Regional Wireless Cooperative

Board of Directors
Agenda
November 21, 2013

	ITEM	PRESENTER
1)	**Call to Order, Roll Call, Opening Comments and Employee Recognition**	Chair Campbell El Mirage
2)	**Approval of RWC Board Meeting Minutes from September 26, 2013** **This item is for information, discussion and action.**	Chair Campbell El Mirage Est. 2 min
3)	**Approval of Joint RWC/TRWC Board Meeting Minutes from October 9, 2013** **This item is for information, discussion and action.**	Chair Campbell El Mirage Est. 2 min
4)	**RWC 2013 Annual Audit** The purpose of this item is to provide an update on the RWC annual audit process being conducted by CliftonLarsonAllen (CLA). **This item is for information, discussion and action.**	Ms. Kelli Butz RWC Accountant III & Mr. Ronald Sterns CLA, LLP Est. 15 min
5)	**RWC Fiscal Year 2012/2013 Financial Update** The purpose of this item is to request approval of the Executive Committee's recommendation to distribute fund balances. **This item is for information, discussion and action.**	Ms. Kelli Butz RWC Accountant III Est. 10 min
6)	**RWC Fiscal Year 2014/2015 Budget and 5-year Plan** The purpose of this item is to review and request approval of the RWC Budget for Fiscal Year 2014/15. **This item is for information, discussion and action.**	Ms. Kelli Butz RWC Accountant III Est. 10 min
7)	**Discussion of VPM Issue with Motorola** Chairman Campbell will brief the Board about meetings with Motorola management pertaining to the Voice Processing Module (VPM) issue. **This item is for information and discussion.**	Chair Campbell El Mirage Est. 10 min
8)	**Discussion of FirstNet / National Public Safety Broadband Network** Mr. Michael Britt of the State Public Safety Interoperability Communications (PSIC) office will brief the Board about *First Net* and *Public Safety Broadband Network*. **This item is for information and discussion.**	Mr. Michael Britt PSIC Office & Mr. David Felix RWC Executive Director Est. 15 min

9)	**Locus DiagnostX Tool Overview** The purpose of this item is to inform the Board of the functions and capabilities of the Locus DiagnostX over-the-air radio diagnostic tool. **This item is for information and discussion.**	Mr. Bill Phillips Phoenix ITS Est. 10 min

10)	**Executive Director's Report**
	   A. MAI Hiring Process Update
	   B. RWC Membership Discussion with ASU
	This item is for information and discussion.
		Mr. David Felix
		RWC Executive Director
		
		Est. 10 min

11)	**Call to the Public** **This item is for information only.**	Chair Campbell El Mirage
12)	**Announcements & Future Agenda Items** The purpose of this item is to communicate any Board announcements or future agenda items. The date of the next Board Meeting: January 9, 2014 from 9:00 – 11:00 a.m. **This item is for information only.**	Chair Campbell El Mirage
13)	**Adjourn**	Chair Campbell El Mirage

Board of Directors
MINUTES
November 21, 2013

Maricopa Association of Governments
302 N. 1st Avenue
Phoenix, Arizona 85003

Board Members Present			Board Members Absent
Brent Ackzen	Mike Frazier	Danny Johnson	Wade Brannon
Steve Campbell	Jim Haner	Paul Luizzi	Mark Gorla
Wayne Clement	Bob Hansen	Marc Walker	Tim Van Scoter
Michael Cole*	Brad Hartig	Paul Wilson	
Bob Costello	Dave Heck*	Ed Zuercher	
Chris DeChant	John Imig*		
*Board Alternate			

Staff and Public Present

Leif Anderson	Michael Douglass	Doug Mummert	Stuart Snow
Michael Britt	Kim Engle	Chris Nadeau	Nick Spino
Kelli Butz	David Felix	Cy Otsuka	Ron Stearns
Dave Clarke	Celicia Fiedler	Ron Pazis	James Teasley
Dave Collett	John Gardner	Bill Phillips	Tim Ulery
Jesse Cooper	Jen Hagen	Todd Rogers	
**Telephone Participant			

1. Call to Order, Roll Call and Opening Comments

Chair Campbell called the meeting to order at 10:00 AM.

