Approval Authority Meeting
Thursday, November 8, 2012
10:00 a.m.

LOCATION
Federal Bureau of Investigation
450 Golden Gate Ave., San Francisco, CA 94102
2nd Floor, Hawaii Conference Room
AGENDA

CLOSED SESSION – 10:00 a.m.

1. CALL TO ORDER
ROLL CALL

UASI Chair	Anne Kronenberg, City and County of San Francisco
UASI Vice-Chair	Rich Lucia, County of Alameda
Member	Raymond Guzman, City and County of San Francisco
Member	Renee Domingo, City of Oakland
Member	Chris Godley, City of San Jose
Member	Emily Harrison, County of Santa Clara
Member	Mike Casten, County of Contra Costa
Member	Bob Doyle, County of Marin
Member	Sherrie L. Collins, County of Monterey
Member	Carlos Bolanos, County of San Mateo
Member	Mark Aston, County of Sonoma
Member	Brendan Murphy, CalEMA
General Manager	Craig Dziedzic

ITEM: RISK AND CAPABILITY ASSESSMENT
(Document for this item is a report from Northern California Regional Intelligence Center Director, Mike Sena.)

PUBLIC COMMENT ON CLOSED SESSION ITEM
Prior to adjournment into Closed Session, the public may speak on items to be addressed in Closed Session.

ADJOURNMENT TO CLOSED SESSION: THREAT TO PUBLIC SERVICES OR FACILITIES CONSULTATION WITH MIKE SENA, NORTHERN CALIFORNIA REGIONAL INTELLIGENCE CENTER DIRECTOR, PURSUANT TO CALIFORNIA GOVERNMENT CODE SECTION 94957(a).

CONVENE OPEN SESSION – 10:30 a.m. or later, immediately upon conclusion of the Closed Session

2. **APPROVAL OF THE MINUTES** (Discussion, Possible Action)
   Discussion and possible action to approve the draft minutes from the October 11, 2012 regular meeting or take any other action related to the matter. *(Document for this item includes draft minutes from October 11, 2012.)* 5 mins.

3. **GENERAL MANAGER'S REPORT** (Discussion, Possible Action)
   The General Manager will give an update on the FY 12 UASI grant. Possible action to approve the job description for the Regional Hub Planners or take any action related to the matter. (*Documents for this item is a report from Craig Dziedzic)* 5 mins.

4. **REPORT FROM THE ADVISORY GROUP** (Discussion, Possible Action)
   Report from the Chair of the Advisory Group. Possible action to approve any recommendation(s) or take any other action related to this matter. (*Document for this item is a report from Mike Sena*) 10 mins.

5. **B AY AREA EFFECTIVENESS REPORT** (Discussion, Possible Action)
   Josh Filler will provide a detailed report on the Bay Area Effectiveness Report. Possible action to support any recommendation(s) or take any other action related to this matter. *(Document for this item is a report from Catherine Spaulding and Josh Filler)* 10 mins.

6. **BAY AREA HOMELAND SECURITY STRATEGY** (Discussion, Possible Action)
   Josh Filler will provide an update of the Bay Area Homeland Security Strategy. Possible action to support any recommendation(s) or take any other action related to this matter. *(Document for this item is a report from Josh Filler)* 10 mins.

7. **2013 PRIORITY CAPABILITY OBJECTIVES** (Discussion, Possible Action)
   Catherine Spaulding will provide a report on the 2013 Priority Capability Objectives. Possible action to support any recommendation(s) or take any other action related to this matter. *(Document for this item is a report from Catherine Spaulding)* 10 mins.

8. **IECGP AND QUARTERLY TRAVEL REPORT** (Discussion)
   Staff will provide an update on the RCPGP Conference. *(Document for this item is a report from Tristan Levardo)* 5 mins.

9. **PROJECT PROPOSAL UPDATE** (Discussion)
   Staff will provide an update of the project proposal process. Possible action to approve any recommendation(s) or take any other action related to this matter. *(Document for this item is a report from Janell Myhre.)* 5 mins.

10. **REGIONAL CATASTROPHIC PREPAREDNESS GRANT PROGRAM (RCPGP) PROJECT UPDATES** (Discussion, Possible Action)
    Staff will provide an update of RCPGP projects. Possible action to approve any recommendation(s) or take any other action related to this matter. *(Document for this item is a report from Janell Myhre.)* 5 mins.

11. **REPORT FROM THE BAY AREA REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM JOINT POWERS AUTHORITY(BayRICS JPA)** (Discussion, Possible Action)
    Report from Barry Fraser regarding the BayRICS JPA. Possible action to approve the report or take any other action related to this matter. (*Document for this item is a report from Barry Fraser)* 10 mins.

12. **TRACKING TOOL** (Discussion, Possible Action)
    Review the tracking tool for accuracy and confirmation of deadlines. Possible action to add or clarify tasks for the Management Team or take other action related to the tracking tool. (*Document for this item is the UASI Approval Authority Tracking Tool.)* 5 mins.

13. **ANNOUNCEMENTS-GOOD OF THE ORDER**

14. **FUTURE AGENDA ITEMS** (Discussion)
    The Approval Authority members will discuss agenda items for future meetings.

15. **GENERAL PUBLIC COMMENT**
    Members of the Public may address the Approval Authority for up to three minutes on items within the jurisdiction of the Bay Area UASI Approval Authority.

16. **ADJOURNMENT**

If any materials related to an item on this agenda have been distributed to the Approval Authority members after distribution of the agenda packet, those materials are available for public inspection at the Department of Emergency Management located at 1011 Turk Street, San Francisco, CA 94102 during normal office hours, 8:00 a.m.- 5:00 p.m.

Public Participation:

It is the policy of the Approval Authority to encourage and permit public participation and comment on matters within the Approval Authority's jurisdiction, as follows.

- *Public Comment on Agenda Items*. The Approval Authority will take public comment on each item on the agenda. The Approval Authority will take public comment on an action item before the Approval Authority takes action on that item. Persons addressing the Approval Authority on an agenda item shall confine their remarks to the particular agenda item. For each agenda item, each member of the public may address the Approval Authority once, for up to three minutes. The Chair may limit the public comment on an agenda item to less than three minutes per speaker, based on the nature of the agenda item, the number of anticipated speakers for that item, and the number and anticipated duration of other agenda items.
- *General Public Comment*. The Approval Authority shall include general public *comment* as an agenda item at each meeting of the Approval Authority. During general public comment,

each member of the public may address the Approval Authority on matters within the Approval Authority's jurisdiction. Issues discussed during general public comment must not appear elsewhere on the agenda for that meeting. Each member of the public may address the Approval Authority once during general public comment, for up to three minutes. The Chair may limit the total general public comment to 30 minutes and may limit the time allocated to each speaker depending on the number of speakers during general public comment and the number and anticipated duration of agenda items.

- *Speaker Identification*. Individuals making public comment may be requested, but not required, to identify themselves and whom they represent.
- *Designated Public Comment Area*. Members of the public wishing to address the Approval Authority must speak from the public comment area.
- *Comment, Not Debate*. During public comment, speakers shall address their remarks to the Approval Authority as a whole and not to individual Approval Authority representatives, the General Manager or Management Team members, or the audience. Approval Authority Representatives and other persons are not required to respond to questions from a speaker. Approval Authority Representatives shall not enter into debate or discussion with speakers during public comment, although Approval Authority Representatives may question speakers to obtain clarification. Approval Authority Representatives may ask the General Manager to investigate an issue raised during public comment and later report to the Approval Authority. The lack of a response by the Approval Authority to public comment does not necessarily constitute agreement with or support of comments made during public comment.
- *Speaker Conduct.* The Approval Authority will not tolerate disruptive conduct by individuals making public comment. Speakers who use profanity or engage in yelling, screaming, or other disruptive behavior will be directed to cease that conduct and may be asked to leave the meeting room.

Disability Access

The UASI Approval Authority will hold its meeting at the Federal Bureau of Investigation 450 Golden Gate Ave., San Francisco, CA 94102.

In compliance with the Americans with Disabilities Act, those requiring accommodations for this meeting should notify Nubia Mendoza, at least 24 hours prior to the meeting at (415) 353-5223

Bay Area UASI Program
Approval Authority Meeting
Thursday, October 11, 2012 10:00 a.m.
Alameda County Sheriff's Office OES
4985 Broder Blvd.
Dublin, CA 94568

REGULAR MEETING MINUTES
DRAFT

1. Roll Call

Chair Kronenberg called the meeting to order at 10:07 am. UASI General Manager, Craig Dziedzic, took roll and Chair Kronenberg, Members Guzman, Collins, Godley, Domingo, Casten, Aston, and CalEMA member, Brendan Murphy, were present. Members Bob Doyle, Emily Harrison, Carlos Bolanos, and Vice Chair Lucia were absent, but their respective alternates Dave Augustus, Ken Kehmna, Mark Wyss, and Brett Keteles were present.

2. Approval of the Minutes

Chair Kronenberg asked the Board if they had any questions or changes to discuss. Representative Wyss requested an update to item 3. He noted that it indicates performance period for the planner position as June 1, 2012 to July 31, 2012 but the end date should actually be November 30, 2012. He requested that this be updated. Chair Kronenberg also noted that in the future, Approval Authority Meeting minutes will only include a brief synopsis and voting details. Chair Kronenberg directed Mr. Dziedzic to prepare the minutes in that manner for the next meeting.

Chair Kronenberg asked if there were any additional topics to discuss or any changes. Upon hearing none, she asked for public comment. Hearing no public comment, Chair Kronenberg asked for a motion to approve the minutes from the October 11, 2012 meeting.

Motion: Approve the minutes from the October 9 Approval Authority meeting.

Moved: Member Godley **Seconded:** Member Aston
Vote: The motion passed unanimously

Chair Kronenberg moved to item 3.

3. General Manager's Report

UASI General Manager, Craig Dziedzic, provided a report on the following items:

- Management Team Staff Update
- New website/logo
- FY 2013 UASI Grant update
- Recommend an approval for the Regional Hub Planners job description

Chair Kronenberg asked for public comment. Captain Kevin Jensen commented that the process of hiring regional planners would be a great idea and the work that the North Bay Hub planner has done should be replicated for the other planners.

Chair Kronenberg asked for a motion to approve the job description for the Regional Hub Planners.

Member Aston moved to accept the motion for the job description and encouraged hubs to fill the planner position. Member Godley seconded the motion.

Representative Kehmna asked for clarification regarding the hiring of the Regional Hub Planner position.

Member Casten clarified that the person being hired would be evaluated according to the Emergency Planner job description and comply with each jurisdictions' human resources policies and procedures. He further stated that the job description for the Regional Hub Planner reads more like a work plan or scope of work.

Chair Kronenberg suggested that the "job description" should be renamed "scope of work" and revised on the final document. Chair Kronenberg asked for public comment. Upon hearing none, Chair Kronenberg added a friendly amendment to the motion and it was seconded by Member Godley.

Motion: Approve the job description for the Regional Hub Planner position
Friendly Amendment: Approve the scope of work for the Regional Hub Planner position

Moved: Member Aston **Seconded:** Member Godley
Vote: The motion passed unanimously

Chair Kronenberg moved to item 5.

5. Grant Expenditure Report on the Regional Catastrophic Preparedness Grant Program

Mr. Levardo gave an update regarding the grant expenditure of the Regional Catastrophic Preparedness Grant. Mr. Levardo indicated that the FY09 grant has been extended to January 31, 2013. FY10 still has the same grant expiration date of April 30, 2013 and most sub-grantees and jurisdictions have a performance period end date of 12/31/12. Mr. Levardo stated that an extension request for FY 10 was in the process of being submitted.

Mr. Levardo reported that for the quarter ended September 30, 2012, the grants management unit processed expenditures of about $66,000 for FY09 and $303,000 for

FY10. He also indicated that a remaining unallocated budget balance for FY 09 is a total of $216,512.

Chair Kronenberg asked the Board for any questions. Upon hearing none, she asked for public comment. Hearing no public comment, Chair Kronenberg moved to item 6.

6. Regional Catastrophic Preparedness Grant Program (RCPGP) Conference Update

Janell Myhre, Regional Program Manager, provided a presentation on the Public Information and Warning (PI&W) system regarding the following items:

- Conference Theme: Building Regional Resiliency
- Bay Area Presentations
- Disaster Ethics
- Pre-Hospital Care
- Regional Catastrophic Plan Briefings
- RCPGP Sustainment Briefing

Chair Kronenberg asked the Board for any questions. Upon hearing none, she asked for public comment. Hearing no public comment, Chair Kronenberg moved to item 7.

7. Regional Catastrophic Preparedness Grant Program (RCPGP) Project Update

Janell Myhre, Regional Program Manager, provided an update on the Regional Catastrophic Preparedness Grant Program project. Ms. Myhre gave an overview and background information of the various projects in the RCPGP and indicated that this RCPGP project information would help the Approval Authority members be well informed.

Member Collins and Ms. Myhre discussed the on-line "Just In Time" training sessions and clarified that it will be tested so that it can be used as a standard way to train others on all of the RCPGP plans.

Chair Kronenberg asked the Board for any questions. Upon hearing none, she asked for public comment. Hearing no public comment, Chair Kronenberg moved to item 8.

8. Report from the Bay Regional Interoperable Communications System Joint Powers Authority (BayRICS JPA)

Barry Fraser, interim General Manager for the BayRICS JPA, reported on the status of the BayRICS JPA. Mr. Fraser indicated that the BayRICS Authority held its regular monthly Board of Directors meeting on Thursday October 11, 2012 at 1:30 PM. Mr. Fraser also gave an update and overview of the following:

- FCC Spectrum Transition Order
- FirstNet Board Update
- FirstNet Network Architecture Notice of Inquiry

Chair Kronenberg asked the Board for any questions.

Member Godley asked if BayRICS will request funding from FY 13 UASI for BayLoop maintenance, a consultant and a FirstNet project. Mr. Fraser responded the proposals are in the development stage, and BayRICS received sustainment funding for BayLoop, which is for microwave backhaul network. He added that he would like to continue that sustainment for that maintenance.

Chair Kronenberg asked for public comment. Hearing no public comment, Chair Kronenberg moved to item 12.

9. Tracking Tool

Chair Kronenberg asked the Board for any comments or questions.

Member Godley asked if the Management Team can compile an inventory catalog that includes all the information from the deliverables that the Bay Area UASI has invested in. He indicated that this inventory would be a great resource for references and also be able to easily access it from the Bay Area UASI website.

Mr. Dziedzic responded that Elizabeth Holden is working on the website and there will be a resource area to showcase these investments.

Member Domingo asked about the status of the Metrics Project and the Public Information project. Chair Kronenberg clarified that the report for the Public Information project was accepted and a follow-up was not needed. Janell Myhre responded that the Metrics Project is currently being discussed at the Advisory Group meeting so the project can continue moving forward. The Advisory Group is also discussing some funding that may be allocated to the Metrics Project. Ms. Myhre stated that a status update will be given at a later time.

Chair Kronenberg asked for public comment. Hearing none, Chair Kronenberg moved to item 10.

10. Announcements-Good of the Order

Dave Hober, Co-Chair of the Advisory Group, gave a report on the Advisory Group meeting held on September 27, 2012 and discussed regional project priorities, the preliminary regional risk information, and the FY 2013 UASI grant process proposal and implementation guidance.

Mr. Hober commented that the Advisory Group requested support from the Management Team to coordinate the submittal of sustainment project details and have subject matter experts available to provide information at upcoming Advisory Group Meetings. He indicated that during the Advisory Group meeting it was also discussed if maintaining the human resources and capabilities developed through UASI funding should be a priority.

Chair Kronenberg asked the Board for any questions.

Mr. Dziedzic announced that the next Approval Authority meeting will be held at the NRIC building, and there will be a closed session as well.

Upon hearing none, she asked for public comment. Hearing no public comment, Chair Kronenberg moved to item 11.

11. Future Agenda Items

Chair Kronenberg asked the Board for any questions. Upon hearing none, she asked for public comment. Hearing no public comment, Chair Kronenberg moved to item 12.

12. General Public Comment

Chair Kronenberg asked for general public comment. The meeting adjourned at 11:50 a.m.

To: **Bay Area UASI Approval Authority**

From: **Craig Dziedzic, General Manager**

Date: **November 8, 2012**

Re: **Item 3: General Manager's Report**

Recommendations:

UASI FY 2012 Update: Discussion Only.

Action or Discussion Items:

Discussion Only.

Discussion/Description:

FY 2012 Homeland Security Grant Program (HSGP)

On October 12, 2012, the Management Team received the Notification of Subgrantee Award Approval from Cal EMA in the amount of $21,931,312. The Management Team prepared the Accept and Expend legislation and it was introduced at the October 30, 2012 meeting of the San Francisco Board of Supervisors. The legislation will be sent to committee for review and is expected to be approved by the end of November. Following the Mayor's signature (within 10 days of the Board's approval), the 2012 MOUs will be sent to all Subrecipients for approval within their respective jurisdictions.

To: **Bay Area UASI Approval Authority**

From: **Mike Sena, NCRIC Deputy Director, Advisory Group Chairperson**

Date: **November 8, 2012**

Re: **Item 4: UASI Advisory Group Report**

Recommendations:

No recommendations at this time.

Action or Discussion Items:

On October 25th, 2012, The UASI Advisory Group held a meeting to review the UASI sustainment projects and discuss the allocation of funding for the FY 2013 UASI Grant planning process. The Advisory Group will continue to develop a proposal for the allocation of funding for projects at the upcoming advisory group meetings.

Discussion/Description:

The Advisory Group has been tasked with making a recommendation to the Approval Authority for the "Allocation of Funding" that includes:

Sustainment Projects:

1. Resource Typing Database
2. BayLoop Maintenance
3. Coplink
4. Aries
5. NCRIC
6. Regional T&E Team, Training and Exercises
7. Core City Allocation ($3M)

The Advisory Group received detailed presentations from subject matter experts on each of the projects from number one through six on page one, from the Resource Typing Database to the Regional Training and Exercise Program.

The Advisory Group also received presentations regarding other regional projects that included:

1. Interoperability Projects
2. BayRICS Projects
3. Regional Catastrophic Planning

During the presentations we identified that the Regional Catastrophic Planning Project had elements that could be incorporated into the Regional Training and Exercise Project. After the review of sustainment projects and proposed regional projects the Advisory Group determined that we must develop a definition for sustainment projects. The Advisory Group will be working on that definition at the next meeting in November. The Advisory group will also be developing a proposed plan for allocations that includes sustainment projects and:

- Hub Allocation
- A set aside for the State Requirement (20%)
- A set aside for the Management and Administration (5%)
- A set aside for the Management Team ($2M)

To: **Bay Area UASI Approval Authority**

From: **Catherine Spaulding, Assistant General Manager**

Date: **November 8, 2012**

Re: **Item 5: Bay Area UASI Effectiveness Report**

Recommendation:

The Approval Authority Legislative Sub-committee reviews the Bay Area UASI Effectiveness Report and makes recommendations on next steps.

Action or Discussion Item:

Bay Area UASI Effectiveness Report

Attachments:

- Draft Bay Area UASI Effectiveness Report Talking Points Summary
- Bay Area UASI Effectiveness Report

Discussion/Description:

I. Background

The Bay Area UASI Grant Effectiveness Report evaluates how investments better position the Bay Area region to prevent, protect against, respond to and recover from acts of terrorism and other hazards. The analysis focuses on the expenditure of approximately $52 million in UASI funds from FY 2007 through FY 2010. Josh Filler conducted the analysis and drafted the report.

II. Why We Conducted the Analysis

We conducted this analysis given the Approval Authority's direction to document the strategic use of UASI resources and how we have improved our ability to address terrorism and other hazards. We need to make the argument to policy makers that funding cuts threaten critical capabilities.

III. Next Steps

The Management Team recommends that the Approval Authority Legislative Sub-Committee review the report and make recommendations for next steps. This could include Approval Authority members meeting with policy makers and committee staffers to discuss the report. The time to start doing this is right now, given that we have just had the election.

To support Approval Authority members in these efforts, the Management Team has prepared a draft list of policy makers and staffers to whom we can distribute the report. We have also prepared draft talking points that Approval Authority members may wish to refer to in meetings to discuss the report.

IV. Talking Points Summary

The draft talking points are included with your meeting materials as attachment A. Seven key findings from the report are highlighted. These include:

- The region successfully invests UASI funds in documented high risk areas.
- All regional emergency response capabilities have improved.
- Capability enhancements are in almost all cases dual use.
- The Bay Area UASI program tests capabilities on annual basis through a full scale preparedness exercise.
- UASI funds continue to enhance interoperable communications in the Bay Area.
- The UASI-funded Northern California Regional Intelligence Center is the largest provider of Suspicious Activity Reports that result in the FBI taking counter terrorism action.
- Funding cuts threaten critical capabilities.

V. Presentation by Josh Filler

Josh Filler will give a ten minute presentation on the analysis and findings of the 2012 Bay Area Effectiveness Report.

Talking Points Summary
Bay Area UASI Grant Effectiveness Report
November 2012

The report evaluates how investments better position the Bay Area region to prevent, protect against, respond to and recover from acts of terrorism and other hazards. The analysis focuses on the expenditure of approximately $52 million in UASI funds from FY 2007 through FY 2010.

Key Findings:

1. **The region successfully invests UASI funds in documented high risk areas**. The region identifies capability gaps using a sophisticated risk analysis center software platform. Approximately 86% ($45million) of total funding has been invested in 22 priority target capabilities to address those gaps. These investments have contributed to improvement or sustainment in capability in all cases.

2. **All regional emergency response capabilities have improved**. For example, SWAT teams can better assess an incident and deploy necessary tactics against terrorists, bomb squads can successfully render safe IEDs through remote devices, and search and rescue teams conduct safer operations.

3. **Capability enhancements are in almost all cases dual use**. The Bay Area has built dual use regional capabilities that can address both the terrorism and natural hazard scenarios (i.e., earthquakes, floods, wildfires) that pose the greatest risk to the region.

4. **The Bay Area UASI program tests capabilities on annual basis through a full scale preparedness exercise**. Urban Shield is a multi-day event involving dozens of local, state and federal agencies and thousands of responders.

5. **UASI funds continue to enhance interoperable communications in the Bay Area.** The region met National Emergency Communications Plan Goal 1 for interoperability.

6. **The UASI-funded Northern California Regional Intelligence Center is the largest provider of Suspicious Activity Reports that result in the FBI taking counter terrorism action**. The NCRIC generated an average return on investment of $991 for every dollar invested in law enforcement. In 2012, the Department of Homeland Security and the Director of National Intelligence recognized the NCRIC as a best practice.

7. **Funding cuts threaten critical capabilities.** Although the Department of Homeland Security increased the Bay Area's risk score, funding was cut by 39% (from $43 to $26 million) in FY2012. This cut delayed the completion of interoperable communications systems and prevented the acquisition of critical equipment to support bomb squads, search and rescue teams, and evacuation of people with access and functional needs.

Bay Area UASI
Grant Effectiveness Report

Building Regional Capabilities to Reduce Risk

November 2012

For Official Use Only

TABLE OF CONTENTS

EXECUTIVE SUMMARY 1

1.0 INTRODUCTION AND BACKGROUND 15

1.1 About the Urban Areas Security Initiative 15
1.2 About the Bay Area UASI 16
1.3 Grant Effectiveness and Preparedness Overview 17

2.0 METHODOLOGY AND ASSUMPTIONS 19

2.1 Methodology 19
2.2 Assumptions 20

3.0 BAY AREA RISK PROFILE 21

3.1 Risk Overview 21
3.2 Threats and Hazards 21
3.3 Risk Relevant Capabilities 23

4.0 BAY AREA ALLOCATION OF FUNDING 25

4.1 Mapping Priority Capabilities to Goals 25
4.2 Funding by Target Capability 27
4.3 Funding by Homeland Security Mission Area 29

5.0 CAPABILITY IMPROVEMENTS 30

5.1 Capability Assessments 30
5.2 Capabilities by Mission Area 34
5.3 Capabilities by Bay Area Homeland Security Goals 35
5.4 Building Dual Use Capabilities 36

6.0 CAPABILITIES IN ACTION 38

6.1 Regional Collaboration through Risk Management and Planning 38
6.2 Intelligence and Critical Infrastructure Protection 43
6.3 Regional Emergency Response 52
6.4 Interoperable Communications 57

7.0 CAPABILITY GAPS 62

7.1 Risk and Remaining Capability Gaps 62

8.0 SUSTAINMENT 67

8.1 Consequences of UASI Funding Cuts 67

APPENDIX A HOMELAND SECURITY MISSION AREAS 69

APPENDIX B TARGET CAPABILITIES LIST 70

APPENDIX C BAY AREA GOALS, OBJECTIVES AND TARGET CAPABILITIES 71

Executive Summary

Background and Purpose of the Report

The U.S. Department of Homeland Security's (DHS) Urban Areas Security Initiative (UASI) program is designed to assist high threat urban areas in preparing to prevent, protect against, respond to, and recover from threats and acts of terrorism and other major hazards. The purpose of this report is to qualitatively and quantitatively document the efforts made by Northern California's 12-county Bay Area UASI region in building capabilities, reducing risk from terrorism and other hazards, and enhancing overall regional preparedness through investments funded by the UASI grant program.

The analysis focuses on the expenditure of $52 million in UASI funds over the period of October 2009 to October 2011, the implementation of the eight National Homeland Security Priorities and the goals and objectives in the *Bay Area Homeland Security Strategy* ("*Strategy*"), a comparison of regional capability assessments from calendar years 2009 and 2011 involving the DHS Target Capabilities List (TCL)[1], and how resources have been allocated across the homeland security mission areas of prevention, protection, response, and recovery. Finally, the report also evaluates the direct impact of 2012 cuts in the Bay Area's UASI grant program allocation.

Risk and Capabilities

Managing risk is at the core of the Bay Area's homeland security efforts. Through the UASI grant program, the Bay Area has developed a sophisticated risk management program involving people, processes, and analytic software systems. This allows the region to determine which terrorism threats and other hazards pose the greatest risk to the region, which capabilities are most needed to address those threats and hazards, and what level of ability the region possesses in each of the necessary capabilities and where the capability gaps are.

Risk can be expressed as a number or value in order to make comparisons. It is calculated by DHS based on threat, vulnerability, and consequence: Risk = Threat x Vulnerability x Consequence. The Bay Area follows this equation in defining risk to the region. The Bay Area's risk environment is a complex one involving terrorism, crime, natural hazards, and industrial and other accidents. The terrorism scenarios and natural hazards that pose the greatest risk to the Bay Area are listed below in rank order:

[1] The report uses the TCL instead of the new Core Capabilities released in 2011 by DHS as part of the National Preparedness Goal, because all of the UASI funding spent during the covered time frame occurred under the TCL framework as the Core Capabilities were not yet in place.

Rank	Terrorism Scenarios	Natural Hazards
1	Vehicle Borne Improvised Explosive Device	Flood
2	Aircraft as a Weapon	Earthquake
3	Improvised Explosive Device	Wildfire
4	Contagious Biological	Wind
5	Cyber Attack	Ice

Consistent with federal guidance and frameworks, the Bay Area's risk management program has identified 15 capabilities from the TCL that are the most "risk relevant." This means the capabilities are vital in order to effectively prevent, protect against, respond to, and recover from the threats and hazards that represent the greatest risk to the region. The 15 capabilities listed in priority order are:

Rank	Local Priority Target Capabilities
1	Risk Management
2	Counter-Terror Investigation and Law Enforcement
3	Critical Infrastructure Protection
4	Information Gathering and Recognition of Indicators and Warnings
5	Planning
6	Emergency Public Safety and Security Response
7	On-Site Incident Management
8	Responder Safety and Health
9	Communications
10	Intelligence Analysis and Production
11	Intelligence and Information Sharing and Dissemination
12	Emergency Operations Center (EOC) Management
13	Fatality Management
14	Medical Surge
15	Emergency Public Information and Warning

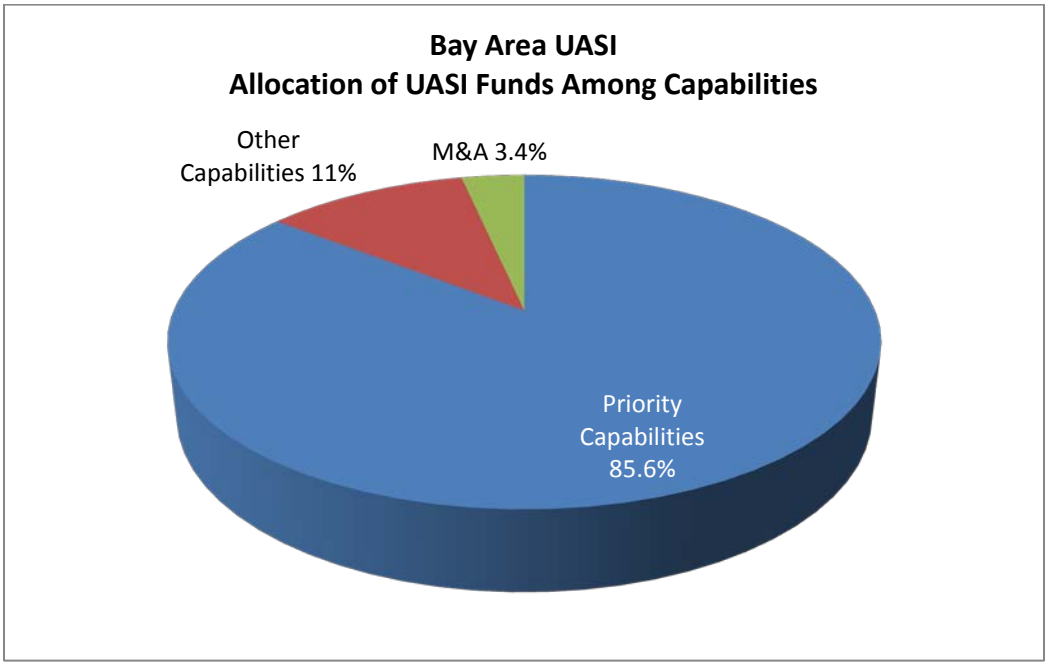
In addition to these 15 local priority capabilities, the Bay Area has identified seven additional capabilities that are a national priority, as determined by DHS, each of which is ranked in priority order as determined by the Bay Area:

Rank	National Priority Target Capabilities
1	Chemical Biological Radiological Nuclear Explosives (CBRNE) Detection
2	Explosive Device Response Operations
3	Weapons of Mass Destruction (WMD) Hazardous Materials (HazMat) Response and Decontamination
4	Community Preparedness and Participation
5	Citizen Evacuation and Shelter In-Place
6	Mass Care
7	Mass Prophylaxis

These 22 capabilities in total represent the Target Capabilities most needed to reduce risk by implementing both the Bay Area's and the nation's homeland security priorities within the region.

THE UASI GRANT PROGRAM INVESTMENTS AND CAPABILITY ENHANCEMENTS

The UASI program is enhancing and sustaining priority Target Capabilities in the Bay Area. In 2009 and in 2011, the Bay Area conducted a regional capability self-assessment based on the TCL. In-between the two assessments, the region spent approximately $52 million of UASI funds involving multiple grant years.[2] The funds spent in-between the two assessments were heavily invested in the 22 priority Target Capabilities, with approximately $45 million (or roughly 86%) of the funds allocated among them. This means the region has been allocating its UASI funding based on its risk profile by funding the capabilities most necessary to mitigate the risk. The percentage allocation of the $52 million is outlined in the chart below across three categories: priority capabilities, other capabilities, and management and administration (M&A) of the grant.



The results of the 2009 and 2011 capability assessments show that the $45 million contributed to improvement or sustainment in capability levels among *all* of the 22 priority capabilities. This is outlined in the capability assessment comparison chart below. For both the 2009 and 2011 assessments, capability levels were organized into four quartiles: Low, Medium-Low, Medium-High and High. The chart below highlights the amount of funding allocated toward each of the 22 priority capabilities from 2009 through 2011, the capability level as of October 2011, and whether the capability is trending positively,

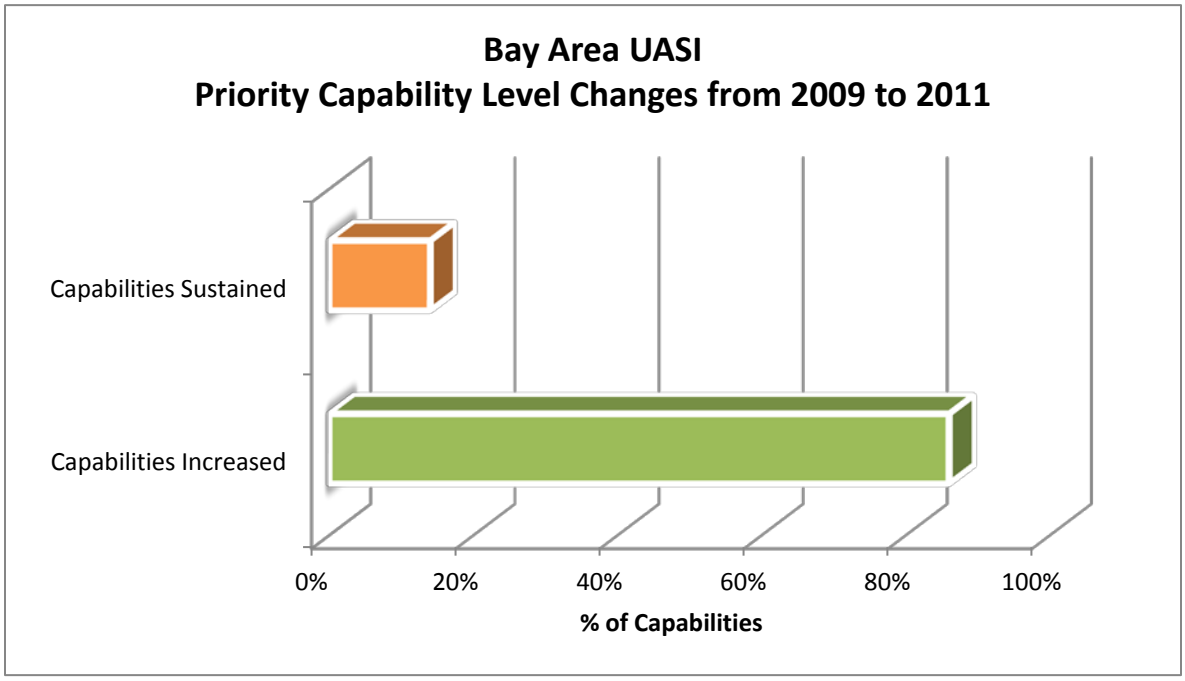
[2] The $52 million comes from UASI grant years FY 2007 through FY 2010.

negatively, or is remaining constant from one assessment to the next. Finally, the gap analysis column outlines whether the capability level is sufficient to address the terrorism scenarios that pose the greatest risk to the Bay Area.

Bay Area UASI Capability Self-Assessment Results

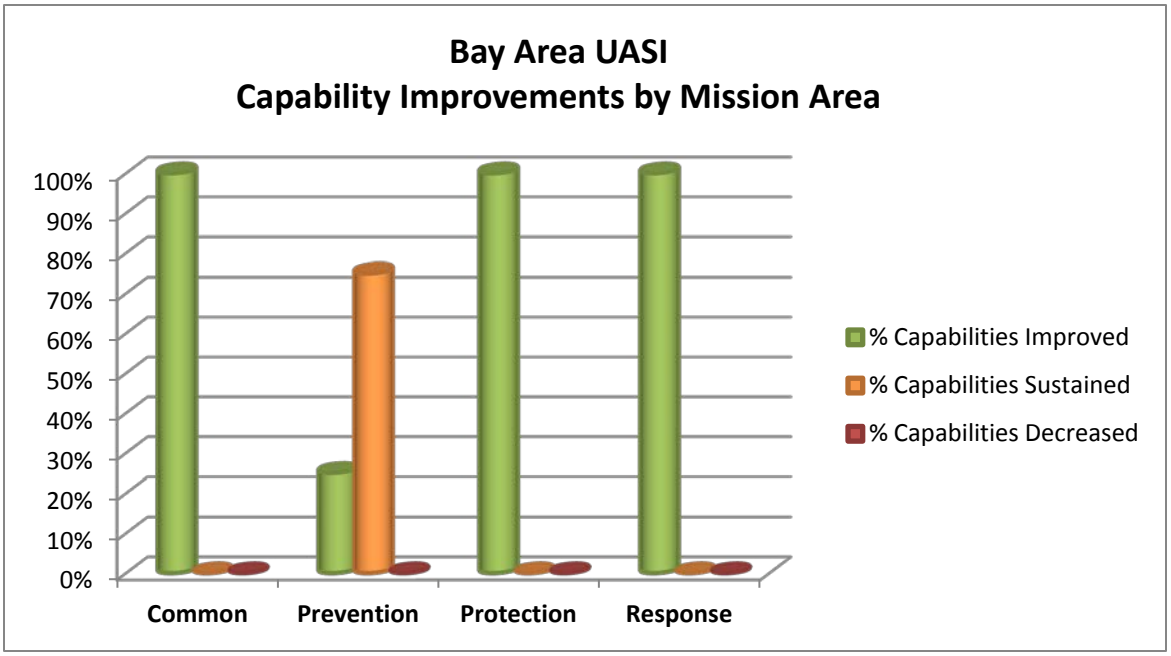
Bay Area Priority	Target Capability	UASI Funding	2011 Level of Ability	Capability Trend	2011 Gap Analysis
1	Risk Management	$1,006,373	Medium Low	Improved	**Needs Extra Attention**
2	Counter-Terror Investigation and Law Enforcement	$3,097,682	Medium Low	Sustained	**Needs Extra Attention**
3	Critical Infrastructure Protection	$2,324,506	Medium Low	Improved	**Needs Attention**
4	Information Gathering and Recognition of Indicators/Warnings	$2,368,669	Medium Low	Sustained	**Needs Extra Attention**
5	Planning	$3,094,860	Medium Low	Improved	**Needs Extra Attention**
6	Emergency Public Safety and Security Response	$2,596,102	Medium Low	Improved	**Needs Attention**
7	On-Site Incident Management	$1,249,556	Medium Low	Improved	**Needs Attention**
8	Responder Safety and Health	$537,308	Medium Low	Improved	**Needs Attention**
9	Communications	$13,148,754	Medium Low	Improved	**Needs Attention**
10	Intelligence Analysis and Production	$2,381,983	High	Sustained	**Adequate**
11	Intelligence and Information Sharing and Dissemination	$3,956,844	Medium High	Improved	**Needs Attention**
12	Emergency Operations Center Management	$1,886,606	Medium High	Improved	**Needs Attention**
13	Fatality Management	$206,160	Medium Low	Improved	**Needs Attention**
14	Medical Surge	$384,184	Medium Low	Improved	**Needs Attention**
15	Emergency Public Information and Warning	$784,761	Medium Low	Improved	**Needs Attention**
National Priority Capabilities	CBRNE Detection	$22,706	Medium Low	Improved	**Needs Attention**
	Explosive Device Response Operations	$1,023,383	High	Improved	**Adequate**
	WMD/HazMat Response and Decontamination	$1,595,444	Medium High	Improved	**Adequate**
	Community Preparedness and Participation	1,639,763	Medium Low	Improved	**Needs Attention**
	Citizen Evacuation and Shelter In-Place	$310,949	Low	Improved	**Needs Attention**
	Mass Care	$679,192	Medium Low	Improved	**Adequate**
	Mass Prophylaxis	$312,756	High	Improved	**Adequate**

From 2009 through 2011, the Bay Area improved in 19 of the priority capabilities, which accounts for over 86% of all of the priority capabilities. The remaining 3 priority capabilities sustained their levels of ability, all of which is noted in the capability trend column above. In no case did the level of ability drop among any of the priority Target Capabilities (local or national) in-between the two assessments. The figure below summarizes the capability gains and sustainment over the covered time period.



While capability trends were either positive or sustained among all the priority Target Capabilities, there were only five capabilities deemed fully adequate to address the region's risk profile. These were Intelligence Analysis and Production, Explosive Device Response Operations, WMD/HazMat Response and Decontamination, Mass Care, and Mass Prophylaxis. For these five capabilities, the Bay Area's goal is to continue to sustain levels of ability. For all other priority capabilities, the Bay Area's goal remains attaining an adequate level of capability to address the region's risk profile.

The Bay Area's priority capability improvements span much of the spectrum of homeland security activities. The figure below summarizes the capability gains across four of the homeland security mission areas: prevention, protection, response, plus the common mission area. In the common, protection and response mission areas, the Bay Area saw improvement in 100% of the priority capabilities in each mission area. While the prevention mission area saw improvement in only 25% of its applicable priority capabilities, the remaining 75% of capabilities were sustained. No priority capabilities decreased. Finally, the recovery mission area is not accounted for, as no priority capabilities fall under that mission area at this time.



BAY AREA UASI CAPABILITIES IN ACTION

The UASI funded investments made across capabilities have had a demonstrable impact on capability improvement. The following highlights four major areas where those improvements can be found: risk management and planning, intelligence and critical infrastructure protection, regional emergency response, and interoperable communications. In virtually all cases, the capability enhancements have been "dual use." This means while the investments were made primarily to strengthen capabilities to address terrorism, the capability enhancements enable the region to also address other hazards to include conventional crime, i.e., drug cartels, and naturally caused disasters, i.e., earthquakes. This dual usage of capabilities is an efficient use of scarce resources and enables the Bay Area to more effectively manage all hazards.

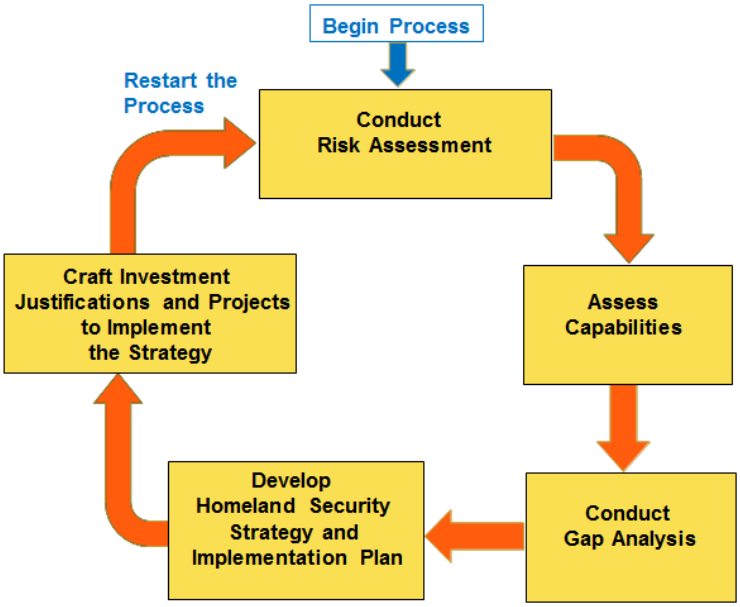
Risk Management and Planning

The UASI program's mandated governance structure has transformed the way cities, counties, and the private sector work together in the Bay Area to enhance regional preparedness and security. Governed by a multi-year memorandum of understanding between the participants, the Bay Area UASI is managed through a three-tiered governance structure. This includes an Approval Authority that serves as a regional executive board for policy making, an Advisory Group made up of a wide variety of regional stakeholders that serves as a policy clearinghouse for the Approval Authority, and a Management Team made up of public safety and management professionals that oversees the grant and helps

implement policy and programs. The Bay Area's governance structure is widely viewed as a homeland security "best practice."[3]

During the 2009 through 2011 covered time period, the Bay Area allocated approximately $4.1 million for its priority risk management and planning capabilities, which allowed the region to acquire a comprehensive risk management software system and regional planners, conduct risk and capabilities assessments, and produce a revised homeland security strategy based on the new risk and capability data.

Bay Area UASI Risk Management and Planning Process



As required by the UASI program, the Bay Area has developed a DHS - approved regional homeland security strategy and planning structure designed around implementing National Homeland Security Priorities at the regional level. The purpose of the homeland security strategy is to provide both a blueprint for comprehensive, enterprise-wide planning and risk management for homeland security efforts, and a strategic guide for the use of related federal, state, local, and private resources within the region. The Bay Area's overall risk management and planning process is summarized in the figure above.

To ensure its *Strategy* is based on reducing risk to the region through enhanced capabilities, the Bay Area has invested UASI funds in the Risk Analysis Center (RAC) software platform. The RAC allows the region to engage in sophisticated terrorism and natural hazards risk assessments, determine which capabilities are needed to mitigate the identified risk, understand where the gaps are in those capabilities, and use that combined data to drive specific regional goals, objectives, and projects in support of implementing the *Bay Area Homeland Security Strategy.*

In addition to regional planning, the Bay Area has also developed a comprehensive regional training and exercise program. At the center of this program is the UASI-funded full scale preparedness exercise, Urban Shield. This exercise is a multi-day event involving dozens of local, state and federal agencies and thousands of responders that tests a variety of Target Capabilities based upon terrorism and other hazards.

[3] See, *Emergency Management Magazine*, Bay Area UASI's Governance Structure Aids Collaboration, Coordination in California, (April 30, 2010) accessed at http://www.emergencymgmt.com/disaster/Bay-Area-UASIs-Governance.html.

Intelligence and Critical Infrastructure Protection

The Bay Area spent approximately $10.1 million from October 2009 through October 2011 on its priority terrorism prevention and protection capabilities. At the center of the region's counter terrorism efforts is the Northern California Regional Intelligence Center (NCRIC), which is the Bay Area's nationally renowned "All Crimes Fusion Center." The NCRIC operates under the unified command of the Bay Area's High Intensity Drug Trafficking Area (HIDTA) and is co-located with the region's Joint Terrorism Task Force (JTTF). The NCRIC helps safeguard the region by disseminating intelligence and facilitating communications between federal, state, and local agencies and private sector partners to help them take action against terrorism, gangs, drug trafficking organizations, and serial crimes.

The NCRIC has catalogued and prioritized over 8,500 assets in the Bay Area across 18 National Infrastructure Protection Plan sectors including the commercial sector, information technology, government, energy, finance and others. The NCRIC also supports the Bay Area's UASI funded Terrorism Liaison Officer (TLO) program. TLOs are trained public safety personnel whose purpose is to improve information-sharing among and between public safety agencies and the private sector. TLOs achieve this by working with the NCRIC as a conduit for homeland security information-sharing from the field to the fusion center for analysis, and from the fusion center to the field for action. By the end of calendar year 2011, there were 1,717 fully trained and certified TLOs operating in the Bay Area.

The TLOs have been instrumental in collecting suspicious activity reports (SARs) for analysis. These SARs are critical indicators and potential warnings of terrorist pre-operational planning and logistics. The NCRIC is the single largest provider of SARs to the FBI that result in the FBI taking counter terrorism action. A summary of all of the NCRIC's operational, preparedness, and analytical support to the region's homeland security efforts from 2009 through 2011 is outlined in the figure below:

NCRIC Support to the Bay Area

Products Delivered to Stakeholders	Suspicious Activity Reports Given to the FBI	Major Vulnerability Assessments	Criminal Cases Supported	JTTF Requests For Information Support	TLO Training	Law Enforcement Training
220 intelligence products	**381 SARs reported to FBI**	**54 critical infrastructure site assessments**	**1,395 Cases**	**418 RFIs**	**109 courses and 4,319 TLOs trained**	**389 courses and 16,551 students trained**

In 2011, for every $1 invested in law enforcement initiatives, the NCRIC/HIDTA generated an average return on investment (ROI) of $986.58 in drug seizures and $4.89 in cash and asset seizures, for a total ROI of $991.48 for drugs and assets seized. Drug and asset seizures have increased by over $2 billion since 2006 and the ROI of every dollar expended has increased by $688.08 since that year. This is reflected in the table below:

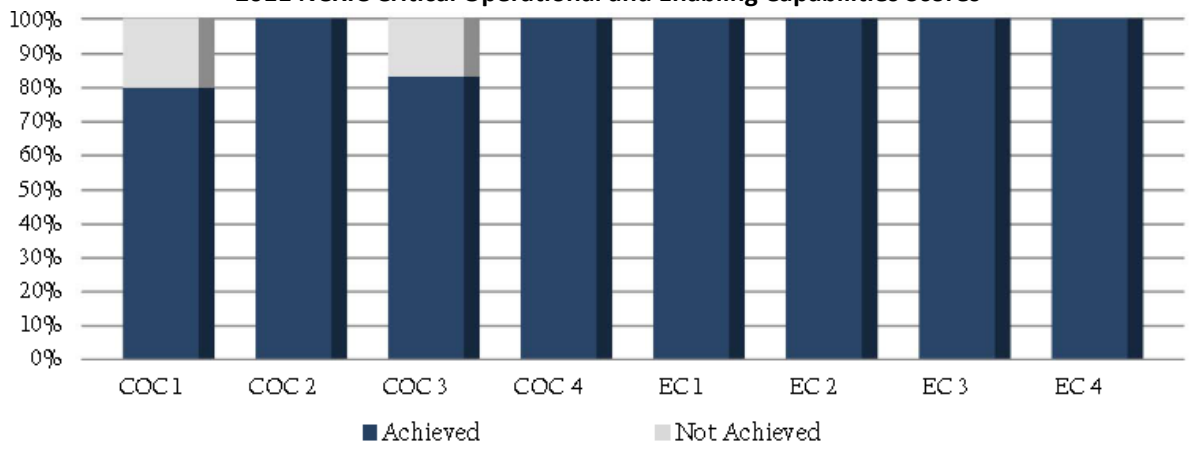
NCRIC Return on Investment

Year	2006	2007	2008	2009	2010	2011
Seized	$662,427,559	$513,214,272	$1,156,045,674	$1,766,521,094	$1,097,661,392	$2,723,564,842
ROI	$303.40	$262.49	$570.89	$684.04	$421.44	$991.48

In order to test and validate levels of capability, the NCRIC has undergone several federally overseen assessments in recent years starting in October 2010 with the most recent concluding in 2011. The assessments focused on four Critical Operational Capabilities (COCs) and Enabling Capabilities (ECs) for fusion centers:

- **COC 1:** Ability to receive classified and unclassified information from federal partners;
- **COC 2:** Ability to assess local implications of threat information through the use of a formal risk assessment process;
- **COC 3:** Ability to further disseminate threat information to other state, local, tribal, territorial, and private sector entities within their jurisdiction; and
- **COC 4:** Ability to gather locally generated information, aggregate it, analyze it, and share it with federal partners as appropriate.
- **EC 1:** Privacy, Civil Rights, and Civil Liberties
- **EC 2:** Sustainment
- **EC 3:** Communications
- **EC 4:** Security

2011 NCRIC Critical Operational and Enabling Capabilities Scores



In 2011, the NCRIC achieved the highest possible score in all four ECs and two out of the four COCs, as reflected in the figure above. Among the new ECs, the NCRIC was one of the first fusion centers in the nation to acquire a U.S. Department of Justice and DHS-approved privacy policy.

For all of its accomplishments, which include being named a "best practice" by the Director of National Intelligence in 2012, the NCRIC and its leadership have been formally recognized for their achievements at national level forums. In April 2012, NCRIC Director Ronald E. Brooks received the highest individual State and Major Urban Area Fusion Center Award as the Representative of the Year, and NCRIC Supervising Lead Analyst Jim Paterson was awarded the Michael Schooler Award for Excellence in the Field of Infrastructure Protection.

Regional Emergency Response

With just over $11.5 million dedicated to priority response capabilities during the covered time period, the UASI program has been essential to enhancing incident management involving a wide array of threats and hazards across the Bay Area. For example, through the Urban Shield full scale exercise, the Bay Area's law enforcement tactical teams, such as Special Weapons and Tactics (SWAT) teams, have shown steady improvement in their ability to assess an incident, develop an initial incident action plan, and properly identify terrorists versus hostages, and employ necessary tactics to address the terrorist threat. Today, the teams are further able to use scouts to gather on-site intelligence, communicate among team members, and can more effectively and safely move through large open spaces during an incident, such as one involving an active shooter.

The Bay Area's thirteen FBI certified public safety bomb squads have increased their capabilities dramatically through the addition of UASI-funded explosive device response operations equipment and training. This was demonstrated on September 13, 2011, when the San Jose Police Department's bomb squad rendered safe four IEDs found inside a home in downtown San Jose. The squad members used the UASI-funded QinetiQ Dragon Runner™ 20 robot to safely remove the four devices remotely. Before obtaining this robot, the San Jose bomb technicians would have been required to render safe these devices in person.

The region's investment of UASI funds in search and rescue teams has enhanced the teams' capabilities throughout the region. They are now able to conduct safe and effective search and rescue operations at structure incidents involving the collapse or failure of heavy wall construction caused by an earthquake or vehicle-borne improvised explosive device (VBIED). These teams are also capable of conducting high angle rope rescue, confined space rescue, and trench and excavation rescue.

UASI funding has supported improvement in Emergency Operations Center (EOC) management during a large-scale disaster encompassing multiple counties in the Bay Area. This includes the ability to shift from the primary to back-up EOC sites to ensure the EOCs are in a functional state of readiness and that continuity of command and control can be maintained if a transition is necessary during an incident.

Finally, under the UASI program, the region is leading the development of a regional mobile field force capable of overseeing large-scale operations, including managing large and violent crowds, traffic control enforcement, and general saturation presence for the purpose of maintaining order and preserving the peace to include in environments involving CBRN hazards. This highly trained and specially equipped regional asset can respond 24 hours a day, 7 days a week, to emergencies occurring anywhere in the Bay Area.

Interoperable Communications

The Bay Area has developed a strategic plan to achieve region-wide interoperable communications among emergency responders, as defined by the SAFECOM Interoperability Continuum, and in coordination with the California Statewide Communications Interoperability Plan (CalSCIP). The strategic plan introduced the Bay Regional Interoperable Communications System (BayRICS) as the vision for communications interoperability in the region. The Bay Area spent $13.1 million from the 2009 through 2011 time period to implement this vision and enhance interoperability among responders through equipment, training and exercises.

In 2010, the Bay Area's interoperable communications capabilities were successfully tested by DHS pursuant to the National Emergency Communications Plan Goal 1. Goal 1 called for 90% of all high-risk urban areas designated within the UASI program to be able to demonstrate, by 2010, "response-level emergency communications within one hour for routine events involving multiple jurisdictions and agencies."[4] The successful interoperable

[4] U.S. Department of Homeland Security, Office of Emergency Communications, *National Emergency Communications Plan*.

communications test took place during the Amgen Tour of California Bike Race involving 160 bicycle racers from around the globe and covering more than 750 miles in the Bay Area. It is one of the largest cycling events in the United States. Approximately 100 emergency response personnel from state and local agencies supported the event. Most recently, in October 2012, the region successfully used a portion of its UASI funded communications system to support dozens of agencies and hundreds of local responders across a regional emergency operations center, five counties in the Bay Area, eight area commands, and at over 40 incident sites during the 48 hour Urban Shield full scale exercise.

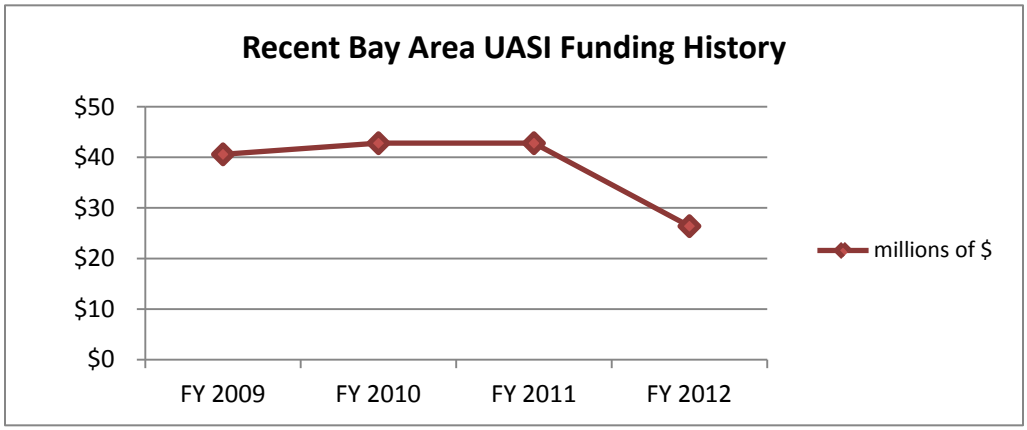
REMAINING CAPABILITY GAPS

Despite the region's capability improvements, gaps in overall level of ability remain among 22 of the 37 Target Capabilities. Among those 22 Target Capabilities with remaining gaps, 17 *are priority capabilities*. This is due to the fact that despite capability improvements in priority capabilities, in 2011, the Bay Area's risk profile, as determined by DHS, actually increased as compared to prior years, and the Bay Area's understanding of that risk improved as evidenced by an increase in the region's level of ability in the Risk Management Target Capability. The increase in risk requires a greater level of ability among those Target Capabilties most needed to mitigate that risk from a prevention, protection, response, and recovery perspective. The Bay Area is committed to building those capabilities, but will need UASI funding to support those efforts.

SUSTAINMENT AND THE IMPACT OF FUNDING CUTS

It takes time and resources to build capabilities and then to sustain them. In addition to UASI funds, the Bay Area spends tens of millions of local dollars each year to build and sustain the public health and safety infrastructure for the region through law enforcement, fire service, public health, public works, and emergency medical and emergency management, etc.

In FY 2012, the Bay Area suffered a massive reduction in UASI funds, going from $42.8 million in FY 2011 to $26.4 million in FY 2012, a 39% reduction. This reduction occurred despite the fact that the region's relative risk score as calculated by DHS (and compared to other urban areas across the nation) actually *increased* in FY 2012 (calendar year 2011). A comparative summary of recent Bay Area UASI funding is set forth in the chart below:



These recent cuts put in jeopardy the capability gains made over the last several years and make it far more difficult for the region to enhance vital capabilities needed to address the risk from terrorism and other hazards. As a consequence of these cuts, the Bay Area has been forced to cancel projects designed to implement the region's interoperable communications plan, improve equipment capabilities for several public safety bomb squads around the region, provide first responder personal protective equipment for CBRNE incidents, supply search and rescue equipment to the fire service, provide evacuation supplies for people with access and functional needs, and much more.

