

From its iconic nose to its rear safety camera, the U.S. Postal Service's new, American-made Next Generation Delivery Vehicle (NGDV) is an integral part of the organization's long-term growth strategy. With more than twice the cargo capacity of today's postal delivery vehicles, the

VEHICLE FOR

“Deploying the NGDV nationally throughout our delivery operations is a significant milestone in our ability to become a high-performing, financially and environmentally sustainable enterprise. This vehicle is the tool our carriers need to serve the American public today, tomorrow and far into the future.”

— **Louis DeJoy**, Postmaster General

NGDV will help deliver more packages to more people at a lower cost. And when they start rolling down America's streets later this year, NGDVs will provide an attention-getting example of a modernizing USPS.

GROWTH



The NGDV epitomizes the investment strategy of the Delivering for America plan: correcting decades of underinvestment with best-in-class, purpose-built vehicles that will enhance the Postal Service's competitiveness. This new truck is a more efficient tool than the current Long Life Vehicle (LLV), which was created when letter delivery reigned supreme, and the NGDV's ability to deliver hundreds of packages to more customers every day means each trip will generate much more revenue than the LLV it replaces.

The NGDV provides a vastly improved, safer and more comfortable workplace for the tens of thousands of carriers who help the Postal Service serve 167 million addresses across America six and seven days a week. It also provides an enormous benefit in the form of cost reduction by removing the heavy burden of maintaining and operating an aging fleet of LLVs that have outlived their planned lifespan by more than 10 years on average.

Intentionally greener

From the start, the modernization of the mail delivery fleet was a critical component of Delivering for America's environmental sustainability vision, with fuel efficiency and low emissions fundamental to the new vehicle's design. One of the winning attributes of the NGDV is the manufacturer's ability to install a traditional internal combustion engine (ICE) or a battery-electric powertrain on the same platform. This has allowed USPS, with the support of Congress, to ensure that at least 35,000 of the current order for 50,000 NGDVs — 70 percent of the total — will be battery-electric vehicles.



DRIVING TOWARD A

More than twice the storage space of an LLV

2x

Large rear walk-in cargo door
For easier loading and unloading



Large sliding side cargo door and low step height

For safe and ergonomic entrance and exit



Automatic front and rear braking



Airbag



Large side window and adjustable seat

For easy reach to a mailbox



“The NGDV’s ability to deliver larger volumes of mail and packages to more customers maximizes the efficiencies of our new processing and distribution network. The NGDV helps us to be more reliable, improve and expand our delivery operation and reduce the number of inefficient trips. That’s a win for everyone.”

— **Ronnie Jarriel**, USPS Senior Vice President, Facilities and Fleet Management



MODERN POSTAL SERVICE



Adjustable cargo shelving
For optimal mail and package organization



360-degree camera system
For a full view around the vehicle for safe operation



Air conditioning



Blind spot warning



Enlarge windshield and low front hood
For enhanced visibility of surroundings to maximize safety



Adjustable mail tray
For ergonomic reach during curbside deliveries



Automatic electronic parking brake



Front and rear bumper sensors



Forward collision warning system
For improved situational awareness

AN ELECTRIFYING FUTURE

The Postal Service's \$9.6 billion fleet revitalization strategy extends far beyond the NGDV. With commitments to add more than 21,000 battery-electric commercial-off-the-shelf delivery vehicles between now and 2028 and 25,000 fuel-efficient internal combustion engine vehicles in the next two years, USPS is firmly at the front of the country's effort to reduce greenhouse gas emissions.

This unprecedented effort to electrify much of the USPS delivery fleet will require an entirely new energy infrastructure, with tens of thousands of charging stations installed at sorting and delivery centers (S&DCs) nationwide.

The multiyear rollout of this charging infrastructure has already started, with the first 14,000 charging stations in production. Approximately 6,000 charging stations supporting over 11,000 BEVs are expected to be installed by the end of 2024 at approximately 130 S&DCs and at other facilities.

The first 14,000 charging stations can support up to 26,000 BEVs, taking approximately 8-10 hours to fully charge a vehicle.

PURPOSE-BUILT FOR NETWORK TRANSFORMATION

The NGDV is a vital component of the Postal Service's transformation and modernization plan. The vehicles will vastly improve package delivery capability in every market, especially when integrated into the new network of sorting and delivery centers.

