Where Should New Housing Go?

Public Discussion and Book Launch

Presented by
Dr Tony Recsei
Environmental Consultant

THE UNIVERSITY OF SYDNEY

Where should new housing go?

Inner city area ?

Middle suburbs ?

Outer suburbs ?

Medium density ?

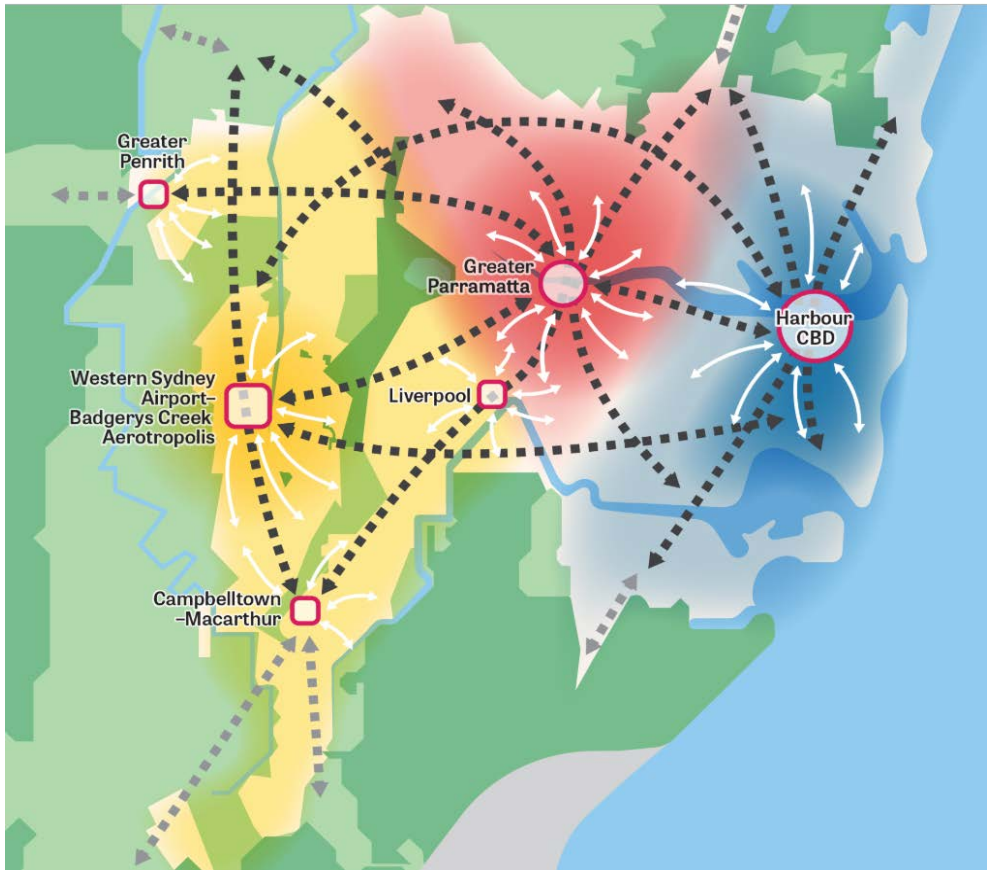
High density ?

Does the choice have to comprise higher density?

Greater Sydney Commission

Vision of A Metropolis of Three Cities

Most residents live within 30 minutes of their jobs, education and health facilities, services and great places



But by 1965, only 24 percent of Vallingby residents worked locally; 76 percent commuted out. Most jobs were fueled by in-commuters, while the residents went out.
Farsta did even worse: only 15 percent of residents worked locally, 85 percent commuted out……
Original occupants moved out and were replaced mainly by migrants and social welfare recipients

Did not save travel and people did not want to live there.

Peter Hall, *Cities in Civilisation*, Weidenfeld and Nicholson, London, 1998; *Cities of Tomorrow,* 3rd Edition, Blackwell Publishing *

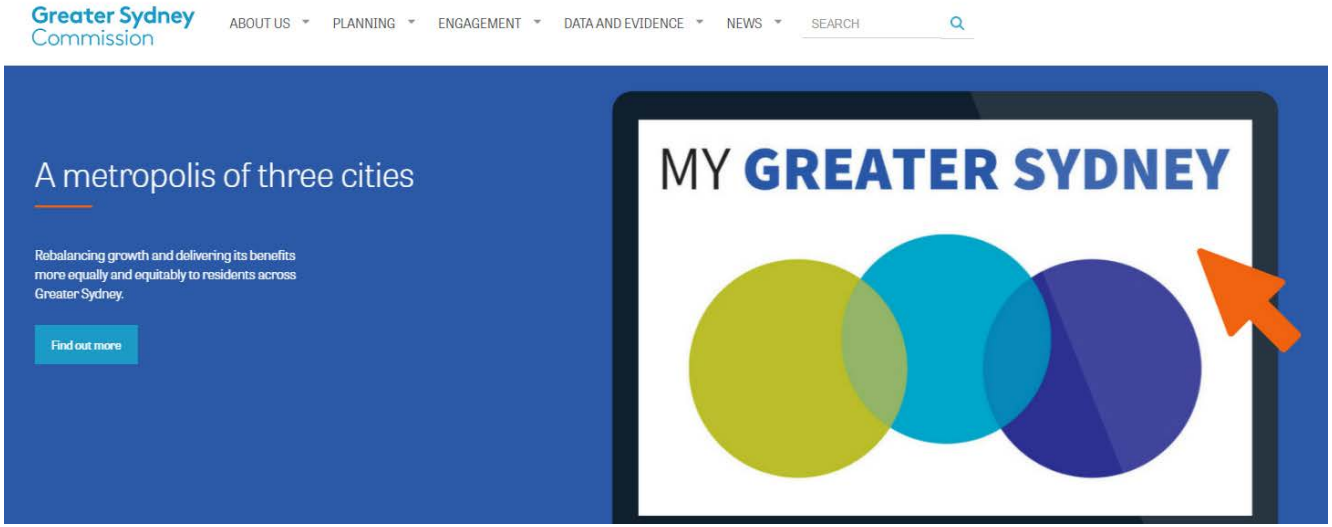
The 19 largest employment centres in Sydney

	Proportion of total city employment, 2016	
Sydney – Haymarket – The Rocks	14.5%	14.5%
Parramatta – Rosehill	2.3%	8.4%
North Sydney – Lavender Bay	2.2%	
Macquarie Park – Marsfield	2.2%	
Liverpool – Warwick Farm	1.0%	77.1%
Mascot – Eastlakes	1.0%	
Newtown – Camperdown – Darlington	0.9%	
Blacktown (East) – Kings Park	0.9%	
Penrith	0.9%	
Concord West – North Strathfield	0.9%	
Gosford – Springfield	0.9%	
Campbelltown – Woodbine	0.8%	
**********	*********	
City Total	**100.0%**	

Jane Jacobs marveled at the intricate order of cities as a manifestation of the freedom of countless numbers of people to make and carry out countless objectives and schemes.

1 Terrill, Marion, Batrouney, Hugh, Ha, James, and Hourani, Diana (2018). Remarkably adaptive: Australian cities in a time of growth. Grattan Institute

2 Jacobs, Jane. 1961. The Death and Life of Great American Cities. New York: Vintage House.



forcing high-density into local government areas

Top down : Public unrest

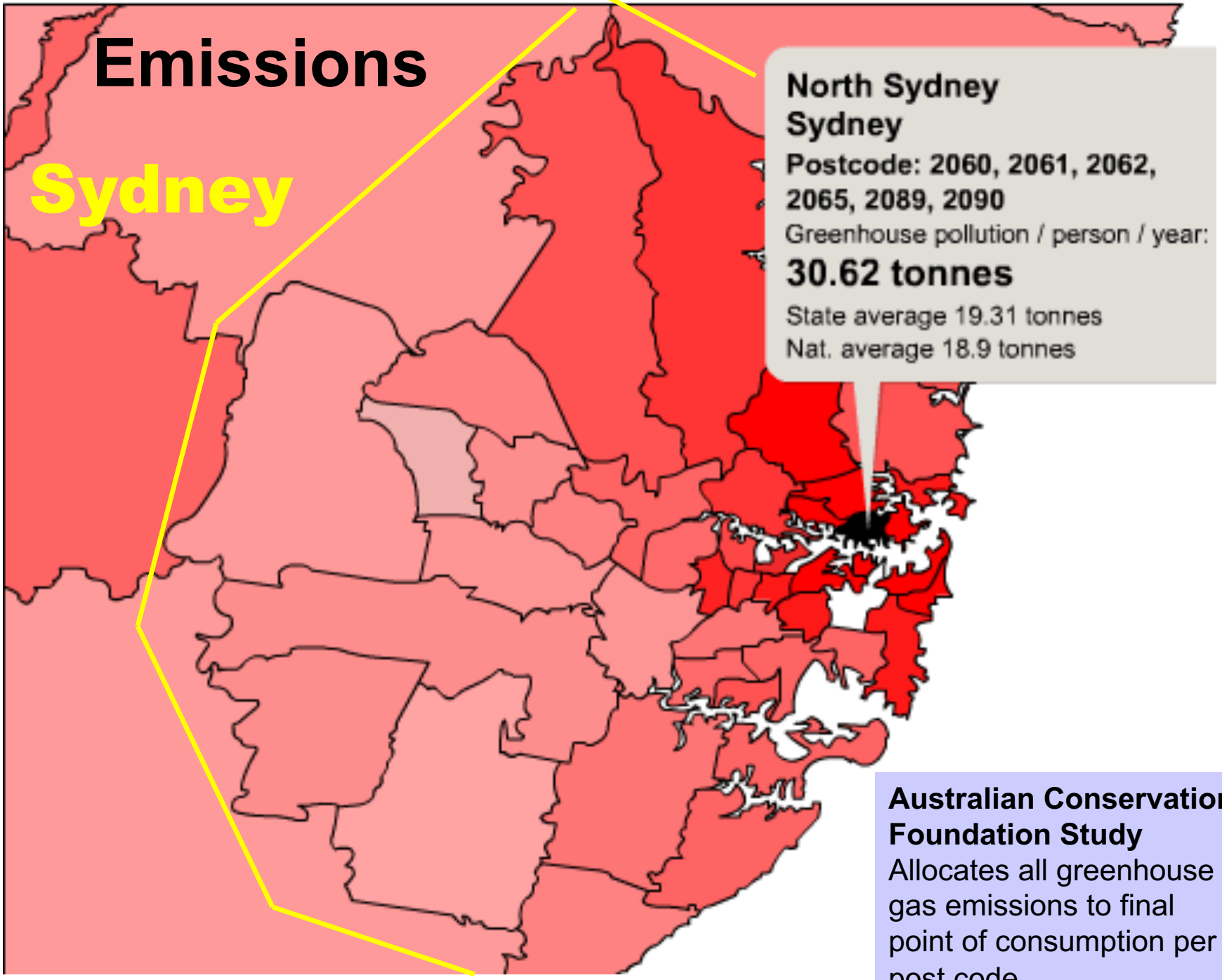
Community up?