The capabilities developed using UASI and other grant funds supplement local expenditures and allow the Bay Area to build toward enhanced capability levels designed to support federal missions, which include counter-terrorism, homeland security, and catastrophic incident response. Without such funding, the Bay Area would not have the resources to develop such capability levels to meet those missions, let alone sustain them. Without UASI funding, much of the gains made over the years in the Bay Area as outlined in this report will be at risk.

This Page Intentionally Left Blank

Section 1
Introduction and Background

In June 2011, Northern California's 12-county Bay Area region developed the nation's first preliminary effectiveness report on the Department of Homeland Security's (DHS') Urban Areas Security Initiative (UASI) grant. That report involved a broad evaluation of the effectiveness of UASI grant funds spent in the region covering federal fiscal year (FY) 2006 through FY 2010. The purpose of this follow-on report is to further qualitatively and quantitatively document the efforts made by the Bay Area UASI in building capabilities, reducing risk from terrorism and other hazards, and enhancing overall regional preparedness through investments funded by the UASI grant program.

1.1 About the Urban Areas Security Initiative

Created in 2003 in the wake of the September 11, 2001 terrorist attacks against the United States by al-Qaeda, the UASI program is the **only** federal homeland security grant program that **requires** regional governance, strategic planning and investing that involves all disciplines - law enforcement, fire service, public health and medical, public works, critical infrastructure owners and operators, and emergency management – in order to acquire the necessary plans, organization, equipment, training and exercises to prevent, protect against, respond to, and recover from threats and acts of terrorism and other major hazards. From FY 2003 to FY 2012, approximately $7 billion has been appropriated for this program nationally. The Bay Area UASI has been a member of the UASI program since the program's inception in FY 2003.

The UASI program goes to the heart of one of the 9/11 Commission's recommendations: allocate homeland security grants based upon risk by funding high threat, high density urban areas where threats often begin and ultimately seek to materialize.[5] The risk of terrorism against the U.S. today is more complex and diverse than it was on September 11, 2001. The al-Qaeda network has become a franchise with affiliates in Yemen, Somalia, Pakistan, and elsewhere that have trained or inspired foreigners and Americans to plot and commit acts of terror in numerous locations across America.

Today, there are 64 UASI regions across the United States based on a risk analysis of the 100 largest metropolitan statistical areas by DHS. These UASI regions range from New York City to Columbus to Chicago to the Bay Area UASI. However, due to federal budget cuts, in FY 2011, DHS cut 33 of those UASI regions from the UASI list for future funding purposes. While the Bay Area remained a member of the program in FY 2011, it suffered deep cuts in UASI funding in FY 2012.

[5] The National Commission on Terrorist Attacks Upon the United States, *The 9/11 Commission Report*, (2004), page 396.

1.2 About the Bay Area UASI

The Bay Area UASI is located in northern California and is comprised of 12 counties (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma, Monterey, and San Benito) and the two major cities of Oakland and San Jose (San Francisco is a consolidated city and county government). The twelve counties are inclusive of over 100 incorporated cities and a combined total population exceeding 7.5 million people.

Figure 1: Bay Area UASI Region

In addition to the 7.5 million residents, the Bay Area attracts 15.9 million visitors annually who spend more than $16.6 million per day in the region. The Bay Area is one of the most culturally diverse regions in California. The Bay Area is one of the nation's top exporting regions, ranking second only to the New York-New Jersey metropolitan area in the value of its exports.

With just over 800,000 residents, San Francisco is the 4th most populous city in California and the most densely populated major city in the state. San Jose is the third largest city in California with Oakland being the eighth largest in the state. A map of the current Bay Area UASI is set in Figure 1.

In addition to its large population, there are approximately 8,500 critical infrastructure and key resource assets in the entire Bay Area that cover all 18 *National Infrastructure Protection Plan* (NIPP) sectors. These assets include such iconic sites and businesses as the Pyramid Building, the Golden Gate Bridge, Apple, Oracle, Google, Intel, Adobe, Hewlett-Packard, the Bay Area Rapid Transit Authority, Yahoo!, eBay, Candlestick Park, Stanford University, the Oakland Coliseum, the Ports of San Francisco and Oakland, and many more. There are six professional sports teams in the region representing the National Football League, National Hockey League, National Basketball Association and Major League Baseball, all playing to sell-out crowds. The region is also home to several major government facilities, including Travis Air Force Base, the Federal Reserve Bank of San Francisco, the National Aeronautics and Space Administration (NASA) Ames Center, the San Francisco Mint, the Defense Language Institute, and the Naval Postgraduate School.

1.3 Grant Effectiveness and Preparedness Overview

The term "preparedness" refers to capabilities necessary for providing the means to prevent, protect against, respond to, and recover from major incidents by performing critical tasks, under specified conditions, to target levels of performance.[6] Capabilities are developed and delivered by appropriate combinations of planning, organization, equipment, training, and exercises.

"Capabilities-Based Preparedness" is a way to make informed choices about how to manage the risk and reduce the impact posed by potential threats and hazards. It focuses on building and maintaining capabilities to achieve the eight National Homeland Security Priorities and four homeland security mission areas: prevention, protection, response and recovery.[7] A description of the four mission areas is attached as Appendix A and a list of the eight National Priorities is listed in Table 1 below. The National Priorities were developed by DHS and represent broad and thematic goals that the nation should strive to achieve in homeland security.

Table 1: The National Homeland Security Priorities

Implement the National Incident Management System (NIMS) and the National Response Framework (NRF)
Implement the National Infrastructure Protection Plan (NIPP)
Expand Regional Collaboration
Strengthen Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) Detection, Response and Decontamination Capabilities
Strengthen Information Sharing and Collaboration Capabilities
Strengthen Interoperable and Operable Communications Capabilities
Strengthen Planning and Citizen Preparedness
Strengthen Medical Surge and Mass Prophylaxis Capabilities

[6] U.S. Department of Homeland Security, *National Preparedness Guidelines* (2007), page 30. In 2011, Presidential Policy Directive (PPD) 8 (National Preparedness) adopted mitigation as a homeland security mission area and called for the creation of a new National Preparedness Goal (NPG). The NPG, issued in September 2011 by DHS, included a set of 31 new Core Capabilities, which are necessary to address a wide range of threats and hazards. The Core Capabilities serve as the successor to the Target Capabilities List (TCL) and align with the new five mission areas (prevention, protection, mitigation, response and recovery). While this report is based on the TCL and the four mission areas due to that framework being in place over most of the covered time period in the report, future effectiveness reports issued by the Bay Area will likely be centered on the region's implementation of the new Core Capabilities.

[7] Id.

For purposes of this report, unless otherwise noted, the terms "capability" or "capabilities" refer to the 37 capabilities outlined in the DHS Target Capabilities List (TCL) which is attached as Appendix B. The TCL are those 37 capabilities divided among the four mission areas, plus the common mission area, that are needed to implement and achieve the National Priorities.

For purposes of this report, the term "effectiveness" means the expenditure of funds and other resources based upon risk that increase or sustain, in a demonstrable way, those **capabilities** needed in order to reduce the highest **risk** terrorism incidents and other catastrophic events faced by the Bay Area UASI. When measuring or analyzing the effectiveness of the UASI program, one is essentially analyzing the outcomes produced by the investments made by urban areas with UASI funds. Ultimately, the effectiveness of an investment is best measured by how the capability it was designed to build, enhance or sustain performs in a real world incident.

1.3.1 The Preparedness Cycle

Preparedness is a cyclical process, as opposed to a linear endeavor in which there is a defined end. This explains why the term "preparedness cycle" is used by DHS and others to explain the preparedness process as set forth in Figure 2. When it comes to preparedness there is no "end state", because risks change, plans need updating, training for new personnel is required, and equipment is replaced or upgraded, and so on. As long as there are risks, there will be a need to prepare for them and resource those preparedness efforts.

Figure 2: The Preparedness Cycle

1.3.2 Measuring Grant Effectiveness

Measuring effectiveness of a grant program or overall preparedness is not simply a scientific equation. Thus, use of equations and percentages when discussing preparedness and capabilities, while useful, can at times be misleading, as they may present a false sense of precision that otherwise does not exist in such a dynamic and complex environment as homeland security and domestic preparedness. Nor is grant effectiveness or preparedness adequately measured by looking at the United States as a single operating entity, which it is not. Rather, our nation is a vast network of independent actors - towns, villages, cities, counties, states, the private sector and federal departments and agencies - that must unify as much as possible to achieve homeland security priorities and perform critical operational tasks before, during, and after an incident. As such, reports such as this one provide a detailed and meaningful review of how capabilities at the local and regional level – where they are most often needed and used – have either improved, been sustained, or decreased over time as a result of UASI funding.

Section 2
Methodology and Assumptions

This section outlines both the methodology used to develop the report and several of the key assumptions behind the methodology. The report uses a range of regional data sources on terrorism and natural hazard risk, capabilities, and data on UASI grant expenditures to draw conclusions on the efforts the Bay Area has made using the UASI program to build capabilities, reduce risk, and enhance regional preparedness

2.1 Methodology

The analysis focuses on the expenditure of approximately $52 million in UASI funds from FY 2007 through FY 2010.[8] The report evaluates whether any improvements have been made in the Bay Area's overall preparedness as a result of receiving these grant funds. The analysis began by compiling relevant data sources from Bay Area UASI stakeholders, including:

- The *Bay Area Homeland Security Strategy*
- Risk analysis and capabilities assessment data
- Financial data from grant reporting processes that track investments
- Quantitative and qualitative performance data from training, exercises, and real-world incidents
- Interviews with local subject matter experts on a variety of topics

Analysts used these different data inputs to identify linkages across risk, capabilities, and historical spending, taking into consideration relevant analytic frameworks such as the TCL, homeland security mission areas, and the *Bay Area Homeland Security Strategy*. What followed was an analysis of correlations between historical grant expenditures and:

- The National Homeland Security Priorities
- The Bay Area's homeland security strategic priorities
- The Target Capabilities List
- The homeland security mission areas
- Real world incidents and major regional exercises

This analysis allowed the region to evaluate how investments ultimately impacted various capabilities from the TCL throughout the region in support of national and regional homeland security priorities and goals with an emphasis on how these capability enhancements have impacted real world operations in the Bay Area.

[8] The $52 million comes from UASI grant years FY 2007 through FY 2010. Included in the $52 million is approximately $1.8 million that was spent on management and administration of the grants.

2.2 Assumptions

Several assumptions and caveats are applicable to the overall research methodology used to evaluate the Bay Area's investments. The analysis focuses specifically on UASI grant funding from FY 2007 through FY 2010 and its impacts over the three year period in which it was spent. However, some of the projects and initiatives analyzed were not exclusively funded by the UASI program. In certain cases, funding was also provided by other homeland security and public health preparedness grant programs, or local funds, etc. This is to be expected, as DHS encourages its grantees to leverage multiple funding sources to build and sustain capabilities.

While the TCL is a central feature of the analysis, the allocation of dollars among Target Capabilities is an inexact science. The available data are currently captured in different formats and reside in separate systems. Moreover, the 37 Target Capabilities are not isolated from each other. Rather, they overlap one another with elements of one capability present in another or even several others. This complicates but does not preclude a process of aggregating existing information and conducting a broader meta-analysis of grant effectiveness involving the TCL.

Given the overlap of Target Capabilities, funded projects may enhance or impact more than one Target Capability. For example, hiring an intelligence analyst in a fusion center to monitor, link and report on suspicious activity would impact both the Intelligence Analysis and Production Target Capability and Information Gathering and Recognition of Indicators and Warnings, etc. While the results of the analysis of dollars to capabilities herein are directionally accurate, this challenge can be reduced in the future by enhancing current data collection tools so that they acquire more precise and explicit information on the alignment between projects and their expected impact on capabilities.

Finally, in certain cases, current data collection tools used to track UASI grant expenditures do not incorporate specific outcome measures for investments. Thus, proxy evaluations of outcome and impact were developed through targeted interviews with local subject matter experts as a way to capture anecdotally both the results of a selection of investments made through the UASI program, as well as the potential ramifications of reduced or eliminated funds in the future.

Section 3
Bay Area Risk Profile

This section outlines the Bay Area's risk environment and the capabilities needed to effectively mitigate that risk. It describes both the terrorism threats and natural hazards that pose the greatest risk to the region, and the Target Capabilities across mission areas that must be in place in the Bay Area to address those threats and hazards.

3.1 Risk Overview

Managing risk is at the core of the Bay Area's homeland security efforts. Through the UASI grant program, the Bay Area has developed a sophisticated risk management program involving people, processes, and analytic software systems. As part of its risk management efforts, the region conducts an annual risk assessment to outline the region's current threats and hazards and the capabilities in place to address them.[9]

Federal law defines a terrorism incident as the "…unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives."[10] In addition, natural hazards – such as floods, earthquakes, windstorms, tsunamis, coastal storms, landslides, and wildfires that strike populated areas – can cause an incident when those hazards harm people, property, or the environment.

Risk, then, is the expected negative impact of an adverse incident (whether the result of terrorism or a natural hazard) on an asset, considering both its likelihood and the magnitude of its impact. Risk can be expressed as a number or value in order to make comparisons, and is calculated as a function of threat, vulnerability, and consequence. **Risk = Threat x Vulnerability x Consequence.**

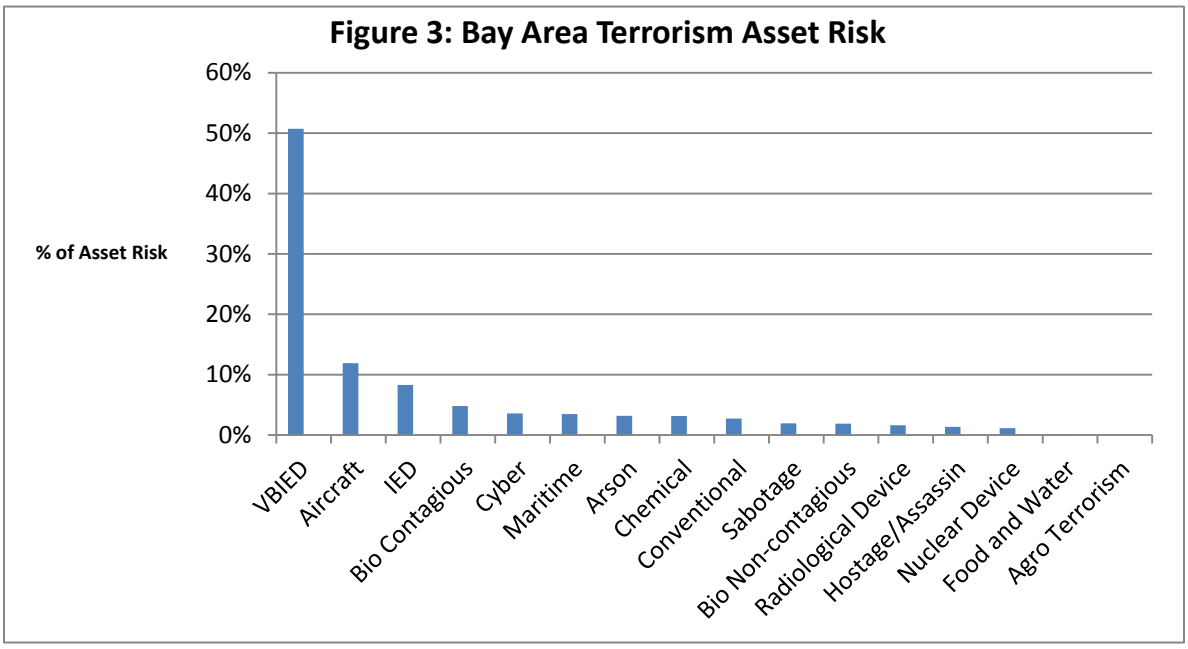
3.2 Threats and Hazards

The Bay Area has continuously been cited as one of the highest risk urban areas in the nation. This is evidenced by its classification as a "tier one" urban area under the UASI program for several years, along with other regions, including New York City, Chicago, Washington, DC, Houston, and Los Angeles. In calendar year 2011, as part of the FY 2012 DHS led UASI risk assessment process, the Bay Area's risk ranking actually rose relative to other regions in the country.

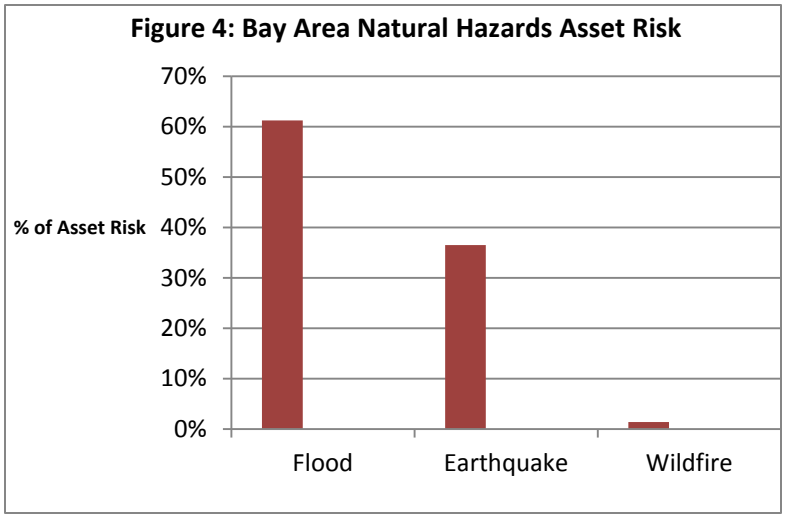
[9] This assessment is in addition to and supports the DHS annual assessment conducted for purposes of allocating UASI funds across urban areas nationally.

[10] 28 C.F.R. Section 0.85

The terrorism scenario that poses the greatest risk to the Bay Area's critical infrastructure and key resources (CIKR) is the vehicle-borne improvised explosive device (VBIED), e.g., a truck bomb. VBIED attacks are relatively easy to carry out as evidenced by the scenario's common usage across the world. CIKR in the region are also vulnerable to such an attack, with potentially significant consequences involving loss of life and economic damages. An attack using a conventional improvised explosive device (IED) ranks third in total risk. This results in over half of the Bay Area's terrorism risk emanating from the possibility of terrorists using explosives. The use of an aircraft as a weapon (primarily a general aviation aircraft) ranks third among the sixteen terrorism scenarios that were analyzed. Figure 3 ranks the terrorism scenarios that pose the greatest risk to the region's CIKR.



In addition to terrorism scenarios, the Bay Area also faces significant risk from natural hazards, in particular floods and earthquakes. As outlined in Figure 4, floods pose the greatest risk to the Bay Area's CIKR based upon their frequency, the region's vulnerability to such a hazard, and the consequences of major flooding in terms of lives and property. The Bay Area also rests upon one of the longest and most active earthquake fault systems in the world. This system includes the San



Andreas Fault, the Hayward Fault and the Calaveras Fault. The U.S. Geological Survey estimates a 63% probability of a magnitude 6.7 or greater quake striking the Bay Area within the next 30 years.

3.3 Risk Relevant Capabilities

Consistent with federal guidance and frameworks, the Bay Area identified capabilities from the TCL that are the most "risk relevant" i.e., a priority for the region in order to prevent, protect against, respond to, and recover from terrorism scenarios that represent the greatest risk to the region. While terrorism is the primary driver for evaluating and ranking capabilities based on risk, virtually every capability ranked accordingly has a dual use purpose – the capability can also be used to address natural hazards, or crime or man-made accidents.

After classifying capabilities according to their risk relevance a capabilities assessment and gap analysis were conducted. The Target Capabilities were then plotted by risk relevance and capability gap depending on each capabilities risk relevance and the size of the gap in the capability. The Target Capabilities with the largest capability gap and highest risk relevance were ranked as a priority. The top 15 capabilities listed in priority order are in Table 2 below.

Table 2: Bay Area Priority Target Capabilities

Rank	
1	Risk Management
2	Counter-Terror Investigation and Law Enforcement
3	Critical Infrastructure Protection
4	Information Gathering and Recognition of Indicators and Warnings
5	Planning
6	Emergency Public Safety and Security Response
7	On-Site Incident Management
8	Responder Safety and Health
9	Communications
10	Intelligence Analysis and Production
11	Intelligence and Information Sharing and Dissemination
12	Emergency Operations Center (EOC) Management
13	Fatality Management
14	Medical Surge
15	Emergency Public Information and Warning

In addition to these fifteen local priority capabilities, the Bay Area has identified seven additional capabilities that are a national priority. These seven national priority capabilities are among those that DHS has determined are critical to implementing the eight National Homeland Security Priorities. While there are other national priority capabilities beyond the seven, those other national priority capabilities are accounted for within the 15 local priority capabilities, e.g., Communications. The additional seven

capabilities are ranked in priority order based on their risk relevance and capability gaps within the Bay Area:

Table 3: National Priority Target Capabilities

Rank	
1	Chemical Biological Radiological Nuclear Explosives (CBRNE) Detection
2	Explosive Device Response Operations
3	Weapons of Mass Destruction (WMD) Hazardous Materials (HazMat) Response and Decontamination
4	Community Preparedness and Participation
5	Citizen Evacuation and Shelter In-Place
6	Mass Care
7	Mass Prophylaxis

These 22 capabilities in total represent the Target Capabilities most needed to address scenarios posing a significant risk to the Bay Area by implementing both the Bay Area's and the nation's homeland security priorities in the region. These 22 capabilities are mapped across the four applicable mission areas in Figure 5 below (none of the priority capabilities fall under the recovery mission area).

Figure 5: Priority Capabilities by Mission Area

Response	Common	Prevention	Protection
Emergency Public Safety and Security Response	Communications	Counter Terrorism and Law Enforcement	Critical Infrastructure Protection
On-Site Incident Management	Risk Management	Information Gathering and Recognition of Indicators and Warnings	
Responder Safety and Health	Planning	Intelligence Analysis and Production	
Emergency Operations Center Management	Intelligence and Information Sharing and Dissemination	CBRNE Detection	
Fatality Management	Community Preparedness and Participation		
Medical Surge			
Emergency Public Information and Warning			
Explosive Device Response Operations			
WMD/HazMat Response and Decontamination			
Citizen Evacuation and Shelter In-Place			
Mass Care			
Mass Prophylaxis			

Section 4
Bay Area Allocation of Funding

This section outlines how the Bay Area has spent UASI funding across its regional homeland security goals, National Priorities, Target Capabilities, and homeland security mission areas in order to determine if those UASI funds were spent in the appropriate areas based on risk and capability needs. While all capabilities are examined, the emphasis is on those 22 capabilities deemed a priority for the region.

4.1 Mapping Priority Capabilities to Goals

Pursuant to DHS guidance and requirements, the region has developed a homeland security strategy, which has gone through several iterations over the years. Goals and objectives from the *Bay Area Homeland Security Strategy* ("*Strategy"*) have and will continue to evolve over time as the region completes various implementation steps and adjusts to federal guidance and requirements. However, at a high level, the overarching priorities for the region have remained relatively stable.

Each of the Bay Area's goals in the *Strategy* aligns whenever possible with a national or State of California homeland security priority and each objective with a capability from the TCL.[11] The purpose of aligning each objective to a Target Capability is to ensure the *Strategy* drives investments centered on enhancing specifically defined capabilities needed to better secure and protect the Bay Area from acts of terrorism and other major hazards. A complete breakout of Bay Area goals, objectives and Target Capabilities is set forth in Appendix C.

In order to facilitate meta-analysis for this report, all strategic goals were aligned with the National Priorities and the 22 priority Target Capabilities in Table 4 on the following page. Table 4 from left to right lists the National Homeland Security Priorities and then maps the goals from the *Strategy* to those National Priorities, and then lists the 22 associated priority Target Capabilities linked to achieving each of the National Priorities and the Bay Area goals. Some capabilities, such as Planning, are accounted for among more than one National Priority and/or Bay Area goal. Each Target Capability that is considered a priority by the Bay Area *but not* by DHS is in italics (there are five in total).

Finally, the Bay Area recovery goal has no corresponding priority capabilities due to the fact that no recovery capabilities have been determined by the federal government or the Bay Area to be a priority at this time. However, this can and may change over time as the recovery mission area takes on greater importance at all levels of government.

[11] The *Bay Area Homeland Security Strategy* links to 35 out of 37 of the Target Capabilities. The *Strategy* does not link to either Animal Disease Emergency Support or Food and Agriculture Safety and Defense as the authority and responsibility to execute each of those capabilities rests with either the federal or state government.

Table 4: National Priorities Mapped to Bay Area Goals

National Priority	Bay Area Homeland Security Strategy Goal	Associated National and Regional Priority Target Capabilities
Expand Regional Collaboration	Goal 1: Develop a Regional Risk Management and Planning Program	Planning *Risk Management*
	Goal 8: Enhance Regional Homeland Security Exercise, Evaluation and Training Programs	Planning[12] Multiple other priority capabilities
Implement the National Infrastructure Protection Plan (NIPP)	Goal 2: Enhance Information Analysis and Infrastructure Protection	Intelligence/Information Sharing and Dissemination Counter-Terror Investigations and Law Enforcement Critical Infrastructure Protection *Information Gathering and Recognition of Indicators and Warnings* *Intelligence Analysis and Production*
Strengthen Information Sharing and Collaboration Capabilities		
Strengthen Interoperable and Operable Communications Capabilities	Goal 3: Strengthen Communications	Communications
Strengthen CBRNE Detection, Response, and Decontamination Capabilities	Goal 4: Strengthen CBRNE Detection, Response, and Decontamination Capabilities	CBRNE Detection Explosive Device Response Operations WMD/Hazardous Materials Response and Decontamination Emergency Public Safety and Security Response On-site Incident Management *Responder Safety and Health*
Implement the National Incident Management System (NIMS) and National Response Framework (NRF)		
Strengthen Medical Surge and Mass Prophylaxis Capabilities	Goal 5: Enhance Medical, Public Health and Mass Care Preparedness	Medical Surge Mass Prophylaxis Mass Care *Fatality Management*
Strengthen Planning and Citizen Preparedness Capabilities	Goal 6: Strengthen Emergency Planning and Citizen Preparedness	Planning EOC Management Emergency Public Information and Warning Citizen Evacuation and Shelter-in-Place Community Preparedness and Participation
	Goal 7: Enhance Recovery Capabilities	None

[12] The Bay Area's regional training and exercise program tests numerous capabilities across the full spectrum of homeland security mission areas. However, for purposes of this table and analysis herein, the only Target Capability listed is Planning, which covers the cost of the personnel and their time necessary to manage and implement the regional training and exercise program. All other capabilities impacted by training and exercises are accounted for among the other goals.

4.2 Funding by Target Capability

The data shows that the Bay Area is targeting UASI funds to enhance and sustain the 22 priority capabilities as determined by regularly conducted risk and capabilities assessments. A breakdown of funding among all Target Capabilities shows that from 2009 through 2011, of the approximately $52 million spent, $45 million, or 85.6% of all funding, went to the region's 22 priority capabilities. The remaining 11%, or $5.2 million, was spent on other capabilities, with 3.4% or $1.8 million spent on management and administration of the grant. Figure 6 provides this information in graphic form.

Figure 6: Bay Area Allocation of UASI Funds Among Capabilities

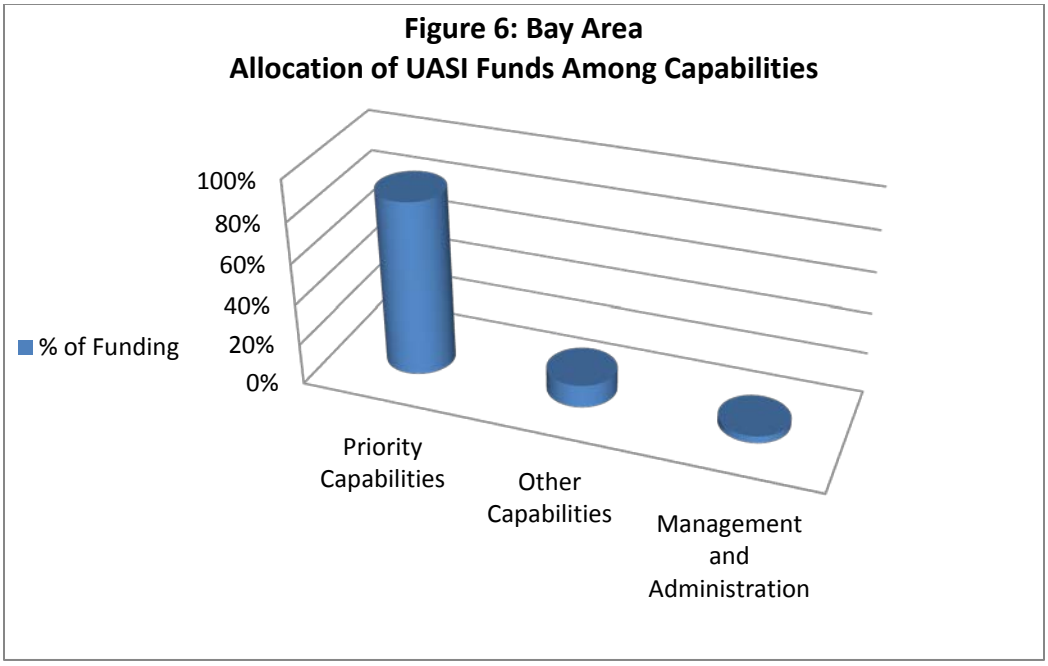
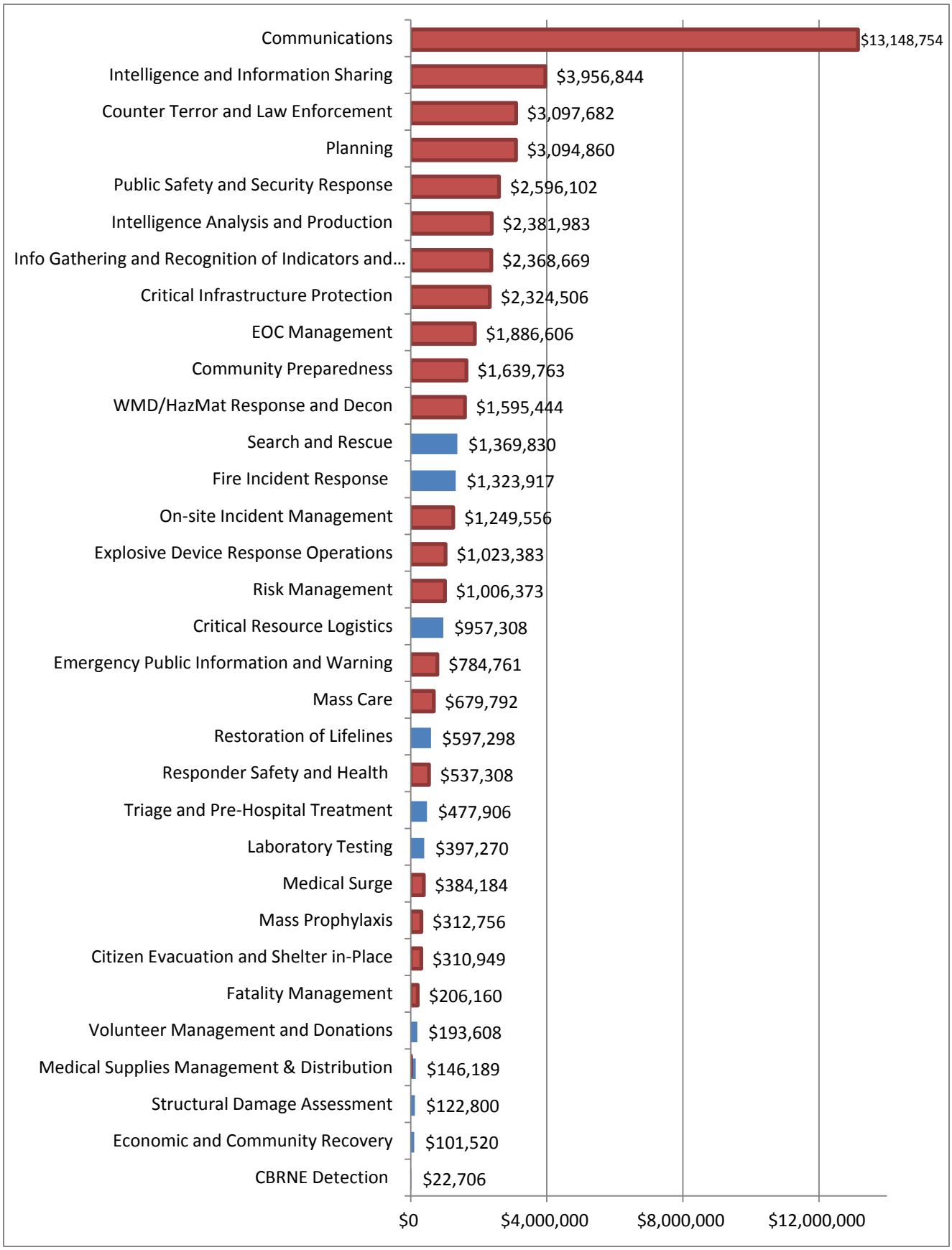


Figure 7 on the following page breaks out $50.2 million (excluding the $1.8 million for management and administration) in funding per Target Capability. Each of the 22 priority capabilities in Figure 7 is **highlighted in red** with all other funded capabilities listed in blue. In all, 32 capabilities received some level of funding with five Target Capabilities receiving no UASI funding under the covered time frame. These five are:

- Animal Disease Emergency Support[13]
- Environmental Health
- Isolation and Quarantine
- Food and Agriculture Safety and Defense
- Epidemiological Surveillance and Investigation

[13] The lack of funding for Animal Disease Emergency Support is not a concern because the responsibility to execute that capability resides largely with the State of California and the federal government. As a result, the Bay Area has recently removed the capability from the *Bay Area Homeland Security Strategy*.

Figure 7: Bay Area UASI Funding by Target Capability

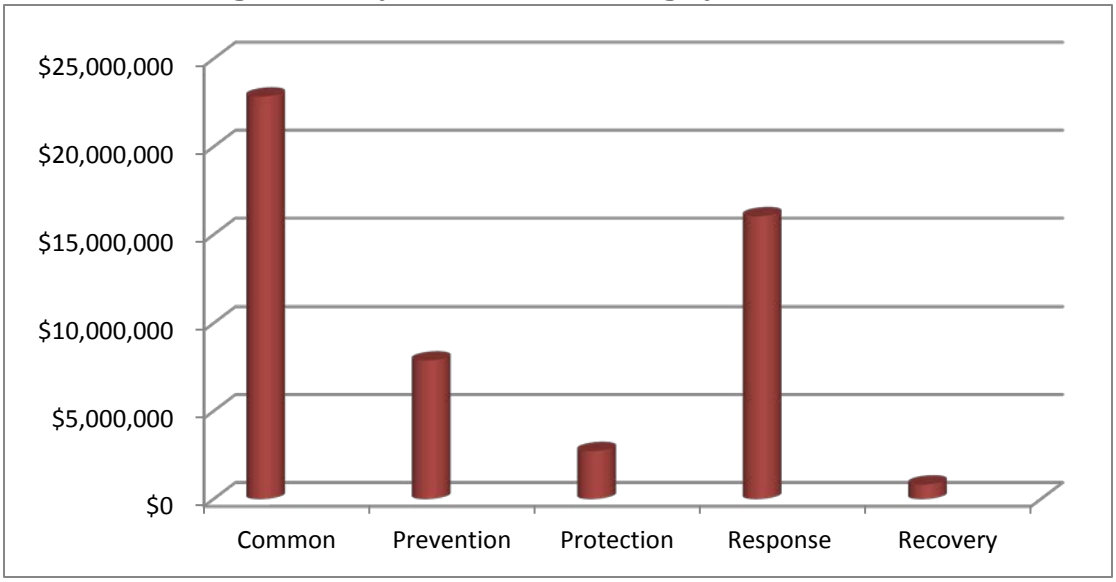


The Bay Area did not allocate UASI funding to each capability solely on the basis of which capability was ranked highest in priority alone. Costs of capabilities also helped drive how much UASI funding was allocated to each capability. The "cost of a capability" is the amount of money and other resources needed to build or sustain that capability. This varies significantly among the Target Capabilities and explains why the largest increases in ability (discussed in more detail in section 5) were not always synonymous with the largest amounts of funding allocated toward a capability.

4.3 Funding by Homeland Security Mission Area

The Bay Area is allocating its funding across the full spectrum of homeland security mission areas as outlined in Figure 8. Chief among these mission areas is the common mission area. Building common mission area Target Capabilities supports the full homeland security enterprise from prevention through recovery. However, more or less funding assigned to a given mission area does not necessarily determine a mission area's importance, as the mission areas are not equal in terms of the number of capabilities assigned to them or in the costs associated with building or sustaining capabilities (discussed in more detail in section 5). For example, the common mission area's five capabilities received the most funding based in large part on the fact that the Communications Target Capability is grouped under that mission area, along with Intelligence and Information Sharing and Dissemination (the two capabilities that received the most funding under the covered time period).

Figure 8: Bay Area UASI Funding by Mission Area



While the response mission area received the second largest amount of total funding, the prevention mission area capabilities received a larger average amount of funding per capability ($1,967,760) versus those capabilities in the response mission area ($891,203 average per response capability). The region funded a total of four prevention capabilities and 18 response capabilities.

Section 5
Capability Improvements

This section reviews how the $50.2 million of UASI funds spent on capabilities impacted them as determined by two capabilities assessments. These impacts include increases, sustainment, or decreases in capability levels; increases, sustainment, or decreases in capabilities by mission areas and regional homeland security goals; and finally, the dual use nature of any capability increases, e.g., capabilities that can be used to manage terrorism and natural hazards.

5.1 Capability Assessments

In 2009 and in 2011, the Bay Area conducted a regional capability self-assessment based on the TCL. For both the 2009 and 2011 assessments, capability levels were organized into four quartiles that determined level of ability: Low, Medium-Low, Medium-High and High as outlined in Table 5 below.

Table 5: Capability Assessment Levels of Ability

Low	No needs are satisfied for this activity. This may be because it is not critical to the region, or because insurmountable barriers exist. The activity cannot be performed successfully. Needs within this activity have been recognized and initial efforts have been made to satisfy some of those needs for this activity, but very few if any have been met. Few needs are satisfied for this activity, but substantial barriers remain and it is not yet clear how they will be overcome. This activity is unlikely to be performed successfully.
Medium Low	Needs within this activity have been recognized and initial efforts have been made to satisfy some measures/metrics at the specified level for this activity, but very few if any have been met. A few needs are satisfied; for this activity, but substantial barriers remain and it is not yet clear how they will be overcome. This activity is unlikely to be performed successfully.
Medium High	Though much effort remains to satisfy the needs for this activity, a plan is in place to satisfy the rest. Remaining issues are being identified. Though effort remains, a plan is in place to satisfy the rest. Remaining issues have been identified and are being addressed. The activity may be performed successfully if required.
High	Most/Almost all needs are satisfied for this activity, and though moderate effort remains and a few issues are outstanding, a plan is in place and being followed to address them. Progress is being made toward satisfying the others with no issues outstanding. It is likely, though not assured, that the activity could be performed adequately if required. All needs are satisfied at the specified level for this activity. Ideally, activity performance is validated via exercises or experience.

In-between the two assessments, the region spent approximately $50.2 million of UASI funds across 32 of the Target Capabilities. The Bay Area saw the $50.2 million contribute to improvement or sustainment in capability levels among *all* of the 22 priority capabilities and eight other funded capabilities as outlined in the capability assessment comparison chart in Table 6 below.

Table 6: Bay Area UASI 2009-2011 Target Capability Comparison

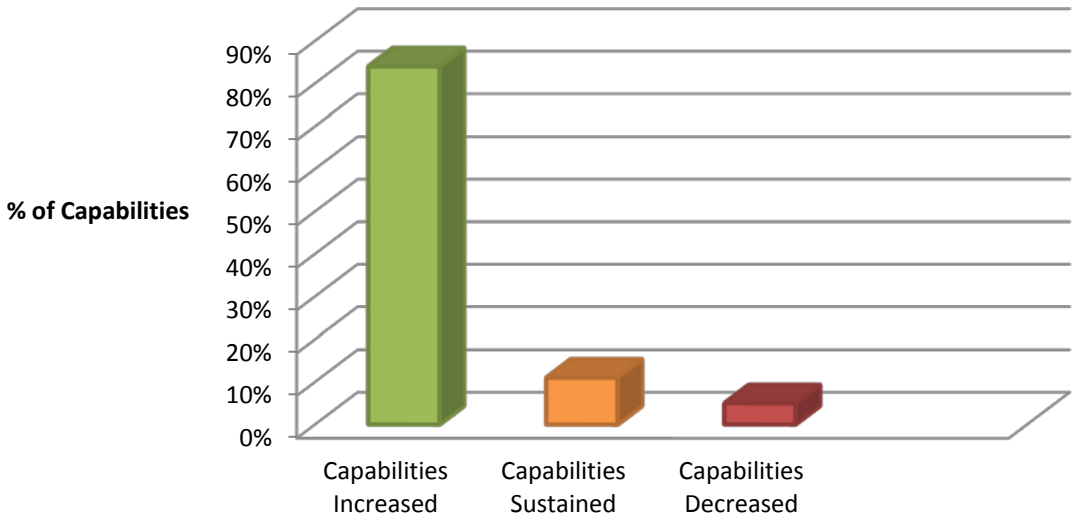
Priority	Target Capability	2009 Level of Ability	UASI Funding	2011 Level of Ability	Capability Trend	2011 Gap Analysis
1	Risk Management	Low	2.5%	Medium Low	Quartile Change	**Needs Extra Attention**
2	Counter-Terror Investigation and Law Enforcement	Medium Low	6.2%	Medium Low	Sustained	**Needs Extra Attention**
3	Critical Infrastructure Protection	Low	4.6%	Medium Low	Quartile Change	**Needs Attention**
4	Information Gathering and Recognition of Indicators/Warnings	Medium Low	4.7%	Medium Low	Sustained	**Needs Extra Attention**
5	Planning	Medium Low	6.2%	Medium Low	Improved	**Needs Extra Attention**
6	Emergency Public Safety and Security Response	Medium Low	5.2%	Medium Low	Improved	**Needs Attention**
7	On-Site Incident Management	Medium Low	2.5%	Medium Low	Improved	**Needs Attention**
8	Responder Safety and Health	Low	1.1%	Medium Low	Quartile Change	**Needs Attention**
9	Communications	Medium Low	26.1%	Medium Low	Improved	**Needs Attention**
10	Intelligence Analysis and Production	High	4.7%	High	Sustained	**Adequate**
11	Intelligence and Information Sharing and Dissemination	Medium High	7.9%	Medium High	Improved	**Needs Attention**
12	Emergency Operations Center Management	Medium Low	3.8%	Medium High	Quartile Change	**Needs Attention**
13	Fatality Management	Low	0.4%	Medium Low	Quartile Change	**Needs Attention**
14	Medical Surge	Low	0.8%	Medium Low	Quartile Change	**Needs Attention**
15	Emergency Public Information and Warning	Low	1.6%	Medium Low	Quartile Change	**Needs Attention**
16	CBRNE Detection	Medium Low	0.1%	Medium Low	Improved	**Needs Attention**
17	Emergency Triage and Pre-Hospital Treatment	Medium High	1%	Medium High	Improved	**Adequate**
18	Explosive Device Response Operations	Medium High	2%	High	Quartile Change	**Adequate**
19	WMD/HazMat Response and Decontamination	Medium Low	3.2%	Medium High	Quartile Change	**Adequate**
20	Fire Incident Response Support	High	2.6%	High	Improved	**Adequate**
21	Critical Resource Logistics and Distribution	Low	1.9%	Medium low	Quartile Change	**Needs Attention**
22	Community Preparedness and Participation	Low	3.3%	Medium Low	Quartile Change	**Needs Attention**
23	Citizen Evacuation and Shelter In-Place	Low	0.6%	Low	Improved	**Needs Attention**
24	Economic and Community Recovery	Low	0.2%	Low	Sustained	**Needs Attention**
25	Volunteer Management and Donations	Low	0.4%	Low	Improved	**Needs Attention**
26	Restoration of Lifelines	Low	1.2%	Low	Improved	**Needs Attention**
27	Structural Damage Assessment	Medium High	0.2%	Medium low	Decreased	**Needs Attention**
28	Mass Care	Medium Low	1.4%	Medium Low	Improved	**Adequate**
29	Search and Rescue (Land-Based)	Medium Low	2.6%	Medium High	Quartile Change	**Adequate**
30	Medical Supplies Management and Distribution	Medium Low	0.3%	Medium High	Quartile Change	**Adequate**
31	Animal Disease Emergency Support	Medium Low	N/A	Low	Decreased	**Adequate**
32	Environmental Health	Medium Low	N/A	Medium Low	Improved	**Adequate**
33	Isolation and Quarantine	Low	N/A	Medium Low	Quartile Change	**Adequate**
34	Food and Agriculture Safety and Defense	Medium Low	N/A	Medium Low	Improved	**Adequate**
35	Laboratory Testing	Medium High	0.8%	Medium High	Improved	**Adequate**
36	Epidemiological Surveillance and Investigation	Medium High	N/A	Medium High	Improved	**Adequate**
37	Mass Prophylaxis	Medium Low	0.6%	High	Quartile Change	**Adequate**

Table 6 above lists the percentage of UASI funding allocated to each capability in-between the two assessments and whether each capability improved within a quartile, improved enough to move to a higher quartile, was sustained, or decreased. Not applicable (N/A) is listed for the five capabilities that did not receive UASI funding during the covered time frame (but may have received funding from other sources). Finally, the last column to the right entitled "Gap Analysis" lists whether the capability level is sufficient based on the Bay Area's risk profile. Three categories were used: "Adequate" meaning no additional capability is needed, "Needs Attention" meaning some additional capability is needed, and "Needs Extra Attention", meaning the gap in capability level based on risk is significant.

From 2009 through 2011, the UASI program helped the Bay Area improve in 84% of all Target Capabilities

The region saw 15 capabilities improve enough to move-up in their overall quartile ranking, e.g., from Medium-Low to Medium-High, with 16 capabilities improving within their quartile (but not enough to move-up in quartile ranking). These 31 capabilities that increased account for approximately 84% of all the Target Capabilities, as outlined in Figure 9 below. The remaining six Target Capabilities saw four capabilities or 11% sustain from one assessment to the next, with two capabilities or 5% decreasing. However, in no case did the level of ability drop among any of the 22 priority Target Capabilities in-between the two assessments.

Figure 9: Bay Area UASI Capability Level Changes from 2009 to 2011



The degree to which capabilities improved was not based simply on a matter of the amount of funding provided towards a capability. For example, arguably the capability with highest "cost" to build and maintain is interoperable communications among first responders (the Communications Target Capability), due to the type and amount of equipment involved. As

a result, while just over 25% of UASI funding was invested in Communications (the 9th ranked capability), and improvements in overall capability were present, there was no overall positive change in quartile ranking for Communications. In this case, Communications stayed at "Medium-Low" in both assessments with a gap indicating "Needs Attention." Compare this to Critical Infrastructure Protection, the number 3 ranked capability, which received a small fraction of funding relative to Communications (6% in-between assessments), but which nonetheless moved up a quartile from "Low" in 2009 to "-Medium-Low" in 2011. The region also closed capability gaps in Critical Infrastructure Protection relative to risk by moving from "Needs Extra Attention" to "Needs Attention."

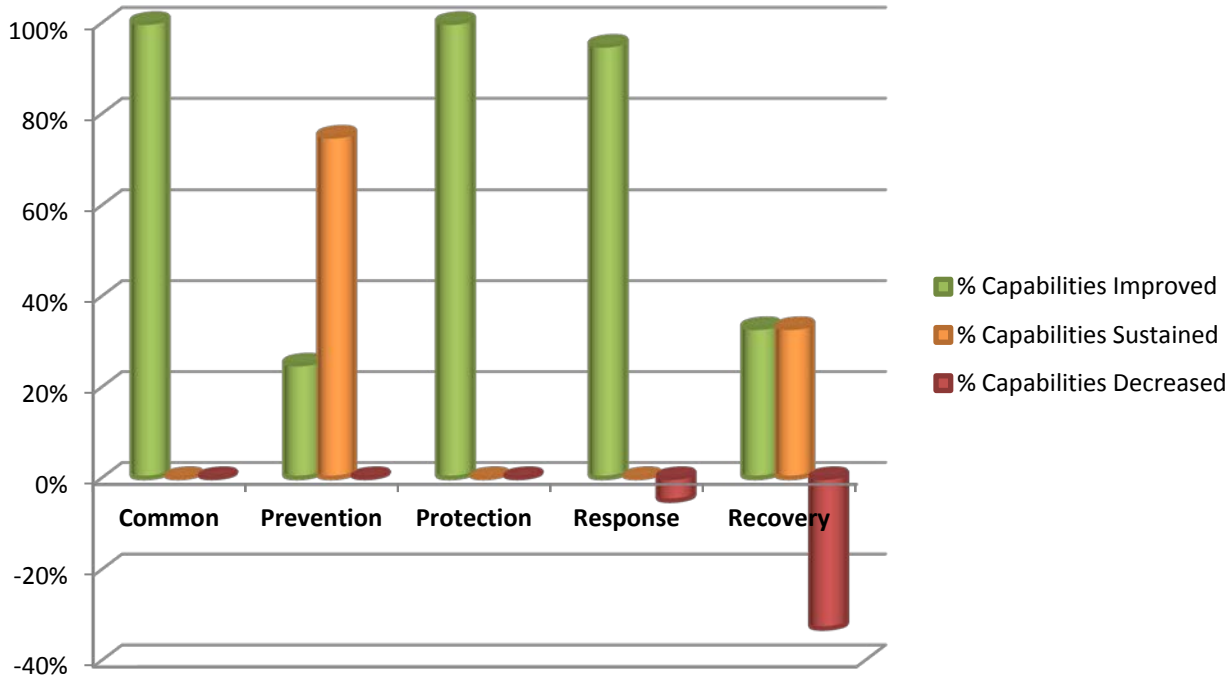
In addition to the cost of raising a capability's level, the law of diminishing returns is a factor in how funding is allocated and its impact on capability improvements. For example, when capabilities attain the "High" level, no additional funds can move the Target Capability to a higher quartile, even if capability levels do improve. And in certain cases, depending on the capability's priority ranking, a "Medium-High" level of ability may be sufficient based on the region's risk profile, as is the case with the Bay Area and the WMD/HazMat Response and Decontamination Target Capability.

Finally, another important factor is non-UASI funding. While the UASI program is a vital resource to assist the Bay Area in building regional capabilities, for several capabilities it is but one source and by no means the largest. For example, federal grants, particularly those from the U.S. Department of Health and Human Services (HHS), for medical and health capabilities, e.g., Isolation and Quarantine and Epidemiological Surveillance and Investigation, contribute significantly to capability enhancements in those areas.

5.2 Capabilities by Mission Area

As noted previously, the Bay Area saw positive trends or sustainment in all capabilities with two exceptions. Figure 10 below summarizes this data across all four mission areas plus the common mission area. In both the common and protection mission areas, the Bay Area saw improvement in 100% of the capabilities in each mission area. The response mission area saw improvement in 95% of its capabilities with a decrease in 5% or one capability. While the prevention mission area saw improvement in only 25% of its applicable capabilities, the remaining 75% of capabilities were sustained. Finally, the recovery mission area was split among the three capabilities in that mission area with 33% of all capabilities increasing, decreasing, and having no change.

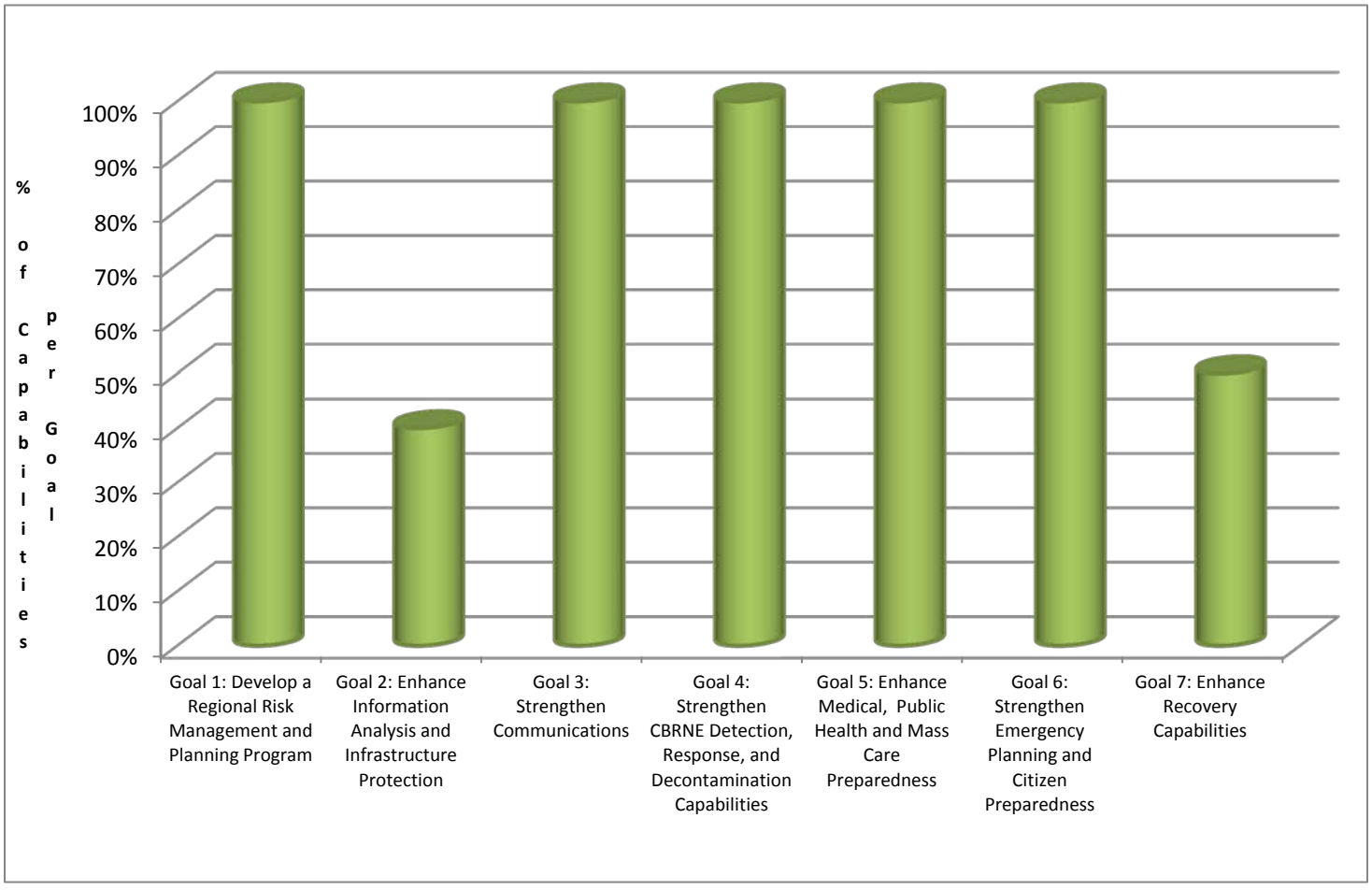
Figure 10: Capability Improvements by Mission Area



5.3 Capabilities by Bay Area Homeland Security Goals

Finally, an analysis of capability improvements from 2009 to 2011 by *Bay Area Homeland Security Strategy* shows that with UASI funds, the Bay Area made improvements in or sustained capabilities across all of its homeland security goals. Figure 11 below shows that five out of the eight goals – 1, 3, 4, 5 and 6 – saw every capability (100%) linked to an objective under each goal increase in some capacity. Goals 2 and 7 each saw capability improvements, with three of the five applicable capabilities in goal 2 sustaining levels of ability, and two improving. Goal 7 saw one capability decrease, one sustain, and two improve. Since goal 8, training and exercises, covers all applicable capabilites, any improvements in capabilities enhanced as a result of goal 8 ctivites would be relfected in one of the other seven goals.

Figure 11: Capabilities Enhanced or Sustained by Bay Area Homeland Security Strategy Goal



5.4 Building Dual Use Capabilities

In funding its priority capabilities, the Bay Area has built dual use regional capabilities that can address both the terrorism and natural hazard scenarios that pose the greatest risk to the region. Building dual use capabilities is an efficient use of scarce resources. It allows the Bay Area to focus on those capabilities primarily designed to address terrorism scenarios while simultaneously enhancing the region's ability to address hazards such as earthquakes, wildfires, floods and industrial accidents. This cost saving and efficient approach is fully endorsed by DHS. In Table 7, each of the 22 priority capabilities as identified by the Bay Area and DHS, along with ten other necessary capabilities, is mapped to the Bay Area's highest-risk terrorism and natural hazard scenarios that each capability is essential for addressing. The 22 capabilities are in italics and highlighted in red.

