

How great cities happen: integrating people, land use and transport

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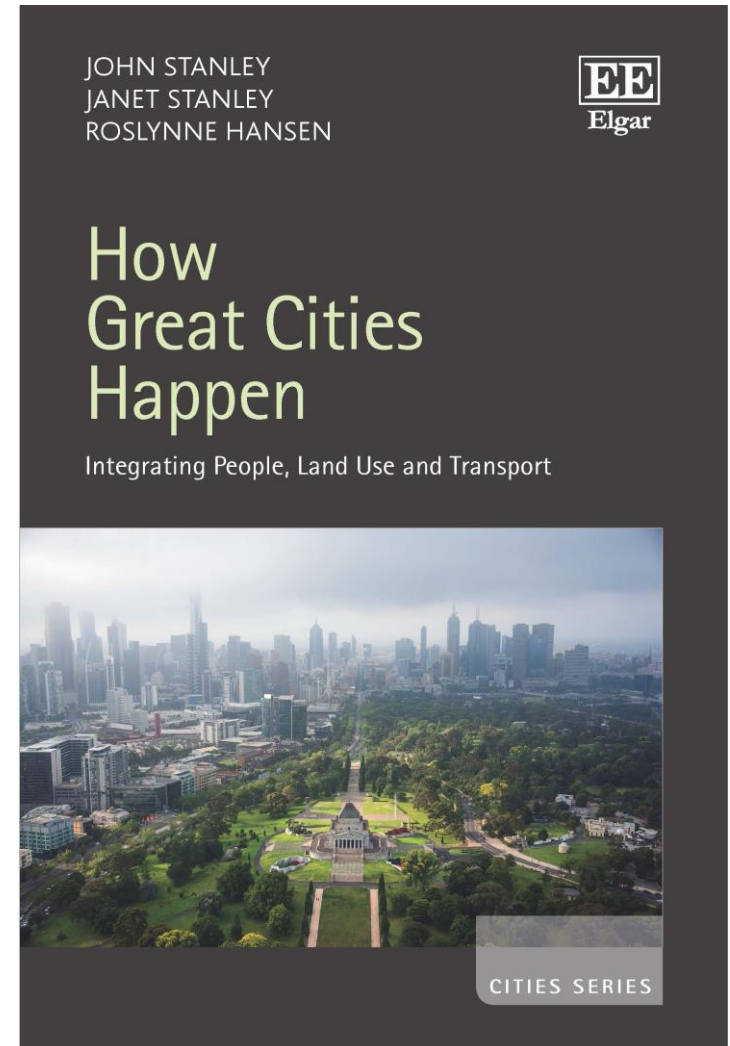
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After years of seeking more integrated *land use/transport* planning, we are now recognizing that it is important to take a broader approach, encompassing all the key land use/transport inter-relationships that societal goals (e.g. affordable housing is impacted by land use and transport and must be in the mix)



Scope of presentation

1. **Challenges for urban LUT planning**
2. **Goals for cities**
3. **Key land use transport requirements for cities**
4. **Talk briefly about productivity**
5. **The 20 minute city/neighbourhood**
6. **A city for children**
7. **Governance**
8. **Concluding comments**

Stockholm: LUTI done well



Photo : John Stanley

Examples of city challenges



Australian cities are famed for their livability but have

- **Low productivity growth**
- **Increasing traffic congestion**
- **Crowded PT**
- **Unaffordable housing**
- **High GHG emissions**
- **Air pollution (PM, NO_x)**
- **Social exclusion & increasing inequality**
- **Growing obesity**

These challenges are common to successful cities in the developed world

Planning challenge:

Q. How can we shape our cities to maximize their benefits (e.g. livability) and mitigate problems like these?

A. Read our book to find out! Full of case studies.

Start with a vision that has wide buy-in: Greater Vancouver = the gold standard

The highest quality of life embracing cultural vitality, economic prosperity, social justice and compassion, all nurtured in and by a beautiful and healthy natural environment. Achieved by an unshakeable commitment to the well-being of current and future generations and the health of our planet, in everything we do'.

(Metro Vancouver (2011), *Metro Vancouver 2040: Shaping our Future. Regional Growth Strategy Bylaw No 1136, 2010. Metro Vancouver*)



Photo John Stanley

Vancouver's vision is followed through with high quality, integrated LUT planning

Common goals for cities and regions

1. Increase economic productivity
2. Reduce environmental footprint
3. Increase social inclusion/reduce inequality
4. Improve health and safety outcomes
5. Promote intergenerational equity

Outcome goals

Getting people out of cars and into PT/active transport helps all 5

6. Engage communities widely
7. Take an integrated approach to the above goals

Process goals

The 'how' in terms of goal achievement

It is really hard to get multiple goal achievement right when your city population growth is >1.5-2% p.a.

