

**Council Meeting: April 8, 2008****SUBJECT: Silicon Valley Regional Interoperability Project Update and Request for Funding to Support the 2008 Emergency Communications (ECOMM) Work Plan****REPORT IN BRIEF**

Steering Committee Members of the Silicon Valley Regional Interoperability Project (SVRIP) presented the 2008 Project Work Plan to the Santa Clara Cities Managers' Association (SCCMA) on February 13, 2008 (Attachment A). The 2008 Work Plan was approved by SCCMA Members, and as part of that approval, a "per capita" formula for the distribution of maintenance costs for a five-year period, to begin in FY 2009/2010, was approved for the Emergency Communications (ECOMM) Microwave Network System element of the Work Plan. SCCMA directed that SVRIP review the ongoing maintenance funding formula to ensure equity among participating agencies. Sunnyvale's "per capita" share of maintenance costs will be approximately \$16,738 in FY 2009/2010 and will increase to \$24,288 in FY 2010/2011 due to the transfer of hardware and software being moved from an "under warranty" status to the maintenance agreement, and will be inflated thereafter by approximately five percent annually (Attachment B). Additionally, the SCCMA voted to approve adding an Executive Director to oversee the ECOMM Project and to provide backfill funding, if necessary, to cities providing significant staff effort to the project, at a cost of approximately \$250,000 annually; Sunnyvale's share of this amount is \$13,157 annually, beginning in FY 2008/2009.

Staff is requesting that Council confirms to continue as a participant of SVRIP and approves annual funding within the Department of Public Safety Operating Budget in the amount of \$13,157 beginning in FY 2008/2009 to fund the Executive Director position and support project management and oversee the ECOMM Project; approve additional funding in the amount of \$16,738 for FY 2009/2010 and \$24,288 in FY 2010/2011, to fund Sunnyvale's per capita share of the ECOMM System maintenance, there will be a five percent increase per year after FY 2010/2011 for the remainder of the agreed upon five year period; and direct staff to return to Council at the end of the five year period, to confirm the funding distribution formula for system maintenance is equitable to all participating agencies.

Silicon Valley Regional Interoperability Project Update and Request for Funding to Support the 2008 Emergency Communications (ECOMM) Work Plan

April 8, 2008

Page 2 of 7

BACKGROUND

In 1998, eighteen Santa Clara municipalities, representing thirty law enforcement, fire, and emergency medical services agencies partnered together to enhance interagency coordination and communication between public safety agencies. These eighteen entities each contributed \$19,000 and formed the SVRIP to focus on radio and data interoperability. The terrorist attacks of September 11, 2001, highlighted the need for police, fire, and medical services responders to be able to communicate by radio and to share data to ensure community safety. The SVRIP had already recognized those same needs.

The SVRIP began to focus on both voice and data interoperability in Santa Clara County and was able to secure significant funding as Federal Department of Homeland Security Grant Funding began to provide support for such initiatives. Since 2001, the SVRIP has been the recipient of almost \$20 million dollars in Grant Funds that have been and are being used on a variety of projects that continue to enhance the ability of emergency responders to communicate within the region. Examples include the development of the Bay Area Mutual Aid Communications Channel (BAYMACS), which is a single radio channel that can connect disparate radio frequencies allowing for the management of large scale events across jurisdictions; and a Voice Over Internet Protocol (VOIP), a “proof of concept” project that connected Sunnyvale’s 400MHz radio frequency with Santa Clara’s 800MHz radio frequency, using internet transmissions. Pursuit of the VOIP project will allow for the connection of phones and radio over the internet. In effect, authorized law enforcement users could “dial-in” over a phone and gain access to secure radio frequencies. Each of the SVRIP Projects have been “stepping stones,” and have provided a foundation for larger projects.

Each year, the SVRIP, now functioning under a Joint Funding Agreement signed by participating agencies, provides a Work Plan to the SCCMA. The SVRIP is supported by a Steering Committee comprised of representatives from the Santa Clara County Police and Fire Chiefs’ Associations, the SCCMA, the Office of the County Executive and the San Jose City Manager’s Office. The Work Plan is reviewed, modified, and approved. The SVRIP provides periodic update on work progress to the SCCMA as appropriate.

