

M E M O R A N D U M

To: Zoning Code Rewrite Task Force
From: Michael V. Dyett, FAICP
Re: Proposed Electric Vehicle Charging Station Standard
Date: September 19, 2013

We believe this makes sense because of state and national incentives to produce more electric vehicles. For example, the California Air Resources Board recently approved a measure to have about one in seven cars (15.4 percent) sold in California in the year 2025 be zero emissions vehicles, which corresponds to about 1.4 million zero-emission and plug in hybrid vehicles. Because California is a significant market, carmakers often retool in response, and want to sell similar proportions in other markets as well.

Today, there are only 57,462 electric vehicles in the U.S., corresponding to less than 0.02 percent of total vehicles. By the year 2040, about 9 percent of the sales are projected to be from battery electric vehicles, and the total stock of battery electric vehicles in 2040 is projected to be about 20.86 million out of 283,650 vehicles, or about 7.3 percent.

Arizona has a number of specific incentives already in place, as the website link below shows, so we would expect that there would be about at least 580,000 electric vehicles in the State by 2035-2040 (7.3 percent of total), and there may in fact be more if Arizona's incentive programs are successful. The proposed standard of 5% for EV parking therefore is not unreasonable to start to have the infrastructure in place.

<http://www.afdc.energy.gov/laws/laws/AZ/user/3260>