



Regional Wireless Cooperative  
 Board of Directors  
 Agenda  
 May 25, 2017  
 10:00 a.m. – 11:30 a.m.

	ITEM	PRESENTER
1)	<b>Call to Order, Roll Call, Opening Comments</b>	Chair Hartig Scottsdale
2)	<b>Call to the Public</b> A member of the public may request to address the Board by submitting a blue card that is available at the entry of the room. Speakers will be considered at the sole discretion of the Board Chairman, and will be allotted no more than three (3) minutes to speak.	Chair Hartig Scottsdale
3)	<b>Approval of RWC Board Meeting Minutes from March 23, 2017 Meeting</b> <b>This item is for information, discussion and action.</b>	Chair Hartig Scottsdale  Est. 2 min.
4)	<b>Approval of Election of Board Chair and Vice Chair Procedure</b> The purpose of this item is to request Board approval of the Election of Board Chair and Vice Chair Procedure. <b>This item is for information, discussion and action.</b>	Chair Hartig Scottsdale  David Felix – RWC Executive Director  Est. 5 min.
5)	<b>2017 Fort McDowell Yavapai Nation Grant Application</b> The purpose of this item is for the RWC to seek approval to receive and disperse funds from the 2017 Fort McDowell Yavapai Nation Grant application. <b>This item is for information, discussion and action.</b>	Mr. David Felix – RWC Executive Director  Est. 5 min



Regional Wireless Cooperative

Board of Directors

Agenda

May 25, 2017

10:00 a.m. – 11:30 a.m.

6)	<p><b>RWC Secure Website</b> Discuss the developing RWC Secure Website. <b>This item is for information, discussion and action.</b></p>	<p>Dave Clarke – RWC Administrative Aide</p> <p>Est. 5 min.</p>
7)	<p><b>Long Term Microwave Maintenance and Upgrades</b> Discuss the long term microwave maintenance and upgrades. <b>This item is for information only.</b></p>	<p>Mr. David Felix – RWC Executive Director</p> <p>Est. 5 min</p>
8)	<p><b>FirstNet Update</b> Latest developments of the First Responder Network Authority (FirstNet). <b>This item is for information only.</b></p>	<p>Dave Faulkner</p> <p>Est. 10 min.</p>
9)	<p><b>Executive Director's Report</b></p> <ul style="list-style-type: none"><li>A. Project Updates:<ul style="list-style-type: none"><li>1. Paradise Valley</li><li>2. Pyramid Peak Site</li></ul></li><li>B. Accountant Outreach and Updated Reporting Processes</li><li>C. UASI Grant Update</li></ul> <p>The purpose of this item is to update the Board. <b>This item is for information and discussion.</b></p>	<p>Mr. David Felix – RWC Executive Director</p> <p>Est. 10 min.</p>
10)	<p><b>Announcements &amp; Future Agenda Items</b> The purpose of this item is to communicate any Board announcements or future agenda items. The next meeting is on July 27, 2017 from 10:00 – 11:30. <b>This item is for information only.</b></p>	<p>Chair Hartig Scottsdale</p>



Regional Wireless Cooperative

Board of Directors

Agenda

May 25, 2017

10:00 a.m. – 11:30 a.m.

11)	<b>Adjourn</b>	Chair Hartig Scottsdale
-----	----------------	----------------------------



**Regional Wireless Cooperative  
Board of Directors  
MINUTES  
May 25, 2017**

City of Phoenix  
200 W. Washington Street, 7<sup>th</sup> Floor  
Phoenix, Arizona 85003

Board Members Present			Board Members Absent
Kevin Artz**	Shauna Henrie*		Brad Miller
Bob Costello**	John Imig		Terry McDonald
Rick St. John**	Robert Sweeney*		Wayne Clement
Paul Luizzi**	Mike Thompson**		Tim Van Scoter
James Hughes* **	Mike Frazier		Troy Maloney
Brent Ackzen**	Hans Silberschlag*		
Brad Hartig	Bob Hansen		
Mark Nichols*			
*Board Alternate	** Telephone Participant	^Non-Voting Alternate	

**Staff and Public Present**

Jesse Cooper	Brian Mahoil		
John Sater	Dave Faulkner		
Ron Parks	David Felix		
Jeremy Knoll	David Clarke		
Dave Collett	Jeanine Besnier		
Tom Grebner			
Jimmy Trivedi			
Cy Otsuka			
Tim Ulery			

**1. Call to Order, Roll Call and Opening Comments**

Chair Brad Hartig called the meeting to order at 10:01 AM.