Employee Recognition:
David Felix announced recognition recipients for the Wireless Support/Services section: Cheryl Arrellano, Belinda Bell, Gerald Birnbaum, Fran Carena, Robert DeLorey, Michael Douglass, Thomas Grebner, Hector Gutierrez, Keith Klein, Phil Lense, Curtis Nowak, Todd Rogers, John Sater, Stuart Snow, James Teasley, and Angelo Urias. Chief Campbell thanked ITS staff and stated that the lives of public safety depend on them.

2. **Approval of RWC Board Meeting Minutes from September 26, 2013**

A **MOTION** was made by Paul Wilson and **SECONDED** by Bob Hansen to approve the RWC Board meeting minutes from September 26, 2013. **MOTION CARRIED UNANIMOUSLY (17-0)**.

3. **Approval of Joint RWC/TRWC Board Meeting Minutes from October 9, 2013**

A **MOTION** was made by Ed Zuercher and **SECONDED** by John Imig to approve the RWC/TRWC Board meeting minutes from October 9, 2013. **MOTION CARRIED UNANIMOUSLY (17-0)**.

4. **RWC 2013 Annual Audit**

Mr. Felix introduced Ronald Sterns of CliftonLarsonAllen (CLA).

Mr. Sterns delivered a report on the RWC 2013 Annual Audit.

Mr. Felix noted that hard copies of the Comprehensive Annual Financial Report (CAFR) have been printed and are available for members and is available on the website.

Mr. Sterns noted that the organization has received a Certificate of Excellence for 2012 financial statements and a copy of that page is included in the CAFR.

Mr. Sterns thanked Board of Directors for being able to present at the Board Meeting. He noted that they have completed the 2013 audit and have issued an "Unmodified Opinion" on those financial statements. New standards from the Association of CPAs changed terminology from last year from Unqualified Opinion to Unmodified Opinion. No fraudulent transactions were found and no material weaknesses or significant deficiencies were found in internal controls. Minor past findings have been satisfactorily resolved and congratulated David Felix, Kelli Butz and staff on that.

Mr. Sterns noted that Total Cash and Investments of the organization were in excess of approximately $2.6M which is up $900,000 over the prior year. Total Assets of the organization was $89.7M and of that $87.1M is capital assets (physical assets) put on the books and depreciated over time. The Accounts Payable approximated to the members at about $2M. The Revenues were up $800,000 for the year at about $9.2M and the Operating expenses were at $17.1M which was down $1M from the previous year. Of that, $10.4M is non-cash and related to depreciation. The organization is financially sound as of June 30, 2013. There was a change in terminology from Net Asset to Net Position and that is reflected in this CAFR.

Mr. Sterns was asked how many years in a row there has been a clean audit and replied, there have been three.

Chair Campbell thanked Mr. Sterns for his work on the audit.

Mr. Felix thanked Chandler's Assistant Fire Chief Marc Walker, Sun City Fire District's Fire Chief Jim Haner, and Goodyear's Fire Chief Paul Luizzi for serving on the audit committee. He thanked Kelly Butz, RWC Accountant III, for providing the audit documentation, creating the internal controls, and establishing a desk procedure.

A **MOTION** was made by Jim Haner and **SECONDED** by Chirs DeChant to approve the RWC 2013 Annual Audit Update as presented. **MOTION CARRIED UNANIMOUSLY (17-0)**.

5.   RWC Fiscal Year 2012/2013 Financial Update

RWC Accountant III, Kelli Butz, presented on the FY12/13 O&M Revenues and Expenses. Total Revenues billed to members was $8.5M and Total Expenses was $6.6M so a settlement is due back to members of $1.9M. Ms. Butz noted that revenues do include interest earnings. Also, the RWC Executive Committee requests that the RWC Board apply the member's settlement to the 3rd quarter billing or members can request a refund with the next quarterly invoice for O&M.

A question was asked as to how a member would request a refund. Ms. Butz replied members must have a zero account balance and then when they get a credit memo along with their invoice, they can return it along with a memo requesting the refund. Once the memo is approved by Mr. Felix, they would receive a credit. She noted that most members chose to apply their credit to the next quarterly billing cycle.

