



TRWC Board of Directors Meeting

Tuesday, March 2, 2010 10:30 to 12:00

Location: Town of Gilbert – Room 233
50 E. Civic Center Drive
Gilbert, AZ 85296

Agenda

1. Agenda Review

Topic Leader: Chairman Kross

2. Action on the 09/14/09 TRWC Board Meeting Minutes

Topic Leader: Chairman Kross

3. RWC/TRWC IGA Update

Topic Leader: Executive Director

4. Reconfiguration Update

Topic Leader: Executive Director and Jeff Toye (Mesa Communications)

5. Data Network Upgrade Update

Topic Leader: Executive Director and John Minick (Mesa Communications)

6. Discussion/Possible Action on Revision to the System Key Control Policy

Topic Leader: Executive Director and Randy Thompson (Mesa Communications)

7. Updates on TRWC Membership Inquiries (MPS, Rural Metro, Rio Verde, GRIC, Chandler, Tempe)

Topic Leader: Executive Director

8. Preliminary Operating Budget and Capital Review

Topic Leader: Executive Director and Denny Fulton (Mesa Financial Services)

9. Updates from the Executive Director

- a. Determine future board meeting dates/times

10. Meeting Summary and Next Meeting Preview

Topic Leader: Executive Director

11. Adjournment



TRWC Board of Directors Meeting

Tuesday, March 2, 2010 10:30 to 12:00

Location: Town of Gilbert – Room 233
50 E. Civic Center Drive
Gilbert, AZ 85296

Members Present: *Mesa:* Dale Shaw, Alex Deshuk; *Queen Creek:* John Kross; *Gilbert:* Ajay Joshi; *AJFD:* Chuck Zanella; *Apache Junction:* Troy Mullender; *TRWC Attorney:* Bill Anger (Engelman Berger)

Guests Present: *Mesa:* Randy Thompson, Denny Fulton, Mike Brown, John Minick, Bruce McGregor, Jeff Toye, Darin Douglass, Jennifer Means; *Phoenix Fire:* Doug Mummert; *Motorola:* Mike Sumnicht; *Tempe:* Jenae Naumann; *Gilbert:* John Glorioso; *Sun Lakes Fire:* Paul S. Wilson

Recorder: Leslie Dibble

Minutes:

Agenda Review

Topic Leader: Chairman Kross

Chairman Kross welcomed Collin DeWitt (Interim Town Manager) and Ajay Joshi (Technology Services Manager) of Gilbert, as primary and alternate board members on the TRWC. Mr. Kross also thanked Shawn Woolley and George Pettit of Gilbert for their time spent with the TRWC. Both Shawn and George have recently retired from the Town of Gilbert. The Board also welcomed Troy Mullender of AJ, as he was sitting in for Board member, Kathy Jeter. Chairman Kross then reviewed the agenda items with the Board.

Action on the 03/30/09 TRWC Board Meeting Minutes

Topic Leader: Chairman Kross

Chairman Kross asked for a motion for consideration of the 9/14/09 Board meeting minutes. There was a motion to approve by Alex Deshuk and a second by Chuck Zanella. All were in favor.

RWC/TRWC IGA Update

Topic Leader: Executive Director

Dale Shaw provided an overview of the final [draft](#) of the IGA. To summarize, it provides the ability to establish interoperability talkgroups with the RWC, and share system credentials thus providing opportunities to work together. A special meeting will be scheduled to vote on the IGA, as recommended by Attorney Bill Anger. After TRWC approval, it will then go before the Mesa and Phoenix City Councils.

ACTION: We will be conducting a conference call in about two weeks to vote on the adoption of the RWC/TRWC IGA. Invites will go out in advance, along with an agenda.

Reconfiguration Update

Topic Leader: Executive Director and Jeff Toye (Mesa Communications)

Dale thanked Jeff Toye and all the staff for the significant work in establishing the TRWC as an independent system. We are now a standalone system with three sites: Simulcast D, which provides the primary coverage for East Mesa, AJ and Gilbert areas, Thompson Peak and now White Tanks, over on the west side of Phoenix.

Motorola is currently cleaning up the remaining punch list items left over from the work they did including final documentation and cable labeling. All three should be complete in the next week or so. Next step is the reprogramming of the subscribers with post reconfiguration templates.

Data Network Upgrade Update

Topic Leader: Executive Director and John Minick (Mesa Communications)

John presented an overview of the data system that will be put in place. Our HPD system is obsolete and no longer supported by the manufacturer. We are under a mandate by FCC to go to narrow banding by 2012. High performance data system provided by Motorola. It will be a three-site 700 MHz system. The planned sites are TRWC, Thompson Peak and Mesa Community College. Signed contract w/Motorola and are working out the detail design review currently. Use existing GPS in the mobiles. It will be the end of June, first of July before a system on the air is available for some testing.

Discussion/Possible Action on Revision to the System Key Control Policy

Topic Leader: Executive Director and Randy Thompson (Mesa Communications)

The newest revision of the [System Key Control Policy](#) was distributed and reviewed by the Board. There was a motion to approve by Chuck Zanella and a second by Alex Deshuk. All were in favor.

Updates on TRWC Membership Inquiries (MPS, Rural Metro, Rio Verde, GRIC, Chandler, Tempe)

Topic Leader: Executive Director

- MPS: Mesa has executed an IGA with MPS. The first project is related to radio communications, which will allow the City of Mesa Public Safety to patch into the MPS radio system if needed.
- Rural Metro: An agreement has been drafted and it is currently under review with their legal department.
- Rio Verde: Rio Verde still has interest but is not prepared to move forward at this time.
- GRIC: Dale spoke with Mark Hill this week. They are still establishing direction.
- Chandler and Tempe: Chandler and Tempe will be a part of the RWC request for system access.
- SW Ambulance may become an associate member. Today Mesa contracts with SW for EMT services.

Preliminary Operating Budget and Capital Review

Topic Leader: Executive Director and Denny Fulton (Mesa Financial Services)

The [reconciliation](#) between FY 09/10 Budget and 10/11 Budget was presented by Denny to the Board, along with [Cost per Subscriber](#).

ACTION: We will be conducting a conference call in about two weeks for added discussion regarding budget issues. Invites will go out in advance, along with an agenda.

Updates from the Executive Director

Determine future board meeting dates/times

[Deferred to next meeting.](#)

Meeting Summary and Next Meeting Preview

Topic Leader: Executive Director

Adjournment - Chairman Kross adjourned the meeting.

**INTERGOVERNMENTAL AGREEMENT BETWEEN
THE CITIES OF PHOENIX AND MESA ON BEHALF OF
THE REGIONAL WIRELESS COOPERATIVE AND
THE TOPAZ REGIONAL WIRELESS COOPERATIVE NETWORKS**

No.

THIS INTERGOVERNMENTAL AGREEMENT (“Agreement”) is made and entered into by and between the City of Phoenix (“Phoenix”) in its capacity as the Administrative Managing Member of the Regional Wireless Cooperative (“RWC”) Network and the City of Mesa (“Mesa”) in its capacity as the Administrative Manager of the Topaz Regional Wireless Cooperative (“TRWC”) Network (hereinafter the RWC and the TRWC as represented by Phoenix and Mesa respectively shall be referred to as the “Parties”).

WHEREAS, Mesa is the Administrative Manager of the TRWC and is entering into this Agreement with the approval and authorization of the TRWC Board of Directors; and

WHEREAS, Phoenix is the Network Managing Member and Administrative Managing Member of the RWC and is entering into this Agreement with the approval and authorization of the RWC Board of Directors; and

WHEREAS, subject to the terms and conditions of this Agreement, the Parties desire to enter into this Agreement to allow TRWC Members to use the RWC for intermittent interoperable situations or circumstances and for the RWC Members to use the TRWC for intermittent interoperable situations or circumstances; and

WHEREAS, the Parties are authorized to enter into this Agreement by the joint exercise of powers and provisions of Title 11, Chapter 7, Article 3 (§§ 11-951 et seq.), Arizona Revised Statutes and the authorization of their legislative or other governing bodies; and

WHEREAS, the Parties are entering into this Agreement for joint and cooperative action and communication between themselves to achieve the purposes specified in paragraphs above; and

NOW THEREFORE, the Parties, in consideration of the foregoing and the mutual promises contained herein, hereby agree as follows:

1. **Term and Duration of Agreement; Termination.**

- 1.1. This Agreement shall be binding upon each signing Party as of the date on which the Agreement has been executed by each such Party, so long as such Party has complied with the requirements of A.R.S. § 11-952. In order for this Agreement to have legal effect, both Parties must have signed it. The Effective Date of this Agreement will be the date when the last Party has executed the Agreement. The initial term of this Agreement is ten (10) years, commencing from the Effective Date, unless otherwise terminated in accordance with this Agreement. Thereafter, this Agreement will automatically renew for terms of ten (10) years, unless otherwise terminated in accordance with this Agreement.
- 1.2. The Parties shall have the right to terminate this Agreement at anytime, with or without cause, during the term of this Agreement or any extended term by first providing not less than six (6) months prior written notice to the other Party.

