ACNU 08

2008 NATIONAL CONGRESS OF THE AUSTRALIAN COUNCIL FOR NEW URBANISM

Brisbane

6th – 9th February, 2008
Australian New Urbanism
Principles, Practices, Examples, and Genesis

Chip Kaufman, Ecologically Sustainable Design Pty Ltd (ESD), Melbourne
Term adopted in 1991-2 in the USA, and the Congress for the New Urbanism (CNU) was established as an alliance of like-minded professionals. First CNU Congress held in 1992.
Contents of Chip’s Presentation

Genesis of NU, its rising momentum, and Australian Involvement

NU defined, by comparing to Sprawl, with case studies
  Segregated versus Mixed Uses
  Residential
  Employment
  Movement Efficiency, Safety and Amenity
  Mixed-Use Centres vs Private Enclosed Shopping Centres
  Physical Health and Social Well-being
  Town and Neighbourhood Structuring

Enquiry by Design Processes

Optimising Urban Structure for Urban Centres, Movement, and Public Transport, with case studies
Community, Environment, Economics
Self-evident Common Sense
Sprawl versus New Urbanism

Cartoon courtesy of Lizz Plater-Zyberk

Mandurah, WA
What is New Urbanism

Initially A Reaction to Sprawl

Now a Basis for Sustainable Urban Management & Smart Growth, and

A Design Basis for Addressing Physical Health and Social Well-being, and

A Design Basis for addressing Climate Change and Peak Oil

But NU has failed thus far to fully demonstrate its worth to Australia.
An Unauthorised NU Genesis, including Australia’s Involvement
Timeline of New Urbanism, www.cnu.org

1980’s: Spontaneous reaction to Sprawl, in US, England and Australia

Responsive Environments…Murrain et al at Oxford
Seaside, Florida

Delivered Community
Unleashed pent-up demand
Massively profitable and newsworthy
Out of reach of Sprawl regulations
Coding for local vernacular, climate, materials
Little but dazzling mixed-use centre on highway

Wendy Morris goes to Oxford, taught by Paul Murrain
1989: Folsom Lecture by Andres, epiphany for Chip, elevation of Peter Calthorpe, Chip becomes DPZ West Coast Office

1991: Chip meets Wendy and Murrain at McKean Street in Melbourne, VicCode I launch, design workshops, NU seeds begin to sprout in Oz

1991: Southport Charrette, Sacramento: hatched by Chip for DPZ, with Calthorpe, Stef Polyzoides, and guests Morris and Murrain, plus Peter Katz…seminal meeting over dinner, to hatch ‘New Urbanism’ as a movement during that charrette

1992 Cranbourne Charrette (led by CK) and Bayside Charrette (led by Murrain) - first two charrettes - applying New Urbanist principles to both an urban extension and growth corridor, and then an urban infill site.

1993/4 CNU I in Alexandria USA: Morris, Murrain, Dover, Poticha, and Chip

1994: Chip moves to Melbourne, founds ESD, Kennett elected, Wendy begins working with Chip, and soon leaves State Government.

1995: The CNU Charter finalised and signed at CNU IV at Charleston, USA. The usual Australian and Pommie suspects attend.


1997: WA Government publishes *Liveable Neighbourhoods Code*, as an optional code for urban extensions. WA already taking a strong lead in the move away from sprawl, with several projects already under construction, including Ellenbrook. 2001 CNU Charter Award for LN.

2000: The book ‘*Charter of the New Urbanism*’ published in USA by CNU, to explain the 27 Charter principles.
2001: First Australian and New Zealand New Urbanism Congress in Melbourne, over four days with 400 attendees.

2003: Centre for Transit-Oriented Development and Reconnecting America set up, and Shelley Poticha takes the healm.


2006: Hurricane Katrina devastates Louisiana and Mississippi, Duany leads 11 simultaneous charrettes with massive voluntary team, to re-plan Mississippi Coast (see Victor Dover’s Presentation)


A city’s purpose is to maximise exchange with minimum effort.

