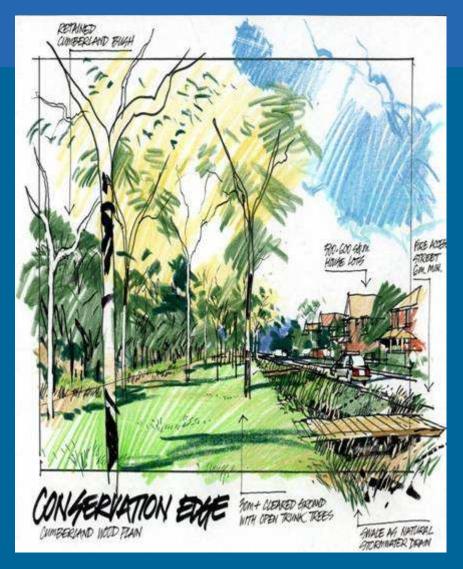




CRITERIA 2: ENVIRONMENTAL PROTECTION – To protect and enhance biodiversity, air, water and agricultural land

- BIODIVERSITY Save core biodiversity values and enhance natural ecosystem of the bioregion
- AIR QUALITY Improve air quality
- WATER QUALITY Maintain and improve waterway health
- AGRICULTURAL LAND Ensure important agricultural land is conserved

Peter Newman 'GOOD' to 'BEST' practice as one of the major features of the area is the new ways that the environment will be protected however air and water quality limits are approaching so any development has to be very clean: the introduction of BASIX for 40% decease in energy and water usage for all new homes

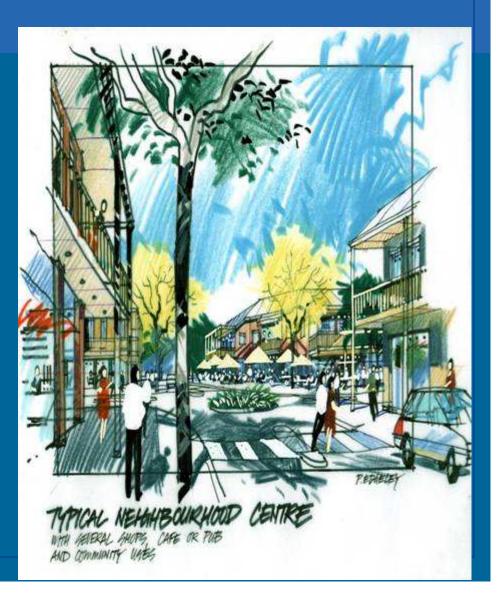




CRITERIA 3: QUALITY PLACES – To provide quality places to live and play

- PARKS Preserve open space corridors and ensure local parks are provided
- HERITAGE Protect and enhance regionally significant cultural landscapes and places
- COMMUNITY FACILITIES Provide land for community facilities
- AMENITY & DESIGN QUALITY Ensure amenity and design of streets and buildings that provides quality urban spaces with minimal traffic conflicts
- WALKABILITY- Provide easy accessibility for walking and cycling in local areas

Peter Newman: Exceeds world 'BEST' practice as there is very high quality in all aspects of spatial design





CRITERIA 4: HOUSING DIVERSITY – To provide a range of housing choices to ensure a broad population can be housed & which can be adapted

over time

- HOUSING TYPES Ensure there is a range of housing types available for the full demographic of the city
- HOUSING CHOICE Provide housing choice for households on a range of incomes across the region
- HOUSING QUALITY Manage the quality of housing to ensure it is sustainable and liveable
- HOUSING ADAPTABILITY Ensure land and housing is available that can be adapted for an aging population
- HOUSING QUANTITY Manage the quantity of housing to enable demand to be met

Peter Newman: 'GOOD' practice as considerable effort is taken to facilitate a much bigger range of housing, though inevitably less than in older areas of the city



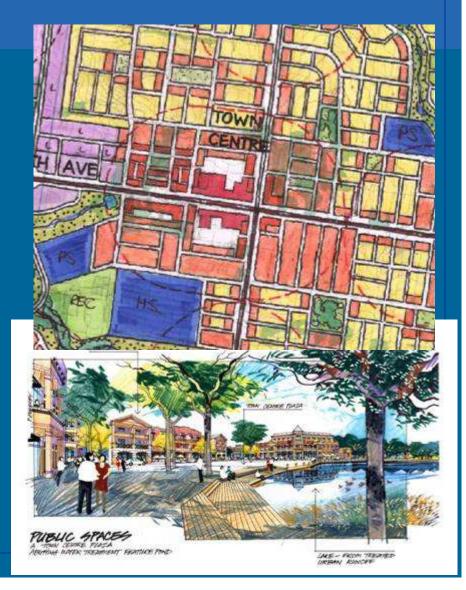




CRITERIA 5: JOBS-ECONOMY – To provide employment opportunities through growing Sydney's role in the global economy and in regionally-based jobs

- OFFICES Provide quality office space in centres and along corridors serviced by quality public transport
- INFRASTRUCTURE Provide all necessary employment-related infrastructure, especially communications networks
- LAND Ensure employment-related land is provided in appropriately zoned areas
- CLUSTER LINKS Facilitate interactions between R&D and employment centres in relevant clusters
- TRAINING Ensure skills are available in appropriate regions for employment support and job creation

