

## Executive Summary

The purpose of this document is to outline the requirements of the LexisNexis Investigative and Law Enforcement solution (the “Solution”) for the Columbus Police Department and provide an analysis of the justification for a sole source contract with LexisNexis.

The Columbus Police Department is responsible for safeguarding the lives and property of citizens across its entire jurisdiction. The Columbus Police Department uses various technology and human resources to reduce the incidence and fear of crime, and works with a multitude of diverse communities to improve quality of life. The Columbus Police Department requires additional tools to support their mission, including:

- Ability to search across Columbus Police Department own law enforcement data, other law enforcement data from other jurisdictions, and public record data all in one search.
- Ability to view results of a combined law enforcement data and public record data visually in a geo spatial map or on a link analysis chart.
- Real-time access to nationwide public records databases
- Data linking and automated analytics integrated across solutions

LexisNexis provides data-driven solutions to government and law enforcement organizations around the world, and offers the only investigative and law enforcement solution that will satisfy the technical and functional requirements of the Columbus Police Department. LexisNexis possesses the breadth of public records information, patented linking technology, and entity resolution technology used to create integrated products such as Accurint for Law Enforcement, eCrash, and Accurint Crime Analysis that preclude other suppliers from providing a comparable solution to the Columbus Police Department.

LexisNexis is uniquely qualified to provide this combination of patented technology, security and privacy compliance, tens of thousands of unique data sources, information on hundreds of millions of individuals, and proprietary products required to create the Solution. **The following document will justify and support selecting LexisNexis as the sole source provider to satisfy the Columbus Police Department’s requirements for the Solution.**

## Scope of Work

It is the mission of the Columbus Police Department to safeguard the lives and property of the people served, to reduce the incidence and fear of crime, and to enhance public safety while working with the diverse communities to improve their quality of life. This mission requires the most complete and up-to-date information possible on the people, businesses, vehicles and places of interest to the Columbus Police Department, delivered quickly and directly to all of their staff when they need it.

Every law enforcement agency, but especially one with time-sensitive missions like the Columbus Police Department, experiences a problem with identity resolution and data updates. Various mission critical information is needed, including the following:

- Ability to search across Columbus Police Department’s own law enforcement data, other law enforcement data from other jurisdictions, and public record data all in one search.
- Ability to view results of a combined law enforcement data and public record data visually in a geo spatial map or on a link analysis chart.

- Real-time access to nationwide public records databases
- Data linking and automated analytics integrated across solutions

### **Real-time Access to Nationwide Public Records Databases**

The Columbus Police Department requires real-time, online access to nationwide information on individuals and businesses of interest to the Columbus Police Department. This solution should provide access to at minimum 10,000 different data sets that are nationwide in scope, reaching beyond state borders and rule-driven systems. The Solution must also include a unique 12-digit identifier, completely separate from any public identifier such as a Driver's License or Social Security Number. This identifier must act as a common thread across all elements of the Solution, including legal research, online research tools (Accurint), Batch and XML. Finally, the solution must provide the Columbus Police Department the ability to perform searches with limited input such as partial name or address only.

Data include in this online solution must include at minimum:

- A real-time phone search including access to as many as 300 million cell, unlisted and unpublished phone numbers
- A virtual identity and email search
- Residence and other personal address information, including multiple concurrent addresses
- Deceased Records, including date of death and county of death
- Motor Vehicle Searches, including registration, lien holders, and make and model information
- Enhanced Person Searches
- A full history of addresses on subjects of interest including beginning and ending dates
- Enhanced Business Searches and Reports, including addresses, ownership, registered agents, and name variations
- Property Search, including buy/sell dates, deeds, assessments, mortgage amounts and lien holders
- Criminal Records Search, including records from various state DOCs, county jails and arrest records

### **Direct Integration of Linked Data with Existing Technology Systems**

The Columbus Police Department needs an automated Web solution that is proven to integrate with mostly all technology systems and can provide the public records data outlined above. The Solution must include comprehensive entity resolution enhancement to uniquely identify each individual with at least 99% accuracy. In addition, the solution must seamlessly link to an online investigative application for additional, deeper research, available via a unique non-public identifier assigned to each unique identity. Finally, to minimize integration costs, the Solution must be proven with existing installations already in production.

### **Data Linking and Automated Analytics Integrated Across Solutions**

The Columbus Police Department requires more than access to thousands of databases – the Solution must also provide resolution of unique entities across these databases, resolved with over 99% accuracy. The Solution must include analytics to identify best addresses, best phones, linked real property, linked criminal records, and links to thousands of other related pieces of disparate data. The Columbus Police Department also requires the ability to complete additional research, in order to verify and complete the investigative process. The Solution must leverage a unique, non-public identifier that Columbus Police Department personnel can use across the Solution and other integrated applications to immediately retrieve additional details on each individual or business.

