February 2020

NSW Grain Harvest Management Scheme

July – December 2019 Harvest Period Report

Introduction

GHMS July – December 2019

The NSW Grain Harvest Management Scheme (GHMS) promotes the safe and productive movement of grain. It provides up to 5% mass allowance for productivity and minimises the risk associated with the variable conditions of loading trucks at farms. It is designed to minimise heavy vehicle movements, protect roads and to increase productivity and efficiency of the grain industry.

The GHMS half year reporting is based on data provided to Transport for NSW by Participating Grain Receivers (PGRs) during the July to December 2019 period. The total harvest figures in this report do not include crops not covered by the GHMS.

The percentage of deliveries made under the GHMS remained constant (80% of all deliveries) for winter harvests in 2018 and 2019. Overall total breaches have increased slightly by 0.63% from (2.82% to 3.45%) 2018-2019. A total of 2,545 one way trips were saved (using an average GHMS vehicle) in the same period.

Notes on the Reporting Period

The Australian Bureau of Agricultural and Resource Economics and Sciences forecasted winter production to be 27 per cent below the 10-year average to 2018-2019, falling for the third consecutive year since record high production in 2016-2017 (ABARES 2019).

There has been a steady increase in the production of barley since 2017, with international markets also seeing upward trends of barley production. Wheat and Canola have experienced sustained decreases in production, performing at approximately 35 per cent below their 10-year averages in 2018-2019 (ABARES 2019).

The below average total harvest numbers have impacted the following areas in GHMS reporting:

- Harvest size: The total harvest size has decreased by 22% (1,343,857 to 1,043,510 million tonnes, from 2018-2019).
- Number of trips saved: Due to the decreased harvest size, there were fewer deliveries made (a 20% decrease). Even though the total harvest size and number of deliveries decreased, the number of trips saved increased (from 3% to **7%**) of total deliveries. The increase in trips saved was due to PGRs resolving reporting inconsistencies with truck limits, continuing to focus on compliance and improving their reporting methods.
- Most common GHMS eligible vehicle types – There was an increase in Rigid Truck and DOG Trailer (5 axles) vehicles and Rigid Truck and PIG Trailer (5 axles), and a decrease in Road Train (11 axle) vehicles. Rigid Truck and DOG/PIG Trailer (5 axle) vehicles may better accommodate smaller harvest loads.

The ongoing drought conditions have impacted the harvest yield. Transport for NSW has provided continued support through the Drought Relief Heavy Vehicle Access Program.

The NSW Government and Transport for NSW will continue to work with the freight and agricultural industries to support access for heavy vehicles carrying larger loads to safely and efficiently move feed, water and stock in drought affected areas (RMS 2019).

GHMS Objectives

1. **Promote** the safe movement of grain
2. **Facilitate** the movement of grain off farms to grain receivers during the peak harvest season
3. **Maximise** the productivity of the existing fleet of vehicles to complement an increase in on-farm productivity
4. **Minimise** the number of vehicle trips between farm gate and receival point
5. **Maintain** existing statutory obligations, including Chain of Responsibility laws
6. **Protect** road and bridge infrastructure
7. **Manage** excess loads on-site, rather than return those loads to the network
8. **Support** the competitiveness of the NSW grain industry on national and international market

Key Highlights – 2019 Winter Harvest

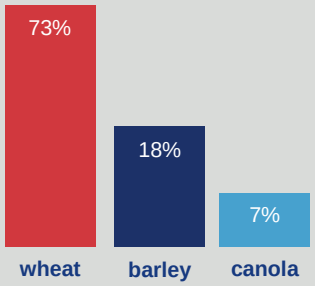
1 The Harvest and Scheme Participation

How big was the harvest?

1,043,510 tonnes

22% from 2018

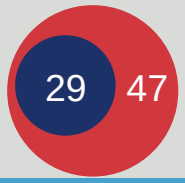
What did we harvest?



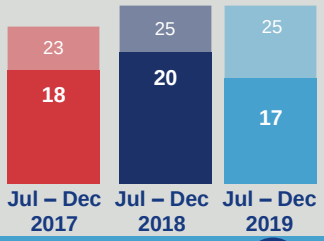
How many Local Government Areas (LGAs) participated?

Data reported covered PGR sites in **29 LGAs**

47 LGAs participated in GHMS



How many PGRs vs How many PGRs reported data?



2 Transportation of Grains

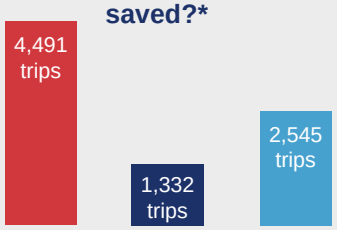
How many deliveries were made?

6,972

28,405

80% of all deliveries

How many trips were saved?*



*Approximates based on one way trips using an average GHMS vehicle.

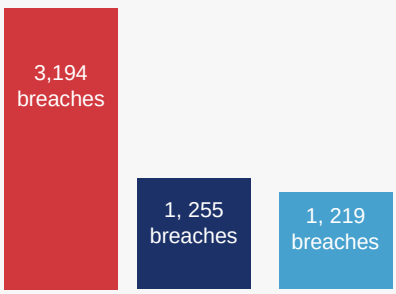
What was the most common vehicle type?

Prime mover and semi-trailer combination (6 axles)

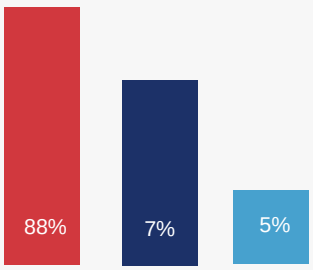
GHMS: 59.35%	**NON-GHMS**: 50.29%

3 Delivery Compliance

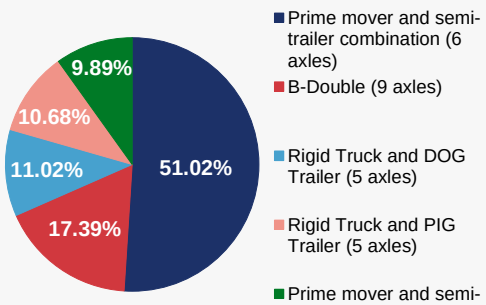
How many overmass breaches were recorded?



What is the breakdown of overmass breaches by overmass percentile group?

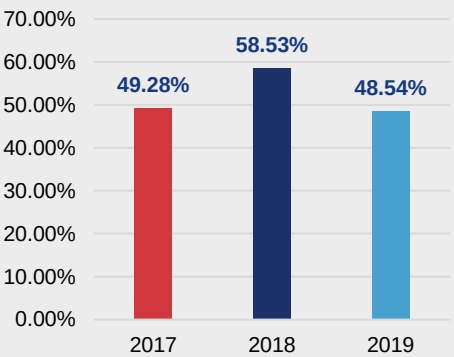


Which Truck Types had the most overmass breaches?



