$1.4 billion economic benefit
walking + cycling for transport

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Summary

1. **Urban development in Adelaide**
   - Attracting jobs + skilled workers to Adelaide/SA
   - Supply + upgrade of infrastructure + housing (300,000 people in 15 years)
2. **Why cycling + walking matter**
   - Cheapest effective solution
   - Economic benefits including health
   - 'Low-hanging fruit'
3. **What needs to be done**
   - Plan, build, encourage, co-ordinate

Economics of cities

Cities are **highly productive:**

- Adelaide produces **79%** of state **GDP** ($60.4bn vs $16.2b) Grattan Institute 2014

Cities are **where people want to live:**

- **77%** of SA's population lives in Adelaide
- Adelaide one of **world's most liveable cities**
- Yet only **1.2%** of 457 visas for Adelaide ?!

Transport in South Australia

PROBLEMS

- Traffic congestion at bottlenecks, safety,
- High level of private car use
- Expensive proposals

SOLUTIONS

- 'Transport' solutions about 'people + place'
- Space + time efficient transport
  - Bicycles and pedestrians
  - Public transport (w good catchments)

Economic development + transport

www.transport.govt.nz

Future Demand
Summary report

Economic Development and Transport
Summary report

> VISION
> OBJECTIVES

2. Why cycling + walking matter

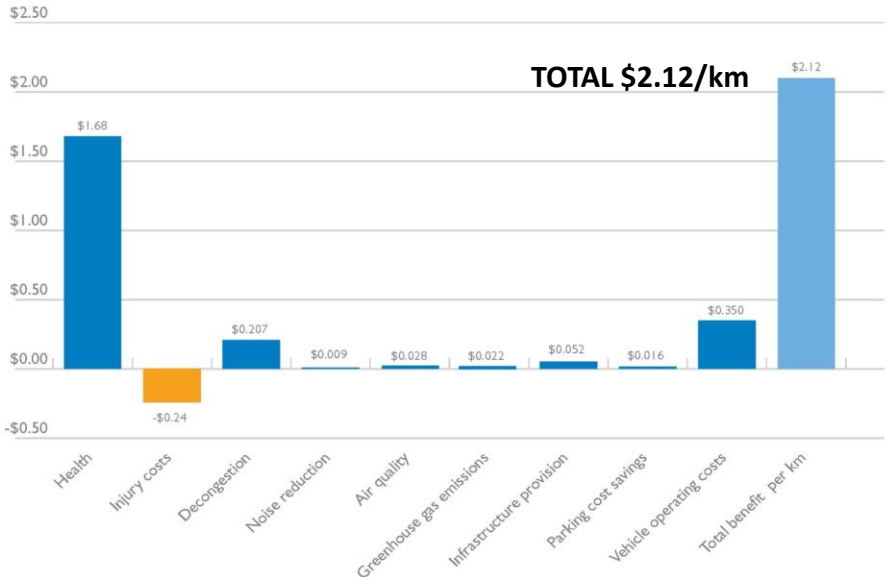
- Economic benefits
- Low-hanging fruit
- 'Bullcreek Syndrome'
- Equity

Why walking matters

- Most Australians walk at least once a day
- Almost **every journey by public transport** starts and ends with a walk
- Walking is excellent **preventive health** tool

Why walking matters

Figure 1.2 Benefits per kilometre walked, for an average project



Data: 2010 figures by Qld DTMR, reported in federal 2013 WRAPT paper

Why walking matters

Walking to work benefits the economy:

376,921 people walk daily to work (Census 2011)

x 2.0 km return trip (1km average each way)

x $2.12/km benefit to economy

= $1,600,000 benefit to the economy

"$1.6 million a day from walking commuters"

x 260 working days a year

= **$416,000,000 / year** to economy

"$416 million a year from walking commuters"

Why walking matters

Walking to public transport benefits the economy:

746,479 people used public transport (Census 2011, BITRE 2014)

Excludes 290,778 who used PT and 'another method'

x 1.6 km walking distance (400m each way x twice)

x $2.12/km benefit to economy

= $2,530,000 benefit to the economy

"$2.5 million a day walking to public transit"

x 260 working days a year

= **$658,000,000 / year** to economy

"$658 million a year walking to public transit"

