

The Fleet Manager's Guide to Safer Routes

How navigation helps fleets prevent
route-related incidents



Executive Summary

Safer routes are not just about avoiding incidents. They're about reducing exposure to risk on every trip.

This guide looks at route-related safety risks fleets face in daily operations. From access restrictions and clearance limits to complex junctions and unfamiliar environments. It combines operational patterns seen across commercial fleets with practical navigation use in real transport operations.

Not every incident can be avoided. But many routing-related risks can be reduced.

Professional navigation supports safer routes in more ways than one might think. This guide explains how navigation contributes to safer routes, where standard navigation falls short for commercial vehicles, and what fleets can realistically improve without adding operational complexity.

What Does a Single Low Bridge Strike Actually Cost?



Bridge strikes are one of the most visible routing failures. They're also one of the most expensive. A low bridge strike rarely ends with vehicle repairs alone.

Direct damage can exceed €50,000, and in some cases reach six figures. On top of that come **delivery delays, customer penalties, insurance claims, regulatory fines, and reputational damage.**

For many fleets, bridge strikes are linked to routing and clearance mismatches rather than unpredictable events.

In this guide, you'll see:

- **Where routing mistakes turn into high-cost incidents**
- **Which navigation capabilities directly reduce risks**
- **Why standard navigation fails in truck operations**
- **How to test safer routing and navigation in daily operations**



Navigating through change and regulation is our daily business; ensuring that every route our drivers take is safe and compliant isn't just a goal—it's a necessity.

Sygic's navigation tools give our drivers the details they need to avoid unexpected issues on the road, which is crucial for making sure they can do their jobs effectively. The drivers appreciate features like lane guidance and bridge height alerts, which help avoid last-minute maneuvers and ensure safety.

Director of Product Management
at Teletrac Navman

Why Navigation Matters for Fleet Managers

Navigation is often seen as something for drivers. But it also affects fleet safety, compliance, and daily operations. Poor routing decisions raise risk in four predictable areas:

✓ OPERATIONAL RISK

Wrong turns, unsuitable roads, and clearance mismatches don't stay minor for long. They **lead to delivery delays, vehicle damage, and extra work** for dispatch and fleet managers. Bridge strikes are a clear example. Queensland Rail recorded 398 rail bridge or protection-beam strikes in 2024, showing how often low-clearance mistakes still happen in real operations.

✓ DRIVER PRESSURE

Tight schedules and long hours don't just affect morale. They affect safety. In the UK, a 2025 survey found **87% of professional drivers admit to driving while tired**, even though most recognise the risk. In Australia, the NHVR's January 2025 Operation Omega results flagged 200+ fatigue-related offences, including 17 critical breaches, showing that **fatigue and work-rest compliance is still a live issue** on freight routes.

✓ COMPLIANCE AND ACCESS

Height and weight limits, restricted zones, and local access rules vary by route and vehicle type. Fleets have to deal with low-clearance infrastructure such as bridges, tunnels, and underpasses, weight-restricted roads and bridges, and ADR or hazardous goods constraints including tunnel categories and prohibited routes. In cities, low-emission zones, time-window access rules, and loading zone restrictions add another layer. **If navigation doesn't account for these constraints, drivers face reroutes, fines, and missed slots.**

✓ BUSINESS IMPACT

Routing and navigation issues don't stop at the road. They ripple through the business. Extra kilometers increase fuel and toll costs. Delays and detours break delivery commitments and force reactive replanning. More exceptions mean more manual work across dispatch, customer service, and planning systems. Over time, **this shows up in higher operating costs, lower asset utilisation, and less predictable performance.** Reliable navigation helps fleets protect margins by keeping operations stable and repeatable at scale.



Common Problems & How Navigation Solves Them

Behind many routing-related incidents are a small number of recurring patterns. Truck-aware navigation doesn't remove all risk, but it can reduce exposure where route choice and on-road guidance matter.

Problem 1: Truck routed onto a road it shouldn't be on

It usually starts with a route that looks fine on a screen, but doesn't match the vehicle. Weight limits, height restrictions, hazardous goods constraints, or streets that are simply not suitable for trucks. By the time the driver realises it, the options are limited.

How navigation helps:

Truck-aware routing applies the vehicle profile and relevant restrictions before the route is driven. It reduces the risk of being sent onto prohibited or unsuitable roads, so drivers don't have to improvise and dispatch doesn't have to step in.

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“When you're handling oversized and heavy transports, not every road is an option. We needed a way to guide these transports securely from origin to destination—routes that could handle the size and weight. Finding those routes was our biggest challenge,”

Executive Director Heavy and Special Transport at Gruber Logistics

Problem 2: Drivers are forced into last-second decisions

Unfamiliar cities, complex junctions, and tight delivery approaches leave little room for hesitation. Missed lanes, sharp turns, and unclear approaches increase distraction and make the route harder to execute safely and consistently.

How navigation helps: Professional navigation supports drivers with lane guidance, clear voice instructions, hazard warnings, and speed alerts. The goal isn't just to reach the destination, but to make the route easier to follow when timing and attention matter most.

Problem 3: Complex urban deliveries

City deliveries rarely fail because of distance. They fail at the last kilometer. Narrow streets, restricted access zones, time-based entry rules, loading areas that are hard to reach, or arrival on the wrong side of the street.

When navigation doesn't reflect these constraints, drivers end up circling, stopping unsafely, or arriving late. What should be a short delivery turns into delay, stress, and extra coordination with dispatch.

