CITIES FOR ALL? WALKING BACK TO HAPPINESS AND EQUALITY

Tim Williams, CEO Committee for Sydney
March 2017
Cities for all: walking back to happiness and equality?

- Cities are it: capital cities and regional cities/towns?
- Wealthy Australia but divided cities: ins and outs: 25% growth since GSC/90%-1%: financialisation
- Some who cannot get in at all: 10% FTB: housing affordability /affordable housing: confusion
- Dominant sprawl model/compact city model:
  - Latter: people voting for with their feet: smaller, shared, lifestyles, walkable: hot spots problem
  - New econ and innovation agenda around this: walkable IS the market: reurbanisation of economy and unis/innovation districts
- But unequal access to benefits of density
- Problem of poverty, education, ill health: no longer inner city paradigm: suburbs: cities with poor mobility and accessibility are less socially mobile: ‘Sydney made me sick’ headline
- Spreading benefits of compact walkable development: density done well, public transport, retrofitting suburbia, town centre renewal, green grid/money does grow on trees
- Governance reform/GSC: appraisal reform: walkable development in planning system and walkable outcomes seen as foundational in transport appraisal/ don’t get me talking re it!
- Problems coming: just when we are winning re PT: AV’s and shared cars threaten PT and walking
‘Populism’ is really about equality and fair shares in growth. The average house price in Sydney is 12 times the median income.

Not everyone doing well: 90% of growth since 2008 to top 1%. People (here too) actually feel more and more disenfranchised—and is not limited to the US and UK: city for all?
If that weren’t enough we now have this: towards the data driven city: disrupting all our thinking..

What does this data driven digital/shared econ/IoT future/present mean for city management?
Back to the beginning
Cities – where the world’s population and wealth going
2010 metropolitan population
2050 metropolitan population
Where is the money going?

Top 20 cities for commercial real estate momentum, 2015

Source: Jones Lang LaSalle
To cities in the S and E, wealth shifting too: getting closer to a really nice neighborhood near us...
South is the north of the 21st century but...
Sydney’s Moment: 23% GDP/30% jobs growth

Sydney Financial Services alone= Mining in WA: bigger by value than HK and Singapore FS BTW
GENERAL GOVERNMENT NET DEBT – 2016

As a percentage of GDP

Advanced Economies Average: 71.9
G20 Advanced: 79.4
Euro Area: 69.7
G7: 83.3
Emerging Economies Average: 14.0
Asia: 47.5
Europe: 27.3
Latin America: 38.2
G20 Emerging: 31.8

F = Forecast
1. IMF staff estimates and projections. Projections are based on staff assessment of current policies.
2. Gross debt as a percentage of GDP (Source: IMF, Fiscal Monitor October 2015; Statistical Table A16)
3. For cross-country comparability, gross and net debt levels reported by national statistical agencies for countries that have adopted the 2008 System of National Accounts (Australia, Canada, and USA) are adjusted to exclude unfunded pension liabilities of government employees’ defined benefit pension plans.

Sources: International Monetary Fund, Fiscal Monitor October 2015, Statistical Tables A8 and A16; Austrade
The price of success

- High costs: housing, labour, goods, living
- Infrastructure investment demand
- Social cohesion and integration
- Two-tier labour market
- Traffic congestion
- Pollution
- Opposition to growth model
## Australian cities: weak transport and infrastructure platforms

<table>
<thead>
<tr>
<th>Arthur D Little Urban Mobility Index</th>
<th>IESE Cities in Motion, Transport, 2015</th>
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<tbody>
<tr>
<td>4 Copenhagen</td>
<td>4 Copenhagen</td>
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<td>10 Helsinki</td>
<td>9 Helsinki</td>
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<td>11 Munich</td>
<td>10 Munich</td>
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<td>13 Berlin</td>
<td>15 Stockholm</td>
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<td>3 Montreal</td>
<td>17 Berlin</td>
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<td>6 Toronto</td>
<td>32 Oslo</td>
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<td>8 Sydney</td>
<td>35 Melbourne</td>
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<td>6 Montreal</td>
<td>63 Toronto</td>
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<td>5 Melbourne</td>
<td>89 Vancouver</td>
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<td>0 Melbourne</td>
<td>95 Sydney</td>
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<td></td>
<td>111 Montreal</td>
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<td>122 Ottawa</td>
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Based on traffic, subway provision, modal split, bike sharing, smart cards etc.
Transport has a role to play in this: homes follow transport

