

CASE STUDY



Behavior-Based Safety Reduces Hard-Braking and Speeding by 47%

ABA Technologies

INTRODUCTION

A well-established transportation company with a substantial regional fleet faced persistent safety challenges despite implementing various traditional approaches. Their drivers were experiencing higher-than-acceptable incident rates involving speeding, hard braking, and hard turns, which impacted both operational efficiency and costs. Previous attempts to address these issues through policy changes and technology-based monitoring had yielded only temporary improvements. By partnering with our team to implement a behavior-based safety program grounded in scientific principles, the company achieved a significant reduction in fleet accidents and decreased safety violations within just 5 months.



The Client's Challenge

The transportation company implemented a technology-based driver monitoring program that tracked speeding, hard braking, and hard turns through a dashboard that showed both individual and group performance. Despite this sophisticated system, they saw minimal improvement in safety outcomes.

The company then revised its approach by rewarding only the top-performing driver, which initially showed some promise but failed to maintain results. This approach inadvertently created a discouraging environment where most drivers concluded they “weren’t going to win, so what does it matter?” It reinforced those already driving safely while failing to motivate those who needed improvement the most.

After these disappointing results, the company approached our behavioral science team to redesign their safety initiative, focusing on the actual contingencies influencing their drivers’ decision-making rather than just monitoring and selective recognition.

Reduction in Fleet Incidents

Prior to our intervention, the transportation company had implemented a technology-based driver

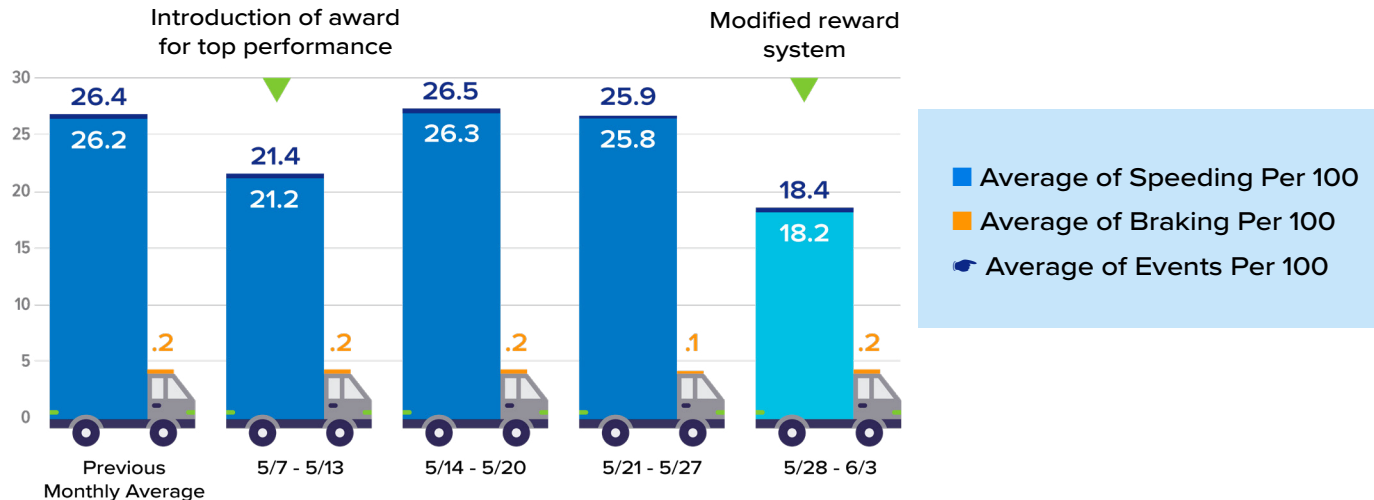
monitoring system that tracked key risk behaviors - speeding, hard braking, and hard turns. Despite having good monitoring technology and a performance dashboard, they saw minimal improvement in safety outcomes.

We modified their reward system so that ALL drivers who met the company safety standard had a chance of winning, not just the top performers.

