An Introduction to the Perth Light Rail TOD Master Class

23rd September 2011

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and ACNU Director
Sponsors and Supporters

And thanks to the Australian Urban Design Research Centre for allowing us to use their very new premises!
Master Class Visiting Facilitator

Stef Polyzoides
Moule & Polyzoides Architects and Urbanists
Los Angeles, USA

Co-founder of the CNU
Master Class Leaders

Urban Designers

- Peter Richards
- Clive Alcock
- Chip Kaufman
- Malcolm Mackay
- John Stimson
- Ben De Marchi
- Steve Thorne
- Chris Hare

Transport Engineers

- Jim Higgs
- Chris Stapleton

Specific Expertise

- Peter Newman
- Evan Jones
- Stephen Bowers
- Crystal Olin
- Xiaojian
The first three proposed LRT routes for Perth, in the latest Public Transport Plan for Perth, 2031
The Three LRT Corridors

North - to Mirrabooka

South West - to UWA

South East - To Curtin U

The combined SW and SE lines are also known as the Knowledge Arc.
Master Class Objectives

Learn about designing for LRT and for appropriate TODs by:

- Critiquing the existing plans for the LRT; test proposed routes before they are finalised; test operational approach, stops, spacings and design
- Exploring the different scales of TOD - regional, 400m radius nodes; station stop precincts
- Testing opportunities and constraints for TOD along the routes
- Testing transit facility design - TOD-friendly and transit performance
- Exploring architecture for TODs, including architecture of its place/context
- Exploring and progress funding and implementation concepts
- Documenting outcomes to inform Government

The key question........Will the LRT work???
Master Class Program and Process

Friday
- Project Briefing
- Site Tour in Teams (one bus per corridor)
- TOD Principles keynote presentation
- Design Session 1
- Groups preliminary report back 6.00 - 7.00pm

Saturday
- Melbourne Tram Route Intensification presentation
- Graphic techniques presentation
- Design Sessions 2 and 3 (no morning report back)
- Groups report back and critique 4.30 - 7.30pm
- Optional team designing into evening

Sunday
- Design Sessions 4 and 5 (no morning report back)
- Documentation of outcomes
- Final Design Presentation 4.30 - 6.30pm
- Celebration and Closing - Finish around 7.15pm
Four Design Teams

Architecture of Place
Chip, Crystal, Xiaojian

LRT North
Clive, Ben, Jim

LRT South West
Steve, Peter A, Chris H

LRT South East
Peter R, Malcolm, John
Please see me at Morning Tea (at the Registration Desk) if you want to join the Architecture of Place team, or you have a specific problem with your team allocation, or if your name is missing…

<table>
<thead>
<tr>
<th>EXPERTISE/ROLE</th>
<th>LRT NORTH</th>
<th>LRT SOUTH</th>
<th>LRT SOUTH</th>
<th>WEST</th>
<th>EAST</th>
<th>ARCHITECTURE OF PLACE</th>
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<tbody>
<tr>
<td>Facilitators/Urban Designers</td>
<td>Clive Alcock, Ben De Marchi</td>
<td>Steve Thorne, Peter Annand, Chris Hare</td>
<td>Peter Richards, Malcolm Mackay, John Slimson</td>
<td>Chip Kaufman</td>
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<td>Transport specialist</td>
<td>Jim Higgs</td>
<td>Chris Stapleton (P/T)</td>
<td>Chris Stapleton (P/T)</td>
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<td>Crystal Olin, Xiaojian</td>
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<td>Graphic specialists</td>
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<td>Urban designer or architect</td>
<td>Sonny Embleton, Bret White</td>
<td>Jeff Thierfelder</td>
<td>Oliver Penman, Felicity Dowling</td>
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<td>Volunteers wanted</td>
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<td>Transport focus</td>
<td>Maireed Cantwell, Andrew Foreman, Donald Yates</td>
<td>Simon Cox, Louise Howells, Michael Somerville-Brown</td>
<td>Ben Fereday, Gary Meritt, Chris Watts</td>
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<td>Planning focus</td>
<td>Melanie Bradley, Catherine Evans, Tayne Evershed, Daniel Heymans, Rochelle Lavery</td>
<td>Mark Bancroft, Robina Crook, Jeremy Holland, Lucian Iacab, Michael Murphy, Michael Wilcock</td>
<td>Suzanne Barker, Anna Evangelisti, Denise Morgan, Andrew Patterson, Phil Slater, Karen Wright</td>
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<td>Engineering focus</td>
<td>Danya Alexander, John White</td>
<td>Christie McKinnon, Eamonn O’Liannain</td>
<td>Mark Johnston, Jamie Mullins</td>
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<td>Mystery skills</td>
<td>Benjamin Pyromanski</td>
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<td>Donald Veal</td>
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<td>AUDRC</td>
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LRT Northern Route