2. **Interoperability.**

2.1. **Use of Networks.**

- 2.1.1. *RWC Interoperability Participant Use of the TRWC.* Subject to reasonable conditions imposed by the TRWC Board of Directors and the provisions of the Intergovernmental Agreement to Plan, Design, Construct, Operate, Maintain and Finance the Topaz Regional Wireless Cooperative Network, Members of the RWC (“RWC Interoperability Participants”) may use the TRWC Network to support existing TRWC and RWC Members with intermittent interoperable situations. The TRWC will develop policies, procedures and guidelines that govern how RWC Interoperability Participants obtain services, whether routine or emergency, establish Talkgroups, set priorities, determine roaming/site access, use encryption, and operate on the TRWC Network. When using the TRWC Network, the RWC

Interoperability Participants shall abide by all policies, procedures and guidelines established by the TRWC as a condition for using the TRWC Network. Notwithstanding anything to the contrary herein, RWC Interoperability Participants may only use the TRWC Network if TRWC Interoperability Participants are allowed to use the RWC Network. The Parties recognize that such use of each other's networks need not be concurrent or simultaneous.

- 2.1.2. **TRWC Interoperability Participant Use of the RWC.** Subject to reasonable conditions imposed by the RWC Board of Directors and the provisions of the RWC Amended and Restated Intergovernmental Agreement, Members of the TRWC ("TRWC Interoperability Participants") may use the RWC Network to support existing RWC and TRWC Members with intermittent interoperable situations. The RWC will develop policies, procedures and guidelines that govern how TRWC Interoperability Participants obtain services, whether routine or emergency, establish Talkgroups, set priorities, determine roaming/site access, use encryption, and operate on the RWC Network. When using the RWC Network, the TRWC Interoperability Participants shall abide by all policies, procedures and guidelines established by the RWC as a condition for using the TRWC Network. Notwithstanding anything to the contrary herein, TRWC Interoperability Participants may only use the RWC Network if RWC Interoperability Participants are allowed to use the TRWC Network. The Parties recognize that such use of each other's networks need not be concurrent or simultaneous.
- 2.2. **No Interoperability Participant Voting Rights.** RWC Interoperability Participants shall have no TRWC voting rights or representation on the TRWC Board of Directors or any TRWC committees. TRWC Interoperability Participants shall have no RWC voting rights or representation on the RWC Board of Directors or any RWC committees.
- 2.3. **No Interoperability Participant Fees and Costs.** No membership fees and costs will be assessed to RWC Interoperability Participants for using the TRWC Network and no membership fees and costs will be assessed to TRWC Interoperability Participants for using the RWC Network. The RWC and TRWC Networks each have their own budgets and manner of financing. The Parties mutually agree that no additional payments will be made to each other to accomplish the goals of this Agreement, and that the RWC and TRWC will each bear their own costs for the mutual use of each other's Network.
- 2.4. **Restrictions on Interoperability Participant Use of Networks.** Notwithstanding anything to the contrary in this Section 4, Mesa may restrict RWC Interoperability Participants from using the TRWC Network if the use by the RWC Interoperability Participants is adversely affecting the TRWC Network. Notwithstanding anything to the contrary in this Section 4, Phoenix may restrict TRWC Interoperability Participants from using the RWC Network if the use by the TRWC Interoperability Participants is adversely affecting the RWC Network.
- 2.5. **Interoperability Defined.** As used in this Agreement the word "Interoperability" shall mean: "an essential communication link within Public Safety and Public Service wireless communications systems which permits units from two or more different agencies to interact with one another and to exchange information according to a prescribed method in order to achieve predictable results."
3. **Records; Confidentiality.** To the extent permitted by law, the Parties shall treat any information about the other Party's Network (either TRWC or RWC) ("Network Information") as proprietary and confidential. Network Information includes, but is not limited to, technical data, engineering details, construction documents, equipment lists, programming configurations, and operational procedures. Any Party who receives a request for information, or a public records request concerning the other Party's Network, shall promptly forward the request to the other Party for consideration and response.
4. **Conflict of Interest.** The Parties understand and acknowledge that this Agreement may be subject to cancellation under A.R.S. § 38-511 (Arizona's public employee conflict of interest law) in the event there is a conflict of interest of the type specified in A.R.S. § 38-511 by persons significantly involved in initiating, negotiating, securing, drafting or creating this Agreement.
5. **Compliance with Applicable Laws.** Each Party shall comply with all applicable laws, statutes, ordinances, executive orders, rules, regulations, standards, and codes of federal and state governments whether or not specifically referred to in this Agreement.
6. **Cooperation.**
 - 6.1. The Parties agree to make, sign and deliver all documents and to perform all acts that are necessary to fully carry out the terms of this Agreement. Each of the Parties shall fully cooperate with and assist one another in

obtaining all licenses, permits, authorizations, approvals and consents required in the performance of this Agreement.

- 6.2. In the event any legal proceeding is instituted challenging the authority and power of any of the Parties to execute this Agreement or to perform its terms and conditions, the Parties shall jointly and cooperatively defend the validity of this Agreement.
- 6.3. The Parties may elect and shall have the right to seek specific performance by any Party of any or all of the obligations set forth in this Agreement. The Parties agree that specific performance may be sought by way of special action filed in superior court seeking an injunction ordering the Party to perform its obligations under this Agreement. The Parties agree not to raise as a defense the position that there is an "adequate remedy at law." The Parties hereby stipulate and consent to the jurisdiction of the superior court in any such special action.
- 6.4. The Parties agree to meet regularly, with respective TRWC and RWC Board of Directors, Executive Director, and other appropriate representation, to discuss operational items and interoperability needs. The number of Board of Directors members from the TRWC and RWC that will be allowed to participate will be limited so that the quorum requirements of each Board will not be met. The Parties also agree to participate together at the working level including operational and technical working groups.

7. **Security.**

- 7.1. In order to accommodate each other's programming needs, the Parties agree to share access to each other's system credentials in accordance with the policies and procedures for the TRWC and RWC.
- 7.2. Should radios be lost, stolen, misplaced, changed, or added, the Parties agree to report all such losses, including losses by their respective Interoperability Participants, in a timely manner in accordance with each other's policies and procedures.

8. **Amendment.** This Agreement may be amended only by a written document executed by a duly authorized representative of each of the Parties.

9. **Third Parties.** This Agreement is entered into for the sole and exclusive benefit of the Parties, and no other person shall claim any implied right, benefit or interest in this Agreement. The Parties do not intend to create rights in or remedies to any third party as a beneficiary of this Agreement or of any duty, obligation, or undertaking established under this Agreement.

10. **Notice.** Any notice, consent or other communication ("NOTICE") required or permitted under this Agreement shall be in writing and either delivered in person, sent by facsimile transmission, deposited in the United States mail, return receipt requested, or deposited with any commercial air courier or express service addressed as follows:

If to the TRWC:	TOPAZ Regional Wireless Cooperative Executive Director Mesa Information Technology Department Stop Box 968. Mesa, AZ 85211-968 Telephone: (480) 644-5377 Fax: (480) 644-2175
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If to the RWC :	Regional Wireless Cooperative Executive Director Phoenix Intergovernmental Relations 200 West Washington Street Phoenix, AZ 85003-2295 Telephone: (602) TBD FAX: (602) TBD
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Notice shall be deemed received at the time it is personally served, on the day it is sent by facsimile transmission, on the second day after its deposit with any commercial air courier or express service or, if mailed, five (5) days after the notice is deposited in the United States mail as above provided. Any time period stated in a notice shall be computed from the time the notice is deemed received. Either party may change its mailing address, telephone or FAX number, or the person to receive the notice, by notifying the other party as provided in this Section.