In addition to the requirements outlined above, key requirements of the Solution include:

- Over 10,000 sources of public and commercially available records informing identity
- Over 65 billion records going back as far as 40 years
- Accurate and up-to-date information on more than 728 million people of interest
- Over 99% accuracy in unique resolution of Individual identities
- Ability to assign a unique, non-public identifier not based on Social Security number, driver's license number or other personally identifiable information that can be used for accessing an existing online solution for additional research
- Compliance with state and federal statues on data security and privacy

### **LexisNexis Overview**

LexisNexis provides information and technology solutions to government and law enforcement organizations around the world, and has developed the only investigative and law enforcement support solution that will satisfy the technical requirements of the Columbus Police Department.

Key facts on LexisNexis relevant to this document include:

- The LexisNexis database contains in excess of 35 billion records and information on over 550 million unique identities drawn from 10,000 disparate sources.
- LexisNexis has patented technology for linking individuals and businesses with 99.8% accuracy.
- LexisNexis data is updated by source with frequencies including real-time, daily, weekly and monthly. Datasets that are received daily are made available to our users within 24 hours
- LexisNexis offers a patented process that combines LexisNexis data content and Data Analytics Supercomputer (DAS) technology to offer the industry's highest hit rate when verifying and updating identity information.
- LexisNexis is the only company able to match disparate files using proprietary logic and advanced, patented supercomputer technology, resulting in extremely high speed data processing with 99.8% accuracy. The LexisNexis ability to link datasets and identify best addresses based on multiple patented algorithms (LexID) is unprecedented and ensures that the Columbus Police Department will always access only the most current data.
- LexisNexis is currently contracted with the Columbus Police Department, and has successfully completed numerous audits and reviews of the security of our technology, platforms, solutions, network and physical locations.

LexisNexis staff contains numerous subject matter experts and solution consultants with vast local, state, and federal experience in data processing, intelligence management, investigations, and field enforcement operations.

### **LexisNexis Data Coverage**

LexisNexis is the largest and fastest growing data repository of public records and commercially available data in the country with information on hundreds of millions of uniquely identified individual and business entities. These entities are scattered throughout the United States, providing information on desirable and rapidly growing emerging markets that include criminals, students, immigrants, visiting foreigners, etc. Therefore, it is very likely these individuals are in the LexisNexis database and even more

likely that they have data on these individuals even when other sources do not. In addition, only LexisNexis has the patented technology to accurately link these entities.

Overall, the LexisNexis data storehouse contains in excess of 65 billion records that map to more than 728 million unique identities drawn from over 10,000 disparate sources. LexisNexis provides information products that allow organizations such as the Columbus Police Department to quickly and easily extract valuable knowledge and actionable information from huge amounts of data. These innovative products are made possible by integrating powerful technology, tens of billions of data records on individuals, and patented data-linking methods.

LexisNexis collects data from many different sources with varying update frequencies including real-time, daily, weekly, and monthly. Update frequencies are dictated by the source. The majority of the LexisNexis data sets update at least monthly, and many are updated daily (e.g., Electronic Directory Assistance (EDA), public utilities, bankruptcies, liens, UCC and corporate filings.) In addition to the daily updates, LexisNexis currently adds more than 1.2 million records daily. Datasets that are received daily are made available to customers within 24 hours.

### **LexisNexis Patented Technology**

LexisNexis is the exclusive provider of the Accurint Virtual Crime Center, Accurint Crime Analysis, & Accurint for Law Enforcement, created by LexisNexis patented technologies required for the Solution, including their entity linking technology (LexID) and entity resolution technology (Data Analytics Supercomputer).

The Columbus Police Department manages information on their citizens and businesses, and these entities are likely duplicated across multiple Columbus Police Department systems. For example, an individual arrested for one crime may have an outstanding warrant in another system. A critical aspect of the Solution is the accurate resolution of each identity, to ensure the information used by the Columbus Police Department is for the correct individual. This entity resolution is managed by the LexisNexis LexID and Data Analytics Supercomputing (DAS) platform which uses LexisNexis' patented Enterprise Control Language (ECL) technology.

### **Patented Linking Technology**

LexisNexis LexID is an advanced proprietary linking and analysis technology that works behind the scenes in LexisNexis' Solution. LexisNexis employs patented algorithms to provide the Columbus Police Department with a single, consolidated view of each of the unique identities contained within their systems.

