

TRWC Board of Directors Meeting - Minutes May 22, 2024 - 2:00 p.m. Virtual Teams Meeting

Agenda

- 1) Call to Order and Opening Comments
 - a. Materials and sign-in sheet
 - b. Speaker cards
 - c. Audio and video recording

Chair Busby called the meeting to order and welcomed the attendees. He also provided instructions on the process for public comment and reminded the participants the meeting is audio recorded.

- d. Board representative attendees: Chair Busby, Director Duggan, Director Butler, Director Smith, Director Gray, Director Ott
- 2) Public Comment

Members of the public may address the Board on items not on the printed agenda.

No public comment email requests were received.

3) Discussion and Action on Board Meeting Minutes

There were no questions or comments on the Board Meeting Minutes for October 5, 2023. Director Butler motioned for an approval of the minutes and Director Duggan second the motion. All Board members who were in favor signaled by saying aye; there was no opposition, the motion passed unanimously.

4) <u>Executive Committee Updates</u> – Co-Chair Chief Duggan & Co-Chair Lieutenant King

Co-Chair Duggan informed the Board that the systems have been functioning well, so there are no issues to report on at this time. All the installations are moving forward, and the teams are getting the systems set up and upgraded. He thanked everyone that came out to the H60 Tower event stating that it's not something we get to do very often. He also said that it's important to understand the criticality of the infrastructure and it's always impressive to see the equipment working and getting installed.

5) <u>Network Administrator Updates</u>

- a. Finance Update Angie Huckaby
 For the Operations budget Ms. Huckaby announced that there will be approximately 200,000 savings that will be split back up between the agencies. She also stated that the Motorola contract will be posted to the budget by the end of the week.
 For the Capital budget most of the projects were not able to start for various reasons. The agencies will be asked for a carryover amount of a little over \$4 million into next year's budget to be able to work on the projects that were not able to be started this year.
- Network Updates and Performance Overview Chuck Craig Mr. Craig stated that we have not had any system outages in the past 6 months. There have been 2 minor microwave interruptions, but the interruptions did not negatively impact the system or the ability of PS personnel to use the trunked system. The airtime usage remains

steady as seen on the rolling average spreadsheet.

Tower work was completed at Twin Knolls bringing the site into ANSI/TIA – 222H compliance. The Motorola SUA supported system software, with associated server replacements began in October 2023 with punch list items completed February 2024. Mr. Craig stated that this was one of the smoothest upgrades that they have had. ActiveEye implementation is moving forward. The Mesa Admin team has begun training and is actively working with the Town of Gilbert to complete their installation of the system.

As part of the SUA, Motorola will be replacing all the ageing routers. This upgrade is covered by the SUA and will include VHF (non SUA) routers. They have also indicated an outage will be necessary when they upgrade to Juniper, this outage is in the planning for Q3/2024.

The H60 Tower Expansion event went well, the tower now has SRP power, and the radios are on. Mr. Craig's team is working on a punch list with Engineering and will start their drive-test to determine how some of the expansion is improving.

The Wolverine site received approvals for the 160-foot tower from the Forest Service. The core samples are complete, and this will determine the best location for the tower.

Mr. Craig's team will be meeting with Queen Creek regarding a site in the Southeast Valley.

There were no questions or concerns from the Board for Mr. Craig or Ms. Huckaby.

6) <u>Comments from the Board</u>

An opportunity will be provided for Board members to present a brief summary of current events. The Board is not allowed to propose, discuss, deliberate or take action at the meeting on any matter in the summary, unless the specific matter is properly noticed for legal action.

No comments were made by the Board.

7) Future Board of Directors Schedule

Date	Upcoming Agenda Items
Sept 2024	Budget Adoption

8) Adjournment

Chair Busby adjourned the meeting at 2:20.



TRWC Board of Directors Meeting May 22, 2024 - 2:00 p.m. Virtual Teams Meeting 480-535-7460 access code 62711644#

Agenda

- 1) Call to Order and Opening Comments
 - a. Materials and sign-in sheet
 - b. Speaker cards
 - c. Audio and video recording
 - d. Board representative roll-call
- 2) Public Comment

Members of the public may address the Board on items not on the printed agenda. Please address the Board by sending an email to gina.ross@mesaaz.gov by 2:00 p.m. on May 22, 2024. (limited to 500 words – identify your name, address and whether you wish your comment to be read at the meeting or just submitted as part of the written record). The Board may not discuss or take action on any issue raised during public comment until a later meeting. Speakers are limited to three (3) minutes each. Only one comment per person per Agenda Item will be allowed and comments without identifying name and address will not be read or submitted as part of the written record.

3) Discussion and Action on Board Meeting Minutes

October 5, 2023, Board Meeting Minutes

- 4) Executive Committee Updates Co-Chair Chief Duggan & Co-Chair Lieutenant King
- 5) <u>Network Administrator Updates</u>
 - a. Finance Update Angie Huckaby
 - b. Network Updates and Performance Overview Chuck Craig
- 6) Comments from the Board

An opportunity will be provided for Board members to present a brief summary of current events. The Board is not allowed to propose, discuss, deliberate or take action at the meeting on any matter in the summary, unless the specific matter is properly noticed for legal action.

7) Future Board of Directors Schedule

Date	Upcoming Agenda Items
Sept 26, 2024	Budget Adoption

8) Adjournment



TRWC Board of Directors Meeting

October 5, 2023 - 2:00 p.m. Gilbert Public Safety Training Facility Apollo Room 6860 S Power Rd Gilbert, AZ 85295

Members of the public may address the Board on any item. Please complete a "Request to Speak Card", located at the entry of the room and promptly turn it in to the Executive Director or designee prior to the beginning of the meeting. There is a time limit of three minutes for comments.

