

Fremantle North Quay Truck Survey 2018

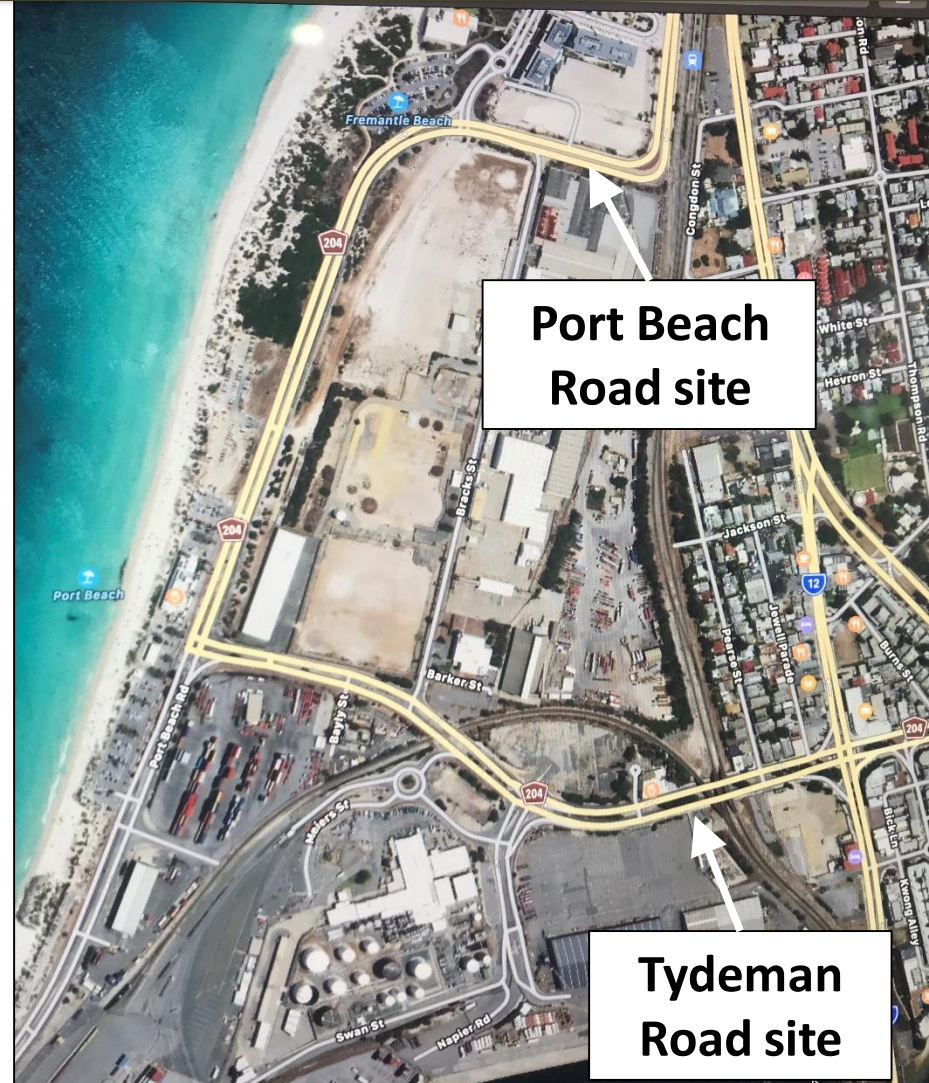
Port Operations Task Force

17th Annual Survey of Container Truck Volumes and Loading

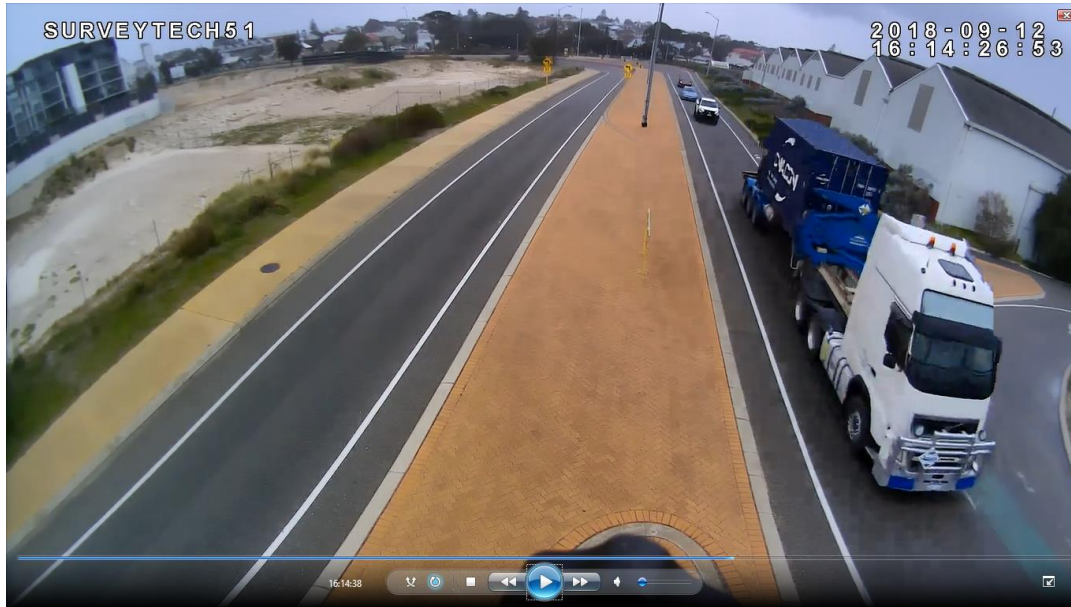


Survey characteristics

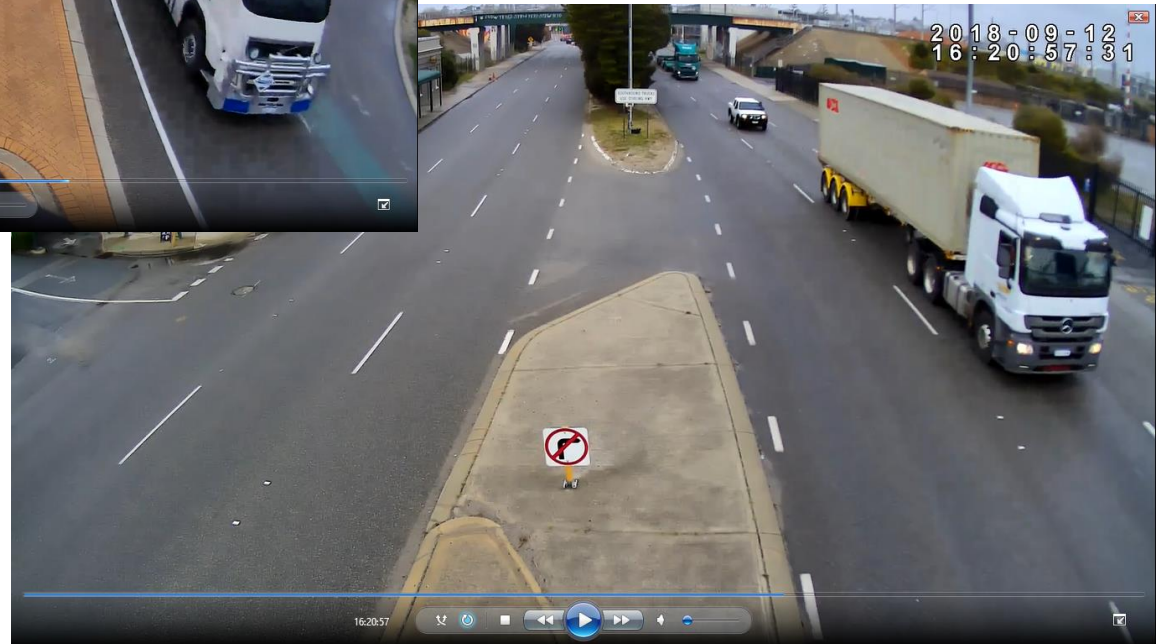
- To monitor container truck:
 - numbers
 - contribution to overall traffic volumes
 - types engaged in trade
 - loading (number of containers and size)
 - lifting capacity
- Data collected 24 hours over two weeks
- Mon 10th to Sun 23rd September 2018



