PIMA COUNTY WIRELESS INTEGRATED NETWORK (PCWIN)
USER COMMITTEE / TECHNICAL COMMITTEE
JOINT MEETING

Pima County Sheriff’s Department
Administration Building, Sheriff’s Operations Center, 3rd Floor
1750 E. Benson Highway, Tucson, Arizona
Tuesday, December 1, 2009
1:00 p.m.

SUMMARY OF MEETING

Note: The following is a summary of what transpired at the December 1, 2009 meeting.

I. **Call to Order:** Mr. Larry Sayers, Technical Committee Chair, calls the meeting to order at 1:05 p.m.

   **Roll Call:** Catherine Hanna, Pima County Sheriff’s Department

   Quorum is established for the Technical Committee with a total of 14 members present.
   Quorum is established for the User Committee with a total of 9 members present.

**Members Present Technical Committee**
Larry Sayers, Chair, Pima County Wireless Services
Rick Brown, Marana Police Department
Mike Bullock, City of Tucson Communications
Gary Bynum, Drexel Heights Fire District
Steven Campbell, Drexel Heights Fire District
Scott Ferguson, Pima Community College DPS
Jeff Guthrie, Pima County OEM & Homeland Security
Joseph Jakoby, City of Tucson IT
Pat Joy, Pima County Sheriff’s Department
Ted Martin, Pima County Sheriff’s Department IT
Gregory McNeal, City of Tucson IT
Robert Morton, City of Tucson Communications
Gary Schmitz, Oro Valley Police Department
Paul Wright, Jr., Northwest Fire District

**Members Present User Committee**
Gary Bynum, Co-Chair, Drexel Heights Fire District
Mike Sacco, Co-Chair, Pima County Sheriff’s Department
Fred Bair, Tucson Fire Department
Bill Bohling, Green Valley Fire District
Jeff Guthrie, Pima County OEM & Homeland Security
Charles Hangartner, Tohono O’odham Tribal Police
Wren Keller, Corona de Tucson Fire District
Jim Long, Northwest Fire District
Angela Spencer, City of Tucson

**Members Not Present – Technical Committee**
John Armstrong, Tucson Police Department
Ken Boynton, University of Arizona
Don Harrison, Tucson Airport Authority
Tim Hoban, Tucson Airport Authority
John Moffatt, Pima County Office of Strategic Planning
Isaiah Twombly, City of Tucson Communications

**Members Not Present – User Committee**
Patricia Abel, Golder Ranch Fire District
Manny Amado, Pima Community College DPS
Larry Anderson, South Tucson Fire Department
Sheila Blevins, Marana Police Department
Lee Bucklin, Rincon Valley Fire District
James Craig, Helmet Peak Fire Department
Orchid Jones, City of Tucson (Tucson General Services)
Charles Kmet, Tohono O’odham Fire Department
Henry Leyva, Sahuarita Police Department
Dan Morelos, Tucson Airport Authority
Tom Nix, Avra Valley Fire District
Hector Olivo, Pascua Yaqui Police Department
Luis Puig, University of Arizona Police Department
Ernie Robles, Picture Rocks Fire Department
Larry Stevens, Oro Valley Police Department
David Tibbitt, Ajo/Gibson Volunteer Fire Department
John Williams, Three Points Fire District

**Others Present**
John Bowers, Motorola
Elizabeth Esparza, Pascua Yaqui Police Department
Rodney Siemiatkowski, Motorola
Carlos Valencia, Pima Community College DPS
Paul Wilson, Pima County Sheriff’s Department
II. Approval of Minutes
Mr. Larry Sayers, Chair, Technical Committee

Mr. Sayers asks members if there are any suggested changes for the September 29, 2009, joint meeting minutes. Mr. Martin moves to accept and approve the minutes. Ms. Joy seconds the motion. Motion unanimously carries.


III. Radio System Project Status Report
Mr. David Smith, Pima County Information Technology

**Work Breakdown Schedule (WBS) & Master Schedule**

The PCWIN Project Management Team is working with Motorola and meeting regularly to finalize both items. The Team is receiving Gant charts from various vendors and incorporating them into the master schedule.

The next meeting with Motorola is the week of December 14th. Both items are anticipated to be complete by late December 2009.

**Detailed Design Review**

The Team is working with Motorola to finalize the detailed design of the system. Site selection is being reviewed to maximize coverage, ensure the requirements are met, and review design ideas.

**Scope of Work Review Meetings**

As the 29 sites move into construction, the Team is meeting with the site owners to review the detailed design plans, seeking clearance to proceed. The scope of work must be accurate and complete before the bidding process begins. Changes determined during the meetings are being incorporated into the scope of work.

