Billion in investments earlier this year. Even Google is the in EV game with its Waymo company. Waymo's strategy is to link up with traditional auto manufactures to incorporate their electric and self-driving technology. Their initial focus has been on mini-vans. Waymo plans to launch a driverless taxi service in Arizona this year. Waymo has been testing their vehicles in Texas, California, Michigan, Arizona, Washington and Georgia.

This seismic shift in the industry toward EV's will present both risks and opportunities for automotive suppliers. Here at Proper, we see mostly opportunities in plastic injection molding. BASF, one of the world's largest producers of plastic resins stated there will be "no electric car without plastics". According to Tesla, they expect plastics in EV's to grow 37% annually. The reason plastics is so strategic to EV's is increased mileage gained due to lighter weight components. Proper has been engaged in light weighting strategies for several years now. This includes MuCell technology, thin wall development and hybrid injection molding with composite fiber technology. Another aspect driving up the plastics content is replacing heavier metal components with lighter plastic components.

The Proper Group team is engaged with customers today on light weighting innovations. The challenge is that customers want light weight, better performance and lower cost. This is a huge challenge because lightweight materials come at a premium, and many light weight technologies require additional capital beyond our standard injection molding machines. Somebody has to pay for this. Some of you may be familiar with our Fiber Form Cell in Warren's plant 3. Last year, Proper, along with its technology partners developed a new version of the Ford F150 Console Lid. Our team did a fantastic job re-designing the products and tools, as well as the manufacturing process to incorporate a high strength, light weight fiber sheet in the molding process. The entire Fiber Form cell in Warren's building 3 was displayed prominently at the 2018 North American Plastics Expo (NPE) last spring. This cell has generated significant interest from our customers because it resulted in a 15% weight reduction and a 40% improvement in strength. We are currently working with a customer on a Fiber Form concept for a structural component on the F150. Although it is a work in process in process, we are currently seeing a weight reduction in excess of 40%. We also see an improvement in strength of 24%. The down side is that our current cost model shows the light weight part will cost approximately 20% more to produce than conventional injection molding. In some cases, customer might accept higher cost if they perceive a higher value in the product. Even so, we are working to close the price gap.

The bottom line is that the move toward EV's will only accelerate the use of plastics in the vehicles and that is good news for the Proper Group. The future will be both challenging and exciting, the way we like it. Bring it on!!

Joe Grippe
Vice President
Automotive / Industrial