

## INTRODUCTION

The *Dictionary of Occupational Titles* (DOT) was developed in response to the demand of an expanding public employment service for standardized occupational information to support job placement activities. The U.S. Employment Service recognized this need in the mid-1930's, soon after the passage of the Wagner-Peyser Act established a Federal-State employment service system, and initiated an occupational research program, utilizing analysts located in numerous field offices throughout the country, to collect the information required. The use of this information has expanded from job matching applications to various uses for employment counseling, occupational and career guidance, and labor market information services.

In order to properly match jobs and workers, the public employment service system requires that a uniform occupational language be used in all of its local job service offices. Highly trained occupational analysts must go out and collect reliable data which is provided to job interviewers so they may systematically compare and match the specifications of employer job openings with the qualifications of applicants who are seeking jobs through its facilities. The Occupational Analysis (OA) Program is currently supporting job analysis activity in the states of Michigan, Missouri, Massachusetts, and Utah, with North Carolina serving as the lead Field Center providing leadership and oversight.

Based on the data collected by occupational analysts, the first edition of the DOT was published in 1939. The first edition contained approximately 17,500 concise definitions presented alphabetically, by title, with a coding arrangement for occupational classification. Blocks of jobs were assigned 5- or 6-digit codes which placed them in one of 550 occupational groups and indicated whether the jobs were skilled, semi-skilled, or unskilled.

The second edition DOT, issued in March 1949, combined material in the first edition with several supplements issued throughout the World War II period. The second edition and its supplements reflected the impact of the war on jobs in the U.S. economy including new occupations in the plastics, paper and pulp, and radio manufacturing industries.

The third edition DOT, issued in 1965, eliminated the previous designation of a portion of the occupations as "skilled, semi-skilled, or unskilled" and substituted a classification system based on the nature of the work performed and the demands of such work activities upon the workers. These new indicators of work requirements included eight separate classification components: training time, aptitudes, interests, temperaments, physical demands, working conditions, work performed, and industry.

The fourth edition of the DOT published in 1977, contained over 2,100 new occupational definitions and several thousand other definitions were substantially modified or combined with related definitions. In order to document these changes, approximately 75,000 on-site job analysis studies were conducted from 1965 to the mid-1970's. These studies, supplemented by information obtained through extensive contacts with professional and trade associations, reflected the restructuring of the economy at that time.

Two supplements to the DOT have been released since the publication of the 1977 fourth edition DOT, one in 1982 and one in 1986. The 1982 supplement contained titles, codes, and definitions derived from Occupational Code Requests (see Appendix E) submitted by DOT users to local Job Service offices. The 1986 supplement continued this effort to publish new definitions as well as modify existing definitions consistent with new data collected. The 1986 supplement contained 840 occupational definitions; of these, 761 were not defined in the fourth edition.

Changes in occupational content and job characteristics due to technological advancement continue to occur at a rapid pace. This rapid change to occupations coupled with user demand for the most current information possible has resulted in a revised approach to the publication of the DOT. The OA network has focused its efforts on the

study of selected industries in order to document the jobs that have undergone the most significant occupational changes since the publication, in 1977, of the fourth edition DOT.

This effort of gathering data and writing/revising definitions in these selected industries, including "new" and revised definitions from the 1986 fourth edition supplement, has resulted in the publication of this revised fourth edition DOT. This information is presented in the hope that it will provide the best "snapshot" of how jobs continue to be performed in the majority of industries across the country. Comments, suggestions, or criticism by DOT users concerning the content and format of this revised DOT are welcomed.