

2020 ANNUAL REPORT

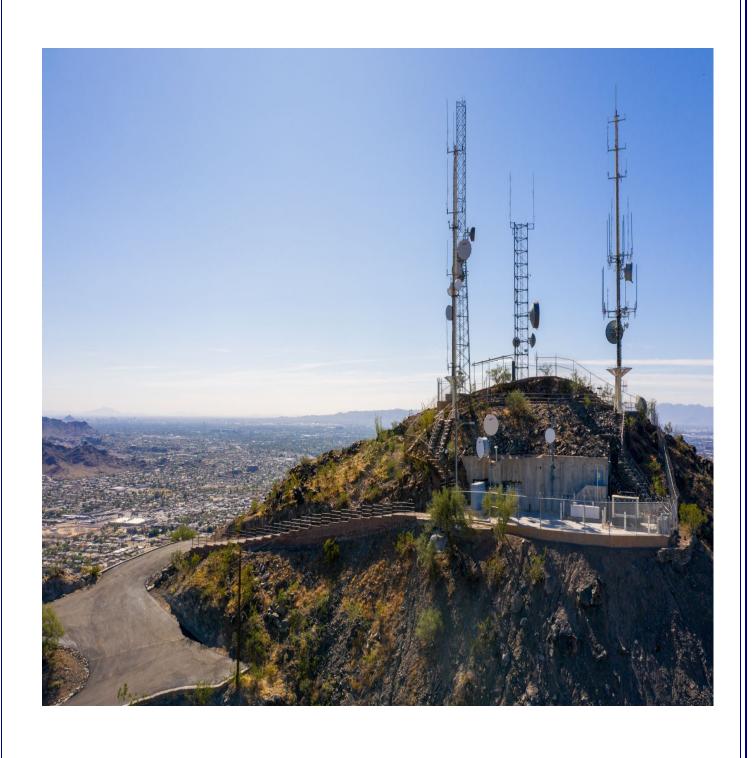


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Cover Photo: RWC tower on North Mountain.



EXECUTIVE DIRECTOR'S MESSAGE

RWC Members and Interested parties –

2020 proved itself to be a challenging year from beginning to end. Through the Covid-19 crisis starting early in the year, to some positive gains through the Summer, then back into a severe upswing in the Fall and continuing, it has been a roller coaster like we've never seen.



The RWC underwent significant staff changes in 2020. In February, Nicholas Roosevelt joined the RWC as Management Assistant, coming from the Office of Government Relations with significant education and experience in public safety and intergovernmental relations. Nick absolutely jumped in with both feet from the start, immediately becoming an indispensable part of our team. In July, after many years of dedicated, valuable service to the RWC, David Clarke left to accept a promotional opportunity with the Phoenix Water Department. And finally, in November, we welcomed our newest member, Selena Barner. Selena joined us as Administrative Aide, coming from the Phoenix Police Department, with over 20 years of experience with administrative and office functions in the public safety and medical fields. She, too has jumped right in and is quickly learning the "world" of the RWC and wireless communications. I know you will all join me in welcoming Nick and Selena and extending our thanks and best wishes to Dave.

RWC staff began working remotely in March and continue to do so as this is written. The City of Phoenix continues to lend enormous support to all remote workers, with technology implementations that allowed electronic, voice and video communications to be used reliably and effectively. RWC staff to date have held well over 100 teleconference meetings, ranging from small, daily staff meetings to large, multi-jurisdictional conferences, all while staying safe and socially distanced.

Projects have continued to evolve and progress, including the completion of the RWC system along the I-17 corridor to Black Canyon City and at the Sunset Point Rest Area. The "Burnt Mountain" project for the far West Valley is approaching completion, with exceptional collaboration between the Buckeye Valley Fire District, project managers, contractors, and the Arizona Department of Public Safety. After that site is completed and the 700MHz trunked system comes online, the Buckeye Valley and Harquahala Fire Districts will both apply to become full members of the RWC.

The RWC expanded its membership in 2020 with the Federal Reserve Bank of San Francisco (FRBSF - Phoenix) Police becoming the 20th member. The RWC is in discussions with other prospective agencies, which may add additional members in 2021.

The excellent reputation of the RWC and desire from other respected organizations to join the Cooperative reflects the hard work of staff and many valuable contributions of RWC Members.



EXECUTIVE DIRECTOR'S MESSAGE (continued)

The RWC continues to be a highly collaborative, collegial cooperative with members who truly care about public service and public safety, notably within the complex area of communications. As the Administrative Manager of the system, the City of Phoenix and its hard-working, dedicated employees continue to support the RWC mission in an extremely competent, customer-focused manner.

On behalf of the RWC staff and the technical representatives from the City of Phoenix, we thank you for your continued support and contributions to the success of the Cooperative.

Regards,

John Imig, Executive Director Regional Wireless Cooperative

OVERVIEW

Background

The VHF communications system formerly used by the City of Phoenix's public safety and other departments was based on outdated technology and was no longer able to meet the operational needs of its users. After much study and several consultants' recommendations, the City replaced the existing system with an APCO Project 25, 800 MHz digital trunked radio system. In 2001, Bond Funds were approved by Phoenix residents to pursue the replacement, which was completed in 2005.

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

In 2008, 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. Membership is open to all local, state, federal governmental and tribal entities and currently includes most of the communities in the Phoenix metropolitan area. Governance provides for a Board of Directors consisting of one executive representative from each Member. The Board directs the operation, maintenance, planning, design, implementation, and financing of the RWC.

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



OVERVIEW (continued)

System Description

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

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

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



Multiple agencies conduct a joint exercise via the Urban Area Security Initiative program

OVERVIEW (continued)

Interoperability

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

The RWC system has been effectively used to provide interoperable communications for numerous special events in the metropolitan area. The system provided support for the annual Fiesta Bowl, BCS championship, two Super Bowls, and NBA and MLB All Star games. The Super Bowl games clearly demonstrated the need for a truly regional radio system and has prompted more discussions between the metropolitan cities regarding more effective use of the RWC.

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

Ak-Chin Fire Department

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 National Guard

Arizona State University Police Department

BNSF Railway Police Department Carefree Fire Department / Rural Metro

Casa Grande Fire Department Cave Creek Marshal's Office

Circle City / Morristown Fire District

Community Bridges, Inc.

Federal Reserve Police Department

Fort McDowell Yavapai Nation Fire Department

Gila River Indian Community

Grand Canyon University Police Department

Luke Air Force Base

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

Pinal County

Rural Metro Fire Department

Salt River Pima Maricopa Indian Community Union Pacific Railroad Police Department

US DOHS Investigations

US DOI Bureau of Land Management

US DOJ Bureau of Alcohol, Tobacco and Firearms

US DOJ Drug Enforcement Agency US DOJ Federal Bureau of Investigation US DOJ United States Marshals Service

Town of Wickenburg

Yavapai County Sheriff's Office



MISSION STATEMENT

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

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

We Are Dedicated to Serving Our Customers

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

We Value and Respect Diversity

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

We Work as a Team

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

We Each Do All We Can

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

We Learn, Change and Improve

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

We Focus on Results

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

We Work with Integrity

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

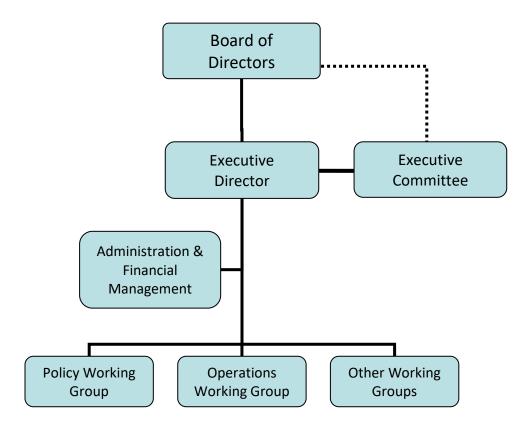
We Make the RWC Better

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



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 three staff positions who assist with the administration and financial management of the RWC. The Executive Director and staff are City of Phoenix employees residing in the Office of Government Relations.



MEMBERS











































BOARD OF DIRECTORS

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EXECUTIVE COMMITTEE

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

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

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

Executive Committee Members

Chair

Police Representative Jesse Cooper Police Administrator City of Phoenix 602.495.5237 jesse.cooper@phoenix.gov

Vice-Chair

Public Works Representative Mike Gent Public Works Director City of Surprise 623.222.6223 mike.gent@surpriseaz.gov

Information Technology Representative Steven Brunasso Chief Information Officer Town of Paradise Valley 480-348-3547 sbrunasso@paradisevalleyaz.gov Administrative Managing Member

Representative Tom Grebner

Wireless Communications Manager

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Fire Services Representative Jeff Schripsema

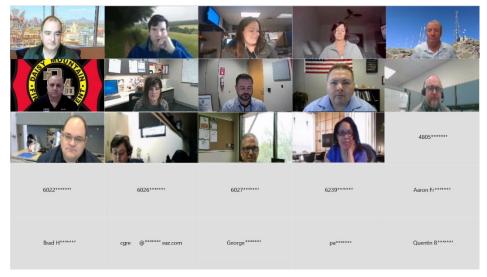
Deputy Fire Chief City of Phoenix 602.495.7230

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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 (4) 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—a point illustrated in the fact that throughout COVID-19, the CWG/OWG has not missed one meeting and has maintained its significant attendance and participation.



