



2018 ANNUAL REPORT

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Cover Photo:

Construction of a new RWC Tower
at Pyramid Peak in Peoria.

EXECUTIVE DIRECTOR'S MESSAGE

Dear RWC Board of Directors and Community Members:

I am pleased to submit the 2017-18 Annual Report for review. The Annual Report highlights the on-going modernization, financial health, operational performance and achievements of the Regional Wireless Cooperative (RWC). Some of the areas of interest and achievement highlighted in this year's report include:



The RWC and TOPAZ Regional Wireless Cooperative (TRWC, Mesa) Governance Working Group finalized the Communications Systems Strategic Alliance (CSSA) intergovernmental agreement. This now formalizes many of our joint activities with the TRWC since the formation of the two cooperatives in 2008.

Phase II of the RWC TDMA, Lifecycle and Infrastructure Project, under the management of Phoenix IT/Radio Services Department, Operations Working Group, and Motorola Solutions continues to be deployed with completion of Phases II A and B. Phases C and D will be completed over the course of the next two years.

Both the Town of Paradise Valley and Daisy Mountain Fire Department completed and updated their communications sites and infrastructure for improved performance and coverage for their Member agencies.

The City of Peoria began construction of their new Pyramid Peak site as well as planning for the Vistancia site. Both are located in the far north valley. These two sites will be added to the overall RWC infrastructure and will significantly improve coverage in this part of the Phoenix metropolitan region.

Buckeye Valley Fire District has acquired bond funding and is working closely with the RWC, Phoenix Fire Department and City of Phoenix Radio Services to become a new RWC Member with an expanded site located on Burnt Mountain in the far west valley.

Finally, the long awaited revised RWC Governance Document was approved by the RWC Board of Directors and is being adopted by all 19 Members' governing councils and boards of directors. The new Government Document will take effect on January 1st of 2019.

With my retirement at the end of 2018, this will be my last Annual Report as the RWC Executive Director. I wish to again extend my appreciation to the Board of Directors, Executive Committee, Operations and Policy Working Groups for their commitment to the RWC and support during my tenure as Executive Director. Finally, thank you to the men and women who provide expert technical and administrative support behind the scenes to make the RWC one of the most successful interoperable public safety communications systems in the country.

Sincerely,

A handwritten signature in black ink that reads "David A. Felix". The signature is fluid and cursive.

David Felix, Executive Director
Regional Wireless Cooperative

OVERVIEW

Background

The VHF communications system formerly used by the City of Phoenix's public safety and other departments was based on 1950s technology and unable to meet the operational needs of its users. After much study and several consultants' recommendations, the City replaced the existing system with a Project 25, digital, 800 MHz trunked radio system. 2001 Bond Funds were approved by Phoenix residents to pursue the replacement, which was completed in 2005.

The City formed the Phoenix Regional Wireless Network (PRWN) and began transitioning Phoenix Police, Fire and municipal departments to the new system. PRWN was intended to be a regional radio system supporting the City's operations as well as the Fire Department's automatic aid partners.

In 2008, in order to meet the needs of the expanding network and its many new partners, the Regional Wireless Cooperative (RWC) was formed; PRWN transitioned to RWC upon its formation. The RWC now oversees the administration, operation, management, maintenance and growth of this regional communications network.

Governance

The RWC is a cooperative body formed under an Intergovernmental Agreement. Membership is open to all local, state, and federal governmental and tribal entities and currently includes most of the communities in the Phoenix metropolitan area. Governance provides for a Board of Directors consisting of one executive representative from each Member. The Board directs the operation, maintenance, planning, design, implementation, and financing of the RWC.

The City of Phoenix serves as the "Administrative Managing Member" responsible for the administration and financial management of the RWC. Four administrative staff positions support the RWC: Executive Director, Accountant III, Management Assistant I, and Administrative Aide. RWC staff are City of Phoenix employees residing in the Government Relations office.

System Description

The RWC is a large, Public Safety radio network based on the Project 25, Phase I/II Standard. The network is an ASTRO 25™, Integrated Voice and Data, trunked radio system. It operates in the 700/800 MHz frequency bands and uses standard Simulcast, IP Simulcast, and individual site trunking. The network consists of seven (7) major simulcast subsystems and ten (10) Intelligent Site Repeaters (ISRs).

The system provides seamless, wide area coverage across the entire metropolitan area. It is data capable, but at the current time is only used in a data capacity to provide encryption services.

Some of the benefits of this large regional radio system include wide area coverage beyond what agencies could achieve individually; seamless *interoperability* (the ability for diverse public safety agencies to communicate directly, in real-time, as the need requires); shared resources, such as people, equipment and tower sites and funding and financial responsibilities shared by all members based on their relative size, measured by the number of radios on the network; and increased success in obtaining state and federal grant support.

OVERVIEW (continued)

Interoperability

The RWC system provides a platform on which to build interoperability with many other agencies. Because of the regional nature of the system, significant grant funding has been made available to increase the regional use of the system and reduce the cost of membership in the RWC. Grants have been used to link the many dispatch centers, also known as Public Safety Answering points (PSAPs), in the Valley; add the City of Tempe to the network; increase system capacity to allow greater roaming and interoperability; add several mountain sites to be used for very wide-area coverage, emergency backup and wide area interoperability; provide connectivity to Peoria's new system; and provide cache radios to be used for emergencies.

The RWC system has been effectively used to provide interoperable communications for numerous special events in the metropolitan area. The system was used during the 2004 Presidential Debate linking motorcade officers, providing interoperability for Tempe and ASU, and administrative communications for the ASU staff coordinating the debate. The system provided support for the annual Fiesta Bowls, the BCS football game, the 2008 and 2015 Super Bowls, and the 2009 NBA and 2010 MLB All Star games. The Super Bowls, in particular, have clearly demonstrated the need for a truly regional radio system and has prompted more discussions between the metropolitan cities regarding more effective use of the RWC.

Many non-members of the RWC have programmed radios to allow them to interoperate with RWC members and other agencies around the Valley. These agencies include members of federal, tribal, state, county, local, quasi-government and support agencies:

Ak-Chin Fire Department	Luke Air Force Base
Arizona Attorney General's Office	Maricopa County Adult Probation
Arizona Department of Corrections	Maricopa County Attorney's Office
Arizona Department of Game and Fish	Maricopa County Department
Arizona Department of Health Services	of Emergency Management
Arizona Department of Juvenile Corrections	Maricopa County Department of Transportation
Arizona Department	Maricopa County Judicial Branch
of Liquor Licenses and Control	Security Department
Arizona Department of Public Safety	Maricopa County Juvenile Probation Department
Arizona Department of Transportation	Maricopa County Office of Enterprise Technology
Arizona Division of Emergency Management	Maricopa County Sheriff's Office
Arizona National Guard	Pinal County
Arizona State University Police Department	Rural Metro Fire Department
BNSF Railway Police Department	Salt River Pima Maricopa Indian Community
Buckeye Valley Fire District	Tonopah Valley Fire District
Carefree Fire Department / Rural Metro	Union Pacific Railroad Police Department
Casa Grande Fire Department	US DOHS Homeland Security Investigations
Cave Creek Marshal's Office	US DOJ Bureau of Alcohol, Tobacco and Firearms
Circle City / Morristown Fire District	US DOJ Drug Enforcement Agency
Community Bridges, Inc.	US DOJ Federal Bureau of Investigation
Federal Reserve Police Department	US DOJ United States Marshals Service
Fort McDowell Yavapai Nation Fire Department	US DOI Bureau of Land Management
Gila River Indian Community	Town of Wickenburg
Grand Canyon University Police Department	Yavapai County Sheriff's Office
Harquahala Fire District	

MISSION STATEMENT

The Mission of the Regional Wireless Cooperative (RWC) is to provide seamless operable and interoperable communications for all Members through a governance structure founded on the principle of cooperation for the mutual benefit of all Members.

In November of 2010, the newly formed staff of the RWC, as a component of the City of Phoenix's Government Relations Department, met to develop a strategic plan to assist them in serving the needs of RWC Members, Board of Directors, Executive Committee and other work groups. The following Value Statements are intended to focus staff's efforts and memorialize their commitment to support the RWC Mission:

We Are Dedicated to Serving Our Customers

We succeed by responding to and focusing our attention on the needs of our customers.

We Value and Respect Diversity

Understanding diversity helps us to work together and serve our communities.

We Work as a Team

Teamwork is the basis of our success. We use cooperation as our first tool in working with others.

We Each Do All We Can

We each have the opportunity and responsibility to develop and use our skills to the highest level.

We Learn, Change and Improve

We are open to new methods and we listen and learn from others. Training and education is the basis for our success.

We Focus on Results

Each of us knows the level of our customer satisfaction, our response time in delivering services and the cost of those services. We use information about the results we provide so we can improve.

We Work with Integrity

Whenever we make a decision, provide a service or deal with customers, we act with honesty and integrity.

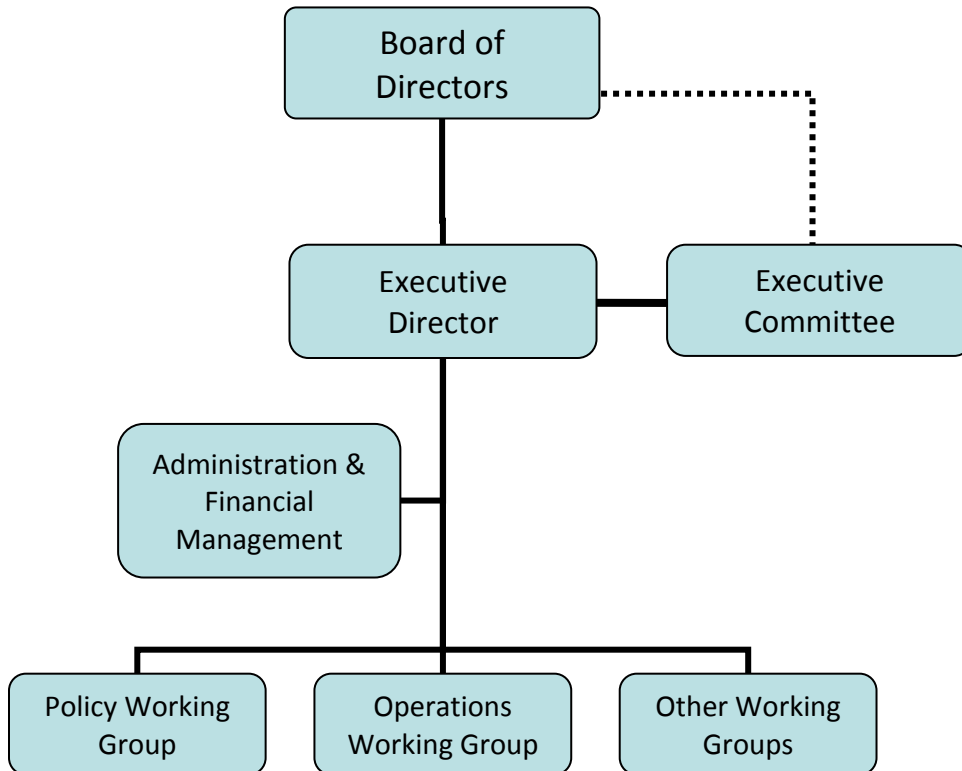
We Make the RWC Better

We work to make the RWC better. Improving the RWC is the reason we come to work each day.

ATC Buckeye Tower

ORGANIZATIONAL STRUCTURE

The RWC is governed by a Board of Directors, with all members of the RWC having a seat and a vote on the Board. The Executive Director reports to the Board of Directors and serves as a non-voting member of the Board-appointed Executive Committee. The Executive Director is supported by the Executive Committee, Operations Working Group, and other Working Groups, in addition to three staff positions who assist with the administration and financial management of the RWC. The Executive Director and staff are City of Phoenix employees residing in the Office of Government Relations.



MEMBERS



BOARD OF DIRECTORS

Chair

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EXECUTIVE COMMITTEE

The purpose of the Executive Committee is to provide high level expertise in communications and operations, advise the Board of Directors, help direct the efforts of the Executive Director and provide intermediate strategic direction for the RWC. Functions of the Executive Committee include review and approval of all proposals and recommendations, budget and financial reports, Network performance reports, and Board of Directors meeting agendas prior to submittal to the Board of Directors. The Executive Committee also identifies performance issues and recommendations for Network enhancements and construction.

The Executive Committee consists of five Representatives appointed by the Board of Directors, plus the Executive Director who is a non-voting member. Representatives, selected from the RWC Membership, consist of: one (1) Police Department executive manager; one (1) Fire Department executive manager; one (1) Municipal executive manager; one (1) Chief Information Officer (or equivalent); and one (1) executive manager from a Network Managing Member. The Executive Committee may not be comprised of Representatives from only one Member and every two years the Board of Directors reviews the Executive Committee representation. The Executive Committee Chair serves a two-year term.

The Executive Committee conducts regularly scheduled meetings at least once monthly prior to the Board of Directors meeting.

Executive Committee Members

Chair

Police Representative
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Administrative Managing Member
Representative
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Vice-Chair

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OPERATIONS WORKING GROUP

The Operations Working Group is responsible for addressing Network operational issues and maintaining Board-approved comprehensive policies and procedures for the operation and maintenance of the Network. The Operations Working Group reviews the RWC policies and procedures on an as needed basis, but not less than bi-annually, and submits necessary revisions to the Executive Director for Board of Directors' approval.

Each Member may have up to three (3) representatives ("Agency Representatives"), with one (1) Agency Representative each from a Law Enforcement Agency, Fire Services Agency and Municipal Agency. However, each Member may only have an Agency Representative from each agency for which the Member has actual users on the Network. The Agency Representatives act as liaisons to their respective agencies and are responsible for promptly notifying the Operations Working Group of issues potentially affecting Network operations.



The Operations Working Group collaborating with Motorola on software upgrades.

POLICY WORKING GROUP

The Policy Working Group (PWG) is responsible for developing, reviewing and modifying RWC policies and procedures. The PWG consists of representatives from Member agencies and meets monthly or as required throughout the year. Policies and procedures completed by the PWG must be approved by the Operations Working Group, Executive Committee or Board of Directors prior to implementation.

