Abstract: This presentation summarizes the results of experiments conducted over the past year to empirically validate extensions made in an attempt to use the COCOMO II Early Design model to accurately estimate web development effort and duration. The presentation starts by summarizing the challenges associated with estimating resources for web-based developments. Next, it describes a new sizing metric, web objects, and an adaptation of the Early Design model, WEBMO (Web Model) developed to meet these challenges. Both the size metric and model adaptation have been developed to address unique estimating issues identified as data from more than 40 projects was collected, normalized and analyzed in order to get a handle on the resources needed for quick-to-market software developments. The presentation concludes by discussing lessons learned from the effort and the next steps.