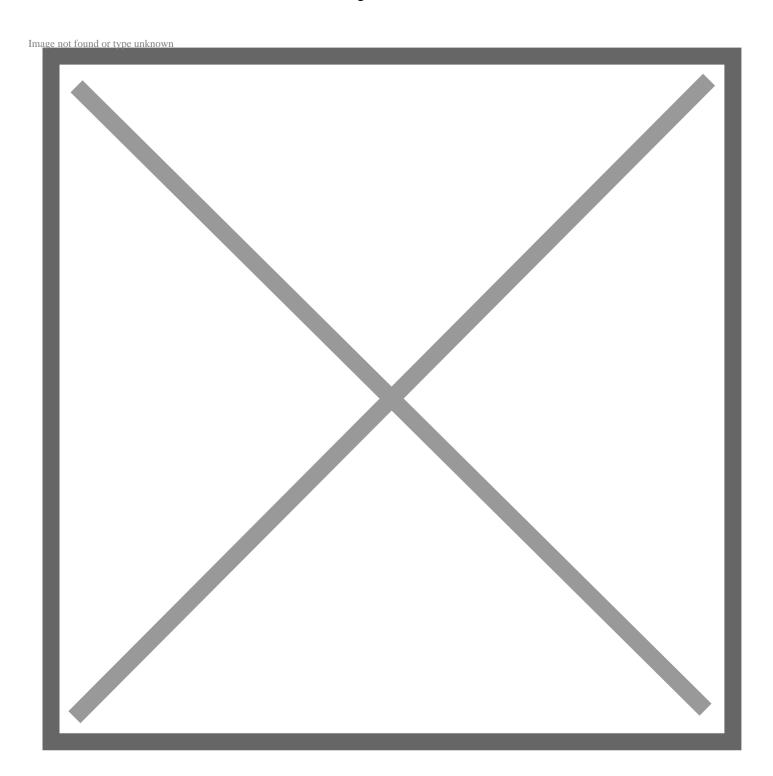
Toyota Celebrates 50 Years in Michigan

August 24, 2022



In 1972, Toyota changed the Michigan auto industry.

But nobody really knew it then.

See, the upstart Japanese company needed a place to perform vehicle emissions testing near the Environmental Protection Agency (EPA) office. So, it bought Hilbert's Garage in Ann Arbor, Michigan, just a mile away from the EPA.

Five years later, Toyota established the Toyota Technical Center (TTC) — its North American Research and Development operations — in Southfield, Michigan, before moving to a larger campus in Ann Arbor in the early 1990s and then expanding to nearby York Township in the early 2000s and adding satellite campuses in Livonia, Midland and Plymouth. In the late 2010s, the name changed from TTC to TMNA R&D.

In the last half century, the tiny footprint of Hilbert's Garage has evolved into a team of thousands of engineers creating the future of mobility.