FINANCIAL MANAGEMENT

The responsibilities and tasks of managing the financial well-being of The Regional Wireless Cooperative includes Fund Management, Budget Development, Subscriber Unit Rates and Fees, Member Billing, Procurement, Financial Reporting and Financial Audit.

RWC Budgetary Information for Fiscal Year 2017-18 and 2018-19

	FY 2017-18	FY 2018-19
Operations, Maintenance and Staffing	\$6,673,341.00	\$6,868,179.12
System Upgrade (SUAll)	\$2,660,549.00	\$2,772,469.98
700MHz Narrow Banding, TDMA, Lifecycle Upgrade	\$1,606,008.00	\$3,907,847.64
Required Minimum Balance	\$0.00	\$3,902.22
Total Budget	\$10,939,897.00	\$13,552,398.96
Subscriber Unit* Rate	\$30.30	\$30.97
Total Positions (Administrative Staff)	4	4

* Includes: mobile and portable radios, dispatch consoles and control stations.



Phoenix Firefighters battle a blaze.

FINANCIAL MANAGEMENT (continued)

Funding

The RWC is funded through annual membership fees and special assessments from the Members. The annual membership fees are used to pay for administrative services, network operations and maintenance services, network infrastructure replacement, and system upgrades.

Operations, Maintenance, and Staffing Costs

The operations, maintenance, and staffing portions of the budget are used to pay for the cost of maintaining and staffing the RWC Network. Operations and maintenance expenditures include labor costs related to network operations and maintenance, microwave expenses, and software subscription and service agreements contracted through Motorola. Other costs include land leases, utilities charges, insurance premiums, and maintenance managing member expenses. Staffing include costs associated with the RWC Executive Director and the support staff. Such costs include salaries for staff and an Encryption Specialist, a Project Manager's wages, and office expenses.

Capital Improvement Project Fund

Funds budgeted for system upgrades, infrastructure replacement and other long term capital improvement projects (CIP) are accounted for in this fund. Funds from RWC members deposited into the CIP Fund are included in determining RWC Members' equity percentages.

Required Minimum Balance

The required minimum balance is used to provide a contingency for the cost of operating and maintaining the communications network. Member billing for the required minimum balance is accounted for in an RWC operating reserve fund.

Equity

Members of the RWC who contributed assets or funds to pay for RWC infrastructure have equity in the RWC. The total Members' equity in the RWC is equal to the Net Position of RWC.

Awards

The Government Finance Officers Association of the United States and Canada ("GFOA") awarded a Certificate of Achievement for Excellence in Financial Reporting to the RWC for its comprehensive annual financial report for the fiscal year ended June 30, 2017. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports. The RWC also won this award in 2012, 2013, 2014, 2015, and 2016.

PLAN FOR THE FUTURE

RWC PROJECTS	2017/18	2018/19	2019/20	2020/21
Software & Hardware Upgrades	7.16 upgrade	7.17.3 upgrade hardware replacement begins	7.17.3 completion 2nd or 3rd quarter 2019	
Paradise Valley	Construction of new site in Simulcast H and complete transition to RWC			
Peoria	Pyramid Peak Sim G site negotiations	Pyramid Peak Sim G subsite. 4th quarter 2018 completion	Vistancia new Sim G subsite	Vistancia new Sim G subsite
Scottsdale	Microwave replacement planning.	VHF migration to RWC discussion	VHF and 700 MHz infrastructure to RWC discussion	VHF and 700 MHz infrastructure to RWC discussion
Valley Wide VHF Network		VHF migration to RWC discussion	Complete VHF transition to RWC	Complete VHF transition to RWC
700 MHz Narrow-banding	TDMA Phase II A will begin 1st quarter 2018.	Completed Phase A and B 2nd quarter 2018	Phase II C TDMA installation 3rd quarter	Phase II D TDMA installation 3rd quarter
END USER PROJECTS				
Phoenix Subscriber Replacement	Continued Subscriber Replacement	Completion of purchase of new subscriber radios	Finish replacing PD mobiles - Update PFD radios with TDMA licenses	
Phoenix Microwave Replacement	Continue 5-Year MW Replacement	Continue 5-Year MW Replacement	Continue 5-Year MW Replacement	Begin transition of RWC replacing old MW radios
Avondale		Install 6 MCC7100 consoles in EOC		

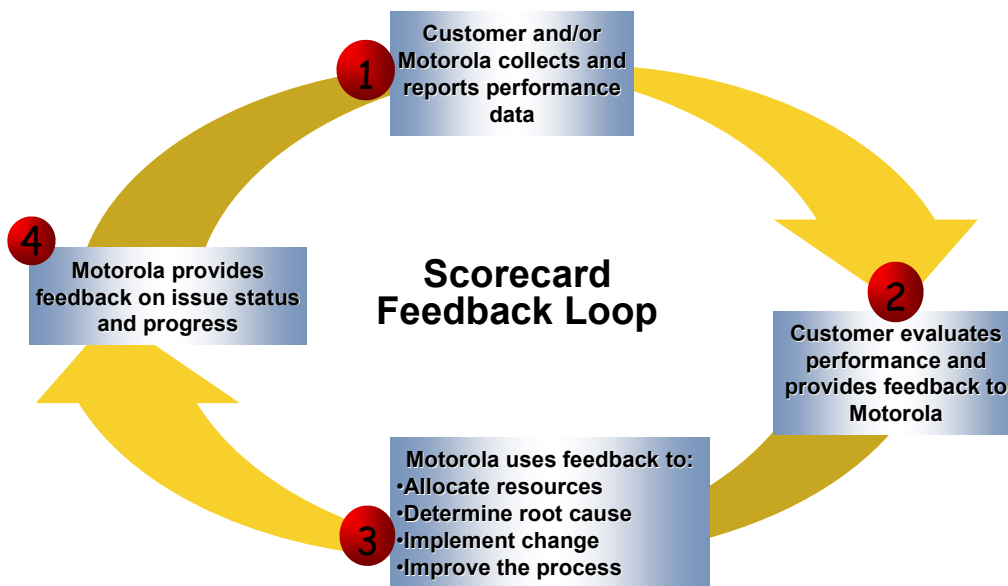
MOTOROLA SCORECARD

The Scorecard Initiative, which began at the end of 2004, is a joint process between Motorola and the RWC. It is used as a way for Motorola to improve its performance by validating key requirements through measurable objectives. Quarterly meetings are held with Motorola’s local team, select executives, and RWC Members.

The continuous improvement model includes the collection of performance data, evaluation by the customer, and feedback to Motorola so that improvements can be made.

The 2018 Scorecard for the RWC has eleven metric/performance items. Many of the deliverables are very strategic and help other Motorola customers of the same size. A new project and activities tracking tool was implemented in 2016 which improved accountability and communication among the key RWC stakeholders.

The Scorecard Process is based on a Continuous Improvement Model



PROJECTS AND MAJOR INITIATIVES

These projects and initiatives, underway in 2017/18 and beyond, added new interoperability partners, improved radio coverage and reliability, and showcased the Regional Wireless Cooperative as a reliable regional public safety radio communications backup through its “Good Neighbor” policies.

Phoenix Fire VHF Transition to RWC Management

The Phoenix Fire VHF System is an essential shared resource used by all Valley Fire Partners for fire ground and hazard zone communications. This system is completely independent from the existing RWC Trunked System. The Phoenix Fire Department is working cooperatively with their partners and the RWC to bring the VHF system under the management of the RWC. This will provide more effective oversight, expansion planning, and budgeting for all parties involved.

Plans are currently in development to thoroughly prepare for the requirements of this transition and to establish five-year technical and budgetary plans. The preliminary goal is to complete this transition by the end of 2019.

Peoria Simulcast G Subsite

The City of Peoria received funding to construct a new subsite at the Pyramid Peak Water Treatment plant. The RWC is contributing 18 RF base stations for this location. These base stations were utilized for the Simulcast A and B upgrade and became available to be repurposed after the upgrades were complete. This new site, which is scheduled to become operational in late 2018, provides improved coverage for an expanded residential community.



Beginning construction phase of the new Pyramid Peak, Simulcast G subsite for Peoria.



Construction of block walls at the new Pyramid Peak, Simulcast G subsite for Peoria.

PROJECTS AND MAJOR INITIATIVES (continued)

Communications Systems Strategic Alliance

After many years of work an intergovernmental agreement has been established to create the Communications Systems Strategic Alliance (CSSA), which formalizes joint activities between the RWC and TOPAZ Regional Wireless Cooperative and is designed to grow in the future to include other public safety wireless networks in Arizona. The CSSA provides a formal framework for a wide variety of mutually beneficial programs, projects, and activities to support cooperation and improve operational efficiencies between regional systems.

Some examples of benefits the CSSA can facilitate are:

Combined purchasing of equipment and related services for cost savings

Shared use of facilities and co-location of equipment

Interoperable and operable use between systems

Joint strategic planning

Cooperative development of policies and procedures

Coordinated grant applications

Technical coordination and planning to ensure long term compatibility of systems

All actions that occur through the CSSA are subject to review and approval by the RWC Board of Directors, and by the governing bodies of any other networks involved, which allows all parties to retain their independence.



Construction of the new RWC Tower at Pyramid Peak continues.

PROJECTS AND MAJOR INITIATIVES (continued)

Daisy Mountain Fire

Daisy Mountain Fire is in the process of building fire VHF infrastructure in Black Canyon City as well as Sunset Point. These sites are being built to accommodate RWC subsite infrastructure when funding is available. The City of Phoenix Radio Shop is providing complete engineering requirements for these sites. The Arizona Department of Transportation has already built a new equipment room at Sunset Point with space for the RWC and the Department of Public Safety is providing redundant T1 circuits as a backup in case of failure of primary connectivity systems.

700 MHz Narrow Banding, TDMA Conversion

The purpose of this project is to convert five selected channels on the simulcast systems and three channels on the Intelligent Repeater (IR) sites for the RWC system to Time Division Multiple Access (TDMA) protocol. This will add five additional voice channels to the simulcast and three to the IR sites. The TDMA upgrade will be implemented in four phases – Phase II A, B, C and D. Phase II A began after the 7.16 software upgrade was completed in September 2017. Phase II A and B were completed in June 2018.

7.17.3 Software Upgrade

The software for the RWC Network will be upgraded from 7.16 to 7.17.3 beginning in the 2nd or 3rd quarter of 2019 as established by the terms of the System Upgrade Agreement (SUAII). This software upgrade will also require upgrades to some hardware components, which is included as part of this upgrade.



RWC communications site on North Mountain.
This site is a primary hub for microwave connectivity.

PROJECTS AND MAJOR INITIATIVES (continued)

New Interoperability Participants

The RWC has continued to expand its partnership with other regional agencies in need of interoperability resources. The US Department of the Interior Bureau of Land Management and US Department of Homeland Security Investigations were approved as RWC interoperability participants, as well as additional groups within the Arizona National Guard.

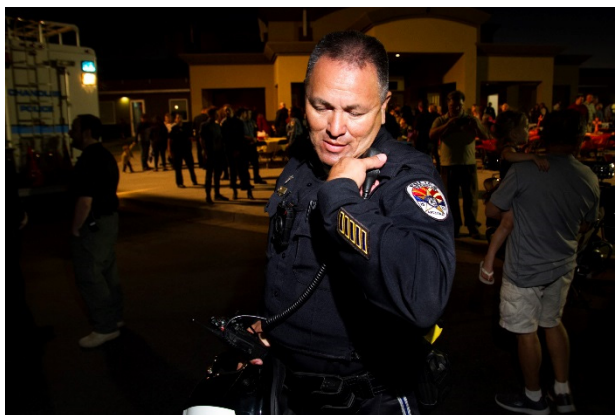
RWC Secure Interoperability Talkgroup Scheduling System

At the request of the members of the Operations Working Group, a secure interoperability talkgroup scheduling system has been established and is now in use. This system provides members with an easily accessible place to make online reservations for the use of interoperability talkgroups. Among other helpful features, this system prevents unintentional double-booking of talkgroups, allows members to contact each other to resolve schedule conflicts, and helps to ensure interoperability activity is conducted in compliance with RWC policies and procedures.

Access to this secure interoperability talkgroup scheduling system is carefully vetted by RWC Administrative Staff to ensure only RWC Members are permitted. This is done to ensure sensitive information that could put our end users at risk is kept protected.

Buckeye Valley Fire Department

Buckeye Valley Fire Department has obtained funding to possibly add an RWC subsite to Burnt Mountain. Bureau of Land Management (BLM) law enforcement officers have expressed a need for interoperability with Buckeye Valley Police and other law enforcement agencies. The RWC and the City of Phoenix are working to expedite BLM approval to add a new tower and shelter to the existing agreement they have at Burnt Mountain.



Chandler Police Officer Eddie Cuthbertson uses his radio on the RWC Network.

SYSTEM PERFORMANCE

Radio Counts

Radio counts give a generalized picture of the size and relative volume of the system. Radios on the system include all consoles, control stations, portables and mobiles. They also include radios used by the RWC Members and those radios used by outside agencies for interoperability. Radio counts are updated quarterly and the last year’s totals are shown below:

	FY 2017-18			
	July	October	January	April
	Count	Count	Count	Count
Member Total	18,522	18,543	18,483	18,920
Interoperability	22,576	22,537	20,977	20,864
Grand Total	41,098	41,080	39,460	39,784



Typical portable radio used by Public Safety personnel on the RWC network.



The City of Phoenix has replaced all of their municipal department portable radios with the new Tait radio.

SYSTEM PERFORMANCE (continued)

Overall System Statistics

The following charts provide a compilation of the overall system statistics including the number of calls, busy calls and emergency calls, including the total and average duration of each type of call. A busy signal occurs when a user tries to make a call, but all channel resources are in use and thus the user must wait to complete the call. An emergency call occurs when the user presses the emergency button on a radio. Grade of Service (GOS) for the system is also shown; GOS is explained in more detail in the next item. System statistics provide a general overview of system performance, but they cannot be used as the final guide since statistics must be viewed individually for each sub-system in order to truly see the performance from the user perspective. These statistics are not shown in this report since they are so voluminous.