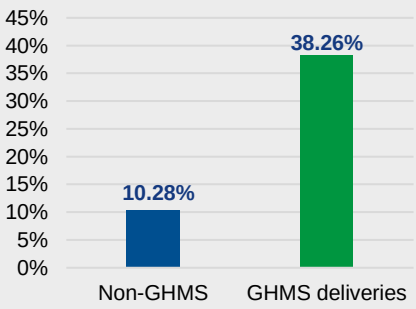
4 Delivery Productivity

Allowable Mass Utilised (95-100%) 2017-2019*



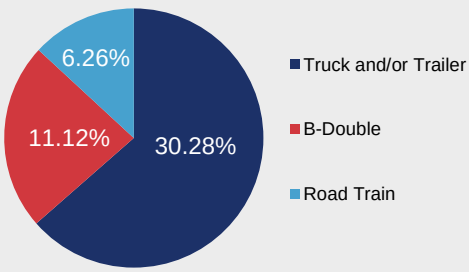
*Percentage calculated from total deliveries July – December.

Allowable Mass Utilised (95-100%)*



*Percentage is calculated from total deliveries July – December 2019. GHMS mass limit include 5% overmass allowance.

Allowable Mass Utilised by Vehicle Type (95-100%)* GHMS



*Non-GHMS deliveries had variance of -1.06%, +2.18%, and -0.24% for the respective truck types.
Truck and/or trailer vehicles (which includes all other vehicles that are not a Road Train or B-Double such as Rigid Truck + dog trailer.

1.1 Overview of the Grains

What did we harvest in July – December 2019?

- For this winter harvest, the total harvest was 1,043,510 tonnes.

For **July to December 2019**

- The most prominent grain harvested was **Wheat** (73.45%), followed by **Barley** (17.69%), and **Canola** (7.30%).

For **July to December 2018**

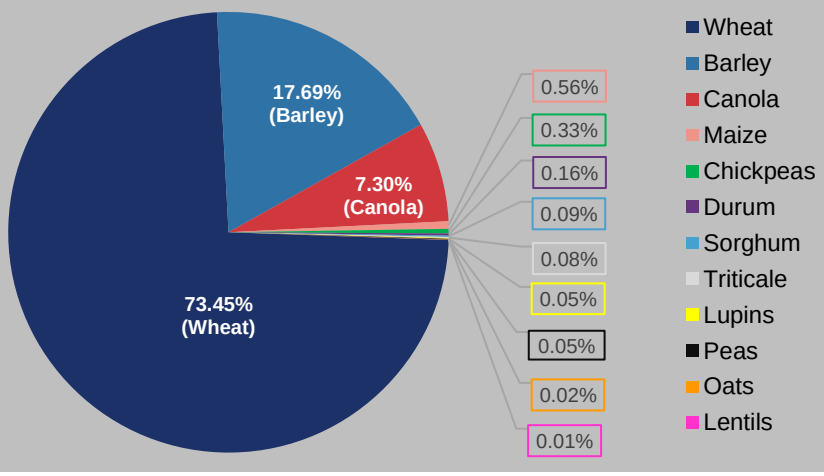
- The breakdown of the most prominent grains harvested were as follows: **Wheat** (72.12%), **Barley** (15.96%), **Canola** (8.81%) and **Chickpeas** (2.58%).

Total GHMS harvest (tonnes)

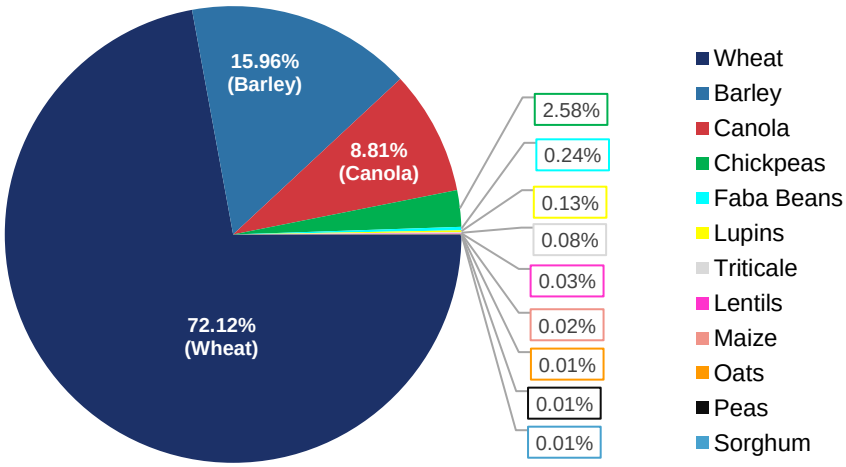
July – Dec 2017	Jul – Dec 2018	Jul – Dec 2019
3,720,575	1,343,857 - 64% from 2017	1,043,510 - 22% from 2018

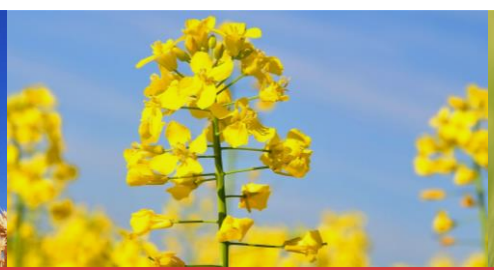
**Please note the total harvest figures displayed in this half year report are based on data reported by GHMS PGRs only. The total harvest figures in this report does not include crops not covered by GHMS.*

Distribution of deliveries across grain types
(Jul - Dec 2019)



Distribution of deliveries across grain types
(Jul - Dec 2018)

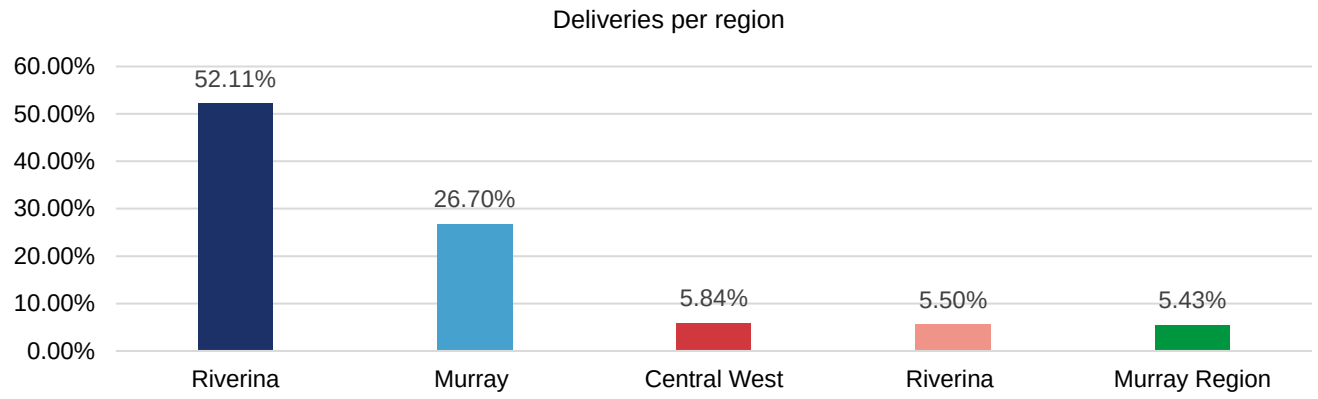




1.2 Region Participation

What were the top deliveries (trips) by region*?

- Top deliveries were measured as percentages of total deliveries.
- For July to December 2019, Riverina was the Region with the most deliveries (52.11%).
- Murray (26.70%) and Central West (5.84%) held the respective second and third largest share of deliveries.

