

**City of Milpitas
Approved Minutes
Telecommunications Commission
April 18, 2011**

I. Call to Order & Roll Call:

Commissioner N. Gupta called the meeting to order.

Members Present W. Lam, S. Ahjua, R. Shaw, N. Gupta, S. Bansal, K. Bohan, D. Lax

I.S. Staff: B. Marion, E. Pasion

City Council: A. Polanski

Members Absent: A. Alcorn, D. Gupta, H. Tran, I. Munir

II. Pledge of Allegiance:

The members of the Commission recited the Pledge of Allegiance.

III. Announcements:

Council representative Polanski noted that the 211 outreach program was to provide contact information on services that are available to Milpitas and Santa Clara County residence. The city of Milpitas was providing information on the 211 program through its website and cable channel. She corrected her statement from last month's meeting clarifying that 211 was not emergency information contact number.

Councilmember Polanski also shared a message from Mayor Esteves regarding email messages. She asked if an e-mail address could be added to the city's webpage that would be addressed to city council members, for citizens to leave comments on future agenda items and comments. This e-mail address would be used as a centralized area for comments and review of agenda suggestions.

IV. Approval of the Agenda:

Commissioner N. Gupta and S. Bansal recommended amending the order of agenda items 1 and 3. They recommended discussing agenda 3 as the first agenda and agenda item 1 at the third item.

Motion to approve the agenda as amended.

M/S S. Bansal / W. Lam Ayes: 7

V. Approval of the Minutes:

Commissioner Bansal noted the March 21 minutes should have noted that Chair Alcorn added that comments from Mayor's Esteves recommendation of reviewing infrastructure technology by the commission.

Motion to approve the minutes as corrected.

VI. Citizen's Forum:

No comments made for the record.

VII. New and Continued Business:

1. Voice and Data Infrastructure Presentation

Matthias Schwarz, Telecommunications Manager with the Information Services department, provided a detailed summary of the city's existing telecom infrastructure. He detailed the development and growth of the city's data and voice networks and provided an outlook on the existing infrastructures.

Mr. Schwarz provided a detailed history of the city's existing fiber optic communications network that connects most of the city's main public buildings and public safety facilities, including fire stations 2, 3, and 4. He also noted that the city's fiber optic network connects the Midtown Garage, Great Mall Police Substation and Sal Carolice senior center. The city currently operates several microwave links, two of which, connects the Milpitas Sports Center facilities and the McCarthy Ranch main sewer lift station located west of Interstate 880. Another microwave link is operating on the top of the Crowne Plaza Hotel. Finally, microwave link operates on Frazier Peak providing connectivity to Santa Clara County public safety services.

In the area of voice and data, he reported that the city's existing voice network was operating on CAT5e wiring, and CAT6 in the most recently built facilities, such as the Midtown Garage and Barbara Lee Senior Center. Historically, a transition to move the city's voice services, from then Pacific Bell began, in the late 90's. The city installed its first PBX telephone switches in 1998. The three PBX switches were located at Milpitas City Hall, Fire Station One and at the City's data center at 1265 North Milpitas Boulevard. Over time an aggressive replacement program to replace existing copper wire phone lines with new fiber optic cables within all city buildings was undertaken. The end result was the migration off of costly leased T1 carrier lines on to city owned fiber optic lines. A new voice messaging system and telephone network was launched throughout all city building as a result of the new PBX system.

The City's fiber optic network continues to evolve since its inception in the late 90's. Staff continues to negotiate with regional telecommunications providers who seek access to the City's rights-of-way and avoid costly time delays with their fiber construction and installations. The city benefits by receiving newer higher count fiber optic cables that would be used later on for future expansion of technology services throughout the city.

Currently, staff is working on completing incremental upgrades throughout the city's data and voice network. The city's

Community Center and Fire Stations 2, 3, and 4 will require a full replacement of its data and voice networks at those locations. However, a funding source to replace the aging equipment, for those locations, has not been determined. Meanwhile, the minor improvements are being made to the city's Data Center, Police, Public Works and Information Services center.

Staff presented to the commission an outlook of what is to come involving the life expectancy of the city's data and voice equipment. Even with the continued management and maintenance of the existing data and voice equipment the reality of hardware failure looms. The prospects of available spare replacement parts is also becoming problematic as vendors are migrating away from servicing older equipment and service contracts are no longer a cost effective means of doing business. Staff estimates that the data network has a practical end-of-life in 2017. As for the voice network life expectancy, the equipment continues to operate effectively but on borrowed time. The voice network is proprietary system with no full-system spares. Staff has been able to do partial replacement of certain components but with limitations and an upgrade of the existing equipment is impractical. It is estimated that by 2012-13 the voice network will require a consideration for replacement. Staff has looked at the future use of VoIP technology as a possible option but would not rule out other options such as traditional telephone services, hybrid and software phone options. The issues involving VoIP technology is the overall benefits that may not be of an advantage to the city's existing and anticipated needs. The estimated costs to implement a VoIP telephone system is around \$550,000 or \$130,000 on a five-year lease system. The system would require maintenance contract or in-house training.