1. MORE DENSITY

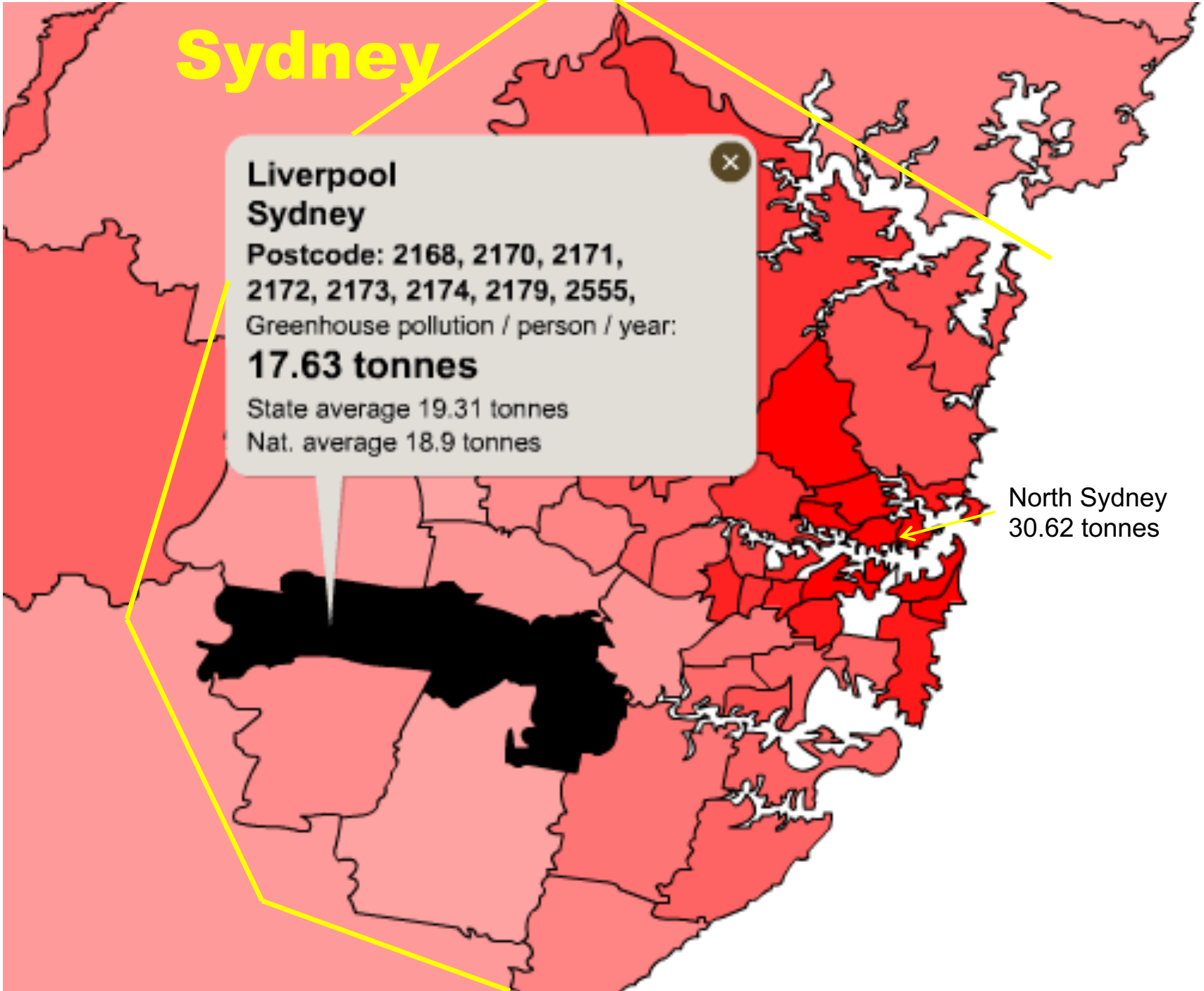
2. URBAN SPREAD

1. MORE DENSITY:

1. Sustainability
2. Housing choice
3. Cost
4. Environmental preservation
5. Less car travel



Australian Conservation Foundation Study
Allocates all greenhouse gas emissions to final point of consumption per post code


Sydney
Liverpool
Sydney
Postcode: 2168, 2170, 2171,
2172, 2173, 2174, 2179, 2555,
Greenhouse pollution / person / year:
17.63 tonnes
State average 19.31 tonnes
Nat. average 18.9 tonnes
North Sydney
30.62 tonnes

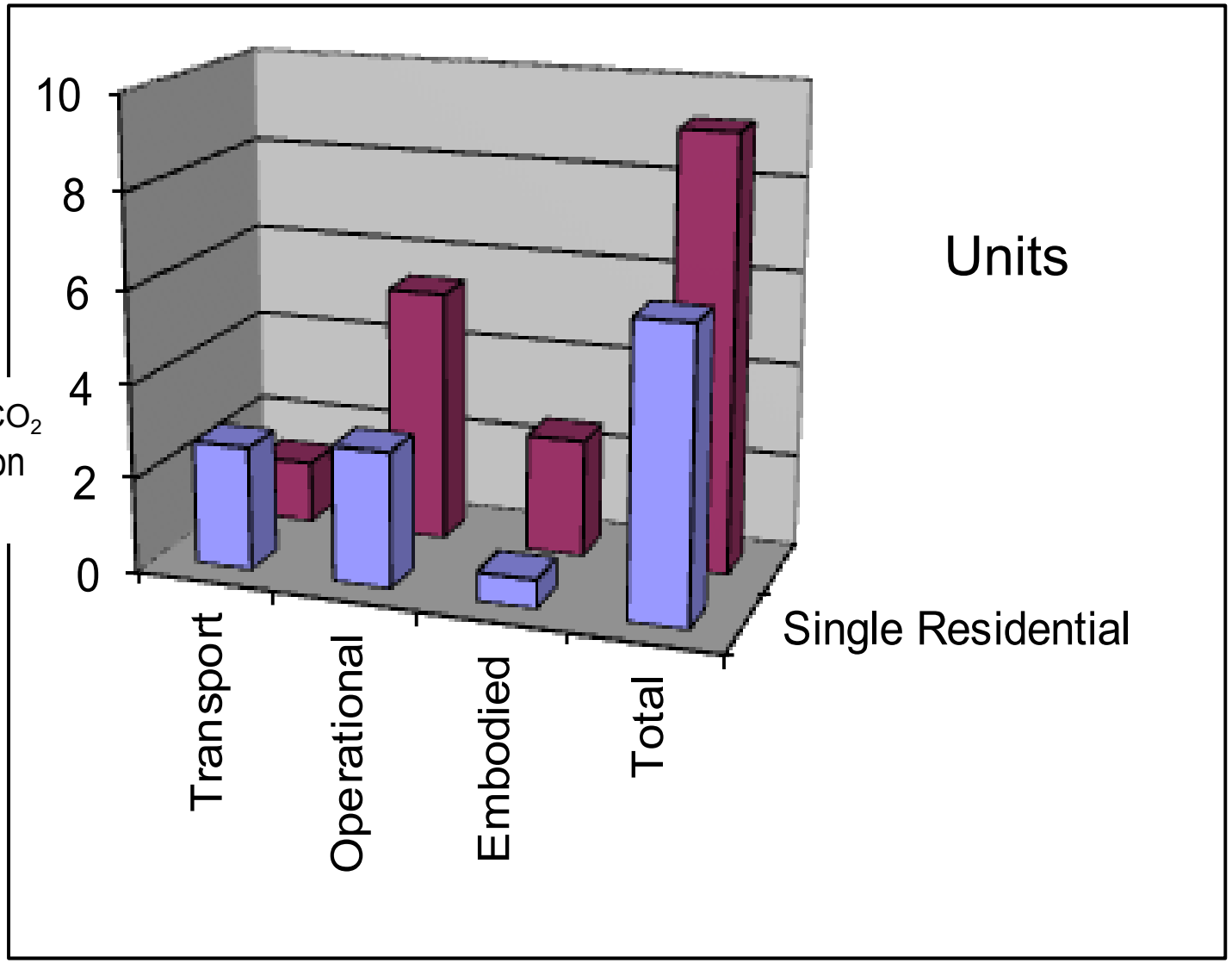
Greenhouse gas emissions

High density core area of cities national average 27.9 tonnes

Low density outer areas national average 17.5 tonnes

Comprehensive

More CO_2 equivalent emissions from high-rise



SOURCES:1.Multi-Unit Residential Building Energy & Peak Demand Study By Paul Myors, EnergyAustralia, with Rachel O'Leary and Rob Helstroom, NSW Department of Planning (October 2005), Energy News VOl 23 no 4, December 2005
2 Net Benefits of Urban Consolidation, Melbourne City Council. Neilson Associates, Nov 87
3. Kenworthy&Laube Internationa Source Book Automobile Dependence in Cities 1999 Page 354
4. Estimating Energy Consumption In The Urban Environment With A Focus On Embodied Energy;Stephen Pullen, Patrick Troy, Darren Holloway & Raymond Bunker;Proceedings of the 36th Conference of Architectural Science Association (ANZAScA). 1 – 4 November 2002. Deakin University, Australia.
5. An analysis of the embodied energy of office buildings by height, G.J. Treloar, R. Fay, B. Ilozor, P.E.D. Love; Journal: Facilities; ISSN: 0263-2772; May 2001 Volume: 19 Issue: 5/6 Page: 204 - 214
See in UrbanConsol\cost\HiiseVSSingleResEnergyBalance07.xls

Significance

REGRESSION COEFFICIENTS resulting from multivariate analysis of energy related quantities		
COMPONENT	**COEFFICIENT for Gigajoules per Capita**	
	Total energy requirement	**Automotive fuel consumption**
Income	0.503	0.732
Density (low to high)	-0.003	-0.046

Regression coefficient is the constant "a" in the regression equation y = ax + b that tells about the change in the value of the dependent variable corresponding to the unit change in the independent variable

M. Lenzen et al. / Ecological Economics 49 (2004) 375–399

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1. HIGH DENSITY
Benefits claimed

1. ~~Sustainability~~
2. Housing choice
3. Cost
4. Environmental preservation
5. Car travel

13. What type of dwelling would you prefer?

	Response Percent	Response Count
Single dwelling on one lot	**44.9%**	**954**
Dual Occupancy (two dwellings - attached/detached - on one lot)	7.4%	157
Villa or townhouse (1-2 storey with more than two dwellings on one lot)	32.1%	682
Unit (apartment in a multistorey building)	4.9%	104
Granny flat	0.4%	8
Retirement village	9.2%	196
Nursing home/hostel	1.1%	23
Other (please specify)		307
answered question		**2,124**

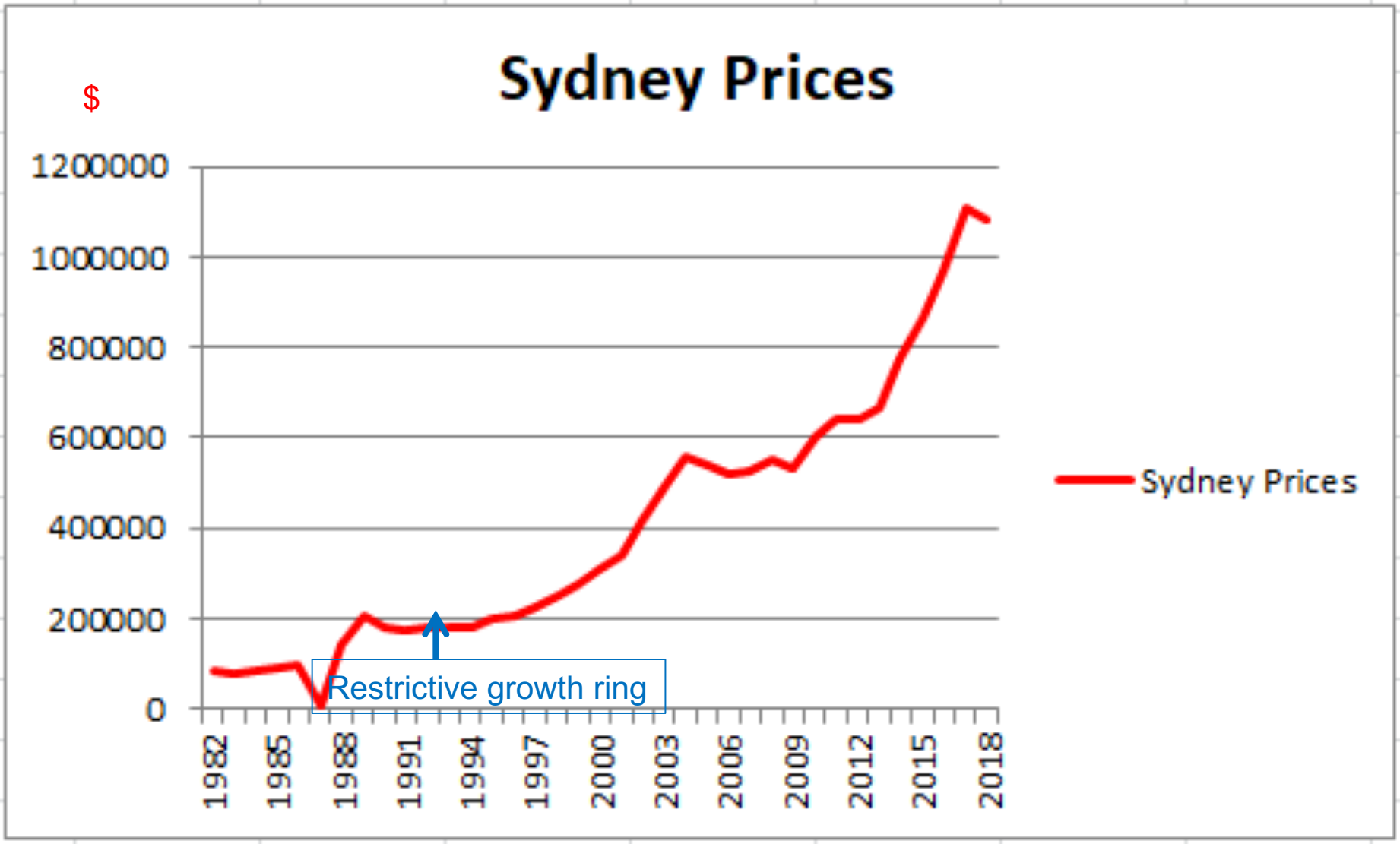
The Desirable Apartment Life?

However, our analysis of the preferences of people within each of these factor groups also indicated that in many cases, people are living in apartments not by choice, but as a result of a number of constraints. Indeed, the fact that the majority of the Economically Engaged, Battler and Achieving Education groups would prefer to live in a house than in an apartment indicates that they are living in apartments as a result of a series of trade-offs (including location and affordability).

