

# Tyres: from zero to (tracking) millions





# What is Tyrewise?

About **40%** of the 6.5 million tyres Kiwis use to keep us moving every year are recycled, repurposed or used as tyre derived fuel. The rest end up stockpiled, dumped, or in landfill.

Together with our network of registered partners, Tyrewise works to end tyre waste in every community in Aotearoa.

## What's our goal?

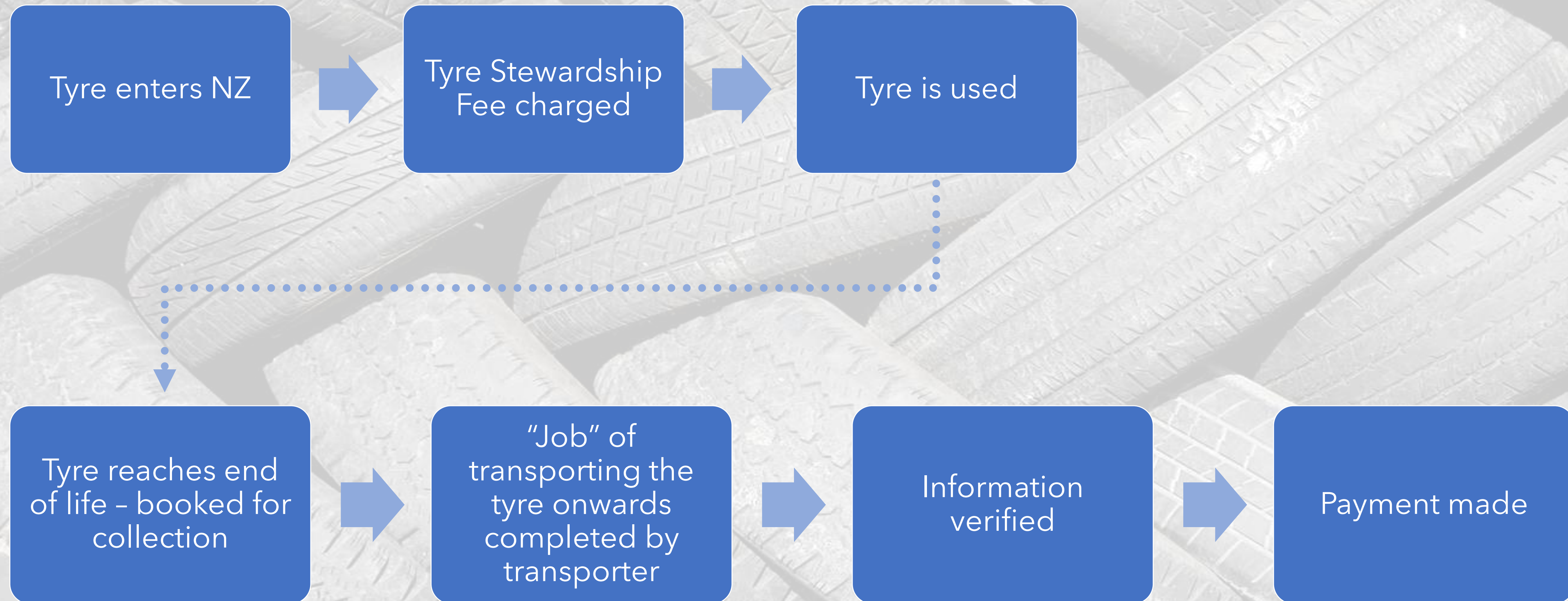


**80%**

By our fourth year of operation, our goal is that **80%** of collected tyres will be processed in New Zealand and sold into the domestic market. The balance will be exported to approved markets.

