



# TABLE OF CONTENTS

Executive Director's Message	3
Background	5
RWC Systems	6
Interoperability	7
Interoperability Participating Agencies	8
Mission Statement	9
Organizational Structure	10
Fire and EMS	11
Law Enforcement	12
Municipal Services	13
Board of Directors	14
Executive Committee	15
Operations and Conventional Working Groups	16
Policy Working Group	17
Financial Management	18
Projects and Major Initiatives	21
System Performance	25
City of Phoenix Radio Shop	29
RWC Administration	30



# **EXECUTIVE DIRECTOR'S MESSAGE**

**RWC Members and Interested Parties:** 

As we bring 2023 to a close, I want to say how proud I am in continuing to serve RWC Member Agencies as Executive Director. Each day, I am fortunate to work with RWC Staff, a group of professional, dedicated, and dynamic people. Working alongside an engaged, thoughtful, and responsive RWC Board of Directors, as well as our supportive technical staff, is truly rewarding. It is an honor to serve our Member agencies and to contribute to the mission of supporting local government efforts to protect and enhance the lives of residents, visitors, and elected officials.

The RWC was formed to create, manage, and operate a public safety-grade communications system covering the greater Phoenix Metropolitan area and its outlying region. In 2023 we surpassed the 45,000 subscriber (radio) mark for the first time. This is an increase of over 10% from 2022. But, despite the increase in the number of subscribers on the system, we are still operating at nearly *"four nines"* (99.99%) of reliability, a remarkable achievement, given the complexity, size and heavy use of the system, across Member, Associate, Conditional and Interoperability Participating agencies. Credit for the reliable operation of the system goes to the staff members of the City of Phoenix Radio Shop, the City of Scottsdale Radio Shop, (supporting Zone 5 as a Maintenance Managing Member), and individual Member agency technical representatives.

The RWC is self-funded through collection of revenues from the Member, Associate and Conditional Participating agencies. These revenues are used to operate, maintain, and regularly upgrade the system, supported by a five-year projection formula. Any unspent revenue is credited back to the Members at the end of each Fiscal Year, either to be used to offset membership costs, fulfill future project needs, or to be refunded. The RWC does not make any profit from this model.

As the accounting functions are so intensely critical to RWC operations, in 2023 we expanded our staff for the first time since 2009 by welcoming a new, part-time Accountant, Mark Sampson. Mark comes to us with many years of accounting experience, primarily supporting the automotive industry in Liberia, Sierra Leone, South Africa, and Kenya. Mark quickly developed a strong, highly collaborative working relationship with all the RWC staff, has gained exceptional knowledge about the RWC, and has started contributing a huge amount over a very short period. Welcome, Mark!

I continue to be so very proud of the continued work of the entire RWC staff. Our Accountant IV, Almira Santos, who keeps our accounting operations going amidst an ever-growing workload; Nicholas Roosevelt, our Management Analyst II, who oversees RWC contracts, agreements, policies, procedures, and overall "detailed" operations; and Selena Barner, who supports the administrative side of the RWC operation, handling scheduling, meeting minutes, electronic record-keeping, and Member relations. Thanks to all of you for your hard work and dedication!



# **EXECUTIVE DIRECTOR'S MESSAGE (CONTINUED)**

We continue to appreciate the collaboration with the Phoenix Radio Shop, Network Operations Center, other supporting Phoenix Departments, including Government Relations, Finance and Budget & Research, as well as technical representatives from our Member agencies.

The RWC continues to support ongoing and future planning for site-related projects. The City of Buckeye continues construction on the "Jackrabbit Trail" site and is in future planning for a new communications center. The Cities of Goodyear and Surprise each recently completed new site constructions, and Surprise is already in planning on a new site in south central Surprise. The Phoenix Radio Shop is overseeing the in-process T1-to-Ethernet conversion project, as well as implementation of the new router replacements systemwide. The RWC continues to engage with the Phoenix Urban Area Security Initiative (UASI), Interoperable Communications Subcommittee, through their annual grant process. Over the past three years, this process has funded the RWCs Interference Detection System, along with a further size expansion that will add even more detectors, expanding the capabilities even further. Over the next couple of years, the RWC will likely continue to apply for UASI grants to fund such critical items as a virtual system core, to expand the system's redundancy and survivability.

In closing, I appreciate the continued support of the RWC Board, Executive Committee, Staff, the critical Operations, VHF, Policy, and ERRCS working groups, and all our Member, Associate, Conditional and Interoperability Participants. Together, all these groups have made the RWC what I believe it is: The premier public-safety grade radio communications system in the State of Arizona. Thank you to everyone for your continued support in 2023. Together, we will continue to strive for even more greatness in 2024.

Warm regards,

John Imig, Executive Director Regional Wireless Cooperative February 2024



#### BACKGROUND

The VHF communications system formerly used by the City of Phoenix's public safety and other departments was based on outdated technology, and by the 1990's was no longer able to meet the operational needs of its users. After much study and several consultants' recommendations, the city funded and began the replacement of the existing system with an APCO<sup>1</sup> Project 25, 800 MHz digital trunked radio system. With the new radio system online by 2005, the Phoenix Regional Wireless Network (PRWN) was formed, and so began the transition of the Phoenix Police, Fire and Municipal Departments to the new system.

PRWN was initially intended to be a regional radio system supporting the City's operations, as well as the Fire Department's automatic aid partners. However, by 2008, with a clear understanding of what local government entities in the valley wanted from a regional communications system, PRWN was dissolved and became the Regional Wireless Cooperative, or RWC, with all new governance, policies, and procedures. 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 a series of Intergovernmental Agreements (IGA's). Membership is open to all local, state, federal governmental and tribal entities and currently includes most of the communities in the Greater 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 Manager" responsible for the administration and financial management of the RWC. Five administrative staff positions support the RWC: Executive Director, Management Assistant II, Accountant IV, Accountant I, and Administrative Aide. RWC staff are City of Phoenix employees residing in the Office of Government Relations.

<sup>&</sup>lt;sup>1</sup> APCO – The Association of Public-Safety Communications Officials is the world's oldest and largest organization of public safety communications professionals and supports the largest U.S. membership base of any public safety association. It serves the needs of public safety communications practitioners worldwide - and the welfare of the general public as a whole – by providing complete expertise, professional development, technical assistance, advocacy and outreach (via APCO website).



#### **RWC SYSTEMS**

**<u>700 MHz Trunked:</u>** The primary RWC system is based on the APCO Trunked P25, Phase II Standard. This network is a Motorola ASTRO 25<sup>™</sup>, Integrated Voice and Data system. It operates in the 700 MHz frequency band and uses standard Simulcast, IP Simulcast, and individual site trunking. The network consists of eight (8) major simulcast subsystems and 11 Astro Site Repeaters (ASRs) utilizing over 60 sites across the valley floor and surrounding mountains, providing wide area coverage across the entire metropolitan area.

Some of the benefits of this regional 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.

**<u>VHF Conventional</u>:** In 2019, the RWC assumed responsibility for the VHF simplex system that serves the region's fire departments as an adjunct to the RWC trunked system. This system is for enhanced communication during hazard-zone operations (Fires, Hazmat, Special Operations) where fireground communications are essential for public safety operations. The VHF system is comprised of 15 simplex channels utilizing over 70 transmit and/or receive sites across the valley. RWC Fire Member agencies are billed separately for the use and maintenance of the VHF system, which is maintained by the two RWC Maintenance Manager agencies (Phoenix and Scottsdale).



## **INTEROPERABILITY**

The RWC system provides a platform on which to interoperate with many other agencies. Because of the regional nature of the system, significant grant funding has been utilized 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; increase system capacity to allow greater roaming and interoperability; added several mountaintop sites to be used for wide-area and backup coverage, emergency backup and wide area interoperability; 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 has provided support for the annual Fiesta Bowl and Waste Management Phoenix Open, the NCAA BCS championship, multiple NFL Super Bowls, the NBA, and MLB All Star games, the Final Four NCAA Tournament, the 2023 World Series, and many more high-profile events. The Super Bowl games clearly demonstrated the importance of our regional radio system and highlighted the effectiveness of the RWC's organization and operations.

# HERIFF,

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





POLICE



# INTEROPERABILITY PARTICIPATING AGENCIES

**Ak-Chin Indian Community** Arizona Air National Guard 161ARW Arizona Army National Guard Arizona Attorney General's Office Arizona Department of Corrections Arizona Department of Game and Fish Arizona Department of Health Services Arizona Department of Juvenile Corrections Arizona Department of Liquor Licenses and Control Arizona Department of Public Safety Arizona Department of Transportation Arizona Division of Emergency Management Arizona State University Police Department **BNSF Railway Police Department Bureau of Land Management** Carefree Fire Department / Rural Metro **Casa Grande Fire Department** Cave Creek Marshal's Office Circle City / Morristown Fire District **Community Bridges, Inc.** Department of Homeland Security **Investigations (HSI)** Department of Homeland Security -**Tucson** Air Branch Drug Enforcement Agency (DEA) Federal Bureau of Investigations (FBI) Town of Florence Fort McDowell Yavapai Nation Fire Department Gila River Indian Community City of

Casa Grande

Grand Canyon University Police Department

Luke Air Force Base 56<sup>th</sup> Wing

Maricopa County Adult Probation Maricopa County Attorney's Office Maricopa County Department

of Emergency Management Maricopa County Department of Transportation

Maricopa County Judicial Branch Security Department

Maricopa County Juvenile Probation Department

Maricopa County Office of Enterprise Technology

Maricopa County Sheriff's Office

Palo Verde NGS Fire Department

Pinal County Sheriff's Office

Rural Metro Fire Department

Salt River Pima Maricopa Indian Community

Topaz Regional Wireless Network (TRWC):

City of Apache Junction Town of Gilbert

City of Mesa

Town of Queen Creek

Rio Verde Fire District

Superstition Fire District Union Pacific Railroad Police Department

United States Marshals Service Yavapai County Sheriff's Office







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.

#### **RWC Values**

#### 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.

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#### 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 are 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.