**2. Call to the Public – None**

**3. Approval of RWC Board Meeting Minutes from March 23, 2017.**

A **MOTION** was made by Bob Hansen and **SECONDED** by John Imig to approve the RWC Board meeting minutes from March 23, 2017. **MOTION CARRIED UNANIMOUSLY (15-0).**

#### **4. Approval of Election of Board Chair and Vice Chair Procedure**

Chair Hartig thanked everyone for his time serving the RWC, first as Vice Chair, then as Chair. He will continue to be involved with the RWC.

Executive Director David Felix reminded the Board about the RWC policies referencing the nomination of the Chair and Vice Chair positions. He told the Board that the committee formed during the March Board meeting to solicit interest in serving as Chair and Vice Chair produced three names: Danny Johnson to continue as Vice Chair; John Imig as Chair or Vice Chair; and Milton Dohoney as Chair or Vice Chair. Milton Dohoney excused himself from the nomination before the Board meeting.

A **MOTION** was made by Bob Hansen and **SECONDED** by Rob Sweeney to nominate John Imig as the RWC Board Chair and to keep Danny Johnson as the RWC Board Vice Chair. **MOTION CARRIED UNANIMOUSLY (15-0).**

#### **5. 2017 Fort McDowell Yavapai Nation Grant Application**

Mr. Felix said that RWC staff applied for the Fort McDowell Yavapai grant asking for the same jamming mitigation equipment asked for in the UASI grant (which the RWC was not rewarded): real time portable spectrum analyzers, a year of cellular air card data service, and a year of spectrum monitoring fees. The difference was the number of devices asked for was reduced to three from five, and the amount asked for was reduced from \$200,000 to \$134,000. This one-year subscription period would be an evaluation period to see how the devices work. If the results are favorable, the program can be expanded.

Mr. Felix explained to the Board that the deadline to submit the grant application was May 1, between Board meetings. RWC staff did not have the opportunity to seek approval from the Board before applying for the grant.

Chair Hartig asked that if by reducing the number of devices will the total area serviced be reduced. Jessie Cooper, City of Phoenix Police, said that three sites would be monitored but at this time those sites have yet to be determined.

A **MOTION** was made by Rob Sweeney and **SECONDED** by John Imig to recommend approval of the 2017 Fort McDowell Yavapai Nation Grant Application and the authority to administer the funds, if awarded. **MOTION CARRIED UNANIMOUSLY (15-0).**

#### **6. RWC Secure Website**

Dave Clarke, RWC Administrative Aide, said that the Operations Working Group has been asking for a secure, online area for document storage and sharing, as well as an area to schedule interoperability talk groups, for a number of years. The City of Phoenix ITS now has the technical capacity needed to provide the secured document sharing area only (PH I of the secured website project.) The

scheduling application portion (Phase II of the secure website project) will have to be done through a third party. Mr. Clarke is currently evaluating several potential recommendations for companies with the help of the City of Phoenix ITS. The secured document portion can be provided to the RWC by Phoenix ITS at no cost but the interoperability talk-group scheduling portion will cost between \$3,600 - \$12,000 per year, depending on which online scheduling resources used. Approximately 50 members have access to this resource. He wanted to let members know that this is not a request for additional money to be added to the budget. Instead, funds will be reallocated to pay for this service. This reallocation will start in the next 2017/18 fiscal year. The secured document area is already online and members are currently using it.

Chair Hartig commented that the issue of a secured website has been one that has been going on for a while and he would like to see a solution. Mr. Clarke said that the current interoperability talk-group scheduling method is Google Calendar, and anyone in the cooperative can add themselves to this calendar. This has led to scheduling interoperability events out of policy, perhaps because some do not fully understand the restrictions and permissions that go along with the policy for interoperability resources. This new system will help to prevent misuse of these resources.