Space efficient

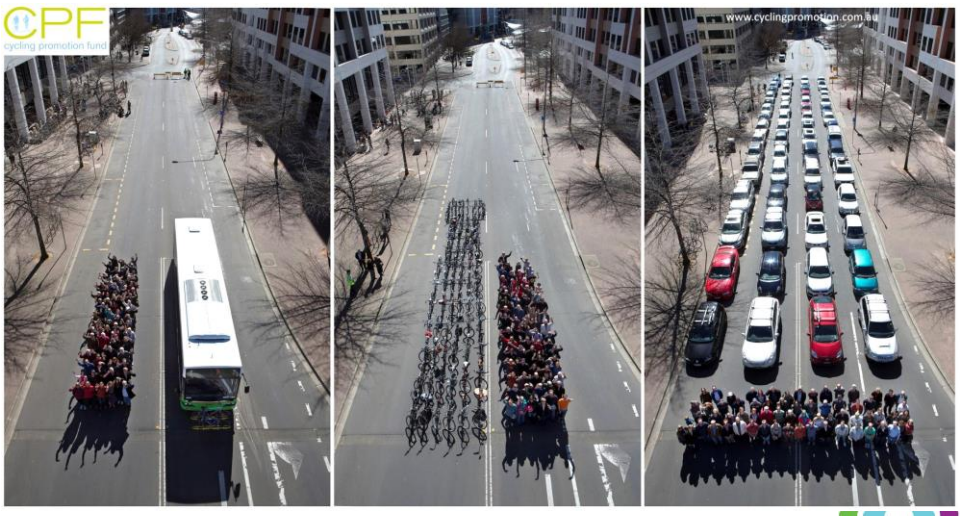


Photo by Cycling Promotion Fund, Canberra

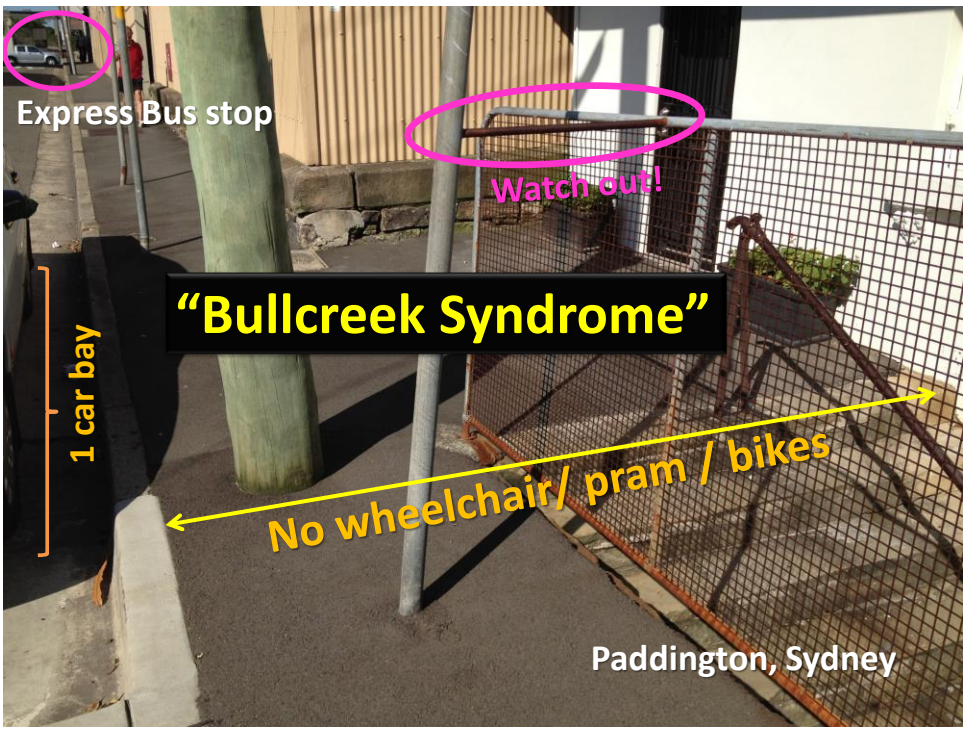
Why walking matters

So why do we make it so hard?