Homes are not being built where jobs are being created

Employment and population growth, 2006-11

Jobs per resident, Sydney, 2011
The market is not providing denser, healthier communities in the middle and outer rings

- Population density has increased within 5kms of CBDs since 1981
- **BUT:** 10 to 15kms from the CBDs, density has barely changed

Sydney’s structural disadvantage: importance of effective job density, amenity and connectivity
Reinforcing city divides not helped by LG fracturing

FIGURE A4  CENSUS MAP OF WHERE HIGH INCOME (>$2,000 PER WEEK) HOUSEHOLDS RESIDE
Figure 14. Occurrence of deaths attributable to cardiovascular disease by Sydney LGA

The difference is stark – deaths caused of cardiovascular disease are almost double in Western Sydney than in many parts of the inner city.

Source: HealthStats NSW and WSU

Figure 15. Amount of hospitalisations caused by type II diabetes by Sydney LGA

Once again, differential health outcomes for the West – hospitalisations from diabetes are concentrated in the West.

Source: HealthStats and WSU
Health divide

• Western Sydney continues to lag in a series of health outcomes such as diabetes, deaths attributable to high body mass, coronary heart disease, asthma and circulatory disease

• While much of this is associated with relative disadvantage, there is another factor at play here:
  – Low density urban form and a lack of public transport in Western Sydney leads to more sedentary, car-based lifestyles
Sydney’s west is not walkable: also distant from new jobs: leading to car journeys/scary numbers/trend

Figure 13. Occurrence of high body mass attributable deaths by Sydney LGA

Figure 6. Access to knowledge jobs

Source: Health Stats NSW and WSU
Source: Arup 2016
Many of these problems are rooted in a key deficit experienced by the West: a lack of public transport connectivity.
Shift to the knowledge economy: 400,000 a day commute in from WS now

By 2036, Jobs for NSW forecasts that knowledge intensive jobs will make up 61% of the workforce

Source: Jobs for the Future Report, 2016
This comes down to a structural imbalance: there are actually 2 Sydneys

• The dense and connected Sydney and the sprawled Sydney
• Urban sprawl brings a range of problems that need to be remedied
• A *Plan for Growing Sydney* acknowledges this
  – “It is critical not to repeat the mistakes of the past – dispersed housing growth that resulted in a sprawling and poorly connected city, complicated by unique geographic constraints.”
West is also least dense
At a time when people voting with feet for density done well: smaller homes etc/scale/amenity/time hungry/two grads/ know-jobs
Where the hot spots are
Walkable urban development is becoming the market for today and in the future...
Key Findings

“For perhaps the first time in 60 years, walkable urban places (WalkUPs) in all 30 of the largest metros are gaining market share over their drivable sub-urban competition—and showing substantially higher rental premiums.

This research shows that metros with the highest levels of walkable urbanism are also the most educated and wealthy (as measured by GDP per capita)—and, surprisingly, the most socially equitable.”
Walkable urbanism and education level go together
Walkable places are more successful
They also have lower inequality.
Re-urbanisation of the economy

• Businesses are following talent away from the suburbs to the inner city
  – Commonwealth Bank is moving from Olympic Park to Redfern

• Worker preferences have shifted from suburban business parks to in-town mixed use environments
  – Knowledge workers prefer urban locations with active uses outside of the workplace
Creating great walkable urban centres = jobs in the new economy

• The conventional wisdom used to be that creating a strong economy came first, and that increased population and a higher quality of life would follow. The converse now seems more likely: creating a higher quality of life is the first step to attracting new residents and jobs. This is why Chris Leinberger believes that “all the fancy economic development strategies, such as developing a biomedical cluster, an aerospace cluster, or whatever the current economic development ‘flavour of the month’ might be, do not hold a candle to the power of a great walkable urban place.”
Universities all heading back to cities: and Phoenix connects by light rail