A **MOTION** was made by Paul Luizzi and **SECONDED** by Mr. Zuercher to approve the Executive Committee's recommendation to distribute fund balances. **MOTION CARRIED UNANIMOUSLY (17-0)**.

6.   RWC Fiscal year 2014/2015 Budget and 5-year Plan

Ms. Kelli Butz reported on the 2014/2015 Budget and 5-year plan. RWC staffing levels are the same. Motorola is 72% of budget, ITS services is 20%, staff is 4%, and the remaining 2% is for various audit, lease, electricity, etc. expenses. The subscriber rate is $38.63 ($1 less than this year) and is based on billable members as of September 30, 2013 and anticipated new subscribers coming on for Goodyear Police Department and our two new members. Subscriber rate for O&M and Staffing is $8.3M, Annual System Upgrade Agreement Special Assessment is $2.7M, and Narrowbanding TDMA Life Cycle Upgrade Special Assessment (fixed amounts as approved by RWC Board in May 2013 and new members coming on) is $8.5M, and one member required minimum balance due for next year so a total budget of approximately $19.6M. The budget for 2015/2016 is $19.7M, $17.7M ($11.6M if Narrowbanding gets pushed out) for

2016/2017, $11.8M for 2017/2018, and $12.1M for 2018/2019. The Executive Committee is requesting the RWC Board to approve the 2014/2015 Budget. A note was made that the subscriber rate will be set in the spring of 2014.

In response to a question from Brad Hartig about what escalator is being used for subscriber rates, Ms. Butz answered that the subscriber rate escalator was in personnel services at about 9%. Chair Campbell asked if that accounts for the 17/18 and 18/19 costs where we have already completed the upgrades and updates? Ms. Butz replied that it's the operations and maintenance (O&M) and staffing.

Mr. Zuercher asked what in the O&M staffing fees is for overhead charges for the City of Phoenix. Ms. Butz answered there are no overhead charges for the City of Phoenix. Mr. Zuercher commented that the City of Phoenix has absorbed the overhead costs, as it benefits the RWC not to charge rent.   Mr. Zuercher noted that, if the RWC goes to an outside entity, it would have to consider overhead costs that are not currently being incurred by the RWC.

Mr. Wilson asked Ms. Butz to provide the Board with the break out per member based on the O&M vs. Capital. Also, on the budget itself that the Board is being asked to approve, is that the total budget? Ms. Butz answered, yes, the budget included everything.

Chief Campbell confirmed that if all new members don't come on board during this fiscal year that the subscriber costs would be about the same as it is this year. Ms. Butz replied yes that is correct, and if members do not reduce their radio counts, the subscriber rate would not change. Mr. Felix stated that the RWC has asked its members to report any subscriber changes.

A **MOTION** was made by Mr. Hartig and **SECONDED** by Mr. Zuercher to approve the RWC Budget for Fiscal Year 2014/2015. **MOTION CARRIED UNANIMOUSLY (17-0)**.

7.   **Discussion of VPM Issue w/Motorola**

Chair Campbell stated that the RWC was concerned that it was not getting timely circuit board replacements and fixes. Motorola has assigned a number of resources. He did not think Motorola would let the RWC down. RWC members stressed that system failures cannot be afforded due to the need to protect police officers and fire fighters.

Mr. Felix reported the following:
  o Motorola had high-level representation at the meeting
  o Motorola is starting to get a handle on the problems
  o Motorola resources have been permanently allocated to fix the problems
  o The TRWC has similar problems
  o The RWC and TRWC are working collaboratively to ensure this problem is tracked

Chair Campbell gave the following Motorola conference call update:
- o Motorola had significant advancement on troubleshooting the problem
- o Motorola is now able to recreate failures
- o The RWC will continue meeting with Motorola to ensure issues are addressed; the RWC system is performing at an acceptable level
- o Mr. Felix will visit the Schaumburg, IL, Motorola facility in mid-December and will give the RWC Board an update after the first of the year

Mr. Zuercher thanked Chair Campbell for following up on this problem, as it is very important to public safety.