'Walking' **largely ignored in transport policy**

- 'Disability Access' regs **WITHIN** public transport (eg. at bus stops)
- Not **TO** public transport in public domain

Walking seen as 'local government' problem



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Why walking matters

"The **distance** people will walk to transit depends on the **type of transit service,** but even more, on the **quality of the walking experience**."

Brent Toderian, Twitter, 10 Aug 2015

Why cycling matters

4.0 million Australians ride a bike **every week**

=17.4% of the population

8.3 million Australians ride at least once a **year**

WHY cycling matters

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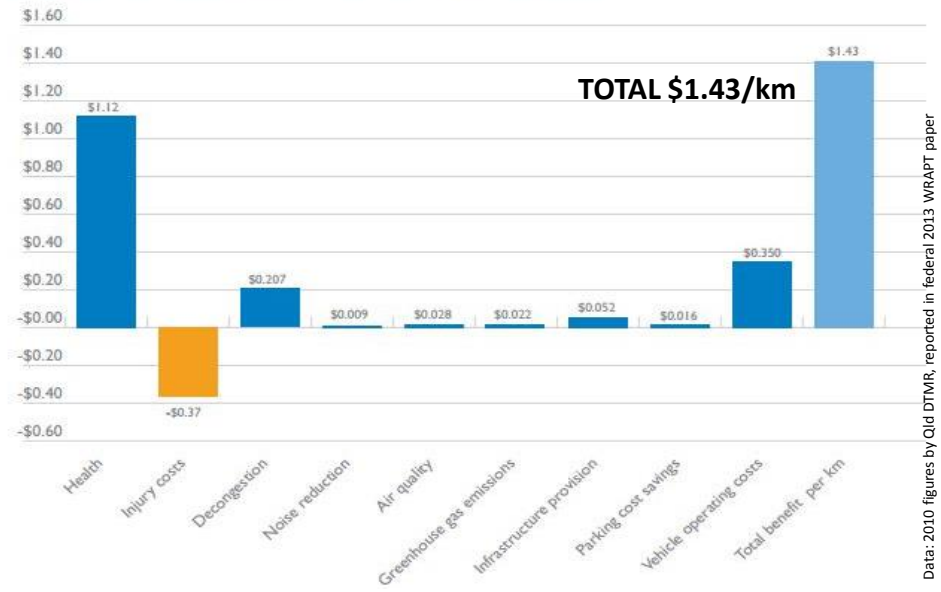
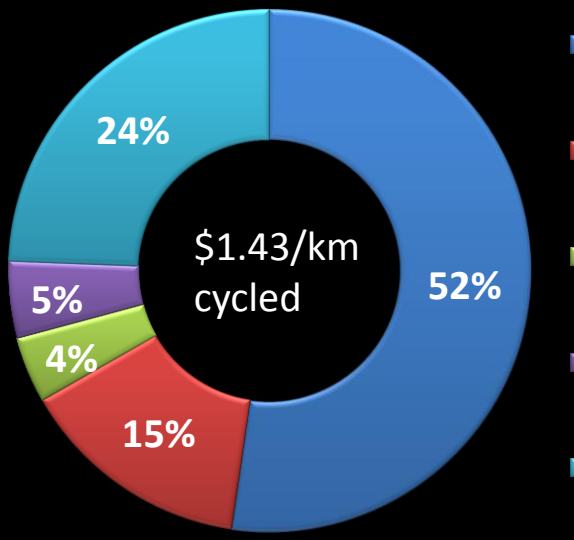
ACTIVE STREETS VIBRANT PRECINCTS

Figure 1.3 Benefits per kilometre cycled, for an average project



Data: 2010 figures by Qld DTMR, reported in federal 2013 WRAPT paper

Economic benefits of cycling for transport



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WHY cycling matters

Cycling to work benefits the economy:

103,893 people cycle daily to work (ABS 2012)

x 9.2km return trip (4.6km average each way, Charting Transport)

x $1.43/km benefit to economy

= $1,370,000 benefit to the economy

"$1.37 million a day from bike commuters"

x 260 working days a year

= $355,000,000 / year to economy

"$355 million a year from bike commuters"

AT = $1.43 billion every year

Savings to the national economy by "active travel commuters":

Cycling	$355 million / year
Walking	$416 million / year
Walk to PT	$658 million / year
TOTAL	**$1,429 million/ year** (in 2011 figures)

"Active Travel saves the national economy

$1.43 billion a year"

AT = $1.43 billion every year

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The next $ billion?