On the Downtown Phoenix campus, ASU is joining student life with an urban lifestyle in the heart of Phoenix. Fulfilling a compelling vision for a transformational student experience, for the more than 11,500 students enrolled, the campus integrates research, classroom learning and real-world problem-solving in high-tech facilities that make the most of the location and the city’s vibrant neighborhoods and culture.
Agglomeration in know-econ/Innovation districts: Quality of life, location and amenity close to work or PT: walkable good too

Table 2: Comparing traditional innovation spaces and innovation districts

<table>
<thead>
<tr>
<th>TRADITIONAL INNOVATION SPACES</th>
<th>INNOVATION DISTRICTS</th>
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<tbody>
<tr>
<td>Accessible by car</td>
<td>Accessible by public transport, and walkable</td>
</tr>
<tr>
<td>Spatially Isolated</td>
<td>Located in downtown, mid-town or ex-industrial urban areas*</td>
</tr>
<tr>
<td>Sprawling corridor or Campus Layout</td>
<td>Physically compact</td>
</tr>
<tr>
<td>Predominantly research or commercial space</td>
<td>Mixed use</td>
</tr>
<tr>
<td>Often built on green field sites</td>
<td>Built on brownfield sites</td>
</tr>
</tbody>
</table>

*Katz and Wagner’s report also include the ‘reimagined science park’ – districts in suburban or exurban areas where have been densified and redesigned to include more urban-style mixed use.*
“the ultimate mash-up of entrepreneurs and educational institutions, start-ups and schools, mixed-use development and medical innovations, bike-sharing and bankable investments – all connected by transit, powered by clean energy, wired for digital technology, and fuelled by caffeine”

The Rise of Innovation Districts, The Brookings Institution
But our transport agenda leads away from agglomeration/ exacerbates sprawl

Figure 17. Urban density versus road supply

Source: US Federal Highway Administration

As urban densities decline, per capita roadway increases. Each dot represents a US urban region.
Sprawl model costs more BTW And leads to social immobility: poverty has moved to low density suburbs

(#Designperth) For every 1000 dwellings developed in infill sites, it costs the government 3x as much to provide infrastructure for greenfield sites

**TABLE 1:**

<table>
<thead>
<tr>
<th></th>
<th>INFILL cost per lot</th>
<th>GREENFIELD cost per lot</th>
<th>COMPARISON cost per lot</th>
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</thead>
<tbody>
<tr>
<td><strong>Government Infrastructure Costs (upfront costs)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roads</td>
<td>$5,623</td>
<td>$33,583</td>
<td>$27,960</td>
</tr>
<tr>
<td>Water and Sewerage</td>
<td>$16,303</td>
<td>$24,738</td>
<td>$8,435</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>$2,847</td>
<td>$4,103</td>
<td>$1,256</td>
</tr>
<tr>
<td>Electricity</td>
<td>$4,512</td>
<td>$10,719</td>
<td>$6,207</td>
</tr>
<tr>
<td>Gas</td>
<td>$0</td>
<td>$4,080</td>
<td>$4,080</td>
</tr>
<tr>
<td>Fire and Ambulance</td>
<td>$0</td>
<td>$334</td>
<td>$334</td>
</tr>
<tr>
<td>Police</td>
<td>$0</td>
<td>$429</td>
<td>$429</td>
</tr>
<tr>
<td>Education</td>
<td>$4,306</td>
<td>$36,644</td>
<td>$32,338</td>
</tr>
<tr>
<td>Health (Hospitals, etc)</td>
<td>$22,237</td>
<td>$35,759</td>
<td>$13,522</td>
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<tr>
<td><strong>TOTAL COST PER LOT</strong></td>
<td><strong>$55,828</strong></td>
<td><strong>$150,389</strong></td>
<td><strong>$94,561</strong></td>
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</tbody>
</table>

Poor mobility means poor social mobility

• There is evidence of an inverse relationship between sprawl and social mobility

• Sprawl encourages residential sorting by income

• *A Plan for Growing Sydney* makes it clear that Sydney’s sprawl dynamic is not the best model of growth
Equitable density?