FY 17/18 SYSTEM STATISTICS	
Total Number of Calls	28,203,736
Total Call Duration (Hours)	73,560
Total Call Duration (Sec)	264,813,910
Average Call Duration (Sec)	9.4
Average Calls per Day	77,271
Total Busies	131
Busy Duration (Hours)	0.02
Total Busy Duration (Sec)	68
Average Busy Duration (Sec)	0.5
Average Busies per Day	0.4
Total Emergency Calls	3,473
Total Emergency Duration (Hours)	31
Total Emergency Duration (Sec)	112,483
Average Emergency Duration (Sec)	32.4
Average Emergencies per Day	9.5
FY 17-18 System Reliability	99.97480%

SYSTEM PERFORMANCE (continued)

Grade of Service

Grade of Service (GOS) is a measure of how many times a user gets a “Busy” signal when a user “Pushes to Talk” (PTT) on their radio. GOS is measured in percent as the number of PTT’s where a Busy occurs divided by the total number of PTT’s. The design specifications for the RWC system is to maintain a GOS of 2% or less, which means that there will be only 2 Buses or less, out of each 100 PTT’s. GOS is measured on each Simulcast and Intelligent Site Repeater (ISR) subsystem. GOS reports are prepared weekly and the 2% GOS goal has not been exceeded on any subsystem. The following table shows the maximum GOS for the past year on each sub-system:

System Use

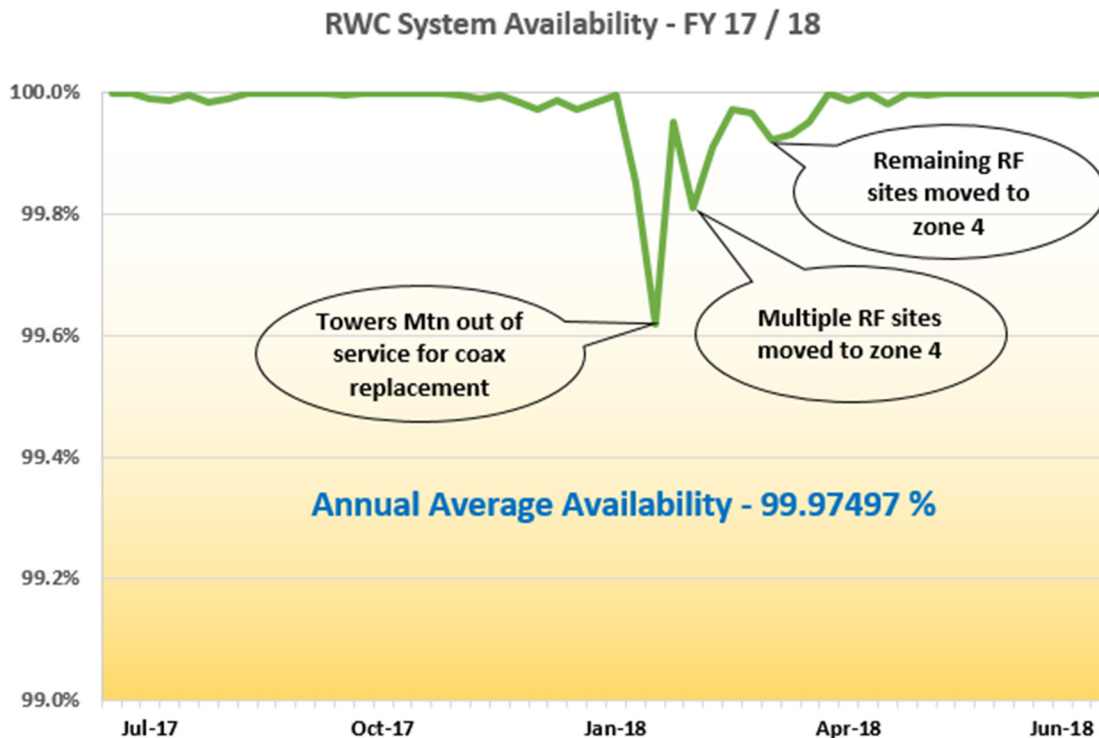
System Use shows the averages of how many of the system’s channels are used. It is shown as a percentage of the number of channels used divided by the total number of channels available for each Simulcast and Intelligent Site Repeater (ISR) subsystem.

Site Utilization / Grade of Service - FY 17 / 18			
SYSTEM	PEAK GOS	Avg Use	Max Use
Simulcast A	0.00%	24.86%	49.13%
Simulcast B	0.00%	14.66%	40.09%
Simulcast C	0.00%	17.33%	41.13%
Simulcast D	0.17%	10.07%	35.29%
Simulcast F	0.00%	8.07%	26.46%
Simulcast G	0.00%	25.10%	49.02%
Simulcast H	0.00%	13.85%	39.32%
Simulcast J	0.00%	9.74%	28.72%
Mount Gillen	0.00%	1.02%	23.52%
North Mountain	0.00%	5.88%	32.85%
Quintero	0.00%	0.03%	10.43%
Sacaton Peak	0.00%	6.09%	17.99%
Sky Harbor	0.50%	8.55%	32.29%
South Mountain	0.00%	6.18%	30.75%
Thompson Peak	0.00%	9.11%	22.57%
Towers Mountain	0.00%	5.25%	14.06%
White Tank	0.00%	6.15%	19.69%

SYSTEM PERFORMANCE (continued)

System Availability

System Availability is a measure of the percentage of time that the system is operating normally, with no operational impact to the users. Since the system is made up of many Simulcast and ISR sub-systems, the system availability is the combined availability of all these subsystems. The goal is to keep the system operating as close to 100% available from the user’s perspective. Note that failures may occur to various components, but due to the system redundancy, there is no impact to the user. If System Availability is less than 100%, it may be due to a failure in a single subsystem, with the majority of the overall network remaining available to the users. System Availability for the RWC network for the twelve-month period of July 2017 through June 2018 is shown below:



NOTE: The industry standard and baseline for system availability of public safety radio systems is 98.5%. The performance of the RWC Network is well above this standard. The scale above has been adjusted to a baseline of 100% to more easily show performance values.

CITY OF PHOENIX RADIO SHOP



The City of Phoenix Radio Shop Staff.

The City of Phoenix is the Maintenance Managing Member for all RWC zones except Zone 3 (Simulcast H) which operates in and is managed by the City of Scottsdale.

The City of Phoenix is also the Administrative Managing Member of the Cooperative and is responsible for tracking of all subscriber radios on the RWC network. This work is done by the City of Phoenix Radio Shop, who also provide quarterly report subscriber information for Operations and Maintenance billing.

CONTACT INFORMATION

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Regional Wireless Cooperative
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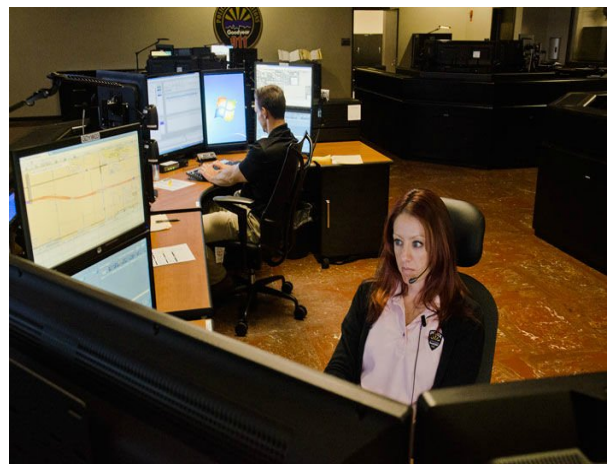
All RWC Administrative Staff members, past and present, gather to congratulate David Felix on his retirement.

Front, from left: Kim Engle, Tahir Alhassan, David Clarke, David Felix, Jeanine Besnier, Kelly Stewart
Back, from left: Kelli Butz, Almira Santos, Theresa Faull, Kacie Howard



Regional Wireless Cooperative

An Arizona Joint Venture
Comprehensive Annual Financial Report
For Fiscal Year Ended June 30, 2018



Prepared by:
Regional Wireless Cooperative
&
City of Phoenix Finance Department

Regional Wireless Cooperative
Comprehensive Annual Financial Report
For the Fiscal Year Ended June 30, 2018

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INTRODUCTORY SECTION



December 14, 2018

To the Board of Directors of the Regional Wireless Cooperative:

In accordance with the governance of the Regional Wireless Cooperative (RWC), I am pleased to submit the RWC Comprehensive Annual Financial Report for the fiscal year ended June 30, 2018. These financial statements are prepared and presented in conformity with accounting principles generally accepted in the United States of America (GAAP) as prescribed in pronouncements of the Governmental Accounting Standards Board (GASB). To the best of our knowledge and belief, this report is accurate in all material respects and is reported in a manner designed to fairly present the financial position, results of operations and cash flows of the RWC. All disclosures necessary to enable the reader to gain an understanding of the RWC's net position and changes in net position have been included. Management assumes full responsibility for both the accuracy of the data, and the completeness and fairness of the presentation, including all disclosures.

To the best of our knowledge and belief, this report is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of operations of RWC. Management assumes full responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures.

CliftonLarsonAllen, LLP has issued an unmodified ("clean") opinion on the RWC financial statements as of and for the year ended June 30, 2018. The independent auditors' report is located at the front of the financial section of this report. Management's Discussion and Analysis (MD&A) immediately follows the independent auditors' report and provides a narrative introduction, overview, and analysis of the basic financial statements. The MD&A complements this letter of transmittal and should be read in conjunction with it.

PROFILE OF THE REGIONAL WIRELESS COOPERATIVE

This report summarizes the activities of the RWC. The RWC was formed in 2008 to oversee the administration, operation, management, and maintenance of an expanding regional communications network. The RWC was formed through a governance structure founded on the principles of cooperation for the mutual benefit of all members, and has expanded to serve a still-growing list of cities, towns, and fire districts, along with many other area entities who serve public safety needs.

The RWC is an independent, multi-jurisdictional organization throughout the Phoenix Metropolitan Region which currently consists of the following 19 members: City of Avondale, City of Buckeye, City of Chandler, Daisy Mountain Fire District, City of El Mirage, City of Glendale, City of Goodyear, Town of Guadalupe, City of Maricopa, Maricopa County Community College District, Town of Paradise Valley, City of Peoria, City of Phoenix, City of Scottsdale, Sun City Fire District, Arizona Fire & Medical Authority, City of Surprise, City of Tempe, and City of Tolleson.

The RWC is a large, Public Safety radio network based on the Project 25, Phase I Standard. The network is an ASTRO 25™, integrated voice and data, trunked radio system that operates in the 700MHz frequency bands and uses standard Simulcast, IP Simulcast and individual site trunking. The network consists of five (5) major simulcast subsystems and ten (10) Intelligent Site Repeaters (ISR's).

This regional radio communications network was built to seamlessly serve the interoperable communication needs of first responders and other municipal radio users in and around Central Arizona's Valley of the Sun. The system is data capable, but at the current time, is only used in a data capacity to provide encryption services. Some of the benefits of this large regional radio system include wide area coverage beyond what cities could achieve individually; seamless interoperability (the ability for diverse public safety agencies to communicate directly, in real-time, as the need requires); shared resources; such as people, equipment, and tower sites; shared funding; and increased success in obtaining state and federal grant support. Financial responsibilities are shared by all members based on their relative size, and is measured by the number of subscriber units (radios) on the network.

LOCAL ECONOMY

According to the US Department of Commerce, the estimated population in the State of Arizona as of 2017 was 7.0 million. This represents a population growth of 9.8% from 2010. The Phoenix metropolitan area has been one of the most rapidly growing metropolitan areas in the country in recent decades in terms of population, employment and personal income growth. From 2010 to 2017, population growth was 12.8% in Maricopa County compared to 5.5% for the United States.

Metro Phoenix, also known as the Valley of the Sun, is home to a strong and growing transportation system including one of the nation's 10 busiest airports, Sky Harbor International Airport. The airport provides service to more than 121,000 passengers with approximately 1,200 aircraft arriving and departing every day. Flights at Phoenix Sky Harbor International Airport serve more than 100 domestic and 22 international destinations. Other features of the area transportation system are two major railways and excellent interstate highways and local freeways connecting the Valley to major markets and ports in western states and Mexico. The Metro Light Rail System currently covers 26 miles linking Mesa, Tempe, and Phoenix. Expansion plans will include service to additional cities in the region.

The Valley has access to a labor pool of several million diverse workers, and has a wealth of educational resources to educate new and existing talent. All three Arizona public universities have a presence in the Valley, along with many other public and private academic institutions offering undergraduate and graduate degrees.

Major employers range from hospitals and banks, to universities and aerospace manufacturers. Emerging industries include renewable energy, biotechnology, and data centers. Arizona has a well-managed water and power supply including an abundant supply of electricity from various sources, including the largest U.S. nuclear plant, dams, coal and gas burning plants as well as wind and solar plants. The water supply to the Valley via canals from local reservoirs and the Colorado River is adequate to meet projected population growth for at least the next 100 years.

LONG TERM FINANCIAL PLANNING

RWC began system software upgrades to version 7.16 in 2016. These upgrades have been included in the RWC Five-Year Plan and budget that was recently submitted to the RWC Board of Directors. In addition, there are many product changes that occur as part of the life of the system. Motorola annually briefs the RWC on the product roadmap for the next five years. The roadmap includes key product changes where support for certain products will be ending, thus necessitating upgrades and/or changes in these products. The critical product changes that must be considered are those affecting base stations, consoles, and subscriber units.

A Federal Communications Commission (FCC) mandate to narrowband all 700 MHz frequencies was eliminated, resulting in a tremendous time and costs savings for RWC Members as well as other 700 MHz-based systems across the country. Narrowband (TDMA) capable equipment will be replaced, which allows the 12.5 KHz bandwidth of the 700 MHz channels to be changed to 6.25 KHz, effectively doubling the number of channels available.

Currently, the RWC is using the Frequency Division Multiple Access (FDMA) protocol. Although both protocols may be used on the same system, they cannot be used on the same talk group at the same time. This limits the ability to seamlessly roam across the coverage area. Thus, in order to overcome this limitation, the RWC will convert the 700 MHz components of the system to TDMA. Eventually, all subscriber equipment will be converted to TDMA.