This is the first time the SVRIP has requested ongoing project support from participating entities, because the ECOMM Project is now nearing its implementation phase. Staff believes that continued participation in the ECOMM and other regional emergency communication projects is critical to Santa Clara Valley residents as well as police, fire, and medical responders.

EXISTING POLICY

4.1 Law Enforcement Sub-Element

Goal D: Conduct planning and administration that incorporates interaction with other city departments as well as other agencies, both public and private, where mutual concerns exist which could have impact on the delivery of law enforcement services.

Policy D.2 Provide effective and efficient management of Public Safety resources.

Action Statement D.2d. Monitor the development of technology and apply appropriate technology in order to enhance Police Services.

Policy D.1 Coordinate law enforcement planning with local, regional, State and Federal plans.

4.1D.1d. Establish and maintain agreements (plans) for Mutual Aid and Participate in statewide Law Enforcement Mutual Aid Plan.

4.2 Fire services

Goal D: Provide planning and administration while maintaining liaison with other agencies and organizations to provide a quality level of fire services to the community.

Policy D.1. Adjust to changing service requirements, new laws, regulations, policies, technologies, and changes occurring in the community.

Action Statement D.1a. Develop and maintain data processing systems capable of providing information for operational and management analysis.

4.3 Support Services

Policy B.1 Maintain knowledge of technological advances, current trends and issues that impact Public Safety services.

Action Statement B.1c. Maintain active representation in professional organizations to facilitate information exchange.

Legislative Action Positions

4.1.25 Support a strong intergovernmental partnership that ensures effective communications, long-term financial support to municipalities for their role in national defense, and true collaboration in preventing and responding to any acts of terrorism in America's cities and towns.

4.1.33 Support resolving interoperability problems that affect emergency communications systems, remedying the current shortage of broadcast spectrum availability for public safety needs, and providing funding for interoperable equipment.

4.3.20 Continue to support interoperability initiatives as they relate to public and private industry. Interoperability is the ability of diverse agencies (police, fire, EMS, and local government) to communicate directly with each other by radio.

4.3.21 Support efforts by congress to assist state and local governments with developing and funding integrated criminal justice information systems, and further to enact legislation that will establish uniform standards for criminal justice systems and provide financial assistance to state and local governments wiling to implement integrated criminal justice information systems that incorporate the established standards.

DISCUSSION

Operational and Policy Issues

Although the Members of the SCCMA, in their role of providing operational management to their respective cities, towns, and to the County, approved the SVRIP 2008 Work Plan, staff believes it is in the Council's best interest to understand the Work Plan and to ensure the elements within the Plan meet Council's Policy direction.

Further, while staff is confident that the goals of the SVRIP and the proposed projects align with the current Policy of the City, staff believes that with any major advance in technology, there will be costs associated with implementation and ongoing maintenance and/or replacement. The funding request for the ECOMM Project is the first such request, and staff believes there is a likelihood future projects will also come with a shared cost to participating agencies. Staff is committed to keeping Council apprised of those costs and providing the appropriate opportunities for Council consider the cost and benefit of each project and to provide direction.

ECOMM Executive Director

All interoperability projects undertaken thus far have utilized personnel from several participating agencies. Their work on interoperability projects has typically been completed as a collateral assignment to their role within their agency. As examples, Santa Clara Police Chief Steve Lodge drafted many of the grant requests received to date, and often met with Federal officials to "lobby" for the collective interests within the region; Cheryl Contois, Communications Manager for the City of Palo Alto, has taken the lead role in managing several of the contracts that were awarded through SVRIP, as well as technology demonstration projects that laid the foundation for current interoperability projects. Participating agencies have found over time, that as projects move forward, individual cities cannot continue to provide the support that may be

Silicon Valley Regional Interoperability Project Update and Request for Funding to Support the 2008 Emergency Communications (ECOMM) Work Plan

April 8, 2008

Page 5 of 7

required because the projects are simply too large and too time consuming. As shown in Attachment A, an ECOMM project Manager, employed by the City of San Jose using Department of Homeland Security grant funding, is providing project implementation oversight, however this position will terminate when the system is up and running. In 2006, the SVRIP Steering Committee recognized the workload associated with the multitude of projects and suggested funding an Executive Director position that would oversee not only ECOMM, but all other SVRIP Interoperability Projects. The job duties and cost distribution formula is provided in Attachment C. The SVRIP Steering Committee scoped and benchmarked the position at approximately \$150,000 annually for one full time equivalent; and added \$100,000 in contingency funding to provide reimbursement to agencies that provide significant or extraordinary support to the project. The SVRIP Steering Committee believes that this position will be needed for at least five years as build out of both voice and data projects move through implementation phases. The longer-term need for an Executive Director has yet to be determined.