**Site Studies**

The Team is working with the Pima County Cultural Resources Department, and the Pima County Development Services to obtain clearances on the sites, as they are needed to proceed with construction. Pima County Real Property will create Right of Entry letters for each site.

**Motorola R56 Audit**

Motorola will visit each site to ensure it meets their requirements. The Team wants the audit complete before site construction design begins.

Each item above is being analyzed and the Team will compress the schedule to begin construction as soon as possible.
IV. RECOC Project Status Report
Captain Paul Wilson, Pima County Sheriff’s Department

Pima County Facilities Management (PCFM) has been given direction by the County Administrator to proceed with Schematic Design services with Durrant. The first workshop is scheduled for December 15-16. The workshop agenda has been distributed, along with specific questionnaires to prepare attendees for the workshop activities.

The City of Tucson has been exploring the feasibility of renovating the Thomas Price Service Center (TOPSC), leaving their police and fire dispatch in their current location. The funding amount to renovate is limited, but if it falls within their desired range, the City may choose to renovate the TOPSC, which will then act as a back-up facility for RECOC. The City’s consulting firm will present their report this week.

The schedule is on track. Durrant has been asked to tighten their schedule to accommodate PCWIN meetings and activities.

V. Contracts/Agreements Status Report
Captain Paul Wilson, Pima County Sheriff’s Department

**Right of Entry Agreements**

Correspondence has been sent out to give notice to property owners and site managers, advising that County staff will be in contact to discuss agreement details. The Committees and audience members were asked to give their site managers, site owners, or real estate personnel notice of impending contact.

**Master Site Agreements**

Revisions to the agreement are complete. Pima County Real Property will begin interacting with the property owners to secure long-term access to those sites. Cultural studies are underway with a number of the sites, in coordination with detailed design activities. Staff will be in contact with agencies who have sites where Right of Entry agreements and IGAs are needed to gain access.

**User Agreements**

Each agency’s senior management staff will be contacted to update them on the project, and gain additional support for the project.

**Microwave Vendor**

Draft documents have been completed and will be distributed to the vendor for review. Our goal is to have those contracts approved by the Board of Supervisors at their December 15th meeting. Following approval, the selected vendor will engage Staff and Motorola in the WBS and Master Schedule discussions.
VI. Radio System Design Coverage  
Mr. Larry Sayers, Pima County Information Technology

PCWIN Tower Site Locations

- Motorola Proposed Tower Site Locations
- Proposed Changes
  - Valencia Standpipe
  - Arivaca North
  - Faguita Peak
  - Pima West
- Coverage Sectors (maps)
  - Heavy, Medium, Lite, Portable Outside
  - Mobile Coverage
  - Reliability Table from Motorola
  - Original Motorola Coverage (map)
  - Revised Motorola Coverage (map)
  - Questions

Discussion

Golder Ranch has expressed concerns with the lack of coverage testing in their area. Motorola confirms that as outlined in the RFP specifications, areas with “maintained/accessible roads” will be included in coverage testing. Specific coverage testing details/plans will be addressed in a future meeting.

Lt. Sacco expresses concern over the coverage loss in Sector 5 (Ajo/Arivaca), and requests additional maps, outlining where the coverage loss is located. Mr. Sayers explains that some towns were too small to calculate. The total areas were combined to calculate the reliability numbers. Maps with coverage details are available, and can be narrowed down to specific sub-sectors, although they do not include the reliability percentage.

Sector 11 (Ajo/Pima West) reports an 86% reliability score on outbound mobile coverage, and an 89% inbound mobile coverage. The amount of reliability is anticipated to increase once the Pima West boundary is redrawn.

The Committees are asked to contact Mr. Casella if they have concerns or questions regarding coverage in their organization.

Each sub-sector was guaranteed at 95% reliability, although some sector maps are showing a decrease. Captain Wilson seeks clarification as to why that is happening. Mr. Siemiawski explains that the RFP called for a 95% reliability for each sector, not sub-sector. Sub-sectors were combined into individual sectors, which produced the current reliability percentages. Mr. Casella will provide maps that will detail specific sub-sectors.

Staff will review the RFP regarding reliability testing.
Recommendation

Mr. Sayers recommends the Committees accept the proposed site changes and reliability testing figures outlined in the presentation, and forward these recommendations to the EMC for further consideration and approval.

Discussion

Mr. Jakoby inquires about simulcast phasing and its affect on the area coverage. He asks Motorola if they can produce maps illustrating the reliability figures during simulcast phasing. Mr. Siemiawski explains that the reliability figures were not based on just signal strength, but also takes phasing into account. Mr. Jakoby states that when a painted map completely covers a sector, the areas still may not have complete coverage during simulcast phasing. Mr. Siemiawski agrees, stating that these coverage maps are a prediction.

