

MOVING FLEET MANAGEMENT TO THE IVY LEAGUE

Transportation & Delivery Service at Cornell University manages a diverse fleet of transient drivers and seasonal demands with a fleet management tool that tracks driver compliance, vehicle utilization, and maintenance needs.



An Ivy League school needs Ivy League level transportation to move students, artwork, high-tech equipment, and more from place to place.

It seems straightforward, but becomes complex when different stakeholders, fleet vehicles, and shifting service requirements are involved.

Cornell University, an Ivy League institution renowned for its innovative research, knows this all too well.

The university fleet comprises a complex system of specialized vehicles, from golf carts to limited-use GEMS electric vehicles, and hybrids like the Toyota Camry and Prius. Heavy-duty trucks, dump trucks, Ford F-600 box trucks, buses and vans round out its fleet.

The drivers of these vehicles are equally diverse, ranging from students engaged in research to skilled tradespeople maintaining campus infrastructure.

If that wasn't enough, service demand also fluctuates for the Ithaca, New York fleet. More frequent use of short-term lease vehicles occurs when the university's student population arrives. Winter puts a strain on snow removal equipment and increases service needs, while summers put higher demand on vehicles used for maintenance work.

Sitting at the helm of this active fleet is William (Billy) Meade, fleet manager of Cornell University's Transportation & Delivery Service. Meade started as the fleet's lead mechanic at Cornell in 2017 and transitioned to fleet manager in 2022.

It was when he jumped into the fleet management role that Meade discovered FleetCommander. Although the Transportation & Delivery Service was already using Agile Fleet's customizable fleet management information system, the fleet wasn't taking full advantage of its functionality. In fact, the university mostly used FleetCommander for kiosk reservations, some work orders, and limited inventory tracking.

That changed when Meade attended the Agile Fleet conference in 2022 and learned how much more the system can do.

Meade promptly expanded its inventory capabilities to encompass the entire fleet and tire inventory. "We also started using the technician dashboard," he says. "That was something we had never used before to schedule and track our work."

He also made two admins and four mechanics authorized users of the system. He explains, "One person cannot manage everything and use the system to its full potential."

The platform now helps Cornell's Transportation & Delivery Service improve operational efficiency and optimize fleet management in four ways.

- 1. Vehicle Utilization**—The system schedules preventative maintenance, tracks completed tasks, manages vehicle availability, and tracks vehicle use.
- 2. Driver Compliance**—Automatic verification checks that drivers meet criteria for university vehicle use.
- 3. Tech Dashboard**—A user-friendly dashboard helps technicians view their work priorities and tasks.
- 4. Analytics and Reporting**—Data on fleet operations shows insights on usage, maintenance, and costs to aid budgeting, resource allocation, and cost-saving.



MANAGING DRIVER COMPLIANCE

"Our drivers range from students here to do research, to tradespeople here to maintain our buildings," he says. "We also must manage credentials for a constantly changing driver community."

To achieve this, Meade has drivers register in FleetCommander and submit relevant documents, including a valid driver's license, proof of safety training, and knowledge of department policies.

"It's an efficient process that promotes driver responsibility for compliance," Meade says.

He explains drivers first create a profile in the system that prompts supervisor or professor approval. Once approved, drivers populate forms by clicking in each field and filling in required information. They also sign a release form and upload a copy of their driver's license.

Agile created a unique release form that matches Cornell's risk management policies, Meade adds. "This form allows Cornell's Office of Risk Management and Insurance to perform a Department of Motor Vehicles (DMV) check on the driver," he says.

The DMV review considers speeding tickets, accidents, and other criteria required by the university's insurance companies. "Certain offenses bar people from operating our vehicles," Meade explains. "If they have a DWI, for example, they cannot drive for the university."

He mentions students from other countries might also face restrictions, as some countries lack accurate driver's license information.

"This process makes sure drivers are clear to drive before they can check out a university vehicle," he says.



TRACKING VEHICLE UTILIZATION

The Transportation & Delivery Service at Cornell once tracked vehicle utilization and scheduling manually, a time-consuming process prone to errors, according to Meade. FleetCommander has simplified this process, eliminated paperwork and reduced vehicle pickup and drop-off times.

"We have set up vehicle scheduling to manage itself," Meade explains. "We set the parameters of vehicle availability between reservations, returns, and leave time, so we have a 9-hour gap required between reservations. This allows us to prep the vehicle for the next user, which includes fueling and cleaning it."

Authorized users can reserve vehicles independently, with the system verifying credentials and assigning vehicles accordingly. Drivers are pre-approved to use specific vehicles. Meade explains, “We have some 12-passenger vans that require additional training and a road test to be able to drive. If a user is not approved to drive those vehicles, they cannot automatically check them out.”

Drivers retrieve keys from a kiosk system once the system approves their reservation. After returning the vehicle, they log in and put the keys in the kiosk.

“This process has saved us hours of manually assigning vehicles,” Meade says. “Before Agile, we had a pegboard with keys on it and a log for scheduling reservations.”

The tool improves record keeping by logging vehicle and driver assignments and manages seasonal demands on vehicles.

Meade explains demand fluctuates throughout the year. Labs and sensitive equipment must be rearranged and relocated when classes are in session. When students leave, the trades must prepare the facilities for their return. Vehicle demand is also influenced by events such as commencement or the Cornell reunion.

“This system helps ensure we have vehicles available and ready when they are needed,” he says.

