CITY OF MADISON POSITION DESCRIPTION

1. Name of Employee (or "vacant"):

Dan Seidensticker

Work Phone: 608-266-9119

2. Class Title (i.e. payroll title):

Planning GIS Specialist 2 (NEW - Proposed)

3. Working Title (if any):

4. Name & Class of First-Line Supervisor:

William Schaefer, Transportation Planning Manager

Work Phone: 608-266-9115

5. Department, Division & Section:

Department of Planning & Community & Economic Development, Planning Division, Transportation Planning Services Section

6. Work Address:

121 S. Pinckney St., Suite 400, Madison WI 53703

7. Hours/Week: 38.75

Start time: 8:00 AM

End time: 4:30 PM

8. Date of hire in this position:

March 6, 2000

9. From approximately what date has employee performed the work currently assigned:

January, 2005.

10. Position Summary:

A responsible, professional position that provides acquired expertise, technical support, and leadership on GIS and planning projects. Perform all work of the GIS Planning Specialist in addition to advanced GIS duties including management and coordination of enterprise GIS databases, web-based GIS applications, spatial and statistical analysis, and technical documentation. Work is performed with independent judgment with limited, general, supervision of the Transportation Planning Manager.

- 11. Functions and Worker Activities: (Do NOT include duties done on an "Out-of-Class" basis.)
 - 20% A. Management and administration of GIS databases and applications in an enterprise environment.
 - 1. Manage workflow of internal and external GIS databases in enterprise and local data repositories.
 - 2. Install, test, manage, and troubleshoot ESRI GIS applications and extensions.

- 3. Write GIS technical data development procedures, user documents, policy, and metadata.
- 4. Handle internal and external GIS technical support and data requests. Initiate and maintain intra- and inter-governmental GIS coordination, partnerships, and working relationships with City of Madison, Dane County, State of Wisconsin, and UW-Madison agencies.
- 5. Contact vendors, evaluate GIS data, hardware, and software products, and follow data sharing agreements and policies.

25% B. Urban and regional transportation planning support work.

- 1. Delineate traffic analysis zonal system and prepare input data for travel demand forecast model.
- 2. Format and analyze large relational databases of census, socioeconomic, commuter flow, and other transportation related data.
- 3. Integrate, transfer, and convert data between regional forecast travel model application and GIS applications.
- 4. Coordinate GIS tasks in transportation planning projects.
- 5. Maintain GIS data sets (roadways, bicycling facilities, transit, land use) while applying a working knowledge of urban and transportation planning principles.

25% C. Provide project leadership, supervision, and technical training.

- 1. Train Planning Technicians and interns on GIS applications and supervise data development and entry.
- 2. Represent the City's Planning Division at Dane County GIS Users Group, Dane County GIS Technical Advisor's Group, City of Madison GIS Project Team, Wisconsin Land Information Association, and others.
- 3. Provide project leadership and delegate tasks to Planning Technician.
- 4. Troubleshoot, research, recommend purchases, and guide staff in hardware and software use. Advise management on advancements in technology.
- 5. Supervise design, development, and content of agency Website.

20% D. Advanced GIS data development and analysis.

- 1. Design, develop, and maintain, transportation, land use, and other GIS databases for planning.
- 2. Conduct statistical and advanced spatial analysis using GIS and other statistical applications.
- 3. Automate geocoding and address validation process of large data sets against various sources (roadways, property, landmarks).
- 4. Research, evaluate, and acquire federal, state, local, and private party GIS data sets.
- 5. Formatting and conversion of various data types for use in an ESRI GIS environment.

10% E. Develop advanced GIS and cartographic products for city staff, local officials, and the public.

- 1. Develop interactive web-based GIS applications using map services.
- 2. Design and create high quality maps, graphics, and tables at both technical and non-technical levels to be used in public meetings and/or plan documents.
- 3. Develop tools with scripting, coding, and customization of GIS software applications for use by staff with limited GIS background.
- 4. Present GIS topics at conferences, city and county GIS user groups, and board meetings.

12. Primary knowledge, skills and abilities required:

Thorough knowledge of GIS principles and ESRI applications including ArcGIS Desktop (ArcMap, ArcCatalog, ArcToolBox), ArcInfo, ArcView, ArcGIS Server, ArcSDE, ArcGlobe, ArcScene, ArcReader, ArcExplorer, and related extensions (3D Analyst, Publisher, Geostatistical Analyst, Maplex, Network Analyst). Thorough knowledge of map projections, coordinate systems, ESRI spatial data types (file, personal, and SDE geodatabases; shape file; image; grid; cover), statistical and spatial analysis, relational databases and SQL. Working knowledge of web-based mapping API and REST services (ArcGIS Online, Google Maps, Bing Maps), scripting languages (XML, VBA, KML, Python, HTML,

JavaScript), ESRI proprietary languages (ArcObjects, Avenue, AML), Adobe Creative Suite, and Microsoft Office Suite. Ability to keep pace with new GIS technology, strong attention to detail, ability to communicate effectively orally and in writing, and chair GIS user groups and meetings. Working knowledge of land use and transportation planning principles. Knowledge of travel demand forecast modeling process. Ability to work independently, exercise judgment, prioritize and complete projects with minimal supervision. Ability to determine, plan, recommend, and act on departmental GIS and computer system needs with limited supervision. Work closely with Information Technology staff and other City of Madison departments. Ability to provide training and project level supervision of other staff.

| 13. | Special tools and equipment required: | |
|-----|---|--|
| | None. | |
| 14. | Required licenses and/or registration: | |
| | None. | |
| 15. | Physical requirements: | |
| | None. | |
| 16. | Supervision received (level and type): | |
| | None or minimal. | |
| 17. | Leadership Responsibilities: | |
| | has no leadership responsibility. | es (Supervisory Analysis Form attached). provide detail under Function Statement). |
| 18. | Employee Acknowledgment: | |
| | I prepared this form and believe that it accurately describes my position. I have been provided with this description of my assignment by my supervisor. Other comments (see attached). | |
| | Du to | 1-22-11 |
| | EMPLOYEE | 1-22-11 DATE |
| 19. | Supervisor Statement: | |
| | I have prepared this form and believe that it accurate I have reviewed this form, as prepared by the employed this position. | ly describes this position. byee, and believe that it accurately describes |
| | I have reviewed this form, as prepared by the employee, and find that it differs from my assessment of the position. I have discussed these concerns with the employee and provided them with my written comments (which are attached). | |
| | I do <u>not</u> believe that the document should be used as the official description of this position (i.e., for purposes of official decisions). Other comments (see attached). | |
| | | |
| | William Cr Schaefer | 1-22-204 |
| | SUPERVISOR | DATE |

Note: Instructions and additional forms are available from the Human Resources Dept., Room 501, City-County Bldg. or by calling 266-4615.