Notices sent by facsimile transmission shall also be sent by regular mail to the recipient at the above address. This requirement for duplicate notice is not intended to change the effective date of the notice sent by facsimile transmission.

10. **Dispute Resolution.** If a complaint, dispute or controversy arises under this Agreement, the Parties agree to negotiate, in good faith, a mutually agreeable solution. In the event the Parties cannot agree on a solution, the Parties agree to use arbitration as provided in A.R.S. § 12-1518. Nothing in this Agreement will prohibit a Party from seeking injunctive relief at anytime as provided by Paragraph 6.3 and without first pursuing arbitration under this Paragraph.
11. **Waiver.** The waiver by any Party of any breach of any term, covenant or condition of this Agreement shall not be deemed a waiver of such term, covenant or condition or any subsequent breach of the same or any other term, covenant or condition of this Agreement.
12. **Uncontrollable Events.**
 - 12.1. No Party shall be considered to be in default in the performance of any obligations under this Agreement (other than obligations of a Party to pay costs and expenses) if failure of performance is due to an uncontrollable event. The term "uncontrollable event" means any cause beyond the control of the Party affected, including but not limited to flood, earthquake, storm, fire, epidemic, war, riot, civil disturbance or disobedience, labor dispute, and action or non-action by or failure to obtain the necessary authorizations or approvals from any governmental agency or authority or the electorate, labor or material shortage, sabotage and restraint by court order or public authority, that by exercise of due diligence and foresight the Party reasonably could not have been expected to avoid and that by exercise of due diligence it will be unable to overcome. A Party that is rendered unable to fulfill any obligation by reason of an uncontrollable event shall exercise due diligence to remove such inability with all reasonable dispatch.
 - 12.2. If any Party claims that its failure to perform was due to an uncontrollable event, the Party shall bear the burden of proof that such activity was within the meaning and intent of this section, if such claim is disputed by any Party to this Agreement.
13. **Assignment and Binding Effect.** This Agreement shall be binding upon and shall inure to the benefit of the Parties and their respective successors and assigns; provided, however, that nothing shall relieve any Party of any obligation under this Agreement, except upon the express written consent of the other Party.
14. **Entire Agreement.** This Agreement contains the entire agreement and understanding among the Parties regarding the subject matter herein and supersedes and replaces Intergovernmental Agreement #107120. Each Party acknowledges that no other Party, nor any agent or attorney of any Party, has made any promise, representation, or warranty whatsoever, expressed or implied, not contained in this Agreement and acknowledges that this Agreement has not been executed in reliance on any promise, representation or warranty not contained in this Agreement. This Agreement shall not be amended, modified or supplemented at any time unless in writing.
15. **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of Arizona applicable to contracts executed and intended to be performed entirely within the State of Arizona by residents of the State of Arizona. Any action at law, suit in equity or judicial proceeding for the enforcement of this Agreement or any provision therefore shall be instituted only in the courts of Maricopa County, Arizona.
16. **Severability.** If any provision of this Agreement is declared void or unenforceable by a court of competent jurisdiction, the provision shall be severed from this Agreement, which shall otherwise remain in full force and effect if the remaining provisions permit the Parties to obtain the practical benefits of the TRWC and RWC Networks. If any law or court of competent jurisdiction prohibits or excuses any Party from undertaking any contractual commitment to perform any act under this Agreement, this Agreement shall remain in full force and effect, but the provisions requiring such action shall be deemed to permit the Party to take such action at its discretion, if such a construction is permitted by law.
17. **Headings.** Section headings are inserted in this Agreement solely for convenience and the section headings shall not by themselves alter, modify, limit, expand or otherwise affect the meaning of any provision of this Agreement.
18. **Counterparts.** This Agreement may be signed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.
19. **Personnel.** This Agreement is not intended to and will not constitute, create, give rise to, or otherwise recognize a joint venture, partnership or formal business association or organization of any kind between the parties. No

employee, agent, or servant of a Party shall be deemed to be an employee, agent or servant of the other Party. Each Party will be solely and entirely responsible for its acts and the acts of its employees, agents, servants, subcontractors, and volunteers during the performance of this Agreement. Each Party will have total responsibility for all salaries, wages, bonuses, retirement withholdings, worker's compensation, occupational disease compensation, unemployment compensation, other employment compensation, other employee benefits, and all employer's taxes and premiums concerning the persons who are supplied by that Party in the performance of this Agreement, and each Party agrees to hold the other Party harmless from any liability thereof.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized officers.

CITY OF MESA, a municipal corporation
Chris Brady, City Manager

CITY OF PHOENIX, a municipal corporation
DAVID CAVAZOS, City Manager

By: _____
Name: _____
Title: _____
Date: _____

By: _____
Charles T. Thompson
Chief Information Officer
Date: _____

APPROVED AS TO FORM and within the powers and authority granted under the laws of Arizona to the City of Mesa.

APPROVED AS TO FORM and within the powers and authority granted under the laws of Arizona to the City of Phoenix.

City Attorney


City Attorney

ATTEST:

ATTEST:

City Clerk

City Clerk

		System Key Control Policy	
Owner: See Below	Created: Sept. 14, 2009	Applicability: See Below	
Category: Network Security	Revised: February 10, 2010	REVISION 1	
Page: 1 of 4	Last Review:		

1.0 Purpose

- 1.1. The purpose of this policy is to establish the controls for the TRWC System Key used for subscriber unit programming.

2.0 Owner

- 2.1. Administrative Manager

3.0 Applies To

- 3.1. Anyone that has access to the TRWC subscriber programming software.

4.0 Background

- 4.1. TRWC is a radio communications network that provides services and features to radio users through the programming software of the subscriber radios. Programming of the subscriber radios is controlled by an electronic "System Key." As this programming application directly affects the TRWC public safety and public service department operations it is important that the System Key is protected from potential security related risks that can cause disruptions or anomalies to subscriber operations.
- 4.2. The System Key may take the form of a "software" System Key or an "Advanced" System Key ("ASK"). The ASK is comprised of two components, a "parent" key and "child" key(s). There is only one parent key per system, but there may be multiple child keys per system.
- 4.3. The System Key must be programmed into any subscriber unit that operates directly on TRWC. These subscriber units include all Area Managers, Members, Associates, Interoperability Participants, and Conditional Participants, and could also include radio units from other entities that are given access rights to use TRWC.
- 4.4. TRWC public safety departments have operational requirements and mutual aid agreements that require they interoperate with non-TRWC entities. Direct interoperability (automatic unit to unit) is supported by programming non-TRWC subscriber equipment with the TRWC System Key. Please refer to section 4.1.5 of the Governance Agreement.
- 4.5. The risk of inaccurate programming substantially increases when multiple entities are allowed access to and use the System Key to program

subscriber units. This risk translates into an increase in subscriber radio operational anomalies and the associated administrative/maintenance activities. There is also an increased risk of possible unauthorized transmissions, interference or monitoring of public safety radio communications channels.

5.0 Policy Statement

- 5.1. Anyone that has access to the TRWC subscriber programming equipment shall at all times employ appropriate operational and network security practices, as adopted by the Administrative Manager, to protect TRWC users from programming errors that could potentially cause disruptions or failures in service.
- 5.2. The Administrative Manager will control the TRWC System Key. The TRWC software System Key and the ASK parent key will not be released to Area Managers, Members, Associates, Interoperability Participants, Conditional Participants, or their Contractors.
- 5.3. An ASK child key will be released to Area Managers, Members, Associates, Interoperability Participants, or Conditional Participants in accordance with the provisions described herein.
- 5.3.1. A separate ASK child key and request form will be required for each programming template to be used with the ASK child key (i.e. law enforcement, fire, public works).