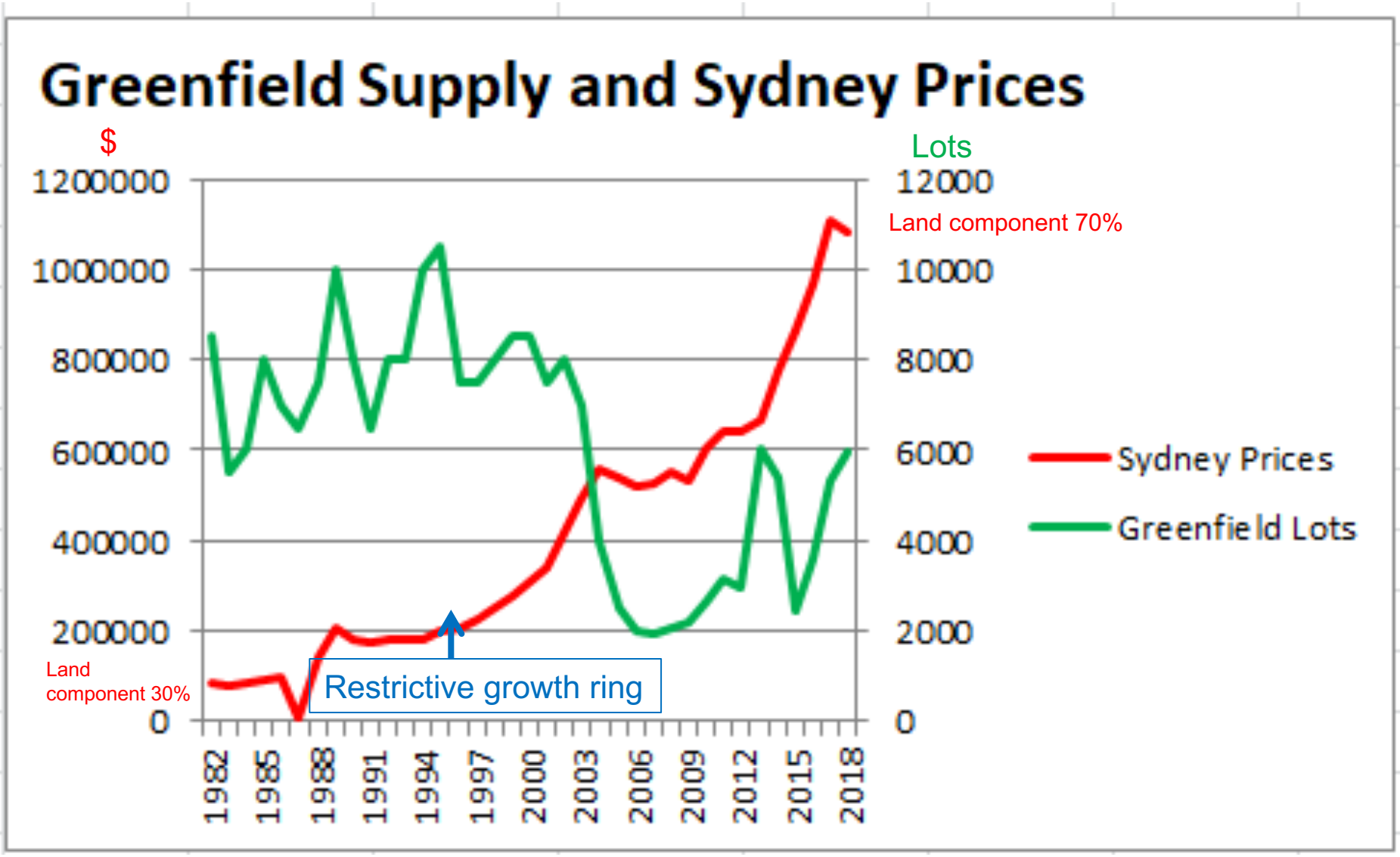
1. HIGH DENSITY
Benefits claimed

1. ~~Sustainability~~
2. ~~Housing choice~~
3. Cost
4. Environmental preservation
5. Car travel

Ashfield



Quarterly median house prices - Real Estate Institute of Australia



Greenfield Lots1981 to 2006 From NSW Metropolitan Development Program 2007/2008 page 31
Quarterly median house prices - Real Estate Institute of Australia.

Result of restricted supply – inflated prices

Medich mega windfall

The sale of two parcels of land next to the Badgerys Creek airport site to a Chinese developer will net the Medich brothers hundreds of millions, writes **Kate McClymont**.

A digitally altered photo of Ron Medich (left), Tin Ching Shum and Roy Medich at the Badgerys Creek airport site.

SMH Investigations
investigations@smh.com.au

Accused murderer Ron Medich and his property-developing brother Roy are set to make hundreds of millions of dollars after secretly selling their substantial landholding adjacent to the proposed second airport at Badgerys Creek.

The sale, rumoured to be more than $500 million, is to companies associated with Chinese property billionaire Shen Yuxing, also known as Tin Ching Shum.

Sources close to the deal say it is contingent upon Foreign Investment Review Board approval. This may not be straightforward given the land's proximity to the proposed airport.

Mr Shum is the majority shareholder of property development company Boyuan Holdings, which, since listing on the Australian Securities Exchange last year, has been buying up properties

Continued Page 6

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1. HIGH DENSITY
Benefits claimed

~~1. Sustainability~~

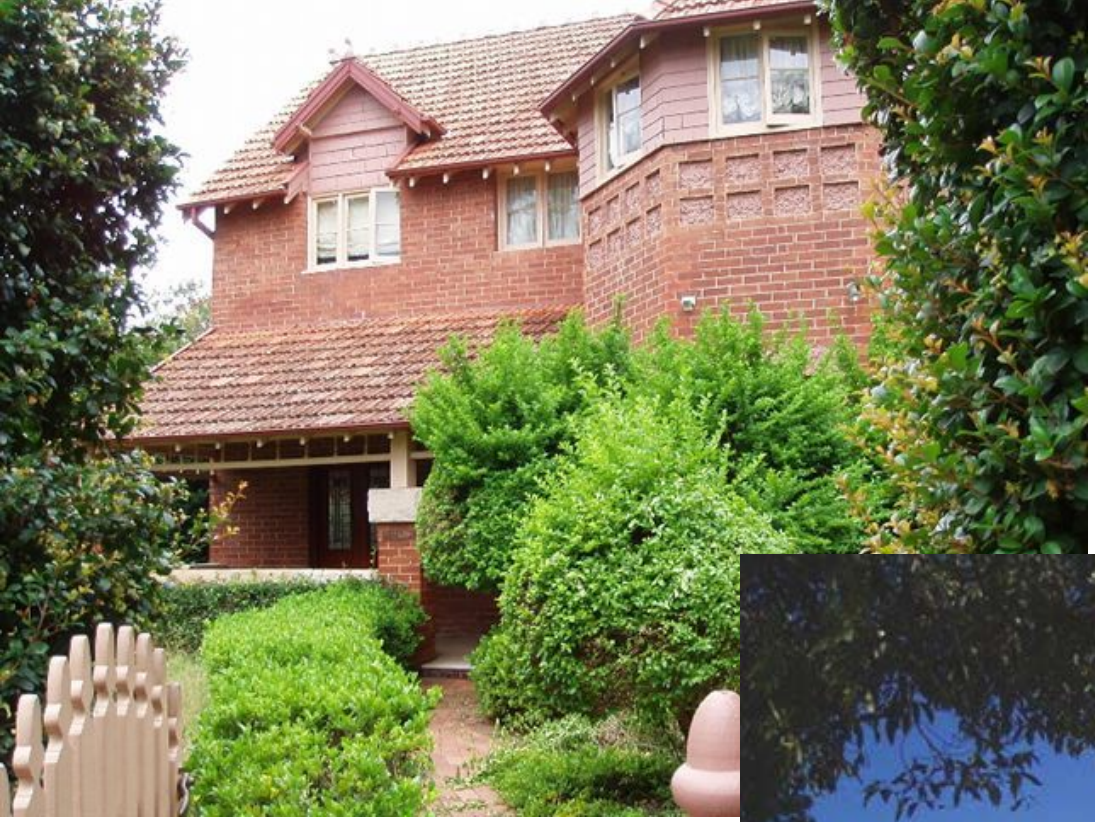
~~2. Housing choice~~

~~3. Cost~~

4. Environmental preservation

5. Car travel


SHOE REPAIRS
Gloria Jean's Coffees



Tryon Rd, Lindfield, Sydney

became

Remnant urban bushland

*

Carlingford Rd

became

1. HIGH DENSITY
Benefits claimed

~~1. Sustainability~~

~~2. Housing choice~~

~~3. Cost~~

~~4. E~~

5. C

Hong Kong: Mean journey time to work 47 minutes

Hong Kong Transport Department, Travel Characteristics Survey 2011 – Final Report

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1. HIGH DENSITY
Benefits claimed

~~1. Sustainability~~

~~2. Housing choice~~

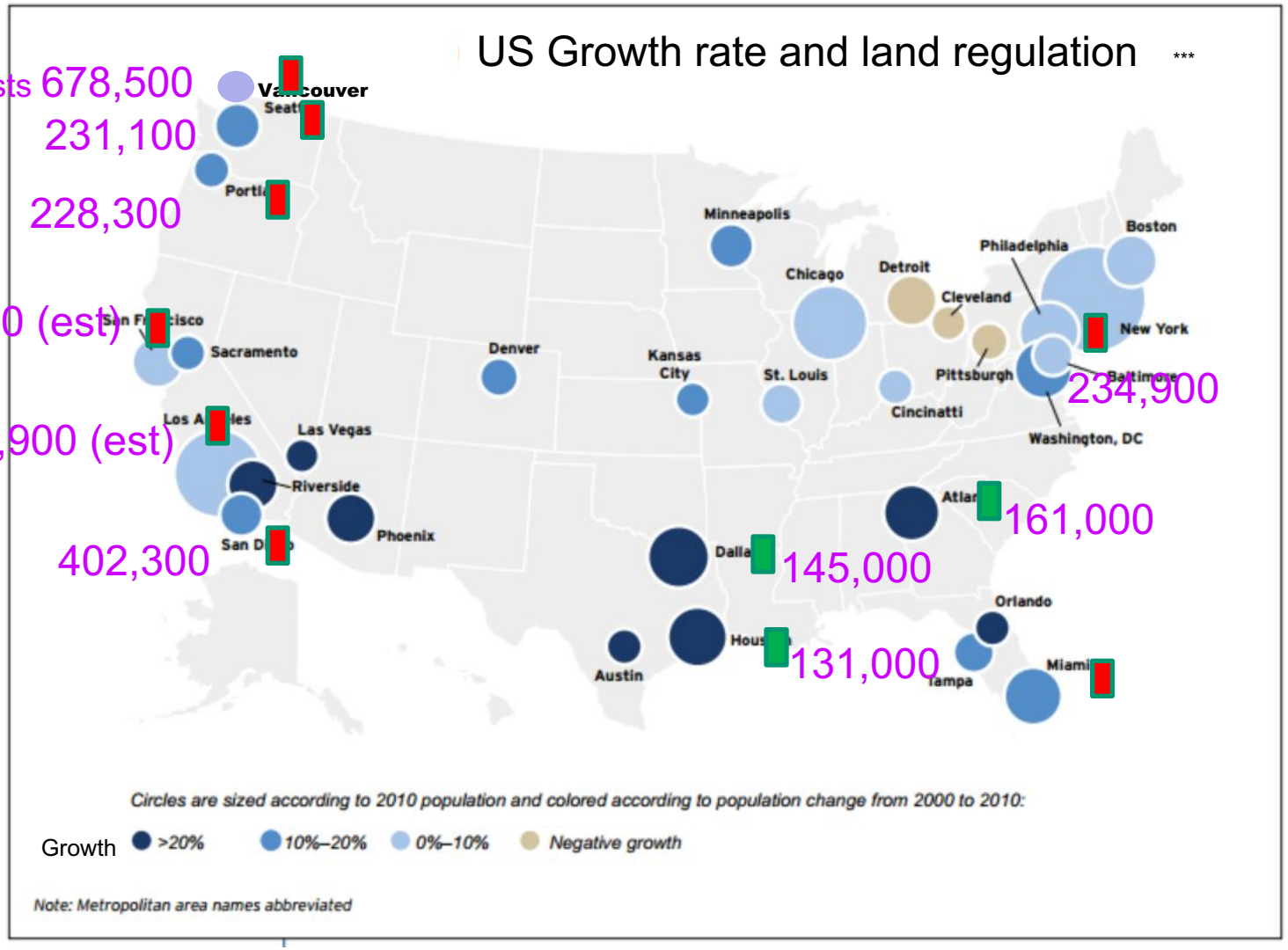
~~3. Cost~~

~~4. Car travel~~

~~5. Environmental preservation~~

2. URBAN SPREAD

Other solutions?