Agenda

- 1) Call to Order and Opening Comments
 - a. Materials and sign-in sheet
 - b. Speaker cards
 - c. Audio and video recording Chair Busby called the meeting to order and welcomed the attendees. He also provided instructions on the process for public comment and reminded the participants the meeting is audio recorded.
 - d. Board representative attendees: Chair Busby, Vice Chair Leah Rhineheimer, Director Butler, Director Smith, Director Mooney, Director Stewart, Director Krushak
- 2) Public Comment

Members of the public may address the Board on items not on the printed agenda. Please complete a "Request to Speak Card", located at the entry of the room and promptly turn it in to the Executive Director or designee prior to the beginning of the meeting. There is a time limit of three minutes for comments.

No public comment requests were received.

3) Discussion and Action on Board Meeting Minutes

There were no questions or comments on the Board Meeting Minutes for January 17, 2023. Director Smith motioned for an approval of the minutes and Director Butler second the motion. All Board members who were in favor signaled by saying aye; there was no opposition, the motion passed unanimously.

4) <u>Discussion and Action on Election of Board Vice Chair</u> – Executive Director Shaw

No solicitations for Vice Chair had been received; Chair Busby asked for a motion for Vice Chair Rhineheimer to continue in her role for another two-year term. Director Butler motioned and Director Smith second the motion. All Board members who were in favor signaled by saying aye; there was no opposition, the motion passed unanimously. The Board thanked Vice Chair Rhineheimer for her service.

5) <u>Executive Committee Updates</u> – Co-Chair Chief Duggan

Co-Chair Duggan stated that one of the Executive Committees top discussions has been the preliminary budget. The Committee worked through the process and made sure everyone understood the carryovers and projects.

Co-Chair Duggan stated that the Executive Committee had a meeting with several Motorola Stakeholders regarding customer service and as a result service levels have improved. Motorola also agreed to quarterly meetings with TRWC representatives.

The Executive Committee discussed the System Expansion and how it might impact the different providers and vice versa. Radio Amplification systems was another policy discussion that was reviewed and approved by the Executive Committee. The last ongoing discussion was regarding bringing Fountain Hills on as a partner. They reviewed the region, the impact that will happen, and the process to bring them on with the TRWC.

6) <u>Action on Policy Manual Updates – System Expansion and Radio Amplification Systems –</u> Executive Director Shaw, Lieutenant King, Chuck Craig

Executive Director Shaw reviewed the System Expansion Funding Policy with the Board of Directors explaining that the purpose of this policy is to establish the methodology for preparing member cost distribution associated with TRWC radio system expansion. There were no questions or concerns from the Board. Chair Busby asked for a motion for approval of the System Expansion Funding Policy. Director Butler motioned for approval and Director Smith second the motion. All Board members who were in favor signaled by saying aye; there was no opposition, the motion passed unanimously.

Mr. Craig reviewed the Radio Amplification Systems Policy with the Board of Directors explaining that this policy is to provide standards for the deployment of radio amplification systems to improve radio signal coverage inside of buildings and underground spaces on the TOPAZ Regional Wireless Cooperative (TRWC) network. Chair Busby asked for a motion for approval of the Radio Amplification Systems. Director Smith motioned for approval and Director Bulter second the motion. All Board members who were in favor signaled by saying aye; there was no opposition, the motion passed unanimously.

7) <u>Discussion and Possible Action on the FY 24/25 Preliminary Budget</u> – Executive Director Shaw, Angie Huckaby

Ms. Huckaby and Mr. Craig reviewed the FY 24/25 Preliminary Budget with the Board of Directors. The TRWC Executive Director and Executive Committee endorsed the presented budget for consideration for adoption of the Preliminary TRWC Budget in the amount of \$8,985,836 for Fiscal Year 2024/2025. Chair Busby opened the discussion for any questions and comments. Vice Chair Rhineheimer asked Mr. Craig to review the 7% escalation factor on the Capital Plan and asked if they thought that was adequate for the coming year. Mr. Craig replied that at this time it is adequate but will review the costs throughout the year and if he feels the budget will need more he will revisit with the Board. There were no more questions or concerns from the Board. Chair Busby asked for a motion to adopt the FY 24/25 budget. Director Smith motioned for approval and Director Gardner second the motion. All Board members who were in favor signaled by saying aye; there was no opposition, the motion passed unanimously.

8) Discussion and Action on Admission Request for Fountain Hills – Executive Director Shaw

Executive Director Shaw reviewed the Fountain Hills TRWC Admission Request. He explained that Fountain Hills is establishing a town-owned and operated Fire Department and has contracted with the City of Mesa to provide dispatch services. In conjunction with this, Fountain Hills has requested admission to the TRWC. Staff, in coordination with the TRWC Executive Committee, have worked with Fountain Hills to identify the optimal approach to support its communications needs. The staff is comfortable that the Fountain Hills admission will be mutually beneficial for the TRWC members and the larger region. This admission will be subject to some conditions. Chair Busby asked for approval of acceptance of the application as well as approving their membership referencing the staff information and all the conditions that are outlined. Director Smith motioned for approval and Director Bulter second the motion. All Board members who were in favor signaled by saying aye; there was no opposition, the motion passed unanimously.

9) Network Administrator Updates

a. Finance Update – Angie Huckaby

Ms. Huckaby reviewed the current FY budget including Operations and Maintenance, Capital, and Capital Projects.

b. Network Updates and Performance Overview – Chuck Craig

Mr. Craig reviewed the expansion projects, general operations, router replacement project, security audit, and the operations summary.

There were no questions or concerns from the Board.

10) Comments from the Board

An opportunity will be provided for Board members to present a brief summary of current events. The Board is not allowed to propose, discuss, deliberate or take action at the meeting on any matter in the summary, unless the specific matter is properly noticed for legal action.

