



DFW Car & Toy Museum drives smart cleaning with the Tennant X4 ROVR powered by BrainOS®

Background

The DFW Car & Toy Museum had recently moved into a brand-new facility in Fort Worth, Texas, featuring rare vehicles, vintage toys, and one-of-a-kind memorabilia. But with the move came a big problem: how to keep such an expansive, high-traffic space clean without putting its priceless collections at risk. Owned by Ron Sturgeon and managed by his son Brian Sturgeon, the museum combines classic Americana with modern innovation. During the initial renovation and move-in phase, cleaning the expansive floors quickly became a monumental task.





We had 10 people working every day. We were remodeling, painting, and mopping nonstop. It was clear we couldn't keep this up forever.

----RON STURGEON OWNER



Challenge

The museum's leadership faced four primary cleaning challenges:

- Overwhelming square footage: Keeping two football fields' worth of flooring clean on a daily basis was consuming a staggering amount of time. As one team member put it, "It felt like floor care was all we did. With just 10 of us, keeping two football fields' worth of space clean every day took nearly every hour of every shift."
- 2 Small, multitasking staff: The same small crew responsible for exhibit rotations couldn't sustain the daily cleaning workload.
- **Delicate surroundings:** Priceless vintage vehicles demanded a cleaning solution that was both autonomous and trustworthy.
- Inefficient manual tools: Mop heads became unusable quickly, mop water dirtied fast, and the team had to outsource the process around just cleaning the mops.

Solution

Ron turned to automation and ultimately chose the Tennant X4 ROVR powered by BrainOS®, drawn to its agility, intelligence, and reliability. After hearing it was in use at Walmart, he went to see it for himself, and was impressed. For a museum filled with high-value vintage cars, trust was non-negotiable; they needed a solution that could navigate carefully and perform consistently in a sensitive environment. The decision was about cleaning and confidence.

He and his team named the robot Fast Fred, a tribute to Ron's late brother, a spirited drag racer known for his speed and grit. "Fast Fred was always moving," Ron shared. "Fast, fearless, and never one to slow down. Naming the robot after him felt natural. Now when it's cruising through the museum, there's a piece of him moving right along with it." Wrapped in racing decals, Fast Fred brought both functionality and personality to the museum.



Performance at a glance



11,000 ft²



95% of total usage



2.42 hours per day

We send it through high-traffic areas during the day. Kids love seeing it go by. I do a quick dump and fill at lunch, and then it's back on its way. It helps keep the place clean and also acts as a presence. **People notice it.**

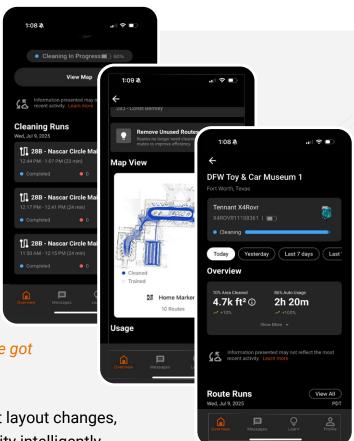
——JANITORIAL STAFF

Results

Minimal setup, maximum return: Fast Fred was deployed and functional within minutes; no complicated programming needed. "I didn't even know what autonomous really meant," said Brian. "But within 15 minutes of training, Fast Fred was off and running. It was amazing."

Safe around high-value exhibits: "Fast Fred hasn't touched a single car," Ron said. "And we've got some worth over a million dollars."

Self-sufficient and adaptive: Even with frequent layout changes, Fast Fred adapts and navigates around the facility intelligently.



Key takeaways



UNMATCHED EASE OF USE

One-button operation, app alerts, and simple maintenance make Fast Fred easy to integrate.



LABOR RELIEF

Staff spends more time curating experiences and less time with mops and buckets.

ម្ប៉ា៖ TECH MEETS □ STORYTELLING

Fast Fred has become part of the museum's charm, guests love him.

During one visit, Ron's friend brought his eight-year-old grandson, who was instantly intrigued. "He's an adventurous kid," Ron shared. "I told him, 'Go ahead, stand in front of the robot, he won't run into you.' And sure enough, Fast Fred stopped right in his tracks. He was amazed. He couldn't stop talking about how cool it was."

Moments like that have made Fast Fred part of the experience.



SMART AND RELIABLE CLEANING

Consistent high performance in a space where reliability is crucial.



What I love most about the X4 ROVR is that it just works.

Fast Fred is a team member now - one with hustle, brains, and a racing spirit.

——RON AND BRIAN STURGEON