

Australian Government
Productivity Commission

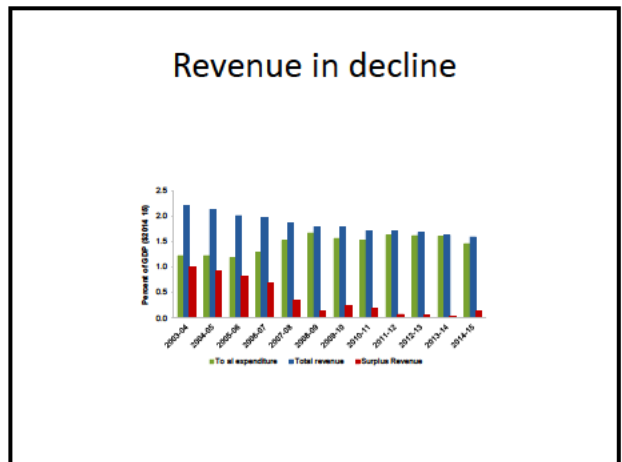
Efficiency in Logistics

Peter Harris
Productivity Commission



The biggest pressure in logistics is road infrastructure

- Water, gas, electricity, ports, airports all have some link in their infrastructure funding between charging and allocating
- Road transport is a bigger draw on capital funding than any of them, but has no effective link between the decision on what to build and who pays for it
- Roads also face the biggest prospective demand growth (due to urban costs, VTK, LCV deliveries)
- Toll roads are not a form of user pays. They are chosen by governments, and users simply cop the cost after the event (or shareholders do).
- Selection of projects should be managed by users choosing what they want built because they pay for it.



Online retail

"We will continue to focus relentlessly on our customers."

Bezos, 1997

What is this leading to?

The Amazon effect 5

US online sales

Grew from **4%** of all retail sales in 2009 to **8%** in 2017

To account for **10%** of sales in less than five years

Have grown about **15%** per year

Roughly **60 tonnes** of freight each year per person


The Amazon effect 6

> **The e-commerce bonanza**

Parcel delivery is booming

The UPS delivered **3.1 billion** packages in 2010,
and **5.1 billion** packages in 2016





... and starting to deliver on Saturdays




The Amazon effect 7

> **US freight volume**

Projected to increase by more than **40%**
... to **25.3 billion** tonnes by 2045 – **mostly by truck**

	11.5 billion to 16.5 billion	+44%
	835 million to 1.2 billion	+38%
	1.7 billion to 2.1 billion	+24%
	7 million to 24 million	234%



The Amazon effect 8

> **Australia's road freight task**

- Truck traffic to increase by around **50%** by 2031
- Capital cities account for **22%** of total freight task
- Road freight task grew **3% p.a.** over the past 20 years




The Amazon effect 9

> **US – impact on urban traffic**

Driven by people ordering **smaller amounts of goods**
with **higher frequency**

In large **metropolitan areas**

So far, reduced travel associated with shopping trips
has not offset increased truck traffic to urban areas




The Amazon effect 10

> **US – impact on traffic**

Vehicle traffic expected to expand areas of
recurring peak congestion to **37%**
of the US national highway system
by 2040

Up from **11%** in 2007



The Amazon effect 11