Via Alexander Drive to Mirrabooka
LRT South West Route
Via West Perth to University of Western Australia
South East LRT Route
Via Victoria Park to Curtin University
Each Team will have:

- Graphic equipment, scales and tracing paper
- Base Maps at various scales - mainly 1:5000 and 1:1000
- 400m and 800m walkable radius template at 1:5000
- Design principles for TODs and mixed use town etc
- Other useful bits and pieces

**PEN CARE!!!** PLEASE PUT TOPS BACK ON PENS IMMEDIATELY AFTER USE - OR THEY WILL DIE!!!
Standard colour charts in each drawing box…

Designates ground floor uses only. (Though it is hard to colour good mixed use town centres!)

Colours ‘hot up’ visually in and around centres …gives a much better depiction of the urban structure than zoning colours.

Consistency means it is easier for us to understand each others’ plans!
Perth’s Recent TOD achievements

Over the past 15 years Perth has transformed its urban form in significant ways.

Extensive rail route extensions and system upgrades.

New rail-based TODs are occurring in greenfields areas around stations on the heavy rail lines, and urbanistic medium rise mixed use redevelopments are occurring around existing rail stations.

The LRT routes provide a new opportunity and challenge, but it is one that the city seems keen to take up.

The Master Class is a real chance to contribute to this ongoing re-shaping of the city towards a more sustainable future.
Perth and *Liveable Neighbourhoods*

A Statewide Code principally for new Urban Extensions – has transformed them from sprawl to a much more sustainable form.


Significant change in form of new urban fringe extensions built across Perth and WA. Impressive start, but still a long way further to go….

Good impact on major Perth infill sites as well. Supportive of TOD.
Somerley
Clarkson, North-west Corridor, Perth, WA

Transit-oriented urban village at Clarkson Station. Rail extended well in advance of freeway. Nearby Ocean Quays Town Centre is a main street hybrid, with street front development expanding. Council and Landcorp key players.
Wellard
SW Perth, WA

Transit-oriented urban extension at new station south of Kwinana on the new Perth SW railway, with village centre and higher density housing.
Brighton – rail being extended ahead of growth, nearly 40km north of CBD; increasing housing density emerging around future station…but is it enough?
Subi Centro
Subiaco, Perth, WA

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

Creating dense, mixed use inner suburbs around a new urban fringe centre with rail station. Extensive terrace housing, rear lanes, studio units and a range of small business spaces.
Midland, WA

Major revitalisation charrette 1997
MRA established 2000
Refined visions 2002 & 2007
Extensive site clean-up, street construction, new level crossing, landscape restoration 2002-2009
Police, hospital, university catalysts
Woodbridge coal dam catalyst - now >$1m housing
Urban frontage to Midland Gate SC as part of expansion
Retail high street revitalising
Recent 3-4 storey mixed use, apartments, and live works
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After lunch…. base maps, existing conditions plans, and details on scenarios, tasks and outputs