Highlights of SVRIP Projects

The 2008 SVRIP Work Plan for the ECOMM Project (Attachment A) provides an overview of the project, along with key activities that will occur in the coming months. The project is essentially a Microwave network connecting dispatch centers and other key stakeholders throughout Santa Clara County. ECOMM provides a high capacity digital connection that will eliminate reliance on phone circuits through hard wire lines. This project could be completed by December 2008. This project is dependant on the construction/installation of microwave antennas at sites throughout Santa Clara Valley. As an example, the project will add a connection on the Emergency Communications Tower at Public Safety that will “communicate” with sites in other cities, while other cities including Mountain View, Campbell, and Palo Alto will require the addition of a monopole to ensure their connectivity is in place. Grant Funding will cover these associated project costs. Once complete, the ECOMM Microwave Network will allow for the secure transmission of voice and data including sensitive information such as law enforcement databases, photos, and fingerprints.

The SVRIP will continue to work on the Santa Clara Valley Regional Communications System (SVRCS), a hybrid digital radio communication system that is exploring the feasibility of connecting disparate radio frequencies through a technology called P25, essentially a “black box” that can capture a radio signal from a frequency in the 400 MHz range and connect that signal to a frequency in the 800MHz range. This is important because radio frequencies in Santa Clara Valley range from 400MHz in Sunnyvale, to 800 MHz in Santa Clara. Simultaneously, the SVRIP is seeking funding through Federal Grants that would allow every agency in the county to migrate radio frequencies to the 700MHz range that is not yet available, but will soon be released for government use by the Federal Communications Commission. Use

Silicon Valley Regional Interoperability Project Update and Request for Funding to Support the 2008 Emergency Communications (ECOMM) Work Plan

April 8, 2008

Page 6 of 7

of 700MHz frequencies would allow for the expansion of radio channels, which are otherwise unavailable in other spectrums of radio frequencies. As an example, Public Safety is currently limited to four licensed frequencies without possibility of expansion in our current 400MHz range.

The SVRIP will also continue work on data sharing via CAD to CAD links in 2008. A project is currently underway and has demonstrated success linking the CAD Systems in the cities of San Jose, Milpitas, and Campbell. This project will be particularly beneficial to the region by providing automated links between dispatch centers and between field personnel, better allowing for the sharing of resources.

The final SVRIP Project of note that will continue in 2008 is the RMS to RMS Project. This project will provide significant gains for law enforcement by linking Records Management Systems between cities (RMS to RMS). The primary benefit is the sharing of the voluminous information gathered by individual law enforcement agencies that will be automatically linked. As an example, a person who might be stopped in Sunnyvale as a result of their being involved in suspicious activity may be linked to the same suspicious activity in another city. At present, this link is not established without phone contact between law enforcement agencies. RMS to RMS automated links provide the best opportunity for police to recognize patterns of suspicious activity that may be related to crimes.

FISCAL IMPACT

With Council's approval, funding for the SVRIP ECOMM Project will be included in the Department of Public Safety Operating Budget. Beginning in FY 2008/2009, annual funding in the amount of \$13,157 is needed for the apportioned cost of the ECOMM Executive Director. In FY 2009/2010, an additional \$16,738 is needed for partial system maintenance; and in FY 2010/2011 a total of \$24,288 (inflated five-percent annually) is necessary to fund complete system maintenance.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall, in the Council Chambers lobby, in the Office of the City Clerk, at the Library, Senior Center, Community Center and Department of Public Safety; posting the agenda and report on the City's Web site; and making the report available at the Library and the Office of the City Clerk.

