



Electric Vehicle Chargers Update – July 2020

In June 2016, the City of Red Lodge installed 4 publicly available electric vehicle charger stations. These stations were funded with grants and in-kind donations from Tesla Motors and Yellowstone Teton Clean Cities at no cost to the City. Over their lifetime as of July 2020, they have fueled over **39,000 miles with 14,781 kWh of electricity** with an average annual energy cost to the City of \$673. These calculations are made with the assumption that every 34 kWh charges 100 electric vehicle miles. This is a conservative estimate that takes into account a variety of efficiency ratings with different vehicle models.

Similar to gas powered vehicles, some electric vehicles are more efficient than others. A lower kWh rating per 100 miles means that that vehicle requires less energy to go the same distance, so it is more efficient than a model with a higher kWh rating. For example, a 2017 Tesla Model 3 boasts a 27 kWh/100 miles rating and is more efficient than a 2017 Mercedes-Benz B250e, which has a 40 kWh/100 miles rating. Just like MPG ratings for gas powered vehicles, the actual performance can change depending on if the electric vehicle is traveling on the highway or in a city.

These stations have a [management plan](#) and publicly accessible [Google sheet](#) monitoring energy use and miles charged since they were installed in 2016. These documents can be found at cityofredlodge.net/projects.

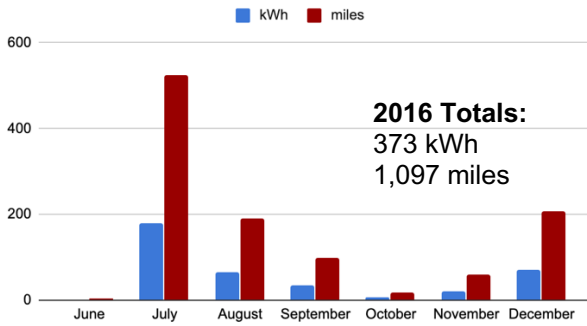
As electric vehicle infrastructure continues developing in Montana, we will likely see the usage of these stations increase. More visitors will have a positive economic impact for businesses and the City's resort tax revenue.



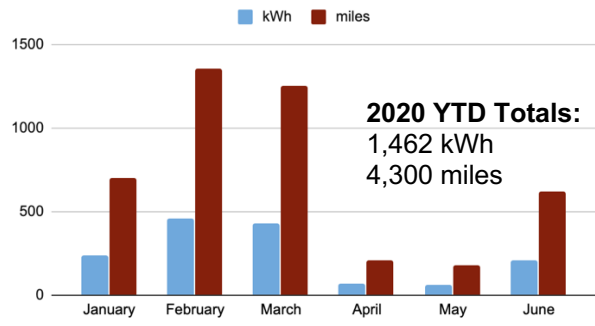
As stated in the City of Red Lodge Energy Conservation Plan, the City should continuously assess the feasibility of upgrading to a level 3 supercharger facility as well as mitigating energy costs with a solar array.

Annual Electric Vehicle Charger Performance

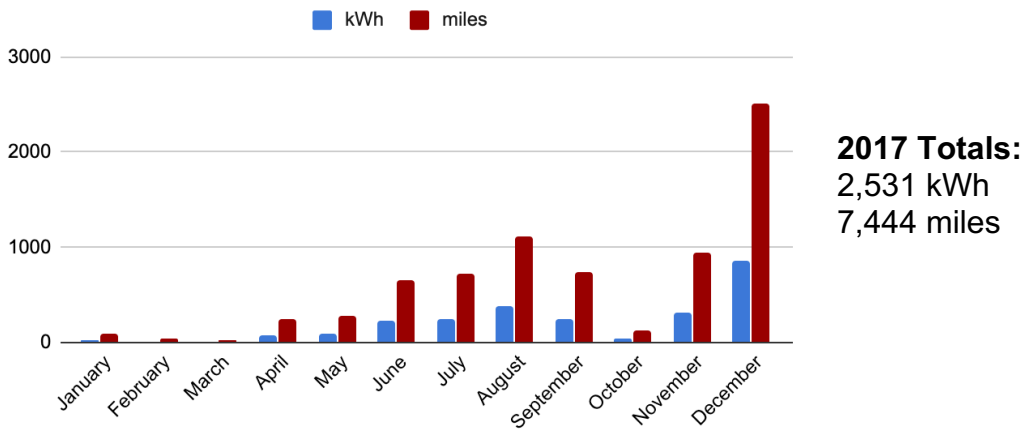
2016 Electric Vehicle Charger Performance



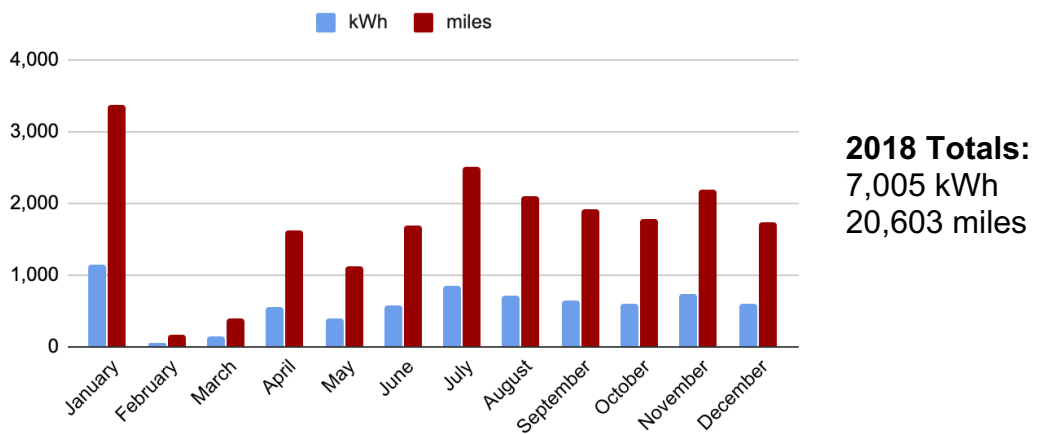
2020 YTD Electric Vehicle Charger Performance



2017 Electric Vehicle Charger Performance



2018 Electric Vehicle Charger Performance



2019 Electric Vehicle Charger Performance

