

FOODSTUFFS CASE STUDY

CLIENT: Foodstuffs

As New Zealand's largest grocery retailer, Foodstuffs has one of the biggest supply chains in New Zealand, with over 300 company trucks, plus contractor fleets, servicing 333 stores, distribution centres, depots and online delivery.

MAX-SAFE Side View protection delivers a huge step forward in road safety for Foodstuffs. This solution will ensure consistent safety across our supply chain and on New Zealand roads.

BLAIR INGLIS, Fleet Safety Manager for Foodstuffs

SHAPSHOT

New Zealand's largest grocery retailer – Foodstuffs – has become the first company in New Zealand to install the MAX-SAFE Side View™ solution to protect vulnerable road users (VRUs) around its heavy vehicles.

With innovation and safety as key company values and with hundreds of Foodstuffs vehicles on the road every day and night, the company wanted to address what was becoming an increasingly high-risk environment for VRUs and their drivers – notably more cyclists at risk from turning trucks.

Foodstuffs Fleet Safety Manager, Blair Inglis, worked with a trusted local provider to source the innovative solution from Australian company, SGESCO-MAX, with the technology proving its worth in five seconds.

MAX-SAFE Side View uses AI-powered camera technology to detect VRUs, such as pedestrians, cyclists, and scooter riders, in the vehicle's left-side blind spot to prevent accidents.

Read on for details on:

- The business overview
 - The safety challenge
 - The solution
 - The rollout
 - Future plans
 - Key benefits
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BUSINESS OVERVIEW

The Foodstuffs enterprise operates via North Island and South Island cooperatives that serve over four million New Zealanders every week across their five major brands: New World, PAK'nSAVE, Four Square, Gilmours, and Liquorland.

The “wheels” of their co-op turn 24 hours a day with their supply chain being one of the biggest in New Zealand.

Foodstuffs North Island Transport operates a fleet of 300 trucks, servicing Houhora in the far North right through to Island Bay (Wellington) in the south. They also have 45 contracted transport partners that deliver freight services to and from Foodstuffs' five distribution centres, four depots and 333 grocery stores.

This makes for a lot of heavy vehicles on highways and city roads at any one time, which is why Foodstuffs has been an early adopter of EVs to reduce emissions.

Their Journey to Zero mission aims to reduce waste and drive continuous improvement across all areas of the business and with all stakeholders. This encompasses innovation and safety, including road safety and commitments to keeping staff, customers, suppliers and the public safe during their interactions with Foodstuffs.

THE SAFETY CHALLENGE

Large heavy vehicles used for Foodstuffs' freight have blind spots around the vehicle preventing drivers from having clear vision of any people or objects in the blind spot. Mirrors only provide a limited view as to the exterior of the vehicle.

For most heavy vehicles, between 90 and 180 degrees of a heavy vehicle's surrounds is in a blind spot. The rear is a given and is why Foodstuffs has long had reversing cameras on their trucks. The other main hazard areas are the left corner and side for a vehicle driven on the right. This is particularly evident when a vehicle turns left.

With vehicles operating day and night, spotting a VRU can be more difficult in darkness which is much more prevalent during New Zealand's non-daylight-saving months. And while compared to other countries, cycling in New Zealand is not a major mode of transit to and from work, that is changing with the addition of cycling lanes in major cities. As well, the number of leisure cyclists on many of NZ roads has long been notable and is increasing, as too the rise of e-scooters.

This creates a high-risk environment for all VRUs and Foodstuffs' drivers, and one that Foodstuffs wanted to address.

THE SOLUTION

For several years, Foodstuffs has engaged Advanced Fleet Installs to provide them with efficiency and safety solutions for their fleet. The Auckland based company specialises in fitting GPS tracking systems, Driver Fatigue Monitoring Systems, Reversing Cameras for trucks and trailers, as well as other safety solutions for light commercial and heavy vehicles.

A few years ago, they sourced a radar-based blind spot solution from SGESCO-MAX to trial on a Foodstuffs vehicle as a possible blind spot solution for the side of a truck. The radar solution was able to detect people, objects and vehicles external to the vehicle, but it was not always able to distinguish genuine risks versus possible risks, resulting in many constant and at times false alerts which could be counterproductive for the driver and safety risk.

That all changed in late 2023 when SGESCO- MAX introduced a range of AI-based camera solutions with remarkable accuracy and other advantages.

One of these solutions – the MAX-SAFE Side View system – is an intelligent safety solution designed to protect VRUs during left-hand turns – a noted high-risk manoeuvre for heavy vehicles in urban environments.

MAX-SAFE Side View uses Machine Learning (ML) and AI-powered camera technology to detect pedestrians, cyclists, and scooter riders in the vehicle's left-side blind spot. This is smart, event-based warning system which only activates when there's a real risk, cutting down on driver distraction and alert fatigue.