The CWG/OWG meeting virtually.

POLICY WORKING GROUP

The Policy Working Group (PWG) is responsible for developing, reviewing (every policy and procedure must be reviewed at least every two 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. One notable achievement by the PWG in 2020 was the revision to the Emergency Responder Radio Coverage Policy (FKA Radio Amplification Systems Policy) This required significant research and work by the group and was formally adopted by the Board in November 2020.



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.

Budgetary Information for Fiscal Year 2019-20 and 2020-21

RWC Trunked Network Annual Budget	FY 2019-20	FY 2020-21
Operations, Maintenance and Staffing	\$ 7,282,680.00	\$ 7,424,937.00
System Upgrade (SUAII)	\$ 2,752,269.00	\$ 2,763,142.00
700MHz Narrow Banding, TDMA, Lifecycle Upgrade	\$ 3,201,941.11	\$ 1,322,951.37
Required Minimum Balance	\$ -	\$ -
Total Budget	\$ 13,236,890.11	\$ 11,511,030.37
Subscriber Unit* Rate	\$ 31.71	\$ 32.78
Total Positions (Administrative Staff)	4	4

RWC Conventional Network Annual Budget	FY 2019-20	FY 2020-21
Operations, Maintenance and Staffing	\$ 447,960.56	\$ 504,855.00
Special Assessment	\$ -	\$ 584,513.00
Required Minimum Balance	\$ 55,955.07	\$ -
Total Budget	\$ 503,915.63	\$ 1,089,368.00
Subscriber Unit* Rate	\$ 10.71	\$ 11.39

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





Members communication equipment



FINANCIAL MANAGEMENT (continued)

<u>Funding</u>

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

Operations, Maintenance, and Staffing Costs

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

Capital Improvement Project Fund

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

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 RWC.

<u>Awards</u>

The Government Finance Officers Association of the United States and Canada ("GFOA") awarded a Certificate of Achievement for Excellence in Financial Reporting to the RWC for its comprehensive annual financial report for the fiscal year ended June 30, 2020. 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.



PLAN FOR THE FUTURE

RWC PROJECTS	2020/21	2021/22	2022/23
Software & Hardware Upgrades	Completed 7.18 upgrade in first quarter of 2021	Upgrade Phase 1 mid-July 2021; Phase 2 mid-Aug	
Ethernet Backhaul Project	Continue replacing network equipment to meet Motorola Ethernet requirements	Continue replacing network equipment to meet Motorola Ethernet requirements	Continue replacing network equipment to meet Motorola Ethernet requirements
Microwave Replacement	Complete Scottsdale MW replacement	Begin planning for RWC replacing old MW radios	
Subscriber TDMA	Subscriber TDMA Begin migrating talkgroups to TDMA		
END USER PROJECTS			
Buckeye – New Subsite	Planning and site selection	Construction	
Buckeye Valley Fire – IR Site at Burnt Mt	Construction underway	Complete 4th guarter 2021 est	
Goodyear – New Subsite	Construction started 2nd quarter 2020	Complete 4th quarter 2021 est	
Scottsdale	VHF radio replacement	VHF radio replacement	
Surprise – New Subsite	Construction started 2nd quarter 2020	Complete 4th quarter 2021 est	

PROJECTS AND MAJOR INITIATIVES

These projects and initiatives, underway in 2020/2021 and beyond, improved radio coverage and reliability and showcased the Regional Wireless Cooperative as a reliable regional public safety radio communications backup through its "Good Neighbor" policies.

Buckeye Valley Fire District

A new tower and shelter were constructed at the new site on Burnt Mountain (I-10 @ 491st Ave). The RWC partnered with the Arizona Department of Public Safety for cost sharing and site use. This project is underway, with expected completion during 2021. Finalization of this site will allow both the Buckeye Valley and Harquahala Fire Districts to apply for full membership to the RWC.

City of Buckeye

Buckeye is still in the planning stage of adding new RWC subsite(s) to Simulcast J. Several possible locations near the I-10 corridor are being evaluated for suitability.

City of Goodyear

Goodyear is currently in the construction stage of adding a new RWC subsite to Simulcast J at the Goodyear PD facility on West Van Buren Street, west of Litchfield Road.

City of Surprise

Surprise will be installing a new Simulcast G subsite which will be located at one of their water treatment facilities. This site will also include Hazard Zone VHF equipment. Project is targeted for completion by the end of 2021.

Daisy Mountain Fire and Medical District

Expansion of the trunked and VHF networks was completed with new sites being commissioned in Black Canyon City and at Sunset point (I-17 north of the valley).



New tower at Daisy Mountain Fire Station 143



PROJECTS AND MAJOR INITIATIVES (continued)

7.18 Software Upgrade

The software for the RWC Network was upgraded from 7.16 to 7.18 as established by the terms of the System Upgrade Agreement (SUAII). This software upgrade also required upgrades to some hardware components, which is included as part of this upgrade.

Subscriber TDMA Migration

Now that the TDMA upgrade is complete to the network, planning has started to start moving talkgroups that have TDMA compliant radios to TDMA. The RWC Network Operations team will be working with various agencies to develop a migration plan.

Ethernet Upgrade

Motorola is mandating that the RWC network must be 100% Ethernet backhaul compliant by end of 2022. Radio shop staff are replacing networking equipment and microwave radios to meet this requirement.

Scottsdale Microwave and VHF Replacement

Scottsdale will be replacing their microwave radios which will meet the Motorola Ethernet requirements. Once the microwave radios are replaced the installation of new VHF equipment will begin. Project targeted for completion in 2022.

Membership Update

The Federal Reserve Bank of San Francisco (FRBSF) Police officially became a Member of the RWC in November 2020. This was a culmination of many months' work by RWC, Phoenix and FRBSF staff members in establishing costing, needs and system coverage at the FRBSF facility in Phoenix. The FRBSF is the RWC's first Federal Member and is expected to go live on the system in early 2021.



SYSTEM PERFORMANCE

Radio Counts

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

RWC Trunked Network

	FY 2019/20			
	July October January April			
	Count	Count	Count	Count
Member Total	18,802	19,007	19,151	19,135
Interoperability	19,824	20,416	20,315	20,363
Grand Total	38,626	39,423	39,466	39,498

RWC Conventional Network

	FY 2019/20				
	July	October	January	April	
	Count	Count	Count	Count	
Member Total	3,577	3,816	3,820	4,068	



Typical APX radios in use by Fire and Police



SYSTEM PERFORMANCE (continued)

Overall System Statistics

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

FY 19/20 System Statistics				
Total Number of Calls	28,935,697			
Total Call Duration (Hours)	100,806			
Total Call Duration (Sec)	362,900,928			
Average Call Duration (Sec)	12.54163423			
Average Calls per Day	79,059			
Total Busies	2,194			
Busy Duration (Hours)	3.85			
Total Busy Duration (Sec)	13865			
Average Busy Duration (Sec)	6.3			
Average Busies per Day	6			
Total Emergency Calls	2,849			
Total Emergency Duration (Hours)	22.81			
Total Emergency Duration (Sec)	82,098			
Average Emergency Duration (Sec)	28.8			
Average Emergencies per Day	7.8			
FY 17-18 System Reliability	99.99%			

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 is 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 Intelligent Site Repeater (ISR) subsystem. GOS reports are prepared weekly and the 2% GOS goal has not been exceeded on any subsystem. The following table shows the maximum GOS for the past year on each sub-system:



SYSTEM PERFORMANCE (continued)

System Use

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

Site Utilization / Grade of Service - FY 19-20

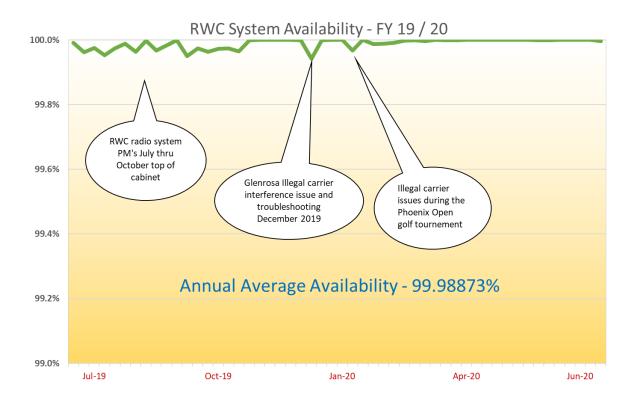
Site	Average Use	Peak Use	Average GOS	Peak GOS
Simulcast A	42.57%	49.87%	0.002%	0.097%
Simulcast B	28.32%	46.50%	0.000%	0.000%
Simulcast C	31.83%	49.83%	0.000%	0.000%
Simulcast D	25.08%	46.59%	0.007%	0.196%
Simulcast F	18.84%	33.75%	0.000%	0.000%
Simulcast H	28.77%	46.35%	0.001%	0.055%
Sky Harbor	14.54%	24.88%	0.000%	0.000%
South	26.66%	53.36%	0.021%	0.569%
Mountain				
North	24.19%	51.84%	0.002%	0.106%
Mountain				
Mt Gillen	5.83%	19.32%	0.000%	0.000%
Sacaton	10.24%	14.18%	0.000%	0.000%
Thompson	18.93%	52.39%	0.006%	0.319%
Peak				
Towers	9.40%	12.88%	0.000%	0.000%
Mountain				
White Tanks	17.02%	41.44%	0.000%	0.000%
Simulcast G	41.50%	50.46%	0.000%	0.000%
Quintero	1.87%	6.66%	0.000%	0.000%
Simulcast J	20.43%	32.70%	0.000%	0.000%



SYSTEM PERFORMANCE (continued)

System Availability

System Availability is a measure of the percentage of time that the system is operating normally, with no operational impact to the users. Since the system is made up of many Simulcast and ISR sub-systems, the system availability is the combined availability of all these subsystems. The goal is to keep the system operating as close to 100% available from the user's perspective. Note that failures may occur to various components, but due to the system redundancy, there is no impact to the user. If System Availability is less than 100%, it may be due to a failure in a single subsystem, with the majority of the overall network remaining available to the users. System Availability for the RWC network for the twelve-month period of July 2019 through June 2020 is shown below:



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



CITY OF PHOENIX RADIO SHOP



The City of Phoenix Radio Shop Staff.