- The benefits of density generate an “amenity paradox” that threatens to translate America’s already egregious wealth gap into a widening health gap between rich and poor.
- Life-filled, walkable, transit-served neighborhoods have delivered the goods in ways that Jane Jacobs prophesized 50 years ago — with the glaring exception of diversity.
- Ten percent of Aus households control **almost 75% of all wealth**. They, along with their slightly less affluent peers, are consuming walkable neighborhoods at a voracious rate.
- This demand is bidding up housing costs and forcing poorer residents into less healthy, car-dependent environments. For the first time in Australia’s history **more poor people live in suburbs than cities**.
- Clustered increasingly at the fringes of car-centric suburbs, yet often unable to afford a reliable car, they are isolated from access to health care — and jobs, education, and support networks.
- Nor is this a passing trend.. As we employ density to create healthy neighborhoods, we also need to employ it to create equity. The challenge is not market acceptance.
- Where possible, we need to tap the rising value of amenity-rich urban neighborhoods to fund the mixed-income housing that makes the concept of diversity real. Density bonuses in return for increased affordability, inclusionary zoning and public benefit agreements represent potential strategies. More are needed.
- We need to expand access — for everyone — to environments that support healthier lifestyles.
More emissions

Figure 20
Land Use Impacts on Transport Emissions

Source: LSE Cities 2014
More compact development can reduce transport emissions by an order of magnitude.
Infrastructure appraisal in Australia is broken

• Megaprojects are announced by politicians before proper analysis has been completed let alone business cases
  – Encourages bad processes and leads to extra costs
  – Options analysis is shallow
  – The public becomes sceptical of announcements by the Government

Like the East-West Link in Melbourne
For Tomorrow’s Sydney – we need to take some of this kind of stuff out as in Seoul: value up/congestion down
And put green, walkable stuff in: need new govt infrastructure appraisal process fast
The Interstate 405 was recently widened in LA (cost US$1.1 Billion)

The extra lanes did make a difference: the morning commute is now 1 minute slower than before.
With this structural imbalance, what is the focus of appraisal? Travel time reductions

- Business cases for Billion dollar projects often rely largely on **travel time reductions**
- Proposed travel time savings rarely eventuate – especially with road projects – because of **induced demand**
- New roads create new drivers!
- They also encourage existing drivers to drive more /move from PT
And after a decade+ of road investment commutes in Sydney are same or longer: we NEVER check whether claimed benefits are delivered

| TABLE 2. AVERAGE TRIP TIMES AND LENGTH, GREATER METROPOLITAN SYDNEY, 2002/3-2012/3 |
|--------------------------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Av. work trip duration (mins)                    | 32       | 31       | 32       | 33       | 34       | 34       | 34       | 34       | 34       | 35       | 35       |
| Av. non-work trip duration (mins)                | 18       | 18       | 18       | 18       | 18       | 18       | 18       | 18       | 18       | 19       | 19       |
| Daily travel time per person (mins)              | 81       | 81       | 81       | 80       | 82       | 82       | 82       | 79       | 80       | 80       | 81       |
| Total travel per person (km)                     | 32.2     | 32.1     | 32.1     | 31.7     | 31.9     | 31.8     | 31.4     | 30.6     | 31.2     | 31.9     | 31.9     |
| Av. trip length (km)                             | 8.3      | 8.2      | 8.2      | 8.2      | 8.3      | 8.2      | 8.2      | 8.3      | 8.5      | 8.7      | 8.7      |
| VKT per person (km)                              | 18.9     | 18.8     | 18.8     | 18.2     | 18.3     | 18.1     | 17.9     | 17.5     | 18.0     | 18.4     | 18.5     |

Source: Bureau of Transport Statistics, Household Travel Survey.
City shaping

- Infrastructure appraisal is too narrowly focused
  - Social benefits of projects are rarely included but then neither are economic impacts
  - Environmental and Health impacts are often left out, e.g. How this affects lifestyles of residents? Discourage walking and cycling?/driving?
  - Projects are not assessed on how they may change the very structure and performance of the city

- By focusing so narrowly we ignore the real benefits of transport projects:
  - Land use changes that allow for densification
  - Social changes that arise from improved accessibility
  - Health outcomes that accrue as people become more (or less) active
  - Economics of agglomeration: serving this through PT
Better land use and transport integration

- We need to better align land use planning and transport planning and value land use changes in transport appraisal.
- And see walking as foundational in the appraisal system.
Active cities

• Places where many people are able to walk, cycle or catch public transport for the majority of their daily needs.