The next $1 billion?

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We could save a further $1 billion

by convincing 350,000 adults to swap 2-3 hours/week driving to cycle/walk

(ie. 40km/week cycled)

Low-hanging fruit:

a) 'Interested but concerned' cohort
b) Living < 5km from work/study
c) Living < 2km from major transport hub

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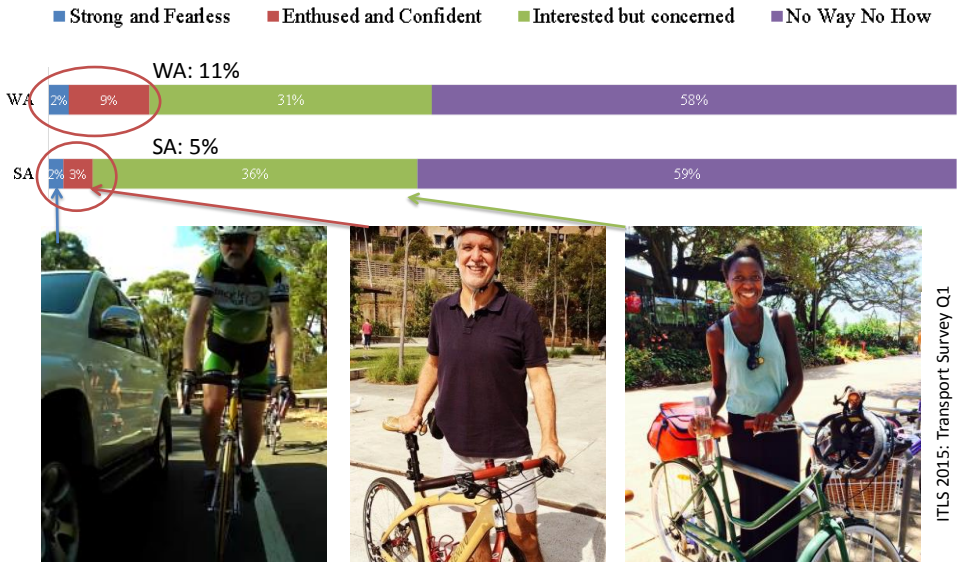
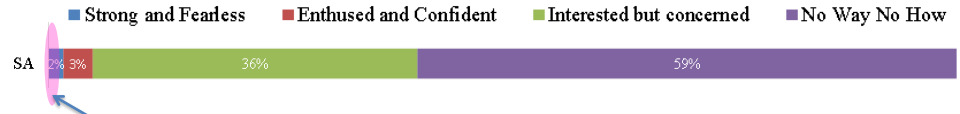
Roger Gellar scale

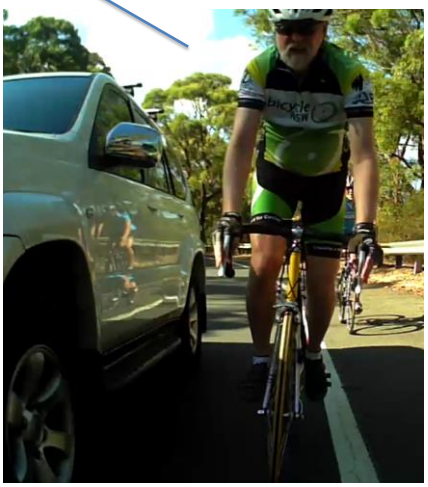
How would you categorise yourself as a bike rider?



ITLS 2015: Transport Survey Q1

Beyond 'Strong + Fearless'





Cycling to work or study…

~ 1% mode share in Adelaide
'Strong +Fearless' only

In some locations up to 11% =
'Enthused + Confident'
'Interested + Concerned'

ITLS 2015: Transport Survey Q1

Low-hanging fruit

b) **People who live close to work/study**

~ 600,000 (14%) live < 5km from work

~ 700,000 (16.5%) live 5-10km from work

= **1,300,000 adults live < 10km from work**

Most of them drive.