House costs 678,500

231,100

228,300

427,200 (est)

347,900 (est)

402,300

234,900

161,000

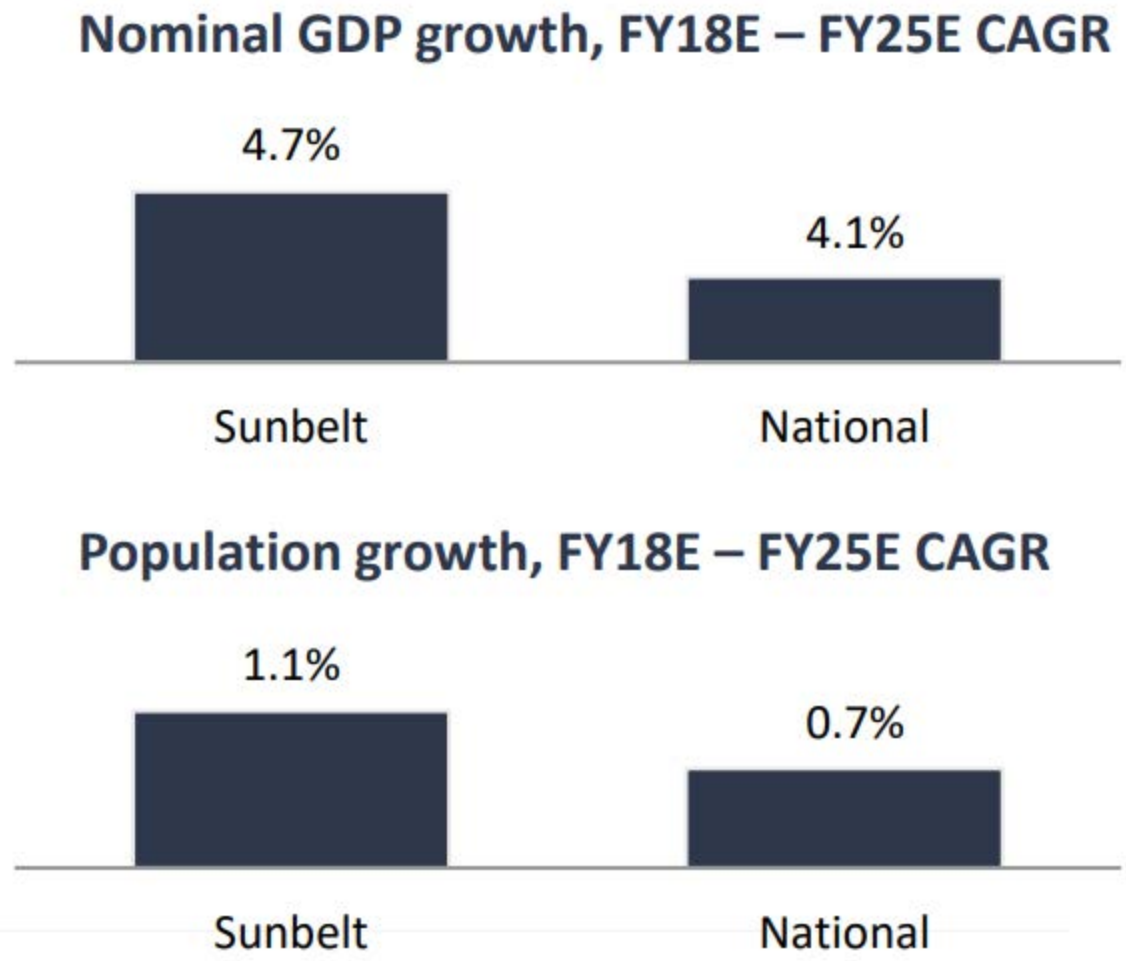
145,000

131,000

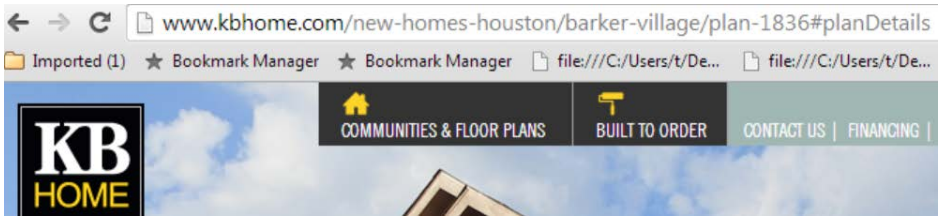
More responsive land regulation From Wendell Cox, 6th Annual Demographia International Housing Affordability Survey:2010

Regulation promoting more high-density

Population Growth in Metro America since 1980:Putting the Volatile 2000s in Perspective William H. Frey Brookings Institution, Washington, March 2012
http://www.brookings.edu/~/media/research/files/papers/2012/3/20%20population%20frey/0320_population_frey.pdf



US Sunbelt states forecast to grow at higher compound annual rates of GDP and population growth compared to national forecasts



Houston

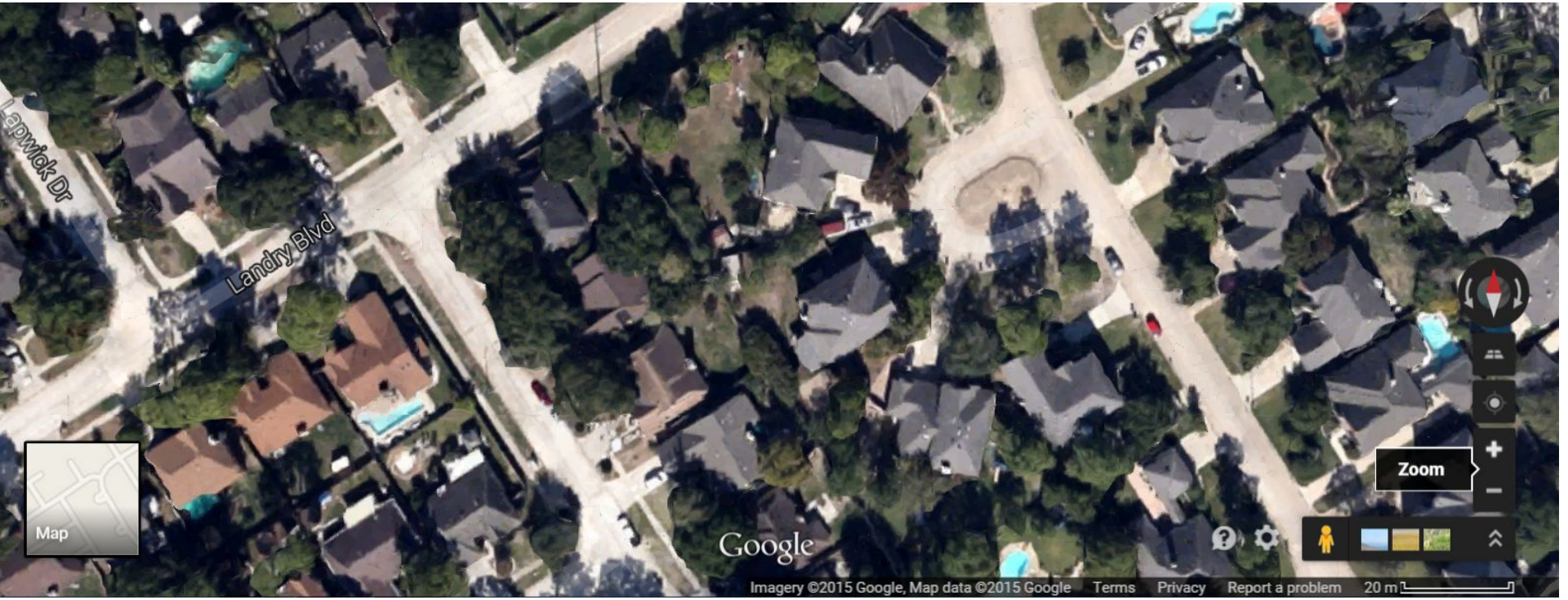
PLAN 1836

Stories:	1
Square Footage:	1836
Bedrooms:	3 - 4
Baths:	2
Garage:	2 Car

Priced From: **$139,495**
Monthly Payment - [illegible]
30 years* Full details

VIEW DETAILS >

Houston



Journey times to work (minutes):

CITY	TIME	POP/SQ KM	POPULATION
Houston	29	1200	5,764,000
Dallas Fort-Worth	27	1200	6,174,000
Sydney	35	2000	5,000,000
Hong Kong	46	26400	7,246,000
Tokyo-Yokohama	46	4400	37,843,000

Demographia World Urban Areas 2018
Demographia Work Trip Travel Times (One Way) 2013
Improving the Competitiveness of Metropolitan Urban Areas, Weddell Cox 2012

POPULATION AND TRAFFIC

CITY	COUNTRY	POPULATION (REF 1)	DENSITY (REF 1)	CONGESTION LEVEL (REF 3)	JOURNEY TIME TO WORK	REF
Los Angeles	United States	15,620,000	2,300	45%	28.5	2
Sydney	Australia	4,690,000	2,000	39%	34	6
Paris	France	10,980,000	3,700	38%	56.5	7
Hong Kong	Hong Kong	7,380,000	25,900	36%	47	1
Hamburg	Germany	2,115,000	2,700	33%		
Vienna	Austria	1,795,000	4,000	31%		
Barcelona	Spain	4,840,000	4,500	31%		1
Houston	United States	6,285,000	1,100	24%	27.6	2
Dallas-Fort Worth	United States	6,600,000	1,100	18%	26.1	2
Portland	United States	2,075,000	1,400	29%	25.9	8

1. Demographia World Urban Areas 2018
2. American Community Survey of the US Census Bureau: 2008
3. TomTom World Traffic Congestion 2018
6. NSW Household Travel Survey for 2007
7. The Local https://www.thelocal.fr/20160418/parisians-spend-23-days-a-year-on-public-transport_Refers to a report
8. American Community Survey of the US Census Bureau: 2017

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FLICKR/PHILIP TAYLOR

Best city to stretch that paycheck

Low cost of living – including things like consumer prices and services, utilities and transportation costs, housing, and $2 brea[illegible] spot in terms of stretching your income.

Low housing cost → Enables lower wages → Low production unit cost → Low prices products & services → Greater economic activity

Best at creating jobs (2014 highest)
Largest medical conglomerate in world
After New York, most Fortune 500 companies
Lowest cost of living
Named by Business Insider “The Best City in America”

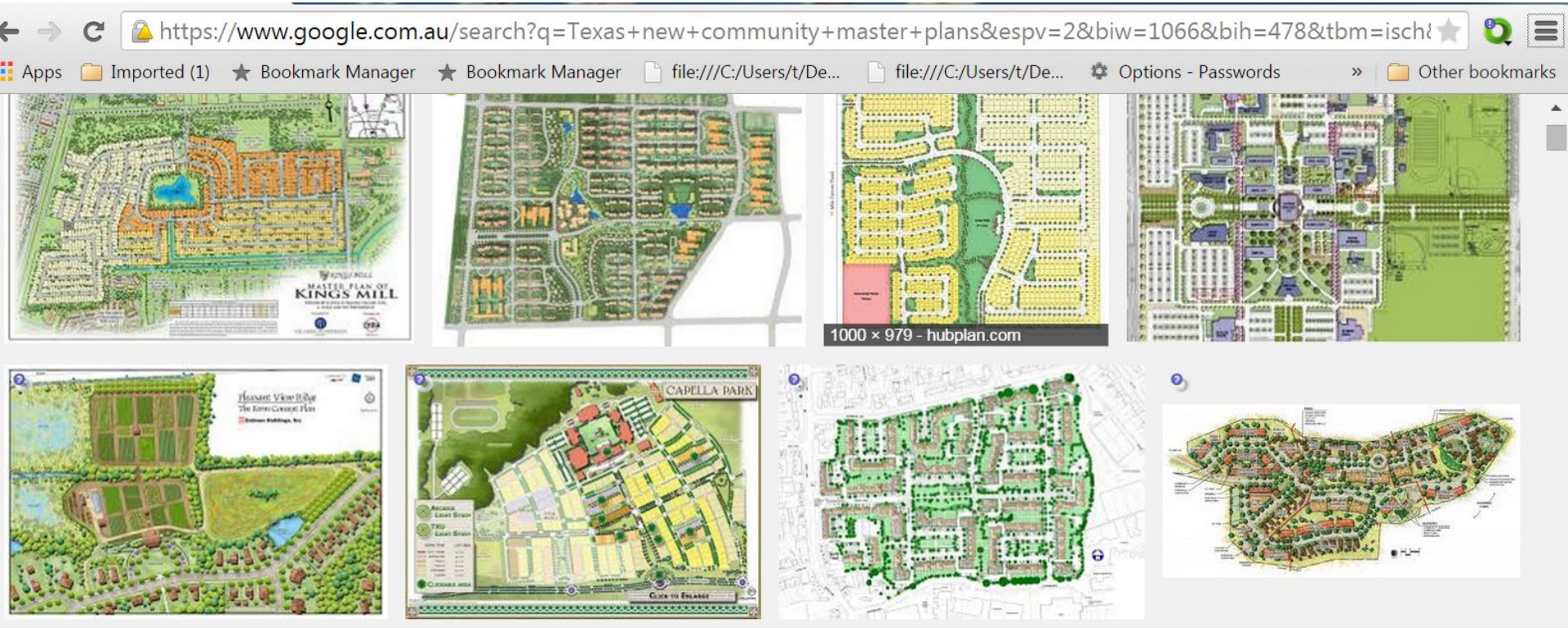
How do they do it?

