

CITY OF HIGH POINT

AGENDA ITEM



Title: Motorola/Intrado Solutions, Inc. - Next Generation 911 Service Solution

From: Steve Lingerfelt, Director of Information
Technology Services

Meeting Date: July 20, 2015

Public Hearing: No

**Advertising Date /
Advertised By:**

Attachments: Motorola/Intrado Solutions, Inc – Executive Summary
Next Generation 911 Service Solution Quote

PURPOSE:

Information Technology Services is recommending the City of High Point purchase a service agreement with Motorola Solutions/Intrado, Inc to support the 911 Center's life critical Next Generation 911 solution.

BACKGROUND:

The City of High Point's citizens expect to receive help from emergency responders, even in cases where the caller cannot convey their location and/or the nature of their problem or hear the instructions of the call-taker due to the caller's age, circumstances, or disability.

The City evaluated other systems and chose one that was best suited to meet the needs of the 911 Center. The North Carolina 911 Board has approved the selection recommended by the City.

BUDGET IMPACT:

The City of High Point will use NC State 911 Funds to purchase the service agreement with Motorola/Intrado Solutions, Inc. 911 funds are provided to the City of High Point by the State of North Carolina 911 Board. The contract price is \$1,173,365.51 with an upfront payment of \$27,441 and a monthly combined recurring charge of \$19,098 payable over a 60 month term. The budgetary impact per year over the course of the service agreement is:

2015-2016-\$256,625 (includes upfront payment of \$27,441)
2016-2017-\$229,184
2017-2018-\$229,184
2018-2019-\$229,184
2019-2020-\$229,184

RECOMMENDATION / ACTION REQUESTED:

The Department of Information Technology Services requests the City Council approve the contract and authorize the appropriate City official to execute all necessary documents.

EXECUTIVE SUMMARY

1.1 OVERVIEW

Motorola Solutions, Inc., (Motorola) appreciates the opportunity to provide this Next Generation 9-1-1 (NextGen9-1-1, NG9-1-1) proposal to the City of High Point, North Carolina. This proposal incorporates the latest 9-1-1 solution provided by our partner Intrado® and the local Motorola support that the City of High Point currently depends on to meet your public safety needs.

9-1-1 services have become a vital part of our nation's emergency response and disaster preparedness system since the Wireless Communications and Public Safety Act of 1999 (commonly referred to as the "9-1-1 Act") took effect. Soon afterwards, the National Emergency Number Association (NENA) identified the need for 9-1-1 services to address the rapidly growing wireless mobile society, and although the existing 9-1-1 system has been operational for more than 30 years; it has reached its technological limit. The current 9-1-1 system was never intended to receive calls and data from these new and emerging technologies. As a result, through cumbersome adaptations, E9-1-1 is being asked to perform functions it was not designed to handle. In short, the nation's 9-1-1 systems are in need of a significant overhaul. New wireless and IP-based communications devices offering text and video messaging services are being developed at a rapid rate and a growing percentage of citizens have given up their landline phones in lieu of their wireless counterparts. A report by the *Wall Street Journal* dated September 5, 2013, based on data provided by the results of a Census Bureau survey released the same day stated in part: "About one-third of U.S. households have ditched landline phones, driven by younger Americans relying on their cell phones."

The introduction of a robust and secure Next Generation 9-1-1 network makes new information, advanced collaboration, and interoperability services available to Public Safety Answering Points (PSAPs) and other public safety entities because it enables the public to transmit text, images, video and data directly to dispatch centers. These capabilities generate an exponential improvement in 9-1-1 service and expand the degree to which new, contextually appropriate information can be automatically provided to a broadened set of users and agencies. The NG9-1-1 infrastructure is intended to replace current 9-1-1 services over time.

An estimated 240 million calls are made to 9-1-1 in the U.S. each year.

According to the FCC, one-third of these calls are received from wireless (mobile) phones; in many communities, it's one-half or more of all 9-1-1 calls.

