“This is my opening farewell:”¹ Well, it would have to end sometime. I will be handing over the reins to The Hybrid Report in the near future as I prepare to leave government service in less than 3 months. We are currently in negotiations to turn The Report over to another office. We will keep you posted on that as details develop. The last Report I will write and edit will be the April 1st edition,² The Hybrid Report’s twelfth anniversary.

We created The Report way back in 2005 to answer questions about the impact of hybrid cars on Washington State’s highway revenue structure. The answer: not much. The Report originally circulated to eight coworkers, who would forward it to their friends and coworkers. From a simple collection of news articles sent to WSDOT employees it now has readers in other Washington State agencies and legislative staff. We now have hundreds of subscribers around the world. It has been fun to learn, read, and write about hybrid cars. With only two exceptions, comments that I have received about The Report have been positive. One complaint had to do with the plural of Prius, when we adopted the Magliozzi Brothers’³ plural, “Prii.” The other complaint had to do with Kelowna, Canada. After over 47 years of employment including over 40 years of government service (18 with Washington State Department of Transportation; 22 in the US Navy, Louisiana Army National Guard, and the US Army; and time with the National Technical Information Service and the Town of Herndon, VA Public Works Department) it’s time to try something else.

National Sales for January 2016

Hybrids: Hybrid car sales were down in January compared to the previous month, but were up compared to January 2016, according to HybridCars (Cobb, February 2, 2017). While hybrid sales did not perform as well as the total market in January compared to December, compared to the previous January, hybrids were up 7.6%, while the rest of the market was down 1.7%. The big news, however, was that for the first time in over ten years, the Prius Liftback did not lead

² No, this is not some sort of April Fool’s joke.
³ Click and Clack of NPR’s Car Talk.
the pack. The Ford Fusion, with 4,856 sales slipped into first place. Not since the earliest days of hybrid sales when the Honda Insight was a contender, has the Prius given up the sales crown. Toyota did have six of the top 10 hybrids and dominated the sector with 57.04% of all hybrid sales. This, too, is lower than Toyota’s usual piece of the market, which is almost always exceeds 60%. The hybrid sector accounted for 1.98% of all new cars sold.

Plug-in Hybrids: The Chevrolet Volt continued to lead the plug-in hybrid market with 28.33% of the plug-in market. While Ford’s fusion may have squeaked past the Prius in the hybrid market, Toyota’s Prius Prime pushed by both the Ford Fusion Energi and C-Max Energi plug-in to take second place with 24.02% of plug-in sales. The Fords, combined, sold 18.79% of the plug-ins. Overall, plug-in hybrids were 0.5% of the new car market. For the second time since we’ve tracked sales, plug-in sales exceeded all-electric sales (Cobb).

Electric Cars: The Tesla Model S led the all-electric sector with 22.23%, barely edging out the Chevrolet Bolt’s 21.53%. Tesla’s Model X came in third with 18.53% and the Nissan Leaf was a distant fourth at 14.3%. BMW’s i3 was an even distanter fifth with less than half the sales of the Leaf. Electric cars accounted for 0.47% of new car sales (Cobb).

Combined, these three groups of automobiles accounted for 2.95% of all new car sales.

HYBRIDS

Nissan, which had ignored the hybrid market and went all-in on electrics, has introduced only its second hybrid, Reuters (Tajitsu & Shiraki, February 1, 2017) reports. The Note e-Power shares many components with the Leaf and calls its hybrid a “near-electric.” The car may well be a true extended range electric, but the article isn’t quite clear. It uses the same electric motor as in the leaf, but has a gasoline motor.

In London, when an inspector calls, he might show up in one of 30 new hybrid cars, the Evening Standard (Davenport, February 1, 2017) waves. The Metropolitan Police force is also planning to bring out 250 vehicles fueled by other energy sources, including hydrogen motorcycles and emergency response cars. The Met quit buying diesel vehicles in 2015, but the latest round of alternative fuel vehicles is intended to aid in Mayor Sadiq Kahn’s push to reduce air pollution in the Metropolis.

Boulder County, Colorado, has established a free service to its residents to give advice on the hybrid or electric vehicles that best fits their needs, the Times-Call (Fryar, February 1, 2017) called. The advisors can also help with home charging advice. You can call or go to the Energy Smart website.

If you aren’t in Boulder County, there is a website called Electro Motive that can help you out. You can take a short quiz that will match you to cars that may fit you and your driving style. In our case it recommended the Volt and Prius Prime, two plug-in hybrids. It is a veritable treasure-trove of electrical vehicle information.