The City of Phoenix is the Maintenance Managing Member for all RWC zones except Zone 3 (Simulcast H) which operates in and is managed by the City of Scottsdale. The Radio Shop is made up of 24 employees that work diligently on behalf of the Network. They, along with our Member agency wireless communications staff leads are what ensure the Network function at its highest level.

The City of Phoenix as the Administrative Manager of the Cooperative is responsible for tracking of all subscriber radios on the RWC network. This work is done by the City of Phoenix Radio Shop, which provides quarterly reporting of subscriber activity for Operations and Maintenance billing.

CONTACT INFORMATION

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www.rwcaz.org



Regional Wireless Cooperative

An Arizona Joint Venture



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INTRODUCTORY SECTION

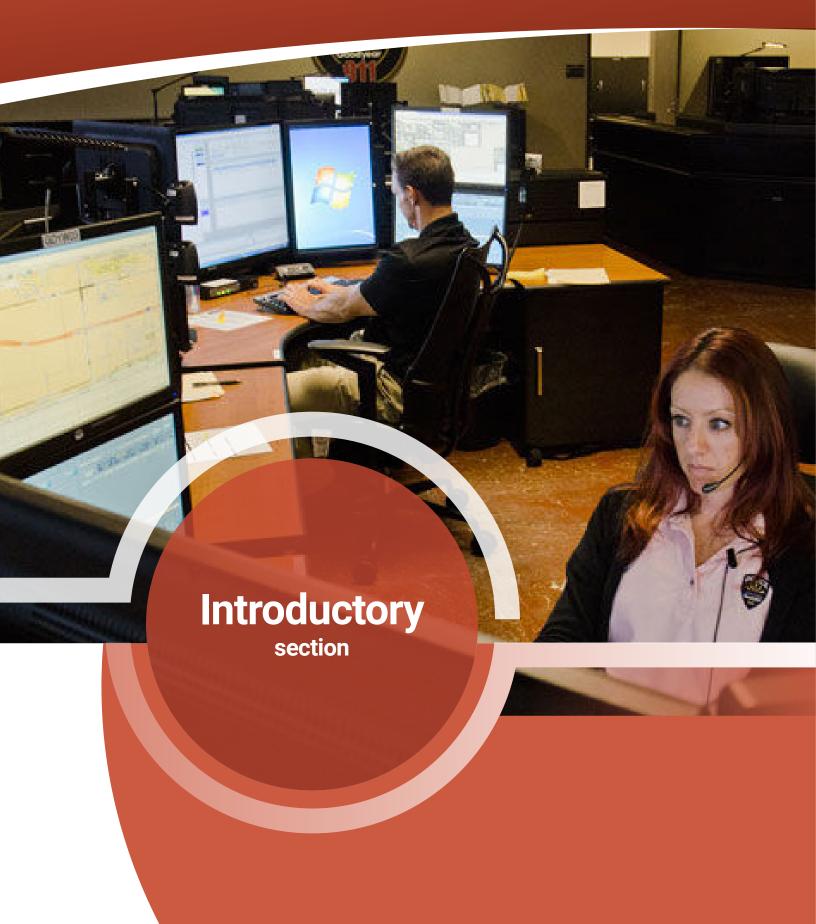
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For The Year Ended June 30, 2020

Regional Wireless Cooperative

An Arizona Joint Venture

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REGIONAL WIRELESS COOPERATIVE AN ARIZONA JOINT VENTURE



December 8, 2020

To the Board of Directors of the Regional Wireless Cooperative:

In accordance with the governance of the Regional Wireless Cooperative (RWC), I am pleased to submit the RWC Comprehensive Annual Financial Report for the fiscal year ended June 30, 2020. 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, 2020. The independent auditors' report is located at the front of the financial section of this report. Management's Discussion and Analysis (MD&A) immediately follows the independent auditors' report and provides a narrative introduction, overview, and analysis of the basic financial statements. The MD&A complements this letter of transmittal and should be read in conjunction with it.

PROFILE OF THE REGIONAL WIRELESS COOPERATIVE

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

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

The RWC is a large, Public Safety-grade radio network based on the APCO Project 25, Phase I/II Standard. The network is a Motorola ASTRO© 25, digital trunked radio system that operates in the 700MHz frequency band. The network consists 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 in and around 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

According to the United States Department of Commerce, the estimated population in the State of Arizona as of 2019 was 7.3 million. This represents a population growth of 13.9% from 2010. The Phoenix metropolitan area has been one of the most rapidly growing metropolitan areas in the country in recent decades in terms of population, employment and personal income growth. From 2010 to 2019, population growth was 17.5% in Maricopa County compared to 6.3% for the United States.

Metro Phoenix, also known as the Valley of the Sun, is home to a strong and growing transportation system including one of the nation's 10 busiest airports, Sky Harbor International Airport. The airport provides service to more than 125,000 passengers with approximately 1,200 aircraft arriving and departing every day. Flights at Phoenix Sky Harbor International Airport serve more than 100 domestic and 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

RWC began a major system software upgrade to version 7.18 in 2019. This upgrade has been included in the RWC Five-Year Plan and budget that was submitted to the RWC Board of Directors. In addition, there are many product changes that occur as part of the life of the system. Motorola annually briefs the RWC on the product roadmap for the next five years. The roadmap includes key product changes where support for certain products will be ending, thus necessitating upgrades and/or changes in these products. The critical product changes that must be considered are those affecting base stations, consoles, and subscriber units.

The RWC is continuing the system-wide conversion to the Time Division Multiple Access (TDMA) protocol, enhancing coverage abilities through doubling of capacity, all while maintaining the current number of frequencies in use. Phase I was completed in 2016 and Phase II is underway with conversion to TDMA throughout the system. The implementation of this phase began in Fiscal Year 2019. This phase is estimated to cost \$10.0 million.

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 separate infrastructure as the 700 MHz trunked system. After RWC Board approval in 2018, the RWC assumed oversight and billing responsibilities for the VHF network in July 2019 for approximately 3,000 VHF-capable radios across the RWC. Considerable work was done in coordinating accurate radio counts with all members, and two new Conditional Participants (the Buckeye Valley and Harquahala Fire Districts) were officially accepted by the Board and their subscriber counts added to the VHF inventory for billing purposes. In July 2019, billing began for approximately 3,000 VHF-capable radios across the RWC. Additionally, a new working group called the Conventional Working Group (CWG) was commissioned to directly support operations of the VHF network, in coordination with the Operations Working Group (OWG).

MAJOR INITIATIVES

As membership of the RWC will likely continue 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:



Emergency Responder Radio Communications System (ERRCS)

As construction efforts on new and remodeled commercial facilities continue to expand and grow, the RWC is increasingly focused on ensuring that our Member agencies and their internal services are given the support for in-building treatments and coverage. The ERRCS program is assisting RWC agencies understand the coverage of the RWC radio networks and is providing updates and best practices to assist when new or remodeled buildings are possibly in need of treatments to enhance coverage inside those structures. This is an ongoing effort, with personnel, technology, policies and procedures underway to support this effort.

Daisy Mountain Fire Sites

With the expansion northwards of the Daisy Mountain Fire District, two new sites were added to expand coverage north of the Valley. The Fire Station 143 site in Black Canyon City and the Sunset Point Rest Area site on I-17 at Sunset Point were completed in 2020. These two sites greatly enhance communications for first responders along an extremely busy and sometimes dangerous stretch of Interstate-17.

"Burnt Mountain" Site

Buckeye Valley Fire District (BVFD) received public safety improvement bond funding to expand an existing site on Burnt Mountain along Interstate-10 in the far West Valley. The improved site will include both 700 MHz trunked and Fire VHF equipment. Once completed, the site will provide significant improvement in coverage for responders along the busy stretch of Interstate-10 west of the Metropolitan area.

West Valley Sites

The Cities of Goodyear and Buckeye are currently in the planning stages for new sites to improve coverage in support of growing development in their areas. Budgeting for and planning of these sites is currently underway. Additionally, the City of Surprise is investigating potential future sites to enhance coverage within their growing city in the Northwest Valley. The City of Tolleson recently approved a new 150-foot tower project within their City that will support both municipal and RWC operations. The RWC and Tolleson will work on an agreement to allow the RWC to assume space on the tower in exchange for assistance with costs. This project will benefit both entities by reducing costs for separate towers and should allow the RWC to eventually eliminate a costly tower lease that expires in 2022.