Source: NENA 9-1-1 Statistics

As of October 2013 several states had completed successful NG9-1-1 implementations. Based on U.S. Census data collected in January 2014, the United States has 6,050 primary and secondary PSAPs and 3,135 counties (includes parishes, independent cities, boroughs, and other areas identified within the census). 73% of the counties in the United States (91.5% of the population) had full Phase II NG9-1-1 capabilities as of January 2014. Percentages for PSAPs, counties, and the overall U.S. Population that currently have some Phase I/Phase II capabilities are shown in Table 1-1.



Table 1-1: Percentages of Entities with Some Phase I/II Capabilities

Phase	PSAP	Counties	Population
Phase I	98.5%	96.0%	98.6%
Phase II	97.6%	94.5%	98.3%

Phase I – Provides call back number, carrier information, tower location.

Phase II – Provides approximate location based on X & Y coordinates in addition to providing Phase I capabilities. (Accuracy requirements vary by technology and are currently under review by the FCC).

As mobile technology advances, more people of all ages and walks of life are becoming reliant upon their cellular devices for texting, multi-media, and data applications. As a result, the City requires a new technology that blends voice, data, and multi-media from a variety of trusted sources. This technology must get the right data to the right user at the right time during an emergency and facilitate data delivery beyond the call-taker to the first responder.

The City of High Point can continue to meet the evolving 9-1-1 service expectations of its citizens and protect the City from technical obsolescence by upgrading to NextGen9-1-1, which will enable your network to expand beyond traditional 9-1-1 services. A NextGen9-1-1 network facilitates new life-saving applications, eliminates single points of failure, and supports new technology access and new data types allowing interoperability between PSAPs.

1.2 THE NEED FOR NEXT GENERATION 9-1-1

During any mission-critical moment, an IP-based, packet-switched NextGen9-1-1 system mitigates many of the limitations of the legacy 9-1-1 system. When enabled with a nationwide IP network for call routing and delivery, PSAPs have the ability to reroute calls to any PSAP on the network regardless of Local Access and Transport Area (LATA) or geopolitical boundaries. For example, should a the City of High Point PSAP be disabled by a tornado, the City will have the ability to call the Intrado Network Operations Center (NOC) and reroute all or a portion of incoming 9-1-1 calls to an unaffected PSAP.

While NextGen9-1-1 provides solutions for disaster recovery, there are also day-to-day applications where an IP-based, packet-switched network helps solve inefficiencies of the current E9-1-1 system. For instance, should one of the City of High Point's neighboring PSAPs not serviced by the same tandem servicing the City of High Point receive a misrouted wireless call of an overturned vehicle on a stretch of highway inside the City of High Point, the only way to transfer the call would be on a ten-digit administrative line and not on a native 9-1-1 trunk. Advanced 9-1-1 (A9-1-1SM) solves this problem by allowing transfer of 9-1-1 calls to the correct PSAP on a native 9-1-1 line.

The proposed A9-1-1 services will support the City of High Point's strategic direction to implement Next Gen9-1-1 services. This proposal includes a fully-managed Next Generation solution offering A9-1-1 services with A9-1-1 Location Data Management, A9-1-1 Routing provided by the Intrado[®] Emergency Services IP Network (ESInet), and optional TXT29-1-1 services. In addition to consumer expectations, support of these technologies introduces changes in how calls need to be delivered and possibly managed at the PSAP. The PSAP must be running at optimal efficiency.

The legacy E9-1-1 network has traditionally left much of the changes in the system outside the control of the PSAP, whether it is the need to reroute 9-1-1 calls in the case of a "bugout" or the ability to run reports on demand. The proposed A9-1-1 Routing solution will enable the City of High Point to have greater control of your system and operations.



The Intrado ESInet is designed to work with existing legacy equipment through NENA i3 functions, such as the Legacy Network Gateway (LNG) and the Legacy PSAP Gateway (LPG). These NENA i3 defined functions are integrated, operated, and maintained to the public safety class standards required of a life-critical application. ESInet lays a foundation for the development and implementation of innovative applications and services that will advance the capabilities of public safety communications and eliminate many of the challenges.

