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| CS-214  Rev 11/2013 |  | Position Code  TRAENGAD42R |
|  | State of Michigan **Civil Service Commission**  Capitol Commons Center, P.O. Box 30002  Lansing, MI 48909 |  |
|  | POSITION DESCRIPTION |  |

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| This position description serves as the official classification document of record for this position. Please complete this form as accurately as you can as the position description is used to determine the proper classification of the position. | |
| 2.Employee’s Name (Last, First, M.I.) | 8. Department/Agency |
| Vacant | Transportation/5901 |
| 3.Employee Identification Number | 9. Bureau (Institution, Board, or Commission) |
|  | Highway Operations |
| 4.Civil Service Position Code Description | 10. Division |
| Transportation Engineer A (12) | Metro Region |
| 5.Working Title (What the agency calls the position) | 11. Section |
| Connected Vehicle/Automated Vehicle Engineer | Executive |
| 6.Name and Position Code Description of Direct Supervisor | 12. Unit |
| Michele Mueller, State Assistant Administrator | Connected and Automated Vehicles |
| 7.Name and Position Code Description of Second Level Supervisor | 13. Work Location (City and Address)/Hours of Work |
| Vacant, Region Engineer | 18101 W 9 Mile RoadSouthfield, Michigan7:30 – 4:30 |
| 14. General Summary of Function/Purpose of Position | |
| This position serves as the recognized resource for the Connected Vehicle/Automated Vehicle Program.  This position performs advanced level engineering duties for the Connected Vehicle (CV), Automated Vehicle (AV), and Advanced Mobility (AM) projects in the Metro Region and other areas as needed.  Duties include supporting and leading complex efforts in the Connected and Automated Vehicle areas; reviewing and incorporating engineering standards and specifications, providing project accuracy reviews and providing input for Connected Vehicle application development. This position meets with external and internal partners to facilitate outreach activities incorporating Transportation Systems Management and Operations (TSM&O) and PLANET M initiatives into day-to-day operations.  This position may also support other projects and initiatives in Metro Region and other areas as needed. | |
| 15. Please describe the assigned duties, percent of time spent performing each duty, and what is done to complete each duty.  List the duties from most important to least important. The total percentage of all duties performed must equal 100 percent. | |
| Duty 1 **General Summary of Duty 1 % of Time 25**  Assist in developing partnerships with internal and external partners by coordinating utilizations of infrastructure, project level activities, and compiling and analyzing engineering data. | |
| **Individual tasks related to the duty.**   1. Identify opportunities to maximize the utilization of local and state infrastructure for CV opportunities and projects in Metro Region and other areas as needed. 2. Assist with coordination of logistics for CV deployments, pilots, and planning projects in Metro Region and other areas as needed. 3. Provide technical assistance in testing of applications within Metro Region and other areas as needed. 4. Assist with coordination of project level details for deployments in Metro Region and other areas as needed. 5. Support and determine user needs for application development for Metro Region local agencies and other areas as needed. 6. Work with local agencies to coordinate and advance their CV, AV, and other mobility initiatives. 7. Identify internal and external use cases for CV and AV data to improve mobility and operations impacting Metro Region facilities, Duties and Operation Centers. | |
| Duty 2 **General Summary of Duty 2 % of Time 25**  At the advanced level, provide input and lead efforts for Connected Vehicle Design and Deployment projects managed in the Metro Region and other areas as needed. | |
| **Individual tasks related to the duty.**   1. Assist with project management for Connected Vehicle Infrastructure Deployment projects in Metro Region 2. Serve as technical day to day lead for Connected Vehicle Infrastructure Deployment in Metro Region 3. Provide technical and specifications review for all Connected Vehicle Infrastructure Design and Deployment projects in Metro Region. 4. Provide updates to the asset and mapping database for future and current deployments. 5. Attend project design meetings for Metro Region to ensure CV Infrastructure Deployment elements are incorporated and provide expert feedback and review of contract documents and specifications for the CV elements. 6. Identify CV implementation opportunities within existing projects and ensuring that standards are being implemented within the projects (plan reviews, specifications, details, standards, products, etc.). 7. Work and interact closely with the ITS Program Office and other regions. | |

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| Duty 3 **General Summary of Duty 3 % of Time 15**  Advance the TSM&O strategic direction and incorporate CV and AV areas for Metro Region. |
| **Individual tasks related to the duty.**   1. Interact with Traffic Operations /ITS to incorporate CV and AV elements into the daily operations. 2. Support and determine user needs within MDOT for application development for Metro Region, SEMTOC and other areas as needed. 3. Support interoperations across business units within MDOT to advance mobility forward. 4. Support development of an internal outreach plan for CV and AV initiatives. 5. Coordinate with DTMB and other areas for CV data, network, etc. interactions for projects in Metro Region. |
| Duty 4 **General Summary of Duty 4 % of Time 15**  Provide engineering support for the advancement of Michigan in the Connected Vehicle andAutomated Vehicle areas for Metro Region and other areas as needed. |
| **Individual tasks related to the duty.**   1. Assist in facilitation of events promoting MDOT in the CV and AV areas. 2. Coordinate and communicate with internal and external stakeholders the PLANET M brand, initiative and continue to maintain PLANET M content. 3. Support development of content for outreach in the form of websites, presentations, informational packets, newsletters, etc. |