The Hardware Upgrade (Phase I) of this project was completed in August 2016 at a cost of \$22.4 million.

Phase II is underway with conversion to TDMA throughout the system. The implementation of this phase began in Fiscal Year 2018. This phase is estimated to cost \$10.0 million.

MAJOR INITIATIVES

Membership of the RWC continues to increase; therefore, the RWC has embarked on several projects focused on expanding the regional radio network and fortifying its coverage, resiliency and reliability. The projects include the following:

Fire VHF System Plans for RWC Governance

Fire agencies across the Phoenix Metropolitan Region utilize a VHF simplex (radio-to-radio) network for all hazardous and “fire zone” operations. The VHF network operates on similar, but totally separate infrastructure as the 700 MHz trunk system. In 2018, the Phoenix Fire Department, which has funded and maintained the VHF network, approached the RWC Board of Directors with a request to study the feasibility of managing the VHF network in the same way as the trunked network. A work group was commissioned to develop technical, budgetary, capital replacement, policy and management recommendations for RWC Board consideration. It is envisioned that all fire department partners will ultimately share in all costs required to maintain the VHF network.

City of Peoria’s “Pyramid Peak” Site

The City of Peoria received funding to construct a new subsite at the Pyramid Peak Water Treatment plant. The RWC is contributing the 18 RF base stations for this site. These base stations were utilized for the Simulcast “A” and “B” upgrade and are not utilized now that both systems are fully operational. Once constructed, the new site will provide improved coverage for an expanded residential community. This site became operational in October 2018.

Daisy Mountain Fire New Simulcast Zone

Daisy Mountain Fire received funding for the installation of a new three site, six channel simulcast network. The three sites are already existing RWC facilities - Outlet Mall - Fire Station 141 - Fire Station 146. This project is currently underway. The RWC is contributing the 18 RF base stations for these sites. These base stations were utilized for the Simulcast “A” and “B” upgrade and are not utilized now that both systems are fully operational.

Buckeye Valley Fire District

Buckeye Valley Fire District (BVFD) received public safety improvement bond funding to expand an existing site on Burnt Mountain in the far west valley. The improved site will include both 700 MHz trunked and Fire VHF equipment. Once completed, the site will provide significant improvement in coverage across the area and I-10 corridor. This is the first step in BVFD’s plan to join the RWC as a full member.

City of Peoria’s Vistancia Site

The City of Peoria is in the early planning stages for a new site in the northwest valley to improve coverage for new development in the region. Construction of this site is slated for 2019.

RELEVANT FINANCIAL POLICIES

General

The City of Phoenix serves as the Administrative Managing Member, responsible for the administration and financial management of the RWC. As such, the RWC follows all administrative and financial management policies and procedures of the City of Phoenix. RWC has four full-time staff who are employed by the City of Phoenix.

Budgeting Systems and Controls

The RWC maintains budgetary controls, which are designed to ensure compliance with the provisions of the annual budget adopted by the RWC Board of Directors. The RWC budget process provides for input from the RWC Members and the Executive Committee in developing revenue and expenditure projections, and determines RWC programs and services for the coming year.

Accounting and Administrative Controls

Internal controls are procedures that are designed to protect assets from loss, theft, or misuse; check the accuracy and reliability of accounting data; promote operational efficiency; and encourage compliance with managerial policies at a cost that does not exceed the benefits to be derived. Management of the RWC has established a system of integral internal controls designed to provide reasonable, rather than absolute assurance, that the financial statements are free of any material misstatements and that these objectives are met.

Federal and State financial assistance programs require recipients to comply with many laws and regulations. Administrative controls are procedures designed to ensure compliance with these requirements. The RWC has established a system of administrative controls to ensure compliance with the requirements of the programs under which it receives financial assistance. As with other internal controls, this system is subject to a periodic review and

evaluation by management. As part of the annual audit process, internal controls are considered in order to determine the nature, timing, and extent of auditing procedures.

AWARDS AND ACKNOWLEDGEMENTS

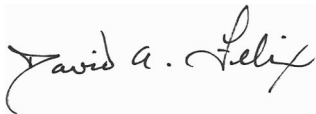
The Government Finance Officers Association of the United States and Canada (“GFOA”) awarded a Certificate of Achievement for Excellence in Financial Reporting to the RWC for its comprehensive annual financial report for the fiscal year ended June 30, 2017. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, the RWC published an easily readable and efficiently organized comprehensive annual financial report. This report satisfied both generally accepted accounting principles and the applicable legal requirements.

I believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program’s requirements, and are submitting it to the GFOA to determine its eligibility for another certificate.

I want to thank all the members of the RWC Board of Directors, the RWC Executive Committee, City of Phoenix (City) Information Technology and Services Department, and City Budget and Research Department for their assistance throughout the past year. Special thanks to the City Finance Department for their assistance in the preparation of this comprehensive financial report.

Respectfully submitted,

A handwritten signature in black ink that reads "David A. Felix". The signature is written in a cursive style with a large initial 'D' and 'F'.

David Felix
RWC Executive Director



Government Finance Officers Association

Certificate of
Achievement
for Excellence
in Financial
Reporting

Presented to

**Regional Wireless Cooperative
Arizona**

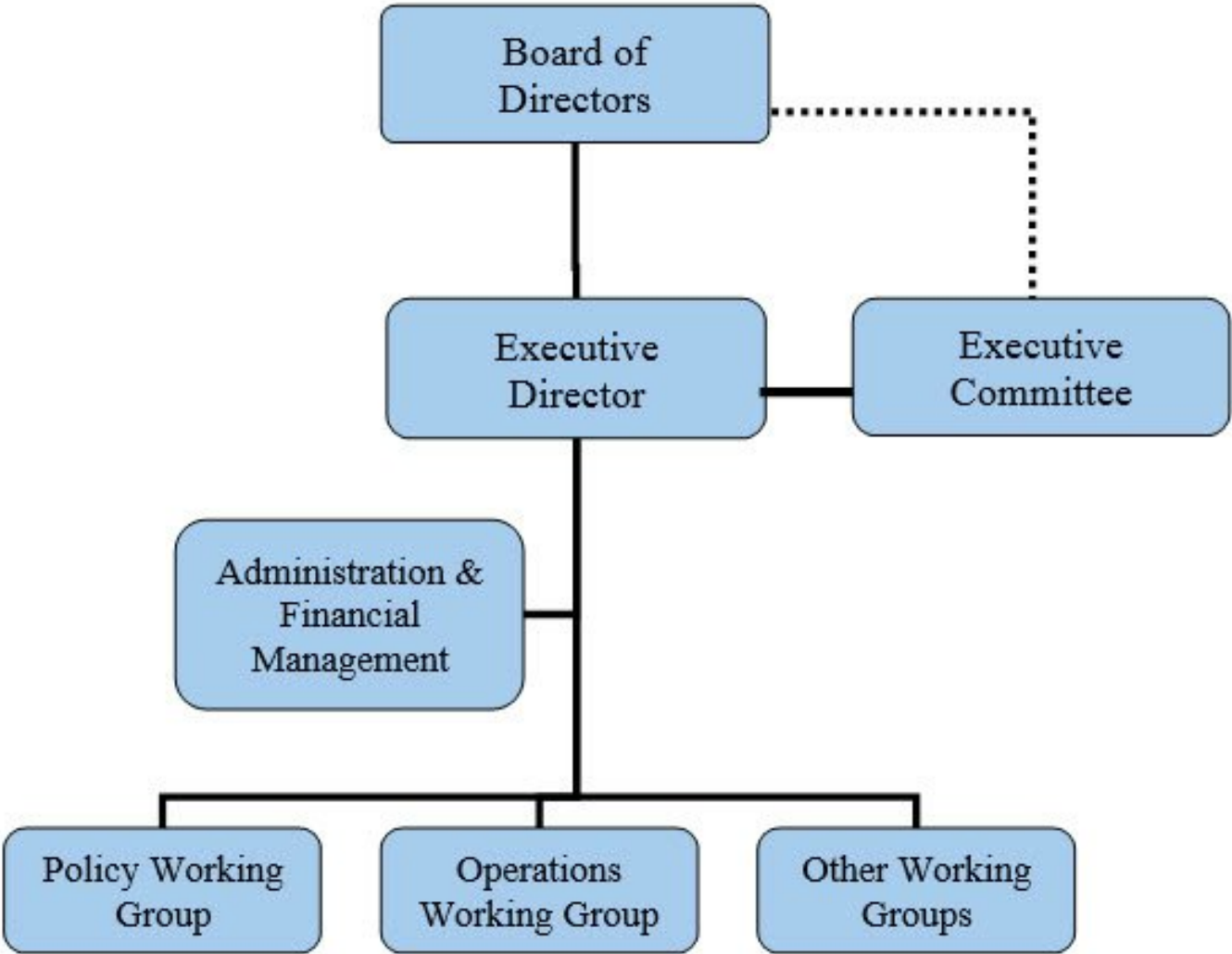
For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2017

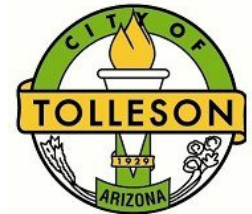
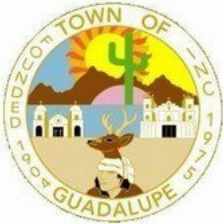
Christopher P. Morrill

Executive Director/CEO

Regional Wireless Cooperative Organizational Chart



MEMBERS



**Regional Wireless Cooperative
Comprehensive Annual Financial Report
For the Fiscal Year Ended June 30, 2018**

RWC BOARD OF DIRECTORS

Chair
John Imig
Chief Technology Officer
City of Peoria

Vice Chair
Danny Johnson
Deputy Fire Chief
Daisy Mountain Fire District

Tim Van Scoter
Deputy Fire Chief
American Fire & Medical Authority

Paul Luizzi
Fire Chief
City of Goodyear

Brad Hartig
CIO/Executive Director IT
City of Scottsdale

Kevin Artz
Acting Assistant City Manager
City of Avondale

Wayne Clement
Fire Chief
Town of Guadalupe

Ron Deadman
Interim Fire Chief
Sun City Fire District

Bob Costello
Fire Chief
City of Buckeye

Lonnie Inskeep
Assistant Chief
City of Maricopa

Mike Frazier
Assistant City Manager
City of Surprise

Val Gale
Assistant Fire Chief
City of Chandler

Roy Stanifer
Communications & Records Manager
Maricopa Community Colleges

Brenda Buren
Assistant Police Chief
City of Tempe

Paul Marzocca
Police Chief
City of El Mirage

Michael Cole
Police Lieutenant
Town of Paradise Valley

Ginger Sanabria
PD Support Services Manager
City of Tolleson

Rick St. John
Police Chief
City of Glendale

Milton Dohoney, Jr.
Assistant City Manager
City of Phoenix

FINANCIAL SECTION

INDEPENDENT AUDITORS' REPORT

Board of Directors
Regional Wireless Cooperative
Phoenix, Arizona

Report on the Financial Statements

We have audited the accompanying financial statements of the Regional Wireless Cooperative, which comprise the statement of net position as of June 30, 2018, and the related statements of revenues, expenses, and changes in net position, and cash flows for the year then ended, and the related notes to the financial statements, which collectively comprise the entity's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Regional Wireless Cooperative as of June 30, 2018, and the changes in its financial position and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management discussion and analysis on pages 3 through 7 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary and Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Regional Wireless Cooperative's basic financial statements. The accompanying supplementary information, introductory and statistical sections, as referenced in the table of contents, are presented for purposes of additional analysis, and are not a required part of the basic financial statements.

The supplementary information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.



CliftonLarsonAllen LLP

Phoenix, Arizona
December 14, 2018

**REGIONAL WIRELESS COOPERATIVE
MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE FISCAL YEAR ENDED JUNE 30, 2018**

The following Management Discussion and Analysis (MD&A) of the Regional Wireless Cooperative's (RWC) activities and financial performance provides an introduction to RWC's financial statements as of and for fiscal year ended June 30, 2018. The information in this MD&A should be considered in conjunction with the information contained in the Letter of Transmittal included in the Introductory Section of this report.

FINANCIAL AND OPERATIONAL HIGHLIGHTS

- Net position for the RWC totaled \$75.2 million at June 30, 2018 and decreased by \$6.5 million compared to fiscal year 2017. The decrease in 2018 is primarily due to the continued depreciation of capital assets.
- Operating revenues were \$10.8 million for fiscal year 2018 and increased by \$1.5 million compared to fiscal year 2017. The increase in 2018 was due to \$1.9 million higher special assessment revenues due to project billings to system upgrades.
- The operating expenses increased by \$1.0 million to \$17.3 million in fiscal year 2018. This increase was due to an increase in the current year depreciation expense after capitalizing Narrow-Banding Phase I and System Upgrade Agreement II 7.16.

OVERVIEW OF THE FINANCIAL STATEMENTS

This discussion and analysis is intended to serve as an introduction to the RWC's basic financial statements. The RWC's basic financial statements include the statement of net position, statement of revenues, expenses, and changes in net position, statement of cash flows, and notes to the financial statements. The RWC's financial statements are prepared on an accrual basis in accordance with generally accepted accounting principles applicable to a governmental entity.

Enterprise Operations

The RWC is structured as a joint venture, governed by a Board of Directors, with all members of the RWC having a seat and a vote on the Board. The Executive Director reports to the Board of Directors and serves as a non-voting member of the Board-appointed Executive Committee.

The Executive Director is supported by the Executive Committee, Operations Working Group, and other Working Groups, in addition to three staff positions who assist with the administration and financial management of the RWC. The Executive Director and staff are City of Phoenix employees residing in the Office of Government Relations.

RWC'S FINANCIAL ANALYSIS

Net position may serve over time as a useful indicator of the joint venture's financial position. The net position of the RWC decreased by \$6.5 million for the year ended June 30, 2018 as compared to June 30, 2017.