Camera location and capture

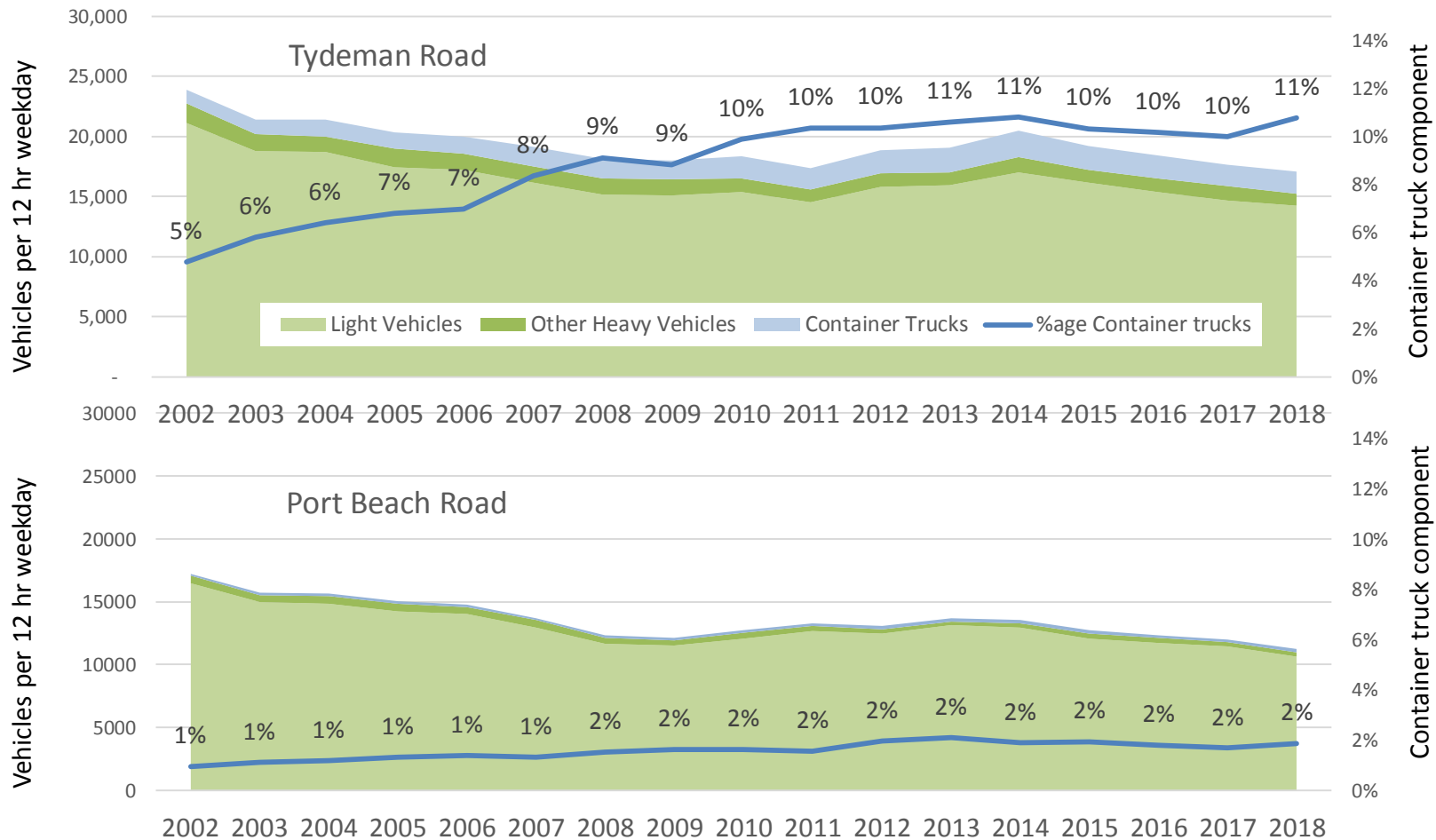


Port Beach Road



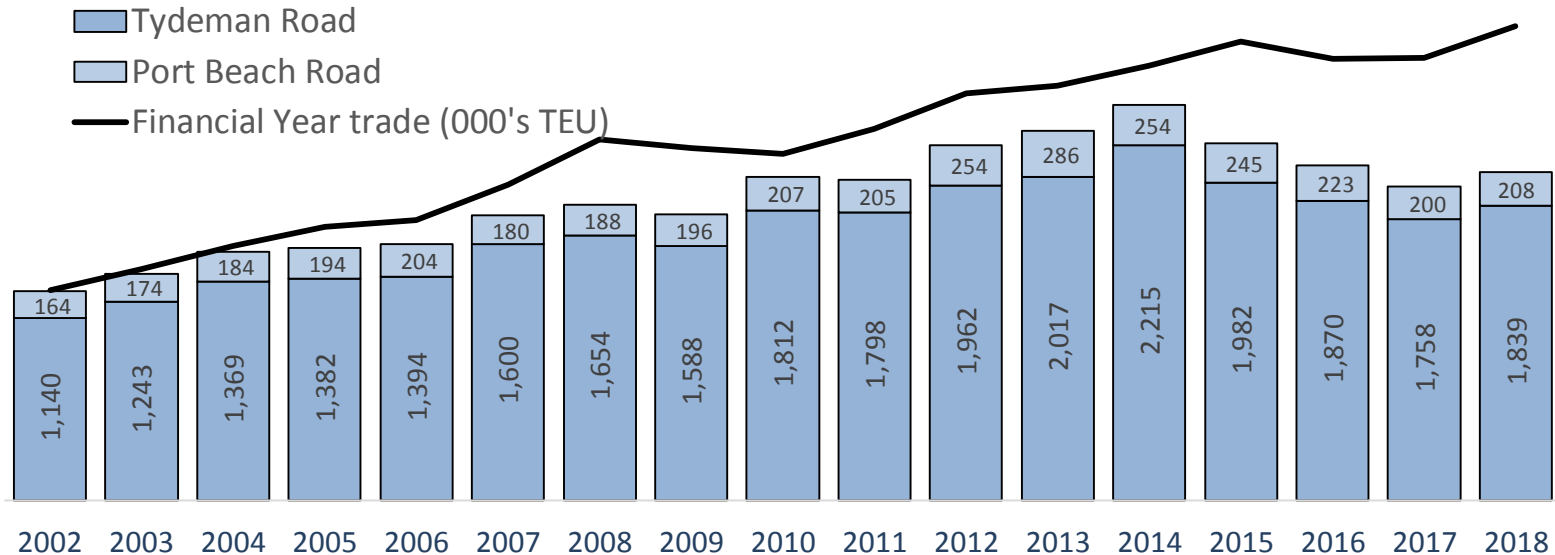
Tydeman Road

Container trucks in general traffic



Between 6am and 6pm container trucks form 11% of all vehicles on Tydemans Road and 2% of all vehicles on Port Beach Road

