## 2012 Toyota Prius Plug-in Betting On HOV Access

By SCOTT DOGGETT September 19, 2011



Toyota is counting on access to high-occupancy vehicle (HOV) lanes to drive initial U.S. sales of the 2012 Toyota Prius Plug-in, its first-ever plug-in hybrid-electric vehicle (PHEV). Toyota's first-year sales estimate for the Prius Plug-in, which arrives in spring and will be distributed in only 14 states initially, is a seemingly conservative 15,000 units, Toyota Division Group Vice President and General Manager Bob Carter said at last week's introduction of the car. By contrast, Toyota sells about that many standard-issue Prius liftback models in America in a single month.

So far, a handful of states have granted solo occupants of the Prius Plug-in access to HOV lanes. Among them is California (the others are North Carolina and Virginia), which accounts for one of every four Prius models sold in the U.S. Massachusetts is considering joining the trio. HOV lane access can slash more than an hour off a daily commute in Los Angeles and other traffic-choked cities. The 2012 Chevy Volt -- the only other mass-produced plug-in hybrid available in the U.S. -- is not eligible for solo-occupant HOV lane use due to its dirtier tailpipe emissions. This gives the Toyota plug-in hybrid a potentially huge competitive advantage -- especially given the fact that hybrid drivers in California and Utah recently lost their right to use HOV lanes when driving solo. Virginia will strip its regular-hybrid drivers of their special access to carpool lanes in June 2012. In Maryland, the practice ends in September 2013.

Toyota also hopes consumers will see the price advantage of the Prius Plug-in over its competitors. The U.S. price of the 2012 Prius Plug-in hybrid hatchback will start at \$32,000. The plug-in vehicle is expected to qualify for a federal tax credit of \$2,500, dropping the price to \$29,500. By comparison, the 2012 Volt starts at \$39,145 and is eligible for a \$7,500 federal tax credit, dropping the base price of the Volt to \$31,645. That puts the after-incentives starting price of the Toyota at \$2,145 below that of the Chevrolet. The all-electric 2012 Nissan Leaf, an altogether different vehicle due to its driving-range limitations, starts at \$35,700 and drops to \$27,700 after a \$7,500 tax credit is applied. The Chevy and Nissan enjoy bigger federal tax credits, because their batteries are substantially larger than the battery inside the Toyota. Toyota will begin taking online orders in October for the 14 launch states. They are California, Oregon, Washington, Arizona, Maine, Massachusetts, Vermont, New Hampshire, Rhode Island, Connecticut, New York, New Jersey, Maryland and Virginia. Customer deliveries are slated to start in March.







## Prius Plug-in Vs. Volt

In addition to HOV lane access and a lower starting price, Toyota will emphasize another difference between the Prius Plug-in and its prime competitor, the Volt, in the months ahead: the Toyota's battery can go from fully depleted to fully charged in three hours using a standard 120-volt outlet. A fully depleted Volt battery requires about 10 hours to fully charge using the same outlet. The amount of time needed to charge a Volt battery using an ordinary electrical outlet is usually enough motivation for the Volt owner to spend at least \$2,000 on a 240-volt charger to speed up the charging process. After a full charge, the Volt can go 25 to 50 miles using only electricity before an onboard gasoline generator comes on to supply the vehicle's lithium-ion battery with more juice.

The Prius Plug-in is also fitted with a lithium-ion battery, but it is much smaller than the Volt's and so is its all-electric range – 15 miles, according to Toyota. After the electric range, the Prius Plug-In behaves just like a regular Prius liftback and achieves nearly the same fuel economy: 49 mpg in combined city and highway driving versus 50 mpg in the standard 2012 Prius hybrid, according to Toyota. **Edmunds.com** has not yet officially tested the Prius Plug-in. Edmunds' vehicle testers found the Volt achieved 31.4 mpg in mixed driving after its battery ran out of power.

Studies show that perceived value is a much bigger factor in an Americans' vehicle purchases than environmental consideration. To that end, Toyota's Carter said he believes the Prius Plug-in's pre-incentive starting price of \$32,000 "will provide a good value for the consumer." But with no experience selling a plug-in hybrid vehicle, Toyota cannot be sure of sales so the automaker is being conservative in its forecast for the model. In addition, Toyota is monitoring General Motors' experience selling the Volt, which went on sale in December. GM says it is on track to sell 10,000 Volts this year, though it may not make that number, in part due to a shutdown of the plant that makes the Volt for preparation to build other GM models.

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## **Bests The Prototype**

AutoObserver and editors at Edmunds' InsideLine.com have written extensively about the prototype of the 2012 Prius Plug-in over the past 18 months. Test drives of the production version of the Prius Plug-in at a Toyota media event in the San Francisco Bay Area last week demonstrated that it drives just like a standard Prius, which is to say that it drives like a regular car. Major changes from the prototype to the production version are in the size of the battery. The size and its location give the plug-in the same cargo capacity as the standard third-generation Prius. A small but appreciated change from the prototype is the more flexible onboard charging cable that makes it easier to handle and plug into an outlet.

At the same event, Toyota allowed test drives of the regular 2012 Prius liftback, but did not announce its price. The 2011 Prius liftback starts at \$23,520 and is currently available in four trim levels (level 1 has sold out). Level 3 starts at \$24,520 and Level 5 starts at \$28,790. The Prius Plug-in is available in two trim levels, the Standard and the Advanced. In terms of features, the Standard version is most like the 2012 Prius liftback with the Level 3 trim package (again, price unknown), and the Advanced trim level of the plug-in resembles the 2012 Prius liftback with the Level 5 options. The base 2012 Prius Plug-in will, as mentioned, start at \$32,000, excluding the \$2,500 federal tax credit. The 2012 Prius Plug-in Advanced will start at \$39,525, excluding the tax credit.

Assuming the price of the Prius liftback with the Level 3 trim package doesn't change, the price difference between it and the base 2012 Plug-in Prius would be \$4,980, including the tax credit. It would take quite a lot of driving in electric-only mode to make purchasing a Prius Plug-in a better financial move than buying a regular Prius liftback with the Level 3 trim. That's probably why Toyota is talking up the HOV lane access that the plug-in model will enjoy in three and possibly more states. For some people, the price difference is nothing compared to the torment and time waste of sitting in freeway gridlock and watching solo occupants in other vehicles whiz by in a carpool lane. Reflecting on that Prius Plug-in perk, Carter said: "The customer now has motivation for a higher MPG, more efficiency...and can get in the HOV lane. That dynamic I think is going to be pretty big."

While the arrival of the Prius Plug-in remains some months away, Toyota is going to market in October with the Prius V wagon. It has 58 percent more cargo capacity than the Prius liftback and the Prius Plug-in; indeed more cargo space than 80 percent of the small SUVs on the road today. Last week, Toyota announced the Prius V's manufacturer's suggested retail price is \$26,400. Toyota now has introduced the regular 2012 Prius liftback, the roomier Prius V and the Prius Plug-in. Next up is the Prius C, which Toyota promises will be the most fuel-efficient hybrid in the U.S. without a plug. Toyota debuts the production version at the Detroit Auto Show in January.



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