



**HOUSTONKEMP**  
Economists

# Shaping Australia's Transport Future Through Road Reform

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Presentation to the ALGA Local Roads Congress 2017

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7 November 2017  
Albany, Western Australia

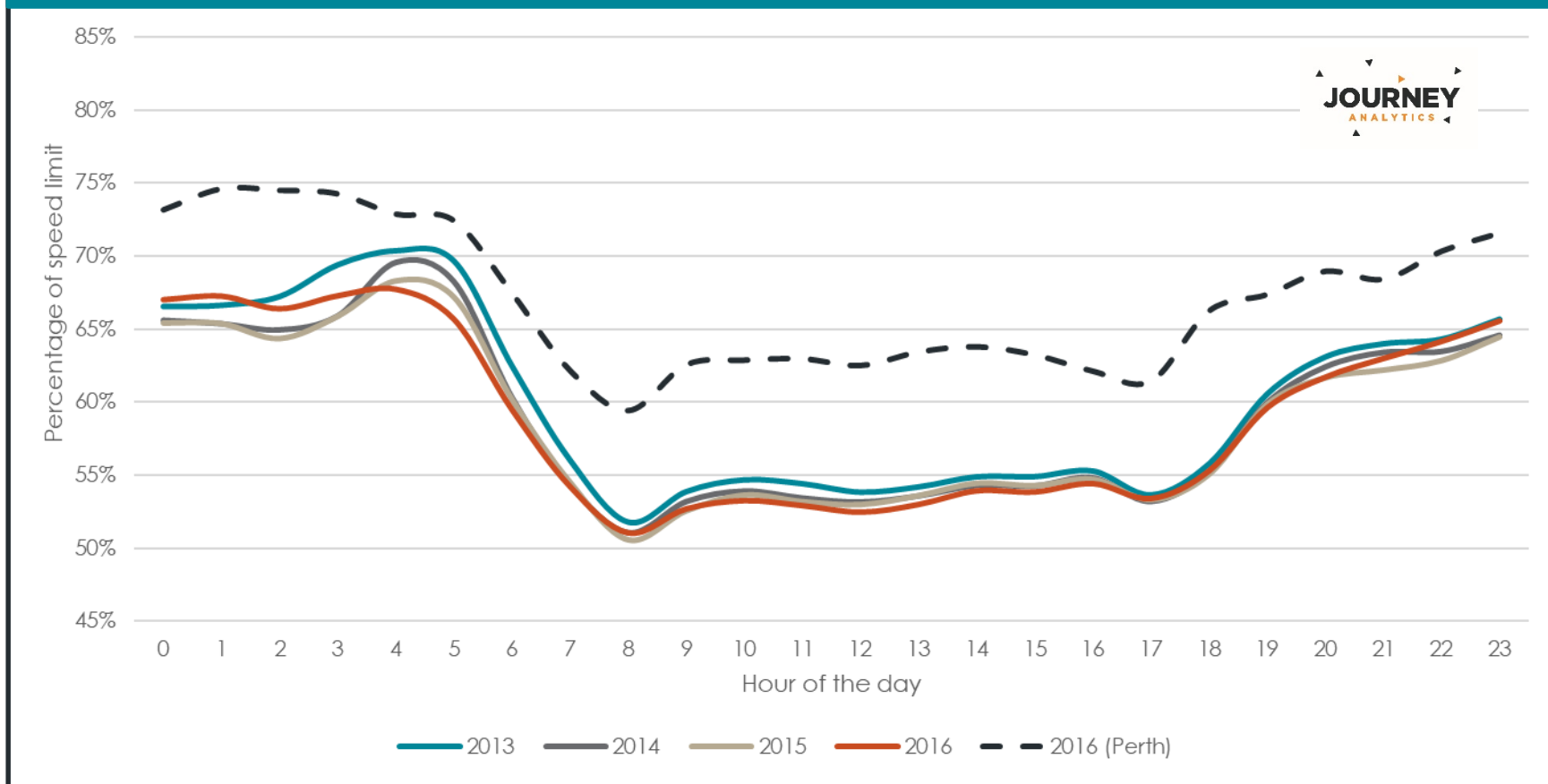


# Road network performance is deteriorating

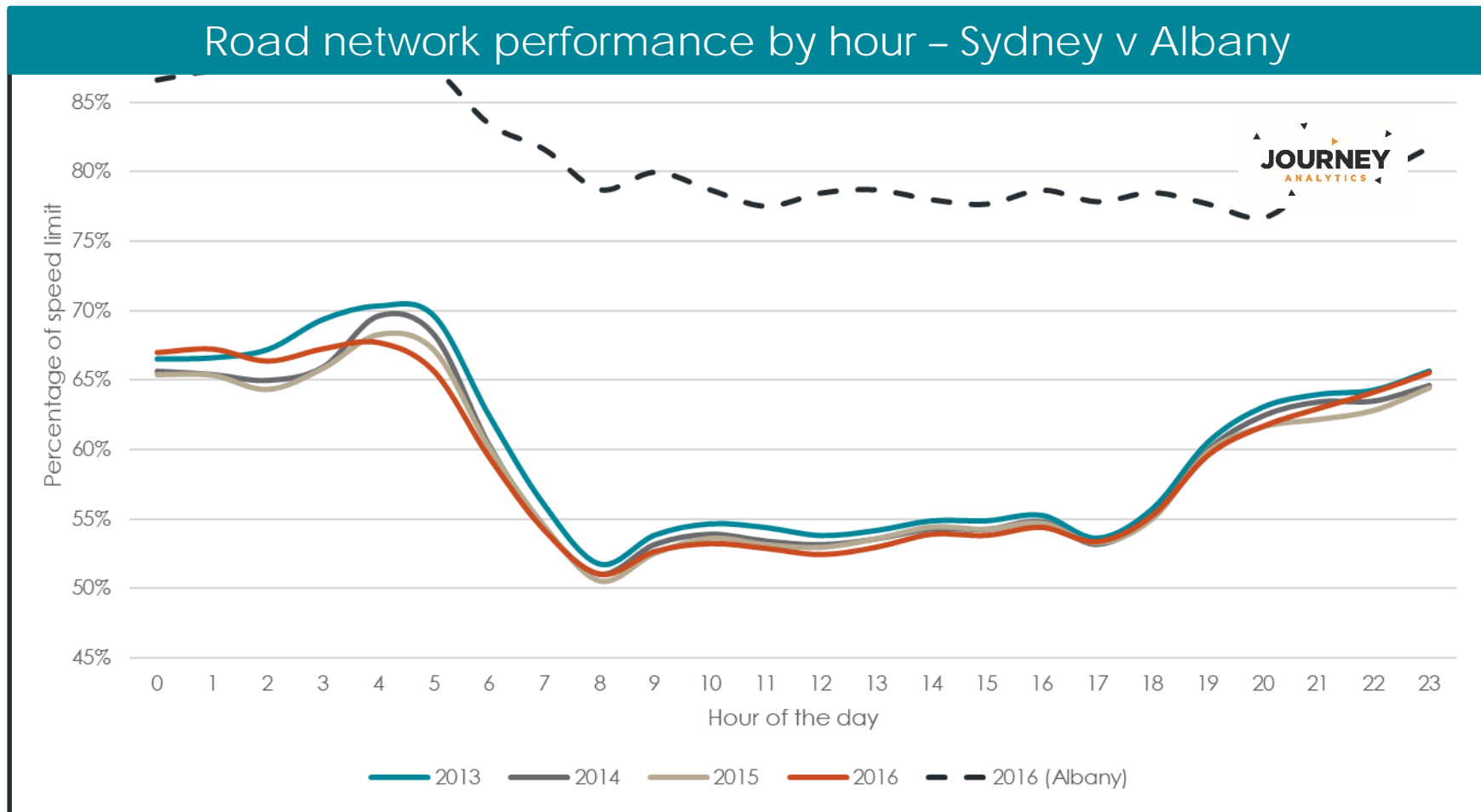
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# 2016 was the worst traffic speed year for Sydney's road network

