Future Street Masterclass

NATIONAL URBANISM NEXT CONFERENCE 2018
Your Future Street Masterclass
Tour Guides

CHRIS

ADAM
Adam

- ex-Portlander
- reformed urban planner
- Eco-Districts
- Exec Director Smart Cities Council ANZ
Chris

- still an urban planner
- play at the intersection of planning, technology, digital and commerce
- smart city thinker
- fascinated about the ‘smart city enabler’ aka, the street.
Master Class Structure

Hour 0-1
- The background
- Sydney Case Study
- Questions

Hour 1-2
- Topics/ Theme Deep Dives (15 Minutes per topic)
- Deep Dive Topics 1-3

Hour 2-3
- Deep Dive Topics 4-6
- Wrap up and learnings
We didn’t just wake up and decide to build a street.

The street, was the outcome of months of coffees, chats, frustrations and ‘what if’ discussions.

I know. We should just build a street of the future.
Future Street Origins.
It starts with all of the acronyms in one place...

- ASLA
- AILA
- AV’s
STREETS 2.0
6TH DECEMBER, SYDNEY
Half Day Forum in partnership with Australian Institute of Landscape Architects

Traffic Engineers  Landscape Architects  Urban Planners
Architects  Government  Urban Designers
Half Day Forum
- Green Streets
- Complete Streets
- Smart Streets
- AV’s
Building the Momentum towards Future Street
Chris. What you doing in Sept? Want to build a street?

I think I'm busy

You can fill it with tech! Plus we only have 3 weeks!

You had me at tech!

Awesome. Did I mention the minister is opening it?
Ooh and it's 300 ft long

And it's next to the opera house

And only a small budget

Did I mention we don't have a contractor

I'm definitely busy

The Phone Call Part 2
So began our Future Street Journey.

We then went from phone call to project delivery in a little under 4 weeks!
The Street was a conceptual visualisation of how our streets of the future may look.

Responding to opportunities created by the introduction of autonomous vehicles, smart city technology, urban agriculture and urban landscape imperatives.
It was designed by Place Design Group to showcase innovative ideas around landscape, infrastructure and technology to make our cities and towns more liveable, productive and sustainable.

It tested the possibilities, of happens if we dedicate less of our public spaces to cars and return them for people to use.
WHERE WAS FUTURE STREET?

OPERASHOOSE
We turned this.....
into this.....
and this.....
and this.....
Why a demonstration project?

A street is something we all know, so to challenge thinking, we needed to do that on a 1:1 scale.

People needed to walk and experience it.
FUTURE STREET
BOXES TO TICK

- challenge thinking
- demonstrate new tech
- juxtapose ideas
- be ‘wired’ and ‘live’
- be a destination
- not disrupt the city
- educational/story telling
- be bold and statement installation
Initial Ideation for Design

- Streets 2.0 told us future streets needed to be greener, more complete and smarter

- so there was our idea and starting point
ON DISPLAY
1 DRIVERLESS SHUTTLE
1 TESLA
1 ELECTRIC SHARED VEHICLE
3 ELECTRIC BIKES
1 SMART POLE
2 SMART BENCHES
1 GREEN WALL
2 VERTICAL AGRICULTURE UNITS
1 COFFEE CART

21 MATURE TREES
10 PYRUS,
12 ANGOPHORA,
5 FICUS,
2 MAGNOLIA,
1 WATERHOUSIA,
2 POPLARS.

SIR GRANGE TURF
MORE DROUGHT TOLERANT
SHADE TOLERANT
NEEDS TO BE MOWN 50% LESS

100 TONNES
OF SOIL AND DECO

2100
PLANTS

KEY STATS
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60% OF THE STREETS FOR CARS

40% FOR PEOPLE AND BIKES

90%+ IMPERVIOUS MATERIALS
We intuitively know they can be better.

We fight to keep/take back space for bikes.

Becoming more contested with deliveries, share cares and AV’s.

We monitor nothing other than parking times so as to issue fines.
WE HAVE FORGOTTEN THAT STREETS CONNECT PEOPLE FOR INTERACTION

WHilst ROADS CONNECT PLACES FOR TRAVEL

WE HAVE BECOME EXPERT STROAD BUILDERS

A STREET/ROAD HYBRID WITH ALL OF THE CONVEYANCE PARTS OF ROADS BUT NONE OF THE PEOPLE PARTS OF STREETS
“when you’re a hammer, everything looks like a nail.
And when you’re a traffic engineer everything looks like a highway”

Jeff Speck
Design influences and objectives:

- Active and public transport solutions
- Green and health infrastructure
- Biophilia – humans innate connection to nature
- Evidence based design in psychological and physiological responses to landscape
- Import ‘grass and trees’ to bring shade and green into the street
- Challenge views on what a ‘street’ is.
GREEN STREET

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Welcome to Green Street.