Historic container truck numbers (12 hours)



Container truck numbers grew broadly in line with trade, albeit at a lower rate, until 2014:

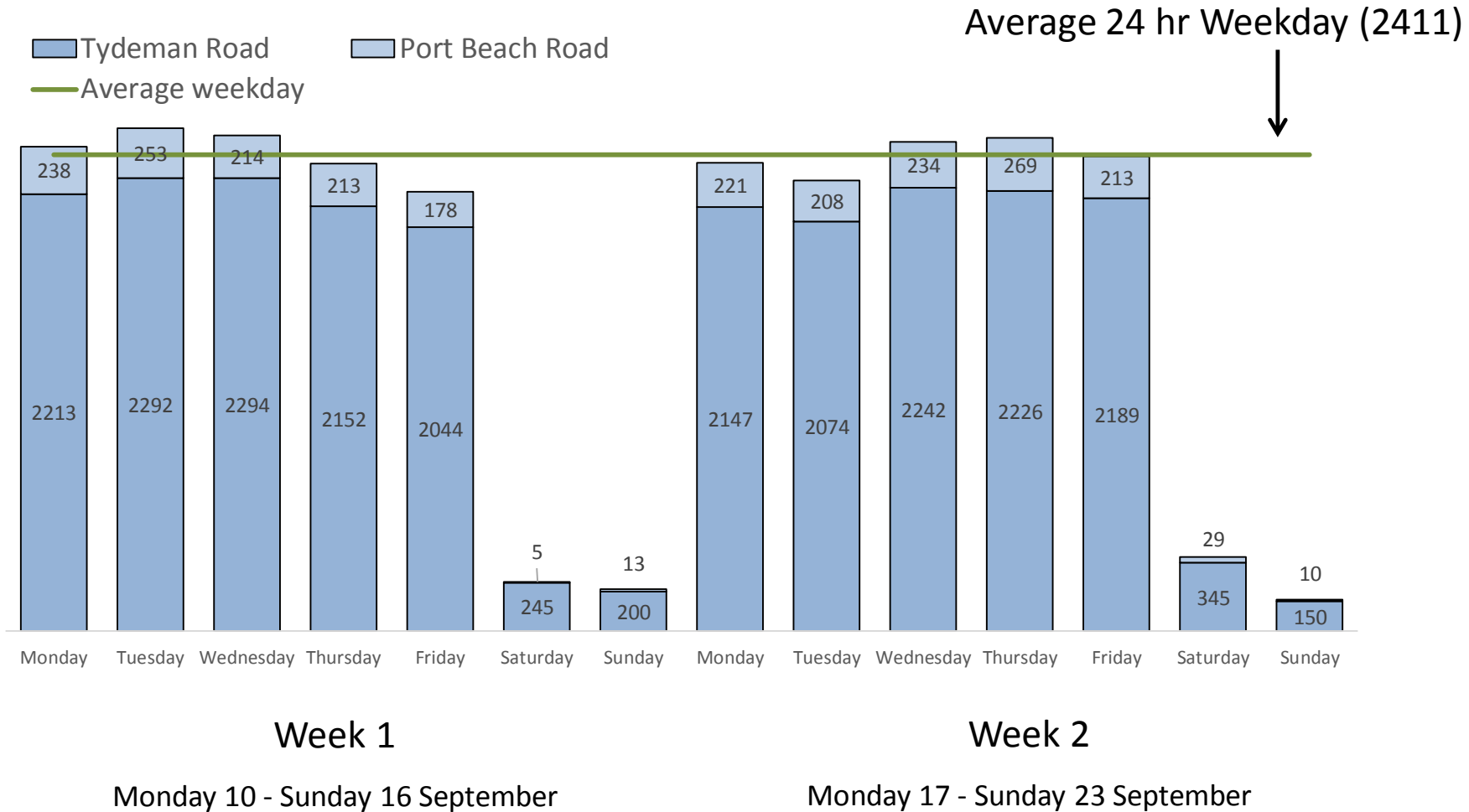
Trade growth averaged 6% and container growth averaged 5% per annum

Since 2014, the trend has changed:

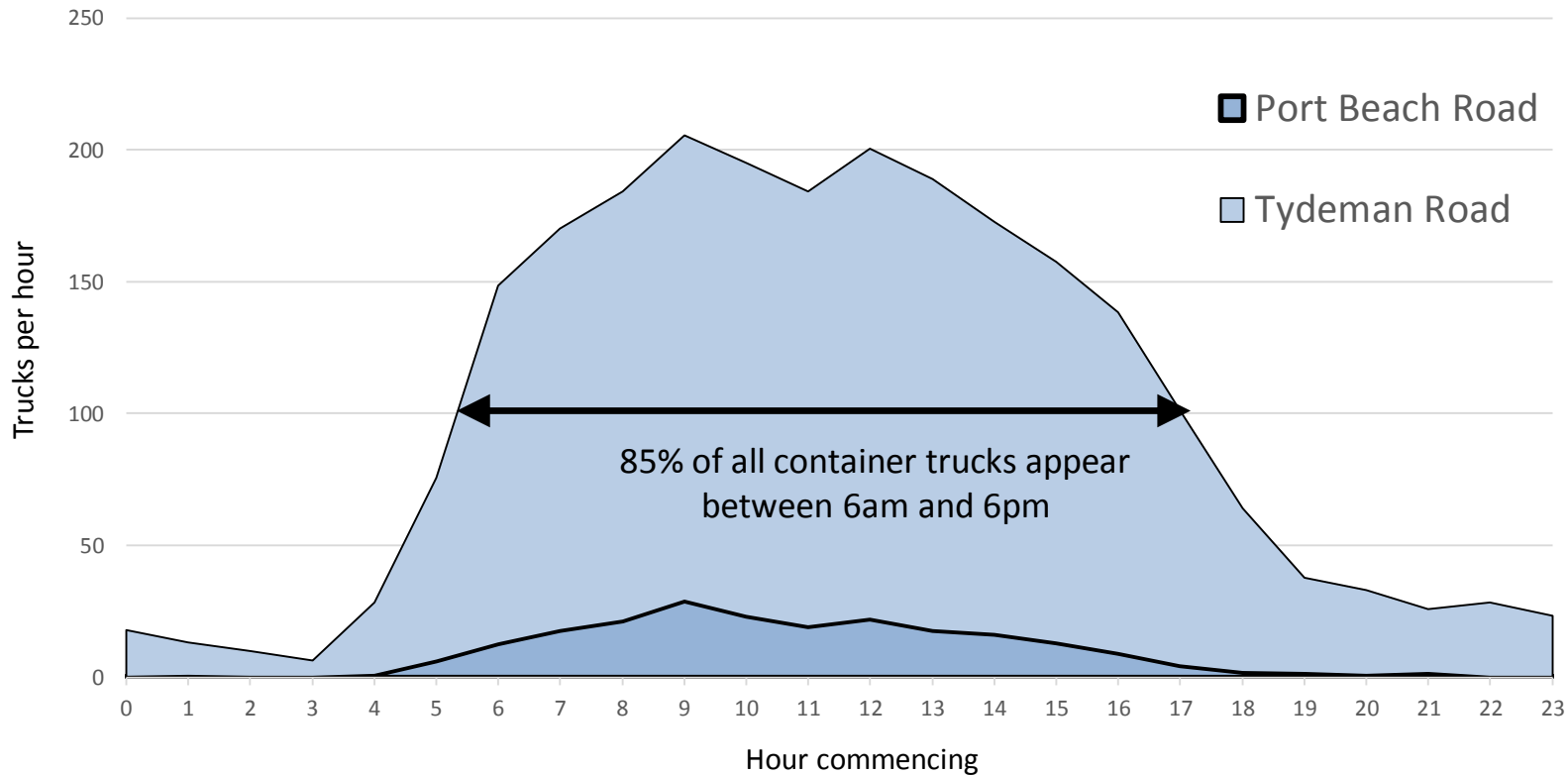
Trade growth has averaged 2% per annum while truck numbers have fallen by an average of 5% per annum

