

LANCASTER COUNTY STATISTICAL/MODELING ANALYST

NATURE OF WORK

This is responsible technical work providing statistical data and support to property appraisal personnel.

Work involves maintenance, setup and implementation of models for the valuation of all real property in Lancaster County and implementing and analyzing assessment data for all property types to evaluate trends and data integrity. Work also involves maintaining cost tables, depreciation tables and market and income models in the Computer Assisted Mass Appraisal (CAMA) System and evaluating and enhancing system preference. An individual within this classification will be expected to utilize independent judgment in performing operational tasks with work decisions made in accordance with departmental policies, procedures and State statutes. Supervision is received from an administrative superior with work reviewed in the form of accuracy, results achieved and compliance with departmental and legal requirements.

EXAMPLES OF WORK PERFORMED

Identify and interpret trends, inverse relationships and critical elements in program and administrative data.

Select and apply established mathematical and statistical methods and techniques for use in computing percentages, averages, totals and ratios to meet analytical and interpretation requirements of studies of data.

Summarize statistical data into technical reports, charts, graphs and tables; apply statistical testing techniques to the analysis and interpretation of data; formulate conclusions and calculate probabilities based on data analysis.

Maintain technical models used in valuing real property; analyze and interpret the validity and accuracy of all market and income models.

Evaluate the effectiveness of multiple regression models; implement new models as needed.

Implement statistical studies for all types of property characteristics; distribute results to appraisal staff.

Prepare and maintain detailed program and operation documentation.

Evaluate operational effectiveness of hardware and software for purposes of field collection and mass appraisal.

DESIRABLE KNOWLEDGE, ABILITIES, AND SKILLS

Considerable knowledge of the principles, methods, practices and techniques of real property appraisal and assessment.

Considerable knowledge of the principles of random sampling and probability.

Considerable knowledge and technical understanding of appraisal system hardware and software platforms.

Considerable knowledge of computerized appraisal systems including applicable software and hardware technology.

Ability to establish and maintain effective working relationships with co-workers, property owners, public officials and the general public.

Ability to prepare and maintain clear and concise reports and documentation.

Ability to communicate effectively both orally and in writing.

MINIMUM QUALIFICATIONS

Graduation from an accredited four-year college or university in math, statistics, business administration, data science or related field plus two years of experience appraising real property or performing complex data analysis, or any equivalent combination of training and experience that provides the desirable knowledge, abilities and skills.