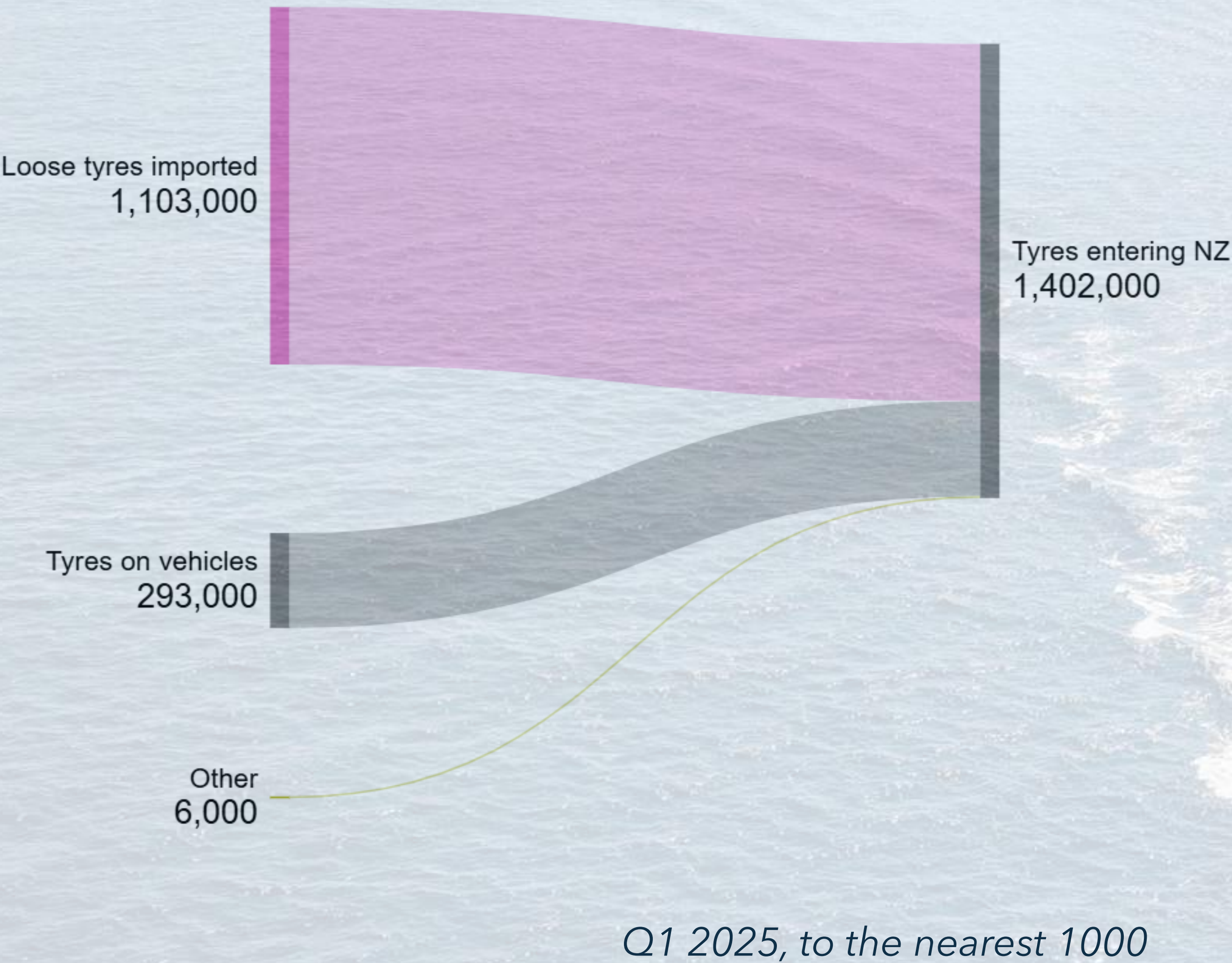


# How does Tyrewise work?



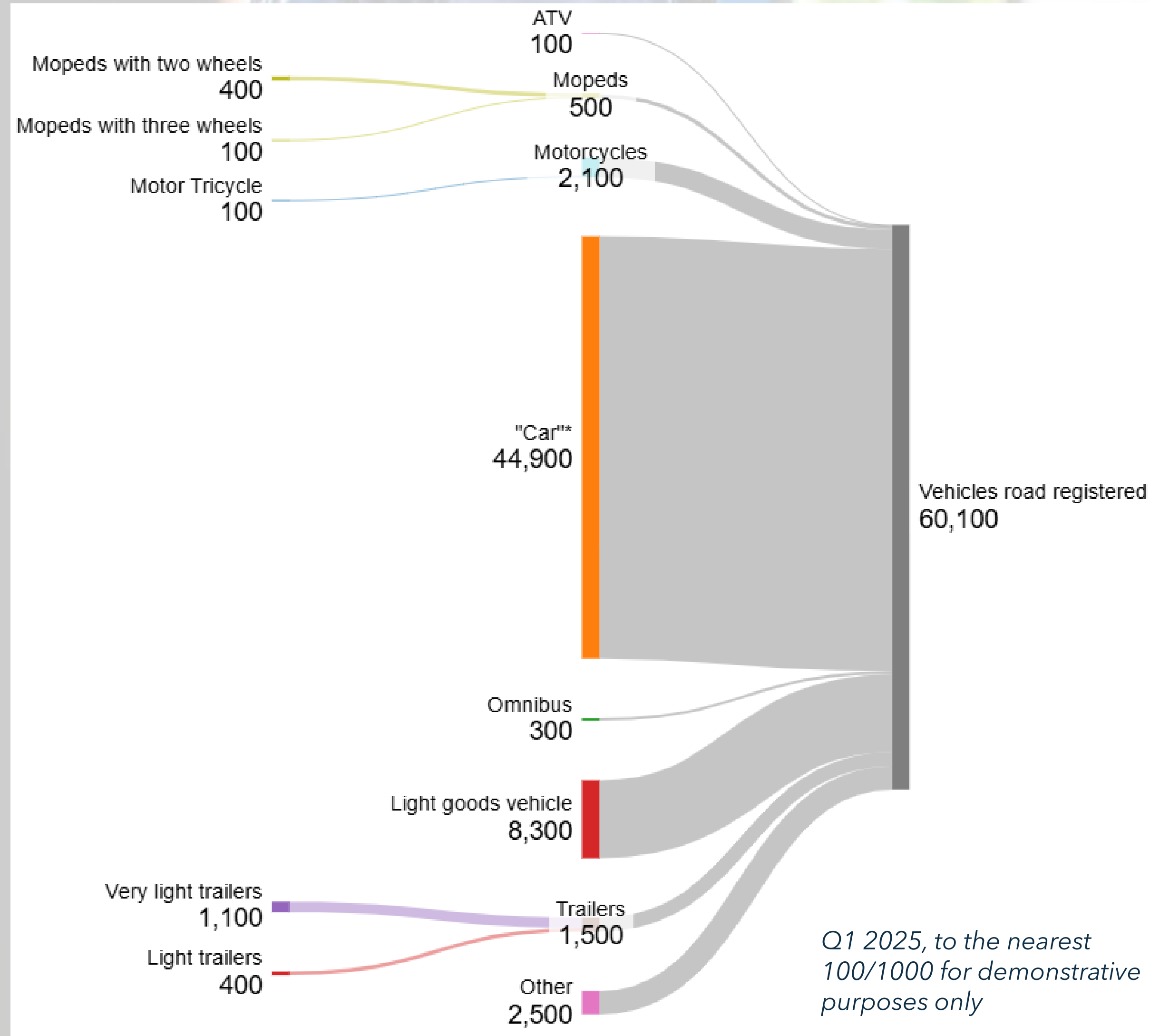


# Where does a tyre come from?





# Tyres on vehicles?



60,000 vehicles

293,000 tyres




# How many tyres do different classes of vehicle have?

Motorcycle:	2
Moped with three wheels:	3
Car:	4, 4.5, or 5
Omnibus:	5 (probably)
Light goods vehicle (under 3.5T):	7 (maybe)







Now that we know\* how many tyres  
are coming into NZ, how are  
collections going?



# Counting the tyres we collect



Job ID: 43591

Pickup:

4 Apr 2025  
Demo Retailer  
207 Karamu Road North  
Hastings  
1

Delivery:

DO NOT USE Demo  
Processor Hub (hub)  
8 Karamu Road  
Hastings  
Whakatu  
Hastings  
Hastings  
1

Note:

7-3-2025

Load:

TYRES - LOOSE

	Requ.	Actual
Passenger	20	Count

Add tyre type



# The problem with counting

Pictured: four good examples of what 10 tyres can look like





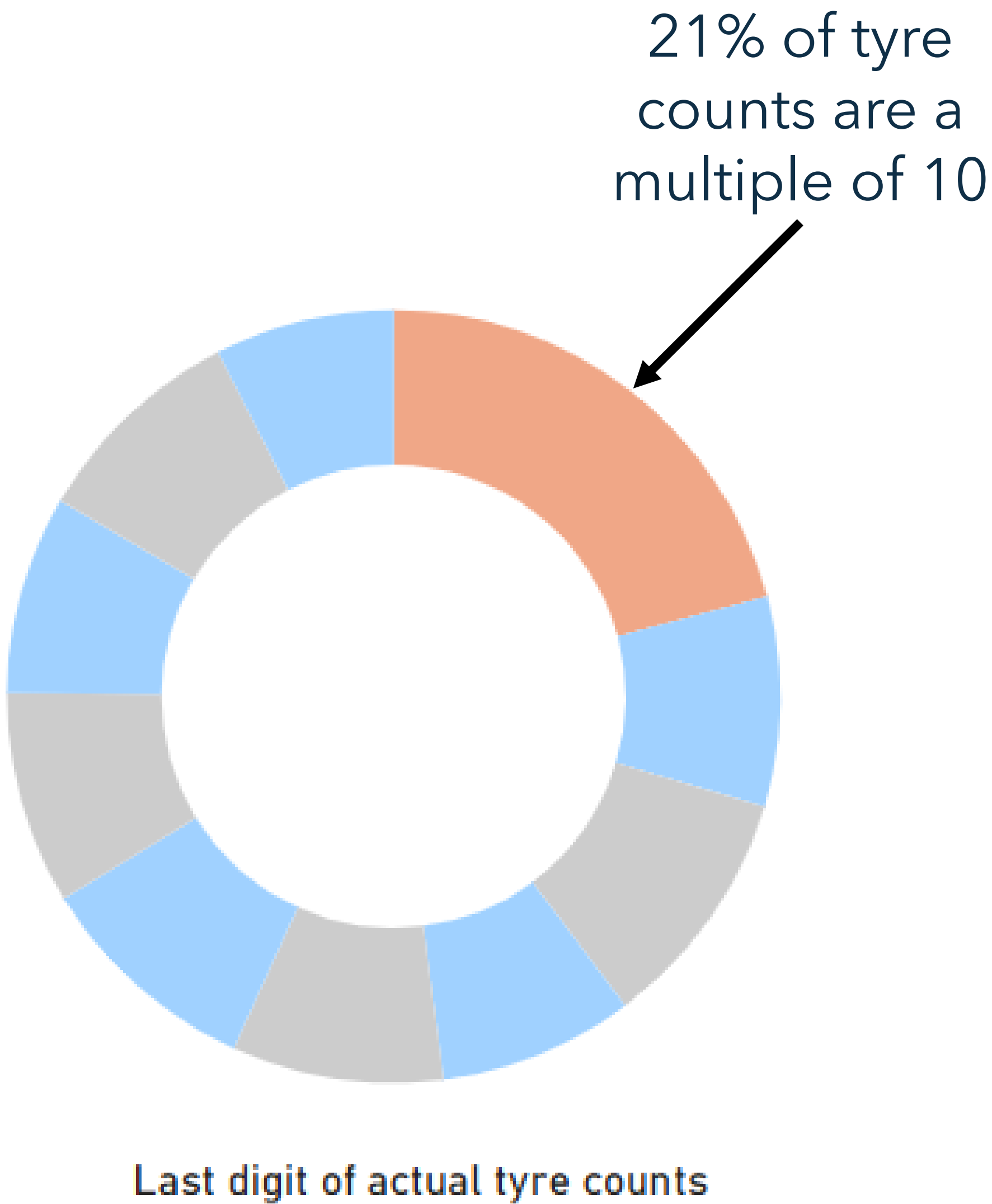
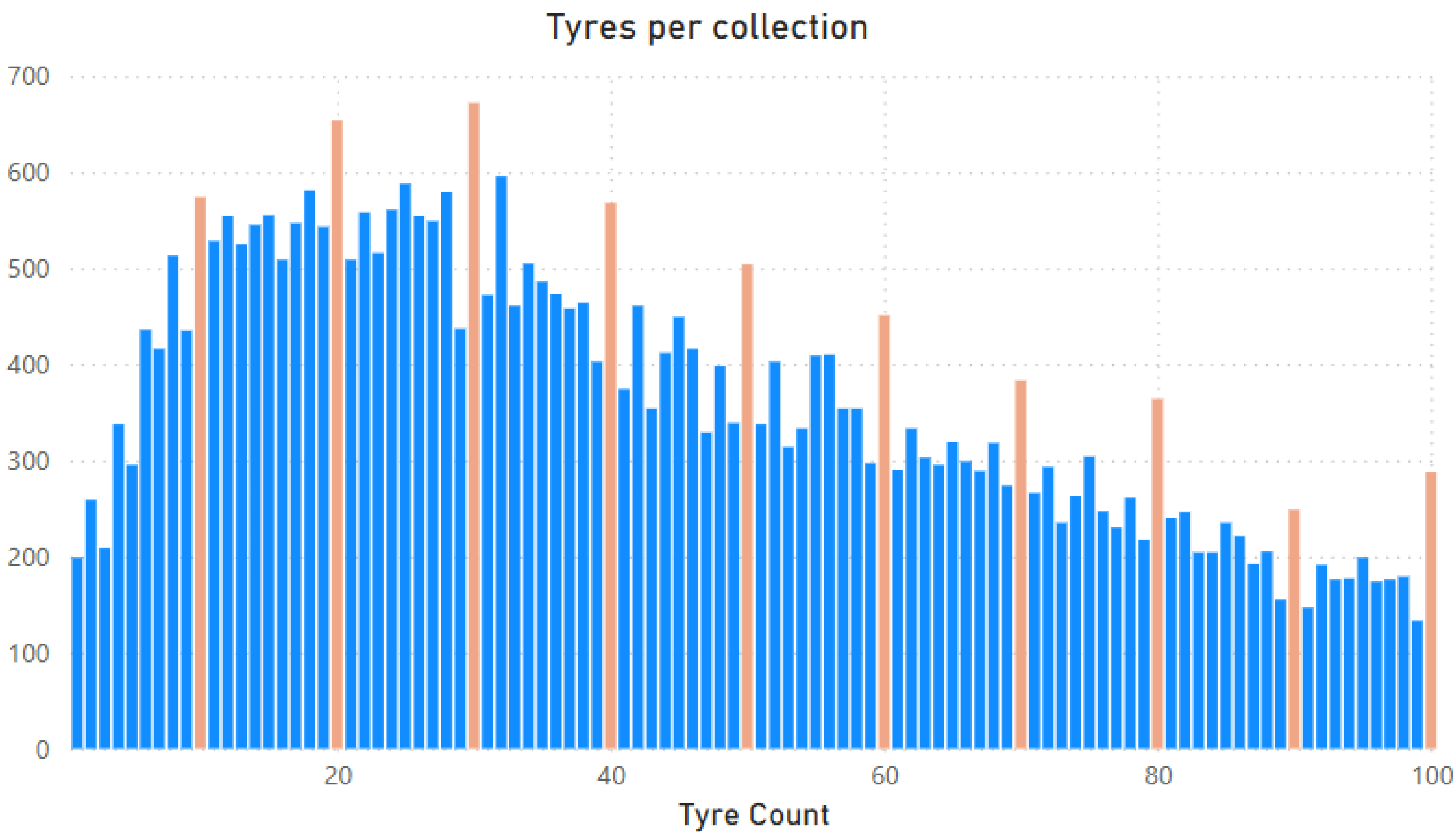
# More examples of 10 tyres...



