

DESCRIPTION: Under close to limited supervision, manages and maintains multiple bridge related computer files including mainframe, personal computer, and geographic information system (G.I.S.) databases, and inventory, management, and rating evaluation files. Generates and evaluates data, reports, and maps for use by Nebraska Department of Roads (NDOR) employees, consulting engineers, and federal, county, and city officials; produces and enters load ratings of bridges using in-house software programs and criteria; performs related work as assigned.

DISTINGUISHING CHARACTERISTICS: (A position is assigned to this class based on the scope and level of work performed as outlined below.)

This is a single level classification series, in which positions perform a complete range of technical database management work related to planning studies, construction projects, and condition and other inspection activities, involving State and local bridges and other structures. Positions in this classification perform work at the developmental and fully functioning levels, where incumbents initially learn assigned duties and develop and apply the understanding of and proficiency in using technical procedures and techniques, and computer systems and applications pertinent to NDOR. Work is performed initially under close supervision, changing over time to limited supervision for most assignments. Initial assignments are well defined with guidelines and assistance readily available from other technical or professional engineering workers. As requisite knowledge and skill are developed, incumbents would typically be given progressively more advanced assignments and greater independence.

EXAMPLES OF WORK: (A position may not be assigned all the duties listed, nor do the listed examples include all the duties that may be assigned.)

Coordinates the collection and distribution of data and updates databases using information received from State and county bridge inspectors, consultants, or local bridge owners.

Processes inspection reports received and prepares reports regarding changes to bridges due to construction or maintenance activities.

Selects bridges for load ratings if condition ratings warrant their review.

Creates and modifies database queries to extract and compile data on the kinds/types and numbers of bridges about load ratings and condition ratings of bridges.

Compiles and extracts data and updates bridge databases after lettings; updates and maintains G.I.S. databases from letting, planning, and inspection information.

Researches plans and changes National Bridge Inventory (N.B.I.) condition ratings according to the improvements required by construction/repair contracts.

Generates bridge maps and produces data reports for inspectors, NDOR employees, State and local agency representatives, and other federal, local, and regional transportation offices; submits data reports to appropriate agencies.

Reviews and evaluates field and electronic data to determine inventory, condition status, and operating load ratings of bridges.

M55660 – HIGHWAY BRIDGE DATA TECHNICIAN (continued)

Conducts end of year edits.

Recommends work standards, reporting requirements, and operating procedures to NDOR bridge managers and engineers.

Monitors and evaluates data for consistency to ensure validity of reported statistics; evaluates collected data for trends by comparing to prior reports; verifies inspection compliance and data/coding integrity.

Instructs and advises NDOR bridge engineers and inspectors, local county/city workers, and consultants on utilizing bridge inventory and inspection databases, management manuals, and specifications.

Coordinates receipt and distribution of information pertinent to the bridge related computer databases from and to other NDOR sections and local jurisdictions; compiles and interprets data to fulfill requests involving maintenance, engineering, designing, and planning needs.

KNOWLEDGE, SKILLS, AND ABILITIES REQUIRED: (These are needed to perform the work assigned.)

Knowledge of: National Bridge Inventory requirements and National Bridge Inspection Standards pertinent to NDOR inventory practices; bridge plans and reports terminology; bridge inventory, inspection, and load-rating reports, plans, maps and record keeping requirements; bridge inventory, management, and rating databases; applicable NDOR policies, procedures, and record keeping practices; the features and capabilities of computer-aided design/drafting software used by NDOR.

Skill in: developing complex computer queries and extracting/analyzing bridge inventory and inspection data to produce reports for NDOR employees and others.

Ability to: communicate in person, and by telephone, email, and correspondence with NDOR employees and representatives of contracted firms and public agencies to collect and share information and explain operating procedures; interact with NDOR employees and others to maintain work relationships; interpret and apply computer operating and software manuals, NDOR policies and directives, and work instructions; operate standard office equipment, personal computers and mainframe terminals and associated applications software; use and update GIS databases; calculate solutions using algebra, geometry, and trigonometry; analyze data for consistency and trends; understand and use bridge plans and reports; identify and apply pertinent data from engineering plans and field measurement records; create and modify NDOR bridge related computer database queries.

MINIMUM QUALIFICATIONS: (Applicants will be screened for possession of these qualifications. Applicants who need accommodation in the selection process should request this in advance.)

Experience in using computer-aided database management and report generation applications.

SPECIAL NOTE:

State agencies are responsible to evaluate each of their positions to determine their individual overtime eligibility status as required by the Fair Labor Standards Act (FLSA).