CRIME ANALYST, SENIOR/LEAD

DEFINITION OF SERIES:

The Crime Analyst Series covers positions that are involved in researching and analyzing criminal incidents to identify crime patterns and trends using computer, databases, and information from internal and external sources and/or agencies to independently identify areas where criminal activity may occur, and to create visual presentations, such as spreadsheets, maps, and graphs. The information provided by the Crime Analyst is used by the Montgomery County Police Department to formulate crime prevention strategies, devise solutions to improve public safety, and support the effective deployment of law enforcement resources and assist detectives in identifying and apprehending suspects by analyzing four types of data – tactical (which is concerned with immediate and high-level threats such as murders, theft, rape and abduction), administrative (which concentrates on supplying the heads of law enforcement agencies with information about crime patterns and trends), strategic (which is focused on properly deploying and utilizing law enforcement officers), and intelligence (which is focused on collecting information about a subject to predict future behavior and make operational decisions).

DISTINGUISHING CHARACTERISTICS:

Positions assigned to this perform advanced and complex professional crime analysis work involving the collection of criminal justice data and conversion of this data into criminal intelligence information. Crime Analyst, Senior/Lead positions collect and analyze crime data to identify trends and provide the department with information to support the development of long-term strategies, policies, prevention techniques, the deployment of department resources to address crime in the County and to predict future behavior and make operational decisions. Incumbents of this class also may support the Crime Analyst Supervisor by providing direction, advice and training lower level Crime Analysts as well as providing feedback to the Supervisor on the work performance of the Crime Analysts.

MAJOR DUTIES:

Under general supervision, employees in this class are responsible for studying complex crime reports, arrest reports, and police calls for service to identify emerging patterns, series, and trends of violations of law and criminal activity, typically classified as strategic and administrative crime analysis and crime intelligence. They analyze these phenomena for all relevant factors and sometimes predict or forecast future occurrences, and issue bulletins, reports, and alerts to their agencies. They work with police officers and police leadership to develop effective tactics and strategies to address crime and disorder. The position may support law enforcement personnel by conducting research on a set of criminal behaviors to generate leads, may be required to present analytical information in legal proceedings such as depositions and courtroom testimony), and/or work with the community to decrease the likelihood of future crimes.

EXAMPLES OF DUTIES: (Illustrative Only)

- Performs a variety of complex tactical, strategic, administrative, and/or intelligence analysis for the Department. Monitors local, regional, and national crime trends. Monitors police activity and builds an automated database for use in planning, information retrieval and reporting, and

other police related activities.

- Conducts in-depth research and strategic crime analysis to identify crime patterns and trends of specific offense categories and/or at a county-wide and/or regional level. Conducts analysis of long-term crime patterns and trends using probability studies and complex statistical analysis techniques. Extracts data from Computer Aided Dispatch (CAD) system, subsystems of the Records Management System (RMS), such as arrests, warrants, crashes, field interviews, and case histories. Analyzes data to identify trends and patterns in suspect characteristics, methods of operation, and spatial and temporal information; such as, serious habitual offenders, crime rings and crime locations.
- Performs special studies which may require in-depth and complex analysis for individual criminal cases, types of criminal activity, and interrelationships, etc.
- Collects, analyzes and integrates complex crime information to develop options or logical conclusions for difficult issues. Collects, reviews, and collates both verified and unverified intelligence from open, covert, electronic, and human intelligence sources. Collects and organizes criminal information from all available resources, including the Uniform Crime Report (UCR), the National Incident-Based Report System (NIBRS), other agencies, the media, crime bulletins, and review of crime reports and supplements, in order to study and analyze past and existing crime series patterns and trends.
- Creates specialized and complex statistical reports for use at periodic and daily briefings to display the level of criminal activity and abatement efforts, success and failures.
- Evaluates and reviews information on crime patterns and trends and develops ways and means to deploy this information to law enforcement personnel and others involved in police work to aid in reducing crime. Evaluates databases to track crimes such as murders, rapes, robbery, drug and gang activity, sexual assaults, etc. Uses crime data and advanced knowledge of police programs and patrol activities within an assigned area to identify opportunities for proactive law enforcement.
- Advises Crime Analysts in the analysis of complex crime data and guides/leads staff on the practices and procedures of crime analysis. In conjunction with the Supervisor, trains, guides, and provides feedback to Crime Analysts on assignments.
- Coordinates programs for the gathering, documenting and analyzing of threat assessment and criminal intelligence data and information within the Department. Facilitates criminal investigations through case linking, suspect identification, and identification of criminals' modus operandi. Develops and tests hypotheses, develops victim and suspect profiles, and forecasts criminal activity.
- Establishes and evaluates research priorities, standards, and methods for production of complex analytical reports.
- Meets with police personnel to discuss and determine data and information needed to support development and implementation of crime prevention, reduction, and investigative strategies and initiatives. Works with operations and management personnel to plan the deployment of resources to prevent and suppress criminal activity, and develops and prioritizes problem areas in the County, top offenders, and specialized crime projects on which to focus activities.
- Develops new, and recommends modifications of existing, criminal intelligence analytical techniques and systems to improve the identification, documentation and tracking of potential threatening individuals and situations.
- Establishes and maintains collaborative relationships with assigned departments and agencies.