6.0 Supporting Rules

- 6.1. The Administrative Manager will provide all routine and emergency TRWC radio programming services for the Area Manager, Members, Associates, Interoperability Participants, and Conditional Participants as defined in the TRWC Governance Agreement.
- 6.2. Requests for programming of the TRWC System Key into non-TRWC radios shall be made by the appropriate representative of the requesting agency to the Executive Director.
- 6.3. The Administrative Manager will provide, upon approval by the Executive Director, programming services for authorized non-TRWC radios for interoperable service as defined in section 4.1.5 of the TRWC Governance Agreement.
- 6.4. Any breaches in TRWC System Key use shall immediately be reported to the Administrative Manager and Executive Director who shall take immediate steps to minimize the danger to the operational capabilities of TRWC.
- 6.5. An ASK child key will be issued upon acceptance of a written request by a Representative to the Executive Director containing the information on the "Advanced System Key (ASK) Child Key Request" form.

- 6.6. The following rules apply to the issuance of an ASK child key:
 - 6.6.1. Adherence to this Policy, in particular the need to safeguard the ASK child key and report the loss of an ASK child key as required in section 6.4.
 - 6.6.2. Agreement to pay the hardware cost of the ASK child key and for the Administrative Manager's time to create the ASK child key and associated template development.
 - 6.6.2.1. A time & material "Two-Way Radio Equipment Maintenance Agreement" with the City of Mesa is required to enable billing of the costs above (**not** a monthly recurring fee).
 - 6.6.3. Timely notification to the Administrative Manager if a radio programmed with their ASK child key is missing, lost, stolen, destroyed, or otherwise rendered inoperable.
- 6.7. Upon notification by the Executive Director that a written request for an ASK child key has been accepted, the Administrative Manager will create an ASK child key and arrange for receipted transfer to the responsible party.
 - 6.7.1. The Administrative Manager will create an ASK child key specifying the radio identification number (ID) range and set the permissions (such as talkgroups, functions, templates) for the requestor to program radios on the TRWC network.
 - 6.7.2. The Administrative Manager will work with the responsible party to develop a radio programming template for use with the ASK child key being issued.
 - 6.7.3. The ASK child key will be set to expire 18 months after the date the ASK child key is created. An expired ASK child key must be replaced, by initiating the process described in section 6.5, above.
 - 6.7.4. The ASK child key will be issued with password protection enabled. The password will be communicated to the responsible party.
 - 6.7.5. The responsible party is required to notify the Administrative Manager of the radio identification number(s) (ID) and radio serial numbers to be enabled in the infrastructure before the radio will be operational on the TRWC network.
- 6.8. The TRWC reserves the right to audit the ASK child key, radio identification numbers (IDs), and associated templates.

7.0 Responsibilities

- 7.1. The Administrative Manager is responsible for the development of internal controls for protection of the TRWC System Key.
- 7.2. The Administrative Manager or designee is responsible for monitoring issues related to use of the System Key, and to report actions involving misuse of the System Key to the Administrative Manager and Executive Director for resolution.

8.0 for Exemption or Waiver

- 8.1. None

9.0 Applicable Procedures

- 9.1. TRWC Governance Agreement
- 9.2. Recommended Form for Advanced System Key (ASK) Child Key Request
- 9.3. City of Mesa Two-Way Radio Equipment Maintenance Agreement



Advanced System Key (ASK) Child Key Request

Owner: See Below	Created: February 10, 2010	Applicability: See Below
Category: Network Security	Revised:	ASK CHILD KEY REQUEST FORM
Page: 1 of 1	Last Review:	

To be completed by Advanced System Key (ASK) Child Key Requester
(all lines below are required to be filled in)

Organization: _____

Representative Name: _____

Date of Request: _____

Responsible Party Information:

Name: _____

Job Title: _____

Mailing Address: _____

City, State, & Zip Code: _____

Telephone Number: _____

E-mail Address: _____

Representative acknowledges receipt of the attached TRWC System Key Control Policy.

Signature of Representative: _____

To be completed by the TRWC Executive Director

Signature & Date for Acceptance of ASK Child Key Request: _____

To be completed by Administrative Manager

ASK Child Key Created Date/Expiration Date: _____ / _____

**TRWC Operating & Maintenance Budget And Capital Improvement Costs
RECONCILIATION BETWEEN FY 09/10 BUDGET AND 10/11 BUDGET**

	FY 09/10	FY 10/11	Change
1. LABOR			
Positions	18	18	0
Cost	\$897,616	\$861,147	-\$36,469
2. NON LABOR	<u>\$569,890</u>	<u>\$905,099</u>	<u>\$335,209</u>
3. TOTAL OPERATING & MAINTENANCE BUDGET	<u>\$1,467,506</u>	<u>\$1,766,246</u>	<u>\$298,740</u>
4. SUBSCRIBER UNITS	3,775	3,699	-76
5. RECONCILIATION OF BUDGET INCREASE:			
a. Wage reduction and no merit/COLA increase			-\$36,469
b. Change from SSA to UAP (Motorola)	\$378,255	\$660,000	\$281,745
c. Full Costing Allocation			\$53,464
			<u>\$298,740</u>
TOTAL RECONCILIATION			<u>\$298,740</u>
6. Cost Per Subscriber Unit	\$ 32	\$ 40	\$8
a. Impact of UAP [(\$281,745/3,671)/12]			\$7
b. Full Costing Allocation Impact			\$1
7. Capital Network Reliability Improvements [Changes in mix of improvements]	<u>\$1,287,500</u>	<u>\$625,000</u>	<u>-\$662,500</u>
8. Capital Network Reliability Improvements Cost Per Subscriber	<u>\$28</u>	<u>\$14</u>	<u>-\$14</u>

February 22, 2010

TRWC Operating & Maintenance Budget

Personnel Allocations Position Description	Position #	FY10/11	% TRWC		\$ TRWC			
		Labor Budget	Data	Administration	Data	Administration		
Communications Project Liasion	0185	\$ 121,812		25%		\$ 30,453		
Communications Project Liasion	0528	\$ 106,704		50%		\$ 53,352		
Communications Project Liasion	2397	\$ 128,019		50%		\$ 64,010		
Administration Support Assistant III	1098	\$ 66,222		15%		\$ 9,933		
Lead Parts & Supply Specialist	1598	\$ 60,289		10%		\$ 6,029		
Parts & Supply Specialist	3936	\$ 50,637		10%		\$ 5,064		
Communications Administrator	2931	\$ 140,563		25%		\$ 35,141		
Wireless Communications Administrator	3358	\$ 113,072		50%		\$ 56,536		
Executive Director	3833 ITD	\$ 148,269		50%		\$ 74,135		
Communications Dispatcher - Encryption	2868 PD	\$ 108,103		10%		\$ 10,810		
Communications Techican III	0982	\$ 84,870	55%		\$ 46,679			
Communications Network Technologist	1671	\$ 98,773	55%		\$ 54,325			
Sr. Communications Network Technologist	4669	\$ 97,865	55%		\$ 53,826			
Communications Techican III	3432	\$ 70,323		50%		\$ 35,162		
Communications Techican III	1167	\$ 69,318		50%		\$ 34,659		
Communications Techican III	0804	\$ 88,530		50%		\$ 44,265		
Communications Network Technologist	1168	\$ 75,759		50%		\$ 37,880		
Communications Systems Coordinator	0805	\$ 86,337		50%		\$ 43,169		
Total Personal Services		\$ 1,715,465			\$ 154,829	\$ 195,134	\$ 345,462	
	Overtime	\$ 34,275		50%	\$ -	\$ 17,138	\$ -	
	Overhead							
	Gen Svc	20.85%			\$ 32,282	\$ 44,259	\$ 69,775	\$ 146,316
	Encription	20.99%					\$ 2,269	\$ 2,269