How navigation helps: Professional navigation supports urban deliveries by respecting access restrictions, avoiding unsuitable streets, and guiding drivers to arrive on the correct side of the road. Hazard warnings and clear instructions reduce last-minute decisions in dense traffic and pedestrian areas.



"The integration is so intuitive that drivers rarely think twice about it. They activate the route, follow the guidance, and move back into the app environment naturally."

Head of Engineering at Xplanis

Problem 4: Inconsistent infrastructure and connectivity

Not all routes have reliable signage, up-to-date mapping, or stable mobile coverage. Rural areas, cross-border routes, and industrial zones often expose gaps in infrastructure and connectivity. When navigation depends entirely on live data, drivers can lose guidance at the worst moment. That increases uncertainty and forces manual decision-making.

How navigation helps: Offline navigation with pre-downloaded maps ensures routes remain usable even without connectivity. Combined with region-specific road data and traffic patterns, this helps drivers stay on course and fleets maintain consistency across different operating environments.

Quick wins. What Sygic's customers track first:

Operational metrics

- Clearance violations (incidents per month)
- Route compliance rate (drivers following planned routes)
- Time spent on route planning, replanning, and corrections
- Calls to dispatch related to route guidance

Driver feedback

- Confidence navigating unfamiliar areas
- Comfort with complex junctions and dense delivery areas
- Perceived workload during route execution
- Clarity of voice guidance (including language coverage)



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“Drivers get the navigation right on their tablets. It works offline, starts up quickly, and is easy to use. That alone takes a lot of friction out of the day-to-day work.”

Operations Manager at Villart

Key features that make routes safer

TRUCK-SAFE ROUTING

Routes are calculated using the vehicle profile. Height, weight, length, axle load, and relevant restrictions. This reduces the chance of routing a truck onto unsuitable roads, and avoids last-minute reroutes and on-road improvisation.

LANE ASSISTANT

Lane guidance helps drivers position the vehicle early at complex junctions, motorway interchanges, and roundabouts. This reduces late lane changes, missed exits, and sharp manoeuvres, especially in unfamiliar areas or heavy traffic.

PLANNED ROUTING

Dispatch can send a planned route to the driver, or send destinations and stops for the app to calculate. Either way, drivers get consistent guidance and the route stays aligned with the plan.

HAZARD ALERTS

Early warnings alert drivers to such things as sharp curves, steep descents, crossings, and other high-risk aspects that require attention. Advance notice allows drivers to adjust speed and positioning earlier, rather than reacting late.



VOICE INSTRUCTIONS IN MULTIPLE LANGUAGES

Clear voice guidance reduces the need for drivers to look at the screen. Support for multiple languages ensures instructions are understood immediately, even by international drivers operating outside their home market.

SPEED LIMIT INFORMATION AND ALERTS

Navigation displays current speed limits, upcoming changes, and special zones along the route. Alerts notify drivers when limits are exceeded or about to change, helping reduce speeding violations.

OFFLINE NAVIGATION

Navigation remains available without continuous mobile connectivity. Pre-downloaded maps ensure guidance continues in rural areas, tunnels, and cross-border routes where coverage is limited or inconsistent.

SAFER TURNS AND ARRIVAL ON THE CORRECT SIDE OF THE ROAD

Navigation favours turn manoeuvres that are easier and safer for trucks to execute. Where possible, this means prioritising right turns over left turns, as they reduce the need to cross oncoming traffic and multiple lanes. (In left-hand traffic markets such as the UK and Australia, the same logic applies in reverse.) This logic also avoids sharp turns, complex U-turns, and manoeuvres that force drivers into late corrections at intersections.

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"Drivers don't need to manually select vehicle types or worry about restrictions. It removes guesswork and minimizes errors, making their jobs easier and safer."

Head of Engineering at Xplanis



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“Before Sygic, drivers sometimes ended up on roads they shouldn't be on — resulting in fines or even accidents, like hitting low bridges.

In one case, a driver ignored Sygic's suggested route and was fined. When the team retraced the route using waypoints, Sygic had correctly avoided that road. Another incident involved a truck striking a bridge it was too tall for. Again, Sygic would've guided the driver safely around it.””

Logistics Manager at Richards Building Supply

Beyond safety. Connecting navigation to dispatch

Multiple Integration options

Fleets can connect navigation to existing systems in different ways, depending on their dispatch and planning setup. Sygic supports API and SDK integrations, stand-alone or embedded usage, and MDM deployment, each offering a different level of control and communication.

Low-emission zone awareness

Navigation supports routing around low-emission zones and access restrictions. This helps fleets stay compliant as environmental rules expand, and reduces avoidable reroutes or fines caused by entering restricted areas.

Implementation & day-to-day support

Sygic's team supports customers and partners through integrations, rollout, and day-to-day use. Including setup guidance, configuration help, troubleshooting, and making sure the solution works as expected in real operations.

Live services. Traffic, incidents, and road closures

Live traffic, incidents, and road closures help avoid delays and unnecessary detours. When conditions change, navigation can automatically suggest an alternative route, helping fleets meet delivery windows and keep ETAs accurate.

Backend routing control. From central planning to execution

Fleets often know about roads that are technically open but operationally problematic, such as recurring bottlenecks, temporary restrictions, or local rules. Custom closures and fleet-specific rules help ensure navigation respects those realities and avoids repeat issues.

Custom road closures and fleet rules

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“We deliver fuels and gases, so we’re transporting hazardous goods, and we need to make sure we don’t end up with a truck stuck in a narrow road or in the headlines.”

Head of IT Business Systems at Oxalis Logistics

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