Table 7: Dual Use Capabilites Mapped to High Risk Scenarios

Earthquake	Terrorists' Use of Explosives	Contagious Biological	Floods	Wildfires
Planning	*Planning*	*Planning*	*Planning*	*Planning*
Communications	*Communications*	Laboratory Testing	*Communications*	*On-site Incident Management*
Critical Infrastructure Protection	*Emergency Public Safety and Security Response*	*Emergency Public Information and Warning*	*Community Preparedness and Participation*	*Mass Care*
Intelligence/ Information Sharing and Dissemination	*Intelligence/ Information Sharing and Dissemination*	*Intelligence/ Information Sharing and Dissemination*	*Intelligence/ Information Sharing and Dissemination*	*Intelligence/ Information Sharing and Dissemination*
Risk Management	*Risk Management*	*Emergency Public Safety and Security*	*Risk Management*	*Citizen Evacuation and Shelter-in Place*
Community Preparedness and Participation	*Critical Infrastructure Protection*	*WMD/HazMat Response and Decontamination*	Search and Rescue	Fire Incident Response Support
EOC Management	*Counter-Terror Investigations and Law Enforcement*	*Fatality Management*	Critical Resource Logistics and Distribution	Critical Resource Logistics and Distribution
Critical Resource Logistics and Distribution	*Explosive Device Response Operations*	*Intelligence Analysis and Production*	*Citizen Evacuation and Shelter-in-Place*	*Communications*
Emergency Public Information and Warning	*Information Gathering and Recognition of Indicators and Warning*	*Responder Safety and Health*	*Emergency Public Information and Warning*	*Community Preparedness and Participation*
Volunteer Management and Donations	*Intelligence Analysis and Production*	Epidemiological Surveillance and Investigation	*EOC Management*	*Risk Management*
Fire Incident Response Support	Search and Rescue	*Medical Surge*	*Fatality Management*	*Responder Safety and Health*
Citizen Evacuation and Shelter-in-Place	*EOC Management*	*Mass Prophylaxis*	Economic and Community Recovery	*EOC Management*
Emergency Public Safety and Security	*Fatality Management*	*Risk Management*	*Mass Care*	*Emergency Public Information and Warning*
Fatality Management	*Medical Surge*	*Citizen Evacuation and Shelter-in-Place*	*Critical Infrastructure Protection*	Critical Infrastructure Protection
Medical Surge	*Emergency Triage and Pre-Hospital Treatment*	*Medical Surge*		
Mass Care	*Responder Safety and Health*			
Search and Rescue	*CBRNE Detection*			
Restoration of Lifelines	*On-site Incident Management*			
Economic and Community Recovery				
Structural Damage Assessment				

Among the 32 capabilities listed in Table 7, the Bay Area allocated approximately $50.1 (or over 99% of all its funding spent) across 31 of those capabilities during the covered time period. The only listed capability not funded with UASI dollars was the Epidemiological Surveillance and Investigation Target Capability necessary for a contagious biological terrorist attack. This capability is among the medical and health capabilities and is therefore eligible for funding under other federal and state grant programs and local general funds.

Section 6
Capabilities in Action

This section examines the actual use of multiple UASI supported capabilities though real world incidents and several full scale exercises. The analysis is centered on four major areas: risk management and planning, intelligence and infrastructure protection, emergency operations, and emergency communications. Each of the sub-sections links to the National Priorities, Bay Area goals, and Target Capabilities that are examined in that sub-section and provides a summary of major UASI funded items.

6.1 Regional Collaboration through Risk Management and Planning

National Priority: *Expand Regional Collaboration*

Bay Area Goal: *Develop a Regional Risk Management and Planning Program*

Primary Target Capabilities: *Planning and Risk Management*

Regional collaboration goes to the core of the UASI program's purpose, which is to break down traditional barriers based on level of government, e.g., city versus county, and public safety discipline, e.g., law enforcement versus fire, in order to enhance regional capabilities to address those terrorism scenarios that pose the greatest risk to large urban areas. The Bay Area UASI has fully embraced this model and allocated $4.1 million from 2009 through 2011 to develop a sophisticated risk management program and regional collaboration system to coordinate and manage a region that is as large and diverse as several states.

Like every UASI region, the Bay Area has developed a DHS-mandated and approved regional homeland security strategy and planning structure designed around implementing National Homeland Security Priorities at the regional level. The strategy serves as a foundation upon which all other local homeland security efforts are built.

In addition to regional planning, the Bay Area has also developed a comprehensive regional training and exercise program. At the center of this program is the UASI funded full scale preparedness exercise entitled Urban Shield, which is a multi-day event involving dozens of local, state and

The Bay Area Homeland Security Strategy
2012 – 2014

November 2011

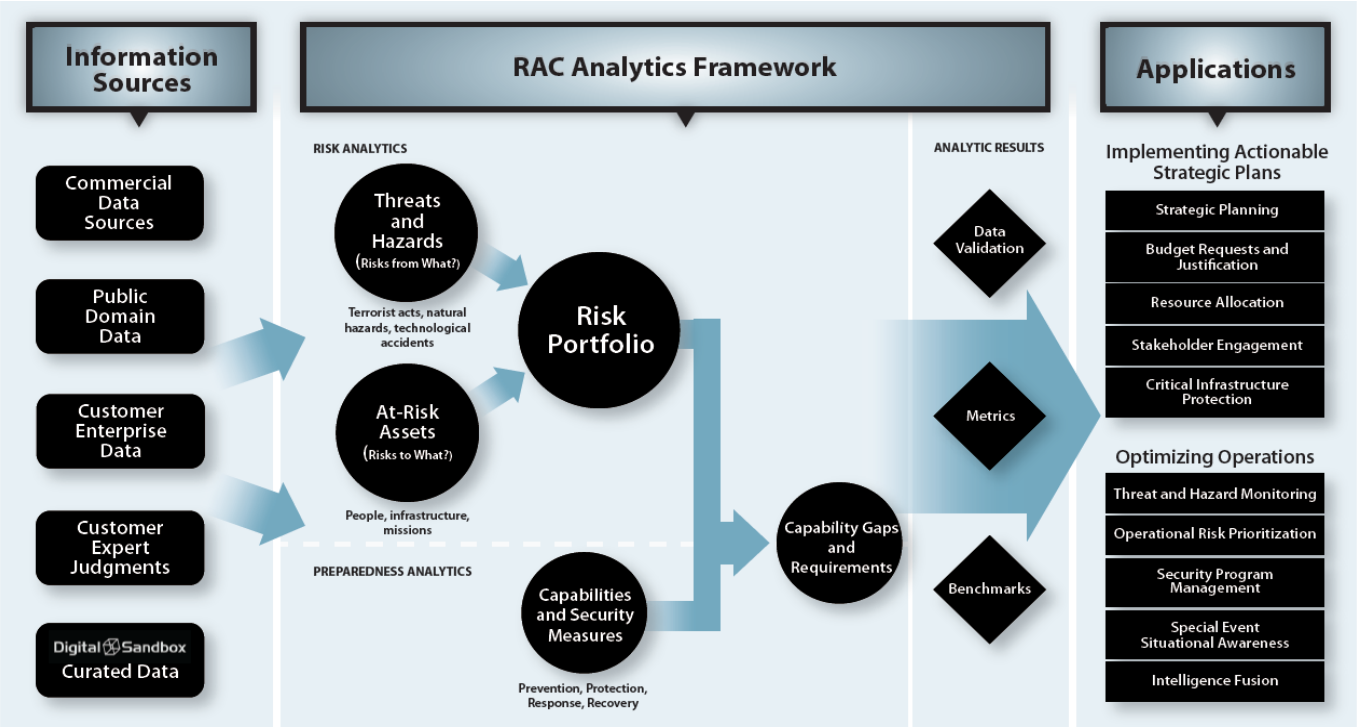
federal agencies and thousands of responders that tests a variety of Target Capabilities based upon terrorism and other scenarios.

Table 8: Major UASI Funded Risk Management and Planning Initiatives	
	Deliverable
Planning	Regional and local risk and capabilities assessments
	Updates to the *Bay Area Homeland Security Strategy*
	New homeland security strategy implementation process
	Recovery planner
	Implementation of EOPs, including recovery plan, disaster shelter plan
	New procedures to define EOC roles and responsibilities
	Updated mutual aid policies, protocols, and plans
	Enhanced plans for regional emergency coordination, medical surge, and mass prophylaxis
	Continuity of operations, strategic communications, catastrophic earthquake, and recovery plans
	Alameda County – Enhanced plans for HazMat Area, Oil Spill Response Plan
	Emergency response annexes
	Enhanced plans for NIMS, All-Hazard Strategic Plan, disaster response training plans for employees and citizen groups
	Regional homeland security program managers and planners
	Soft story housing safety assessment and implementation plan
	Regional assessment and strategic plan for emergency public information and warning
Training	Development and delivery of a regional training program
Exercises	Development and delivery of full scale regional exercises

6.1.1 Risk Management Tools and Procedures

To ensure its *Strategy* is based on reducing risk to the region through enhanced capabilities, in FY 2009, the Bay Area invested in the Risk Analysis Center (RAC) software platform. Today, with the UASI funded RAC, the Bay Area is engaging in sophisticated terrorism and natural hazards risk and capabilities assessments to help determine regional homeland security goals and objectives. Those goals and objectives then lead to UASI funded plans, organization, equipment, training, and exercises necessary to produce the outcomes that support enhancing preparedness and security in the Bay Area. The full scope of the RAC's suite of capabilities is set out in Figure 12 below.

Figure 12: Risk Analysis Center Capabilities



The RAC leverages the above analytic framework within the Bay Area risk management program to continually refine the breadth and depth of data sources feeding the analytic framework. As a result, real-time results are produced that have broad application over several homeland security functions within the Bay Area. In addition to strategic planning and investing, example application use cases include:

- Critical Infrastructure protection – *Cataloging and vetting data, risk quantification*.
- Public Safety Operations – *Supporting fire planning, EOC integrations.*
- Intelligence Fusion – *Risk context applied to intelligence*.
- Special Event Security – *National special security events, common operating picture, situational awareness*.
- Catastrophic Emergency Planning – *Scenario modeling, mapping of vulnerable populations*.

The Bay Area's use of the RAC helped lead to the system becoming the first in the nation non-federal system to be designated as Protected Critical Infrastructure Information (PCII) certified by DHS. This was a joint effort between the Bay Area, California Emergency Management Agency (CalEMA), and DHS, and took 14 months to achieve. This certification has allowed the private sector to share more information with the Bay Area's public safety agencies, while maintaining the security of that information through the PCII designation. The enhanced information-sharing allows the region to better assess and evaluate risk to the region and its CIKR.

6.1.2 Regional Governance and Management

The UASI mandated governance structure has transformed the way cities, counties and the private sector work together in the Bay Area to enhance regional preparedness and security. In the past, each level of government, and the public health and safety agencies within them, operated in a competitive environment when it came to acquiring funding to enhance capabilities. The UASI program has removed this competitive stove-piped approach with a required framework that saves time and money and leverages resources through regional cooperation and collaboration.

The Bay Area's governance structure is a groundbreaking regional approach that has been recognized across the country as a homeland security best practice.

Governed by a multi-year memorandum of understanding between the participants, the Bay Area UASI is managed through a three-tiered governance structure. This includes an Approval Authority that serves as a regional executive board for policy making, an Advisory Group made up of a wide variety of regional stakeholders that serves as a policy clearinghouse for the Approval Authority, and a Management Team made up of public safety and management professionals that oversees the grant and helps implement policy and programs. The Bay Area's governance structure is widely viewed as having an important, groundbreaking regional approach that has been recognized across the country as a homeland security "best practice."[14]

6.1.3 Regional Training and Exercise Program

The Bay Area's multi-year Homeland Security Exercise, Evaluation, and Training Program is designed to address regional goals, build towards and test against Target Capabilities within the *Bay Area Homeland Security Strategy*, and to improve the operational readiness of the homeland security system in the region across the full spectrum of prevention, protection, response and recovery.

The Alameda County Sheriff's Office (ACSO) is the Bay Area's managing agent for the area's regional training and exercise program and leads a multi-disciplinary staffing structure. The ACSO Regional Training Center (RTC) includes a full basic academy, a state-of-the-art firearms training facility, an advanced emergency vehicle operations facility, and multiple contemporary classrooms equipped with modern technology.

[14] *Emergency Management Magazine*, Bay Area UASI's Governance Structure Aids Collaboration, Coordination in California, (April 30, 2010) accessed at http://www.emergencymgmt.com/disaster/Bay-Area-UASIs-Governance.html.

Over the years, the Bay Area's regional training program has trained thousands of responders across a range of disciplines, including emergency management, emergency medical services, fire-fighting, law enforcement, and hazardous materials response, etc. This training is invaluable to building regional capacity to better protect the lives and property of all Bay Area residents from all hazards. The region has also developed a training and exercise website for all of its regional stakeholders. The site is fully functional and allows subject matter experts to submit training proposals, register students, and produce basic statistical reports.

The Bay Area UASI also manages the internationally-recognized, annual, and full-scale exercise, "Urban Shield." Urban Shield is a multi-day continuous exercise conducted throughout the Bay Area UASI region. Thousands of first responders are mobilized and deployed to dozens of different exercise scenarios hosted by various agencies. These scenarios address the core competencies and response capabilities of law enforcement tactical teams, emergency medical services providers, hazardous materials/urban search and rescue teams, communications, explosive ordnance disposal teams, as well as intelligence and critical infrastructure protection, among others.

6.2 Intelligence and Critical Infrastructure Protection

National Priorities: *Strengthen Information Sharing and Collaboration Capabilities, and Implement the NIPP*

Bay Area Goal: *Enhance Information Analysis and Infrastructure Protection*

Primary Target Capabilities: *Intelligence and Information Sharing and Dissemination, Counter-Terror Investigations and Law Enforcement, Critical Infrastructure Protection, Information Gathering and Recognition of Indicators and Warnings, and Intelligence Analysis and Production*

The Bay Area spent just over $10.1 million in UASI resources from 2009 through 2011 to support its mission to prevent and protect against terrorism and major crimes. A critical element of that effort is the Northern California Regional Intelligence Center (NCRIC). The NCRIC is the Bay Area's nationally renowned "All Crimes Fusion Center", owned and operated by the local public safety agencies in the region. The NCRIC helps safeguard the community by disseminating intelligence and facilitating communications between federal, state, and local agencies and private sector partners to help them take action against terrorism, gangs, drug trafficking organizations, and serial crimes. Today, the NCRIC includes 8,388 public and private sector members and reviewed 2,631 new applications for membership during local fiscal year 2011-12.

The NCRIC is the only fusion center in the nation to be under the unified command of a High Intensity Drug Trafficking Area's (HIDTA) Executive Board. The NCRIC is co-located in the FBI Field Division's main facility in San Francisco, along with the HIDTA Investigative Support Center and the FBI Joint Terrorism Task Force (JTTF). The NCRIC's homeland security program consists of the Assessment and Monitoring Team, Vetting and Awareness Team, Critical Infrastructure Protection Team, and Outreach Programs for Terrorism Liaison Officers (TLOs) and the Private Sector. The HIDTA consists of a Management Initiative, an Investigative Support Center, a Training Initiative, and five Investigative Initiatives.

Table 9: Major UASI Funded Intelligence and Infrastructure Protection Initiatives

	Deliverable
Planning	Plans and protocols for regional information sharing concept of operations implementation
	COPLINK - Enhanced information sharing plans and policies and procedures between multiple UASI regions
	Public sector outreach plans
	Bay Area regional risk assessment
	Critical infrastructure assessments
	Updated NCRIC policies and procedures
	NCRIC, Terrorism Liaison Officers (TLOs)

Organization	Multidisciplinary Terrorism Early Warning Groups (TEWGs)
	NCRIC intelligence analysts
	Automated field reporting - records management system
Equipment	COPLINK law enforcement information-sharing system
	Golden Gate Bridge security enhancements
	Terrorist and criminal surveillance, tracking, and telecom equipment
	Automated Regional Information Exchange System
	Water treatment devices and physical security devices
	Cyber security equipment
	Portable barricades
	Automated Critical Asset Management System (ACAMS)
Training	Terrorism analysis
	Suspicious activity reporting
	WMD threat and risk assessment
	TLO basic and advanced
	Physical security enhancements
	Prisoner radicalization
	Test and evaluate response to an active shooter scenario at the Pyramid Building
Exercises	Test and evaluate an active shooter scenario at the East Bay Municipal Utility District, City of Daly City Water Treatment Plant and the Rinconada Water Treatment Plant

6.2.1 NCRIC Return on Investment Analysis

The NCRIC has been recognized as a national "best practice" for information sharing by the Director of National Intelligence

While the NCRIC's UASI and HIDTA funds are not comingled and are managed separately as a matter of fiscal and grants-management policy, the capabilities produced by the two sources of funds are fully integrated to help secure the region against major crimes and terrorism. This unified approach is a model for effectiveness and efficiency of information-sharing, threat and vulnerability identification, and prevention initiatives. In fact, in 2012, the Director of National Intelligence said the NCRIC is a model fusion center for the nation.

In 2011, for every $1 invested in law enforcement initiatives, the NCRIC/HIDTA generated an average return on investment (ROI) of $986.58 in drug seizures and $4.89 in cash and asset seizures, for a total ROI of $991.48 for drugs and assets seized. Drug and asset seizures have increased by over $2 billion since 2006, and the ROI of every HIDTA dollar expended has increased by $688.08 since that year. This is reflected in Table 10 below.

Table 10: NCRIC/HIDTA Supported Drug and Asset Seizures						
Year	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Seized	**$662,427,559**	**$513,214,272**	**$1,156,045,674**	**$1,766,521,094**	**$1,097,661,392**	**$2,723,564,842**
ROI	**$303.40**	**$262.49**	**$570.89**	**$684.04**	**$421.44**	**$991.48**

The NCRIC's support to homeland security and law enforcement efforts across the region spans multiple areas. For example, from 2010 to 2011, the NCRIC provided vulnerability assessments at 54 critical infrastructure and key resource sites, large special events, and specialized training events. In 2012, the NCRIC vulnerability assessment methodology and report template was adopted by Argonne National Laboratory as a model for fusion center assessments and for use as a training tool for fusion centers across the nation. The full scope of the NCRIC's operational, preparedness, and analytical support from 2009 through 2011 is outlined in Figure 13 below.

Figure 13: NCRIC Support to Bay Area Preparedness and Security

NCRIC Products Delivered	**Suspicious Activity Reports (SARs) Received**	**SARs Reported to FBI**	**Major Vulnerability Assessments**
220 intelligence products	708 SARs	381 SARs	54 site assessments
Criminal Cases Supported	**JTTF RFI Support**	**Electronic Surveillance Support**	**TLO Training**
1,395 Cases	418 RFIs	155 electronic intercepts and 128 pen registers	109 courses and 4,319 students trained
Law Enforcement Training			
389 courses and 16,551 students trained			

The collection and analysis of suspicious activity reports (SARs) that are later forwarded to the FBI/JTTF for investigation are particularly important. These SARs provide a sufficient basis for the FBI to make formal inquiries or open full field terrorism investigations. Without the NCRIC, many, and possibly most, of these SARs would never reach the FBI, resulting in a major intelligence and homeland security gap.

The SARs provided by the NCRIC are often the proverbial "dots" that need to be collected and then connected in order to prevent an attack from occurring. Sometimes the SAR may be non-criminal in nature, e.g., photographing security cameras at iconic buildings, while others may involve an independent crime intended to support terrorist operations, e.g., stealing law enforcement uniforms.

The collection and analysis of suspicious activity allows the region to determine if a potential terrorist plot or material support to terrorism is occurring before an actual attack occurs in the Bay Area or anywhere else in the United States. It is a vital terrorism prevention tool and the NCRIC is the FBI/JTTF's single largest provider in the region of SARs that have a potential nexus to terrorism.

6.2.2 The Terrorism Liaison Officer Program

A key element of the Bay Area's homeland security efforts is the region's UASI funded Terrorism Liaison Officer (TLO) program. TLOs are trained public safety personnel whose purpose it is to improve information sharing among and between public safety agencies and their private sector partners. TLOs achieve this by working with the NCRIC as a conduit for homeland security information sharing from the field to the fusion center for analysis, and from the fusion center to the field for action. This includes TLOs collecting suspicious activity reports for NCRIC analysis and subsequent follow-up by the region's JTTF. By the end of calendar year 2011, there were 1,717 fully trained and certified TLOs operating in the Bay Area. The TLO program originated in California and is now used as a national model by DHS and other states and urban areas. On numerous occasions, TLOs have been instrumental in collecting and sharing information to deter potential acts of terrorism and violent crime.

The Terrorism Liaison Officer program originated in California and is now used as a national model by DHS and other states and urban areas.

In March 2010, a man was observed in an Oakland airport bathroom changing into a blue jump suit with yellow reflective stripes similar to those used by airline ramp agents. After passing through TSA screening, the man walked to the "employees only" airport operations section. He was later caught by TSA in an airport office behind a ticket counter trying to access a computer. The man was then arrested by the Alameda County Sheriff's Office and booked at the county jail, where detailed maps of subways and transit schedules were discovered among the man's personal property. The jail TLO then notified the NCRIC of the incident at the airport. This information was then provided to the FBI as a suspicious

activity report. The man later admitted to being a member of the Hell's Angels outlaw motorcycle gang.

On November 5, 2011, the date of former transit police officer Johannes Mehserle's sentencing for shooting an unarmed man on a transit platform and associated protests in Oakland, the NCRIC issued an officer safety bulletin to TLOs and law enforcement. The bulletin was based on threats a man had made via Twitter against law enforcement officers in the Bay Area region. Angry over the two year sentence Mehserle had received, the man claimed "This is war" and said that he was armed and heading to Oakland where the Mehserle's sentence was handed down. The bulletin included a picture of the man, his registered vehicles and registered firearms. The individual was later contacted by police at the Oakland airport and prevented from committing any act of violence.

6.2.3 Supporting Terrorist Screening Operations

The Bay Area is directly supporting the federal government's efforts to screen and track known and suspected terrorists.

The Bay Area's intelligence programs directly support federal counter terrorism screening efforts. This was evidenced by a recent incident in which local law enforcement and the NCRIC supported the FBI led Terrorist Screening Center (TSC). In June 2012, a San Jose police officer reported to the TSC an encounter with a "known or appropriately suspected terrorist" after the individual attempted to rent a car with fake identification.[15] As a result of this encounter, the TSC notified all of California's fusion centers, including the NCRIC, via the new Law Enforcement Online notification and request for information process.

The NCRIC, in response to the TSC's request for information on the suspected terrorist, reviewed its databases and then forwarded all information it had on the individual to the TSC. The information supplied by the NCRIC was then vetted against all available TSC databases by its Terrorist Screening Operations Unit (TSOU). New information found by the TSOU was then forwarded for review to the FBI case agent responsible for the case surrounding the suspected terrorist. Within minutes of the case agent being notified, the agent called to inform the TSC that a Social Security number had been found that was being used by his subject that the agent was previously unaware of. In addition to the Social Security number, new information also included previously unrecorded system identification numbers for the subject from Colorado, Nevada, and Virginia.

By learning of the Social Security information, the FBI case agent now knows of alternate identifying information – name, Social Security number, etc. – that the suspected terrorist

[15] The point of a TSC "hit" is to notify an FBI case agent of a law enforcement encounter with his/her subject, and to notify the law enforcement officer doing the encountering that the individual is potentially the subject of an ongoing terrorism investigation in order to relay pertinent information.

was using. This enabled the agent to learn of any prior and unknown activity committed by the subject in that alternate name. The system identification numbers allowed the case agent to discover any previously unknown or unreported criminal activity undertaken by the suspected terrorist in other jurisdictions. The FBI agent acknowledged the benefits of the notification process and expressed his gratitude to all those involved.

6.2.4 Operational Support and Special Event Security

During violent demonstrations within the City of Oakland in 2012, the NCRIC, using CIKR information in the RAC, was able to provide known locations of CIKR to the Oakland Police Department. This allowed the Oakland incident commander to prioritize what assets to protect with the limited resources available. As a risk mitigation strategy, this limited the consequences of the riots in relation to damaging or disrupting CIKR.

The Bay Area has a considerable number of nationally and internationally recognized sporting and special events that include regularly occurring National Football League and Major League Baseball games. The most recent special event was the U.S. Open golf tournament held in San Francisco. The region used one of its three UASI supported Type I bomb squads (that of the San Francisco Police Department (SFPD)) to sweep the area and remain on standby in the event it was needed. As a risk mitigation tool, the NCRIC provided analytical support to the SFPD with integrated channel feeds that included news feeds, suspicious activity reports, camera feeds, license plate reader feeds, Law Enforcement On-line feeds, and on-site security feeds. Analytically triaged information was provided to the SFPD joint operations center, the command staff, and the NCRIC, which provided strategic and tactical support to mitigate risk to the event.

6.2.5 Fusion Center Assessments

Federally led assessments consistently show the NCRIC to be among the highest performing fusion centers in the country.

In order to test and validate levels of capability, the NCRIC has undergone several assessments in recent years. Starting in October 2010, the federal Office of the Program Manager, Information Sharing Environment; the U.S. Department of Justice; and DHS provided resources and guidelines for a self-assessment. This was followed by an independent on-site validation review as part of an effort to assess capabilities at fusion centers across the country. The assessment focused on four Critical Operational Capabilities (COCs):

- **COC 1** Ability to receive classified and unclassified information from federal partners
- **COC 2** Ability to assess local implications of threat information through the use of a formal risk assessment process
- **COC 3** Ability to further disseminate threat information to other state, local, tribal, territorial, and private sector entities within their jurisdiction

- **COC 4** Ability to gather locally generated information, aggregate it, analyze it, and share it with federal partners as appropriate.

The results of the assessment are outlined in Figure 14 below.[16]

Figure 14: 2010 NCRIC Critical Operational Capabilities Scores

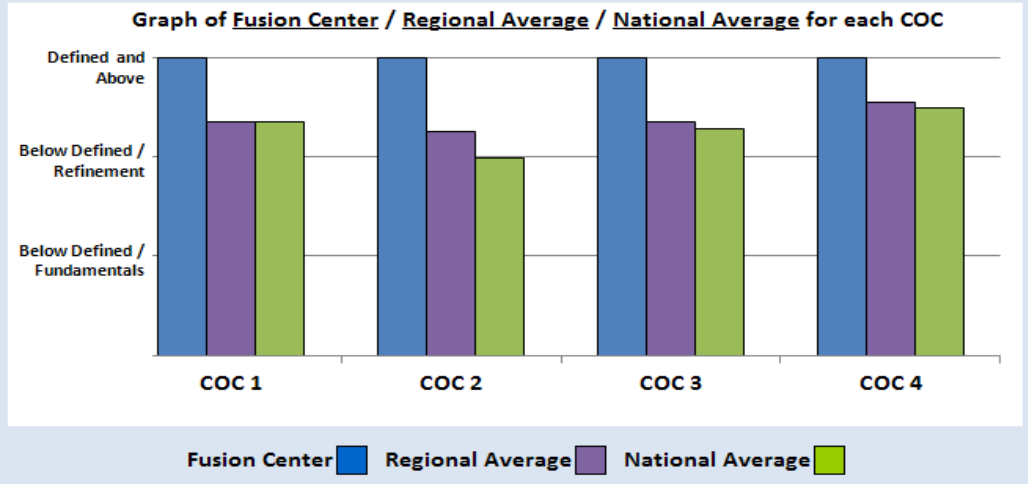


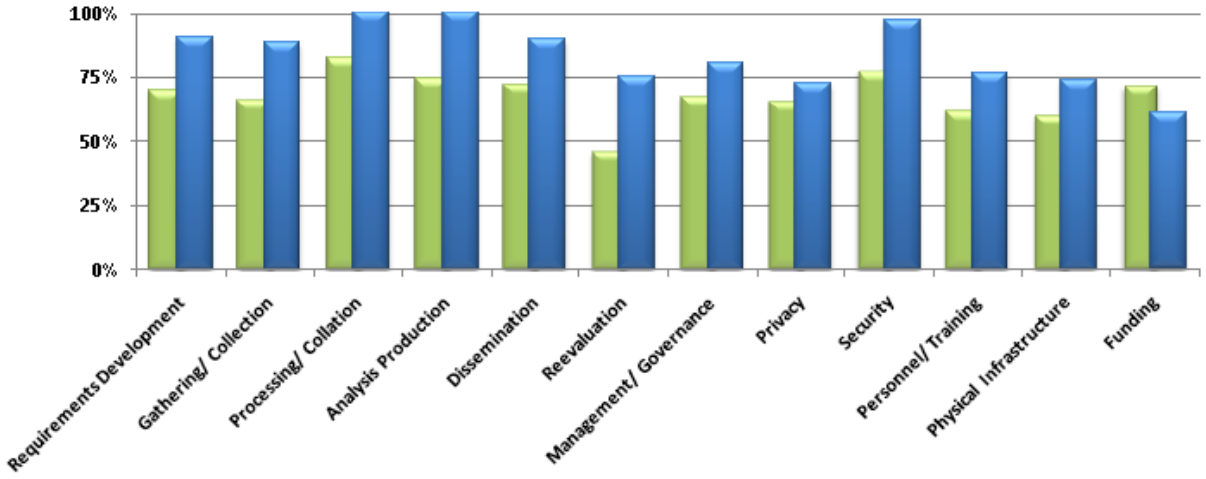
Figure 14 above shows that the NCRIC (listed as "Fusion Center") performed at the highest level and well above the national and regional (Western U.S.) averages in all four COC categories. Its "Defined and Above" score means the NCRIC has "documented plans, policies, and standard operating procedures in place to execute the fundamentals of the COC."[17]

The 2010 assessment also broke out the four COCs into 12 subcategories in which the NCRIC outperformed its counterparts across the nation in 11 out of the 12 subcategories, as outlined in Figure 15 below. Only in the funding category did the NCRIC get outperformed due to the fact that the NCRIC relies heavily on federal grant funding to maintain its capabilities.

[16] *Northern California Regional Intelligence Center Baseline Capabilities Assessment*, Prepared by the Office of the Program Manager, Information Sharing Environment (October 2010) at page 24.

[17] Id at 23.

Figure 15: 2010 NCRIC Critical Operational Capabilities - Subcategory Scores

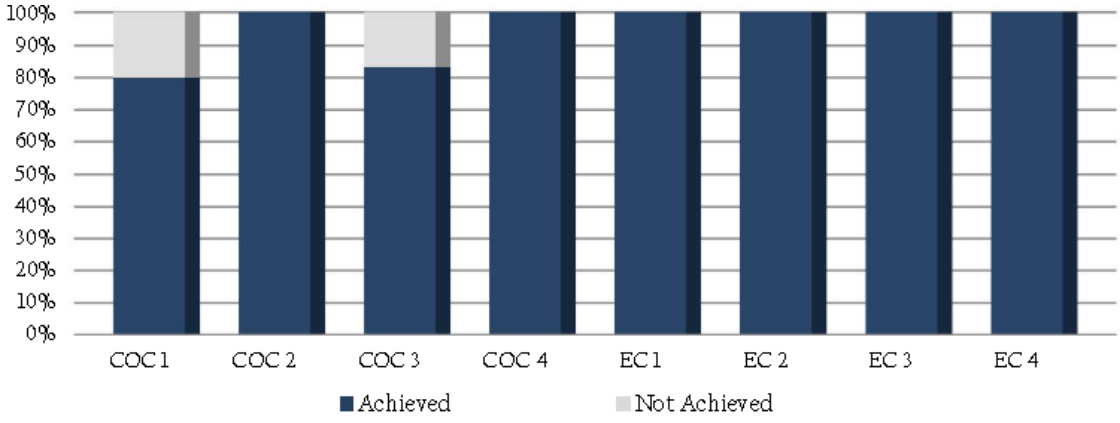


In 2011, the NCRIC underwent a follow-on self-assessment again led by federal partners. The 2011 assessment included the four COCs, as well as four new enabling capabilities (ECs):

- **EC 1: Privacy, Civil Rights, and Civil Liberties**: The ability and commitment to safeguard the privacy, civil rights, and civil liberties of all Americans.
- **EC 2: Sustainment**: The ability to establish and execute a sustainment strategy to ensure the long-term growth and maturity of the National Network.
- **EC 3: Communications**: The ability to develop and execute a communications and outreach plan
- **EC 4: Security**: The ability to protect the security of the fusion center's facility, information, systems, and personnel

As in 2010, the NCRIC scored among the top fusion centers in the nation with an overall score of 92.7 out of a possible 100. This was nearly 16 points above the national average score of 76.8. The NCRIC achieved the highest possible score in all four ECs and two out of the four COCs as reflected in Figure 16 below.

Figure 16: 2011 NCRIC Critical Operational and Enabling Capabilities Scores



6.2.6 Protecting Civil Liberties

Among the new ECs, the NCRIC was one of the first fusion centers in the nation to acquire a U.S. Department of Justice and DHS-approved privacy policy. Today, compared to all other Bay Area regional public safety programs, the NCRIC provides the greatest amount of regional privacy, civil rights, and civil liberties training to law enforcement personnel in the Bay Area.

As part of its privacy and civil liberties program, in 2011, the NCRIC led a series of meetings over a three day period in San Francisco, Oakland, and San Jose with local and federal law enforcement agencies and community organizations to discuss fostering trust among law enforcement and the communities they serve. The meetings led to the production of a guide for law enforcement agencies around the nation, "Building Communities of Trust – A Guidance for Community Leaders," produced by the Bureau of Justice Assistance, DHS, and the International Association of Chiefs of Police.

6.2.7 Nationally Recognized Accomplishments

In addition to being recognized as a "best practice" by the Director of National intelligence, the NCRIC and its leadership have been formally recognized for their achievements at national level forums for all their accomplishments. In April 2012, two members of the NCRIC management team received the top fusion center awards from the Secretary of Homeland Security at the National Fusion Center Training Event. NCRIC Director Ronald E. Brooks received the highest individual State and Major Urban Area Fusion Center Award as the Representative of the Year (see picture above), and NCRIC Supervising Lead Analyst Jim Paterson was awarded the Michael Schooler Award for Excellence in the Field of Infrastructure Protection.

6.3 Regional Emergency Response

National Priorities: *Strengthen CBRNE Detection, Response, and Decontamination Capabilities, and Implement the National Incident Management System (NIMS) and National Response Framework (NRF)*

Bay Area Goal: *Strengthen CBRNE Detection, Response and Decontamination Capabilities*

Primary Target Capabilities: *Explosive Device Response Operations, CBRNE Detection, WMD/Hazardous Materials Response and Decontamination, Emergency Public Safety and Security Response, On-site Incident Management, Responder Safety and Health, and EOC Management*

The UASI program has been essential to enhancing incident management capabilities across the region involving a wide array of events, hazards and emergencies. Under the covered time period, the Bay Area allocated over $16 million across all emergency response capabilities. The Bay Area's investments in emergency response capabilities have reduced the potential consequences of a terrorist attack or natural disaster. These investments have resulted in more effective detection and response capabilities for CBRNE and other incidents, thereby reducing loss of life, property damage, and economic impacts. Capabilities have improved through enhanced planning, equipment, training, and exercises.

Table 11: Major UASI Funded Emergency Response Initiatives

	Deliverable
Planning	Updates to HazMat response plans
	Critical resource inventory planning
	EOC readiness and response operations update
	Major fire rescue plans
	CBRNE assessments
Equipment	Bomb robots to support bomb squad operations
	Swift water rescue equipment
	Thermal imaging equipment
	Explosive, biological and chemical detection equipment
	Power tools for search and rescue
	Chemical leak control kits
	CBRNE personal protective equipment, including gloves, masks, boots, splash protection face masks, self-contained breathing apparatus
	Ballistic Engineered Armored Response Counter Attack Trucks (BEARCATs)
	EOC software for situational awareness and information sharing
	Life safety rope
	Explosive entry equipment and bomb containment vessels

Training	Bomb squads at FBI's hazardous device school
	Large vehicle bomb counter measures
	Search and rescue, trench, confined space, river and flood, etc.
	Haz/Mat incident commander, technician and specialist
	Operational maritime security
	Safety officer
	Advanced EOC management and operations
	Enhanced incident management/unified command
Exercises	Bay Area Urban Shield full scale exercises
	California Golden Guardian full scale exercises

6.3.1 Law Enforcement Tactical Teams

With UASI funding, the Bay Area's law enforcement tactical teams, e.g., special weapons and tactics (SWAT) teams, have shown steady improvement in their ability to assess an incident, develop an initial incident action plan, and properly identify terrorists versus hostages and employ necessary tactics to address the terrorist threat. Today, the teams are further able to use scouts to gather on-site intelligence, communicate among team members, and can more effectively and safely move through large open spaces during an incident, such as one involving an active shooter at a school or other public facility.

6.3.2 Public Safety Bomb Squads

The Bay Area is home to thirteen FBI certified public safety bomb squads. Among these thirteen squads, three are Type 1 and the rest are Type 2 under the NIMS. The Type 1 squads are capable of handling a complex incident to include multiple or simultaneous life-threatening or time-sensitive IEDs involving sophisticated improvised energetic materials, electronic/remote firing systems, and tactical explosive breaching support. Type 1 squads have "render safe" capabilities up to and including large VBIEDs, and can operate in a CBRN environment and support tactical team operations.[18] Type 2 squads are capable of handling a moderate incident to include a life-threatening or time-sensitive scenario involving sophisticated improvised energetic materials and electronic/remote firing systems. Type 2 squads have "render safe"

[18] See, Federal Emergency Management Agency, *Typed Resource Definitions*, *Law Enforcement and Security Resources* (July 2007), page 5.

capabilities up to and including a medium VBIED and can operate in a CBRN environment.[19]

Urban Shield has shown that virtually all of the region's thirteen public safety bomb squads have increased their capabilities dramatically through the addition of UASI-funded explosive device response operations equipment and training. This includes using robotic, diagnostic and "render safe" equipment to successfully respond to IED incidents. Moreover, NIMS and the incident command system (ICS) training have improved the squads' command, control, and intelligence gathering capabilities. For example, the public safety bomb squads are now well versed in the recommended procedures and safety objectives for establishing onsite command and control involving IEDs, and the squads' intelligence gathering and communication functions are now well above the required levels set by the federal government. These and other enhancements are supported by real-world incident operations.

On September 13, 2011, the San Jose Police Department's Type 1 Bomb Squad responded to a call involving four IEDs, along with several firearms and ammunition inside a home in downtown San Jose. After further investigation, it was discovered that these four IEDs were "live." As a result, the police evacuated residents from an entire block within the vicinity of the house. Investigators and bomb technicians determined the safest way to dispose of the material was to detonate it. The squad members utilized the UASI-funded QinetiQ Dragon Runner™ 20 robot to safely remove the four devices remotely. Before obtaining this robot, the San Jose bomb technicians would have been required to render safe these devices in person.

In 2009, the National Bomb Squad Commanders Advisory Board was requiring all civilian bomb squads to have a bomb robot or lose federal certification. At that time, the City of Berkeley's bomb squad did not have a bomb robot. However, with UASI funds, Berkeley was able to acquire a bomb robot that can manage bomb calls remotely and assist the city's SWAT team with reconnaissance and communications involving barricaded suspects. Shortly after acquiring the robot, and also with UASI funds, Berkeley obtained a camera accessory for the robot that allows the robot to see the undercarriage and interior of vehicles to help deter and detect VBIEDs. The camera also assists the city's SWAT team with reconnaissance of raised first floor windows.

[19] Id.

6.3.3 Search and Rescue Teams

The region's investment in urban search and rescue (US&R) teams has enhanced such capabilities throughout the region. The Bay Area's US&R teams vary from the most capable teams, Type 1, to the least capable, Type 4 under the NIMS. Typing is based largely on equipment and training. Most of the region's teams fall under the Type 2 umbrella. These Type 2 teams have the capability to conduct safe and effective search and rescue operations at structure collapse incidents involving the collapse or failure of heavy wall construction, e.g., caused by an earthquake or VBIED. These teams are also capable of conducting high angle rope rescue (not including highline systems), confined space rescue, and trench and excavation rescue.[20] All of the Bay Area's teams have consistently shown the ability to work well within the ICS framework. Based upon gaps discovered in 2010, in 2011, the US&R teams improved the interoperability of their respective equipment caches with multi-agency teams able to work more efficiently and effectively together. This was validated as part of the UASI funded 2011 Urban Shield exercise.

6.3.4 Emergency Operations Center Management

The Bay Area has also showed improvement in EOC management during a large-scale disaster encompassing multiple counties in the region. This includes the ability to shift from the primary to back-up EOC sites to ensure the EOCs are in a functional state of readiness and that continuity of command and control can be maintained if a transition occurs. For example, during the 2010 Urban Shield exercise, three of the EOC's operated from their back-up sites and determined they were functional and operationally sound. The fourth was asked to move operations to the back-up site during the exercise based upon a simulated failure to their primary EOC facility. This fourth EOC planned to temporarily hand over command, control, and communications to one of the other three EOCs during the transition process. However, the fourth EOC was so successful in its transition using UASI funded technology and redundant communication systems they did not need any outside assistance.

[20] California Emergency Management Agency, *California Fire Service and Rescue, Emergency Mutual Aid System, Urban Search & Rescue Program*, (November 2010), page 17.

6.3.5 Emergency Public Safety and Security Response

Under the UASI program, the SFPD, the San Francisco Sheriff's Department and the San Mateo County Sheriff's Office are leading the development of a regional Type 1 mobile field force (MFF) capable of managing large-scale operations, including managing large and violent crowds, traffic control enforcement, and general saturation presence for the purpose of maintaining order and preserving the peace to include in CBRN environments.[21] This highly trained and specially equipped regional asset responds 24 hours a day, 7 days a week to emergencies occurring in the jurisdiction of the three current participants and acts as a mutual aid resource to other local, state and federal agencies in the Bay Area.

The SFPD and the two Sheriff's Departments that make-up the MFF have been collectively called to respond to numerous mutual aid requests in the region over the years. This includes the City of Oakland for the 2010 Meshserle trial, the City of San Bruno for the 2010 gas pipeline explosion and fire, several protests in 2011 surrounding the shooting of a man at a BART station in San Francisco, riots following the San Francisco Giants 2010 World Series victory, and numerous violent protests in 2011 and 2012 throughout the region.

In addition to supporting security at major events and incidents, the MFF also supports critical infrastructure protection to include county hospitals as a security element during a medical surge event, and is involved in food and water supply distribution in the event of a terrorist or natural disaster in the region.

[21] See, Federal Emergency Management Agency, *Typed Resource Definitions*, *Law Enforcement and Security Resources* (July 2007), page 12.

6.4 Interoperable Communications

In 2008, the Bay Area developed a five-year strategic plan to achieve region-wide interoperable communications among emergency responders, as defined by the SAFECOM Interoperability Continuum, and in coordination with the California Statewide Communications Interoperability Plan (CalSCIP). The strategic plan introduced the Bay Regional Interoperable Communications System (BayRICS) as the vision for communications interoperability in the region.

A key element to achieving the BayRICS vision is BayComm. BayComm is the "system of systems" voice initiative that seeks to provide Bay Area first responders with a common frequency band and a common open digital standard in Project (P) 25.[22] To implement BayComm, the Bay Area has divided itself into four sub-regions for the purpose of strengthening communications capabilities: the Silicon Valley Regional Communications System (SVRCS), the West Bay Regional Communications System (WBRCS), the East Bay Regional Communications Systems Authority (EBRCSA), and the North Bay Regional Communications System (NBRCS). Consistent with federal guidance, the BayComm focuses on three core elements of interoperability:

Governance – A three-tiered structure for Bay Area decision-making and planning that allows local and Regional Communications Systems (RCS) to control their respective systems.

Standard Operating Procedures (SOPs) – Common SOPs related to the NIMS and the ICS to support day-to-day task force and mutual aid types of interoperable communications.

Technology – Standards-based wireless technology that facilitates communications within RCS, linking the EBRCS and WBRCS. BayLink, a conventional radio system in the Bay Area, facilitates communications between agencies not affiliated with an RCS. In addition, BayLoop is a digital microwave network that links the various interoperability projects across the region, enabling features such as seamless roaming and the ability for dispatch centers to contact their neighboring dispatch centers to exchange information.

[22] P25 is recognized nationwide as the voice standard for public safety by the Association of Public-Safety Communications Officials and the Federal Government through the DHS Office of Emergency Communications, FEMA, and the National Institute of Standards and Technology.

Table 12: Major UASI Funded Communications Initiatives	
	Deliverable
Planning	Joint interoperable communications protocols between the Bay Area UASI and the Sacramento UASI
	Communications and Interoperability plans and protocol for all BayRICS Counties/Operational Areas and RCS
	MOU for EBRCS, WBRCS, WBRCS and for Counties within the Bay Area, not part of a regional system, to enhance regional governance and SOPs for mutual roaming between P25 systems at the command and responder levels
	Studies for migrating to next generation systems for Alameda , Contra Costa, Solano, and Sonoma Counties and the city of Oakland
Equipment	Implementation of core communications infrastructure; Completing EBRCS and WBRCS
	BART underground system upgrade for interoperability with San Francisco and Oakland first responders
	Microwave systems region-wide linkage E-COMM Microwave Network
	Expansion of digital microwave systems to Sacramento
	Completion of Bay Area Digital Microwave Network (BayLoop)
	Portable P25 radios and software for emergency responders
Training	Training on county Tactical Interoperable Communications Plans
Exercises	Test and evaluate county communication systems redundancies
	Test and evaluate communication systems of EOCs
	Test mobile command communications between multiple areas and their associated area commands
	Exercises to test established plans, e.g., Tactical Interoperable Communications Plans

6.4.1 Build out of BayComm

In 2011 the EBRCS achieved several major milestones towards the completion of their system when police departments from the cities of Richmond, San Pablo, Hercules, El Cerrito, Pinole, and Kensington migrated to the West Contra Costa County simulcast cell. The simulcast allows the same signal to be broadcast from multiple sites. These six police departments account for over 900 mobile and handheld radios.

The other EBRCS major milestone occurred in July 2012 with the migration of the police departments from the cities of Pleasanton, Livermore, and Dublin to the simulcast cell located in East Alameda County. The remaining four simulcast cells are nearing completion and their users will begin migrating during fourth quarter 2012. Once all 40 participating agencies have moved to the EBRCSA, there will be over 12,000 subscriber radios operational on the same system. This will solve an interoperable communications problem that has existed for decades and enhance the public safety of the 2.5 million people who reside in the East Bay.

The EBRCS is using a combination of upgraded Motorola Gold Elite consoles and the Internet protocol-based MCC 7500 consoles. Both consoles feature an easy to use Graphical User Interface. The seamless integration of the dispatch console into the radio system gives dispatchers full access to system functionality, allowing access and control of the Project 25 trunked resources, as well as superior audio quality. At final build out, the EBRCSA will consist of 6 cells with a total 36 sites. The system will be a P-25 compliant communications system that will provide fully interoperable communications to all public agencies within the two counties of the East Bay.

Most recently, in October 2012, the EBRCS was successfully used as the primary communications platform during the Urban Shield full scale exercise. Through the region's ICS Form 205 (Incident Radio Communications Plan) the system was tested over a 48 hour period involving a regional emergency operations center, five counties, eight area commands, and at over 40 incident sites in the Bay Area. The EBRCS supported dozens of agencies and hundreds of local responders. This included all transportation, medical and logistics units. This was the first time the system had been used on such a large scale. The successful use of the system among so many jurisdictions and agencies demonstrates that the UASI (and other) investments made in building out the system have enhanced communications capabilities in ways that have never existed in the region before.

6.4.2 Communications Capability Assessments

In 2008, DHS issued the National Emergency Communications Plan (NECP), which outlined the vision of emergency communications for the nation over five years and established tangible goals to help measure implementation. The first goal in the NECP called for 90% of all urban areas designated within the UASI program to be able to demonstrate, by 2010, "response-level emergency communications within one hour for routine events involving

multiple jurisdictions and agencies."[23] In 2010, in coordination with the DHS Office of Emergency Communications, the Bay Area successfully demonstrated its ability to meet this goal using Stage 3 of the Amgen Tour of California Bike Race as the test environment.

The Amgen Tour of California Bike Race is a Tour de France-style cycling road race involving 160 bicycle racers from around the globe. It covers more than 750 miles in the Counties of San Francisco, San Mateo and Santa Cruz and is one of the largest cycling events in the United States. The race took place over an eight-day period (May 16-23, 2010) and included multiple stages. Stage three of the race was held on Tuesday, May 18, 2010. Approximately 100 emergency response personnel from state and local agencies supported the event.

Several response-level emergency communications *successes* were identified during the event:

- Emergency response agencies in counties throughout the Bay Area had access to common statewide mutual aid and interoperability channels. The California Law Enforcement Mutual Aid Radio System (CLEMARS) channel was identified as a common channel across all law enforcement agencies participating in the event.
- Plain language as called for under the NIMS was consistently used throughout the event during radio communications.
- Commanders and supervisors established and maintained command and control among response-level emergency personnel within their respective jurisdictions and agencies.[24]

The event also identified several *opportunities for improving* regional response-level emergency communications in the region. Major recommendations included:

- The use of an Area Command structure for similar events in the Bay Area that have distinct segments across multiple counties would be beneficial.
- The region should create a single Incident Action Plan (IAP) to incorporate the planning information from all response entities and locations within the confines of a large-scale pre-planned event. This should include a unified Incident Command System (ICS) Form 205 (Incident Radio Communications Plan) in the IAP.
- Provide an opportunity for all individuals who could potentially fill the Communications Unit Leader (COML) position to attend the All Hazards Type III COML training course when available. The region should also consider identifying a single COML early in the planning stages for future multi-jurisdictional events.[25]

[23] U.S. Department of Homeland Security, Office of Emergency Communications, *National Emergency Communications Plan*

[24] U.S. Department of Homeland Security, Office of Emergency Communications, *After Action Report/Improvement Plan, Bay Urban Area 2010 Amgen Tour of California – Stage 3*(May 2010), page iv.

[25] Id.

In addition to federally-led assessments, regional assessments through Urban Shield have also demonstrated improved communications capabilities based upon UASI investments. In the 2009 exercise, the region successfully validated communication systems redundancies, ensured interoperability, and piloted new systems. Emergency medical services and fire personnel communicated effectively with law enforcement personnel on a designated radio channel.

In 2011, during Urban Shield, area commanders established communications links with each of their respective scenario sites for the exercise and with the department operations center. The various communication types included: portable radios, landlines, cell phones, and runners. Area commanders delivered initial briefings to staff, confirmed roles and responsibilities, reiterated the plan for the 12-hour operational period, and defined the specific goals. Finally, when a communication format would not operate properly, the area commands were able to adapt to the situation and quickly switch to another communications format that did work.

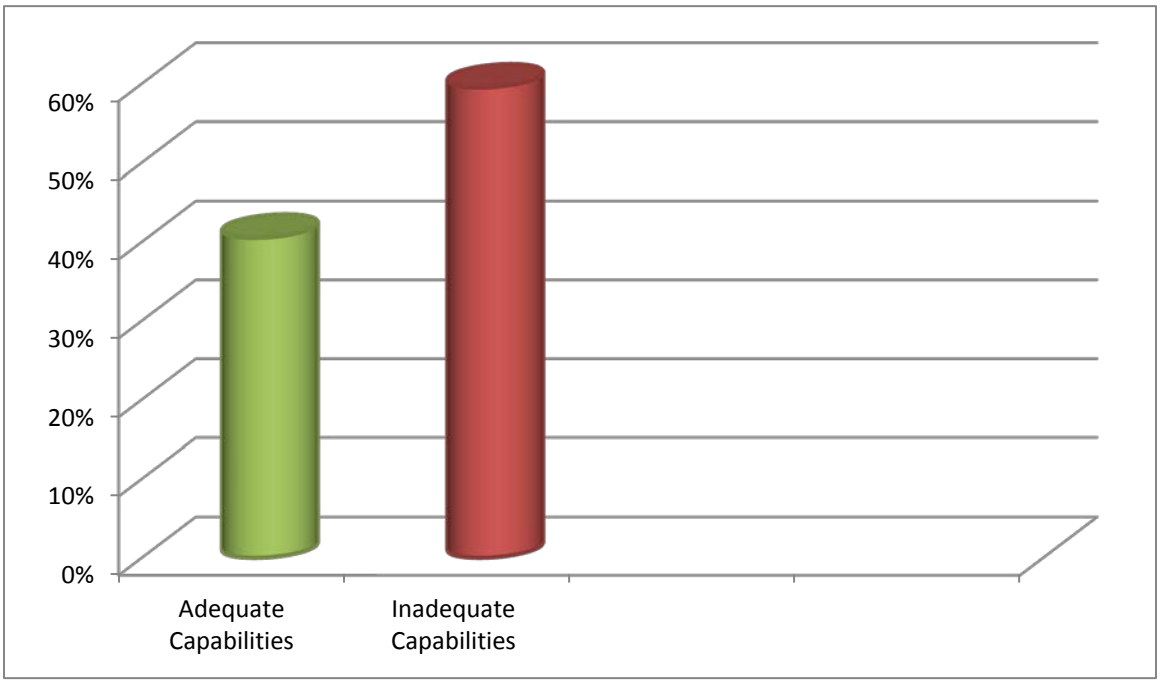
Section 7
Capability Gaps

This section provides an overview of the gaps in capabilities that remain despite the improvements that have been achieved. The analysis focuses on where capabilities are insufficient to address the threats and hazards that pose the greatest risk to the Bay Area, how gaps in capabilities have changed from 2009 to 2011, and where gaps are by homeland security mission area and Bay Area homeland security goals.

7.1 Risk and Remaining Capability Gaps

Despite the region's dual use capability improvements, gaps in overall level of ability remain among 22 of the 37 Target Capabilities, with 15 capabilities having adequate levels of ability. This is outlined in Figure 17 below.

Figure 17: Bay Area UASI 2011 Capability Gap Analysis



Among the 15 adequate capabilities, five are priority capabilities for the Bay Area: Intelligence Analysis and Production, Explosive Device Response Operations, WMD/HazMat Response and Decontamination, Mass Care, and Mass Prophylaxis. Among those 22 Target Capabilities with remaining gaps, 17 are priority capabilities. Four of those 17 priority Target Capabilities have significant gaps and need "Extra Attention." Those four capabilities are: Risk Management, Counter-Terror Investigation and Law Enforcement, Information Gathering and Recognition of Indicators and Warnings, and Planning.

Gaps in priority capabilities is based largely on the fact that despite improvements in all of those priority capabilities, most of the priority Target Capabilities' require a still-higher level of ability to effectively prevent, protect against, respond to, and recover from acts of terrorism and other hazards that pose a significant risk to the region. The need for a higher level of ability is especially true for the four Target Capabilities needing "Extra Attention", as they are among the top five risk relevant (most necessary) capabilities for the region.

7.1.1 Capability Gap Comparison

From 2009 to 2011 the Bay Area took the positive step of *decreasing capability gaps* as measured against risk across four[26] capabilites:

- Critical Infrastructure Protection
- Responder Safety and Health
- Fatality Management
- Medical Surge

This means that based upon the region's understanding of its terrorism risk profile and the capabilites necessary to address that risk profile, the gaps among those capabilites decreased, e.g., went from "Needs Extra Attention" to "Needs Attention." However, the region saw an *increase in capability gaps* as measured against terrorism risk, e.g., went from "Adequate" to "Needs Attention" among six capabilites. These six[27] capabilites are:

- Counter Terrorism Investigation and Law Enforcement
- Information Gathering and Recognition of Indicators and Warning
- Planning
- Intelligence and Information Sharing and Dissemination
- Volunteer Management and Donations
- Structural Damage Assessment

The increase in capability gaps occurred despite the fact that the level of ability among three of these capabilites actually *increased*. Those were Planning, Intelligence and Information Sharing, and Dissemination, and Volunteer Management and Donations.[28] While the increase in gaps may appear counterintuitive for those capabilites that improved, the basis for this is that *the Bay Area's risk profile actually increased* over time.[29] The

[26] Each of the 4 capabilities is among the region's 22 priority capabilities.

[27] The first four bulleted capabilities are among the 22 priority capabilities.

[28] Two capabilities sustained levels of ability: Counter Terrorism Investigation and Law Enforcement, and Information Gathering and Recognition of Indicators and Warning. And one, Structural Damage Assessment, saw a decrease in level of ability.

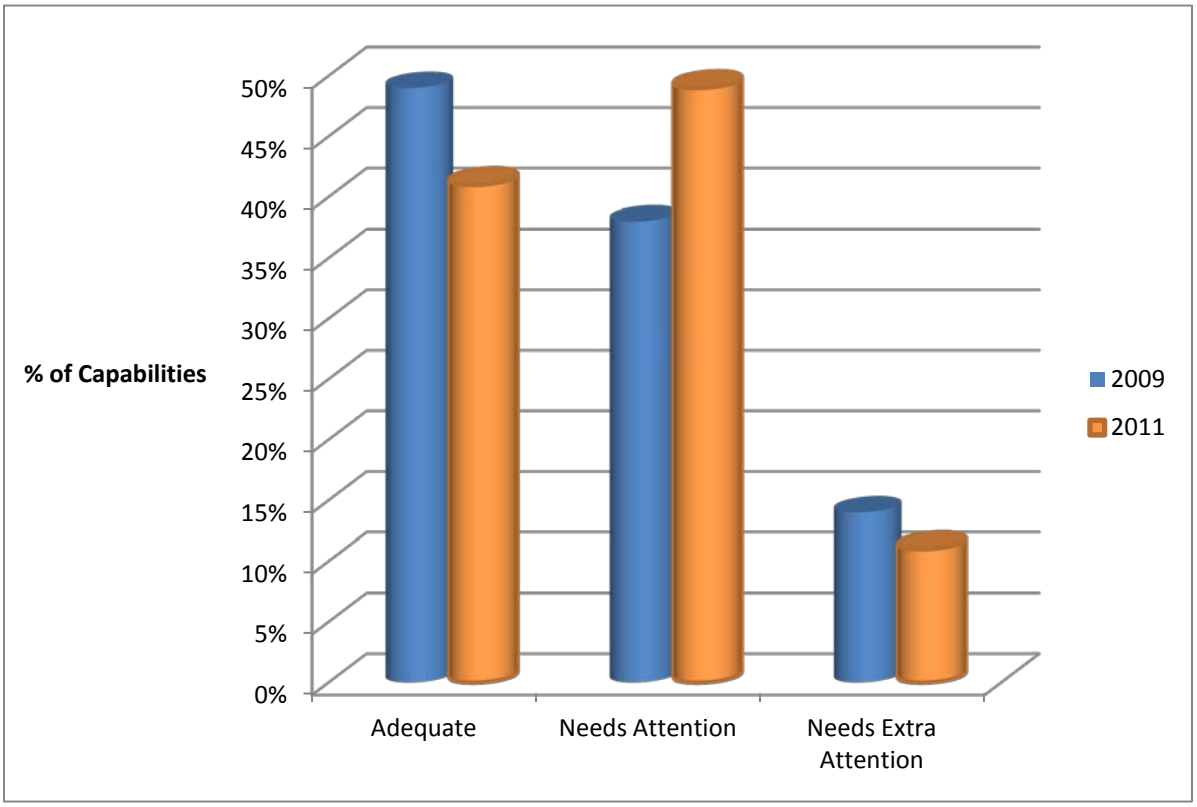
[29] The Bay Area's understanding of that risk also improved as evidenced by a rise in the region's level of ability in the Risk Management Target Capability.

increase in the Bay Area's risk profile was validated by an independent terrorism risk assessment conducted by DHS in 2011 for purposes of allocating UASI grant funds. That assessment found that the Bay Area's overall "risk score" increased relative to other major urban areas across the United States. This increase in risk requires a greater level of ability among those Target Capabilties directly related to addresing that risk. In short, for those Target Capabilites that did increase in level of ability, that improvement did not keep pace with the increase in risk to the Bay Area's CIKR as represented by acts of terrorism.