ALTERNATIVES

1. Council confirms to continue as a participant of SVRIP and approves annual funding for the SVRIP ECOMM Project in the Department of Public Safety Operating Budget; beginning in FY 2008/2009, \$13,157 for the apportioned cost of the ECOMM Executive Director. In FY 2009/2010, an

Silicon Valley Regional Interoperability Project Update and Request for Funding to Support the 2008 Emergency Communications (ECOMM) Work Plan

April 8, 2008

Page 7 of 7

additional \$16,738 for partial system maintenance; and in FY 2010/2011 \$24,288 (inflated five-percent annually) to fund complete system maintenance; and directs staff to return to council at the end of the five year period, to ensure the funding distribution formula for system maintenance is equitable to all participating agencies.

2. Council does not approve funding the SVRIP ECOMM Project in the Department of Public Safety Operating Budget.

RECOMMENDATION

Staff recommends Alternative #1, Council confirms to continue as a participant of SVRIP and approves annual funding for the SVRIP ECOMM Project in the Department of Public Safety Operating Budget; beginning in FY 2008/2009, \$13,157 for the apportioned cost of the ECOMM Executive Director. In FY 2009/2010, an additional \$16,738 for partial system maintenance; and in FY 2010/2011 \$24,288 (inflated five-percent annually) to fund complete system maintenance; and directs staff to return to council at the end of the five year period, to ensure the funding distribution formula for system maintenance is equitable to all participating agencies.

Reviewed by:

Don Johnson, Director, Public Safety

Prepared by: Don Johnson, Director, Public Safety

Reviewed by:

Mary J. Bradley, Director, Finance

Approved by:

Amy Chan
City Manager

Attachments

- A. 2008 SVRIP Work Plan for the ECOMM Project
- B. ECOMM Annual Maintenance Costs
- C. SVRIP Dedicated Staff Responsibilities and Projected Costs

**Silicon Valley Regional Interoperability Project
Santa Clara County/Cities Managers' Association
FY 2007-08 SVRIP WORKPLAN**

Project / Description / Key Activity	Players	Cost / Sources By Key Activity	Projections and Funding
<p>Emergency Communications (E-Comm) - Microwave network connecting dispatch centers and other key stakeholder locations throughout Santa Clara County. Additional microwave connections to Bay Area Regional Microwave Network and Tri-MAC microwave system.</p> <p><u>Operational Benefits:</u></p> <ul style="list-style-type: none"> ▪ Connects 9-1-1 centers and provides a high-capacity digital connection having data bandwidth equivalent to 672 simultaneous conversations ▪ Examples of applications/systems can run or be redirected to E-Comm (e.g., CLETS (law enforcement database information), AFIS (fingerprints), Amber Alerts ▪ Cost avoidance on current expenditures (e.g., phone circuits to receiver sites) <p>ACTIVITY:</p> <ol style="list-style-type: none"> 1. NEPA final from Dept of Justice 2. City Council authorized contract amendment with Harris 12/11/07 3. Mountain View, Campbell and Los Alto approval of 100-foot monopole 4. Kick off meeting with Harris 5. Soil investigations 6. Perform path surveys for Los Gatos 7. Public hearing for Los Altos 8. 2007 SUASI MOU complete, appropriation placed on Council agenda by Jan 2. Begin construction and installation 	<ul style="list-style-type: none"> ✓ E-Comm Project Manager ✓ SVRIP Network Participants (Lease Approval) ✓ SVRIP Vice-Chair (Network Security) ✓ SVRIP User Group Committee (being established) ✓ Harris (contractor) ✓ Northrop Grumman (as needed) ✓ Bay Area SUASI for Bay Area Loop connection ✓ Silicon Valley Water District (for SVWD connection) 	<p>\$10.1 million Department of Homeland Security, US Department of Justice COPS, SB720 and Local General Fund Dollars (San Jose and Palo Alto only)</p> <p>Project Manager - \$250,000 (employed by San Jose Police Department paid for with DHS Urban Area funding)</p> <p>Ongoing Maintenance: Distributed cost amongst Network Participants (NP) beginning in Fiscal Year 2009-10, based on Per Capita formula – pending Cities Managers' Assn. approval on February 13, 2008.</p> <p>FY08-09: \$218,531 (Prepaid with federal SUASI dollars in current contract)</p> <p>FY09-10: \$218,531 FY10-11: \$317,101 FY11-12: \$332,956 FY12-13: \$349,604</p>	<p>BEST CASE – Construction complete and Network operational by December 2008</p> <p>BEST GUESS- Successful Project Completion</p> <p>WORST CASE – Construction delays at key sites</p> <p>PROJECT STATUS – Harris contract approval, site sampling and construction efforts beginning</p> <p>FUNDING: \$10.1 million (Core 23 sites fully funded)</p> <p>Additional network connections – Silicon Valley Water District (funded by Water District); Bay Area Loop (funded by SUASI); TriMAC (funded by UASI) Future Sites: SJSU, VTA</p> <p>ONGOING MAINTENANCE: Per Capita Distribution</p> <p>SOURCE – COPS Department of Justice and DHS SUASI, plus Local Match from SB720 funds, San Jose and Palo Alto</p>