- Conducts complex crime data analytics projects using advanced qualitative and quantitative investigative techniques, fact finding methods such as interviews, statistical analysis, and surveys.
- Conducts studies and analyses of datasets to uncover performance trends using a variety of tools and systems including, but not limited to, databases, geospatial mapping software, statistical analysis applications, data integration and manipulation tools and techniques. Reviews, maintains and updates databases, reports, bulletins, and files.
- Provides expert advice on complex issues and provides tactical and strategic analysis focused on local, national, and international criminal activities. Supports Police district executives and crime prevention officers in meetings with community groups and other County agencies. Assists command staff with presenting information for the department's CompSTAT program. Represents the department on multi-agency task forces and interacts with a wide range of investigative personnel from other local, state, and federal law enforcement agencies. May be required to attend and participate in agency decision-making meetings to ensure the work of and implications for crime analyses are represented.
- Provides intelligence and investigative support and statistical data to specified investigative division and other agencies in the intelligence community. Provides specialized support for criminal investigations such as, but not limited to, developing suspect leads, identifying links between addresses, phone numbers, vehicles, bank accounts, etc., for known offenders and associates to show relationships in criminal enterprises, identifying victims in associated or similar cases, and searching databases of stolen property to identify or establish connections to other cases.
- Researches and prepares comprehensive technical reports and correspondence using a variety of specialized software applications. Writes technical reports of findings of analysis and intelligence information including recommendations such as when and where to deploy resources, the identity of possible suspects, profiles of suspects and victims, and potential avenues of investigation. Makes written and oral presentations of analysis and criminal intelligence information including maps, charts and graphs to police officers, detectives, investigators, and commanders, and other members of the law enforcement community, to assist in prevention, detection and investigation of criminal activity.
- Presents crime analysis data in an effective format by using Geographic Information System (GIS) to plot areas of criminal activity, calls for service, and/or crashes and incidents.
- Demonstrates crime analysis techniques to other employees and citizen groups.
- May be required to present analytical information in legal proceedings (depositions and courtroom testimony).
- Performs related duties as required.

SUPERVISORY CONTROLS:
Overall objectives and resources available are set. The employee has full technical responsibility for the work and may independently determine or in consultation with the supervisor, plan and carry out the work, collaborating with internal and/or external stakeholders. The employee has full control over how the work is performed and is responsible for planning and carrying out all aspects of program development, implementation and evaluation, resolving most of the conflicts which arise, coordinating the work with others, and interpreting policy on own initiative in terms of established objectives. Typically, this involves planning the work effort, identifying potential problems, resolving problems, coordinating with others outside the work unit, and determining the methods, procedures or approaches to be used. The employee keeps the supervisor informed of program status

and achievements, and of potentially controversial matters or far-reaching implications. The work is reviewed in terms of effectiveness in meeting objectives, and in terms of quality, accuracy, volume, timeliness; and adherence to established methods, standards, and policies.

SUPERVISION EXERCISED:
Positions assigned to this class regularly participate in performing advanced crime analysis and often provide work direction or lead other analysts, and may supervise other positions in the absence of or at the direction of the Crime Analysis Supervisor. The work may involve providing information, advice, or suggestions to the supervisor on personnel decisions or acting upon a personnel matter.