Last year trade grew by 8% while observed truck growth was lower at 5%

Container trucks over the survey period

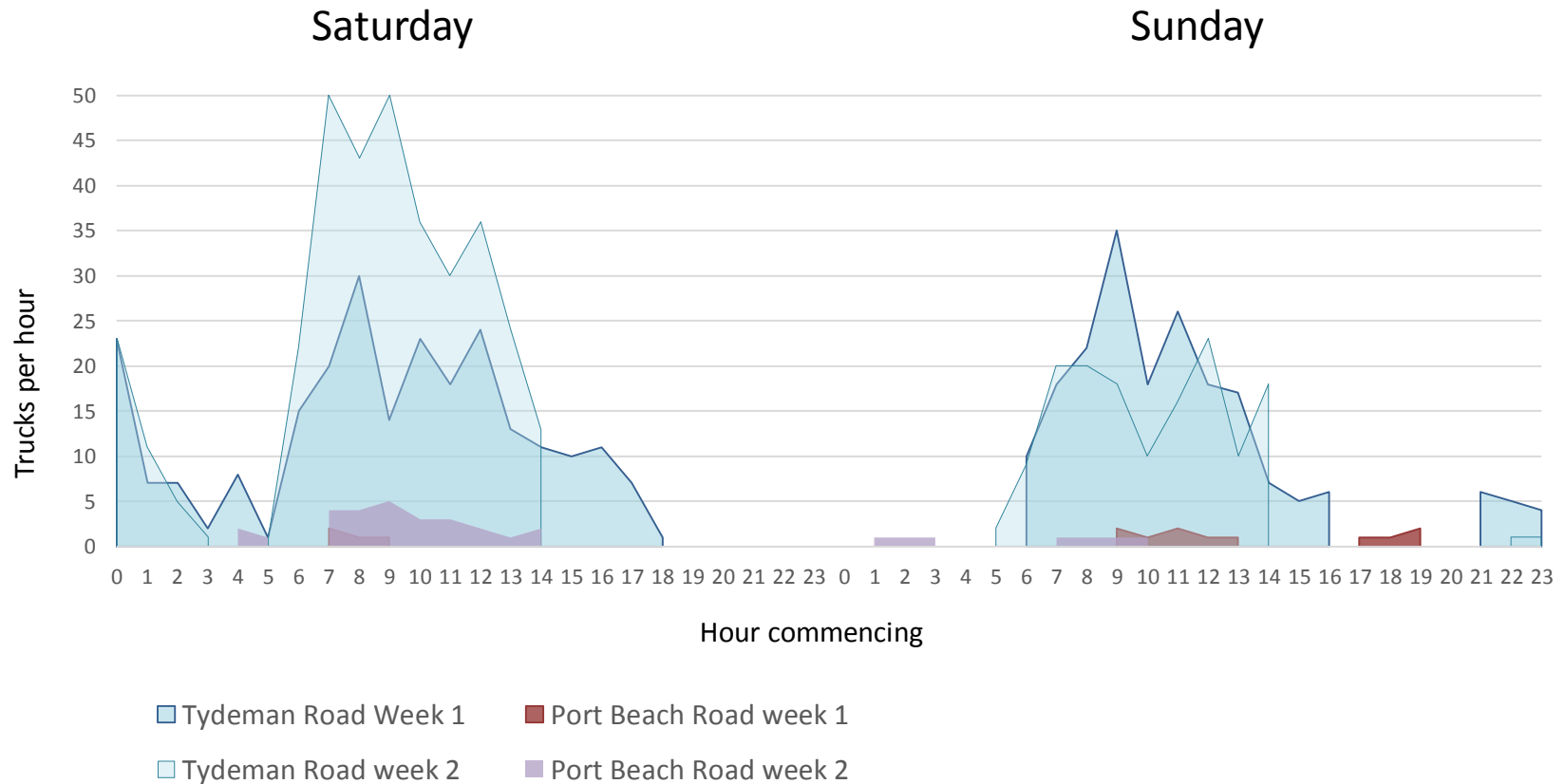


Container truck activity over the weekday



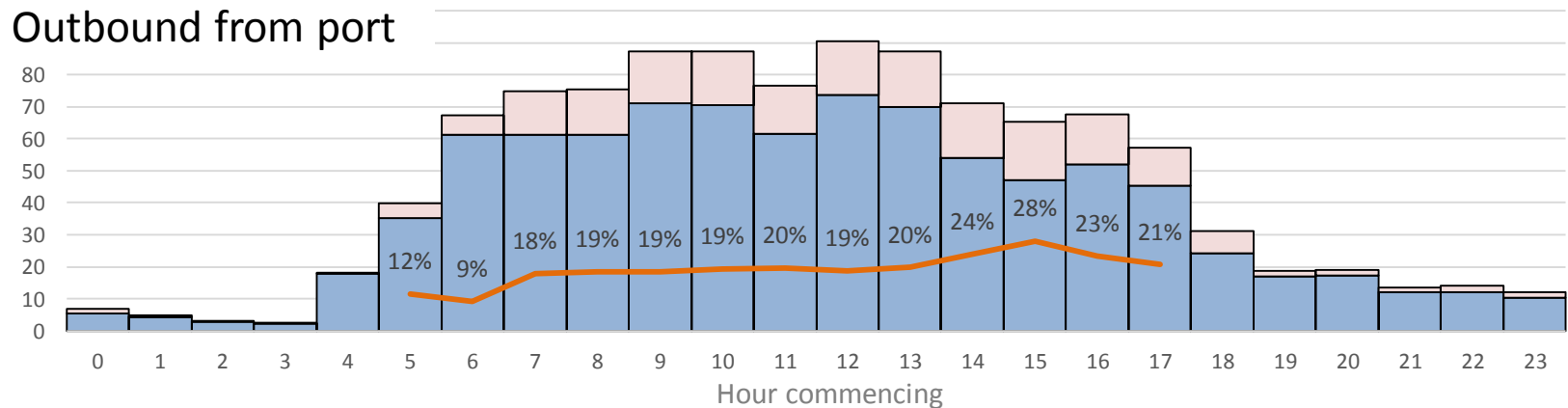
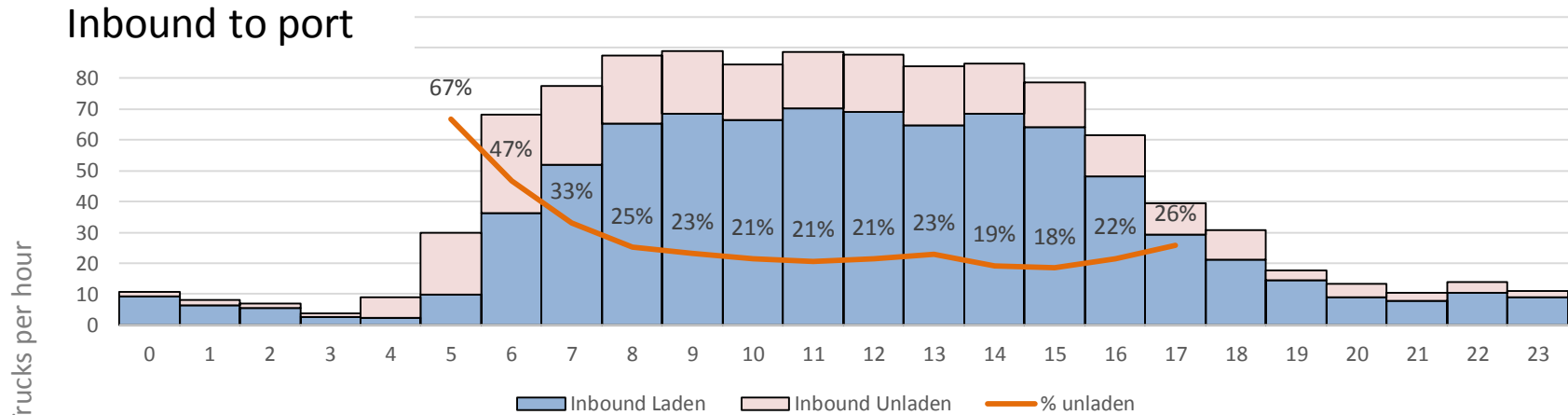
Truck activity remains concentrated during the normal working day
Relatively little activity outside “normal” working hours