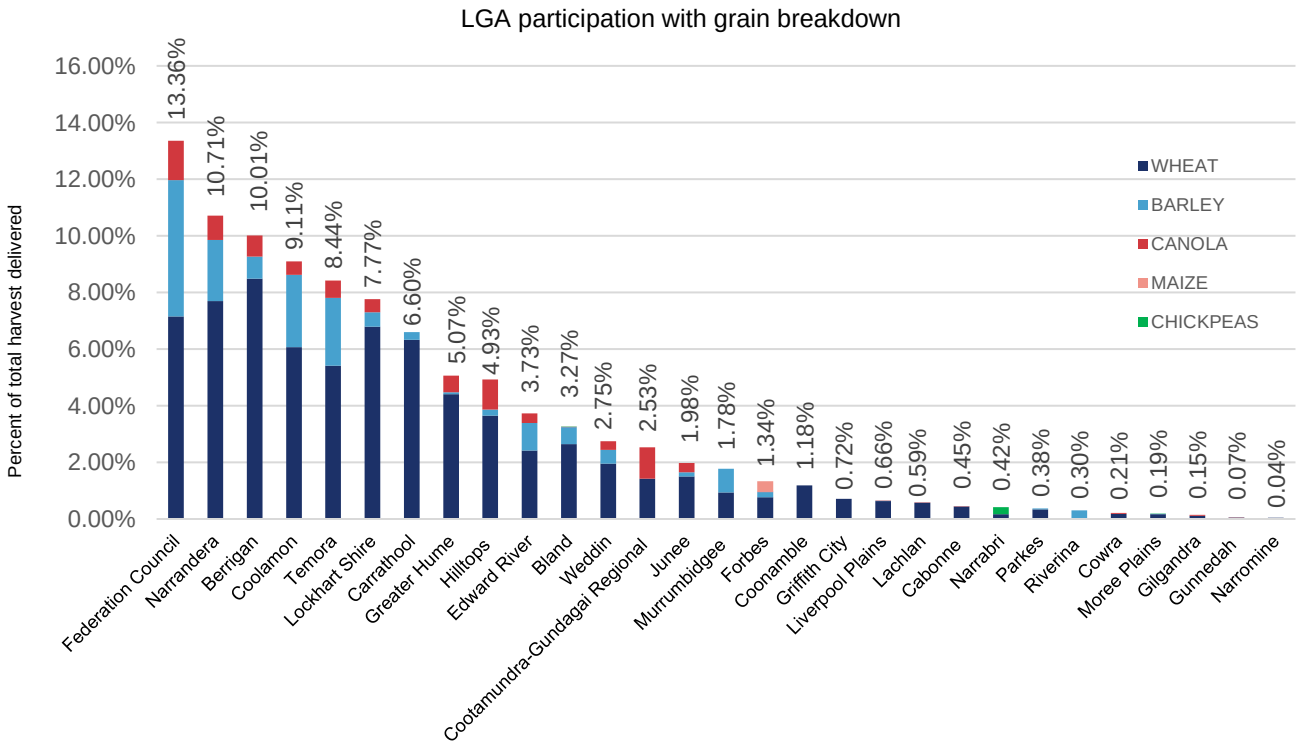


** NSW Local Land Services Regional grouping were used for this section of the report*

1.3 LGA Participation

How many LGAs participated and what grains did they receive?

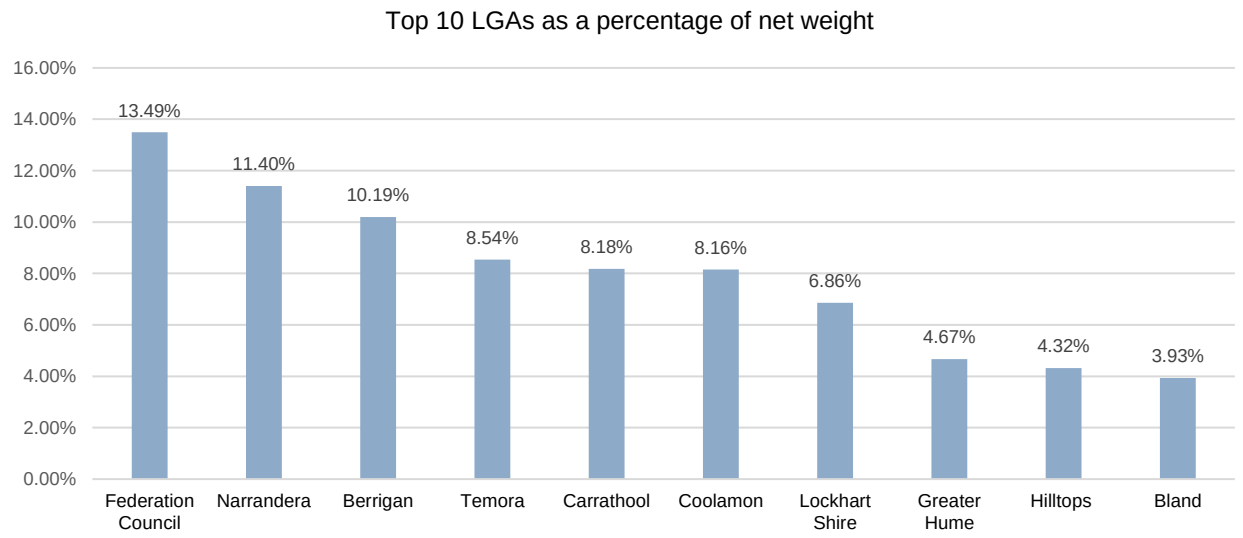
- Data reported from July to December 2019 covered PGR sites in 29 LGAs.
- Federation Council (13.36%) and Narrandera (10.71%) received the most amount of grain.
- Most LGAs received wheat as the most prominent grain, followed by barley and canola.



1.3 LGA Participation

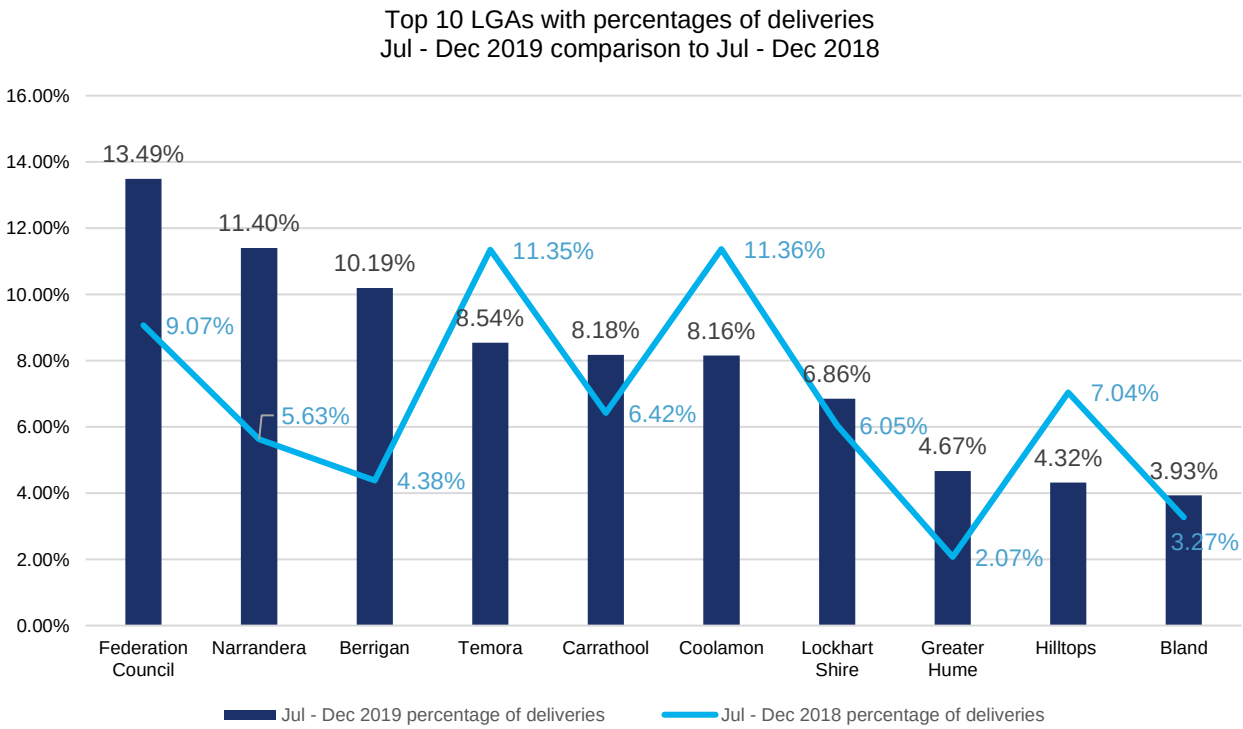
What were the top 10 LGAs by percentage of total net weight?