February 22, 2010

TRWC Operating & Maintenance Budget

		FY10/11			TRWC FY 10/11									TRWC FY 11/12	TRWC FY 12/13	TRWC FY 13/14	TRWC FY 14/15	TRWC FY 15/16	TRWC FY 16/17	TRWC FY 17/18	TRWC FY 18/19
		Communications	Percentage		Budget Based on FY09/10			Assigned to TRWC			1.55%	1.66%	1.77%	1.68%	1.82%	1.70%	1.70%	1.70%	1.70%		
ESCALATION FACTOR	Object Code	Description			Data	Systems	Admin														
Labor	71000	Personal Services (less OT)		Attachment 1	\$ 154,829	\$ 195,134	\$ 345,462														
	71120	Overtime		Attachment 1	\$ -	\$ 17,138	\$ -														
		Overhead			\$ 32,282	\$ 44,259	\$ 69,775														
		Overhead - Encryption					\$ 2,269														
		Total Labor			\$ 187,111	\$ 256,530	\$ 417,506	\$ 874,495	\$ 889,012	\$ 904,747	\$ 919,947	\$ 936,690	\$ 952,614	\$ 968,808	\$ 985,278						
							49.22%														
ESCALATION FACTOR								2.12%	2.18%	2.21%	2.23%	2.24%	2.70%	2.70%	2.70%						
Non Labor	72030	Advertising	\$ 3,000	49%	\$ 1,476	\$ 1,508	\$ 1,541	\$ 1,575	\$ 1,610	\$ 1,646	\$ 1,690	\$ 1,736	\$ 1,783								
	72140	Prof Services - Consulting	\$ 7,000	49%	\$ 3,445	\$ 3,518	\$ 3,595	\$ 3,674	\$ 3,756	\$ 3,840	\$ 3,944	\$ 4,051	\$ 4,160								
	72150	Prof Services - Lab	\$ 500	49%	\$ 246	\$ 251	\$ 257	\$ 262	\$ 268	\$ 274	\$ 282	\$ 289	\$ 297								
	72160	Prof Services - Legal	\$ 7,500	100%	\$ 7,500	\$ 7,659	\$ 7,826	\$ 7,999	\$ 8,177	\$ 8,360	\$ 8,586	\$ 8,818	\$ 9,056								
	72180	Prof Services - Other	\$ 12,600	49%	\$ 6,201	\$ 6,333	\$ 6,471	\$ 6,614	\$ 6,761	\$ 6,913	\$ 7,099	\$ 7,291	\$ 7,488								
	72210	Telephone - Local	\$ 12,600	49%	\$ 6,201	\$ 6,333	\$ 6,471	\$ 6,614	\$ 6,761	\$ 6,913	\$ 7,099	\$ 7,291	\$ 7,488								
	72211	Telephone - Cellular	\$ 2,100	49%	\$ 1,034	\$ 1,055	\$ 1,078	\$ 1,102	\$ 1,127	\$ 1,152	\$ 1,183	\$ 1,215	\$ 1,248								
	72212	Telephone - Long Distance	\$ 315	49%	\$ 155	\$ 158	\$ 162	\$ 165	\$ 169	\$ 173	\$ 177	\$ 182	\$ 187								
	72220	Postage	\$ 786	49%	\$ 387	\$ 395	\$ 404	\$ 413	\$ 422	\$ 431	\$ 443	\$ 455	\$ 467								
	72240	Print Shop	\$ 734	49%	\$ 361	\$ 369	\$ 377	\$ 385	\$ 394	\$ 403	\$ 414	\$ 425	\$ 436								
	72260	Equipment Usage	\$ 42,000	49%	\$ 20,671	\$ 21,109	\$ 21,569	\$ 22,046	\$ 22,537	\$ 23,042	\$ 23,664	\$ 24,303	\$ 24,959								
	72265	Mileage	\$ 210	49%	\$ 103	\$ 106	\$ 108	\$ 110	\$ 113	\$ 115	\$ 118	\$ 122	\$ 125								
	72270	Travel	\$ 11,600	49%	\$ 5,709	\$ 5,830	\$ 5,957	\$ 6,089	\$ 6,225	\$ 6,364	\$ 6,536	\$ 6,712	\$ 6,894								
	72360	Repairs & Maint Outside	\$ 65,100	33%	\$ 21,483	\$ 21,938	\$ 22,417	\$ 22,912	\$ 23,423	\$ 23,948	\$ 24,594	\$ 25,258	\$ 25,940								
	72430	Thompson Peak	\$ 3,500	100%	\$ 3,500	\$ 3,574	\$ 3,652	\$ 3,733	\$ 3,816	\$ 3,902	\$ 4,007	\$ 4,115	\$ 4,226								
	72510	Utilities-Communications Bldg	\$ 71,251	50%	\$ 35,504	\$ 36,256	\$ 37,047	\$ 37,866	\$ 38,710	\$ 39,577	\$ 40,646	\$ 41,743	\$ 42,870								
	72510	Utilities-Sites	\$ 60,000	75%	\$ 45,000	\$ 45,954	\$ 46,956	\$ 47,994	\$ 49,064	\$ 50,163	\$ 51,517	\$ 52,908	\$ 54,337								
	72720	Other Subscriptions	\$ 3,200	49%	\$ 1,608	\$ 1,643	\$ 1,680	\$ 1,717	\$ 1,756	\$ 1,803	\$ 1,852	\$ 1,902									
	72813	Contract - Preventative UAP/Tech	\$ 635,000	100%	\$ 635,000	\$ 648,462	\$ 662,598	\$ 677,242	\$ 692,344	\$ 707,853	\$ 726,965	\$ 746,593	\$ 766,751								
	72813	Contract - Preventative Generators	\$ 25,000	100%	\$ 25,000	\$ 25,530	\$ 26,087	\$ 26,663	\$ 27,258	\$ 27,868	\$ 28,621	\$ 29,393	\$ 30,187								
	72820	Training	\$ 24,000	49%	\$ 11,812	\$ 12,062	\$ 12,325	\$ 12,598	\$ 12,878	\$ 13,167	\$ 13,522	\$ 13,888	\$ 14,263								
	72821	Tuition	\$ 3,000	49%	\$ 1,476	\$ 1,508	\$ 1,541	\$ 1,575	\$ 1,610	\$ 1,646	\$ 1,690	\$ 1,736	\$ 1,783								
	72835	Linens & Laundry	\$ 4,830	49%	\$ 2,377	\$ 2,428	\$ 2,480	\$ 2,535	\$ 2,592	\$ 2,650	\$ 2,721	\$ 2,795	\$ 2,870								
	72850	Sundry	\$ 250	49%	\$ 123	\$ 126	\$ 128	\$ 131	\$ 134	\$ 137	\$ 141	\$ 145	\$ 149								
	72857	Bus Passes	\$ 100	49%	\$ 49	\$ 50	\$ 51	\$ 52	\$ 54	\$ 55	\$ 56	\$ 58	\$ 59								
	74110	Materials - Warehouse	\$ 1,205	33%	\$ 398	\$ 406	\$ 415	\$ 424	\$ 434	\$ 443	\$ 455	\$ 468	\$ 480								
	74210	Materials - Outside	\$ 26,501	33%	\$ 8,745	\$ 8,931	\$ 9,125	\$ 9,327	\$ 9,535	\$ 9,749	\$ 10,012	\$ 10,282	\$ 10,560								
	74220	Repair Parts - Outside	\$ 120,627	33%	\$ 39,807	\$ 40,651	\$ 41,537	\$ 42,455	\$ 43,402	\$ 44,374	\$ 45,572	\$ 46,802	\$ 48,066								
	74240	Non Cap Assets	\$ 36,752	33%	\$ 12,128	\$ 12,385	\$ 12,655	\$ 12,935	\$ 13,223	\$ 13,520	\$ 13,885	\$ 14,260	\$ 14,645								
	74250	Software	\$ -	0%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -								
	74255	Software Maintenance	\$ 10,000	49%	\$ 4,922	\$ 5,026	\$ 5,135	\$ 5,249	\$ 5,366	\$ 5,486	\$ 5,634	\$ 5,786	\$ 5,943								
	74280	Uniform	\$ 3,501	49%	\$ 1,723	\$ 1,760	\$ 1,798	\$ 1,838	\$ 1,879	\$ 1,921	\$ 1,973	\$ 2,026	\$ 2,081								
	74290	Safety Shoes	\$ 596	49%	\$ 293	\$ 300	\$ 306	\$ 313	\$ 320	\$ 327	\$ 336	\$ 345	\$ 354								
	74292	Safety Glasses	\$ 200	49%	\$ 98	\$ 101	\$ 103	\$ 105	\$ 107	\$ 110	\$ 113	\$ 116	\$ 119								
	74299	Recognition Awards	\$ 600	49%	\$ 295	\$ 302	\$ 308	\$ 315	\$ 322	\$ 329	\$ 338	\$ 347	\$ 357								
	74321	Automotive Fuel - Outside	\$ 300	100%	\$ 300	\$ 306	\$ 313	\$ 320	\$ 327	\$ 334	\$ 343	\$ 353	\$ 362								
					\$ 905,099	\$ 924,287	\$ 944,436	\$ 965,308	\$ 986,835	\$ 1,008,940	\$ 1,036,181	\$ 1,064,158	\$ 1,092,890								
		Total Operating & Maintenance	\$ 1,749,740		\$ 187,111	\$ 256,530	\$ 1,766,246	\$ 1,798,782	\$ 1,833,448	\$ 1,870,056	\$ 1,906,782	\$ 1,945,630	\$ 1,988,795	\$ 2,032,966	\$ 2,078,168						