GUIDELINES:
Guidelines are available but may not apply completely or cover new, complex or unusual situations. The employee must use judgment and initiative in interpreting and applying guidelines to situations or may recommend the development of new guidelines. The guides governing the work include established accepted principles and methods of law enforcement investigative techniques and crime data analytics, such as standard practices in the field, regulations, policies and procedures of the department, crime investigation and examination procedures, and federal, state and county laws and regulations. Work may involve a variety of substantive issues and unique, complex problems requiring the analysis of unusual circumstances or interpretation of incomplete or contradictory data, and the identification of various alternative solutions or approaches. The employee uses initiative and resourcefulness in deviating from traditional methods, to develop new methods or criteria, or to propose new policies.

COMPLEXITY:
The work involves conducting advanced analytical work in support of law enforcement activities. The employee monitors, researches and collects local, regional, national and international crime data, and interprets information to determine the meaning, significance or interrelationships among data, and systematically identifies situations or conditions that may not be apparent. This analysis includes: (1) assembling and categorizing facts or information; (2) examining the facts or information to ascertain their significance or meaning; and (3) determining what action to take. Work is made complex by the variety and types of demographic data collected and information regarding crime incidents. Employees base their decisions on crime patterns and trends identified and correlations found, and the course of action chosen is selected from many alternatives consistent with standard practices or department guidelines or may require more specialized analytical approaches to determine the most effective solution. The recommendation developed by the analyst may affect the operations and policies of the department and impacts the safety of County residents.

SCOPE AND EFFECT:
The work involves carrying out a range of crime analysis assignments focusing on tactical, strategic, administrative and intelligence activities at the county, regional, and national level. The employee analyzes a variety of conventional issues and situations and problems in conformance with established criteria (e.g., department guidelines, best practices, etc.). The purpose of the work is to identify areas of criminal activity and disseminate information to law enforcement personnel. The

finished service is used by the County to reduce this activity and to develop tactics and long-term strategies that create safer communities.

CONTACTS:
Personal contacts include employees in the work unit to coordinate work, department staff to present the results of analyses and advise on courses of action to be taken, police departments and other law enforcement agencies at the state, federal and local level, correctional facilities, to gather information for use in police services and to provide subject matter expertise. The purpose of these contacts is to gather information for use in police services and to provide subject matter expertise, advice, and recommendations to reduce crime. This information is also used to assist law enforcement in more effective deployment of resources. These contacts are generally cooperative in nature with parties working toward mutual goals and involve the presentation of ideas and technical information.

PUBLIC SERVICE /ASSISTANCE:
Assistance to the public is incidental to the primary purpose of the job and the employee rarely interacts with the individuals outside of the County government.

HAZARDS:
The work is primarily sedentary, performed in a typical office setting, and presents no significant hazards. No special measures are taken to control environmental conditions.

MINIMUM QUALIFICATIONS:
Education: A Bachelor's Degree with a major in computer science/information systems, statistics, police science, criminal justice, criminology, sociology or a closely related field.
Experience: Five (5) years of experience in a law enforcement, criminal investigation or field directly related to the assignment
Substitution(s): An advanced degree and/or additional experience in the use of databases and sophisticated analytics tools, geographic information systems (GIS) and software similar to that used by the County in conducting crime analysis may be substituted for experiential or educational requirements.

KNOWLEDGE, SKILLS, AND ABILITIES:
Thorough Knowledge of:
- The operations, rules, regulations and procedures related to a law enforcement agency and the operations, practices, and information management systems.
- County, State, and Federal laws, regulations, court decisions, and issues related to police work and skill in applying this knowledge to a variety of complex criminal analysis cases.
- Crime analysis and criminal investigation principles, techniques, and procedures – the crime analysis process and the intelligence cycle, types of crime and intelligence analysis, goals of crime and intelligence analysis.
- Investigative research, intelligence/data collection methods and techniques, and statistical and analytical principles, techniques and procedures.
- The methods and techniques of fact finding, interview techniques, analysis, and resolution of complex problems, particularly regarding the area of specialty assignment, including Advanced GIS/mapping, geographic profiling, link analysis, and intelligence analysis (organized crime rings and/or terrorism rings).

- Specialized computer operations, relational database structures and files management, spreadsheet applications, and Internet research methods including but not limited to search engines, news-groups, and list-serves.
- The department's CompStat process.
- Understanding of criminal behavior – the Crime Triangle, the 80/20 Rule, the Routine Activity Theory, Rational Choice Theory, psychopathology, etc.