(I'm not counting these)



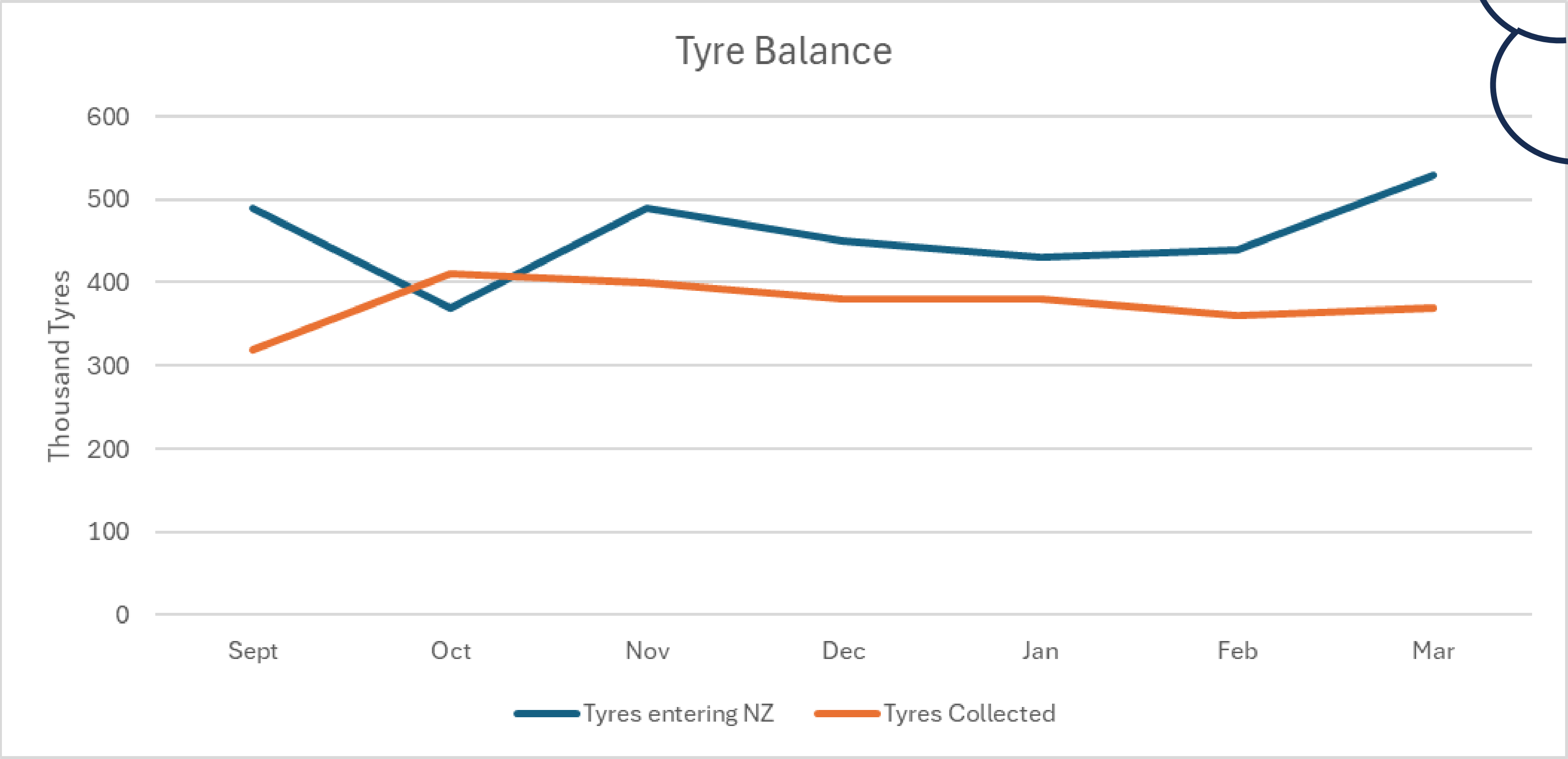
# People are lazy





Now that we know\* how many tyres are coming into NZ, and how many tyres have been collected, how are collections going?

How long until a tyre is end-of-life anyway?