Road network performance by hour – Sydney v Perth

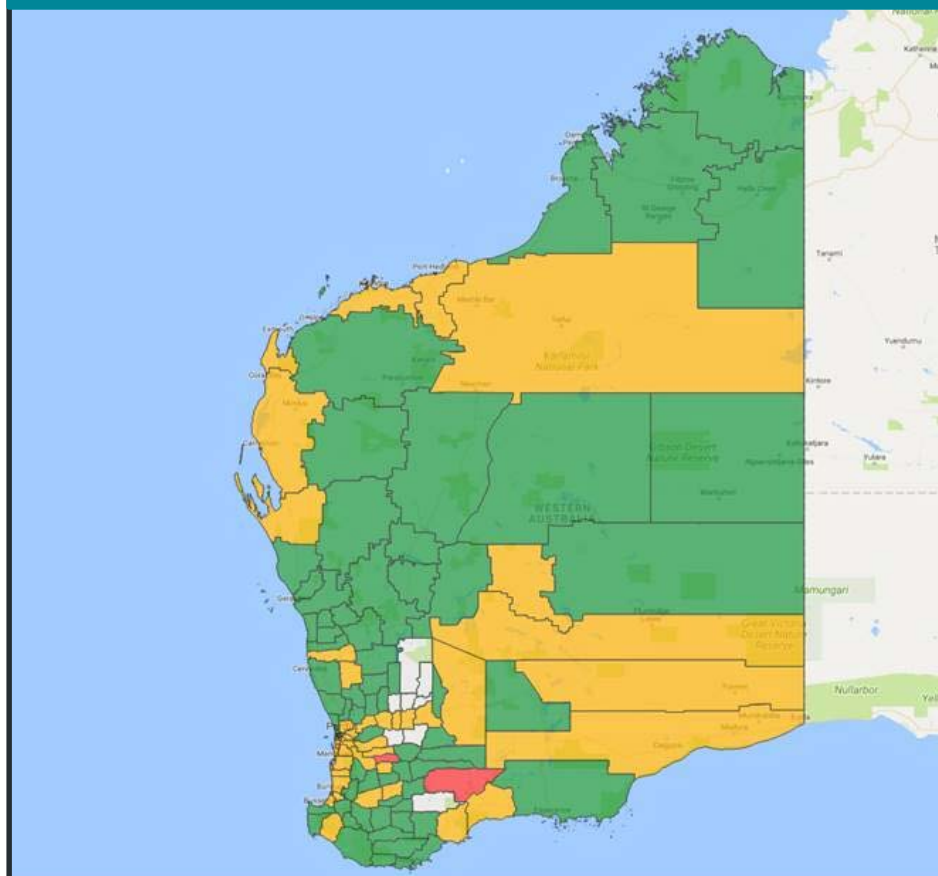


# How well does Albany's road network perform in terms of speed performance?






# Pingelly and Lake Grace were the worst areas for speeding in WA in 2016

## The extent of speeding by LGA



Albury is relatively safer when it comes to speeding, with the fastest 10% of drivers speeding 17% of the time

