# POSITION DESCRIPTION

This position description serves as the official classification document of record for this position. Please complete the information as accurately as you can as the position description is used to determine the proper classification of the position.

<table>
<thead>
<tr>
<th>2. Employee's Name (Last, First, M.I.)</th>
<th>8. Department/Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TRANSPORTATION CENTRAL OFFICE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Employee Identification Number</th>
<th>9. Bureau (Institution, Board, or Commission)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Highway Operations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Civil Service Position Code Description</th>
<th>10. Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRANSPORTATION ENG LIC SPL 2</td>
<td>Metro Region</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Working Title (What the agency calls the position)</th>
<th>11. Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pavement Management Engineer</td>
<td>Development</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MINTON, STEVEN D; STATE ADMINISTRATIVE MANAGER-1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. Name and Position Code Description of Second Level Supervisor</th>
<th>13. Work Location (City and Address)/Hours of Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORBES, COLIN P; STATE OFFICE ADMINISTRATOR</td>
<td>18101 West Nine Mile Road, Southfield, MI  48075 / 7:30 am - 4:30 pm (Mon-Fri) Hours may vary</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14. General Summary of Function/Purpose of Position</th>
</tr>
</thead>
</table>

This position is the specialist for the Region responsible for analyzing and predicting pavement conditions and developing and implementing strategies to improve system conditions in connection with region road capital programs and the Five-Year Plan. Using department management systems and forecasting tools, this position is responsible for developing program strategies that comply with state and federal regulations, resulting in progress towards the department's statewide pavement condition goals. This position is responsible for performing pavement systems asset management by validating and reporting physical inventories and project and program data. This position provides region-wide expertise on all pavement related matters and is the key resource for the Region and TSCs for determining pavement needs, including evaluating condition data, pavement performance, and asset management. The position is responsible for highly complex assignments, including coordination and compilation of various capital road template program submittals in the annual integrated Call for Projects, coordination with other Region and statewide programs, and completion of special assignments, studies, and reports.

The function of this position also includes responsibility in region-wide consistency, department alignment, budget constraint, and project timeliness. Under the authority of the Associate Region Engineer of Development, this specialist role also monitors project scopes, schedules, and budgets.
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:**
Conduct asset management of the Region infrastructure, focusing on roadway pavements, including corridor planning, implementation, and management. Act as the single region resource to provide region-wide expertise and make recommendations to TSC, Region, and Lansing staff, as well as local agencies or other governmental or public entities on pavement system subjects.

**Percentage:** 30

**Individual tasks related to the duty:**

- Provide technical expertise, decisions, advice, and recommendations regarding pavement condition data, project fix selection, pavement performance, strategic investment analysis and decision making, department management system data entry, maintenance and retrieval.
- Develop and maintain long-term (10 year) pavement investment strategies through Long-term Corridor Planning. Utilize ArcGIS to manage strategic investment recommendations and asset management coordination with TSC, Region, and Lansing staff for all assets within Metro Region's system.
- Manage and analyze pavement condition data and other physical inventory data from management systems and other available sources.
- Manage the Region's Remaining Service Life (RSL) reviews and updates process and perform Region quality assurance of the data and process. Utilize ArcGIS to perform Region RSL reviews and continue to enhance the RSL review process.
- Manage the Pavement Surface Evaluation and Rating System (PASER) pavement condition rating reviews process for the Metro Region and perform Region quality assurance of the data and process.
- Prepare and provide the Region's annual pavement improvement data to the Central Office to be incorporated into the pavement management database.
- Manage the annual Pavement History Database (PHD) data entry process and ensure Region quality assurance of the data and process.
- On an annual basis, provide all changes to Region's Lane Mile Inventory (LMI) to MDOT's Asset Management Section.

**Duty 2**

**General Summary:**
Lead and manage the Region's annual integrated Call-for-Projects (CFP) process and submittal.

**Percentage:** 20

**Individual tasks related to the duty:**

- Using department forecasting tools (RQFS), develop pavement system investment strategies in accordance with the department's pavement condition goals and other department strategic objectives.
- Coordinate the region submittal of roadway capital templates for the annual integrated Call for Projects, including these tasks:
  - Lead TSC and Region staff in candidate project identification and prioritization, based on needs assessment during the RSL review process. Utilize ArcGIS in candidate project identification and prioritization.
  - Lead and coordinate TSC Van Tours for collaborative reviews of candidate projects and pavement condition confirmation. Utilize ArcGIS to capture input and feedback from Van Tours for consideration for final project selection.
  - Develop objective weighting system to rank candidate priorities based on several factors including multiple pavement condition factors, traffic volumes, commercial traffic volumes, strategy, crash history, and TSC priority.
  - Lead TSC and Region staff in final project selection, consistent with department goals and objectives and the condition strategies, and CFP direction. Communicate project selection decisions with all affected stakeholders including Region Leadership.
  - Utilize and enhance ArcGIS tools to coordinate roadway project selection with project selection for all templates. Specifically focus on coordinating pavement project selection with the bridge and Transportation Systems Management and Operations (TSMO) templates.
  - Manage project and program submittal documents, computer applications, JobNet database entry, and other materials as required in the annual CFP letter of instruction.
  - Represent the Region in review meetings with the Call for Projects Subcommittees, prepare project information, justifications, and responses as necessary.
- Participate on annual Statewide Call For Projects Subcommittees as assigned.
Duty 3