8. **Discussion of FirstNet / National Public Safety Broadband Network**

Michael Britt delivered an Arizona FirstNet presentation. Mr. Zuercher asked Mr. Britt to describe what Arizona FirstNet would add to the RWC network. Mr. Britt replied with the following details:
- o It will be used for transmission and data sharing
- o It will primarily be used for data streaming and officer situational awareness
- o It can provide biometric data (heat signature/heart rate)
- o It will not be reliable early on
- o It will work off different cell towers
- o The system will be completed in 10 years
- o The business model might be ready by the third quarter of next year
- o Major highways will be used for laying conduit and fiber
- o It allows for setting public safety priority over other data streaming (e.g. Netflix video)

Mr. Hartig stated that the density for infrastructure is significantly higher. Cell towers would need to be placed every 3-4 miles and would involve jurisdictions that this body can't govern.

Mr. Britt stated that 3G is currently being built and FirstNet is dealing with more density; however, 4G LTE can be done on taller towers. Public safety is in a different environment with less congestion and higher powered technology. The City of Mesa put together a model and submitted an RFP to use its existing towers.

Mr. Felix stated that FirstNet is not a replacement for land mobile radios. There's a survey which is asking for feedback on what public safety would like to see the network doing. There's much that needs to be answered. Bill Phillips and his staff are tracking this.

9. **Locus DiagnostX Tool Overview**

Bill Phillips delivered a report on Locus DiagnostX Tool.

Mr. Felix noted that the cost for this very valuable tool is in the budget and there is an upfront cost as well as an ongoing cost which is why it was important to present to the Board.

Mr. Phillips commented that all though this is a very useful tool it does not replace good preventative maintenance (PM) programs. There is $174,000 in next year's budget for purchasing the units with an annual cost of $20,000 for maintenance.   IT is looking at how to network these units together to avoid trips to the mountain tops to gather data which is being done right now, and to take a look at the return on investment.

In response to a question from Mr. Hartig on how many units are going to be purchased, Mr. Phillips replied three units will be purchased and put on the mountain tops. Right now, each waive form analyzer monitor looks at only one control channel but we think there may be an option to monitor three control channels at a time.

In response to a question about how fast data can be analyzed, Mr. Phillips responded that it depends on how often the reports are needed; once networked it can be checked regularly. Reports can be dumped into an Excel spreadsheet.

Chair Campbell confirmed this tool will help the RWC be proactive in getting faulty radios off the streets. He asked how often a radio should be PM'd. John Gardner commented that the manufacturer suggests annually, but due to the number of subscribers on the network it will only be done every two years.

10. Executive Director's Report
a. MA I Hiring Process Complete

Mr. Felix reported that Kim Engle was selected. She is currently at Aviation and has worked six years for the city. She will start December 2, 2013.

b. RWC Membership Discussion with ASU

Mr. Felix reported the following:
- o Tempe is working with ASU regarding the operational issues
- o Motorola will be brought in to take a look at engineering and what it would cost for a cutover.
- o Some infrastructure will not have to be built out and some can be eliminated if the RWC network already covers their needs.

11. Call to the Public

None

12. <u>Announcements and Future Agenda Items</u>

Chair Campbell stated that the next Board meeting is January 23, 2014, and the next Joint Board meeting is tentatively scheduled May 22, 2014.

Mr. Felix thanked Celicia Fiedler for her assistance at the Board Meeting. He thanked David Clarke for stepping up to fill the void of the vacant Management Assistant I position. He shared his appreciation for the RWC Board's interest and attendance at meetings.

Mr. Imig noted that Agenda Item 12 showed January 9, 2014, as the next RWC Board meeting, and the 2014 Meeting Schedule showed the next RWC Board meeting as January 23, 2014. Mr. Felix said the correct date is January 23, 2014.

13. <u>Adjournment</u>

Chairman Campbell adjourned the meeting at 11:19 a.m.

Respectfully submitted,
Kim Engle, Management Assistant I

Regional Wireless Cooperative

BOARD OF DIRECTORS REPORT

TO:	Regional Wireless Cooperative (RWC) Board Members	Agenda Date: November 21, 2013
FROM:	David Felix, RWC Executive Director	Item 4

SUBJECT: **RWC ANNUAL AUDIT FOR FISCAL YEAR 2012/2013**

BACKGROUND
The RWC financial audit has been completed by the audit firm of CliftonLarsonAllen, LLP. The RWC Audit Committee met with the auditors and RWC staff to review the audit findings and will present their findings to the RWC Board of Directors.

