

City of Fayetteville Staff Review Form

2021-0325

Legistar File ID

5/18/2021

City Council Meeting Date - Agenda Item Only
N/A for Non-Agenda Item

Mike Reynolds

4/27/2021

CENTRAL DISPATCH (260)

Submitted By

Submitted Date

Division / Department

Action Recommendation:

Staff recommends a resolution to approve a memorandum of understanding with Washington County, Arkansas and City of Springdale, Arkansas to improve public safety radio communications.

Budget Impact:

_____ Account Number		_____ Fund	
_____ Project Number		_____ Project Title	
Budgeted Item?	NA	Current Budget	\$ -
	_____	Funds Obligated	\$ -
		Current Balance	\$ -
Does item have a cost?	NA	Item Cost	
	_____	Budget Adjustment	
Budget Adjustment Attached?	NA	Remaining Budget	\$ -

Purchase Order Number: _____

Previous Ordinance or Resolution # V20180321

Change Order Number: _____

Approval Date: _____

Original Contract Number: _____

Comments:



MEETING OF MAY 18, 2021

TO: Mayor and City Council *Mike Reynolds*
FROM: Mike Reynolds, Chief of Police
DATE: April 27, 2021
SUBJECT: Resolution to Approve a MOU for the Washington County Radio System

RECOMMENDATION:

Staff recommends a resolution to approve a memorandum of understanding with Washington County, Arkansas and City of Springdale, Arkansas to improve public safety radio communications.

BACKGROUND:

In 2020, voters approved a .25% sales tax for a new public safety communication system for Washington County, Arkansas. The City of Springdale also implemented a new communications system on the Arkansas Wireless Information Network (AWIN). The City of Fayetteville has been operational on the AWIN system since 2011. As the design of the Washington County system moved forward, it was an opportune time to see how the three systems could work together to enhance system connectivity, redundancy and interoperability.

DISCUSSION:

In order to support the mission-critical communication needs of each locality's individual and collective public safety and public service personnel, we were able to improve certain radio communication frameworks. Improvements such as enhanced system connectivity, geographic redundancy of system control equipment, direct inter-agency interoperability, and greater radio frequency (RF) coverage will be realized by taking advantage of an opportunity to pool resources and needs. Collectively, this will benefit all parties and agree this opportunity is best realized through joint action. This agreement will tie the three radio systems together into one county-wide simulcast system, which involves sharing of equipment. The proposed system would be the first of its kind in the state. The Washington County system is projected to be completed in 2023.

Enhancements for the City of Fayetteville:

- Geo-redundant prime sites. If our main tower site was destroyed, then we could automatically switch to the Springdale prime site.
- Site-trunking. We would no longer be limited to the Fayetteville coverage area.
- Additional hops for microwave redundancy will be added.
- New technology such as Edge Availability. This provides maximum level of trunking services if the sites become detached from the controllers.

- Reprogramming of City of Fayetteville Public Safety radios to add Northwest Arkansas regional talkgroups and add new upgrades for more efficient channel use.

Springdale City Council will be meeting on May 11, 2021. A signed document by all parties will be forwarded once it is received.

BUDGET/STAFF IMPACT:

There is no cost to the City of Fayetteville at this time. As the system grows, there will be future costs as needed to increase capacity. This is not an issue at this time. It is understood the grade of service system design criteria is 1.2% or better per safety system standards. Public Safety grade of service is 2% or lower with lower being better.

Attachments:

Memorandum of Understanding

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding is entered into on behalf of the City of Fayetteville, Arkansas, the City of Springdale, Arkansas and the County of Washington, Arkansas. All parties acknowledge that this MOU is executed for good and valuable consideration.

Introduction:

In order to support the mission-critical communication needs of each localities individual and collective public safety and public service personnel, the parties to this agreement have or desire to improve certain radio communication frameworks. Improvements such as enhanced system connectivity, geographic redundancy of system control equipment, direct inter-agency interoperability, and greater RF coverage will be realized by taking advantage of an opportunity to pool resources and needs, which will collectively benefit all parties, and agree this opportunity is best realized through joint action.

Purpose:

The purpose of this Memorandum of Understanding is to establish an understanding and agreement among the parties related to ownership and responsibilities for a unified and shared infrastructure of the Arkansas Wireless Information Network (AWIN) operating in and near Washington County, Arkansas. This agreement provides for a working relationship among parties, which benefits the public-safety and public service officials servicing the citizens of the region. The parties to the agreement expect over time, the particular components of the System may change as operational and capacities needs change.