Truck activity over the weekend



Weekend container truck activity remains very low

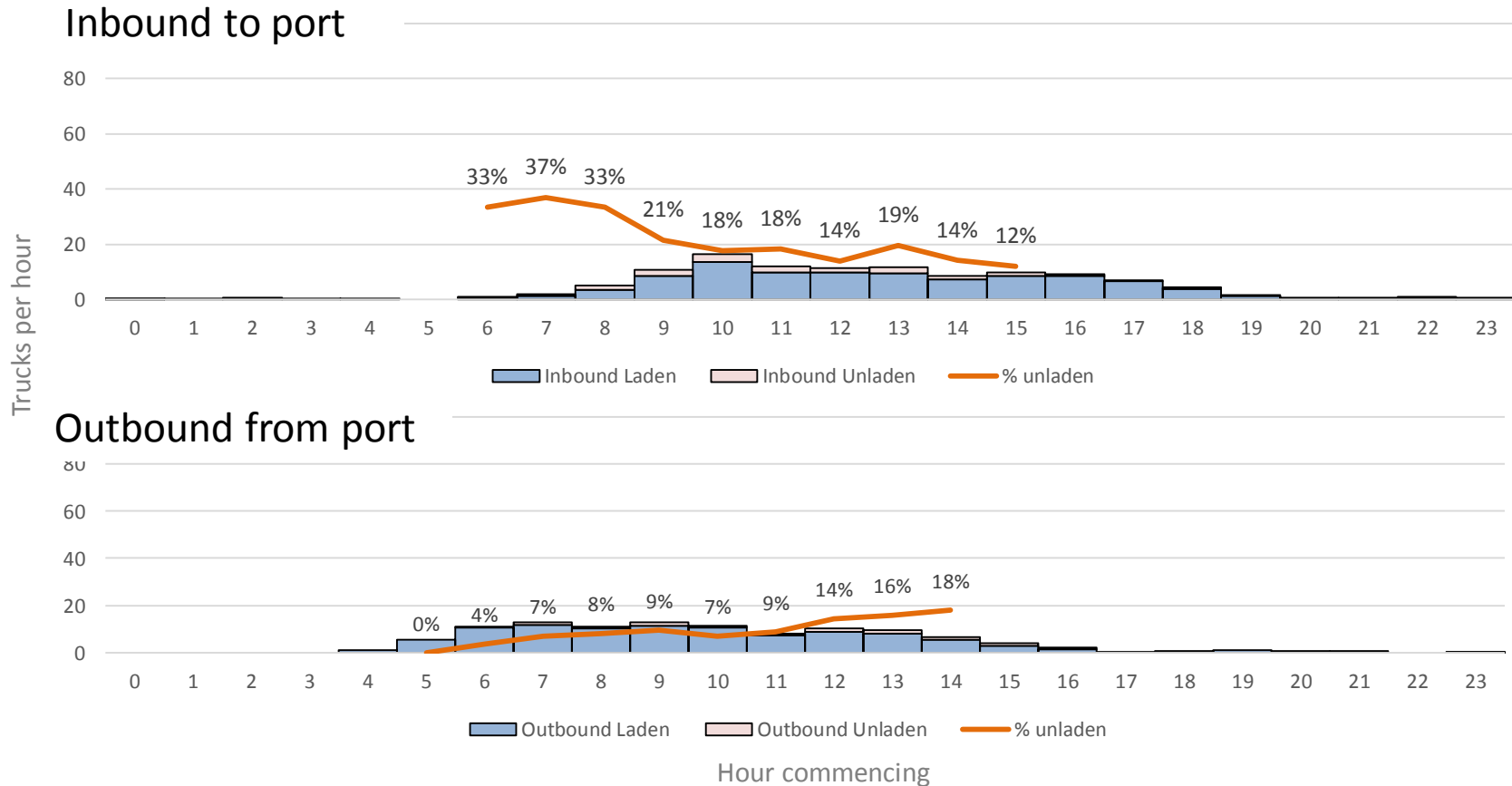
Tydeman Road unladen trucks



Over 24 hours, 22% of all container trucks on Tydeman Road are unladen (26% inbound and 18% outbound)

This equates to 487 trucks every 24hr weekday

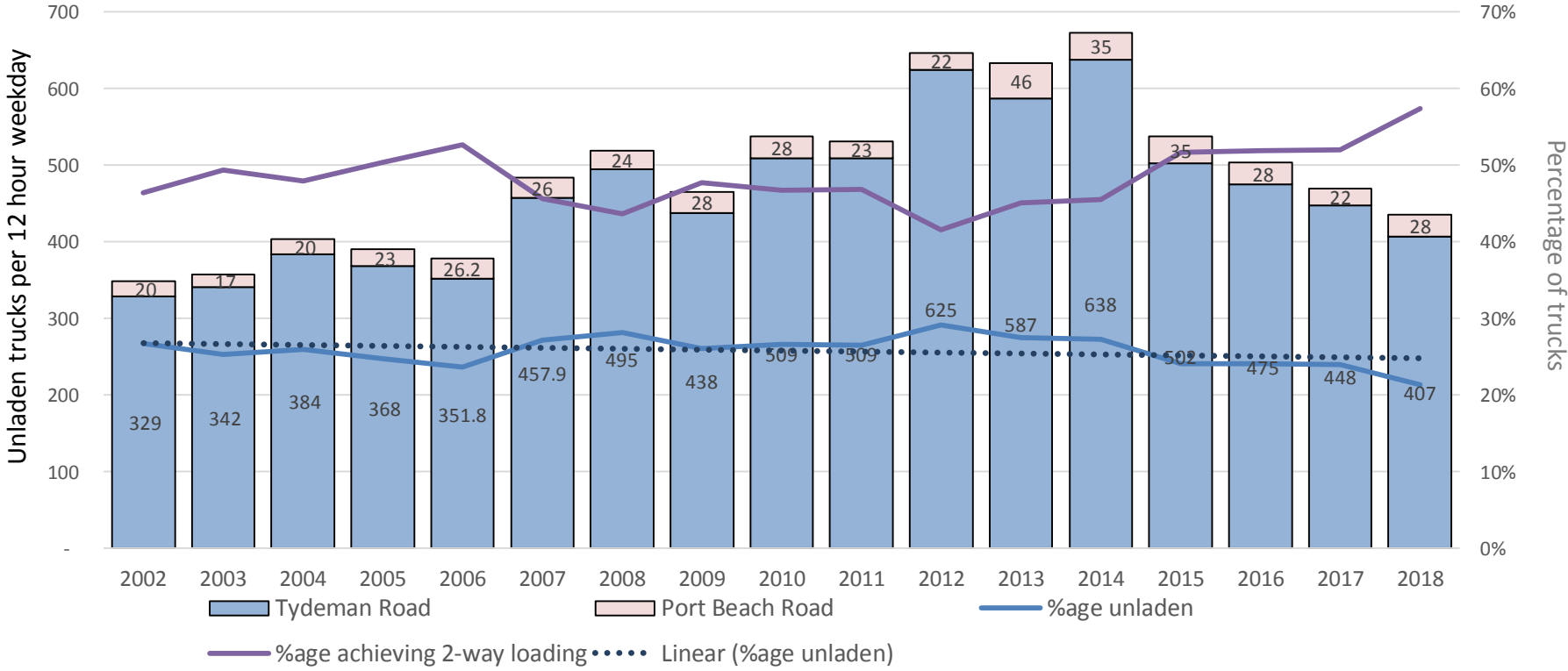
Port Beach Road unladen trucks



Over 24 hours, 14% of all container trucks on Port Beach Road are unladen (17% inbound and 10% outbound)

This equates to 30 trucks every 24hr weekday

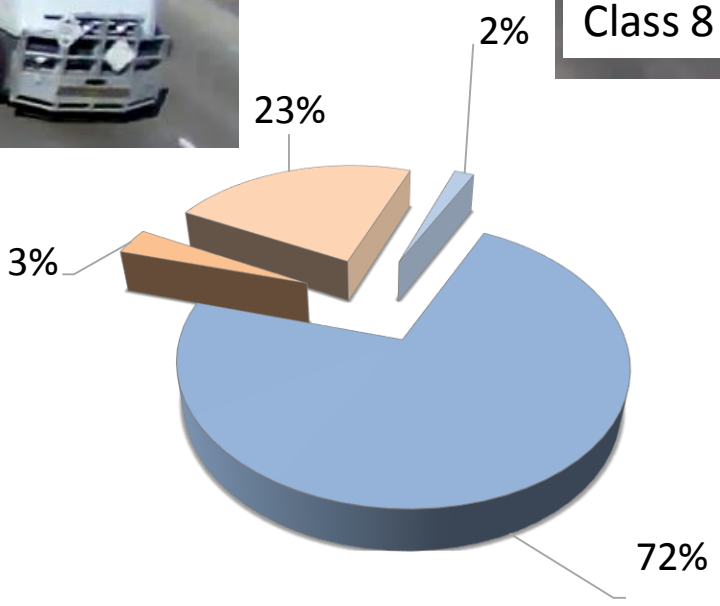
Historic unladen truck numbers and 2-way loading



In 2018, 21% of all truck observed between 6am and 6pm were travelling unladen

This means that 58% of trucks were loaded in both directions

Container Truck Types



Container Truck Classes 8 and 9

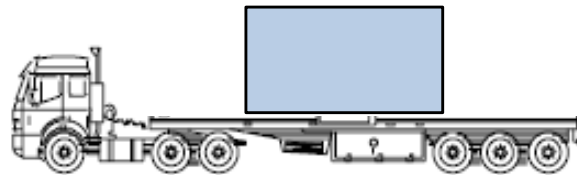


Classes 8 and 9 (74% of all container trucks)