Cities need to understand their 'unique' competitive advantages and use LUT planning to enhance these: e.g., Distinctive Melbourne (MAC view)

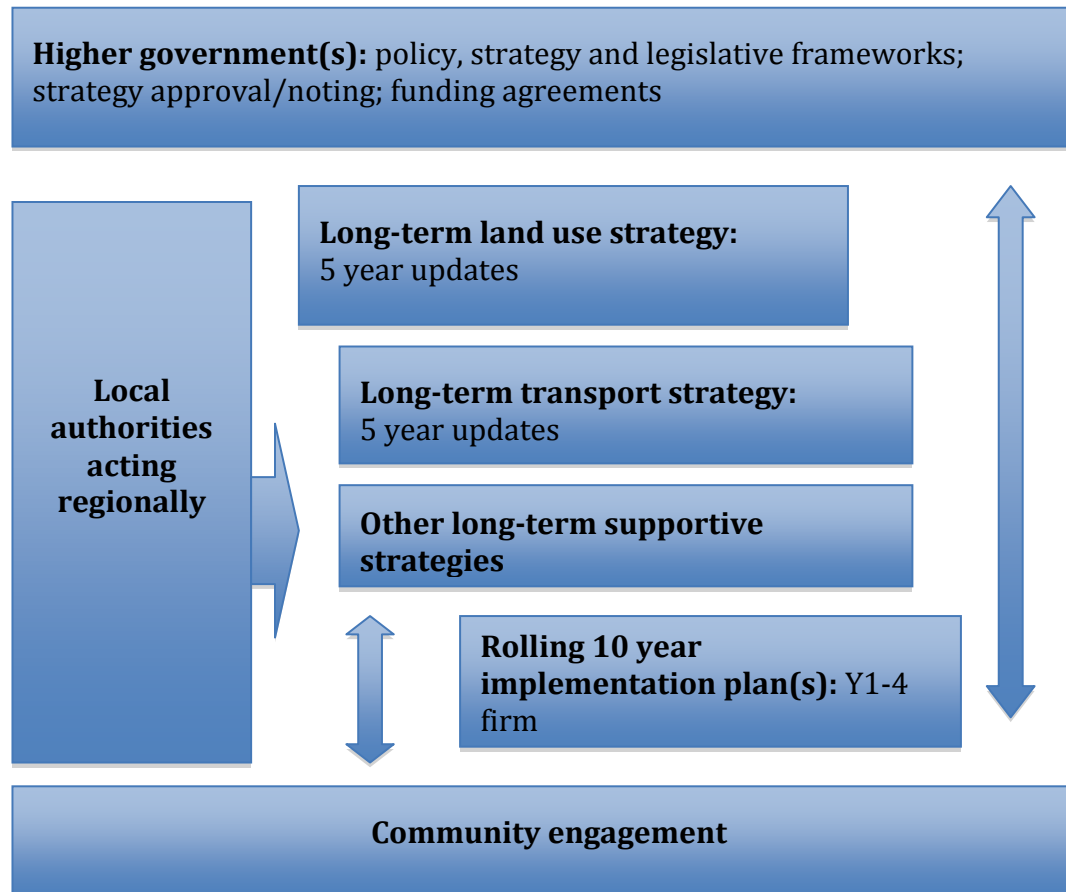
- **World's most liveable city (EIU)**
- **Elegant public realm and civic buildings**
- **Notable Hoddle Grid**
- **Distinctive boulevards and high streets**
- **Expansive inner city parks, gardens and recreational facilities; leafy suburbs**
- **Vibrant street life**
- **Events capital**
- **Shopping, cafes & food**
- **Cultural & design strengths**
- **Design strengths**
- **Etc**

These provide a place-based focus for integrated LUT planning



Photo: John Stanley

Integrated strategic urban (land use transport) policy/planning process for goal achievement



The LUT process needs to start with land use development directions

Key land use => transport influencers

- 1. Density**
- 2. Diversity (mix) of land uses**
- 3. Design**
 - **E.g. creating great places; intersection density**
- 4. Destination accessibility**
- 5. Distance to PT**