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The U. S. Department of Energy gave Odyne Systems LLC a $2.9 million contract to build plug-in hybrid work trucks, Next-Gen Transportation (Tyler, February 6, 2017) notes. Odyne will work with Freightliner, Allison, and federal laboratories in developing the vehicles that are required to reduce work truck fuel usage by 50%. The work trucks will be able to act as generators and electrical power sources for a variety of work-related tools.

ELECTRIC VEHICLES

Kaua’i Island Utility and Hawaiian Electric Company are offering $10,000 rebates until the end of March, Utility Dive (Walton, January 27, 2017) delves. According to Kaua’i Island Utility, with the federal break, rebates come to $17,500, making the price of a new Leaf a mere $13,500. In a related story on Maui Now (January 25, 2017) Hawaiian Electric, Maui Electric, and Hawai'i Electric Light will also get a $10,000 rebate on new Leaves.

Meanwhile on the Mainland, three Colorado counties served by Garfield Clean Energy are planning to offer discounts for 90 days, Aspen Daily News (January 27, 2017) asserts. Garfield Clean Energy asked local car dealers to submit bids for discounted electric vehicles. In the middle of March, the organization will list the dealers and their offers.

The province of British Columbia announced incentives for electric vehicles, the Parksville Qualicum Beach News (January 27, 2017) notes. Rebates start at $2,000 and top out at $50,000. The actual amount varies based on the price of the vehicle as well as other factors.

What will it take to get electric vehicles past the 1% of sales mark? HybridCars (LeSage, January 30, 2017) reviews some of the answers a McKinsey & Co. developed in a world-wide study. The first item that needs work is battery cost, which accounts for about $13,000 of the price of an electric car. While this component drives up the price of an electric car, automakers don’t do a very good job of marketing the lower maintenance cost of electric cars, which ranges from 20 to 40% lower than conventional cars over five years. Expansion into markets other than the luxury sector might be worth a try. Many carmakers feel they have to compete against Tesla, which has the luxury sector locked up. Perhaps they should look at other markets and sectors, the study says. There’s more. Read the full article.

The Anteaters of the University of California, Irvine, will be the first to have an all zero-emissions bus service at their disposal, HybridCars (LeSage, January 31, 2017) says. When the University adds 20 all-electric buses to its fleet next year, it will no longer have any diesel buses. Students voted to pay a $40 fee each quarter to fund the buses, but they get to ride for free. The Anteater Express has one fuel cell bus operating.

As part of the remediation that Volkswagen is required to make because of their cheating on diesel emissions tests, the company has to provide $2 billion dollars over ten years to make restitution to the owners of the dirty diesel cars and the states that the owners reside in (Banse, February 3, 2017). Northwest News Network reports that the governors of Oregon and Washington have issued a joint shopping list to Volkswagen for projects that will promote electric cars. Many of the requested projects include beefing up and filling in the gaps of the two state’s electric highways by installing a number of fast chargers and combination chargers that meet both CHAdeMO and SAE charging standards. Another project includes adding electric vehicles to ridesharing programs. You can see the entire proposal here. Volkswagen will pick
the projects they will fund February 22, then forward the list to the U. S. Environmental Protection agency. Finally, there is another $3 billion environmental remediation fund that requires Volkswagen to send $112 million to Washington state. Most of that money will go to replace diesel equipment, buses, trucks, and locomotives.

In related news, Volkswagen has established a new company, Electrify America LLC, to handle the $2 billion mentioned above, Bloomberg (Beene, February 7, 2017) blogs. Electrify America will build and maintain a network of 200 fast charging stations across the country and install 300 more chargers in 15 cities around the U. S.

“Danger, Will Robinson, Danger.” If you are planning on buying an electric car charging unit on the innerwebs, use caution. Charged (Ruoff, February 7, 2017) says that “many of the best-selling EV charging stations on Amazon are not safety-certified.” In January Charged did a search of charging stations on Amazon’s website and found that three of the four best-selling, including the best seller, were not certified by Underwriter Laboratories or Intertek or any other Nationally Recognized Testing Laboratory. Charged says that they contacted Amazon and the uncertified best seller was removed, but it came back and was removed again. Charged says that there are still several chargers listed on Amazon that are not certified.

Honda and Hitachi will create a joint venture to build and sell electric vehicle motors, Reuters (Tajtsu, February 7, 2017) reports. While Honda plans to use the electric motors in its own cars, it also plans to sell them to other companies to help reduce the cost of production. Hitachi already sells electric components to Nissan, Toyota, Ford, and Volkswagen. Some of the motors will be built in the United States.