**REGIONAL WIRELESS COOPERATIVE
MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE FISCAL YEAR ENDED JUNE 30, 2018**

RWC'S FINANCIAL ANALYSIS (CONTINUED)

**RWC's Condensed Statements of Net Position
as of June 30, 2018 and 2017**

(in thousands)

	June 30,	
	2018	2017
Current Assets	\$ 5,634	\$ 6,998
Capital Assets, Net	73,867	80,098
Total Assets	79,501	87,096
Deferred Outflows of Resources	—	—
Current Liabilities	1,199	1,489
Noncurrent Liabilities	3,090	3,929
Total Liabilities	4,289	5,418
Deferred Inflows of Resources	—	—
Investment in Capital Assets	73,867	80,098
Unrestricted	1,345	1,580
Total Net Position	\$ 75,212	\$ 81,678

During fiscal year 2018, current assets decreased by \$1.4 million from fiscal year 2017. The decrease in 2018 was due to a decrease in equity in pooled cash and investments for capital related payments made for system upgrades.

Capital assets, net decreased by \$6.2 million from fiscal year 2017 primarily due to current year depreciation expense of \$10.5 million and \$4.3 million of additions.

Liabilities decreased in 2018 by \$1.1 million from fiscal year 2017. The decrease in 2018 was due to a decrease in unearned revenue of \$0.9 million for adjustments to recognize amounts as current year operating revenues.

Net position decreased by \$6.5 million to \$75.2 million in fiscal year 2018. This overall decrease is primarily related to the decrease in capital assets, net based on current year depreciation expense.

**REGIONAL WIRELESS COOPERATIVE
MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE FISCAL YEAR ENDED JUNE 30, 2018**

RWC'S FINANCIAL ANALYSIS (CONTINUED)

**RWC's Condensed Statements of Revenues,
Expenses, and Changes in Net Position
For the Years Ended June 30, 2018 and 2017
(in thousands)**

	June 30,	
	2018	2017
Operating Revenues	\$ 10,790	\$ 9,309
Non-Operating Revenues	38	24
Total Revenues	10,828	9,333
Operating Expenses		
Staff and Administrative Allocation	654	538
Operations and Maintenance	5,994	6,048
Special Assessments	151	245
Depreciation	10,495	9,476
Total Operating Expenses	17,294	16,307
Non-Operating Expenses	—	—
Total Expenses	17,294	16,307
Changes in Net Positions	(6,466)	(6,974)
Net Position, July 1	81,678	88,652
Net Position, June 30	\$ 75,212	\$ 81,678

Operating revenues increased by \$1.5 million during 2018 primarily due to higher special assessments with a major systems upgrade project now underway.

During fiscal year 2018, total operating expenses increased by \$1.0 million, when compared to fiscal year 2017. This increase was primarily due to a higher depreciation expense on capital assets.

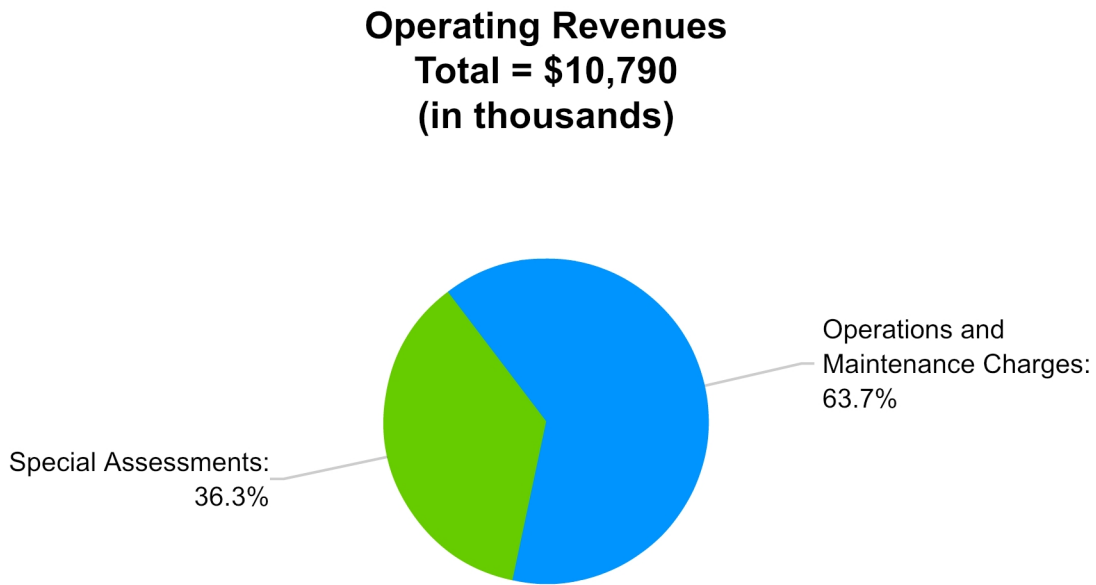
OPERATING REVENUES

The RWC's revenue is primarily generated by charges to the joint venture members for operations and maintenance costs, special assessments, and an operating reserve. For fiscal year 2018, revenues amounted to \$10.8 million of which \$6.9 million is revenue from operations and maintenance and \$3.9 million is from special assessments.

**REGIONAL WIRELESS COOPERATIVE
MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE FISCAL YEAR ENDED JUNE 30, 2018**

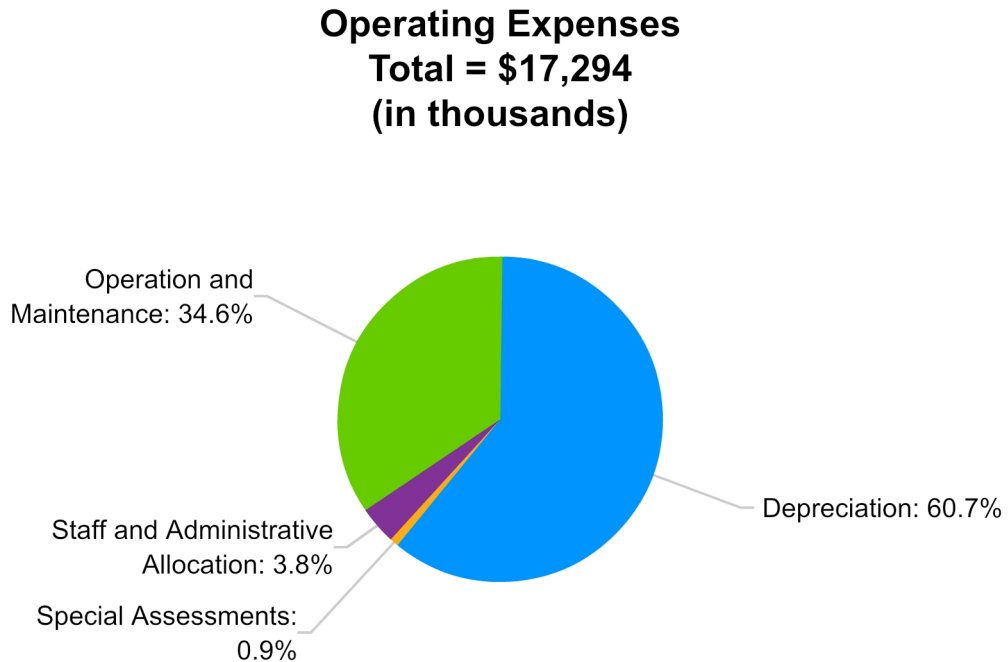
OPERATING REVENUES (CONTINUED)

The following chart depicts the RWC's operating revenues by category for the year ended June 30, 2018:



OPERATING EXPENSES

The following chart depicts the RWC's operating expenses by category for the year ended June 30, 2018:



**REGIONAL WIRELESS COOPERATIVE
MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE FISCAL YEAR ENDED JUNE 30, 2018**

CAPITAL ASSETS

The RWC's investment in capital assets as of June 30, 2018 amounts to \$73.9 million (net of accumulated depreciation) and \$80.1 million as of June 30, 2017. Net capital assets decreased by \$6.2 million during fiscal year 2018. For additional information on RWC's capital assets, please refer to the Notes to the Financial Statements, Organization and Summary of Significant Accounting Policies, Note 1, page 12 and Capital Assets, Note 3, page 17.

**RWC's Capital Assets
(in thousands)**

	June 30	
	2018	2017
Buildings	\$ 28,842	\$ 28,842
Improvements other than Buildings	4,830	4,830
Equipment	113,941	113,941
Intangible Assets	9,371	4,511
Construction in Progress	4,265	4,862
Accumulated Depreciation	(87,382)	(76,888)
Capital Assets, Net	\$ 73,867	\$ 80,098

REQUEST FOR FINANCIAL INFORMATION

This financial report is designed to provide a general overview of RWC'S finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Regional Wireless Cooperative, 200 West Washington Street, 7th Floor, Phoenix, Arizona, 85003-1611.

BASIC FINANCIAL STATEMENTS

Regional Wireless Cooperative
Statement of Net Position
June 30, 2018
(in thousands)

ASSETS

Current Assets	
Unrestricted Assets	
Equity in Pooled Cash and Investments	\$ 2,305
Equity in Pooled Cash and Investments - Operating Reserve	1,074
Equity in Pooled Cash and Investments - Capital	2,255
Total Unrestricted Assets	5,634
Total Current Assets	5,634
Noncurrent Assets	
Capital Assets	
Buildings	28,842
Improvements other than Buildings	4,830
Equipment	113,941
Intangible Assets	9,371
Construction in Progress	4,265
Less: Accumulated Depreciation	(87,382)
Capital Assets, Net	73,867
Total Assets	79,501

DEFERRED OUTFLOWS OF RESOURCES

Total Deferred Outflows of Resources	—
--------------------------------------	---

LIABILITIES

Current Liabilities	
Accounts Payable	1,008
Members' Payable	178
Accrued Expenses	13
Total Current Liabilities	1,199
Noncurrent Liabilities	
Accrued Expenses	96
Unearned Revenue	2,994
Total Noncurrent Liabilities	3,090
Total Liabilities	4,289

DEFERRED INFLOWS OF RESOURCES

Total Deferred Inflows of Resources	—
-------------------------------------	---

NET POSITION

Investment in Capital Assets	73,867
Unrestricted	1,345
Net Position	\$ 75,212

The accompanying notes are an integral part of these financial statements.

Regional Wireless Cooperative
Statement of Revenues, Expenses, and
Changes in Net Position
For the Fiscal Year Ended June 30, 2018
(in thousands)

Operating Revenues	
Operations and Maintenance Charges	\$ 6,871
Special Assessments	3,919
Total Operating Revenues	10,790
Operating Expenses	
Staff and Administrative Allocation	654
Operation and Maintenance	5,994
Special Assessments	151
Depreciation	10,495
Total Operating Expenses	17,294
Operating Loss	(6,504)
Non-Operating Revenues (Expenses)	
Investment Income	
Net Decrease in Fair Value of Investments	(72)
Interest	110
Total Non-Operating Revenues (Expenses)	38
Changes in Net Position	(6,466)
Net Position, July 1	81,678
Net Position, June 30	75,212

The accompanying notes are an integral part of these financial statements.

Regional Wireless Cooperative
Statement of Cash Flows
For the Fiscal Year Ended June 30, 2018
(in thousands)

Cash Flows from Operating Activities	
Cash Received from Members	\$ 10,790
Cash Paid to Suppliers	(7,295)
Cash Paid for Staff and Administration Allocation	(633)
Net Cash Provided by Operating Activities	2,862
Cash Flows from Capital and Related Financing Activities	
Acquisition and Construction of Capital Assets	(4,264)
Net Cash Used by Capital and Related Financing Activities	(4,264)
Cash Flows from Investing Activities	
Interest on Investments	38
Net Cash Provided by Investing Activities	38
Net Decrease in Cash and Cash Equivalents	(1,364)
Cash and Cash Equivalents, July 1	6,998
Cash and Cash Equivalents, June 30	\$ 5,634
Reconciliation of Operating Loss to Net Cash	
Provided by Operating Activities	
Operating Loss	\$ (6,504)
Adjustments	
Depreciation	10,495
Increase (Decrease) in Liabilities	
Accounts Payable	30
Members' Payable	(322)
Accrued Expenses	21
Unearned Revenue	(858)
Net Cash Provided by Operating Activities	\$ 2,862

The accompanying notes are an integral part of these financial statements.

NOTES TO THE FINANCIAL STATEMENTS

Regional Wireless Cooperative
Notes to the Financial Statements
For the Fiscal Year Ended June 30, 2018

The Notes to the Financial Statements include a summary of significant accounting policies and other disclosures necessary for a clear understanding of the accompanying financial statements.

An index to the notes follows:

<u>NOTE</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
1	Organization and Summary of Significant Accounting Policies	12
2	Cash and Pooled Investments	15
3	Capital Assets	17
4	Risk Management	17
5	Members' Equity	18
6	Related Party Transactions	18
7	Commitments and Contingencies	19

**Regional Wireless Cooperative
Notes to the Financial Statements
For the Fiscal Year Ended June 30, 2018**

The Regional Wireless Cooperative (RWC) was formed in 2008 to oversee the administration, operation, management and maintenance of the expanding regional communication network. The RWC is an Arizona joint venture, multi-jurisdictional organization throughout the Phoenix Metropolitan Region which currently consists of 20 members. The RWC is a large, Public Safety radio network based on the Project 25, Phase I Standard. The network is an ASTRO 25™, integrated voice and data, trunked radio system that it operates in the 700/800 MHz frequency bands and uses standard Simulcast, IP Simulcast, and individual site trunking. The network consists of seven major simulcast subsystems and ten Intelligent Site Repeaters (ISR's).

The system provides seamless, wide area coverage in and around Central Arizona's Valley of the Sun. The system is data capable, but at the current time is only used in a data capacity to provide encryption services.

Some of the benefits of this large regional radio system include wide area coverage beyond what cities could achieve individually; seamless interoperability (the ability for diverse public safety agencies to communicate directly, in real-time, as the need requires); shared resources; such as people, equipment, and tower sites and funding; and increased success in obtaining state and federal grant support. Financial responsibilities are shared by all members based on their relative size, and is measured by the number of subscriber units on the network.

1. Organization and Summary of Significant Accounting Policies

The accompanying financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP) as applied to governmental units. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles.