Vice Chair Reinheimer commented by saying she hoped that the Board members and staff enjoyed the new Gilbert facility location for the Board meeting and that Gilbert is happy to host again.

11) Future Board of Directors Schedule

Date	Upcoming Agenda Items
January 2024	Canceled
May 2024	
Sept 2024	Budget Adoption

12) Recognition and retirement of Bill Anger - Executive Director Dale Shaw

Executive Director Shaw recognized and thanked William Anger for his time with the TRWC and his vital role as our Legal Representative.

13) Adjournment

Chair Busby asked for a motion to adjourn the meeting. Director Smith motioned for adjournment and Director Bulter second the motion. All Board members who were in favor signaled by saying aye; there was no opposition, the motion passed unanimously.

TOPAZ Detail of Operating and Maintenance Fiscal Year 2023 / 2024

1 13Cal 16al 2023 / 2024	Year to Date Through April 30, 2024										
									\$ Var	% Var	
			l	Updated		YTD	YTD)	From YTD F	orecast	
Description	Bud	lget	F	Forecast	Forecast*		Actual		Incr/(De		
Personnel Services	\$ 77	7,727	\$	777,727	\$	568,339	\$ 502,8	330	\$ (65,509)	-12%	
Insurance Premiums		9,714		9,714		8,095		-	(8,095)	-100%	
Temp Services		6,857		6,857		5,714		99	(5,615)	-98%	
Leases and Rents - Land	2	26,770		26,770		22,308	24,2	224	1,916	9%	
Professional Services - Consulting	10	3,156		103,156		85,963	80,6	571	(5,292)	-6%	
Professional Services - Other-combining legal, consulting	18	86,708		186,708		155,590	70,7	799	(84,791)	-54%	
Utilities	8	87,920		87,920		73,267	64,5	507	(8,760)	-12%	
Telephone		3,886		3,886		3,238	2,9	918	(320)	-10%	
Networking Subscription Costs		2,960		12,960		10,800		-	(10,800)	-100%	
Repairs & Maintenance	3	87,551		37,551		31,293	27,2	117	(4,176)	-13%	
Equipment Usage (Vehicles)	2	24,226		24,226		20,188	17,4		(2,783)	-14%	
All Other Services	2	4,020		44,020		36,683	Ę	582	(36,101)	-98%	
Sub-total Services	54	3,768		543,768		453,139	288,3	322	(164,817)	-36%	
Motorola Contract	1,08	82,910		1,082,910		902,425	Ę	582	(901,843)	-100%	
Juniper Software	7	2,967		72,967		60,806	32,7	130	(28,676)	-47%	
Materials & Parts	3	3,538		33,538		27,948	1,6	648	(26,300)	-94%	
Non Cap Assets	-	4,284		14,284		11,903	8,7	758	(3,145)	-26%	
All Other Commodities		-		-		-		-	-	0%	
Sub-total Commodities	1,20	3,699		1,203,699		1,003,082	43,7	118	(959,964)	-96%	
Subtotal O&M	2,52	25,194		2,525,194		2,024,560	834,2	270	(1,190,290)	-59%	
Contingency - 5.0% of total O&M	12	26,260		126,260		105,217		-	(105,217)	-100%	
VHF Operations	6	60,221		60,221		50,184			(50,184)	-100%	
Total	\$ 2,71	1,675	\$	2,711,675	\$	2,179,961	\$ 834,2	270	\$ (1,345,691)	-62%	

*YTD Forecast represents 10 months of operational costs plus any contractual expenses already incurred (i.e. one time payments such as Insurance Premiums, Land Rental and Motorola Contract).