Data linking is a complex process that involves matching records not just against one measure, but hundreds of data elements in an entity's data makeup, each with their own variances and nuances. The result of this process creates a unique identification number, called a LexID, for each entity, which is then used to pull together information from disparate databases on an individual. LexisNexis LexID will enable the Columbus Police Department to uniquely identify individuals. In addition, the LexID can also be used to quickly search Accurint LE, an online tool that provides comprehensive identity information, and can be used to link information across many LexisNexis products, including Batch and XML solutions.

LexisNexis continuously applies the LexisNexis LexID technology against its internal reference database, composed of tens of thousands of disparate data sources of public records, containing billions of individual data records to resolve and link the identities of hundreds of millions of individual person and business entities in the United States.

### **LexisNexis Data Analytics Supercomputer (DAS) Platform**

The DAS platform is a powerful, patented processing technology that provides unprecedented capabilities for managing up to petabytes of data – billions of individual data records. Using its fast, scalable engines and parallel processing architecture, LexisNexis integrates large volumes of disparate data for effective and reliable analysis. DAS offers the speed and scalability that conventional processing technologies cannot support, thus enabling the Columbus Police Department to employ an architecture optimized uniquely for data correlation and analysis on a massive scale.

Conventional high-performance computing platforms and database technologies cannot handle the variety and volume of data needed to analyze and uncover key connections and relationships as required by the Columbus Police Department. Tasked with ingesting, linking, and analyzing this amount of complex data, conventional technologies are brought to a grinding halt. They are not scalable and they are not fast enough to meet the Columbus Police Department's needs. The patented LexisNexis solution was created with these capabilities from the ground up.

Using the proprietary LexisNexis LexID technology, DAS can easily process the billions of records contained in the massive LexisNexis data repository together with the Columbus Police Department's proprietary data – simultaneously – in a fraction of the time it would take using other systems.

DAS helps government departments and agencies uncover key connections and relationships with unparalleled capacity, linking technology and analysis:

- **Massive Data Capacity** – The Columbus Police Department is projected to process up to millions of transactions annually against over 20,000 disparate sources of data. Only the LexisNexis DAS can ingest and analyze the entirety of this data set and enable a “one to many” search capacity that allows full table scans instead of only analyzing a portion of the data.
- **Powerful Ingest and Refresh** - DAS provides an exclusive Extract, Transform, Load and Link (ETL(L)) feature—a powerful linking capability that links and clusters all associated information around a unique entity.
- **Accuracy** – LexisNexis' patented Enterprise Control Language (ECL) is a flexible, declarative programming language that enables users to express complex queries with less lines of code than other conventional programming languages. Clusters and best-in-class LexID algorithms provide for disambiguation and reduction of false positives, resulting in a 99.8% linking accuracy rate

### **LexisNexis Proposed Solution – Accurint Virtual Crime Center**

LexisNexis offers the only product in the world that connects 10,000 public record sources with agency's law enforcement data using linking technology driven by high performance computing clusters.

The public record data used in Accurint Virtual Crime Center includes:

### **Real-time Access to Nationwide Public Records Databases**

LexisNexis offers Accurint for Law Enforcement (Accurint LE), a real-time online tool with access to nationwide information on individuals and businesses. Accurint LE provides access to over 10,000 different data sets that are nation-wide in scope. Accurint LE also includes the LexisNexis LexID, a unique 12-digit identifier, completely separate from any public identifier such as a Driver's License or Social Security Number. This identifier acts as a common thread across all elements of the Solution, including legal research (Lexis.com), online research tools (Accurint LE) social media monitoring, batch and XML. Leveraging the technology behind the LexID, Accurint LE also provides the ability to perform searches with limited input such as partial name or address only.

Data include in Accurint LE includes all the minimum data sets required by the Columbus Police Department as well as thousands of others, including Real-time Phone Search, Virtual Identity/E-mail Search, Advanced Person Search, Deceased, Criminal Records, Addresses, Business Searches, Property Search, People at Work, Social Media, Person Alerts, Sex Offender Search, Mapping, Bankruptcy Search & Report, Case Deconfliction Reports, Civil Court Search, Concealed Weapon Search, Death Search, Drivers License Search (selected states), Department of Collections Search & Report, FAA Information, Foreclosure Information, Hunting & Fishing Information, Lien & Judgments, Marriage & Divorce Search, Motor Vehicle Search & Report, National UCC/Corporate Filings, Property Deed Search, Relatives & Neighbors Report, FEIN Numbers, Firearms & Explosives Report License Search, Case Connect, LexisNexis Investigators Network (LNIN), and Accurint Mobile (iPad, BlackBerry, iPhone)

### **Data Linking and Automated Analytics Integrated Across Solutions**

All LexisNexis solutions leverage proprietary linking and data analytics at their core – this provides the highest degree of accuracy and speed when searching across over 10,000 different data sources. The LexisNexis solution includes analytics to identify best addresses, best phones, linked real property, linked criminal records, and links to thousands of other related pieces of disparate data.