Keeping the current PSAP environment in mind, the Next Generation 911 Service is integrated, operated, and maintained to the public safety class standards demanded of a life-critical application.

Through implementation of our proposed solution, the City of High Point will be able to meet the NG9-1-1 expectations of your citizens while balancing operational efficiency at the PSAP.

1.3 THE MOTOROLA SOLUTIONS AND INTRADO PARTNERSHIP

For more than 80 years Motorola has provided solutions to meet the challenges faced by our Public Safety customers. To date, Motorola has implemented Radio Systems, 9-1-1, CAD, and Mobile Records management systems in hundreds of agencies throughout the United States, supporting multi-discipline, multi-agency organizations with populations ranging up to the millions.

Motorola has the demonstrated experience, stability, and qualifications to provide the City of High Point a powerful, intuitive solution that will easily grow and adapt to the City's future needs.

Motorola is proud to partner with Intrado, the industry leader in Next Generation 9-1-1. Intrado has been at the forefront of pioneering 9-1-1 technology solutions that enable improved performance, reliability and capabilities of communications systems and response. Today Intrado provides the core of the nation's 9-1-1 infrastructure and supports the delivery of over 240 million calls to 9-1-1 centers every year.

With Motorola Solutions and Intrado, the City of High Point will have:

- **Peace of Mind:** That comes with partnering with a trusted and experienced 9-1-1 technology partner to fully manage your transition to Next Generation 9-1-1.
- **Full Budgetary Predictability:** By managing all aspects of your Next Generation 911 transition from planning to implementation, training, and deployment, Motorola Solutions and Intrado offer you one competitive price with no hidden costs or surprises.
- **Support and Confidence:** A long-term partner that will work with you to manage your transition to Next Generation 9-1-1 and industry standards compliance today and tomorrow.
- **Control:** the solution offers unprecedented choice, leaving you in full control over your operations, providing the flexibility to change standard operational procedures as needed, and the ability to maximize your staffing resources.
- **Resources:** to manage your Next Generation 911 transition needs, so you can focus on saving lives while Motorola and Intrado deliver your next generation technology.
- **Continuity of Service:** System Support and Monitoring services including local support provided by Motorola's local authorized service provider, Wireless Communications.



PRICING

6.1 PRICING SUMMARY

High Point One Time setup fee

Configuration Setup and Project Management	\$ 27,440.93
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High Point Recurring Payment

Based on current wirelined telephone numbers	\$ 19,098.74
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Total Customer Sale Price \$1,173,365 for 60 Months for 2 PSAPS

The Contract Price in U.S. dollars is \$1,173,365.51 which will be payable over a 60 month term with an upfront payment of \$27,441 and a monthly combined recurring charge of \$19,098.74 for ALI Management service and Voice and Routing service and Text 2 911. The monthly recurring charge of \$19,098.74 is based on a quantity of 55,000 wireline telephone numbers (TN's). Should the quantity of wireline TN's exceed 55,000, the monthly charge will be recalculated at a rate of \$.20 per TN.

During implementation, the monthly recurring charges will be invoiced in three phases. Phase one will begin upon activation of the ALI Management service; the associated monthly recurring charge is \$ 8,629.57. Phase two will begin upon activation of Voice and Geo Spatial Routing services; the associated monthly recurring charge will increase to \$18,762.91. Phase three will begin in year 2 after activation of texting service; the associated monthly recurring charge will increase to \$19,098.74. The 60 month terms will commence once all services are live. ALI Management and Voice services may be active for one or more months prior to all services going live. A change order will be used to amend the Contract Price to include any additional months of ALI Management service.

Must be signed by 08/01/2015 or additional monthly charges of \$1,375 will apply for backup PSAP

TEXT 2 911 PRICING BREAK OUT SUMMARY (INCLUDED ABOVE)

High Point Monthly Recurring Payment over 60 Months

Text 2 911	\$ 335.83
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