No restrictive land policies. +++

Developers propose developments, in any unrestricted location, often on the periphery.
They create neighbourhoods with amenities that attract buyers
They compete with each other thus ensuring desirable facilities are provided *.

Development schemes

++++++*



Developers can create a “municipal utility district” on the urban fringe

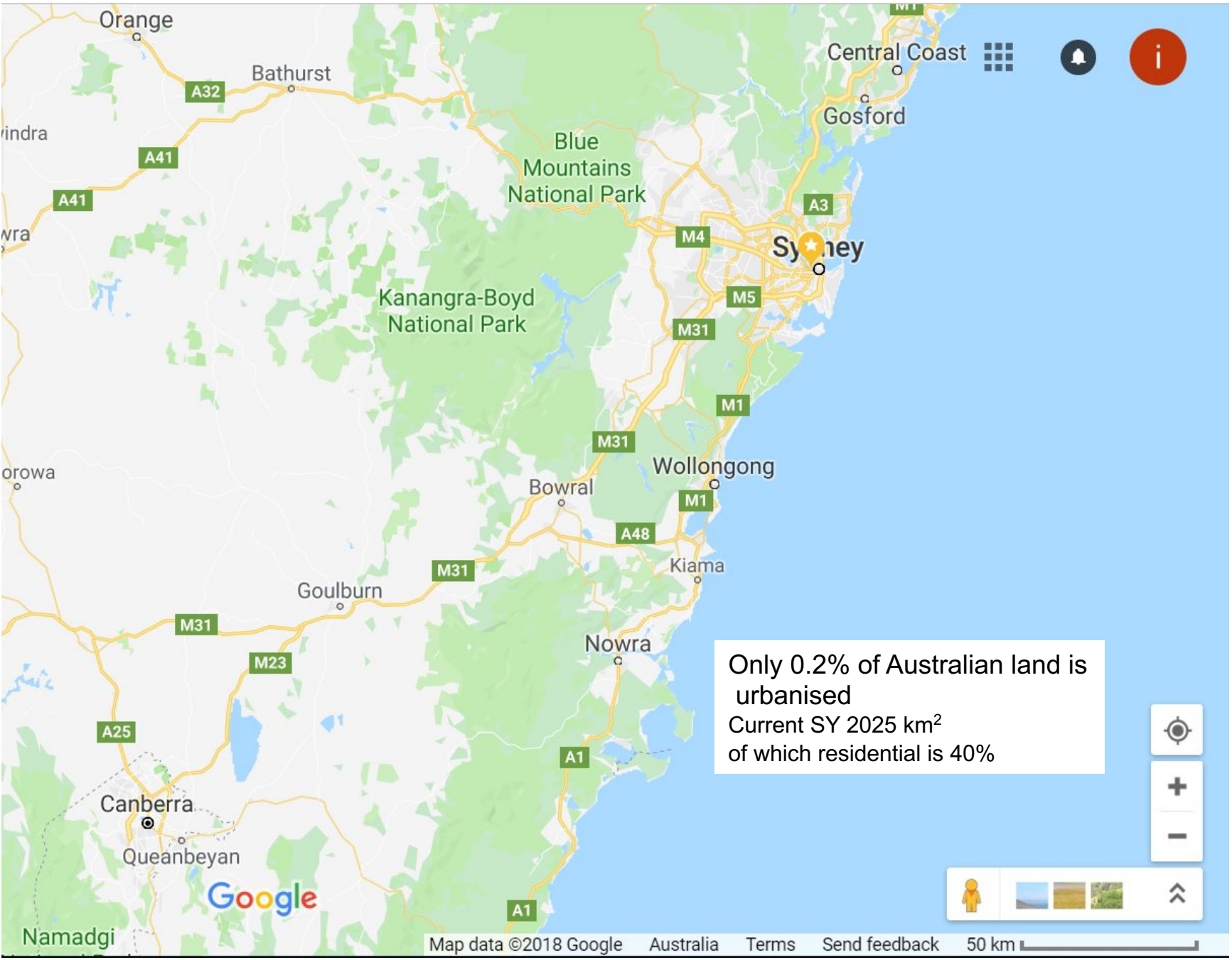
Begin as self-sufficient enterprises

Covenants to ensure standards are preserved

Provide roads, water, sewerage and drainage

Finance these with tax-free bonds with repayments funded by utility usage charges

Designed so ultimately can be connected to the city’s corresponding infrastructure


Orange
Bathurst
A32
A41
A41
Blue
Mountains
National Park
Central Coast
Gosford
A3
M4
Sydney
M5
M31
Kanangra-Boyd
National Park
M1
M31
Wollongong
Bowral
M1
A48
Kiama
M31
Goulburn
M31
M23
Nowra
A25
A1
Canberra
Queanbeyan
Google
A1
Namadgi
Only 0.2% of Australian land is urbanised
Current SY 2025 km2
of which residential is 40%
Map data ©2018 Google
Australia
Terms
Send feedback
50 km

Sydney

Ecological Footprint 150 times greater than the Sydney area

Sustainable cities report, Commonwealth Parliament, August 2005

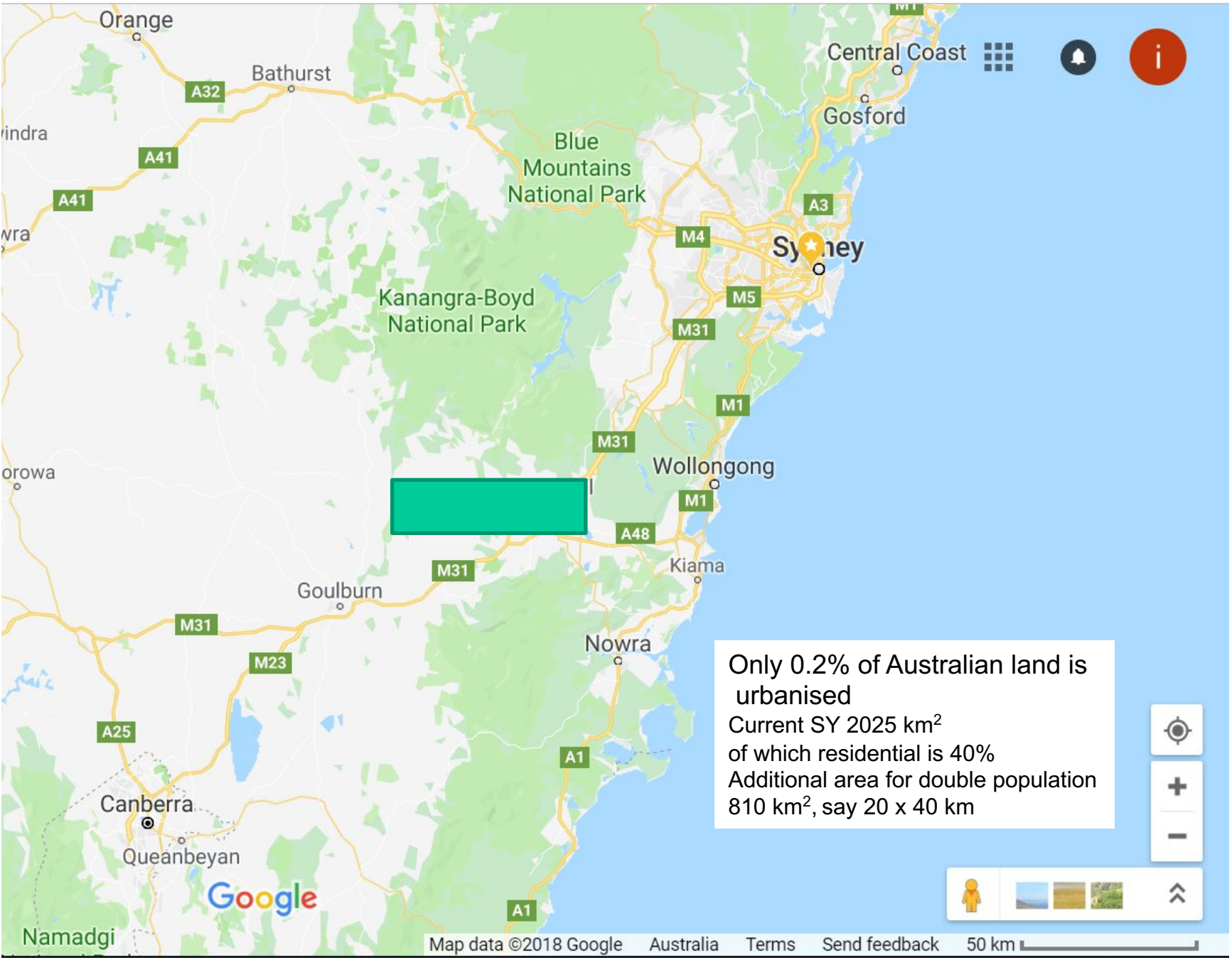
Send your article to
smhopinion@smh.com.au

No relief from nuclear danger

The NK threat is not imminent but Australia is still a potential target, writes **Peter Hartcher**.

North Korea publicly painted a nuclear target on Australia in April 2017. Kim Jong-un's regime seized on the fact that a contingent of US marines is now in a permanent, rotating deployment in the Northern Territory. Specifically, the regime's main mouthpiece, the official party newspaper *Rodong Sinmun*, said: "If Australia persists in following the US moves to isolate and stifle the DPRK [Democratic People's Republic of Korea] and remains a shock brigade of the US master, this will be a suicidal act of coming within the range of the nuclear strike of the strategic force of the DPRK." With all the excited talk of Donald Trump's two meetings with Kim in June and again last week, has anything changed?

Released by North Korea's state news agency
CREDIT: KCNA VIA REUTERS


Only 0.2% of Australian land is urbanised
Current SY 2025 km2
of which residential is 40%
Additional area for double population
810 km2, say 20 x 40 km
Orange
Bathurst
Central Coast
Gosford
Blue Mountains National Park
Kanangra-Boyd National Park
Sydney
Wollongong
Kiama
Goulburn
Nowra
Canberra
Queanbeyan
Namadgi
A32
A41
A3
M4
M5
M31
M1
A48
M23
A25
A1
Google
Map data ©2018 Google
Australia
Terms
Send feedback
50 km

FACTOR	HIGH-DENSITY	LOW-DENSITY
Sustainability- greenhouse gas		✓
Housing choice		✓
Cost		✓
Transport - congestion, travel times		✓
Environmental preservation urban plants, wildlife solar energy, rain area	✓	✓
Public acceptance		✓
Safer strategically		✓

LY 6, 2018 THE SYDNEY MORNING HERALD

Opinion 21

Suffocating residents shout 'no' to development

Aidan Anderson

Look around Sydney and you'll see battles in nearly every suburb between residents' action groups and the state government. The terms of conflict are consistent: the government is trying to override local opposition to overdevelopment

HIA 17/5/17

HORNSBY

Planning panels row

Independent boards will stop 'dodgy and dirty deals' within councils, says minister

Nigel Gladstone

NEW planning panels that take decisions about developments worth between $5 million and $30 million away from councils will either "erode" local democracy or make the system "much more efficient", opposing groups say.

"Shonky developers and their mates will no longer be able to flaunt their power with elected councillors in order to get their DAs through," Mr Roberts said on his would end "the dodgy and dirty backroom deals that have gone on for far too long inside local councils".

Local Government NSW Keith Rhoades said the panels could erode accountability and transparency in planning decisions.

"Councils are accountable to the community where panels are not," Cr Rhoades said.

"Councillors are their ing for determination.

Urban Taskforce developers' lobby group chief executive Chris Johnson said the panels would "ensure a level playing field for everyone".

"Having a central pool of experts will also ensure effective use of resources and that all panel members have

The Bill passed after being amended so developers and real estate agents could not be on the panels.

A Hornsby Council spokeswoman said "at this stage, the legislation and its implications for Hornsby Shire have not been reported to council".

A Ku-ring-gai Council

THE SYDNEY MORNING HERALD OCTOBER 21-22, 2017

4 NEWS

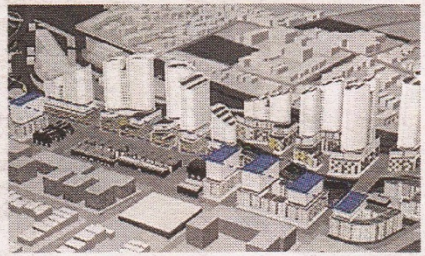
Development Damning verdicts from Inner West

Labor leads battle against mega-apartment project

Lisa Visentin

Property giant Mirvac is facing a Labor-led campaign opposing its plans to build a string of apartment towers in Sydney's inner west, as ALP politicians from each level of government rallied the community at a meeting in Marrickville.

More than 350 people crowded into Marrickville Town Hall on Thursday night to hear details about the mammoth development.



Artist's impression of the Mirvac plan.

between Mirvac and the NVT Group, rezoning would allow the Marrickville station precinct to provide 6000 additional dwellings by 2036.