These, and outcome goals 1-5, underpin compact city development directions



Graphic: Prof. Rob Adams

(Source: Ewing & Cervero 2010)

Land use development directions for more compact settlement patterns

1. **Strong CBD and close surrounds**
2. **Small number of high tech/knowledge-based clusters (see next slide)**
3. **Major urban renewal areas**
4. **Strategic transit corridors**
5. **Series of 20 minute neighbourhoods**
6. **Slower fringe growth (70+% infill – population not houses) at higher density**

Copenhagen middle 'suburban' housing in a transit corridor

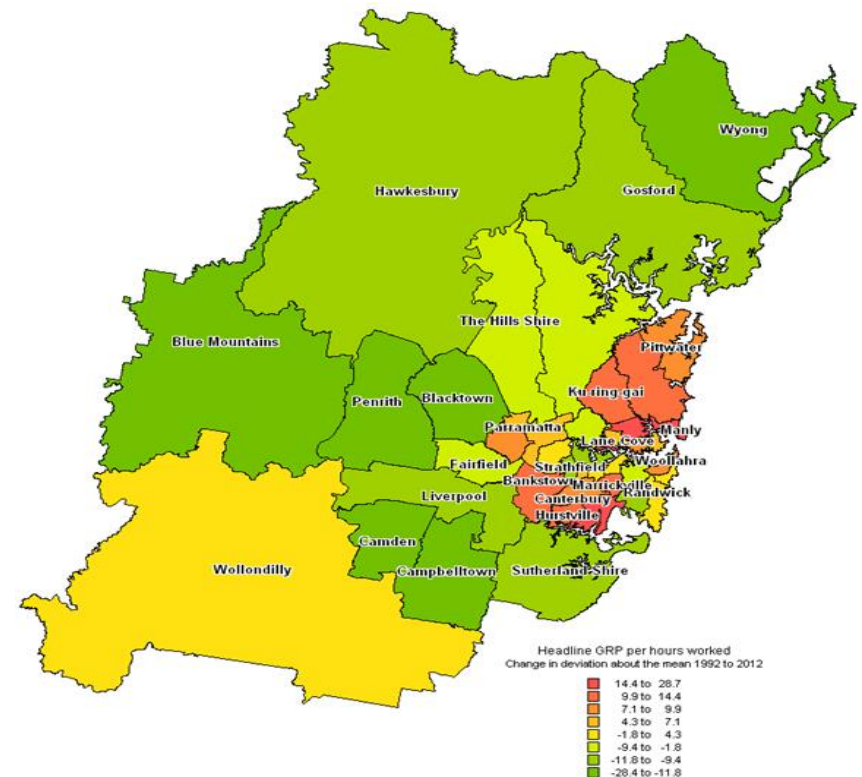


Photo John Stanley

Clusters are grounded in promoting productivity and better sharing the benefits

- NIEIR's Australian capital city 'Rules of economic development'
- Led to *Plan Melbourne's* National Employment and Innovation Clusters
 - To promote productivity growth and sharing the benefits thereof
 - Recent BIC work (Stanley and Brain 2017) suggests PT travel time improvements to middle urban clusters will support urban productivity growth
- Greater Sydney Commission similar focus
- Improved transport links from growth areas are vital for supporting housing/employment access, to better share the productivity benefits
- London spatial focus somewhat different because the distribution of disadvantage is different to our cities

Growing productivity differentials in Sydney 1992-2012 (NIEIR)



Supportive strategic transport directions

1. **Strong trunk radial public transport to the CBD/surrounds**
2. **Good arterial road access across the whole city**
3. **Fast and frequent trunk PT (mainly bus) to urban clusters**
 - Including circumferential routes (which can be radial to clusters)
4. **Better trunk PT from growth suburbs/urban renewal areas to employment hubs**
5. **Local PT/active transport supporting 20 minute (not 30!) neighbourhoods**
6. **High priority to walking and cycling throughout**
7. **Place making focus throughout**

Adelaide progressing



Photo John Stanley

Diagnosis: Australian capital city LUT strategies

- **Australian capital city LUT strategies tend to talk about more compact settlement patterns**
 - **And the focus on PT to the centre is supportive BUT**
- **Road investment strategies can conflict with this intent**
 - **Still too many freeways/tollways increasing effective road capacity to the centre and/or encouraging further sprawl**
 - **Without the middle + outer investment in better PT to offset the latter**
 - **Our transport planners do not seem to understand generated road traffic!**
 - **Insufficient focus on place and place-making investment**
 - **Too much emphasis on ‘big projects’ and not enough on place-based (bottom up) investment**