General Summary: 
Percentage: 20

Lead and manage the Metro Region’s Road Scoping effort.

Individual tasks related to the duty:

- As part of the Call For Projects and Long-Term Corridor Planning, develop road scoping strategies to align with pavement investment priorities.
- Assist the Metro Region Associate Engineer of Development with management of Metro’s yearly scoping budget and coordinate scoping priorities with the Bridge Management Engineer and the Traffic Safety and Operations Engineer.
- Program Scoping Projects for approval by Lansing Planning and update the Systems Implementation and Monitoring Unit as to progress of scoping funding utilization along with the Region Discretionary budget.
- Lead all road scoping activities for Metro Region by either managing consultant contracts directly or by coordinating with TSC or Region staff who are managing consultant contracts for preliminary and detailed project scoping. Assist TSC staff as-needed throughout scope development activities.
- Develop a road scoping organizational plan for all road scoping documents, both hard copy and digital. Actively manage scoping status lists on the Metro Region Steering Team SharePoint site for completed and active scopes. Report out monthly on status of scoping effort at the Development Steering Team meeting.

Duty 4

General Summary: 
Percentage: 20

Ensure successful program delivery by monitoring project scopes, schedules, and budgets.

Individual tasks related to the duty:

- Prepare reports and agendas for the monthly Development Steering Team meeting and co-lead the meeting with the Associate Region Engineer of Development. Provide updated Planisware reports with notes to Region Leadership in preparation for the Statewide Steering Committee.
- Utilizing Department information management systems prepare reports and briefings as-needed for program and project inquiries by Leadership and Region and Lansing staff.
- Attend project milestone meetings for R&R and other template projects to provide guidance on scope, cost, and schedule. Assist TSCs and Lansing PMs when needed with project development to ensure program delivery.
- Participate in monthly capital budget meetings and assist in the resolution of funding issues through the utilization of JobNet, PI, and SMART.
- In coordination with Region Planning staff, monitor the TIP to head off potential program delays due to changes in the program. Attend meetings with SEMCOG when needed.
- Act as a liaison between Metro Region and Lansing Planning and Finance to resolve programming and finance issues for all phases of projects in the Metro Region.
- Develop reporting to show trends in construction costs along with the cost of developing projects and the cost of construction oversite. Monitor and report out regularly on the cost of R&R, CPM, FRP, and NFRP projects on a per lane mile basis.
- Co-lead the Metro Region Quarterly Mobility Reviews along with Metro Region Operations staff and coordinate program changes accordingly.

Duty 5

General Summary: 
Percentage: 10

Other Duties as assigned.

Individual tasks related to the duty:

- Coordinate Culvert Template management with Lansing staff. Lead the TSCs in developing candidates for the Culvert Template. Ensure culvert projects are completed and all culvert funding is utilized.
- Coordinate the annual responses from the TSCs for the Resource Allocation solicitation.
- Transfer knowledge to EDPs, Interns, TDRP students, etc.
- Participate on Statewide Teams related to Pavement Management and Project Development.
- Participate on Process Improvement teams when solicited and lead implementation efforts.

16. Describe the types of decisions made independently in this position and tell who or what is affected by those decisions.

Evaluation and interpretation of pavement data.

Recommendations on investment strategies, pavement repair options, and project scopes.

Functional coordination of Region, TSC, and consultant staff for Call for Projects tasks.

The position requires considerable independent engineering judgement. Region and TSC staff rely on these decisions to perform their work in scoping, managing, and designing capital improvement projects and in making routine maintenance plans and decisions.

17. Describe the types of decisions that require the supervisor’s review.

Allocation of funding and human resources; conflicts in policy, procedures, goals or objectives; project selection and scope; project schedules, budgets, and changes.
18. What kind of physical effort is used to perform this job? What environmental conditions in this position physically exposed to on the job? Indicate the amount of time and intensity of each activity and condition. Refer to instructions.