THE TRIAL

Blair Inglis, Fleet Safety Manager for Foodstuffs, had previously seen new AI camera safety solutions at the Brisbane Truck Show in 2023.

With more cyclists at risk from turning trucks on New Zealand's roads, Blair engaged Advanced Fleet Installs to identify a suitable solution.

In June 2024, MAX-SAFE Side View was installed as a trial on a Foodstuffs tractor unit and semi-trailer.

The trial went for five minutes only. "That was all it took for us to see it worked well and was what we needed. It was a no brainer," said Blair.

He compiled a business case and applied for a capex which was approved over a two-year period.

A MAJOR SAFETY ADVANCE

The solution has multiple components which collectively deliver a major advancement in safety.

1. The AI camera is a small camera attached to the left-hand sideview mirror strut that can scan an area all along a truck's side and outwards. This is a programmable area, according to the size of the vehicle. For example, it can cover up to up to 4 meters wide, alongside the vehicle and even 14 meters behind the vehicle.
2. The solution becomes 'hyperactive' when the driver a) turns their left-hand indicator on or b) turns the wheel to the left.
3. At this point, horizontal strips of lighting along the side of the vehicle's trailer, at approximately 1 m height level begin flashing. On truck and trailer vehicles there are 4 light bars.
4. A vertical light bar on the vehicle's cab also flashes amber and white to alert VRUs
5. At the same time, an external audio announcement is made: "Caution, vehicle turning left." For truck and trailer units there is a speaker on both units.

Meanwhile, inside the vehicle, the driver is alerted by a flashing light and a spoken alert that there is a VRU on the left-hand side of the vehicle. This ensures the driver slows down and takes extra care when turning left. They wait until the alerts stop – signifying the VRU / cyclist has moved away – before doing so.

The solution delivers a 99.9% accuracy, 24 hours a day, in all types of weather situations.

According to Blair, MAX-SAFE Side View protection delivers a huge step forward in road safety for Foodstuffs.

“Having a solution that is so accurate, with minimal false alerts, removes a major stress for our drivers around vulnerable road users, while at the same time it's a great safety aid for VRUs,” said Blair.

THE ROLLOUT

Since the first install, Foodstuffs has progressively rolled out the solution to other vehicles in their fleet with Advanced Fleet Install collaborating with SGESCO-MAX's New Zealand distributor, Autokraft Electrical & Diesel (AED), for supply and implementation.

By the end of June 2025, the solution was installed on 20 trucks (Isuzu, Fuso and Iveco). Another 20 vehicles, the balanced of Foodstuffs' owned fleet, will be installed by the end of June 2026.

The solution is relatively easy and straightforward to implement and can be retrofitted on existing trucks, said Blair.

Training the drivers in how the solution works is very easy and straightforward. SGESCO-MAX has online training videos for drivers to learn how the system operates and alerts, including the safety checks that need to be done.

There is little drivers need to do with respect to the solution other than to take note when a VRU is detected and drive responsibly, said Blair.

FUTURE PLANS

Foodstuffs has updated its owner contracts making it compulsory for its contractors when buying a new rigid truck or trailer to have the MAX-SAFE Side View solution installed as part of their contract.

‘We are looking forward to the entire Foodstuffs fleet including our transport partners being fitted with MAX-SAFE Side View,’ said Blair.

‘This solution will ensure consistent safety across our supply chain and on New Zealand roads.

‘Safer vehicles are part of keeping people – our staff and the public – safe every day. Foodstuffs is always looking for ways to optimise our delivery processes, and having safer vehicles is a key component.

‘We are excited to be the first company in New Zealand to use this technology, leading the way in road safety, and hope that many more companies adopt new AI solutions to keep VRUs safe,’ he said.

KEY BENEFITS

The **MAX-SAFE Side View Solution™**

- ◆ PROVIDES SAFETY ASSISTANCE to the driver.
- ◆ SAFEGUARDS the **SIDE** of the **VEHICLE**.
- ◆ PROTECTS **VULNERABLE ROAD USERS** – pedestrians, cyclists, motorcyclists, scooters, skateboarders, e-bikes.
- ◆ **HIGH ACCURACY** – detects people stationary and moving.
- ◆ **AFFORDABLE** solution.
- ◆ State of the art **EUROPEAN TECHNOLOGY**.
- ◆ Options for more **ACTIVE SAFETY MEASURES**.
- ◆ Provides **ALERTS** and **AUDIBLE WARNINGS**.
- ◆ **GREATER SAFETY** and **PEACE OF MIND** –for drivers and Fleet Managers.
- ◆ Part of the **MAX-SAFE SAFETY ECOSYSTEM**.

With thanks to Foodstuffs and Autokraft Electrical & Diesel for provision of images of fleet vehicles.