- For the July to December 2019 reporting period, Federation Council had the highest percentage of net weight (13.49%), followed by Narrandera (11.40%).



How did LGA trends in 2019 compare to July – December 2018?

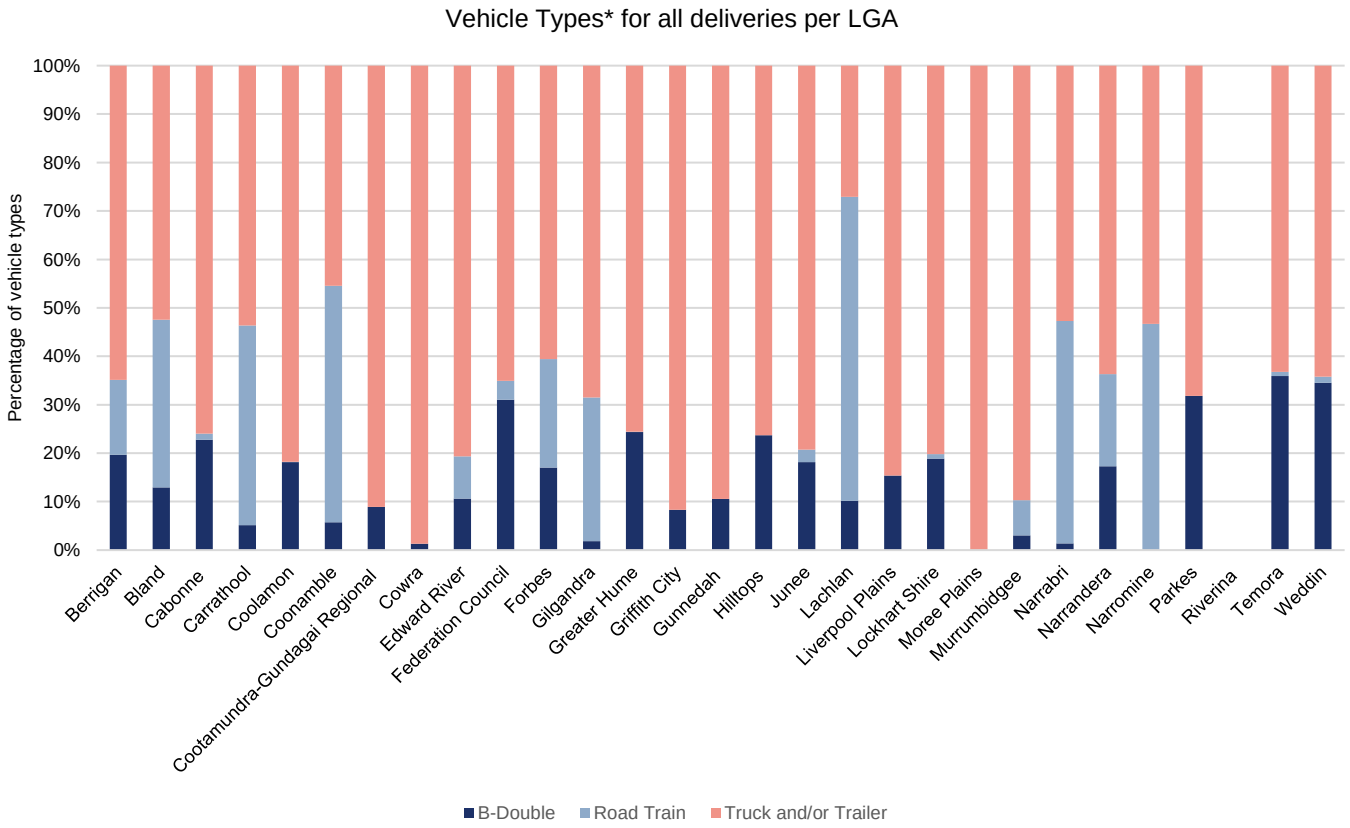
- Federation Council had the highest percentage of deliveries (13.49%), a 4.42% increase from July to December 2018.
- Narrandera had the second highest percentage of deliveries (11.40%), a 5.77% increase from the previous reporting period of July to December 2018.



1.3 LGA Participation

What type of vehicles are utilised for deliveries across each LGA?

- Truck and/or trailer vehicles were the greatest type of vehicle used for deliveries (69%), followed by B-Double (20%) and Road Train vehicles (10%).

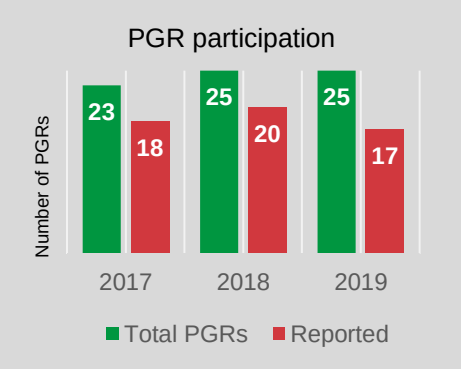


* Vehicles have been categorised into 3 types: Road Trains (which includes all Road Train vehicles such as AB – triples and Modular B-triples); B-Double vehicles, and Truck and/or trailer vehicles (which includes all other vehicles that are not a Road Train or B-Double such as Rigid Truck + dog trailer and Prime mover + semi-trailer combination).