"S&DCs are a vital link in the new transportation, processing and delivery ecosystem at the heart of USPS modernization. By fulfilling the work of five to 10 delivery units, S&DCs can serve upward of 200,000 customers each day, and strategic locations provide quick and easy next-day and same-day delivery options for local businesses. The NGDV is the essential last-mile cog in that ecosystem," explained Ronnie Jarriel, USPS senior vice president, facilities and fleet management.

"With S&DCs receiving tens of thousands of packages daily from a regional processing and distribution center, they need a large, nimble fleet of delivery vehicles to get these packages to customers reliably and on time," Jarriel noted, adding that the NGDV — with its increased capacity, right-hand drive configuration, capacity to deliver a greater quantity of parcels and ability to serve more customers each trip — is tailor-made for this mission.

S&DCs will also be home to a sizable fleet of NGDVs, serve as a charging center for BEVs and provide secure parking for gas-powered vehicles, added Jarriel. "Direct control of these fleets at the local level allows the Postal Service to fine-tune its daily schedules to operate the nation's most efficient, effective and extensive last-mile delivery network," he said.

These BEVs, as they are known, are well suited to the Postal Service's mission. They are very effective at frequent stop-and-go driving, and the powertrain provides an immense amount of power to the vehicle, a real bonus when carrying heavy loads. BEVs also have fewer moving parts and use fewer fluids than vehicles powered by internal combustion, so there is less wear and tear and lower maintenance costs.

Frequent braking inherent with curbside delivery provides its own energy source, recharging the vehicle's battery through a process known as regenerative braking. These batteries, which are expected to last at least 10 years on the road, can also be used to store energy when they have passed their useful service life, and their precious materials can be rotated back into the manufacturing process.

Leading the way

The Postal Service's commitment to BEVs is pioneering. It is one of the largest single fleet electrification efforts in the country, and over the next several years, the deployment of battery-electric NGDVs and commercial-off-the-shelf delivery trucks will be a proving ground for local, state and federal officials to see firsthand what can be achieved with a vehicle that reduces both greenhouse gas emissions and dependence on fossil fuels.

BEVs provide the operational and environmental capabilities that are essential to the Postal Service's future, but the realities of America's geography, climate and infrastructure mean they cannot meet the entirety of America's delivery needs. That is why an ICE will power a quarter of the initial NGDV purchase. This fleet will still improve the Postal Service's sustainability credentials, with significantly improved fuel efficiency and larger capacity doing their part to reduce postal gas usage by 300 million gallons between now and the end of the decade and eliminate 3.5 million metric tons of carbon emissions by 2030.

A better mobile workplace

The delivery truck is a carrier's workplace and the goal from the beginning has been to make the NGDV as safe, efficient and comfortable as any delivery vehicle available. Extensive field testing and collaboration with postal unions from the initial design stage ensured that the driver and the maintainer were always the priority.

From the ground up, the NGDV keeps postal employees safe. The cargo area is designed to keep carriers inside the NGDV as much as possible to avoid the many hazards of using the street to load and unload, and the sliding side door provides





A lasting competitive edge

As the NGDV fleet is fully deployed in coming years, it will create opportunities to provide a wider range of delivery services and help win a greater share of America's package business — and put mail carriers in a better position to serve customers while lowering the cost to do so. NGDVs and the creation of a national charging infrastructure are bringing to life the vision and commitment to invest in a modern, high-performing, financially sustainable, competitive Postal Service — and they will be on America's roads this year.

easy curbside access, again to limit time on the street.

Collision avoidance technologies, visual and audible warning systems, traction control, automatic braking, 360-degree camera views, backup cameras, a heads-up touch-screen display, a driver's-side airbag and much more are also built into every NGDV to make this one of the safest and most secure delivery vehicles in the world. Even the NGDV's distinctive low front hood and oversize windshield are safety aspects, allowing carriers to see everything in front of them, particularly small children and animals.

The heat and cold that many LLV drivers have experienced is addressed with a modern air conditioning and heating system. Adjustable lumbar support in the driver's seat, along with seat and steering wheel adjustments, will deliver a comfortable and safe driving position for anyone between 4 feet, 11 inches and 6 feet, 2 inches tall. Seemingly minor but critical improvements like a docking and charging port for mobile delivery devices, intermittent wipers, a street-side exhaust pipe for ICE vehicles and an adjustable cupholder — along with many other meaningful changes — have also been incorporated into the NGDV to address things that got in the way of daily life with the LLV.

