## 19S20 Chronology

August – November, 2018: On August 21, 2018 NHTSA opened investigation PE18-010 regarding loss of motive power without warning allegations in 2009-2016 Model Year Econoline vehicles with the 5R110W transmission. In opening their investigation, NHTSA referenced a complaint from a fleet operator that needed to transfer individuals with special needs from a disabled Econoline school bus in a roadway. The Agency sent an Information Request to Ford on September 21, 2018; Ford's response was provided on November 2, 2018.

Ford's investigation found reports principally related to a weld in the Coast Clutch Cylinder within the 5R110W transmission, which transmits torque from the engine to the transmission. Investigation of field return parts found evidence of weld failure in the coast clutch cylinder. When this weld fails, the transmission is no longer able to transmit torque, resulting in loss of motive power. The majority of weld failures were found to occur when the torque is highest, which is when the driver attempts to accelerate from a stop. There were no reports of accident or injury related to this condition.

December 2018 – March 2019: Ford's ongoing analysis found an elevated rate of reports for 5.4L engines compared with other engines. NHTSA provided Ford with vehicle information and fleet contact information obtained by the Agency to facilitate Ford's inspection of complaint vehicles. These field inspections found no unusual vehicle usage or maintenance practices that might contribute to these reports.

April – May 2019: Ford conducted ongoing reviews with the Agency pertaining to the unique performance of the 5.4L engine applications, as well as certain vehicle applications such as school bus usage. Analysis included detailed review of reports from the field, dealer and fleet visits, and returned part analysis. Though the majority of reports pertained to vehicles at a stop and not while moving, Ford discussed with the Agency the ongoing concern pertaining to school bus applications that present unique vulnerabilities if a loss-of-mobility without warning concern occurs. Ford observed that unique vulnerabilities may also exist on ambulance applications with 5.4L engines based on an elevated rate of reports.

On June 3, 2019, Ford's Field Review Committee reviewed the concern and approved a field action.