The RWC is a special purpose governmental entity, engaged only in business-type activities. It is required to present the financial statements required for enterprise funds, which include a statement of net position, a statement of revenues, expenses and changes in net position, and a statement of cash flows. It also requires a Management's Discussion and Analysis as required supplementary information.

The RWC's other significant accounting and financial policies are described as follows:

Reporting Entity

The RWC is structured and reported as a joint venture between the members. Each member includes their equity in the joint venture in their respective basic financial statements. The accompanying financial statements present the financial position of the RWC only. The RWC does not have any component units.

Basis of Accounting

The RWC is accounted for using the flow of economic resources measurement focus and the accrual basis of accounting. All assets, liabilities, net position, revenues, and expenses are accounted for through an enterprise fund. Revenues are recorded when earned and expenses recorded at the time the liabilities are incurred.

The Statement of Net Position present the reporting entity's assets and liabilities, with the difference reported as net position. Net position is reported in three components:

Investment in capital assets consists of capital assets, net of accumulated depreciation and is reduced by outstanding balances for bonds, notes, and other debt that are attributed to the acquisition, construction, or improvement of those assets.

Restricted results when constraints placed on asset use are either externally imposed by creditors, grantor, contributors, and the like, or imposed by law through constitutional provisions or enabling legislation.

Unrestricted consist of those assets which do not meet the definition of the two preceding categories. Unrestricted often are designated to indicate that management does not consider them to be available for general operations. The unrestricted component often has constraints on resources which are imposed by management, but can be removed or modified by the RWC Board of Directors.

**Regional Wireless Cooperative
Notes to the Financial Statements
For the Fiscal Year Ended June 30, 2018**

1. Organization and Summary of Significant Accounting Policies (continued)

Basis of Accounting (continued)

The Statement of Revenues, Expenses, and Changes in Net Position demonstrates the degree to which the expenses are offset by revenues. Operating revenues are members' charges and other miscellaneous revenues that are received based on the ongoing activities of the RWC. Operating expenses are those incurred for network operations, maintenance, administration and depreciation of capital assets. Non-operating revenues and expenses are items that are not a result of the direct operations of the network, including interest.

Cash and Pooled Investments

Equity in pooled cash and investments on the Statement of Net Position and cash and cash equivalents on the Statement of Cash Flows consists only of pooled investments. Pooled investments are cash equivalents and are held in the investment pool of the City of Phoenix, Arizona (City). The City's cash resources are combined to form a cash and investment pool managed by the City Treasurer. Interest earned by the pool is distributed monthly to the RWC based on daily equity in the pool.

The RWC's pooled investments are stated at fair value, except for re-purchase agreements with original maturities of one year or less which are valued at cost that approximates fair value. Fair value is based on quoted market prices as of the valuation date.

Receivables

Management analyzes receivables periodically to determine whether an allowance for doubtful accounts should be recorded. There is no current provision required for possible bad debts.

Capital Assets

Capital assets are recorded at historical cost plus capitalized interest on assets constructed. Donated capital assets are recorded at the estimated acquisition value at the date of donation. Depreciation is computed using the straight-line method over the estimated useful lives of the related assets as follows:

Land	Not depreciated
Buildings	10 - 40 years
Improvements other than buildings	10 - 50 years
Equipment	5 - 30 years
Intangible assets	5 - 40 years
Construction in progress	Not depreciated

A gain or loss on disposal of capital assets is recognized when assets are retired from service or are otherwise sold or removed. The minimum capitalization policy is \$5,000 or more with an estimated useful life exceeding two years.

Members' Payable

The RWC reports members' payable in connection with revenues from billings to members. Members' payable at June 30, 2018 was \$178,025.

Operating Revenues

Operating revenues include members' charges and other revenues. Members' charges are contributions received from the members for costs of operation and maintenance, administration, and the construction of capital assets. All operating revenues are recognized when earned. Members' charges for operating costs are earned ratably throughout the year.

Operating Expenses

Operating expenses include operation and maintenance expenses, depreciation and administrative expenses. Administrative expenses include direct administrative costs for RWC assigned staff. Operating, maintenance, and administrative costs are allocated to the members based on the number of operable subscribers on the network.

**Regional Wireless Cooperative
Notes to the Financial Statements
For the Fiscal Year Ended June 30, 2018**

1. Organization and Summary of Significant Accounting Policies (continued)

Application of Restricted or Unrestricted Resources

In cases where an expense is incurred for purposes for which both restricted and unrestricted resources are available, the expense is first applied to the restricted resources.

Budget

The RWC assigned staff prepares and presents the operating and capital budget to the Executive Committee. The budget includes operations and maintenance, administration costs as well as planned capital costs. The budget is forwarded to the RWC Board of Directors for approval and adoption. It is the responsibility of each RWC member to take appropriate steps in conformity with the state and local laws to ensure that it appropriates sufficient funds to cover its obligation. The budget is prepared in sufficient detail to facilitate its use by management in monitoring operations.

Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make a number of estimates and assumptions that affect the reported amount of assets and liabilities at the date of the financial statements and reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

New Accounting Pronouncements Adopted in 2018:

GASB Statement No. 75, GASB Statement No. 75, ***Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions***, will improve the decision-usefulness of information in employer and governmental nonemployer contributing entity financial reports and will enhance its value for assessing accountability and interperiod equity by requiring recognition of the entire OPEB liability and a more comprehensive measure of OPEB expense. The requirements of this Statement are effective for financial statements for reporting periods beginning after June 15, 2017. RWC has determined there is no impact to the financial statements as a result of this Statement.

GASB Statement No. 81, ***Irrevocable Split-Interest Agreements***, requires that a government that receives resources pursuant to an irrevocable split-interest agreement recognize assets, liabilities, and deferred inflows of resources at the inception of the agreement. The Statement also provides expanded guidance for circumstances in which the government holds the assets. The requirements of this Statement are effective for financial statements for periods beginning after December 15, 2016. RWC has determined there is no impact to the financial statements as a result of this Statement.

GASB Statement No. 85, ***Omnibus 2017***, addresses practice issues that were identified during implementation and application of certain GASB Statements. The Statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits (OPEB)). The requirements of this Statement are effective for financial statements for periods beginning after June 15, 2017. RWC has determined there is no impact to the financial statements as a result of this Statement.

GASB Statement No. 86, ***Certain Debt Extinguishment Issues***, establishes standards of accounting and financial reporting requirements, for in-substance defeasance of debt transactions in which cash and other monetary assets acquired with only existing resources—that is, resources other than the proceeds of refunding debt—are placed in an irrevocable trust for the sole purpose of future repayment of outstanding debt. The requirements of this Statement are effective for financial statements for periods beginning after June 15, 2017. RWC has determined there is no impact to the financial statements as a result of this Statement.

GASB Statement No. 89, ***Accounting for Interest Cost Incurred before the End of a Construction Period***, requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result, interest cost incurred before the end of a construction period will not be included in the historical cost of a capital asset reported in a business-type activity or enterprise fund. For financial statements that are prepared with the current financial resources measurement focus, the interest cost incurred before the end of a

**Regional Wireless Cooperative
Notes to the Financial Statements
For the Fiscal Year Ended June 30, 2018**

1. Organization and Summary of Significant Accounting Policies (continued)

New Accounting Pronouncements Adopted in 2018 (continued):

construction period should be recognized as an expense according to governmental fund accounting principles. The requirements of this Statement are effective for financial statements for periods beginning after December 15, 2019. RWC has implemented this Statement in fiscal year 2018.

Pronouncements Issued But Not Yet Effective:

GASB has issued the following pronouncements that may effect future financial position, results of operations, cash flows, or financial presentation of RWC upon implementation. RWC has not fully determined the effect these pronouncements will have on the RWC's financial statements.

GASB Statement No.	GASB Accounting Standard	Effective Fiscal Year
83	<i>Certain Asset Retirement Obligations</i>	2019
84	<i>Fiduciary Activities</i>	2020
87	<i>Leases</i>	2021
88	<i>Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements</i>	2019

2. Cash and Pooled Investments

The RWC did not have cash on hand at June 30, 2018. Pooled investments are maintained in the cash and investment pool of the City. RWC does not have a formal investment policy. The investment policy is maintained with the City.

Pooled Investments

The RWC investments are included in the City's pooled investments. The City Charter and ordinances authorize the City to invest in U.S. Treasury securities, securities guaranteed, insured or backed by the full faith and credit of the U.S. Government, U.S. Government agency securities, repurchase agreements, commercial paper, money market accounts, certificates of deposit, the State Treasurer's Local Government Investment Pool "LGIP", highly rated securities issued or guaranteed by any state or political subdivision thereof rated in the highest short-term or second highest long-term category, and investment grade corporate bonds, debentures, notes and other evidence of indebtedness issued or guaranteed by a solvent U.S. corporation which are not in default as to principal or interest. Investments are carried at fair value. It is the City's policy generally to hold investments until maturity. A detailed listing of City investments can be found in the City CAFR in Note 5 in the Notes to the Financial Statements.

RWC maintains a portion of its unrestricted cash and investments in the City's cash and investment pool. Total investments for RWC at June 30, 2018 stated at fair value, was \$5,633,684.

Fair Value Hierarchy

The City categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure fair value of the assets.

The three levels of the fair value hierarchy are as follows:

- Level 1 inputs are quoted prices in active markets for identical financial assets that the City has the ability to access at the measurement date;
- Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the financial asset, either directly or indirectly;
- Level 3 inputs are unobservable inputs for the financial asset.

**Regional Wireless Cooperative
Notes to the Financial Statements
For the Fiscal Year Ended June 30, 2018**

2. Cash and Pooled Investments (continued)

The following is a summary of the fair value hierarchy of the fair value of City pooled investments as of June 30, 2018 (in thousands):

Investments by Fair Value Level	Fair Value Measurement Using			
	6/30/2018	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
U.S. Government securities	\$ 1,488,031	\$ 15,785	\$ 1,472,246	\$ —
U.S. Government agency obligations	957,774	—	957,774	—
U.S. Government agency MBS/CMO	1,646	—	1,646	—
Municipal bonds	15,132	—	15,132	—
Commercial paper	123,364	—	123,364	—
Investment in land	872	—	—	872
Total investments, including those classified as, cash equivalents by fair value level	\$ 2,586,819	\$ 15,785	\$ 2,570,162	\$ 872

Interest Rate Risk

In order to limit interest rate risk, the City's investment policy limits maturities as follows:

U.S. Treasury Securities	5 year final maturity
Securities guaranteed, insured, or backed by the full faith and credit of the U.S. Government	5 year final maturity
U.S. Government Agency Securities	5 year final maturity
Repurchase Agreements	60 days
Municipal Obligations	5 years for long-term issues
Money Market Mutual Funds	90 days
Commercial Paper	270 days

For Mortgage Backed Securities (MBS) and Collateralized Mortgage Obligations (CMO), the maximum weighted average life using current Public Securities Association (PSA) prepayment assumption shall be twelve years at the time of purchase for MBS and five years at the time of purchase for CMO.

Credit Risk

The City's investment policy limits its purchase of investments to the top ratings issued by nationally recognized statistical rating organizations such as Standard & Poor's "S&P" and Moody's Investors Service "Moody's". The portfolio is primarily invested in securities issued by the U.S. Treasury or by U.S. Government Agency Securities which are rated Aaa by Moody's and AA+ by S&P. Repurchase agreements are generally collateralized by U.S. Treasuries and U.S. Government Agency Securities at 102%. In addition, the portfolio is invested in pre-refunded or escrowed to maturity municipal securities for which the payment of interest, and ultimately the repayment of the principal, is backed by U.S. Treasury Securities. Municipal securities must have a short-term minimum rating of A1 by S&P and P1 by Moody's and a long-term uninsured rating of A+ by S&P and A1 by Moody's. Money market mutual funds must have a current minimum money market rating of AAAM by S&P and Aaa-mf by Moody's. For commercial paper, an Issuer's program must have a minimum rating of "A1" by S&P and "P1" by Moody's. The issuing corporation must be organized and operating in the United States and have a minimum long-term debt rating of "A+" by S&P and "A1" by Moody's. Programs rated by only one of the agencies are ineligible.

Regional Wireless Cooperative
Notes to the Financial Statements
For the Fiscal Year Ended June 30, 2018

Concentration of Credit Risk

Investments in any one issuer that represent 5% or more of total City investment are as follows (in thousands):

<u>Issuer</u>	<u>Fair Value</u>
FFCB	\$ 286,189
FHLB	334,837
FNMA	155,540

3. Capital Assets

Capital asset activity for the fiscal year ended June 30, 2018 was as follows (in thousands):

	<u>Beginning Balance</u>	<u>Increases</u>	<u>Decreases</u>	<u>Ending Balance</u>
Non-depreciable Assets				
Construction in Progress	\$ 4,862	\$ 4,263	\$ (4,860)	\$ 4,265
Total Non-depreciable Assets	<u>4,862</u>	<u>4,263</u>	<u>(4,860)</u>	<u>4,265</u>
Depreciable Assets				
Buildings	28,842	—	—	28,842
Improvements other than Buildings	4,830	—	—	4,830
Equipment	113,941	—	—	113,941
Intangible Assets	4,511	4,861	—	9,372
Total Depreciable Assets	<u>152,124</u>	<u>4,861</u>	<u>—</u>	<u>156,985</u>
Accumulated Depreciation				
Buildings	(6,007)	(794)	—	(6,801)
Improvements other than Buildings	(1,615)	(238)	—	(1,853)
Equipment	(68,137)	(8,318)	—	(76,455)
Intangible Assets	(1,129)	(1,145)	—	(2,274)
Total Accumulated Depreciation	<u>(76,888)</u>	<u>(10,495)</u>	<u>—</u>	<u>(87,383)</u>
Total Depreciable Assets, Net	<u>75,236</u>	<u>(5,634)</u>	<u>—</u>	<u>69,602</u>
Total Capital Assets, Net	<u>\$ 80,098</u>	<u>\$ (1,371)</u>	<u>\$ (4,860)</u>	<u>\$ 73,867</u>

4. Risk Management

RWC's insurance program is administered by the City of Phoenix Risk Management Division of the Finance Department. RWC is charged annually for its share of insurance coverage. For fiscal year 2018, RWC was charged \$41,752 for insurance premiums. The members proportionately share the costs of the insurance program according to the provisions of the intergovernmental agreement. The City of Phoenix maintains a \$7.5 million self-insured retention for third-party liability claims. Losses which exceed the retention levels are covered by commercial insurance purchased through the City. Self-insured claims are reported as liabilities in the City of Phoenix's basic financial statements when it is probable that a loss has occurred and the amount of that loss can be reasonably estimated. This determination is based on an independent actuarial analysis of reported claims and estimated claims incurred but not reported. For the year ended June 30, 2018, there were no reductions in insurance coverage from the prior year and settled claims have not exceeded insurance coverage for the past three years. In the opinion of management, no provision for claims is required in the accompanying financial statements.