ESCALATION FACTOR Object Code	Description	FY10/11		TRWC FY 10/11	TRWC FY 11/12 1.55%	TRWC FY 12/13 1.66%	TRWC FY 13/14 1.77%	TRWC FY 14/15 1.68%	TRWC FY 15/16 1.82%	TRWC FY 16/17 1.70%	TRWC FY 17/18 1.70%	TRWC FY 18/19 1.70%	
		Communications Budget Based on FY09/10	Percentage Assigned to TRWC										
SPECIAL ASSESSMENT PROJECTS TO BE DISCUSSED BY BOARD OF DIRECTORS		2010 Estimated Cost											
A.	Far Southeast Mesa Transmitter Site	\$	1,740,000		\$	1,815,624							
B.	Microwave Connectivity to Far Southeast Mesa Transmitter Site	\$	75,000		\$	78,260							
C.	Upgrade all 9 sites for Base Station Replacements	\$	13,000,000					\$	14,491,477				
D.	Upgrade Thompson Peak for Base Station Replacement	\$	750,000						\$	858,620			
E.	Far Northeast Mesa Transmitter Site	\$	1,740,000								\$	2,045,782	
F.	Microwave Connectivity to Far Northeast Mesa Transmitter Site	\$	75,000								\$	88,180	
TOTAL ESTIMATED SPECIAL ASSESSMENT PROJECTS		\$	17,380,000		\$	1,893,884		\$	14,491,477	\$	858,620	\$	2,133,963
ANNUAL REVENUE SPECIAL ASSESSMENT PROJECTS													
	MESA	\$	1,363,453		\$	1,363,453		\$	10,432,766	\$	618,141	\$	1,536,292
	GILBERT	\$	390,655		\$	390,655		\$	2,989,185	\$	177,109	\$	440,177
	APACHE JUNCTION FIRE DISTRICT	\$	46,080		\$	46,080		\$	352,591	\$	20,891	\$	51,921
	APACHE JUNCTION	\$	74,240		\$	74,240		\$	568,063	\$	33,658	\$	83,651
	QUEEN CREEK	\$	19,456		\$	19,456		\$	148,872	\$	8,821	\$	21,922
TOTAL		\$	1,893,884		\$	1,893,884		\$	14,491,477	\$	858,620	\$	2,133,963
MONTHLY FEE PER SUBSCRIBER UNIT FOR SPECIAL ASSESSMENTS					\$	39		\$	256	\$	14	\$	34

TRWC Data Systems Operations Operating & Maintenance Budget AND Capital Budget
 BASED ON SUBSCRIBER COUNTS

		FY10/11		TRWC FY 10/11			TRWC FY 11/12	TRWC FY 12/13	TRWC FY 13/14	TRWC FY 14/15	TRWC FY 15/16
		Communications	Percentage				1.55%	1.66%	1.77%	1.68%	1.82%
		Budget Based on FY09/10	Assigned to TRWC								
ESCALATION FACTOR				Data	Systems	Admin					
Object Code	Description										
Labor											
71000	Personal Services (less OT)	\$ 1,715,465	Attachment 2	\$ 21,792	\$ 4,857	\$ 8,267					
71120	Overtime	\$ 34,275	Attachment 2	\$ -	\$ -	\$ -					
	Overhead			\$ 4,544	\$ 1,013	\$ 1,724					
	Overhead - Encryption					\$ -					
	Total Labor	\$ 1,749,740		\$ 26,336	\$ 5,870	\$ 9,991	\$ 42,850	\$ 43,561	\$ 44,332	\$ 45,077	\$ 45,898
						2.41%					
ESCALATION FACTOR							3.00%	3.00%	3.00%	3.00%	3.00%
72360	Repairs & Maint Outside						\$ 599	\$ 617	\$ 635	\$ 654	\$ 674
72813	Contract - Preventative (SSA)						\$ 18,200	\$ 18,746	\$ 19,308	\$ 19,888	\$ 20,484
74220	Repair Parts - Outside						\$ 526	\$ 542	\$ 558	\$ 575	\$ 592
	Total Non-Labor	\$ -				\$ -	\$ 19,325	\$ 19,905	\$ 20,502	\$ 21,117	\$ 21,751
	Total Operating & Maintenance	\$ 1,749,740		\$ 26,336	\$ 5,870	\$ 42,196	\$ 62,175	\$ 63,466	\$ 64,834	\$ 66,194	\$ 67,648

**TRWC Data Systems Operations Operating & Maintenance Budget AND Capital Budget
 BASED ON SUBSCRIBER COUNTS**

	FY10/11											
	Communications	Percentage										
	Budget Based on FY09/10	Assigned to TRWC	TRWC FY 10/11	TRWC FY 11/12	TRWC FY 12/13	TRWC FY 13/14	TRWC FY 14/15	TRWC FY 15/16				
ESCALATION FACTOR				0.00%	0.00%	0.00%	0.00%	0.00%				
TRWC Data System Subscriber Units (From Randy 12-2-09)												
MESA POLICE DEPARTMENT			380	380	380	380	380	380				
MESA FIRE DEPARTMENT			85	85	85	85	85	85				
GILBERT FIRE DEPARTMENT			41	41	41	41	41	41				
APACHE JUNCTION FIRE DISTRICT			20	20	20	20	20	20				
QUEEN CREEK FIRE DEPARTMENT			7	7	7	7	7	7				
COM - SOUTHWEST AMBULANCE			44	44	44	44	44	44				
TOTAL			577	577	577	577	577	577				
TRWC Data System Subscriber Units Percentage												
MESA POLICE DEPARTMENT			65.86%	65.86%	65.86%	65.86%	65.86%	65.86%				
MESA FIRE DEPARTMENT			14.73%	14.73%	14.73%	14.73%	14.73%	14.73%				
GILBERT FIRE DEPARTMENT			7.11%	7.11%	7.11%	7.11%	7.11%	7.11%				
APACHE JUNCTION FIRE DISTRICT			3.47%	3.47%	3.47%	3.47%	3.47%	3.47%				
QUEEN CREEK FIRE DEPARTMENT			1.21%	1.21%	1.21%	1.21%	1.21%	1.21%				
SOUTHWEST AMBULANCE			7.63%	7.63%	7.63%	7.63%	7.63%	7.63%				
TOTAL			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%				
ANNUAL REVENUE OPERATING & MAINTENANCE												
MESA POLICE DEPARTMENT	\$	27,789	\$	40,947	\$	41,798	\$	42,699	\$	43,594	\$	44,552
MESA FIRE DEPARTMENT	\$	6,216	\$	9,159	\$	9,349	\$	9,551	\$	9,751	\$	9,966
GILBERT FIRE DEPARTMENT	\$	2,998	\$	4,418	\$	4,510	\$	4,607	\$	4,704	\$	4,807
APACHE JUNCTION FIRE DISTRICT	\$	1,463	\$	2,155	\$	2,200	\$	2,247	\$	2,294	\$	2,345
QUEEN CREEK FIRE DEPARTMENT	\$	512	\$	754	\$	770	\$	787	\$	803	\$	821
SOUTHWEST AMBULANCE	\$	3,218	\$	4,741	\$	4,840	\$	4,944	\$	5,048	\$	5,159
TOTAL	\$	42,196	\$	62,175	\$	63,466	\$	64,834	\$	66,194	\$	67,648
MONTHLY FEE PER SUBSCRIBER UNIT OPERATING & MAINTENANCE	\$	6	\$	9	\$	9	\$	9	\$	10	\$	10

