2024

Machine learning cameras

Transport for NSW is installing a number of machine learning traffic counting and classifying cameras across the state.

What are they?

- These machine learning cameras take high-definition pictures of heavy vehicles and then classify the type of vehicle.

- There is a radar sensor and camera on the unit that takes a picture of the heavy vehicles when certain criteria are met.

- After the picture is taken, artificial intelligence within the unit can tell the difference between different types of heavy vehicles, for example, a container carrying heavy vehicle, B-Double or Semi-trailer.

- The units are also able to track changes in load. If a shipping container truck entered a location carrying one container and left with two containers the platform contains a record of this change.

What they are not

- They are not speed cameras

- They are not mobile phone detection cameras

Machine learning cameras

The Machine Learning project was developed to understand if machine learning and artificial intelligence could be adapted to extract heavy vehicle information from roadside cameras. This new heavy vehicle traffic data will be used to improve Transport for NSW's understanding of heavy vehicle and freight movement.

Why are we using these cameras?

- To capture the movements of heavy vehicles around NSW
- Generate data to inform long term transport network planning and other non-infrastructure solutions to support the safe, productive and sustainable movement of goods in NSW
- To provide assurance that heavy vehicles are on the routes they are meant to be on.

Why do we need machine learning cameras?

These cameras are able to distinguish between heavy vehicle types and classifications. They can also recognise changes in shipping container loads between heavy vehicles moving between port, intermodal and other freight routes. This enables Transport for NSW to identify efficiencies in the supply chain, prioritise investment, and support industry.

Machine learning cameras also offer visibility on what heavy vehicles are using the roads and how.

Where will you find them?

- Sheahan Bridge (northbound only), Gundagai
- Foreshore Road, Port Botany, Sydney
- Hexham Bridge (South Bound only), Stockton Bridge, Tighes Hill Bridge, Newcastle
- Moorebank Avenue, Moorebank, Sydney
- Cockfighters Bridge, Wollombi Brook
- Thomas Mitchell Drive, Muswellbrook
- Newell Hwy x Lizard Dr/Old Brewery Rd, Narrandera

For further locations, visit www.transport.nsw.gov.au/mlc

Look out for these solar-powered machine learning cameras. Transport for NSW is expanding its network and will be installing a number of cameras across the state

Contact us

If you have any questions or would like more information please contact our project team:

✉ **freight@transport.nsw.gov.au**

🖥 **www.transport.nsw.gov.au/freight-hub**

If you need help understanding this information, please contact the Translating and Interpreting Service on **131 450** and ask them to call us on **13 77 88**.