Understanding:

It is understood that the City of Fayetteville and the City of Springdale both operate P25 trunked simulcast radio systems with associated control equipment known as a Simulcast Prime Site, both operating in conjunction with the SmartZone Controllers that are located in Little Rock, Arkansas at DIS and at the Arkansas Department of Emergency Management (ADEM). These AWIN SmartZone Controllers and the associated equipment are vital for two-way radio communications among various entities around the State, and are a critical link in the City's and County's two-way AWIN radio communications. It is understood that Washington County is replacing and upgrading its proprietary public safety radio system with a P25 trunked simulcast radio system also in conjunction with AWIN. If implemented alone, Washington County, Fayetteville, and Springdale would each operate separate trunked simulcast systems each with its own dedicated Simulcast Prime Site. Upgrading and integrating the existing Fayetteville and Springdale Simulcast Prime Sites, and adding additional Washington County simulcast tower sites, provides for geographic system control redundancy that is not currently

present, improves inter-agency interoperability, enhances system coverage, and increases system reliability.

Agreement:

In exchange for the mutual considerations received and given by the County of Washington, Arkansas, City of Fayetteville Arkansas and City of Springdale Arkansas, all parties agree to the following:

1. The City of Fayetteville agrees to allow Washington County and the City of Springdale reasonable use of its Prime Site and associated equipment necessary for transmitting and receiving voice and data communication as part of the City's communication system operations.
2. The City of Springdale agrees to allow Washington County and the City of Fayetteville reasonable use of its Prime Site and associated equipment necessary for transmitting and receiving voice and data communication as part of the City's communication system operations.
3. At the expense of Washington County, additional tower sites will be added for the improved coverage of the system that will be integrated and interoperable with the City of Fayetteville and City of Springdale simulcast sites and controllers. These sites will be operational as part of the AWIN system. This includes adding additional microwave hops to Springdale and providing MPLS backhaul routers to the sites providing for an alternate connection path for all entities in the county to the AWIN Smartzone Controllers.
4. The upgraded system will provide public safety grade capacity for the Police, Fire, EMS, and Emergency Management/users of Washington County, Fayetteville, and Springdale with the ability for additional capacity to be added. The Public Safety grade capacity industry standard is a Grade of Service (GOS) of 2%, or less. The capacity design goal for the upgraded county-wide system is 1.2%, or less. If project funding allows, Washington County will purchase a seventh county-wide simulcast channel to expand upon the six-channel capacity of the Springdale simulcast system going from 10 TDMA talk paths to 12 TDMA talk paths. This 12 TDMA county-wide talk path capacity design exceeds the Public Safety Grade of Service (GOS) standard design criteria for all Washington County, Fayetteville, and Springdale user agencies. The addition of the seventh channel hardware also provides for the future expansion of up to five additional channels by way of line cards that insert into the new seventh channel hardware assemblies requiring no additional rack space or antenna system changes at any simulcast site.
5. At the expense of Washington County, Motorola will provide Edge Availability which provides site-to-site communications, roaming, and wireline dispatch by grouping together local sites. This feature maintains the maximum level of trunking services, coverage, and access to talkgroups, even if sites should become detached from the Controllers.

6. At the expense of Washington County, Motorola will integrate the City of Fayetteville and City of Springdale Prime sites to make them geographically redundant Prime sites, providing additional layers of redundancy to the systems.
7. At the expense of Washington County, Motorola will upgrade the Fayetteville APX subscribers to TDMA (Time Division Multiple Access) and reprogram all police and fire radios with new fleetmaps.
8. If needed by Washington County for the county-wide simulcast system the City of Fayetteville agrees that Washington County can use its excess GTR repeater equipment for use at the County's Lincoln Lake ASR tower site or at other Washington County simulcast tower sites. Washington County understands this GTR repeater equipment is owned by the City of Fayetteville. Furthermore, if in the future there is a need for additional like equipment on the system, the County acknowledges that this GTR repeater equipment is Fayetteville's contribution.
9. All parties agree that each entity is responsible for their own tower site locations and any related expenses such as lease expense and maintenance costs.
10. Each City agrees to allow Washington County access to their existing simulcast system frequencies to allow for the configuration of the county-wide simulcast system. Washington County will be responsible for all costs associated with any FCC licensing fees incurred to utilize these frequencies for the county-wide simulcast system.