• Active cities priorities accessibility over mobility

• They will be more and more important as cities grow larger and more dense, especially in Australia
Why does designing a city to encourage being active matter?

• The evidence now seems pretty clear, neighbourhoods which have a higher level of walking and cycling have a significantly less incidence of lifestyle diseases.
  – In ‘Cities Alive: Towards a Walking World’ Arup estimates that for people living in a walkable environment the risk of early death is reduced by 22% and mental health improves by 33%.

• Likewise, areas where the only real transport option is the car, people are unhealthier.

• Access to PT =3 times physical activity of car user per day
Walkability as a health strategy

• The amenity benefits of dense, walkable places connected by good public transport lead to differential health outcomes

• Individuals in walkable precincts who use public transport get over 3 times the amount of physical activity of those who don’t

• “If you live in a less walkable neighbourhood, you are 60% more likely to be overweight.”
  – Jeff Speck

• Suburban sprawl discourages active transport – walking and cycling
• Light Rail in Charlotte: lost weight as people walked to it
Walkability as a health strategy

• A compact city model in which land-use density and diversity are increased and distances to public transport are reduced, results in health gains for cities

• Government policies need to actively pursue land-use elements – particularly a focus towards compact cities – that support a modal shift towards walking, cycling, and low-emission public transport

• Precincts with more compact street networks, increased intersection density and a more traditional street grid have been shown to have lower levels of obesity, diabetes, blood pressure and heart disease
Walkability as an economic strategy

• Creating urban places with mixed use density and high connectivity is the first step to attracting new jobs and residents

• The best economic performance in the modern city is to be found in walkable urban precincts
  – Christopher Leinberger

• Western Sydney lacks walkable urban precincts – addressing this imbalance is not a minor matter of urban design, but a serious strategy for economic renewal and spatial inclusion
Challenges in Australia

• Australian cities are not very walkable

• Governments are relying on the construction of sprawling peri-urban housing estates to accommodate large increases in population

• We are designing active transport out of large parts of our cities
If we valued walking and active transport in appraisal, we could stop building place like this.
Winston Hills, Sydney
Why people don’t walk in Aus cities: we have designed walking out ...

• First we shape our streets then they shape us
• Corner store less than 5 mins walk: we walk
• PT/light rail in Charlotte; within year people nr it were walking 1.2m a day extra and lost 6 kilos.
• People don’t walk in aus cities because we have designed destinations out of reach; kids put on weight in summer hols in aus....
• Does getting to a grocer’s or a doctor or a restaurant without a car seem like a pretty big burden? Can your children walk or cycle to school safely on their own? If you think these are unreasonable questions then choice has been designed out of your area
• Public transit revolution?
• Compact city?
• Retrofitting suburbia
We even know the street pattern to report to The Bill
Street layout impacts accessibility

Auburn
5 kilometres SE of Parramatta
Grid street layout
234 hectares can be reached

Winston Hills
5 kilometres NW of Parramatta
Circuit and cul-de-sac street layout
82 hectares can be reached
Street pattern (cont.)

• cities with more compact street networks—specifically, increased intersection density—have lower levels of obesity, diabetes, high blood pressure, and heart disease. The more intersections, the healthier the humans.

• older, denser, connected cities were killing three times fewer people than sparser, tree-like cities on an annual basis.