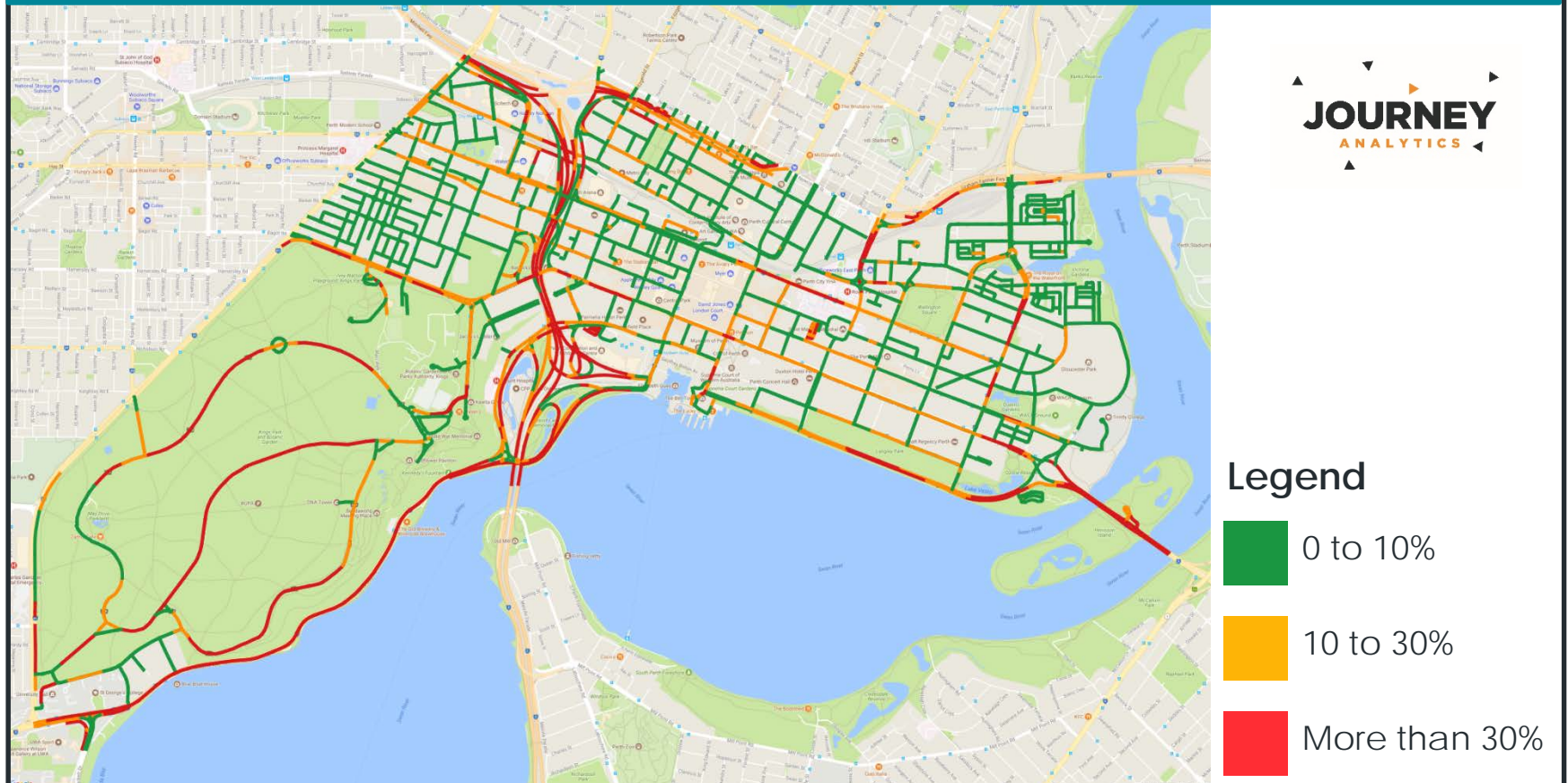
### Legend

-  0 to 20% of the time
-  20 to 50% of the time
-  More than 50% of the time



# In 2016, the fastest 10% of drivers were exceeding speed limits 21% of the time

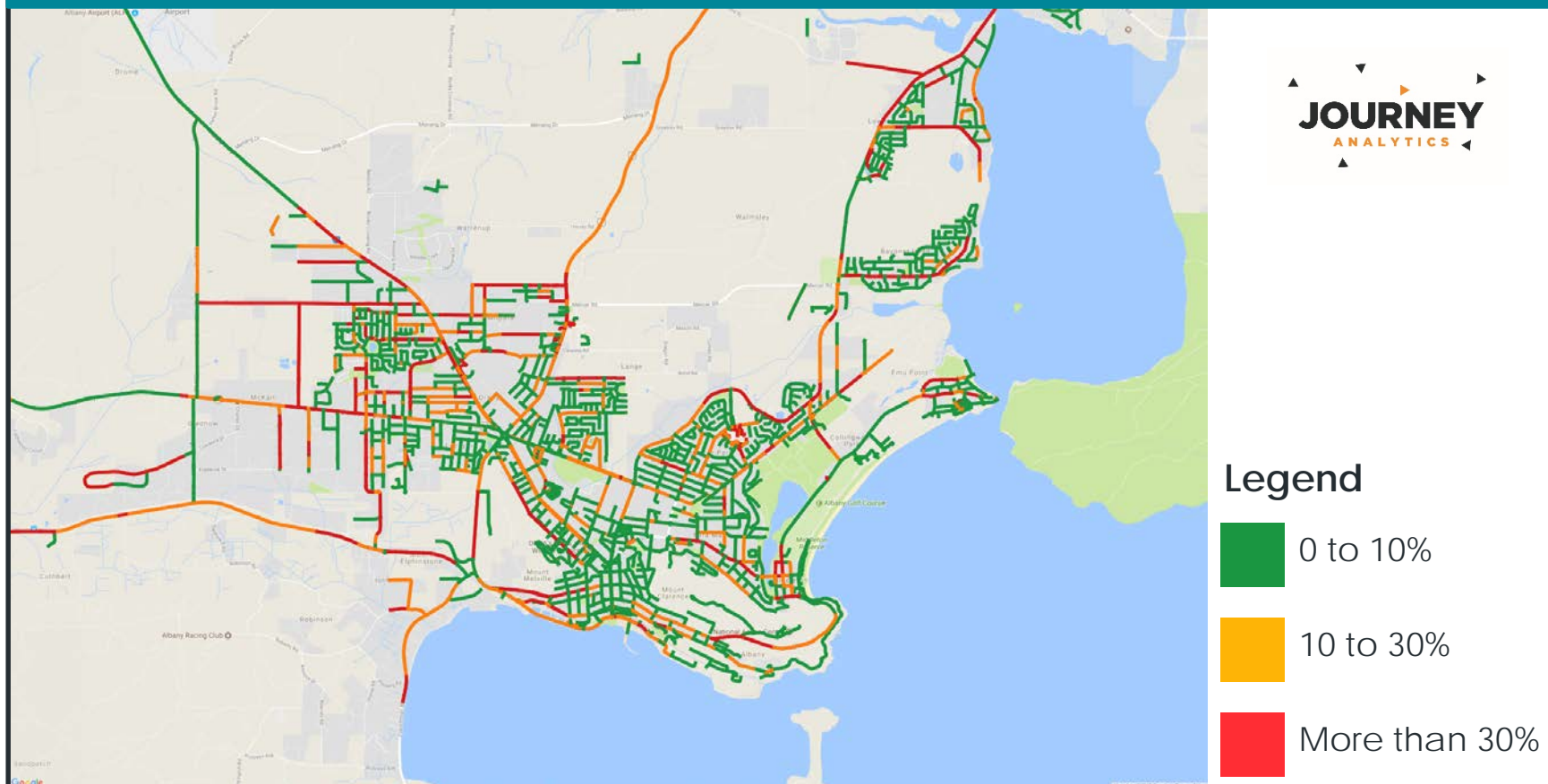
Road sections by the extent of speeding - Perth





