

## COMPETENCY MODEL FOR GEOGRAPHIC INFORMATION SYSTEMS SUPERVISOR (7214)

The following competencies have been identified as those that best separate superior from satisfactory job performance in the class of **GEOGRAPHIC INFORMATION SYSTEMS SUPERVISOR**. (Numbers refers to the order of the competencies in the Competency Bank.)

- 1. Reading Comprehension
- 4. Analytical Ability
- 7. Self-Management
- 20. Job Knowledge
- 28. Supervision
- 31. Results Orientation
- 33. Interpersonal Skills
- 47. Written Communication

On the following pages are descriptions of each competency, including a definition, the level of the competency required for the class (*italicized*, **bolded**, and underlined), examples of behavioral indicators, and satisfactory and superior performance levels.

**1. READING COMPREHENSION** – Comprehends and correctly applies information presented in written form. Makes correct inferences; draws accurate conclusions.

Level of Competency Required by Job:

Level 1: Concrete, specific job-related information (work orders; instructions; material/equipment labels)

**Level 2: General information related to field of work and assignments; (articles in trade publications; technical/instructional manuals; memos; letters; e-mails; reports)**

Level 3: Abstract/complex information (highly technical articles/ reports in specialized area; legal or other regulatory material)

Examples of Behavioral Indicators:

- Follows written instructions correctly.
- Learns information presented in writing.
- Identifies relevant written information.
- Interprets written legal regulatory material accurately.

Performance Levels:

Satisfactory

Reads instructions correctly. Learns from manual and other printed material.

Superior

Learns from manual and may answer others' questions. Explains information presented in written form to others.

**4. ANALYTICAL ABILITY** – Identifies, obtains, and evaluates relevant information to establish relationships or patterns, cite causes, and reach logical conclusions.

Level of Competency Required by Job:

Level 1: Recognize similarities/differences in current situation to those previously encountered and is guided accordingly. Apply existing policies correctly. Ask pertinent questions or otherwise seek additional information to formulate appropriate response.

**Level 2: Consider multiple, varied factors when evaluating a situation or issue. Seek additional information to provide further insight. Reach conclusions that logically follow from the information obtained.**

Level 3: Consider a multitude of diverse factors, their interrelationships, the perspectives of others, alternative courses of action and their likely ramifications when evaluating information to reach a conclusion.

Examples of Behavioral Indicators:

- Obtains the necessary amount of relevant information.
- Recognizes the impact of each type of information on conclusions.
- Evaluates the quality/source of information when considering it.
- States the shortcomings of the information and, therefore, the analysis.

Performance Levels:

Satisfactory

Recognizes available relevant information, seeks additional information to consider, and reaches a conclusion. Provides sound, convincing justification for conclusions, citing relevant data and facts.

Superior

Uses a great deal of existing and obtained information and data to develop and evaluate alternatives and arrive at a final conclusion. Provides compelling arguments in support of conclusions.

**7. SELF MANAGEMENT** – Organizes and plans for task accomplishment; manages time and works diligently to complete assigned work/fulfill responsibilities.

Level of Competency Required by Job:

Level 1: Order tasks for efficient performance; maintain awareness of time allotted and deadlines in order to ensure they are met.

**Level 2: Plan and perform work in a way that maximizes efficient performance; establish and adjust priorities to ensure timely completion of most critical assignments.**

Level 3: Allot time to responsibilities proportional to their prominence, priority, and impact.

Examples of Behavioral Indicators:

- Performs only work activities during work hours.
- Alters means of performing work when original approach proves to waste time.
- Keeps a “to do” list (with indication of priority and deadlines, if necessary).
- Requests assistance as necessary when it becomes clear that work will not be completed on time.
- Demonstrates a record of progress with respect to all assignments/responsibilities.
- Uses optimal means of communication for efficiency and effectiveness.

Performance Levels:

Satisfactory

Conducts self while at work in a manner that ensures work will be completed as scheduled, or provides explanation or secures assistance or adjustment of schedule if it will not be.

Superior

Seeks efficiencies in doing work to maximize productivity. Plans work carefully and follows the plan or makes adjustments if it is disrupted. Maintains personal responsibility for all work accomplishment.