Commissioner Bohan asked of the maintaining a system that is nearing an end-of-life expectancy. Staff noted that it is an unknown that the equipment may fail the next day or in five years. The matter of parts availability is a major concern in the event of a needed replacement part. Commissioner Lam asked of quantitative performance measurements. Staff noted that it does track the number of users and hours that all the data center equipment uses on a weekly basis. Commissioner Lam also asked of the use of cloud computing. Staff noted Granicus web streaming service as one example of current use of cloud computing. As for future use the city has not determined its viability use since it deals with sensitive data and records.

Commissioner Bansal noted that the existing PBX phone network will eventually live its natural course. The commission will need to research and recommend a viable option for the future and consider its overall cost effectiveness and savings of operating PBX system compared to a VoIP system. Staff added that the network is more critical to address and implement and that planning for a VoIP phone network would be planned in parallel which could be integrated with the city's data network.

Commissioner Lax asked of the time frame of implementation given that network and VoIP technology change overtime. Staff

notes that an ideal time frame would be three years but beyond that networking and VoIP technology begins to divert and compatibility becomes even more difficult to integrate. Staff added the City's current network is working effectively to serve the business needs of the city for the next several years.

Commissioner Ahuja added can the city's network be able to address services to commercial businesses and market it to potential future businesses locating in Milpitas. Staff noted that there are a number of commercial businesses that are capable of commercial businesses meeting that needs for high-speed data. However, the city's operating a free public wireless network for casual users and much smaller operations that may meet their needs.

Commissioner N. Gupta requested that a copy of the presentation be emailed to the all the commissioners. Staff would email the presentation after the meeting.

Mr. Marini, a member from the audience, asked if there would be discussion of the water and sewage rates web ballot and noted it was on the discussion of the agenda. Councilmember Polanski and staff noted that it was not on that agenda for discussion. He was referring to the commission minutes from the February meeting. Staff would clarify water and sewer web ballot issue after the meeting had concluded.

Motion to note, receipt and file.

M/S S. Bansal / W. Lam Ayes: 7

2. Discussion Five-Year Master Plan

Staff provided an outline for planning of the new five-year telecom master plan for the commission's review and recommendation. Staff was seeking final approval for a weekend work session and meeting date to develop the telecom master plan. The initial planned meeting date was for Saturday, July 9, 2011.

The members of the commission no further comment on the proposed meeting date and recommended to meet on Saturday, July 9, 2011. Staff would coordinate on the meeting location and start time.

Motion to schedule the Telecom Master Plan work session for the morning of Saturday, July 9, 2011.

M/S S. Bansal / W. Lam Ayes: 7

3. Infrastructure Technology Discussion.

Commissioner N. Gupta requested for volunteers to serve on the infrastructure technology subcommittee.

Commissioner Lam noted he would volunteer on the infrastructure technology subcommittee. Staff added that Chair Alcorn would also volunteer on the infrastructure technology subcommittee. The commissioners also volunteers D. Gupta to serve on the infrastructure technology subcommittee.

Motion to create an infrastructure subcommittee consisting of members Albert Alcorn, William Lam and Dinesh Gupta.

M/S S. Ahjua / D. Lax Ayes: 7

4. March 2011 Information Services Report

Staff provided a summary of the activities from the Information Services Department for the month of March.

Staff reported that the MCTV26 video server was sent out for repairs do to a damaged mother board and to increase the existing storage capacity of the hard drives. Staff was also reviewing the current Granicus web streaming services and was looking at hardware and monthly service costs.

Staff continues to work on the ECOM microwave network technology expansion with the various public safety agencies in Santa Clara County.

Staff has also added new mapping features through the use of Google maps to the city's GIS data base.

The city's website was given an award for best website. The award was noted on the San Francisco Chronicle's SFGate website.

Finally, staff has started working on developing a request for proposal for consulting services to evaluate the existing audio visual equipment at Milpitas city hall.

Motion to note, receipt and file.

M/S S. Ahjua / S. Bansal Ayes: 7

5. Round Table Discussion

Commissioner Bansal noted Council member's Polanski's request for the creation of an e-mail address for the comments and suggestions for future discussion.

Staff added that an e-mail address can be developed but first must be tested before publishing.

VIII. Adjournment of Meeting:

Meeting adjourned to May 16, 2011.