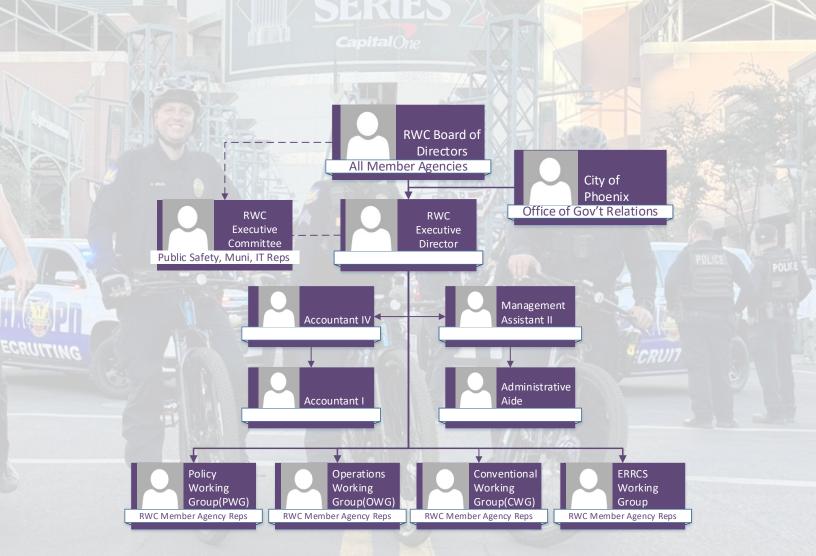
#### We Make the RWC Better

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



# **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 Executive Committee. The Executive Director is supported by the Executive Committee, the Operations, Conventional, and other Working Groups, in addition to four (4) 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.







# **LAW ENFORCEMENT**





# **MUNICIPAL SERVICES**





#### **BOARD OF DIRECTORS (2023)**

Chair

Paul Luizzi Fire Chief City of Goodyear <u>Vice Chair</u> Andrea Glass\* Assistant Fire Chief City of Tempe

**Shawn Holcomb** Battalion Chief Arizona Fire and Medical Authority

**Jeff Scheetz** Chief Information Officer City of Avondale

**Greg Platacz** IT Director City of Buckeye

Val Gale\*\* Assistant Chief Chandler Fire Department

Alan Zangle Deputy Chief Daisy Mountain Fire District

**Paul Marzocca** Police Chief City of El Mirage

**Milton 'Douglas' Wiener** Police Chief Federal Reserve Bank of San Francisco **Rick St. John** Deputy City Manager City of Glendale

**Wayne Clement** Fire Chief Town of Guadalupe

**Jeff McMenemy** Fire Chief Harquahala Fire District

**George Burger** Emergency Manager City of Maricopa

**Roy Stanifer** Communications and Records Manager Maricopa County Community College District (MCCCD)

**Patrick Beumler** Police Commander Town of Paradise Valley **Douglas Steele** Deputy Chief Peoria Police Department

**Steen Hambric** Chief Information Officer City of Phoenix

**Bianca Lochner** Chief Information Officer City of Scottsdale

**Rob Schmitz** Fire Chief Sun City Fire & Medical Dept

**Tracy Montgomery** Deputy City Manager City of Surprise

**Garrett Robert** Fire Chief City of Tolleson

**Les Brown** Police Chief Town of Wickenburg

\* Elected Chair August 2023 \*\*Elected Vice-Chair November 2023



#### **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 the Administrative Managing Member. The Executive Committee may not be comprised of Representatives from only a single Member and every two years the Board of Directors may review 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 Chair**

Jeff Schripsema Deputy Chief Phoenix Fire Department Fire Service Representative

#### <u>Area Representatives</u>

Andy Granger Deputy City Manager City of Goodyear Municipal Services Representative

**Feroz Merchhiya** Chief Information Officer City of Glendale Information Technology Representative Jesse Cooper

Police Administrator Phoenix Police Department Police Representative

**Tom Grebner** Wireless Systems Manager City of Phoenix Administrative Manager Representative



## **OPERATIONS AND CONVENTIONAL WORKING GROUPS**

The Combined Conventional and Operations Working Groups (CWG/OWG) are responsible for addressing network services, operations and maintenance issues, performance issues, Impact Assessments, and other Network technical matters for both the Trunked and VHF systems. The group consists of Member agency technical and operational practitioners and pursuant to the governance Subsection 2.2.12, are tasked with the following: discussing and/or providing operational or field input regarding RWC Network use and performance; sharing knowledge and experience; receiving input from RWC department delegates, industry providers or RWC management (or RWC management designee); and conduct other related activities.

Currently, the group meets monthly, and the meeting is facilitated by the Executive Director. These meetings provide a forum to address issues large and small and their importance cannot be overstated. To that end, this meeting has never once been canceled in the last, and this includes the disruptions caused during COVID-19.



## **POLICY WORKING GROUP**

The Policy Working Group (PWG) is responsible for developing, reviewing (every policy and procedure must be reviewed at least every two (2) years) 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.

In the last year the PWG expanded the Emergency Responder Radio Coverage Systems Policy with an additional procedure regarding loaner resources. This program will allow vendors to borrow RWC resources to test in-building treatments prior to inspection. The response has been resoundingly positive. It has been suggested that this program be highlighted for national standard.

Also notable, the PWG updated multiple policies and procedures to link vendor provided work with the Administrative Manager's formal standards documents. This will ensure that all RWC projects, regardless of Member jurisdiction will be built in accordance with the RWC's exacting standards. This will also assist our membership in their individual contract monitoring and project management.

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# 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 Trunked Network Annual Budget	FY 2022-23		F	Y 2023-24
Operations, Maintenance and Staffing	\$	8,235,398.00	\$	<mark>8</mark> ,468 <mark>,443</mark> .00
System Upgrade (SUAII)	\$	2,487,183.59	\$	2,507,075.28
Logging Recorder	\$	332,891.00	\$	675,699.50
T1-Ethernet Upgrade		1	\$	891,624.00
Juniper Paragon Suite			\$	1,035,270.40
Required Minimum Balance			\$	2,095.56
Total Budget	\$	11,055,472.59	\$	13,580,207.74
Subscriber Unit* <sup>2</sup> Rate	\$	34.48	\$	34.59
Total Positions (Administrative Staff)		4	3	4

## Budgetary Information for Fiscal Year 2022-23 and 2023-24

RWC Conventional Network	FY 2022-23	FY 2023-24
Annual Budget		
Operations, Maintenance and Staffing	\$ 491,013.00	\$ 482,560.00
Special Assessment	<mark>\$ 3</mark> 51,180.00	\$ 351,180.00
Juniper Paragon Suite		\$ 258,818.00
Required Minimum Balance		
Total Budget	\$ 842,193.00	\$ 1,092,558.00
Subscriber Unit* Rate	\$ 9.72	\$ 9.19
Total Positions (Administrative Staff)	0	1

<sup>2</sup> \* Includes: mobile and portable radios, dispatch consoles and control stations.



## **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 includes costs associated with the RWC Executive Director and the support staff. Such costs include salaries for staff and an Encryption Specialist, and office expenses.

#### **Capital Improvement Project Fund**

Funds budgeted for system upgrades, infrastructure replacement and other longterm 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.

#### **Operating Fund Contingency**

The Operating Fund Contingency 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 the RWC.



# **FINANCIAL MANAGEMENT (continued)**

#### <u>Awards</u>

The Government Finance Officers Association of the United States and Canada<sup>3</sup> ("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, 2022. 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 has won this award every year since 2012 and has already submitted for FY23.



<sup>3</sup> https://www.gfoa.org/



## **PROJECTS AND MAJOR INITIATIVES**

Below are just a few of the projects and initiatives undertaken by the RWC in 2022-2023. They were aimed at increasing radio coverage, reliability, and efficiency. They not only showcase the Regional Wireless Cooperative as a highly reliable public safety radio communications system, but also, they highlight our commitment to equity and regional partnership.

#### **COMPLETED IN 2023**

#### **City of Surprise**

The City of surprise new site (SPA II) was completed in 2023 with significant project support from the RWC. This new Simulcast G subsite also includes Fire VHF (Hazard Zone) equipment.

#### **Emergency Responder Radio Communication Systems (ERRCS)**

The ERRCS Team implimented a new loaner test radio program in 2023. This program, modeled after a similar program in Orange County, CA, has been very successful in supporting ERRCS vendors operating in region. Currently, there are only two (2) testing kits available, but more may be issued if the demand warrants it.

#### Urban Area Security Initiative (UASI) Interoperability Grant

In 2021, the RWC drafted and managed the submission of a multidepartment UASI grant for an Interference Detection System. It was awarded the full amount requested (\$150,000). The initial six (6) sites proved to be incredibly valuable resulting in another award –in 2023—for an additional six (6) sites. The RWC has received a total of \$270,000 in grant funding over the last three (3) years. The RWC will continue to take advantage of any opportunities that benefit our membership and strengthen regional interoperability, security and ensuring the RWC and other systems remain available, reliable, and secure for our public safety and municipal users.

#### Town of Wickenburg

Wickenburg, one of our newest members, completed their new site and facilities in 2023. The RWC provided significant technical and oversight support. The RWC will continue to work closely with them to ensure their integration into the Network is seamless.



# **PROJECTS AND MAJOR INITIATIVES (continued)**

#### **IN PROGRESS**

#### **City of Buckeye**

- Jackrabbit Trail Site: The RWC continues to work with Buckeye on a new RWC subsite for Simulcast J. The shelter, tower, and generator were completed in CY 2023, but there is still vendor specific work remaining, and will be worked on in CY 2024. The speed at which the infrastructure was completed is a testament to the dedication of the City of Buckeye and the RWC and is another example of the benefits of contracting civil work internally, rather than always going "turnkey" with a single vendor.
- <u>Communications Center:</u> The City of Buckeye has broken ground on their new Communications (Dispatch) Center and the RWC is proving technical support regarding the nine (9) consoles which will be connected to the Network. This project will continue into CY 2024.

#### **City of Goodyear**

• <u>Fire Station 187</u>: The RWC is working with the City of Goodyear and Maricopa County to utilize an existing Maricopa County site in Mobile, AZ to add RWC equipment in support of Goodyear Fire Station 187. The RWC is coordinating the agreements and providing the technical support needed for this type of leveraged project. It is expected to be complete in CY 2024.