If a quarter (350,000) swap 2-3 hours/week driving to cycling, we'd save $1 BILLION annually

(ie. 40km/week cycled)

4,273,000 people drive to work daily (Census 2011)

Low-hanging fruit

c) Leverage **public transport** assets by expanding **catchment potential**

ie walk/cycle to train/tram/bus stop

"Bullcreek Syndrome"

(ie. 40km/week cycled)

One problem, however, is that local street networks don't always support good walking or riding connection to train stations. At Bull Creek station, some houses are only 260 metres from the station in a direct line, but require a walk of up to 1570 metres along the footpath.

Mawson Lakes Syndrome?

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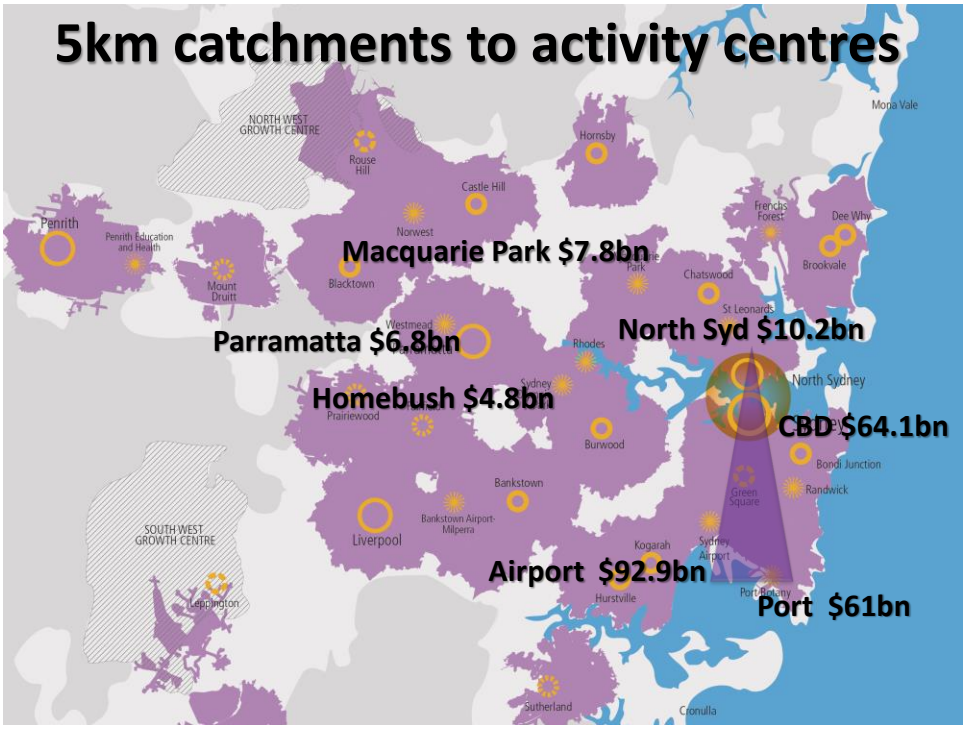
What needs to be done

1. PLAN
2. BUILD
3. ENCOURAGE
4. CO-ORDINATE

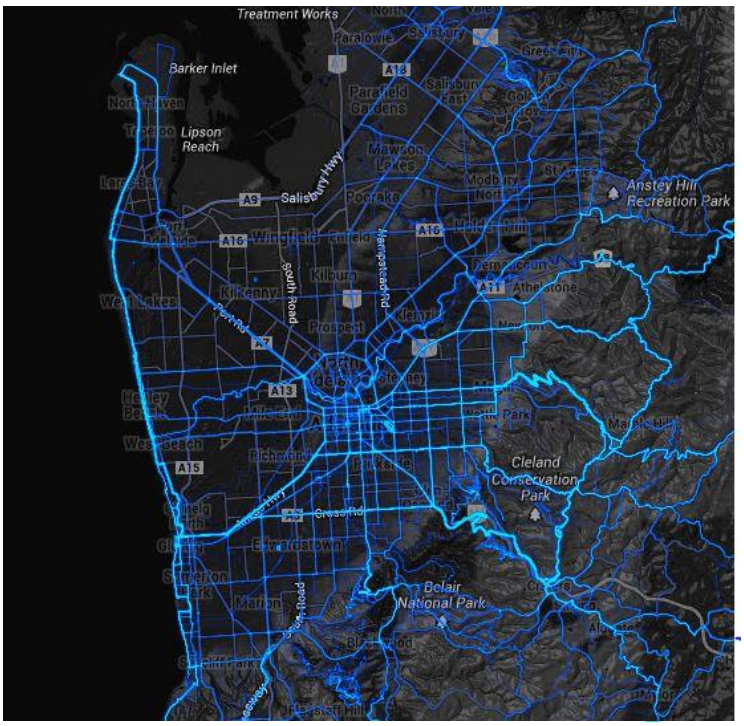
1. PLAN

Include walking + cycling when planning for **all** land use and transport:

- Networks of continuous, convenient connections
- Focus on 20-minute catchments
  - 5km bicycle ride / 2km walk
  - Bus stops 400m/ 800m to PT



Strava 'heat map'



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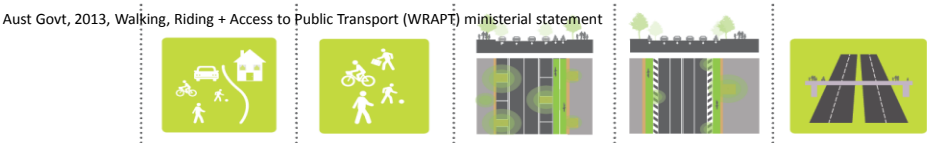
2. BUILD

Deliver appropriate infrastructure:

- Create **safe environments**
  - Separate from high-speed, high-volume traffic
  - Allocate/ Share road in low-speed, low-volume traffic
- Incorporate **when building other infrastructure**
- Leverage **public transport catchments**
- Improve **paths, intersections**, facilities
  - Prioritise bikes + pedestrians
  - Remove barriers, obstacles, bottlenecks

Aust Govt, 2013, Walking, Riding + Access to Public Transport (WRAPT) ministerial statement



Street or road type	Shared Zone with mixed traffic considered on a case by case basis	High pedestrian activity areas	Most urban roads	Urban arterial roads	Motorways and national highway network
Vehicle speed	< 20km/h	15–40km/h	40–60km/h	60–90km/h	90–110km/h
				Pedestrians + bicycles fully separated from vehicles	Pedestrians + bicycles fully separated from road environment
Consider first	Pedestrians	Pedestrians	Pedestrians on footpaths		
	Bicycles	Bicycle lane on road	Wide bicycle lane on road or shared path**		
	Public transport	Public transport	Public transport	Public transport	Freight vehicles
	Service vehicles	Service vehicles	Service vehicles	Freight and goods	Public transport
	Goods delivery	Goods delivery	Goods delivery	Service vehicles	Service vehicles
Consider last	Private vehicles	Private vehicles	Private vehicles	Private vehicles	Private vehicles

Build the right infrastructure

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Build the right infrastructure

Build the right infrastructure

3. ENCOURAGE

Encourage all ages/ groups to participate:

- **Programs and incentives**
  - Inform people of options (eg workplace travel plans)
  - Improve skills + awareness (eg driver + cycling skills)
  - Encourage kids, parents, employers, workers
  - Aspirational, positive, fun!

- **Information**
  - Good maps, route information
  - Real time information (eg bus arrival at stop)