1.4 PGR Participation

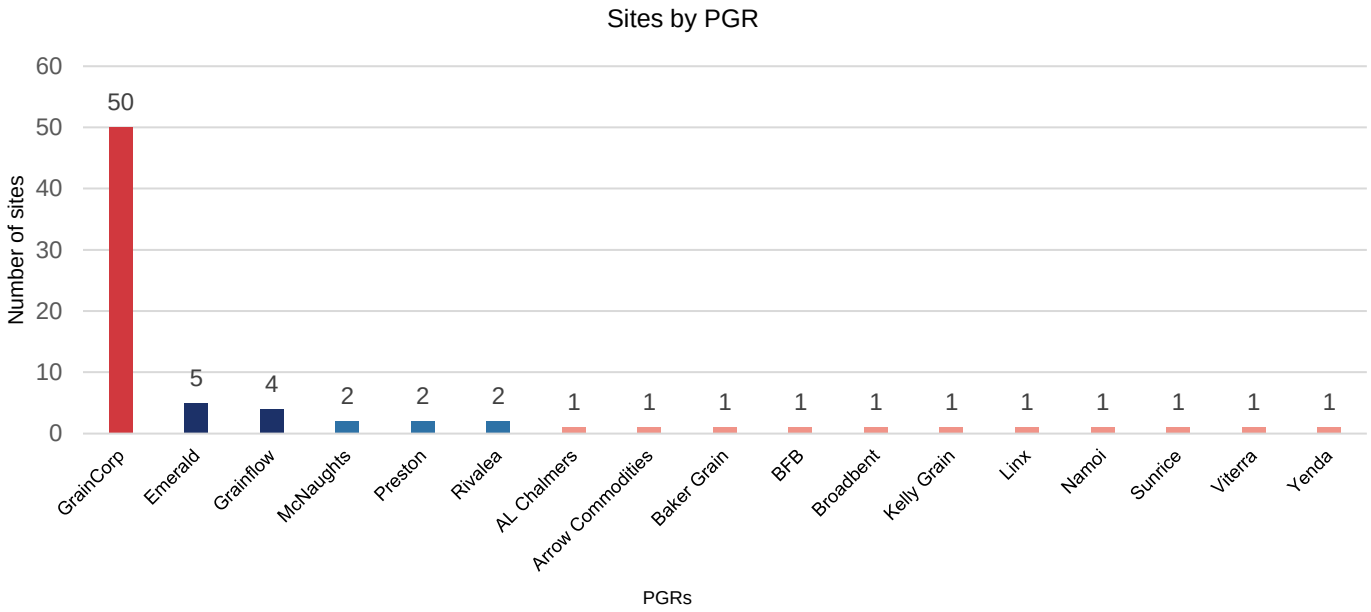
How many PGRs participated?

- **25 PGRs participated** in the GHMS in the July to December 2019 period.
- Of these 25 PGRs, **17 provided data for reporting purposes**.
- Of the 8 PGRs that did not provide data, some cited that they did not receive any deliveries during the reporting period due to the drought conditions.



How many sites are there for each PGR?

- GrainCorp is the PGR with the most sites (50), followed by Emerald (5), Grainflow (4), McNaughts (2), Preston (2), and Rivalea (2).
- One third of PGRs have 2 sites or more (35%). Close to two-thirds of PGRs have only 1 site (65%).

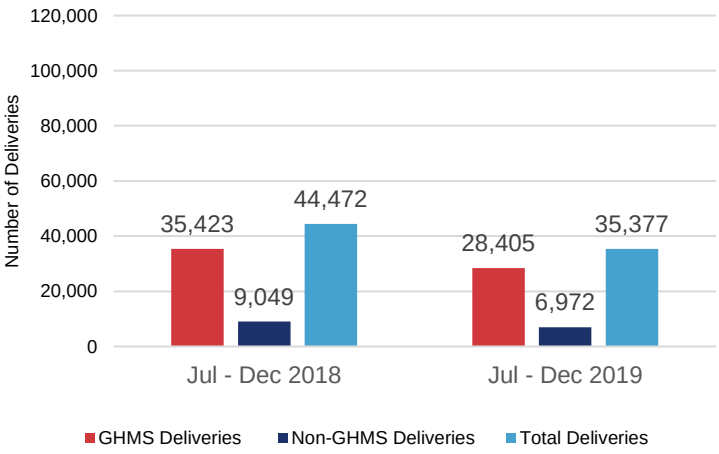


2.1 Deliveries

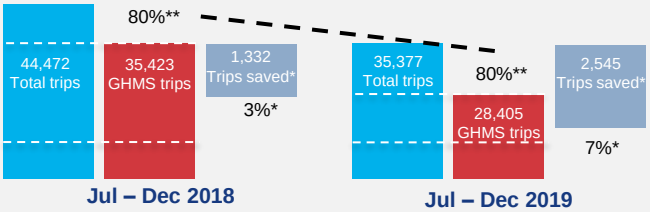
How many deliveries were made under GHMS?

- In the July to December 2019 reporting period, **35,377** deliveries were made, with **28,405** deliveries made under GHMS.
- Despite the drought conditions, most deliveries continue to be made under the GHMS mass concession (**80%**). This shows the continual effectiveness of the GHMS, even with the decrease in total harvest size of (22%) in 2019, compared to the winter harvest of 2018.
- The number of trips saved increased by **4%** (from 1,332 trips in 2018 to 2,545 trips in 2019).
  The increase in trips saved was due to PGRs resolving reporting inconsistencies with truck limits, continuing to focus on compliance and improving their reporting methods. PGRs also implemented stronger governance measures when breaches were reported, to investigate and resolve root causes in reporting breaches/errors. They also invested more in training staff to report deliveries correctly, and mitigate the risk of manual reporting errors.

Total Deliveries
Winter Crop Harvest year-on-year trends



Number of Trips Saved
Winter Crop Harvest year-on-year comparison



Trip saved *= An average GHMS vehicle load made up of the load (gross weight) differences between GML and GHMS.*

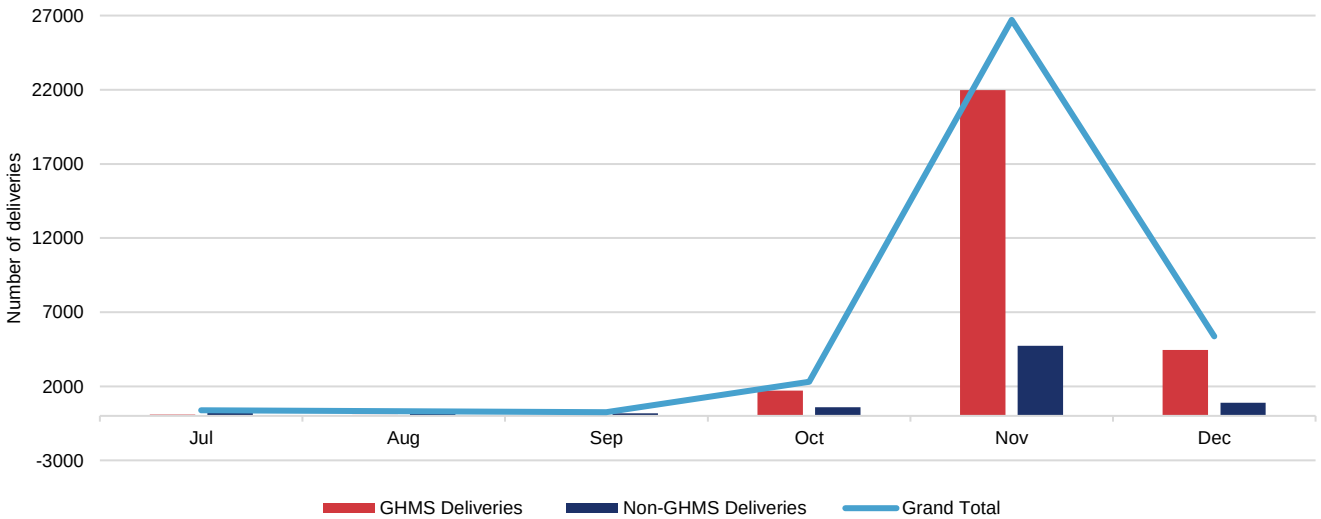
**Trips saved are approximates based on one way trips*

***Percentage of deliveries that were under GHMS*

How many deliveries were made per month?