RELEVANT FINANCIAL POLICIES

General

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

Budgeting Systems and Controls

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

Accounting and Administrative Controls

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

Federal and State financial assistance programs require recipients to comply with many laws and regulations. Administrative controls are procedures designed to ensure compliance with these requirements. The RWC has established a system of administrative controls to ensure compliance with the requirements of the programs under which it receives financial assistance. As with other internal controls, this system is subject to a periodic review and evaluation by management. As part of the annual audit process, internal controls are considered in order to determine the nature, timing, and extent of auditing procedures.

AWARDS AND ACKNOWLEDGEMENTS

The Government Finance Officers Association of the United States and Canada ("GFOA") awarded a Certificate of Achievement for Excellence in Financial Reporting to the RWC for its comprehensive annual financial report for the fiscal year ended June 30, 2019. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports.

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

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

I want to thank all the members of the RWC Board of Directors, the RWC Executive Committee, the City of Phoenix (City) Information Technology Services Department (ITS), and City 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 comprehensive financial report.

Respectfully submitted,

John W. Imig

RWC Executive Director



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Regional Wireless Cooperative Arizona

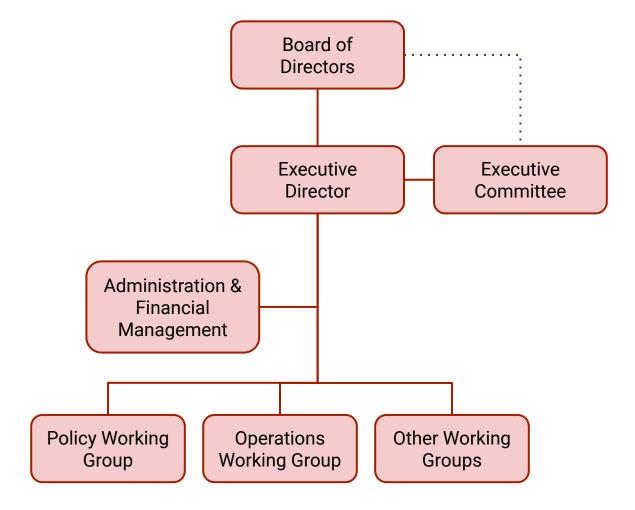
For its Comprehensive Annual Financial Report For the Fiscal Year Ended

June 30, 2019

Christopher P. Morrill

Executive Director/CEO

Regional Wireless Cooperative Organizational Chart





MEMBERS







































RWC BOARD OF DIRECTORS

ChairVice ChairPaul LuizziBob CostelloFire ChiefFire Chief

City of Goodyear City of Buckeye

Chris DeChant Wayne Clement Milton Dohoney, Jr.
Assistant Fire Chief Fire Chief Assistant City Manager

American Fire & Medical Authority Town of Guadalupe City of Phoenix

Jeff Scheetz James Hughes Brad Hartig

Chief Information Office Police Commander CIO/Executive Director IT

City of Avondale City of Maricopa City of Scottsdale

Val GaleRoy StaniferRon DeadmanAssistant Fire ChiefCommunications & Records ManagerFire Chief

City of Chandler Maricopa Community Colleges Sun City Fire District

Alan Zangle Freeman Carney Terry Young

Deputy Fire Chief Police Lieutenant Police Chief

Daisy Mountain Fire Department Town of Paradise Valley City of Surprise

Paul Marzocca Kris Dalmolin Andrea Glass

Police Chief Information Technology Director Assistant Fire Chief
City of El Mirage City of Peoria City of Tempe

Rick St. John Ginger Sanabria

Interim Deputy City Manager Police Support Services Manager
City of Glendale City of Tolleson

For The Year Ended June 30, 2020

Regional Wireless Cooperative

An Arizona Joint Venture

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INDEPENDENT AUDITORS' REPORT

Board of Directors Regional Wireless Cooperative Phoenix, Arizona

Report on the Financial Statements

We have audited the accompanying financial statements of the Regional Wireless Cooperative, which comprise the statement of net position as of June 30, 2020, and the related statements of revenues, expenses, and changes in net position, and cash flows for the year then ended, and the related notes to the financial statements, which collectively comprise the entity's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

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

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Regional Wireless Cooperative as of June 30, 2020, and the changes in its financial position and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.



Board of Directors Regional Wireless Cooperative Page 2

Other Matters

Required Supplementary Information

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

Supplementary and Other Information

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

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

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

CliftonLarsonAllen LLP

Clifton Larson Allen LLP

Phoenix, Arizona December 8, 2020



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, 2020. 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 \$68.6 million at June 30, 2020 and decreased by \$2.3 million compared
 to fiscal year 2019. The decrease in 2020 is primarily due to the continued depreciation of capital assets.
- Operating revenues were \$12.8 million for fiscal year 2020 and decreased by \$0.7 million compared to fiscal year 2019. The decrease in 2020 was due to a \$1.1 million decrease in special assessment revenues.
- The operating expenses decreased by \$2.8 million to \$15.3 million in fiscal year 2020. This decrease was due to a lower depreciation expense 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 \$2.3 million for the year ended June 30, 2020 as compared to June 30, 2019.

For The Year Ended June 30, 2020

RWC's Condensed Statements of Net Position as of June 30, 2020 and 2019

(in thousands)

	June 30				
	 2020	2019			
Current Assets	\$ 3,769	\$	5,521		
Capital Assets, Net	67,044		69,091		
Total Assets	 70,813		74,612		
Deferred Outflows of Resources	 				
Current Liabilities	1,204		1,860		
Noncurrent Liabilities	960		1,854		
Total Liabilities	2,164		3,714		
Deferred Inflows of Resources	 				
Investment in Capital Assets	67,044		68,866		
Unrestricted	1,605		2,032		
Total Net Position	\$ 68,649	\$	70,898		

During fiscal year 2020, current assets remained steady and decreased by only \$1.7 million from fiscal year 2019. This decrease is due to lower operating revenues and an increase in operations and maintenance expenses.

Capital assets net decreased by \$2.1 million from fiscal year 2019 primarily due to current year depreciation expense of \$8.1 million and \$6.0 million of additions.

Liabilities decreased in 2020 by \$1.5 million from fiscal year 2019. The decrease in 2020 was due to decreased in unearned revenue of \$0.9 million for adjustments to recognize amounts as current year operating revenues.

Net position decreased by \$2.3 million to \$68.6 million in fiscal year 2020. This overall decrease is primarily related to the decrease in capital assets, net based on current year depreciation expense.

RWC's Condensed Statements of Revenues, Expenses, and Changes in Net Position For the Years Ended June 30, 2020 and 2019

(in thousands)

	Ju	June 30					
	2020		2019				
Operating Revenues	\$ 12,831	\$	13,541				
Non-Operating Revenues	188		249				
Total Revenues	13,019	13,019					
Operating Expenses							
Staff and Administrative Allocation	499		541				
Operations and Maintenance	6,695		6,133				
Depreciation	8,074		11,430				
Total Operating Expenses	15,268	_	18,104				
Total Expenses	15,268		18,104				
Changes in Net Positions	(2,249)	(4,314)				
Net Position, July 1	70,898		75,212				
Net Position, June 30	\$ 68,649	\$	70,898				

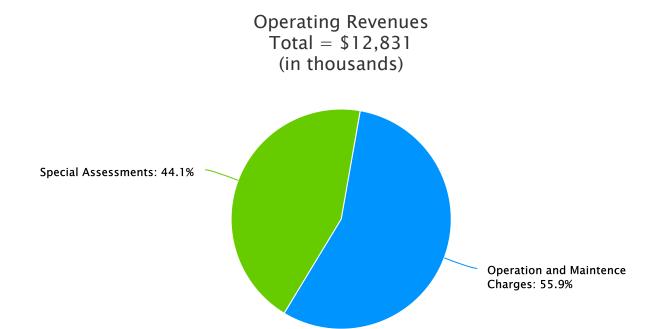
Operating revenues decreased by \$0.7 million during 2020 primarily due to lower special assessments to members as projects, such as TDMA, move closer to completion.

During fiscal year 2020, total operating expenses decreased by \$2.8 million, when compared to fiscal year 2019. This decrease was primarily due to a lower depreciation expense on capital assets.

OPERATING REVENUES

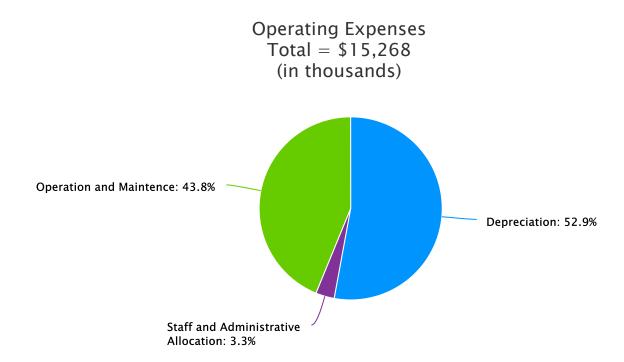
The RWC's revenue is primarily generated by charges to the joint venture members for operations and maintenance costs, special assessments, and an operating reserve. For fiscal year 2020, revenues amounted to \$12.8 million of which \$7.1 million is revenue from operations and maintenance and \$5.7 million is from special assessments.