The position requires extended hours of vehicular travel in state owned (for van tours or pavement reviews - 15%) or personal vehicle (generally alone). There may be exposure to inclement weather, being adjacent to high volumes of traffic, traversing uneven terrain during field reviews (5% of the time). Extended periods of time sitting at a computer, talking on the phone, or in meetings (50% of the time).

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.

Additional Subordinates

20. This position’s responsibilities for the above-listed employees includes the following (check as many as apply):

- Complete and sign service ratings.
- Provide formal written counseling.
- Approve leave requests.
- Approve time and attendance.
- Orally reprimand.
- Assign work.
- Approve work.
- Review work.
- Provide guidance on work methods.
- Train employees in the work.

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?

The essential duties of this position include management of the pavement systems data and inventory, compilation and reporting of data, preparation of the annual call for projects, development of strategic investment plans, development of asset management plans, and providing pavement related technical advice and recommendations.

24. Indicate specifically how the position’s duties and responsibilities have changed since the position was last reviewed.

This position has changed since it was last reviewed, in the following ways:

- The updated position description (PD) clarifies specific responsibilities related to asset management and the Call For Projects process through the use of GIS.
- The managing and reporting of program and project data and scoping responsibilities have been clarified as well.
- Duty 1 on this PD was previously duty 2 on the old position description and has increased from 20% of time to 30% of the positions time. Bullets 1, 2, 4, 5, 6, 7 and 8 have been added to this PD. The previous tasks (bullets 2-5) of the old PD are inclusive in these newly written bullets.
- Duties 2, 3, and part of 4 of this PD previously made up duty 1 of the old PD. Duty 1 of the old PD accounted for 55% of the positions time. Duties 2, 3, and 4 of this PD account for 20% each of the positions time, therefore, duty 1 of the old PD has been broken out into three separate duties, but the percentage of time essentially remains the same. These three duties are all fairly balanced in terms of the time needed to be spent on them week to week and are very interrelated; spending time on a particular task could be attributed to any and possibly all of them at any given time.
- Duty 2 on this PD was previously Duty 1 on the old PD. This is now a separate duty because it is not really part of the Scoping Process as discussed and affirmed with all of the Region System Engineers. Since the Scoping Process is now listed as its own separate duty (duty 3) this duty has also been separated and, as a result, the percentage of time of this duty has been reduced.
- Duty 3 of the old PD is now reflected in Duty 1 of this PD.
- Duty 3 of this PD has been broken out from Duty 1 of the old PD. This is now a separate duty because the management of the scoping process for Metro’s PME was a major part of the previous Duty 1 and is now worthy of its own main duty and time allocation. This is especially true now as Metro’s road scoping budget has increased by 50-100% from the time the PD was last reviewed.
- Duty 4 of this PD was previously inclusive in duties 1 and 2 of the old position description. This duty has now been broken out to show that a substantial amount of this positions time is spent on monitoring project scopes, schedules, and budgets for corridor planning, implementation, and management; Call-for-Projects (CFP); and Road-Scoping.

25. What is the function of the work area and how does this position fit into that function?
The work area is responsible for the development of all new projects in the region. This includes all pre-construction activities from needs assessment, project identification, project scoping, surveys, design, real estate acquisition, and general project and program monitoring and coordination. This position is responsible for the coordination of the key portion of the capital improvement projects in the Rehabilitation and Reconstruction and Capital Preventive Maintenance programs. The position plays a vital role in needs assessment, project identification, project scoping and the development of strategies that will allow the Region to attain the Transportation Commission goals for pavement condition. Through pavement systems management and asset management, this position provides vital recommendations for the most efficient use of scarce public resources to maintain and improve transportation infrastructure.

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:
Transportation Engineering Licensed Specialist 13
Four years of professional experience equivalent to a Transportation Engineer, including two years equivalent to a Transportation Engineer P11 or one year equivalent to a Transportation Engineer 12 or Transportation Engineer Licensed 12.

KNOWLEDGE, SKILLS, AND ABILITIES:
Knowledge and experience in the design and project development process and computerized management systems (RQFS, TMIS, JobNet, SMART, and ArcGIS). Ability to communicate effectively both verbally and in writing. Ability to manage meetings and coordinate the activities of several people in a team setting.

CERTIFICATES, LICENSES, REGISTRATIONS:
Valid Driver’s License.
Michigan PE License

NOTE: Civil Service approval does not constitute agreement with or acceptance of the desired qualifications of 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 Date

TO BE FILLED OUT BY APPOINTING AUTHORITY

Indicate any exceptions or additions to the statements of employee or supervisors.

N/A

I certify that the entries on these pages are accurate and complete.

STACI ERICKSON 11/25/2019
Appointing Authority Date

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 Date