**SILICON VALLEY REGIONAL INTEROPERABILITY PROJECT
 ECOMM ANNUAL MAINTENANCE
 BY NETWORK PARTICIPANT JURISDICTION**

Network Participant	Population	Per Capita Formula	FY 2008-09**	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13
Campbell	38,300	2.21%	\$4,838	\$4,838	\$7,021	\$7,372	\$7,740
Cupertino	52,167	3.02%	\$6,590	\$6,590	\$9,562	\$10,041	\$10,543
Gilroy	44,975	2.60%	\$5,681	\$5,681	\$8,244	\$8,656	\$9,089
Los Altos	27,722	1.60%	\$3,502	\$3,502	\$5,082	\$5,336	\$5,602
Los Altos Hills	8,229	0.48%	\$1,040	\$1,040	\$1,508	\$1,584	\$1,663
Los Gatos	28,910	1.67%	\$3,652	\$3,652	\$5,299	\$5,564	\$5,843
Milpitas	65,049	3.76%	\$8,217	\$8,217	\$11,924	\$12,520	\$13,146
Monte Sereno	3,503	0.20%	\$443	\$443	\$642	\$674	\$708
Morgan Hill	34,918	2.02%	\$4,411	\$4,411	\$6,401	\$6,721	\$7,057
Mountain View	72,006	4.16%	\$9,096	\$9,096	\$13,199	\$13,859	\$14,552
Palo Alto	60,465	3.50%	\$7,638	\$7,638	\$11,083	\$11,638	\$12,220
San Jose	924,950	53.47%	\$116,844	\$116,844	\$169,547	\$178,025	\$186,926
Santa Clara	105,831	6.12%	\$13,369	\$13,369	\$19,399	\$20,369	\$21,388
Saratoga	30,482	1.76%	\$3,851	\$3,851	\$5,587	\$5,867	\$6,160
Sunnyvale	132,501	7.66%	\$16,738	\$16,738	\$24,288	\$25,502	\$26,778
Unincorporated (County)	99,909	5.78%	\$12,621	\$12,621	\$18,314	\$19,229	\$20,191
TOTAL Per Capita Distribution	1,729,917	100.00%	\$218,531	\$218,531	\$317,101	\$332,956	\$349,604

** Included (Prepaid) as part of Harris Contract

SILICON VALLEY REGIONAL INTEROPERABILITY PROJECT
DEDICATED STAFF RESPONSIBILITIES AND PROJECTED COSTS

Executive Director

The Executive Director is responsible for advancement of SVRIP projects and initiatives. The Director must have a thorough knowledge of SVRIP goals and complete understanding of the status of each project. He/she must be thoroughly familiar with SVRIP's financial situation and the financial impact of each project. The incumbent must establish and maintain a good rapport with other organizations and individuals working in the interoperability field. He/she may supervise or liaison with contract employees hired for various projects. He/she reports to the Chair of the Steering Committee. The incumbent must demonstrate strong ethical, professional, and service-oriented leadership. This position requires in and out-of-state travel. The incumbent is an "at will" contract employee and serves at the discretion of the Steering Committee.

