

# Safety: Case Study

## [CS-001] Key Insights from Cognitive Assessments

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## Driving Fleet Performance: Key Insights from Impirica's Cognitive Assessments

### Transform Fleet Safety, Retention, and Efficiency with Cognitive Fitness

As the transportation industry faces mounting pressures to improve safety, reduce costs, and retain top drivers, Impirica's cognitive assessments are transforming fleet management. Explore our case studies to see how cognitive evaluations enhance safety, driver quality, retention, and operational efficiency, providing actionable insights for fleet leaders.

#### CASE STUDY [001]

## Safety

### Summary

Safety is critical in the fleet industry. Learn how a 1,537-driver fleet **reduced collisions by 8% and preventable accidents by 7%** using Impirica's cognitive assessment to identify high-risk drivers.

#### CASE STUDY [002]

## Quality

### Summary

Hiring the right candidates is key to a high-performing fleet. This case study shows how two fleets **screened 10,500 candidates** with Impirica's cognitive assessment, **improving driver quality, performance, and retention.**

#### CASE STUDY [003]

## Impact

### Summary

Safety technology needs to demonstrate measurable impact. Learn how three fleets **reduced collisions, improved passenger safety, and minimized financial exposure** with Impirica's cognitive assessments.

#### CASE STUDY [004]

## Retention

### Summary

Driver retention is a costly challenge. This case study shows how a fleet **improved retention by 7.17%, saving \$340,000 annually** by using Impirica's cognitive assessment to select more resilient candidates.

#### CASE STUDY [005]

## Savings

### Summary

Every dollar counts in fleet operations. This case study shows how a **fleet of 2,100 drivers saved \$590,000 annually** by improving hiring and reducing collisions with Impirica's cognitive evaluation.



# CASE STUDY [001]

## Safety

### Overview

A leading commercial fleet company with a workforce of 1,537 drivers partnered with Impirica to enhance their driver safety protocols through cognitive testing. **The objective was to identify drivers who may be at risk due to underlying cognitive impairments** that traditional medical evaluations might overlook.

### Implementation

Impirica's cognitive assessment was administered to all 1,537 drivers in the fleet. Those who were flagged as high-risk through the evaluation were subsequently referred for a medical assessment to determine their fitness to drive.

## Healthy & Productive Drivers: Enhancing Fleet Safety with Cognitive Assessment

### Key Findings

#### Minimal Driver Disqualification

Of the **87 drivers (5.7%) flagged as high risk**, 47 were found to have underlying medical conditions that compromised their ability to safely drive a commercial vehicle but could return to duty following medical intervention. **Only 3 drivers (0.2%) were required to retire from driving** due to medical conditions that also necessitated urgent medical care.

#### High Confidence in Safety

Impirica's cognitive assessment **demonstrated a 95% confidence level in determining driver safety** for those who successfully passed the evaluation.

#### Impact

The implementation of Impirica's cognitive assessment allowed the commercial fleet company to proactively address potential safety risks, ensuring that drivers who required medical attention or training received appropriate support. By integrating this testing into their safety program, the company was able to reinforce their commitment to both driver well-being and public safety.

#### Unnoticed Medical Issues

Several medical conditions were detected through Impirica's cognitive assessment, despite drivers having undergone routine medical examinations as recently as two weeks before the evaluation.

#### Conditions Included

- Drug & alcohol-related issues
- Dementia
- Diabetes
- Hypertension
- Medications & treatments
- Parkinson's disease
- Psychiatric illness
- Renal disease
- Respiratory disease
- Sleep apnea
- Traumatic brain injury

### Conclusion

This case study highlights the value of cognitive testing in complementing traditional medical assessments. Impirica's cognitive assessment provided the commercial fleet company with a scientifically validated approach to identifying and mitigating cognitive risks, ultimately improving driver retention and road safety.

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