#### City of Maricopa

- <u>Fire Station 572:</u> The RWC has been working with the City of Maricopa to help address coverage issues near their Fire Station 572. There are plans to install an RWC site at this location, which should be completed sometime in CY 2024.
- <u>Communications Center Location</u>: The RWC is working closely with Maricopa to ensure that their new Communications (Dispatch) Center Relocation will move smoothly. The expected completion is sometime in CY 2024.



#### **IN PROGRESS (continued)**

#### **TDMA Migration**

With the TDMA upgrade completed, the network continues to convert talkgroups that have TDMA compliant radios to TDMA 'dynamic dual' mode. At this point, our members continue to work toward utilizing TDMA. Some agencies have reached 100% and others are still moving in that direction. Currently, roughly 53.24% of all network calls are being conducted via TDMA.

#### Leased Lines Replacement

The RWC continues to work to move the Network off leased T-1 lines, which are no longer being supposed actively by telecom carriers. The Phoenix Radio Shop is working with each agency affected by these moves and will be working on this transition throughout 2024.

#### Ethernet Upgrade

Motorola is mandating that the RWC network must be 100% Ethernet backhaul compliant, prior to the next system upgrade, currently scheduled for CY 2025. Staff is busily replacing networking equipment and microwave radios to meet this requirement. The addition of the Backhaul Specialist position provided significant support on this project. The RWC continues to work with Motorola to ensure that the upgrade costs are contained, and the integration is smooth. In 2022 the RWC Board of Directors were presented with and approved a comprehensive solution including a funding plan. Staff is working with the City of Phoenix to procure all needed contracts. The Juniper Solutions portion of the project began in CY 2023 and continues to move forward. The Motorola portion of the project will be starting in CY 2024.

#### **Scottsdale Microwave and VHF Replacement**

Scottsdale continues to replace their legacy microwave connections between sites, as well as installing new VHF (Fire Hazard Zone) radio equipment. This project is targeted for completion in Calendar Year 2024.



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 2022/23	July	October	January	April
Member Total	20,526	20,529	20,521	20,732
Interoperability	22,245	22,182	22,013	22,458
Grand Total	42,771	42,711	42,534	43,190

## RWC Trunked (700 MHz) Network

# **RWC Conventional (VHF) Network**

FY 2022/23	July	October	January	April
Member Total	4,333	4,249	4,249	4,672





#### SYSTEM PERFORMANCE

#### **Overall System Statistics**

The following charts provide a compilation of the overall system statistics including the number of calls, system busies 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 to truly see the performance from the user perspective. These statistics are not shown in this report since they are so voluminous.

Total Number of Calls	28,298,517
Total Call Duration (Hours)	63,664
Total Call Duration (Sec)	229,190,400
Average Call Duration (Sec)	8.1
Average Calls per Day	7 <mark>7,</mark> 530
Total Busies	213
Busy Duration (Hours)	0.01
Total Busy Duration (Sec)	184
Average Busy Duration (Sec)	1.1
Average Busies per Day	0.6
Total Emergency Calls	2,801
Total Emergency Duration (Hours)	22.00
Total Emergency Duration (Sec)	79,200
Average Emergency Duration (Sec)	0.04
Average Emergencies per Day	7.7
FY 22-23 System Reliability	99.9859%

#### System Statistics 2023



# **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 <u>number of PTT's where a Busy occurs</u> divided by the <u>total number of PTT's</u>. The design specifications for the RWC system are to maintain a GOS of 2% or less, which means that there will be only 2 Busies or less, out of each 100 PTT's. GOS is measured on each Simulcast and Astro Site Repeater (ASR) 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 average 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.



# SYSTEM PERFORMANCE (continued)

# Site Utilization / Grade of Service - FY 22-23

<u>Subsystem/Site</u>	<u>Average Use</u>	<u>Peak Use</u>	<u>Average GOS</u>	<u>Peak GOS</u>		
Subsystems						
<u>Simulcast A</u> (Phoenix PD/Muni)	<u>28.11%</u>	<u>33.12%</u>	0.00%	0.00%		
<u>Simulcast B</u> (Phoenix FD/Muni)	<u>20.56%</u>	<u>27.16%</u>	0.00%	0.00%		
<u>Simulcast C</u> (Southeast Valley)	<u>22.01%</u>	<u>25.32%</u>	<u>0.00%</u>	<u>0.00%</u>		
<u>Simulcast D</u> (Far North Valley)	<u>20.63%</u>	<u>32.15%</u>	<u>0.04%</u>	<u>0.81%</u>		
Simulcast F (Tempe)	<u>14.60%</u>	<u>21.71%</u>	<u>0.00%</u>	<u>0.00%</u>		
Simulcast G (West Valley)	<u>29.43%</u>	<u>38.47%</u>	0.00%	<u>0.00%</u>		
Simulcast H (Scottsdale/P.V.)	<u>20.59%</u>	<u>34.78%</u>	<u>0.00%</u>	<u>0.00%</u>		
Simulcast J (Southwest Valley)	<u>21.19%</u>	<u>46.05%</u>	0.02%	<u>1.19%</u>		
1	<u>ASR (</u>	Site Repeaters)	A REAL FOR	and the second		
<b>Burnt Mountain</b>	<u>25.05%</u>	<u>32.45%</u>	<u>0.00%</u>	<u>0.00%</u>		
<u>Mt Gillen</u>	2.80%	<u>5.18%</u>	<u>0.00%</u>	<u>0.00%</u>		
<u>North Mountain</u>	<u>12.79%</u>	<u>16.64%</u>	<u>0.00%</u>	<u>0.00%</u>		
Sky Harbor	<u>11.64%</u>	<u>20.56%</u>	<u>0.00%</u>	<u>0.00%</u>		
South Mountain	<u>16.80%</u>	<u>23.02%</u>	<u>0.00%</u>	<u>0.00%</u>		
Quintero	<u>0.66%</u>	<u>2.20%</u>	<u>0.00%</u>	<u>0.00%</u>		
Sacaton	<u>7.29%</u>	<u>12.41%</u>	<u>0.00%</u>	<u>0.00%</u>		
Thompson Peak	<u>9.86%</u>	<u>15.51%</u>	<u>0.00%</u>	<u>0.00%</u>		
Towers Mountain	<u>10.35%</u>	<u>13.73%</u>	<u>0.00%</u>	<u>0.00%</u>		
White Tanks	<u>10.09%</u>	<u>17.64%</u>	<u>0.00%</u>	<u>0.00%</u>		
Wickenburg	<u>2.34%</u>	<u>7.88%</u>	<u>0.00%</u>	<u>0.00%</u>		



### SYSTEM PERFORMANCE (continued)

# System Availability

System Availability<sup>4</sup> (SA) 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 ASR sub-systems, the SA 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 SA is less than 100%, it may be due to a failure in a single subsystem, with most of the overall network remaining available to the users. System Availability for the RWC network for the twelve-month period of July 2022 through June 2023 is shown below:



RWC System Availability - FY 22 / 23

nn re

<sup>4</sup> 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 show performance values more easily.



# **CITY OF PHOENIX RADIO SHOP**

The City of Phoenix is the Maintenance Managing Member for all RWC zones except Zone 5 (Simulcast H) which operates in and is managed by the City of Scottsdale. The Phoenix Wireless Systems group has 27 highly qualified, dedicated professionals that work diligently on behalf of the Network. They, along with our Member agencies' wireless communications staff leads are what ensures the Network functions at its highest level.





# **RWC ADMINISTRATION**

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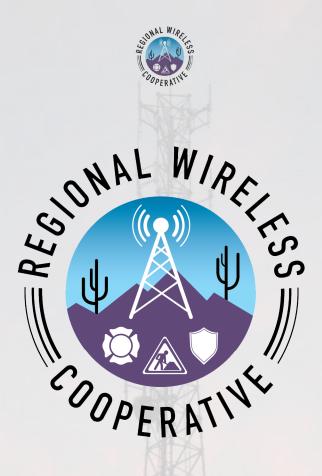
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# **Regional Wireless Cooperative, Arizona** A Joint Venture

# Annual Comprehensive Financial Report For fiscal year ended June 30

# **Annual Comprehensive Financial Report**

For the Fiscal Year Ended June 30, 2023



Prepared by:

City Manager's Office and Finance Department

# Table of Contents

#### INTRODUCTORY SECTION

Letter of Transmittal	111
Certificate of Achievement in Financial Reporting	VII
Organizational Chart	VIII
Member Cities	IX
Board of Directors	Х
FINANCIAL SECTION	
Independent Auditors' Report	1
Management Discussion and Analysis	4
Basic Financial Statements	
Statement of Net Position	12
Statement of Revenues, Expenses, and Changes in Net Position	13
Statement of Cash Flows	14
Notes to the Financial Statements	18
Supplementary Information	
Members' Operating Fund Reserve	30
Members' VHF Reserve Fund	31
Members' Infrastructure Replacement and Enhancement Activity	32
Members' Net Operating and Maintenance Expenditures	33
STATISTICAL SECTION	
Statements of Net Position	37
Statements of Revenues, Expenses, and Changes in Net Position	37
Members' Operations and Maintenance Expenses	38
Jurisdiction Map (Current Members)	39
Coverage Map	40
Regional Wireless Cooperative Cities' and Towns' Population Growth	41
Major Employers Metropolitan Phoenix	42
Subscriber Units	42
System Statistics	43

# Regional Wireless Cooperative

An Arizona Joint Venture

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# Introductory section

An Arizona Joint Venture



December 14, 2023

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 Annual Comprehensive Financial Report for the fiscal year ended June 30, 2023. 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.

CliftonLarsonAllen, LLP has issued an unmodified ("clean") opinion on the RWC financial statements as of and for the year ended June 30, 2023. 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

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 an Intergovernmental 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 governmental entities who serve public safety needs.

The RWC is an independent, multi-jurisdictional organization throughout the Greater Phoenix Metropolitan Region which currently consists of 22 cities, towns, fire districts, and governmental agencies, as well as two Associate, one Long-Term Conditional and nearly 50 Interoperability Participating agencies. Member agencies include: Arizona Fire & Medical Authority, City of Avondale, City of Buckeye, City of Chandler, Daisy Mountain Fire & Medical District, City of El Mirage, Federal Reserve Bank of San Francisco, City of Glendale, City of Goodyear, Town of Guadalupe, Harquahala Fire District, City of Maricopa, Maricopa County Community College District, Town of Paradise Valley, City of Peoria, City of Phoenix, City of Scottsdale, Sun City Fire & Medical District, City of Surprise, City of Tempe, City of Tolleson and the Town of Wickenburg.