Detail of Capital Projects Year to Data Through April 30, 2024 Fiscal Year 2023 / 2024 S Var Var Var Project ID Budgetd From YTD From YTD From YTD Site Expansion #1 H60 CP0091 2.015,162 1,511,372 1.263,658 \$ (247,714) -16.39% Site Expansion #2 QC Land Purchase CP0754CAP 1,742,001 1,306,501 61,808 \$ (247,714) -16.39% Site Expansion #3 QC Land Purchase CP0779 475,000 356,250 - \$ (356,250) -100,00% Upgrade Shaw Buts & Florence Gardens to P25 Phase II CP0906 526,911 395,183 - - - 0.00% System of-System Stand Upgrade LF0403CAP 431,476 323,607 1,100 (322,507) -99,066% Enhanced Data TBD System of-System Networking CP0433 - - - 0.00% Fire Hazard Zone System Simuclast Timing Reference Lifecycle Upgrade LF0402POM - - 2,216 0.00% <t< th=""><th>TOPAZ Detail of Capital Projects</th><th></th><th>Уеа</th><th>r to Date Throu</th><th>ugh April 30-2</th><th>2024</th><th></th><th></th></t<>	TOPAZ Detail of Capital Projects		Уеа	r to Date Throu	ugh April 30-2	2024		
Project Project YTD Prom YTD Fore-Cast Project ID Budgeted From YTD Fore-Cast Actual Incr/(Decr) Site Expansion #1 H60 CP0091 2,015,162 1,517,22 1,26,568 \$ (1,241,714) -16.39% Site Expansion #2 OC Land Purchase CP0754CAP 475,000 356,250 - \$ (356,250) - \$ 0.00% Upgrade Shaw Bute & Florence Gardens to P25 Phase II CP0906 526,911 395,183 - (395,183) -0.00% Wrieless Bachual (Microwaey) Network Lifecycle Upgrade LF0403CAP 431,476 322,607 1,100 (322,507) -9,86% Enhanced Data TBD 371,000 278,250 - (110,625) - (100,00% Fire Hazard Zone System Simulcast Timing Reference Lifecycle Upgrade LF0405CAP 147,500 130,523 - (100,00% Fire Hazard Done System Simulcast Timing Reference Lifecycle Upgrade LF0422POM - - 2,216 0.00% Radio & Core Sites Battery Backup Lifecycle Upgrade LF0228 17,7			104		.gii Apiii 00, 1	-02-1		% Var
Project ID Budgeted Forecast* Actual Incr/(Decr) Site Expansion #1 H60 CP0091 2,015,162 1,511,372 1,263,658 \$ (1,244,693) >95,27% Site Expansion #2 WOL CP07754 CAP 1,742,001 1,306,501 61,808 \$ (1,244,693) >95,27% Site Expansion #3 QC Land Purchase CP0779 475,000 356,250 - \$ (356,250) -100,00% Upgrade Shaw Bute & Florence Gardens to P25 Phase II CP0906 526,911 395,183 - (395,183) -100,00% Wireless Backhual (Microwave) Network Lifecycle Upgrade LF0403CAP 431,476 323,607 1,100 (322,507) -99,66% Enhanced Data TBD 371,000 278,250 - (278,250) - (337,500) -100,00% System-of-Systems Networking CP0438 - - - - - 0,00% Fire Hazard Zone System Simulcast Timing Reference Lifecycle Upgrade LF0465CAP 147,500 110,625 - - 0,00% -		Project		YTD	YTD		1 -	
Site Expansion #1 H60 CP0091 2.015,162 1.511,372 1.263,658 \$ (247,714) -16,39% Site Expansion #2 WOL CP0754CAP 1.742,001 1.306,501 61,808 \$ (1,244,693) -95,27% Site Expansion #2 OC Land Purchase CP0779 476,000 356,250 - \$ - 0.000% TOPAZ Voice Radio Network Upgrade CP0906 526,911 395,183 - (395,183) -100.00% Wireless Backhual (Microwave) Network Lifecycle Upgrade LF0403CAP 431,476 323,607 1,100 (322,507) - - 0.000% System-of-Systems Networking CP0438 - - - 0.00% Fire Hazard Zone System Coverage Improvement & Expansion CP0907 450,000 337,500 - (10,625) - (110,625) - (110,625) - 0.00% Fire Hazard Zone System Simulcast Timing Reference Lifecycle Upgrade LF0465CAP 147,500 110,625 - - 0.00% Fadio & Core Sites Battery Backup Lifecycle upgrade LF0	Project	-	Budgeted		Actual		Incr/(De	cr)
Site Expansion #3 QC Land Purchase CP0779 475,000 356,250 - \$ (366,250) - 100.00% TOPAZ Voice Radio Network Upgrade CN0022 - - - - - 0.00% Upgrade Shaw Bute & Florence Gardens to P25 Phase II CP0906 526,911 395,183 - 0.00% Wireless Backhual (Microwave) Network Lifecycle Upgrade LF0403CAP 431,476 323,607 1,100 (322,507) -99,66% Enhanced Data TBD 371,000 278,250 - - - - - - 0.00% Fire Hazard Zone System Coverage Improvement & Expansion CP0438 - - - (337,500) -100.00% Fire Hazard Zone System Simulcast Timing Reference Lifecycle Upgrade LF0402POM - - 2.216 (300,00% System-of-Systems CP0905 - - - 0.00% Radio & Croe Sites Battery Backup Lifecycle Upgrade LF0226 71,825 53,869 - 0.00% Radio Sites Emergency Power Upgrade LF0226 71,825 53,869 - - 0.00% -		CP0091		1,511,372	1,263,658	\$	(247,714)	-16.39%
TOPAZ Voice Radio Network Upgrade CN0022 - - - \$ 0.00% Upgrade Shaw Bute & Florence Gardens to P25 Phase II CP0906 526,911 395,183 - (395,183) -100.00% Wireless Bachual (Microwave) Network Lifecycle Upgrade LF0403CAP 431,476 323,607 1,100 (322,2507 -99,66% Enhanced Data TBD 371,000 278,250 - - 0.00% System-of-Systems Networking CP0438 - - - 0.00% Fire Hazard Zone System Coverage Improvement & Expansion CP0907 450,000 337,500 - (337,500) -100.00% Fire Hazard Zone System Coverage Improvement & Expansion CP0907 450,000 337,500 - - 0.00% System-of-Systems Croucest State State If ecycle Upgrade LF0402POM - - - 0.00% Radio & Core Sites Battery Backup Lifecycle Upgrade LF0226 71,825 53,869 - (53,869) -00.00% Radio & Core Sites Battery Replacement LF0226 17,700 13,275 15,675 2,400 18.00 366,000 -	Site Expansion #2 WOL	CP0754CAP	1,742,001	1,306,501	61,808	\$	(1,244,693)	-95.27%