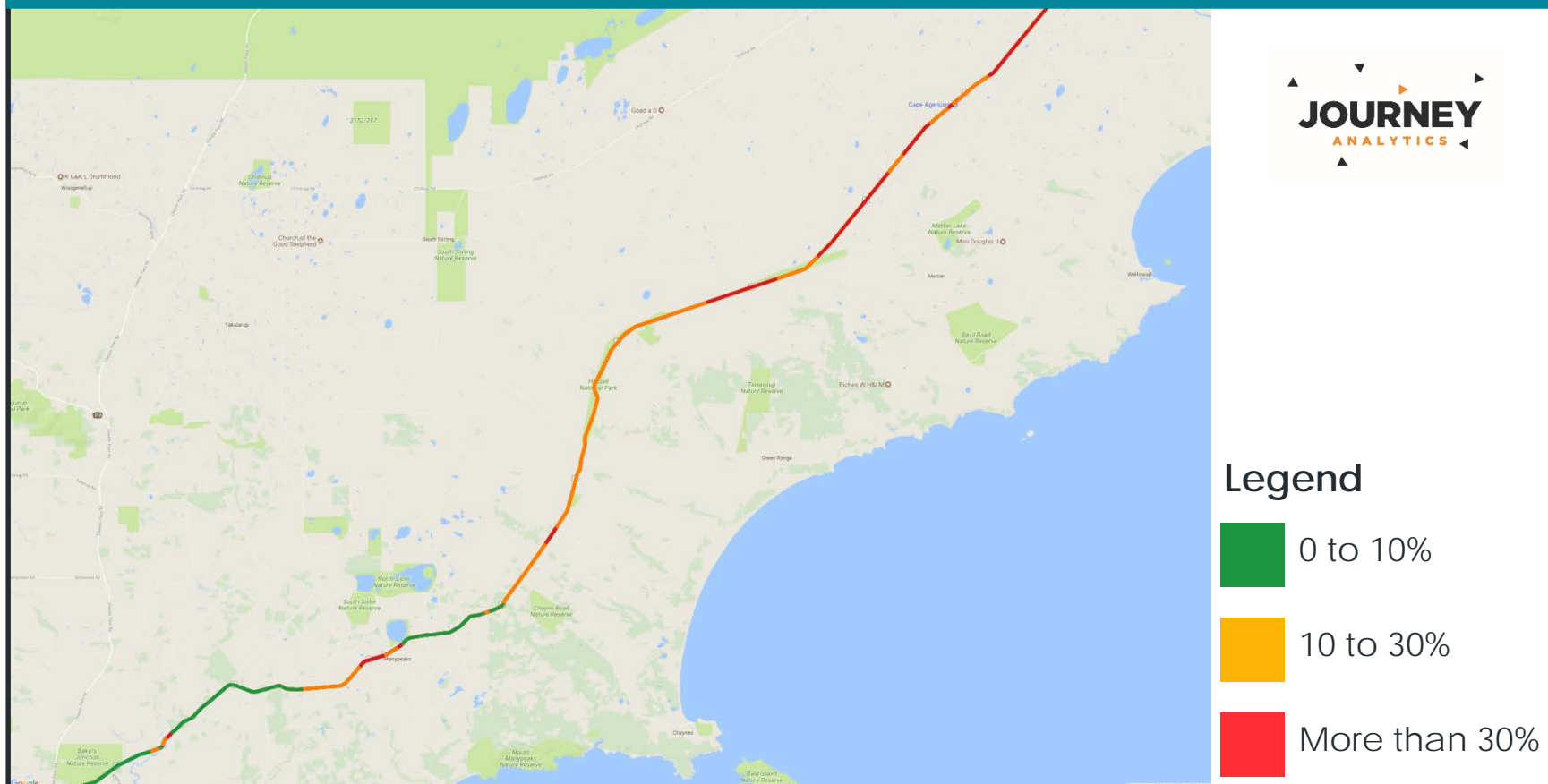
# There was less speeding in Albany in 2016

Road sections by the extent of speeding - Albany



# Which parts of the South Coast Highway had the highest speeding risk in 2016?

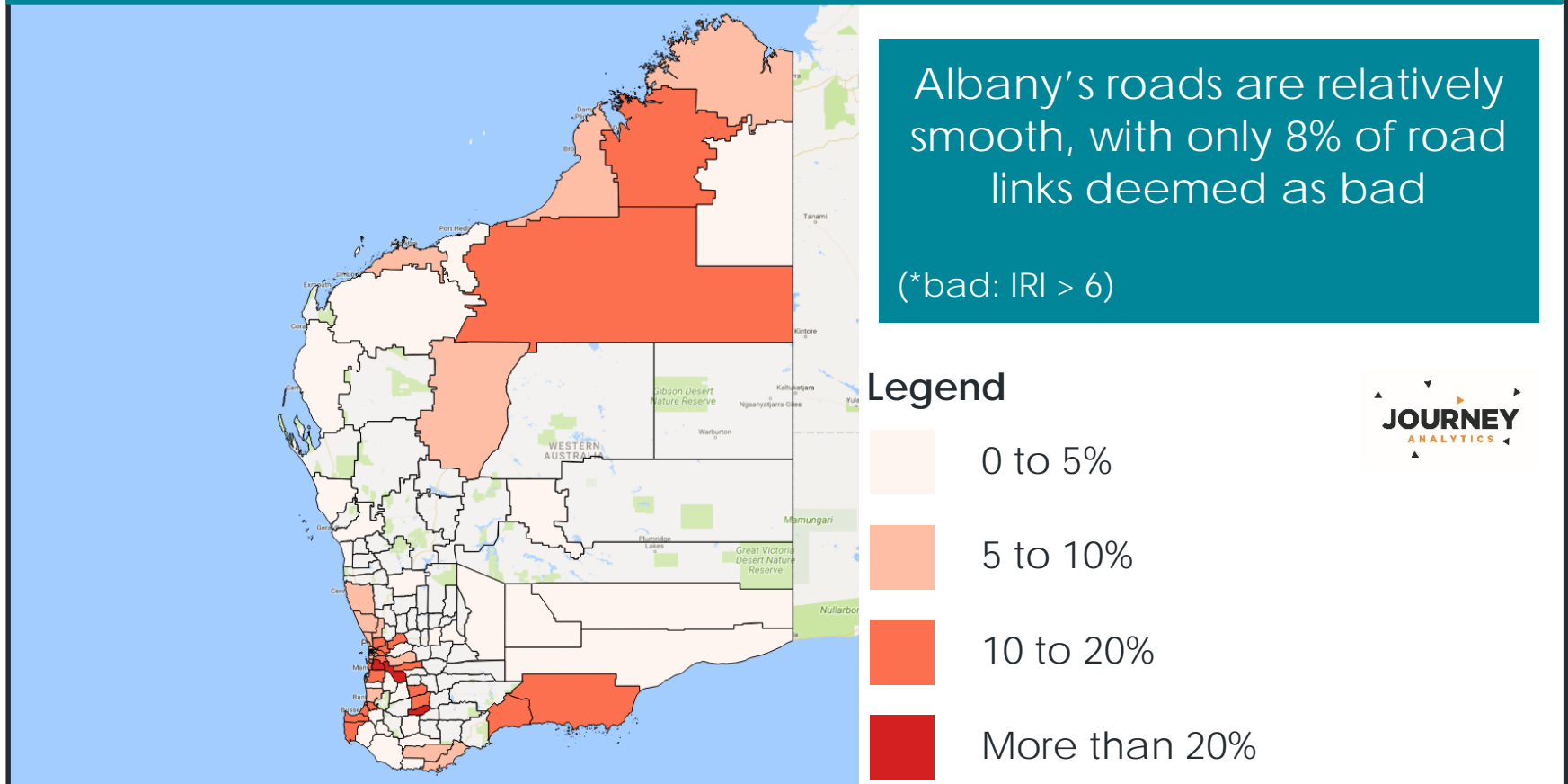
Road sections by the extent of speeding - Albany