Mr. Felix said that Mr. Clarke has already started to populate the document sharing portion of the website by posting activities and schedules of the various RWC workgroups. It has been tested and has proven to be valuable. Mr. Felix stressed that the need for the scheduler is critical as a normal Google calendar can be unknowingly overscheduled. A new interoperability scheduling method will prevent that from happening.

A **MOTION** was made by John Imig and **SECONDED** by Bob Hansen approval to seek the funding for Phase II of the RWC Secured Website project. **MOTION CARRIED UNANIMOUSLY (15-0).**

## 7. **Long Term Microwave Maintenance and Upgrades**

Chair Hartig explained to the Board how the City of Scottsdale's Water Department came to the City of Scottsdale's IT Department requesting use of the microwave network for their operations. Scottsdale IT explored letting the Water Department use some of its existing bandwidth to reduce cost and to avoid additional microwave dishes, however, the technology that Scottsdale Water needs to implement is based on next generation technology.

The RWC is required to change to this next generation technology by 2022. The City of Phoenix is already in the process of replacing the City's and the RWC's entire microwave network and this project is being entirely funded by the City of Phoenix. Members are responsible for their physical property but the technology itself is a component of the RWC. This is something that isn't currently in any sort of life cycle cost.

Chair Hartig continued by posing this question: The City of Phoenix was able to have a Capital Improvement Project (to upgrade all of the microwaves), but the RWC as a cooperative is the number one user of the system. What happens if the City of Phoenix, years from now when there are needed upgrades, can't fund these upgrades? It is better to have a sinking fund for future issues now instead of tackling an even larger issue in the future.

Rob Sweeney stated that he was here when the RWC was PRWN. The City of Phoenix had already deployed and leveraged the use of a microwave network for a number of technologies within the city. So when it came time to look at replacement of its conventional radio system into the trunk system, the City looked at how it could leverage other existing equipment, long before there was a cooperative or a conversation about any sense of governance. So the entire network that was initially built was built given the fact that an existing microwave network had already been in place. The City of Phoenix has many systems that leverage the network. But the RWC is the number one user. While the City of Phoenix is not asking for money in return, it does deserve a conversation so that there are no surprises when the next upgrade needs to happen and the City of Phoenix isn't in a position to be able to fund it or should have fund it completely.

Chair Hartig said that there needs to be a way to determine how much various departments within a city use a network so as to have them pay for their use of the microwave network. This is to the RWC doesn't solely bare the cost.

Rob Sweeney says that the maintenance and usage of the network, at least from the City of Phoenix's infrastructure, is allocated to all user sets. And portions are coming back to the RWC as O & M costs from the City of Phoenix. But it needs to be looked at from a Capital Replacement cycle. At the time the RWC was established, and the rates and charges were coming from the City, it did contain an O & M component for the microwave network.

Both Chair Hartig and Mr. Felix agreed that Board members should meet this fall to further discuss this issue.

## **8. FirstNet Update**

David Faulkner, from FirstNet, explained that FirstNet is a nationwide broadband network for public safety organizations that was created after the events of 911. The goal of FirstNet is to not take the place of radios. Rather, it is to allow the user to listen and to talk to radio talk channels and talk-groups on their phones. It will be possible to talk to multiple people at once on these talk-groups.

Mr. Faulkner told the Board that FirstNet partnered with AT&T in late March. AT&T provides \$180 Billion in existing infrastructure so there will be no need to wait for a greenfield (investment) type of build-out. Public safety users will have access to AT&T's Spectra network with preemption, which gives the public safety community the first right (priority) access. The contract with AT&T is a 25-year contract and AT&T is bringing \$40 Billion over the course of the 25 years to build

out the network and to continually improve security. There will be build out of rural coverage over the next five years. FirstNet is providing 20 MHz of the 700 MHz Spectrum, along with \$6.5 Billion that goes into the contract with AT&T. Once (if) the state ops in, AT&T will provide FirstNet its entire network to public safety. The law requires that FirstNet produces a state plan and provides it to a single point of contact in every state and territory. Arizona's contact is Lt. Colonel Chum at the Department of Public Safety. There is a committee that is forming that will review the state plan.