TRWC Data Systems Operations Operating & Maintenance Budget AND Capital Budget
 BASED ON SUBSCRIBER COUNTS

	FY10/11	Percentage	TRWC FY 10/11	TRWC FY 11/12	TRWC FY 12/13	TRWC FY 13/14	TRWC FY 14/15	TRWC FY 15/16
	Communications	Assigned to TRWC						
	Budget Based on FY09/10							
CAPITAL IMPROVEMENT COSTS								
Mobile Data Infrastructure - ONE TIME PURCHASE								
HPD infrastructure equipment and master site upgrade	\$	389,809		\$ 842,703	\$ -	\$ -	\$ -	\$ -
Systems integration	\$	366,700						
Radio IP middleware infrastructure (less server)	\$	86,195						
	\$	842,703						
Southwest Data System Expansion				\$ 50,000				
ANNUAL REVENUE CAPTIAL - MOBILE DATA INFRASTRUCTURE - ONE TIME PURCHASE								
MESA POLICE DEPARTMENT	\$			\$ 554,987	\$ 32,929			
MESA FIRE DEPARTMENT	\$			\$ 124,142	\$ 7,366			
GILBERT FIRE DEPARTMENT	\$			\$ 59,880	\$ 3,553			
APACHE JUNCTION FIRE DISTRICT	\$			\$ 29,210	\$ 1,733			
QUEEN CREEK FIRE DEPARTMENT	\$			\$ 10,223	\$ 607			
COM - SOUTHWEST AMBULANCE	\$			\$ 64,262	\$ 3,813			
TOTAL	\$			\$ 842,703	\$ 50,000	\$ -	\$ -	\$ -
MONTHLY FEE PER SUBSCRIBER UNIT CAPITAL - MOBILE DATA INFRASTRUCTURE - ONE TIME PURCHASE	\$			122	7			

Mobile Data Subscribers - ONE TIME PURCHASE - INFORMATION ONLY								
Cost Per Subscriber Unit	\$	2,259		\$ -	\$ -	\$ -	\$ -	\$ -
ANNUAL REVENUE CAPTIAL - MOBILE DATA SUBSCRIBERS - ONE TIME PURCHASE - INFORMATION ONLY								
MESA POLICE DEPARTMENT	\$			\$ 858,420				
MESA FIRE DEPARTMENT	\$			\$ 192,015				
GILBERT FIRE DEPARTMENT	\$			\$ 92,619				
APACHE JUNCTION FIRE DISTRICT	\$			\$ 45,180				
QUEEN CREEK FIRE DEPARTMENT	\$			\$ 15,813				
COM - SOUTHWEST AMBULANCE	\$			\$ 99,396				
TOTAL MOBILE DATA SUBSCRIBERS - ONE TIME PURCHASE - INFORMATION ONLY	\$			1,303,443				

**TRWC Data Systems Operations Operating & Maintenance Budget AND Capital Budget
BASED ON SUBSCRIBER COUNTS**

INITIAL YEAR OF OPERATION

	FY 10/11	FY 11/12
1. LABOR		
Positions	10	10
Cost	\$42,196	\$42,850
2. NON-LABOR	\$0	\$19,325
3. TOTAL OPERATIONS & MAINTENANCE BUDGET	\$42,196	\$62,175
4. SUBSCRIBER UNITS	577	577
5. COST PER SUBSCRIBER UNIT	\$6	\$9
6. CAPITAL COSTS - ONE TIME PURCHASE		
a. Mobile Data Infrastructure		\$842,703
b. Cost Per Subscriber		\$122
7. CAPITAL COSTS - ONE TIME PURCHASE - INFORMATION ONLY		
a. Cost Per Subscriber Unit		\$2,259

2/22/2010

TOPAZ SUBSCRIBER UNITS, OPERATIONS AND MAINTENANCE, CAPITAL, SPECIAL ASSESSMENTS AND REVENUE ESTIMATES AND CASH FLOW
 FISCAL YEAR 2010 - 2011
 AND FORECAST YEARS

Fulton February 22, 2010

SUMMARY	TRWC FY 09/10	TRWC FY 10/11	TRWC FY 11/12	TRWC FY 12/13	TRWC FY 13/14	TRWC FY 14/15	TRWC FY 15/16	TRWC FY 16/17	TRWC FY 17/18	TRWC FY 18/19
TOPAZ OPERATIONS AND MAINTENANCE COSTS	\$1,467,506	\$1,766,246	\$1,798,782	\$1,833,448	\$1,870,056	\$1,906,782	\$1,945,630	\$1,988,795	\$2,032,966	\$2,078,168
Total O&M	\$1,467,506	\$1,766,246	\$1,798,782	\$1,833,448	\$1,870,056	\$1,906,782	\$1,945,630	\$1,988,795	\$2,032,966	\$2,078,168
SUBSCRIBER UNITS [AS ON JANUARY 4, 2010]										
MESA	2,770	2,663	2,796	2,936	3,083	3,237	3,399	3,569	3,747	3,934
TOWN OF GILBERT	741	763	801	841	883	927	974	1,022	1,074	1,127
APACHE JUNCTION FIRE DISTRICT	74	90	95	99	104	109	115	121	127	133
CITY OF APACHE JUNCTION	164	145	152	160	168	176	185	194	204	214
TOWN OF QUEEN CREEK	26	38	40	42	44	46	48	51	53	56
Total Units	3,775	3,699	3,884	4,078	4,282	4,496	4,721	4,957	5,205	5,465
ANNUAL FEE PER SUBSCRIBER UNIT - TOPAZ OPERATIONS AND MAINTENANCE COSTS	\$389	\$477	\$463	\$450	\$437	\$424	\$412	\$401	\$391	\$380
MONTHLY FEE PER SUBSCRIBER UNIT - TOPAZ OPERATIONS AND MAINTENANCE COSTS	\$32	\$40	\$39	\$37	\$36	\$35	\$34	\$33	\$33	\$32
ANNUAL REVENUE FROM SUBSCRIBER UNITS - OPERATING AND MAINTENANCE										
MESA	\$1,076,819	\$1,271,564	\$1,294,987	\$1,319,944	\$1,346,298	\$1,372,739	\$1,400,706	\$1,431,782	\$1,463,582	\$1,496,124
TOWN OF GILBERT	\$288,059	\$364,327	\$371,038	\$378,189	\$385,740	\$393,316	\$401,329	\$410,233	\$419,344	\$428,668
APACHE JUNCTION FIRE DISTRICT	\$28,767	\$42,974	\$43,766	\$44,609	\$45,500	\$46,394	\$47,339	\$48,389	\$49,464	\$50,564
CITY OF APACHE JUNCTION	\$63,754	\$69,236	\$70,512	\$71,871	\$73,306	\$74,745	\$76,268	\$77,960	\$79,692	\$81,464
TOWN OF QUEEN CREEK	\$10,107	\$18,145	\$18,479	\$18,835	\$19,211	\$19,588	\$19,988	\$20,431	\$20,885	\$21,349
O&M Rev	\$1,467,506	\$1,766,246	\$1,798,782	\$1,833,448	\$1,870,056	\$1,906,782	\$1,945,630	\$1,988,795	\$2,032,966	\$2,078,168
TRWC CAPITAL NETWORK RELIABILITY IMPROVEMENTS										
1. Reconfiguration	\$721,000									
2. White Tanks	\$566,500									
3. Replace batteries and DC power plant equipment, reached end of useful life		\$150,000	\$153,180	\$156,519	\$159,978	\$163,546	\$167,209	\$171,724	\$176,361	\$181,122
4. Replace Spread Spectrum MW Radios (AJ area reliability improvement)		\$75,000	\$76,590							
5. Thompson Peak Radio Site Improvement		\$400,000								
6. Twin Knolls Second Tower			\$306,360							
7. Replace antennas and transmission lines, reached end of useful life			\$153,180	\$156,519						
8. Replace Network Backbone MW radio equipment, reached end of useful life							\$200,345	\$205,754	\$211,309	\$216,864
9. Various Facility Upgrades				\$102,180	\$255,525	\$261,223	\$267,075	\$85,862	\$88,180	\$90,561
TOTAL TRWC CAPITAL NETWORK RELIABILITY IMPROVEMENTS	\$1,287,500	\$625,000	\$689,310	\$415,219	\$415,503	\$424,769	\$434,284	\$457,931	\$470,295	\$482,993
ANNUAL FEE PER SUBSCRIBER UNIT - TOPAZ CAPITAL IMPROVEMENTS	\$341	\$169	\$177	\$102	\$97	\$94	\$92	\$92	\$90	\$88
MONTHLY FEE PER SUBSCRIBER UNIT - TOPAZ CAPITAL IMPROVEMENTS	\$28	\$14	\$15	\$8	\$8	\$8	\$8	\$8	\$8	\$7
ANNUAL REVENUE FROM SUBSCRIBER UNITS - CAPITAL IMPROVEMENTS										
MESA	\$944,735	\$449,953	\$496,251	\$298,926	\$299,131	\$305,802	\$312,652	\$329,675	\$338,577	\$347,718
TOWN OF GILBERT	\$252,725	\$128,920	\$142,185	\$85,648	\$85,707	\$87,618	\$89,581	\$94,458	\$97,009	\$99,628
APACHE JUNCTION FIRE DISTRICT	\$25,238	\$15,207	\$16,772	\$10,103	\$10,110	\$10,335	\$10,567	\$11,142	\$11,443	\$11,752
CITY OF APACHE JUNCTION	\$55,934	\$24,500	\$27,021	\$16,276	\$16,288	\$16,651	\$17,024	\$17,951	\$18,435	\$18,933
TOWN OF QUEEN CREEK	\$8,868	\$6,421	\$7,081	\$4,266	\$4,268	\$4,364	\$4,461	\$4,704	\$4,831	\$4,962
Capital Rev	\$1,287,500	\$625,000	\$689,310	\$415,219	\$415,503	\$424,769	\$434,284	\$457,931	\$470,295	\$482,993
TOTAL OPERATING & MAINTENANCE AND CAPITAL NETWORK RELIABILITY IMPROVEMENTS	\$2,755,006	\$2,391,246	\$2,488,092	\$2,248,667	\$2,285,559	\$2,331,551	\$2,379,914	\$2,446,726	\$2,503,261	\$2,561,161
SPECIAL ASSESSMENT PROJECTS TO BE DISCUSSED BY BOARD OF DIRECTORS										
A. FAR SOUTHEAST MESA TRANSMITTER SITE				\$1,815,624						
B. MICROWAVE CONNECTIVITY TO FAR SOUTHEAST MESA TRANSMITTER SITE				\$78,260						
C. UPGRADE ALL 9 SITES TO GTR8000							\$14,491,477			
D. UPGRADE THOMPSON PEAK TO GTR8000								\$858,620		
E. FAR NORTHEAST MESA TRANSMITTER SITE										\$2,045,782
F. MICROWAVE CONNECTIVITY TO FAR NORTHEAST MESA TRANSMITTER SITE										\$88,180
TOTAL SPECIAL ASSESSMENT PROJECTS TO BE DISCUSSED BY BOARD OF DIRECTORS				\$1,893,884			\$14,491,477	\$858,620		\$2,133,963