THE ISSUE
On November 12, 2013 the Audit Committee met with representatives from CliftonLarsonAllen, LLP to review relevant documents and recommendations. The following are key highlights from the meeting and the Fiscal Year 2012/2013 RWC financial statements audit:

- On November 12, 2013, CliftonLarsonAllen, LLP issued an unmodified or "clean" opinion.

- The appointed RWC Audit Committee, acting on behalf of the Board of Directors, reviewed the audited financial statements and agreed with the audit opinion.

- The RWC audited financial statements include $87 million in net position and approximately $9 million in annual operating revenues.

- The significance of the "clean" audit is that all financial responsibilities were properly managed and accounted by RWC staff.

- There were no additional administrative recommendations to management for this audit period.

- CliftonLarsonAllen, LLP will formally brief the RWC Board of Directors on the audit process and its findings at the November 21, 2013 RWC Board meeting.

RECOMMENDATION
The Audit Committee and Executive Committee recommend Board approval of the audit findings.

Regional Wireless Cooperative

BOARD OF DIRECTORS REPORT

TO:	Regional Wireless Cooperative (RWC) Board Members	Agenda Date: November 21, 2013
FROM:	Kelli Butz, RWC Accountant III	Item 5

SUBJECT: **FINANCIAL UPDATE FOR FISCAL YEAR 2012/13**

BACKGROUND
The purpose of this report is to present Fiscal Year 2012/13 financial updates to the Board.

THE ISSUE
The RWC governing documents state that year end expenditure reporting should be provided to the RWC Board. This report is a summary of total revenues and expenses for fiscal 2012/13. Total revenues collected for the fiscal year ended June 30, 2013 were $8,554,872 and total actual operations and maintenance (O&M) expenditures were $6,646,248. Total revenues exceeded total expenses by $1,908,624.

There were a number of line items in the budget that contributed to revenues exceeding expenses. The main variance from budget to actuals occurred in the following areas:

- Unfilled Information Technology Services (ITS) positions and reduction in facility and preventive maintenance
- Cost savings in electricity charges at shared sites
- White Tanks site relocation was delayed
- Fixed asset adjustments which resulted in a credit to O&M expenditures
- Additional FCC licenses for the Narrow Banding project were delayed until fiscal year 2013/14

RECOMMENDATION
The RWC Executive Committee recommends Board approval of the proposal to apply each Member's fiscal year 2012/13 settlement towards their respective billings for Fiscal Year 2013/14.

BOARD OF DIRECTORS REPORT

TO:	Regional Wireless Cooperative (RWC) Board Members	Agenda Date: November 21, 2013
FROM:	Kelli Butz, RWC Accountant III	Item 6
SUBJECT:	**RWC BUDGET 2014/15 BUDGET OVERVIEW & FIVE YEAR PLAN**	

BACKGROUND
The purpose of this report is to present the proposed 2014/15 RWC Budget and Five Year Plan to the Board. The Executive Committee's input and recommendations have been incorporated into the budget proposal.

THE ISSUE
The RWC Budget is made up of the following categories:

- Motorola Contracts
  - Service Agreement and System Upgrade Agreement (SUA II), Narrow Banding, Lifecycle Upgrades, and TDMA
- Phoenix Information Technology and Services (ITS)
  - Wireless Services, Microwave, Network Services, and Share Sites.
- RWC Staffing
  - The cost of six staff positions
- Other budget items
  - Including maintenance cost for City of Scottsdale, site leases, electricity, auditing services, and consultants

For planning purposes, a summary of the RWC's estimated five year budget is shown below.