Figure 18 below summarizes the gap anlaysis for all 37 of the Target Capabilites as compared during the period from 2009 to 2011. Capabilities assesed in 2009 are in blue and those assessed in 2011 are in orange. The gap analysis comparison shows that:

- The number and percentage of capabilites with an "Adequate" rating *decreased* from 18 or 49% in 2009, to 15 or 41% in 2011.
- There was an *increase* in the total number of capabilties that "Need Attention", with 14 or 38%, of the capabilities needing attention in 2009, and 18 or 49%, falling into that category in 2011.
- However, the number of capabilities needing "Extra Attention" actually *decreased* from 2009 to 2011, going from five capabilities or 14%, to four capabilities or 11%, respectively.

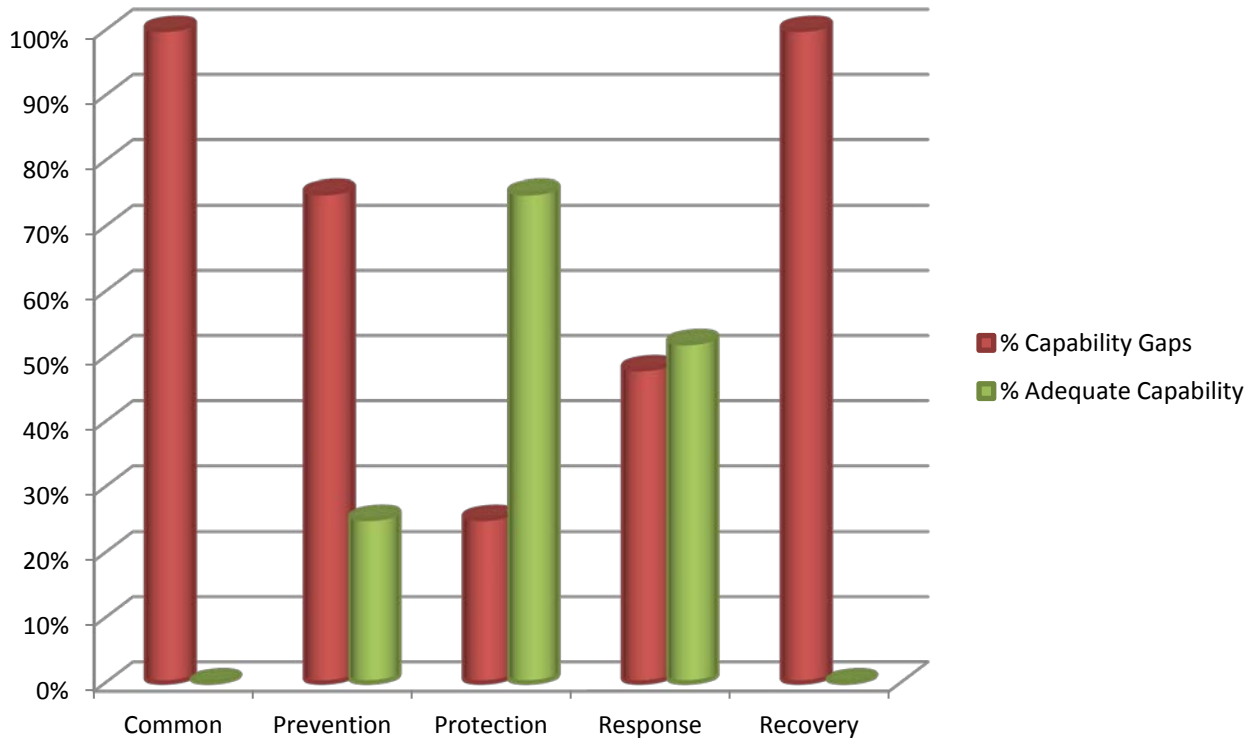
Figure 18: 2009-2011 Capability Gap Analysis Comparison



7.1.2 Gaps by Mission Area

An analysis of capability gaps (and strengths) by mission areas shows that gaps are spread throughout the four mission areas and the common mission area as outlined in Figure 19 below. Capability gaps are in red and adequate capabilities are referenced in green. For both common and recovery, every associated Target Capability has a gap requiring either "Extra Attention" or "Attention." Therefore, each of the two mission areas is rated as 100% for gaps in the figure. No capabilities are adequate in either mission area. The protection mission area has the fewest gaps, although the one capability in this area with a gap, Critical infrastructure Protection, is among the most important to the Bay Area. The response mission area has the second fewest number of capabilities with gaps, followed by the prevention mission area.

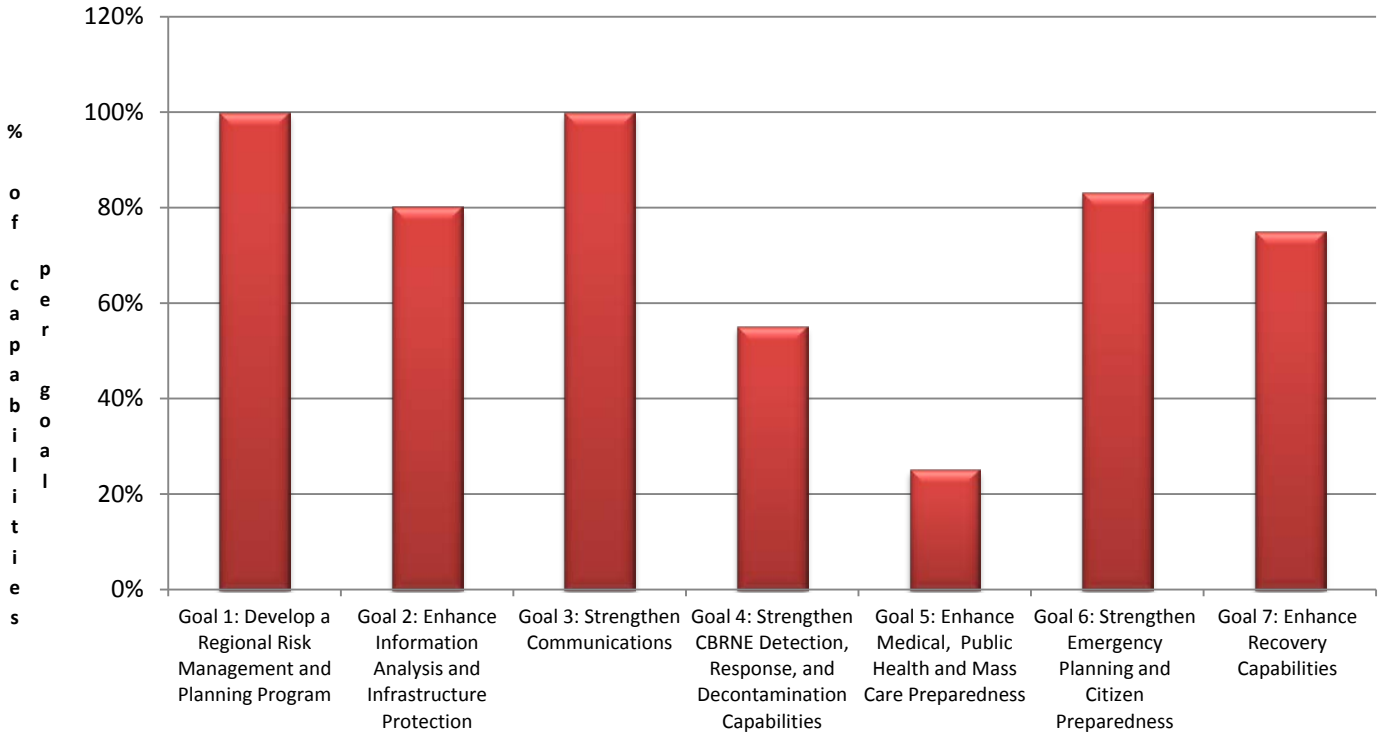
Figure 19: Capability Levels by Mission Area



7.1.3 Gaps by Bay Area Homeland Security Goals

Finally, an analysis of capability gaps by *Bay Area Homeland Security Strategy* goals shows that gaps remain across all of the applicable goals. This is highlighted in Figure 20 below. Two of the goals have 100% gaps, meaning each Target Capability specifically linked to an objective within a goal has gaps. In the case of goal 3, there is only one objective in the goal and it is based entirely on enhancing the Communications capability. Given that gaps remain in that capability, the percentage of objectives with gaps is 100%. Goal 1 has only two capabilities linked to it: Planning and Risk Management, each of which has gaps. The goal with the fewest gaps is goal 5, which is centered on strengthening medical and health capabilities. Despite the fact that goal 5 has eight capabilities tied to it, the absence of gaps may be the result, in part, of the fact that medical and health capabilities are supported by UASI, HHS and other grant funds.

Figure 20: Bay Area Homeland Security Goals with Capability Gaps



Section 8
Sustainment

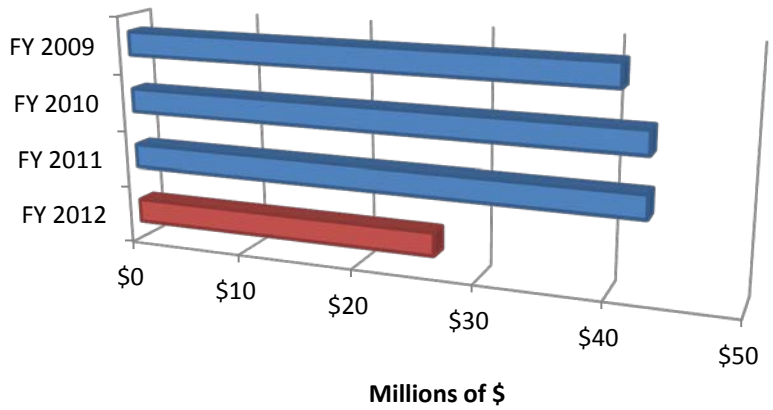
It takes time and resources to build capabilities, and ultimately to sustain them. The capabilities developed through the UASI program in the Bay Area have made a significant difference in preparedness and security across the region. However, the preparedness cycle is not linear. When it comes to preparedness, there is no "end state", as risks sometimes change, plans need updating, people retire or move on, new personnel require training, and equipment is replaced or upgraded. As long as there are risks, the Bay Area will need to invest in preparedness initiatives to address those risks.

The capabilities developed using UASI and other grant funds supplement local expenditures and allow the Bay Area to build toward enhanced capability levels designed to support federal missions, specifically, counter-terrorism, homeland security, and catastrophic incident response. Without such funding, the region would not have the resources to develop high capability levels in the first place, let alone sustain them.

8.1 Consequences of UASI Funding Cuts

In FY 2012, the Bay Area suffered a massive reduction in UASI funds going from $42.8 million in FY 2011 to $26.4 million in FY 2012, a 39% reduction highlighted in red in Figure 21 below. This cut was implemented despite the fact that the region's relative risk score as calculated by DHS and compared to other urban areas across the nation actually *increased* in FY 2012.

Figure 21: Recent Bay Area UASI Funding History



These cuts put in jeopardy the significant capability gains made over the last several years and make it far more difficult for the Bay Area to sustain and enhance vital capabilities needed to address the risk from terrorism, crime, natural and other hazards. For example, the Bay Area had to cancel numerous FY 2012 projects to include:

- Projects to implement the region's interoperable communications plan. This will delay the ability of the region to fully implement interoperable communications among responders during an emergency incident.
- Improve equipment capabilities for several public safety bomb squads around the region. This will degrade over time the ability of the region's bomb squads to respond to and render safe IEDs.
- Provide first responder personal protective equipment for CBRNE incidents. This will decrease the ability of responders to operate safely in a CBRNE environment.
- Supply search and rescue equipment to the fire service. This will degrade over time the search and rescue capabilities of the various teams across the region making it more difficult to find and rescue people in distress.
- Evacuation supplies for people with access and functional needs, and much more. This will make it more difficult to evacuate effectively and safely individuals with access and functional needs.

These UASI cuts also make it far more difficult for the region to launch other initiatives, such as the implementation of a regional emergency public information and warning strategic plan designed to integrate people, plans and technology across the region for catastrophic regional incidents.

Finally, the UASI grant program has been a groundbreaking one that has focused on fostering regional collaboration and building regional capabilities to manage potential acts of terrorism, while simultaneously enhancing the Bay Area's ability to address all hazards. The UASI program's unique requirements of regional governance and planning have positively changed the way public health, safety and homeland security agencies operate across the Bay Area. As threats and hazards facing the Bay Area continue to evolve and increase, it remains to be seen whether the region can sustain the benefits derived from the UASI program if its allocation of UASI funds continues to diminish.

Appendix A
Homeland Security Mission Areas

Prevention

Prevention involves actions to avoid an incident or to intervene or stop a terrorist incident from occurring. It involves applying intelligence to a range of activities that may include such countermeasures as deterrence operations; heightened inspections; improved surveillance and security operations; investigations to determine the full nature of the threat; and specific law enforcement operations aimed at deterring, preempting, interdicting, or disrupting illegal activity and apprehending potential perpetrators.

Protection

Protection involves actions to reduce the vulnerability of critical infrastructure or key resources in order to deter, mitigate, or neutralize terrorist attacks, major disasters, and other emergencies. It includes awareness elevation and understanding of threats and vulnerabilities to critical facilities, systems, and functions; identification and promotion of effective infrastructure sector-specific protection practices and methodologies; and information sharing among private entities within the sector, as well as between government and private entities.

Response

Response includes activities that address the short-term, direct effects of an incident. Response includes immediate actions to save lives, protect property, and meet basic human needs. Response also includes the execution of emergency operations plans and of mitigation activities designed to limit the loss of life, personal injury, property damage, and other unfavorable outcomes.

Recovery

Recovery involves activities that include the development, coordination, and execution of service-and-site-restoration plans; the reconstitution of government operations and services; individual, private-sector, nongovernmental, and public-assistance programs to provide housing and to promote restoration; long-term care and treatment of affected persons; and additional measures for social, environmental, and economic restoration.

Appendix B
Target Capabilities List

Common Capabilities
Planning
Communications
Community Preparedness and Participation
Risk Management
Intelligence and Information-sharing and Dissemination

Prevent Mission Capabilities
Information Gathering and Recognition of Indicators and Warning
Intelligence Analysis and Production
Counter-Terror Investigation and Law Enforcement
CBRNE Detection

Protect Mission Capabilities
Critical Infrastructure Protection
Food and Agriculture Safety and Defense
Epidemiological Surveillance and Investigation
Laboratory Testing

Respond Mission Capabilities
On-Site Incident Management
Emergency Operations Center Management
Critical Resource Logistics and Distribution
Volunteer Management and Donations
Responder Safety and Health

Respond Capabilities Cont.
Emergency Public Safety and Security Response
Animal Disease Emergency Support
Environmental Health
Explosive Device Response Operations
Fire Incident Response Support
WMD and Hazardous Materials Response and Decontamination
Citizen Evacuation and Shelter-in- Place
Isolation and Quarantine
Search and Rescue (Land-Based)
Emergency Public Information and Warning
Emergency Triage and Pre-Hospital Treatment
Medical Surge
Medical Supplies Management and Distribution
Mass Prophylaxis
Mass Care (Sheltering, Feeding and Related Services)
Fatality Management

Recover Mission Capabilities
Structural Damage Assessment
Restoration of Lifelines
Economic and Community Recovery

Appendix C
Bay Area Goals, Objectives and Target Capabilities

Goal 1 Develop a Regional Risk Management and Planning Program	
Target Capability	**Bay Area Objective**
Risk Management Planning	**Objective 1.1 Develop and Enhance Risk Management Capabilities:** The Bay Area will identify and assess risks, prioritize and select appropriate plans, solutions, and investments based on risk reduction, and monitor the outcomes of risk based funding allocation decisions.

Goal 2 Enhance Information Analysis and Infrastructure Protection Capabilities	
Target Capability	**Bay Area Objective**
Counter-Terrorism Investigations and Law Enforcement	**Objective 2.1 Increase Counter-Terrorism Investigations and Law Enforcement:** The Bay Area law enforcement community will ensure that suspects involved in criminal activities related to homeland security are successfully identified, deterred, detected, disrupted, investigated, and apprehended.
Information Gathering and Recognition of Indicators and Warnings	**Objective 2.2 Enhance Information Gathering and Recognition of Indicators and Warnings:** The Bay Area will identify and systematically report suspicious activities or circumstances associated with potential terrorist or criminal pre-operational planning for vetting and review and operational follow-up by the appropriate authorities.
Intelligence Analysis and Production	**Objective 2.3 Strengthen Intelligence Analysis and Production:** The Bay Area will sustain and build upon its multidisciplinary, all-source information/intelligence fusion center, in order to produce timely, accurate, clear and actionable intelligence/information products in support of regional prevention, awareness, deterrence, response and public safety operations.
Intelligence Information-sharing and Dissemination	**Objective 2.4 Enhance Intelligence Information-sharing and Dissemination:** The Bay Area will develop and sustain systems and procedures to effectively and timely share information and intelligence across Federal, State, local, tribal, territorial, regional, and private sector entities within the Bay Area to achieve coordinated awareness of, prevention of, protection against, mitigation of, and response to a threatened or actual terrorist attack, major disaster, or other emergency.
Critical Infrastructure Protection	**Objective 2.5 Increase Critical Infrastructure Protection:** The Bay Area will assess the risk to the region's critical infrastructure and key resources from acts of terrorism and natural hazards and deploy a suite of actions to enhance protection and reduce the vulnerability of the region's critical infrastructure and key

	resources from all hazards.

Goal 3 Strengthen Communications Capabilities	
Target Capability	**Bay Area Objective**
Communications	**Objective 3.1 Enhance Communications Capabilities:** The emergency response community in the Bay Area will have the ability to provide a continuous flow of mission critical voice, data and imagery/video information among multi-jurisdictional and multidisciplinary emergency responders, command posts, agencies, and Bay Area governmental officials for the duration of an emergency response operation.

Goal 4 Strengthen CBRNE Detection, Response, and Decontamination Capabilities	
Target Capability	**Bay Area Objective**
Fire Incident Response Support	**Objective 4.1 Enhance Fire Incident Response Support Operations:** Fire service agencies across the Bay Area will dispatch initial fire suppression resources within jurisdictional response time objectives, and firefighting activities will be conducted safely with fire hazards contained, controlled, extinguished, and investigated, with the incident managed in accordance with local and state response plans and procedures.
Search and Rescue	**Objective 4.2 Increase Search and Rescue Capabilities:** Search and rescue operations in the Bay Area will be conducted to rescue and transfer the greatest number of victims (human and, to the extent that no humans remain endangered, animal) to medical or mass care capabilities, in the shortest amount of time, while maintaining rescuer safety.
CBRNE Detection	**Objective 4.3 Strengthen CBRNE Detection:** The Bay Area will develop systems and procedures to rapidly detect and identify chemical, biological, radiological, nuclear, and/or explosive (CBRNE) materials at ports of entry, critical infrastructure locations, public events, and incidents and communicate CBRNE detection and warning information to appropriate entities and authorities across the State and at the Federal level.
Explosive Device Response Operations	**Objective 4.4 Enhance Explosive Device Response Operations:** Public safety bomb squads across the Bay Area will build and sustain capabilities to provide on-scene threat assessments, and the explosive and/or hazardous devices will be located and rendered safe, and the area cleared of hazards.
Critical Resource Logistics and Distribution	**Objective 4.5 Increase Critical Resource Logistics and Distribution Capabilities:** The Bay Area will develop a system to track and manage critical resources and make them available to incident managers and emergency responders from across the Bay

	Area upon their coordinated request for proper distribution to enhance emergency response operations and aid disaster victims in a cost-effective and timely manner.
WMD/Hazardous Materials Response and Decontamination	**Objective 4.6 Increase WMD/Haz Mat Response and Decontamination:** Hazardous materials teams across the Bay Area will build and sustain capabilities to rapidly identify and mitigate the effects of a hazardous materials release through victim rescue, decontamination and treatment and effectively protect responders and at-risk populations.
On-site Incident Management	**Objective 4.7 Strengthen On-site Incident Management:** The Bay Area will develop and sustain a fully integrated response system through a common framework of the Incident Command System and Unified Command including the use of incident action plans and the tracking of on-site resources in order to manage major incidents safely, effectively and efficiently.
Responder Safety and Health	**Objective 4.8 Increase Responder Safety and Health:** The Bay Area will strive to reduce the risk of illnesses or injury to any Bay Area first responder, first receiver, medical facility staff member, or other skilled support personnel as a result of preventable exposure to secondary trauma, chemical/radiological release, infectious disease, or physical/emotional stress after the initial incident or during decontamination and incident follow-up.
Emergency Public Safety and Security Response	**Objective 4.9 Strengthen Emergency Public Safety and Security Response:** Public safety agencies within the Bay Area will be able to keep the public and critical infrastructure safe by securing a particular incident scene and maintaining law and order following an incident or emergency to include managing the criminal justice prisoner population.

Goal 5 Enhance Medical, Public Health and Mass Care Preparedness	
Target Capability	**Bay Area Objective**
Emergency Triage and Pre-Hospital Treatment	**Objective 5.1 Enhance Emergency Triage and Pre-Hospital Treatment:** Emergency medical services (EMS) resources across the Bay Area will effectively and appropriately be dispatched to provide pre-hospital triage, treatment, transport, tracking of patients, and documentation of care appropriate for the incident, while maintaining the capabilities of the EMS system for continued operations up to and including for mass casualty incidents.
Medical Surge	**Objective 5.2 Increase Medical Surge:** Those injured or ill from a medical disaster and/or mass casualty event in the Bay Area will rapidly and appropriately be cared for. Continuity of care will be maintained for non-incident related illness or injury.
Mass Prophylaxis	**Objective 5.3 Strengthen Mass Prophylaxis:** With the onset of an event, appropriate drug prophylaxis and vaccination strategies will be implemented across the Bay Area in a timely manner to prevent

	the development of disease in exposed individuals. Public information strategies will include recommendations on specific actions individuals can take to protect their family, friends, and themselves.
Medical Supplies Management and Distribution	**Objective 5.4 Improve Medical Supplies Management and Distribution:** Critical medical supplies and equipment in the Bay Area will be appropriately secured, managed and distributed to field responders and providers, and then restocked in a timeframe appropriate to the incident and according to plan(s).
Isolation and Quarantine	**Objective 5.5 Strengthen Isolation and Quarantine:** Individuals in the Bay Area who are ill, exposed, or likely to be exposed will be separated and their health monitored in order to limit the spread of a newly introduced contagious disease (e.g., pandemic influenza). Legal authority for those measures will be clearly defined and communicated to all responding agencies and the public.
Laboratory Testing	**Objective 5.6 Improve Laboratory Testing:** Potential exposure to disease in the Bay Area will be identified rapidly by determining exposure and mode of transmission and agent. Confirmed cases and laboratory results will be reported immediately to all relevant public health, food regulatory, environmental regulatory, and law enforcement agencies in support of operations and investigations.
Epidemiological Surveillance and Investigation	**Objective 5.7 Strengthen Epidemiological Surveillance and Investigation:** Potential exposure to disease in the Bay Area will be identified rapidly by determining exposure and mode of transmission and agent followed by the issuance and implementation of control measures to contain the spread of the event, thereby reducing the number of cases.
Fatality Management	**Objective 5.8 Enhance Fatality Management:** The Bay will effectively document, recover and dispose of human remains and items of property and evidence following a disaster.

Goal 6 Strengthen Emergency Planning and Citizen Preparedness Capabilities	
Target Capability	**Bay Area Objective**
EOC Management	**Objective 6.1 Enhance EOC Management:** Emergency operations centers **(**EOCs) across the Bay Area will function in accordance with the National Incident Management System (NIMS) and the Standardized Emergency Management System (SEMS), emergency plans and standard operating procedures. EOCs will effectively plan, direct and coordinate information and activities internally within EOC functions, and externally with other multi-agency coordination entities, command posts and other public information to effectively coordinate disaster response

	operations.
Emergency Public Information and Warning	**Objective 6.2 Strengthen Emergency Public Information and Warning Capabilities:** The Bay Area will develop an integrated system of systems involving government agencies, the general public, and the private sector that allows for the transmission of clear, specific, accurate, certain and consistent alerts and warnings to all appropriate recipients through Joint Information Centers, or other means, regarding threats to health, safety, and property.
Citizen Evacuation and Shelter in Place	**Objective 6.3 Strengthen Citizen Evacuation and Shelter-in-Place Capabilities:** Affected and at-risk populations, to include access and functional needs populations, in the Bay Area will be safely sheltered-in-place or evacuated to safe refuge areas and eventually returned home when safe and feasible.
Mass Care	**Objective 6.4 Improve Mass Care:** Mass care services, including sheltering, feeding, and bulk distribution, will be rapidly, effectively and efficiently provided for the population, including those with access and functional needs.
Community Preparedness and Participation	**Objective 6.5 Increase Community Preparedness and Participation:** The Bay Area will build and sustain a formal structure and process for ongoing collaboration between government and nongovernmental resources at all levels to prevent, protect/mitigate, prepare for, respond to and recover from all threats and hazards.
Volunteer Management and Donations	**Objective 6.6 Enhance Volunteer Management and Donations:** Volunteers and donations within the Bay Area will be organized and managed throughout an emergency based upon pre-designated plans, procedures and systems.

Goal 7 Enhance Recovery Capabilities	
Target Capability	**Bay Area Objective**
Structural Damage Assessment	**Objective 7.1 Strengthen Structural Damage Assessment Capabilities:** The Bay Area will provide accurate situation needs and damage assessments by utilizing the full range of engineering, building inspection, and code enforcement services in a way that maximizes the use of resources, aids emergency response, implements recovery operations, and restores the affected area to pre-event conditions as quickly as possible.
Economic and Community Recovery	**Objective 7.2 Enable Economic and Community Recovery:** During and following a disaster, the Bay Area will estimate economic impact, prioritize recovery activities, minimize business disruption, and provide individuals and families with appropriate levels and types of relief with minimal delay.
Environmental Health	**Objective 7.3 Improve Environmental Health Capabilities:** After the primary disaster event, disease and injury will be prevented across the Bay Area through the quick identification of

	associated environmental hazards, including debris and hazardous waste.
Restoration of Lifelines	**Objective 7.4 Enhance Restoration of Lifelines Capabilities:** The Bay Area will coordinate activities between lifeline operations and government operations to include a process for getting the appropriate personnel and equipment to the disaster scene so that lifelines can be restored as quickly and as safely as possible.

Goal 8 Enhance Homeland Security Exercise, Evaluation and Training Programs	
Target Capability	**Bay Area Objective**
All Relevant Capabilities	**Develop a Regional Exercise and Evaluation Program:** The Bay Area exercise program will test and evaluate the region's enhancement and/or sustainment of the right level of capability based on the risks faced by the region with an evaluation process that feeds identified capability gaps and strengths directly into the region's risk management and planning process for remediation or sustainment.
All Relevant Capabilities	**Objective 8.2 Develop Regional Training Program:** The Bay Area will have a multi-discipline, multi-jurisdictional risk and capabilities based training program that enhances and sustains priority capabilities in order to mitigate the region's most pressing risks.

The Bay Area Homeland Security Strategy Summary

2012 – 2015

November 2012

For Official Use Only

Table of Contents

BACKGROUND 2

PURPOSE 2

VISION 3

BAY AREA DESCRIPTION 3

URBAN AREA STRUCTURE 3

STRATEGY DEVELOPMENT PROCESS 4

STATE AND NATIONAL GOALS 5

BAY AREA RISK OVERVIEW 5

CAPABILITIES ASSESSMENT 7

SUMMARY OF GOALS AND OBJECTIVES 9

GOAL 1 PLANNING AND RISK MANAGMENT 10

GOAL 2 INTELLIGENCE AND INFRASTRUCTURE PROTECTION 10

GOAL 3 COMMUNICATIONS 10

GOAL 4 CHEMICAL, BIOLOGICAL, RADIOLOGICAL, NUCLEAR AND EXPLOSIVES RESPONSE 11

GOAL 5 MEDICAL AND PUBLIC HEALTH PREPAREDNESS 12

GOAL 6 EMERGENCY PLANNING AND CITIZEN PREPAREDNESS 13

GOAL 7 RECOVERY 14

GOAL 8 TRAINING AND EXERCISES 14

STRATEGY IMPLEMENTATION 15

EVALUATION OF THE STRATEGY 15

BAY AREA HOMELAND SECURITY STRATEGY SUMMARY

BACKGROUND

Homeland Security is the coordinated effort to ensure the entire Bay Area region is prepared to prevent, protect against, mitigate, respond to and recover from threats and acts of terrorism and other man-made or natural catastrophes. It requires a risk management process in order to ensure the region has the right capabilities in place to manage those hazards that pose the greatest risk to the Bay Area, its people, and its critical infrastructure and key resources. The threat of catastrophic events, both natural and man-made, requires continuous attention and strategic commitment from all levels of government, the private sector and the general public. The Bay Area is committed to this effort.

The Urban Areas Security Initiative (UASI) program provides financial assistance to address the unique multi-discipline planning, organization, equipment, training, and exercise needs of high-threat, high-density urban areas, and assists those urban areas with supplemental funding to build and sustain capabilities to prevent, protect against, mitigate, respond to, and recover from threats or acts of terrorism and other major hazards. Working together, the entire Bay Area UASI has strived to integrate preparedness activities, especially preparedness planning at the strategic level. This homeland security strategy represents the latest effort in that regard.

PURPOSE

The purpose of the *Bay Area Homeland Security Strategy* (*"Bay Area Strategy"* or *"Strategy"*) is to ensure the Bay Area region has a comprehensive document and system that outlines the region's risks, capabilities, vision, structure, goals and objectives for homeland security. Having such a *Strategy* will ensure the Bay Area is in the best possible position to clearly track and articulate its risk and capability needs to local leaders, the State of California and the U.S. Department of Homeland Security (DHS) when seeking resources and funding to enhance homeland security and public safety across the region.

The *Strategy* is designed primarily to address terrorism risk faced by the Bay Area with an understanding that capabilities enhanced to combat terrorism often enhance the ability to also manage natural disasters, such as earthquakes, and man-made accidents, such as hazardous materials spills. The *Strategy* outlines a comprehensive system for enhancing regional capability and capacity that will guide the Bay Area's efforts to:

- Prevent and disrupt terrorist attacks;
- Protect the people of the Bay Area, its critical infrastructure and key resources;
- Mitigate the damage caused by acts of terrorism, natural disasters and man-made accidents;
- Respond to and recover from major incidents that do occur;

- Continue to strengthen our preparedness foundation to ensure our long-term success; and
- Guide future investments, increase capabilities and reduce risk.

Finally, the *Strategy* does not alter the statutory or regulatory authority or responsibility of any agency in the Bay Area related to public safety, health, and security. Nor does the *Strategy* impose any affirmative duty for any jurisdiction or entity to take any action or inaction concerning public health, safety, or security. Rather, the *Strategy* is designed as an integration tool and guide to better coordinate and focus those often disparate authorities and resources spread across the region necessary to achieve homeland security.

VISION

The Bay Area's vision for homeland security is a secure, prepared and resilient region consistently developing regional capabilities based on an analysis of risk through collaboration and coordination.

BAY AREA DESCRIPTION

The current Bay Area UASI region is comprised of twelve counties (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma, Monterey and San Benito) and the three major cities of Oakland, San Francisco, and San Jose.[1] In 2005, prior to the DHS led consolidation, this group initiated regional planning and collaboration efforts by developing the Regional Emergency Coordination Plan (RECP).

The Bay Area UASI is inclusive of over 100 incorporated cities and a combined total population exceeding 7.5 million people. In addition to the 7.5 million residents, the Bay Area attracts 15.9 million visitors annually who spend more than $16.6 million per day in the region. The Bay Area is one of the most culturally diverse areas in California.

URBAN AREA STRUCTURE

The Bay Area UASI is managed through a three-tiered governance structure. The top tier is the eleven-member Approval Authority that includes representation from each of the three major cities of Oakland, San Francisco, and San Jose and the County of Alameda, County of Contra Costa, County of Marin, County of Monterey, County of San Francisco, County of San Mateo, County of Santa Clara and County of Sonoma. An appointee from the Secretary of the California Emergency Management Agency is also a non-voting member. The Approval Authority provides policy direction to the program and is responsible for final decisions.

The eleven-member Approval Authority works collaboratively with an Advisory Group which acts as the second tier of the governance structure. Advisory Group members include one representative each from the twelve Bay Area county operational areas, the three major cities, the

[1]The California Emergency Management Agency (CalEMA) divides the state's 58 counties into 3 administrative regions: Coastal, Inland, and Southern. The Bay Area UASI is part of the Coastal Region which includes: law, fire, coroners/medical examiners, emergency medical, and search and rescue mutual aid systems.

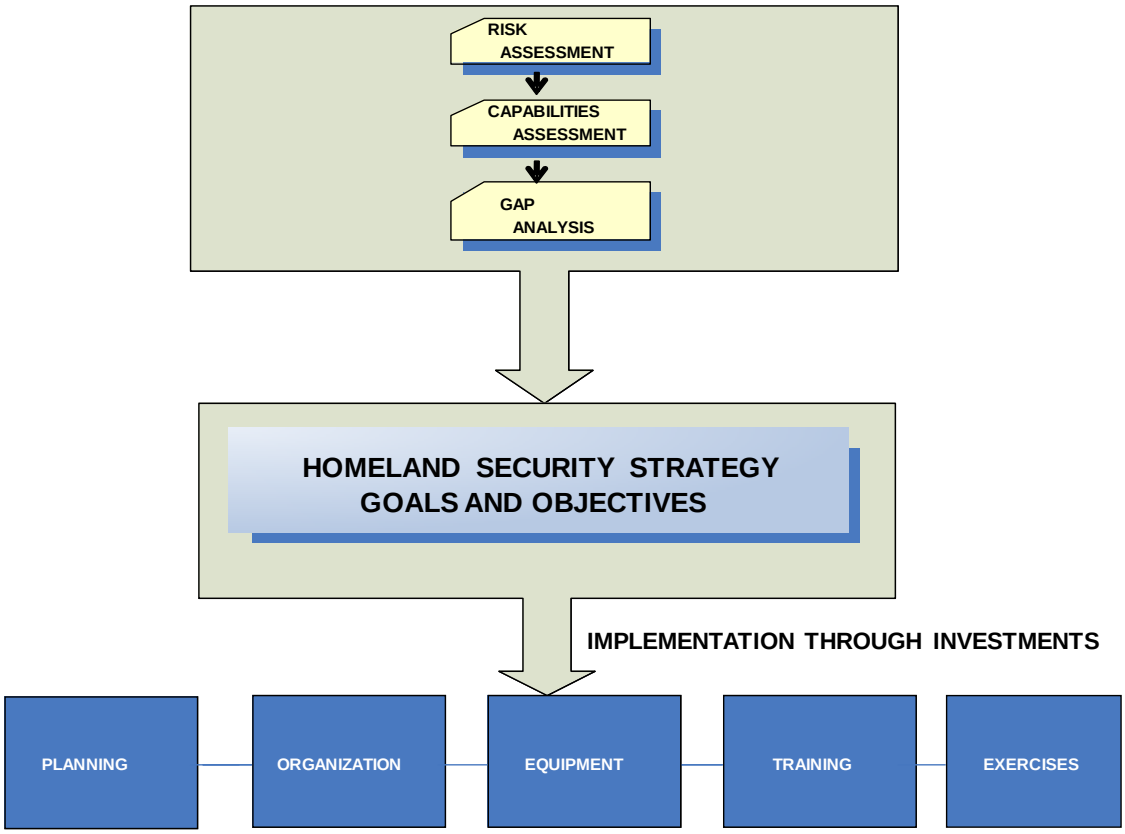
regional NCRIC and an appointee from the Secretary of CalEMA. The Advisory Group makes policy and programmatic recommendations to the Approval Authority and ensures there is broad representation, input and participation in the regional planning process.

Managing the day-to-day work of the Bay Area UASI is a Management Team comprised of a general manager, an assistant general manager, project managers, a chief financial officer, and finance and grants staff. The City and County of San Francisco has been designated as the fiscal agent for the grants managed by the Bay Area UASI.

STRATEGY DEVELOPMENT PROCESS

Through a series of meetings and other planning activities within the region, the *Strategy* and its goals and objectives as well as various ideas and recommendations were developed. The planning process used to develop the *Strategy* is outlined below. This process included a regional risk assessment, a capabilities assessment, and a gap analysis. From that data, strategic goals and objectives were updated along with implementation steps. The implementation steps involve a series of resource elements divided among the elements of capability: plans, organization, equipment, training and exercises (POETE) needed to achieve the objective as outlined in the figure below.

Bay Area Strategy Development Process



In 2008, the Bay Area UASI produced five major planning guidance documents: an assessment and strategic plan for regional interoperable communications; an assessment and project plan for community preparedness; a gap analysis and multi-year training and exercise program for EMS, the fire service and law enforcement; a training and exercise mandate for search and rescue; and a chemical, biological, radiological, nuclear, and explosive (CBRNE) assessment and strategic plan. In 2011 the region produced several region-wide response and recovery plans focusing on catastrophic disaster management. This was followed by a regional assessment and strategic plan for public information and warning. The plans from 2011 and 2012 cover:

- Mass Care and Sheltering
- Interim Housing
- Mass Fatality Management
- Donations Management
- Debris Removal
- Mass Transportation
- Volunteer Management
- Emergency Public Information and Warning

All of these plans and strategies have been reviewed and relevant key elements have been integrated into this overall regional *Bay Area Homeland Security Strategy*.

STATE AND NATIONAL GOALS

The *Strategy* is built on the premise that achieving homeland security is an ongoing mission and one that must be a shared responsibility across the entire region, state and nation. This includes our local, tribal, state, and federal agencies, international partners, community organizations, businesses and individuals. Therefore, the *Strategy* supports implementation of the State of California Homeland Security Strategy and the National Security Strategy. Indeed, this *Strategy* serves as the Bay Area's focal point for implementing not only local and regional homeland security policy and priorities, but also national and state homeland security policy at the local and regional level.

BAY AREA RISK OVERVIEW

Mitigating risk plays a vital role in the region's homeland security efforts. Risk is the expected negative impact of an adverse incident (whether the result of terrorism or a natural hazard) on an asset, considering both its likelihood and the magnitude of its impact. Risk can be expressed as a number or value in order to make comparisons. The Bay Area calculates risk as a function of threat, vulnerability, and consequence: **Risk = Threat x Vulnerability x Consequence.** The Bay Area's risk environment is a complex one involving terrorism, crime, natural hazards and industrial and other accidents concerning its people, and critical infrastructure and key resources (CIKR).

In addition to its large population, there are approximately 8,500 CIKR assets in the entire Bay Area that cover all 18 *National Infrastructure Protection Plan* (*NIPP*) sectors. These assets

include such iconic sites and businesses as the Pyramid Building, the Golden Gate Bridge, Apple, Google, Intel, Adobe, Hewlett-Packard, the San Francisco Bay Area Rapid Transit District, Yahoo!, eBay, Candlestick Park, Stanford University, the Oakland Coliseum, the Ports of San Francisco and Oakland, and many more. There are six professional sports teams in the region, including from the National Football League, National Hockey League, National Basketball Association and Major League Baseball. The region is also home to several major government facilities including Travis Air Force Base, the Federal Reserve Bank of San Francisco, the National Aeronautics and Space Administration Ames Center, the San Francisco Mint, the Defense Language Institute, and the Naval Postgraduate School.

The terrorism scenarios and natural hazards that pose the greatest risk to the Bay Area's CIKR are listed below in rank order:

Rank	Terrorism Scenarios	Natural Hazards
1	Vehicle Borne Improvised Explosive Device	Flood
2	Aircraft as a Weapon	Earthquake
3	Improvised Explosive Device	Wildfire
4	Biological Attack (Contagious)	Wind
5	Cyber Attack	Ice

From a terrorism perspective, the Bay Area's CIKR is particularly at risk from vehicle borne improvised explosive devices (VBIED), e.g., car or truck bombings against critical infrastructure. The relatively high likelihood of a VBIED attack in the Bay Area is driven by the ease and low expense of carrying out such an attack. Such a method of attack is common around the world. When combined with a conventional IED attack, over 50% of the calculated risk to the region's CIKR comes from terrorists' use of explosives. In addition to IEDs, general aviation aircraft as a weapon poses a risk given the number of general aviation airports in the region and the lower security standards imposed on general aviation as compared to commercial aviation.

The Bay Area also faces risk from natural hazards, especially floods, earthquakes and wildfires. The region rests upon one of the longest and most active earthquake fault systems in the world. This system includes the San Andreas Fault, the Hayward Fault and the Calaveras Fault. The U.S. Geological Survey estimates an 80% chance of a magnitude 6.7 or greater quake striking the Bay Area within the next 30 years. Based on the Bay Area's topography, risk from wild land fires as well as tsunamis are also of major concern.

The Bay Area's Northern California Regional Intelligence Center (NCRIC) has identified over 8,500 assets in the region covering all eighteen sectors under the *National Infrastructure Protection Plan*. A breakdown of the top ten CIKR sectors in the Bay Area based on the number of assets and risk to each sector (both from terrorism and natural hazards) is set forth in the table below.

Bay Area Sector Rankings

Rank	Sectors Ranked by Total Assets	Sectors Ranked by Terrorism Risk	Sectors Ranked by Natural Hazards Risk
1	Government	Government	Government
2	Commercial	Transportation	Commercial
3	Transportation	Banking	Water
4	Emergency Services	Commercial	Health
5	Postal	Health	Transportation
6	Dams	Defense Industrial Base	Emergency Services
7	Health	Monuments and Icons	Energy
8	Banking	Energy	Communications
9	Water	Water	Chemical
10	Food and Agriculture	Communications	Banking

The NCRIC has further refined all of the region's assets into four priority levels (Level I being the highest and Level IV being the lowest priority) with the vast majority of the assets (over 6,300) falling within priority Level IV. Just 2% of all NCRIC identified assets fall into Level I. Such a breakdown reflects the region's goal of accounting for as many assets as possible while recognizing that a smaller subset of those assets, if attacked or otherwise incapacitated, could have a devastating impact on the region.

CAPABILITIES ASSESSMENT

Upon updating its risk profile, the Bay Area identified those capabilities that were most needed to address the highest-risk acts of terrorism faced by the region i.e., how vital each capability is to preventing, protecting against, mitigating, responding to and recovering from acts of terrorism that pose a risk to the region. While the assessment was driven by terrorism risk, most, if not all of the capabilities involved in the assessment can be used to address natural hazards as well. This "dual use" concept is one the Bay Area has used for years and will continue to use to help drive investments and strategic planning across the region.

After classifying capabilities according to their terrorism risk relevance, a capabilities assessment and gap analysis were conducted. The capabilities assessment was held in September 2012 and for the first time involved DHS's 31 Core Capabilities from the 2011 National Preparedness Goal. The use of the Core Capabilities replaces the Target Capabilities List (TCL). The Bay Area had used the TCL for assessments in 2009, 2010 and 2011. During the 2012 assessment, capability levels were organized into four quartiles: low, medium low, medium high and high.

Upon completing the capabilities assessment, the Core Capabilities were then plotted by terrorism risk relevance and capability gap depending on each capabilities risk relevance and the size of the gap in the capability. The Core Capabilities with the largest capability gap and highest risk relevance were ranked highest. The full findings from the 2012 Core Capabilities assessment, including current levels of ability and capability gaps, for the Bay Area are set forth in the table below.

2012 Core Capability Assessment Findings

Risk and Gap	Core Capability	Risk Relevance	Level of Ability	Gap Analysis
1	Infrastructure Systems	2	Low	Needs Extra Attention
2	Long Term Vulnerability Reduction	5	Low	Needs Extra Attention
3	Community Resilience	6	Low	Needs Extra Attention
4	Forensics and Attribution	11	Low	Needs Extra Attention
5	Interdiction and Disruption	9	Medium Low	Needs Attention
6	Public Information and Warning	12	Medium Low	Needs Attention
7	Screening, Search and Detection	14	Medium Low	Needs Attention
8	Situational Assessment	1	Medium High	Adequate
9	Threat and Hazard Identification	3	Medium High	Adequate
10	Risk and Disaster Resilience Assessment	4	Medium High	Adequate
11	Risk Management for Protection Programs/Activities	7	Medium High	Adequate
12	Physical Protective Measures	8	Medium High	Adequate
13	Intelligence and Info Sharing	10	High	Adequate
14	Planning	13	Medium High	Adequate
15	Access Control and Identity Verification	17	Low	Needs Attention
16	Cyber Security	20	Low	Needs Attention
17	Fatality Management	21	Low	Needs Attention
18	Operational Coordination	15	Medium Low	Needs Attention
19	Operational Communications	16	Medium Low	Needs Attention
20	On-Scene Security and Protection	18	Medium Low	Needs Attention
21	Public Health	19	Medium Low	Needs Attention
22	Critical Transportation	22	Medium Low	Needs Attention
23	Health and Social Services	25	Low	Adequate
24	Supply Chain Security	26	Low	Needs Attention
25	Economic and Community Recovery	27	Low	Needs Attention
26	Natural and Cultural Resources	28	Low	Needs Attention
27	Public and Private Services	30	Low	Adequate
28	Mass Care Services	29	Medium Low	Adequate
29	Mass Search and Rescue	23	Medium High	Adequate
30	Environmental Response	24	Medium High	Adequate
31	Housing	31	Low	Adequate

SUMMARY OF GOALS AND OBJECTIVES

After completing the risk and capabilities assessments, the region used the information to update the goals, objectives and implementation steps in the *Strategy*. Each of the *Strategy's* goals seeks to align whenever possible with either a National or State Homeland Security Priority. The eight DHS National Homeland Security Priorities represent broad and thematic goals that the nation should strive to achieve. They include Strengthen Information Sharing and Collaboration Capabilities, Strengthen Interoperable and Operable Communications Capabilities, etc. Each objective aligns with a capability or set of capabilities from the Core Capabilities[2], and the Centers for Disease Control and Prevention's (CDC's) Public Health Preparedness Capabilities for medical and health related objectives. Each objective describes the desired capability end state the region will strive to achieve.

The purpose of aligning each objective to a capability is to ensure the *Strategy* drives investments centered on enhancing specifically defined capabilities needed to better secure and protect the Bay Area from those acts of terrorism and other major hazards that pose the greatest risk to the region. In the end, the Bay Area's ability to prevent acts of terrorism or respond effectively to major natural disasters, such as a catastrophic earthquake, will be determined by the region having sufficient capabilities in place to deal with incidents caused by those threats and hazards. The *Strategy*'s goals, objectives and implementation steps outline in detail what the Bay Area needs to do to make sure it achieves and sustains those capabilities.

The goals and objectives are directed towards the next three years and may be reviewed and updated annually or as needed. It is likely that some of the objectives will carry over from year to year while others may be removed or updated based on the region's progress and actual needs. The goals and objectives will continue to be defined by risk analysis, identified preparedness gaps and sustainment priorities. A summary of the Bay Area's 8 goals and 31 objectives is set forth below.

[2] In certain cases an objective may reference both a Core Capability and a Target Capability, e.g., Objective 4.1 Improve Public and Private Services and Resources Management through *Fire Incident Response Support*. (Target Capability is in italics). This is due to the fact that certain Core Capabilities are ambiguous in their terms and require added definition, which the Target Capabilities provide, and/or the Core Capabilities are inclusive of multiple capabilities that were formally divided among the Target Capabilities List and that division is still necessary for planning purposes in the Bay Area, e.g., Objective 4.5 Improve Public and Private Services and Resources Management through *Critical Resource Logistics*. This breaking up of certain Core Capabilities along the Target Capability taxonomy reflects the reality of how the Bay Area plans and invests in these Core Capabilities.

Goal 1 Strengthen the Regional Risk Management and Planning Program

Objective 1.1 Enhance Planning, Threat and Hazard Identification, and Risk Management Capabilities: The Bay Area is able to identify and assess the threats and hazards that pose the greatest risk to the whole community. The region can prioritize and select appropriate capability-based planning investments and solutions for prevention, protection, mitigation, response, and recovery concerning those risks; monitor the outcomes of allocation decisions; and undertake corrective and sustainment actions.

Goal 2 Enhance Information Analysis and Infrastructure Protection Capabilities

Objective 2.1 Enhance Intelligence Collection, Analysis and Sharing: The Bay Area has systems and procedures to effectively collect, analyze and timely share information and intelligence across federal, state, local, tribal, territorial, regional, and private sector entities to achieve coordinated awareness of, prevention of, protection against, mitigation of, and response to a threatened or actual terrorist attack, major disaster, or other emergency. This involves sustaining and building upon the region's intelligence fusion center to include the ability to identify and systematically report suspicious activities associated with potential terrorist or criminal pre-operational planning and logistics.

Objective 2.2 Strengthen Terrorism Attribution, Interdiction and Disruption Capabilities: The Bay Area's law enforcement community (federal, state and local) and other public safety agencies can conduct forensic analysis and attribute terrorist threats and acts to help ensure that suspects involved in terrorist and criminal activities related to homeland security are successfully identified, deterred, detected, disrupted, investigated, and apprehended.

Objective 2.3 Increase Critical Infrastructure Protection: The Bay Area can assess the risk to the region's physical and cyber critical infrastructure and key resources from acts of terrorism, crime, and natural hazards and deploy a suite of actions to enhance protection and reduce the risk to the region's critical infrastructure and key resources from all hazards. This includes a risk-assessment process and tools for identifying, assessing, cataloging, and prioritizing physical and cyber assets from across the region.

Goal 3 Strengthen Communications Capabilities

Objective 3.1 Enhance Operational Communications Capabilities: The emergency response community in the Bay Area has the ability to provide a continuous flow of mission critical voice, data and imagery/video information among multi-jurisdictional and multidisciplinary emergency responders, command posts, agencies, and Bay Area governmental officials for the duration of an emergency response operation. The Bay Area can also re-establish sufficient communications infrastructure within the affected areas of an incident, whatever the cause, to support ongoing life-sustaining activities, provide basic human needs, and transition to recovery.

Goal 4 Strengthen CBRNE Detection, Response, and Decontamination Capabilities
Objective 4.1 Improve Public and Private Services and Resources Management through Fire Incident Response Support: Fire service agencies across the Bay Area can dispatch initial fire suppression resources within jurisdictional response time objectives, and firefighting activities are conducted safely with fire hazards contained, controlled, extinguished, and investigated, with the incident managed in accordance with local and state response plans and procedures.
Objective 4.2 Strengthen Mass Search and Rescue Capabilities: Public safety personnel in the Bay Area are able to conduct search and rescue operations to locate and rescue persons in distress and initiate community-based search and rescue support-operations across a geographically dispersed area. The region is able to synchronize the deployment of local, regional, national, and international teams to support search and rescue efforts and transition to recovery.
Objective 4.3 Enhance Screening Search and Detection Capabilities: The Bay Area has systems and procedures to rapidly detect, locate and identify CBRNE materials at ports of entry, critical infrastructure locations, public events, and incidents, and can communicate CBRNE detection, identification and warning information to appropriate entities and authorities across the state and at the federal level.
Objective 4.4 Strengthen On-Scene Security and Protection through Explosive Device Response Operations: Public safety bomb squads in the Bay Area are able to conduct threat assessments; render safe explosives and/or hazardous devices; and clear an area of explosive hazards in a safe, timely, and effective manner. This involves the following steps in priority order: ensure public safety; safeguard the officers on the scene (including the bomb technician); collect and preserve evidence; protect and preserve public and private property; and restore public services.
Objective 4.5 Improve Public and Private Services and Resources Management through Critical Resource Logistics: The Bay Area has a system to track and manage critical resources and make them appropriately available to incident managers and emergency responders from across the Bay Area to enhance emergency response operations and aid disaster victims in a cost-effective and timely manner.
Objective 4.6 Enhance Environmental Response/Health and Safety through WMD/HazMat Response and Decontamination Capabilities: Responders in the Bay Area are able to conduct health and safety hazard assessments and disseminate guidance and resources, including deploying HazMat response and decontamination teams, to support immediate environmental health and safety operations in the affected area(s) following a WMD or HazMat incident. Responders are also able to assess, monitor, clean up, and provide resources necessary to transition from immediate response to sustained response and short-term recovery.
Objective 4.7 Strengthen Operational Coordination Capabilities: The Bay Area has a fully integrated response system through a common framework of the Standardized Emergency Management System, Incident Command System and Unified Command including the use of emergency operations centers (EOCs), incident command posts, emergency plans and standard operating procedures, incident action plans and the tracking of on-site resources in order to manage major incidents safely, effectively and efficiently. EOCs in the Bay Area can

effectively plan, direct and coordinate information and activities internally within EOC functions, and externally with other multi-agency coordination entities, command posts and other agencies to effectively coordinate disaster response operations.

Objective 4.8 Improve Environmental Response/Health and Safety through Responder Safety and Health: The Bay Area can reduce the risk of illnesses or injury to first responders, first receivers, medical facility staff members, or other skilled support personnel as a result of preventable exposure to secondary trauma, chemical/radiological release, infectious disease, or physical/emotional stress after the initial incident or during decontamination and incident follow-up.

Objective 4.9 Enhance On-Scene Security and Protection through Emergency Public Safety and Security Response: Public safety agencies within the Bay Area are able to keep the public and critical infrastructure safe by securing a particular incident scene and maintaining law and order following an incident or emergency to include managing the criminal justice prisoner population.

Goal 5 Enhance Medical and Public Health Preparedness

Objective 5.1 Enhance Emergency Triage and Pre-Hospital Treatment: Emergency medical services (EMS) resources across the Bay Area can effectively and appropriately be dispatched (including with law enforcement tactical teams) to provide pre-hospital triage, treatment, transport, tracking of patients, and documentation of care appropriate for the incident, while maintaining the capabilities of the EMS system for continued operations up to and including for mass casualty incidents.

Objective 5.2 Increase Medical Surge: The Bay Area is able to provide adequate medical evaluation and care during incidents that exceed the limits of the normal medical infrastructure of an affected community or the region. The healthcare system in the region is able to survive a hazard impact and maintain or rapidly recover operations that were compromised. Those injured or ill from a medical disaster and/or mass casualty event in the Bay Area are rapidly and appropriately cared for. Continuity of care is maintained for non-incident related illness or injury.

Objective 5.3 Strengthen Medical Countermeasure Dispensing: With the onset of an incident, the Bay Area is able to provide appropriate medical countermeasures (including vaccines, antiviral drugs, antibiotics, antitoxin, etc.) in support of treatment or prophylaxis (oral or vaccination) to the identified population in accordance with local, state and federal public health guidelines and/or recommendations.

Objective 5.4 Improve Medical Materiel Management and Distribution: The Bay Area is able to acquire, maintain (e.g., cold chain storage or other storage protocol), transport, distribute, and track medical materiel (e.g., pharmaceuticals, gloves, masks, and ventilators) during an incident and recover and account for unused medical materiel, as necessary, after an incident.

Objective 5.5 Strengthen Non-Pharmaceutical Interventions: Public health agencies in the Bay Area are able to recommend to the applicable lead agency (if not public health) and implement, if applicable, strategies for disease, injury, and exposure control. Strategies include the following: isolation and quarantine, restrictions on movement and travel advisory/warnings, social distancing, external decontamination, hygiene, and precautionary protective behaviors. Legal authority for those applicable measures is clearly defined and communicated to all responding agencies and the public. Logistical support is provided to

maintain measures until danger of contagion has elapsed.
Objective 5.6 Improve Laboratory Testing: Laboratories in the Bay Area are able to conduct rapid and conventional detection, characterization, confirmatory testing, data reporting, investigative support, and laboratory networking to address actual or potential exposure to all-hazards. Confirmed cases and laboratory results are reported immediately to all relevant public health, food regulatory, environmental regulatory, and law enforcement agencies in support of operations and investigations.
Objective 5.7 Strengthen Public Health Surveillance and Epidemiological Investigation: Bay Area public health agencies have the ability to create, maintain, support, and strengthen routine surveillance and detection systems and epidemiological investigation processes, as well as to expand these systems and processes in response to incidents of public health significance. This includes the ability to identify potential exposure to disease, mode of transmission, and agent.
Objective 5.8 Enhance Fatality Management: Bay Area agencies, e.g., law enforcement, public health, healthcare, emergency management, and medical examiner/coroner) are able to coordinate (to ensure the proper recovery, handling, identification, transportation, tracking, storage, and disposal of human remains and personal effects; certify cause of death; and facilitate access to mental/ behavioral health services to the family members, responders, and survivors of an incident.