...David Engwitch

Mixing Uses
Optimised Movement Network
Compatibly mixing most land uses in close proximity
Protecting heritage & environmental assets
Providing for parklands
Solar lot orientation
Mixed Use with Compatible Use Transitions
Residential
Lower density residential and its relationship to the street
More than a third of us going it alone

MICHIELLE GUNN  — Social affairs writer

People without partners by compared to men. The bureau found men without partners do not
employees were trade union

IN 1998, 52 per cent of mar-
riages were between people of
different birthplace groups (up
from 39 per cent in 1974).
A MARKED shift in long-
term unemployment from
young people to those aged 35
and older. In 1989, 33 per cent
of long-term unemployed were
under 25. Ten years later, that
figure had fallen to 23 per cent.
At the same time the
Active frontages to parks and streets...where are the garages?

Fairview Village, Portland Oregon
Tullimbar Village, NSW

Markham, Toronto, Ontario
Studio Units on rear lanes

Seaside, Coolum, Qld

Tullimbar Village (partial plan), ESD urban designers
Tullimbar’s Rear Lanes

Affordability, density, and CPTED safety
Open Space inspires Density

Density inspires Open Space
Employment
“No urban area will prosper unless it attracts those who can choose to live wherever they wish.”
Johnathon Barnett

“Unless our ambition is to be a low-wage developing nation, high urban amenity is a basic.”
Australian Urban Futures Research Program
More people working from home

76% of work activities are now compatible with residential

Cost Efficiencies, no commute
Need for compatibility with household
Cabin Fever
Support Services
The Post-industrial Economy (post 1970)

- Mainly Male Jobs
  - Mostly Full Time Jobs
  - Many High Income Jobs
  - Unskilled Jobs
  - Skilled/semi-skilled jobs
  - Pink collar jobs
  - White Collar jobs

- Mainly Female Jobs
  - Mostly Part Time Jobs
  - Many Low Income Jobs
  - Services
    - Consumer services
    - Distributive services
    - Producer services
    - Export services
    - Recreational tourism
    - Business tourism

Manufacturing
- Production
- Distribution (In-house)
- Services (In-house)

Economic Monocultures
- Industrial land
- Business Parks
- Drive-in shops
- Drive-by banks

Mixed Use Development
- Home Based Business
- Mixed Use Town Centres
- Integrated Employment Areas

The Industrial Economy (19th Century to 1970’s)

- Dispersed Residential Pattern
  - Work close to home or unemployed
  - Training/childcare close to work

- Small businesses
  - Self-employment
  - Home-based employment
  - Robust small cheap premises

Source: Derek. Kemp
Retail Trends

Average length of visits to US enclosed shopping malls declined from 49 minutes in 1987 to 29 minutes in 1995. Therefore, conventional approach of high specialty retail rents cross-subsidising low supermarket/DDS is under stress.

Enclosed shopping centres need to remodel every 7 years on average, and to expand their catchments to fund these improvements.

...Mike Cullen, Patrick Partners, Sydney
Town Centre Form, walkability and community

Car-orientated shopping centre

Pedestrian-based town centre

5 times as many non-retail jobs

(Mike Cullen, Patrick Partners, Sydney)
Just like humans, every building has a “face” and a “butt”. Building “faces” are the good things like interesting shop windows. Building “butts” are the loading docs, blank walls, and large boring car parks. ‘Courteous’ buildings put their faces to the public realm, not their butts.

\[
\text{Continuous active frontages} = \frac{\text{blank walls} + \text{parking} + \text{truck docks}}{\text{butt coefficient}}
\]

The dashed yellow and red lines on the photos below show ‘building butts’, facing out on the left, and courteously facing into rear lanes on the right. Both types of centres can have large supermarkets, department stores, and so forth.
Multi-storey, main street-based centre concept of around 25,000 sqm retail, and 15,000 commercial, with community facilities, live-works and housing. Boardwalk Boulevard and Dunnings Rd designed as Integrator Arterials.
Walker Corp constructing Point Cook Town Centre as joint venture partner with VicUrban in response to ESD Indicative Plan and Design Brief

Don’t miss Walker Corp Presentation at 4:40pm on Day 2
The Future of New Town Centers . . .
Well-merchandised and well-designed public spaces:
Streets, squares and parks will become commercial, social and civic hubs.
Result:

Food and drink expenditures are 5 times the average mall.
Result:
The average length of stay is 102 minutes compared to a mall average of 76 minutes and a Lifestyle Center average of 57 minutes.
Visit us online:
www.steiner.com
Choices of Parking, Mixed-use Building Forms and Characters
Integrating Big Boxes into Mixed-Use CBD Buildings
“19% of all regional malls in the US are dead or dying”

**Greyfields into Goldfields**

from failing shopping centers to great neighborhoods

A Study by Congress for New Urbanism and PriceWaterhouseCoopers

**Malls into Mainstreets**

an in-depth guide to transforming dead malls into communities

A report by the Congress for the New Urbanism in cooperation with the United Stated Environmental Protection Agency
Movement Efficiency, Safety, Walkability, and Carbon Emissions
Congestion, Vehicle Km traveled, and Carbon Emissions

GREENHOUSE NEIGHBOURHOOD PROJECT

Results: Transport energy use emissions

<table>
<thead>
<tr>
<th>Neighbourhood Type</th>
<th>CO₂ emissions (tonnes/dw/annum)</th>
<th>% reduction compared with Conventional</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONVENTIONAL</td>
<td>3.3</td>
<td>-</td>
</tr>
<tr>
<td>VICCODE</td>
<td>2.2</td>
<td>33%</td>
</tr>
<tr>
<td>TRADITIONAL</td>
<td>1.4</td>
<td>57%</td>
</tr>
</tbody>
</table>

Estimated annual transport related greenhouse emissions per dwelling (tonnes CO₂)
Streetscape, vehicle speed, amenity and detailing
Contrasting forms - Arterial design

**Divider arterial**
- Isolating
- Poor surveillance
- No business opportunity
- Boring pedestrian environment
- Fast-moving traffic
- Poor quality bus stop locations

**Integrator arterial**
- Active frontage
- Public transport
- Trees
- Pedestrian-friendly
- Easy to cross
- Good passive surveillance
- Supportive of business
Traffic Calming

One-lane two-way bridge over creek, retains trees, avoids cost of bigger bridge, and slows traffic; yielding neighbours meet each other.

Sketch by Peter Richards,
North Geelong Charrette, 1996
Access Street/Access Street
Basic four-way intersection treatment, without roundabouts or lights required

Australian traffic authorities had virtually banned four way local intersections as considered highly dangerous. There is not a culture of four way stops in Oz, so this was a major battle.
The traditional neighbourhood design of Plan B is more effective and efficient in terms of capturing a larger land area, and a greater number of people within a 400m and 800m walking distance of the destination.

The street networks of New Urbanism designs deliver similar benefits over conventional suburban development.
Urban Fabric, Physical Health and Social Well-being
Impacts of car dependence on Elderly, Youth and Caregivers (often mothers)
Obesity Relationships with Community Design, Physical Activity, and Time Spent in Cars

Lawrence D Frank, PhD, Martin A. Anderson, MA, Thomas L. Schmid, PhD
2004 American Journal of Preventative Medicine, Published by Elsevier, Inc

“Doubling the accessible land use mix within a 1 km radius of a household quadrupled the walking activity for that household.”
The Public Realm, safety, interest and interaction
‘Social Capital’
civic engagement activities include:

- political, civic and religious participation,
- connections in the workplace,
- informal social connections,
- altruism, volunteerism and philanthropy,
- reciprocity, honesty and trust, and
- small groups, social movements and the Net.