RWC ANNUAL BUDGET	FY2014/15	FY2015/16	FY2016/17	FY2017/18	FY2018/19
Subscriber Rate	$38.63	$39.30	$40.92	$42.18	$43.48
Estimated Subscriber Count	17,936	17,936	17,936	17,936	17,936
O & M, Staffing	$8,314,930	$8,458,294	$8,807,538	$9,077,691	$9,357,741
Required Minimum Balance	$13,094	$10,598	$0.00	$0.00	$0.00
700 MHz, TDMA & Life Cycle	$8,588,364	$8,588,364	$17,737,600	$0.00	$0.00
System Upgrade Agreement	$2,720,200	$2,725,000	$2,764,400	$2,809,400	$2,809,400
Total Budget	**$19,636,588**	**$19,782,256**	**$29,309,538**	**$11,887,091**	**$12,167,141**

The budget allocation for each Member is presented below.

Member	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19
Avondale	$ 308,520	$ 311,040	$ 446,133	$ 202,412	207,174
Buckeye	238,169	240,185	339,047	161,930	165,739
Chandler	1,005,070	1,012,646	1,501,359	608,564	622,882
Daisy Mountain	5,973	6,022	8,576	3,982	4,076
El Mirage	92,770	93,513	135,221	59,728	61,133
Glendale	1,508,164	1,518,880	2,302,367	860,749	881,000
Goodyear	280,407	270,288	326,576	238,913	244,534
Guadalupe	11,167	11,250	16,800	6,636	6,793
Maricopa	148,445	149,594	219,514	92,247	94,417
Maricopa County Community College District	246,394	256,613	364,780	152,639	156,230
Paradise Valley	67,490	70,290	99,918	41,810	42,793
Peoria	960,729	968,131	1,422,936	594,627	608,617
Phoenix	10,935,537	11,015,977	16,486,513	6,461,259	6,613,275
Rural Metro	47,286	48,101	50,087	51,624	53,216
Scottsdale	1,480,512	1,491,864	2,197,024	911,850	933,303
Sun City Fire	46,840	47,212	68,550	29,864	30,567
Sun City West	40,706	41,020	60,268	25,219	25,812
Sun Lakes	32,137	32,384	47,580	19,909	20,378
Surprise	431,410	434,748	637,924	268,113	274,421
Tempe	1,718,414	1,731,815	2,533,015	1,076,434	1,101,760
Tolleson	30,449	30,681	45,348	18,582	19,019
Total	**$19,636,588**	**$19,782,256**	**$29,309,538**	**$11,887,091**	**$12,167,141**

RECOMMENDATION
The RWC Executive Committee recommends Board approval of the proposed 2014/2015 Budget.

Regional Wireless Cooperative

BOARD OF DIRECTORS REPORT

TO:	Regional Wireless Cooperative (RWC) Board Members	Agenda Date: November 21, 2013
FROM:	Steven Campbell, RWC Chairman	Item 7

SUBJECT: **VOICE PROCESSING MODULE (VPM) UPDATE**

BACKGROUND
At the September 26, 2013 RWC Board of Directors meeting, a briefing was provided by Phoenix ITS staff to the Board regarding issues with Motorola's "Voice Processing Module" (VPM) in recently installed MCC7500 radio dispatch consoles. As a result of the briefing, Chairman Steve Campbell directed RWC staff to schedule a conference call with Motorola management to discuss progress and future plans to address the VPM issues.

THE ISSUE
After installation of new Motorola MCC7500 radio dispatch consoles for the cities of Mesa, Chandler and Tempe; a number of anomalies surfaced with the Voice Processing Module (VPM) including random "resets." The VPM is an essential part of the console subsystem. The City of Mesa (TRWC) and RWC technical staff have been working closely with Motorola technical and management staff to identify the root cause and solutions to the problems. The difficulty with this issue has been the random nature of the problem which makes it difficult to isolate and fix.

CONFERENCE CALL/IN-PERSON MEETINGS
On Friday, October 25th; a conference call was hosted by Chairman Campbell with key RWC/TRWC and Motorola management/technical staffs. The following are actions that have been implemented or on-going by Motorola to resolve VPM issues:

- Identified root causes and addressed manufacturing issues with respect to "solderability" problems (Tempe) and "shields" (Chandler)
- Installed a software fix in September 2012 for a "stack overflow" issue (Mesa)
- Repeater on/off issue fixed and is now undergoing System Validation (Mesa)
- Motorola staff and support engineers assigned full time to VPM issue
- Motorola cross-functional team involved in the analysis of any issues
- Faulty computer boards immediately sent to the Motorola engineering team for triage and analysis
- Customers provided with new computer boards as replacements

On Wednesday, November 6th, Chairman Campbell facilitated a follow-up, in-person meeting with Brenda Herold, Corporate Vice President; Motorola Global Astro Engineering, additional Motorola management personnel and RWC/TRWC management/technical staff to answer questions and solidify Motorola's commitment as annotated above.