The following chart depicts the RWC's operating revenues by category for the year ended June 30, 2020:



OPERATING EXPENSES

The following chart depicts the RWC's operating expenses by category for the year ended June 30, 2020:



CAPITAL ASSETS

The RWC's capital assets as of June 30, 2020 amounts to \$67.0 million (net of accumulated depreciation) and \$69.1 million as of June 30, 2019. Net capital assets decreased by \$2.1 million during fiscal year 2020 due primarily to depreciation expense. For additional information on RWC's capital assets, please refer to the Notes to the Financial Statements, Organization and Summary of Significant Accounting Policies, Note 1, page 15 and Capital Assets, Note 3, page 20.



RWC's Capital Assets

(in thousands)

	June 30				
	2020			2019	
Buildings	\$	28,842	\$	28,842	
Improvements other than Buildings		4,830		4,830	
Equipment		121,787		118,480	
Intangible Assets		14,477		9,372	
Construction in Progress		2,947		5,332	
Accumulated Depreciation		(105,839)		(97,765)	
Capital Assets, Net	\$	67,044	\$	69,091	

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.





Regional Wireless Cooperative Statement of Net Position June 30, 2020 (in thousands)

ASSETS

7,652.16	
Current Assets	
Unrestricted Assets	
Equity in Pooled Cash and Investments	\$ 391
Equity in Pooled Cash and Investments - Operating Reserve	925
Equity in Pooled Cash and Investments - VHF	57
Equity in Pooled Cash and Investments - Capital	2,396
Total Unrestricted Assets	3,769
Total Current Assets	3,769
Noncurrent Assets	
Capital Assets	
Buildings	28,842
Improvements other than Buildings	4,830
Equipment	121,787
Intangible Assets	14,477
Construction in Progress	2,947
Less: Accumulated Depreciation	(105,839)
Capital Assets, Net	67,044
Total Assets	70,813
DEFERRED OUTFLOWS OF RESOURCES	
Total Deferred Outflows of Resources	
LABULTIFO	
LIABILITIES	
Current Liabilities	450
Accounts Payable	650
Members' Payable	540
Accrued Expenses	14
Total Current Liabilities	1,204
Name (mand Link Hain)	
Noncurrent Liabilities	100
Accrued Expenses Unearned Revenue	109
	851
Total Noncurrent Liabilities	960
Total Liabilities	2,164
DEFERRED INFLOWS OF RESOURCES	
Total Deferred Inflows of Resources	_
Total Deferred lilliows of Nesources	
NET POSITION	
Investment in Capital Assets	67,044
Unrestricted	1,605
Net Position	\$ 68,649
Net i Osition	y 00,049

Regional Wireless Cooperative Statement of Revenues, Expenses, and Changes in Net Position For the Fiscal Year Ended June 30, 2020 (in thousands)

Operating Revenues	
Operations and Maintenance Charges	\$ 7,170
Special Assessments	5,661
Total Operating Revenues	12,831
Operating Expenses	
Staff and Administrative Allocation	499
Operation and Maintenance	6,695
Depreciation	8,074
Total Operating Expenses	15,268
Operating Loss	(2,437)
Non-Operating Revenues	
Investment Income	
Net Decrease in Fair Value of Investments	55
Interest	133
Total Non-Operating Revenues	188
Changes in Net Position	(2,249)
Net Position, July 1	70,898
Net Position, June 30	\$ 68,649

Regional Wireless Cooperative Statement of Cash Flows For the Fiscal Year Ended June 30, 2020 (in thousands)

Cash Flows from Operating Activities	
Cash Received from Members	\$ 12,831
Cash Paid to Suppliers	(8,260)
Cash Paid for Staff and Administration Allocation	(484)
Net Cash Provided by Operating Activities	4,087
Cash Flows from Capital and Related Financing Activities	
Acquisition and Construction of Capital Assets	(6,027)
Net Cash Used by Capital and Related Financing Activities	(6,027)
Cash Flows from Investing Activities	
Interest on Investments	188
Net Cash Provided by Investing Activities	188
Net Decrease in Cash and Cash Equivalents	(1,752)
	5.504
Cash and Cash Equivalents, July 1	5,521
Cash and Cash Equivalents, June 30	\$ 3,769
Reconciliation of Operating Loss to Net Cash	
Provided by Operating Activities	
Operating Loss	\$ (2,437)
Adjustments	
Depreciation	8,074
Increase (Decrease) in Liabilities	
Accounts Payable	(923)
Members' Payable	268
Accrued Expenses	15
Unearned Revenue	(910)
Net Cash Provided by Operating Activities	\$ 4,087



Regional Wireless Cooperative

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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:

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For The Year Ended June 30, 2020

REGIONAL WIRELESS COOPERATIVE AN ARIZONA JOINT VENTURE NOTES TO THE FINANCIAL STATEMENTS

The Regional Wireless Cooperative (RWC) was formed in 2008 to oversee the administration, operation, management and maintenance of the expanding regional communication network. The RWC is an Arizona joint venture, multi jurisdictional organization throughout the Phoenix Metropolitan Region which currently consists of 19 members. The RWC is a large, Public Safety radio network based on the Project 25, Phase I Standard. The network is an ASTRO 25™, integrated voice and data, trunked radio system that it operates in the 700/800 MHz frequency bands and uses standard Simulcast, IP Simulcast, and individual site trunking. The network consists of seven major simulcast subsystems and ten 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 realtime, as the need requires); shared resources; such as people, equipment, and tower sites and funding; and increased success in obtaining state and federal grant support. Financial responsibilities are shared by all members based on their relative size, and is measured by the number of subscriber units on the network.

1. Organization and Summary of Significant Accounting Policies

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

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

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

Reporting Entity

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

Basis of Accounting

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

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

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

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

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

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

Cash and Pooled Investments

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

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

Receivables

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

Capital Assets

Capital assets are recorded at historical cost. 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:

LandNot depreciatedBuildings10-40 yearsImprovements other than Buildings10-50 yearsEquipment5-30 yearsIntangible assets5-40 yearsConstruction in progressNot depreciated

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

Members' Payable

The RWC reports members' payable in connection with revenues from billings to members. Members' payable at June 30, 2020 was \$539,973.

Operating Revenues

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

Operating Expenses

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

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 2020:

GASB Statement No. 93, *Replacement of Interbank Offered Rates*, requires that governments replace citations of the London Interbank Offered Rate (LIBOR) with one or more acceptable benchmark reference rates. The requirements of this Statement are effective for reporting periods beginning after December 31, 2021. The RWC has opted to early implement this Statement in fiscal year 2020 and determined there is no impact to the financial statements as a result of this Statement.

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
84	Fiduciary Activities	2021
87	Leases	2022
90	Majority Equity Interests	2021
91	Conduit Debt Obligations	2023
94	Public-Private and Public-Private Partnerships and Availability Payment Arrangements	2023
96	Subscription Based Information Technology Arrangements (SBITA)	2023
97	Certain Component Unit Criteria, and Accounting and Financial Reporting for Section 457 Plans	2022

2. Cash and Pooled Investments

The RWC did not have cash on hand at June 30, 2020. Pooled investments are maintained in the cash and investment pool of the City. RWC does not have a formal investment policy. The investment policy is maintained with the City.

Pooled Investments

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

RWC maintains a portion of its unrestricted cash and investments in the City's cash and investment pool. Total investments for RWC at June 30, 2020 stated at fair value was \$3,769,356.

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, 2020 (in thousands):

	Fair Value Measurement Using						
			Q	uoted Prices		Significant	
				In Active		Other	Significant
				Markets for		Observable	Unobservable
				Identical Assets		Inputs	Inputs
Investments by Fair Value Level	6	/30/2020		(Level 1)		(Level 2)	(Level 3)
U.S. Treasury Securities	\$	2,536,492	\$	16,432	\$	2,520,060	\$ -
U.S. Government Agency Obligations		552,284		-		552,284	-
U.S. Government Agency MBS/CMO		113,863		-		113,863	-
Municipal Bonds		287,806		-		287,806	-
Commercial Paper		19,993		-		19,993	-
Investment in Land		-		-		-	-
Total Investments, Including Those Classified as, Cash							
Equivalents by Fair Value Level	\$	3,510,438	\$	16,432	\$	3,494,006	\$ -

U.S. Government securities totaling \$16.4 million in fiscal year 2020 are classified in Level 1 of the fair value hierarchy and are valued using quoted prices in active markets.

U.S. Government securities totaling \$2.5 billion, U.S. government agency obligations totaling \$552.3 million, U.S. government agency MBS/CMO totaling \$113.9 million, municipal bonds totaling \$287.8 million and commercial paper totaling \$20.0 million in fiscal year 2020 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.