**20. JOB KNOWLEDGE** – Knows information required to perform a specific job. Includes both widely available courses of study (for example, chemistry, human resources management, graphic arts) and City-specific information (parking regulation and ticketing practices; purchasing procedures; provisions of the City Charter).

Level of Competency Required by Job:

**Level 1: Knowledge is concrete, factual, and/or procedural and may be defined by the organization. Situations in which it is applied are quite consistent.**

Level 2: Knowledge is substantive and may be defined by an external trade, field, or profession. Situations in which it is applied vary and, as such, require breadth and depth of understanding.

Level 3: Knowledge is abstract, conceptual, and/or complex and may be supported by a well-defined academic discipline or authoritative sources (e.g., laws, ordinances, government guidelines/regulations/codes). Situations in which it is applied may vary greatly or be novel.

Examples of Behavioral Indicators:

- Performs work correctly/avoids technical (job content related) errors.
- Answers technical questions about work accurately.
- Asks few technical questions about the performance of routine work activities.
- Offers advice (“coaching”) to new employees regarding their work.
- Develops training programs for other employees.
- Sought out as a source of information by others.

Performance Levels:

Satisfactory

Sufficient job knowledge to perform work correctly independently. Answers technical questions about work correctly.

Superior

Expertise in technical job information sufficient to serve as a resource to others. May develop training manuals/ programs and/or give internal and/or external presentations related to work.

## **JOB KNOWLEDGE AREAS**

1. Knowledge of topographic tools in geographic information systems to map legal descriptions or edit parcel layers, subdivisions, and other graphically displayed information onto maps, charts or graphs, in order to produce paper maps or web based mapping applications.
2. Knowledge of the techniques, functions, and best practices used to calculate statistic values with programs, such as Excel, in order to convert tabular data into bar charts and line graphs.
3. Knowledge of various types of coordinate systems, such as Cartesian or Lambert coordinates and latitude and longitude, used in map production.
4. Knowledge of geographic information system software packages and understanding of computer hardware structures, such as web servers, database servers, and Arc servers used in the delivery of GIS products.
5. Knowledge of a computer aided drafting environment, such as AutoCAD sufficient to convert designs into GIS enabled data.
6. Knowledge of basic cartographic and/or drafting terminology and principles used in map construction or map editing, such as projecting, spatially joining data, geometric construction, scaling, and data query.
7. Knowledge of combining various computer functions, such as select by location, select by attribute, and export in a logical manner, in order to carry out procedures necessary in map creation or revision.
8. Knowledge of various data formats such as SQL, Oracle, file servers, geodatabases, and web services, in order to maintain and analyze geographic information.
9. Knowledge of the use and maintenance of large-scale plotters and scanners used to print large-scale maps for presentation purposes.
10. Knowledge of the steps and procedures used in the maintenance of databases such as indexing or database compression, in order to optimize the database performance.
11. Knowledge of the elements of graphic design used to enhance final map appearance or in the creation of data displays for public settings, such as layout, color coordination, color intensity, legend placement, and shading sufficient to most adequately convey the maps intended message.
12. Knowledge of the underlying principles and concepts of computer operations, such as programming and applications sufficient to understand the entry, storage, retrieval and manipulation of data used in computerized cartographic systems.
13. Knowledge of graphically displayed information on existing maps such as subdivision, tract, parcel or license surveys in order to place the data onto newly created maps.

**28. SUPERVISION** – Ability to assume direct responsibility for all aspects of the performance of a work group, which requires knowledge and/or ability in the areas of:

- Planning and goal setting
- Creating a safe and positive work environment
- Establishing standards and training employees
- Motivating employees and teambuilding
- Performance Management (assigning, monitoring, facilitating, reviewing and evaluating work, and providing feedback)
- Supporting and developing employees through delegation and participation
- Taking disciplinary action including progressive discipline
- Provisions of employees' MOU's and handling grievances
- Legal requirements including EEO, ADA, FLSA, FMLA, and Workers' Compensation provisions
- Civil Service Commission Rules and Policies related to the management of employees
- Administrative Code provisions related to the management of employees
- Budget processes sufficient to request and justify expenditures in a correct and timely manner

Level of Competency Required by Job:

**Level 1: Supervises small workgroup of employees performing the same or highly related work.**

Level 2: Supervises a larger workgroup of employees performing various types of work.