Increasing the focus on place: 20 minute neighbourhoods

1. **Support increased economic productivity**
2. **Reduce environmental footprint**
3. **Increase social inclusion and reduce inequality**
4. **Improve health and safety outcomes**
5. **Promote intergenerational equity**
6. **Engage communities widely**
7. **Demand an integrated approach**

Freiburg, Germany: A city of 'short distances' (density 50+ dw/Ha)



Photo John Stanley

The 20 minute city is about enabling people to access most activities within 20 minutes by PT/active transport. It requires...

- 1. Densities $>25dw/Ha$ on fringe**
 - **Implies a catchment of about 300,000; higher densities in middle suburbs)**
- 2. More mixed use development**
- 2. Greater provision of local services**
- 3. High quality local PT/active travel choices**
- 4. Local engagement**
 - **More local community decision-making**
- 5. Sense of place: green spaces, treed streets, arts, urban forests, community gardens**



Density done well in West Vancouver: multi-occupancy dwellings
(Photo John Stanley)

Minimum local 'PT' service standards to support the 20 minute city

- **Services within 400 metres walk of residences**
- **Frequencies of 20 minutes or better for 18 hours a day**
- **Supported by better coordinating all forms of local transport**
 - **MaaS is tending this way but low demand settings a challenge**
 - **Future 'shared mobility contracts'**
- **Extensive walking and cycling opportunities designed in or retrofitted**

**Hammarby Sjöstad,
Stockholm: urban renewal**



Photo John Stanley

Create 'third places', which to facilitate the development of bridging social capital and connections with the community (high value)

- **Parks**
- **Cafes**
- **Meeting places**
- **Child care/aged residential**
- **Multiple uses**
 - **School/theatre**
 - **Playground/café**
- **Planting of roads**
- **Community gardens**
- **Community theatres**
- **Local stores**



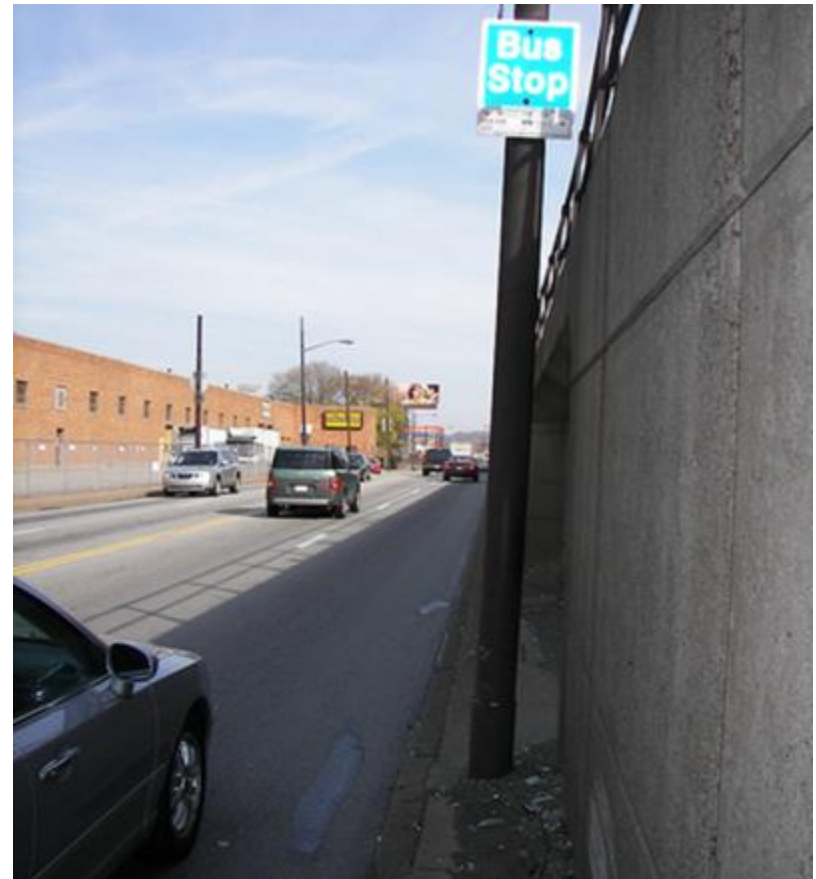
One of Melbourne's iconic laneway arcades.
Photo John Stanley

Detail (fine grain) is important

Land use and housing is still usually designed around car travel

- **Houses face roads, rather than walkways/bike paths through parkland or other options**
- **New housing developments with roundabouts limit bus access**
- **Footpaths and bus stops are often not well lit, without shelter, seating, bike stations, information**
- **Traffic light cycles are usually designed to give priority to cars**

No-one would want to own this!