REGIONAL WIRELESS COOPERATIVE AN ARIZONA JOINT VENTURE NOTES TO THE FINANCIAL STATEMENTS

Interest Rate Risk

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

U.S. Treasury Securities 5 year final maturity

Securities guaranteed, insured, or

backed by the full faith and credit

of the U.S. Government 5 year final maturity
U.S. Government Agency Securities 5 year final maturity

Repurchase Agreements 60 days

Municipal Obligations 5 years for long-term issues

Money Market Mutual Funds 90 days Commercial Paper 270 days

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

Credit Risk

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

Concentration of Credit Risk

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

Issuer	Fair Value	!	
FHLB	\$322,491		

For The Year Ended June 30, 2020

3. Capital Assets

Capital asset activity for the fiscal year ended June 30, 2020 was as follows (in thousands):

	В	eginning						Ending
	Balance		Increases		Decreases		Balance	
Non-depreciable Assets								
Construction in Progress	\$	5,332	\$	3,047	\$	(5,432)	\$	2,947
Total Non-depreciable Assets		5,332		3,047		(5,432)		2,947
Depreciable Assets								
Buildings		28,842		-		-		28,842
Improvements other than Buildings		4,830		-		-		4,830
Equipment		118,480		3,307		-		121,787
Intangible Assets		9,372		5,105		-		14,477
Total Depreciable Assets		161,524		8,412		-		169,936
Accumulated Depreciation								
Buildings		(7,594)		(794)		-		(8,388)
Improvements other than Buildings		(2,090)		(237)		-		(2,327)
Equipment		(83,883)		(4,927)		-		(88,810)
Intangible Assets		(4,198)		(2,116)		-		(6,314)
Total Accumulated Depreciation		(97,765)		(8,074)		-		(105,839)
Total Depreciable Assets, Net		63,759		338		-		64,097
Total Capital Assets, Net	\$	69,091	\$	3,385	\$	(5,432)	\$	67,044

4. Risk Management

RWC's insurance program is administered by the City of Phoenix Risk Management Division of the Finance Department. RWC is charged annually for its share of insurance coverage. For fiscal year 2020, RWC was charged \$50,227 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, 2020, 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.

5. Members' Equity

A summary of the joint venture members' equity as of June 30, 2020 is as follows:

Arizona Fire & Medical Authority	\$ 336,754
City of Avondale	591,371
City of Buckeye	349,544
City of Chandler	1,890,821
Daisy Mountain Fire District	92,424
City of El Mirage	281,598
City of Glendale	2,825,834
City of Goodyear	346,870
Town of Guadalupe	79,670
City of Maricopa	213,481
Maricopa County Community College District	250,783
Town of Paradise Valley	21,650
City of Peoria	1,889,222
City of Phoenix	47,228,022
City of Scottsdale	1,971,110
Sun City Fire District	590,698
City of Surprise	1,051,916
City of Tempe	8,499,737
City of Tolleson	 137,283
Total Members' Equity	\$ 68,648,788

6. Related Party Transactions

Staff and administrative costs allocated by the City to RWC was \$499,616 for the year ended June 30, 2020. 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, 2020 and compensation totaled \$467,833 for the year ended June 30, 2020.

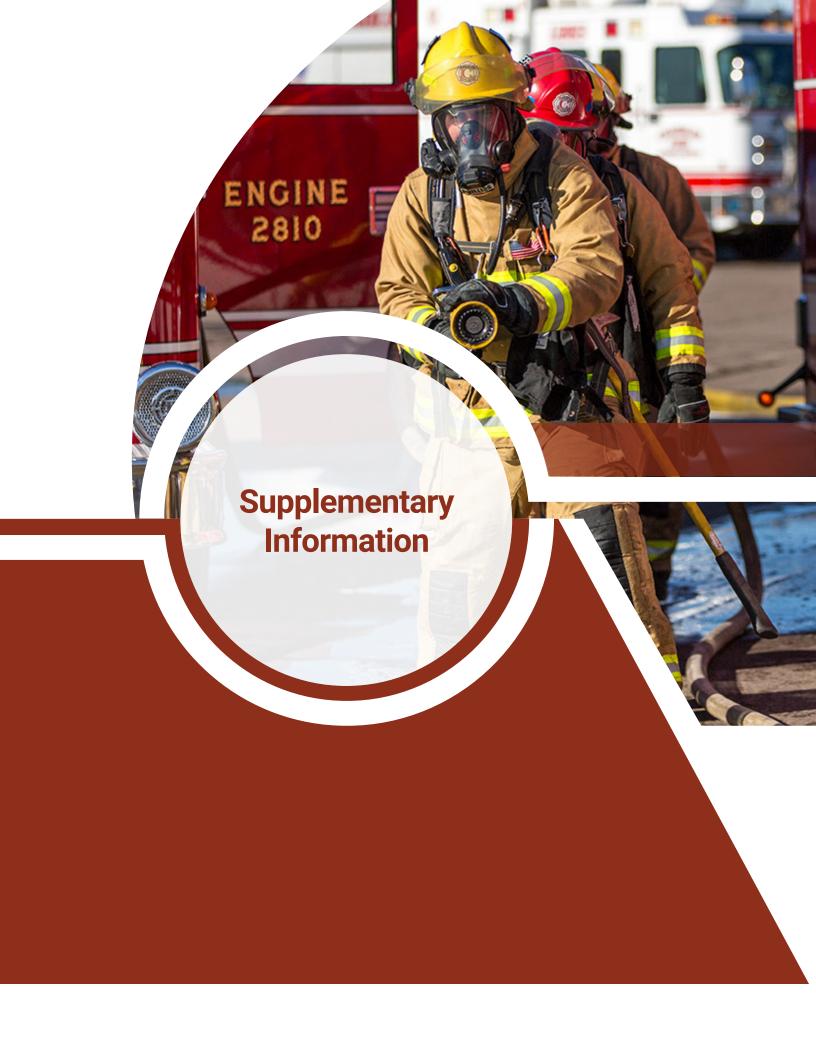
RWC's full-time staff are employed by the City of Phoenix, Arizona and participate in the City of Phoenix Employees' Retirement Plan (COPERS). In addition to normal retirement benefits, COPERS also provides for disability and survivor benefits, as well as deferred pensions for former employees. Pension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

7. Commitments and Contingencies

The RWC has entered into contractual agreements with Motorola to provide services related to maintenance, operations, and upgrades of the RWC Network. The percentages of the total RWC budget for these agreements were 66% for the year ended June 30, 2020.

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.



Regional Wireless Cooperative Members' Operating Fund Reserve For the Fiscal Year Ended June 30, 2020

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, 2019	Contributions	Adjustments*	Interest	Expenditures	June 30, 2020
Arizona Fire & Medical						
Authority	\$ 4,3	14 \$ 655	\$	- \$ 118	\$	- \$ 5,087
City of Avondale	18,9	05 (93)		- 451		19,263
City of Buckeye	18,3	83 (1,114)		- 414		17,683
City of Chandler	55,1	07 (2,087)		- 1,198		54,218
Daisy Mountain Fire District	1,1	29 3,260		- 105		4,494
City of El Mirage	9,3	12 (3,427)		- 141		6,026
City of Glendale	77,4	97 (26,320)		- 1,226		52,403
City of Goodyear	23,3	76 (9,195)		- 340		14,521
Town of Guadalupe	5	98 (68)		- 13		543
City of Maricopa	9,8	73 787		- 255		10,915
Maricopa County Community						
College District	13,7	51 (2,801)		- 262		11,212
Town of Paradise Valley	3,9	77 26		- 96		4,099
City of Peoria	53,1	86 (8,375)		- 1,074		45,885
City of Phoenix	683,5	67 (188,046)		- 11,871		507,392
Rural Metro	6,5	76 (6,576)		-		
City of Scottsdale	90,6	19 (16,916)		- 1,766		75,469
Sun City Fire District	2,6	95 392		- 74		- 3,161
City of Surprise	24,6	35 1,749		- 632		27,016
City of Tempe	105,6	25 (47,405)		- 1,395		59,615
City of Tolleson	5,7	42 336		- 146		6,224
	\$ 1,208,8	67 \$ (305,218)	\$	- \$ 21,577	\$	925,226

^{*}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, 2020

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	e				End	ling Balance	
Member	July 1, 2019	Contributions		Interest	Expenditures	June 30, 2020		
Arizona Fire & Medical								
Authority	\$	- \$	892	\$ 13	ć	- \$	905	
City of Avondale	Ş	- \$	1,080	16	\$	· Ş	1,096	
		-			•			
City of Buckeye		-	1,487	22			1,509	
City of Chandler		-	2,505	38		-	2,543	
Daisy Mountain Fire District		-	1,096	16		•	1,112	
City of El Mirage		-	360	5		-	365	
City of Glendale		-	2,442	37		-	2,479	
City of Goodyear		-	1,127	17			1,144	
Town of Guadalupe		-	110	2			112	
City of Maricopa		-	798	12		-	810	
City of Peoria		-	2,004	30			2,034	
City of Phoenix		-	30,134	454			30,588	
City of Scottsdale		-	3,585	54			3,639	
Sun City Fire District		-	877	13		-	890	
City of Surprise		-	1,832	28		-	1,860	
City of Tempe		-	3,757	57		-	3,814	
City of Tolleson		-	360	5		-	365	
Buckeye Valley Fire District		-	1,378	21		-	1,399	
Harquahala Fire District		-	172	3		-	175	
	\$	- \$	55,996	\$ 843	\$	- \$	56,839	

Regional Wireless Cooperative Members' Infrastructure Replacement and Enhancement Activity For the Fiscal Year Ended June 30, 2020