FOLLOW-UP
The following meetings and activities are scheduled for on-going discussions and progress reporting:

- December 5, 2013 – regularly scheduled Motorola Scorecard meeting
- December 16 & 17, 2013 – RWC executive director and technical staff visit to Motorola Corporate Headquarters, Schaumburg, IL to view staging of new RWC 700 MHz, TDMA/Lifecycle equipment and meeting with Motorola management
- January 2014, follow-up and progress meeting with Motorola, RWC and TRWC management and technical staffs
- January 23, 2014 – progress report to regular meeting of RWC Board of Directors

RECOMMENDATION
This agenda item is for information, discussion and possible follow-up action

BOARD OF DIRECTORS REPORT

TO:	Regional Wireless Cooperative (RWC) Board Members	Agenda Date: November 21, 2013
FROM:	David Felix, RWC Executive Director	Item 8
SUBJECT:	**Arizona FirstNet**	

BACKGROUND
The First Responder Network Authority, FirstNet, has been charged with building a national 4G LTE network for the use of Public Safety and Public Service personnel. It will be a self-sustaining, fee-based network. States will be given the option of Opting In or Opting Out, meaning that either FirstNet or the State will build out the in-state portion of the network. Each individual agency/jurisdiction may decide to use the data network or not.

THE OVERVIEW

- Nationwide Public Safety Broadband Network
- State and Local Implementation Grant Program (SLIGP)
- Next Steps
- What does FirstNet mean to Wireless Cooperatives

RECOMMENDATION
Please continue to track the progress of this effort and provide input and course corrections so that Arizona can get the most value from this national effort.

National Public Safety Broadband Network
A Preview of the State and Local Implementation Grant Program

The public safety community has made significant strides toward strengthening national preparedness and improving emergency communications capabilities. First responders, however, continue to be limited by fragmented networks and decades-old wireless technologies. Deploying a cost-effective, nationwide, public safety wireless broadband network will provide public safety agencies with access to advanced, cutting edge technologies and applications to improve their emergency response capabilities.

The nationwide public safety wireless broadband network needs to be closely aligned to commercial deployments of Long Term Evolution wireless services [*commonly known as 4G LTE*] to keep pace with changes in technology and leverage cost efficiencies. It must also deliver mission critical voice and data communications to public safety agencies in State, Local, and Tribal jurisdictions across the Nation, as well as Federal responders and secondary users (such as transportation or utilities). However, the transition from Land Mobile Radio (LMR) to broadband will not occur overnight, and Federal, State, Local, and Private Sector entities must work together to develop requirements and standards to assure mission critical operations.

In the near term, wireless broadband will complement LMR, not replace it. Wireless broadband does not currently meet the requirements for emergency response voice communications, therefore LMR will be around for years.

Investments in LMR will continue to be necessary now and well into the future. Even with the emergence of broadband, it will still be years before emergency responders can rely on broadband technologies for their mission critical communications. Public safety must continue LMR investments as appropriate in this context.

FirstNet has been tasked with building a nationwide wireless public safety broadband network (NPSBN) to be used by 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.

- Some agencies already use data (air-cards), but 4G LTE will allow for more and faster data – video, building plans, real-time GIS mapping, etc.

- What will this cost? No one knows for sure, however, Arizona should be prepared to participate in the advancements which are offered.

