

New York State Department of Civil Service
DIVISION OF CLASSIFICATION & COMPENSATION

Classification Standard

Occ. Code 4053100

Transportation Maintenance Engineer 1, M-2	4053100
Transportation Maintenance Engineer 2, M-3	4053200
Transportation Maintenance Engineer 3, M-4	4053300

Brief Description of Class Series

Transportation Maintenance Engineers oversee the maintenance of State highways and bridges. Incumbents organize and direct maintenance operations, recommend projects for construction and rehabilitation, administer a maintenance budget, establish work priorities, ensure the health and safety of their workforce and traveling public, establish and maintain contact with public officials, and participate in synchronized responses to disasters or emergency situations.

Transportation Maintenance Engineers are classified in regional settings of the Department of Transportation.

Distinguishing Characteristics

Transportation Maintenance Engineer 1: highest level manager in a small* highway maintenance residency or regional bridge maintenance program; plans and directs all maintenance and operations for the residency or for the regional bridge program; determines the operating budget, which includes equipment, material, and staff requirements; determines work priorities and maximizes the use of available resources; and represents the department with local officials and the public.

Transportation Maintenance Engineer 2: highest level manager in a large* residency or regional bridge maintenance program; performs all of the duties listed for Transportation Maintenance Engineer 1.

Transportation Maintenance Engineer 3: one position per region; plans, develops, and organizes regional highway and bridge maintenance programs including snow and ice control, and responses to emergencies; coordinates regional maintenance activities, appropriates capital improvement funds, and manages regional bridge and highway maintenance.

* The classification of the Transportation Maintenance Engineer 1 and 2 positions functioning as residency or bridge maintenance program managers is determined by

regional data, to which a point system is assigned. If score is 40 or below, a Transportation Maintenance Engineer 1 is classified; If score is 41 and above, a Transportation Maintenance Engineer 2 is classified. The data considered and the point value system currently in use are listed below:

Factor	Points Assigned
Lane Miles	1 point for each 50 lane miles
Urban Center Line Miles	1 point for each 25 center line miles
Population	1 point for each 25,000 population
Employees	1 point for each 25 employees
Vehicle Miles	1 point for each 50 million vehicle miles
Number of Bridge Crews (BRS2s)	2 Points per Bridge Repair Supervisor 2
Number of Bridges Maintained	0.0125 points for each bridge
Bridge Deck Area Maintained	1.25 points for each Million Square Feet
High Traffic Volume Bridges	0.05 points for each bridge with an Average Annual Daily Traffic greater than 10,000 vehicles per day
Lift Bridges	1 point for each lift bridge operated

Related Classes

Transportation Managers oversee programs where an engineering background is not required. Incumbents administer a specific office or regional function, including budget, personnel, program delivery, and quality assurance.

Illustrative Tasks

Transportation Maintenance Engineer 1 and 2

Supervises all staff assigned to the residency.

- Interviews and selects candidates for appointment and promotions; reviews employee performance and performance evaluations and, when necessary, counsels employees about their performance or work problems; and ensures that employees receive training.
- Plans and schedules the assignment of individuals and crews to meet work schedules.
- Manages labor relations activities for the residency by reviewing grievances, recommending disciplinary charges, and meeting with employees and union representatives to discuss and resolve work related problems.

Plans and organizes highway maintenance and repair projects and priorities for the residency.

- Conducts inspections of roads and rights-of-way in the residency to evaluate their condition and determine repair and maintenance needs.
- Develops annual maintenance program based on inspections, engineering considerations, cost, availability of staff, equipment, and material resources, and seasonal workload.
- Reviews and approves annual, quarterly, and biweekly work schedules and equipment schedules, and coordinates these with subordinate supervisors.
- Determines project and work schedule priorities, adjusting them based on emergencies, complaints, or subordinates' recommendations; and reviews work accomplishment reports to evaluate effectiveness of crews, compliance with schedules, cause of cost or time overruns, and need for program and schedule adjustments.
- Reviews and approves the residency budget proposal, including costs for programs, special projects, supplies, equipment, and materials.
- Authorizes overtime as necessary to complete projects or handle emergencies.
- Inspects bridges and supervises other engineers doing bridge inspections.