Upgrade Shaw Bute & Florence Gardens to P25 Phase II CP0906 526,911 395,183 - (395,183) -100.00% Wireless Backhual (Microwave) Network Lifecycle Upgrade LF0403CAP 431,476 323,607 1,100 (322,507) -99,66% Enhanced Data TBD 371,000 278,250 - (278,250) -100.00% System-of-Systems Networking CP0438 - - - 0.00% Fire Hazard Zone System Lifecycle Upgrade LF0465CAF 147,500 110,625 - (110,625) -100.00% Fire Hazard Zone System Lifecycle Upgrade LF0492POM - - 2,216 0.00% System-of-Systems CP0905 - - - 0.00% Radio & Core Sites Battery Backup Lifecycle Upgrade LF0226 71,825 53,869 - (53,869) -100.00% Radio Sites Emergency Power Upgrade LF0228 71,825 53,869 - (360,000) -100.00% Communications Building UPS Battery Replacement LF0228 17,700 13,275 15,675 2,400	Site Expansion #3 QC Land Purchase	CP0779	475,000	356,250	-	\$	(356,250)	-100.00%
Wireless Backhual (Microwave) Network Lifecycle Upgrade LF0403CAP 431,476 323,607 1,100 (322,507) -99.66% Enhanced Data TBD 371,000 278,250 - (278,250) -100.00% Fire Hazard Zone System Coverage Improvement & Expansion CP0438 - - 0.00% Fire Hazard Zone System Coverage Improvement & Expansion CP0907 450,000 337,500 - (337,500) -100.00% Fire Hazard Zone System Simulcast Timing Reference Lifecycle Upgrade LF0402POM - 2,216 2,216 0.00% Forence Gardens ISR Site Lifecycle upgrade LF0224 - - - 0.00% Radio & Core Sites Battery Backup Lifecycle Upgrade LF0226 71,825 53.869 - (53.869) -100.00% Communications Building UPS Battery Replacement LF0228 17,700 13,275 15,675 2,400 18.08% Internet Protocol Network Routers & Switches Upgrade LF0248 480,000 360,000 - 0.00% Antenna & Transmission Lines Lifecycle Upgrade LF0248 480,000 360,000	TOPAZ Voice Radio Network Upgrade	CN0022	-	-	-	\$	-	0.00%
Enhanced Data TBD 371,000 278,250 - (278,250) -100.00% System-of-Systems Networking CP0438 - - - - 0.00% Fire Hazard Zone System Coverage Improvement & Expansion CP0907 450,000 337,500 - (337,500) -100.00% Fire Hazard Zone System Lifecycle Upgrade LF0465CAP 147,500 110,625 - (10.00% Fire Hazard Zone System Simulcast Timing Reference Lifecycle Upgrade LF0465CAP 147,500 110,625 - 0.00% Fire Hazard Zone System Simulcast Timing Reference Lifecycle Upgrade LF0226 - - - 0.00% System-of-Systems CP0905 - - - 0.00% Radio & Core Sites Battery Backup Lifecycle Upgrade LF0226 71,825 53,869 - (63,869) -100.00% Communications Building UPS Battery Replacement LF0228 17,700 13,275 15,675 2,400 18.08% Internet Protocol Network Routers & Switches Upgrade LF0248 480,000 360,000 - - 0.00% Consulting Services for VHF & 7/800 MHz Coverage Expansion	Upgrade Shaw Bute & Florence Gardens to P25 Phase II	CP0906	526,911	395,183	-		(395,183)	-100.00%
System-of-Systems Networking CP0438 - - - - 0.00% Fire Hazard Zone System Coverage Improvement & Expansion CP0907 450,000 337,500 - (337,500) -100.00% Fire Hazard Zone System Circycle Upgrade LF0465CAP 147,500 110,625 - (110,625) -100.00% Fire Hazard Zone System Simulcast Timing Reference Lifecycle Upgrade LF0402POM - - 2,216 2,216 0.00% System-of-Systems CP0905 - - - 0.00% Florence Gardens ISR Site Lifecycle upgrade LF0226 71,825 53,869 - (46,433) -100.00% Radio Sites Emergency Power Upgrade LF0226 71,825 53,869 - (363,869) -100.00% Communications Building UPS Battery Replacement LF0228 17,700 13,275 15,675 2,400 18.08% Internet Protocol Network Routers & Switches Upgrade LF0282 - - - 0.00% Consulting Services for VHF & 7/800 MHz Coverage Expansion - -	Wireless Backhual (Microwave) Network Lifecycle Upgrade	LF0403CAP	431,476	323,607	1,100		(322,507)	-99.66%
Fire Hazard Zone System Coverage Improvement & Expansion CP0907 450,000 337,500 - (337,500) -100.00% Fire Hazard Zone System Lifecycle Upgrade LF0465CAP 147,500 110,625 - (110,625) -100.00% Fire Hazard Zone System Simulcast Timing Reference Lifecycle Upgrade LF042POM - - 2,216 0.00% Florence Gardens ISR Site Lifecycle upgrade LF0224 - - - 0.00% Radio & Core Sites Battery Backup Lifecycle Upgrade LF0226 71,825 53,869 - (46,433) -100.00% Radio Sites Emergency Power Upgrade LF0226 71,825 53,869 - (53,869) -100.00% Internet Protocol Network Routers & Switches Upgrade LF0228 17,700 13,275 15,675 2,400 18.08% Consulting Services for VHF & 7/800 MHz Coverage Expansion - - - 0.00% Total Capital Projects \$ 6.73,7485 \$ 5,092,865 \$ 1,344,457 \$ (30,838) -32.71% Gilbert Mesa 16.52% 355,841 266,881 165,076 (101,805) -38.15% <t< td=""><td>Enhanced Data TBD</td><td></td><td>371,000</td><td>278,250</td><td>-</td><td></td><td>(278,250)</td><td>-100.00%</td></t<>	Enhanced Data TBD		371,000	278,250	-		(278,250)	-100.00%
Fire Hazard Zone System Lifecycle Upgrade LF0465CAP 147,500 110,625 - (110,625) -100.00% Fire Hazard Zone System Simulcast Timing Reference Lifecycle Upgrade LF0402POM - - 2,216 0.00% System-of-Systems CP0905 - - - - 0.00% Fiorence Gardens ISR Site Lifecycle Upgrade LF0266 61,910 46,433 - 0.00% Radio & Core Sites Battery Backup Lifecycle Upgrade LF0226 71,825 53,869 - (53,869) -100.00% Communications Building UPS Battery Replacement LF0228 17,700 13,275 15,675 2,400 18.08% Internet Protocol Network Routers & Switches Upgrade LF028 17,700 13,275 15,675 2,400 18.08% Consulting Services for VHF & 7/800 MHz Coverage Expansion LF028 - - - 0.00% Calibert Gilbert S5,841 266,881 165,076 (101,805) -38.15% Gilbert 10,45% 167,391 125,543 96,536 (29,007) -23.11% Fi McDowell 1,71% 40,486	System-of-Systems Networking	CP0438	-	-	-		-	0.00%