- Responsible for educating Steering Committee on relevant technology initiatives
- Steering Committee Agenda Preparation and Coordination
- Steering Committee Meeting Minutes Review
- Coordination with Project Attorney on Agreements
- Coordination with Outside Network Participant agencies on Agreements/contracts
- Liaison and coordinate legislative outreach at state and congressional level
- Prepare Annual Workplan for City Managers Association
- Represent SVRIP at conferences and workshops
- Grants Administrator for Project:
 - ✓ Writing Grants
 - ✓ Coordination with Northrop Grumman (SVRIP Systems Integrator) on grant information
 - ✓ Liaison with UASI-SHSGP other grant sources for auditing / payments
 - ✓ City of Mountain View Auditor liaison on federal grants
 - ✓ Tracking/monitoring new grants or funding sources
- Coordinate invoice payments with City of Mountain View Finance
- Track and coordinate equipment purchases with City of Mountain View Purchasing (or other agency purchasing – San Jose for UASI purchases or County of Santa Clara for SHSGP purchases)
- Draft Project Correspondence or coordinate Project Correspondence
- Represent Project at meetings, including but not limited to:
 - ✓ Bay Area Super UASI Interoperable Communications Working Group
 - ✓ California Statewide Interoperability Executive Committee (CALSIIEC)
 - ✓ CALSIIEC Capitol-Bay Area Region Working Group
 - ✓ San Jose UASI
 - ✓ SAFECOM Executive Council
 - ✓ COPS Interoperable Communications Technical Assistance Program Grants
 - ✓ Other Miscellaneous Interoperability or Department of Homeland Security meetings
- Maintain SVRIP documentation
- Provide or coordinate Stakeholder (Association or other) briefings
- Prepare briefing materials
- Primary liaison with National Capital Region (NCR) on Broadband initiative
- Coordinates all pilot activities and coordinates with Sr. Project Manager on Northrop Grumman needs
- Liaison with Business Development for Northrop Grumman
- Primary Point of Contact with DHS ICTAP and OIC/SAFECOM program staff
- Congressional liaison on project issues
- Other duties as assigned

SILICON VALLEY REGIONAL INTEROPERABILITY PROJECT
DEDICATED STAFF RESPONSIBILITIES AND PROJECTED COSTS

Senior Project Manager

The Senior Project Manager is a voting member of the Steering Committee and has overall responsibility to coordinate contractors and vendors working on SVRIP initiatives, as well as oversee individual project managers. Duties include, but are not limited to:

- Development of scope of services and/or contract Statement of Work and ensures compliance of contracts and agreements
- Serve as primary liaison with Northrop Grumman (Systems Integrator)
- Oversight and management of project deadlines
- Participate in regional interoperability related working groups
- Attend and participate in meetings related to individual project initiatives and represents SVRIP Steering Committee across disciplines and jurisdictions
- Coordinate and communicate with Network Participant agency points of contact
- Other duties as assigned by Steering Committee

Other Dedicated SVRIP Staff

Although most of the staff serving on the Steering Committee or otherwise involved in the SVRIP, work on this initiative as a collateral assignment in the spirit of regional coordination and collaboration. However, at the discretion and upon pre-approval by the Steering Committee, other dedicated Network Participant staff *may* be eligible for paid outside contract services and/or agency reimbursement include, but are not limited to:

- Legal resources (review and development of contracts/agreements)
- Other Project related legal services
- Fiscal staff involved in audits of project account
- Project Management duties of individual SVRIP initiatives
- Staff actively participating in individual SVRIP initiatives

PROPORTIONATE SHARE – SVRIP PROJECT COSTS* (RECOMMENDED)

Network Participant	Cost/Share
CAMPBELL	\$13,157
GILROY	\$13,157
LOS ALTOS	\$13,157
LOS GATOS	\$13,157
MILPITAS	\$13,157
MORGAN HILL	\$13,157
MOUNTAIN VIEW	\$13,157
PALO ALTO	\$13,157
SAN JOSE	\$13,157
SAN JOSE STATE UNIVERSITY	\$13,157
SANTA CLARA	\$13,157
SANTA CLARA COUNTY	\$13,157
SANTA CLARA VALLEY WATER DISTRICT	\$13,157
SOUTH SANTA CLARA COUNTY	\$13,157
SUNNYVALE	\$13,157
CUPERTINO	\$13,157
LOS ALTOS HILLS	\$13,157
MONTE SERENO	\$13,157
SARATOGA	\$13,157
TOTAL Distribution	\$250,000

* Whenever possible NP costs will be reduced through the use of federal planning dollars