Ms Haylen, member for Summer Hill, said a Labor government would "immediately tear up" the Berejiklian government's Sydenham-to-Bankstown rezoning plan if elected in 2019. It follows a major policy announcement by opposition planning spokesman Michael Daley to a planning forum on Wednesday night, during which he committed to

THE SYDNEY MORNING HERALD THURSDAY, NOVEMBER 23, 2017

14 News

HOUSING CRITICISM

Government pushes back on 'precinct' zones

Jacob Saulwick
City editor

The state government is pushing back against criticism of its housing development zones across Sydney, saying that without them housing growth would not be matched by local infrastructure.

trial land at Rhodes East on the Parramatta River.

The Rhodes East development will be the first within the program to include infrastructure paid for with a $20,000 per dwelling "special infrastructure contribution" or SIC levy.

That levy, to be charged on top of contributions required by council, will raise about $74 million to be spent on road upgrades, pedestrian and cycle paths, and on acquiring

Environment gets another bite at the PIE in mega-agency

Jacob Saulwick, Peter Hannam

NSW will have an 'environment' department once more after the word was added to the mega-agency now called, Planning, Industry and Environment.

The restoration comes amid a number of administrative changes at the organisation, one of which represents the latest attempt to find a place within government for the advisory body, the Greater Sydney Commission (GSC).

The chief executive of the GSC, Sarah Hill, will also take on a position as deputy secretary of Planning, Industry and Environment. Planning Minister Rob Stokes said via email that Dr Hill's dual roles would "support the work of the Department and GSC through a more cohesive, collaborative partnership to deliver great places for communities."

The move follows a widespread feeling within and outside government that the GSC and the former Department of Planning had often been at loggerheads.

Among other changes disclosed to staff this week, the former head of the Environment Protection Agency (EPA), Anissa Levy, will take on a new role as 'coordinator-general for Environment, Energy and Science'.

Ms Levy left the EPA last year, and went to work at Infrastructure NSW, where Jim Betts was the chief executive. Mr Betts, who addressed staff across nearly 50 statewide locations on Friday, was appointed to run PIE last month.

Mr Betts has previously outlined the size of the task facing the department, which has responsibility for a portfolio of areas – including, the environment, housing, regional development, Aboriginal affairs, science and industry, local councils as well as government property.

Former EPA head Anissa Levy's is now 'coordinator-general for Environment, Energy and Science' under Planning, Industry and Environment boss Jim Betts.

"Our cluster has been created by the Premier to deal with some of the most contentious issues of our era," Mr Betts wrote to staff. "We all want NSW to be prosperous, liveable, environmentally sustainable and socially inclusive, but in pursuit of these goals there are sometimes difficult trade-offs to be made."

Staff who observed briefings from Mr Betts yesterday said he stressed a commitment to tackle climate change, and said the EPA would remain independent.

Other staff changes hint at future policy priorities. For instance, Alex O'Mara was appointed to a new role as deputy secretary for 'place, design and public spaces'. Staff were told she will work to "re-orient the planning system around public, places and communities".

Since it was established by legislation in 2015, the GSC has undergone multiple administrative changes. Set up with the requirement to "lead metropolitan planning," the agency first reported to the planning minister before being transferred to the control of the premier.

In messages to staff, Mr Betts commits to delivering to the people of NSW. "We won't waste time on pointless bureaucracy. We will be decisive, bold and constantly move forward with the government's agenda."

THE SYDNEY MORNING HERALD MAY 4-5, 2019

Overdevelopment and population growth will be key state election issues in March. The Finance Minister and Member for Ryde, Victor Dominello, is demanding targets for new housing in his electorate be slashed as part of his campaign against development.

Sydney Morning Herald

Where should new housing go?

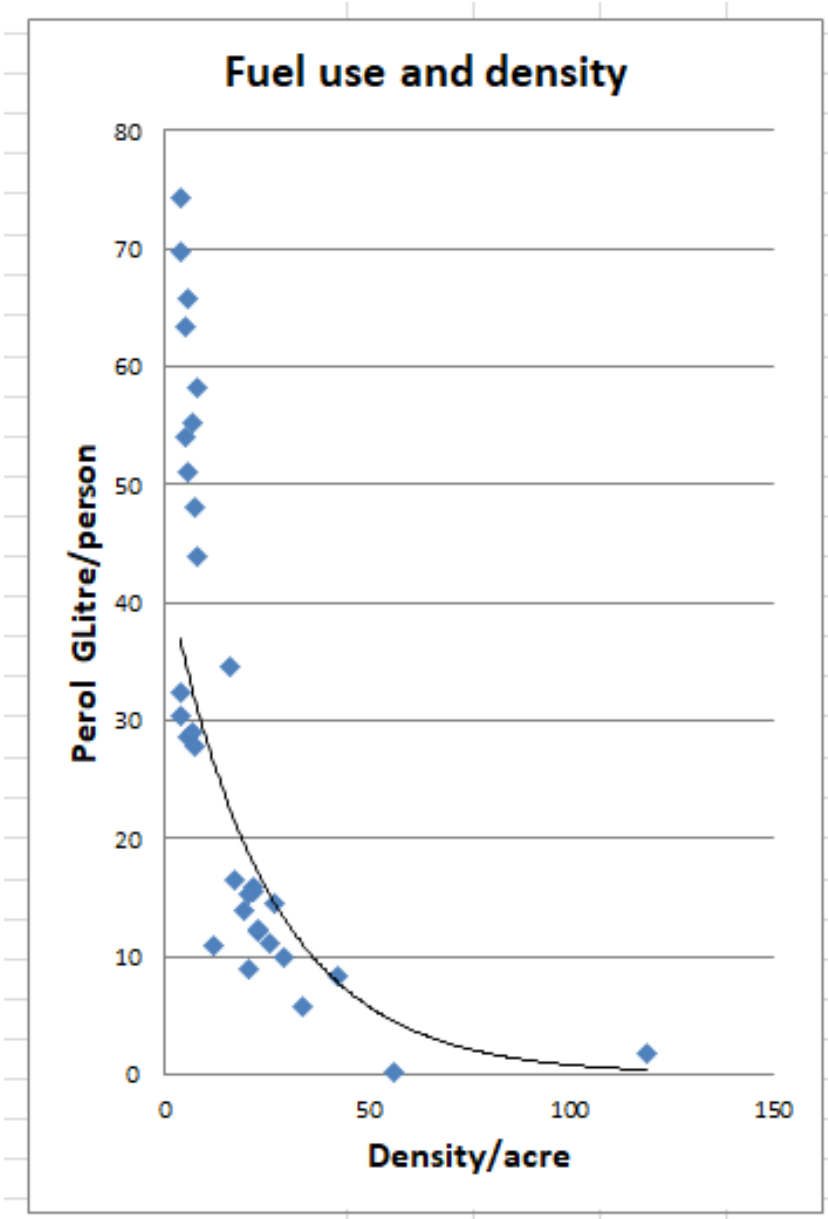
Let the community decide!

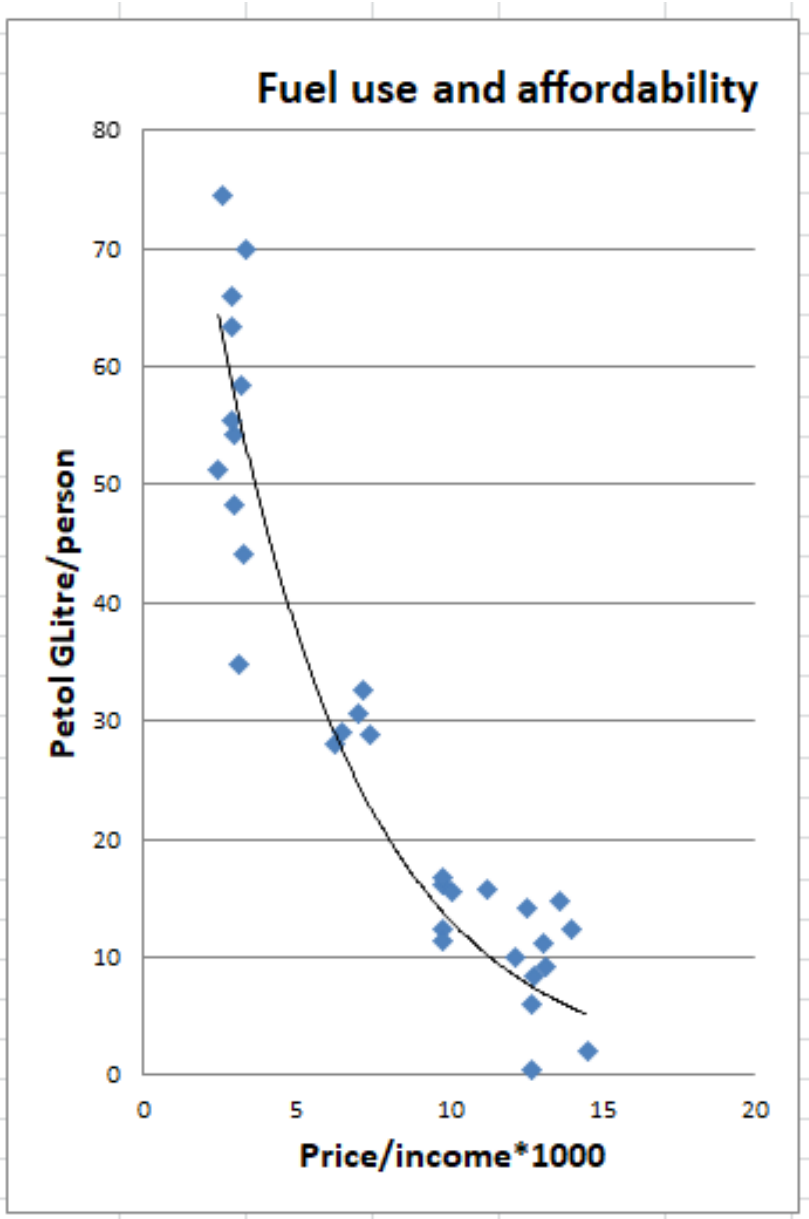
Instead of current TOP DOWN impositions:

COMMUNITY UP STRATEGY

- Councils develop a long term development plan with genuine community consultation
- Plans submitted to Department of Planning for coordination
- Councils bid for future development and compete each other

Allow suitable fringe development of housing that people want





Petrol Gl = $42.565\ e^{-0.04density}$

Petrol Gl = $107.3e^{-0.209relative\ price}$

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-p

ACF Consumption Atlas

Available online at www.sciencedirect.com

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Ecological Economics 49 (2004) 375–399

ECOLOGICAL ECONOMICS

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ANALYSIS

Energy requirements of Sydney households

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Abstract

Supporting the lifestyles of the populations of modern cities requires vast quantities of natural resources and leads to environmental stresses such as air and water pollution. Research into the metabolism of cities therefore aims at understanding the physical flows into, within, and out of cities with a view to reducing the use of resources and the environmental impacts. One important physical indicator is energy use. Most studies on cities only consider direct or end-user energy consumption. Since the function of cities is to serve the lives of their residents, indirect energy use in cities, or energy embodied in the consumption of goods and services by its residents, can be regarded as being as important as direct energy use. However, physical models of cities are extremely complex and have difficulty in dealing with boundary issues, and hence the indirect resource requirements. In this paper we use input–output analysis and detailed household expenditure data to yield comprehensive energy use breakdowns for the 14 Statistical Subdivisions of Sydney. Multivariate regression and structural path analysis (SPA) are used to interpret the results. Clear correlations can be drawn between energy use and income, household size, age, and degree of urbanity. The structural path analysis is used to demonstrate how significant differences in lifestyles between inner and outer areas of Sydney leads to different energy use characteristics. This final consumption-based approach to

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1. Introduction

Due to increasing urbanisation in the past few

mercial and industrial activities, and transport. As a consequence, cities concentrate environmental pressure: they can be seen to represent localised inten-

Using input/output tables all greenhouse gas emissions are allocated to the final point of consumption.