The RWC comprises both a Motorola ASTRO 25<sup>™</sup> 700 MHz digital trunked radio system, and a VHF Simplex system dedicated to Fire hazard-Zone operations. The 700Mhz system is a large, Public Safety-grade radio network based on the APCO Project 25, Phase I/II Standard, consisting of five (5) major simulcast subsystems and ten (10) Astro Site Repeaters (ASR's).

This regional radio communications network was built to serve the interoperable communication needs of first responders and other municipal radio users serving 3.5 million residents across 5,000 square miles of the Greater Phoenix Metropolitan Area. This system provides wide area coverage beyond what individual entities could achieve alone; seamless interoperability (the ability for diverse public safety agencies to communicate directly, in real-time, as the need requires); shared resources (i.e., people, equipment, and tower sites); shared funding; and increased success in obtaining state and federal grant support. Financial responsibilities are distributed amongst all members based on their number of subscriber units (radios) used on the network.

# LOCAL ECONOMY

The City has grown steadily since its inception and has shown especially strong growth since 1950. In 1950, the City occupied 17 square miles with a population of almost 107,000, ranking it 99th among American cities. The 1990 census recorded Phoenix's population at 983,403 and the 2010 census recorded Phoenix's population at 1,447,128. As of June 30, 2023, the City encompassed 519.9 square miles, with the City of Phoenix estimating the City's population at 1,674,652.

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 125,000 passengers with approximately 1,200 aircraft arriving and departing every day. Flights at Phoenix Sky Harbor International Airport serve more than 120 domestic and 23 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 28 miles linking Mesa, Tempe, and Phoenix. Expansion plans will include service to south, west and northwest Phoenix.

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

As part of the ongoing program of system upgrades and capabilities, the RWC strives to complete one (1) major system upgrade every two years, apart from those years where major other system-related projects are occurring. These upgrades are included in the rolling RWC Five-Year Plan and budget that is submitted annually 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, replacements and/or changes to these products. The critical product changes that must be considered are those affecting network infrastructure, sites, transport/connectivity, base stations, consoles, and subscriber units.

# Fire VHF System Billing

Fire agencies across the Phoenix Metropolitan Region utilize a VHF simplex (radio-to-radio) network for all "hazard zone" (e.g. fire/hazmat) operations. The VHF network operates on a similar, but physically separate infrastructure as the 700 MHz trunked system. The RWC is wholly responsible for oversight and billing responsibilities for the VHF network comprised of over 3,000 VHF-capable radios across the RWC.

# MAJOR INITIATIVES

As membership of the RWC has continued to increase, 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:

# Service and Cybersecurity

The RWC completed a significant multi-million-dollar contract with Motorola Solutions that will provide maintenance services and managed cyber security detection from FY2023 – FY2028. This will ensure the Network can continue to operate at the level expected by our members and users.

# **New Members**

In recognition of the value of the RWC as a state of the art, truly regional interoperable communications network, the RWC welcomed the Town of Wickenburg as its newest operational Member, along with the Federal Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) as the first Long-Term Conditional Participant. The addition of these agencies means that the RWC is continuing to expand geographically for the benefit of all members as well as providing a higher level of communications which enhances public safety in these areas located in the outer reaches of the Greater Metropolitan Area.

# INTRODUCTORY SECTION

# Town of Wickenburg Site

The Town of Wickenburg funded expansion of a new site at the Wickenburg Police Department. The improved site gives much-needed 700 MHz coverage throughout the Town. Connectivity to this new site was accomplished through a partnership with the Arizona Department of Public Safety at the Towers Mountain site in Yavapai County.

# **City of Surprise Site**

The City of Surprise completed a new site located in the northwest portion of Surprise. This will improve coverage across the Northwest Valley for the rapidly growing population in that area.

# Emergency Responder Radio Communications System (ERRCS)

The RWC continued to grow our Emergency Responder Communication Systems (ERRCS) program. Our policy governing the use of ERRCS has evolved significantly over the last few years. In working closely with the Valley Fire Marshals, the RWC implemented language requiring that campus style projects must be tied together on a single system. This will prevent campus style projects, often built by multiple sub-contractors, from installing stand-alone ERRCS at each building. The concern is that too many amplifiers in such proximity will raise the noise level so high that they will not only render each other useless, but also impact the entire system negatively.

# **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. The RWC has four full-time and one part-time staff members who are employed by the City of Phoenix but funded by the RWC.

# **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 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 annual comprehensive financial report for the fiscal year ended June 30, 2022. 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 annual comprehensive financial report. This report satisfied both generally accepted accounting principles and the applicable legal requirements.

I believe that our current annual comprehensive financial report continues to meet the Certificate of Achievement Program's requirements and am 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, the City of Phoenix (City) Information Technology Services Department (ITS), and Phoenix Budget and Research Department (B&R) for their assistance throughout the past year. Special thanks to the City Finance Department for their assistance and support over the past year and in the preparation of this annual comprehensive financial report.

Respectfully submitted,

twi

John W. Imig RWC Executive Director





Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

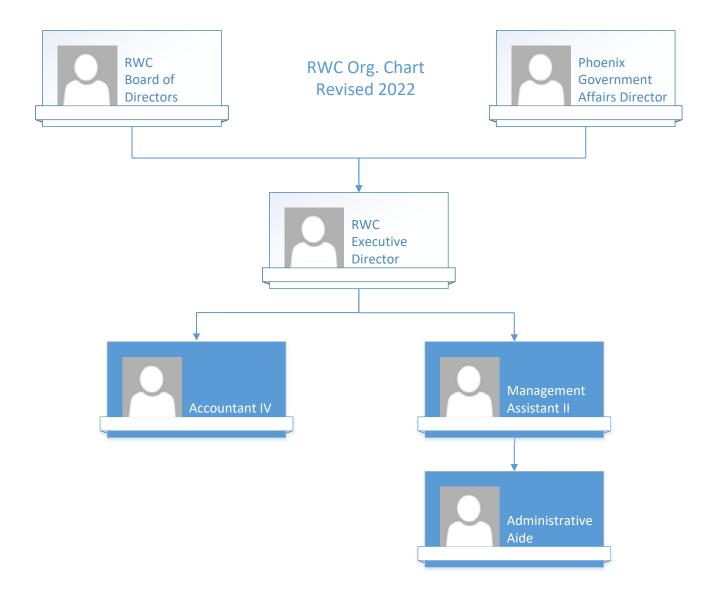
# Regional Wireless Cooperative Arizona

For its Annual Comprehensive Financial Report For the Fiscal Year Ended

June 30, 2022

Christophen P. Morrill

Executive Director/CEO





# **MEMBERS**



# **RWC BOARD OF DIRECTORS**

Chair Paul Luizzi **Fire Chief** City of Goodyear

**Mark Burdick Fire Chief** Arizona Fire and Medical Authority

Jeff Scheetz **Chief Information Officer** City of Avondale

**Greg Platacz** Director of Information and Technology Fire Chief City of Buckeye

Val Gale Assistant Fire Chief City of Chandler

Alan Zangle **Deputy Fire Chief** Daisy Mountain Fire District

Paul Marzocca **Police Chief** City of El Mirage

**Milton Wiener Police Chief** Federal Reserve Bank of San Francisco City of Peoria

Rick St. John **Deputy City Manager** City of Glendale

Wayne Clement Fire Chief Town of Guadalupe

Jeff McMenemy Harquahala Fire District

George Burger Emergency Manager City of Maricopa

**Roy Stanifer** Communications and Records Manager PD Support Services Manager MCC Department of Public Safety

Patrick Beumler Police Commander Town of Paradise Valley

**Kris Dalmolin** Information Technology Director **Vice Chair** Andrea Glass Assistant Fire Chief City of Tempe

**Steen Hambric Chief Information Officer** City of Phoenix

**Bianca Lochner Chief Information Officer** City of Scottsdale

**Rob Schmitz** Assistant Fire Chief Sun City Fire and Medical Dept.

**Tracy Montgomery** Deputy City Manager City of Surprise

**Ginger Sanabria** City of Tolleson

Les Brown **Police Chief** Town of Wickenburg

# Financial section

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## INDEPENDENT AUDITORS' REPORT

Board of Directors Regional Wireless Cooperative Phoenix, Arizona

# **Report on the Audit of the Financial Statements**

#### Opinion

We have audited the accompanying financial statements of the Regional Wireless Cooperative, as of and for the year ended June 30, 2023, and the related notes to the financial statements, which collectively comprise the Regional Wireless Cooperative's basic financial statements as listed in the table of contents.

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, 2023, and the changes in financial position, and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

## **Basis for Opinion**

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Regional Wireless Cooperative and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Emphasis of Matter

As discussed in Note 1 to the financial statements, effective July 1, 2022, the Regional Wireless Cooperative adopted new accounting guidance for subscription-based information technology arrangements. The guidance requires the Regional Wireless Cooperative to recognize a right to use subscriptions asset and corresponding subscriptions liability for all arrangements with terms greater than twelve months. Our opinion is not modified with respect to this matter.

#### **Responsibilities of Management for the Financial Statements**

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for 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.

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Board of Directors Regional Wireless Cooperative Page 2

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Regional Wireless Cooperative's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

#### Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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 Regional Wireless Cooperative's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about Regional Wireless Cooperative's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.



Board of Directors Regional Wireless Cooperative Page 3

#### **Required Supplementary Information**

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis be presented to supplement the basic financial statements. Such information is the responsibility of management and, 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 GAAS, 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 Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Regional Wireless Cooperative's basic financial statements. The Members' Operating Fund Reserve, Members' VHF Reserve Fund, Members' Infrastructure Replacement and Enhancement Activity, and Members' Net Operating and Maintenance Expenditures are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such 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. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the Members' Operating Fund Reserve, Members' VHF Reserve Fund, Members' Infrastructure Replacement and Enhancement Activity, and Members' Net Operating and Maintenance Expenditures are fairly stated, in all material respects, in relation to the basic financial statements at themselves.