# Systematic measures of road roughness are becoming available

Proportion of bad road links by LGA

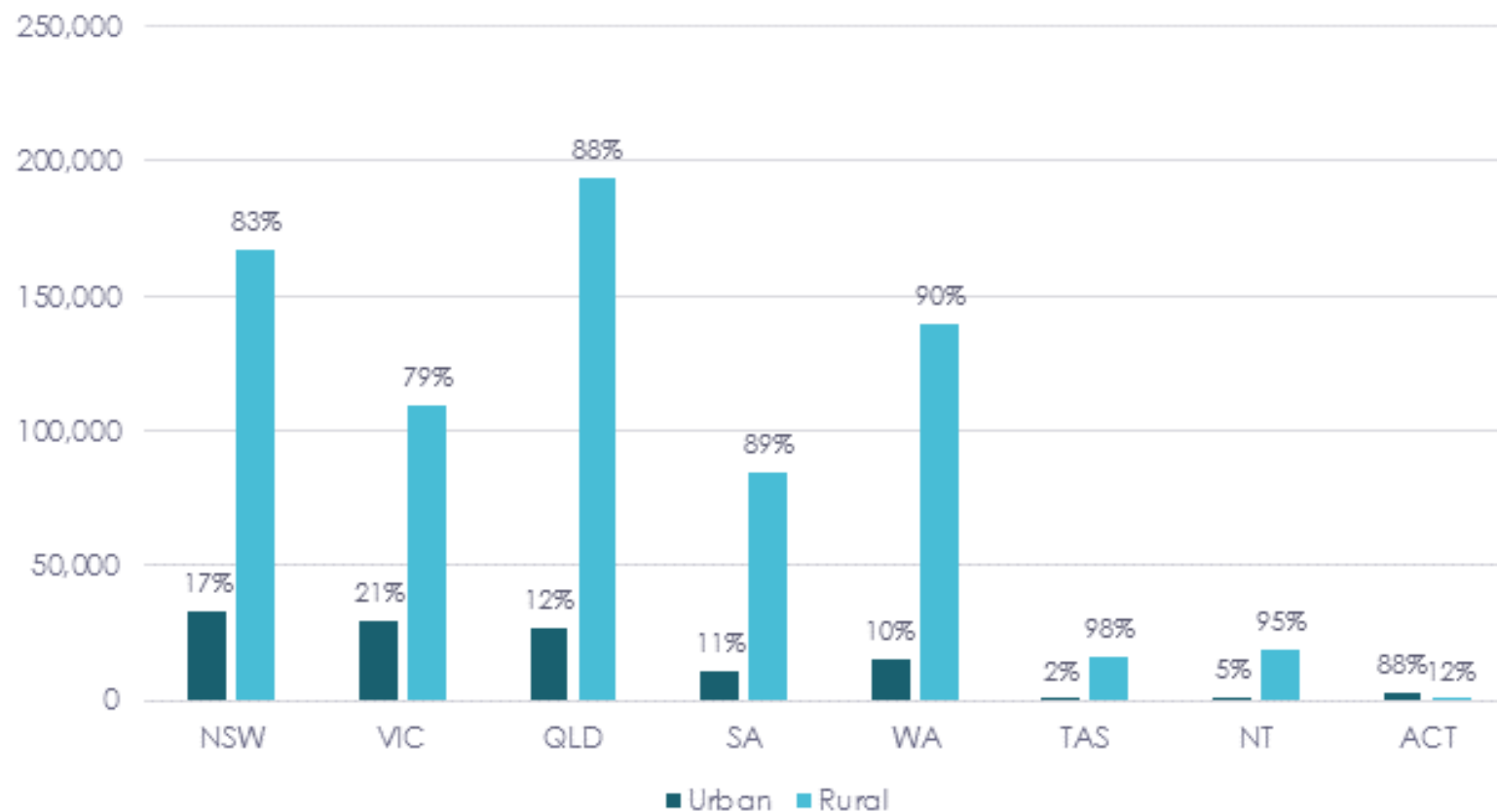


# The road funding challenge

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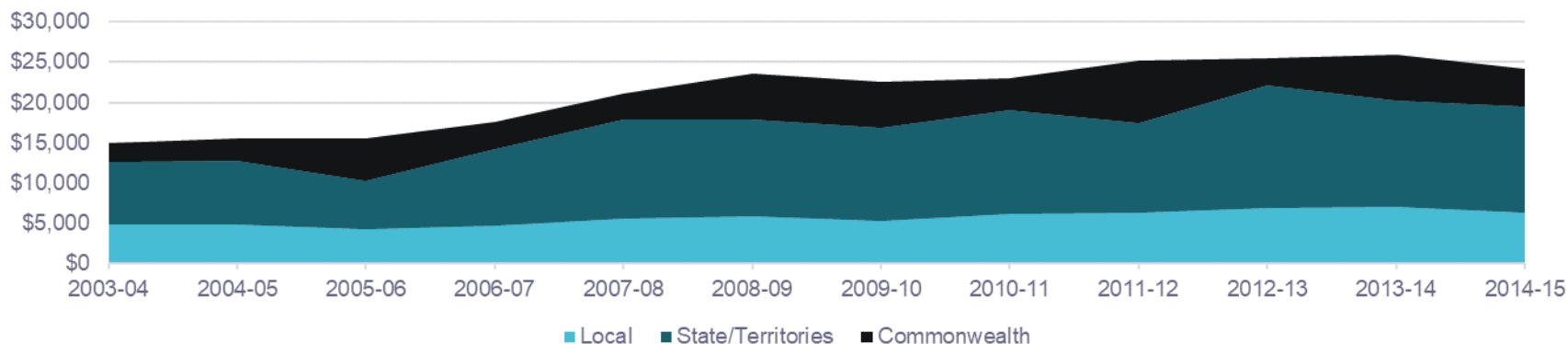
# Rural roads represent the majority of the network

Length of road network by area and jurisdiction

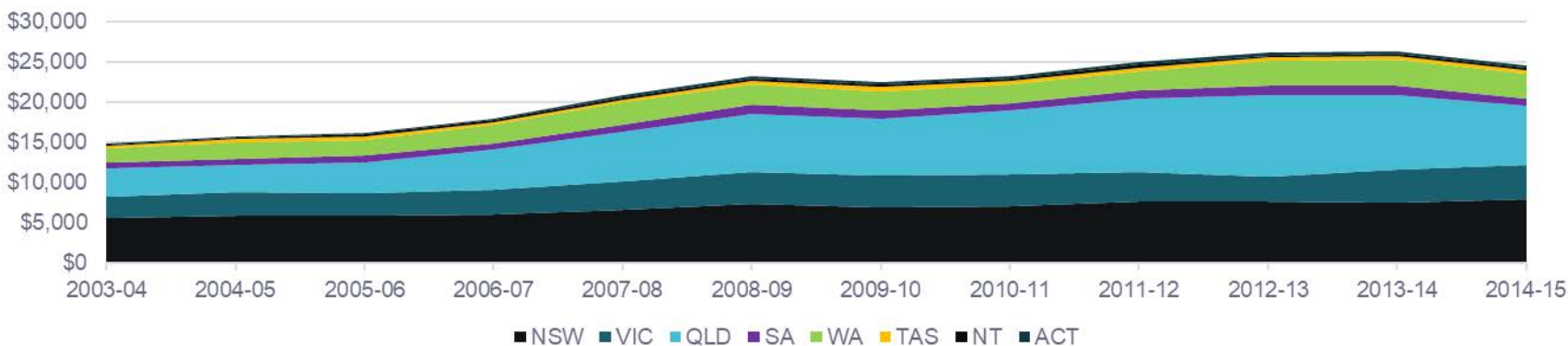


# Road related expenditure has grown significantly

Road related expenditure by level of government (\$m, 2014-15)

