DA 281-2 (Special)
Rev. 01-97 (KDOT)

State of Kansas Department of Administration
DIVISION OF PERSONNEL SERVICES

Position Description

Read each heading carefully before proceeding. Make statements simple, brief, and complete. Be certain the form is signed. Send the original to KDOT Bureau of Personnel Services.

CHECK ONE: ☐ NEW POSITION ☒ **EXISTING POSITION**

Agency #

Position

PART I - Position Information

1. Agency Name **KS Dept. of Transportation**	9. Position Number 00-12-15-805/K0231938	10. Budget Program Number 0121
2. Employee Name (leave blank if position vacant)	11. Present Civil Service Title / FLSA code (if existing position) **Unclassified Engineering Associate I / Non-Exempt (Engineering Associate I)**	
3. Division **Planning and Development**	12. Proposed Civil Service Title	
4. Section **Bureau of Transportation Planning**	**For use by Personnel Office**	
5. Unit **Models and Forecasting**	13. (a) Allocation	(b) FLSA code
6. Location (address where employee works) **City Topeka** **County Shawnee**	14. Effective Date	
7. (Check appropriate items) Full Time X Regular X 100% Part Time Temp	15. By Approved 16. Audit Date: By: Date: By:	
8. Regular hours work: (check appropriate time) **FROM: 8:00 AM** **TO: 5:00 PM**	17. Position Review Date: By: Date: By:	

PART II – Organizational Information

18. a) Briefly describe why this position exists. (What is the purpose, goal or mission of this position?) b) **If this is a request to reallocate a position,** briefly describe the reorganization, reassignment of work, new function added by law or other factors which change the duties and responsibilities of the position.

This position exists to prepare traffic forecasts and transportation studies, develop travel demand models of urban and urbanized areas in Kansas, conduct break-in-access studies in accordance with KDOT and Federal Highway Administration regulations. The position develops and reviews traffic simulation to analyze in-depth travel patterns and capacity. This position would have a significant role with transportation planning processes, corridor studies and economic inpact analyzes.

19. Who is the supervisor of the position? (Who assigns work, conducts performance reviews, gives directions, answers questions and is directly in charge?)

Name	**Civil Service Title**	**KDOT/SHARP Position Number**
Alan Spicer	Unclassified Professional Civil Engineer II (Assistant Bureau Chief)	00-12-10-803 / K0225111

20. a) How much latitude is allowed the employee in completing the work? b) What kinds of instructions, methods and guidelines are given to the employee in this position to help do the work? c) State how and in what detail work assignments are made.

This person is allowed a limited amount of latitude in completing work assignments. Upon receipt of specific instructions, this person applies engineering and planning knowledge and skills in preparing work assignments for review by the Metropolitan Planning Manager. Work in progress is reviewed on a regular basis as to progress, quality, and consistency.

d) Check the statement which best describes the results of error in action or decision of the employee:
( ) Minimal property damage, minor injury and/or minor disruption of the flow of work.

( ) Moderate loss of time, injury, damage and/or adverse impact on health and welfare of others.
(X) Major program failure, major property loss and/or serious injury.
( ) Loss of life and/or disruption of operations of a major agency.
Give examples:

Inaccurate forecasts can lead to delays in state highway projects being constructed. Failure to complete the Lawrence travel demand model will delay Lawrence in updating its long-range transportation plan which would result in state highway and local road construction projects being delayed and possible loss of federal funds.

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21. Describe the work of this position using this page or one additional page only. Use the following format for describing job duties: **What** is the action being done (use an action verb)? To **whom** or **what** is the action directed (object of action)? **Why** is the action being done (describe the expected result or outcome)? ***How** is the action being done (describe the manner, methods, techniques or procedures by which the task is currently performed). For each task state: Who reviews it? How often? What is it reviewed for? Number each task, indicate percent of time and identify each function as essential or marginal by placing an E or M next to the % of time for each task. Essential Functions are the primary job duties for which the position was created (see 18a) and that an employee must be able to perform, with or without reasonable accommodation. A marginal function is a peripheral, incidental or minimal part of the position.

No. % E/M	
	The conventional transportation planning process generally consists of technical methods designed to use and produce a uniform set of projections and analyses. Federal regulations divide responsibilities for the transportation planning process between state departments of transportation (DOTs) and regional MPOs. Each metropolitan region and state must have a transportation planning process that includes a long-range transportation plan and transportation improvement program. Some of the elements in the transportation planning process are: land use, economic, and demographic projections, estimations of travel demand, highway capacity analyses, public involvement, environmental justice, capital programming, administration of the planning process, and the like.
1. 25% E	Develops, documents and is responsible for assigned travel demand models. Development of the travel demand model includes understanding the four-step modeling process along with the calibration process. The four-step modeling process includes trip generation, trip distribution, mode split, and trip assignment. Knowledge and understanding of the four-step modeling process is critical to the building and calibration of the model for an urban or urbanized area.
2. 25% E	Develops traffic forecasts and analyses as prioritized. Develops estimates of future year traffic for use in location/design studies, environmental studies, system enhancement program requests, and other special studies. Participates on study committees within KDOT and with local agencies. Reviews transportation / traffic data for accuracy and reasonableness. Reviews methodologies used to calculate or analyze traffic data.
3. 25% E	Construct traffic simulation models for the the purpose of analyzing in-depth travel patterns and capaicity shortages for localized sections of the Kansas State Highway System and roads that feed it. Develops documents and is responsible for assigned microsimulation models. Reviews models submitted by consultants for accuracy and validity of representation of traffic flow. Constructs microsimulations models that can assess the impact of work zones traffic control on roadways
4. 15% E	Assist in the development of transportation planning processes, corridor studies and economic inpact analyzes.
5. 05% E	Represents KDOT at assigned MPO and other meetings. This includes attending appropriate training sessions, conferences, and workshops to update and maintain technical skills.
6. 5% M	Carry out other duties as assigned.
E	**Must be capable of performing the essential physical functions detailed in Section 28.**