#### **Other Information**

Management is responsible for the other information included in the annual report. The other information comprises the introductory and statistical sections but does not include the basic financial statements and our auditors' report thereon. Our opinion on the basic financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Clifton Larson Allen LLP

CliftonLarsonAllen LLP

Phoenix, Arizona December 14, 2023

An Arizona Joint Venture

Management's discussion and analysis



An Arizona Joint Venture

# MANAGEMENT'S DISCUSSION AND ANALYSIS (MD&A)

# (Unaudited)

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 the fiscal year ended June 30, 2023. 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 \$52.4 million at June 30, 2023 and decreased by \$5.8 million compared to fiscal year 2022. The decrease in 2023 is primarily due to the continued depreciation and amortization of capital assets.
- Operating revenues were \$11.5 million for fiscal year 2023 and increased by \$0.9 million compared to fiscal year 2022. The increase in 2023 was primarily due to a \$0.7 million increase in operations and maintenance charges.
- Operating expenses increased by \$0.6 million to \$17.3 million in fiscal year 2023. This increase was primarily due to higher operating and maintenance expenses in the current year.

# **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 \$5.8 million for the year ended June 30, 2023 as compared to June 30, 2022.

# RWC's Condensed Statements of Net Position as of June 30, 2023 and 2022

(in thousands)

	June 30			
		2023		2022
Current Assets	\$	4,172	\$	4,981
Capital Assets, Net		51,891		55,883
Total Assets		56,063		60,864
Deferred Outflows of Resources				_
Current Liabilities		1,470		1,999
Noncurrent Liabilities		2,149		625
Total Liabilities		3,619		2,624
Deferred Inflows of Resources				
Net Investment in Capital Assets		50,103		55,883
Unrestricted		2,341		2,357
Total Net Position	\$	52,444	\$	58,240

During fiscal year 2023, current assets decreased by \$0.8 million from fiscal year 2022. The decrease in pooled cash and investments is due primarily to increased construction in progress and operating and maintenance expenses.

Capital assets net decreased by \$4.0 million from fiscal year 2022 primarily due to current year depreciation and amortization expense of \$9.3 million and \$3.1 million of additions related to construction in progress.

Total liabilities increased in 2023 by \$1.0 million from fiscal year 2022 primarily due to the addition of a \$1.8 million software subscription liability. Accounts payable decreased by \$0.8 million compared to fiscal year 2022 due to the timing of vendor payments.

Net position decreased by \$5.8 million to \$52.4 million in fiscal year 2023. This overall decrease is primarily related to the decrease in capital assets, net based on current year depreciation and amortization expense.



# RWC's Condensed Statements of Revenues, Expenses, and Changes in Net Position For the Years Ended June 30, 2023 and 2022

(in thousands)

	June 30			
		2023		2022
Operating Revenues	\$	11,453	\$	10,590
Non-Operating Revenues		198		208
Total Revenues		11,651		10,798
Operating Expenses				
Staff and Administrative Allocation		622		583
Operations and Maintenance		7,429		7,048
Depreciation and Amortization		9,321		9,113
Total Operating Expenses		17,372		16,744
Non-Operating Expenses		75		-
Total Expenses		17,447		16,744
Changes in Net Positions		(5,796)		(5,946)
Net Position, July 1		58,240		64,186
Net Position, June 30	\$	52,444	\$	58,240

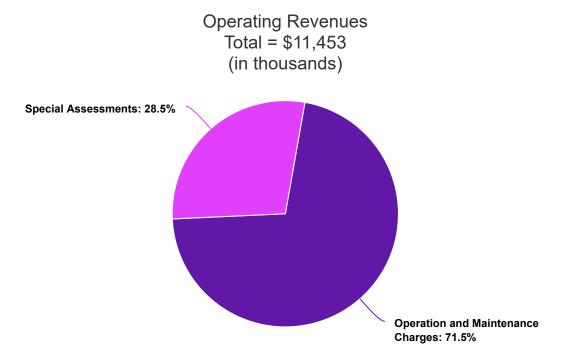
Operating revenues increased by \$0.9 million during 2023 primarily due to a \$0.7 million increase in operations and maintenance charges.

During fiscal year 2023, total operating expenses increased by \$0.7 million, when compared to fiscal year 2022. This increase was primarily due to higher operating and maintenance expenses incurred in the current year.

# **OPERATING REVENUES**

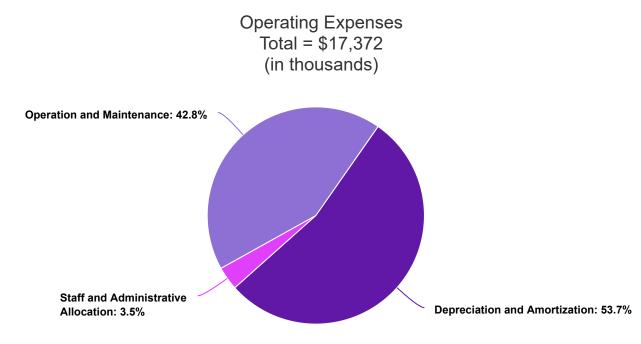
The RWC's revenue is primarily generated by charges to the joint venture members for operations and maintenance costs, special assessments, and an operating reserve. For fiscal year 2023, revenues amounted to \$11.5 million of which \$8.2 million is revenue from operations and maintenance and \$3.3 million is from special assessments.

The following chart depicts the RWC's operating revenues by category for the year ended June 30, 2023:



# **OPERATING EXPENSES**

The following chart depicts the RWC's operating expenses by category for the year ended June 30, 2023:





# **CAPITAL AND SUBSCRIPTION ASSETS**

The RWC's capital and subscription assets as of June 30, 2023 amounts to \$50.1 million (net of accumulated depreciation) and \$55.9 million as of June 30, 2022. Net capital assets decreased by \$4 million during fiscal year 2023 due primarily to depreciation and amortization expense. For additional information on RWC's capital assets, please refer to the Notes to the Financial Statements, Note 1, Organization and Summary of Significant Accounting Policies; Note 3, Capital and Subscription Assets; and Note 4, Subscription-Based Information Technology Arrangements.

# **RWC's Capital and Subscription Assets**

(in thousands)

	June 30			
		2023		2022
Buildings	\$	28,842	\$	28,842
Improvements other than Buildings		4,830		4,830
Equipment		123,262		123,136
Intangible Assets		21,086		21,086
Subscription Assets		2,069		-
Construction in Progress		5,219		2,084
Accumulated Depreciation and Amortization		(133,417)		(124,095)
Capital Assets, Net	\$	51,891	\$	55,883

# **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, 14th Floor, Phoenix, Arizona, 85003-1611.

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# Basic financial statements

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# Regional Wireless Cooperative Statement of Net Position June 30, 2023 (in thousands)

### ASSETS

ASSETS	
Current Assets	
Unrestricted Assets	
Equity in Pooled Cash and Investments	\$ 1,018
Equity in Pooled Cash and Investments - Operating Reserve	975
Equity in Pooled Cash and Investments - VHF Reserve	59
Equity in Pooled Cash and Investments - Capital Reserve	2,066
Accounts Receivable	54
Total Unrestricted Assets	4,172
Total Current Assets	4,172
Noncurrent Assets	
Capital Assets	00.040
Buildings	28,842
Improvements other than Buildings	4,830
Equipment	123,262
Intangible Assets	21,086
Subscription Assets Construction in Progress	2,069 5,219
Less: Accumulated Depreciation and Amortization	(133,417)
Capital Assets, Net Total Assets	<u> </u>
I Oldi Assels	
DEFERRED OUTFLOWS OF RESOURCES	
Total Deferred Outflows of Resources	-
LIABILITIES	
Current Liabilities	
Accounts Payable	99
Members' Payable	1,042
Subscription Liabilities	305
Accrued Expenses	24
Total Current Liabilities	1,470
Noncurrent Liabilities	
Subscription Liabilities	1,483
Accrued Expenses	170
Unearned Revenue	496
Total Noncurrent Liabilities	2,149
Total Liabilities	3,619
DEFERRED INFLOWS OF RESOURCES	
Total Deferred Inflows of Resources	_
I UTAL DETETTED ITHIUWS UT NESUUICES	
NET POSITION	
Net Investment in Capital Assets	50,103
Unrestricted	2,341
Net Position	\$ 52,444
	<u> </u>

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, 2023 (in thousands)

Operating Revenues	
Operations and Maintenance Charges	\$ 8,194
Special Assessments	3,259
Total Operating Revenues	11,453
Operating Expenses	
Staff and Administrative Allocation	622
Operation and Maintenance	7,429
Depreciation and Amortization	9,321
Total Operating Expenses	17,372
Operating Loss	(5,919)
Non-Operating Revenues (Expenses) Investment Income	
Net Increase in Fair Value of Investments	103
Interest	95
Interest on Subscription Liability	(75)
Total Non-Operating Revenues	123
Changes in Net Position	(5,796)
Net Position, July 1	58,240
Net Position, June 30	\$ 52,444

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, 2023 (in thousands)

Cash Flows from Operating Activities	
Cash Received from Members	\$ 11,399
Cash Paid to Suppliers	(8,268)
Cash Paid for Staff and Administration Allocation	 (576)
Net Cash Provided by Operating Activities	 2,555
Cash Flows from Capital and Related Financing Activities	
Acquisition and Construction of Capital Assets	(3,261)
Principal Paid on Subscription Liability	(280)
Interest Paid on Subscription Liability	(75)
Net Cash Used by Capital and Related Financing Activities	 (3,616)
Cash Flows from Investing Activities	
Income on Investments	198
Net Cash Provided by Investing Activities	 198
Decrease in Cash and Cash Equivalents	(863)
Cash and Cash Equivalents, July 1	 4,981
Cash and Cash Equivalents, June 30	\$ 4,118
Reconciliation of Operating Loss to Net Cash	
Provided by Operating Activities	
Operating Loss	\$ (5,919)
Adjustments	
Depreciation and Amortization	9,321
Change in Assets and Liabilities	
Accounts Receivable	(54)
Accounts Payable	(824)
Members' Payable	(15)
Accrued Expenses	 46
Net Cash Provided by Operating Activities	\$ 2,555
Noncash Capital and Financing Activities	
Subscription-Based Information Technology Asset and Liability Arrangement	\$ 1,714
Total Noncash Capital and Financing Activities	\$ 1,714

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

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Notes to the financial statements

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# Table of Contents

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:

Note	Description	Page
1	Organization and Summary of Significant Accounting Policies	19
2	Cash and Pooled Investments	22
3	Capital and Subscription Assets	24
4	Subscription-Based Information Technology Arrangements	24
5	Risk Management	25
6	Members' Equity	25
7	Related Party Transactions	25
8	Commitments and Contingencies	26

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, multijurisdictional organization throughout the Phoenix Metropolitan Region which currently consists of 22 members. The RWC is a large, Public Safety radio network based on the Project 25, Phase I Standard. The network is an ASTRO 25<sup>™</sup>, integrated voice and data, trunked radio system that 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 Astro Site Repeaters (ASR'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 presents the reporting entity's assets and liabilities, with the difference reported as net position. Net position is reported in three components:

*Net investment in capital assets* consists of capital assets, net of accumulated depreciation and amortization 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.

