

Lessons Learned: The Million-Mile Tundra's Influence on the Tundra of Today

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When Victor Sheppard's 2007 Toyota Tundra reached its 1 millionth mile, almost every component of the truck was still fully functioning except for the sun visor detent on the driver's side and the odometer, which at the 999,999-mile mark had reached its six-digit limit.

For Toyota Chief Engineer Mike Sweers, who has overseen the Tundra, Tacoma, Sequoia and 4Runner vehicle programs, the moment should have been an occasion to marvel at being a part of something so legendary. Instead, Sweers popped open the hood to see what made Sheppard's Tundra so resilient. What he found helped lead to the redesign of the all-new 2022 [Toyota Tundra](#). Innovating upon the durability of materials used, the quality of design and the reliability of the mechanics, the Tundra engineering team built a truck destined to reach new heights.



Forged With Durable Materials

Just as Sheppard's million-mile Tundra was no ordinary truck, Sheppard was no ordinary driver. At 6 feet 6 inches tall and weighing 425 pounds, he was built like an NFL lineman. Naturally, that piqued Sweers' interest in the condition of the driver's seat, which he discovered was remarkably unbowed. Not only was the frame unbent and the foam unworn, but the seat itself, consistent with the rest of the truck, showed only light wear and tear.

In fact, the only area of the truck showing serious stress was the bed, which had been battered by the heavy equipment Sheppard, a veteran driver in the oil and gas industry, transported over the nine years he owned it. With his sights set on building the new-generation Tundra with a more durable bed, Sweers swapped mild steel for composite — a lighter, sturdier and less corrodible material. When it came time to test the new bed, Sweers got creative.

“Why don't we do what we see in the commercials?” he asked his team. “Drop some bricks in it; maybe drop an empty toolbox.”

The Toyota team went one step further, throwing rocks, cinder blocks and even a V8 engine into the truck. With a payload capacity of up to 1,940 pounds, the composite bed survived without a dent.



Dedicated Minds Developing Quality Designs

Sweers and his team made it their mission to redefine the next-generation Tundra from the ground up, starting with the chassis. Previous models featured a frame that widened in the center and narrowed toward the bed, but the new-generation Tundra embraces a linear, ladder-shaped frame. The new design gives wider support to the bed, allowing for a more even distribution of weight. Overall, these changes provide an even more stable, controlled ride.

Eager to find more ways to improve the Tundra's form and function, Sweers focused on storage. He wanted to avoid the common trend of compartments-turned-trash-bins found in so many vehicles. His goal was for each storage area to be designed with purpose.

In the end, Sweers and his team completely redesigned the rear seats of the all-new Tundra. Now they feature ample storage underneath, in addition to the ability to fold for extra storage capacity. Additional adjustments to the interior include two new instrumentation panels behind the wheel. Customers may choose between a 12.3-inch instrumentation panel display or a combination meter with a 4.1-inch digital screen—both with access to diagnostics, audio controls, available safety and off-road features, towing functions and navigation. On the head unit, customers can further choose between a standard 8-inch or an available high-resolution 14-inch multimedia touchscreen. Both feature the Toyota Audio Multimedia System, Toyota's newly developed technology for voice, touch and sight activation.

Bumper to bumper, every inch of usable space in the new-generation Tundra is maximized.



Reliable Around the World

Across every step of innovation, Sweers has remained grounded in the same philosophy that has driven Toyota production for the past 60 years.

“We have to make sure that wherever you take your truck, you can get back,” he says.

With a community of Tundra drivers across the globe, this responsibility carries extra weight.

“If you’re in the Outback of Australia, you might not see another person for a week,” Sweers says.

That is why Toyota is committed to making reliable parts.

The new-generation Tundra features a 1¾-inch drive chain — one-quarter wider than all previous Tundra models.

As Sweers explains, “When you increase the width of the chain, your planetary gear, your shafts, everything else has to be beefed up to go along with that.” The result is a seismic 583 pound-feet of torque and up to a 12,000-pound towing capacity, which is a 17.6% increase over the previous generation.

With such a robust standard of reliability and durability, the Tundra has amassed a following from those who praise its strength.

“You can see people with stickers that say the 300,000-mile club, the 400,000-mile club and the 500,000-mile club,” Sweers says.

And of course, Sheppard has inducted his Tundra into the coveted million-mile club. With so many new improvements to the new-generation Tundra, one can only speculate how far future owners will drive their trucks.

For more from Mike Sweers about the Toyota Tundra, listen to him on the Outside Magazine's podcast [here](#).