It is agreed that maps illustrating simulcast phasing may be more accurate than maps illustrating coverage, and Motorola will look into providing a map to include simulcast phasing.

Motion – Changing Valencia Standpipe to Eagles Nest

Technical Committee: Mr. Wright moves to accept site changes from Valencia Standpipe to Eagles Nest. Mr. Campbell seconds the motion. Thirteen (13) Technical members vote for the motion; one (1) opposes the motion.

Discussion

Mr. Jakoby would like to see the specific coverage areas affected within Valencia Standpipe before voting to accept the changes.

Lt. Sacco feels that it’s premature to make a motion on any of the site changes, without knowing the impact to the specific sub-sectors. Mr. Siemiawski explains that individual sub-sectors will be driven through and tested, although the reliability figures calculate each sector.

Mr. Sayers reminds the Committee that the site change to Eagle’s Nest is solely economical. There is no change to the coverage guarantee resulting from this change.

User Committee: Assistant Chief Bohling moves to accept the site changes from Valencia Standpipe to Eagles Nest. Division Chief Bynum seconds the motion. Eight (8) User members vote for the motion; one (1) opposes the motion.

NOTE: The remaining site recommendations (Arivaca North, Fraguita Peak, and Pima West) will be tabled following review of the RFP, and coverage changes. Mr. Casella will forward emails to Committee members, detailing specific changes and will include more detailed coverage maps.

Motion – Pima West Boundary (Sector 11)

Site boundary modifications are recommended. Changes will include removing the areas of the County where coverage isn’t a requirement; therefore, increasing coverage reliability. The proposed description presented by Lt. Sacco is:
“From the north at the intersection of the Pima County line and the peak/ridgeline of the Growler Mountains, travel south and slightly east along the peak/ridgeline of the Growler Mountains until they intersect with the northern boundary of the Organ Pipe National Monument. Go west along the north boundary until it intersects with the west boundary of the Organ Pipe National Monument. Follow the west boundary south to the US-Mexico border.”

Technical Committee: Division Chief Bynum makes a motion to redefine the coverage test sector of the Pima West site. Mr. Martin seconds the motion. Motion unanimously carries.

User Committee: Division Chief Bynum makes a motion to redefine the coverage test sector of the Pima West site. Lt. Hangartner seconds the motion. Motion unanimously carries.


VII. VHF/UHF Narrowbanding

Captain Paul Wilson, Pima County Sheriff’s Department

Many of the participating agencies operate radio systems under the UHF/VHF radio public safety band. The FCC has generated rules, which require those agencies to narrowband their systems prior to January 2013. Additionally, the rules will not allow the manufacturer’s to sell wideband-capable equipment after 2011.

The following webinar will give those agencies an opportunity to learn about the FCC requirements, to make future determinations on what to do with their existing systems. Committee members are encouraged to share their comments and concerns following the presentation.

The following agencies have not narrowbanded their systems:

- Arivaca Volunteer Fire Department
- Corona de Tucson Fire District
- Green Valley Fire District
- Mount Lemmon Fire District
- Northwest Fire Consortium
- Town of Oro Valley
- Pascua Pueblo Fire Department
- Rincon Valley Fire Department
- Town of Sahuarita
- Tucson Fire Department
- Tucson Police Department

Getting Prepared for Narrowbanding Webinar

- Introductions
- Narrowbanding Below 512 MHz R&O – WT Docket 99-87
- Myths & Truths
- Prior to Narrowbanding
- Actions to Narrowband
- Questions
The webinar is available at: http://event.on24.com/eventRegistration/EventLobbyServlet?target=lobby.jsp&eventid=171631&sessid=1&key=ACFA2474C908D6591C55873AF3D296A&eventuserid=29053425
Click on the Launch Presentation button.


VIII. New Business, Mr. Larry Sayers, Technical Committee Chair

Mr. Sayers asks if Committee members request agenda items for presentation at the next meeting. He receives no response.

IX. Call to the Public, Mr. Larry Sayers, Technical Committee Chair

Mr. Sayers asks if anyone from the public would like to address the Committees. He receives no response.

X. Date-Time-Location of Next Meeting(s)

Joint User/Technical Committee Meeting
TBD
Pima County Sheriff’s Department
Administration Building, 3rd Floor
1750 E. Benson Highway, Tucson

XI. Adjournment

Meeting adjourns at 3:46 p.m.

Minutes prepared by: Catherine Hanna