- In the reporting period of July to December 2019, the majority of GHMS and Non-GHMS deliveries occurred in November and December.
- The reporting period of July to December is the winter crop harvest period.

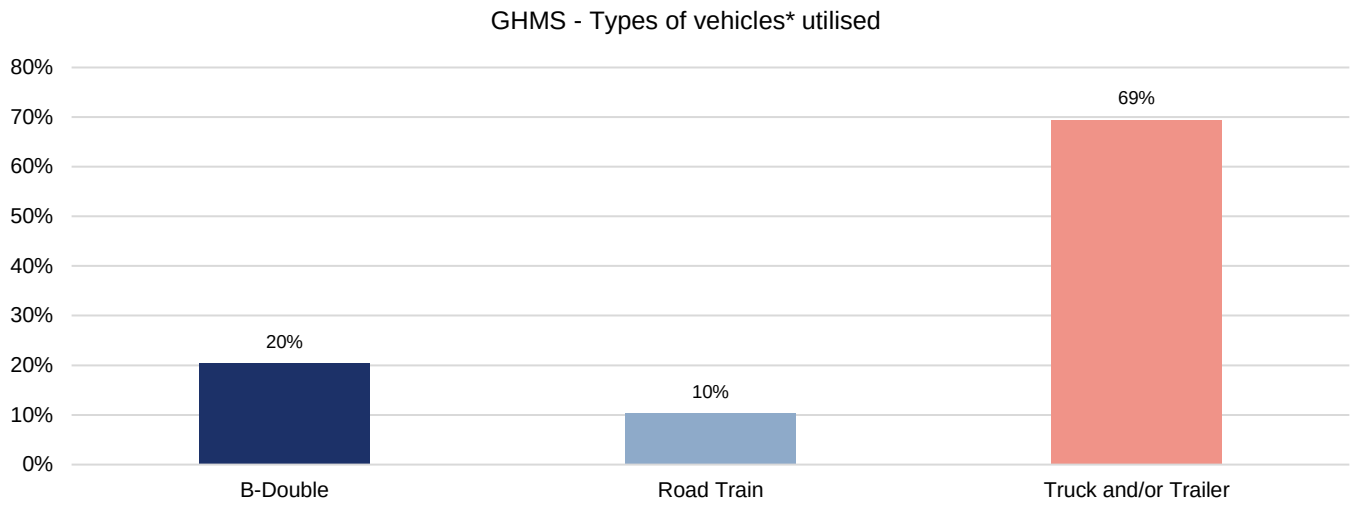
Deliveries (month-by-month)



2.2 Eligible Vehicle Types

What was the most common vehicle type?

- The common vehicle type reported was the **Prime Mover and semi-trailer combination – 6 axle** (50.29%).
- Most GHMS deliveries were made by Truck and/or trailer vehicles (69%), followed by B-Double (20%) vehicles and Road Train (10%) vehicles.



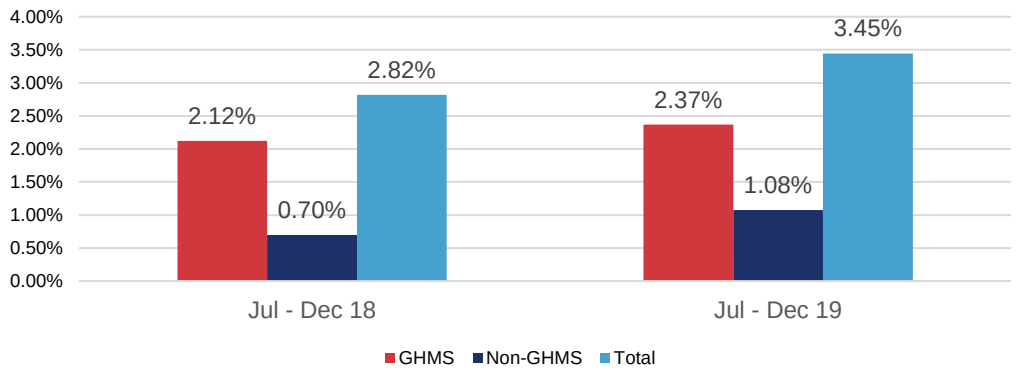
** Vehicles have been categorised into 3 types: Road Trains (which includes all Road Train vehicles such as AB – triples and Modular B-triples); B-Double vehicles, and Truck and/or trailer vehicles (which includes all other vehicles that are not a Road Train or B-Double such as Rigid Truck + dog trailer and Prime mover + semi-trailer combination).*

3.1 Overall Breach Trends

What are the winter crop harvest compliance trends?

- In the July to December 2019 reporting period, **1,219** breaches were recorded.
- The percentage of total breaches has slightly increased by 0.63%, from 2.82% (**2018**) to 3.45% (**2019**).
- **1,255** total breaches were reported in the July to December 2018 reporting period.
- Due to the scale of GHMS deliveries (80% of all deliveries), the majority of breaches were under GHMS deliveries (80%).

GHMS & Non-GHMS non-compliance winter crop harvest comparison



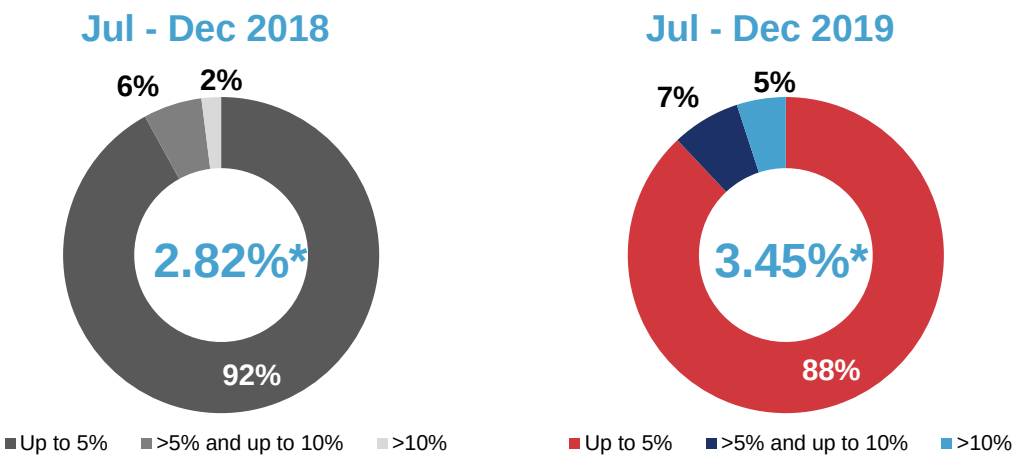
* GHMS percentages are a total of GHMS deliveries
* Non-GHMS percentages are a total of Non-GHMS deliveries
* Total percentages are a % of all deliveries

3.2 Breaches

How many overmass breaches were recorded?

- The majority of breaches were in the up to 5% overmass range.
- Breaches > 10% increased by 3% in 2019.

Total breaches by percentile bracket



*Total breaches for all deliveries

3.3 Overmass Deliveries

What is the breakdown of breaches by numbers?