TOPAZ SUBSCRIBER UNITS, OPERATIONS AND MAINTENANCE, CAPITAL, SPECIAL ASSESSMENTS AND REVENUE ESTIMATES AND CASH FLOW
 FISCAL YEAR 2010 - 2011
 AND FORECAST YEARS

Fulton February 22, 2010

CASH FLOW DETERMINATION:

	<u>OPERATING & MAINTENANCE</u>					TOTAL	<u>CAPITAL</u>			TQC	TOTAL	<u>TOTAL O&M AND CAPITAL</u>						
	COM	TOG	AJFD	CAJ	TQC		COM	TOG	AJFD			CAJ	TQC	COM	TOG	AJFD	CAJ	TQC
JUL	\$105,964	\$30,361	\$3,581	\$5,770	\$1,512		37,496	10,743	1,267	2,042	535	\$143,460	\$41,104	\$4,848	\$7,811	\$2,047		
AUG	\$105,964	\$30,361	\$3,581	\$5,770	\$1,512		37,496	10,743	1,267	2,042	535	\$143,460	\$41,104	\$4,848	\$7,811	\$2,047		
SEP	\$105,964	\$30,361	\$3,581	\$5,770	\$1,512		37,496	10,743	1,267	2,042	535	\$143,460	\$41,104	\$4,848	\$7,811	\$2,047		
OCT	\$105,964	\$30,361	\$3,581	\$5,770	\$1,512		37,496	10,743	1,267	2,042	535	\$143,460	\$41,104	\$4,848	\$7,811	\$2,047		
NOV	\$105,964	\$30,361	\$3,581	\$5,770	\$1,512		37,496	10,743	1,267	2,042	535	\$143,460	\$41,104	\$4,848	\$7,811	\$2,047		
DEC	\$105,964	\$30,361	\$3,581	\$5,770	\$1,512		37,496	10,743	1,267	2,042	535	\$143,460	\$41,104	\$4,848	\$7,811	\$2,047		
JAN	\$105,964	\$30,361	\$3,581	\$5,770	\$1,512		37,496	10,743	1,267	2,042	535	\$143,460	\$41,104	\$4,848	\$7,811	\$2,047		
FEB	\$105,964	\$30,361	\$3,581	\$5,770	\$1,512		37,496	10,743	1,267	2,042	535	\$143,460	\$41,104	\$4,848	\$7,811	\$2,047		
MAR	\$105,964	\$30,361	\$3,581	\$5,770	\$1,512		37,496	10,743	1,267	2,042	535	\$143,460	\$41,104	\$4,848	\$7,811	\$2,047		
APR	\$105,964	\$30,361	\$3,581	\$5,770	\$1,512		37,496	10,743	1,267	2,042	535	\$143,460	\$41,104	\$4,848	\$7,811	\$2,047		
MAY	\$105,964	\$30,361	\$3,581	\$5,770	\$1,512		37,496	10,743	1,267	2,042	535	\$143,460	\$41,104	\$4,848	\$7,811	\$2,047		
JUN	\$105,964	\$30,361	\$3,581	\$5,770	\$1,512		37,496	10,743	1,267	2,042	535	\$143,460	\$41,104	\$4,848	\$7,811	\$2,047		
TOTAL	\$1,271,564	\$364,327	\$42,974	\$69,236	\$18,145	\$1,766,246	\$449,953	\$128,920	\$15,207	\$24,500	\$6,421	\$625,000	\$1,721,516	\$493,247	\$58,181	\$93,736	\$24,565	\$2,391,246
	\$1,271,564	\$364,327	\$42,974	\$69,236	\$18,145	\$1,766,246	\$449,953	\$128,920	\$15,207	\$24,500	\$6,421	\$625,000						

**TRWC Operating & Maintenance Budget And Capital Improvement Costs
RECONCILIATION BETWEEN FY 09/10 BUDGET AND 10/11 BUDGET**

	FY 09/10	FY 10/11	Change
1. LABOR			
Positions	18	18	0
Cost	\$897,616	\$861,147	-\$36,469
2. NON LABOR	<u>\$569,890</u>	<u>\$905,099</u>	<u>\$335,209</u>
3. TOTAL OPERATING & MAINTENANCE BUDGET	<u>\$1,467,506</u>	<u>\$1,766,246</u>	<u>\$298,740</u>
4. SUBSCRIBER UNITS	3,775	\$3,699	-76
5. RECONCILIATION OF BUDGET INCREASE:			
a. Wage reduction and no merit/COLA increase			-\$36,469
b. Change from SSA to UAP (Motorola)	\$378,255	\$660,000	\$281,745
c. Full Costing Allocation			<u>\$53,464</u>
TOTAL RECONCILIATION			<u>\$298,740</u>
6. Cost Per Subscriber Unit	\$32	\$40	\$8
a. Impact of UAP [(\$281,745/3,671)/12]			\$7
b. Full Costing Allocation Impact			\$1
7. Capital Network Reliability Improvements [Changes in mix of improvements]	<u>\$1,287,500</u>	<u>\$625,000</u>	<u>-\$662,500</u>
8. Capital Network Reliability Improvements Cost Per Subscriber	<u>\$28</u>	<u>\$14</u>	<u>-\$14</u>

February 22, 2010