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	Jı	uly 1, 2019	Co	ntributions	Interest	Expenditures		June 30, 2020	
Arizona Fire & Medical Authority	\$	14,469	\$	14,396	\$ 532	, , ,	•		
City of Avondale		56,345		56,162	2,073	(56,19	,	58,382	
City of Buckeye		41,154		55,984	1,514	(56,01	0)	42,642	
City of Chandler		205,697		177,017	7,566	(177,14	17)	213,133	
Daisy Mountain Fire District		1,081		3,732	40	(3,73	33)	1,120	
City of El Mirage		17,482		18,661	643	(18,67	72)	18,114	
City of Glendale		145,014		226,603	5,334	(226,69	95)	150,256	
City of Goodyear		9,317		71,091	343	(71,09	97)	9,654	
Town of Guadalupe		2,343		1,777	86	(1,77	78)	2,428	
City of Maricopa		29,344		32,169	1,079	(32,18	88)	30,404	
Maricopa County Community									
College District		42,343		41,944	1,558	(41,97	71)	43,874	
Town of Paradise Valley		-		14,751	-	(14,75	51)	-	
City of Peoria		191,527		152,135	-	(152,25	66)	191,406	
City of Phoenix		1,016,759		1,700,676	37,399	(1,701,32	20)	1,053,514	
City of Scottsdale		296,399		277,433	10,903	(277,62	21)	307,114	
Sun City Fire District		8,936		10,412	248	(8,53	37)	11,059	
City of Surprise		85,447		73,579	3,143	(73,63	33)	88,536	
City of Tempe		148,009		269,613	5,444	(269,70)7)	153,359	
City of Tolleson		6,165	_	5,687	227	(5,69	91)	6,388	
	\$	2,317,831	\$	3,203,822	\$ 78,132	\$ (3,203,41	0)	\$ 2,396,375	

Regional Wireless Cooperative Members' Net Operating and Maintenance Expenditures For the Fiscal Year Ended June 30, 2020

2020 Charge (Credit) Per

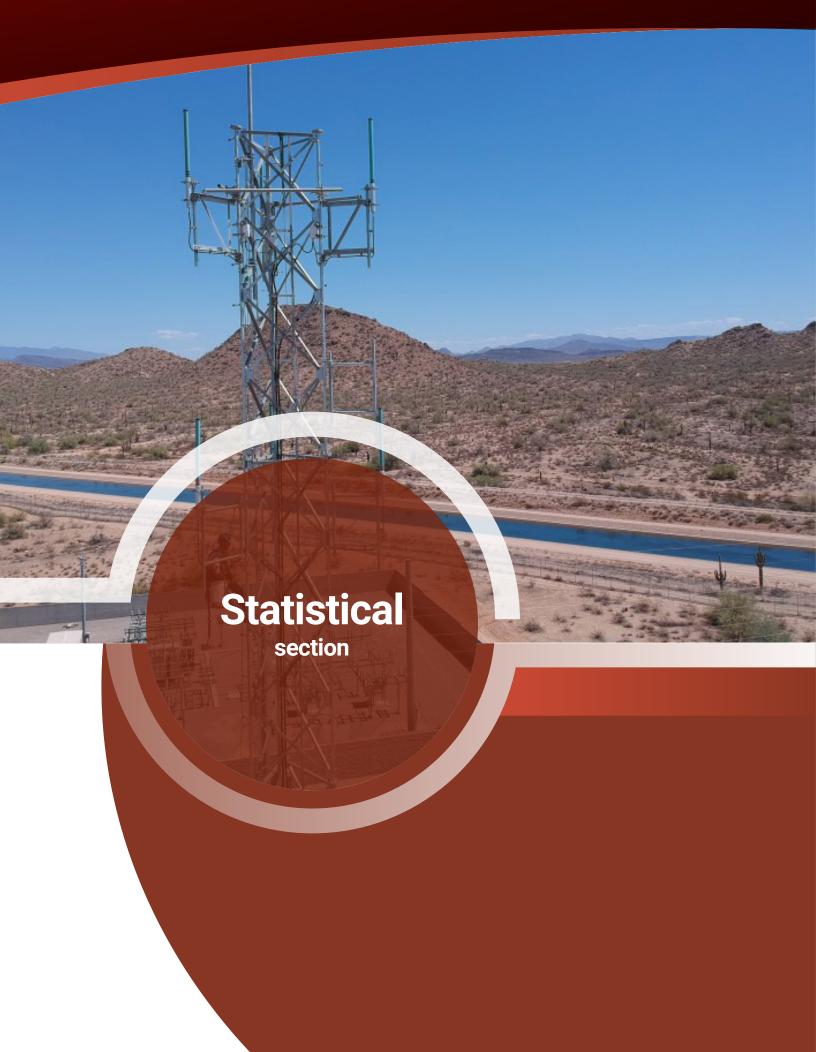
			(Credit) i ei	
			User	
		Amount	Settlement	Net Operating
Member		Billed	(1)	Expenditures
Arizona Fire & Medical Authority	\$	57,193	\$ (6,052)	\$ 51,140
City of Avondale		164,450	(12,637)	151,813
City of Buckeye		149,504	(11,204)	138,300
City of Chandler		416,265	(28,820)	387,444
Daisy Mountain Fire District		48,138	(5,255)	42,883
City of El Mirage		54,371	(4,635)	49,735
City of Glendale		424,537	(31,133)	393,404
City of Goodyear		122,666	(10,047)	112,619
Town of Guadalupe		5,150	(519)	4,630
City of Maricopa		91,738	(6,079)	85,659
Maricopa County Community				
College District		87,070	(5,254)	81,816
Town of Paradise Valley		31,964	(1,855)	30,109
City of Peoria		362,001	(24,356)	337,645
City of Phoenix		4,199,131	(292,132)	3,906,999
City of Scottsdale		614,866	(42,761)	572,105
Sun City Fire District		32,314	(3,337)	28,977
City of Surprise		220,645	(15,323)	205,322
City of Tempe		495,998	(34,200)	461,798
City of Tolleson		54,462	(4,372)	50,090
Non-Members		77,602		77,602
	\$	7,710,064	\$ (539,973)	\$ 7,170,091
	<u>ې</u>	7,710,004	پ (نام کو (نام کو (نام کو کو (نام کو	٦,١/٥,09١

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

Regional Wireless Cooperative

An Arizona Joint Venture

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

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Financial Trends	
These schedules contain trend information to help the reader understand how the financial performance and well-being have changed over time:	ne RWC's
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Statements of Revenues, Expenses, and Changes in Net Position	30
Members' Operation and Maintenance Expenses	31
Demographic and Economic Information	
These schedules offer demographic and economic indicators to show the environment which the RWC's financial activities take place:	ent within
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Operating Information	
These schedules contain service data to show how the RWC's financial information to the services the RWC provides and the activity it performs:	n relates
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For The Year Ended June 30, 2020

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

		2020	2019	2018	2017	2016	2015	2014	2013	:	2012	2011
Investment in Capital	_											
Assets	\$	67,044	\$ 69,091	\$ 73,867	\$ 80,098	\$ 86,472	\$ 83,376	\$ 83,280	\$ 87,125	\$	95,643	\$ 99,481
Restricted		-	-	-	-	-	-	-	-		-	-
Capital Projects		-	-	-	-	243	121	-	88		-	-
Unrestricted		1,605	1,807	1,345	1,580	1,937	12,386	4,250	498		706	534
Net Position	\$	68,649	\$ 70,898	\$ 75,212	\$ 81,678	\$ 88,652	\$ 95,883	\$ 87,530	\$ 87,711	\$	96,349	\$ 100,015