*The description of how the work is to be performed does not preclude the consideration of reasonable accommodations for qualified persons with disabilities.

22. a) If work involves leadership, supervisory, or management responsibilities, check the statement which best describes the position.
   ( ) Lead worker assigns, trains, schedules, oversees, or reviews work of others.
   ( ) Plans, staffs, evaluates, and directs work of employees of a work unit.
   ( ) Delegates authority to carry out work of a unit to subordinate supervisors or managers.

   b) List the titles and position numbers of all persons who are supervised directly by the employee on this position.

Civil Service Title	KDOT / SHARP Position Numbers

23. For what purpose, with whom and how frequently are contacts made with the public, other employees or officials?

This position has frequent contact with staff and officials of MPOs, other units within the agency, and occasional contact with local governments and consultants. These contacts are used to coordinate the activities of the planning process, discuss work efforts, and make certain there is contract compliance.

24. What hazards, risks or discomforts exist in the job or work environment?
   ( ) Frequent exposure to extreme cold/heat wet/humid conditions.
   ( ) Exposure to mechanical parts such as but not limited to, muffler, exhaust pipes, and other radiant energy equipment.
   ( ) Exposure to noise, vibrations, fumes, odors, gases, dust and/or poor ventilation.
   ( ) Works in traffic.
   (X) Other: Occasional travel.

25. List machines or equipment used regularly in the work of this position. Indicate the frequency with which they are used.

- Calculator Daily
- Computer Daily
- Fax machine Daily
- Telephone Daily
- Vehicle Daily
- **For more specific information on equipment used regularly please see Section 28.**

PART III -- Education, Experience and Physical Requirements

26. **REQUIRED CLASS SKILLS** (See Class Specifications)

Standard education, experience, and special requirements of the Engineering Associate class specifications.

27. **SPECIAL REQUIREMENTS**
   a) Indicate any license, registration, certification, etc. required for this position:
   ( ) Professional Civil Engineer License
   (X) Engineer in Training Certificate
   ( ) Survey License
   ( ) CDL - Employee must attain a Commercial Driver's License with required endorsements or options within 60 days of hire, and maintain it, unless the time is extended by the District Engineer in accordance with SOM 2.1.9. **(This statement is for Equipment Operator positions.)**
   ( ) CDL - Employee must attain a Commercial Driver's License with required endorsements or options within 60 days of hire and maintain it unless the time is extended or the employee is exempted by the District Engineer, Bureau Chief, or Division Director in accordance with SOM 2.1.9. **(This statement is for CDL positions other than Equipment Operators.)**
   ( ) Other

   b) List preferred education or experience that may be used to screen applicants.

28. **ESSENTIAL PHYSICAL FUNCTIONS/DUTIES** – duties that are fundamental to the position based on the function and the results to be achieved, rather than the manner in which they are being performed. Duties that are directly related to the reason the position exists and cannot be reassigned without changing the nature of the position. **All job duty physical demands are essential physical functions of this position and the employee must be able to perform them**.

Definition of Frequency:
Occasional = 1-33% (1 – 100 reps) **Frequent = 34-66% (101 – 500 reps)** **Continuous = 67 – 100% (500+ reps)**

Job Duty	Job Duty Physical Demands/Comments	Weight/ Force	Frequency
Complete computer work / Attend meetings	Sit - At a seated computer workstation. Attending meetings/ planning.	N/A	Continuous
	Stand - To use printer, fax, scanner, file, etc.	N/A	Occasional
	Walk - To access printer, fax, scanner, etc.	N/A	Occasional
	Bilateral Hand Coordination - To use computer keyboard and mouse. To handwrite notes, etc.	N/A	Frequent
	Reach, above shoulder - To access binders on shelves over desk (height of 54”).	N/A	Occasional
	Crouch or bend – To access files out of bottom file cabinets.	N/A	Occasional
	Lift, floor to waist - To access files out of bottom file cabinets (<5 lbs.).	2 lbs.	Occasional
	Lift, Waist to shoulder – To access/handle largest binder(s) from desktop to shelf above desk. (30” to 54”).	7 lbs.	Occasional

PART IV -- Signatures

Signature of Employee Date Signature of Personnel Official Date

Signature of Supervisor Date Signature of Appointing Authority Date