**Regional Wireless Cooperative
Notes to the Financial Statements
For the Fiscal Year Ended June 30, 2018**

5. Members' Equity

A summary of the joint venture members' equity as of June 30, 2018 is as follows:

Arizona Fire & Medical Authority	\$	369,580
City of Avondale		588,722
City of Buckeye		309,950
City of Chandler		1,916,437
Daisy Mountain Fire District		94,041
City of El Mirage		297,665
City of Glendale		2,952,265
City of Goodyear		297,717
Town of Guadalupe		90,691
City of Maricopa		190,767
Maricopa County Community College District		222,481
Town of Paradise Valley		—
City of Peoria		1,950,894
City of Phoenix		52,585,404
City of Scottsdale		1,845,805
Sun City Fire District		679,123
City of Surprise		1,096,944
City of Tempe		9,583,599
City of Tolleson		139,740
Total Members' Equity	<u>\$</u>	<u>75,211,825</u>

6. Related Party Transactions

Staff and administrative costs allocated by the City to RWC was \$653,512 for the year ended June 30, 2018. These costs include: salaries, radio operator charges, photocopy equipment, office supplies, computer software, computer components, motor pool, and security charges. The City subsidizes central services costs for the RWC. These costs include: building maintenance, custodial services, electrical maintenance, money management, accounts payable, various financial services, materials management, human resources, safety, fringe benefit administration, labor relations, training, network services, communication services, and general management services.

As RWC has no employees, the City assigned four full-time staff to RWC as of June 30, 2018 and compensation totaled \$491,051 for the year ended June 30, 2018.

RWC's full-time staff are employed by the City of Phoenix, Arizona and participate in the City of Phoenix Employees' Retirement Plan (COPERS). In addition to normal retirement benefits, COPERS also provides for disability and survivor benefits, as well as deferred pensions for former employees. Pension benefits vest after five years for general City employees.

The City provides certain post-employment health care benefits for its retired employees. Retirees meeting certain qualifications are eligible to participate in the City's health insurance program along with the City's active employees.

**Regional Wireless Cooperative
Notes to the Financial Statements
For the Fiscal Year Ended June 30, 2018**

7. Commitments and Contingencies

The RWC has entered into contractual agreements with Motorola to provide services related to maintenance, operations, and upgrades of the RWC Network. The percentages of the total RWC budget for these agreements were 59% for the year ended June 30, 2018.

At this point in time, RWC is not involved in any litigation and claims arising in the normal course of operations. In the opinion of management based on consultation with legal counsel, losses, if any, from pending litigation and claims are covered by insurance or are immaterial; therefore, no provision has been made in the accompanying financial statements for losses, if any, that might arise from the ultimate outcome of these matters.

SUPPLEMENTARY INFORMATION

**Regional Wireless Cooperative
Members' Operating Fund Reserve
For the Fiscal Year Ended June 30, 2018**

RWC members maintain an operating fund reserve to provide cash flow for cost of operating and maintenance of the Network. Each member's obligation to fund the balance reserve is proportionate to its subscriber units in use on the Network at the time the fee is assessed.

Member	Beginning Balance July 1, 2017	Contributions	Interest	Expenditures	Ending Balance June 30, 2018
Arizona Fire & Medical Authority	\$ 4,172	\$ —	\$ 66	\$ —	\$ 4,238
City of Avondale	18,290	—	290	—	18,580
City of Buckeye	17,685	—	281	—	17,966
City of Chandler	53,302	—	846	—	54,148
Daisy Mountain Fire District	1,097	—	17	—	1,114
City of El Mirage	8,982	—	143	—	9,125
City of Glendale	75,136	—	1,192	—	76,328
City of Goodyear	22,737	—	361	—	23,098
Town of Guadalupe	578	—	9	—	587
City of Maricopa	9,572	—	152	—	9,724
Maricopa County Community College District	13,237	—	210	—	13,447
Town of Paradise Valley	—	—	—	—	—
City of Peoria	51,151	—	812	—	51,963
City of Phoenix	557,729	—	8,851	—	566,580
Rural Metro	6,396	—	102	—	6,498
City of Scottsdale	87,628	—	1,391	—	89,019
Sun City Fire District	2,605	—	41	—	2,646
City of Surprise	23,700	—	376	—	24,076
City of Tempe	101,600	—	1,612	—	103,212
City of Tolleson	1,793	—	28	—	1,821
	\$ 1,057,390	\$ —	\$ 16,780	\$ —	\$ 1,074,170

Regional Wireless Cooperative
Members' Infrastructure Replacement and Enhancement Activity
For the Fiscal Year Ended June 30, 2018

RWC Members fund the Infrastructure Replacement and Enhancement Fund through RWC Board of Directors formal resolution stating the purpose of the project, term of project, total cost of project, and each RWC Member's fixed share of the project cost programmed across the specified term. Funds are used to pay for network upgrades and system enhancements.

Member	Beginning Balance July 1, 2017	Contributions	Interest	Expenditures	Ending Balance June 30, 2018
Arizona Fire & Medical Authority	\$ 23,727	\$ —	\$ 380	\$ (10,032)	\$ 14,075
City of Avondale	92,394	—	1,481	(39,065)	54,810
City of Buckeye	67,487	—	1,081	(28,534)	40,034
City of Chandler	337,310	—	5,405	(142,616)	200,099
Daisy Mountain Fire District	1,774	—	28	(750)	1,052
City of El Mirage	28,670	—	459	(12,122)	17,007
City of Glendale	237,801	—	3,810	(100,543)	141,068
City of Goodyear	15,279	—	245	(6,460)	9,064
Town of Guadalupe	3,841	—	62	(1,624)	2,279
City of Maricopa	48,120	—	771	(20,345)	28,546
Maricopa County Community College District	69,435	—	1,113	(29,357)	41,191
Town of Paradise Valley	—	—	—	—	—
City of Peoria	314,071	—	5,033	(132,790)	186,314
City of Phoenix	1,667,322	—	26,716	(704,949)	989,089
City of Scottsdale	486,048	—	7,788	(205,503)	288,333
Sun City Fire District	14,651	—	235	(6,194)	8,692
City of Surprise	140,119	—	2,245	(59,243)	83,121
City of Tempe	242,711	—	3,889	(102,619)	143,981
City of Tolleson	10,110	—	162	(4,275)	5,997
	\$ 3,800,870	\$ —	\$ 60,903	\$ (1,607,021)	\$ 2,254,752

Regional Wireless Cooperative
Members' Net Operating and Maintenance Expenditures
For the Fiscal Year Ended June 30, 2018

Member	Amount Billed	2018 Charge (Credit) Per User Settlement (1)	Net Operating Expenditures before Adjustments	2018 Unearned Revenue Adjustments (2)	Net Operating Expenditures
Arizona Fire & Medical Authority	\$ 30,237	\$ (936)	\$ 29,301	\$ —	\$ 29,301
City of Avondale	142,879	(4,060)	138,819	—	138,819
City of Buckeye	119,373	(3,387)	115,986	—	115,986
City of Chandler	365,964	(11,275)	354,689	—	354,689
Daisy Mountain Fire District	9,090	(236)	8,854	—	8,854
City of El Mirage	39,739	(1,224)	38,515	—	38,515
City of Glendale	454,772	(11,715)	443,057	—	443,057
City of Goodyear	152,530	(3,971)	148,559	—	148,559
Town of Guadalupe	3,636	(94)	3,542	—	3,542
City of Maricopa	78,008	(2,214)	75,794	—	75,794
Maricopa County Community College District	86,660	(2,477)	84,183	—	84,183
Town of Paradise Valley	20,098	(3,094)	17,004	—	17,004
City of Peoria	332,933	(6,615)	326,318	—	326,318
City of Phoenix	3,608,614	(93,423)	3,515,191	—	3,515,191
City of Scottsdale	550,127	(14,234)	535,893	—	535,893
Sun City Fire District	21,089	(551)	20,538	—	20,538
City of Surprise	192,526	(4,985)	187,541	—	187,541
City of Tempe	482,043	(12,276)	469,767	259,520	729,287
City of Tolleson	44,378	(1,258)	43,120	—	43,120
Non-Members	54,540	—	54,540	—	54,540
	<u>\$6,789,236</u>	<u>\$ (178,025)</u>	<u>\$ 6,611,211</u>	<u>\$ 259,520</u>	<u>\$ 6,870,731</u>

(1) These amounts represent the settlement of operating and maintenance expenditures.

(2) Unearned Revenues were recorded in 2016 for overpayments received from members. Members have elected to offset current year billings with these overpayments.

STATISTICAL SECTION

**Regional Wireless Cooperative
Statistical Section
For the fiscal year ended June 30, 2018**

This section of the RWC's comprehensive annual financial report presents detailed information as context for understanding of the information in the financial statements, note disclosures, required supplementary information, and the joint venture's overall financial condition. The RWC began operation in FY 2010; therefore, 10 years of data is not available for presentation in this section.

Financial Trends

These schedules contain trend information to help the reader understand how the RWC's financial performance and well-being have changed over time:

	<u>Page</u>
Statements of Net Position	24
Statements of Revenues, Expenses, and Changes in Net Position	24
Members' Operation and Maintenance Expenses	25

Demographic and Economic Information

These schedules offer demographic and economic indicators to show the environment within which the RWC's financial activities take place:

	<u>Page</u>
Major Employers Metropolitan Phoenix	29

Operating Information

These schedules contain service data to show how the RWC's financial information relates to the services the RWC provides and the activity it performs:

	<u>Page</u>
Subscriber Units	29
System Statistics	30

**Regional Wireless Cooperative
Statements of Net Position
Last Nine Fiscal Years
(in thousands)**

	2018	2017	2016	2015	2014	2013	2012	2011	2010
Investment in Capital Assets	\$ 73,867	\$ 80,098	\$ 86,472	\$ 83,376	\$ 83,280	\$ 87,125	\$ 95,643	\$ 99,481	\$ 96,350
Restricted									
Capital Projects	—	—	243	121	—	88	—	—	—
Unrestricted	1,345	1,580	1,937	12,386	4,250	498	706	534	514
Net Position	\$ 75,212	\$ 81,678	\$ 88,652	\$ 95,883	\$ 87,530	\$ 87,711	\$ 96,349	\$ 100,015	\$ 96,864