Cities are for people, e.g. children and youth (It takes a village to raise a child!)

- Over the past few thousand years, children grew up in a close network of family and community relationships
- A child spends about 6 hours a day on a digital devices with fewer face-to-face contacts than ever before
- **Healthy development depends on the quality and reliability of a young child's relationships with the important people in his or her life, both within and outside the family.**

Not meeting a child's needs imposes personal, societal and economic costs.
'The early years last a lifetime. . . .
(Hertzman 2004)

A Cotswolds' Saturday afternoon



Photo John Stanley

Children need opportunities to grow esteem and self-actualisation

- Creativity, independence, spontaneity, personal development
- Play is critical
- Opportunities for play need to be age appropriate, well-designed, stimulating, secure, incorporating trees
- Most school environments have very poor and neglected play opportunities

Do children's needs get a mention in our LUT planning?

Kindergarten in Vauban, Freiburg.



Photo Janet Stanley

Principles for determining governmental roles in delivery

- **Government involvement in LUT policy/planning is largely because of negative externalities from private actions**
- **Governmental responsibility for particular matters between the 3 levels of government, should be largely determined by the incidence of associated benefits/costs of those matters and responses thereto**
 - **Presume local but escalate if benefits/costs cross boundaries, and ditto between state/federal**
- **Then bring revenue raising capacities in line with functional responsibilities**
 - **Means more fiscal devolution**
- **Partnerships are a key element throughout, across a wide range of stakeholders**

State role: has historically been largely the 'big stuff'

- **Drive the implementation of integrated strategic LUT policy and planning**
 - Horizontal and vertical
 - Building the underlying evidence base
- **A major project focus is still needed BUT**
- **A place focus needs to be much more strongly embedded if we want more compact cities**
- **Strategic LUT planning should be conducted as a PARTNERSHIP between the State and regional local government**
 - to promote longevity in approach and
 - a clearer policy line of sight
- **Community engagement and stakeholder partnerships must be key elements**

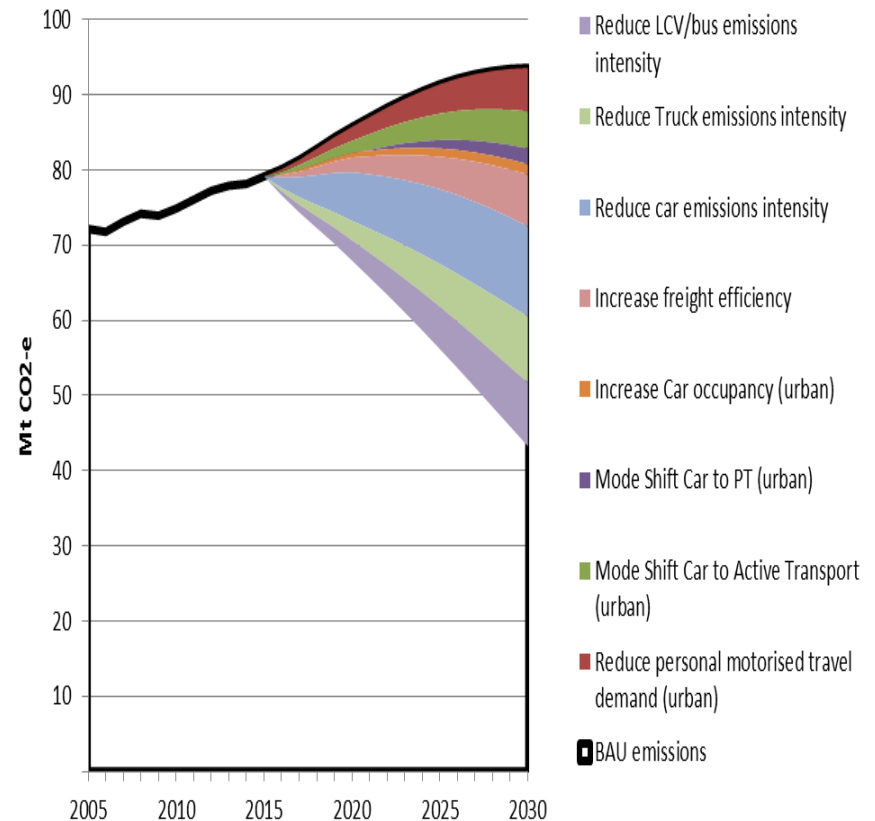
QUESTION: DO OUR CAPITAL CITIES NEED A MAYOR TO SPEAK FOR FOR THE WHOLE CITY?