Goal 6 Strengthen Emergency Planning and Citizen Preparedness Capabilities

Objective 6.1 Strengthen Emergency Public Information and Warning Capabilities: The Bay Area has an interoperable and standards-based system of multiple emergency public information and warning systems that allows Bay Area leaders and public health and safety personnel to disseminate prompt, clear, specific, accurate, and actionable emergency public information and warnings to all affected members of the community in order to save lives and property concerning known threats or hazards.
Objective 6.2 Enhance Critical Transportation Capabilities: The Bay Area can provide transportation (including infrastructure access and accessible transportation services) for response priority objectives, including the evacuation of people, including those with access and functional needs, and animals, and the delivery of vital response personnel, equipment, and services into the affected incident areas to save lives and to meet the needs of disaster survivors.
Objective 6.3 Improve Mass Care: Mass care services, including sheltering, feeding, and bulk distribution, are rapidly, effectively and efficiently provided for the impacted population, including those with access and functional needs, in a manner consistent with all applicable laws, regulations and guidelines.
Objective 6.4 Increase Community Resiliency: The Bay Area has a formal structure and process for ongoing collaboration between government and nongovernmental resources at all levels to prevent, protect/mitigate, prepare for, respond to and recover from all known threats and hazards.
Objective 6.5 Strengthen Public and Private Services and Resources Management through Volunteer Management and Donations: Volunteers and donations within the Bay Area are organized and managed throughout an emergency based upon pre-designated plans,

procedures and systems.

Goal 7 Enhance Recovery Capabilities

Objective 7.1 Strengthen Infrastructure Systems: The Bay Area can provide accurate situation needs and damage assessments by utilizing the full range of engineering, building inspection, and code enforcement services in a way that maximizes the use of resources, aids emergency response, implements recovery operations, and restores the affected area to pre-incident conditions as quickly as possible. The Bay Area can coordinate activities between critical lifeline operations and government operations to include a process for getting the appropriate personnel and equipment to the disaster scene so that lifelines can be restored as quickly and as safely as possible to support ongoing emergency response operations, life sustainment, community functionality, and a transition to recovery
Objective 7.2 Enable Economic Recovery: During and following an incident, the Bay Area can estimate economic impact, prioritize recovery activities, minimize business disruption, and provide individuals and families with appropriate levels and types of relief with minimal delay.
Objective 7.3 Improve Environmental Response/Health and Safety: After the primary incident, the Bay Area is able to assess, monitor, perform cleanup actions, including debris and hazardous waste removal, and provide resources to prevent disease and injury through the quick identification of associated environmental hazards.

Goal 8 Enhance Homeland Security Exercise, Evaluation and Training Programs

8.1 Strengthen the Regional Exercise and Evaluation Program: The Bay Area exercise program tests and evaluates the region's enhancement and/or sustainment of the right level of capability based on the risks faced by the region with an evaluation process that feeds identified capability gaps and strengths directly into the region's risk management and planning process for remediation or sustainment.
8.2 Enhance the Regional Training Program: The Bay Area has a multi-discipline, multi-jurisdictional risk and capabilities based training program that enhances and sustains priority capabilities in order to mitigate the region's most pressing risks.

STRATEGY IMPLEMENTATION

The Bay Area UASI Management Team will have overall responsibility for managing and tracking implementation of the *Strategy* with oversight from the Bay Area UASI Approval Authority and input from the region's other stakeholders. Implementation will occur through major annual investments and projects developed at the city, county/operational area, sub-regional and regional level.

The Bay Area's strategic approach to investing will be premised on two overarching principles:

- First, sustain current priority programs and capabilities in the region.
- Second, close gaps in capabilities with an emphasis on those capabilities that have the highest risk relevance and the largest capability gaps.

The Management Team is responsible for developing the region's annual planning and investment guidance, which outlines the details for planning structures and priorities to ensure the Bay Area is executing the strategy through investments. These details actualize the two guiding investment principles outlined above. It includes planning timelines, grant guidance, project templates and such other materials and policies as may be necessary to ensure a seamless and integrated planning structure and system for each year.

EVALUATION OF THE STRATEGY

In order to truly understand the value of the Bay Area's homeland security investments, the region must have a consistent mechanism by which to measure the effectiveness of the homeland security activities generated (i.e., what plans were developed, personnel hired, organization and operations conducted, equipment purchased, number of people trained, and exercises conducted, etc.) by those investments. This will be done in the form of an effectiveness report to the Approval Authority, which may be shared with state and federal partners as needed.[3] Through its goals and objectives, the *Strategy* outlines the region's approach and path forward for homeland security. The effectiveness report outlines the region's progress in achieving those goals and objectives based on enhancing capabilities tied to risk management.

[3] In 2011, the Bay Area produced a preliminary UASI effectiveness report, which examined certain UASI investments to determine if the region had been following its strategic plans over the years and investing in priority, risk based capabilities. A more extensive follow-on report was issued in November 2012. The overall findings from both the 2011 and the 2012 report show that the region has been investing according to its plans and that priority capabilities have been enhanced to help reduce risk.

The Bay Area Homeland Security Strategy and Implementation Plan

2012 – 2015

November 2012

For Official Use Only

Table of Contents

BAY AREA HOMELAND SECURITY STRATEGY SUMMARY 1
BAY AREA HOMELAND SECURITY STRATEGY AND IMPLEMENTATION PLAN 16
1.1 INTRODUCTION 16
1.1 BACKGROUND 16
1.2 BAY AREA OVERVIEW 16
1.3 BAY AREA MANAGEMENT 17
2.0 PURPOSE 19
2.1 PURPOSE OVERVIEW 19
2.2 PRIOR AND ONGOING PLANNING EFFORTS 19
3.0 VISION 21
4.0 FOCUS & MISSION 22
4.1 FOCUS AND MISSION OVERVIEW 22
4.2 THE NATIONAL PRIORITIES 23
4.3 THE CORE CAPABILITIES 23
4.4 PUBLIC HEALTH AND MEDICAL CAPABILITIES 25
5.0 RISK OVERVIEW 26
5.1 INTRODUCTION 26
5.2 RISK METHODOLOGY 26
5.3 DESCRIPTION OF THREATS AND HAZARDS 28
5.4 CRITICAL INFRASTRUCTURE AND KEY RESOURCES 31
5.5 RISK PROFILE 33
5.6 ASSET RISK BY SECTOR 36
5.7 CAPABILITIES ASSESSMENT 38
6.0 GOALS, OBJECTIVES & IMPLEMENTATION STEPS 41
6.1 OVERVIEW 41
6.2 ORGANIZING THE GOALS AND OBJECTIVES 41
6.3 STRUCTURING THE GOALS AND OBJECTIVES 41
GOAL 1 PLANNING AND RISK MANAGMENT 43
GOAL 2 INTELLIGENCE AND INFRASTRUCTURE PROTECTION 46
GOAL 3 COMMUNICATIONS 55
GOAL 4 CBRNE DETECTION AND RESPONSE 58
GOAL 5 MEDICAL AND PUBLIC HEALTH PREPAREDNESS 71

For Official Use Only

GOAL 6 EMERGENCY PLANNING AND CITIZEN PREPAREDNESS 78
GOAL 7 RECOVERY 84
GOAL 8 TRAINING AND EXERCISES 88
7.0 STRATEGY IMPLEMENTATION 92
7.1 IMPLEMENTATION OVERVIEW 92
7.2 INVESTMENT JUSTIFICATIONS 92
7.3 STRATEGY IMPLEMENTATION PROCESS 93
8.0 STRATEGY EVALUATION 94
8.1 EVALUATION OVERVIEW 94
8.2 THE EVALUATION PROCESS 94
8.3 METHODS FOR EVALUATION 95
APPENDIX A TARGET AND CORE CAPABILITY CROSSWALK 97
APPENDIX B RECORD OF CHANGES 98

BAY AREA HOMELAND SECURITY STRATEGY SUMMARY

Background

Homeland Security is the coordinated effort to ensure the entire Bay Area region is prepared to prevent, protect against, mitigate, respond to and recover from threats and acts of terrorism and other man-made or natural catastrophes. It requires a risk management process in order to ensure the region has the right capabilities in place to manage those hazards that pose the greatest risk to the Bay Area, its people, and its critical infrastructure and key resources. The threat of catastrophic events, both natural and man-made, requires continuous attention and strategic commitment from all levels of government, the private sector and the general public. The Bay Area is committed to this effort.

The Urban Areas Security Initiative (UASI) program provides financial assistance to address the unique multi-discipline planning, organization, equipment, training, and exercise needs of high-threat, high-density urban areas, and assists those urban areas with supplemental funding to build and sustain capabilities to prevent, protect against, mitigate, respond to, and recover from threats or acts of terrorism and other major hazards. Working together, the entire Bay Area UASI has strived to integrate preparedness activities, especially preparedness planning at the strategic level. This homeland security strategy represents the latest effort in that regard.

Purpose

The purpose of the *Bay Area Homeland Security Strategy* ("*Bay Area Strategy"* or "*Strategy"*) is to ensure the Bay Area region has a comprehensive document and system that outlines the region's risks, capabilities, vision, structure, goals and objectives for homeland security. Having such a *Strategy* will ensure the Bay Area is in the best possible position to clearly track and articulate its risk and capability needs to local leaders, the State of California and the U.S. Department of Homeland Security (DHS) when seeking resources and funding to enhance homeland security and public safety across the region.

The *Strategy* is designed primarily to address terrorism risk faced by the Bay Area with an understanding that capabilities enhanced to combat terrorism often enhance the ability to also manage natural disasters, such as earthquakes, and man-made accidents, such as hazardous materials spills. The *Strategy* outlines a comprehensive system for enhancing regional capability and capacity that will guide the Bay Area's efforts to:

- Prevent and disrupt terrorist attacks;
- Protect the people of the Bay Area, its critical infrastructure and key resources;
- Mitigate the damage caused by acts of terrorism, natural disasters and man-made accidents;
- Respond to and recover from major incidents that do occur;
- Continue to strengthen our preparedness foundation to ensure our long-term success; and
- Guide future investments, increase capabilities and reduce risk.

Finally, the *Strategy* does not alter the statutory or regulatory authority or responsibility of any agency in the Bay Area related to public safety, health, and security. Nor does the *Strategy* impose any affirmative duty for any jurisdiction or entity to take any action or inaction concerning public health, safety, or security. Rather, the *Strategy* is designed as an integration tool and guide to better coordinate and focus those often disparate authorities and resources spread across the region necessary to achieve homeland security.

Vision

The Bay Area's vision for homeland security is a secure, prepared and resilient region consistently developing regional capabilities based on an analysis of risk through collaboration and coordination.

Jurisdiction Description

The current Bay Area UASI region is comprised of twelve counties (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma, Monterey and San Benito) and the three major cities of Oakland, San Francisco, and San Jose.[1] In 2005, prior to the DHS led consolidation, this group initiated regional planning and collaboration efforts by developing the Regional Emergency Coordination Plan (RECP).

The Bay Area UASI is inclusive of over 100 incorporated cities and a combined total population exceeding 7.5 million people. In addition to the 7.5 million residents, the Bay Area attracts 15.9 million visitors annually who spend more than $16.6 million per day in the region. The Bay Area is one of the most culturally diverse areas in California.

Urban Area Structure

The Bay Area UASI is managed through a three-tiered governance structure. The top tier is the eleven-member Approval Authority that includes representation from each of the three major cities of Oakland, San Francisco, and San Jose and the County of Alameda, County of Contra Costa, County of Marin, County of Monterey, County of San Francisco, County of San Mateo, County of Santa Clara and County of Sonoma. An appointee from the Secretary of the California Emergency Management Agency is also a non-voting member. The Approval Authority provides policy direction to the program and is responsible for final decisions.

The eleven-member Approval Authority works collaboratively with an Advisory Group which acts as the second tier of the governance structure. Advisory Group members include one representative each from the twelve Bay Area county operational areas, the three major cities, the regional NCRIC and an appointee from the Secretary of CalEMA. The Advisory Group makes

[1]The California Emergency Management Agency (CalEMA) divides the state's 58 counties into 3 administrative regions: Coastal, Inland, and Southern. The Bay Area UASI is part of the Coastal Region which includes: law, fire, coroners/medical examiners, emergency medical, and search and rescue mutual aid systems.

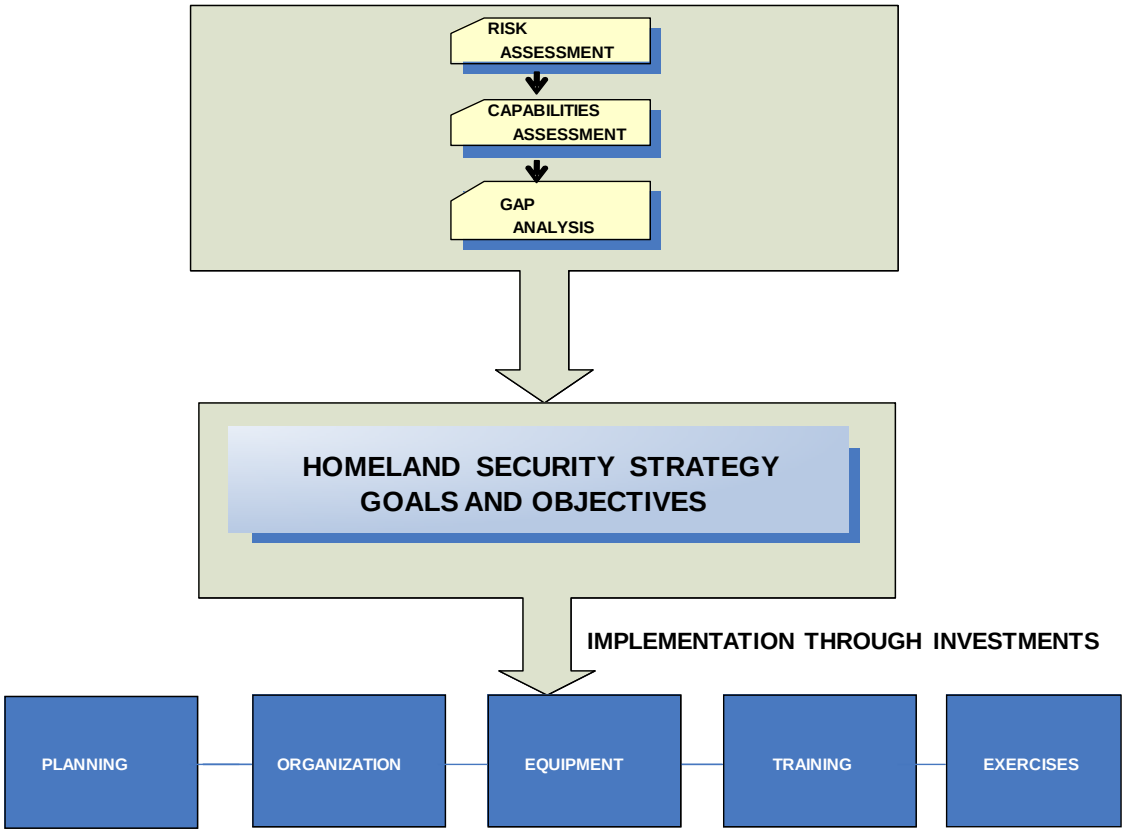
policy and programmatic recommendations to the Approval Authority and ensures there is broad representation, input and participation in the regional planning process.

Managing the day-to-day work of the Bay Area UASI is a Management Team comprised of a general manager, an assistant general manager, project managers, a chief financial officer, and finance and grants staff. The City and County of San Francisco has been designated as the fiscal agent for the grants managed by the Bay Area UASI.

Strategy Development Process

Through a series of meetings and other planning activities within the region, the *Strategy* and its goals and objectives as well as various ideas and recommendations were developed. The planning process used to develop the *Strategy* is outlined below. This process included a regional risk assessment, a capabilities assessment, and a gap analysis. From that data, strategic goals and objectives were updated along with implementation steps. The implementation steps involve a series of resource elements divided among the elements of capability: plans, organization, equipment, training and exercises (POETE) needed to achieve the objective as outlined in the figure below.

Bay Area Strategy Development Process



In 2008, the Bay Area UASI produced five major planning guidance documents: an assessment and strategic plan for regional interoperable communications; an assessment and project plan for community preparedness; a gap analysis and multi-year training and exercise program for EMS, the fire service and law enforcement; a training and exercise mandate for search and rescue; and a chemical, biological, radiological, nuclear, and/or explosive (CBRNE) assessment and strategic plan. In 2011 the region produced several region-wide response and recovery plans focusing on catastrophic disaster management. This was followed by a regional assessment and strategic plan for public information and warning. The plans from 2011 and 2012 cover:

- Mass Care and Sheltering
- Interim Housing
- Mass Fatality Management
- Donations Management
- Debris Removal
- Mass Transportation
- Volunteer Management
- Emergency Public Information and Warning

All of these plans and strategies have been reviewed and relevant key elements have been integrated into this overall regional *Bay Area Homeland Security Strategy*.

State and National Goals

The *Strategy* is built on the premise that achieving homeland security is an ongoing mission and one that must be a shared responsibility across the entire region, state and nation. This includes our local, tribal, state, and federal agencies, international partners, community organizations, businesses and individuals. Therefore, the *Strategy* supports implementation of the State of California Homeland Security Strategy and the National Security Strategy. Indeed, this *Strategy* serves as the Bay Area's focal point for implementing not only local and regional homeland security policy and priorities, but also national and state homeland security policy at the local and regional level.

Bay Area Risk Overview

Mitigating risk plays a vital role in the region's homeland security efforts. Risk is the expected negative impact of an adverse incident (whether the result of terrorism or a natural hazard) on an asset, considering both its likelihood and the magnitude of its impact. Risk can be expressed as a number or value in order to make comparisons. The Bay Area calculates risk as a function of threat, vulnerability, and consequence: **Risk = Threat x Vulnerability x Consequence.** The Bay Area's risk environment is a complex one involving terrorism, crime, natural hazards and industrial and other accidents concerning its people, and critical infrastructure and key resources (CIKR).

In addition to its large population, there are approximately 8,500 CIKR assets in the entire Bay Area that cover all 18 *National Infrastructure Protection Plan* (*NIPP*) sectors. These assets include such iconic sites and businesses as the Pyramid Building, the Golden Gate Bridge,

Apple, Google, Intel, Adobe, Hewlett-Packard, the San Francisco Bay Area Rapid Transit District, Yahoo!, eBay, Candlestick Park, Stanford University, the Oakland Coliseum, the Ports of San Francisco and Oakland, and many more. There are six professional sports teams in the region, including from the National Football League, National Hockey League, National Basketball Association and Major League Baseball. The region is also home to several major government facilities including Travis Air Force Base, the Federal Reserve Bank of San Francisco, the National Aeronautics and Space Administration Ames Center, the San Francisco Mint, the Defense Language Institute, and the Naval Postgraduate School.

The terrorism scenarios and natural hazards that pose the greatest risk to the Bay Area's CIKR are listed below in rank order:

Rank	Terrorism Scenarios	Natural Hazards
1	Vehicle Borne Improvised Explosive Device	Flood
2	Aircraft as a Weapon	Earthquake
3	Improvised Explosive Device	Wildfire
4	Biological Attack (Contagious)	Wind
5	Cyber Attack	Ice

From a terrorism perspective, the Bay Area's CIKR is particularly at risk from vehicle borne improvised explosive devices (VBIED), e.g., car or truck bombings against critical infrastructure. The relatively high likelihood of a VBIED attack in the Bay Area is driven by the ease and low expense of carrying out such an attack. Such a method of attack is common around the world. When combined with a conventional IED attack, over 50% of the calculated risk to the region's CIKR comes from terrorists' use of explosives. In addition to IEDs, general aviation aircraft as a weapon poses a risk given the number of general aviation airports in the region and the lower security standards imposed on general aviation as compared to commercial aviation.

The Bay Area also faces risk from natural hazards, especially floods, earthquakes and wildfires. The region rests upon one of the longest and most active earthquake fault systems in the world. This system includes the San Andreas Fault, the Hayward Fault and the Calaveras Fault. The U.S. Geological Survey estimates an 80% chance of a magnitude 6.7 or greater quake striking the Bay Area within the next 30 years. Based on the Bay Area's topography, risk from wild land fires as well as tsunamis are also of major concern.

A breakdown of the top ten CIKR sectors in the Bay Area based on the number of assets and risk to each sector (both from terrorism and natural hazards) is set forth in the table below.

Bay Area Sector Rankings

Rank	Sectors Ranked by Total Assets	Sectors Ranked by Terrorism Risk	Sectors Ranked by Natural Hazards Risk
1	Government	Government	Government
2	Commercial	Transportation	Commercial
3	Transportation	Banking	Water
4	Emergency Services	Commercial	Health
5	Postal	Health	Transportation
6	Dams	Defense Industrial Base	Emergency Services
7	Health	Monuments and Icons	Energy
8	Banking	Energy	Communications
9	Water	Water	Chemical
10	Food and Agriculture	Communications	Banking

The NCRIC has further refined all of the region's assets into four priority levels (Level I being the highest and Level IV being the lowest priority) with the vast majority of the assets (over 6,300) falling within priority Level IV. Just 2% of all NCRIC identified assets fall into Level I. Such a breakdown reflects the region's goal of accounting for as many assets as possible while recognizing that a smaller subset of those assets, if attacked or otherwise incapacitated, could have a devastating impact on the region.

Capabilities Assessment

Upon updating its risk profile, the Bay Area identified those capabilities that were most needed to address the highest-risk acts of terrorism faced by the region i.e., how vital each capability is to preventing, protecting against, mitigating, responding to and recovering from acts of terrorism that pose a risk to the region. While the assessment was driven by terrorism risk, most, if not all of the capabilities involved in the assessment can be used to address natural hazards as well. This "dual use" concept is one the Bay Area has used for years and will continue to use to help drive investments and strategic planning across the region.

After classifying capabilities according to their terrorism risk relevance, a capabilities assessment and gap analysis were conducted. The capabilities assessment was held in September 2012 and for the first time involved DHS's 31 Core Capabilities from the 2011 National Preparedness Goal. The use of the Core Capabilities replaces the Target Capabilities List (TCL). The Bay Area had used the TCL for assessments in 2009, 2010 and 2011. During the 2012 assessment, capability levels were organized into four quartiles: low, medium low, medium high and high.

Upon completing the capabilities assessment, the Core Capabilities were then plotted by terrorism risk relevance and capability gap depending on each capabilities risk relevance and the size of the gap in the capability. The Core Capabilities with the largest capability gap and highest risk relevance were ranked highest. The full findings from the 2012 Core Capabilities assessment, including current levels of ability and capability gaps, for the Bay Area are set forth in the table below.

2012 Core Capability Assessment Findings

Risk and Gap	Core Capability	Risk Relevance	Level of Ability	Gap Analysis
1	Infrastructure Systems	2	Low	Needs Extra Attention
2	Long Term Vulnerability Reduction	5	Low	Needs Extra Attention
3	Community Resilience	6	Low	Needs Extra Attention
4	Forensics and Attribution	11	Low	Needs Extra Attention
5	Interdiction and Disruption	9	Medium Low	Needs Attention
6	Public Information and Warning	12	Medium Low	Needs Attention
7	Screening, Search and Detection	14	Medium Low	Needs Attention
8	Situational Assessment	1	Medium High	Adequate
9	Threat and Hazard Identification	3	Medium High	Adequate
10	Risk and Disaster Resilience Assessment	4	Medium High	Adequate
11	Risk Management for Protection Programs/Activities	7	Medium High	Adequate
12	Physical Protective Measures	8	Medium High	Adequate
13	Intelligence and Info Sharing	10	High	Adequate
14	Planning	13	Medium High	Adequate
15	Access Control and Identity Verification	17	Low	Needs Attention
16	Cyber Security	20	Low	Needs Attention
17	Fatality Management	21	Low	Needs Attention
18	Operational Coordination	15	Medium Low	Needs Attention
19	Operational Communications	16	Medium Low	Needs Attention
20	On-Scene Security and Protection	18	Medium Low	Needs Attention
21	Public Health	19	Medium Low	Needs Attention
22	Critical Transportation	22	Medium Low	Needs Attention
23	Health and Social Services	25	Low	Adequate
24	Supply Chain Security	26	Low	Needs Attention
25	Economic and Community Recovery	27	Low	Needs Attention
26	Natural and Cultural Resources	28	Low	Needs Attention
27	Public and Private Services	30	Low	Adequate
28	Mass Care Services	29	Medium Low	Adequate
29	Mass Search and Rescue	23	Medium High	Adequate
30	Environmental Response	24	Medium High	Adequate
31	Housing	31	Low	Adequate

Summary of Goals and Objectives

After completing the risk and capabilities assessments, the region used the information to update the goals, objectives and implementation steps in the *Strategy*. Each of the *Strategy's* goals seeks to align whenever possible with either a National or State Homeland Security Priority. The eight DHS National Homeland Security Priorities represent broad and thematic goals that the nation should strive to achieve. They include Strengthen Information Sharing and Collaboration Capabilities, Strengthen Interoperable and Operable Communications Capabilities, etc. Each objective aligns with a capability or set of capabilities from the Core Capabilities[2], and the Centers for Disease Control and Prevention's (CDC's) Public Health Preparedness Capabilities for medical and health related objectives. Each objective describes the desired capability end state the region will strive to achieve.

The purpose of aligning each objective to a capability is to ensure the *Strategy* drives investments centered on enhancing specifically defined capabilities needed to better secure and protect the Bay Area from those acts of terrorism and other major hazards that pose the greatest risk to the region. In the end, the Bay Area's ability to prevent acts of terrorism or respond effectively to major natural disasters, such as a catastrophic earthquake, will be determined by the region having sufficient capabilities in place to deal with incidents caused by those threats and hazards. The *Strategy*'s goals, objectives and implementation steps outline in detail what the Bay Area needs to do to make sure it achieves and sustains those capabilities.

The goals and objectives are directed towards the next three years and may be reviewed and updated annually or as needed. It is likely that some of the objectives will carry over from year to year while others may be removed or updated based on the region's progress and actual needs. The goals and objectives will continue to be defined by risk analysis, identified preparedness gaps and sustainment priorities. A summary of the Bay Area's 8 goals and 31 objectives is set forth below.

[2] In certain cases an objective may reference both a Core Capability and a Target Capability, e.g., Objective 4.1 Improve Public and Private Services and Resources Management through *Fire Incident Response Support*. (Target Capability is in italics). This is due to the fact that certain Core Capabilities are ambiguous in their terms and require added definition, which the Target Capabilities provide, and/or the Core Capabilities are inclusive of multiple capabilities that were formally divided among the Target Capabilities List and that division is still necessary for planning purposes in the Bay Area, e.g., Objective 4.5 Improve Public and Private Services and Resources Management through *Critical Resource Logistics*. This breaking up of certain Core Capabilities along the Target Capability taxonomy reflects the reality of how the Bay Area plans and invests in these Core Capabilities.

Goal 1 Strengthen the Regional Risk Management and Planning Program

Objective 1.1 Enhance Planning, Threat and Hazard Identification, and Risk Management Capabilities: The Bay Area is able to identify and assess the threats and hazards that pose the greatest risk to the whole community. The region can prioritize and select appropriate capability-based planning investments and solutions for prevention, protection, mitigation, response, and recovery concerning those risks; monitor the outcomes of allocation decisions; and undertake corrective and sustainment actions.

Goal 2 Enhance Information Analysis and Infrastructure Protection Capabilities

Objective 2.1 Enhance Intelligence Collection, Analysis and Sharing: The Bay Area has systems and procedures to effectively collect, analyze and timely share information and intelligence across federal, state, local, tribal, territorial, regional, and private sector entities to achieve coordinated awareness of, prevention of, protection against, mitigation of, and response to a threatened or actual terrorist attack, major disaster, or other emergency. This involves sustaining and building upon the region's intelligence fusion center to include the ability to identify and systematically report suspicious activities associated with potential terrorist or criminal pre-operational planning and logistics.

Objective 2.2 Strengthen Terrorism Attribution, Interdiction and Disruption Capabilities: The Bay Area's law enforcement community (federal, state and local) and other public safety agencies can conduct forensic analysis and attribute terrorist threats and acts to help ensure that suspects involved in terrorist and criminal activities related to homeland security are successfully identified, deterred, detected, disrupted, investigated, and apprehended.

Objective 2.3 Increase Critical Infrastructure Protection: The Bay Area can assess the risk to the region's physical and cyber critical infrastructure and key resources from acts of terrorism, crime, and natural hazards and deploy a suite of actions to enhance protection and reduce the risk to the region's critical infrastructure and key resources from all hazards. This includes a risk-assessment process and tools for identifying, assessing, cataloging, and prioritizing physical and cyber assets from across the region.

Goal 3 Strengthen Communications Capabilities

Objective 3.1 Enhance Operational Communications Capabilities: The emergency response community in the Bay Area has the ability to provide a continuous flow of mission critical voice, data and imagery/video information among multi-jurisdictional and multidisciplinary emergency responders, command posts, agencies, and Bay Area governmental officials for the duration of an emergency response operation. The Bay Area can also re-establish sufficient communications infrastructure within the affected areas of an incident, whatever the cause, to support ongoing life-sustaining activities, provide basic human needs, and transition to recovery.

Goal 4 Strengthen CBRNE Detection, Response, and Decontamination Capabilities
Objective 4.1 Improve Public and Private Services and Resources Management through Fire Incident Response Support: Fire service agencies across the Bay Area can dispatch initial fire suppression resources within jurisdictional response time objectives, and firefighting activities are conducted safely with fire hazards contained, controlled, extinguished, and investigated, with the incident managed in accordance with local and state response plans and procedures.
Objective 4.2 Strengthen Mass Search and Rescue Capabilities: Public safety personnel in the Bay Area are able to conduct search and rescue operations to locate and rescue persons in distress and initiate community-based search and rescue support-operations across a geographically dispersed area. The region is able to synchronize the deployment of local, regional, national, and international teams to support search and rescue efforts and transition to recovery.
Objective 4.3 Enhance Screening Search and Detection Capabilities: The Bay Area has systems and procedures to rapidly detect, locate and identify CBRNE materials at ports of entry, critical infrastructure locations, public events, and incidents, and can communicate CBRNE detection, identification and warning information to appropriate entities and authorities across the state and at the federal level.
Objective 4.4 Strengthen On-Scene Security and Protection through Explosive Device Response Operations: Public safety bomb squads in the Bay Area are able to conduct threat assessments; render safe explosives and/or hazardous devices; and clear an area of explosive hazards in a safe, timely, and effective manner. This involves the following steps in priority order: ensure public safety; safeguard the officers on the scene (including the bomb technician); collect and preserve evidence; protect and preserve public and private property; and restore public services.
Objective 4.5 Improve Public and Private Services and Resources Management through Critical Resource Logistics: The Bay Area has a system to track and manage critical resources and make them appropriately available to incident managers and emergency responders from across the Bay Area to enhance emergency response operations and aid disaster victims in a cost-effective and timely manner.
Objective 4.6 Enhance Environmental Response/Health and Safety through WMD/HazMat Response and Decontamination Capabilities: Responders in the Bay Area are able to conduct health and safety hazard assessments and disseminate guidance and resources, including deploying HazMat response and decontamination teams, to support immediate environmental health and safety operations in the affected area(s) following a WMD or HazMat incident. Responders are also able to assess, monitor, clean up, and provide resources necessary to transition from immediate response to sustained response and short-term recovery.
Objective 4.7 Strengthen Operational Coordination Capabilities: The Bay Area has a fully integrated response system through a common framework of the Standardized Emergency Management System, Incident Command System and Unified Command including the use of emergency operations centers (EOCs), incident command posts, emergency plans and standard operating procedures, incident action plans and the tracking of on-site resources in order to manage major incidents safely, effectively and efficiently. EOCs in the Bay Area can

effectively plan, direct and coordinate information and activities internally within EOC functions, and externally with other multi-agency coordination entities, command posts and other agencies to effectively coordinate disaster response operations.

Objective 4.8 Improve Environmental Response/Health and Safety through Responder Safety and Health: The Bay Area can reduce the risk of illnesses or injury to first responders, first receivers, medical facility staff members, or other skilled support personnel as a result of preventable exposure to secondary trauma, chemical/radiological release, infectious disease, or physical/emotional stress after the initial incident or during decontamination and incident follow-up.

Objective 4.9 Enhance On-Scene Security and Protection through Emergency Public Safety and Security Response: Public safety agencies within the Bay Area are able to keep the public and critical infrastructure safe by securing a particular incident scene and maintaining law and order following an incident or emergency to include managing the criminal justice prisoner population.

Goal 5 Enhance Medical and Public Health Preparedness

Objective 5.1 Enhance Emergency Triage and Pre-Hospital Treatment: Emergency medical services (EMS) resources across the Bay Area can effectively and appropriately be dispatched (including with law enforcement tactical teams) to provide pre-hospital triage, treatment, transport, tracking of patients, and documentation of care appropriate for the incident, while maintaining the capabilities of the EMS system for continued operations up to and including for mass casualty incidents.

Objective 5.2 Increase Medical Surge: The Bay Area is able to provide adequate medical evaluation and care during incidents that exceed the limits of the normal medical infrastructure of an affected community or the region. The healthcare system in the region is able to survive a hazard impact and maintain or rapidly recover operations that were compromised. Those injured or ill from a medical disaster and/or mass casualty event in the Bay Area are rapidly and appropriately cared for. Continuity of care is maintained for non-incident related illness or injury.

Objective 5.3 Strengthen Medical Countermeasure Dispensing: With the onset of an incident, the Bay Area is able to provide appropriate medical countermeasures (including vaccines, antiviral drugs, antibiotics, antitoxin, etc.) in support of treatment or prophylaxis (oral or vaccination) to the identified population in accordance with local, state and federal public health guidelines and/or recommendations.

Objective 5.4 Improve Medical Materiel Management and Distribution: The Bay Area is able to acquire, maintain (e.g., cold chain storage or other storage protocol), transport, distribute, and track medical materiel (e.g., pharmaceuticals, gloves, masks, and ventilators) during an incident and recover and account for unused medical materiel, as necessary, after an incident.

Objective 5.5 Strengthen Non-Pharmaceutical Interventions: Public health agencies in the Bay Area are able to recommend to the applicable lead agency (if not public health) and implement, if applicable, strategies for disease, injury, and exposure control. Strategies include the following: isolation and quarantine, restrictions on movement and travel advisory/warnings, social distancing, external decontamination, hygiene, and precautionary protective behaviors. Legal authority for those applicable measures is clearly defined and communicated to all responding agencies and the public. Logistical support is provided to

maintain measures until danger of contagion has elapsed.
Objective 5.6 Improve Laboratory Testing: Laboratories in the Bay Area are able to conduct rapid and conventional detection, characterization, confirmatory testing, data reporting, investigative support, and laboratory networking to address actual or potential exposure to all-hazards. Confirmed cases and laboratory results are reported immediately to all relevant public health, food regulatory, environmental regulatory, and law enforcement agencies in support of operations and investigations.
Objective 5.7 Strengthen Public Health Surveillance and Epidemiological Investigation: Bay Area public health agencies have the ability to create, maintain, support, and strengthen routine surveillance and detection systems and epidemiological investigation processes, as well as to expand these systems and processes in response to incidents of public health significance. This includes the ability to identify potential exposure to disease, mode of transmission, and agent.
Objective 5.8 Enhance Fatality Management: Bay Area agencies, e.g., law enforcement, public health, healthcare, emergency management, and medical examiner/coroner) are able to coordinate (to ensure the proper recovery, handling, identification, transportation, tracking, storage, and disposal of human remains and personal effects; certify cause of death; and facilitate access to mental/ behavioral health services to the family members, responders, and survivors of an incident.

Goal 6 Strengthen Emergency Planning and Citizen Preparedness Capabilities

Objective 6.1 Strengthen Emergency Public Information and Warning Capabilities: The Bay Area has an interoperable and standards-based system of multiple emergency public information and warning systems that allows Bay Area leaders and public health and safety personnel to disseminate prompt, clear, specific, accurate, and actionable emergency public information and warnings to all affected members of the community in order to save lives and property concerning known threats or hazards.
Objective 6.2 Enhance Critical Transportation Capabilities: The Bay Area can provide transportation (including infrastructure access and accessible transportation services) for response priority objectives, including the evacuation of people, including those with access and functional needs, and animals, and the delivery of vital response personnel, equipment, and services into the affected incident areas to save lives and to meet the needs of disaster survivors.
Objective 6.3 Improve Mass Care: Mass care services, including sheltering, feeding, and bulk distribution, are rapidly, effectively and efficiently provided for the impacted population, including those with access and functional needs, in a manner consistent with all applicable laws, regulations and guidelines.
Objective 6.4 Increase Community Resiliency: The Bay Area has a formal structure and process for ongoing collaboration between government and nongovernmental resources at all levels to prevent, protect/mitigate, prepare for, respond to and recover from all known threats and hazards.
Objective 6.5 Strengthen Public and Private Services and Resources Management through Volunteer Management and Donations: Volunteers and donations within the Bay Area are organized and managed throughout an emergency based upon pre-designated plans,

procedures and systems.

Goal 7 Enhance Recovery Capabilities

Objective 7.1 Strengthen Infrastructure Systems: The Bay Area can provide accurate situation needs and damage assessments by utilizing the full range of engineering, building inspection, and code enforcement services in a way that maximizes the use of resources, aids emergency response, implements recovery operations, and restores the affected area to pre-incident conditions as quickly as possible. The Bay Area can coordinate activities between critical lifeline operations and government operations to include a process for getting the appropriate personnel and equipment to the disaster scene so that lifelines can be restored as quickly and as safely as possible to support ongoing emergency response operations, life sustainment, community functionality, and a transition to recovery
Objective 7.2 Enable Economic Recovery: During and following an incident, the Bay Area can estimate economic impact, prioritize recovery activities, minimize business disruption, and provide individuals and families with appropriate levels and types of relief with minimal delay.
Objective 7.3 Improve Environmental Response/Health and Safety: After the primary incident, the Bay Area is able to assess, monitor, perform cleanup actions, including debris and hazardous waste removal, and provide resources to prevent disease and injury through the quick identification of associated environmental hazards.

Goal 8 Enhance Homeland Security Exercise, Evaluation and Training Programs

8.1 Strengthen the Regional Exercise and Evaluation Program: The Bay Area exercise program tests and evaluates the region's enhancement and/or sustainment of the right level of capability based on the risks faced by the region with an evaluation process that feeds identified capability gaps and strengths directly into the region's risk management and planning process for remediation or sustainment.
8.2 Enhance the Regional Training Program: The Bay Area has a multi-discipline, multi-jurisdictional risk and capabilities based training program that enhances and sustains priority capabilities in order to mitigate the region's most pressing risks.

Strategy Implementation

The Bay Area UASI Management Team will have overall responsibility for managing and tracking implementation of the *Strategy* with oversight from the Bay Area UASI Approval Authority and input from the region's other stakeholders. Implementation will occur through major annual investments and projects developed at the city, county/operational area, sub-regional and regional level.

The Bay Area's strategic approach to investing will be premised on two overarching principles:

- First, sustain current priority programs and capabilities in the region.
- Second, close gaps in capabilities with an emphasis on those capabilities that have the highest risk relevance and the largest capability gaps.

The Management Team is responsible for developing the region's annual planning and investment guidance, which outlines the details for planning structures and priorities to ensure the Bay Area is executing the strategy through investments. These details actualize the two guiding investment principles outlined above. It includes planning timelines, grant guidance, project templates and such other materials and policies as may be necessary to ensure a seamless and integrated planning structure and system for each year.

Evaluation of the Strategy

In order to truly understand the value of the Bay Area's homeland security investments, the region must have a consistent mechanism by which to measure the effectiveness of the homeland security activities generated (i.e., what plans were developed, personnel hired, organization and operations conducted, equipment purchased, number of people trained, and exercises conducted, etc.) by those investments. This will be done in the form of an effectiveness report to the Approval Authority, which may be shared with state and federal partners as needed.[3] Through its goals and objectives, the *Strategy* outlines the region's approach and path forward for homeland security. The effectiveness report outlines the region's progress in achieving those goals and objectives based on enhancing capabilities tied to risk management.

[3] In 2011, the Bay Area produced a preliminary UASI effectiveness report, which examined certain UASI investments to determine if the region had been following its strategic plans over the years and investing in priority, risk based capabilities. A more extensive follow-on report was issued in November 2012. The overall findings from both the 2011 and the 2012 report show that the region has been investing according to its plans and that priority capabilities have been enhanced to help reduce risk.

This Page Intentionally Left Blank

SECTION 1
INTRODUCTION

1.1 Background

Homeland Security is the coordinated effort to ensure a region, state or nation is prepared to prevent, protect against, respond to and recover from threats and acts of terrorism and other man-made or natural catastrophes. It requires a risk management process in order to ensure the right capabilities are in place to manage those hazards that pose the greatest risk to the region, its people, and its critical infrastructure and key resources. The threat of catastrophic events, both natural and man-made, requires continuous attention and strategic commitment from all levels of government, the private sector and the general public.

The Northern California Bay Area is a major target of terrorist organizations and a region with an extensive history of natural disasters. To better address these risks on a regional basis, in 2006, the U.S. Department of Homeland Security (DHS) combined three previously independent Urban Areas (Oakland, San Francisco, and San Jose) under the DHS Urban Area Security Initiative grant program and formed the Northern California Bay Area Urban Areas Security Initiative (Bay Area UASI) region for preparedness purposes.

The combining of the three previously independent Urban Areas prompted them to review their existing governance structures. As a result, the Bay Area UASI established a new three-tiered governance structure, which included the major cities of Oakland, San Francisco, and San Jose, the twelve county operational areas, and the State of California Emergency Management Agency. This governance structure is designed to ensure integration and coordination among the diverse members of the region as each works to collectively enhance the region's preparedness and security.

The Bay Area UASI is committed to the homeland security effort. Working together, the entire Bay Area UASI has strived to integrate preparedness activities, especially preparedness planning at the strategic level. This homeland security strategy represents the latest effort in that regard. The Bay Area UASI is a recognized leader in homeland security and has made great strides in improving preparedness and security while maintaining our standards of freedom and civil liberties. The region will build on its accomplishments, but must remain vigilant and continue to meet the challenges going forward.

1.2 Bay Area Overview

The Bay Area is inclusive of over 100 incorporated cities and a combined total population exceeding 7.5 million people. In addition to the 7.5 million residents, the Bay Area attracts 15.9 million visitors annually who spend more than $16.6 million per day in the region. The Bay Area is one of the most culturally diverse regions in California. With just over 800,000 residents, San Francisco is the 4th most populous city in California and the most densely populated major city in the State. San Jose is the third largest city in California with Oakland being the eighth largest in the State.

From the beginning of the UASI program in 2003, the geographic foot print of DHS- designated UASI jurisdictions has been a combination of DHS determined risk analysis and existing state, local and regional compacts. The formula used by DHS has changed almost yearly, along with the number of eligible jurisdictions, with one of the most dramatic shifts occurring in 2006. That year, DHS combined the three previously independent UASI jurisdictions of Oakland, San Francisco, and San Jose into the current Bay Area UASI.

The current Bay Area UASI region is comprised of twelve counties (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma, Monterey and San Benito) and the three major cities of Oakland, San Francisco, and San Jose. In 2005, prior to the DHS led consolidation, this group initiated regional planning and collaboration efforts by developing the Regional Emergency Coordination Plan (RECP). A map of the current Bay Area UASI is set forth in Figure 1.

Figure 1: Bay Area UASI Region

2008 marked another major shift in how DHS calculates risk and determines UASI funding eligibility. That year, per the 9/11 Act passed by Congress, DHS began a new evaluation process that utilized the U.S. Census-determined Metropolitan Statistical Areas (MSA) to determine eligibility and rank those UASI jurisdictions eligible for funding. In using this approach, jurisdictions within the MSA are included in the DHS risk analysis, but are not necessarily included in the actual UASI region's geographic footprint for funding. In the case of the Bay Area UASI, the region's twelve county geographic foot print is actually **larger** than the MSA region used by DHS to calculate risk. This is rare. The Bay Area UASI includes Santa Cruz, Sonoma, Solano, Monterey and San Benito counties, which are not part of the MSA used by DHS to calculate risk and then rank and fund the Bay Area under the UASI program.

1.3 Bay Area Management

The Bay Area homeland security program is comprised of the UASI grant program, COPS Technology Grant, Interoperable Emergency Communications Grant Program (IECGP), Regional Catastrophic Preparedness Grant Program (RCPGP), and the Public Safety Interoperable Communications (PSIC) grant program. These grants serve as both terrorism and all hazards preparedness programs. Thus, this Strategy is focused on all hazards with a particular emphasis on terrorism preparedness.

Governed by a multi-year Memorandum of Understanding (MOU) between the participants, the Bay Area UASI is managed through a three-tiered governance structure. The Bay Area's governance structure is widely viewed as having an important, groundbreaking regional approach that has been recognized, and may be replicated, throughout the State of California and across the country as a homeland security best practice.

1.3.1 Approval Authority

The top tier is the eleven-member Approval Authority that includes representation from each of the three major cities of Oakland, San Francisco, and San Jose and the County of Alameda, County of Contra Costa, County of Marin, County of Monterey, County of San Francisco, County of San Mateo, County of Santa Clara and County of Sonoma. An Appointee from the Secretary of the California Emergency Management Agency (CalEMA) is also a non-voting member. The Approval Authority provides policy direction to the program and is responsible for final decisions.

1.3.2 Advisory Committee

The eleven-member Approval Authority works collaboratively with an Advisory Group which acts as the second tier of the governance structure. Advisory Group members include one representative each from the twelve Bay Area county operational areas, the three major cities, the regional NCRIC and an appointee from the Secretary of CalEMA. The Advisory Group makes policy and programmatic recommendations to the Approval Authority and ensures there is broad representation, input and participation in the regional planning process.

1.3.3 Management Team

Managing the day-to-day work of the Bay Area UASI is a Management Team comprised of a general manager, strategy and compliance director, several project managers, a finance manager, and grants managers. The City and County of San Francisco has been designated as the fiscal agent for the grants managed by the Bay Area.

1.3.4 Planning Hubs and Work Groups

The Bay Area also engages a variety of stakeholders throughout the region to move projects and initiatives forward and to provide essential input for decision makers of the Bay Area's homeland security efforts. Planning hubs are organized sub-regionally – North, South, East and West Bay hubs. Working groups generally organize themselves around the Strategy's goals and objectives. For example, the CBRNE Work Group manages issues related to the CBRNE goal (Goal 4 - Strengthen CBRNE Detection, Response, and Decontamination Capabilities). Work group members represent diverse interests and areas of expertise at the local, regional and state level. Each work group meets on an as needed basis to address identified projects and issues.

SECTION 2
PURPOSE

2.1 Purpose Overview

The purpose of the *Bay Area Homeland Security Strategy* is to ensure the Bay Area has a comprehensive, data driven document that outlines the Bay Area's risks, capabilities, vision, structure, goals and objectives for homeland security. Having such a document will ensure the Bay Area is in the best possible position to clearly track and articulate its risk and capability needs to local leaders, the State of California and DHS when seeking resources to reduce that risk and satisfy those capability needs. The *Strategy* is designed primarily to address terrorism risk with an understanding that capabilities enhanced to combat terrorism often enhance the ability to also manage natural disasters and man-made accidents.

The *Strategy* outlines a comprehensive system for enhancing regional capability and capacity that will guide the Bay Area UASI's efforts to:

- Prevent and disrupt terrorist attacks;
- Protect the people of the Bay Area, its critical infrastructure and key resources;
- Mitigate the damage caused by acts of terrorism, natural disasters and man-made accidents;
- Respond to and recover from major incidents and all hazards that do occur;
- Continue to strengthen our preparedness foundation to ensure our long-term success; and
- Guide future investments, increase capabilities and reduce risk.

This is an exceedingly complex mission requiring coordination, cooperation, collaboration, and focused effort from the entire region – residents, government, as well as the private and non-governmental organization sectors. The Bay Area region will apply the resources available from DHS to address unique planning, organizational, equipment, training, and exercise needs to assist in building an enhanced and sustainable capacity to prepare for all hazards. However, this *Strategy* is not a grant strategy; it is a comprehensive homeland security strategy that will be implemented through projects funded by Federal grants, general funds and such other funding opportunities that may become available.

2.2 Prior and Ongoing Planning Efforts

Prior to the 2006 consolidation of the three previously independent Urban Areas, the initial homeland security strategies were developed based upon the September 2003 regional assessments. That process included comprehensive risk, capabilities, and needs assessments. The results of the assessments provided an early insight into the requirements of each of the three Urban Areas at the time. The three strategies were revised in 2005 to align with the homeland security mission areas of prevention, protection, response and recovery, and the Target Capabilities List to enable the region to more effectively embrace the capabilities based planning process. Later, a regional strategy was developed in accordance with the consolidation of 2006. The 2006 Strategy was followed by a new 2010 Bay Area regional homeland security strategy

based upon a region-wide risk and capabilities assessment conducted in late 2009. The 2010 Bay Area Strategy served as a baseline for this current *2013 Bay Area Homeland Security Strategy*.

In the past, the Bay Area region has conducted assessments and developed several strategic, operational and tactical level plans that have produced valuable data to help drive the region's policies and programs. Those assessments and strategies (and future assessments and strategies) serve two purposes concerning this Strategy: first, they provide valuable data and strategic input into this regional Strategy; and second, they serve as implementation plans, policies and procedures under the umbrella of this larger region-wide *Bay Area Homeland Security Strategy*. Appendix A outlines this interrelated planning structure.

In 2008, the Bay Area UASI produced five major planning guidance documents: an assessment and strategic plan for regional interoperable communications; an assessment and project plan for community preparedness; a gap analysis and multi-year training and exercise program for EMS, the fire service and law enforcement; a training and exercise mandate for search and rescue; and a CBRNE assessment and strategic plan. In 2011, the region produced several region-wide response and recovery plans focusing on catastrophic disaster management. This was followed by a 2012 regional strategic plan for public information and warning. The plans from both years cover:

- Mass Care and Sheltering
- Interim Housing
- Mass Fatality Management
- Donations Management
- Debris Removal
- Mass Transportation
- Volunteer Management
- Emergency Public Information and Warning

All of these plans and strategies from 2008 and beyond have been reviewed and relevant key elements have been integrated into this overall regional *Bay Area Homeland Security Strategy*.

Finally, the homeland security planning and implementation process has no "end state" any more than traditional public safety has an end point. Rather, it is a constant cycle of improving plans, procedures, systems and operations designed to enhance security and preparedness for the region. The Bay Area is committed to this process and the current *Bay Area Homeland Security Strategy* is the latest product in that endeavor.

SECTION 3
VISION

The Bay Area's vision for homeland security is a secure, prepared and resilient region consistently developing regional capabilities based on risk through collaboration and coordination.

The Bay Area's vision will be implemented through a set of guiding principles that will help shape this regional *Strategy* and its implementation and maintenance. These principles are:

- Homeland security is a shared responsibility among all regional members at all levels of government and the private sector.

- Local jurisdictions and sub-regions are in the best position to know how to achieve regional goals and objectives.

- Each individual jurisdiction and the region as a whole will be best able to implement its vision for homeland security through regional collaboration and cooperation.

- The region will strive to use empirical data to drive its homeland security programs to include risk and capabilities assessment data.

- Every individual and family across the region has a critical role to play in homeland security from preparing for disasters to helping deter and detect terrorist plots.

- The region will strive to develop and share best practices in homeland security across the region and the State of California and recognizes that such best practices are often first developed at the local level.

- The region will responsibly leverage and manage funds to achieve the optimal result with the dollars available. This will include, wherever possible, the integration of State Homeland Security Program grants and UASI grants among others.

SECTION 4
FOCUS & MISSION

4.1 Focus and Mission Overview

To accomplish the Bay Area's vision for homeland security, this Strategy and its goals and objectives are focused and organized around managing **major/regional** threats and hazards through the five[4] mission areas of homeland security: prevention, protection, mitigation, response and recovery. Certain programs cross all mission areas; these are listed in this document under the category "common." The Strategy also reflects that day-to-day public safety policy development and implementation is the responsibility of local jurisdictions, while at the same time recognizing that such local capabilities are essential to building regional capacity for which this Strategy is designed. Each strategic goal and objective under this Strategy will be based upon and built to help the region achieve one or more of these mission areas. The five mission areas are broken down as follows:

4.1.1 Prevention

Prevention involves actions to avoid an incident or to intervene or stop a terrorist incident from occurring. It involves applying intelligence to a range of activities that may include such countermeasures as deterrence operations; heightened inspections; improved surveillance and security operations; investigations to determine the full nature of the threat; and, specific law enforcement operations aimed at deterring, preempting, interdicting, or disrupting illegal activity and apprehending potential perpetrators.

4.1.2 Protection

Protection involves actions to reduce the vulnerability of critical infrastructure or key resources in order to deter, mitigate, or neutralize terrorist attacks, major disasters, and other emergencies. It includes awareness elevation and understanding of threats and vulnerabilities to critical facilities, systems, and functions; identification and promotion of effective infrastructure sector-specific protection practices and methodologies; and information sharing among private entities within the sector, as well as between government and private entities.

[4] When the mission areas were first developed the mitigation mission area was not formally recognized. In 2011, PPD-8 formally adopted mitigation as a homeland security mission area. Thus, up until 2011, there were only four mission areas plus the common mission area. This change is most relevant when dealing with the Target Capabilities List, which is aligned to the four mission areas, plus common, and the new Core Capabilities List, which is aligned to the five mission areas plus common, each of which is discussed in sections 4.3 and 4.4 respectively.

4.1.3 Mitigation

Mitigation involves efforts to reduce loss of life and property by lessening the impact of disasters. Mitigation is achieved through risk analysis, which results in information that provides a foundation for mitigation activities that reduce risk. Mitigation includes ongoing public education and outreach activities designed to reduce loss of life and destruction of property; complying with or exceeding floodplain management and land-use regulations; enforcing stringent building codes, seismic design standards, and wind-bracing requirements for new construction, repairs, or retrofitting of existing buildings.

4.1.4 Response

Response includes activities that address the short-term, direct effects of an incident. Response includes immediate actions to save lives, protect property, and meet basic human needs. Response also includes the execution of emergency operations plans and of mitigation activities designed to limit the loss of life, personal injury, property damage, and other unfavorable outcomes.

4.1.5 Recovery

Recovery involves activities that include the development, coordination, and execution of service-and-site-restoration plans; the reconstitution of government operations and services; individual, private-sector, nongovernmental, and public-assistance programs to provide housing and to promote restoration; long-term care and treatment of affected persons; and additional measures for social, political, environmental, and economic restoration.

4.2 The National Priorities

The National Homeland Security Priorities represent broad and thematic goals that fall under the mission areas that the Nation should strive to achieve in homeland security. The National Homeland Security Priorities are:

- Implement the National Incident Management System and National Response Framework
- Implement the National Infrastructure Protection Plan
- Expand Regional Collaboration
- Strengthen Information Sharing and Collaboration Capabilities
- Strengthen CBRNE Detection, Response and Decontamination Capabilities
- Strengthen Interoperable and Operable Communications Capabilities
- Strengthen Planning and Citizen Preparedness
- Strengthen Medical Surge and Mass Prophylaxis Capabilities

4.3 The Core Capabilities

In September 2011, DHS released the new National Preparedness Goal. At the center of the new Goal is the Core Capabilities. The Core Capabilities is a list of 31 capabilities necessary to

address a wide range of hazards based on the results of a national risk assessment conducted by DHS. The Core Capabilities serve as the successor to the Target Capabilities List. A Core Capability to Target Capability Crosswalk is set forth in Appendix A. A breakdown of the Core Capabilities by mission area is set forth in Table 1 below.

Table 1: Core Capabilities by Mission Area

Common				
Planning				
Public Information and Warning				
Operational Coordination				
Prevention	**Protection**	**Mitigation**	**Response**	**Recovery**
Forensics and Attribution Intelligence and Information Sharing Interdiction and Disruption Screening, Search, and Detection	Access Control and Identity Verification Cyber Security Intelligence and Information Sharing Interdiction and Disruption Physical Protective Measures Risk Management for Protection Programs and Activities Screening, Search, and Detection Supply Chain Integrity and Security	Community Resilience Long-term Vulnerability Reduction Risk and Disaster Resilience Assessment Threats and Hazard Identification	Critical Transportation Environmental Response/Health and Safety Fatality Management Services Infrastructure Systems Mass Care Services Mass Search and Rescue Operations On-scene Security and Protection Operational Communications Public and Private Services and Resources Public Health and Medical Services Situational Assessment	Economic Recovery Health and Social Services Housing Infrastructure Systems Natural and Cultural Resources

4.4 Public Health And Medical Capabilities

Unlike the Target Capabilities, which included seven distinct medical and health related capabilities, the new Core Capabilities has one all-inclusive Public Health and Medical Services capability under the response mission area. However, in 2011, the Centers for Disease Control and Prevention (CDC) released the *Public Health Preparedness Capabilities, National Standards for State and Local Planning*. This document outlines a series of capabilities (15 in total) intended to "assist state and local planners in identifying gaps in preparedness, determining the specific jurisdictional priorities, and developing plans for building and sustaining capabilities."[5]

Many of the CDC's public health and medical related capabilities link directly to the Target Capabilities List medical and health capabilities, which the Bay Area had built most of its medical and health related objectives around. As such, for those CDC capabilities that have such a link, the Bay Area will use those CDC capabilities to develop specific medical and health related objectives in the *Strategy*. This will ensure consistency between the broader homeland security efforts in the region and the specific medical and health programs the Bay Area's public health and medical stakeholders are engaged in with the CDC.[6] Moreover, all of the efforts undertaken to enhance these medical and health capabilities can be "rolled-up" under the single Public Health and Medical Services Core Capability for reporting purposes to DHS.

A breakdown of the CDC's public health capabilities applicable to the *Strategy* are listed in Table 2.

Table 2: CDC Capabilities and Target Capabilities Crosswalk

CDC Capability	Target Capability
Public Health Laboratory Testing	Laboratory Testing
Public Health Surveillance and Epidemiological Investigation	Epidemiological Surveillance and Investigation
Medical Surge	Medical Surge
Medical Counter Measures Dispensing	Mass Prophylaxis
Medical Material Management and Distribution	Medical Supplies Management and Distribution
Non-Pharmaceutical Interventions	Isolation and Quarantine

[5] Centers for Disease Control and Prevention, *Public Health Preparedness Capabilities, National Standards for State and Local Planning* (2011), page 2.