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than their own size (see for example Barrett et al., 2001; Folke et al., 1997; Simmons et al., 1998; Wackernagel, 1998; Luck et al., 2001). On the other

doi:10.1016/j.ecolecon.2004.01.019

Completely contrary to claims made

Table 4
Regression coefficients resulting from a multivariate regression of

Coefficient	Total energy requirement (GJ/cap)
k_{inc}	**0.503 ± 6%**
k_{size}	**−0.080 ± 16%**
k_{age}	**0.005 ± 32%**
k_{urb}	−0.003
k_1	0.443
k_{empl}	**0.429 ± 13%**
k_{size}	**−0.145 ± 11%**
k_{age}	0.005 ± 51%
k_{htype}	0.000
k_2	**5.722 ± 3%**

Income

Density

inc annual per-capita before-tax household income,

size number of household members,

edu index of highest qualification of household members aged 15 and over with a qualification (1 basic vocational; 2 skilled vocational; 3 Associate Diploma; 4 Undergraduate Diploma; 5 Bachelor degree; 6 Postgraduate Diploma; 7 Higher than 1–6),

htype index of house type (1 caravan, cabin, houseboat or other; 2 flat, unit or apartment; 3 semi-detached, row or terrace house; 4 separate house),

urb SSD ranking in terms of population density (see Table 1),

age age of reference person,

kid percentage of household members aged 18 and below,

empl percentage of household members aged 18–64 working

Ranking from high to low density

Selected family groups with equivalent incomes

Table 6
Selected family groups in inner and outer SSDs and breakdowns of their monetary and energy budget

		Domestic energy	Petrol	Urban public transport	Non-urban bus and train, ferry and ship	Air travel	Cars	Goods and house	Services	Food	Total
IS, ES	Annual expenditure	$519	$470	$301	$51	321	$365	$15,028	$9918	$4085	$31,057
	Annual per-capita expenditure	$348	$315	$201	$34	215	$244	$10,059	$6638	$2734	$20,788
	% of total	1.7	1.5	1.0	0.2	1.0	1.2	48.4	31.9	13.2	
	Energy requirement (GJ)	57	9	7	3	7	2	98	37	32	252
	Per-capita energy requirement (GJ)	38	6	5	2	5	1	66	25	21	169
	% of total	22.5	3.7	2.8	1.4	2.8	0.6	38.9	14.6	12.6	
FL, OSW	Annual expenditure	$1012	$1264	$174	$9	216	$2164	$12,437	$10,424	$6442	$34,143
	Annual per-capita expenditure	$260	$325	$45	$2	$56	$557	$3199	$2681	$1657	$8782
	% of total	3.0	3.7	0.5	0.0	0.6	6.3	36.4	30.5	18.9	
	Energy requirement (GJ)	122	25	5	3	5	9	110	44	51	375
	Per-capita energy requirement (GJ)	31	7	1	1	1	2	28	11	13	96
	% of total	32.5	6.8	1.4	0.9	1.3	2.3	29.3	11.8	13.7	

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Selected family groups with equivalent incomes

GJ per capita

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Energy requirement for equivalent incomes *

LOCATION	ANNUAL GJ PER CAPITA
Inner city and Eastern Suburbs	169
Fairfield-Liverpool and Outer South-Western Sydney	96

* For this comparison households with comparable incomes were selected from each location.

*

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Selected family groups with equivalent incomes

$Goods, house and and services

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$Petrol per capita

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Selected family groups with equivalent incomes

Non-urban transport per capita

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NSW GOVERNMENT | Planning & Infrastructure

BASIX

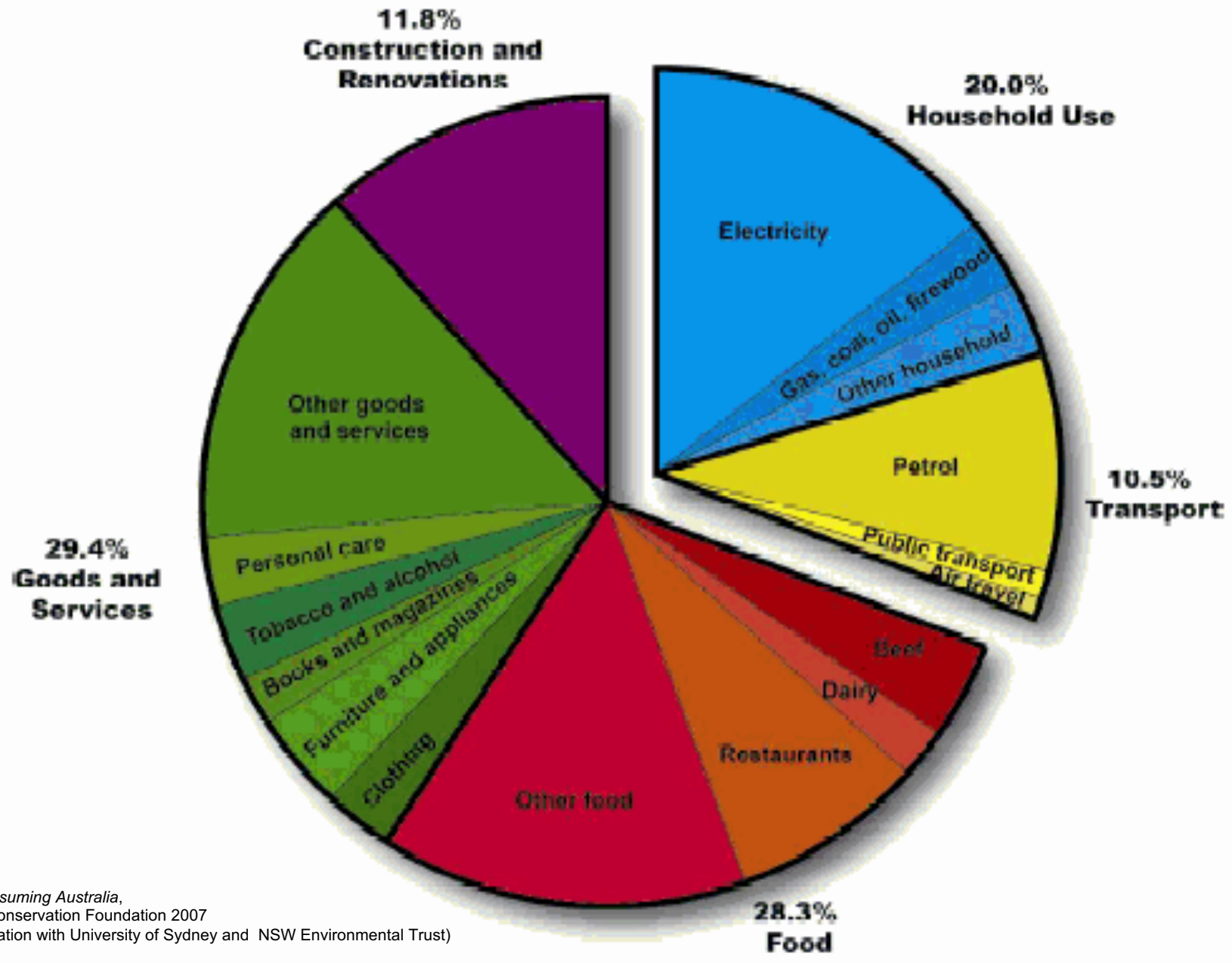
Current Target - Energy			
Building Type	**Zone**		
	1	**2**	**3**
Detached and semi-detached	40	35	25
Low-Rise (3 storey units)	35	30	20
Mid-rise (4-5 storey units)	30	25	15
High-rise (6 storey units or higher)	20	15	5

BASIX targets currently require detached and semi-detached dwellings to emit some 40 percent less greenhouse gas than the NSW per capita benchmark, whereas the figure for high-rise apartments is only 20 percent.
Targets are % savings on average per person water consumption and greenhouse gas emission levels across the state

ACF data shows GHG emissions including transport more in high-density

https://www.basix.nsw.gov.au/basixcms/images/4050pdfs/Basix_Energy_Targets.pdf June 2014

Fig 1. Average household profile: greenhouse gas pollution



Source: *Consuming Australia*,
Australia Conservation Foundation 2007
(in collaboration with University of Sydney and NSW Environmental Trust)

Sydney: Emissions per mode:

Greenhouse gas emissions

	Gm CO_2 per passenger km	
Rail	105	
Bus	120	
CSELightRail	171	1
New car	135	2

1. CBD and SE Light Rail Project EIS, Parsons Brindkerhof/Transport for NSW, 7 Nov 2013, Vol 4 Table 5.2
2. Australian Government Green Vehicle Guide; assume 1 1/3 passengers; https://www.greenvehicleguide.gov.au/Vehicle/QuickCompareVehicles;

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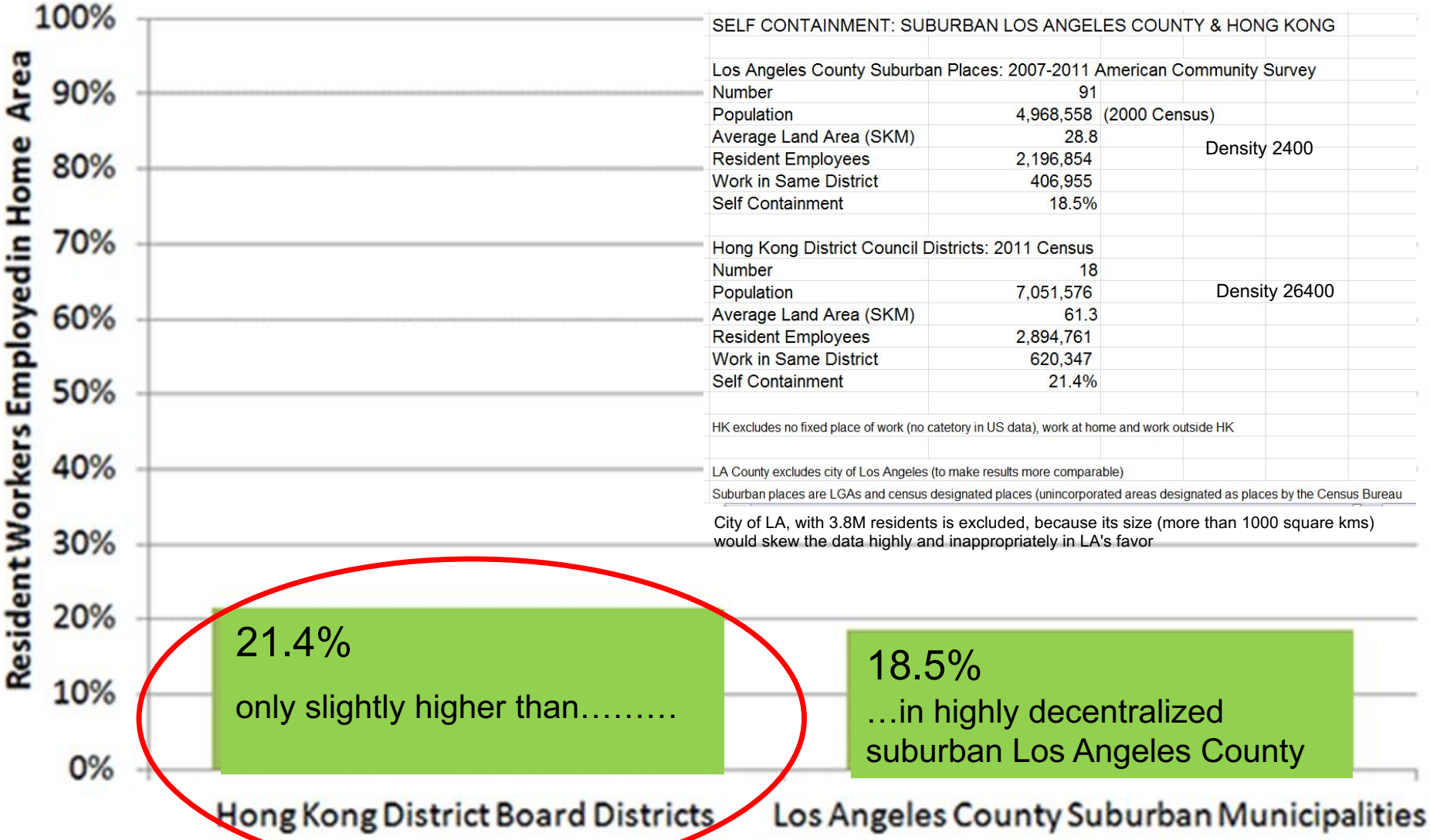
Jobs Housing Balance

HONG KONG DISTRICTS & SUBURBAN LOS ANGELES



SELF CONTAINMENT: SUBURBAN LOS ANGELES COUNTY & HONG KONG		
Los Angeles County Suburban Places: 2007-2011 American Community Survey		
Number	91	
Population	4,968,558	(2000 Census)
Average Land Area (SKM)	28.8	
Resident Employees	2,196,854	Density 2400
Work in Same District	406,955	
Self Containment	18.5%	
Hong Kong District Council Districts: 2011 Census		
Number	18	
Population	7,051,576	Density 26400
Average Land Area (SKM)	61.3	
Resident Employees	2,894,761	
Work in Same District	620,347	
Self Containment	21.4%	

HK excludes no fixed place of work (no catetory in US data), work at home and work outside HK

LA County excludes city of Los Angeles (to make results more comparable)

Suburban places are LGAs and census designated places (unincorporated areas designated as places by the Census Bureau

City of LA, with 3.8M residents is excluded, because its size (more than 1000 square kms) would skew the data highly and inappropriately in LA's favor

21.4%

only slightly higher than……

18.5%

…in highly decentralized suburban Los Angeles County

Wendell Cox, HONG KONG'S DECENTRALIZING COMMUTING PATTERNS, 12/12/2012, http://www.newgeography.com/content/003300-hong-kong-s-decentralizing-commuting-patterns; Personal communication 13/12/12

Unsuitable for young children

Epidemic of confined frustrated children with no backyard to play in falling to their death from apartment windows

The campaign is a joint initiative involving the department, other government agencies and The Children's Hospital at Westmead.

More...

City kids test out a new playground – the street

EXCLUSIVE

Megan Gorrey

Rowdy rounds of kick-the-can, hotly contested street cricket matches with garbage bins for stumps, and quick games of hopscotch on grids scrawled in pastel chalk on asphalt. Sydney's streets have acted as playgrounds for generations of youngsters.