The governor makes the ultimate decision whether the state ops in or out of the FirstNet program. This process starts mid to late June, 2017. FirstNet will present a plan to the governor. If the plan is accepted, FirstNet will come and build it out at no risk for the state. The state isn't responsible for the operating or capital expenses, nor the spectrum leases – all the things that go along with building out a network. If the Governor opts out, the Governor is saying that the state will build its own radio access network. The state is then responsible for working with the FCC and NTIA to make sure the network will be sustainable and interoperable with a nationwide network for the life of the project. This means that over the 25 years there will be equipment and software upgrades and other related things that the state will be responsible for maintaining and keeping in pace with the national network. Other things the state will have to be responsible for are deplorable assets, as well as the call centers and software support. If the Governor can say nothing, it is an implied opt-in and FirstNet will come in and build the network. Politically, in some states, there's an aversion to anything Federal. This allows the Governor to opt in without having to say anything. The FirstNet core network will exist nationwide, no matter if a state has opted-in or not. This is mandated by law.

Brian Maholic, AT&T, Principal Consultant with the State of Arizona, spoke next. He is working with David Faulkner to expand the AT&T network. The initial FirstNet offer is to take advantage of all the AT&T infrastructure that is available today. 20 MHz is reserved for public safety use only; this is only a fraction of what AT&T has in terms of net spectrum. AT&T's commitment is to offer its entire network to first responders. With this comes immediate access. There will be no waiting for band class 14 to be built out. It will build it out and with the input of Arizona directly. The handsets and all the assets that can connect to that network today can carry over to FirstNet. In addition to the LTD towers that are the in-building systems – the hospitals, the PSAPS, the stadiums, sports facilities, airports, etc. - those all offer preemption to first responders as well. The Wi-Fi access points to first responders are provided per their sims subscription. They will have access without the need for authentication. This is just the beginning. At this point AT&T and FirstNet are determining where the need is the greatest in the state. This information will also go into the state plan. There are additional capabilities that come with it including applications and dedicated support for first responders, which will include dedicated support and sales staff. If a LTD site can't physically be placed where it is needed, like the Grand Canyon, for example, FirstNet, as part of the contract, has deployable assets. There is a time commitment for those assets to be in the place where they need



to be. Assets will be strategically placed to be available when and where they are needed the most. There is a total of 72 nationwide, some of which will be placed in Arizona. There are additional Mission Continuity Assets that are available, in addition to what AT&T already has and maintains. AT&T has capacity adding sites and core infrastructure sites that can be mobilized around the US, which are separate and available to FirstNet. As part of this offer, AT&T will be giving the (RWC?) over 100 MHz of dedicated spectrum.

Mr. Felix asked that the term “aggressive pricing” be explained.

Mr. Maholic answered. There will be direct detail in the state plan on the pricing. As far as “aggressive pricing,” the market price is already set so FirstNet is sensitive to this. This isn’t something that can be more expensive to what is being paid right now.

Mike Worrell, retired from City of Phoenix Fire Department, told the Board his story. He spent his whole adult life as a Police Officer. He said that this makes fire and law enforcement so much safer.

Chair Hartig asked that if the state does opt in, does that make it a requirement that all first responders will subscribe to that service? Mr. Faulkner said no. Every agency could choose to adopt it or not. There is no requirement that every agency must opt-in.

## **9. Executive Director’s Report**

### A. Project Updates:

1. Paradise Valley – Approximately one year from completion.
2. Pyramid Peak Site – The Board was updated on the status of this site.

B. Accountant Outreach and Updated Reporting Processes – Almira Santos has been compiling billing contacts and more to streamline RWC accounting.

C. UASI Grant Update – The RWC did not receive the UASI grant.

## **10. Announcements & Future Agenda Items**

The next RWC Board meeting will be on July 27, 2017.

## **11. Adjournment**

Chair Hartig adjourned the meeting at 11:10 a.m.

A **MOTION** was made by Bob Hansen and **SECONDED** by Mike Frazier to adjourn the May 25, 2017 Board Meeting. **MOTION CARRIED UNANIMOUSLY (15-0).**

Respectfully submitted,

Jeanine Besnier, Management Assistant I



## BOARD OF DIRECTORS REPORT

TO:	Regional Wireless Cooperative (RWC) Board Members	Agenda Date:	May 25, 2017
FROM:	David Felix, RWC Executive Director		Item 4
SUBJECT:	<b>Election of a New Board Chair and Vice-Chair</b>		

### BACKGROUND

In accordance with the RWC Governance, Section 3.2.1.2.1, Chair and Vice-Chair, “The Board of Directors shall elect one of its Members as the Chair.” This Section further states that, “The Chair shall serve a two-year term. No Member shall serve two consecutive terms as Chair.”