- Non-GHMS deliveries (20% of all deliveries) reported a disproportionate amount of overmass breaches in:
  - The 5% overmass bracket (32%).
  - The greater than 5% and up to 10% overmass bracket (46%).

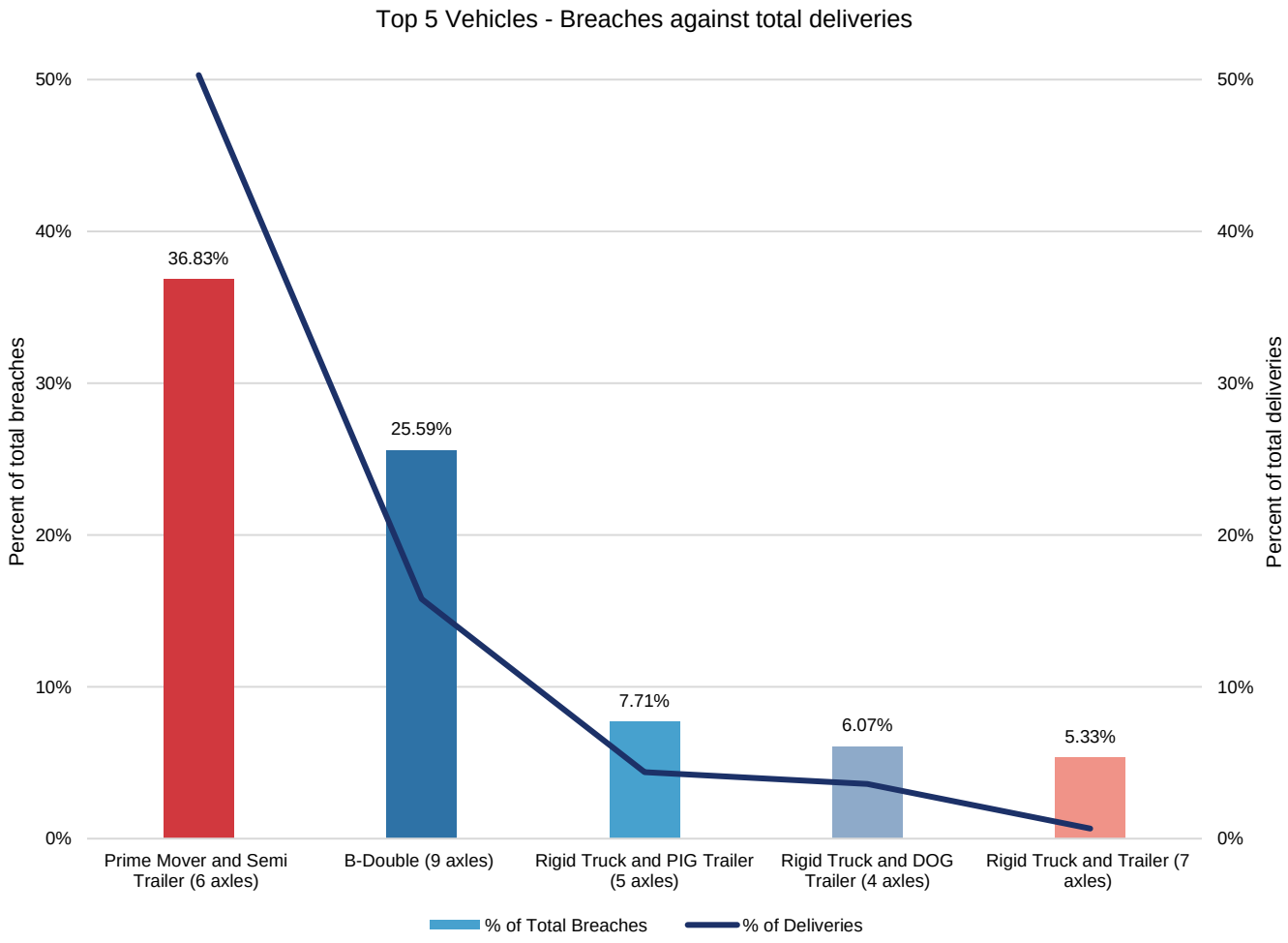
Total number of breaches

	Up to 5% overmass	Greater than 5% and up to 10% overmass	Greater than 10% overmass
GHMS	729	59	50
Non-GHMS	340	27	14
Total	1069	86	64

3.5 Breaches

Which vehicle types had the most number of breaches?

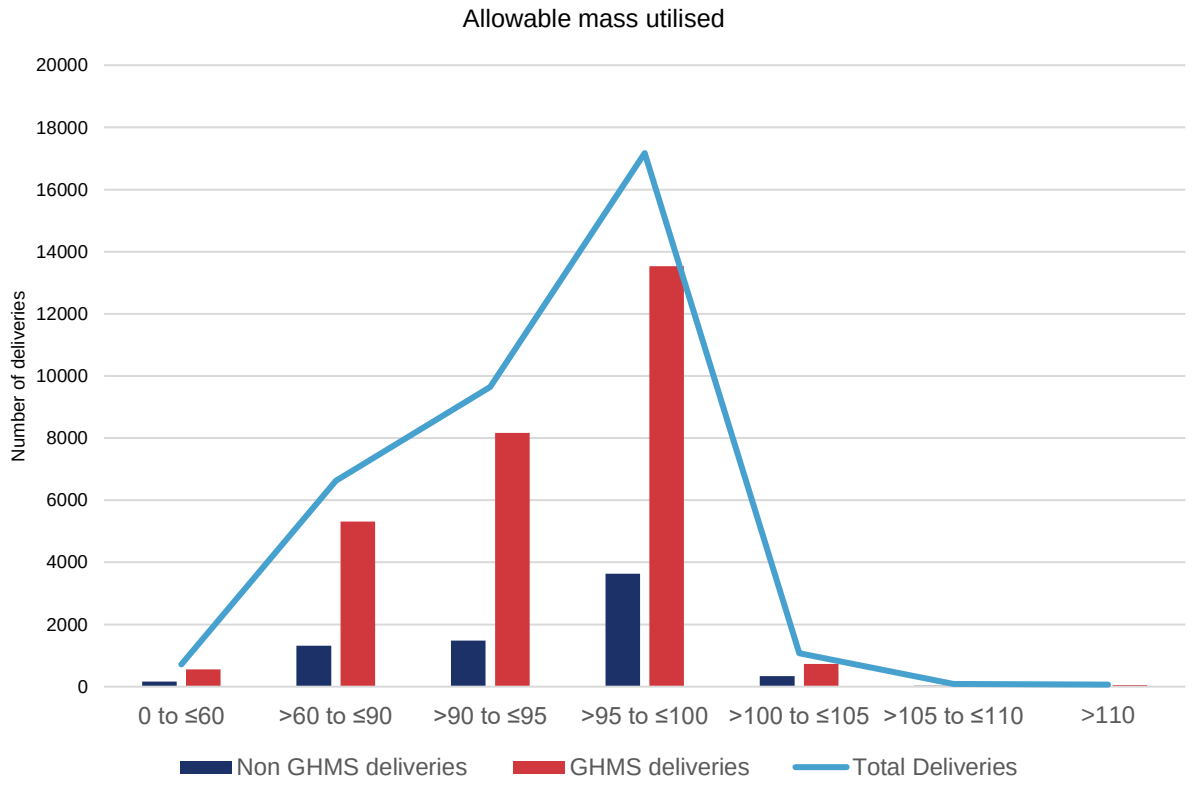
- In the July to December 2019 reporting period, most breaches were conducted by 5 vehicle types (81.54%).
- The majority (36.83%) were committed by Prime Mover and Semi Trailer (6 axles) vehicles.
- The percent of breaches for this vehicle type exceed the utilisation of Prime Mover & Semi Trailer (6 axles).