11. The tower sites identified here;

Washington County:

- 1) Hazel Valley
- 2) Winslow
- 3) Hale Mountain
- 4) Lincoln Lake

Fayetteville:

- 1) Sequoyah Water Tank (Simulcast Prime Site)
- 2) Dinsmore Trail
- 3) Fulbright

Springdale:

- 1) Dodd Water Tank (Simulcast Prime Site)
- 2) Children's Hospital;

are considered to be a critical part of the AWIN system and serve various public-safety entities and first responders from multiple agencies to advance the Federal, State and City's goals of interoperable communications. During the term of this agreement, all entities agree to allow the identified tower sites to remain part of AWIN system and, except as is provided in this agreement, shall not take action restricting the use of, access to, or limiting the capabilities necessary to maintain interoperable communications utilizing the tower sites. Nothing in this agreement shall preclude the entity from making additions to or allowing non-AWIN-related equipment at the identified tower sites, if proper propagation, interference

analysis, and tower-loading studies are conducted and no significant adverse impact results to AWIN operations. If the entity proposes additional non-AWIN related equipment or users, the entity agrees to provide copies of the aforementioned studies and user information to AWIN system managers, prior to the final approval of any equipment placement, for input and proper record keeping purposes

- a. Reasonable efforts to adhere to R-56 grounding standards should be made when adding or modifying any equipment in the sites.
 - b. Expansions or changes to the system will require coordination with the other entities involved and all parties agree to submit plans for review and approval to one another and the State for final approval prior to procurement.
12. All entities agree that all parties involved will develop radio programming consistent with operational requirements, taking into consideration the loading characteristics of the AWIN network. Further, agree to utilize the existing interoperability radio programming guidelines established by AWIN and the fleetmap design for NWA Regional talkgroups.
13. All entities will be individually responsible for maintaining adequate insurance on equipment and infrastructure owned by their respective jurisdictions.

Maintenance:

1. Each entity is responsible for their own tower site maintenance and lease expenses.
2. Ensuring the generators and all equipment connected to the generators necessary for generator operations are properly maintained and insured. Maintenance is handled in a timely manner.
3. Weed control, site mowing, road maintenance, fencing and signage at the City and County controlled tower sites. No site will be identified as an AWIN site for security purposes.
4. Controlling access to the tower sites and allowing employees, contractors, and subcontractors of the State access to the tower sites (including any buildings and equipment located thereon) as long as this agreement is in place.

Oversight:

Each locality subject to this agreement shall appoint two representatives to a committee for working collaboratively on trunked radio system issues and needs. These members will also work towards a goal of a regional communications plan for the NWA Metropolitan area. Ideally, these individuals are familiar with radio system management

and are in a position to convey information about any needs in the system moving forward to their respective City and County leadership. Any future expansion or enhancements recommendations will need to be brought forward through each entity's approval and budget processes.

Right to Cancel or Amend

The Parties recognize the importance of public-safety communications and that disruptions may create life-threatening situations. Neither party may unilaterally cancel the agreement contained herein during the term of this agreement. This agreement shall continue until either party gives the other party twenty-four (24) months advance written notice of an intention to cancel this agreement, which may be based on, but not limited to, the absence of funding necessary to perform the obligations of the party giving such notice. This agreement may be amended at any time upon mutual written agreement of the parties.

Conflict with Law

Any conflict between this agreement and laws subsequently established shall result in the conflicting provisions of this agreement being superceded by such law. In such event, any party whose rights or obligations are adversely affected by such subsequent law shall have the right to issue to the other party a notice of termination of the affected party's obligations under this agreement effective on the effective date of such subsequent law.

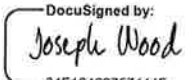
Entire Agreement


Neither party to this agreement is the agent of the other for the purposes of this agreement. No employee or contractor of one party shall become the employee or agent of the other party by participating in the joint communication activities of this agreement.

This Memorandum of Understanding contains the entire agreement of all parties, and all prior communications, oral or written, are without any force and effect, as it is the specific intent of the parties that this agreement alone sets forth the terms on which the parties have mutually agreed. Each party specifically agrees that it enters into this agreement based on its own understanding of the terms hereof and does not rely, in whole or in part, on any interpretation or representation of the other party. Each party agrees that this agreement is the result of good faith, arms-length negotiations.

On this _____ day of _____ 2021.

Washington County

By:  _____
34F19462757444F
Judge

By:  _____
ABF7527C0FBB45C...
County Attorney

City of Springdale

By: _____
Mayor

Attest:

By: _____
City Clerk

City of Fayetteville

By: _____
Mayor

Attest:

By: _____
City Clerk