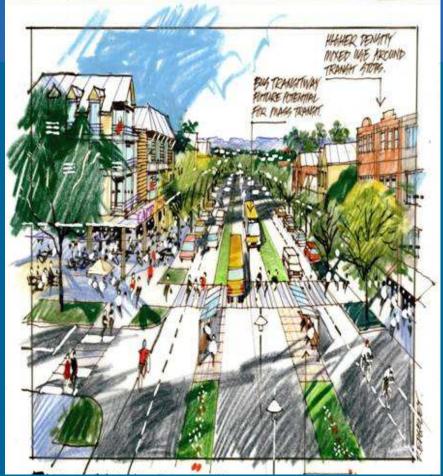
Peter Newman: Jobs are always hard in outer suburbs but moving towards 'GOOD' practice in comparison to the rest of the city and considerably better than most new areas





CRITERIA 6: ACCESS – To provide sustainable accessibility between homes, jobs, services and recreation

- PUBLIC TRANSPORT INFRASTRUCTURE Ensure all knowledge-intensive centres and corridors have quality public transport at their core
- ROAD NETWORK Maintain and extend the road network where appropriate
- LOCAL ACCESS Facilitate short trips by sustainable modes for local accessibility
- DENSITY AND MIX Create appropriate zonings and opportunities for density and mix of uses in centres and corridors to reduce car dependence and create efficient land use
- FREIGHT ACCESS Ensure there is quality access for freight especially between manufacturing areas, ports and airports
- TRAVEL DEMAND MANAGEMENT Use TravelSmart and other demand management tools to make transport of people and freight more effective



Peter Newman 'OK to GOOD' as rail links to areas eventually with rapid transit routes planned within the regions though service levels will be low until population develops



CRITERIA 7: QUALITY and EQUITY in SERVICES – To ensure quality health, education, security, community development and other government services are provided equitably across Sydney

- QUALITY SERVICES Require the provision of quality services in health, education, security and community development
- EQUITABLE SERVICES –Ensure that services are provided equitably across the GMR



Peter Newman: 'GOOD' to 'BEST' practice as Development Corporation will ensure services are available in a timely manner to all of the new areas

CRITERIA 8: GOVERNANCE – To establish effective, fair and efficient planning and decision-making

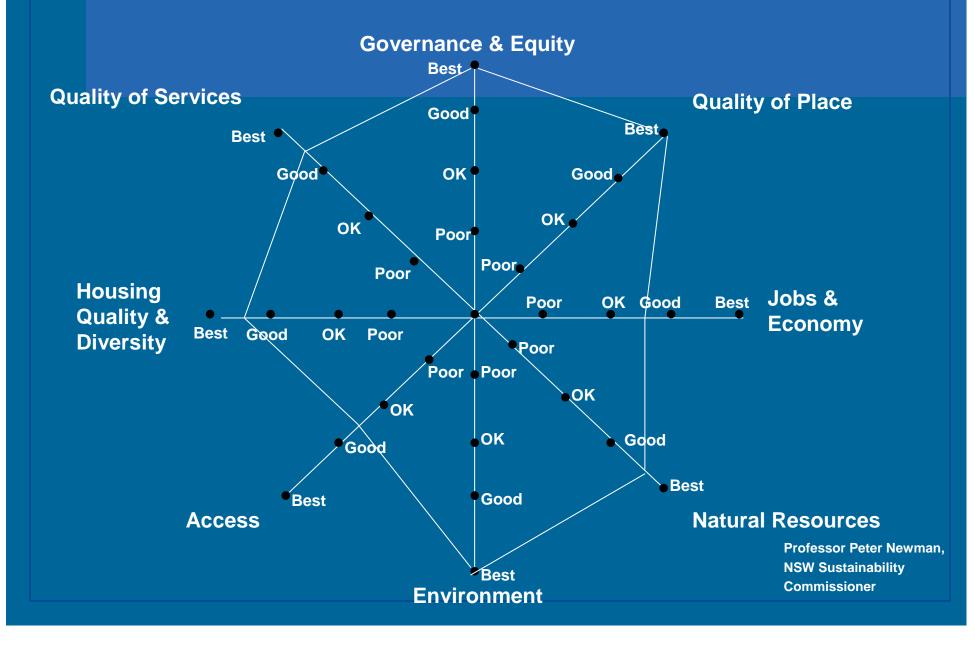
- PLANNING GOVERNANCE Ensure that appropriate institutional support with local government is available for the implementation and review of plans in new land release areas, complex redevelopment areas and centres/corridors/regions across the GMR
- FUNDING and FINANCING MECHANISMS Create funding and financing opportunities for each of the planning functions required to deliver the Metropolitan Strategy
- TRANSPARENT & ENGAGING PROCESSES Ensure each planning step is transparent and where complex issues are involved create community engagement processes

Peter Newman: 'BEST' practice due to Development Corporation and partnerships with local governments, industry and civil society





Sustainability Criteria Spidergram for Sydney's New Land Release Program





Western Sydney Land Release



6. Key Success Factors

Key Success Factors

- 1. Very strong market demand
- 2. Over-riding government agency
- 3. Enquiry by Design a structured *integrative* mechanism that gets stakeholders in one place.
- 4. Precedents and available codes + skilled and experienced multi-disciplinary team
- 5. Long-term Regional Plan Project
- 6. Champion/s
- 7. Available instruments adapted not reliant on legislation
- 8. Specific governance & implementation
- 9. Integrated planning, design and implementation controls, from the region to the architecture
- 10. Measurement and evaluation of the outcome/s



