

TRAILER TELEMATICS:

Cost of Ownership



Introduction

In today's fast-paced world of logistics and transportation, optimizing operational efficiency and profitability is crucial and every second counts. That's why today more fleets are using advanced trailer telematics technologies – solutions that are quickly changing the trucking and logistics industry. By leveraging the power of data and connectivity, advanced trailer telematics solutions now offer a wide range of benefits that go beyond location tracking to help fleet performance including enhanced fleet management, improved security, and proactive maintenance. To make informed decisions, it's essential for fleet professionals to fully understand how advanced trailer telematics impacts the total cost of ownership of trailers.

Understanding Trailer Telematics

Every advanced trailer telematics solution is powered by two elements, hardware and software. Hardware installed onto a trailer measures specific trailer conditions, while software collects, analyzes and interprets the data generated from the trailer to uncover real-time insights into the location, condition, and performance of trailers. All advanced telematics systems utilize the mobile/wireless network to broadcast trailer data seamlessly to the cloud through a mobile communications unit installed on each trailer.

Staying Ahead on Maintenance

Sensor technologies include the things most fleet managers know cause the most issues with their trailers: brakes, lights, and tires. Tire inflation and wheel-end temperature sensors help ensure top performance and prevent catastrophic thermal events, while light-out detection helps identify lighting failures while a trailer is in field.

Cargo Management with Road Ready

Road Ready advanced trailer telematics give you clearer line-of-sight into what's inside the trailer. Cargo management sensors help you make sure that you're getting the most out of your fleet's time on the road. A fully-loaded trailer – both increasing average yields and also eliminating or reducing empty back hauls – helps maximize your revenue per mile.

Consider this: if 20% of a trailer's miles driven are while it's empty, that means **65 billion empty miles per year**. When your trailer is empty, it's not earning you revenue. Even more, our sensors can help you make better use of your trailer cube space, going from less than 70% full to more than 90%.

Benefits of Trailer Telematics

Implementing a trailer telematics solution can be a complex endeavor, but it doesn't have to be a sunk cost. Investment in trailer telematics can help fleets maximize their time on the road, increasing revenues through fleet efficiency, reduced theft, and improved maintenance (and reducing downtime, repairs, and fines).

Improved Fleet Management and Operational Efficiency:

- Real-time location tracking allows fleet managers to monitor trailers' whereabouts and optimize route planning and dispatching for maximum efficiency.
- Optimized asset utilization enables better resource allocation and reduces idle time, leading to increased productivity and cost savings.
- Trusted documentation of equipment operating conditions reduces liability risks.

Increased Cargo Security and Trailer Theft Prevention:

- Geofencing and alerts provide instant notifications when a trailer enters or exits designated areas.
- Unauthorized movement detection ensures immediate action can be taken if a trailer is moved or a trailer door is opened when it shouldn't be, preventing potential loss or misuse.
- The presence of advanced telematics hardware installed on trailers acts as a deterrent to thieves.

Proactive Maintenance and Reduced Downtime:

- Remote diagnostics enable continuous monitoring of trailer components, allowing for timely identification of issues and proactive maintenance scheduling.
- Condition monitoring of critical components helps prevent unexpected breakdowns or more severe equipment failures, reducing unscheduled downtime, costly repairs, or potentially expensive violations and fines.

Keep Drivers Happy with Road Ready

Here's a thing that no one wants to hear: there's a current shortage of about 80,000 drivers in the United States — and the number is growing. That's why it's in your best interest to keep drivers satisfied and on the road.

Road Ready knows when your driver isn't on the road, neither of you make money — and that doesn't make anyone happy. Our solutions help fleets minimize downtime so your assets are on the road, your wheels are turning, and your drivers are happily making money.

Reduce your idle time. Reduce unscheduled downtime. Reduce driver idle time. Reduce violations. And increase your driver's time spent driving, their satisfaction, and your driver retention. Road Ready advanced trailer telematics help you do it all.

Factors Impacting Cost of Ownership

Initial Investment and Equipment Costs:

- The cost of installing a trailer telematics system, including hardware and software expenses, should be considered.

Subscription Fees and Data Plans:

- Telematics service providers typically charge monthly or annual fees for their services, including data usage and potential overage costs.

Training and Integration:

- Employee training on using the telematics system and integrating it with existing fleet management software may require additional investments.

Cost Savings with Trailer Telematics

Fuel Efficiency and Optimization:

- Monitoring and reducing idle time helps save fuel and minimize unnecessary consumption.
- Improving driver behavior, such as reducing excessive speed and aggressive driving, can significantly impact fuel efficiency.
- Optimized route planning based on real-time data can lead to fuel savings and reduced emissions.

Maintenance Cost Reduction:

- Preventive maintenance scheduling based on telematics data helps identify and address potential issues before they escalate, reducing maintenance costs.
- Early detection of mechanical problems allows for timely repairs and avoids major breakdowns, saving both time and money.
- Extended lifespan of trailer components through proactive maintenance translates to lower replacement and repair costs.

Reduce Compliance, Safety, and Accountability Violations:

- A higher CSA score allows you to keep fleets in higher selection sets and reduce insurance rates – while also reducing the likelihood of damage that would take a trailer out of operation.

