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"Pretty much everybody who has an EV has a charger at home," Becker said. For those who don't have home charging access, more charging stations "will allow them to enter the EV revolution."

## How Biden's infrastructure funding could push more Americans into the electric vehicle 'revolution'

By Ella Nilsen Nov 23, 2021

President Joe Biden wants half the vehicles sold in the US to be electric vehicles or plug-in hybrids by 2030. But to reach that goal, not only do Americans need to start buying more electric vehicles, they need more charging stations to plug them into.

EVs and plug-in hybrids accounted for just 2% of US vehicle production in 2020, according to the Environmental Protection Agency. Part of the reason EVs have been slow to take off -- in addition to being expensive -- is the lack of <u>charging infrastructure</u>: there are currently only around 45,000 publicly available EV chargers in the US.

The Biden administration's goal is to increase that number to 500,000, and it plans to do that, in part, using \$7.5 billion in funding from the bipartisan infrastructure package the <u>President signed</u> last week. Though it's only half of what the White House initially proposed for EV charging, experts told CNN it will get the administration most of the way to its goal.

A White House official also told CNN the administration expects the funding to catalyze more investment from businesses, utilities, and state and local governments.

But EV advocates told CNN that if the White House really wants EVs to take off, it needs to be even more ambitious.

"It's going to need to be a lot more," said Connor Morgan, a spokesperson for the Zero Emission Transportation Association. "Questions remain on how many more -- that's going to depend on consumer behavior."

## Fast or slow charging

The infrastructure funding earmarked for charging stations has been divided up into two main components: money that will go directly to states and money for a grant program.

Around \$5 billion of it <u>has been allocated to states</u> over five years to establish an interconnected network of EV charging stations, and to "facilitate data collection, access, and reliability," according to the infrastructure bill text. Large states are the biggest benefactors -- Texas and California, for example, are receiving \$408 million and \$384 million, respectively.

In addition to the allocation, states are eligible to apply for grants from a pool of \$2.5 billion. A spokesperson from the Department of Transportation told CNN it is developing guidance to administer the programs.

Ultimately it will be up to the states to decide what kind of chargers to install and where to put them.

There's a big cost difference between DC fast chargers, which can charge a car to mostly full in 20-30 minutes, and L2 chargers, which can take hours. DC fast chargers are meant to be installed along highway corridors and at rest stops, while L2 chargers make more sense for homes, workplaces, restaurants and shopping centers, where people have time to step away from their vehicle.

But the speed of a DC fast charger comes with a cost. They typically cost around \$100,000, compared to around \$6,000 for an L2, according to Ellen Hughes-Cromwick, a senior resident fellow at the think tank Third Way.

"If it only costs \$6,000, you can put a lot of plugs in," Hughes-Cromwick said, noting that states will have to find the right balance between the faster, more expensive chargers and the slower, cheaper ones.

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## **Beyond charging**

The infrastructure funding is a giant leap forward for charging stations, but key parts of Biden's EV agenda are still tied up in Congress.

Democrats' economic package includes up to a \$12,500 tax credit for purchasing an EV that's made in the US with union labor. It also contains more funding to upgrade electrical transmission -- which will be needed if half the cars sold in the US need to be plugged in.

The House passed the package on Friday, but its fate is unclear in the Senate. West Virginia Sen. Joe Manchin, a Democrat, has voiced opposition to providing tax credits for union-made vehicles, for example.

And there are other challenges beyond the political battle. Morgan, the spokesperson for the Zero Emission Transportation Association, said as more Americans start to drive EVs, there needs to be a larger societal shift in how we think about fueling our cars.

Instead of driving until the tank is empty and then stopping to fill up, Morgan said EV drivers need to think about refueling whenever they're parked and close to an available charger. He said Biden's infrastructure funding will help make those chargers more accessible.

"You fill up a little bit wherever you have access to a charger," Morgan told CNN. "The societal shift will have to come."

https://www.cnn.com/2021/11/23/politics/biden-electric-vehicle-chargers-climate/index.html