Their initial program provided no contingencies for safe behaviors, and when they attempted to improve by rewarding only the top performer, they discovered this approach was ineffective - it only rewarded drivers who were already performing well while providing no motivation for those who needed to improve most.

Our behavior science team conducted a thorough analysis of their existing program and identified that the fundamental flaw was in how they designed their reward systems, not the monitoring technology. We modified their reward system so that ALL drivers who met the company safety standard had a chance of winning, not just the top

Average number of speeding and hard-braking events



performers. Under our redesigned program, every employee who met the minimum weekly safety score (80) had their name entered into a regular drawing, with better driver scores earning more entries. Every four weeks, names were drawn, and winners could select from a menu of preferred reinforcers, including gift cards, paid time off, and discount cards.

Key Insights: Beyond Technology to Behavior Change

The transformation highlights several critical principles about effective behavior-based safety programs that apply across industries:

1. **Monitoring performance alone does not work.** The initial implementation relied heavily on sophisticated tracking technology but saw minimal improvement because monitoring without proper consequences fails to drive behavior change.
2. **Feedback alone does not work.** Their dashboard provided drivers with detailed performance data, but without meaningful consequences tied to that feedback, it had little impact on day-to-day decision making.
3. **Reward systems are not inherently effective.** The company implemented a reward system that failed to change behavior upon initial introduction.

Our behavior science approach succeeded because it addressed the complete performance system by:

- **Measuring the right behaviors** that were directly linked to safety outcomes
- **Providing immediate feedback** on both appropriate and inappropriate performance
- **Establishing meaningful consequences** for good performance, not just punishments for unsafe behavior
- **Implementing coaching systems** to help lower performers improve rather than simply identifying them
- **Utilizing an effective reward system** that provided consequences for ALL safe driving behavior.



Proven Results Through Applied Behavioral Science

The most compelling aspect of this intervention was its measurable impact on safety outcomes. When the company initially implemented its technology-based monitoring program without appropriate behavioral contingencies, it saw no significant improvement in driver safety metrics. After attempting to revise the program by rewarding only the top performer, it still failed to achieve sustained results because drivers quickly learned they “weren’t going to win, so what does it matter?” This led to an increase in incidents.

The implementation of our modified reward system, which made all safe drivers eligible for recognition and provided better-performing drivers with more opportunities to be recognized, produced an immediate and significant decrease in safety incidents. Most importantly, unlike the company’s previous attempts, these improvements were sustained over time because the program was designed based on established principles of behavioral science that address the root causes of driver behavior.

Overall Results

Since implementing our behavior-based safety program, the transportation company experienced transformative results across their entire operation. Beyond the significant reduction in safety incidents, they also saw:

- **Improved driver satisfaction and engagement scores**
- **Stronger supervisor-employee relationships**
- **Decreased insurance costs associated with fewer incidents**
- **Enhanced company culture where safety is viewed positively rather than as a punitive measure**

Perhaps most importantly, these improvements have been sustainable because they’re built on a foundation of scientifically-validated behavior principles. Unlike their previous attempts that produced temporary results, our program created lasting change by addressing the actual contingencies that influence driver behavior in real-world conditions.

Ready to Transform Your Fleet Safety Performance?

Want to achieve similar results for your organization? Our team of behavior science specialists is ready to analyze your unique challenges and design a customized program that delivers measurable safety improvements and cultural transformation.

Our approach is grounded in the science of behavior, focusing on why individuals behave the way they do in real-world conditions. As we’ve demonstrated in this case study, policy, training, and tools can only go so far - without addressing the human performance factors and contingencies supporting employee behavior, changes will be short-lived.

The key lessons from this successful implementation include:

1. **Electronic monitoring technologies are valuable tools** but must be properly implemented so employees don’t perceive them as purely punitive
2. **Reward systems** must be designed to motivate ALL employees to improve, not just recognize top performers
3. **Sustainable safety improvement** requires understanding and addressing the actual contingencies that influence behavior.

Schedule a consultation with our behavior science solutions team today.
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