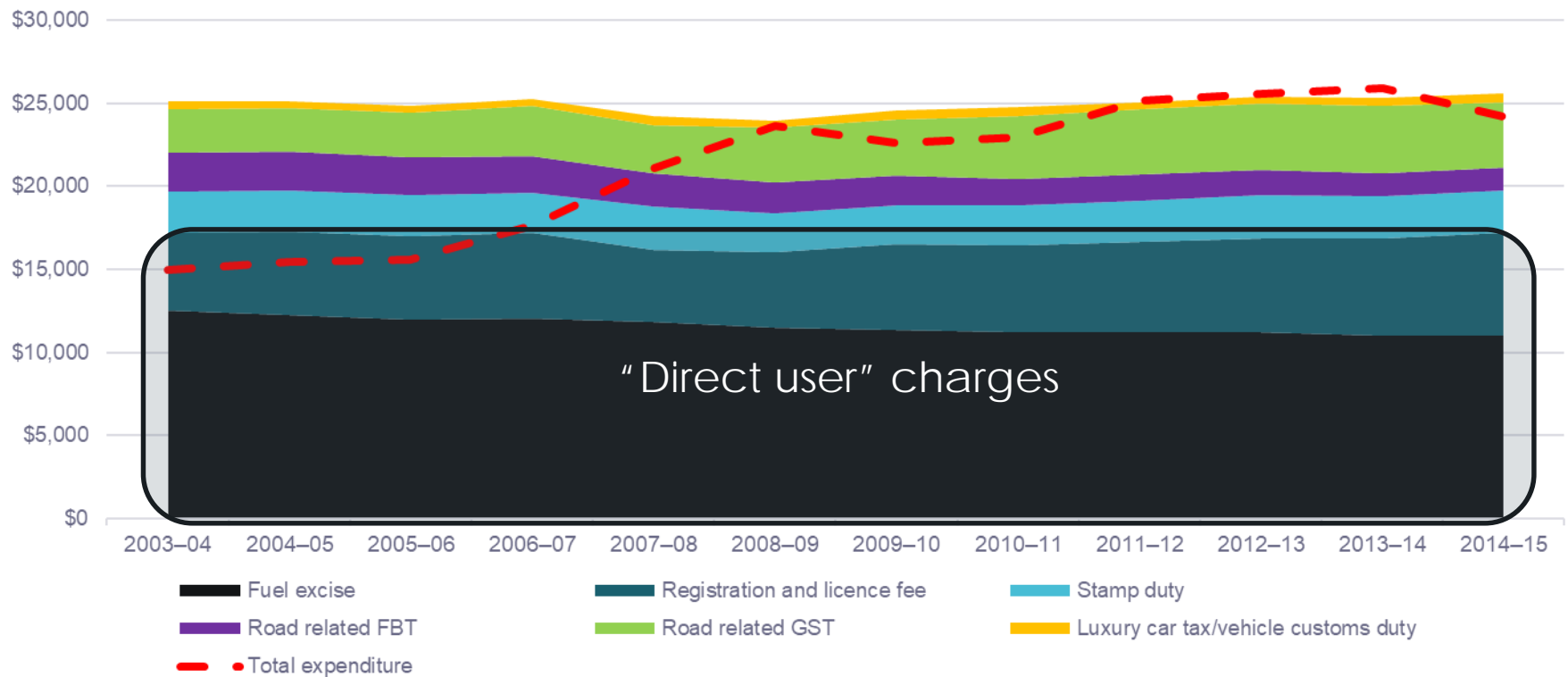


Road related expenditure by State/Territory (\$m, 2014-15)



# But expenditure exceeds “direct user” charges

Road related revenue by source compared with total road expenditure (\$m, 2014-15)