[6] The Emergency Triage and Pre-hospital Treatment Target Capability is primarily focused on the emergency medical services community. As such, it is not directly accounted for in the CDC capabilities. However, the Bay Area will continue to use Emergency Triage and Pre-hospital Treatment in the *Strategy* as part of its medical and health objectives. Also, the Core Capabilities has Fatality Management Services distinct from the Public Health and Medical Services. However, the Bay Area has included Fatality Management under the medical and health goal in the *Strategy* and will continue to do so.

SECTION 5
RISK OVERVIEW

5.1 Introduction

A core element of Bay Area strategic planning is utilizing risk data and risk management principles to guide planning and investments. In 2012, the Bay Area updated its risk assessment data concerning terrorism and natural hazards, the results of which are summarized here. As risk is a dynamic attribute and can shift over time, the 2011 follow-up analysis builds upon the solid baseline established in 2009 and 2010 and will need to be updated again in the future.

The purpose of this section is to highlight and summarize the key findings from the 2012 risk validation analysis as outlined in the Risk Analysis Center as of November 2012. This section begins by providing details regarding the risk methodology utilized for completing the risk analysis. Although the 2012 risk analysis focused primarily on terrorism risk, the Bay Area also considered risks posed by natural hazards. In terms of terrorism events, the 2012 analysis considered sixteen terrorism (and nine natural hazard) scenarios that could potentially impact the region. The analysis goes on to determine which of those scenarios posed the greatest relative risk to the region. The focus then moves to defining the public and private sector critical assets for risk analysis and then to analyzing asset risk by each of the critical infrastructure and key resources (CIKR) sectors across the entire region as defined by the National Infrastructure Protection Plan (NIPP).

5.2 Risk Methodology

A terrorism event is defined under federal law as the "…unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives.[7]" A natural event causes a hazard when it harms people or property. Such natural events may include floods, earthquakes, tornadoes, tsunamis, coastal storms, landslides, and wildfires that strike populated areas.

Risk, then, is the expected negative impact of an adverse incident (whether the result of terrorism or a natural hazard) on an asset, considering both its likelihood and the magnitude of its impact. Risk can be expressed as a number or value in order to make comparisons, and is calculated as a function of threat, vulnerability, and consequence: **Risk = Threat x Vulnerability x Consequence.**

- ***Threat*:** The likelihood of the occurrence of an incident, including those that are caused by nature (e.g., floods, windstorms, earthquakes) and those that are human-caused (e.g., acts of terrorism and industrial accidents). *Likelihood* refers to the estimate of the

[7] 28 C.F.R. Section 0.85

potential of an incident or incident's occurrence as compared to other scenarios in a particular region and takes into account adversarial intent and capabilities.

- ***Vulnerability*:** Likelihood of the asset[8] succumbing to a terrorist attack or natural hazard. Vulnerability is a function of an asset's recognizability, resilience, and countermeasures effectiveness, such as gates, cameras, guards, etc. The higher the asset's vulnerability the greater the chance a terrorist attack will succeed or a natural hazard will cause damage to that asset. For example, a building with no gate or wall is more vulnerable to a vehicle borne improvised explosive device (more likely to succumb to the attack) than the same building is with a reinforced gate or concrete wall designed to block vehicular traffic.

- ***Consequence*:** Consequences of an attack can impact one or all of the following areas:

    - **Human:** The adverse impact of an incident on human health as measured by the number of fatalities and injuries the incident causes, as well as by the resulting long-term health effects.
    - **Economic:** The harm caused by an incident as measured by short-term costs of repair efforts, as well as by the long-term impact of an incident on the economic activity of the asset attacked.
    - **Mission:** The severity of the impairment of the asset that an incident inflicts. Mission interruption includes the degree of interruption, geographic scope, and mission criticality.
    - **Psychological:** The adverse impact of an incident on the morale and confidence of the population. Such adverse impacts may include a reduced sense of general well-being, concerns about personal security, and reduced confidence in the government and the economy.

Multiple kinds of risk exist, and driving the Bay Area's risk profile are the characteristics of the assets and population in the area. Further, an area may have a higher risk of one type but not necessarily of others. The Bay Area currently looks at risk in four broad categories:

- Terrorism Risk to People
- Terrorism Risk to Assets
- Natural Hazard Risk to People
- Natural Hazard Risk to Assets

Population risk takes into account not only how many people are present in a given area but also how those people are distributed within a jurisdiction or region (local population density). Population risk calculations consider residents, commuters, and international visitors in a given area. While asset risk looks at the risk to the area from attacks on or incidents involving an area's critical infrastructure, population risk gives an overview of risk to the major population-at-large.

[8] An asset is a piece of infrastructure such as a bridge, building, power plant, etc. An asset can also include cyber infrastructure such as networks and software.

5.3 Description of Threats and Hazards

The following is a summary of the sixteen terrorism and nine natural hazard scenarios used to help determine the Bay Area's risk profile. The terrorism scenarios are based, in part, upon actual terrorist methods used in attacks around the world such as improvised explosive devices and conventional assaults. While several of the attack scenarios listed have never been used by terrorists, e.g., an improvised nuclear device against a major U.S. city, the intent to acquire and use such weapons and tactics has been clearly articulated by certain terrorist groups.

Table 3: Terrorism Scenarios

Scenario	Description
Agro-terrorism	An attack on the agriculture/food supply chain. Largely designed to inflict economic damage.
Aircraft as a Weapon	The aircraft as a weapon scenario consists of attackers using an airplane to inflict a direct impact on a target. Damage to the asset is a result of the initial explosion of the airplane's fuel supply, as well as secondary events like fires or building collapses. Catastrophic attacks involving commercial airplanes occurred on September 11, 2001 involving financial and military targets in New York, Virginia, and Pennsylvania. A far less severe attack involving general aviation occurred on February 18, 2010 when a man flew a small plane into an IRS building in Austin, Texas.
Arson/Incendiary Attack	Arson or incendiary attacks have been used widely throughout history by terrorist groups and criminals. Attacks vary widely in scope and intensity, from the use of one small incendiary device like a Molotov cocktail to setting a fire from multiple ignition points on one site using highly flammable fuel. In 2008, the Earth Liberation Front burned down a housing development in Woodinville, Washington. The Provisional Irish Republican Army made extensive use of Molotov cocktails in its fight against British control of Ireland.
Biological Attack (Contagious)	Use of a biological agent that can be spread from human to human and results in negative health effects. This includes the intentional release of communicable infectious diseases such as pandemic flu and Bubonic Plague.
Biological Attack (Non-contagious)	Use of a biological agent that cannot be directly spread from human to human but results in negative health effects. Non-contagious biological attacks typically require direct contact or inhalation with a biological strain ─ for example, the 2001 Anthrax attacks, which killed five people.
Chemical Attack	A chemical release on a population using toxic and corrosive chemicals that generate poisonous gases, liquids, and other hazardous substance. Chemical attacks include the release of a nerve agent, blister agent, or industrial chemicals used against an asset's population. Scenario includes aerosol or other distribution of mustard gas, arsenic, mercury, Sarin, or other similar substances. This also considers the use of explosives against chlorine tanks.
Conventional Attack	Conventional attacks include attacks executed with weapons that are not weapons of mass destruction. This can include grenades, bombs, mines, missiles, small firearms, and large-caliber artillery systems. One of the most notable conventional attacks in recent history occurred in 2008 in Mumbai, India, where terrorists affiliated with Islamist group Lashkar-e-Taiba attacked multiple public sites with bombs and guns.
Cyber Attack	Computer-based attack aimed to disrupt the function of an asset or obtain sensitive information from the asset's computer systems. Attacks may involve service disruption or manipulation using destructive worms and viruses, Denial of Service exploits, and intrusions. Actors either inside or outside of the asset's organization could carry out acts of sabotage.
Food and Water Contamination	Poisoning or otherwise tampering with a food/water distribution point in such a way that causes harmful health effects. Poisoning may include the use of bacteria, viruses, and heavy metals. Attacks at a distribution point may spread among the population.

Scenario	Description
Hostage Taking/Assassination	Attack in which terrorists enter an asset and hold captives; also any attack targeting and killing key officials or significant persons who are present at a site.
Improvised Explosive Device (IED)	IEDs are bombs that are not of standard military construction, but may utilize components that are. Constructed using any type of explosive material, fuse, detonator, and container, they can also include biological, chemical, or other contaminants. IEDs have been used widely by terrorist groups; recent examples include use by the Taliban in Afghanistan against Coalition and Afghan forces and by the Liberation Tigers of Tamil Elam against the Sri Lankan government, most often via suicide bombers.
Maritime Attack	Use of a sea vessel to deliver explosives against a target, such as another ship or port asset directly adjacent to a waterway. In 2000, 17 military personnel were killed when such an attack targeted the USS Cole.
Nuclear Device	A nuclear device scenario involves the detonation of a weapon assembled using highly enriched uranium, most likely stolen or purchased from an unstable nuclear or former nuclear state. A device could be assembled near an UA and transported via vehicle to a densely-populated location for detonation. Such an attack has yet to occur; however, overwhelming casualties within 12 miles can be expected, with decreasing casualty rates extending over a 150-mile radius. Long-term environmental and health effects can be expected, as well as damage exceeding $100 billion.
Radiological Dispersion Device (RDD)	An attack, also called a "dirty bomb," combining radioactive materials and conventional explosives. The explosives cause damage and casualties within the blast radius and spread radiation over a larger area. Though a potentially large number of people could be exposed, the radiation levels are unlikely to cause significant deaths. However, a radiation attack would have considerable psychological effects on the public.
Sabotage/Theft	Sabotage encompasses any act intended to prevent an asset from engaging in its mission. It can affect any sector and any level of an asset, and it may be carried out by any actor to include disgruntled employees or terrorists. Sabotage is often classified solely or simultaneously as one or more other crimes, such as arson. An unidentified individual injected a glue-like substance into a remote shutdown panel at a nuclear power plant in St Lucie, Florida, in 1996. In 2006, the Salafist Group for Call and Combat vandalized and set fire to an Algerian cement plant and company vehicles.
Vehicle Borne Improvised Explosive Devices (VBIED)	VBIEDs are IEDs delivered via vehicles. A large sedan can yield up to 1,000 pounds (lbs) of explosives in the trunk alone; a small box truck can yield over 10,000 lbs. By comparison, the truck used in the Oklahoma City bombing was carrying 4800 lbs of explosives. This method of attack is historically common and still used by groups such as al Qaeda, which describes the attack in detail in its training manual.

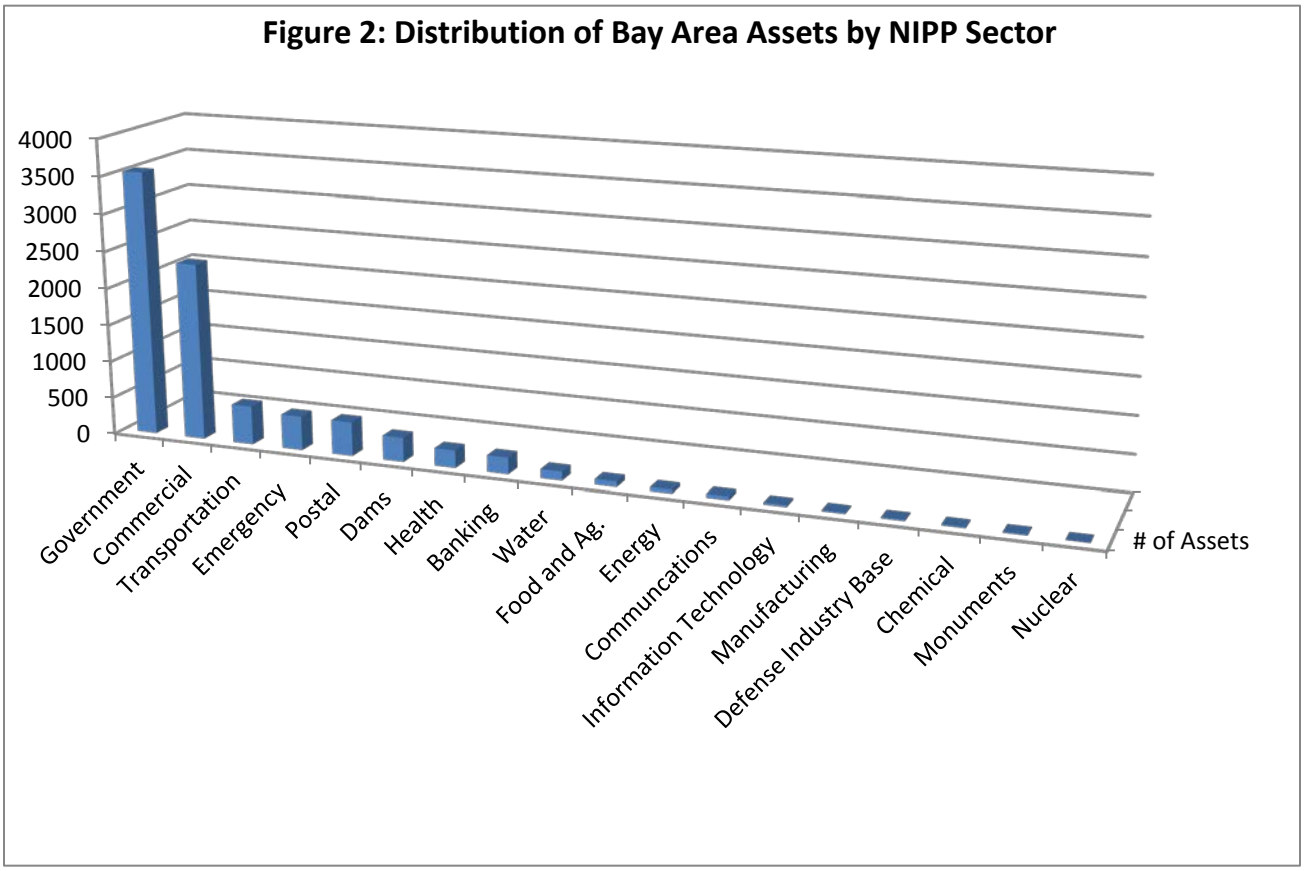
Table 4: Natural Hazard Scenarios

Scenario	Description
Floods	Floods, according to FEMA, are one of the most common hazards in the United States. Flood effects can be local, impacting a neighborhood or community, or very large, affecting entire river basins and multiple states. However, all floods are not alike. Some floods develop slowly, sometimes over a period of days. But flash floods can develop quickly, sometimes in just a few minutes and without any visible signs of rain. Flash floods often have a dangerous wall of roaring water that carries rocks, mud, and other debris and can sweep away most things in its path. Overland flooding occurs outside a defined river or stream, such as when a levee is breached, but still can be destructive. Flooding can also occur when a dam or levee breaks, producing effects similar to flash floods.
Earthquake	An earthquake is ground shaking caused by a sudden movement of rock in the Earth's crust. Such movements occur along faults, which are thin zones of crushed rock separating blocks of crust. When one block suddenly slips and moves relative to the other along a fault, the energy released creates vibrations called seismic waves that radiate up through the crust to the Earth's surface, causing the ground to shake. Earthquakes may last only a few seconds or may continue for up to several minutes. They can occur at any time of the day or night and at any time of the year. They are caused by stress that builds up over time as blocks of crust attempt to move but are held in place by friction along a fault. (The Earth's crust is divided into large plates that continually move over, under, alongside, or apart from one another atop the partly molten outer layer of the Earth's core.) When the pressure to move becomes stronger than the friction holding them together, adjoining blocks of crust can suddenly slip, rupturing the fault and creating an earthquake.
Wildfires	A wildfire in California may involve a fire burning uncontrolled on lands covered wholly or in part by timber, brush, grass, grain, or other flammable vegetation. It may also include any fire, controlled or uncontrolled, including a campfire, burning outside of any structure, mobile home, or living accommodation mounted on a motor vehicle. California has been extremely susceptible to such fires over the years with some of the largest wildfires in the U.S. occurring in the State.
Severe Winds	Severe winds occurring as a result of thunderstorms can be a threat to both life and property. For example, according to the National Weather Service, extreme winds, those damaging wind gusts of 58 mph or greater, within 12 miles of a location, pose an extreme likelihood (36% or greater) of causing minor to major damage in the worst situations.
Tornado	A tornado is a violent, dangerous, rotating column of air that is in contact with both the surface of the earth and a funnel shaped cumulonimbus cloud ranging in width from a few yards to more than a mile and whirling at destructively high speeds, ranging from 100 to as high as 300 miles per hour.
Hail	A hailstorm is a storm of spherical balls of ice. Hail is a product of thunderstorms or intense showers. It is generally white and translucent, consisting of liquid or snow particles encased with layers of ice. Hail can cause serious damage to cars, aircraft, skylights, glass-roofed structures, livestock and crops, etc.
Pandemic	A naturally occurring disease outbreak can cause illness and result in significant casualties. Since 1900, there have been three influenza pandemics that killed approximately 600,000 people in the United States. The 2009 H1N1 flu, first identified in Imperial and San Diego counties, killed more than 550 Californians, sent thousands more to hospitals, caused widespread fear and anxiety and the declaration of a public health emergency.

5.4 Critical Infrastructure and Key Resources

For the 2012 update, the Northern California Regional Intelligence Center (NCRIC) compiled a list of approximately 8,500 critical infrastructure and key resource assets in the entire Bay Area that cover all 18 *National Infrastructure Protection Plan* (NIPP) sectors. A breakdown of those critical assets by sector is set forth in Figure 2 below. The sector with the largest number of assets is the government sector with over 3,500 assets and the sector with the fewest number of assets is nuclear with just two assets.

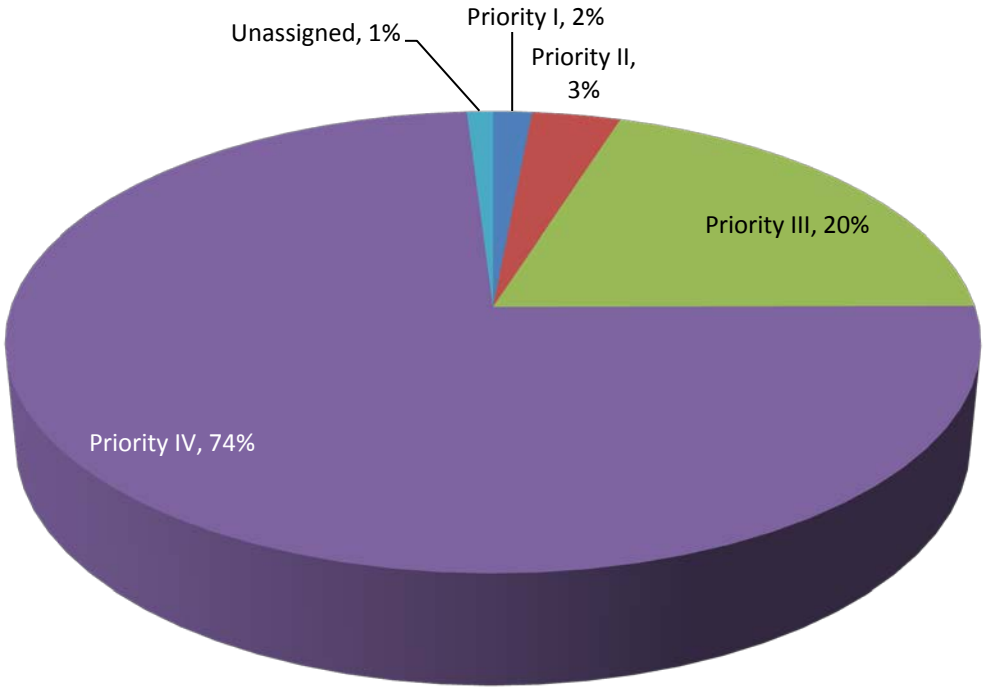
Figure 2: Distribution of Bay Area Assets by NIPP Sector



The Bay Area's assets include such iconic sites and businesses as the Pyramid Building, the Golden Gate Bridge, Apple, Google, Intel, Adobe, Hewlett-Packard, the Bay Area Rapid Transit Authority, Yahoo!, eBay, Candlestick Park, Stanford University, the Oakland Coliseum, the Ports of San Francisco and Oakland, and many more. There are six professional sports teams in the region, including from the National Football League, National Hockey League, National Basketball Association and Major League Baseball. The region is also home to several major government facilities including Travis Air Force Base, the Federal Reserve Bank of San Francisco, the National Aeronautics and Space Administration Ames Center, the San Francisco Mint, the Defense Language Institute, and the Naval Postgraduate School.

The region has further refined its assets into four priority levels (Level I being the highest and Level IV being the lowest priority) with the vast majority of the assets (over 6,300) falling into priority level IV. Only 2% of the total assets fall under Level I. Such a breakdown reflects the region's goal of accounting for as many assets as possible while recognizing that a small subset of those assets, if attacked or otherwise incapacitated, could have a devastating impact on the region. Figure 3 summarizes the distribution of assets across all four levels.

Figure 3: Bay Area Asset Distribution by Priority



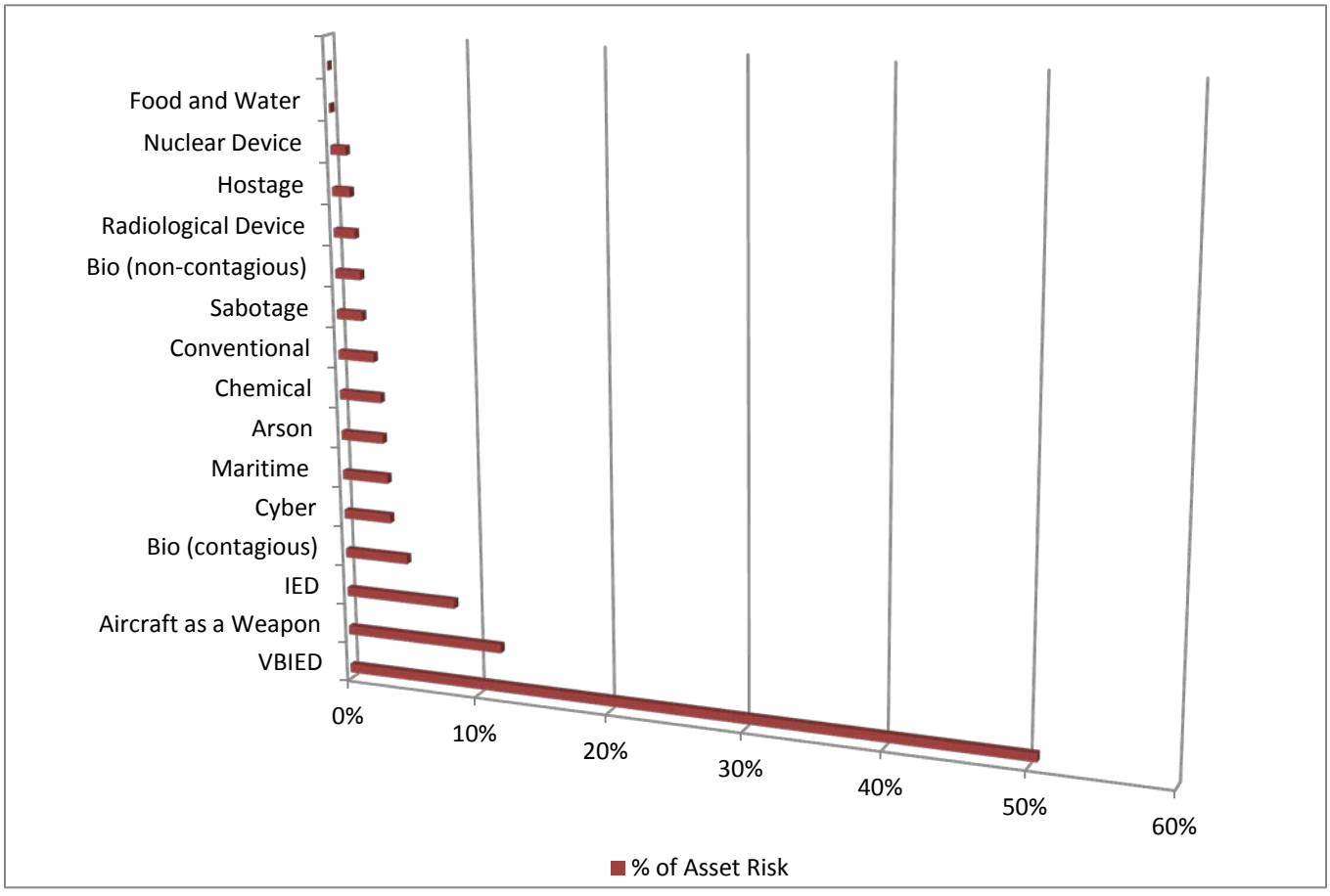
5.5 Risk Profile

The focus of the analysis was on terrorism scenarios and overall terrorism risk to the region's CIKR. However, an analysis was also done concerning natural hazards such as earthquakes, floods and wildfires, etc. This is based on the fact that while natural hazard risk plays a role in how the Bay Area will set its strategic goals and objectives, that role is contingent on a link to terrorism preparedness. Thus, the Bay Area's focus is on building capabilities that have a primary nexus to terrorism while recognizing that such capabilities may also have a "dual" purpose of enhancing all hazards preparedness. This concept of "dual use" has been recognized and encouraged by DHS for many years when developing strategies and investments.

5.5.1 Terrorism Risk

In analyzing the risk of certain attacks against the region's CIKR, two of the sixteen terrorist methods stood out as outlined in Figure 4 below. The top four scenarios for the Bay Area region included the vehicle borne improvised explosive device (VBIED) attack, the aircraft as a weapon attack scenario, a conventional IED attack, a contagious biological attack and a cyber-attack rounding out the top five. The VBIED attack method stood out by a considerable margin, accounting for just over 50% of the total risk to the region's assets. These five scenarios were followed by the remaining nine attack scenarios that pose a risk to the region.

Figure 4: Bay Area Terrorism Scenario Risk Profile

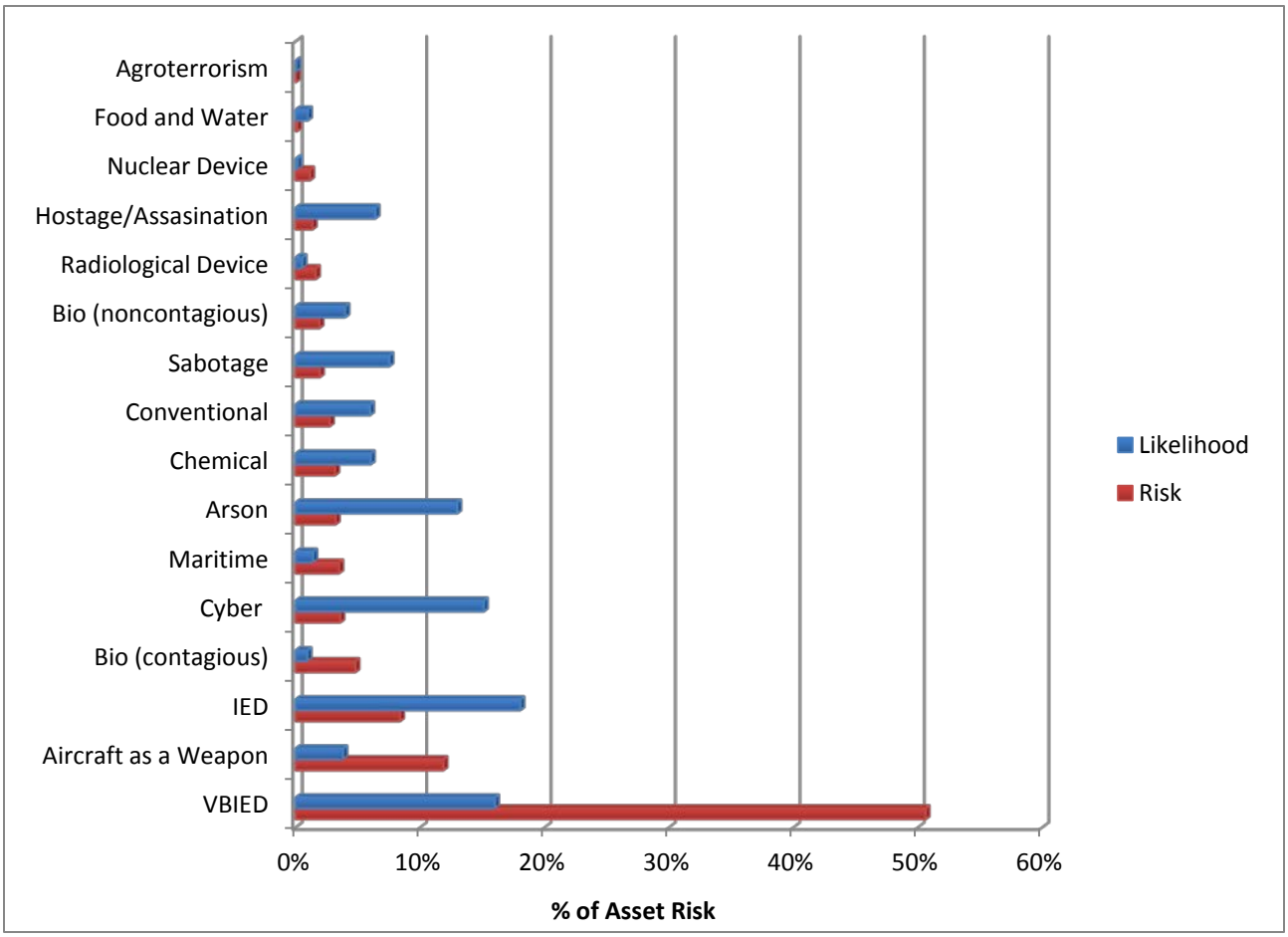


When compared to a threat/likelihood only analysis, i.e., those terrorism scenarios that are the most likely to occur in the Bay Area, the ranking of terrorism scenarios does change for the region. As outlined in Table X below, eight out of the sixteen scenarios have a greater likelihood of occurring than they pose an overall risk to the region, while six scenarios pose a greater risk to the region than they are likely to actually occur. Under a likelihood analysis, the top five scenarios in rank order are:

- IED
- VBIED
- Cyber-attack
- Arson
- Sabotage

Excluded from this list of the top five most likely scenarios are the aircraft as a weapon and contagious biological attack scenarios each of which is in the top five for overall risk, but which have considerably lower likelihood scores than risk scores. This means that while the two scenarios are not likely to occur, in the event they did occur, the region's vulnerability to such attack methods would result in high human, economic and psychological consequences. Figure 5 summarizes risk versus likelihood for all sixteen terrorism scenarios.

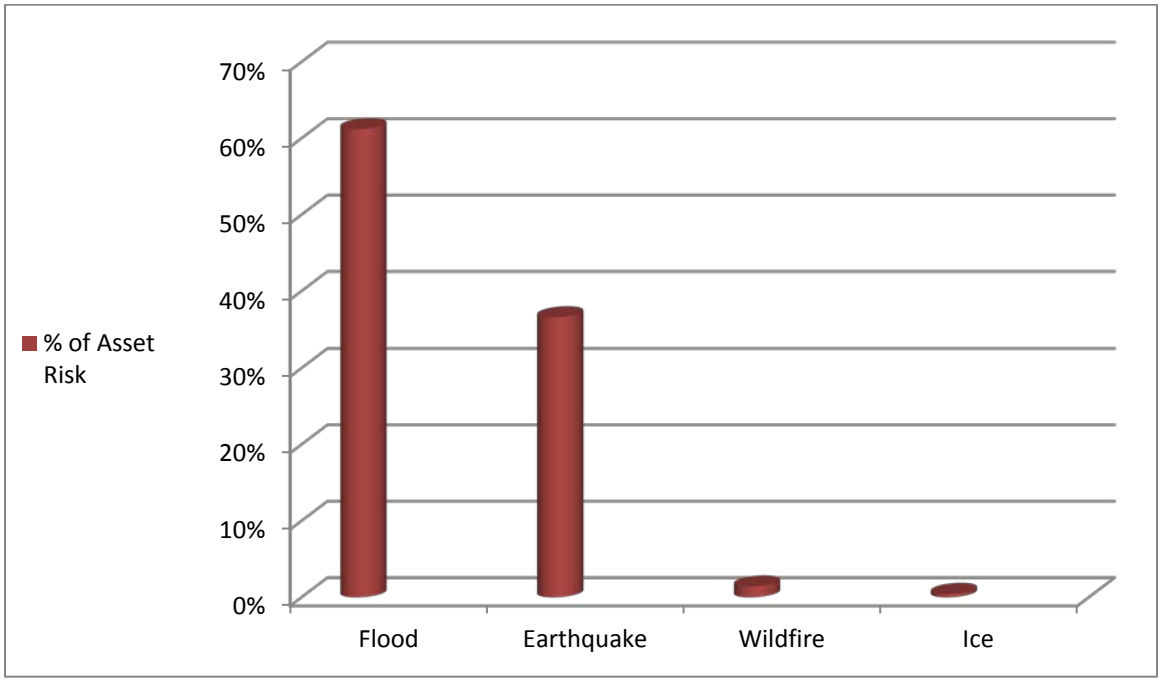
Figure 5: Bay Area Terrorism Risk vs. Likelihood



5.5.2 Natural Hazards Risk

The Bay Area's CIKR also face significant risk from natural hazards; in particular floods and earthquakes. As outlined in Figure 6 below, floods pose the greatest risk to the Bay Area's CIKR based upon their frequency, the region's vulnerability to such an event and the consequences of major flooding in terms of lives and property.

Figure 6: Bay Area Natural Hazard Scenario Risk Profile



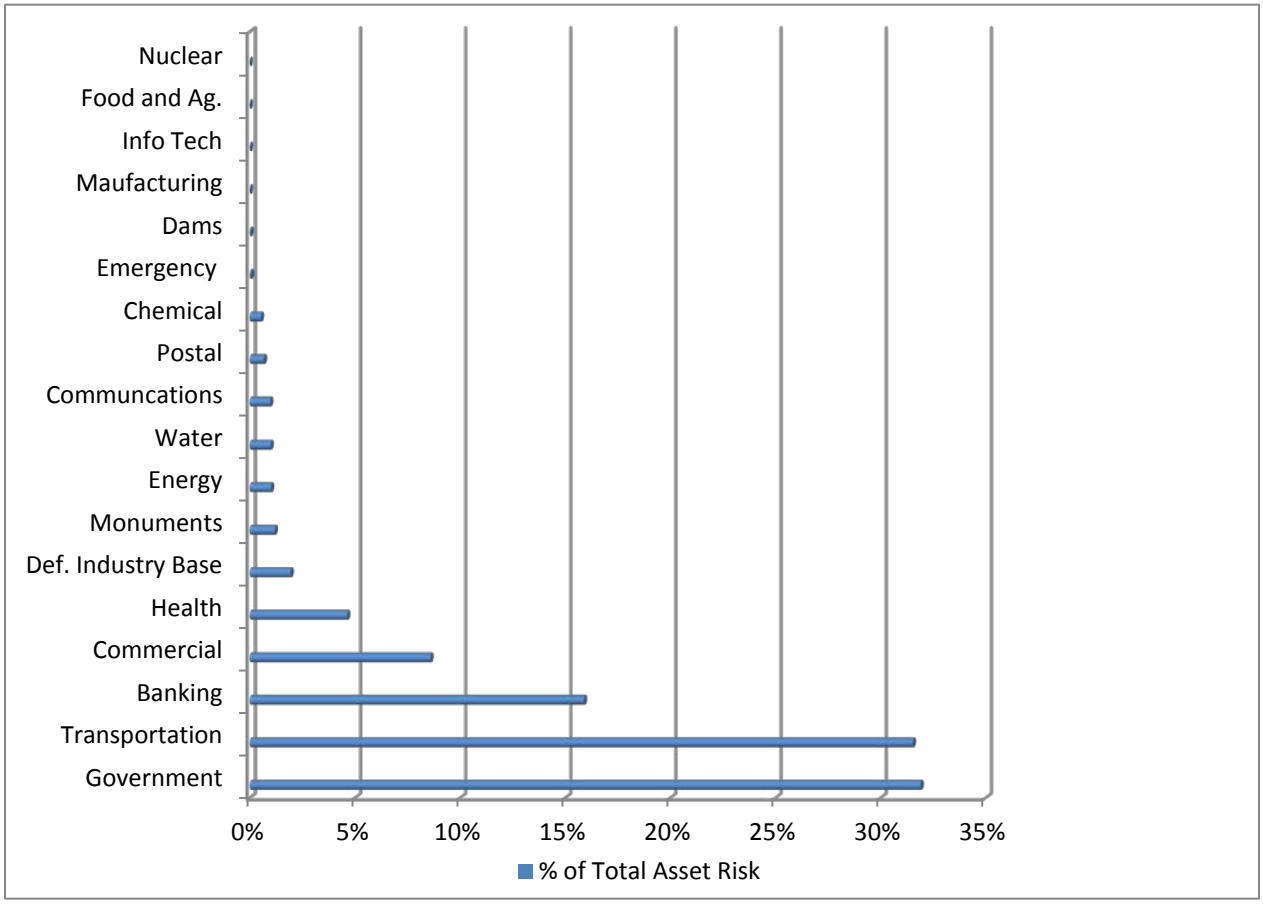
The Bay Area rests upon one of the longest and most active earthquake fault systems in the world. This system includes the San Andreas Fault, the Hayward Fault and the Calaveras Fault. The U.S. Geological Survey estimates an 80% chance of a magnitude 6.7 or greater quake striking the Bay Area within the next 30 years.

Based on the Bay Area's topography, the risk from wild land fires is also a reality. Four wildfires in California have burned at least 200,000 acres since 2007. Though evacuations help limit casualties, significant economic loss can still occur.

5.6 Asset Risk by Sector

For 2012, nearly two thirds, or 66% of the Bay Area region's terrorism asset-based risk is located in the government and transportation sectors. Another 27% of asset-based risk can be found in the banking, commercial and healthcare sectors as shown in Figure 7 below.

Figure 7: Bay Area Distribution of Terrorism Risk by Sector



An overarching theme from the Bay Area's risk analysis process is that simply because a sector may be at high or low risk from a particular attack scenario or multiple attack scenarios, each individual asset within each sector may have a risk profile vastly different from the sector at large. This requires regional planners, asset owners and operators, and the agencies responsible for prevention, protection, mitigation, response and recovery activities to evaluate risk data both individually by site and by attack scenario in order to make more precise security investment decisions on specific assets and sectors.

While much of the Bay Area's infrastructure is found in the commercial, government and emergency services sectors, as outlined in Table 5 below, the terrorism asset risk in the Bay Area does not follow the sectors with the largest number of assets. This is most prevalent in the emergency services sector where the sector ranks 4th in total number of assets and yet ranks 13th in risk. The cause of this type of discrepancy is the nature and type of assets in each sector. A small group of assets or even a single asset can have very high risk due to the likelihood of an

attack, the vulnerability to attack and the human, economic, mission and psychological consequences resulting from an attack. When it comes to risk, "quality" very much outweighs "quantity."

Table 5: Bay Area CIKR Sector Rankings

Rank	Sectors Ranked by Total Assets	Sectors Ranked by Risk
1	Government	Government
2	Commercial	Transportation
3	Transportation	Banking
4	Emergency Services	Commercial
5	Postal	Health
6	Dams	Defense Industrial Base
7	Health	Monuments and Icons
8	Banking	Water
9	Water	Communications
10	Food and Agriculture	Energy
11	Energy	Postal
12	Communications	Chemical
13	Information Technology	Emergency Services
14	Critical Manufacturing	Dams
15	Defense Industrial Base	Critical Manufacturing
16	Chemical	Information Technology
17	Monuments	Food and Agriculture
18	Nuclear	Nuclear

The current list of approximately 8,500 assets represents a major change from 2010 when the region accounted for approximately 2,900 assets. Thus, the Bay Area's asset list is by no means static and will certainly change as the quality of information available to the region continues to improve. For now, the current list reflects a broad representation across multiple CIKR sectors that local subject matter expertise, using best available methods, deem appropriate.

5.7 Capabilities Assessment

Once the 2012 risk assessment was complete, the Bay Area analyzed the relevance of the 31 Core Capabilities based on the region's risk profile. Capability relevance is defined as those capabilities most needed in order to prevent, protect against, mitigate, respond to or recover from threats and acts of terrorism that pose the greatest risk to the region's CIKR. Some of the 31 Core Capabilities are relevant to many different types of hazards affecting the spectrum of CIKR sectors, while others link closely to a few discrete scenarios.

Upon completing the risk relevance analysis, the Bay Area engaged in a region-wide self-assessment covering all 31 of the Core Capabilities. For the assessment, capability levels were organized into four quartiles that determined level of ability: low, medium low, medium high and high as out lined in Table 6 below.

Table 6: Capability Assessment Levels of Ability

Low	No needs are satisfied for this activity. This may be because it is not critical to the region, or because insurmountable barriers exist. The activity cannot be performed successfully. Needs within this activity have been recognized and initial efforts have been made to satisfy some of those needs for this activity, but very few if any have been met. Few needs are satisfied for this activity, but substantial barriers remain and it is not yet clear how they will be overcome. This activity is unlikely to be performed successfully.
Medium Low	Needs within this activity have been recognized and initial efforts have been made to satisfy some measures/metrics at the specified level for this activity, but very few if any have been met. A few needs are satisfied; for this activity, but substantial barriers remain and it is not yet clear how they will be overcome. This activity is unlikely to be performed successfully.
Medium High	Though much effort remains to satisfy the needs for this activity, a plan is in place to satisfy the rest. Remaining issues are being identified. Though effort remains, a plan is in place to satisfy the rest. Remaining issues have been identified and are being addressed. The activity may be performed successfully if required.
High	Most/Almost all needs are satisfied for this activity, and though moderate effort remains and a few issues are outstanding, a plan is in place and being followed to address them. Progress is being made toward satisfying the others with no issues outstanding. It is likely, though not assured, that the activity could be performed adequately if required. All needs are satisfied at the specified level for this activity. Ideally, activity performance is validated via exercises or experience.

The Core Capabilities were then plotted by terrorism risk relevance *and* capability gap depending on each capabilities risk relevance and the size of the gap in the capability. The Core Capabilities with the largest capability gap and highest risk relevance were ranked highest. The results from the Bay Area's 2012 Core Capabilities assessment are summarized in Table 7 below.

Table 7: Capability Assessment Results

Risk and Gap	Target Capability	Risk Relevance	Level of Ability	Gap Analysis
1	Infrastructure Systems	2	Low	Needs Extra Attention
2	Long Term Vulnerability Reduction	5	Low	Needs Extra Attention
3	Community Resilience	6	Low	Needs Extra Attention
4	Forensics and Attribution	11	Low	Needs Extra Attention
5	Interdiction and Disruption	9	Medium Low	Needs Attention
6	Public Information and Warning	12	Medium Low	Needs Attention
7	Screening, Search and Detection	14	Medium Low	Needs Attention
8	Situational Assessment	1	Medium High	Adequate
9	Threat and Hazard Identification	3	Medium High	Adequate
10	Risk and Disaster Resilience Assessment	4	Medium High	Adequate
11	Risk Management for Protection Programs/Activities	7	Medium High	Adequate
12	Physical Protective Measures	8	Medium High	Adequate
13	Intelligence and Info Sharing	10	High	Adequate
14	Planning	13	Medium High	Adequate
15	Access Control and Identity Verification	17	Low	Needs Attention
16	Cyber Security	20	Low	Needs Attention
17	Fatality Management	21	Low	Needs Attention
18	Operational Coordination	15	Medium Low	Needs Attention
19	Operational Communications	16	Medium Low	Needs Attention
20	On-Scene Security and Protection	18	Medium Low	Needs Attention
21	Public Health	19	Medium Low	Needs Attention
22	Critical Transportation	22	Medium Low	Needs Attention
23	Health and Social Services	25	Low	Adequate
24	Supply Chain Security	26	Low	Needs Attention
25	Economic and Community Recovery	27	Low	Needs Attention
26	Natural and Cultural Resources	28	Low	Needs Attention
27	Public and Private Services	30	Low	Adequate
28	Mass Care Services	29	Medium Low	Adequate
29	Mass Search and Rescue	23	Medium High	Adequate
30	Environmental Response	24	Medium High	Adequate
31	Housing	31	Low	Adequate

The results of the capabilities assessment were then linked to those hazards that pose the greatest risk to the region, and CIKR sectors in the region at greatest risk from those hazards. The result is the matrix set forth below in Table 8, which provides a blue print for planning and investing in order reduce the risk to the listed CIKR sectors posed by the listed hazards by enhancing or sustaining the listed Core Capabilities.

Table 8: Hazards, Sectors and Capabilities Matrix

Highest Risk Hazards	Terrorists' Use of Explosives	Earthquake	Floods	Contagious Biological
Sectors at Highest Risk	Transportation	Commercial	Water	Transportation
	Government	Health	Government	Government
	Banking	Government	Transportation	Health
	Commercial	Transportation	Health	Commercial
	Health	Information Technology	Emergency Services	Banking
Most Relevant Capabilities	Planning	Planning	Planning	Planning
	Operational Communications	Operational Communications	Operational Communications	Risk Management for Protection Programs and Activities
	On-Scene Security and Protection	Community Resiliency	Community Resiliency	Intelligence and Information Sharing
	Threat and Hazard Identification	Risk and Disaster Resilience Assessment	Threat and Hazard Identification	Public Health and Medical
	Intelligence and Information Sharing	Intelligence and Information Sharing	Intelligence and Information Sharing	Intelligence Analysis and Production
	Critical Infrastructure Protection	Long Term Vulnerability Reduction	Situational Assessment	Critical Transportation
	Interdiction and Disruption	Operational Coordination	Operational Coordination	Public Information and Warning
	Mass Search and Rescue	Public and Private Services	Public and Private Services	Fatality Management
	Operational Coordination	Volunteer Management and Donations	Critical Transportation	Environmental Response
	Fatality Management	Public and Private Services	Public Information and Warning	Infrastructure Systems
	Public Health and Medical	Critical Transportation	Mass Care	Forensics and Attribution
		On-Scene Security and Protection	Mass Search and Rescue	
	Environmental Response		Fatality Management	Situational Assessment
			Public Health and Medical	
			Economic Recovery	
		Economic Recovery	Infrastructure Systems	
	Screening, Search and Detection	Fatality Management		
	Long Term Vulnerability Reduction	Situational Assessment		
	Forensics and Attribution	Mass Care		
	Physical Protective Measures	Mass Search and Rescue		
	Situational Assessment	Infrastructure Systems		
	Risk Management for Protection Programs and Activities	Public Health and Medical		
		Public Information and Warning		

SECTION 6
GOALS, OBJECTIVES & IMPLEMENTATION STEPS

6.1 Overview

The goals and objectives of the *Strategy* serve as the core for what the Bay Area will seek to achieve over the next three years in the mission areas of prevention, protection, mitigation, response and recovery. The goals and objectives represent the culmination of integrating risk and capabilities assessment by establishing specific implementation steps that are designed to achieve or maintain capability outcomes in those capabilities that are most relevant based on the Bay Area's risk and capability profile.

The goals and objectives are directed towards the next three years but may be reviewed and updated annually or as needed. It is likely that some of the objectives will carry over from year to year while others may be removed or updated based on the region's progress and actual needs. The goals and objectives will continue to be defined by risk analysis, identified preparedness gaps and sustainment priorities.

6.2 Organizing the Goals and Objectives

The goals and objectives represent not only the priorities of the region but also the region's implementation of State and National level policy and priorities at the regional level. As such, each goal is based on alignment with the National Homeland Security Priorities (and/or the State of California Homeland Security Strategy priorities) and each objective with a Core Capability from the National Preparedness Guidelines, which outline the capabilities needed to implement the National Priorities and the five mission areas, or a CDC Public Health Preparedness Capability for medical and health related objectives. The purpose of aligning each objective to a capability is to ensure the *Strategy* is designed around managing risk by enhancing capabilities through investments and other activities.

The Core Capabilities and Public Health Preparedness Capabilities were first organized under relevant National Priorities. The National Priorities were then converted, and sometimes merged, into regional goals with the capabilities converted into specific objectives under each goal. Where no equivalent National Priority exists, the Bay Area simply developed its own goal to meet its own local needs. For example, the Bay Area has developed a recovery goal, whereas the federal government has not delineated recovery as a National Priority. In addition, the federal government has listed implementing the NIPP and Strengthening Information Sharing and Collaboration as separate National Priorities. The Bay Area has combined both priorities into a single regional goal designed to enhance information analysis and infrastructure protection.

6.3 Structuring the Goals and Objectives

The goals and objectives are structured around sustaining sufficient levels of ability and closing identified capability gaps. While capabilities from the Core Capabilities Public Health Preparedness Capabilities are listed as their own objective, the objectives, like the capabilities

themselves, do not operate in a vacuum. Objectives often are linked to one another with elements of one objective sometimes found in another. This is a product of the fact that the capabilities are not isolated from each other. Rather, they overlap one another with elements of one capability present in another or even several others.

Using the capabilities-based planning model as outlined by DHS, each goal and related objective(s) will be implemented through a series of resource elements divided among the elements of capability: plans, organization, equipment, training and exercises (POETE) as defined in Table 9 below." The POETE resource elements outline what resources are needed for the region to achieve each capability based objective. They serve as a critical strategic guide for the region and jurisdictions to develop actual projects that will result in achievement of a particular objective. As such, they are not an exhaustive list meant to limit steps necessary to achieve a goal or objective but instead operate as a roadmap.

The detail of a POETE implementation step may vary from objective to objective or even in a single objective depending on the level of detailed data available from risk and capabilities assessments. Finally, the region and jurisdictions are *not* required to generate projects for each goal and objective in a given grant or funding cycle. Rather, each grant applicant must prioritize projects based on this Strategy and their own risk and need.

Table 9: Elements of Capability[9]

Planning	Development of policies, plans, procedures, mutual aid agreements, strategies and other publications that comply with relevant laws, regulations, and guidance necessary to perform assigned missions and actions.
Organization	Specific personnel, groups or teams, an overall organizational structure, and leadership at each level in the structure that comply with relevant laws, regulations, and guidance necessary to perform assigned missions and tasks. Paid and volunteer staff who meet relevant qualification and certification standards necessary to perform assigned missions and tasks.
Equipment	Major items of equipment, supplies, facilities, and systems that comply with relevant standards necessary to perform assigned missions and tasks.
Training	Content and methods of delivery that comply with training standards necessary to perform assigned missions and tasks.
Exercises	Exercises, self-assessments, peer-assessments, outside review, compliance monitoring, and actual major events that provide opportunities to demonstrate, evaluate, and improve the combined capability and interoperability of the other capability elements to perform assigned missions and tasks to standards necessary to achieve successful outcomes.

[9] U.S. Department of Homeland Security, *Target Capabilities List* (September 2007).

Set forth below are the 2012-2015 homeland security goals and objectives for the Bay Area UASI region.

GOAL 1	Mission Area(s)	National Priorities	Core Capabilities	State Strategy
ENHANCE REGIONAL RISK MANAGEMENT AND PLANNING PROGRAM	Common	All	Planning Threat and Hazard Identification Risk and Disaster Resilience Assessment	N/A

Risk Management

In 2009, the Bay Area began developing a regional risk management and planning program to enable the region to develop, sustain and fund programs, plans and operations based on risk and capabilities assessment data. Today, this risk management program has matured to the point where it serves as the foundation for collecting and analyzing data to support strategic, operational and tactical level planning across the region.

A risk regional management framework is one in which all available data and subject matter expertise and experience is utilized to make informed decisions on what actions should be taken based on the costs of such actions and the return on investment in terms of mitigating the identified risks. The risk management program encompasses virtually all of the region's activities from prevention, protection, mitigation, response and recovery efforts. A risk management program does not eliminate risk. It manages risk.

The Bay Area will continue to assess risk on a regular basis and in a consistent manner in order to provide a common understanding of the threats and hazards confronting the region. This information will, in turn, be used to help better understand what capabilities the region must possess to adequately address those risks. Part of this process will include the federally required threat and hazard identification and risk assessment (THIRA). While there are differences, the THIRA codifies at the federal level much of what the Bay Area has already begun at the regional level in terms of identifying scenarios and hazards that pose a significant risk to the region and the capabilities necessary to address those risks. The THIRA is very similar to the established hazard identification and risk assessment (HIRA) used to develop hazard mitigation plans at the Operational Area level.

Objective 1.1: Enhance Planning, Threat and Hazard Identification, and Risk Management Capabilities

The Bay Area is able to identify and assess the threats and hazards that pose the greatest risk to the whole community. The region can prioritize and select appropriate capability-based planning investments and solutions for prevention, protection, mitigation, response, and recovery concerning those risks; monitor the outcomes of allocation decisions; and undertake corrective and sustainment actions.

Objective 1.1 Implementation Steps and Resource Elements

PLANNING	
1.1-P1	Develop an actionable risk management strategy that includes short, medium, and long term risk management objectives at the regional and jurisdictional level. This will include an annual risk overview report for the region and risk-based formulas to allocate resources to include funding.
1.1-P2	Assign a lead planner from the Bay Area UASI to coordinate the risk management program.
1.1-P3	Develop data collection timelines, requirements, and avenues for receiving information on local threats, vulnerabilities, and consequence of loss from stakeholders at the regional, sub-regional and jurisdictional levels as part of an annual risk assessment.
1.1-P4	Conduct annual risk validation analysis – threats, vulnerabilities, consequences - for the region and, as necessary, for each operational area and such other entities as required across the Bay Area. Continue to expand the use of localized vulnerability and consequence of loss data in the analysis.
1.1-P5	Rank criticality of CIKR assets and potential targets from across the region.
1.1-P6	Organize and prioritize capabilities at the regional and jurisdictional level (where appropriate) based on those capabilities most directly linked to prioritized risks.
1.1-P7	Develop annual strategy implementation guidance and project templates for DHS UASI application process. Ensure project templates link projects to risk and capability gaps and *Strategy* goals and objectives.
1.1-P8	Develop an annual capability assessment and gap analysis process to determine where gaps remain among capabilities with an emphasis on those capabilities necessary to address the region's highest risks.
1.1-P9	Assign/hire planners to assist in the implementation, evaluation and updating of the *Bay Area Homeland Security Strategy* and preparedness report at the regional, sub-regional and jurisdictional levels.
1.1-P10	Produce a Bay Area annual report that outlines the annual accomplishment and major activities to ensure all appropriate stakeholders are kept informed.
1.1-P11	Conduct grant effectiveness analysis and produce grant effectiveness reports to demonstrate the value of UASI and other homeland security grants to local, state and national leaders.
1.1-P12	Bay Area UASI Management Team to provide strategic planning technical assistance to Operational Areas as needed.

1.1-P13	Update, as needed, the *Bay Area Homeland Security Strategy* based upon the latest risk and capabilities assessment data.
1.1-P14	Ensure each Operational Area has an up-to-date hazard mitigation plan, continuity of operations plan (COOP), and continuity of government (COG) plan.
ORGANIZATION	
1.1.-O1	Communicate in writing with all regional stakeholders the risk management process and the intent to use risk in decision making.
1.1-O2	Develop a risk management framework or working group to outline how risk assessments and risk analysis serve the process of managing "risks" and a process for stakeholder buy-in across all four sub-regions. This may include a comprehensive stakeholder governing process and governing bodies to oversee the risk management process.
1.1-O3	Assign/hire risk analysts to conduct risk analysis and produce risk products on behalf of the region, sub-regions and jurisdictions
EQUIPMENT	
1.1-E1	Sustain capabilities and risk management software and systems for the region to conduct capabilities and risk analysis to include threats, vulnerabilities and consequence of loss analysis to support tactical, operation and strategic level planning and operations.
1.1-E2	Other necessary equipment as determined by the region.
TRAINING	
1.1-T1	Conduct principles of risk management training for policy makers and stakeholders from across the region.
1.1-T2	Train Bay Area UASI Management Team and the NCRIC staff on the use of risk analytic tools and software planning systems.
EXERCISES	
1.1-Ex1	Ensure UASI exercise program is risk based with scenarios used and capabilities tested tied to risk.
1.1-Ex2	Conduct exercises to test COOPs and COG plans at the Operational Area and local levels.

GOAL 2	Mission Area(s)	National Priorities	Core Capabilities	State Strategy
ENHANCE INFORMATION ANALYSIS AND INFRASTRUCTURE PROTECTION CAPABILITIES	Prevention Protection	Strengthen Information Sharing and Collaboration Capabilities Implement the *NIPP* Enhance Regional Collaboration	Long Term Vulnerability Reduction Forensics and Attribution Interdiction and Disruption Screening, Search and Detection Risk Management for Protection Programs/Activities Physical Protective Measures Intelligence and Information Sharing Access Control and Identity Verification Cyber Security	Goal 1: Enhance Information Analysis and Law Enforcement Capabilities Goal 2: Protect Critical Infrastructure and Key Resources

The National Intelligence and CIKR Protection Framework

Collecting and sharing information to protect critical infrastructure from threats and acts of terrorism is a core element of homeland security. In October 2007, to better coordinate the Nation's information sharing activities, the Federal Government released the *National Strategy for Information Sharing* (National Strategy). In 2006, DHS published the final *National Infrastructure Protection Plan* (*NIPP*) with a revised version released in 2009. Both the *NIPP* and the National Strategy represent the national level plan for information sharing and CIKR protection, the implementation of which often occurs at the local level.

The *National Strategy* is intended to ensure that those responsible for combating terrorism and protecting local communities have access to the timely and accurate information they need by:

- Providing a framework for enhanced information sharing among federal, state, local, and tribal officials; the private sector; and foreign partners to aid their individual missions and to help secure the U.S. homeland.

- Describing the Federal Government's approach to supporting state and major urban-area NCRICs, as well as national efforts to fight crime and make local communities safer.

- Recognizing that as information-sharing capabilities are enhanced, it is imperative that the legal rights of U.S. citizens continue to be protected, especially in the area of privacy and civil liberties.

