The purpose of the GIMS specialist occupation is to conduct complex analysis of GIMS &/or CADD projects in response to user requests.

At the developmental level, incumbents learn to conduct complex analysis of GIMS &/or CADD projects.

At the full performance level, incumbents conduct complex analysis of GIMS &/or CADD projects in response to user requests.

At the first supervisory level, incumbents manage & coordinate division-wide geo-spatial data base system &/or supervise assigned staff.

At the second supervisory level, incumbents develop overall division-wide GIMS program & supervise GIMS staff.

At the managerial level, incumbent develop overall agency-wide GIMS program &/or supervise GIMS data base administrators &/or GIMS system administrators.

GLOSSARY:

AM - Automated and desktop mapping.
DBMS - Data base management systems.
GIS - Geographic information systems.
CADD - Computer aided drafting and design.
GIMS - A term used to describe a collection of related technologies used to manage geo-spatial data, these technologies include: GIS, CADD, AM, DBMS and RSI.
MGE - Modular geographic environment.
RSI - Remote sensing and image analysis.
Spatial Analysis - Ability to evaluate features in the context of their surroundings.
CLASS TITLE: GIMS Data Base Administrator  
CLASS NUMBER: 85775  
EFFECTIVE DATE: 09/12/1999  
CLASS CONCEPT: The first supervisory level class works under general direction & requires thorough knowledge of computer science, data base systems & data base analysis in geo-spatial data base to include data base applications, design & creation & formulate & implement geo-spatial data base program policies & procedures &/or supervise assigned staff.

CLASS TITLE: GIMS System Administrator  
CLASS NUMBER: 85776  
EFFECTIVE DATE: 12/07/1997  
CLASS CONCEPT: The second supervisory level class works under general direction & requires advanced knowledge of geographic information management systems in order to develop & administer overall division-wide plans, policies & procedures for GIMS programs & applications & supervise lower level GIMS staff.

CLASS TITLE: GIMS Administrator  
CLASS NUMBER: 85777  
EFFECTIVE DATE: 11/25/2001  
CLASS CONCEPT: The managerial level class works under administrative direction & requires extensive knowledge of geographical information management systems & supervisory principals & techniques in order to administer overall agency-wide GIMS program &/or supervise lower-level GIMS data base administrators &/or GIMS system administrators.
JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)

Learns to conduct complex analysis of geo-spatial data for GIS &/or CADD projects in response to user requests, assists & educates users regarding GIS &/or CADD technology &/or opportunities GIS technology affords to resolve resource management problems, coordinates with other consultants & resource managers to respond to user requests for digital data &/or applications & participates in development of macro-language program &/or SQL (standard query language) for GIS operations to improve user products.

Assists in ensuring GIS &/or CADD operations adhere to applicable standards for data capture, data manipulations & output; coordinates applications design & final products based upon user needs & expectations; coordinates GIS &/or CADD activities; participates in applications design; participates in work force & project planning to plan, schedule & implement project activities; transforms final products to storage media & creates data reports to include meta-data.

Operates GIS &/or CADD software (e.g., Intergraph, MGE, Grass, ArcView, ArcInfo, AutoCad, MicroStation, MapInfo, GeneriCad, GeoMedia) to produce &/or revise maps, engineering design drawings, cartographic enhancements (e.g., land use, land cover, bed rock, geology, wetlands, land parcels, highway design characteristics, pavement management, highway performance monitoring system, highway accident statistics, bridge locations) for planning & design report preparation, documentation & project management.

Provides geo-spatial data to government agencies, consultants & conservation organizations; coordinates geo-spatial contracts for project related personnel services; assists staff/interns in processing of spatial data into geo-spatial usable format.