Fire Hazard Zone System Simulcast Timing Reference Lifecycle Upgrade LF0402POM - - 2,216 0.00% System-of-Systems CP0905 - - - - 0.00% Florence Gardens ISR Site Lifecycle upgrade LF0224 - - - 0.00% Radio & Core Sites Battery Backup Lifecycle Upgrade LF0226 71,825 53,869 - (53,869) -100.00% Radio Sites Emergency Power Upgrade LF0226 71,825 53,869 - (53,869) -100.00% Communications Building UPS Battery Replacement LF0228 17,700 13,275 15,675 2,400 18.08% Internet Protocol Network Routers & Switches Upgrade LF0282 - - - 0.00% Consulting Services for VHF & 7/800 MHz Coverage Expansion - - - 0.00% Total Capital Projects \$ 65.37% 1,226,380 919,785 618,947 \$(30,838) -32.71% Gilbert 16.52% 355,841 266,881 165,076 (101,805) -38.15% Apache Junction 10.45% 167,391 125,543 96,5	Fire Hazard Zone System Coverage Improvement & Expansion	CP0907	450,000	337,500	-		(337,500)	-100.00%
System-of-Systems CP0905 - - - - 0.00% Florence Gardens ISR Site Lifecycle upgrade LF0224 - - - 0.00% Radio & Core Sites Battery Backup Lifecycle Upgrade LF0226 71,825 53,869 - (53,869) -100.00% Radio Sites Emergency Power Upgrade LF0226 71,825 53,869 - (53,869) -100.00% Communications Building UPS Battery Replacement LF0228 17,700 13,275 15,675 2,400 18.08% Internet Protocol Network Routers & Switches Upgrade LF028 480,000 360,000 - (360,000) -100.00% Antenna & Transmission Lines Lifecycle Upgrade LF0282 - - - 0.00% Consulting Services for VHF & 7/800 MHz Coverage Expansion - - - 0.00% Mesa 65.37% 1,226,380 919,785 618,947 (300,838) -32.71% Gilbert 16.52% 355,841 266,881 165,076 (101,805) -38.15% Apache Junction 10,45% 167,391 125,543 96,536 (29,007	Fire Hazard Zone System Lifecycle Upgrade	LF0465CAP	147,500	110,625	-		(110,625)	-100.00%
Forence Gardens ISR Site Lifecycle upgrade LF0224 - - - - 0.00% Radio & Core Sites Battery Backup Lifecycle Upgrade LF0226 61,910 46,433 - (46,433) -100.00% Radio Sites Emergency Power Upgrade LF0226 71,825 53,869 - (53,869) -100.00% Communications Building UPS Battery Replacement LF0228 17,700 13,275 15,675 2,400 18.08% Internet Protocol Network Routers & Switches Upgrade LF0282 - - - 0.00% Antenna & Transmission Lines Lifecycle Upgrade LF0282 - - - 0.00% Consulting Services for VHF & 7/800 MHz Coverage Expansion - - - 0.00% Total Capital Projects \$ 6,790,485 \$ 5,092,865 \$ 1,344,457 \$ (3,748,408) -73.60% Mesa - - - - - 0.00% Gilbert 16.52% 355,841 266,881 165,076 (101,805) -38.15% Apache Junction 10.45% 167,391 125,543 96,536 (29,007) -23.11%	Fire Hazard Zone System Simulcast Timing Reference Lifecycle Upgrade	LF0402POM	-	-	2,216		2,216	0.00%
Radio & Core Sites Battery Backup Lifecycle Upgrade LF0266 61,910 46,433 - (46,433) -100.00% Radio Sites Emergency Power Upgrade LF0226 71,825 53,869 - (53,869) -100.00% Communications Building UPS Battery Replacement LF0228 17,700 13,275 15,675 2,400 18.08% Internet Protocol Network Routers & Switches Upgrade LF0248 480,000 360,000 - (360,000) -100.00% Antenna & Transmission Lines Lifecycle Upgrade LF0282 - - - 0.00% Consulting Services for VHF & 7/800 MHz Coverage Expansion - - - 0.00% Total Capital Projects \$ 6,790,485 \$ 5,092,865 \$ 1,344,457 \$ (3,748,408) -73.60% Capital Assessment to Members Mesa 65.37% 1,226,380 919,785 618,947 (300,838) -32.71% Gilbert 16.52% 355,841 266,881 165,076 (101,805) -38.15% Apache Junction 10.45% 167,391 125,543 96,536 (29,007) -23.11%	System-of-Systems	CP0905	-	-	-		-	0.00%
Radio Sites Emergency Power Upgrade LF0226 71,825 53,869 - (53,869) -100.00% Communications Building UPS Battery Replacement LF0228 17,700 13,275 15,675 2,400 18.08% Internet Protocol Network Routers & Switches Upgrade LF0248 480,000 360,000 - (360,000) -100.00% Antenna & Transmission Lines Lifecycle Upgrade LF0282 - - - 0.00% Consulting Services for VHF & 7/800 MHz Coverage Expansion - - - 0.00% Total Capital Projects \$ 6,790,485 \$ 5,092,865 \$ 1,344,457 \$ (30,838) -32.71% Gilbert 16.52% 355,841 266,881 165,076 (101,805) -38.15% Apache Junction 10.45% 167,391 125,543 96,536 (29,007) -23.11% Ft McDowell 1.71% 40,486 30,365 15,922 (14,443) -47.66% Superstition Fire & Medical 0.82% 13,072 9,804 7,440 (2,364) -24.11% Queen Creek 0.04% 545 409 483 74	Florence Gardens ISR Site Lifecycle upgrade	LF0224	-	-	-		-	0.00%
Communications Building UPS Battery Replacement LF0228 17,700 13,275 15,675 2,400 18.08% Internet Protocol Network Routers & Switches Upgrade LF0248 480,000 360,000 - (360,000) -100.00% Antenna & Transmission Lines Lifecycle Upgrade LF0282 - - - 0.00% Consulting Services for VHF & 7/800 MHz Coverage Expansion Total Capital Projects \$ 6,790,485 \$ 5,092,865 \$ 1,344,457 \$ (3,748,408) -73.60% Capital Assessment to Members Mesa 65.37% 1,226,380 919,785 618,947 (300,838) -32.71% Gilbert 16.52% 355,841 266,881 165,076 (101,805) -38.15% Apache Junction 10.45% 167,391 125,543 96,536 (29,007) -23.11% Ft McDowell 1.71% 40,486 30,365 15,922 (14,443) -47.56% Superstition Fire & Medical 0.82% 13,072 9,804 7,440 (2,364) -24.11% Queen Creek 5.09% 11,801 8,851 51,846 42,995 485.76% Rio Verde <td>Radio & Core Sites Battery Backup Lifecycle Upgrade</td> <td>LF0266</td> <td>61,910</td> <td>46,433</td> <td>-</td> <td></td> <td>(46,433)</td> <td>-100.00%</td>	Radio & Core Sites Battery Backup Lifecycle Upgrade	LF0266	61,910	46,433	-		(46,433)	-100.00%