The goal of the *NIPP* is to enhance protection of the Nation's CIKR to prevent, deter, neutralize, or mitigate the effects of deliberate efforts by terrorists to destroy, incapacitate, or exploit them; and to strengthen national preparedness, timely response, and rapid recovery in the event of an attack, natural disaster, or other emergency. The *NIPP's* supporting CIKR Sector-Specific Plans were released in May 2007 and provide the coordinated approach to establish national priorities, goals, and requirements for protection across each of the 18 CIKR sectors at the national level.

The Nationwide Suspicious Activity Reporting Initiative

Virtually every sophisticated terrorist attack has involved some form of pre-attack planning, surveillance and logistical support functions. Most of these pre-attack activities may or may not be criminal in nature, but virtually all could appear suspicious if viewed in isolation and potentially unravel a terrorist plot if viewed in total by a NCRIC or other intelligence agency. In order for such a total view to take place, the Nationwide Suspicious Activity Reporting (SAR) Initiative was created to allow law enforcement agencies to "develop, evaluate, and implement common processes and policies for gathering, documenting, processing, analyzing, and sharing information about terrorism-related suspicious activities."[10] The Bay Area's Northern California Regional Intelligence Center (NCRIC) and law enforcement agencies can play a critical role in this process by linking not only suspicious activities in the region, but fusing those regional SARs with other suspicious activities from across the country to determine if terrorist plots are underway.

California's Intelligence Structure

Consistent with the *National Strategy* and the *NIPP*, the State of California has developed the State Threat Assessment System (STAS) to "protect California's citizenry and economy from terrorism and other criminality by collaboratively producing and disseminating critical threat information to its homeland security partners." The STAS is a public safety partnership that obtains, analyzes, and shares information, and collaboratively develops and shares California-

[10] U.S. Department of Justice, Bureau of Justice Assistance, Nationwide SAR Initiative, accessed at http://nsi.ncirc.gov/documents/Nationwide_SAR_Initiative_Overview_2012.pdf

specific counter-terrorism intelligence products enabling law enforcement to prevent terrorism in California.

The STAS is made up primarily of the State Threat Assessment Center (STAC), which is the State NCRIC operated by the California Highway Patrol and CalEMA; the CalDoJ Intelligence Operations Center (IOC); and four Regional Threat Assessment Centers (RTAC) located in San Diego, Los Angeles, Sacramento and the Bay Area. The STAS is a partnership of these organizations with no single organization exercising command and control over the other. In 2008, California issued the STAS Strategic Business Plan Concept of Operations, which outlines the vision, mission, structure and operations of the STAS. This ConOp was updated in early 2011.

The STAC is responsible for coordinating with the RTACs and compiling the overall State Threat Assessment. It supports regional intelligence analysis by supplying the RTACs with additional analytical support. Each RTAC's geographic area of responsibility coincides with the local FBI field office for that region. The RTAC's work extensively with their local FBI led Joint Terrorism Task Force (JTTF) and Field Intelligence Group (FIG).

Operating within each RTAC is a Terrorism Liaison Officer (TLO) program made up of public safety agency officer(s) trained in understanding terrorism who serve as the bidirectional gateway for terrorism information between the members of his/her own department, the RTACs and CIKR owners and operators.

The Bay Area's Intelligence and Infrastructure Protection Structure

The NCRIC serves as the Bay Area's RTAC and NCRIC. The NCRIC helps safeguard the region by assisting public safety agencies from across the Bay Area in their mission to detect, prevent, investigate and respond to criminal and terrorist activity. The NCRIC is a cooperative federal, state and local public safety effort to centralize the intake, analysis, fusion, synthesis, and appropriate dissemination of criminal and homeland security intelligence. The NCRIC disseminates intelligence and facilitates communications between state, local, federal agencies and private sector partners, in order to help them take action on threats and public safety issues.

The NCRIC is also the region's primary infrastructure protection management entity. It embodies the Bay Area's approach to information sharing and analysis and critical infrastructure protection which is to fuse the two missions by collecting, analyzing and sharing threats to CIKR in order to review intelligence data and map threats against CIKR, determining the threatened infrastructure's vulnerability, and recommending a suite of protective measures and other resources to mitigate the risk posed by the threat.

While the NCRIC plays a vital in homeland security and public safety across the Bay Area, it's continued capabilities are at risk due to the fact that the NCRIC is heavily reliant on federal grant funding to sustain its personnel and capabilities; a fact outlined in the most recent federally led NCRIC baseline capabilities assessment. As federal grant funds go down, the Bay Area will strive to maintain the NCRIC's capability level in an ever tightening budget environment.

The Bay Area will work with its partners at all levels of government and the private sector throughout the intelligence cycle to ensure that information is turned into useful intelligence while at the same time respecting the privacy and civil liberties of all of its people. This will include enhanced cooperation and coordination with the region's JTTF, the region's NCRIC, local law enforcement, and private sector security forces in and around the region's critical infrastructure and key resources.

Objective 2.1 Enhance Intelligence Collection, Analysis and Sharing

The Bay Area has systems and procedures to effectively collect, analyze and timely share information and intelligence across federal, state, local, tribal, territorial, regional, and private sector entities to achieve coordinated awareness of, prevention of, protection against, mitigation of, and response to a threatened or actual terrorist attack, major disaster, or other emergency. This involves sustaining and building upon the region's intelligence fusion center to include the ability to identify and systematically report suspicious activities associated with potential terrorist or criminal pre-operational planning and logistics.

Objective 2.1 Implementation Steps and Resource Elements

PLANNING	
2.1-P1	Ensure NCRIC planners and fiscal agents are in place.
2.1-P2	Maintain plans and protocols to ensure connectivity between the NCRIC and other RTACs in California.
2.1-P3	The NCRIC should lead the development of and maintain operationally sound policies to comply with regulatory, statutory, privacy, and other issues that may govern the gathering and storing of information.
2.1-P4	The NCRIC will work to ensure that jurisdictions understand and follow suspicious activity reporting guidelines.
2.1-P5	Ensure public awareness campaigns are in place, e.g. "see something, say something" at the jurisdictional level and within critical infrastructure sectors to ensure the public and private sectors report suspicious activity to appropriate authorities. Ensure the relevant information is shared with the NCRIC for action as necessary.
2.1-P6	Ensure that processes, protocols, and technical capabilities are in place at the regional and sub-regional level to allow proactive reporting and extraction of information from public, private, and law enforcement databases to the NCRIC.
2.1-P7	Develop plans and protocols to utilize social media in the acquisition of suspicious activity reports.
2.1-P8	The NCRIC will develop plans, to include MOUs, MOAs, SOPs, among Bay Area jurisdictions, outside jurisdictions, and the State of California, for the deployment of automated license plate readers (ALPRs) at fixed critical infrastructure sites as well as roaming ALPRs.
2.1-P9	Develop or maintain plans and procedures for the dissemination and routing of information and intelligence received by law enforcement agencies from outside entities and develop governance and privacy manuals.
2.1-P10	Continue to develop Terrorism Liaison Officers (TLOs) across all disciplines in

	the Bay Area with a particular emphasis on developing Health, Medical and Emergency Management TLOs.
2.1-P11	Develop plans and protocols for the sharing of public health and medical information between the NCRIC and the public health and medical community to include disease surveillance information.
2.1-P12	Develop plans and SOPs for intelligence sharing between the NCRIC and mass transit systems across the Bay Area.
2.1-P13	Ensure the private sector and public works agencies are a part of the intelligence and information sharing process across the Bay Area.
2.1-P14	Ensure the NCRIC has an up to date continuity of operations plan (COOP).
ORGANIZATION	
2.1-O1	Develop administrative structures and protocols to support TLOs and local law enforcement in getting the NCRIC necessary information which can later be disseminated by the NCRIC across the region to local partner agencies.
2.1-O2	Provide funding to support NCRIC staff including intelligence analysts.
2.1-O3	Ensure all necessary personnel possess valid and current national security clearances.
2.1-O4	Provide funding to support NCRIC staff including critical infrastructure protection teams, public health and medical personnel, public safety personnel, and support staff.
2.1-O5	Develop and manage counter-surveillance teams out of the NCRIC and within certain law enforcement agencies across the region to provide counter-surveillance capabilities at CIKR across the Bay Area.
2.1-O6	Develop a regional public awareness and reporting campaign for suspicious activity reporting similar to the National "If You See Something, Say Something" campaign, and IWatch in Los Angeles and Washington, DC, etc.
2.1-O7	Develop a policy and process to raise awareness of the NCRIC and its mission with policy makers, elected officials, first responders, community leaders and the general public.
2.1-O8	Develop a process for the NCRIC to receive stakeholder feedback on all parts of the intelligence cycle to include feedback on training and exercises on intelligence and infrastructure protection.
EQUIPMENT	
2.1-E1	Acquire and deploy interoperable ALPR systems at high risk critical infrastructure sites across the Bay Area to detect patterns of suspicious behavior indicative of terrorist pre-operational surveillance.
2.1-E2	Ensure surveillance detection equipment is acquired and deployed at critical infrastructure and other key sites in the Bay Area including: cameras, detectors, and sensors that can send data collected to the NCRIC either directly or indirectly for analysis.
2.1-E3	Ensure all major law enforcement agencies across the Bay Area have the technology to gather and link suspicious activity reporting within each respective law enforcement agency.
2.1-E4	Acquire equipment to allow different law enforcement database systems to be linked and compatible, allowing for rapid transmission and processing of

	suspicious activity information across jurisdictions and with the NCRIC.
2.1-E5	Acquire tools to conduct link analysis on suspicious activity reports to determine if a pattern of terrorist pre-operational behavior is occurring in the Bay Area.
2.1-E6	Provide and sustain information technology equipment to include computers, software and hardware for intelligence analysts.
2.1-E7	Video Teleconferencing Equipment and bridges for multi-site information sharing conferencing.
2.1-E8	Ensure terminals at the NCRIC and key law enforcement and public safety agencies across the region have access to information sharing networks, including federal classified networks where appropriate.
TRAINING	
2.1-T1	Train permanent and assigned analytical staff at the NCRIC on the intelligence cycle and on developing analytic products.
2.1-T2	When applicable, training should meet International Association of Law Enforcement Analytic Standards from Global Intelligence Working Group and the International Association of Law Enforcement Intelligence Analysts (GIWG/IALEIA) based standards (basic, intermediate, advanced) and such other standards as required.
2.1-T3	NCRIC staff and law enforcement personnel should receive annual awareness training on relevant privacy and security rules, and regulations (28 CFR and any other relevant State statutes and regulations).
2.1-T4	Basic and advanced intelligence analysis training is provided for intelligence operations personnel (e.g., commanders/supervisors, officers, analysts).
2.1-T5	Provide analytic staff at the NCRIC refresher training in analytical methods and practices.
2.1-T6	Personnel are aware of, and trained to adhere to, pre-defined security clearances and need-to-know parameters.
2.1-T87	Personnel are trained in the process for preventing, reporting, and addressing the inappropriate disclosure of information and/or intelligence.
2.1-T8	Provide training to fire service, law enforcement and other public sector agency personnel on identifying and reporting suspicious activity to appropriate authorities.
2.1-T9	Train public and private sector, particularly security personnel at critical infrastructure sites across the Bay Area on the detection and reporting of terrorism pre-attack surveillance and logistical/operational activities against CIKR to the NCRIC.
EXERCISES	
2.1-Ex1	Conduct exercises to test and evaluate surveillance detection capabilities of security personnel.
2.1-Ex2	Conduct exercises to test the NCRIC's ability to analyze, link, and disseminate timely and actionable intelligence to law enforcement and other public safety agencies in the region.
2.1-Ex3	Exercises to test alternative, supplemental, and back-up mechanisms for routing information and/or intelligence to the necessary agencies in an emergency.

2.1-Ex4	Exercises to test the process for preventing, reporting, and addressing the inappropriate disclosure of information and/or intelligence.

Objective 2.2 Strengthen Terrorism Attribution, Interdiction and Disruption Capabilities

The Bay Area's law enforcement community (federal, state and local) and other public safety agencies can conduct forensic analysis and attribute terrorist threats and acts to help ensure that suspects involved in terrorist and criminal activities related to homeland security are successfully identified, deterred, detected, disrupted, investigated, and apprehended.

Objective 2.2 Implementation Steps and Resource Elements

PLANNING	
2.2-P1	Develop a plan and procedures to ensure law enforcement investigators across the region receive timely threat and intelligence information from the NCRIC.
2.2-P2	Ensure that law enforcement agencies across the region have a systematic process for contacting the local JTTF when a connection to terrorism is discovered during a local criminal investigation.
2.2-P3	Ensure law enforcement uses investigative information to help the NCRIC identify potential CIKR terrorism targets.
ORGANIZATION	
2.2-O1	Law enforcement agencies in the region should either maintain, or have access to, special operations teams compliant with the NIMS resource types (e.g., SWAT teams) capable of interdicting and disrupting terrorist and major criminal threats.
2.2-O2	Larger jurisdictions or entities should each identify a designated liaison with the JTTF.
2.2-O3	Ensure staffing within the NCRIC is in place for the coordination of the region's interoperable law enforcement information management and sharing system(s).
EQUIPMENT	
2.2-E1	Continue to deploy interoperable law enforcement information management and sharing system across all Bay Area justice agencies to include procurement of software and computer systems, hardware and peripherals.
2.2-E2	Sustain necessary law enforcement and counter terrorism equipment capabilities already in place.
2.2-E3	Other authorized law enforcement and counter terrorism equipment as agreed to by the region.
TRAINING	
2.2-T1	Provide training for patrol level officers on terrorism awareness, and protocols for passing criminal investigative information to the NCRIC and the JTTF.
2.2-T2	Train law enforcement personnel to use investigative information to identify potential vulnerabilities/target lists with the NCRIC.
2.2-T3	Provide computer-based and classroom training to TLOs, intelligence analysts, police investigators and other public safety personnel on the use of interoperable

	law enforcement records management and information sharing systems.
2.2-T4	Law enforcement agencies across the Bay Area should ensure training to personnel for advanced foreign language capabilities.
2.2-T5	Provide awareness level training to law enforcement on the Terrorist Incident Annex to the NRF.
2.2-T6	Provide all appropriate personnel training on cultural awareness as it relates to terrorism.
2.2-T7	Provide training to law enforcement personnel on the use of tactical intelligence (maps, blueprints, etc.) prior to interdiction and disruption operations.
2.2-T8	Enhance and provide hostage rescue training to law enforcement.
2.2-T9	Access FEMA sponsored courses in evidence collection at WMD/HazMat and CBRNE incident sites to include Crime Scene Management for CBRNE Incidents.
2.2-T10	Provide appropriate fire service personnel training on arson investigations to include the Fire/Arson Origin and Cause Investigation (R206) and the Principles of Fire Protection: Structures and Systems (R222) courses.
2.2-T11	Provide law enforcement tactical teams training in properly "stacking" and clearing rooms and clearing other the potential threat areas during a tactical emergency response.
2.2-T12	Provide law enforcement tactical teams training on forms of cover/concealment and open area movement tactics.
EXERCISES	
2.2-Ex1	Ensure UASI exercise program incorporates terrorism attribution, interdiction and disruption capabilities into appropriate regional exercises. NCRIC staff should also participate in regional exercises to the maximum extent possible.

Objective 2.3 Increase Critical Infrastructure Protection

The Bay Area can assess the risk to the region's physical and cyber critical infrastructure and key resources from acts of terrorism, crime, and natural hazards and deploy a suite of actions to enhance protection and reduce the risk to the region's critical infrastructure and key resources from all hazards. This includes a risk-assessment process and tools for identifying, assessing, cataloging, and prioritizing physical and cyber assets from across the region.

Objective 2.3 Implementation Steps and Resource Elements

PLANNING	
2.3-P1	Develop a Bay Area CIKR protection plan modeled on the National Infrastructure Protection Plan that includes metrics and measures for the CIKR program.
2.3-P2	Identify and catalogue by NIPP sector and sub-sector all high risk CIKR present at the regional, sub-regional and jurisdictional level in a secure web-based system.
2.3-P3	Ensure all high risk CIKR at the regional, sub-regional and jurisdictional level undergoes a vulnerability assessment.
2.3-P4	Within the NCRIC, develop a plan to collect, analyze and map suspicious activity reports against CIKR that may be indicators of terrorist pre-attack surveillance.

2.3-P5	Develop a methodology to prioritize CIKR at the regional, sub-regional and jurisdictional level.
2.3-P6	Fully integrate mass transit and maritime ports across the Bay Area region into the security planning and communication and notification process at the NCRIC and the Bay Area UASI.
2.3-P7	Work with the private sector and other owners and operators of high risk CIKR to encourage their developing COOPs.
2.3-P8	Evaluate the methods of conducting a potential study of interdependencies of CIKR in the Bay Area.
ORGANIZATION	
2.3-O1	Develop and utilize sector coordinating council(s) for high risk infrastructure in the Bay Area.
2.3-O2	Ensure the NCRIC has CIKR protection analysts that fully integrate the intelligence/prevention and protection missions.
EQUIPMENT	
2.3-E1	Acquire devices that utilize biometric characteristics (fingerprints, palm prints, retinal scanning, etc.) to authorize access to facilities and/or systems.
2.3-E2	Acquire Geospatial/Geographical Information Systems including application software as well as integrated hardware for implementation.
2.3-E3	Physical security enhancement equipment for high risk CIKR.
2.3-E4	Cyber security equipment to protect cyber networks and systems.
2.3-E5	CBRNE detection equipment in and around CIKR across the Bay Area.
TRAINING	
2.3-T1	Develop and implement risk and vulnerability assessment training at the NCRIC and jurisdictional level.
2.3-T2	Develop and implement a comprehensive Process Control/Supervisory Control and Data Acquisition (SCADA) cyber security awareness, education, and training program for the owners/operators of SCADA-controlled CIKR within the Bay Area.
EXERCISES	
2.3-Ex1	Develop and conduct exercise programs to test CIKR protection plans to include CIKR protection measures and technology across the Bay Area to test the effectiveness of protection capabilities.

GOAL 3	Mission Area(s)	National Priorities	Core Capabilities	State Strategy
ENHANCE COMMUNICATIONS CAPABILITIES	Response	Strengthen Interoperable and Operable Communications Implement the NIMS/NRF Enhance Regional Collaboration	Operational Communications	Goal 3: Strengthen Communications Capabilities

The National Emergency Communications Plan (NECP)

Produced in 2007, DHS's *National Emergency Communications Plan (NECP)* establishes a comprehensive national vision for the future state of emergency communications. The desired future state is that emergency responders can communicate: as needed, on demand, and as authorized; at all levels of government; across all disciplines.

The *NECP* established three strategic goals:

- **Goal 1:** By 2010, 90 percent of all high-risk urban areas designated within the Urban Areas Security Initiative (UASI) are able to demonstrate response-level emergency communications within one hour for routine events involving multiple jurisdictions and agencies.
- **Goal 2:** By 2011, 75 percent of non-UASI jurisdictions are able to demonstrate response-level emergency communications within one hour for routine events involving multiple jurisdictions and agencies.
- **Goal 3:** By 2013, 75 percent of all jurisdictions are able to demonstrate response-level emergency communications within three hours.

In 2010, according to the DHS Office of Emergency Communications, which oversees the NECP and conducted assessments of 60 Urban Areas, Goal 1 has been met. The Bay Area successfully participated in the 2010 national assessment.

Bay Area Regional Interoperable Communications System

The Bay Area is currently deploying a region-wide, standards-based, communication "system of systems" that supports first responder communication needs for local and regional agencies and interoperates with state and federal public safety agencies and designated public service organizations operating within the Bay Area region. The Bay Area will accomplish this by implementing its 2008 strategic plan for achieving interoperable communications and by coordinating its efforts with the goals and objectives of the California Statewide Communications Interoperability Plan (CalSCIP).

BayComm is the region's 700MHz Project 25 (P25) "system of systems" voice initiative. In the past, the Bay Area agencies have traditionally used disparate frequency and antiquated legacy analog systems. Interoperability required cache radios and gateways for agencies to team together effectively during multi-jurisdictional events and disasters. The BayComm seeks to alleviate these issues by providing Bay Area first responders with a common frequency band and a common open digital standard in P25.

In August 2011, the region established the Bay Area Regional Interoperable Communications System (BayRICS) Authority, a joint powers authority charged with governance and oversight of the Bay Area Enhanced Wireless Broadband (BayWEB), a regional broadband network designed to serve as a platform for fully interoperable voice, data and video communications throughout the region.

Objective 3.1: Enhance Operational Communications Capabilities

The emergency response community in the Bay Area has the ability to provide a continuous flow of mission critical voice, data and imagery/video information among multi-jurisdictional and multidisciplinary emergency responders, command posts, agencies, and Bay Area governmental officials for the duration of an emergency response operation. The Bay Area can also re-establish sufficient communications infrastructure within the affected areas of an incident, whatever the cause, to support ongoing life-sustaining activities, provide basic human needs, and transition to recovery.

Objective 3.1 Implementation Steps and Resource Elements

PLANNING	
3.1-P1	Complete an interagency communication process baseline report for each agency, operational area and sub-region that defines processes required to achieve interoperable communications within and between agencies. Reassess each Operational Area's current level of ability in the interoperable voice communications area to determine how the Bay Area region should move forward in planning and investing.
3.1-P2	Update as necessary the Bay Area Interoperable Voice Communications Strategic Plan based upon the assessment.
3.1-P3	Ensure all Tactical Interoperable Communications Plans (TICPs) in the region are fully up to date. Evaluate the possibility of developing a repository of all Bay Area TICPs for easy access for public safety policy makers.
3.1-P4	Ensure after action plans are developed and reviewed at the county/operational area and/or sub-regional and regional level to evaluate the effectiveness of communications mobilization and demobilization activities.
3.1-P5	Coordinate with and support BayRICS Authority efforts to integrate broadband data and video communications into regional interoperable communications plan.
3.1-P6	Develop COOPs that ensure continued operation of local and regional public safety communications nets during an incident response.
3.1-P7	Ensure incident commanders and first responders have awareness of primary and

	secondary systems and peripheral equipment for interoperable emergency communications.
ORGANIZATION	
3.1-O1	Provide limited initial funding for a Bay Area Regional Communications Coordinator position within the region to provide administrative support and to facilitate the regional approach to Interoperable Communications with an emphasis on mission critical voice communication while laying the ground work for future data communications. This person will liaison with the surrounding regions (CAP-BAY) and the State of California on technical issues as necessary.
3.1-O2	Ensure incident commanders and first responders have awareness of primary and secondary systems and peripheral equipment for interoperable emergency communications.
EQUIPMENT	
3.1-E1	Manage, enhance and sustain the digital microwave network and other high speed data transport networks to support interoperability efforts in the Bay Area to link the various interoperability projects across the Bay Area to include redundant systems such as BayLoop.
3.1-E2	Develop a regional fiber optic backhaul network and transition regional interoperable communications infrastructure from microwave to fiber technology.
3.1-E3	Enhance BayWEB coverage through additional communications equipment or backhaul to improve coverage and performance in areas that demonstrate significant need.
3.1-E4	Other authorized communications equipment (e.g., equipment that allows for voice operability/interoperability and data) as mutually agreed upon by all partners.
3.1-E5	Acquire back-up equipment to support continuity of communications operations in the event primary communications systems are destroyed.
TRAINING	
3.1-T1	Ensure each county/operational area has at least four people trained as Communications Unit Leaders (COML).
3.1-T2	Provide hybrid training on the interoperability communications protocols, tools and efforts to include data, video and multimedia applications and TICPs so as to ensure that responders are prepared to work in the shared environments.
EXERCISES	
3.1-Ex1	Conduct TICP exercises at Operational Area levels.
3.1-Ex2	Use exercise scenarios that test multi-agency communication for the purpose of validating joint standard operating procedures (SOPs) for emergencies and regional communications SOPs.
3.1-Ex3	Continue to test and evaluate the region's first responders in the use of plain language during appropriate incidents.
3.1-Ex4	Conduct exercises to test and evaluate the ability to use back-up communications equipment.

GOAL 4	Mission Area(s)	National Priorities	Core Capabilities	State Strategy
STRENGTHEN CBRNE/WMD DETECTION, RESPONSE AND DECONTAMINATION CAPABILITIES	Response	Strengthen CBRNE Detection, Response, and Decontamination Capabilities	Infrastructure Systems Situational Assessment Operational Coordination On-Scene Security and Protection Public and Private Services Mass Search and Rescue Environmental Response	Goal 5: Strengthen Catastrophic CBRNE and All Hazards Incident Planning, Detection and Response Capabilities

WMD/CBRNE Overview

The National Fire Protection Association (*NFPA) 472: Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents* identifies the minimum levels of competence required by all responders to emergencies involving HazMat and WMD. *NFPA 472* is based on the premise that responders should be trained to perform their expected tasks, and that a responder cannot safely and effectively respond to a terrorism or criminal incident involving HazMat or WMD if they do not first understand basic hazardous materials response.[11] In addition, the standard redefines the awareness level away from "first responders" and to "persons who, in the course of their normal duties, could be the first on the scene of an emergency involving a hazmat/WMD and who are expected to recognize the presence of hazmat/WMD, protect themselves, call for trained personnel, and secure the area."[12]

[11] NFPA®Catalog, "Product Detail: NFPA 472: Standard for Competence of Responders to Hazardous Materials/ Weapons of Mass Destruction Incidents, 2008 Edition" (2012), at http://www.nfpa.org/catalog/product.asp?pid=47208.

[12] Gregory G. Noll, FireEngineering®, "NFPA 472: Developing a Competency-Based Hazmat/WMD Emergency Responder Training Program" (April 1, 2008), at http://www.fireengineering.com/articles/print/volume-161/issue-4/features/nfpa-472-developing-a-competency-based-hazmat-wmd-emergency-responder-training-program.html

NFPA 473: Standard for Competencies for EMS Personnel Responding to Hazardous Materials/Weapons of Mass Destruction Incidents identifies the levels of competence required of emergency medical services (EMS) personnel who respond to hazardous materials incidents. It specifically covers the requirements for basic and advanced life support personnel in the pre-hospital environment. The Bay Area will strive to adhere to both NFPA standard 472 and 473.

In 2008, the Bay Area developed a CBRNE Assessment and Strategic Plan. In doing so, the Bay Area assessed regional capabilities to respond to a range of CBRNE events, including sabotage, terrorism, and industrial accidents. The Bay Area then developed response benchmarks, identified and prioritized gaps in response capabilities, and developed a 5-year strategic plan that categorizes and prioritizes required resources to eliminate the gaps.

Established in 1998, the National Bomb Squad Commanders Advisory Board (NBSCAB) is an association of bomb squad commanders from around the country. The group provides advice and guidance to federal standard-setting agencies that support bomb squads and serves as the final decision-making authority on guidelines and standards for the public safety bomb squad profession. In coordination with NBSCAB, the FBI provides the standards for bomb squad certification based on formation, training and equipment. Every bomb squad technician attends the FBI's Hazardous Devices School for six weeks of initial training and returns to the school every three years for recertification. Each year there are over 200 hours of refresher training.

An emergency operations center (EOC) is a location from which centralized strategic management of an incident is performed. The EOC is a coordination point, not an incident scene command, control and management center; it does not provide tactical direction to field activities. The EOC may manage multiple incidents that have established incident command posts. The EOC coordinates the delivery of resources to address conditions facing field resources, communicates with the next highest level of level of government to provide information regarding the emergency and the acquisition of resources not readily available within the requesting level of government.

There are numerous EOCs in the Bay Area. Each operational area in the region has an EOC as do several major cities, including the cities of Oakland and San Jose. When activated, an operational area EOC will coordinate mutual aid requests between the county, the operational area member jurisdictions, and the State Regional Emergency Operations Center (REOC). EOCs in the region operate under the SEMS, the NIMS based system for emergency management and its five essential functions: Command or Management, Operations, Planning, Logistics and Finance.

Objective 4.1 Improve Public and Private Services and Resources Management through Fire Incident Response Support

Fire service agencies across the Bay Area can dispatch initial fire suppression resources within jurisdictional response time objectives, and firefighting activities are conducted safely with fire hazards contained, controlled, extinguished, and investigated, with the incident managed in accordance with local and state response plans and procedures.

Objective 4.1 Implementation Steps and Resource Elements

PLANNING	
4.1-P1	Develop plans, programs, and agreements on fire-related public safety protection activities, including region-wide mutual aid response protocols.
4.1-P2	Develop firefighting plans and procedures to address ICS with a particular focus on unified command for multi-agency events and ensure they are integrated with onsite incident management.
4.1-P3	Develop plans, procedures, and equipment guidelines to support firefighting response operations with an emphasis on a CBRNE event.
4.1-P4	Develop specialized plans for CBRNE events involving mass transit.
4.1-P5	Ensure plans and agreements are in place for access to aerial units for deployment to roofs or high-rises.
4.1-P6	Develop plans for establishing alternative water supply.
ORGANIZATION	
4.1-O1	Ensure fire scene investigators are in place where necessary.
4.1-O2	Develop unified command structures under NIMS/SEMS/ICS for multi-agency events.
EQUIPMENT	
4.1-E1	Acquire and maintain authorized firefighting equipment as agreed to by the region.
TRAINING	
4.1-T1	Develop and implement training to enable fire rescue and emergency medical services to recognize the presence of CBRNE materials.
4.1-T2	Conduct training in unified command structure and process under NIMS/SEMS/ICS for multi-agency events.
EXERCISES	
4.1-Ex1	Conduct exercises to test and evaluate fire incident response involving multiple disciplines.

Objective 4.2 Strengthen Mass Search and Rescue Capabilities

Public safety personnel in the Bay Area are able to conduct search and rescue operations to locate and rescue persons in distress and initiate community-based search and rescue support-operations across a geographically dispersed area. The region is able to synchronize the deployment of local, regional, national, and international teams to support search and rescue efforts and transition to recovery.

Objective 4.2 Implementation Steps and Resource Elements

PLANNING	
4.2-P1	Implement the CBRNE strategic plan as it relates to search and rescue.
4.2-P2	Develop plans, protocols and SOPs for search and rescue operations involving most common incidents requiring search and rescue. This should include initial search plans using a column grid layout.
4.2-P3	Develop plans and protocols for 100% of search and rescue task force personnel to be debriefed before leaving the scene.
4.2-P4	Develop plans and protocols for the base of operations to return to original condition within 12 hours from the start of the demobilization process.
4.2-P5	Develop plans and protocols for equipment caches to be re-inventoried and packaged for transport within 12 hours from start of demobilization.
ORGANIZATION	
4.2-O1	Continue to integrate EMS into search and rescue teams across the region.
EQUIPMENT	
4.2-E1	Acquire and sustain personal protective equipment for search and rescue teams.
4.2-E2	Acquire and sustain medical equipment for search and rescue teams.
4.2-E3	Acquire and sustain search and rescue watercraft and aviation equipment.
4.2-E4	Acquire and sustain personal identification systems.
TRAINING	
4.2-T1	Update the Bay Area's search and rescue training mandates.
4.2-T2	Conduct training for search and rescue reconnaissance teams to provide preliminary recommendations on search priorities and strategy within 1 hour of an incident.
4.2-T3	Conduct training for the base of operations to return to original conditions within 12 hours from start of demobilization process.
4.2-T4	Conduct training for equipment caches to be re-inventoried and packaged for transport within 12 hours from the start of demobilization.
4.2-T5	Provide training for large scale search and rescue operations to including gridding the search area.
4.2-T5	Provide search and rescue teams training on the steps necessary to secure a scene during critical incidents.
4.2-T6	Provide rescue systems 1 and 2 level training with an emphasis on identifying and mitigating the creation of hazards during search and rescue operations.
EXERCISES	

4.2-Ex1	Update the Bay Area's search and rescue exercise mandates.
4.2-Ex2	Test and evaluate search and rescue capabilities in operational area and regional exercises. Regional exercises should focus on the coordination, command and control of multiple search and rescue teams operating in a multi-jurisdictional incident.

Objective 4.3 Enhance Screening Search and Detection Capabilities

The Bay Area has systems and procedures to rapidly detect, locate and identify chemical, biological, radiological, nuclear, and/or explosive (CBRNE) materials at ports of entry, critical infrastructure locations, public events, and incidents, and can communicate CBRNE detection, identification and warning information to appropriate entities and authorities across the state and at the federal level.

Objective 4.3 Implementation Steps and Resource Elements

PLANNING	
4.3-P1	Prepare and apply for Domestic Nuclear Detection Office Securing the Cities grants in order to design and implement architectures in the Bay Area for the coordinated and integrated screening, search, detection and interdiction of radiological/nuclear materials that are out of regulatory control and may be used as a weapon.
4.3-P2	Ensure the region's radiological/nuclear detection plans and protocols are fully integrated with the State's preventive radiological/nuclear detection program.
4.3-P3	Develop intelligence and risk-based CBRNE screening, search and detection deployment protocols for major events, mass transit and other high profile events and CIKR.
4.3-P4	Develop plans and protocols for the NCRIC to notify appropriate personnel of CBRNE screening, search and detection data and results.
4.3-P5	Develop records management protocol at the NCRIC for all CBRNE issues or alarms and their resolution.
4.3-P6	Develop plans and protocols to acquire and distribute CBRNE screening, search and detection equipment to large numbers of first responders.
4.3-P7	Sustain and update plans and protocols among laboratories across the region for public information regarding CBRNE detection.
ORGANIZATION	
4.3-O1	CBRNE screening, search and detection operator/personnel specially trained and equipped with the ability to recognize potential CBRNE threats through equipment, education, and effective protocols are in place.
4.3-O2	Ensure laboratories across the region are adequately staffed for agent identification.
EQUIPMENT	
4.3-E1	Equipment listed in the CBRNE spending plan.
4.3-E2	CBRNE inspection, detection and screening systems equipment for deployment at pre-determined sites across the region such as seaports, airports, major public events, water supply, mass transit, etc.

TRAINING	
4.3-T1	Appropriate personnel have been identified for CBRNE screening, search and detection training (e.g., law enforcement, transit police and security, fire department, hazardous materials (HazMat), public health, private sector security, and critical infrastructure personnel).
4.3-T2	Awareness level training for first responders and CIKR personnel for each of the CBRNE agents.
4.3-T3	Training for screening, search and detection operators, laboratory staff, and CIKR protection personnel.
EXERCISES	
4.3-Ex1	A program to test and evaluate new CBRNE screening, search and detection technology in the appropriate operational environment is made part of the overall exercise and evaluation program.

Objective 4.4 Strengthen On-Scene Security and Protection through Explosive Device Response Operations

Public safety bomb squads in the Bay Area are able to conduct threat assessments; render safe explosives and/or hazardous devices; and clear an area of explosive hazards in a safe, timely, and effective manner. This involves the following steps in priority order: ensure public safety; safeguard the officers on the scene (including the bomb technician); collect and preserve evidence; protect and preserve public and private property; and restore public services.

Objective 4.4 Implementation Steps and Resource Elements

PLANNING	
4.4-P1	Engage the DHS Office of Bombing Prevention for the purpose of conducting a Multi-Jurisdictional Improvised Explosive Device Security Planning assessment.
4.4-P2	Develop and sustain plans, tactics, techniques, and procedures to respond to vehicle borne improvised explosive devices.
4.4-P3	Develop and sustain plans, tactics, techniques, and procedures to respond to radio-controlled, improvised explosive devices.
4.4-P4	Develop and sustain plans, tactics, techniques, and procedures to respond to suicide bombers.
4.4-P5	Using a risk-based approach, evaluate those high-risk or particularly vulnerable locations in the Bay Area that might be beyond a 1-hour response time frame, and assess the potential for acquiring and pre-deploying additional explosive device response equipment to help meet the 1-hour time response frame.
ORGANIZATION	
4.4-O1	Ensure all bomb squads in the Bay Area are accredited by the FBI to standards set by the National Bomb Squad Commanders Advisory Board
4.4-O2	Ensure full use of the DHS Office of Bombing Prevention information-sharing portal, the Technical Resource for Incident Prevention (TRIPwire), and the ATF's clearing house (Bomb Arson Tracking System (BATS).

EQUIPMENT	
4.4-E1	Ensure all bomb squad personnel have appropriate personal protective equipment, e.g., ballistic vests and helmets with shields, for use during hand entry operations.
4.4-E2	Acquire and sustain necessary electronic counter measures and other EDRO equipment.
4.4-E3	Based on assessment results (4.4-P5), acquire, pre-deploy and sustain necessary explosive device response equipment for high-risk sites outside a 1-hour response time frame.
4.4-E4	Acquire and sustain equipment needed to ensure that all public safety bomb squads in the region maintain certification, e.g., bomb robots.
TRAINING	
4.4-T1	Provide training to bomb squad personnel on locating and neutralizing secondary devices and booby traps.
4.4-T2	Ensure all bomb squad training (including techniques, tactics, and procedures) is consistent with and enhances training delivered by the FBI Hazardous Devices School.
4.4-T3	Ensure effective tactics, techniques, procedures, and training are standardized and shared within the bomb squad community.
4.4-T4	Deliver training for responding to radio controlled improvised explosive devices.
4.4-T5	Deliver training for responding to suicide bombers.
4.4-T6	Deliver training for responding to vehicle borne improvised explosive devices.
4.4-T7	Provide general public and private sector personnel with bomb threat awareness training as needed.
4.4-T8	Ensure that all necessary law enforcement personnel are provided sufficient support and opportunities for continuing/refresher education and explosive device response training.
EXERCISES	
4.4-Ex1	Ensure explosive device response operations, to include responding to a VBIED, IED, waterborne IED and other scenarios are incorporated into exercise programs.

Objective 4.5 Improve Public and Private Services and Resources Management through Critical Resource Logistics

The Bay Area has a system to track and manage critical resources and make them appropriately available to incident managers and emergency responders from across the Bay Area to enhance emergency response operations and aid disaster victims in a cost-effective and timely manner.

Objective 4.5 Implementation Steps and Resource Elements

PLANNING	
4.5-P1	In coordination with the State, develop a comprehensive region-wide system of resource typing, inventoried resources and credentialing (Metrics Project) so as to provide emergency managers and incident commanders and first responders the ability to locate, track and request needed resources in a coordinated and effective manner.

4.5-P2	Develop critical resource management plans supported by standing contracts and/or emergency purchase mechanisms such as credit cards or debit cards.
4.5-P3	Develop plans and procedures to address activation of the resource management system.
4.5-P4	Create plans, procedures, and systems to pre-position resources in order to efficiently and effectively respond to an event.
4.5-P5	Develop standardized procedures for utilizing Law Enforcement Online Virtual Command Center to assist with logistics operations.
ORGANIZATION	
4.5-O1	Ensure a logistics planning manager for regional coordination of logistics operations and planning.
4.5-O2	Pre-negotiate vendor contracts for critical resources and essential services.
EQUIPMENT	
4.5-E1	Acquire and sustain CBRNE logistical support equipment.
TRAINING	
4.5-T1	Develop and deliver training in emergency logistics that incorporates linkages among damage/needs assessment, logistics management, and volunteer/donations management.
EXERCISES	
4.5-Ex1	Test and evaluate resource and logistic tracking and recording.

Objective 4.6 Enhance Environmental Response/Health and Safety through WMD/HazMat Response and Decontamination Capabilities

Responders in the Bay Area are able to conduct health and safety hazard assessments and disseminate guidance and resources, including deploying HazMat response and decontamination teams, to support immediate environmental health and safety operations in the affected area(s) following a WMD or HazMat incident. Responders are also able to assess, monitor, clean up, and provide resources necessary to transition from immediate response to sustained response and short-term recovery.

Objective 4.6 Implementation Steps and Resource Elements

PLANNING	
4.6-P1	Develop maintenance and safety plans for regional equipment caches used by multiple EMD/HazMat teams in the region.
4.6-P2	Develop SOPs for integration of fire personnel and law enforcement tactical teams.
4.6-P3	Ensure fire service has plans and procedures in place to decontaminate equipment and resources during a WMD/HazMat response.
4.6-P4	Ensure plans and procedures are in place to decontaminate deceased bodies during a WMD/HazMat response.
4.6-P5	Integrate the private sector into hazardous materials clean-up/recovery plans.
ORGANIZATION	
4.6-O1	Pre-identify resources (personnel and equipment) to provide rapid initial size- up

	of hazardous materials incident.
EQUIPMENT	
4.6-E1	Acquire equipment for WMD/HazMat teams using CalEMA, FIRESCOPE HazMat Team Standardized Equipment List and the Bay Area CBRNE Plan as guidelines.
4.6-E2	Acquire tools that may be used predominantly in the field by WMD/HazMat teams to generate effective plume modeling.
TRAINING	
4.6-T1	Ensure that all appropriate personnel are trained to NFPA 472 standard and provide refresher training as needed.
4.6-T2	Ensure that all appropriate personnel are trained to NFPA 473 standard and provide refresher training as needed.
4.6-T3	Ensure hazmat team(s) trains regularly with EMS to ensure proper coordination of victim care post-decontamination (identification of substance, administration of antidotes, etc.).
4.6-T4	Develop and implement training related to detection, identification and reporting of hazardous material.
4.6-T5	Provide training to WMD/Haz/Mat teams on the use of plume modeling tools to improve response time and effectiveness in plume modeling.
4.6-T6	Conduct training for integration of fire personnel and law enforcement tactical team response operations.
4.6-T7	Conduct training for fire service on procedures to decontaminate equipment and resources during a WMD/HazMat response.
4.6-T8	Provide WMD/HazMat response and mitigation training to law enforcement personnel as needed.
4.6-T9	Conduct joint public and private sector training on the transition from response to recovery and clean up following a WMD/HazMat incident.
4.6-T10	Training for WMD/HazMat teams on proper use and understanding of the radioactive detection methods and equipment currently in use.
4.6-T11	Train Radiation Safety Officers for Type 1 teams to oversee the radiation equipment and standardize the radiation training each team as well as other mutual aid hazmat technicians.
EXERCISES	
4.6-Ex1	Test and evaluate the use of plume modeling tools to measure improvements in response time and effectiveness in plume modeling.
4.6-Ex2	Exercise CBRNE/WMD/HazMat capabilities and equipment into regional and statewide exercise opportunities.

Objective 4.7 Strengthen Operational Coordination Capabilities

The Bay Area has a fully integrated response system through a common framework of the Standardized Emergency Management System, Incident Command System and Unified Command including the use of emergency operations centers, incident command posts, emergency plans and standard operating procedures, incident action plans and the tracking of on-site resources in order to manage major incidents safely, effectively and efficiently. EOCs in the Bay Area can effectively plan, direct and coordinate information and activities internally within EOC functions, and externally with other multi-agency coordination entities, command posts and other agencies to effectively coordinate disaster response operations.

Objective 4.7 Implementation Steps and Resource Elements

PLANNING	
4.7-P1	Update or develop jurisdiction emergency operations plans (EOPs) that are compatible and integrate support for unified command during multi agency or multi-jurisdictional operations.
4.7-P2	Ensure resource and personnel tracking system(s) is place in coordination with the critical resource logistics and distribution objective.
4.7-P3	Develop policies and procedures for utilizing the Law Enforcement Online Virtual Command Center capability at EOCs and other command posts.
4.7-P4	Develop regional plans and procedures to address ICS with a particular focus on unified command for multi-agency events and ensure they are integrated with onsite incident management.
4.7-P5	Establish and implement an order of command succession or continuity consistent with NIMS/SEMS.
4.7-P6	Ensure that primary and secondary means to establish and maintain EOC communication services through the incident timeline are in place, can be activated promptly, and can continue to operate at acceptable levels.
4.7-P7	Ensure Department Operations Centers (DOCs) and EOCs have IT staffing requirements in their activation plans.
4.7-P8	Ensure DOC and EOC staff coordinate and plan with general services administration personnel for long term support of operations center support.
4.7-P9	Revise EOC activations plans as necessary to include 24 hour staffing for finance support during an emergency.
4.7-P10	Ensure EOCs facilitate the regional reporting of activities, coordination of operational activities and the development of a common operating picture, during an incident and incorporate their communications requirements into local operational communications interoperability plans.
4.7-P11	Ensure that medical and health agencies and personnel are fully integrated in emergency operations plans and standard operating procedures at the regional, operational area, local and field levels.
ORGANIZATION	
4.7-O1	Develop or maintain Type I or II or III or IV incident management team.
4.7-O2	Establish SOPs for addressing staffing issues that area commands cannot address during an incident.

EQUIPMENT	
4.7-E1	Ensure DOCs and EOCs have sufficient information technology equipment and software (WebEOC) that is standardized/interoperable
4.7-E2	Ensure EOCs have operational and redundant communications equipment.
4.7-E3	Acquire and sustain back up power equipment for EOCs as needed.
4.7-E4	Acquire and sustain physical security enhancement equipment for the EOCs.
4.7-E5	Acquire and sustain inspection and screening systems at the EOC as necessary.
TRAINING	
4.7-T1	Ensure all appropriate personnel are trained in NIMS/SEMS incident command and unified command.
4.7-T2	Train personnel in accordance with NIMS/SEMS typing.
4.7-T3	Establish and maintain ICS training benchmarks and metrics and integrate them with relevant regional training plans.
4.7-T4	Provide training on the use of the Law Enforcement Online Virtual Command Center capability.
4.7-T5	Provide FEMA Independent Study Program: IS 700-NIMS, An Introduction; FEMA Independent Study Program: IS 800-National Response Plan, An Introduction; FEMA Independent Study Program: IS 275-EOC Management and Operations training.
4.7-T6	Provide FEMA Independent Study Program: IS 100-Introduction to Incident Command System; FEMA Independent Study Program: IS 200-ICS for Single Resources and Initial Action Incident training.
4.7-T7	Brief or train local chief executives and other key officials of the jurisdiction in the jurisdiction's command, control and coordination plans for large-scale emergencies.
4.7-T8	Establish and train appropriate personnel on standardized reporting format for area commands to utilize during briefings with EOCs and DOCs.
4.7-T9	Provide training to EOC personnel on the NIMS/ICS/SEMS and overall EOC functions and responsibilities in an emergency.
EXERCISES	
4.7-Ex1	Test to ensure all on-site incident management activities are coordinated through the Incident Command System with a focus on testing and evaluating unified command.
4.7-Ex2	Test whether formal operational briefings are conducted at the start of each operational period.
4.7-Ex3	Test whether IAP is re-assessed, revised, distributed, and briefed at least at the start of each new operational period.
4.7-Ex4	Develop exercise program to evaluate the effectiveness EOC incident management processes; communications and standards, and exercise programs for emergency operations plans, policies and procedures.
4.7-Ex5	Test and evaluate the integration of medical and health agencies and personnel in emergency operations plans and standard operating procedures at the regional, operational area, local and field levels.

Objective 4.8 Improve Environmental Response/Health and Safety through Responder Safety and Health

The Bay Area can reduce the risk of illnesses or injury to first responders, first receivers, medical facility staff members, or other skilled support personnel as a result of preventable exposure to secondary trauma, chemical/radiological release, infectious disease, or physical/emotional stress after the initial incident or during decontamination and incident follow-up.

Objective 4.8 Implementation Steps and Resource Elements

PLANNING	
4.8-P1	Develop and adopt agency/jurisdiction safety and health plans and program(s).
4.8-P2	Conduct a detailed analysis of relevant planning scenarios to ensure that all workers are protected while performing tasks from all hazards.
ORGANIZATION	
4.8-O1	Establish plans and procedures for identifying sources of additional equipment and expertise if the safety and health program is overwhelmed.
EQUIPMENT	
4.8-E1	Acquire and sustain authorized personal protective equipment as agreed to by the region to include SCBA, auto injectors, etc.
TRAINING	
4.8-T1	Provide training on acquired PPE.
EXERCISES	
4.8-Ex1	Integrate responder health and safety into exercises to develop and maintain appropriate health and safety knowledge and expertise for responders.

Objective 4.9 Enhance On-Scene Security and Protection through Emergency Public Safety and Security Response

Public safety agencies within the Bay Area are able to keep the public and critical infrastructure safe by securing a particular incident scene and maintaining law and order following an incident or emergency to include managing the criminal justice prisoner population.

Objective 4.9 Implementation Steps and Resource Elements

PLANNING	
4.9-P1	Develop plans and procedures for a Type 1 regional mobile field force (MFF) under NIMS to support emergency public safety and security.
4.9-P2	Develop plans and systems to maintain accountability of public safety personnel, track incident locations, and track resources.
4.9-P3	Develop activation and deployment plans for public safety and security with plans targeting 50 percent of total uniformed (patrol) staff of a jurisdiction having primary responsibility for the incident.
4.9-P4	Develop plans and protocols for alternate facilities for court services, prisoner holding and housing, prisoner transport, criminal intake and other criminal justice services.
4.9-P5	Ensure plans for sheltering, housing, and feeding law enforcement and other public safety personnel are in place
ORGANIZATION	
4.9-O1	Ensure MFF meets NIMS type 1 standards to include a tactical team (platoon) to include four 12-person squads and an officer in charge (OIC) and a Deputy OIC. Each squad should include a supervisor.
EQUIPMENT	
4.9-E1	Acquire and sustain MFF equipment to include protective clothing, soft body armor (helmet and face shield, gloves, shin guards), communications equipment, personal hydration, riot control gear, video equipment, mass arrest kits, and other necessary equipment.
4.9-E2	Acquire and sustain power and traffic control equipment.
TRAINING	
4.9-T1	Provide training to MFF to include, crowd control, traffic management, on-site security, etc.
4.9-T2	Develop and conduct public safety and security training programs to include joint local, state and federal teams pursuant to ESF 13 under the NRF.
EXERCISES	
4.9-Ex1	Test and evaluate MFF and such other public safety and security teams' activation and deployment capabilities.
4.9-Ex2	Test and evaluate criminal justice re-location plans.

GOAL 5	Mission Area(s)	National Priorities	Public Health and Target Capabilities	State Strategy
ENHANCE MEDICAL AND PUBLIC HEALTH PREPAREDNESS	Protection Response Recovery	Strengthen Medical Surge and Mass Prophylaxis Capabilities	Emergency Triage and Pre-Hospital Treatment Medical Surge Medical Countermeasure Dispensing Medical Materiel Management and Distribution Non-Pharmaceutical Interventions Laboratory Testing Public Health surveillance and Epidemiological Investigation Fatality Management	Goal 6: Improve Medical and Health Preparedness

Public Health and Medical Background

Health and medical preparedness is a fundamental component of homeland security. This fact is evidenced by the 2001 anthrax attacks, the outbreak of Severe Acute Respiratory Syndrome (SARS), and the 2009 H1N1 influenza outbreak. Given such risks, the Bay Area must ensure its medical and public health infrastructure is capable of protecting against, responding to, and recovering from such events.

At the National level, the Department of Health and Human Services has led the way with the creation of the National Health Security Strategy (NHSS), released in December 2009. The NHSS is designed to achieve two overarching goals:

- Build community resilience, and
- Strengthen and sustain health and emergency response systems.

As with the *Bay Area Homeland Security Strategy*, the NHSS is designed around building health and medical capabilities in order to achieve strategic goals and objectives based on the elements

of plans, organization, equipment, training, and exercises. As the Federal Government continues to develop implementation plans for the NHSS, the Bay Area will track federal guidance and integrate, where appropriate, such guidance into local and regional health and medical preparedness efforts.

In enhancing medical and public health preparedness, the Bay Area seeks to develop a comprehensive and integrated system of first responders, hospitals, clinics, and public health departments across the region. This includes fully integrating the Metropolitan Medical Response System (MMRS) in the Bay Area.

Finally, the region's CBRNE plan also plays a critical role relative to this strategic goal as several objectives within the plan cover medical and health preparedness concerning a CBRNE event. Jurisdictions and sub-regions should therefore, look to the CBRNE plan for additional guidance in this area.

Objective 5.1 Enhance Emergency Triage and Pre-Hospital Treatment

Emergency medical services (EMS) resources across the Bay Area can effectively and appropriately be dispatched (including with law enforcement tactical teams) to provide pre-hospital triage, treatment, transport, tracking of patients, and documentation of care appropriate for the incident, while maintaining the capabilities of the EMS system for continued operations up to and including for mass casualty incidents.

Objective 5.1 Implementation Steps and Resource Elements

PLANNING	
5.1-P1	Update local mass casualty plans and integrate local plans with the California Disaster Medical Operations Manual.
5.1-P2	Produce written plans and procedures for coordination of the local EMS system with the State and National Disaster Medical System (NDMS).
5.1-P3	Develop protocols and procedures for tracking triage and pre-hospital treatment response staff and equipment during day-to-day operations, as well as catastrophic incidents.
EQUIPMENT	
5.1-E1	Acquire and sustain emergency medical equipment to include patient tracking systems and PPE.
TRAINING	
5.1-T1	Provide training on the California Public Health and Medical Emergency Operations Manual.
5.1-T2	Develop and implement multi-disciplinary training programs for EMS personnel, based on local risk vulnerability assessments and lessons learned.
5.1-T3	Conduct training for EMS and tactical team personnel in joint response events.
5.1-T4	Conduct training for dispatch personnel in protocols and procedures for dispatch during catastrophic events.
5.1-T5	Provide the Tactical Emergency Casualty Care Course to EMS personnel.

EXERCISES	
5.1-Ex1	Develop and implement multi-disciplinary exercises to test and evaluate the ability of EMS agencies to move and track large numbers of patients during a multi-jurisdictional incident consistent with the California Disaster Medical Operations Manual.
5.1-Ex2	Conduct joint EMS and law enforcement tactical team exercises to test and evaluate the ability to operate jointly in a warm zone.

Objective 5.2 Increase Medical Surge

The Bay Area is able to provide adequate medical evaluation and care during incidents that exceed the limits of the normal medical infrastructure of an affected community or the region. The healthcare system in the region is able to survive a hazard impact and maintain or rapidly recover operations that were compromised. Those injured or ill from a medical disaster and/or mass casualty event in the Bay Area are rapidly and appropriately cared for. Continuity of care is maintained for non-incident related illness or injury.

Objective 5.2 Implementation Steps and Resource Elements

PLANNING	
5.2-P1	Develop and maintain medical surge plans that integrate with State and hospital plans including patient distribution plans.
5.2-P2	Develop and maintain medical mutual aid agreements for medical facilities and equipment.
5.2-P3	Develop and maintain surge capacity plans for acute care hospitals.
5.2-P4	Update local mass casualty plans and integrate local plans with the California Disaster Health Operations Manual.
EQUIPMENT	
5.2-E1	Acquire and sustain medical equipment, supplies and pharmaceuticals to support medical surge operations.
TRAINING	
5.2-T1	Provide training on the California Public Health and Medical Emergency Operations Manual.
5.2-T2	Provide training on the California Healthcare Surge Standards and Guidelines for healthcare facilities.
EXERCISES	
5.2-Ex1	Test and evaluate medical surge plans.

Objective 5.3 Strengthen Medical Countermeasure Dispensing

With the onset of an incident, the Bay Area is able to provide appropriate medical countermeasures (including vaccines, antiviral drugs, antibiotics, antitoxin, etc.) in support of treatment or prophylaxis (oral or vaccination) to the identified population in accordance with local, state and federal public health guidelines and/or recommendations.

Objective 5.3 Implementation Steps and Resource Elements

PLANNING	
5.3-P1	Develop and maintain plans, procedures, and protocols for medical countermeasure dispensing.
5.3-P2	Develop procedures for obtaining medical countermeasure dispensing supplies from the receipt, staging, and storage (RSS) sites in coordination with the Medical Supplies and Distribution Capability.
5.3-P3	Develop programs to ensure security of medical countermeasure dispensing during dispensing operations.
5.3-P4	Develop processes to ensure that first responders, public health responses, critical infrastructure personnel, and their families receive prophylaxis prior to POD opening.
ORGANIZATION	
5.3-O1	Develop a medical countermeasure dispensing inventory management system.
EQUIPMENT	
5.3-E1	Caches of medical supplies and strategic national stockpile (SNS) dispensing and distribution equipment.
TRAINING	
5.3-T1	Develop and implement training for medical countermeasure dispensing operations.
5.3-T2	Develop and implement training for medical countermeasure dispensing repacking, distribution, and dispensing, security of mass prophylaxis, and for mass prophylaxis inventory management.
EXERCISES	
5.3-Ex1	Conduct medical countermeasure dispensing exercises to test and evaluate all aspects of medical countermeasure dispensing, including distribution and dispensing, tactical communications, public information and communication, security, inventory management, and distribution.

Objective 5.4 Improve Medical Materiel Management and Distribution

The Bay Area is able to acquire, maintain (e.g., cold chain storage or other storage protocol), transport, distribute, and track medical materiel (e.g., pharmaceuticals, gloves, masks, and ventilators) during an incident and recover and account for unused medical materiel, as necessary, after an incident.

Objective 5.4 Implementation Steps and Resource Elements

PLANNING	
5.4-P1	Develop plans for establishing staging areas for internal and external medical response personnel, equipment, and supplies.
5.4-P2	Establish strategies for transporting materials through restricted areas, quarantine lines, law enforcement checkpoints and so forth that are agreed upon by all affected parties.
5.4-P3	Obtain demographic/health-related data to plan for the types of medications, durable medical equipment, or consumable medical supplies that may need to be provided during an event (including supplies needed for populations requiring functional or medical care).
TRAINING	
5.4-T1	Provide training on the demobilization of medical supplies.
5.4-T2	Provide training in medical supplies management and distribution in the pre hospital triage environment.
5.4-T3	Provide training on CDC supply tracking software.
EXERCISES	
5.4-Ex1	Exercise plans procedures and systems for transporting and tracking medical material assets with specific focus on the demobilization of medical supplies.

Objective 5.5 Strengthen Non-Pharmaceutical Interventions

Public health agencies in the Bay Area are able to recommend to the applicable lead agency (if not public health) and implement, if applicable, strategies for disease, injury, and exposure control. Strategies include the following: isolation and quarantine, restrictions on movement and travel advisory/warnings, social distancing, external decontamination, hygiene, and precautionary protective behaviors. Legal authority for those applicable measures is clearly defined and communicated to all responding agencies and the public. Logistical support is provided to maintain measures until danger of contagion has elapsed.