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 repurchase 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 and Subscription Assets**

Capital assets are recorded at historical cost. 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

Subscription assets are initially recorded at the initial measurement of the subscription liability, plus subscription payments made at or before the commencement of the subscription-based information technology arrangement (SBITA) term, less any SBITA vendor incentives received from the SBITA vendor at or before the commencement of the SBITA term, plus capitalizable initial implementation costs. Subscription assets are amortized on a straight-line basis over the shorter of the SBITA term or the useful life of the underlying IT asset.

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, 2023 was \$1,041,874.

## **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 amortization; 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.

# 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 2023:

GASB Statement No. 91, **Conduit Debt Obligations**, clarifies the definition of conduit debt and provides a single method of reporting these obligations (disclosure only). The RWC has determined there is no impact to the financial statements as a result of this Statement.

GASB Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*, addresses the gap in current accounting guidance related to public-private and public-public partnerships (both referred to as PPPs) that do not meet the definition of a service concession arrangement. The RWC has determined there is no impact to the financial statements as a result of this Statement.

GASB Statement No. 96, **Subscription Based Information Technology Arrangements (SBITA)**, addresses accounting and financial reporting for subscription-based information technology arrangements (SBITAs), a type of information technology (IT) arrangement (i.e. software licensing). This statement defines a SBITA, establishes that a SBITA results in a right-to-use subscription asset and a corresponding subscription liability, provides capitalization criteria, and requires footnote disclosure. The RWC adopted the requirements of the guidance effective July 1, 2022, and has applied the provisions of this standard to the beginning of the period of adoption. The implementation of this standard resulted in the RWC reporting a SBITA asset and liability as disclosed in Note 3 and Note 4.

GASB Statement No. 99, **Omnibus 2022**, addresses various technical corrections, as follows: the remeasurement of certain assets and liabilities solely for a change in an index or rate used to determine variable payments, including those related to payment arrangements for public-private and public-public partnerships and subscription-based IT arrangements; the effect of a purchase option on contract terms and the measurement of the liability; the classification of derivative instruments that are neither hedges nor investments; the recognition of exchange and exchange-like financial guarantees; and technical corrections to terminology in the Codification. The RWC has implemented this Statement in fiscal year 2023.

# Pronouncements Issued But Not Yet Effective:

GASB has issued the following pronouncements that may affect 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		Effective
Statement No.	GASB Accounting Standard	Fiscal Year
100	Accounting Changes and Error Corrections	2024
101	Compensated Absences	2025



# 2. Cash and Pooled Investments

The RWC did not have cash on hand as of June 30, 2023. 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 Annual Financial Report 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, 2023 stated at fair value was \$4.2 million.

# 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 an active market for identical assets;
- Level 2 inputs are significant other observable inputs;
- Level 3 inputs are significant unobservable inputs.

The following is a summary of the fair value hierarchy of the fair value of City pooled investments as of June 30, 2023 (in thousands):

	Fair Value Measurement Using						
			Quoted Prices in		Significant Other		Significant
			A	Active Markets for		Observable	Unobservable
				Identical Assets		Inputs	Inputs
Investments by Fair Value Level	6	/30/2023		(Level 1)		(Level 2)	(Level 3)
U.S. Treasury Securities	\$	3,116,870	\$	15,355	\$	3,101,515	\$
U.S. Government Agency Obligations		1,068,375		-		1,068,375	
U.S. Government Agency MBS/CMO		65,938		-		65,938	
Municipal Bonds		42,686		-		42,686	
Commercial Paper		119,473		-		119,473	
Total Investments, Including Those Classified							
as Cash Equivalents by Fair Value Level	\$	4,413,342	\$	15,355	\$	4,397,987	\$

U.S. Government securities totaling \$15.4 million in fiscal year 2023 are classified in Level 1 of the fair value hierarchy and are valued using quoted prices in active markets.

U.S. Government securities totaling \$3.1 billion, U.S. government agency obligations totaling \$1.1 billion, U.S. government agency MBS/CMO totaling \$65.9 million, municipal bonds totaling \$42.7 million and commercial paper totaling \$119.5 million in fiscal year 2023 are classified in Level 2 of the fair value hierarchy and are valued using matrix pricing techniques maintained by various pricing vendors. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. These prices are obtained from a pricing source.

### 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
Corporate Debt	5 year final maturity

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. For Commercial Mortgaged Back Securities (CMBS) designated as "green", the final maturity is less than ten years.

### 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 collateralized by U.S. Treasuries 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, U.S. Government Agencies or cash. 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 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. Corporate debt securities must have a long-term minimum rating of AAA by S&P and Aaa by Moody's.

### **Concentration of Credit Risk**

Investments in any one issuer, excluding U.S. governments, that represent 5% or more of total City investment are as follows (in thousands):

Issuer	Fair Value
FHLB	\$747,282

### 3. Capital and Subscription Assets

Capital and subscription asset activity for the fiscal year ended June 30, 2023 was as follows (in thousands):

	Beginning			I	December	Ending
	E	Balance		Increases	Decreases	 Balance
Non-depreciable Assets						
Construction in Progress	\$	2,084	\$	3,136	\$ (1)	\$ 5,219
Total Non-depreciable Assets		2,084		3,136	(1)	 5,219
Depreciable Assets						
Buildings		28,842		-	-	28,842
Improvements other than Buildings		4,830		-	-	4,830
Equipment		123,136		126	-	123,262
Intangible Assets		21,086		-	-	21,086
Subscription Assets		-		2,069	-	2,069
Total Depreciable Assets		177,894	_	2,195		 180,089
Accumulated Depreciation and Amortization						
Buildings		(9,975)		(794)	-	(10,769)
Improvements other than Buildings		(2,802)		(237)	-	(3,039)
Equipment		(98,728)		(4,884)	-	(103,612)
Intangible Assets		(12,590)		(3,062)	-	(15,652)
Subscription Assets		-		(345)	-	(345)
Total Accumulated Depreciation and Amortization	-	(124,095)		(9,322)	-	(133,417)
Total Depreciable Assets, Net		53,799		(7,127)	-	46,672
Total Capital Assets, Net	\$	55,883	\$	(3,991)	\$ (1)	\$ 51,891

### 4. Subscription-Based Information Technology Arrangements

Per GASB Statement No. 96, a subscription-based information technology arrangement (SBITA) is defined as a contract that conveys control of the right to use another party's (a SBITA vendor's) information technology (IT) software, alone or in combination with tangible capital assets (the underlying IT assets), as specified in the contract for a period of time in an exchange or exchange-like transaction. The measurement of the subscription liabilities is based on the present value of lease payments expected to be paid during the subscription term, such as fixed payments, variable payments that depend on an index or rate, variable payments that are fixed in substance.

As of June 30, 2023, the RWC had minimum principal and interest payment requirements for its subscription activities, with a remaining term more than one year, as follows (in thousands):

Fiscal Year Ending			
June 30	Principal	Interest	Total
2024	\$305	\$64	\$369
2025	329	51	380
2026	356	38	394
2027	384	24	408
2028	414	9	423
	\$1,788	\$186	\$1,974

### 5. 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 2023, RWC was charged \$101,546 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, 2023, 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.

### 6. Members' Equity

A summary of the joint venture members' equity as of June 30, 2023 is as follows:

Arizona Fire & Medical Authority	\$ 272,103
City of Avondale	473,690
City of Buckeye	304,273
Buckeye Valley Fire District	202,933
City of Chandler	1,432,833
Daisy Mountain Fire District	106,088
City of El Mirage	213,917
Federal Reserve Bank	1,821
City of Glendale	2,064,351
City of Goodyear	749,682
Town of Guadalupe	57,346
Harguahala Fire District	5,492
City of Maricopa	934,755
Maricopa County Community College District	197,736
Town of Paradise Valley	331,841
City of Peoria	1,652,072
City of Phoenix	32,936,137
City of Scottsdale	3,333,306
Sun City Fire District	413,224
City of Surprise	809,886
City of Tempe	5,831,683
City of Tolleson	119,303
Total Members' Equity	\$ 52,444,472

### 7. Related Party Transactions

Staff and administrative costs allocated by the City to RWC were \$621,704 for the year ended June 30, 2023. 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, 2023 and compensation totaled \$607,952 for the year ended June 30, 2023.

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.

### 8. 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 50% for the year ended June 30, 2023.

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.

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### Regional Wireless Cooperative Members' Operating Fund Reserve For the Fiscal Year Ended June 30, 2023

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.