September 2024 – March 2025



# Weight is what really matters

1. More accurate measure of material diverted
2. Environmental impact is by weight, not count

## Hawke's Bay councils to pay \$20m to dig new extension as region's biggest landfill set to be full by 2025

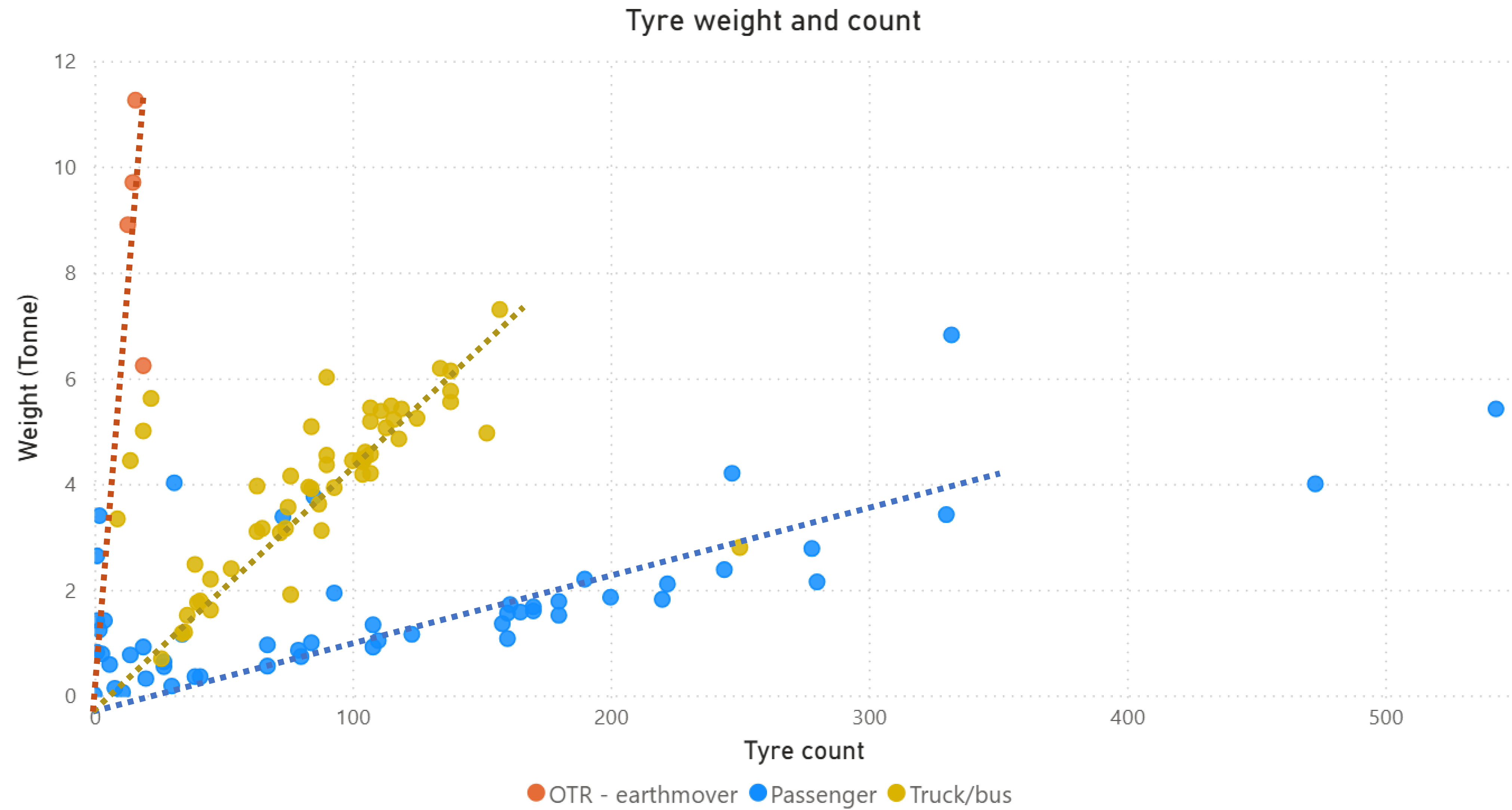
By Gary Hamilton-Irvine

Hawkes Bay Today · 25 Sep, 2022 02:58 PM ⌚ 3 mins to read