Internet Protocol Network Routers & Switches Upgrade LF0248 480,000 360,000 - (360,000) -100.00% Antenna & Transmission Lines Lifecycle Upgrade LF0282 - - - - 0.00% Consulting Services for VHF & 7/800 MHz Coverage Expansion - - - - 0.00% Total Capital Projects \$ 6,790,485 \$ 5,092,865 \$ 1,344,457 \$ (300,838) -32.71% Mesa 65.37% 1,226,380 919,785 618,947 (300,838) -32.71% Gilbert 16.52% 355,841 266,881 165,076 (101,805) -38.15% Apache Junction 10.45% 167,391 125,543 96,536 (29,007) -23.11% Ft McDowell 1.71% 40,486 30,365 15,922 (14,443) -47.56% Superstition Fire & Medical 0.82% 13,072 9,804 7,440 (2,364) -24.11% Queen Creek 5.09% 11,801 8,851 51,846 42,995 485.76% Rio Verde 0.04% 545 409	Radio Sites Emergency Power Upgrade	LF0226	71,825	53,869	-		(53,869)	-100.00%
Antenna & Transmission Lines Lifecycle Upgrade LF0282 - - - - - 0.00% Consulting Services for VHF & 7/800 MHz Coverage Expansion Total Capital Projects \$ 6,790,485 \$ 5,092,865 \$ 1,344,457 \$ (3,748,408) -73.60% Capital Assessment to Members \$ 6,537% 1,226,380 919,785 618,947 (300,838) -32.71% Gilbert 16.52% 355,841 266,881 165,076 (101,805) -38.15% Apache Junction 10.45% 167,391 125,543 96,536 (29,007) -23.11% Ft McDowell 0.82% 13,072 9,804 7,440 (2,364) -24.11% Queen Creek 5.09% 11,801 8,851 51,846 42,995 485.76% Rio Verde 0.04% 545 409 483 74 18.09%	Communications Building UPS Battery Replacement	LF0228	17,700	13,275	15,675		2,400	18.08%
0.00% Consulting Services for VHF & 7/800 MHz Coverage Expansion Total Capital Projects Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulting Services for VHF & 7/800 MHz Coverage Expansion Image: Consulteners for VHF & 7/800 MHz Coverage Expansion Image:	Internet Protocol Network Routers & Switches Upgrade	LF0248	480,000	360,000	-		(360,000)	-100.00%
Total Capital Projects \$ 6,790,485 \$ 5,092,865 \$ 1,344,457 \$ (3,748,408) -73.60% Capital Assessment to Members Mesa 65.37% 1,226,380 919,785 618,947 (300,838) -32.71% Gilbert 16.52% 355,841 266,881 165,076 (101,805) -38.15% Apache Junction 10.45% 167,391 125,543 96,536 (29,007) -23.11% Ft McDowell 1.71% 40,486 30,365 15,922 (14,443) -47.56% Superstition Fire & Medical 0.82% 13,072 9,804 7,440 (2,364) -24.11% Queen Creek 5.09% 11,801 8,851 51,846 42,995 485.76% Rio Verde 0.04% 545 409 483 74 18.09%	Antenna & Transmission Lines Lifecycle Upgrade	LF0282	-	-	-		-	0.00%
Capital Assessment to Members Mesa 65.37% 1,226,380 919,785 618,947 (300,838) -32.71% Gilbert 16.52% 355,841 266,881 165,076 (101,805) -38.15% Apache Junction 10.45% 167,391 125,543 96,536 (29,007) -23.11% Ft McDowell 1.71% 40,486 30,365 15,922 (14,443) -47.56% Superstition Fire & Medical 0.82% 13,072 9,804 7,440 (2,364) -24.11% Queen Creek 5.09% 11,801 8,851 51,846 42,995 485.76% Rio Verde 0.04% 545 409 483 74 18.09%	Consulting Services for VHF & 7/800 MHz Coverage Expansion	_	-	-	-		-	0.00%
Mesa65.37%1,226,380919,785618,947(300,838)-32.71%Gilbert16.52%355,841266,881165,076(101,805)-38.15%Apache Junction10.45%167,391125,54396,536(29,007)-23.11%Ft McDowell1.71%40,48630,36515,922(14,443)-47.56%Superstition Fire & Medical0.82%13,0729,8047,440(2,364)-24.11%Queen Creek5.09%11,8018,85151,84642,995485.76%Rio Verde0.04%5454094837418.09%	Total Capital Projec	ts	\$ 6,790,485	\$ 5,092,865	\$ 1,344,457	\$	(3,748,408)	-73.60%
Mesa65.37%1,226,380919,785618,947(300,838)-32.71%Gilbert16.52%355,841266,881165,076(101,805)-38.15%Apache Junction10.45%167,391125,54396,536(29,007)-23.11%Ft McDowell1.71%40,48630,36515,922(14,443)-47.56%Superstition Fire & Medical0.82%13,0729,8047,440(2,364)-24.11%Queen Creek5.09%11,8018,85151,84642,995485.76%Rio Verde0.04%5454094837418.09%	Canital Assessment to Members							
Gilbert16.52%355,841266,881165,076(101,805)-38.15%Apache Junction10.45%167,391125,54396,536(29,007)-23.11%Ft McDowell1.71%40,48630,36515,922(14,443)-47.56%Superstition Fire & Medical0.82%13,0729,8047,440(2,364)-24.11%Queen Creek5.09%11,8018,85151,84642,995485.76%Rio Verde0.04%5454094837418.09%	•	65 37%	1 226 380	010 785	618 9/7		(300 838)	-32 71%
Apache Junction10.45%167,391125,54396,536(29,007)-23.11%Ft McDowell1.71%40,48630,36515,922(14,443)-47.56%Superstition Fire & Medical0.82%13,0729,8047,440(2,364)-24.11%Queen Creek5.09%11,8018,85151,84642,995485.76%Rio Verde0.04%5454094837418.09%					•			
Ft McDowell1.71%40,48630,36515,922(14,443)-47.56%Superstition Fire & Medical0.82%13,0729,8047,440(2,364)-24.11%Queen Creek5.09%11,8018,85151,84642,995485.76%Rio Verde0.04%5454094837418.09%				•	•			
Superstition Fire & Medical0.82%13,0729,8047,440(2,364)-24.11%Queen Creek5.09%11,8018,85151,84642,995485.76%Rio Verde0.04%5454094837418.09%	•		•				,	
Queen Creek 5.09% 11,801 8,851 51,846 42,995 485.76% Rio Verde 0.04% 545 409 483 74 18.09%							• • •	
Rio Verde 0.04% 545 409 483 74 18.09%				•	•		,	
			•		•		•	
						\$		