MAJOR WORKER CHARACTERISTICS:
Knowledge of geographical information systems to include applications in geographic information systems, design & implementation & analysis of geographic information, creation of digital spatial data bases & data input operations in geographic information. Skill in operation of GIS &/or CADD software packages (e.g., ArcView, ArcInfo, AutoCad, MicroStation, MapInfo, GeneriCad, GeoMedia) to produce &/or revise maps, engineering design drawings, cartographic enhancements (e.g., land use, land cover, bed rock, geology, wetlands, land parcels, highway design characteristics, pavement management, highway performance monitoring system, highway accident statistics, bridge locations) for planning & design report preparation, documentation & project management.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:
Completion of undergraduate core program in geography, natural resources, engineering, planning, computer science, biology, geology, ecology or related field to include course work in geographic information systems (e.g., applications in geographic information systems; design & implementation of geographic information; creation of digital spatial data bases; data input operations in geographic information); 12 mos. trg. or 12 mos. exp. in use of projections, coordinate systems & map algebra in operation of geographic information systems.

-Or 3 yrs. trg. or 3 yrs. exp. in coordination of operations of geographical information systems (e.g., data input operations, creation of digital spatial data bases, design & implementation of geographic information design & use of projections, coordinate systems & map algebra in operation of geographic information systems).

-Or 12 mos. exp. as GIMS Technician 2, 85672.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:
Not applicable.

UNUSUAL WORKING CONDITIONS:
Not applicable.
CLASS TITLE: GIMS Specialist 2
CLASS NUMBER: 85772
BARGAINING UNIT: 014

EFFECTIVE DATE: 11/23/1997

JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)

Conducts complex analysis of geo-spatial data for GIS &/or CADD projects in response to user requests, assists & educates users regarding GIS &/or CADD technology &/or opportunities GIS technology affords to resolve resource management problems, coordinates with other consultants & resource managers to respond to user requests for digital data &/or applications & participates in development of macro-language program &/or SQL (standard query language) for GIS operations to improve user products.

Ensures GIS &/or CADD operations adhere to applicable standards for data capture, data manipulations & output; coordinates applications design & final products based upon user needs & expectations; coordinates GIS &/or CADD activities; participates in applications design; participates in work force & project planning to plan, schedule & implement project activities; transforms final products to storage media & creates data reports to include meta-data.

Operates GIS &/or CADD software (e.g., ArcView, Intergraph, MGE, Grass, Arclnt, AutoCad, MicroStation, MapInfo, GeneriCad, GeoMedia) to produce &/or revise maps, engineering design drawings, cartographic enhancements, (e.g., land use, land cover, bed rock, geology, wetlands, land parcels, highway design characteristics, pavement management, highway performance monitoring system, highway accident statistics, bridge locations) for planning & design report preparation, documentation & project management.

Provides geo-spatial data to government agencies, consultants & conservation organizations; coordinates geo-spatial contracts for project related personnel services; assists staff/interns in processing of spatial data into geo-spatial usable format.

MAJOR WORKER CHARACTERISTICS:
Knowledge of geographical information systems to include applications in geographic information systems, design & implementation & analysis of geographic information, creation of digital spatial data bases, data input operations in geographic information. Skill in operation of GIS &/or CADD software packages (e.g., ArcView, MicroStation, MapInfo, GeneriCad, GeoMedia). Ability to use research methods in gathering data; prepare meaningful, concise & accurate reports; maintain accurate records; use statistical analysis; handle sensitive contacts with users & consultants.

(*)Developed after employment.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:
Completion of graduate core program in geography, natural resources, engineering, planning, computer science, biology, geology, ecology or related field to include course work in geographic information systems (e.g., applications in geographic information systems, data input operations in geographic information & creation of digital spatial data bases); 12 mos. exp. or 12 mos. trg. in use of projections, coordinate systems & map algebra in operation of geographic information systems.

-Or completion of undergraduate core program in geography, natural resources, engineering, planning, computer science, biology, geology, ecology or related field to include course work in geographic information systems (e.g., applications in geographic information systems; design & implementation of geographic information; creation of digital spatial data bases; data input operations in geographic information); 24 mos. trg. or 24 mos. exp. in use of projections, coordinate systems & map algebra in operations of geographic information systems.

-Or 4 yrs. trg. or 4 yrs. exp. in coordination of operations of geographical information systems to include data input operations, creation of digital spatial data bases, design & implementation of geographic information & applications design & use of projections, coordinate systems & map algebra in operation of geographic information systems.