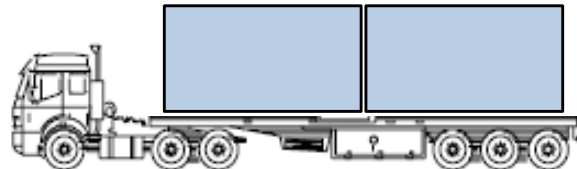
Unladen

21%



1 TEU

20%



2 TEU

59%

These trucks carry 68% of all TEU
Average of 1.39 TEU per truck
Average of 1.76 TEU per loaded truck

A very small percentage (0.4%) of these vehicles were observed to carry 3 or 4 TEU

Container Truck Class 8



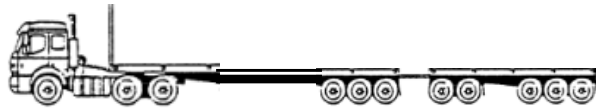
This class 8 truck was seen carrying 4 TEU 13 times during the 2 week period

All other trucks seen carrying 3 or 4 TEU were either class 10 or 11

Container Truck Classes 10 and 11

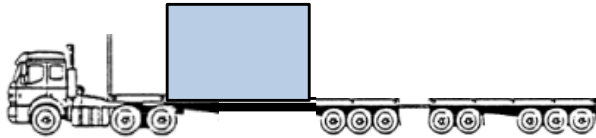


Classes 10 and 11 (26% of all container trucks)



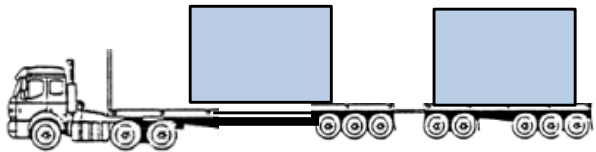
Unladen

22%



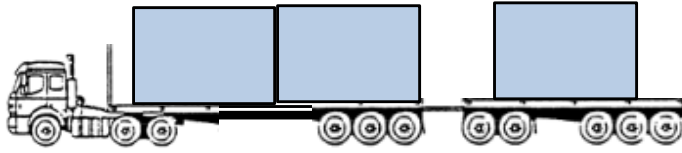
1 TEU

3%



2 TEU

42%

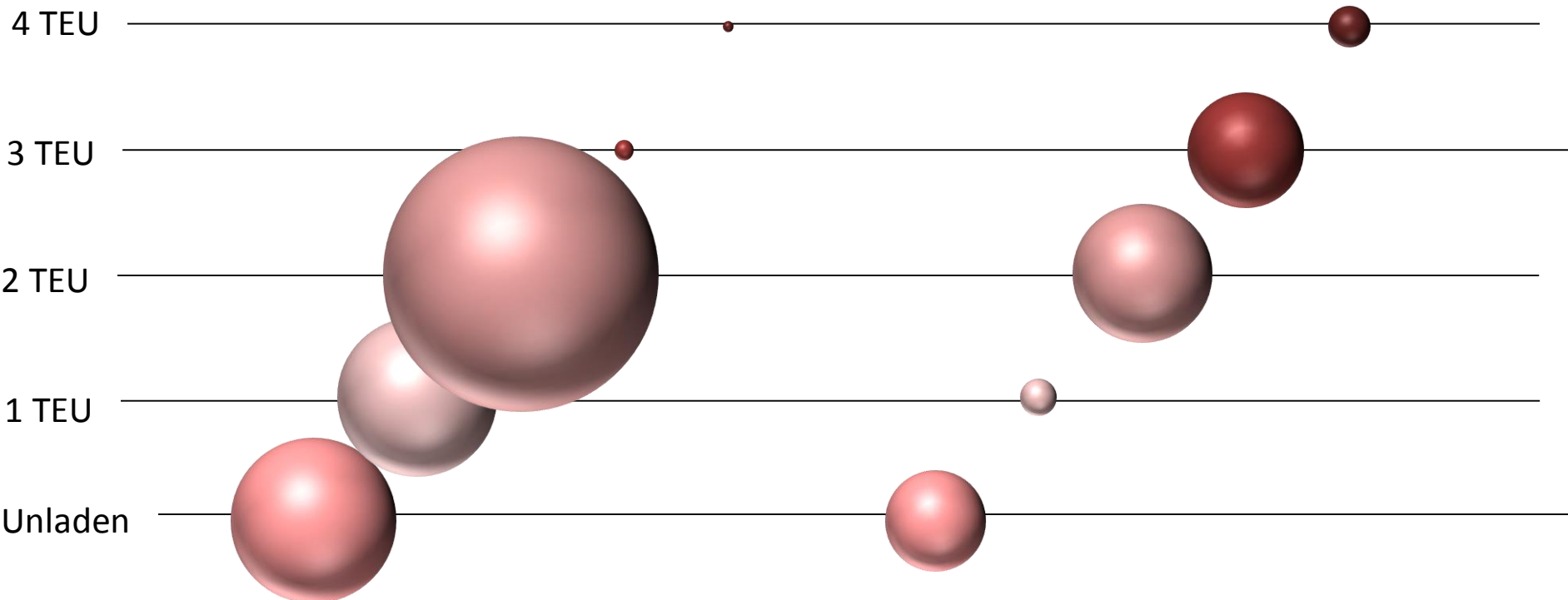


3+ TEU

33%

These trucks carry 32% of all TEU
Average of 1.89 TEU per truck
Average of 2.43 TEU per loaded truck