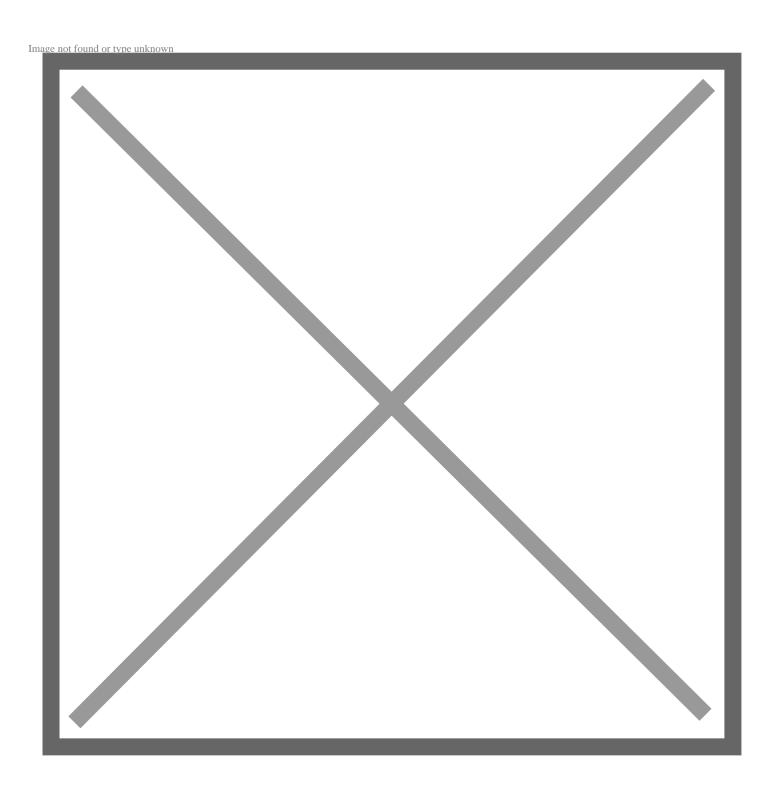
In 2022, as Toyota celebrates 50 years in Michigan and TMNA R&D celebrates 45 years as an official entity, its success in the state might seem obvious. But even well into the 1980s, economic headwinds and strained trade relations made this idea — a Japanese automotive company establishing itself in the heart of the American auto industry — quixotic at best.

Beginning with a sparse crew of mostly Japanese expats helming the project, TMNA R&D wasn't exactly a shot across the bow of Ford, Chrysler and General Motors. But it was certainly something of a statement at a time when the "Big Three" ruled the continent.

But Toyota had big visions for the U.S.

"The U.S. is an especially important market for Toyota," said Kazuhiko Miyadera, who led engineering at TMNA R&D from 1986-1991 and played a pivotal role in its success. "To sell Toyota vehicles in the U.S., Toyota had to become American citizens. To become American citizens, Toyota had to develop vehicles in the U.S."

In 1977, vehicle development in North America was still years away. But the wheels were in motion.



An American Story

For Toyota in North America, the 1980s were a critical period of growth. The sales arm in California had a marketing winner with the new Camry. Manufacturing became a strength with the opening of the Toyota Kentucky plant and the *New United Motor Manufacturing Inc.* (NUMMI) joint venture plant with General Motors in Northern California. In Michigan, supporting those projects became critical business.

At that time, TMNA R&D was still very much a direct arm of Toyota Motor Corporation (TMC). TMNA R&D handled only a fraction of the responsibilities, among them meeting and dealing with local suppliers and performing emissions tests. It wasn't an ideal situation.

"We were taking all these parts from these American suppliers and shipping them over to Japan for testing," says Lori Mead, who began working at TTC in 1986 and still works at R&D today. "It was taking too long."

But TMNA R&D was laying a foundation for growth in the world's automotive hub.