• “It might not be common for people to explicitly contemplate health when selecting a place to live,” Garrick and Marshall write, “but this research indicates it is worth considering.” Here’s where you should live....
We need

• ‘density done well’, PT revolution, shared streets, retrofit suburbia
• Town centre renewal/Unis and jobs as well as homes
• New appraisal process: green, walkable as foundational
• Governance reforms: metro scale
Density? What do people object to

- Architecture? Not really. Proxy for what they don’t like
- Value erosion/quality of life/amenity
- No parking/place on bus/school place/doctor/destroy public realm(green)
- Like affordable housing for their own children...
- Growth without infrastructure: GSC help?
- No deep engagement: done to not with: and ‘developer wins whatever’ suspicion
- Developers think opposite: adversarial culture
- Poor quality of what results: density done badly/promise of density not delivered
Getting communities to buy into density

Sam Sims and Nicolas Bosetti, The Centre for London

Stopped: Why people oppose residential development in their back yard
But we do have a historical legacy of medium/quite high density housing – like in Paddington: 80-90 dph+
But do we mean this
And streets around: who can help us move from this

Rue St.
To this: architecture didn’t change; collaboration across govt plus green inf
Density done well: acceptable growth via green agenda

• Good quality green space improves the image of an area
• Higher-density development needs to be matched by an increase in the quality and range of green spaces
• A high-quality public realm is a powerful means of transforming the image of a depressed area
• Well-designed green space can become the centrepiece of future urban developments.

• An ecological approach to landscape design can be the basis for new development. This approach has a strong resonance with the public and can also be used for branding and promotion.
Reframe Value:
The Benefits of Green Infrastructure/Money does grow on trees: and helps social license to grow city

• “Our work not only shows that the economic returns of environmental investment are comparable and sometimes greater than those of conventional infrastructure investment, but also that the cost of not taking action can be huge.”

• Final Natural Capital Committee Advice to Government (September 2015)

• A considerable barrier facing green infrastructure is our inability to account for its social, environmental and economic value in ways that can help inform decision-making. Traditional business case metrics are not very good at measuring the benefits resulting from complex interactions, environmental externalities or benefits that cannot be readily measured in monetary terms.

• As a result, one of the most powerful arguments in favour of green infrastructure – the provision of multiple benefits – works against investment in green infrastructure. This is because it is often difficult to link the specific cost of investment to the overall value of the different outcomes.

• New approaches to properly valuing the services and benefits provided by green infrastructure are reliant on access to good quality data.
This is sometimes missed: area value uplift

- Since Bryant Park in New York was improved:
  - commercial rental values increased by 220%
  - house prices increased by 5-7%
  - properties within 2 blocks were more highly valued than equivalent properties further away (CABE Space, *Does money grow on trees*)
  - Value Capture for Public Sector is the challenge as the gains can be privatized while costs socialised
Sydney green grid

Who: Government Architect’s Office

Aim:

• Conserve, improve and expand Sydney’s strategic network of open spaces
• Integrating public transport and connecting residents with open spaces and other recreational opportunities
• Reinforce a sense of place in Sydney’s subregions through enhancing open space quality
• Safeguard and plan the green infrastructure of Sydney and promoting multifunctional nature of open spaces

Policy mechanism:

• Influencing planning strategies
• Embed in urban transformation projects

Green Grid Parramatta Pilot, NSW Government Architect’s Office
Town Centre Renewal

• Much of the benefit of agglomeration of EJD can also be addressed by ensuring the benefits of urban density are spread more evenly.

• There is clearly scope to increase the density of jobs (and people) around transport nodes and in existing town centres in Western Sydney to make the area even more attractive for the higher-end service jobs.
Outcomes to aim for to reduce divides in Sydney while maintaining the city’s momentum

• Fostering number of innovation districts

• More walkable neighbourhoods linked to renewed mixed-use town centres

• Increasing effective job density of Western Sydney as a key objective

• A city-wide modal shift towards public and active transport

• More dens urban settlement across Sydney, but especially close to jobs and transport hubs
Walking as foundation of policy

- Transportation planning should accommodate the pedestrian as a foundational element of mobility and access. Policy should prioritize the pedestrian for all trips of distances of one mile or less.
- Transportation planning should seek opportunities to provide safe, secure modal choices that contribute to healthy lifestyle choices.
- Mass transit has the potential to guide compact, mixed-use, walkable development patterns that can lower housing and transportation costs, while providing choices to people of all ages and abilities to improve mobility and access.
- Support a revision of federal and state appraisal processes to give at least equal weight to land use in the selection of a preferred transit alignment as well as measures of cost efficiency. In this way we can secure broader community goals for economic development, community livability, and social equity.