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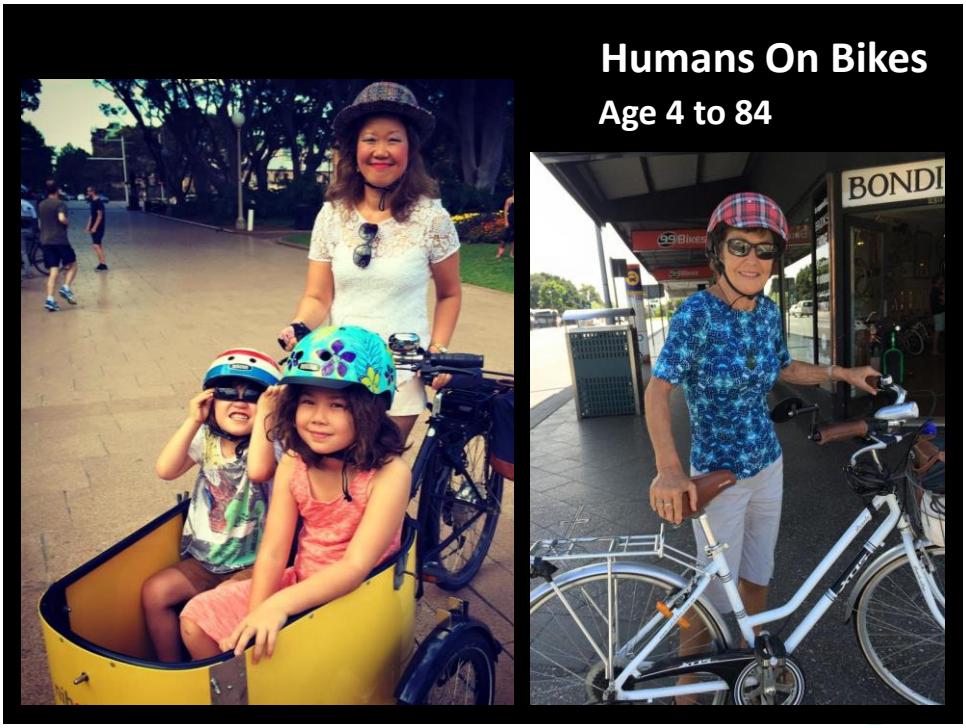

4. CO-ORDINATE

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Co-ordinate and fund **across agencies:**

- Link **plans** to **funding**
- Best practice governance, monitoring, evaluation

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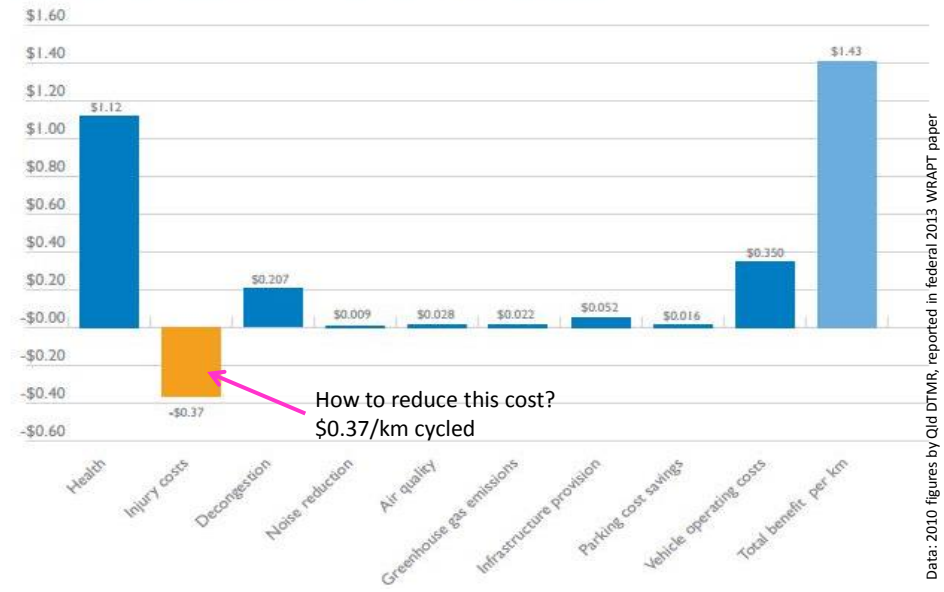
Injury 'disbenefit'

Figure 1.3 Benefits per kilometre cycled, for an average project



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Injury 'disbenefit'

103,893 people cycle daily to work @ 9.2km
x $0.37/km potential injury 'disbenefit'
= **$354,000 daily injury cost of cycle commuting**

376,921 people walk daily to work @ 2.0 km
746,479 people use public transport @ 1.6 km walk
x $0.24/km potential injury disbenefit
= **$468,000 daily injury cost of walk commuting**

x 260 working days a year
= $213 million / year 'injury disbenefit' from AT
"minimum $$ spend" ?

Contact: Sara Stace

$1 billion question

- South Australia's limited funding availability
  - Solution is walking + cycling (and PT)
- Why active transport matters
  - Economic benefits = $1.43 billion annually
  - 'Low-hanging fruit'
    a) Interested but concerned
    b) 2km and 5km catchments
- What needs to be done
  - Plan, build, encourage, manage
  - Minimise injury $0.2bn annually

Reports available from www.linkplace.com.au

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