#futurastreet

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Design influences and objectives:

- Prioritise people over cars
- A street for walking, cycling, commerce, to enjoy food, life and laughter:
- Allow for Mixed modes of transport
- Activation, place making and street commerce
- Urban orchard and vertical farming
- ‘sticky streets’
- feature shared mobility options
COMPLETE STREET
Welcome to Complete Street.

This section of the Future Street illustrates a proposition of what the future of our streets might look like when we balance the importance of people and cars in a street.

A Complete Street is designed to balance the work, convenience and sustainability involved and accessible for users of all ages and abilities regardless of their mode of travel. It proposes green streets, greener spaces and sheltered cycle lanes, enhanced pedestrian access and opportunities for cycling, walking and access to public transport.

Complete streets are simple opportunities for all users, be they pedestrians, cyclists, car drivers, bus users, cyclists or delivery drivers.

Complete streets are arguably the most important aspect of a city. A Complete Street illustrates a preference for a sustainable city where we are encouraged to re-use, recycle and before or after opportunities far exceed those of walking, cycling or cycling. Complete streets are designed to improve opportunities for all to occur, be that commercial opportunities, commerce, public art or landscape.

Complete streets are designed by creating attractive places with greater street level, reducing the number of potential customers passing shops and the length of time spent around centres.
Design influences and objectives:

- Integration of tech and objects ‘internet of things’
- A ‘very smart street’, but with grounded ‘people’ products
- Data hub displaying real time displays and algorithms
- Feature ‘outdoor work and play’ products
- Feature current leaders of autonomous vehicle technology
- Demonstrate that technology can deliver social equality
- Build a ‘virtual’ street of the future ‘future’.
Media Coverage & Story Telling

• for us telling a story and being an educational tool was critical

• we got a lot more media than we thought
Trams, drones and skyways:

Gerry McCarthy

A still from the virtual reality tour of a Sydney civic area in 2053, above, as seen through augmented reality, below, at the Future Street Project at Circular Quay. Photo: Jessica Hromas

Cars still may be a part of it (the city in future) but it’s about making it a zone for the community.

Tim Arnold
Australian Institute of Landscape Architects

650 million Smarter Cities and Suburbs.

There’s always the wonderful, noisy stuff like autonomous vehicles and street smart signage and they’re important innovations and they’re happening piece by piece,” he said.

“But there are also the very practical applications that we’re interested in that solve very real problems in our cities – congestion, better data on mobility, knowing when you have a pipe next to the road.”

“Also, how we better use technologies to make our streets work better – green spaces and active transport (such as) walking, cycling and so on.”

Australia leaves electric cars in slow lane

Timna Jacks

Fancy having your road tolls, parking charges and registration charges waived? Head to Norway, where reducing your carbon footprint through the purchase of an electric vehicle will scour you such benefits.

Or stay in Australia, buy a clean-energy vehicle, and look forward to high import duties, stamp Duty, a luxury car tax and a dearth of charging stations, putting you at risk of coming mid-drive.

Australia has been labelled a “laggard” in the global move towards electric vehicles by battery.

An electric BMW. Photo: Pat Scala

“Transport is the third-largest sector contributing to Australia’s greenhouse gas emissions and there are currently no serious policies to curb these emissions.”

Despite their environmental benefits and cost savings in fuel, electric vehicles in Australia are more expensive than electric cars overseas, while the well-known Tesla cars are unaffordable for most.

Only 0.1 per cent of all cars sold in Australia were electric in 2018.
How we pulled it off
(we had lots of help from lots of people!)
• Rapid Design Concept
• Continual Revisions working with product suppliers
• continual revisions based on construction estimates
• made it all up once on site
• full time project manager for 2 weeks before and week of project
Reflections & Lessons
• where you do it is as important as what it is

• education and story telling critical to bring this to average people

• the longer the better, to leverage the investment and actually pilot and measure things
• in having the products, people and administrators attend, we created an accidental smart city ‘speed dating’ event

• narrative before and post event continuation of narrative critical

• be bold, and take risks
Street design should be like a marquee at a garden wedding.

It is the wedding and people that make it memorable, not the marquee.

We shouldn’t try so hard to design the perfect marquee.