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

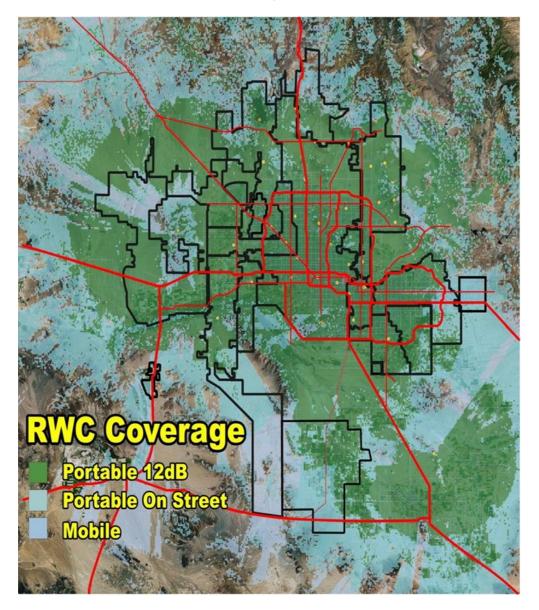
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Operating Revenues					-					
Operation and Maintenance Charges	\$ 7,170	\$ 6,798	\$ 6,871	\$ 7,320	\$ 6,592	\$ 7,209	\$ 7,201	\$ 6,746	\$ 8,305	\$ 6,389
Special Assessments	5,661	6,743	3,919	1,989	16,646	16,170	11,143	2,390	48	93
Other	-	-	-	-	121	121	88	88	60	445
Total Operating Revenues	12,831	13,541	10,790	9,309	23,359	23,500	18,432	9,224	8,413	6,927
Operating Expenses										
Staff and Administrative Allocation	499	541	654	538	691	582	617	597	499	527
Operation and Maintenance	6,695	6,133	5,994	6,048	3,925	6,174	6,541	6,048	7,602	5,853
Special Assessments	-	-	151	245	2,429	5	3	-	48	93
Depreciation	8,074	11,430	10,495	9,476	8,299	8,509	11,546	10,444	9,999	10,181
Total Operating Expenses	15,268	18,104	17,294	16,307	15,344	15,270	18,707	17,089	18,148	16,654
Operating Income (Loss)	(2,437)	(4,563)	(6,504)	(6,998)	8,015	8,230	(275)	(7,865)	(9,735)	(9,727)
Non-Operating Revenues (Expenses) Investment Income Net Increase (Decrease) in Fair										
Value of										
Investments	55	111	(72)	(86)	25	(109)	(109)	(77)	(53)	(18)
Interest	133	138	110	110	262	232	203	81	78	30
Loss on Disposal of Capital Assets	-	-	-	-	(1,190)	-	-	(777)	-	-
Distribution to Members		-	-	-	(14,343)	-	-	-	-	
Total Non0Operating Revenues										
(Expenses)	188	249	38	24	(15,246)	123	94	(773)	25	12
Income (Loss) Before										
Contributions	(2,249)	(4,314)	(6,466)	(6,974)	(7,231)	8,353	(181)	(8,638)	(9,710)	(9,715)
Capital Contributions	_	_	_	_	_	_	_	_	6,044	12,866
Changes in Net Position	\$ (2,249)	\$ (4,314)	\$ (6,466)	\$ (6,974)	\$ (7,231)	\$ 8,353	\$ (181)	\$ (8,638)	\$ (3,666)	\$ 3,151
~										

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

	2020	2019	2018	2017	2016	2015	2014	2013	2012
Arizona Fire & Medical									
Authority	\$ 51,140	\$ 32,798	\$ 29,301	\$ 28,847	\$ 28,275	\$ 27,847	\$ 28,059	\$ 24,952	\$ 31,029
City of Avondale	151,813	143,500	138,819	127,170	96,672	121,150	123,697	108,885	39,787
City of Buckeye	138,300	127,996	115,986	114,114	113,819	123,292	105,746	77,987	91,438
City of Chandler	387,444	365,909	354,689	356,585	345,177	362,723	378,692	340,153	455,420
Daisy Mountain Fire	-	-	-	-	-	-	-	-	-
District	42,883	28,056	8,854	8,209	7,443	8,239	3,819	2,111	3,314
City of El Mirage	49,735	41,176	38,515	38,041	45,293	39,139	38,067	31,944	38,635
City of Glendale	393,404	415,301	443,057	455,537	487,326	513,312	535,581	583,921	248,367
City of Goodyear	112,619	106,821	148,559	219,021	144,228	170,265	41,573	36,693	46,518
Town of Guadalupe	4,630	3,840	3,542	3,574	3,631	4,217	4,126	4,036	2,417
City of Maricopa	85,659	90,120	75,794	67,041	64,285	64,588	63,551	39,943	8,707
Maricopa County									
Community College	81,816	82,621	84,183	84,036	84,503	79,523	-	-	-
Town of Paradise Valley	30,109	33,820	17,004	-	-	-	-	-	-
City of Peoria	337,645	337,138	326,318	312,071	321,022	354,495	369,820	330,061	430,102
City of Phoenix	3,906,999	3,713,027	3,515,191	3,448,585	3,470,070	3,758,471	3,999,612	3,878,073	5,289,117
City of Scottsdale	572,105	542,652	535,893	553,558	558,223	596,642	568,508	503,669	717,469
Sun City Fire District	28,977	22,505	20,538	17,945	17,246	18,166	18,260	15,411	18,971
City of Surprise	205,322	187,571	187,541	171,780	152,212	170,233	167,321	147,314	144,535
City of Tempe	461,798	431,638	729,287	1,231,481	571,819	711,487	675,808	573,249	710,090
City of Tolleson	50,090	46,073	43,120	19,424	11,618	12,887	12,174	10,454	12,498
Non Members (1)	77,602	45,753	54,540	62,555	68,926	72,710	66,432	37,498	16,506
Total	\$7,170,091	\$6,798,315	\$6,870,731	\$7,319,574	\$6,591,788	\$7,209,386	\$7,200,846	\$6,746,354	\$8,304,920

⁽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

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
City of Avondale	87,931	85,835	84,025	82,881	80,684	78,090	78,822	77,511	76,870	76,392
City of Buckeye	79,620	74,370	68,453	64,629	62,138	58,795	56,683	56,460	54,102	52,334
City of Chandler	261,165	257,165	253,458	247,477	260,828	249,423	245,588	246,197	241,214	238,381
City of El Mirage	35,753	35,670	35,216	35,043	33,935	32,857	32,998	32,472	32,067	31,862
City of Glendale	252,381	250,702	246,709	245,895	240,126	232,680	234,632	231,109	229,008	227,446
City of Goodyear	86,840	82,835	79,858	77,258	79,003	74,743	72,864	72,275	69,018	67,337
Town of Guadalupe	6,631	6,597	6,225	6,336	6,177	6,084	6,072	6,019	5,943	5,895
City of Maricopa	52,127	50,024	48,007	46,903	48,602	47,442	45,508	44,946	44,396	43,598
Town of Paradise Valley	14,637	14,502	14,293	14,355	13,922	13,457	13,387	13,282	13,154	13,035
City of Peoria	175,961	172,259	168,181	164,173	171,237	163,832	162,592	160,545	157,653	155,754
City of Phoenix	1,680,992	1,660,272	1,626,078	1,615,017	1,563,025	1,506,439	1,505,070	1,485,751	1,465,901	1,453,462
City of Scottsdale	258,069	255,310	249,950	246,645	236,839	225,698	226,918	222,213	219,713	217,965
City of Surprise	141,664	138,161	134,085	132,677	128,422	123,797	123,546	121,629	119,530	118,349
City of Tempe	195,805	192,364	185,038	182,498	175,826	169,529	168,228	165,158	164,659	162,503
City of Tolleson	7,372	7,299	7,205	7,178	7,008	6,777	6,756	6,632	6,579	6,541

Source: US Census Bureau

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

		2020			2011	
			Percentage			Percentage
			of Total City			of Total City
Employer	Employees	Rank	Employment	Employees	Rank	Employment
Banner Health	47,000	1	2.24%	28,220	3	1.67%
State of Arizona	41,847	2	2.00%	49,282	1	2.92%
Arizona State University	35,730	3	1.70%	12,221	8	0.72%
Wal-Mart Stores Inc.	33,460	4	1.60%	30,608	2	1.81%
Fry's Food Stores	21,738	5	1.04%			
University of Arizona	20,462	6	0.98%			
Wells Fargo	17,217	7	0.82%	13,100	5	0.78%
City of Phoenix	14,858	8	0.71%	15,544	4	0.92%
Maricopa County	13,933	9	0.66%	12,458	7	0.74%
Intel Corp.	12,190	10	0.58%	9,700	10	0.58%
Apollo Group				13,000	6	0.77%
Bank of America				12,000	9	0.71%

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

Note: Top employers in Maricopa County. Employee counts noted above include total Arizona employees.

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Subscriber Units Last Ten Fiscal Years

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Subscriber Units										
Member Total	19,202	18,844	18,504	18,522	18,046	18,242	17,371	17,695	18,213	17,996
Interoperability	20,363	19,417	22,537	22,576	18,976	17,574	10,143	11,682	8,390	5,727
Grand Total	39,565	38,261	41,041	41,098	37,022	35,816	27,514	29,377	26,603	23,723

For The Year Ended June 30, 2020

System Statistics Last Six Fiscal Years

	2020	2019	2018	2017	2016	2015
Total # of Calls	28.9 million	29.8 million	28.2 million	30.3 million	28.1 million	28.5 million
Total Call Duration (hours)	100,806	73,984	73,560	76,635	81,535	80.399
Total Call Duration (sec)	363 million	266 million	265 million	276 million	294 million	289 million
Average Call Duration (sec)	12.5	8.9	9.4	9.1	10.6	10.2
Average Call Per Day	79,059	81,603	77,271	82,913	76,001	77,968
Total Busies	2,194	83	131	261	530	740
Busy Duration (hours)	3.85	0.02	0.02	0.05	0.13	0.11
Total Busy Duration (sec)	231	71	68	177	478	700
Average Busy Duration (sec)	6.3	0.9	0.5	0.7	0.9	1.1
Average Busy per Day	6.0	0.2	0.4	0.7	1.5	2
Total Emergency Calls	2,849	2,890	3,473	3,415	3,519	3,854
Total Emergency Duration (hours)	22.8	24.0	31.0	27.4	29.6	9.1
Total Emergency Duration (sec)	82,098	84,802	112,483	98,640	106,156	33,173
Average Emergency Duration (sec)	28.8	29.3	32.4	28.9	30.2	8.6
Average Emergency Calls per Day	7.8	7.9	9.5	9.4	9.6	10.6
System Reliability	99.989%	99.984%	99.975%	99.978%	99.968%	99.990%

Note: System Statistics for 2011 through 2014 were not available.

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