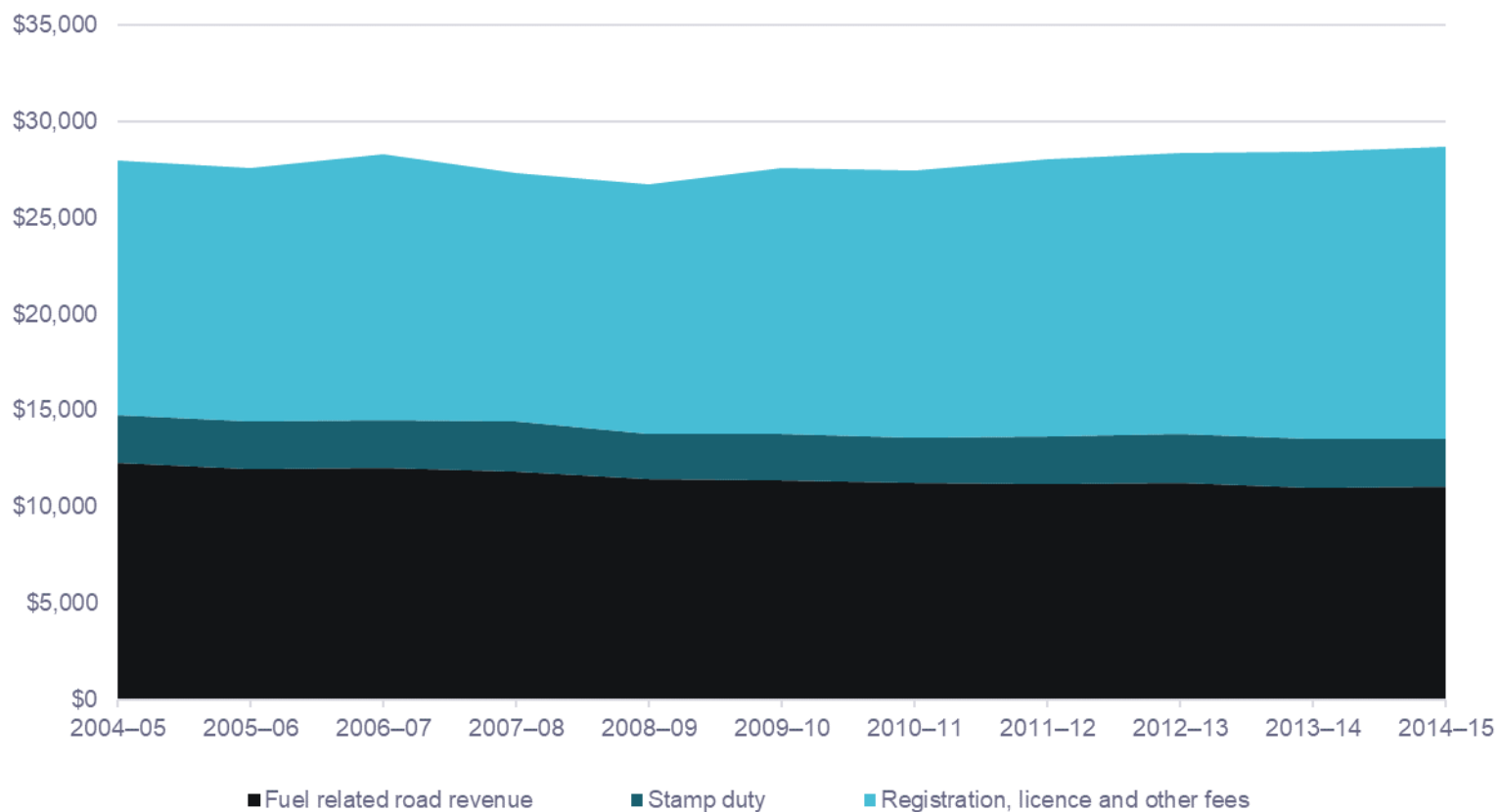


Fuel excise revenue is expected to further decline in the future...



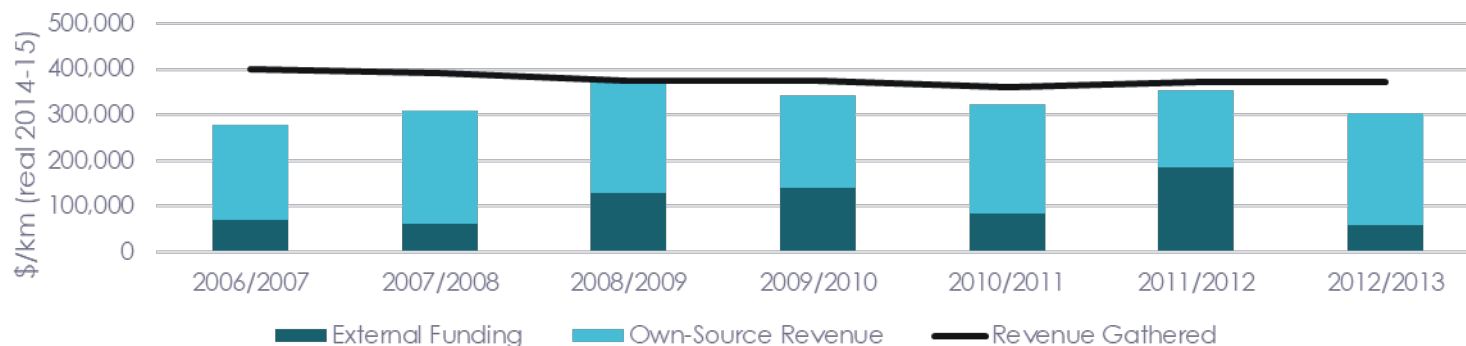
# Fuel related revenue has declined over the years

Government road related revenue by source (millions, \$2014-15)