-Or 12 mos. exp. as GIMS Specialist 1, 85771.

-Or equivalent of Minimum Class Qualifications For Employment noted above.
TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:
Not applicable.

UNUSUAL WORKING CONDITIONS:
Not applicable.
CLASS TITLE:  
GIMS Data Base Administrator

CLASS NUMBER:  85775

BARGAINING UNIT:  022

EFFECTIVE DATE:  
09/12/1999

JOB DUTIES IN ORDER OF IMPORTANCE:  (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)

Manages & coordinates maintenance of division-wide geo-spatial data base system to include data base applications, design & creation, ensures compatibility of logical data base design with appropriate hardware & software, formulates & implements geo-spatial data base program policies & procedures, develops & enforces data base standards &/or supervises assigned staff.

Develops & enforces data standards to include data capture, coding schemes, data base designs, data documentation, data dictionary, index & data archiving procedures; develops & oversees enforcement of data quality control procedures; coordinates activities in data transfer & translation.

Participates or reviews conceptual & detailed designs for new or modified data base elements; establishes & enforces procedures for data access & security & access rights; investigates new technological advances related to spatial data capture, manipulation & storage.

Writes grant proposals; solicits data from organizations, consultants & researchers; organizes & conducts advisory committee meetings; organizes public hearings & files rules on data base information; orders books & publications for research library.

MAJOR WORKER CHARACTERISTICS:

Knowledge of computer science to include data structures, data base & information management & data base systems; data base analysis. Skill in operation of GIS &/or CADD software packages (e.g., ArcView, ArcInfo, AutoCad, GeoMedia, MicroStation, MapInfo, GeneriCad, Intergraph, MGE, Grass). Ability to use research methods in gathering data; maintain accurate records; prepare geo-spatial &/or data base analysis reports.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

Completion of graduate core program in computer science to include data structures, data base & information management & data base systems; data base analysis. Skill in operation of GIS &/or CADD software packages (e.g., ArcView, ArcInfo, AutoCad, GeoMedia, MicroStation, MapInfo, GeneriCad, Intergraph, MGE, Grass). Ability to use research methods in gathering data; maintain accurate records; prepare geo-spatial &/or data base analysis reports.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:

Not applicable.

UNUSUAL WORKING CONDITIONS:

Not applicable.
**EFFECTIVE DATE:**
12/07/1997

**JOB DUTIES IN ORDER OF IMPORTANCE:** (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)

Supervises lower-level GIMS division staff, develops & maintains overall division-wide GIMS programs, applications, policies & procedures, evaluates overall GIMS program to include personnel, contract services, hardware & software & confers & coordinates with GIMS support services to ensure consistency with departmental GIMS standards.

Coordinates with division managers to identify spatial data that should be captured in digital format & used in GIMS programs/applications to enhance division operations; develops contract service agreements for data capture, data conversion, data base design &/or development & GIMS applications in coordination with departmental GIMS support services; coordinates maintenance & service contracts with hardware & software vendors.

Oversees purchase & installation of GIMS hardware & software systems; monitors system performance; conducts system performance evaluations; manages application design & development & responds to users & resolves operational problems; develops division data base budget.

**MAJOR WORKER CHARACTERISTICS:**
Knowledge of geographical information systems to include applications in geographic information systems, design & implementation of geographic information, creation of digital spatial data bases, data input operations in geographic information; supervisory principles & techniques; departmental policies & procedures; employee training & development; budgeting.  Skill in operation of GIS &/or CADD software packages (e.g., ArcView, ArcInfo, MicroStation, MapInfo, GeneriCad, Intergraph, MGE, Grass, AutoCad, GeoMedia).  Ability to use research methods in gathering data; prepare meaningful, concise & accurate reports; maintain accurate records; use statistical analysis; handle sensitive contacts with users & consultants.

