Organizations such as Sports Info Solutions and Football Outsiders have been recording extremely detailed football play-by-play data in the past decade. Some examples of this data are: (a) players participating in each snap, (b) types of runs or passes (draw play, screen pass, quick hitch, etc.), (c) yards after catch, passes thrown away (by QB), and (d) location of passes caught (chest, high, low). We discuss the scope of currently available data. Some of this data has been exploited in published research and we also consider the potential of this data both in player and team evaluation and in rethinking football strategies. (Received September 18, 2016)