Carlos Slim, the Mexican billionaire, will build an electric car to sell in the Mexican car market, Forbes (Estevez, February 6, 2017) says. Slim’s company Giant Motors will work with Moldex, a subsidiary of Grupo Bimbo to build and sell the car. Giant Motors will initially sell the car as an electric taxi in Mexico City.

North East Lincolnshire, home of the towns of Grimsby and Cleethorpes, in England, acquired a fleet of electric vans, the Grimsby Telegraph (Lynch, February 9, 2017) sent. The area council spent £200,000 ($252,016.13) on 11 Nissan eNV200 electric vans to replace diesel vehicles. The vans will be used for a number of purposes in the council area.

Vattenfall, a Swedish utility that operates all over Europe will replace its entire fleet of 3,500 with electric vehicles, the company said in a press release (Vattenfall, February, 5, 2017). The changeover began in January and should take five years to complete. Vattenfall operates in Sweden, Germany, and the Netherlands.

**ALTERNATIVE FUELS**

GM and Honda will invest $85 million to build hydrogen fuel cells at an assembly plant in Brownstown Township, Michigan, Automotive News (Truett & Greimel, January 30, 2017)

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6 Yes, that’s a thing.
reports. GM already makes batteries for its hybrids and electric cars there. The joint effort will add 100 new jobs.

COMING TO A LOCATION NEAR YOU: The latest news on new charging stations which may or may not be somewhere close to you.

United States: Beloit Hospital in Beloit, Wisconsin, has a new level 2 charger, the Beloit Daily News (Bellman, January 28, 2017) bellows. Two cars can charge at the station.

The town of Secaucus, New Jersey, is installing four charging stations around town, North Jersey (Toro, January 31, 2017) notes. The town used a $20,000 grant from New Jersey’s Department of Environmental Protection to pay for the chargers.

Elizabethtown College in Pennsylvania opened two charging stations at the Hoover and Brown parking lots, The Etownian (Williams, February 2, 2017), the school newspaper reports.

Around the World: Auckland Transport in New Zealand will install level 2 chargers at its park and rides, Stuff (Dickey, January 27, 2017) says. The antipodean transit company received NZ$300,000 ($217,801.66) to install 60 charging stations.

Royal Dutch Shell will install chargers at some of its gas stations in England and the Netherlands, Financial Times (Ward, January 29, 2017) tells. Total, a company that sells gas in France is thinking about adding chargers as well.

There is a new charger at Dolmen Mall in Karachi, Pakistan, the Daily Times (January 31, 2017) deals. The BMW charger was installed by Dewan Motors. This is Pakistan’s second public charger.

Pukekohe, on New Zealand’s North Island south of Auckland will install two new fast charging stations the Waikato Times (Hubbard, February 10, 2017) tells. One of the chargers is funded by the Energy Efficiency and Conservation Authority, while the other was funded from the Low Emission Vehicle Contestable Fund. The chargers will be free.

Also on New Zealand’s North Island, the telephone company Spark is putting five charging stations, called Spark Plugs, in their telephone booths, ITWire (Dinham, February 13, 2017) wires. The chargers, installed in Kiwi phone booths in the Kapiti Coast District, will be free for the first year.

OTHER TECHNOLOGY

Finnish company Quantum Electric invented a new digitally controlled electric motor that should increase an electric car’s range by 50%, Business Insider Nordic (Turula, January 31, 2017) says. Unfortunately, the article does not tell us much about the innovation, but refers us an article in Kauppalehti. Problem is, that article’s in Finnish and we can’t read Finnish.

Speaking of electric motors, Japanese company NSK has developed “the world’s first transmission-equipped wheel hub motor” (NSK, January 19, 2017). Several other motor makers have made motors that fit in wheels and axles. This one is significant in several ways: one, it
actually consists of two motors and a transmission that, as best as we can tell, coordinates the power generated by the two motors; and two, well maybe that’s it.

Swiss watch company Swatch is developing an electric car battery, Reuters (Neghaiwi, February 3, 2017) reports. The batteries are two to three years away from certification, then thy be tested by the Chinese electric car maker Geely.

We are pretty sure we’ve covered this before, but Hybrid Report reader Doug McClanahan sent in an article about a Chinese Laboratory that has developed a lithium ion battery that uses graphene. The graphene allows batteries to work safely at higher temperatures and will double the lifespan of the lithium batteries (Beijing Sanyou Intellectual Property Agency, Ltd., February 6, 2017).

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*That’ll do.*