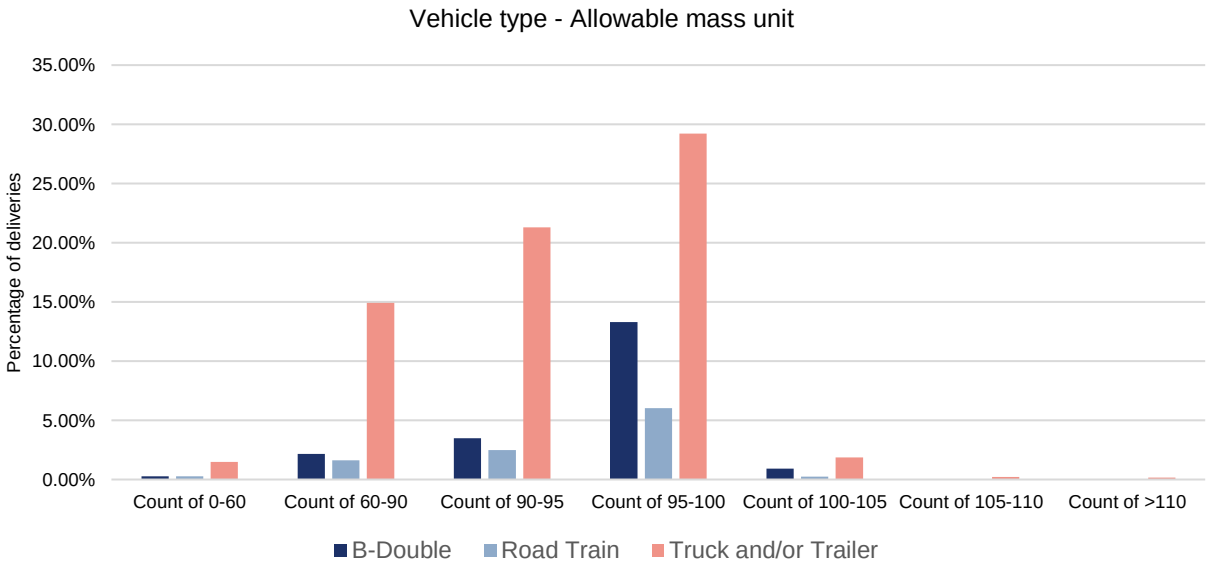
4.1 Productivity

How productive were deliveries?

- Close to half of all deliveries for both GHMS and Non-GHMS deliveries utilised the allowable weight limit of 95-100% (**49%**), whereby 100% represents the Legal Weight Limit (i.e. for GHMS deliveries, 100% includes the additional up to 5% mass provided under the GHMS).
- There is an opportunity to increase productivity levels, with almost half (**48%**) of deliveries (both GHMS and Non-GHMS) falling within the 0-95% mass utilised bracket.



- Almost half of deliveries for all vehicles utilised the allowable weight limit of 95% to 100% (**49%**), whereby 100% represents the Legal Weight Limit.



5 Conclusion

5.1 Summary

What has been achieved in this reporting period?

- The data and scheme participation by councils and industry continue to show strong support for the GHMS. Transport for NSW will continue to administer the scheme, progress previously identified opportunities for improvement, and work with the National Heavy Vehicle Regulator (NHVR) to implement any further changes. This report will also be provided to the Grain Harvest Management Scheme Consultative Committee for consideration.

- Transport for NSW will also continue to monitor the data for compliance purposes to ensure the scheme continues to provide productivity benefits to compliant operators, while ensuring road safety and road use is sustainably maintained.

5.2 The Future

What is the progress on the future visioning for the GHMS?

- **Drought support** – Transport for NSW has provided continued support through the Drought Relief Heavy Vehicle Access Program. The program provides up to $300,000 per council for all projects, toward the cost of maintenance and minor improvement work on roads and roadsides.
  Along with the broader NSW government drought relief support for farmers and their families, Transport for NSW is working with freight and agricultural industries to support access for heavy vehicles carrying larger loads to safely and efficiently move feed, water and stock in drought affected areas. In partnership with the National Heavy Vehicle Regulator, we have also improved and streamlined the assessment of drought relief permit applications.

- **The Farm Gate Access Project** – Is a pilot project that was launched on 1 June 2019, designed to benefit local farmers, businesses, participating councils and the broader community by fostering safe and legal access for heavy vehicles. It has been designed to make it easier to apply for and approve safe and legal access for higher productivity vehicles travelling on low volume council roads. This includes vehicles being used under the Grain Harvest Management Scheme with the exception of Road trains.

- **Stakeholder engagement** – In the FY19 GHMS report, it was identified that there is room to improve the integrity and format of data reporting received from PGRs. Transport for NSW are continuing to work with PGRs to simplify data collection processes to improve data accuracy and reporting efficiency.

- **Increase participation** – LGA and PGR participation has remained steady since 2017/18. Transport for NSW is currently engaging industry stakeholders (including the GHMS Consultative Committee members) to help identify and engage prospective grain receivers.

- **Chain of Responsibility** – Stakeholders in the grain industry have Chain of Responsibility obligations under the Heavy Vehicle National Law. The Grain Industry Transport Code of Practice (Transport Code) was developed by the grain industry as part of the Australian Grain Industry Code of Practice Industry Code (Industry Code) to ensure compliance with the National Heavy Vehicle Law and should be reviewed in conjunction with the Industry Code. At present, Transport for NSW are engaging with the GHMS Consultative Committee to better understand current practices of overmass management. Opportunities are also being examined for adoption of a consistent approach to the management of overmass deliveries to align with Chain of Responsibility requirements under the Heavy Vehicle National Law.

6.1 Appendices

Table 7: Councils that participated in the GHMS in July – December 2019

No.	Participating Council
1	Berrigan
2	Bland
3	Cabonne
4	Carrathool
5	Coolamon
6	Coonamble
7	Cootamundra-Gundagai Regional
8	Cowra
9	Edward River
10	Federation Council
11	Forbes
12	Gilgandra
13	Greater Hume
14	Griffith City
15	Gunnedah
16	Hilltops
17	Junee
18	Lachlan
19	Liverpool Plains
20	Lockhart Shire
21	Moree Plains
22	Murrumbidgee
23	Narrabri
24	Narrandera

No.	Participating Council
25	Narromine
26	Parkes
27	Riverina
28	Temora
29	Weddin

* Data reported in July – December 2019 covered PGR sites in these LGAs.

6.1 Appendices

Table 8: Grain receivers that participated in the GHMS in July – December 2019

No.	Grain Receiver
1	AL Chalmers
2	Arrow Commodities
3	Baker Grain
4	BFB
5	Broadbent
6	Emerald
7	GrainCorp
8	Grainflow
9	Kelly Grain
10	Linx
11	McNaughts
12	Namoi
13	Preston
14	Rivalea
15	Sunrice
16	Viterra
17	Yenda Prods Grain

*Data reported by PGR in the July to December 2019 reporting period to Transport for NSW.