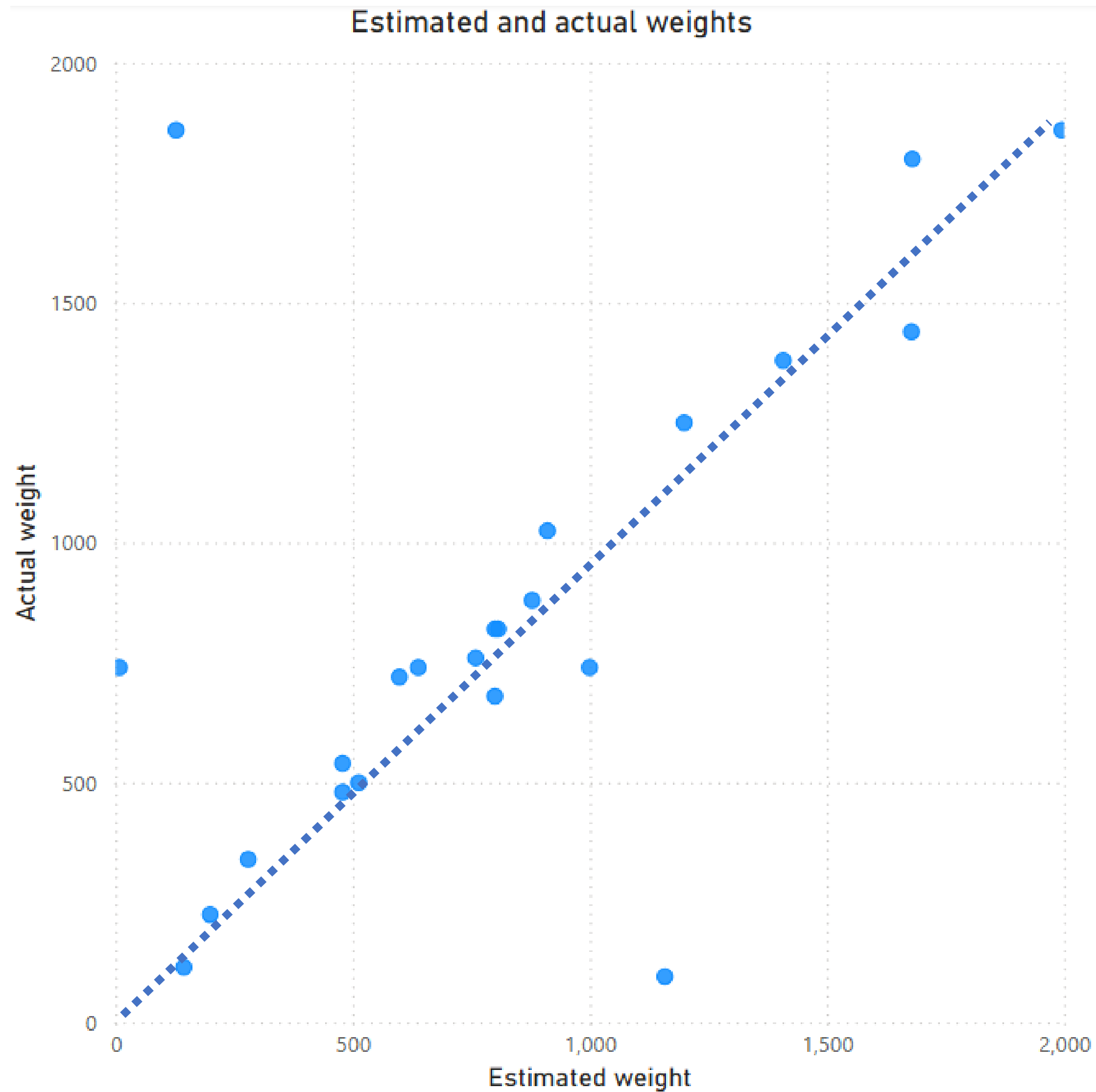


# Putting it together - counts and weights





# Actual and estimated weights



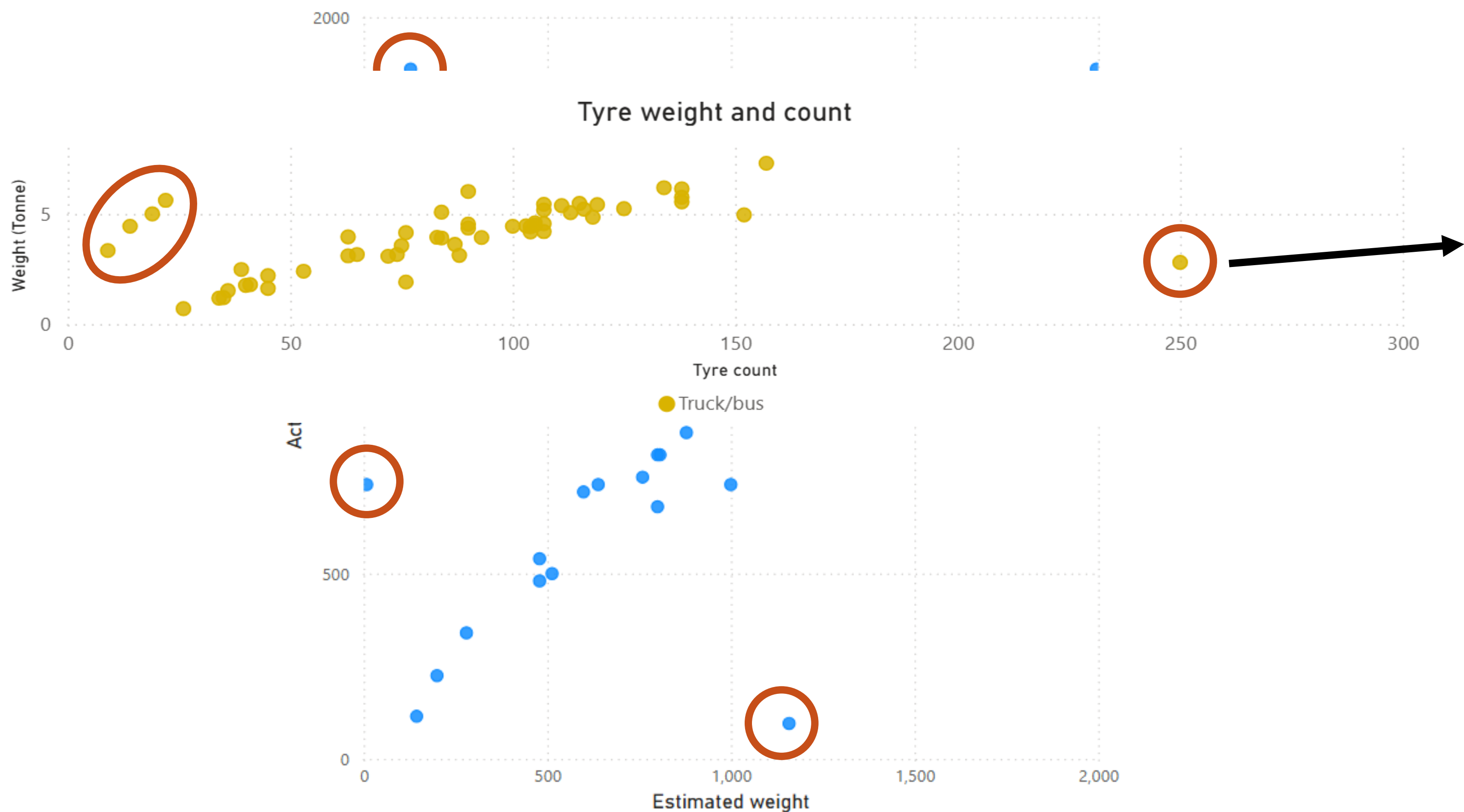
Estimated weight is tyre count \* a constant value.

Actual weight is entered by a driver at a weighbridge



# That's interesting, but what's the point?

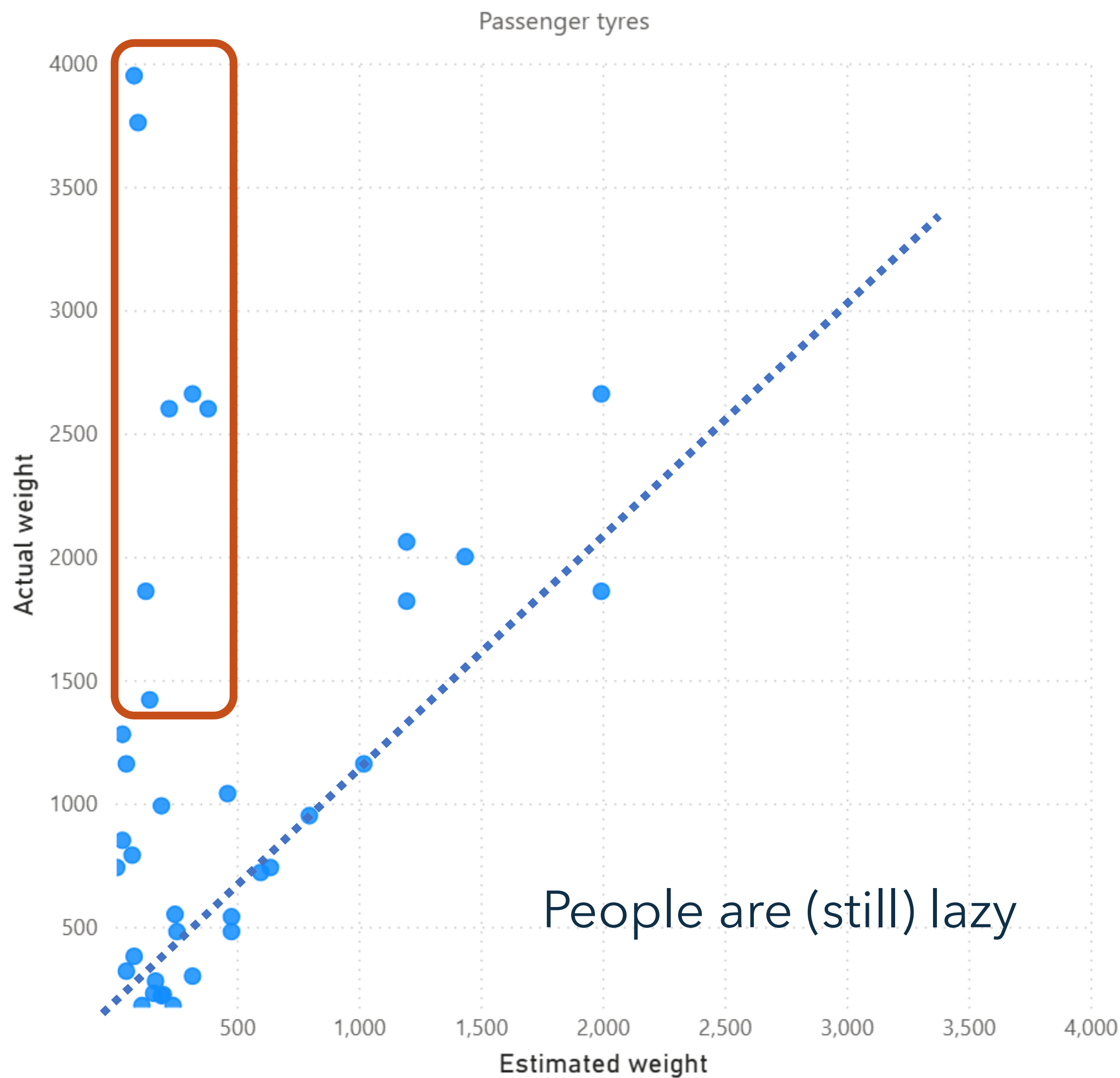
Let the system do the work for you by flagging problems in advance