Level 3: Supervises employees including provision of coaching and advice to subordinate supervisors.

Examples of Behavioral Indicators:

- Plans, assigns, and monitors work progress.
- Trains employees to do work.
- Evaluates work and gives positive and negative feedback.
- Displays knowledge of legal requirements including applicable Federal and State laws, Administrative Code provisions, Civil Service Commission Rules and Policies, and MOU provisions.

Performance Levels:

Satisfactory

Proficiency in supervision sufficient to supervise a workgroup in terms of task orientation, interpersonal concerns, and personnel administration.

Superior

Proficiency in supervision sufficient to serve as a resource to others and/or represent department position in a public forum.

**31. RESULTS ORIENTATION** – Maintains a focus on objectives to be achieved and acts accordingly to ensure their accomplishment.

Level of Competency Required by Job:

Level 1: Remain focused on the task at hand and its purpose. May alter activities if the same result will be achieved. Does not become distracted by extraneous information, events, or details.

**Level 2: Remain focused on the objectives to be achieved and take all reasonable actions necessary to achieve them. If initial activities to achieve objectives are unsuccessful, tries other approaches.**

Level 3: Remain focused on outcome and not process, when possible, in the monitoring and evaluation of staff work. Encourage staff to maintain focus on the objectives of their work and not to be overly affected by nuisances or frustration.

Examples of Behavioral Indicators:

- Clearly understands the purpose/objectives of work assignments.
- Recognizes that there are typically many ways to achieve the same objective.
- Makes multiple attempts to achieve objectives when necessary.
- Does not become distracted by unimportant or irrelevant issues.
- Ignores distracters in order to maintain pursuit of the desired outcome.

Performance Levels:

Satisfactory

Maintains a focus on desired outcomes and makes every reasonable attempt to achieve them. Always recognizes the purpose or objective of work activities.

Superior

Maintains a clear focus on desired results, and is persistent in attempts to achieve them. Insistent that all work activities lead to goal accomplishment; expresses dissatisfaction with activities that have no apparent impact.

### 33. INTERPERSONAL SKILLS – Interacts effectively and courteously with others.

#### Level of Competency Required by Job:

Level 1: Interact with members of the workgroup, supervision, and/or the public in a cordial, service-oriented manner.

**Level 2: Interact across department lines and with appointed City officials, and/or members of the public, at times under adversarial circumstances, in a cordial, respectful manner.**

Level 3: Interact with appointed and elected City officials, department heads, representatives of external organizations, and/or the media in a cordial, effective manner.

#### Examples of Behavioral Indicators:

- Works well with others toward mutual objectives.
- Does not arouse hostility in others.
- “Disagrees without being disagreeable.”
- Elicits acceptance/cooperation from others.
- Affords all individuals respect, regardless of their role or status.
- Effectively addresses concerns of politicians or others who may have their “own agenda.”

#### Performance Levels:

##### Satisfactory

Behaves in a courteous, respectful, cooperative manner toward co-workers, other City employees, and members of the public.

##### Superior

Facilitates positive interpersonal relations within/among workgroups and toward members of the public. Adept at finding similarities and grounds for cooperation/mutual benefit.

## 47. WRITTEN COMMUNICATION – Communicates effectively in writing.

### Level of Competency Required by Job:

Level 1: Write notes/e-mails. Completes forms with some open-ended responses (sentences).

**Level 2: Write letters, articles/reports, and/or detailed descriptions of activities/occurrences.**

Level 3: Write lengthy reports, instruction manuals, in-depth analyses/reviews of complex issues and/or articles for publication. Reviews the written work of others.

### Examples of Behavioral Indicators:

- Writing includes the necessary information to convey the intended message.
- Sufficiently few errors in spelling, punctuation, grammar to not interfere with the intended message or distract the reader.
- Little editing or re-writing needed to produce a final product.
- Composes materials efficiently.
- Information is presented in a well organized manner.
- Tone and degree of formality are appropriate to the purpose and audience.

### Performance Levels:

#### Satisfactory

Writes material that clearly communicates the necessary information; needs little editing.

#### Superior

Precisely uses words and organizes information in a way that enhances presentation of the message. Virtually no editing needed.