

EXHIBIT 1

SPSS ANALYSIS OF MISSING DATA

SPSS [Statistical Package for the Social Sciences] has a prepared component within it which provides an item by item analysis of all missing data and the estimation of population means and other relevant statistics for the same. This “Missing Values Analysis” Component generates several “diagnostic” reports that provide followings:

- (1) An identification of any *patterns* of missing data within a given data set. This identification includes an item by item listing (for all survey items) for the...
 - location of all missing values
 - the frequency & percent of such missing values
 - the status of pairs of missing values, i.e., whether pairs of values are missing in different cases
 - whether data values are extreme, and
 - whether values are missing randomly.

- (2) Additionally, SPSS provides *population estimates* for all survey items, including
 - means
 - standard deviations
 - co-variances (where pairs are involved) and
 - correlations using list-wise and pair-wise regression.

- (3) And, it provides
 - significance tests to indicate differences between respondents and non-respondents and, in some selected circumstances
 - estimated replacement values for cases where either single or pair wise patterns have been identified.

These features are helpful in determining whether missing values of one item are related to missing values in another and how this might impact respondent/non-respondent analysis.