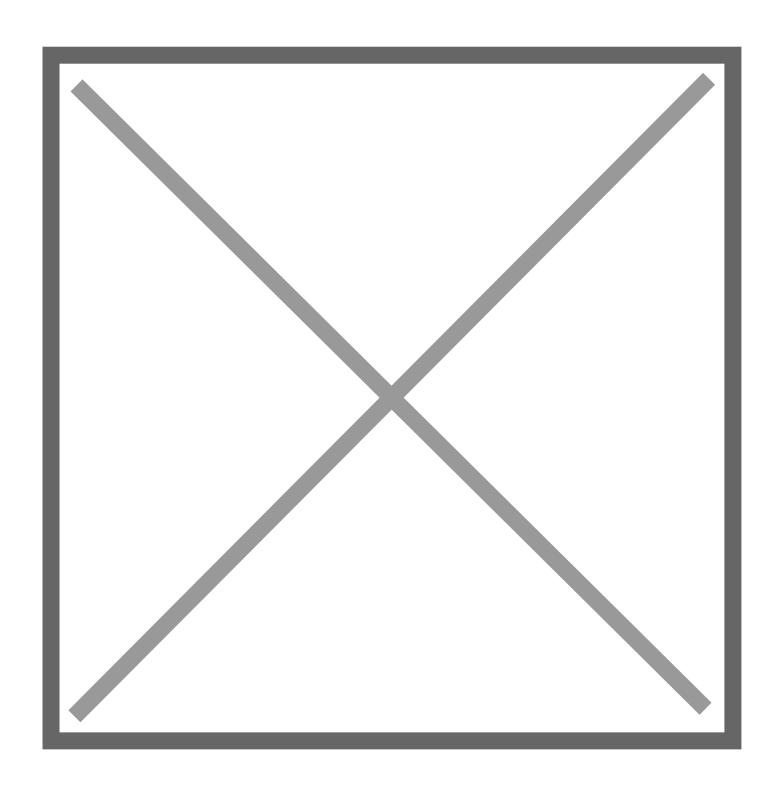
"We settled in Ann Arbor because of its proximity to Detroit, the EPA, the University of Michigan and the supplier community," says Jeff Makarewicz, group vice president of TMNA R&D. "You draw a 60-mile radius around Detroit, and you encompass about 90% of the major automotive companies and suppliers in the industry."

As TMNA R&D matured, the need for American engineers grew. In 1990, Mike Sweers and Greg Bernas were among the first engineers on board, joining Toyota from Chrysler. Randy Stephens and Makarewicz soon followed from local suppliers. Kristen Tabar wasn't far behind. And suddenly, TTC was bursting with a new generation of visionary engineers that would evolve into TMNA R&D leadership team some 30 years later.

"We started working on things like Camry and Avalon," says Bernas, now vice president of Service Parts and Accessories Development. "We just kept on building up our capability as the years went on. And as we learned more, we became mentors and teachers to the new hires coming in."

Sweers is now the chief engineer of the Toyota Tundra and oversees development of the Tacoma, Sequoia and 4Runner. Makarewicz, Tabar and Stephens are all current group vice presidents at TMNA R&D. Like so many of their coworkers, all were Michigan kids who grew up in the shadow of the American auto industry but decided to forge their own path with Toyota.

The Americans that found their way to TMNA R&D in the early '90s were eager and optimistic, combining their expertise with lessons learned from their TMC contemporaries to create a unique kind of automotive research company: a North American approach guided by the wisdom of the Toyota Way.



The Key to the Future

So, Toyota was selling and assembling cars in the U.S., but the vision of car development here needed to take shape: Vehicles for Americans created by Americans. As such, vehicle development shifted to TMNA R&D.

Sweers took over Tundra. Bernas became chief engineer of Venza, Sequoia and RAV4 EV. Stephens was the Avalon chief engineer.

Currently, TMNA R&D operations include product development, engineering design, vehicle evaluation, prototype builds, powertrain, advanced research and purchasing.

Tundra, Tacoma, Sienna and Sequoia are berthed in Michigan, and TMNA R&D plays integral roles in development of Highlander, Camry, Corolla, RAV4 and the Lexus ES.

"That evolution is a testament to the teaching from TMC," Bernas says. "It's like the old *Kung Fu* movie: when you can snatch the pebble from my hand, it's time for me to leave. As they educated us in all their wisdom, it allowed us to grow into what we are now."

Over the last several years, TMNA R&D has undergone a funding transformation that has allowed it to better pursue its goals in North America. Engineers are able to pursue passion projects that can prove revolutionary in Toyota's drive to become a mobility company.

It's further development of an American vision that strengthens each year.

"We're creating all these great vehicles that you see on the road today," Stephens says. "They're planned locally, they're developed locally, and you see everybody's dreams on the road. It's spine tingling for me. It's just an unbelievable journey in a really short amount of time. I mean, 50 years seems like a long time, but I think we essentially built a North American car company over that time."

For more information about the R&D Future Mobility Showcase, click here.