Directs and reviews snow and ice control performed by residency staff or under municipal contracts, including spot-checking work and approving payments to municipalities.

- Represents the department with officials, the public, and private parties; represents the department in Court of Claims actions against the department; and may provide testimony in court.
- Consults with local officials about maintenance and construction projects on State roads and on local roads in the vicinity of State roads and rights-of-way.
- Investigates and resolves complaints.
- Conducts meetings and answers questions about the department and programs.
- Initiates and reviews requests for permits for private individuals or companies to perform work within State rights-of-way, including setting bonds, establishing conditions, and collecting fees.

Recommends major reconstruction projects to the Transportation Maintenance Engineer in charge of the region.

Reviews drainage, slope, maintenance, and construction projects, and problems with regional engineering staff.

Ensures that work projects are conducted with maximum safety to employees and the public.

Manages and directs special projects and programs for the region, such as traffic sign inventories and surveys of advertising signs.

A Transportation Maintenance Engineer 1 or 2 in charge of the regional bridge maintenance program, in addition to the supervisory and general management responsibilities listed above, performs the following duties:

- Inspects every State bridge within the region, which has been flagged for structural or safety deficiencies and develops a repair plan.
- Works closely with the regional structures engineers to address best practice approaches to structural design.
- Reviews all structural plans and inspects all completed structural projects, ensuring that every structural or safety deficiency is satisfactorily resolved.
- Works with regional planning and design to select structures for the capital construction program.
- Responds to emergencies resulting from accident damage or from loss of adequate structural support due to deterioration; and determines if the structure is safe for traffic.
- Independently assesses the need to close or limit the use of bridge structures.
- Monitors all bridge repair contracts and ensures that work is completed on schedule and in accordance with contract provisions.
- Regularly reviews reports to measure program accomplishments, evaluate productivity, analyze performance, and compare progress of work performed against the planned program.
- Plans, provides, and administers training in new construction materials, work procedures, and technologies.
- Ensures that all employees are knowledgeable of the latest safety procedures related to equipment and products used.

Transportation Maintenance Engineer 3

Develops, organizes, and implements the region's highway and bridge maintenance, including operational plans for the regional maintenance group; and integrates those plans with the capital improvement plan, pavement management plan, and bridge maintenance plan.

- Develops an annual maintenance program based on inspections, engineering considerations, cost, availability of staff, equipment, and material resources, and seasonal workload.
- Reviews and approves annual work schedules and equipment schedules; and coordinates these with highway maintenance residencies and bridge maintenance crews within the region.
- Reviews and approves the residency and bridge maintenance budget proposals, including costs for programs, special projects, supplies, equipment, and materials.
- Reviews work accomplishment reports to evaluate effectiveness of residencies and bridge maintenance crews, compliance with schedules, cause of cost or time overruns, and need for program and schedule adjustments.

Directs and reviews region's snow and ice control performed by residencies under municipal contracts.

Represents the department with officials, the public, and private parties.

- Gives speeches and answers questions about the department and programs at events and meetings.
- Represents the department in Court of Claims actions against the department, or may testify in court proceedings.
- Coordinates regional maintenance activities with other divisions within the department and with other State agencies.
- Administers transportation maintenance policies, safety procedures and guidelines.

Directly supervises a group of engineers, technicians, and clerical staff.

Minimum Qualifications

Transportation Maintenance Engineer 1

Promotion: possession of a New York State professional engineer's license and one year of service in a professional engineering position allocated at Grade 24 or above.

Transportation Maintenance Engineer 2

Promotion: possession of a New York State professional engineer's license and one year of service in a professional engineering position allocated at Grade 27/M-2; or two years of service in a professional engineering position allocated at Grade 24 or above.

Transportation Maintenance Engineer 3

Promotion: possession of a New York State professional engineer's license and one year of service in a professional engineering position allocated at Grade 29/M-3; or two years of permanent competitive service in a professional engineering position allocated at Grade 27/M-2 or above.

Note: Classification Standards illustrate the nature, extent, and scope of duties and responsibilities of the classes they describe. Standards cannot and do not include all the work that might be appropriately performed by a class. The minimum qualifications above are those required for appointment at the time the Classification Standard was written. Please contact the Division of Staffing Services for current information on minimum requirements for appointment or examination.

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