**Statements of Revenues, Expenses, and Changes in Net Position
Last Nine Fiscal Years
(in thousands)**

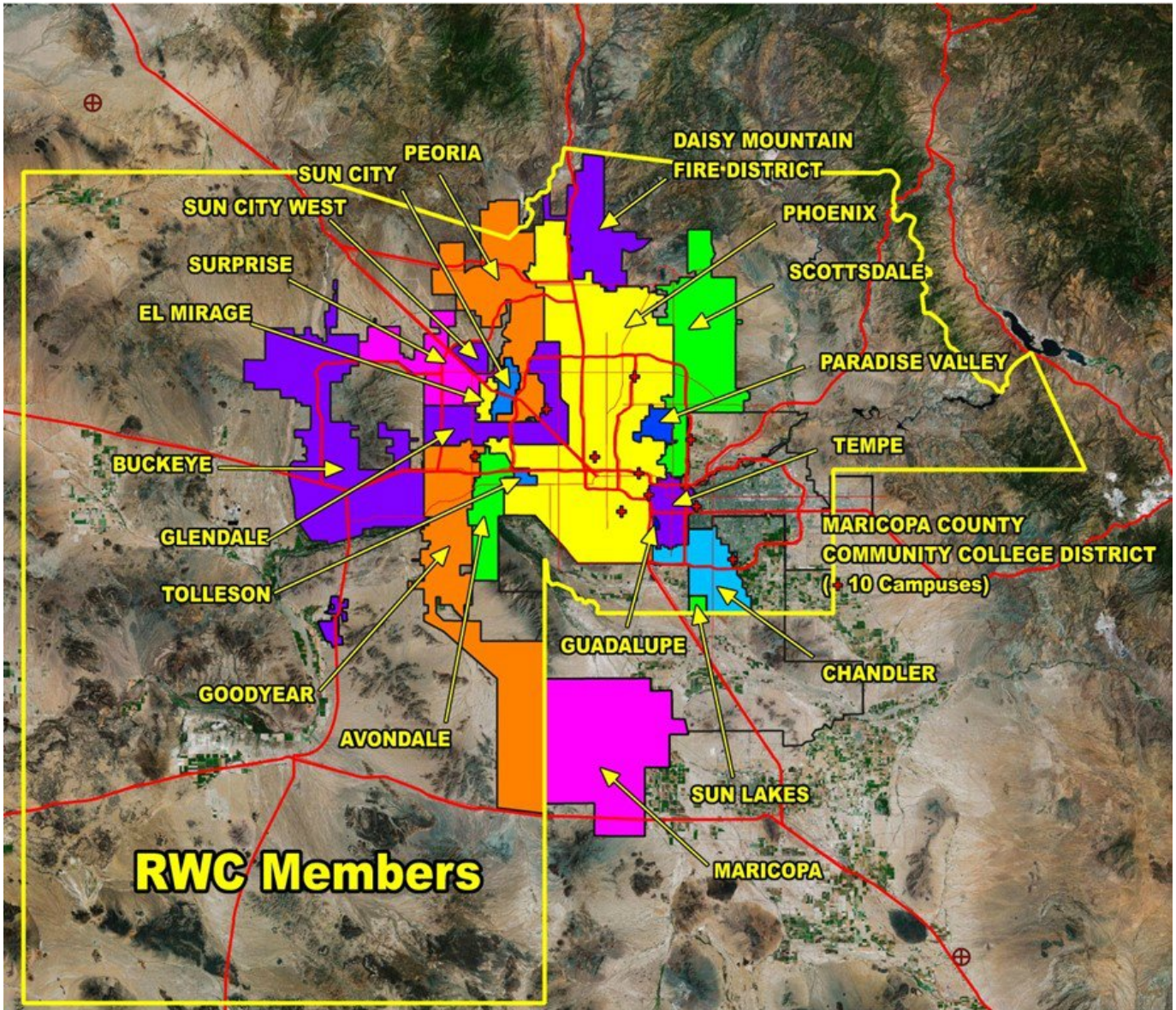
	2018	2017	2016	2015	2014	2013	2012	2011	2010
Operating Revenues									
Operation and Maintenance Charges	\$ 6,871	\$ 7,320	\$ 6,592	\$ 7,209	\$ 7,201	\$ 6,746	\$ 8,305	\$ 6,389	\$ 5,964
Special Assessments	3,919	1,989	16,646	16,170	11,143	2,390	48	93	—
Other	—	—	121	121	88	88	60	445	—
Total Operating Revenues	10,790	9,309	23,359	23,500	18,432	9,224	8,413	6,927	5,964
Operating Expenses									
Staff and Administrative Allocation	654	538	691	582	617	597	499	527	30
Operation and Maintenance	5,994	6,048	3,925	6,174	6,541	6,048	7,602	5,853	5,420
Special Assessments	151	245	2,429	5	3	—	48	93	—
Depreciation	10,495	9,476	8,299	8,509	11,546	10,444	9,999	10,181	9,926
Total Operating Expenses	17,294	16,307	15,344	15,270	18,707	17,089	18,148	16,654	15,376
Operating Income (Loss)	(6,504)	(6,998)	8,015	8,230	(275)	(7,865)	(9,735)	(9,727)	(9,412)
Non-Operating Revenues (Expenses)									
Investment Income									
Net Increase (Decrease) in Fair Value of									
Investments	(72)	(86)	25	(109)	(109)	(77)	(53)	(18)	—
Interest	110	110	262	232	203	81	78	30	—
Loss on Disposal of Capital Assets	—	—	(1,190)	—	—	(777)	—	—	—
Distribution to Members	—	—	(14,343)	—	—	—	—	—	—
Total Non-Operating Revenues (Expenses)	38	24	(15,246)	123	94	(773)	25	12	—
Income (Loss) Before Contributions	(6,466)	(6,974)	(7,231)	8,353	(181)	(8,638)	(9,710)	(9,715)	(9,412)
Capital Contributions	—	—	—	—	—	—	6,044	12,866	106,276
Changes in Net Position	\$ (6,466)	\$ (6,974)	\$ (7,231)	\$ 8,353	\$ (181)	\$ (8,638)	\$ (3,666)	\$ 3,151	\$ 96,864

**Regional Wireless Cooperative
Members' Operations and Maintenance Expenses
Last Seven Fiscal Years**

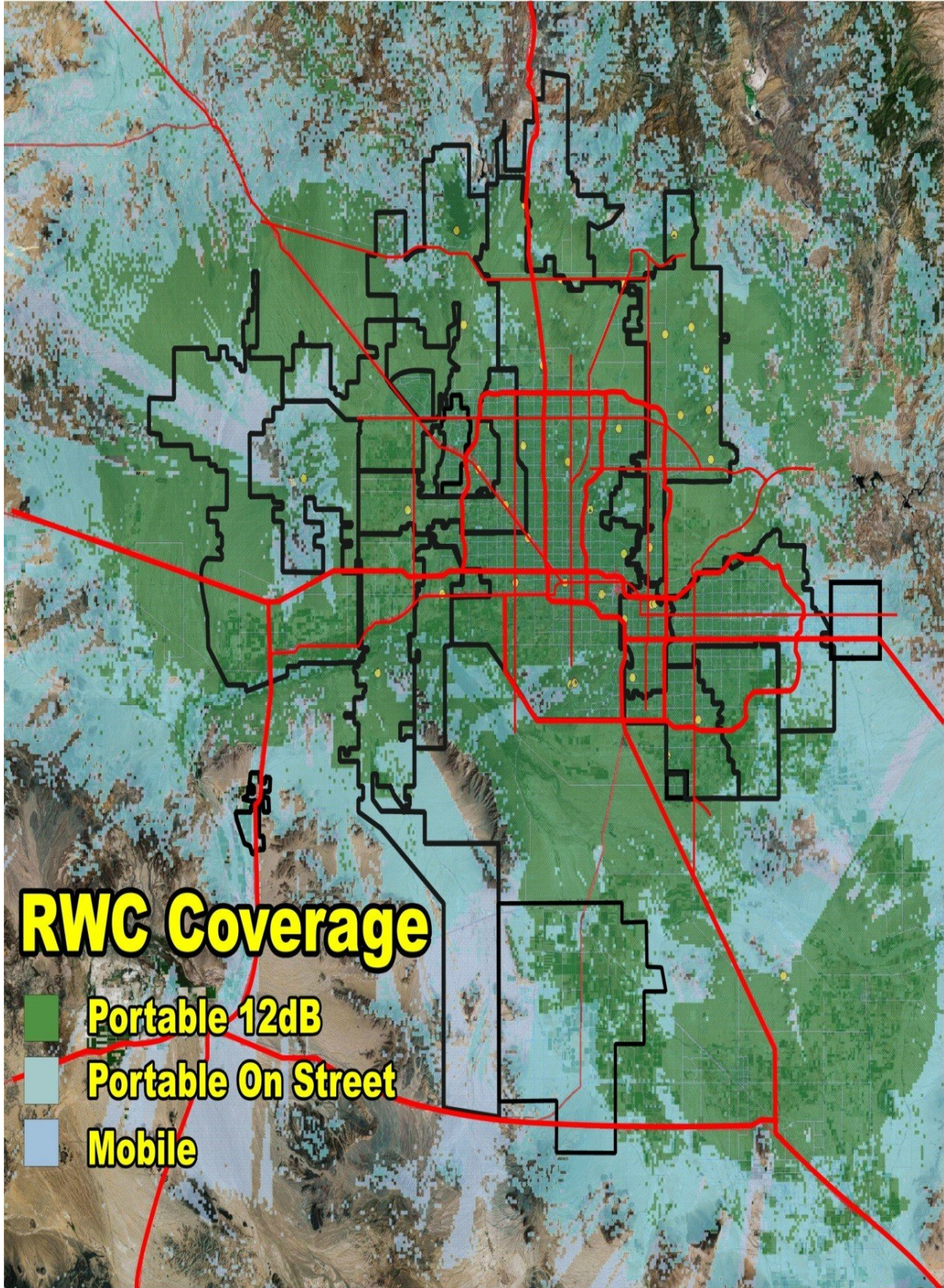
	2018	2017	2016	2015	2014	2013	2012	2011
Arizona Fire & Medical Authority	\$ 29,301	\$ 28,847	\$ 28,275	\$ 27,847	\$ 28,059	\$ 24,952	\$ 31,029	\$ 8,899
City of Avondale	138,819	127,170	96,672	121,150	123,697	108,885	39,787	10,297
City of Buckeye	115,986	114,114	113,819	123,292	105,746	77,987	91,438	81,737
City of Chandler	354,689	356,585	345,177	362,723	378,692	340,153	455,420	54,459
Daisy Mountain Fire District	8,854	8,209	7,443	8,239	3,819	2,111	3,314	1,830
City of El Mirage	38,515	38,041	45,293	39,139	38,067	31,944	38,635	34,353
City of Glendale	443,057	455,537	487,326	513,312	535,581	583,921	248,367	5,604
City of Goodyear	148,559	219,021	144,228	170,265	41,573	36,693	46,518	12,539
Town of Guadalupe	3,542	3,574	3,631	4,217	4,126	4,036	2,417	382
City of Maricopa	75,794	67,041	64,285	64,588	63,551	39,943	8,707	6,099
Maricopa County Community College	84,183	84,036	84,503	79,523	—	—	—	—
Town of Paradise Valley	17,004	—	—	—	—	—	—	—
City of Peoria	326,318	312,071	321,022	354,495	369,820	330,061	430,102	411,673
City of Phoenix	3,515,191	3,448,585	3,470,070	3,758,471	3,999,612	3,878,073	5,289,117	4,937,469
City of Scottsdale	535,893	553,558	558,223	596,642	568,508	503,669	717,469	48,494
Sun City Fire District	20,538	17,945	17,246	18,166	18,260	15,411	18,971	6,807
City of Surprise	187,541	171,780	152,212	170,233	167,321	147,314	144,535	123,972
City of Tempe	729,287	1,231,481	571,819	711,487	675,808	573,249	710,090	630,029
City of Tolleson	43,120	19,424	11,618	12,887	12,174	10,454	12,498	—
Non Members (1)	54,540	62,555	68,926	72,710	66,432	37,498	16,506	14,537
Total	\$ 6,870,731	\$ 7,319,574	\$ 6,591,788	\$ 7,209,386	\$ 7,200,846	\$ 6,746,354	\$ 8,304,920	\$ 6,389,180

(1) Non RWC Member's fee for use of the RWC Network.

Regional Wireless Cooperative Jurisdictions Map



Regional Wireless Cooperative Coverage Map



Regional Wireless Cooperative Cities' and Towns' Population Growth Last Nine Calendar Years

	2018	2017	2016	2015	2014	2013	2012	2011	2010
City of Avondale	84,025	82,881	80,684	78,090	78,822	77,511	76,870	76,392	76,238
City of Buckeye	68,453	64,629	62,138	58,795	56,683	56,460	54,102	52,334	50,876
City of Chandler	253,458	247,477	260,828	249,423	245,588	246,197	241,214	238,381	236,326
City of El Mirage	35,216	35,043	33,935	32,857	32,998	32,472	32,067	31,862	31,797
City of Glendale	246,709	245,895	240,126	232,680	234,632	231,109	229,008	227,446	226,721
City of Goodyear	79,858	77,258	79,003	74,743	72,864	72,275	69,018	67,337	65,275
Town of Guadalupe	6,225	6,336	6,177	6,084	6,072	6,019	5,943	5,895	5,523
City of Maricopa	48,007	46,903	48,602	47,442	45,508	44,946	44,396	43,598	43,482
Town of Paradise Valley	14,293	14,355	13,922	13,457	13,387	13,282	13,154	13,035	12,820
City of Peoria	168,181	164,173	171,237	163,832	162,592	160,545	157,653	155,754	154,058
City of Phoenix	1,626,078	1,615,017	1,563,025	1,506,439	1,505,070	1,485,751	1,465,901	1,453,462	1,447,128
City of Scottsdale	249,950	246,645	236,839	225,698	226,918	222,213	219,713	217,965	217,385
City of Surprise	134,085	132,677	128,422	123,797	123,546	121,629	119,530	118,349	117,517
City of Tempe	185,038	182,498	175,826	169,529	168,228	165,158	164,659	162,503	161,719
City of Tolleson	7,205	7,178	7,008	6,777	6,756	6,632	6,579	6,541	6,545

Source: US Census Bureau

**Regional Wireless Cooperative
Major Employers Metropolitan Phoenix
Current Year and Nine Years Ago**

Employer	2018			2009		
	Employees	Rank	Percentage of Total City Employment	Employees	Rank	Percentage of Total City Employment
State of Arizona	49,800	1	2.60%	50,936	1	2.66%
Wal-Mart Stores Inc.	30,634	2	1.60%	32,814	3	1.71%
Banner Health	24,825	3	1.30%	23,100	2	1.20%
City of Phoenix	15,100	4	0.79%	17,068	4	0.89%
Wells Fargo & Co.	13,308	5	0.70%	14,000	6	0.73%
Bank of America	13,300	6	0.69%			
Maricopa County	12,792	7	0.67%	14,014	5	0.73%
Arizona State University	11,185	8	0.58%	13,005	7	0.68%
Apollo Group	11,000	9	0.57%			
JP Morgan Chase & Co.	10,600	10	0.55%			
Honeywell Aerospace				12,600	8	0.66%
US Postal Service				10,545	9	0.55%
Bashas' Inc.				10,460	10	0.55%

Source: Phoenix Business Journal Book of Lists, Arizona Department of Commerce, Workforce Development

Note: Top Employers in Maricopa County

**Subscriber Units
Last Nine Fiscal Years**

	2018	2017	2016	2015	2014	2013	2012	2011	2010
Subscriber Units									
Member Total	18,504	18,522	18,046	18,242	17,371	17,695	18,213	17,996	14,049
Interoperability	22,537	22,576	18,976	17,574	10,143	11,682	8,390	5,727	6,639
Grand Total	41,041	41,098	37,022	35,816	27,514	29,377	26,603	23,723	20,688

System Statistics Last Four Fiscal Years

	2018	2017	2016	2015
Total # of Calls	28.2 million	30.3 million	28.1 million	28.5 million
Total Call Duration (hours)	73,560	76,635	81,535	80,399
Total Call Duration (sec)	265 million	276 million	294 million	289 million
Average Call Duration (sec)	9.4	9.1	10.6	10.2
Average Call Per Day	77,271	82,913	76,001	77,968
Total Busies	131	261	530	740
Busy Duration (hours)	0.02	0.05	0.13	0.11
Total Busy Duration	68	177	478	700
Average Busy Duration (sec)	0.5	0.7	0.9	1.1
Average Busy per Day	0.4	0.7	1.5	2.0
Total Emergency Calls	3,473	3,415	3,519	3,854
Total Emergency Duration (hours)	31.0	27.4	29.6	9.1
Total Emergency Duration (sec)	112,483	98,640	106,156	33,173
Average Emergency Duration (sec)	32.4	28.9	30.2	8.6
Average Emergency Calls per Day	9.5	9.4	9.6	10.6
System Reliability	99.975%	99.978%	99.968%	99.990%

Note: System Statistics for 2010 through 2014 were not available.