“Community connectedness is not just about warm fuzzy tales of civic triumph. In measurable and well-documented ways, social capital makes an enormous difference in our lives...in child welfare and education; healthy and productive neighbourhoods; economic prosperity; health and happiness; and democratic citizenship and government performance. ...Social capital makes us smarter, healthier, safer, richer, and better able to govern a just and stable democracy.” (p. 332).
Schools: Dealing with 3.5ha public schools

White Box Rise Primary School for Wodonga, Vic (about 2ha)

Courtesy Annand Alcock Urban Design, Sydney
Town and Neighbourhood Structuring
The Basic Element of New Urbanism - A Walkable Neighbourhood

400m walkable radius

Urban Centre Location
1. Centrality
2. Destination
3. Movement Economy

Movement Economy, ‘to’ and ‘through’ traffic, bus route, with at least 3000 adt, serving 750-1000 dwellings.
Optimised Movement Network
Compatibly mixing most land uses in close proximity
Protecting heritage & environmental assets
Providing for parklands
Solar lot orientation
Adapt to Contexts, and optimise ‘Movement Economy’
Enquiry by Design Processes
Enquiry by Design Processes

“For every complex and difficult problem there is an easy solution, and it is wrong.” ...H. L. Mencken

A solve-one-problem-at-a-time approach will only paint the the complex inter-dependent whole into a corner.

Interlocking problems usually require interlocking solutions.

Stakeholders are defacto clients.

Conventional ‘Public Consultation’ is often self-defeating.
Enquiry by Design
(this term generally covers the suite of processes)

Enquiry by Design is a transparent, stakeholder-collaborative, design-based process for resolving complex and controversial urban projects. Because the factors influencing urban development, sustainability and amenity are so inter-dependent, Enquiry by Design deals at the same time with all environmental, economic and social issues, and at all scales ranging from architecture to the sub-region.

Simultaneously Interactive instead of Sequentially Reactive

This writing courtesy of ESD

Ecologically Sustainable Design Pty Ltd, Melbourne
Charrette (5 days usually)

Oriented for public, when project requires very significant citizen participation

Introductory Public Meeting includes Public Consultation, but only after an Introductory Presentation clarifying the whole project context and opportunities
On-site designing and consultation is common across all EBD’s

Set up the design studio & Project Briefing

Study & tour the site, Government Agencies Meeting/s
Community and/or Stakeholder Consultation for Charrettes

Topical and/or area-specific meetings
‘Open Studio’ sessions for the public
Meetings with landowners
Interim Design Review
Day 5

In-house Iterative Design Resolution iterative with Measuring of Outcomes, Preparation of Concluding Public Presentation, common to all EBD approaches
Concluding Meeting
(time afterwards for review, questions, revisions)

When Charrette, it’s public. When other EBD’s, this meeting may be for invited stakeholders only, depends on consultation needs of the project.
Enquiry by Design

Enabling the Power of Reason to prevail.

More on this on Day 3
Optimising Urban Structure for Urban Centres, Movement and Public Transport

Perth’s Northwest Growth Corridor
Western Sydney Urban Land Release
Perth’s Northwest Growth Corridor

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

The Jindalee Enquiry by Design Workshop opens the way to the Liveable Neighbourhoods Community Design Code, 1997
Jindalee Enquiry by Design Workshop, 1996

Regional Scenarios

Scenario A
Rail along Freeway, on edge of urban corridor. National Park to east.

Scenario B
Rail part way into urban corridor, along Connelly Drive

Scenario C - preferred
Rail in the centre of the urban corridor
Jindalee Town and Neighbourhood Structure, and Detailed Indicative Plan...now being implemented for Northern Growth Corridor of Perth, and the basis of WA Liveable Neighbourhoods Community Design Code

Indicative Design by ESD and Taylor Burrell Barnett
Jindalee’s
Main Street-based Mixed-Use Town Centre

Indicative Designs enabled State Steering Committee to conclude that this design approach would optimise the State’s Sustainability Policies.
Jindalee - Comparing Employment

**Conventional Design**
- Population: 29,259
- Dwellings: 9,753
- Jobs Needed: 14,629
- Proposed Jobs: 2,612
- Containment Factor: 18%

**Liveable Neighbourhoods Design**
- Population: 30,234
- Dwellings: 11,768
- Jobs Needed: 17,652
- Proposed Jobs: 11,306
- Containment Factor: 64%
Liveable Neighbourhoods Code
State-wide Code, WA

Code Design Elements
E1. Community Design
E2. Movement Network
E3. Lot Layout
E4. Public Parkland
E5. Urban Water Management
E6. Utilities
E7. Activity Centres & Employment
E8. Schools

www.wapc.wa.gov.au

CNU 2001 Charter Award winner
Street Networks

NEW URBANISM
Interconnected street networks, and development fronting arterials

SPRAWL
Curvilinear streets and cul de sacs, long street blocks, poorly-connected for locals. back fences along arterials.
Western Sydney Urban Land Release
State Government-led planning for two remaining large areas in Sydney basin.