### **LexisNexis Security and Compliance**

LexisNexis is acutely aware of the need to maintain the highest degree of confidence that any personal or financial information furnished to them is protected against unauthorized use, access or disclosure. LexisNexis systems and processes are designed specifically with these requirements in mind, and they strive to meet or exceed Federal and State privacy and security requirements at every level.

### **CJIS Compliance**

As a leader in the Law Enforcement and Public Safety market, LexisNexis Risk Solutions incorporates the best practices in security and compliance to ensure your agency information is protected and accessible when you need it. This includes employing a risk-management framework for privacy, information, and physical and technical safeguards designed to reasonably protect the privacy and confidentiality of customer information.

As required by the Criminal Justice Information Services (CJIS) Security Policy, LexisNexis Risk Solutions has implemented the required standard of security controls and requirements to ensure continuity of information protection and CJIS compliance. Each control has been carefully reviewed and followed to ensure compliance.

LexisNexis Risk Solutions owns, operates, and maintains two data centers that support the ATACRAIDS solutions. These data centers are located in Boca Raton, Florida, and Alpharetta, Georgia. Both data centers are physically secured with multi-factor biometric access controls and are monitored by personnel 24-7, 365 days. Access to the data centers is restricted to only employees that have a job responsibility requiring access.

LexisNexis Risk Solutions conducts an annual independent third-party **Statement on Standards for Attestation Engagements (SSAE) No. 16, Service Organization Control (SOC) Type 2** to validate and test the information security controls and policies. The SSAE-16 SOC 2 is available to your agency upon request, and with the necessary contract or NDA documents in place.

Employees of LexisNexis Risk Solutions must pass a comprehensive background investigation that includes verification of criminal history, credit check, education, previous employment, E-Verify (I-9), as well as drug screening. In addition, employees that have access to CJIS Information must also be fingerprinted and complete the CJIS certified training and testing. LexisNexis Risk Solutions maintains copies of employee CJIS certifications and can provide to your agency upon request.

### **Staff Background Checks**

To maintain and protect the integrity of the company and our associates, LexisNexis conducts background checks on all employees and temporary workers. LexisNexis focus on staff security puts them far ahead of other, smaller competitors. These checks include the following:

- National Criminal Record File
- Statewide in Lieu of County Criminal (7 yrs Felony including misdemeanor when statewide not available)
- SSN Verification
- Education Verification (per institution) (Highest Degree)
- Employment (7 yrs current and former)
- Federal Criminal Check (7 yrs residential address)
- Global Sanctions
- Motor Vehicle Check (Driving Record)
- Credit
- Drug Testing
- I-9 Verification

In addition, each associate must also execute a confidentiality agreement, and all employees are re-credentialed every two years to ensure associates have not been convicted of any disqualifying criminal offenses.

Employees and temporary employees are required to successfully complete annual online training in the areas of information security, privacy, code of conduct and record retention/deletion. Management is notified if a user did not complete the training by the established deadline date. Audits are performed monthly to ensure employees and temporary employees have taken the training. Topics include password security, privacy, appropriate use, data destruction, social engineering and data protection.

### **System Audits and Reviews**

LexisNexis is currently contracted with key State and Federal agencies, and has successfully completed numerous audits and reviews of the security of their technology, platforms, solutions, network and physical locations. Their policies, practices, and controls provide substantially similar safeguards to those required by IRS Publication 1075, as they may be applicable to LexisNexis. LexisNexis strives to provide industry-leading protection of the confidentiality of the information they receive from their customers.

### **Compliance with State and Federal Security and Privacy Laws**

LexisNexis complies with all public record laws and regulations based upon 26 CFR Section 23, the Gramm-Leach-Bliley Act, Fair Credit Reporting Act, and the Driver's Privacy Protection Act. Our Privacy, Security, Compliance Organization oversees strict company and employee adherence to local, state, and federal laws.

Compliance with these statutes, other federal guidelines, Columbus Police Department rules, State statutes, and other state data privacy and security guidelines is absolutely required for the implementation of the Solution. Given LexisNexis' extensive experience and focus on security and privacy, and our long history in the State, LexisNexis is uniquely qualified in this area.

### **Summary**

The Columbus Police Department is responsible for safeguarding the lives and property of citizens across their jurisdiction. The Columbus Police Department uses various technology and human resources to reduce the incidence and fear of crime, and works with a multitude of diverse communities to improve quality of life. The Columbus Police Department requires additional tools to support their mission, including:

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