Charge transport in disordered solids can be described with use of a dispersion parameter. The dispersion parameter can be defined simply as either the thermal energy (low electric field regime) or the field energy (high field regime) scaled by the reciprocal of a characteristic energy of the material. A transitionary temperature and electric field are defined when the ratio of thermal or field energy over the characteristic energy is one, respectively. This indicates a transition from dispersive transport to normal transport. Dispersive transport can be described simply by the dispersion parameter for many disordered materials. Models involving the dispersion parameter describe anomalous behavior for disordered materials in measurements of charge transport for photoconductivity, DC conductivity, radiation induced conductivity, permittivity, and electrostatic breakdown onset, among others. Dispersive to normal transport transitions have been measured with pulsed electroacoustic measurements of internal charge distributions for high field induced transitions. Temperature induced transitions have been measured in photoconductivity and DC conductivity experiments. Low-density polyethylene (LDPE) is a ubiquitous disordered polymer and will be used as an example to show the connections between various measurements through the dispersion parameter. Our group is in the process of measuring temperature dependent conductivity for LDPE with the constant voltage conductivity method.