The rising incidence of families living

streets offered a small solution to families who lived in homes with little or no backyard, and parents who battled to get their children outdoors and away from technology.

"The idea of 'play streets' is to give our kids a taste of the kind of play we remember from our childhoods – by providing a safe and fun outdoor play space for kids in a home environment – right outside the front door."

Youngsters take over the street in Enmore. Photo: Brook Mitchell

afternoon. The council has asked residents to suggest their streets, with more than 30 locations already put forward. They had to be more than 400 metres and "easy walking distance" from a park or open space.

One of the roads suggested is Camden Street in Enmore, where mother-of three Mignon Green and her neighbours had spoken about their desire for children to play on the street.

Soccer is so big at the moment and they love to run. The girls might even just sit in the middle of their street and play with dolls."

Professor Linda Corkery, a landscape architecture expert from the University of NSW, said city planners had assumed apartment living was for young professionals and retirees.

"The big surprise is that families with children do want to live in cities," she

“This unaffordability hits young people the hardest. In time the fact that new generations will not be able to afford a family home will be bitterly resented”.

SYDNEY HOUSING BECOMING ONE OF THE MOST EXPENSIVE IN THE WORLD

Sydney has experienced an unprecedented loss in housing affordability. An international study comparing the affordability of housing shows Sydney is among the least affordable cities in which to buy a new home. The Demographia 2004 Housing Affordability Rankings survey comparing housing affordability in 88 cities around New Zealand, Australia, Canada and the United States shows Sydney ranks fourth in the housing unaffordability league.

“Housing costs have rocketed in Sydney” said Dr Tony Recsei, President of the community group Save Our Suburbs. “It now takes 8.8 years of median household income to buy a median priced house in Sydney” he said. “We have gone backwards. In 1980 it only took 3.5 years of income to buy a house. The current 8.8 years of income for Sydney compares with only 3.9 years for Toronto, 3.1 years for Montreal and 2.7 years for Houston which has the same population as Sydney.

“The major cause of this iniquity is the Government’s Urban Consolidation policy. The State Government has increasingly strangled the land supply, creating artificial scarcities and driving land prices into the stratosphere. In 1976 the land component of the price of a house was 32%. Now the price of land comprises 60% of the cost of buying a house.

“This unaffordability hits young people the hardest. In time the fact that new generations will not be able to afford a family home will be bitterly resented”.

Further information: Tony Recsei 02 9487 2061

LETTER

Nature **474**, 498–501 (23 June 2011)

&

doi:10.1038/nature10190

City living and urban upbringing affect neural social stress processing in humans

Florian Lederbogen[1]*, Peter Kirsch[1]*, Leila Haddad[1]*, Fabian Streit[1], Heike Tost[1], Philipp Schuch[1], Stefan Wüst[1], Jens C. Pruessner[2], Marcella Rietschel[1], Michael Deuschle[1] & Andreas Meyer-Lindenberg[1]

More than half of the world's population now lives in cities, making the creation of a healthy urban environment a major policy priority[1]. Cities have both health risks and benefits[1], but mental health is negatively affected: mood and anxiety disorders are more prevalent in city dwellers[2] and the incidence of schizophrenia is strongly increased in people born and raised in cities[3–6]. Although these findings have been widely attributed to the urban social environment[2,3,7,8], the neural processes that could mediate such associations are unknown. Here we show, using functional magnetic resonance imaging in three independent experiments, that urban upbringing and city living have dissociable impacts on social evaluative stress processing in humans. Current city living was associated with increased amygdala activity, whereas urban upbringing affected the perigenual anterior cingulate cortex, a key region for regulation of amygdala activity, negative affect[9] and stress[10]. These findings were regionally and behaviourally specific, as no other brain structures were affected and no urbanicity effect was seen during control experiments invoking cognitive processing without stress. Our results identify distinct neural mechanisms for an established

including social defeat and chronic social stress, might constitute such a factor[8]. Consequently, many authors have proposed that social stress processing in the urban environment underlies the greater risk for mental illness[2,3,7,8], and contributes to the manifestation of these disorders in adults. To test experimentally the hypothesis that urban living and upbringing modulate neural processing of acute social evaluative stress, we studied the neural responses of healthy German volunteers undergoing such stress during functional magnetic resonance imaging (fMRI). We confirmed our findings in a second study using a different social stress paradigm and then tested for cognitive specificity by ascertaining the effect of urbanicity on brain activation during cognitive processing without stress. Importantly, our subjects did not have a mental disorder nor were they at high risk for one; the link to these illnesses from the environmental risk factor that we studied is established by the epidemiological evidence discussed earlier.

In our first (discovery) study, we used the Montreal Imaging Stress Task (MIST)[14], a social stress paradigm where participants solve arithmetic tasks under time pressure. Difficulty was varied adaptively to keep success rates—visually presented on a 'performance scale'—at

"the incidence of the major brain disorder schizophrenia is about doubled in cities with evidence of a dose-response relationship that probably reflects causation"

Save on infrastructure cost?

Australian Unity Well-being Index

Robert A. Cummins
School of Psychology, Deakin University

"Happiest electorates tend to have a lower population density"

Source: Sydney Morning Herald 13 February 2006

Housing Affordability & Land Regulation

2+ MILLION METROPOLITAN AREAS: 2018

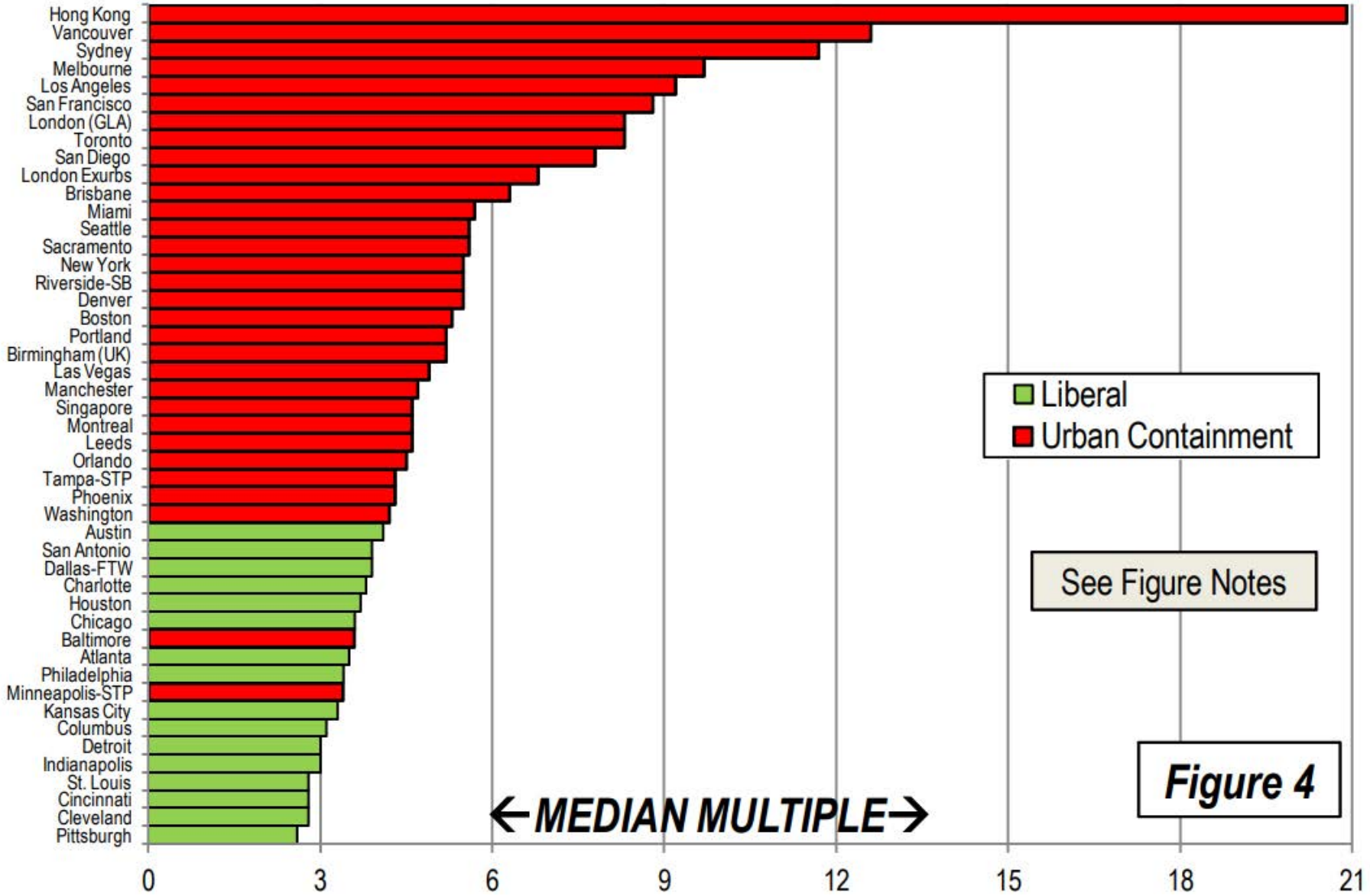


Figure 4

15th Annual Demographia International Housing Affordability Survey: 2019

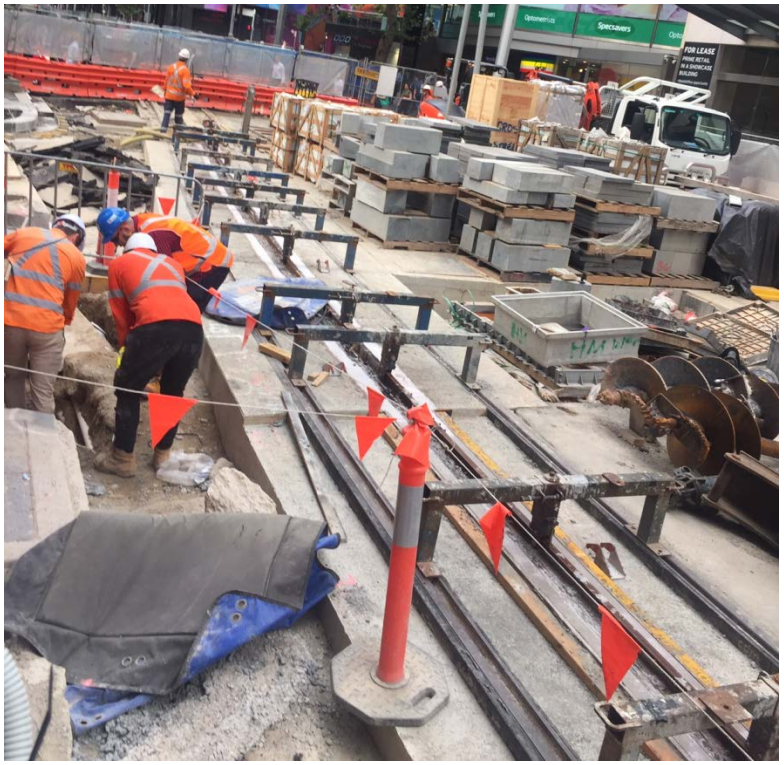
Example 1 - Randwick

– Bought in 2006 for $6m

– Sold on in 2015 with DA consent for $290m

– $184m value uplift or 4,874%

–DA approved for 750 dwellings



Original infrastructure designed
for original housing density

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← Upgrading not cost effective

Cheaper

↓

*

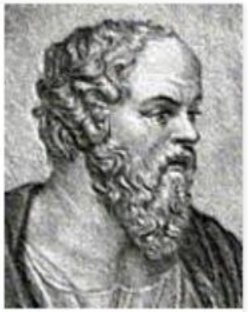
AGRICULTURE IN THE SYDNEY REGION

2005/2006

Outer Sydney portion of NSW agricultural production 7%

CATEGORY	%
Cattle Slaughterings	10.6
Crops for hay	0.3
Egg Production	7.9
Fruit	1.2
Milk Production	2.4
Nurseries/Turf/Cut/Flowers	18.4
Pig Slaughter	0.2
Poultry Slaughterings	25.3
Vegetables	33.7
TOTAL	100.0

Glaucon



Glaucon son of Ariston, was an ancient Athenian and the philosopher Plato's older brother. He is primarily known as a major conversant with Socrates in the Republic, and the interlocutor during the Allegory of the Cave. Wikipedia

Born: 445 BC, Athens, Greece

Died: 400 BC

Siblings: Plato, Adeimantus of Collytus, Potone, Antiphon

Parents: Perictione, Ariston of Athens

Asked Socrates what would happen to a man wearing a mythical gold ring that makes its wearer invisible at will and so could do what he liked without getting caught

Is it better to ***appear to do good*** while doing the opposite

or

to ***do good*** even if this will ***not*** appear to be the case

Mostly people choose ***appearing to do good*** with little consideration with the reality

We are obsessively concerned with what people think of us

We want to identify with our group.

So if our acquaintances generally say high-density is environmentally beneficial we will concur and mentally disregard evidence that this is not the case *

The Righteous Mind, Jonathan Haidt, Allen Lane, St Ives plc, 2012


Strathfield