Some key State/regional local government directions for LUT integration

- **Support key LUT directions for a compact city**
- **Stronger focus on affordable housing (not discussed in this presentation)**
 - **TOD often leads to gentrification**
- **High targets for infill (>70% population growth, with a focus on urban nodes and transit corridors)**
- **Higher net densities in greenfield areas**
 - **25 dwellings/ha**
- **Trunk PT (including bus) frequencies of 10 minutes or better for >16 hours/day (then 15 minutes for additional hours)**
- **Linked with local bus services at spacing and headways supporting 20 minute neighbourhoods**
- **Greater focus on PT service integration/innovation at local level, esp. on urban fringe and in regions (PT, CT, school bus, etc, as per Warrnambool's *ConnectU* and SA case studies)**
- **Development/LUT planning guidelines for local government (e.g. as in WA)**

Key federal roles: get productivity up and GHG emissions down

- **Key federal responsibility areas are productivity and GHG emissions**
 - **Feds capture a significant share of city productivity benefits and should recycle \$**
 - **Particularly for initiatives that promote compact cities, walking, cycling and PT**
- **To meet global GHG targets, new vehicles will need to be virtually carbon free by 2035**
 - **Set mandatory CO2 emission standards as per EU or US**
- **Vertical fiscal imbalance says the Feds should also support state LUT initiatives more broadly (and fairly!)**
 - **While moving to devolve some fiscal powers**
- **Federal 'City Deals' are a good framework for partnering across 3 levels of government and with other sectors (e.g. business, civil society)**



Road transport 40% down on 2005 by 2030

(Source: Stanley, Ellison, Loader and Hensher 2018).

Local government local roles

- **Plan for local 20 minute neighbourhoods, e.g.**
 - **Mixed use nodes (e.g. wide range of local activities; co-location of community facilities)**
 - **Minimum densities for new developments @25dwellings/Ha**
 - **Place making**
 - **Accessible PT (e.g. footpaths, stops, roads designed for buses), local walking/cycling**
 - **Mixed use medium density transit corridors**
 - **Affordable housing**
 - **Restricted parking availability (supporting share cars)**
 - **Community engagement**
- **Local government needs to operate at efficient scale, with sufficient access to own revenue streams to do its job**
 - **E.g. Malmo, Sweden, in photo on RHS**

**Bo01, Malmö, Sweden.
Overall density ~40 dw/Ha.**



Photo John Stanley

UK City Deals: An opportunity to drive governance and funding reform

- **Devolution of decision making responsibility to local level, with incentive-related funding**
 - **Transport a key element**
 - **Associated governance requirements for vertical and horizontal integration**
- **Australian City Deals could require**
 - **States to partner with regional local government, via a jointly managed Metropolitan Planning Authority, to produce and deliver long term LUT plans, with shared priorities and an agreed funding plan (3 levels of government to agree)**
 - **Value capture to be part of the funding mix**
 - **Federal funding to be formula driven, linked to incentives, to de-politicise the process**
 - **Open consultative processes to be used throughout**
 - **Require a place-based focus, including 20 minute neighbourhoods and**
 - **Attention to the needs of particular groups of people (e.g., children)**

Conclusions

- **Australian cities are the envy of most of the world for their livability (not the whole city!)**
- **They need to change and adapt to remain highly livable and deliver benefits to all residents**
- **Integrated LUT planning is fundamental but**
 - **needs to be more firmly rooted in pursuing the compact city growth model**
 - **grounded with a strong unifying vision**
- **This needs both top down and bottom up perspectives**
- **The 20 minute city is a key (bottom up) local way to tackle many city stressors**
- **This needs higher densities, more mixed use, better local PT, a focus on place and on the needs of particular groups of people (e.g. children)**
- **Consultation and partnering across all 3 levels of government and with wider stakeholders is a fundamental requirement**
- **Engagement throughout provides the glue to LUT longevity**
- **It is hard to achieve all city goals when city population growth is over 1.5-2% p.a.**