

# County of Henrico Job Classification

## Traffic Signal Specialist IV



### General Summary of Classification:

Serves as the senior technical authority for traffic signal systems Countywide. Directs complex implementations and system integrations, oversees corridor/program-level timing and optimization, leads major projects, ensures compliance with standards, and provides advanced technical and operational leadership. Performs other duties as assigned.

### Examples of Primary Tasks, Duties and Responsibilities (TDR):

This is the fourth level of an approved career development plan (CDP).

- Directs countywide signal initiatives, including new builds, major upgrades, and intelligent transportation system integrations; defines scope, technical approach, acceptance criteria, and close-out documentation.
- Leads corridor coordination and program-level timing, including performance evaluation, retiming cycles, and after-action improvements based on field data and central system analytics.
- Provides expert-level diagnostics and root-cause analysis for complex multi-intersection faults, network outages, and interoperability issues across hardware, software, and communications layers.
- Reviews and approves signal plans, cabinet designs, detection layouts, and communications architectures for compliance with applicable standards and County requirements.
- Oversees contractor/vendor technical performance; directs site acceptance testing, materials submittals, and corrective actions; coordinates with utilities and external agencies as needed.
- Establishes technical procedures, safety practices, and configuration baselines; mentors staff and delivers advanced training on controllers, detection, networking, and central systems.
- Manages project schedules, materials forecasting, and inventory strategies to ensure readiness and minimize downtime; prepares detailed technical records and reports.
- Leads emergency response and complex incident recovery; provides on-scene technical direction and coordinates multi-party activities to restore operations safely and efficiently.
- Performs other duties as assigned.

### Knowledge, Skills, and Abilities (KSA) Typically Required:

- **Occupation-specific:** Extensive knowledge of traffic signal systems, controller platforms, detection technologies, communications architectures, and applicable standards; expert ability to interpret, evaluate, and approve complex plans and specifications.

- **Technical:** Mastery of central signal software, system analytics, and IP network design and security principles for cabinet/field devices; proven ability to lead complex integrations and acceptance testing.
- **Interpersonal, Communication and Customer Service:** Excellent leadership and stakeholder engagement skills; ability to represent the County on technical matters with contractors, utilities, and agencies.
- **Decision-making and Authority:** Authority to make program-level technical decisions, prioritize countywide corrective actions, and determine acceptance/non-acceptance of contractor work.
- **Leadership:** Senior technical lead; directs multiple teams and major projects; mentors and develops staff.
- **Environment:** Office and field; frequent work under adverse weather and traffic conditions; elevated and confined-space work as required.
- **Physical:** Physical ability for lifting, climbing, extended field operations; consistent use of required PPE.

### **Minimum Education and Experience:**

- **Education:** Graduation from high school or GED; associate degree or higher in electronics/electrical or a related field preferred.
- **Experience:** Eight (8) years of progressively responsible traffic signal experience, including at least two (2) years as a Traffic Signal Specialist III.
- **OR:** Any equivalent combination of experience and training which provides the necessary Knowledge, Skills, and Abilities.

### **Other Requirements (License, Certifications, Training, etc.):**

- Criminal history record check and fingerprinting of all employees in authorized and hourly safety-sensitive positions.
- Successful completion of required NIMS training.
- Valid driver's license with a safe driving record.
- Valid Class A CDL with endorsements necessary to operate County equipment and vehicles.
- Valid VDOT Flagger Certification.
- Forklift Certification; Intermediate Work Zone Certification; ACI Concrete Certification.

Job Code: G.G.K.0004

Date of Last Revision: 18-Feb-2026

This is a generalized class specification and not a job description. Actual duties, qualifications, and requirements vary by position. For more information, contact the Henrico County Department of Human Resources.