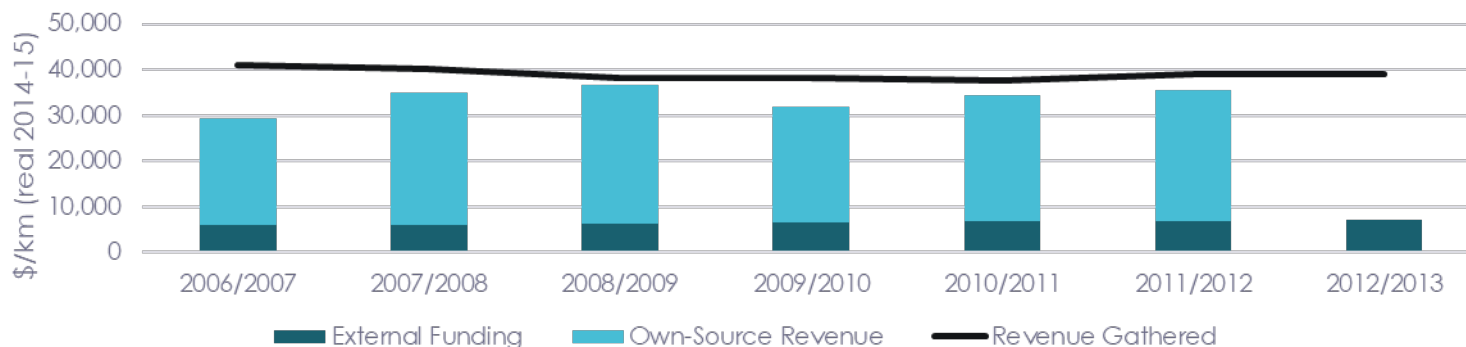


# Urban roads are 'self-sufficient'

## Urban arterial roads

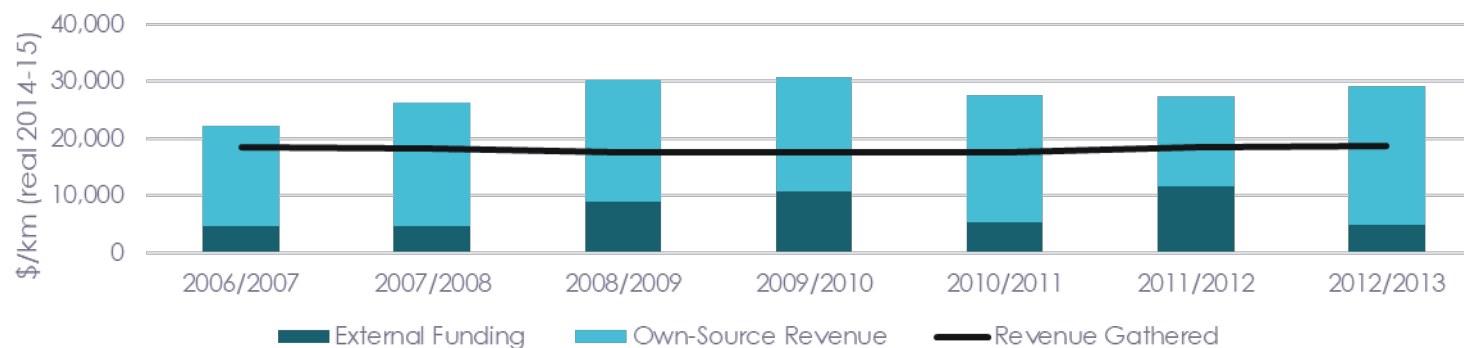


## Urban local roads

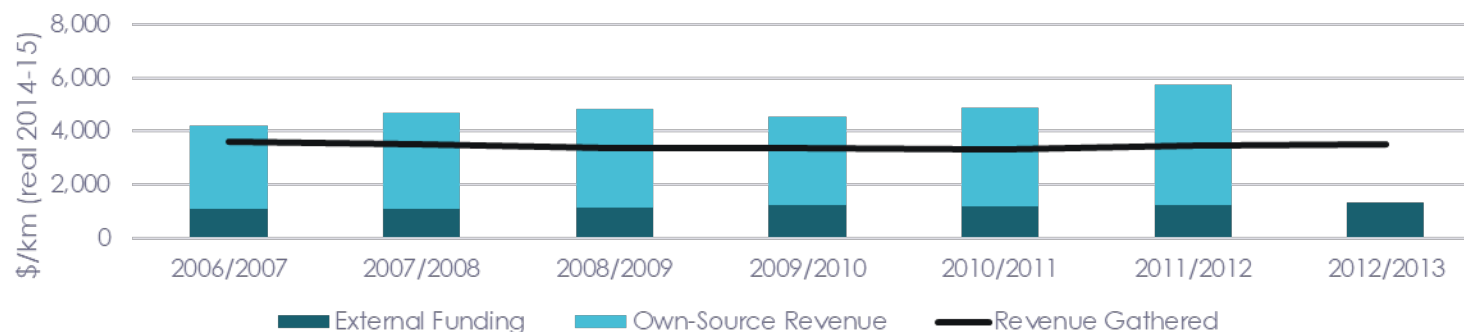


# Rural roads are not...

## Rural arterial roads

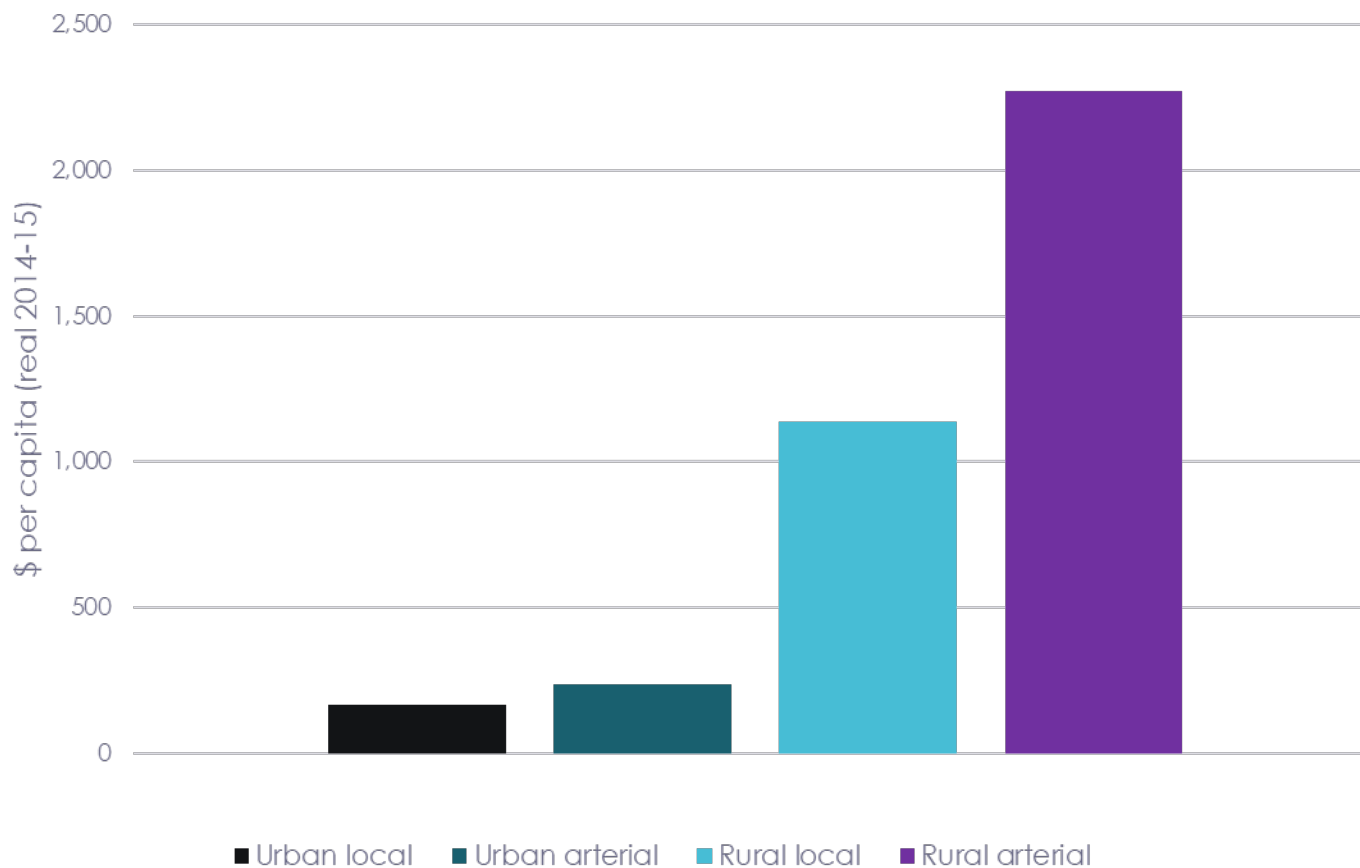


## Rural local roads



# Own-source funding per capita is higher in rural areas

Own source revenue by road type/area per capita (2008-09 to 2012-13)



# Need to consider how to fund roads into the future

Remote and regional roads represent majority of the road network, except for ACT



Expenditure has grown significantly and now exceeds revenue



Road related revenue has declined in recent years and is expected to further decline



Capacity to raise revenue from remote and regional road users is limited



**How should we fund remote and regional roads into the future?**



# Implications for local governments

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# Competition for limited road funds can be expected to grow in the future

Targeting expenditure to deliver better 'bang for buck'

Evidence based analysis to support road funding applications

How does road condition compare between regions, and how is it changing over time?

To what extent does road condition affect speeds?

How is road speed safety performance changing?

How does road expenditure relate to localised economic conditions?

# Designing road funding arrangements that can sustainably support local roads



There is a need to clarify and create certainty about government contributions to rural/regional roads



Developing a universal service obligation, and associated funding arrangement would be a good step forward



Direct user charging has the potential to provide a direct source of revenue to local governments

# Technology changes the opportunities available

## Blockchain technology

Managing counterparty risk in the logistics industry

Recording data on vehicles, drivers and movements

Support disruption in user charging for roads by providing a cost effective means of funding local roads directly



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