Solar filaments are strands of relatively cool, dense plasma magnetically suspended in the lower density hotter solar corona. They trace magnetic polarity inversion lines (PILs) in the photosphere below, and are supported against gravity at heights of up to ~100 Mm above the chromosphere by the magnetic field in and around them. This field erupts when it is rendered unstable, often by magnetic flux cancellation or emergence at or near the PIL. We have studied the evolution of photospheric magnetic flux leading to ten observed filament eruptions. Specifically, we look for gradual magnetic changes in the neighborhood of the PIL prior to and during eruption. We use Extreme Ultraviolet (EUV) images from the Atmospheric Imaging Assembly (AIA), and magnetograms from the Helioseismic and Magnetic Imager (HMI), both on board the Solar Dynamics Observatory (SDO), to study filament eruptions and their photospheric magnetic fields. We examine whether flux cancellation or emergence leads to filament eruptions. We find that continuous flux cancellation was present at the PIL for many hours prior to each eruption. We present two methods of producing eruptions in detail and find the following: (a) the pre-eruption filament-holding core field is highly sheared and appears in the shape of a sigmoid above the PIL; (b) at the start of the eruption the opposite arms of the sigmoid reconnect in the middle above the site of (tether-cutting) flux cancellation at the PIL; (c) these filament eruptions result from flux cancellation in the middle of the sheared field, and thereafter evolve in agreement with the standard model for a CME/flare filament eruption from a closed bipolar magnetic field (flux cancellation (van Ballegooijen and Martens 1989) and Moore and Foumouroti 1992) and runaway tether-cutting (Moore et. al 2001).