### THE ISSUE

Chair Hartig is completing his two-year term as RWC Board Chair which requires the Board of Directors (Board) to elect a new Chair to serve a two-year term. At the March 23, 2017 Board meeting, Vice-Chair Johnson appointed a three-person committee to review potential candidates and to place names into nomination for Chair and Vice-chair to the full Board of Directors for election at the May Board meeting.

### RECOMMENDATION

The RWC Executive Committee has reviewed the nomination process and recommends approval of the Nomination Committee’s nominees; and recommends that the Board proceed with the election. The following Board Members are nominated for election:

Danny Johnson, Daisy Mountain Fire District, to remain as Vice-Chair  
John Imig, City of Peoria, for Board Chair or Vice-Chair  
Milton Dohoney, City of Phoenix, for Board Chair or Vice-Chair

This agenda item is for information, discussion and action.



## BOARD OF DIRECTORS REPORT

TO:	Regional Wireless Cooperative (RWC) Board Members	Agenda Date:	May 25, 2017
FROM:	David Felix, RWC Executive Director		Item 5
SUBJECT:	<b>2017 FORT MCDOWELL YAVAPAI NATION GRANT APPLICATION</b>		

### BACKGROUND

RWC Governance, Section 4.2.3; Grants, outlines the process for acceptance and use of grant funds applied for and administered by the RWC. This Section requires RWC Board approval for grant funds acquired on behalf of the RWC. Recently, a 2017 Fort McDowell Yavapai Nation Grant opportunity was brought to the attention of the RWC staff with a very short application submission deadline.

### ISSUE

Project title: RWC Real Time Spectrum Monitoring Project  
Amount requested: \$134,000  
Performance period: 2017/2018  
Deadline for application: Monday, May 1, 2017

This project will develop an advanced capability in the Phoenix metropolitan region to monitor the overall health of RWC or other wireless spectrum, identify potential interference, locate the source of interference, and mitigate the interferer. This capability would be extremely valuable to ensure public safety or other commercial radio spectrum is protected during its use including cell phones, cellular modems used in public safety vehicles, P-25 radio systems, GPS, Wi-Fi, and Bluetooth capabilities.

Documented incidents of individuals deploying illegal radio spectrum jamming devices makes this issue a real threat to public safety. These devices are readily accessible and inexpensive through foreign manufacturers. Typical threats may involve disrupting radio communications during major planned events, emergencies or even routine responses for service.

This project requires the purchase and deployment of three (3) devices which will be located at strategically located, wide area communications sites; providing monitoring coverage for most of the Valley. Also, these devices will leverage existing capabilities in use by the Phoenix Police Department and RWC technical staff used to identify and mitigate harmful interference.

This grant benefits not only the RWC but also the Indian Nations and other public safety agencies throughout the area.

This application opportunity was brought to the attention of the RWC staff in April, one month before the May RWC Board Meeting. The plan was to insure the RWC was competitive for the funding while seeking formal approval from the RWC Board of Directors at the May meeting. Additionally, documentation will be completed for City of Phoenix Council approval to disburse funding should the grant be awarded to the RWC.

The one-year project performance period will allow technical staff to assess the effectiveness and utility of this capability. If determined to be effective and valuable, on-going UASI funding will be sought to extend its operation.

This technical aspect of the project has been reviewed and approved by the RWC Operations Working Group (OWG).

#### RECOMMENDATION

The RWC Executive Committee recommends approval of the grant application and authority to administer the funds if awarded.



## BOARD OF DIRECTORS REPORT

TO:	Regional Wireless Cooperative (RWC) Board Members	Agenda Date:	May 25, 2017
FROM:	David Clarke, RWC Administrative Aide		Item 6
SUBJECT:	<b>RWC SECURE WEBSITE</b>		

### BACKGROUND

Members of the RWC Operations Working Group (OWG) have requested a secure, central online location to store and share sensitive documents for collaboration, such as encryption protocols and communication plans, as well as a method to schedule the use of interoperability talkgroups.