"250 truck tyres"



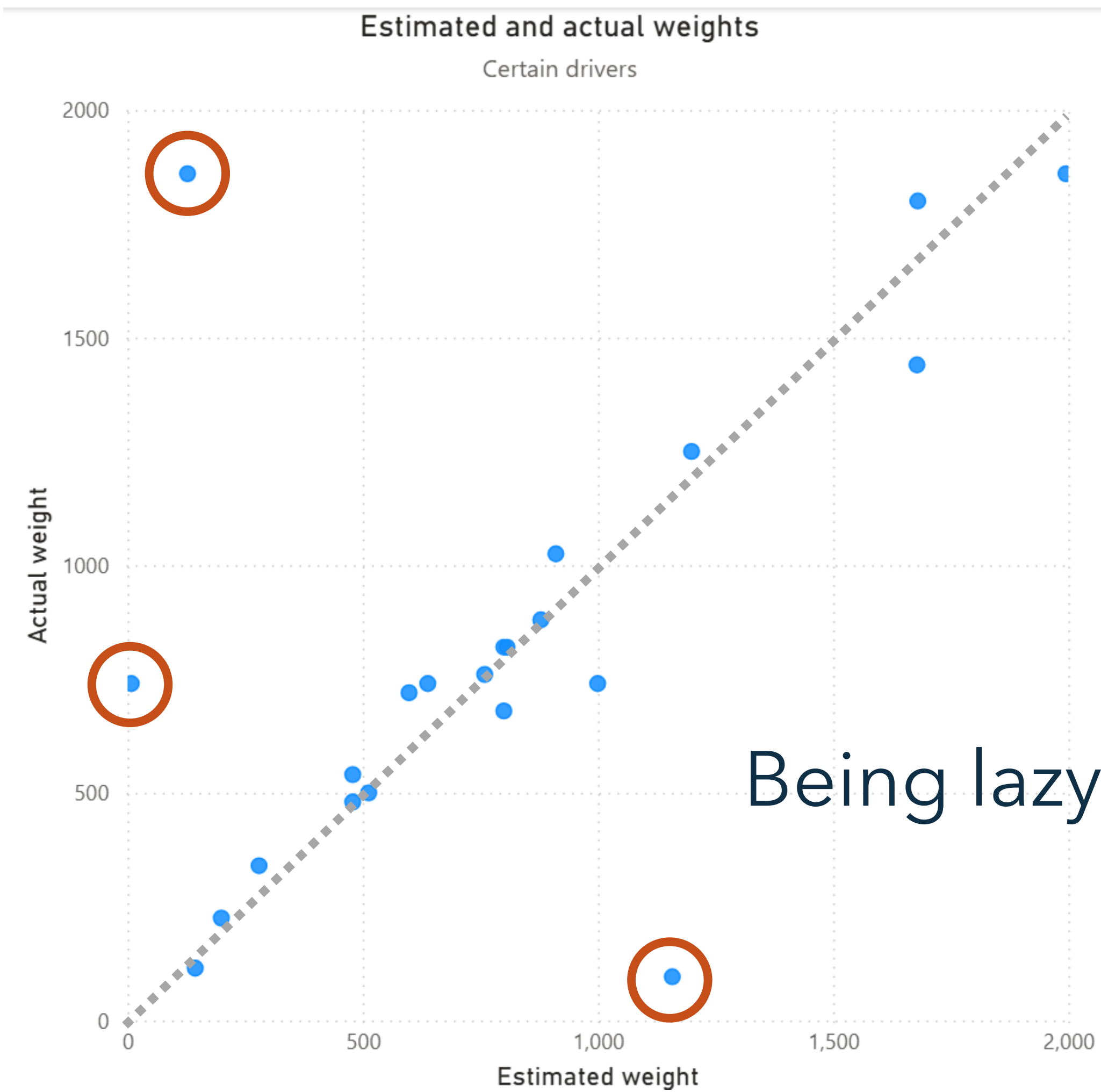
# Is a certain tyre type a problem?