Various law enforcement models – Intelligence-led policing, data-driven policing, community policing, problem-oriented policing, etc.

Skill/Proficiency in:
- Advanced critical thinking skills such as inductive, deductive, abductive and analogous reasoning.
- Researching, compiling data and preparing technical reports, recommendations, correspondence, and presentations.
- Conducting advanced statistical analyses such as correlation and regression analysis, temporal analysis, statistical inference and statistical association.
- Interpreting reports to determine crime trends, patterns, series, and predictions and to draw sound conclusions
- Extracting pertinent information from law enforcement reports and databases, including those that are non-structured, manipulating data sources using crime analysis software, GIS mapping software, law enforcement and intelligence databases, statistical analysis systems, and other applications.
- Applying advanced methods and techniques of fact finding, interview techniques, analysis, and resolution of complex problems to identify trends and patterns in statistical information to problem-solve and generate recommendations and assess and predict the characteristics of criminal groups or criminal operations using data obtained from a variety of sources.
- Performing advanced analytics for units in the department in support of investigative efforts and inform investigators when there are gaps in intelligence in order to drive or refocus the investigation.
- Communicating orally and in writing to exchange and/or present highly technical information to law enforcement personnel.
- The use of advanced information technology tools, e.g., SQL Server Reporting Services, Pen-Link, i2 Analyst Notebook as well as more standardized tools such as MS Word, desktop publishing, Microsoft Excel, Oracle, Crystal Reports.
- Creating specialized reports, spreadsheets, graphs, charts, maps, and tables.
- Leading and training others and advising staff and others outside of the work unit on work related issues.

Ability to:
- Develop and recommend improvements in procedures from data studies and lessons learned.
- Apply logic and sound judgment in assessing and predicting characteristics of criminal groups or criminal operations using data obtained from a variety of sources.
- Make recommendations on investigation unit suppression goals while providing measures or indicators for each goal.
- Learn, operate and then mentor other analysts on emerging technologies/software related to crime and intelligence analysis.

- Establish and maintain effective working relationships with others and act as a primary liaison with regional and national organizations such as MAGLOCLEN, MCAC, HIDTA, the Law Enforcement Information Exchange (LInX), EPIC, etc.
- Train others on the crime/intelligence analysis process and the resources (e.g., crime analysis software, GIS mapping software, law enforcement and intelligence databases, statistical analysis systems, etc.) used to conduct crime analysis and write reports; assign, monitor and review the work of assigned subordinates.

Licenses, Registrations, Certifications, or Special Requirements:
- Preferred: Possession of a certification as a Criminal Intelligence Certified Analyst (CICA) from the International Association of Law Enforcement Intelligence Analysts (IALEIA); and/or
- Preferred: Possession of a certification as a Certified Law Enforcement Analyst (CLEA) from the International Association of Crime Analysts (IACA).

Work Environment:
The work is primarily performed in an office environment and presents no significant hazards to employees. The employee operates personal computers, plotters, and printers, utilizing relational databases, graphics, Geographic Information Systems (GIS), text and statistical analytical software packages, spreadsheets, word processing, and related applications, but does not need to take special measures to safeguard against injury.

Physical Demands:
The work requires ordinary physical effort including: sitting at workstations using microcomputer equipment or reviewing the work of others for extended periods of time, walking, standing, bending, and reaching for or carrying light items associated with working in an office environment.

PROBATIONARY PERIOD:
Individuals appointed or promoted to a bargaining unit position class will be required to serve a probationary period of six (6) months. Individuals appointed to a non-bargaining unit position in this class will be required to serve a probationary period of twelve (12) months, or if promoted to a non-bargaining unit position, will be required to serve a probationary period of six (6) months. Performance will be carefully evaluated during the probationary period. Continuation in this class will be contingent upon successful completion of the probationary period.

BARGAINING STATUS: Positions assigned to this class are normally in the Office, Professional, and Technical (OPT) bargaining unit.

MEDICAL PROTOCOL: Medical History with a Drug/Alcohol Screen.

PROMOTION POTENTIAL:
This is the advanced level of the Crime Analyst series. May be competitively promoted into a vacant Crime Analyst Supervisor position provided that the employee meets the qualifications.

CLASS SPECIFICATION HISTORY:

Class Established: November 2018
Revised Class Code: February 2023