Federal legislation:

- Provides $7B for the build out of the national public safety broadband network

- Allocates the D-block spectrum to Public Safety

- Requires FirstNet to work with State, Tribal and Local entities

- Allows for funding through Public-Private Partnership and the sharing of spectrum

- Provides $135M nationally for states to perform outreach and collect data for input into planning by FirstNet on the national network

(over)

www.azpsic.gov
Public Safety Interoperable Communications Office

National Public Safety Broadband Network
A Preview of the State and Local Implementation Grant Program

State's Role:

- To inform the agencies/jurisdictions of the project timeline, progress and the impacts of the new technology on current operations. (see SLIGP Phase 1 below)

- To collect the State, Tribal and Local requirements, coverage, possible participants, critical infrastructure and special circumstances (see SLIGP Phase 2 below)

- To work with FirstNet on assuring our requirements are communicated and to assist in figuring how to meet the statewide needs

- To assess whether or not the RFP supplied by FirstNet is adequate for statewide needs

The State and Local Implementation Grant Program (SLIGP) is funded at $135M nationwide with an 80/20 split. It consists of two phases:

- Introduction and Outreach – how the NPSBN may impact current governance and operations

- Data collection – validate agency data, possible participants and possible shared infrastructure

Unlike Department of Homeland Security (DHS) grants where funds are available locally – this is a State level grant where the State works with Local and Tribal entities that provide input for inclusion into a response to FirstNet.

Phase 1 – Introduction and outreach program

- Background & Goal

- Governance – National, State, Regional and Local

- Applications and demonstrations

- Introduction to Survey

- Collecting requirements – agency validation, coverage, possible participant pool

- Expectations on timing and costs

- Funding and business model

Phase 2 – Data collection

- Data collection defined by FirstNet/NTIA

- Data collection driven by our State needs for coverage requirements

- Possible infrastructure sharing or public/private partnerships to reduce costs

Outreach and Data collection will cover Law Enforcement, Fire, Emergency Medical Services, Corrections, PSAP/dispatch, *ADOT and County DOTs, Public Works, Water Departments, etc.*

SLIGP Status: The PSIC Office has submitted Arizona's Grant and is awaiting the award announcement

How to get involved and stay aware?

- Please track progress on the Broadband page: http://www.azpsic.gov/library/broadband/

- Sign up for our interested parties email list: http://www.azpsic.gov/news/default.htm

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www.azpsic.gov
Public Safety Interoperable Communications Office

Regional Wireless Cooperative

BOARD OF DIRECTORS REPORT

TO:	Regional Wireless Cooperative (RWC) Board Members	Agenda Date: November 21, 2013
FROM:	David Felix, RWC Executive Director	Item 9

SUBJECT: **LOCUS DIAGNOSTX TOOL OVERVIEW**

BACKGROUND
The RWC Operations Workings Group (OWG) is responsible for providing feedback and recommendations for the on-going operation of the RWC network. To carry out this responsibility, the OWG identifies methods and tools to more efficiently analyze all components of the system to ensure system health. The RWC OWG and Executive Committee were recently briefed and discussed the testing of the *"Locus DiagnostX"* radio diagnostic tool for possible purchase and use on the RWC network.

THE ISSUE
The *Locus Diagnostic Over-the-Air Waveform Analyzer*, identifies, verifies and analyzes the health and field performance of any portable or mobile trunked radio in a network 24 hours a day, 7 days week without user interaction while the radios are operational and deployed in the field. Some of the advantages of this tool are:

- Monitors the Inbound Control Channel (Uplink),capturing and analyzing radio performance data

- Detects in real time , RF Frequency Errors, Frequency Error Changes at Start, Frequency Variations

- Identifies frequency deviations and continuously displays the radio status by ID

- Installs at existing RF sites or mobile command centers and connects to the sites RX antenna multi-coupler or to its own unfiltered antenna.

- Multiple units can be networked to provide system wide coverage with real time field performance analysis of the radios stored in a single database.

- Aids in the discovery of intermittent radio's performance, evaluates the radio's access to the system and resolves radio versus network issues.

- Stand-alone, non-intrusive and has no impact on the radio network.

- Portability allows it to be moved to multiple sites if required for additional area coverage.

- Can be installed on any computer on the network and continuously produces a wide variety of reports on all types of radio status while they are operating in the field

The price of each Locus unit is approximately $58,000. Purchase of 3 units would total approximately $174,000 plus an annual maintenance cost of $20,000. These totals have been included in the 2014/2015 and 5 year budget estimates.

RECOMMENDATION
This briefing is for information only. The OWG will conduct additional analysis of the Locus units before making a formal recommendation for purchase and deployment.