

Go Wisconsin! Madison Follows NYC's Lead in Fleet Improvement

By: Keith T. Kerman and Henry Cornejo

Next in our spotlight series on public fleets across the country, we turn to the fleet of the City of Madison, Wisconsin. We feel a special bond with Madison thanks to its fleet superintendent Mahanth Joishy, who spent almost 16 years working with NYC Parks and DCAS, supporting park operations and citywide fleet management. Many of the initiatives Mahanth worked on in NYC are now rolling out in Madison as well.



Madison Fleet fuels, purchases, and maintains all vehicles for the city's 30 departments, except the Metro and Water Utility department. In total, Madison Fleet oversees 1,400 vehicles. To support their fleet operations, Madison recently unveiled a state-of-the-art new headquarters, the Nakoosa Trail City Fleet Building. This new HQ houses a parts room, administration offices, training rooms, separate light and heavy-duty garages, two vehicle wash bays, a welding and fabrication shop, a body shop, a radio shop, break rooms, and a gym. On June 22, Madison Fleet hosted their ribbon cutting ceremony with Madison Mayor Satya Rhodes-Conway and close to 300 other guests.

The Nakoosa Trail City Fleet Building is a great example of a green building, and in recent weeks it was certified as LEED Gold. Around the building and on its roof are a large number of solar panels providing electrical power and water heating. Portions of the building's wall are also embedded with solar panels which capture the sun's energy to heat the building for the cold winters. In the offices, sun catchers were installed, which are solar kaleidoscope tubes that reflect the sun's light to immediately light up the rooms. Currently, 20% of the building's energy is generated by solar with the goal to reach 100% in the future.



The new HQ also features 3 EV ARC Solar Carports that can charge multiple vehicles at a time. Madison has followed NYC's lead in introducing portable solar carports, which can also serve as an emergency powering asset. NYC Fleet operates the largest such network in the world with 89 units. The current solar carports are regular, level 2 chargers, but Madison is looking at implementing fast charging as well. To make use of the chargers, Madison is growing their electric fleet. At the beginning of 2018, Madison had zero EVs. Today, they have over 60.

Following NYC's lead, Madison has received its first five all-electric police cars to assess for pursuit and policing operations. Madison is also the first city in North America to introduce and assess an all-electric fire truck, the Pierce Volterra. This truck has a range of 37 miles, has a backup diesel engine, and has been undergoing testing and analysis by the Madison Fire Department since May. It is also made in Wisconsin, just up the road from Madison. NYC looks forward to hearing more as this moves forward.

Madison is also using fleet and car share to reduce fleet size. Madison's fleet sharing program is organized around in-city driving and out-of-city driving. As per Mahanth, "We don't plan to increase our fleet count. Instead, we want to make sure that we are operating efficiently and using all our resources to extend the lives of our vehicles."



Complementing Madison's introduction of electric vehicles and greater efficiency is a substantial commitment to biofuels. The use of biodiesel helps both the environment and the local economy. All the ingredients needed to make biodiesel come straight from Wisconsin farmers and are then synthesized in Wisconsin, a win-win for farmers and the fleet. As in NYC, a B5 or B20 blend is used depending on the weather. Madison Fleet is also working on integrating a B100 blend to vehicles in a pilot program. This would enable a full switch-out of fossil diesel fuel. "Since 2018, over 6 million lbs. of Co2 have been reduced by fleet," says Mahanth. "Of this, 90% so far is due to biodiesel and 10% by EVs and hybrids." Madison does not utilize private gas stations. Instead, Madison's fueling operations include ten city-owned fuel stations, where they use a fuel management system to keep a close tab on fuel dispensed.

Madison's fleet team is also working more broadly to support sustainability. Madison Fleet is partnering with the Wisconsin Clean Cities Coalition and participating in a task force focused on increasing EV penetration by all vehicle owners in the community. As Mahanth shared, "...the Midwest is lagging behind the larger coastal cities. Climate change is a global problem and I hope Madison will become a model for others to see."



For NYC Fleet, fleet sustainability is not just emissions but safety as well. In 2020, the City of Madison followed NYC's lead and became a Vision Zero city. Madison Fleet currently works closely with the citywide Vision Zero committee to reduce and someday eliminate collisions. As one of its first projects, Madison Fleet completed its first stage of telematics installations for fleet vehicles this spring, with 650 now being tracked. Madison will be growing this initiative and has begun using the live alerts and reporting to improve safe driving behaviors. Additionally, Madison has partnered with NYC Vision Zero by participating in the 2019 NYC Vision Zero Fleet Safety Forum and participating in the NYC Safe Fleet Transition Plan. Finally, like NYC Fleet, Madison has modified City driver rules to ban all cellular devices, including both hand-held **and** hands-free for city drivers in City vehicles. Mahanth drew heavily on the research and roll out on the same topic with the NYC team just before leaving the East Coast.



None of these initiatives would be possible if it weren't for the frontline operations staff that help keep Madison's fleet running smoothly. Madison technicians are increasing the use of information technology to do their work. All technicians are now using tablets daily, incorporating data entry for the fleet asset management system, videoconferencing, using email regularly, and using tech to improve parts management and inspections.

This past year has been especially hard for Madison Fleet, as COVID-19 disrupted their operations. Mahanth stated, "...I am proud of my staff and how they were able to perform under pressure, but also I'm proud of my colleagues from other parts of city government and how they were able to confront COVID-19 and keep city operations running. Our job is to support those on the front line, and we take that even more seriously in bad times."

Congratulations to everyone in Madison on your new fleet facility and on this exciting transition to greater sustainability. We look forward to partnering with Madison as we all continue to pursue safe and green fleets of the future.

NYC Parks 32nd Annual Equipment & Vehicle Show



[NYC Parks 32nd Annual Equipment & Vehicle Show](#) will highlight vendors who support NYC's Clean Fleet and Vision Zero initiatives, as well as daily operations.

The show is free to all exhibitors and attendees and has been rescheduled to **Wednesday, September 22**
9:00 a.m. to 2:00 p.m.

Fleet Vision International Summer 2021 Quarter 3

Fleet Vision International is an international magazine aimed at fleet, transport, and operational and workshop depot directors/managers.

[The Fleet Vision International 2021 Quarter 3 edition](#) has now been published and focuses on the City of New York's vehicle telematics and DCAS's Fleet Office of Real-Time Tracking (FORT).



DCAS's Inside Citywide Podcast

DCAS's new [Inside Citywide podcast](#) provides a behind-the-scenes look at New York City government. Episode 2 is out now and takes a look at the future of the City of New York's vehicle fleet as it transitions to all-electric by 2040.

COVID-19 Safety Reminder

For all fleet drivers, please be reminded to wear a mask when operating a fleet vehicle with others in the vehicle. Attached again are the [Department of Health's COVID-19 Safety Guidelines relating to vehicle operation](#).

Check out past editions of the Fleet Newsletter

[NYC Fleet Newsletter 355, August 6, 2021](#): NYC Fleet Fuel Use Down 4 Million Gallons in 4 Years

[NYC Fleet Newsletter 354, July 30, 2021](#): NYC Fleet Spotlight - Chris Towns, FDNY

[NYC Fleet Newsletter 353, July 23, 2021](#): Fleet Services First 1,000+ Public EV Customers

[NYC Fleet Newsletter 352, July 16, 2021](#): NYC Fleet Spotlight: Peter Galvin, Parks Fleet

[NYC Fleet Newsletter 351, July 9, 2021](#): DCAS Posts Record Fleet Revenue for Second Straight Year

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