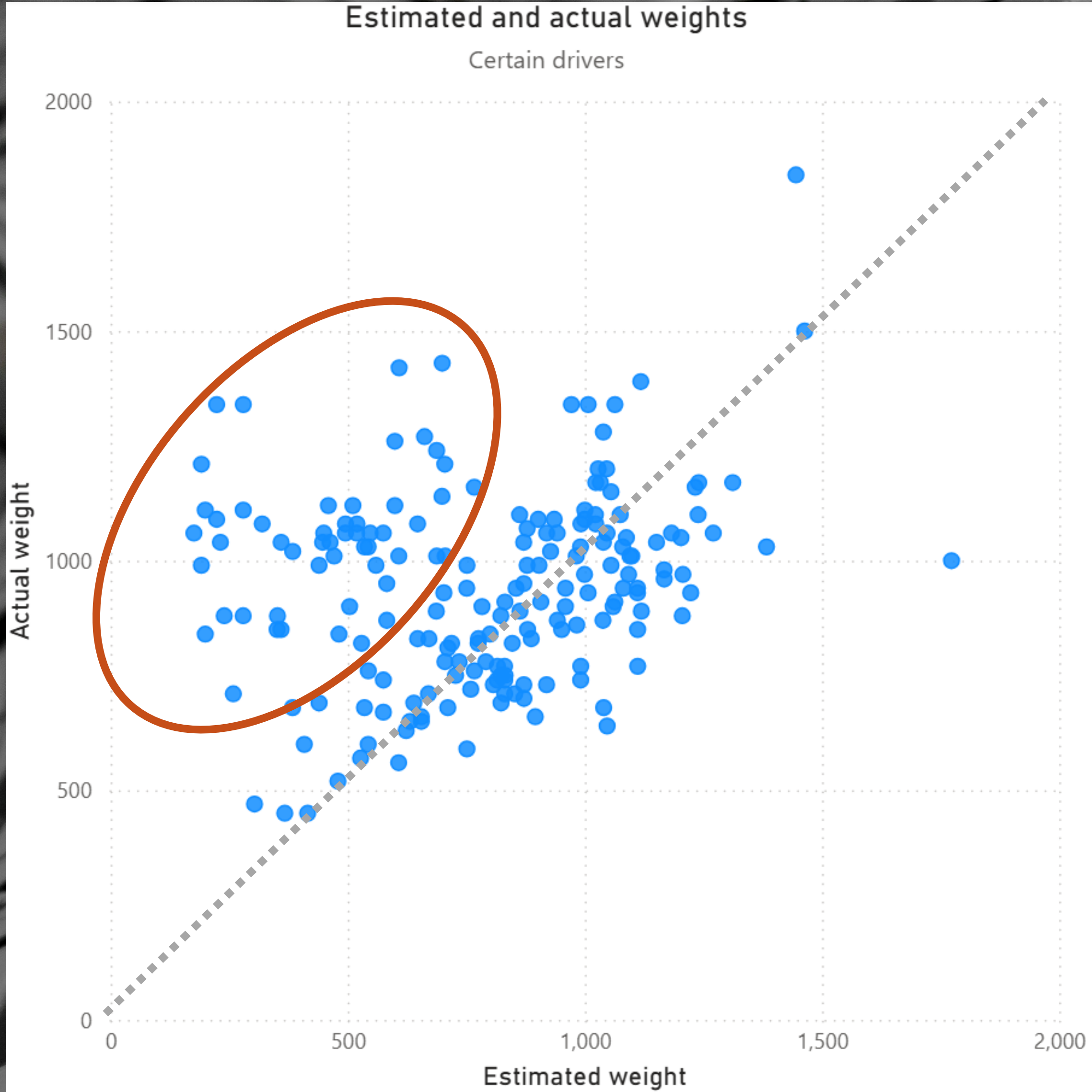
	Requ.	Actual
Passenger	20	Count
Off Road (forestry)		Count
Select tyre size		Select
Solid industrial (forklift)		Count
Tractors - small		Count
Light commercials / industrial		Count
Aircraft		Count
Motorbike		Count
Off road ATV		Count



# Is a certain group of people a problem?



Being lazy?

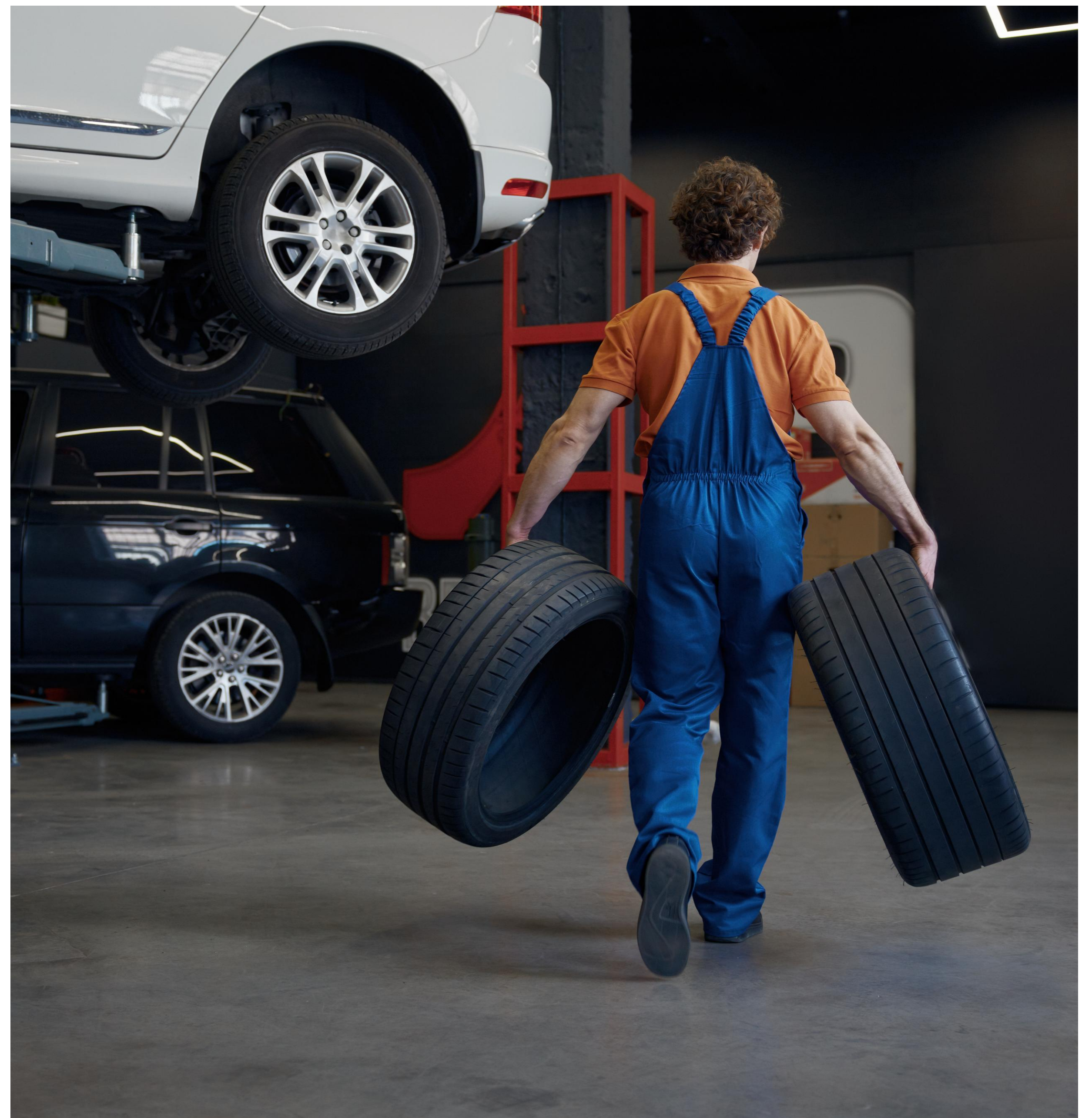


Being malicious?



# What we've learnt

- Data relies on people
- People are lazy
- What 'forces' them not to be?
  - System design
  - Educating transport providers
  - Delaying payment until verification
  - Stopping payment?





# Contact

Cam@tyrewise.co.nz

[www.tyrewise.co.nz](http://www.tyrewise.co.nz)