The members are currently sharing documents via email. This is not as secure as would be ideal, and leads to confusion about which version of a document is current and who has it. Interoperability talkgroups are currently being scheduled via a Google calendar. Unintentional overbooking cannot be prevented with this method and accessibility to this calendar is difficult to manage, leading to some events being improperly scheduled by users who do not understand the proper protocol for appropriate use of interoperability.

### THE ISSUE

The City of Phoenix is able to provide a secure document sharing area, accessible to all members of the OWG, at no cost to the Cooperative. This resource has been established and now being utilized by the members. However, Phoenix is not equipped to create a secure scheduling resource.

Third party secure scheduling resources are being evaluated to meet this need. This will come at a per user, per month cost. The preliminary estimate is that this service will be made available to fifty (50) OWG members or other authorized employees of RWC members, at a cost of between \$6 and \$20 per month. This will require an annual budget allocation of between \$3,600 and \$12,000.

There are already funds in the current RWC budget that can be reallocated for this purpose to fund this service for fiscal year 2017/2018 without seeking additional funding. This will be proposed as an individual item in future budgets.

### RECOMMENDATION

The RWC Executive Committee recommends RWC Board of Directors authorization to reallocate funds for the purpose described above.

This item is for information, discussion, and possible action.



## BOARD OF DIRECTORS REPORT

TO:	Regional Wireless Cooperative (RWC) Board Members	Agenda Date:	May 25, 2017
FROM:	David Felix, RWC Executive Director		Item 7
SUBJECT:	<b>LONG TERM MICROWAVE MAINTENANCE AND UPGRADES</b>		

### BACKGROUND

The RWC microwave network provides vital connectivity between various sites, dispatch centers and the RWC regional operations center. Additionally, in some cases the network also provides connectivity for other wireless or data services for Member agencies.

### ISSUE

Like other equipment and infrastructure which supports the RWC, microwave radios, antennas and support devices require regular maintenance and upgrades. RWC administrative and technical staff, in cooperation with other Members and Motorola Solutions, are developing a short and long-term plan to support the microwave network.

Chairman Hartig and Executive Director will brief the Board on this need and process.

### RECOMMENDATION

This agenda item is for information and discussion.



## BOARD OF DIRECTORS REPORT

TO:	Regional Wireless Cooperative (RWC) Board Members	Agenda Date:	May 25, 2017
FROM:	David Felix, RWC Executive Director		Item 8
SUBJECT:	<b>FIRSTNET UPDATE</b>		

### BACKGROUND

The Nationwide Public Safety Broadband Network (NPSBN) will provide a dedicated wireless data network that police officers, firefighters, and paramedics will be able to access during emergencies and to meet their everyday missions. In addition, secondary users will be identified to utilize the network to support public safety. The First Responder Network Authority (FirstNet) has been tasked with building the NPSBN to provide seamless data interoperability across federal, tribal, state and local Public Safety Agencies. Once built out, the NPSBN will be run and maintained by FirstNet as a self-supporting, fee-based network.

### THE ISSUE

Mr. Dave Faulkner is the regional lead for Arizona, Nevada and California for FirstNet's consultation group. His duties include interacting with, and representing the interests of police and fire chiefs during the development and delivery of the national FirstNet data network.

Mr. Faulkner is a retired commander with the Phoenix Police Department. He will brief the Board on the latest developments and next steps with FirstNet.

### RECOMMENDATION

This item is for information and discussion.





## BOARD OF DIRECTORS REPORT

TO:	Regional Wireless Cooperative (RWC) Board Members	Agenda Date:	May 25, 2017
FROM:	David Felix, RWC Executive Director		Item 9
SUBJECT:	<b>EXECUTIVE DIRECTOR'S REPORT</b>		

### BACKGROUND

The Executive Director will provide an update to the Board of Directors regarding the following issues:

- A. Project Updates
  - 1. Paradise Valley
  - 2. Pyramid Peak Site
- B. Accountant Outreach and Updated Reporting Processes
- C. UASI Grant Update

### RECOMMENDATION

This agenda item is for information and discussion.