BY THE NUMBERS

- ➔ 50,000 NGDVs in current order
- ➔ 263 cubic feet of cargo capacity
- ➔ 8,700 pounds gross vehicle weight rating
- ➔ 235.75 inches long by 84.5 inches wide by 111 inches high (approximately 18 feet, 8 inches by 7 feet by 9 feet, 3 inches)
- ➔ 76 inches (6 feet, 4 inches) height inside the cargo area





CHARGING AHEAD



JUSTIN GLASS

Director, Fleet Management

Vicki Stephen, executive director of the Next Generation Delivery Vehicle program, and **Justin Glass**, director of fleet management, talk about modernizing the postal fleet to include electric delivery vehicles.

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There is a lot of anticipation as the first Next Generation Delivery Vehicles begin to roll off the assembly line. What was the process that resulted in the final design and features for the new fleet of NGDVs?

VICKI STEPHEN: When anyone goes out to buy a car for themselves,

they're incredibly particular about their requirements, and so was the Postal Service. We had to meet basic business needs in terms of greater space for packages, right-hand drive and the ability to reach the mailbox, but we also had a once-in-a-generation opportunity to create a vehicle that would be awesome to use every day. So, we had a lot of employees testing prototypes, participating in focus groups and making sure the vehicles would be a wonderful mobile

workplace for our carriers and have great ergonomics and technologies.

JUSTIN GLASS: Where do you put the coat hook? That sounds like a trivial question, but if we put it in the wrong spot, it could inconvenience 200,000 of our colleagues every day for the life of the vehicles. Hands-on testing was important so we could identify all those little details that make a vehicle fun to be in and drive and to ensure there aren't inconveniences that get in the way of productivity. Employee testers chose where to put the coat hooks and many other aspects of the layout, and our mechanics had a big role in determining the engineering, so repairs would be simple. That's the value of designing a purpose-built vehicle: It can be exactly the way we want it, and it is.

Electric vehicles require big changes in infrastructure. How do you prepare all the sites necessary to operate them?

VICKI STEPHEN: The first thing to know is that a lot of amperage is required to set up 100-plus charging stations in the back parking lot of a postal facility. The charging stations themselves aren't unique or complicated, but the power and charging infrastructure requires investment and maintenance, and so the decision about which facilities will get electric vehicles depends on the location of our future delivery facilities. Sorting and delivery centers are highest on the list because they usually have the requisite power, and they will anchor our future network.

JUSTIN GLASS: A key consideration is that our electric vehicles will all be charging overnight, at the same time, with each vehicle parked next

to its own charging station. So that means parking lot space and layout is really important. Safety is a primary consideration. We need to make sure that loading is done with adequate distance from other lot traffic. All of this requires thoughtful site visits and design at hundreds of locations.

What are the criteria for whether a delivery operation gets an electric or internal combustion engine NGDV?

JUSTIN GLASS: It's the calculus of facility, lot space, power and the characteristics of the routes. Electric vehicles have major advantages when the routes are flatter, the distances aren't too long and the weather isn't too cold for too long in the winter. Internal combustion engines are better suited for steeper routes, longer distances and extended winter weather. We are taking a methodical approach to these investments and looking at every facility on a case-by-case basis to get the best fit.

VICKI STEPHEN: The most important thing to know is that every delivery operation will get new vehicles in the coming years, and they will be a major improvement over the current fleet. There are commercial-off-the-shelf electric vehicles we are deploying alongside NGDVs, and the rollout has already started. It's exciting to bring these new vehicles into delivery operations throughout the country.

What do you think will be the biggest impact of modernizing the postal vehicle fleet?

VICKI STEPHEN: There are tremendous efficiencies that come with having larger vehicles that can carry more packages per trip. The combination of the new vehicles and the larger sorting and delivery centers will make our local delivery operations much more powerful and competitive. I see our new vehicles as tools for growing our business.

JUSTIN GLASS: With each new vehicle, we are putting a postal colleague into a better work environment, and that improves our ability to serve customers. I also think our customers are going to love seeing the new vehicles on their street, and that's a great impact to have.



VICKI STEPHEN
Executive Director,
Next Generation Delivery
Vehicle Program