*YTD Forecast represents 9 months of project costs plus any contractual expenses already incurred (i.e. one time payments).

Date: 05/13/2024

To: TOPAZ Regional Wireless Cooperative (TRWC) Board of Directors

Through: Dale Shaw, TRWC Executive Director

From: Chuck Craig

Subject: Administrator Update

P25 System status

During the past 6 months the TOPAZ P25 has not had any system outages, there have been 2 minor microwave interruptions at the Florance Garden site (19 seconds). These interruptions did not negatively impact the system or the ability of PS personnel to use the trunked system.

We have seen steady usage of the radio system with monthly highs in August 2023, March 2024, April 2024, with an average of 648 hours per month. The following table details the system busies we have encountered this fiscal year

	Busies	Duration in Seconds
June 2023	1	5
August 2023	1	15
October 2023	2	9
January 2024	1	5
March 2024	2	0
	7	34

Airtime usage details

	TRWC O&M	TRWC Capital
Superstition Fire & Medical District	0.84%	0.84%
City of Apache Junction	9.49%	9.54%
Town of Gilbert	17.00%	17.09%
City of Mesa	64.93%	65.26%
Fire	10.93%	7.06%

Police	51.32%	55.08%
Municipal	2.68%	3.13%
Southwest Ambulance	0.00%	
Town of Queen Creek	5.53%	5.56%
Rio Verde Fire District	0.14%	0.14%
American Medical Response	0.51%	
Ft. McDowell Yavapai Nation	1.38%	1.39%
Fountain Hills Fire	0.17%	0.17%
	100.00%	100.00%

General Operations

Tower work was completed at Twin Knolls bringing that site into ANSI/TIA – 222H compliance. The Motorola SUA supported system software, with associated server replacements began in October 2023 with punch list items completed February 2024. This was one of the smoothest upgrades we have had! ActiveEye implementation is moving forward. The Mesa Admin team has begun training and is actively working with the Town of Gilbert to complete their installation of the system.

Router Replacement Project

As part of the SUA, Motorola will be replacing all our ageing routers. This upgrade is covered by the SUA and will include VHF (non SUA) routers. They have also indicated an outage will be necessary when we upgrade to Juniper, this outage is in the planning for calendar in Q3/2024. When we get the installation details from Motorola, we will put a communication plan together with our partner agencies, with a plan minimizing the impact on our public safety radio network.

H60 Expansion

The ribbon cutting event on April 23rd was an overwhelming success. There was an excellent write-up in the Mesa Independent newspaper detailing the benefits this site brings to the residents of the east valley. There are several punch list items which need to be completed before the site goes live, but these should be in-place by the end of June 2024.

Wolverine Expansion Site

We have a signed lease with the US Forest Service for use of the Wolverine Site. We have begun working with various vendors to do core samples to determine where we can build our 160' tower, removal of the existing tower and needed road construction. If things go well this site could be up by the end of 2024.

SE Valley Expansion site

We are continuing to work with Mesa and Queen Creek real estate on finding a location in or around Queen Creek. Mesa COMMs will setup a meeting in the next few weeks with QC real estate and PD to continue this discussion