MAXIMIZING MAINTENANCE TRACKING

Before FleetCommander, the Transportation & Delivery Service at Cornell University used a paper calendar to schedule vehicle maintenance work. The calendar indicated vehicle maintenance needs, parts required, and completion timelines.

Meade reports the calendar often contained incorrect and incomplete information, but FleetCommander has changed this dramatically, saving the fleet money and time in the process.

“Since adding the technician dashboard and tracking our maintenance metrics, our preventive versus repair maintenance has flipped,” he says. “Before we were almost 50/50 for Preventive Maintenance (PM) versus Repair. Now we are at 70/30 for PM versus Repair. We are getting vehicles in for PM before they need repair. We have also noticed financial savings on repairs and a decrease in the costs of parts because we do services on time, instead of having stuff break that was getting ignored or not noticed.”

FleetCommander alerts Meade to time- or usage-based maintenance triggers, eliminating the guesswork for preventative maintenance. The system automatically contacts drivers and maintenance staff to bring in flagged vehicles for maintenance, he explains.

FleetCommander also tracks time and costs of preventative maintenance repairs, parts, and labor. For example, technicians can track their work online via a user-friendly desktop interface. They also can access parts, work orders, troubleshooting info, OEM specs, workflow, and labor times.

“We use the technician dashboard to establish a work order when vehicles are brought in. From there, we can identify what stage of the process the vehicle is in within our facility. We know who is working on it, who needs to work on it, and what parts need to be ordered,” Meade explains.

Accessing vehicles' work progress from a computer also enhances stakeholder communication. Meade can provide updates on repairs and completion times by accessing work orders via the FleetCommander dashboard. "That was a huge game changer for us. It really improved our communication with customers," he says.

FleetCommander also gives deeper insight into shop operations. Meade says Transportation & Delivery Service relies on a local shop for vehicle maintenance when their technicians fall behind. Collecting outsourcing data helped Meade build a powerful argument for adding a mechanic.

"We proved we were not able to keep up with the workload because we were tracking outsourced work," he says.

Meade says outsourcing is pricier, so this shift saved the university money. "An outsourced facility has overhead, utilities, and employee wages they need to cover," he explains. "We were basically paying for their overhead when we had to pay for ours, too."

Meade says repairs also cost more because of higher-priced parts at these shops. "We save on vehicles and parts with state bid pricing, something an outside shop wouldn't offer," he says. "Sometimes we paid double the price for parts that we could have sourced internally."



ROBUST REPORTING & ANALYTICS

Meade values FleetCommander's robust reporting capabilities, streamlined reporting and easy access to data because he no longer needs to search for information in folders or spreadsheets.

The system offers user-specific dashboards and over 60 standard reports. Meade says he uses vehicle utilization, aging by the miles, and driver compliance dashboards most often.

"The vehicle utilization report helps us understand if our fleet is the right size. You don't want vehicles to sit too much, but you also do not want them to get overused. We want to be able to balance the reliability of our vehicles," he says.

He explains the university aims for a seven-year, 100,000-mile lifecycle. "If a vehicle is overused, it reaches that mileage before the seven-year plan," he says. "Which post COVID is not always that great because we've struggled to find the proper vehicles or even purchase them at cost. We've sometimes seen a 200% increase in the cost of some of these vehicles. So being able to keep up with our lifecycle is great."

Meade also regularly runs a report to monitor technician work hours. "This helps me see how much we had to outsource and how much work our guys here can handle," he says.

Running inventory reports helps Meade improve parts inventory management. The Transportation & Delivery Service at Cornell inventories parts every quarter.

"The reports help us see when we stock unnecessary parts," he says, adding that some parts remain stagnant for quarters or years. "That tells me they are obsolete, or we have over purchased," he says, noting the university then can opt to return parts to vendors or sell them to other coach companies.



LOOKING TO THE FUTURE

The Transportation & Delivery Service at Cornell plans to use FleetCommander's fuel module, integrating it with its master fuel system at the university's on-site fuel farm.

"Our goal is to integrate these systems so we can track our fuel costs and mileage on our vehicles, which are used across New York state and even outside the state," he says. "This will help us keep more accurate maintenance records and better understand how much fuel our vehicles use."

Gaining insight into fuel use will also help the university achieve its goal to be carbon neutral by 2035, he adds.

Meade must accurately track fuel usage to electrify the fleet and expand university infrastructure for electric vehicles. The data will also help him identify situations where gas-powered vehicles are still needed. For example, a student doing research in a remote location without access to electricity will need a gas-powered vehicle.

The fuel data also will provide a clear picture of the fleet's fuel, maintenance, financing, depreciation, and insurance costs. "By understanding our total cost of ownership, we will be able to make sure our fleet rates and lease rates are accurate," Meade says.

ABOUT AGILE FLEET

Agile Fleet has provided industry-leading fleet management vehicle sharing and key control technologies for over 22 years. Over 250,000 drivers and fleet commanders in government, higher education, and industry leverage FleetCommander to access shared vehicles every day.

FleetCommander empowers fleet managers with data, offering tools to understand and optimize vehicle utilization, provide excellent customer service to driver communities, and make informed data-driven decisions about the size, composition, and operation of their fleets.

To learn more about Agile Fleet and how Fleet Commander might be used in your fleet, visit the website at www.agilefleet.com, call (571) 498-7555 or email sales@agilefleet.com