Overall truck fleet and TEU loading



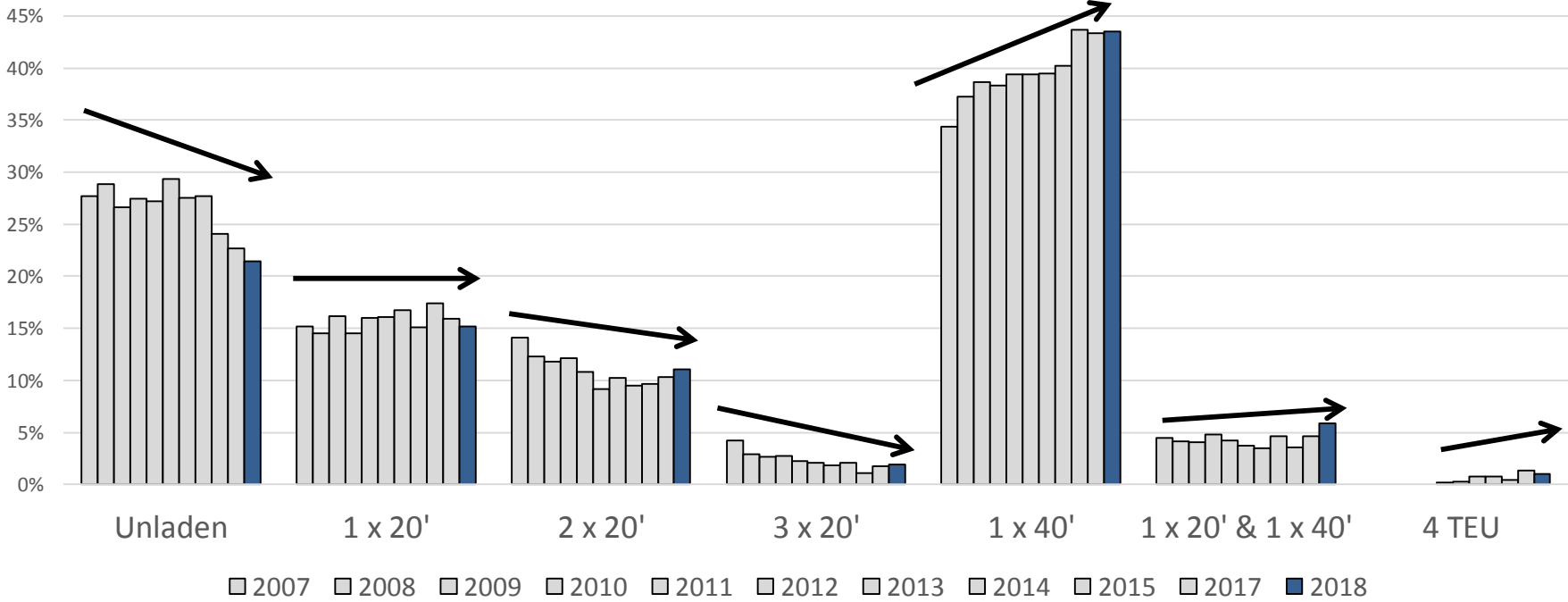
Trucks with lifting capacity

39% of all container trucks serving the port have the capacity to lift containers:

- 37% on Tydeman Road
- 65% on Port Beach Road



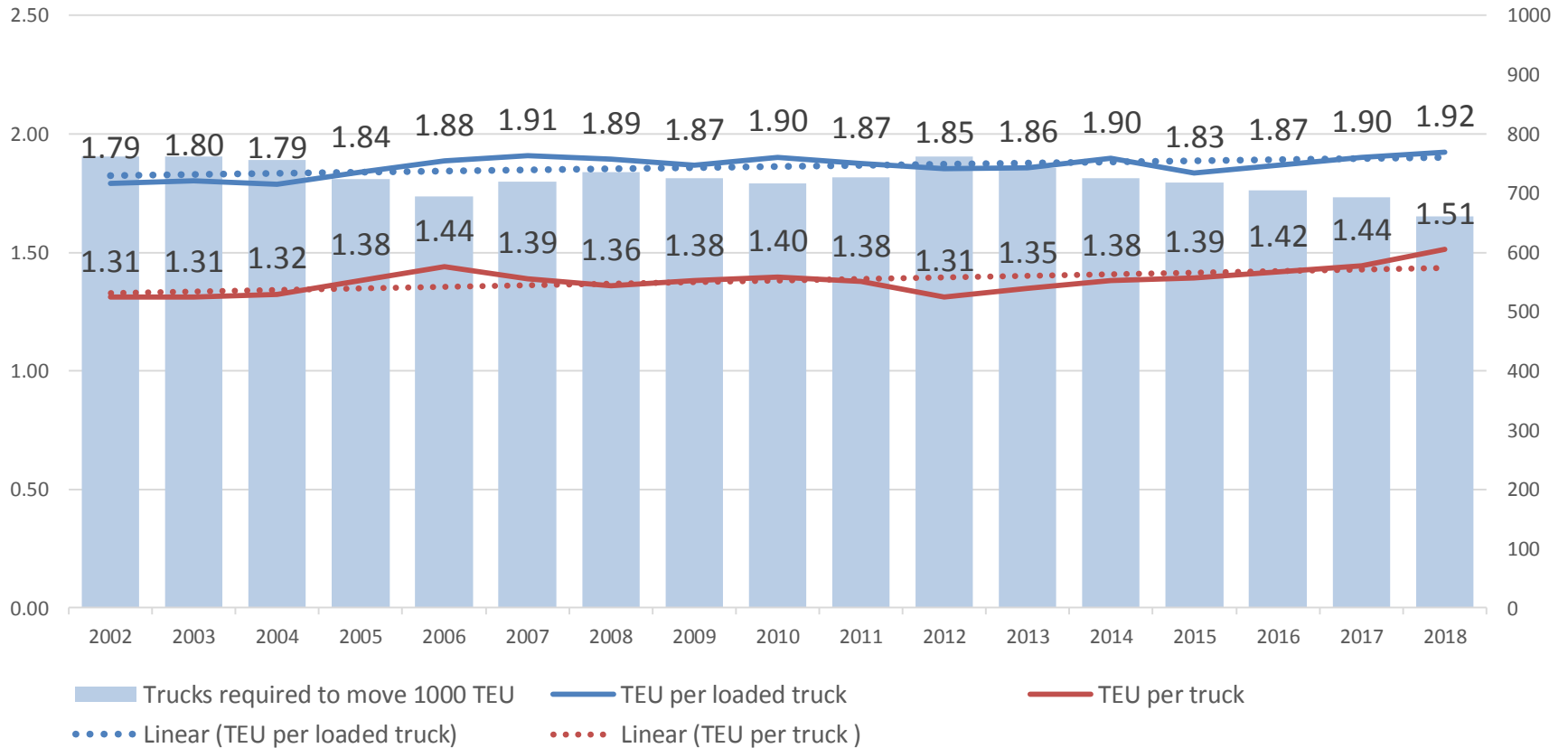
Historic truck loading and container size



In 2006, 40' containers comprised 57% of all observed TEU and 40% of all containers

In 2018, 40' containers comprised 67% of all observed TEU and 50% of all containers

How has truck loading been changing?



Productivity continues to improve steadily

Good News

- **Lower proportion of unladen trucks**
21% unladen over 12hrs compared to 24% last year
- **Better loading of laden trucks**
1.92 TEU per laden truck compared to 1.90 last year
- **Both contributing to increased productivity**
661 trucks required to move 1000 TEU compared to 693 last year

How is rail impacting container truck numbers?



The number of containers carried on rail has increased over time.

More containers on rail must mean fewer containers on trucks near the port

The impact is hard to quantify because of inland container park and triangulation activity but overall more trains mean fewer trucks.

So, the answer must be “in a beneficial way”
Increased rail is contributing to lower numbers of container trucks

How are logistics activities in Rous Head impacting container truck numbers?



- Containers are now being packed/unpacked at premises in Rous Head
- Those containers will thus not be seen on trucks travelling to and from the port
- But the freight they contain must arrive or leave the port on some kind of truck
- The type and number of these trucks is unknown and unaccounted for in our survey
- It is therefore possible that the survey underestimates the impact of the container trade in the vicinity of the port
- Container truck numbers have fallen since logistic hubs established at Rous Head

Containerised freight in non-container trucks



The truck survey is potentially underestimating the trucking activity associated with the container trade.

