Preface

The primary research for the Master Plan used public and university libraries, internet, commercial data bases, (Dataquick, Claritas Inc, Dialog, & Lexis Nexis) statistical programs (Excel, ESRI & SPSS) and Geographical Information system or GIS. The prevailing statistical analysis used for student projections is <u>cohort analysis</u>. The present literature indicates this method provides the most actuate projections for small populations. These projections diminish with each successive time period. This Master Plan and the projections are a combination of cohort analysis, linear regression, and moving averages.

The use of <u>spatial statistic on maps</u> in the Master Plan provides a visual analysis of variables impacting the District. Spatial statistical analysis in this report can be compared with descriptive statistical analysis. Spatial statistic in this report allows the calculation of values that represent a distributions center, compactness or orientation.

- (Central Household) The central feature locates the centrally located point within a group. This analysis is similar to a median in descriptive statistics.
- (68% of Student Household) Standard distance similar to a standard deviation.

Spatial statistics with specific data can produce trend analyses, best locations based on populations, clustering and isolation of outliers. Spatial statistics are commonly used in police department, environmental studies, and traffic analysis.