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| Duty 5 **General Summary of Duty 5 % of Time 15**  Support the coordination of outreach activities with MDOT external partners in the Connected Vehicle, Automated Vehicle, and Advanced Mobility areas for Metro Region. |
| **Individual tasks related to the duty.**   1. Attend external Partner Meetings with other Metro Region, ITS Program Office and/or Connected Vehicle staff. 2. Provide technical reviews of proposals received from Connected Vehicle, Automated Vehicle, and Advanced Mobility Partners in Metro Region, including evaluating the impact on MDOT funding, staff time, and resource needs. 3. Follow up and coordinate engagement with Connected Vehicle, Automated Vehicle and Advanced Mobility partners including (but not limited to) project meetings, document reviews, and providing technical support for field tests in Metro Region. |
| Duty 6 **General Summary of Duty 6 % of Time 5**  Other duties as assigned to support the Metro Region CV and AV programs. |
| **Individual tasks related to the duty.**   * Other duties as assigned. |

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| 16. Describe the types of decisions made independently in this position and tell who or what is affected by those decisions.  Personal judgment based upon prior experiences. Whenever possible, identify, recommend, and implement improvements in the work methods and materials utilized in the position. | | | |
| 17. Describe the types of decisions that require the supervisor’s review.  When there is a need for interpretation of MDOT guidelines, policies, or procedures; or when an existing policy is unclear. When a decision may be required from executive level, personnel matters, assistance in mitigating controversies, or revision of a program schedule. | | | |
| 18. What kind of physical effort is used to perform this job? What environmental conditions is this position physically exposed to on the job? Indicate the amount of time and intensity of each activity and condition. Refer to instructions.  Moving in and around an office setting, including sitting at a computer for long periods of time. Travel to projects and offices statewide. Traversing uneven terrain, including climbing up and down roadway slopes and transporting materials up to 25 lbs. Working in close proximity to traffic, including in and out of traffic. | | | |
| 19. List the names and position code descriptions of each classified employee whom this position immediately supervises or oversees on a full-time, on-going basis. (If more than 10, list only classification titles and the number of employees in each classification.) | | | |
| NAME | CLASS TITLE | NAME | CLASS TITLE |
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| 20. This position’s responsibilities for the above-listed employees includes the following (check as many as apply):  **Complete and sign service ratings. Assign work.**  **Provide formal written counseling. Approve work.**  **Approve leave requests. Review work.**  **Approve time and attendance. Provide guidance on work methods.**  **Orally reprimand. Train employees in the work.** | | | |

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| 22. Do you agree with the responses for Items 1 through 20? If not, which items do you disagree with and why?  Yes |
| 23. What are the essential functions of this position?  This position involves incorporation and review of technical standards and specifications, providing project technical reviews, supporting Connected Vehicle application development, supporting internal and external partner outreach activities and support of TSM&O and PLANET M initiatives. This position may also support other projects and initiatives in the Metro Region and other areas as needed. |
| 24. Indicate specifically how the position’s duties and responsibilities have changed since the position was last reviewed. |
| 25. What is the function of the work area and how does this position fit into that function?  The work area is responsible for Metro Region support and leads the department efforts in the Connected Vehicle, Automated Vehicle, and Advanced Mobility areas. This position serves to provide support for Connected Vehicle and Advanced Mobility projects. All positions responsibilities directly support Metro Region CV and AV activities. |
| 26. What are the minimum education and experience qualifications needed to perform the essential functions of this position? |
| EDUCATION:  Possession of a bachelor of science degree in engineering. |
| EXPERIENCE:  GIS background, construction engineering field work, collaboration with consultants and contractors, infrastructure communications, project planning and programming, spreadsheet budget tracking, infrastructure hardware and software knowledge. |
| KNOWLEDGE, SKILLS, AND ABILITIES:  Ability to speak and write effectively; work as a team member; oversee, lead, and train other workers; make presentations before groups; and deal effectively with others. Resourcefulness and ability to use initiative in carrying out assignments while working independently. Ability to apply engineering principles to ITS projects. Computer knowledge. Familiarity of ITS is highly desirable. |
| CERTIFICATES, LICENSES, REGISTRATIONS:  Valid driver’s license. |
| *NOTE: Civil Service approval of this position does not constitute agreement with or acceptance of the desirable qualifications for this position.* |
| *I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.* |
| **Supervisor’s Signature Date** |
| TO BE FILLED OUT BY APPOINTING AUTHORITY |
| Indicate any exceptions or additions to statements of the employee(s) or supervisors. |
| *I certify that the entries on these pages are accurate and complete.*    **Appointing Authority** **Signature Date** |
| TO BE FILLED OUT BY EMPLOYEE |
| *I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.*    **Employee’s Signature Date** |

**NOTE: Make a copy of this form for your records.**