(*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**
Completion of graduate core program in geography, natural resources, engineering, planning, computer science, biology, geology, ecology, or related field to include course work in geographic information systems (e.g., applications in geographic information systems, data input operations in geographic information systems, design & implementation of geographic information & creation of digital spatial data bases); 24 mos. trg. or 24 mos. exp. in use of projections, coordinate systems & map algebra in operation of geographic information systems; 18 mos. trg. or 18 mos. exp. in supervisory principles & techniques.

-Or completion of undergraduate core program in geography, natural resources, engineering, planning, computer science, biology, ecology or related field to include course work in geographic information systems (e.g., applications in geographic information systems, design & implementation of geographic information, creation of digital spatial data bases, data input operations in geographic information); 36 mos. trg. or 36 mos. exp. in use of projections, coordinate systems & map algebra in operations of geographic information systems; 18 mos. trg. or 18 mos. exp. in supervisory principles & techniques.

-Or 5 yrs. trg. or 5 yrs. exp. in coordination of operations of geographical information systems to include data input operations, creation of digital spatial data bases, design & implementation of geographic information & applications design & use of projections, coordinate systems & map algebra in operation of geographic information systems; 12 mos. trg. or 12 mos. exp. in supervisory principles & techniques.

-Or equivalent of minimum class qualifications for employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:**
Not applicable.

**UNUSUAL WORKING CONDITIONS:**
Not applicable.
EFFECTIVE DATE: 11/25/2001

JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)
Coordinates GIMS implementation, operation & enhancement of GIMS activities directly or through subordinate supervisors, coordinates, develops & implements overall agency-wide GIMS policies & procedures, develops & implements agency-wide GIMS budget for all operations & capital expenditures, coordinates & develops GIMS project schedules & work programs to support multi-use GIMS operations;

&/OR

Supervises lower-level GIMS data base administrators &/or GIMS system administrators.

Coordinates contracts for GIMS hardware, software &/or data conversion; manages resource of GIMS; organizes application & related developmental activities; evaluates technological advances.

Confers & coordinates with users & user organizations to determine needs; organizes & conducts partnerships; promotes usage of appropriate applications among users.

MAJOR WORKER CHARACTERISTICS:
Knowledge of geographical information systems to include applications in geographic information systems, design & implementation of geographic information, creation of digital spatial data bases, data input operations in geographic information; supervisory principles & techniques; manpower planning; budgeting; departmental policies & procedures. Skill in operation of GIMS &/or CADD software packages (e.g., ArcView, ArcInfo, MicroStation, MapInfo, GeneriCad, Intergraph, MGE, Grass, AutoCad, GeoMedia). Ability to use research methods in gathering data; prepare meaningful, concise & accurate plans & reports; maintain accurate records; use statistical analysis; handle sensitive contacts with users & consultants; prepare & deliver speeches to specialized groups.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:
Completion of graduate core program in geography, natural resources, engineering, planning, computer science, biology, ecology, or related fields, to include course work in geographic information systems (e.g., applications in geographic information systems, design & implementation of geographic information & creation of digital spatial data bases); 5 yrs. trg. or 5 yrs. exp. in use of projections, coordinate systems & map algebra in operation of geographic information systems; 24 mos. trg. or 24 mos. exp. in supervisory principles & techniques,

-Or completion of undergraduate core program in geography, natural resources, engineering, planning, computer science, biology, ecology or related field to include course work in geographic information systems (e.g., applications in geographic information systems, design & implementation of geographic information, creation of digital spatial data bases, data input operations in geographic information); 6 yrs. trg. or 6 yrs. exp. in use of projections, coordinate systems & map algebra in operations of geographic information systems; 24 mos. trg. or 24 mos. exp. in supervisory principles & techniques,

-Or 10 yrs. trg. or 10 yrs. exp. in managerial level position involved in coordination of operations of geographical information systems to include data input operations, creation of digital spatial data bases, design & implementation of geographic information & applications design & use of projections, coordinate systems & map algebra in operation of geographic information systems.

-Or 12 mos. exp. as GIMS Systems Administrator, 85776.

-Or equivalent of Minimum Class Qualifications For Employment noted above.
TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:
Not applicable.

UNUSUAL WORKING CONDITIONS:
Not applicable.