NSW DIPNR (Evan Jones) leads two Growth Centres Commission established; $7B infrastructure funding; mixed-use transit-supportive development must be delivered.

Balance between habitat preservation and efficient urban form.
Township Catchments
Complementary instead of Predatory Retail
Movement Network feeds every centre, including with public transport, and reduces big arterials

More from Stephanie Barker, Day 2, 11:10am
SUSTAINABILITY ASSESSMENT
by Professor Peter Newman, NSW Sustainability Commissioner

Exponential Gains in Global and Local Sustainability
Australian New Urbanism - An Overview of Progress

Urban Centre Regeneration
Kogarah Town Centre, Southern Sydney

Major revitalisation of middle-ring town centre. Catalysed by redevelopment of a Council car park to a five-storey mixed use development focussed around a new town square. Leading design demonstration of energy and water efficiency. Born of an EBD.
Midland, WA
1997 Revitalisation Charrette • Enquiry by Design, 2007

Find Kieran Kinsella, Cath Blake-Powell and Brett Wood-Gush for more info.
Australian New Urbanism - An Overview of Progress

Major Urban Infill Sites
Subi Centro
Subiaco, Perth, WA
More on SubiCentre from Andrew Howe, Day 2, 3:00pm

Former industrial. New station, and Rokeby Rd retail anchor. Extensive new commercial/office development, lots of terrace housing and some live-works. Redevelopment Authority.
Claisebrook Village
East Perth, WA

Former contaminated industrial site. Done by a Redevelopment Agency. Now a major new mixed use inner urban community. Great urban art & public spaces.
Australian New Urbanism - An Overview of Progress

Urban Extensions
Urban extension with proposed mixed use village centre in a rehabilitated farmland valley. Private development-led, with first stages under construction and selling. Quite dense for the urban fringe, with extensive use of rear lanes.

More info from Neville Fredericks, here for Days 1 and 2
Australian New Urbanism - An Overview of Progress

New Mixed Use
Street-based
Town Centres
Gungahlin
Canberra, ACT

Creating a street-based town centre for Shellharbour by linking up two distant retail stand-alone centres. Mixed uses are gradually being constructed along the new street. Cinemas and restaurants are completed. Pub constructed.
Market Performance

Seaside, Florida has appreciated at about 25%, almost annually since commencement in 1983.

“Demand for compact housing near transit likely to more than double by 2025.”

...Hidden in Plain Sight: Capturing the Demand for Housing near Transit, Shelley Poticha, www.reconnectingamerica.org

NU may start slowly, but gets better and better as the place matures; sprawl usually does the opposite.

“So far, New Urban projects weather downturn better. Product diversity, closeness to transit, and the appeal of urban living help offset the biggest housing decline in years.” ...Rob Steuteville

“The fundadamentals of the demand side of the housing equation are undergoing radical, once-in-a-century change; family-oriented exurban houses in many markets may never regain their peak values.” ...Tod Zimmerman, New Urban News, Volume 12, Oct/Nov, 2007
Climate Change and Peak Oil = Tipping Point
At least 30% of Global emissions due to transport, about 30% buildings

“Oil at $150-200USD/barrel by end of this year”
Jim Buckee, just retired President/CEO of $25-billion Talisman Energy of Canada, as spoken on ABC radio, 29/1/08

Carbon is not the sole objective; New Urbanism can and should also deliver
Community Health and Well-Being, Urban Amenity, and Beauty!
We need a completely integrated global response to all issues, involving all
governments and stakeholders; all businesses, industries, researchers and
educators; and all aspects of urban design at all scales. All alliances must join
now for this historic Tipping Point.

How is Queensland leading this?
And, we’re nowhere near being heard yet...how do we spread the word
and leverage our momentum? How do we learn to lead better?
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