	Beginning Balance					Ending Balance	
Member	July 1, 2022	Contributions	Adjustments*	Interest	Expenditures	June 30, 2023	
Arizona Fire & Medical							
Authority	\$ 5,82	6\$	- \$ -	\$ 151	\$	- \$ 5,977	
City of Avondale	19,56	5 -		504		- 20,069	
City of Buckeye	17,95	9.		462		- 18,421	
Buckeye Valley Fire District	4,99	9.		129		- 5,128	
City of Chandler	52,05	0 -		1,340		- 53,390	
Daisy Mountain Fire District	7,84	6 -		205		- 8,051	
City of El Mirage	6,12	0		158		6,278	
Federal Reserve Bank	1,41	4 .		36		- 1,450	
City of Glendale	53,22	5.		1,371		- 54,596	
City of Goodyear	14,74	9.		380		- 15,129	
Town of Guadalupe	55	1 ·		14		- 565	
Harquahala Fire District	50	5.		13		- 518	
City of Maricopa	11,87	8 .		307		- 12,185	
Maricopa County Community							
College District	11,38	8 .		293		- 11,681	
Town of Paradise Valley	4,18	9.		108		- 4,297	
City of Peoria	46,60	3 .		1,200		47,803	
City of Phoenix	515,34	9.		13,274		528,623	
City of Scottsdale	76,65	2 .		1,974		- 78,626	
Sun City Fire District	3,60	5 .		93		- 3,698	
City of Surprise	29,20	1 ·		754		- 29,955	
City of Tempe	60,55	0		1,560		- 62,110	
City of Tolleson	6,65	9		172		6,831	
	\$ 950,88	3 \$	\$ -	\$ 24,498	\$	\$ 975,381	

\*Based on an inception-to-date analysis of contributions by members.

### Regional Wireless Cooperative Members' VHF Fund Reserve For the Fiscal Year Ended June 30, 2023

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

Beginning Balance								Ending	nding Balance	
Member		1, 2022	Contributions		ons Interest		Expenditures		June 30, 2023	
Arizona Fire & Medical										
Authority	\$	919	\$	-	\$	24	\$	-	\$	943
City of Avondale		1,113		-		29		-		1,142
City of Buckeye		1,531		-		39		-		1,570
Buckeye Valley Fire District		1,419		-		36		-		1,455
City of Chandler		2,580		-		66		-		2,646
Daisy Mountain Fire District		1,129		-		29		-		1,158
City of El Mirage		371		-		10		-		381
City of Glendale		2,516		-		65		-		2,581
City of Goodyear		1,161		-		30		-		1,191
Town of Guadalupe		114		-		3		-		117
Harquahala Fire District		178		-		5		-		183
City of Maricopa		822		-		21		-		843
City of Peoria		2,064		-		53		-		2,117
City of Phoenix		31,041		-	7	98		-		31,839
City of Scottsdale		3,693		-		95		-		3,788
Sun City Fire District		903		-		23		-		926
City of Surprise		1,887		-		49		-		1,936
City of Tempe		3,870		-		99		-		3,969
City of Tolleson		370		-		9		-		379
	\$	57,681	\$	-	\$ 1,4	83	\$	-	\$	59,164



### Regional Wireless Cooperative Members' Infrastructure Replacement and Enhancement Activity For the Fiscal Year Ended June 30, 2023

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.

	Beginning Balance					Ending Balance
Member	July 1, 2022	Cont	ributions	Interest	Expenditures	June 30, 2023
Arizona Fire & Medical Authority	\$ 12	760 \$	- \$	163	\$-	\$ 12,923
City of Avondale	49	689	-	637	(1)	50,325
City of Buckeye	36	292	-	465	(1)	36,756
City of Chandler	181	397	-	2,322	(3)	183,716
Daisy Mountain Fire District		953	-	12	-	965
City of El Mirage	15	416	-	197	-	15,613
City of Glendale	127	882	-	1,637	(2)	129,517
City of Goodyear	8	216	-	105	-	8,321
Town of Guadalupe	2	067	-	26	-	2,093
City of Maricopa	25	876	-	331	-	26,207
Maricopa County Community						
College District	37	341	-	478	(1)	37,818
City of Peoria	162	906	-	2,086	(3)	164,989
City of Phoenix	896	645	-	11,480	(17)	908,108
City of Scottsdale	261	384	-	3,347	(5)	264,726
Sun City Fire District	9	413	-	121	-	9,534
City of Surprise	75	353	-	965	(1)	76,317
City of Tempe	130	524	-	1,671	(2)	132,193
City of Tolleson	5	436		70		5,506
	\$ 2,039	550 \$	- \$	26,113	\$ (36)	\$ 2,065,627

### Regional Wireless Cooperative Members' Net Operating and Maintenance Expenditures For the Fiscal Year Ended June 30, 2023

		2023	3 Charge			
	Amount	(Credi	t) Per User	Ne	t Operating	
Member	 Billed	Sett	ement <sup>(1)</sup>	Expenditures		
Arizona Fire & Medical Authority	\$ 96,713	\$	(14,490)	\$	82,223	
City of Avondale	240,871		(26,972)		213,899	
City of Buckeye	185,949		(21,873)		164,076	
Buckeye Valley Fire District	54,780		(9,417)		45,363	
City of Chandler	456,738		(50,687)		406,051	
Daisy Mountain Fire District	70,371		(11,435)		58,936	
City of El Mirage	72,782		(8,641)		64,141	
Federal Reserve Bank	11,803		(1,105)		10,698	
City of Glendale	472,305		(54,173)		418,132	
City of Goodyear	252,306		(30,752)		221,554	
Town of Guadalupe	7,203		(1,158)		6,045	
Harquahala Fire District	4,853		(845)		4,008	
City of Maricopa	130,910		(15,458)		115,452	
Maricopa County Community College District	97,803		(9,159)		88,644	
Town of Paradise Valley	35,833		(3,361)		32,472	
City of Peoria	383,567		(44,808)		338,759	
City of Phoenix	4,962,825		(544,503)		4,418,322	
City of Scottsdale	681,487		(74,212)		607,275	
Sun City Fire District	33,815		(5,692)		28,123	
City of Surprise	261,639		(31,746)		229,893	
City of Tempe	659,131		(74,136)		584,995	
City of Tolleson	62,446		(7,251)		55,195	
Non-Members	 -		-			
	\$ 9,236,130	\$	(1,041,874)	\$	8,194,256	

<sup>(1)</sup> These amounts represent the settlement of operating and maintenance expenditures.

# Statistical section

An Arizona Joint Venture

# Table of Contents

This section of the RWC's annual comprehensive 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.

	Page
Financial Trends	
These schedules contain trend information to help the reader understand how financial performance and well-being have changed over time:	w the RWC's
Statements of Net Position	37
Statements of Revenues, Expenses, and Changes in Net Position	37
Members' Operation and Maintenance Expenses	38
Demographic and Economic Information	
These schedules offer demographic and economic indicators to show the environ which the RWC's financial activities take place:	nment within
Jurisdiction Map (Current Members)	39
Coverage Map	40
Regional Wireless Cooperative Cities' and Towns' Population Growth	41
Major Employers Metropolitan Phoenix	42
Operating Information	
These schedules contain service data to show how the RWC's financial inform to the services the RWC provides and the activity it performs:	ation relates
Subscriber Units	42
System Statistics	43

### Regional Wireless Cooperative Statements of Net Position Last Ten Fiscal Years (in thousands)

2023 2022 2021 2020 2019 2018 2017 2016 2015 2014 Net Investment in **Capital Assets** \$ 50,103 \$ 55,883 \$ 62,144 \$ 67,044 \$ 69,091 \$ 73,867 \$ 80,098 \$ 86,472 \$ 83,376 \$ 83,280 Restricted ----\_ \_ \_ **Capital Projects** ------243 121 \_ -Unrestricted 2,341 2,357 2,042 1,605 1,807 1,345 1,580 1,937 12,386 4,250 Net Position \$ 52,444 \$ 58,240 \$ 64,186 \$ 68,649 \$ 70,898 \$ 75,212 \$ 81,678 \$ 88,652 \$ 95,883 \$ 87,530

### Statements of Revenues, Expenses, and Changes in Net Position

### Last Ten Fiscal Years

### (in thousands)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Operating Revenues										
Operation and Maintenance Charges	\$ 8,194	\$ 7,480	\$ 7,537	\$ 7,170	\$ 6,798	\$ 6,871	\$ 7,320	\$ 6,592	\$ 7,209	\$ 7,201
Special Assessments	3,259	3,110	4,732	5,661	6,743	3,919	1,989	16,646	16,170	11,143
Other	-	-	-	-	-	-	-	121	121	88
Total Operating Revenues	11,453	10,590	12,269	12,831	13,541	10,790	9,309	23,359	23,500	18,432
Operating Expenses										
Staff and Administrative Allocation	622	583	516	499	541	654	538	691	582	617
Operation and Maintenance	7,555	7,048	7,153	6,695	6,133	5,994	6,048	3,925	6,174	6,541
Special Assessments	(126)	-	-	-	-	151	245	2,429	5	3
Depreciation	9,321	9,113	9,143	8,074	11,430	10,495	9,476	8,299	8,509	11,546
Total Operating Expenses	17,372	16,744	16,812	15,268	18,104	17,294	16,307	15,344	15,270	18,707
Operating Income (Loss)	(5,919)	(6,154)	(4,543)	(2,437)	(4,563)	(6,504)	(6,998)	8,015	8,230	(275)
Non-Operating Revenues (Expenses) Investment Income Net Increase (Decrease) in Fair										
Value of Investments	103	141	(38)	55	111	(72)	(86)	25	(109)	(109)
Interest	95	67	118	133	138	110	110	262	232	203
Interest on Subscription Liability	(75)	-	-	-	-	-	-	-	-	-
Loss on Disposal of Capital Assets	-	-	-	-	-	-	-	(1,190)	-	-
Distribution to Members	-	-	-	-	-	-	-	(14,343)	-	-
Total Non-Operating Revenues										
(Expenses)	123	208	80	188	249	38	24	(15,246)	123	94
Income (Loss) Before										
Contributions	(5,796)	(5,946)	(4,463)	(2,249)	(4,314)	(6,466)	(6,974)	(7,231)	8,353	(181)
Capital Contributions	_	_	_	-	-	-	-	_	-	_
Changes in Net Position	\$ (5.796)	\$ (5,946)	\$ (4,463)	\$ (2,249)	\$ (4,314)	\$ (6,466)	\$ (6,974)	\$ (7,231)	\$ 8,353	\$ (181)
	<u>v (0,750)</u>	<u> (0,740)</u>	<u>, (1,100)</u>	<u> (2,249)</u>	<u> </u>	<u> </u>	<u> (0,774)</u>	<u> </u>	<del>ç 0,000</del>	<u> </u>