Key Data You'll Have with Road Ready

You know Road Ready sensors give you invaluable data, which leads to even more valuable insights to make your fleets more efficient. But how, specifically, are they doing that? Let's consider a few statistics.

- Find your trailers with GPS sensors. Know when they're moving and, more importantly, when they're not. So you can reduce idle time.
- Get customized alerts so you'll know how long trailers are sitting idle.
- Know exactly when your trailers are in need of maintenance and plan for it. **On average, that gives fleets 21% or more asset uptime improvement.** These reports can also help dealers who are planning for service and maintenance.
- Proactively reduce detention times—which today sit at 3 hours/day on average.

What You Can Save on Maintenance

Sensors can tell you a lot about your trailers. And that information can help you make smart decisions that will drastically change the costs associated with your fleets. Let's look at a few.

- Properly inflated tires can offer roughly **\$1,525 increase in fuel efficiency**. Tire life can also be extended by roughly 10% when properly inflated.
- Reduce the risk of a blowout, which costs an average of \$900 for a roadside repair.
- By planning for maintenance, rather than reacting, you can **reduce maintenance costs by about \$1,650**.
- When operating costs are reduced, **earnings increase by 3.2% on average**.
- These insights allow fleets to track time between maintenance more clearly, so you can be proactive about their needs.

What You Can Save on Compliance

Fines add up — and increase costs of operation and ownership. Fortunately, the addition of a few sensors to your trailers can drastically reduce your likelihood of getting dinged for small infractions. Here are some common ones:

- The top three Compliance, Safety, Accountability violations are for brakes, lights, and tires.
 - 31% of roadside inspections triggered by visible vehicle defects such as lights out and tires
 - 20% of fines associate with lights
 - 20% of fines associated with brakes
 - 9% of fines associated with tires
 - At any one time a fleet could have up to 21% of fleet idle due to CSA violation
- With situations like these reduced, the likelihood of a roadside incident reduces by up to 90%.

ROI Calculation and Long-Term Benefits

Calculating Return on Investment (ROI) for Trailer Telematics:

- Consider factors such as fuel savings, maintenance cost reduction, and increased operational efficiency when calculating the ROI.
- Evaluate the cost savings achieved through telematics against the initial investment to determine the ROI.

Other Long-Term Benefits of Trailer Telematics:

- Improved customer service and satisfaction through accurate delivery tracking and timely updates.
- Enhanced compliance with regulations and safety standards, reducing the risk of penalties or accidents.
- Data-driven decision-making and business intelligence empower fleet managers to make informed choices and optimize operations.

Lowering Cost of Ownership with Road Ready

Let's get right to it. How can Road Ready lower the cost of ownership for your fleet? We can talk all about it, but we'd rather show you hard data from fleets that work with us. Our customers have seen:

- 20%+ asset uptime improvement with proper preventive maintenance
- \$1,650+ reduction in maintenance cost per asset through preventive maintenance
- Up to 90% reduction in emergency roadside incidents
- \$1,500+ fuel economy improvement per asset with active tire inflation management
- Up to 10% extended tire life through active tire inflation management
- Overall earnings growth of 3.2% by reducing operating costs

Road Ready's Solution

Road Ready is a lot more than trailer data and telematics. With us, you get valuable insights that you can act on quickly and keep your assets safely on the road and earning revenue. Below are just a few reasons why Road Ready can change the way you manage your fleet.

Simplicity

Originally created by Truck-Lite, a company that's served trucking fleets and logistics companies since 1955, Road Ready's fleet-centric solution is designed to make things more **straightforward and streamlined** for you. It's easy to install, the data is easy to read, and our consultants make it easy to know how to take action.

Software

Fus1on by Clarience Technologies is a revolutionary data platform that is designed with a powerful brain that can easily integrate and analyze data from a nearly unlimited number of sources – which means Road Ready will be able to change with hardware, software, and data language updates that naturally happen as technology advances and old methods are replaced by new.

Support

The **Road Ready Command Center** allows our team of dedicated consultants – full-time company employees who are based in our Michigan headquarters – to be as informed about your fleet as you are and make helpful suggestions on actions you can take.

Superiority

Road Ready sensors and other system electronics hardware is designed for commercial transportation by Road Ready engineers and is manufactured in Saline, Michigan, by Road Ready's sister company, DAVCO Technology.

Scalability

Road Ready offers a **wide variety of plans** – including completely custom solutions designed specifically for your needs—starting at \$14 per asset.

Conclusion

Advanced trailer telematics revolutionizes the way trailers are managed, providing valuable insights that contribute to cost savings and operational efficiency. By understanding the cost of ownership associated with trailer telematics, fleet owners can make informed decisions regarding the implementation of this technology. With improved fleet management, increased security, and proactive maintenance, trailer telematics offers a compelling proposition for businesses in the logistics and transportation industry.

The value isn't in the data itself. It's in the insights you can get from it. With our wide variety of sensors, our consultants who know and understand your industry, and the sheer amount of information you can

Let's Get Started!

If you're eager to get your fleet Road Ready, then let's start the conversation. Contact us to learn more about our best-in-class sensor options, easy to use software, simple pricing options, or to schedule a demo. We make trailer telematics simple, so you can maximize revenue by keeping your fleet trailers on the road.

— [Contact Us](#)