### Regional Wireless Cooperative Members' Operations and Maintenance Expenses Last Ten Fiscal Years

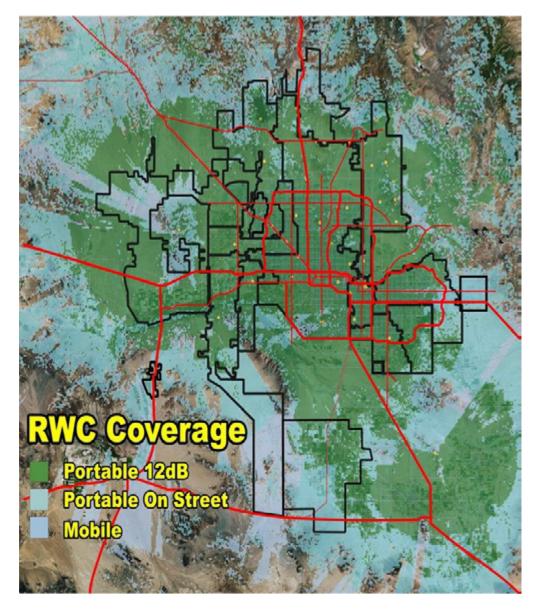
	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Arizona Fire & Medical Authority	\$ 82,223	\$ 67,355 \$	\$ 65,236 \$	\$ 51,140	\$ 32,798	\$ 29,301	\$ 28,847	\$ 28,275	\$ 27,847	\$ 28,059
City of Avondale	213,899	173,694	172,807	151,813	143,500	138,819	127,170	96,672	121,150	123,697
City of Buckeye	164,076	148,720	141,450	138,300	127,996	115,986	114,114	113,819	123,292	105,746
Buckeye Valley Fire District	45,363	41,895	-	-	-	-	-	-	-	-
City of Chandler	406,051	384,244	391,262	387,444	365,909	354,689	356,585	345,177	362,723	378,692
Daisy Mountain Fire District	58,936	51,562	51,077	42,883	28,056	8,854	8,209	7,443	8,239	3,819
City of El Mirage	64,141	56,007	53,937	49,735	41,176	38,515	38,041	45,293	39,139	38,067
Federal Reserve Bank	10,698	7,574	-	-	-	-	-	-	-	-
City of Glendale	418,132	385,307	398,876	393,404	415,301	443,057	455,537	487,326	513,312	535,581
City of Goodyear	221,554	177,978	187,686	112,619	106,821	148,559	219,021	144,228	170,265	41,573
Town of Guadalupe	6,045	5,757	5,903	4,630	3,840	3,542	3,574	3,631	4,217	4,126
Harquahala Fire District	4,008	4,282	-	-	-	-	-	-	-	-
City of Maricopa	115,452	102,033	105,578	85,659	90,120	75,794	67,041	64,285	64,588	63,551
Maricopa County Community										
College District	88,644	83,476	84,138	81,816	82,621	84,183	84,036	84,503	79,523	-
Town of Paradise Valley	32,472	29,684	29,695	30,109	33,820	17,004	-	-	-	-
City of Peoria	338,759	321,432	333,265	337,645	337,138	326,318	312,071	321,022	354,495	369,820
City of Phoenix	4,418,322	3,957,059	3,999,722	3,906,999	3,713,027	3,515,191	3,448,585	3,470,070	3,758,471	3,999,612
City of Scottsdale	607,275	578,170	582,342	572,105	542,652	535,893	553,558	558,223	596,642	568,508
Sun City Fire District	28,123	30,803	28,255	28,977	22,505	20,538	17,945	17,246	18,166	18,260
City of Surprise	229,893	205,424	210,378	205,322	187,571	187,541	171,780	152,212	170,233	167,321
City of Tempe	584,995	545,240	562,512	461,798	431,638	729,287	1,231,481	571,819	711,487	675,808
City of Tolleson	55,195	51,065	52,330	50,090	46,073	43,120	19,424	11,618	12,887	12,174
Non Members <sup>(1)</sup>		70,938	80,287	77,602	45,753	54,540	62,555	68,926	72,710	66,432
Total	\$ 8,194,256	\$ 7,479,699	\$ 7,536,736	\$ 7,170,091	\$ 6,798,315	\$ 6,870,731	\$ 7,319,574	\$ 6,591,788	\$ 7,209,386	\$ 7,200,846

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





### Regional Wireless Cooperative Coverage Map



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

2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
City of Avondale 92,3	24 94,579	90,755	89,480	88,552	86,057	84,719	82,940	81,321	79,975
City of Buckeye 106,3	16 95,463	101,987	93,629	86,806	80,131	73,066	68,090	64,034	60,809
City of Chandler 282,8	91 273,102	280,189	277,116	272,365	268,207	264,582	258,414	252,564	247,136
City of El Mirage 36,2	75 36,365	36,101	35,927	35,318	35,096	34,859	34,570	34,080	33,431
City of Glendale 254,0	05 259,659	250,585	248,686	246,763	244,620	242,138	240,152	237,423	234,687
City of Goodyear 106,0	90 98,741	101,662	96,789	92,584	88,014	84,620	81,581	78,175	74,817
Town of Guadalupe 5,3	33 6,802	5,329	5,326	5,377	5,440	5,526	5,471	5,514	5,564
City of Maricopa 64,7	42 58,424	61,109	58,622	55,798	53,043	50,522	48,978	47,580	46,743
Town of Paradise Valley 12,7	00 15,186	12,707	12,671	12,668	12,687	12,744	12,796	12,867	12,787
City of Peoria 199,4	24 187,055	195,585	191,849	187,381	183,049	178,391	173,666	168,512	164,574
City of Phoenix 1,657,0	35 1,648,257	1,630,195	1,635,879	1,606,815	1,598,736	1,579,253	1,565,896	1,528,115	1,505,070
City of Scottsdale 244,9	59 268,839	243,528	241,718	239,494	237,571	235,606	233,477	228,230	222,997
City of Surprise 155,3	84 153,505	149,710	144,246	138,615	134,779	131,682	129,676	127,195	124,946
City of Tempe 187,3	54 207,982	181,548	181,580	178,706	176,411	171,864	172,485	168,318	166,448
City of Tolleson 7,3	15 7,666	7,309	7,262	7,102	7,034	7,006	6,963	6,890	6,813

Source: Derived from data from the 2010 Census, the 2020 Census, the Arizona State Demographer's Office, the Maricopa Association of Governments, and the Arizona Commerce Authority.



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

		2023			2014	
			Percentage			Percentage
			of Total City			of Total City
Employer <sup>(1)</sup>	Employees <sup>(1)</sup>	Rank	Employment <sup>(2)</sup>	Employees <sup>(1)</sup>	Rank	Employment <sup>(2)</sup>
Banner Health	43,440	1	1.83%	30,266	3	1.67%
State of Arizona	41,564	2	1.75%	48,910	1	2.70%
Wal-Mart Inc	36,931	3	1.55%	32,438	2	1.79%
Arizona State University	35,719	4	1.50%	12,229	7	0.68%
Amazon.com Inc	33,000	5	1.39%			
University of Arizona	22,089	6	0.93%			
Fry's Food Stores	20,000	7	0.84%			
Maricopa County	15,550	8	0.65%	13,341	6	0.74%
City of Phoenix	14,500	9	0.61%	14,875	4	0.82%
Wells Fargo & Co	14,315	10	0.60%	14,126	5	0.78%
Intel Corp				11,700	8	0.65%
Scottsdale Lincoln Health Network				10,500	9	0.58%
Honeywell International				10,000	10	0.55%

Source: Phoenix Business Journal Book of Lists

<sup>(1)</sup> Top employers in the State of Arizona. Employee count is inclusive of all Arizona employees.

<sup>(2)</sup> City Employment is the Phoenix-Mesa-Scottsdale MSA total nonfarm employment, seasonally adjusted.

### Subscriber Units Last Ten Fiscal Years

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Subscriber Units										
Member Total	20,735	20,039	19,720	19,202	18,844	18,504	18,522	18,046	18,242	17,371
Interoperability	22,458	22,234	20,503	20,363	19,417	22,537	22,576	18,976	17,574	10,143
Grand Total	43,193	42,273	40,223	39,565	38,261	41,041	41,098	37,022	35,816	27,514

### System Statistics Last Nine Fiscal Years

	2023	2022	2021	2020	2019
Total Number of Calls	28.3 million	26.1 million	28.3 million	28.9 million	29.8 million
Total Call Duration (hours)	63,664	61,576	68,400	100,806	73,984
Total Call Duration (sec)	229 million	222 million	246 million	363 million	266 million
Average Call Duration (sec)	8.1	8.5	8.7	12.5	8.9
Average Call Per Day	77,530	71,407	77,236	79,059	81,603
Total Busies	213	195	184	2,194	83
Busy Duration (hours)	0.01	0.14	0.07	3.85	0.02
Total Busy Duration (sec)	184	512	241	231	71
Average Busy Duration (sec)	1.1	2.6	1.3	6.3	0.9
Average Busy per Day	0.6	0.5	0.5	6.0	0.2
Total Emergency Calls	2,801	2,523	2,434	2,849	2,890
Total Emergency Duration (hours)	22.0	19.5	20.3	22.8	24.0
Total Emergency Duration (sec)	79,200	71,574	72,909	82,098	84,802
Average Emergency Duration (sec)	0.0	28.4	30.0	28.8	29.3
Average Emergency Calls per Day	7.7	6.9	6.7	7.8	7.9
System Reliability	99.986%	99.986%	99.989%	99.984%	99.975%

Note: System statistics were not available for 2014.



### System Statistics (Continued) Last Nine Fiscal Years

2018	2017	2016	2015
28.2 million	30.3 million	28.1 million	28.5 million
73,560	76,635	81,535	80,399
265 million	276 million	294 million	289 million
9.4	9.1	10.6	10.2
77,271	82,913	76,001	77,968
131	261	530	740
0.02	0.05	0.13	0.11
68	177	478	700
0.5	0.7	0.9	1.1
0.4	0.7	1.5	2
3,473	3,415	3,519	3,854
31.0	27.4	29.6	9.1
112,483	98,640	106,156	33,173
32.4	28.9	30.2	8.6
9.5	9.4	9.6	10.6
99.978%	99.968%	99.968%	99.990%

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