Objective 5.5 Implementation Steps and Resource Elements

PLANNING	
5.5-P1	Ensure legal authority is in place for authorizing isolation and quarantine.
5.5-P2	Develop and maintain plans for coordinating quarantine activation and enforcement with public safety and law enforcement.

ORGANIZATION	
5.5-O1	Establish systems, programs, and resources for implementing isolation and quarantine.
TRAINING	
5.5-T1	Develop and implement exercises for isolation and quarantine.
EXERCISES	
5.5-Ex1	Exercises to test plans for implementing isolation and quarantine.

Objective 5.6 Improve Laboratory Testing

Laboratories in the Bay Area are able to conduct rapid and conventional detection, characterization, confirmatory testing, data reporting, investigative support, and laboratory networking to address actual or potential exposure to all-hazards. Confirmed cases and laboratory results are reported immediately to all relevant public health, food regulatory, environmental regulatory, and law enforcement agencies in support of operations and investigations.

Objective 5.6 Implementation Steps and Resource Elements

ORGANIZATION	
5.6-P1	Identify, establish and maintain working collaboration with all Laboratory Response Network (LRN) Sentinel and LRN Clinical Chemistry laboratories.
5.6-P2	Develop and maintain an accurate and current database of contact information and capability for all the Laboratory Response Network (LRN) Sentinel and LRN Clinical Chemistry laboratories.
EQUIPMENT	
5.6-E1	Laboratory equipment to test and evaluate CBRNE agents.
TRAINING	
5.6-T1	Train all LRN Sentinel laboratories in the use of LRN biological agent ruled-out protocols, specimens or isolate referral responsibilities and notification algorithms.
EXERCISES	
5.6-Ex1	Exercises to test select LRN sentinel and LRN clinical chemistry laboratories

Objective 5.7 Strengthen Public Health Surveillance and Epidemiological Investigation

Bay Area public health agencies have the ability to create, maintain, support, and strengthen routine surveillance and detection systems and epidemiological investigation processes, as well as to expand these systems and processes in response to incidents of public health significance. This includes the ability to identify potential exposure to disease, mode of transmission, and agent.

Objective 5.7 Implementation Steps and Resource Elements

PLANNING	
5.7-P1	Develop plans, procedures, and protocols for investigating a potential disease outbreak.
5.7-P2	Develop and maintain procedures for identification of disease, vector and epidemic.
TRAINING	
5.7-T1	Training for staff on activities required to conduct epidemiological surveillance and detection including exposure and disease detection, surveillance, analysis, reporting, and use of equipment.
EXERCISES	
5.7-Ex1	Exercises to evaluate epidemiological surveillance and detection.

Objective 5.8 Enhance Fatality Management

Bay Area agencies, e.g., law enforcement, public health, healthcare, emergency management, and medical examiner/coroner) are able to coordinate (to ensure the proper recovery, handling, identification, transportation, tracking, storage, and disposal of human remains and personal effects; certify cause of death; and facilitate access to mental/ behavioral health services to the family members, responders, and survivors of an incident.

Objective 5.8 Implementation Steps and Resource Elements

PLANNING	
5.8-P1	Update the Bay Area Regional Catastrophic Incident Mass Fatality Plan.
5.8-P2	Ensure plans are in place to allow for the contracting or use of private sector resources in support of mass fatality to include the use of just in time contracts for body storage, etc.
EQUIPMENT	
5.8-E1	Acquire and sustain mass fatality equipment as called for in the Bay Area Regional Catastrophic Incident Mass Fatality Plan.
5.8-E2	Acquire authorized and needed body storage equipment as agreed to by the region.
TRAINING	
5.8-T1	Provide training on the implementation of the Bay Area Regional Catastrophic Incident Mass Fatality Plan.
5.8-T2	Conduct training on mass fatality equipment.
EXERCISES	
5.8-Ex1	Conduct exercises to test and evaluate the Bay Area Regional Catastrophic Incident Mass Fatality Plan across all phases – trauma, contamination and pandemic.

GOAL 6	Mission Area(s)	National Priorities	Core Capabilities	State Strategy
STRENGTHEN EMERGENCY PLANNING AND CITIZEN PREPAREDNESS CAPABILITIES	Response Recovery	Strengthen Planning and Citizen Preparedness Capabilities	Community Resilience Public Information and Warning Critical Transportation Public and Private Resources Mass Care Services	Goal 4: Enhance Planning and Community Preparedness Capabilities

Community Resiliency

The Bay Area has long viewed emergency and community planning and preparedness as a core element of homeland security. In 2007-2008 the region developed a community preparedness program guide to help identify local best practices concerning social marketing programs as they relate to community preparedness, determine national best practices for citizen preparedness programs, and assess the effectiveness of the various characteristics of community preparedness programs available in the Bay Area. The program guide is a valuable tool to assist the region, sub-regions and jurisdictions in their development of community preparedness programs for all hazards. The program guide also serves as a key element and implementation tool for each of the objectives under this Strategic goal.

Effectively communicating threat or disaster risk, warnings, protective actions, and other information to the community continues to gain prominence as a critical element of keeping communities safe before, during, and after disasters. While researchers and practitioners have made significant strides towards identifying risks and establishing new technology protocols and solutions, the challenge of communicating alerts, warnings, and protective actions across multiple independent jurisdictions with a widely diverse population such as those in the Bay Area still needs to be addressed within the region.

In 2012, the Bay Area developed a comprehensive emergency public information and warning assessment and strategic plan. That plan provides the overall blueprint for how the region can strengthen its emergency public information and warning capability. The *Bay Area Homeland Security Strategy* tracks and reinforces what the emergency public information and warning strategic plan consists of in more detail.

Objective 6.1 Strengthen Emergency Public Information and Warning Capabilities

The Bay Area has an interoperable and standards-based system of multiple emergency public information and warning systems that allows Bay Area leaders and public health and safety personnel to disseminate prompt, clear, specific, accurate, and actionable emergency public information and warnings to all affected members of the community in order to save lives and property concerning known threats or hazards.

Objective 6.2 Implementation Steps and Resource Elements

PLANNING	
6.1-P1	Develop a process for joint regional procurement of future emergency public information and warning tools and for sustaining current emergency public information and warning capabilities. Ensure all equipment purchases are compliant with the Common Alerting Protocol (CAP).
6.1-P2	Review and update Operational Area databases of partner community based organizations and advocacy groups for populations with access and functional needs and/or limited English proficiency.
6.1-P3	Enhance local and regional plans/programs for Joint Information Center (JIC) operations, and develop network-based "virtual" JIC support.
6.1-P4	Update the Regional Emergency Coordination Plan (RECP) and develop an annex to the RECP focused on a regional concept of operations (ConOps) for addressing emergency public information and warning and establishing and operating a regional JIC based on the SEMS, NIMS and the ICS.
6.1-P5	Update local Emergency Operation Plans (EOPs) on to include an emergency public information and warning annex or amendment(s) to each base plan.
6.1-P6	Develop policy and guidance for social media use in emergency public information and warning and formally integrate social media activities into response plans.
6.1-P7	Develop protective actions for all potential Bay Area hazards and develop science-based warning message templates to communicate effective protective actions to the public.
6.1-P8	Develop plans and procedures for providing timely and effective warning information to isolated populations in the Bay Area.
6.1-P9	Develop or determine a regional shared "clearinghouse" server that uses the CAP standard to activate multiple Operational Area warning output systems (sirens, telephone, email, etc.) concurrently with a common message.
6.1-P10	Implement the federal Integrated Public Information Warning System (IPAWS) and Commercial Mobile Alerting System (CMAS) across the Bay Area.
6.1-P11	Obtain a State of California agreement regarding areas and types of warnings each agency will issue using IPAWS.
ORGANIZATION	
6.1-O1	Develop regional policy and program structures and assign a regional program manager for emergency public information and warning initiatives, and programs.
6.1-O2	Develop an MOU/MOA template for Operational Areas to customize and establish agreements with partner organizations and advocacy groups.
6.1-O3	Establish a regional social media subcommittee to develop social media guidance,

	policy, and integration frameworks.
6.1-O4	Establish a regional operational support cell for effective public warning to include necessary MOUs and ConOps.
6.1-O5	Execute an MOA with FEMA for IPAWS access.
EQUIPMENT	
6.1-E1	Implement a virtual platform (e.g., UASI web platform) so emergency public information providers and policy makers (e.g., Bay Area Emergency Public Information Network and Emergency Public Information and Warning Work Group) have a mechanism to collaborate.
6.1-E2	Acquire and sustain equipment required to warn isolated populations (e.g., variable message signs to warn transient/commuter populations; sirens and public announcement systems to warn homeless; tone alert radios.
6.1-E3	Acquire and sustain equipment, laptops, tablets and other computing devices, to enable regional Warning Support Cell personnel connectivity to existing warning systems across the region.
6.1-E4	Procure equipment for Operational Areas necessary for integrating with the regional clearinghouse CAP server.
6.1-E5	Obtain IPAWS-certified warning control software packages for Operational Areas.
TRAINING	
6.1-T1	Subscribe to available newsletters (online or print) and/or magazines, social media, and online networks (e.g., Lessons Learned Information Sharing) in order to review and train on ongoing EPI&W issues, best practices, lessons learned, etc.
6.1-T2	Provide joint training to community based organization (CBO) public information officers and Operational Area emergency management officials on the protocols and procedures for the handling and dissemination of emergency public information and warning to CBO members/constituents.
6.1-T3	Promote educational outreach to isolated populations campaign general preparedness and provide awareness training on available resources from the community (e.g., register/subscribe to alert notification systems).
6.1-T4	Have all authorized warning originators complete a two-hour online course on IPAWS procedures and appropriate use.
6.1-T5	Deliver training courses called for in the Bay Area Emergency Public Information and Warning Strategic Plan (Goal 4, Objective 4.1)
6.1-T6	Provide training in social media use, and establish a regional platform to exchange best practices and develop regional awareness around existing social media capabilities.
6.1-T7	Deliver the California's Senior Officials Workshop to elected and senior officials across the region with an emphasis on emergency public information and warning.
EXERCISES	
6.1-Ex1	Conduct a regional exercise to evaluate JIC operations.
6.1-Ex3	Conduct exercise(s) that involve those with access and functional needs and isolated populations to evaluate emergency public information and warning capabilities to reach these groups.
6.1-Ex3	Conduct local and regional exercises to test and evaluate regional Warning Support Cell capabilities

6.1-Ex4	Involve local media in exercises to educate all participants on emergency public information and warning roles, responsibilities and capabilities.
6.1-Ex5	Conduct coordinated testing of warning systems from across the region.

Objective 6.2 Enhance Critical Transportation Capabilities

The Bay Area can provide transportation (including infrastructure access and accessible transportation services) for response priority objectives, including the evacuation of people, including those with access and functional needs, and animals, and the delivery of vital response personnel, equipment, and services into the affected incident areas to save lives and to meet the needs of disaster survivors.

Objective 6.2 Implementation Steps and Resource Elements

PLANNING	
6.2-P1	Update, as needed, the Bay Area Regional Catastrophic Earthquake Mass Transportation/Evacuation Plan.
6.2-P2	Evaluate the threats and hazards that may cause the need for large evacuations or sheltering in-place and determine evacuation/shelter zones (the areas where people must evacuate from or shelter within) based upon the potential consequences caused by the incident.
6.2-P3	Develop plans and procedures for evacuation/shelter-in place of access and functional needs populations.
6.2-P4	Develop plans and procedures for sheltering in place during a CBRNE event.
6.2-P5	Develop plans and procedures for evacuation/shelter-in place of companion animals.
ORGANIZATION	
6.2-O1	Develop and distribute public education materials on evacuation/shelter-in-place preparation, plans, and procedures for natural hazards and CBRNE events.
6.2-O2	Pre-arrange contracts and agreements to ensure provision of transportation vehicles (land, air and sea) and drivers during an incident requiring mass evacuations.
EQUIPMENT	
6.2-E1	Traffic control equipment (barriers, cones, directional signals).
TRAINING	
6.2-T1	Provide training on the implementation of the Bay Area Regional Catastrophic Earthquake Mass Transportation/Evacuation Plan.
6.2-T2	Develop and implement programs to train local citizens on evacuation, reentry and shelter-in place processes.
EXERCISES	
6.2-Ex1	Conduct exercises to test and evaluate the Bay Area Regional Catastrophic Earthquake Mass Transportation/Evacuation Plan.

Objective 6.3 Improve Mass Care

Mass care services, including sheltering, feeding, and bulk distribution, are rapidly, effectively and efficiently provided for the impacted population, including those with access and functional needs, in a manner consistent with all applicable laws, regulations and guidelines.

Objective 6.3 Implementation Steps and Resource Elements

PLANNING	
6.3-P1	Update, as needed, the Regional Catastrophic Mass Care and Sheltering Plan. Ensure the American Red Cross is fully accounted for in planning aspects.
6.3-P2	Develop plans and procedures for mass care involving a CBRNE incident.
6.3-P3	Develop mass care plans at the operational area level that integrate and account for those individuals and families with access and functional needs consistent with state and federal guidelines such as the Americans with disabilities Act.
ORGANIZATION	
6.3-O1	Develop pre-designated vendor agreements, blanket purchase agreements, or MOAs for critical mass care resources (pre-packaged meals ready to eat and ice).
6.3-O2	Develop public education materials concerning mass care services.
6.3-O3	Conduct an inventory of available shelter space for people and companion animals.
EQUIPMENT	
6.3-E1	Acquire, sustain and store directly or through partners mass care equipment such as cots (standard and accessible), blankets, feeding equipment (e.g., food storage containers), food and beverages, first-aid supplies, and animal supplies, etc.
TRAINING	
6.3-T1	Provide mass care training to include a focus on those with access and functional needs.
EXERCISES	
6.3-Ex1	Conduct exercises to test and evaluate the implementation of the Regional Catastrophic Mass Care and Sheltering Plan. Ensure the American Red Cross is an exercise participant.
6.3-Ex2	Test and evaluate the Bay Area's ability to provide relocation assistance or interim housing solutions for families unable to return to their pre-disaster homes.

Objective 6.4 Increase Community Resiliency

The Bay Area has a formal structure and process for ongoing collaboration between government and nongovernmental resources at all levels to prevent, protect/mitigate, prepare for, respond to and recover from all known threats and hazards.

Objective 6.4 Implementation Steps and Resource Elements

PLANNING	
6.4-P1	Ensure CERT Teams are integrated into ICS/NIMS/SEMS.
ORGANIZATION	

6.4-O1	Establish regional citizen educational programs on personal protective measures, disaster kits and communications plans that can be implemented locally.
6.4-O2	Develop regional public awareness and preparedness campaigns and education materials for access and functional needs populations that can implemented locally.
EQUIPMENT	
6.4-E1	Provide and sustain CERT teams with necessary equipment.
TRAINING	
6.4-T1	Train the public, with an emphasis on citizen corps volunteers, to be aware and to report suspicious items, smells and behavior to local law enforcement (with follow-on reporting by law enforcement to the regional NCRIC for analysis).
6.4-T2	Conduct CERT Team training on integration with first responders through ICS/NIMS/SEMS.
EXERCISES	
6.4-Ex1	Implement an exercise and evaluation process to assess citizen preparedness programs through specific exercises or as part of larger overall exercise
6.4-Ex2	Conduct exercises to test CERT capabilities.

Objective 6.5 Enhance Volunteer Management and Donations

Volunteers and donations within the Bay Area are organized and managed throughout an emergency based upon pre-designated plans, procedures and systems.

Objective 6.5 Implementation Steps and Resource Elements

PLANNING	
6.5-P1	Update, as needed, the Regional Catastrophic Donations Management Plan.
6.5-P2	Develop plans and procedures to improve local government and volunteer organizations' ability to recruit, screen, credential and manage both pre-affiliated and spontaneous volunteers.
ORGANIZATION	
6.5-O1	Provide standardized outreach to local jurisdictions in multiple languages, increasing the ability to effectively utilize all volunteers as necessary.
EQUIPMENT	
6.5-E1	Acquire and sustain interoperable volunteer management tracking systems. Ensure systems can manage spontaneous volunteers as well as on-call volunteers that can support a variety of capability and mission needs during and after a disaster.
TRAINING	
6.5-T1	Provide training on the implementation of the Regional Catastrophic Donations Management Plan.
6.5-T2	Develop just-in-time training program for volunteers to perform required tasks.
EXERCISES	
6.5-Ex1	Conduct exercises on the implementation of the Regional Catastrophic Donations Management Plan.

GOAL 7	Mission Area(s)	National Priorities	Core Capabilities	State Strategy
ENHANCE RECOVERY CAPABILITIES	Recovery	N/A	Infrastructure Systems Economic and Community Recovery	Goal 7: Enhance Recovery Capabilities

The National Recovery Framework

Given the risk of a major disaster occurring in the Bay Area, it is essential for the region to establish both short-term and long-term recovery capabilities. Building recovery capabilities has for some time been a neglected element of homeland security and emergency preparedness. To help address this gap, in September 2011, DHS released the final National Disaster Recovery Framework. The NDRF defines how Federal agencies will organize and operate to utilize existing resources to promote effective recovery and support states, tribes and other jurisdictions affected by a disaster.

The NDRF seeks to define:

- Roles and responsibilities of the newly-proposed recovery coordinators and other stakeholders;
- A coordinating structure, which includes proposed Recovery Support Functions, that facilitates communication and collaboration among all stakeholders;
- Guidance for pre- and post-disaster recovery planning; and
- The overall process by which, together as a nation, we can capitalize on opportunities to rebuild stronger, smarter, and safer communities.

The NDRF compliments and aligns with the National Response Framework (NRF) and utilizes an operational structure to develop a common recovery framework in a manner similar to how the NRF establishes a common response framework. The NDRF replaces the NRF Emergency Support Function #14 (ESF #14) - Long-Term Community Recovery with six Recovery Support functions (RSFs):

- Community Planning and Capacity Building.
- Economic.
- Health and Social Services.
- Housing.
- Infrastructure Systems.
- Natural and Cultural Resources

The Bay Area will utilize the NDRF as a guide for developing its own recovery framework in coordination with the State of California and the Federal Government. In doing so, certain key principles will guide the development of the regional recovery framework:

- Critical to recovery preparedness is pre-disaster planning, an ongoing responsibility for all levels of governments; individuals and families; the business community; and voluntary, faith-based and community organizations.
- Local governments have primary responsibility for disaster recovery in their community and play the lead role in planning for and managing all aspects of community recovery.
- Partnerships and inclusiveness between local businesses; owners and operators of critical infrastructure and key resources; and voluntary, faith-based, and community organizations are vital.

The Bay Area has significant experience in this area and will build upon that experience to ensure that essential functions from initial damage assessment to housing to economic and community restoration takes place as quickly and as smoothly as possible.

Finally, the NIPP and the CIKR Annex to the NRF provide a bridge between steady-state CIKR protection and resilience programs and incident response. The NDRF links both documents and their related protection and response missions to the recovery mission area. As the Bay Area develops its own recovery framework, it will ensure integration with its CIKR protection and incident response programs where applicable.

Objective 7.1 Strengthen Infrastructure Systems

The Bay Area can provide accurate situation needs and damage assessments by utilizing the full range of engineering, building inspection, and code enforcement services in a way that maximizes the use of resources, aids emergency response, implements recovery operations, and restores the affected area to pre-incident conditions as quickly as possible. The Bay Area can coordinate activities between critical lifeline operations and government operations to include a process for getting the appropriate personnel and equipment to the disaster scene so that lifelines can be restored as quickly and as safely as possible to support ongoing emergency response operations, life sustainment, community functionality, and a transition to recovery.

Objective 7.1 Implementation Steps and Resource Elements

PLANNING	
7.1-P1	Provide assessments, inventories and planning recommendations to mitigate seismic risks in the Bay Area by completing an assessment and inventory of soft story construction in the Bay Area.
7.1-P2	Ensure damage assessment protocols and procedures in the Regional Emergency Coordination Plan are kept up to date.
7.1-P3	In coordination with the State, conduct infrastructure intersection/interdependency analysis and work plans for guiding mitigation projects, response priorities and post-disaster recovery actions within operational areas and across the region.
7.1-P4	Continue to utilize the San Francisco Lifelines Restoration Project as a foundation for regional lifelines restoration planning.
ORGANIZATION	
7.1-O1	Consistent with the Regional Volunteer Management Plan, develop plans and procedures to recruit volunteers to join assessment teams and conduct structural

	damage assessments post disasters.
7.1-O2	In coordination with the State sponsored Metrics Project, develop standards and procedures, to include a database to identify qualified contractors offering recovery/restoration services and equipment across the Bay Area.
7.1-O3	Develop qualification and certification standards for paid and volunteer staff.
7.1-O4	Develop and maintain disaster assessment teams per NIMS - Type I, or II, and/or III Disaster Assessment Teams, and Engineering Service Teams.
EQUIPMENT	
7.1-E1	Acquire and sustain technology and systems that can predict the effects of a specific incident or hazard, including estimated damage to the region's transportation system, type, amount and location of debris, and number of buildings severely or completely damaged.
7.1-E2	Acquire, sustain and inventory personal protective equipment for recovery damage assessment teams. Deploy caches of equipment outside danger zones if necessary.
7.1-E3	Acquire and sustain damage assessment data collection system (hardware and software).
7.3-E4	Acquire and sustain back-up generators for short term restoration of lifelines.
TRAINING	
7.1-T1	Provide training to volunteers and paid personnel on damage assessment procedures, plans and equipment.
7.3-T2	Provide training to government entities on the restoration of lifelines process.
EXERCISES	
7.1-Ex1	Ensure damage assessment procedures and mitigation plans and procedures are exercised independently or as part of a regional exercise.
7.1-Ex2	Coordinate with other lifelines companies/sectors to create cross-sector exercises to test restoration plans.

Objective 7.2 Enable Economic Recovery

During and following an incident, the Bay Area can estimate economic impact, prioritize recovery activities, minimize business disruption, and provide individuals and families with appropriate levels and types of relief with minimal delay.

Objective 7.2 Implementation Steps and Resource Elements

PLANNING	
7.2-P1	Develop Regional Recovery Support Function (RSF) or equivalent recovery framework that addresses housing, economic, environmental, infrastructure, and health and social service needs.
7.2-P2	Update, as needed, the Regional Catastrophic Interim Housing Plan.
ORGANIZATION	
7.2-O1	Identify responsibilities for the position of a Regional Disaster Recovery Coordinator (RDRC) or equivalent, and resources for regional recovery support

	functions.
TRAINING	
7.2-T1	Develop and implement recovery training and education as a tool for building recovery capacity and making it available to all other stakeholders.
7.2-T2	Provide training on the implementation of the Regional Catastrophic Interim Housing Plan.
EXERCISES	
7.2-Ex1	Exercise stabilization and recovery plans to include the Regional Catastrophic Earthquake Interim Housing Plan through specific exercises or as part of larger overall regional exercise.

Objective 7.3 Improve Environmental Response Health and Safety Capabilities

After the primary incident, the Bay Area is able to assess, monitor, perform cleanup actions, including debris and hazardous waste removal, and provide resources to prevent disease and injury through the quick identification of associated environmental hazards.

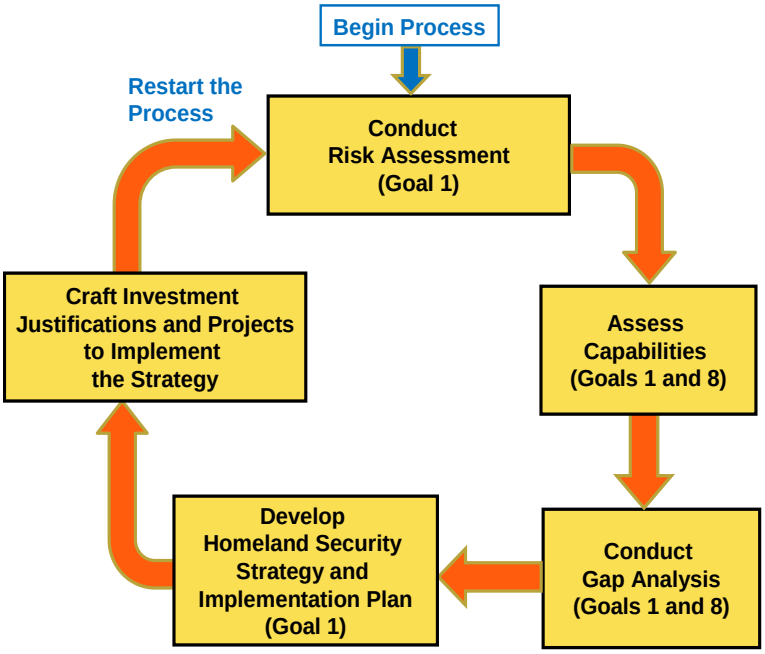
Objective 7.3 Implementation Steps and Resource Elements

PLANNING	
7.3-P1	Update, as needed, the Regional Catastrophic Debris Removal Plan.
7.3-P2	Develop plans to enhance capacity of sewage treatment facilities for major disasters.
7.3-P3	Pre-identify potential routes for debris removal and debris management.
7.3-P4	Develop debris removal and debris management annexes to EOPs where necessary.
TRAINING	
7.3-T1	Provide training on environmental health to pre-designated managers, responders, and volunteers of mass-care operations.
7.3-T2	Provide training to environmental health strike teams.
7.3-T3	Develop and conduct emergency response training relevant to all waste water systems including field staff and managers of waste water programs, waste water utilities, public health, and emergency management.
EXERCISES	
7.3-Ex1	Conduct, or include as part of broader exercises, tests and evaluations of environmental health teams in the region.
7.3-Ex2	Conduct, or include as part of broader exercises, tests of waste water sewage facilities' capacity.

GOAL 8	Mission Area(s)	National Priorities	Core Capabilities	State Strategy
ENHANCE HOMELAND SECURITY EXERCISE, EVALUATION AND TRAINING PROGRAMS	All	All	All	Goal 9: Enhance Homeland Security Exercise, Evaluation and Training Programs

Bay Area Training and Exercise Program

The Bay Area's multi-year Homeland Security Exercise, Evaluation and Training Program is designed to address regional goals, build towards and test against target capabilities within this Strategy, and improve the operational readiness of the homeland security system in the Bay Area across the full spectrum of prevention, protection, mitigation, response and recovery.



The training and exercise goal is primarily focused on developing a system and framework to implement the training and exercise needs identified in the implementation steps within the other objectives in the *Strategy*. The goals, vision and mission of the Bay Area's training and exercise program are set forth below.

Goals: The Training and Exercise Planning Workgroup will engage in fair, open and transparent processes throughout the planning and implementation processes to ensure that products and services rendered, are equitably distributed, are at a reasonable cost, and ensure fair competition.

Vision: To promote, encourage and provide training and exercise opportunities for our emergency response workforce, and by ensuring our workforce is maintained in a state of readiness and competencies for all communities in region.

Mission: Utilizing the Training and Exercise Strategic Plan, the Alameda County Sheriff's Office, on behalf of the Bay Area UASI program, will promote equitable distribution of training and exercise funds amongst various agencies and disciplines within the region.

The figure above reinforces the Bay Area planning process chart by demonstrating once again the cyclical nature of the risk management and planning process and how Goals 1 and 8 play an overarching role in this process by first identifying the priority risks faced by the Bay Area jurisdictions, and the priority capabilities needed to address those risks. This is followed by

constructing the exercise and evaluation means to determine if those priority capabilities are being enhanced through the implementation steps within each of the objectives throughout the Strategy.

Training and exercises provide the means to enhance, test, and evaluate the Bay Area's proficiency in homeland security generally and the priority capabilities in particular. Exercises, as discussed in the Strategy Evaluation Section, are a critical means of determining whether the Bay Area is actually enhancing those priority capabilities designed to reduce the region's risk. Any assessment program must include a robust exercise and evaluation element to ensure data from simulated incidents are integrated with self-assessment data, and of course, real-world incident data collected both during and after the incident when available. Such a process will put the Bay Area in the best possible position to understand whether it is truly enhancing capabilities and overall preparedness.

Training and Exercises Plans and Procedures

The Bay Area will develop and maintain a regional training program that covers all public safety, health and medical agencies and support entities. The program will be managed by an executive agent/program manager. The executive agent/program manager will oversee, either directly or through separate contracts, all training for the region and will manage all training reimbursements from other member jurisdictions and manage the overall program for the entire Bay Area. The purpose is to build a training program that unifies all jurisdictions within the Bay Area toward a common set of goals while recognizing that each jurisdiction and discipline will have differing levels of capabilities and training needs.

The Bay Area's jurisdictions possess differing levels of preparedness regarding terrorism prevention, protection, mitigation, response, and recovery capabilities. Because of these differences, the Bay Area exercise and evaluation program will use a building-block approach in the design of the overall exercise program. This building-block approach ensures successful progression in exercise design, complexity, and execution, and allows for the appropriate training and preparation to take place in the jurisdiction or area conducting the exercise. Exercises conducted at all jurisdictional levels within the Bay Area – local, operational area, full region - should follow the planning, training, exercise, and improvement plan cycle. As the cycle indicates, it is recommended that jurisdictions accomplish the following specific planning steps prior to conducting an exercise:

- Assess current operations plans for completeness and relevance
- Assess the current level of training and operational plan familiarity for all relevant agencies within the jurisdiction
- Conduct necessary training for all relevant agencies
- Train personnel on newly received equipment
- Conduct exercises using equipment, training, and operations plans
- Develop an After Action Report (AAR) that captures the lessons learned.

The exercise progression for each jurisdiction is to move from a seminar to a table top, to a functional exercise, and finally, to a full scale exercise. These particular exercise types allow for a logical progression of regional and jurisdictional preparedness by increasing in size,

complexity, and stress factor, while allowing for significant learning opportunities that effectively complement, build upon, and directly lead into one another. This model is flexible enough to allow for the addition of other desired exercise types.

The Bay Area's Urban Shield Exercise

Urban Shield is a national model, full-scale exercise, designed to assess and validate the speed, effectiveness and efficiency of capabilities, as well as test the adequacy of regional policies, plans, procedures and protocols. Urban Shield incorporates regional critical infrastructure, emergency operations centers, regional communication systems, equipment and assets, as well as personnel representing all aspects of emergency response including intelligence, law enforcement, explosive ordnance disposal units, fire, EMS, etc. The Urban Shield exercise is unique because of its focus on training during the exercise. This training provides first responders, homeland security officials, emergency management officials, private and non-governmental partners, and other personnel with the knowledge, skills, and abilities needed to perform key tasks required in large-scale disasters.

Objective 8.1: Strengthen the Regional Exercise and Evaluation Program

The Bay Area exercise program tests and evaluates the region's enhancement and/or sustainment of the right level of capability based on the risks faced by the region with an evaluation process that feeds identified capability gaps and strengths directly into the region's risk management and planning process for remediation or sustainment.

Objective 8.1 Implementation Steps and Resource Elements

PLANNING	
8.1-P1	Develop and maintain a comprehensive regional exercise plan and program for the development and conduct of exercises based on risk and capability needs that cover the spectrum of prevention, protection, mitigation, response and recovery mission areas.
8.1-P2	Coordinate with local jurisdictions to incorporate locally driven needs into the regional exercise plan.
8.1-P3	Collaborate with local jurisdictions to develop regional exercise goals to meet multiple exercise requirements and foster participation in regional exercises.
8.1-P4	Coordinate regional exercises with State driven exercises (Golden Guardian) to reduce duplication of effort.
8.1-P5	Design After Action Reports and improvement plans that are built from capability targets and capture capability proficiencies and gaps that can be readily assessed and quantified for planning purposes.
8.1-P6	Host agency of major exercise(s) should reconvene participants to review key findings to ensure lessons learned are identified and taken back to all involved agencies.
8.1-P7	The exercise program management office will evaluate the feasibility of developing a regional exercise calendar.
8.1-P8	The exercise program management office will review HSEEP portal for trends on best practices and lessons learned and report this information to the Training and

	Exercise Committee on an as needed basis.
EQUIPMENT	
8.1-E2	Procure authorized and necessary equipment to conduct exercises.
TRAINING	
8.1-T1	Train exercise planning and evaluation staff at the regional and jurisdictional levels on exercise design, management and evaluation procedures.
EXERCISES	
8.1-Ex1	Develop at least one, regional multi-disciplinary full-scale exercise consistent with the identified theme of the annual statewide exercise and run the exercise at multiple locations with multiple partners in the region.
8.1-Ex2	Conduct multiple exercises at the sub-regional and jurisdictional level annually.

Objective 8.2 Enhance the Regional Training Program

The Bay Area has a multi-discipline multi-jurisdictional risk and capabilities based training program that enhances and sustains priority capabilities in order to mitigate the region's most pressing risks.

Objective 8.2 Implementation Steps and Resource Elements

PLANNING	
8.2-P1	Develop and maintain a comprehensive regional training plan and program for the development and conduct of training based on risk and capability needs that cover the spectrum of prevention, protection, mitigation, response and recovery mission areas.
EQUIPMENT	
8.2-E1	Materials and supplies, reproduction of materials, and such other equipment needed to conduct the training and support the training program.
8.2-E2	Tools and systems to document and manage training programs.
TRAINING	
8.2-T1	Implement training to all disciplines based on the regional training program.

SECTION 7
STRATEGY IMPLEMENTATION

7.1 Implementation Overview

With the development and update of the *Strategy*, the Bay Area must have a comprehensive implementation process to ensure the data and priorities encapsulated in the *Strategy* actually drive the region's policies, structures, projects and investments. This requires assigned roles and responsibilities and a process and tools that link the Bay Area's investments back to the *Strategy's* goals and objectives.

The Bay Area UASI Management Team will have overall responsibility for managing and tracking implementation of the *Strategy*. This will include day-to-day management of the *Strategy* and ensuring that it is updated and followed. This will be done through the development of investment justifications and annual reporting (discussed in the following section).

The Bay Area's strategic approach to implementing the *Strategy* through investing will be premised on two overarching principles:

- First, sustain current priority programs and capabilities in the region.
- Second, close gaps in capabilities with an emphasis on those capabilities that have the highest risk relevance and the largest capability gaps

Given the current fiscal reality of strained state and local budgets, the Bay Area will strive to integrate the various homeland security and preparedness grants that flow into the region to include those from DHS and HHS. This will be done while respecting the responsibilities and authorities vested in individual grantees.

7.2 Investment Justifications

The purpose of submitting investment justifications to DHS is to obtain grant funding necessary to implement the goals and objectives of this *Strategy*. Investment justifications that fall outside the goals and objectives of this *Strategy* will not be submitted. In addition, funding received from other sources related to homeland security may be leveraged in accordance with the goals and objectives of this *Strategy*.

The investment justification process must be viewed as the culmination of a comprehensive homeland security planning and implementation process and not simply as a ninety-day application writing event in order to ask for money from the federal government. This process requires specific steps and management in order to ensure the region as a whole presents a unified investment picture to DHS and the State of California. As such, the *Strategy* outlines, at a high level, those steps that, at a minimum, must be taken in order to ensure the regions operates efficiently and effectively in the planning and investment process.

7.3 Strategy Implementation Process

While the specific details concerning the *Strategy's* implementation process may vary from year to year, certain fundamentals will be followed to ensure the region is achieving and tracking its homeland security goals and objectives. For the Bay Area, given its size and diversity, the process will involve a combination of jurisdictional, sub-regional and region-wide efforts and responsibilities.

7.3.1 Strategy Implementation Guidance

For each fiscal year, the UASI Management Team will develop specific strategy implementation guidance for working groups and applicants to follow during each investment justification cycle relative to the UASI grant program. This will include planning timelines, investment strategies and priorities for a given grant cycle, grant guidance to include funding allocation formulas and allowable spending areas, project templates, and such other materials and policies as necessary.

7.3.2 Project Template

For the UASI grant cycle, and as part of the implementation guidance, the UASI Management Team will develop a project template to be used by applicants to outline proposed projects. The template will be designed to link projects to the Bay Area Strategy by requiring applicants to link to the goals, objectives and implementation steps, including POETE elements, within the Strategy. It is through the project templates that the Bay Area will first link dollars to objectives and in turn link capabilities to dollars to help better answer where and how the region is better prepared.

7.3.3 Project Development

The project template designed by the Bay Area UASI Management Team will be a primary tool with which to vet proposed projects by the region's stakeholders. Only upon vetting by the Bay Area UASI Management to ensure compliance with grant guidelines and UASI policy or the work group shall a project be put forward for final approval by the Approval Authority to implement a specific goal and objective(s) in the Strategy.

With support from the Management Team, the entities, planning hubs, or work groups responsible for overseeing the implementation of the goals and objectives in the Strategy will work with project managers and others to track whether an implementation step within each objective is complete, partially complete or ongoing and report this information to the Advisory Group and Approval Authority as necessary. A complete step is one that is finished and requires no additional resources for implementation. A partially complete step is one where some, but not all, of the step is finished and requires additional resources for completion. An ongoing step is one that may be finished insofar as the plan has been written or the equipment has been purchased but where additional resources are need for sustainment.

SECTION 8
STRATEGY EVALUATION

8.1 Evaluation Overview

In order to truly understand what value the Bay Area is getting for its homeland security investments, the region must have a consistent mechanism by which to measure the effectiveness of the homeland security activities – plans developed, personnel hired, organization and operations conducted, equipment purchased, number of people trained, and exercises conducted – generated through those investments.

In 2011, the Bay Area conducted a preliminary analysis of UASI grant effectiveness. The report qualitatively and quantitatively documented progress made by the Bay Area in building capabilities, reducing risk, and enhancing regional preparedness through investments that support the goals and objectives in the *Bay Area Homeland Security Strategy*, which aligns with the National Preparedness Guidelines and supports the implementation of the State of California Homeland Security Strategy and the National Security Strategy. The report serves as a baseline for future assessments and evaluations of how the region is implementing its Strategy and the effectiveness of the grant programs and other funding sources utilized to do so.

8.2 The Evaluation Process

The long-term goal for the Bay Area is to build a process and tools in order to qualitatively and quantitatively document progress made by the Bay Area in building capabilities, reducing risk, and enhancing regional preparedness based on implementing the goals and objectives outlined in the *Bay Area Homeland Security Strategy*. The result will be the *Bay Area Effectiveness Report*.

Where the *Bay Area Homeland Security Strategy* presents what the region needs to achieve or sustain in homeland security, the *Bay Area Effectiveness Report* presents what the region has actually accomplished in the area of homeland security as a result of investments called for in the *Strategy* from different sources, including local budgets, state budgets, and grants.

Built into each goal and objective in this *Strategy* is a previously conducted risk and capabilities assessment and gap analysis which helped prioritize each goal and objective and identify gaps in each capability. To measure the implementation of the *Strategy*, the Bay Area will evaluate each goal and its related objectives based upon the following high level evaluation guidelines the implementation of which shall be developed and coordinated by the UASI Management Team:

- Update the outcome for each objective in the *Strategy*. This outcome will set the agreed upon broad and overall target level of capability upon which evaluation for each objective will be based.

- Develop Bay Area specific preparedness and performance measures and targets based on the TCL/Core Capabilities List and NIMS/SEMS resource types as well as other resources. Both the TCL and the NIMS/SEMS have laid out critical tasks, preparedness and performance measures, targets and standards for resources that can serve as useful

indicators regarding the current level of preparedness in a given capability area. However, they are not tailored to the specific needs of a given jurisdiction or region. Therefore, the Bay Area must define those targets, measures, and metrics specifically for the region and will consider doing so according to the Core Capabilities or some combination of the TCL and Core Capabilities in the near future.

- Conduct the exercise and evaluation program. The Bay Area's HSEEP must be **designed upfront** to test whether target capability performance outcomes and related critical tasks are being achieved. Exercises should be designed around testing and evaluating the region's ability to prevent, protect against, mitigate, respond to and recover from the highest risk terrorism scenarios against the highest risk CIKR across the region.

- Inventory investments and projects based on each capability. Each objective has a set of implementation steps broken out by POETE, which coincides with the funding solution areas allowed under most DHS grant programs. That data will be used directly against the performance measures to help determine increases in capability and better understand allocation of resources by capability.

8.3 Methods for Evaluation

Evaluating the implementation of this *Strategy* will be done in the form of measuring whether risk based capability needs are being implemented and tracked. Each objective in this *Strategy* has a set of outcomes in the form of performance objectives tied to it. Those outcomes will form the basis or capability target for measuring whether the region is on pace to achieving or maintaining that objective. It must be noted that each outcome in this *Strategy* is set at the UASI regional level and not at the jurisdictional level within the Bay Area UASI. Thus, each jurisdiction may have different outcomes based on jurisdictional level planning efforts that may be influenced by unique risk and need factors.

To date, there is no single agreed upon method to assess capabilities. Rather, there are a number of data sources and methodologies to help with this process each of which the Bay Area will utilize in the evaluation process:

- Self-Assessments
- Performance based assessments (real world and exercise events)
- Modeling and simulation

8.3.1 Self Assessments

Self-assessments are those where members of the Bay Area homeland security community convene to evaluate their capability levels based on a series of questions and defined metrics and measures. These assessments can cover a wide array of capabilities and public safety disciplines or be targeted to a specific capability or function (e.g., law enforcement). While useful, self-assessments are subjective and can be influenced by factors including the number and type of attendees at the assessment and the questions asked or not asked.

Self-assessments will most often involve workshops, interviews or webinars whereby subject matter expert participants will be asked a series of questions to get an understanding of how they view their level of ability to perform a specific task or set of tasks during a given scenario. For example, SWAT or bomb squad team-based capability assessments can begin with audits of team equipment, supplies, and training records, as well as on site visits to interview team members to capture data.

The Bay Area has undergone several self-assessments over the last several years, most recently in 2009, 2010 again in 2011. In 2009, the Bay Area conducted a region-wide assessment whereby subject matter experts from across the region evaluated the region's level of ability within each of the 37 Target Capabilities. A similar assessment was conducted in 2010 with the difference being the assessment was broken out into four assessments. In 2011, a region wide assessment was once again conducted along with assessments at each of the 12 operational areas.

8.3.2 Performance Based Assessments

Performance-based assessments are most common in the form of exercises, although an ability to track and measure performance during a real world incident would provide the most accurate picture of capability. For the Bay Area, performance-based exercises should be based on testing the region's ability to prevent, protect against, mitigate, respond to and recover from the highest risk terrorism scenarios against the highest risk CIKR as outlined in the risk overview section of the *Strategy*. The Bay Area's primary mechanism for performance based assessment is the Urban Shield Full Scale Exercise conducted annually.

Urban Shield tests the Bay Area's ability to manage numerous on-going critical incidents through the use of multiple incident commands. The critical incidents take place in a variety of venues over an extended period of time. The exercise requires full implementation of the components of the NIMS and SEMS. An Incident Command System (ICS) structure, with four Area Commands and a Department Operations Center are implemented to manage this extremely large exercise.

8.3.3. Modeling and Simulation Assessments

Quantitative capability models can be used to assist with planning and resource allocation, and to help determine capability gaps. Models can provide an independent baseline estimate of required levels of capability for a given jurisdiction or the region, based upon national averages, demographic information, and risk criteria. These models can use quantitative data to inform investment decisions by estimating the full lifecycle costs of achieving a given level of a capability, identifying capability gains from investments, and optimizing placement of new resources.

Appendix A
Crosswalk of Target and Core Capabilities

Target Capability	Core Capability
Planning	Planning
Critical Infrastructure Protection	Physical Protective Measures
Information Gathering and Indicators and Warnings	Intelligence and Information Sharing
Intelligence and Information Sharing and Dissemination	
Intelligence Analysis and Production	
Risk Management	Risk Management for Protection Programs and Activities
Responder Safety and Health	Environmental Response Safety and Health
WMD/HazMat Response	
Environmental Health	
Counter-Terrorism and Law Enforcement	Interdiction and Disruption
Emergency Public Safety and Security Response	On-Scene Security and Protection
Explosive Device Response Operations	
On-site Incident Management	Operational Coordination
EOC Management	
Emergency Public Information and Warning	Public Information and Warning
Triage and Pre-Hospital Treatment	Public Health and Medical Services
Medical Surge	
Mass Prophylaxis	
Isolation and Quarantine	
Laboratory Testing	
Epidemiological Surveillance and Investigation	
Medical Supplies Management and Distribution	
Communications	Operational Communications
Fire Incident Response Support	Public and Private Services and Resources
Volunteer Management and Donations	
Critical Resource Logistics and Distribution	
Search and Rescue (Land Based)	Mass Search and Rescue
CBRNE Detection	Screening, Search and Detection
Restoration of Lifelines	Infrastructure Systems
Structural Damage Assessment	
Economic and Community Recovery	Economic Recovery
Community Preparedness and Participation	Community Resilience
Citizen Evacuation and/or Shelter In-Place	Critical Transportation
Mass Care	Mass Care Services
Fatality Management	Fatality Management Services
Food and Agriculture Safety and Defense	Supply Chain Integrity and Security
Animal Disease Emergency Support	
Not Applicable	Risk and Disaster Resilience Assessment
	Situational Assessment
	Long Term Vulnerability Reduction
	Access Control and Identity Verification
	Forensics and Attribution
	Threat and Hazard Identification
	Cyber Security
	Health and Social Services
	Housing
	Natural and Cultural Resources

Appendix B
Record of Changes

The following table tracks the significant changes made to the *Strategy*. Revisions that should be documented include the following:

- Updates in risk and capability assessment information.
- Completion or removal of implementation steps and the addition of new implementation steps.
- Addition, reprioritization or other change in goals and objectives following a capabilities assessment or similar analysis.
- Changes in Urban Area organization.
- Changes in vision or mission.

Date of Change	Page(s)	Brief Description of Changes
October 2012	19	Section 2.2 Prior and Ongoing Planning Efforts. Added reference to new regional emergency public information and warning strategic plan.
October 2012	23	Section 4.3 Core Capabilities. New section added based on the 2011 Core Capabilities from the National Preparedness Goal. This replaces the Target Capabilities List previously referenced.
October 2012	25	Section 4.4. Public Health and Medical Capabilities. New section 4.4 added on CDC public and health and medical capabilities and their relationship to the *Strategy's* goals and objectives.
October 2012	31	Section 5.4 Critical Infrastructure and Key Resources. The number of CIKR is now over 8,500.
October 2012	33	Section 5.5 Risk Profile. Updated threats and hazards and added likelihood versus risk comparison.
October 2012	36-37	Section 5.6 Asset Risk by Sector. Update all data.
October 2012	38-40	Section 5.7 Capabilities Assessment. Added new section. New risk relevant capabilities list and table linking threats, CIKR sectors and capabilities all based on new data and taxonomy of Core Capabilities.
October 2012	41	Section 6.2 Organizing the Goals and Objectives. All objectives in the *Strategy* are newly aligned with Core Capabilities and Public Health Preparedness Capabilities (for medical and health objectives) in place of the Target Capabilities. This includes new language summarizing each objective.
October 2012	44-45	Goal 1, Objective 1. Added new implementation steps: 1.1-P4, 1.1-P13, 1.1-P14 and 1.1-Ex2.
October 2012	50	Goal 2, Objective 2.1. Added new implementation step 2.1-O1.
October 2012	52-53	Goal 2, Objective 2.2. Removed prior *Strategy* version implementation steps 2.3-P2 and 2.5-O1. Added new implementation steps 2.2-T9, 2.2-T10, 2.2-T11, and 2.2-T12.

October 2012	54	Goal 2, Objective 2.3. Added new implementation step 2.3-O2.
October 2012	55-56	Goal 3. Updated introductory language explaining BayRICS and BayComm.
October 2012	57	Goal 3, Objective 3.1. Added new implementation steps 3.1-E5 and 3.1-Ex4.
October 2012	58-59	Goal 4. Updated introductory language to account for new NFPA standards and the integration of EOC management into the goal
October 2012	61-62	Goal 4, Objective 4.2. Removed prior *Strategy* version implementation step 4.2-E1. Added new implementation steps 4.2-T5, 4.2-T6, and 4.2-Ex2.
October 2012	62-63	Goal 4, Objective 4.3. Removed prior *Strategy* version implementation step 4.3-T3. Added new implementation steps 4.3-P1 and 4.3-E3.
October 2012	63-64	Goal 4, Objective 4.4. Moved prior *Strategy* version implementation step 4.4-P2 to current *Strategy* 4.4-O1. Removed prior *Strategy* 4.4-T1. Added new implementation steps 4.4-E1, 4.4-E4 and 4.4-T1.
October 2012	65-66	Goal 4, Objective 4.6. Removed prior *Strategy* version implementation step 4.6-P1. Removed prior *Strategy* version implementation steps 4.6-E1, 4.6-E2, 4.6-T1, 4.6-T2, 4.6-T3, 4.3-T6 and 4.6-Ex1. Added new implementation steps 4.6-P1, 4.6-E1, 4.6-E2, 4.6-T1, 4.6-T2, 4.6-T5, 4.6-T9, 4.6-T10, 4.6-T11, and 4.6-Ex1.
October 2012	67-68	Goal 4, Objective 4.7. Combined prior *Strategy* version objectives 4.7 and 6.1. Removed prior *Strategy* version implementation steps 4.7-P1, 4.7-P3, 6.1-P1, 6.1-P2, 6.1-P3, 6.1-P6, 6.1-O1, 4.7-Ex1, 4.7-Ex5, and 6.1-Ex2. Added new implementation step 4.7-P11.
October 2012	70	Goal 4, Objective 4.9. Removed prior *Strategy* version implementation step 4.9-P1, 4.9-P5 and 4.9-E1. Added new implementation steps 4.9-P1, 4.9-O1, 4.9-E1 and 4.9-T1.
October 2012	72-73	Goal 5, Objective 5.1. Removed prior *Strategy* version implementation step 5.1-Ex1 and 5.1-Ex2. Added new implementation steps 5.1-T5, 5.1-Ex1 and 5.1-Ex2.
October 2012	76	Goal 5, Objective 5.6. Added new implementation step 5.6-E1.
October 2012	79-81	Goal 6, Objective 6.1. All implementation steps are new based upon new regional emergency public information and warning capability assessment and strategic plan. All other implementation steps from prior *Strategy* version were either updated or removed.
October 2012	81	Goal 6, Objective 6.2. Added new implementation step 6.2-P2.
October 2012	82	Goal 6, Objective 6.3. Added updates to implementation steps 6.3-P1, and 6.3-P3. Added new implementation step 6.3-Ex2.
October 2012	88	Goal 8. Added goal, vision and mission statements for the region's training and exercise program.
October 2012	92	Section 8.2. Removed prior section and updated language on sustainment policy and strategy.

October 2012	93	Section 8.3.3. Updated title of the section to "project development" and added language on the role of the work groups and planning hubs.

To: **Bay Area UASI Approval Authority**

From: **Catherine Spaulding, Assistant General Manager**

Date: **November 8, 2012**

Re: **Item 7: 2013 Priority Capability Objectives**

Recommendation:

Approve the 2013 priority capability objectives as funding criteria to be included in the 2013 Project Proposal Guidance for hub/workgroup proposed projects.

Discussion/Description:

I. Background

The Bay Area's risk management program identifies capabilities that are the most "risk relevant" and where gaps in capability are of the greatest significance so that the region may target investments in this area. This prioritized and strategic approach is consistent with federal guidance and frameworks.

In the past, at the direction of the Approval Authority, the Management Team developed priority capability objectives to help guide the proposal and selection process of projects that come through the workgroups and hubs. The Management Team included these priority capability objectives in the project proposal guidance as funding criteria. Currently, the 2013 Project Proposal Guidance includes the 2012 priority capability objectives. The Management Team would like to update the guidance with the 2013 priority capability objectives that have resulted from the most recent risk and capability assessment.

II. List of 2013 Priority Capability Objectives

The following is the proposed list of 2013 priority capability objectives. Please see last section for a detailed description of each objective.

2013 Priority Capability Objectives

Goal 1 Strengthen the Regional Risk Management and Planning Program
Objective 1.1 Enhance Planning, Threat and Hazard Identification, and Risk Management Capabilities
Goal 2 Enhance Information Analysis and Infrastructure Protection Capabilities
Objective 2.2 Strengthen Terrorism Attribution, Interdiction and Disruption Capabilities
Objective 2.3 Increase Critical Infrastructure Protection
Goal 3 Strengthen Communications Capabilities
Objective 3.1 Enhance Operational Communications Capabilities
Goal 4 Strengthen CBRNE Detection, Response, and Decontamination Capabilities
Objective 4.1 Improve Public and Private Services and Resources Management through Fire Incident Response Support
Objective 4.2 Strengthen Mass Search and Rescue Capabilities
Objective 4.4 Strengthen On-Scene Security and Protection through Explosive Device Response Operations
Objective 4.6 Enhance Environmental Response/Health and Safety through WMD/HazMat Response and Decontamination Capabilities
Objective 4.7 Strengthen Operational Coordination Capabilities
Objective 4.8 Improve Environmental Response/Health and Safety through Responder Safety and Health
Objective 4.9 Enhance On-Scene Security and Protection through Emergency Public Safety and Security Response
Goal 5 Enhance Medical and Public Health Preparedness
Objective 5.1 Enhance Emergency Triage and Pre-Hospital Treatment
Objective 5.3 Strengthen Medical Countermeasure Dispensing
Objective 5.8 Enhance Fatality Management
Goal 6 Strengthen Emergency Planning and Citizen Preparedness Capabilities
Objective 6.1 Strengthen Emergency Public Information and Warning Capabilities
Objective 6.2 Enhance Critical Transportation Capabilities
Objective 6.3 Improve Mass Care
Objective 6.4 Increase Community Resiliency
Goal 7 Enhance Recovery Capabilities
Objective 7.1 Strengthen Infrastructure Systems
Objective 7.2 Enable Economic Recovery

III. Comparison to Prior Years

A comparison of this year's list to prior years is complicated by the transition from the target capability list to core capabilities. This change at the federal level has created new categorization through which we now must understand our gaps and thus has prompted us to change the wording of our specific objectives. Nonetheless, in substance the list of 2013 priority capability objectives is very consistent with that of prior years although it is slightly broader in the areas of CBRNE (Goal 4) and Emergency Planning and Citizen Preparedness (Goal 6).

Please note that Goal 8, Training and Exercise, is not included in the 2013 priority capability list. This is because the priority capability objectives are intended only for the workgroup and hub planning process and those objectives have historically been met through sustainment allocations.

IV. Methodology

The Management Team developed the 2013 priority capability objectives based on the gap analysis in the recently completed 2012 Bay Area Homeland Security Strategy. Nearly all of the core capabilities that had gaps that "need extra attention" or "need attention" have been included. In addition, several core capabilities that are particularly relevant to the highest risk hazards that we face in the Bay Area have been included given the critical need to sustain such capabilities. (Such highest risk hazards include terrorist use of explosives, earthquakes, floods, and contagious biological incidents.) The result is this prioritized list of 18 core capabilities out of a total of 31:

2013 Priority Core Capabilities, Assessment Findings

Core Capability	Risk Relevance	Level of Ability	Gap Analysis
Infrastructure Systems	2	Low	Needs Extra Attention
Long Term Vulnerability Reduction	5	Low	Needs Extra Attention
Community Resilience	6	Low	Needs Extra Attention
Forensics and Attribution	11	Low	Needs Extra Attention
Interdiction and Disruption	9	Medium Low	Needs Attention
Public Information and Warning	12	Medium Low	Needs Attention
Planning	13	Medium High	Adequate
Fatality Management	21	Low	Needs Attention
Operational Coordination	15	Medium Low	Needs Attention
Operational Communications	16	Medium Low	Needs Attention
On-Scene Security and Protection	18	Medium Low	Needs Attention
Public Health	19	Medium Low	Needs Attention
Critical Transportation	22	Medium Low	Needs Attention
Economic and Community Recovery	27	Low	Needs Attention
Public and Private Services	30	Low	Adequate
Mass Care Services	29	Medium Low	Adequate
Mass Search and Rescue	23	Medium High	Adequate
Environmental Response	24	Medium High	Adequate

In order to arrive at the 2013 priority capability objective list, the priority core capabilities (listed immediately above) were converted into the objectives that were used in the 2012 Bay Area Homeland Security Strategy and presented by the eight Department of Homeland Security Goals.

Please note, as explained in the 2012 Bay Area Homeland Security Strategy, some objectives may reference both a core capability and a target capability. This is due to the fact that certain core capabilities are ambiguous in their terms and require added definition and that some core capabilities are so broad that for planning purposes the former target capability language is used because it is more specific.

V. Detailed Description of 2013 Priority Capability Objectives

Goal 1 Strengthen the Regional Risk Management and Planning Program
Objective 1.1 Enhance Planning, Threat and Hazard Identification, and Risk Management Capabilities: The Bay Area is able to identify and assess the threats and hazards that pose the greatest risk to the whole community. The region can prioritize and select appropriate capability-based planning investments and solutions for prevention, protection, mitigation, response, and recovery concerning those risks; monitor the outcomes of allocation decisions; and undertake corrective and sustainment actions.
Goal 2 Enhance Information Analysis and Infrastructure Protection Capabilities
Objective 2.2 Strengthen Terrorism Attribution, Interdiction and Disruption Capabilities: The Bay Area's law enforcement community (federal, state and local) and other public safety agencies can conduct forensic analysis and attribute terrorist threats and acts to help ensure that suspects involved in terrorist and criminal activities related to homeland security are successfully identified, deterred, detected, disrupted, investigated, and apprehended.
Objective 2.3 Increase Critical Infrastructure Protection: The region can assess the risk to physical & cyber critical infrastructure and key resources from acts of terrorism, crime, and natural hazards and deploy a suite of actions to enhance protection and reduce the risk to the region's critical infrastructure and key resources from all hazards. This includes a risk-assessment process and tools for identifying, assessing, cataloging, and prioritizing physical and cyber assets from across the region.
Goal 3 Strengthen Communications Capabilities
Objective 3.1 Enhance Operational Communications Capabilities: The emergency response community in the Bay Area has the ability to provide a continuous flow of mission critical voice, data and imagery/video information among multi-jurisdictional and multidisciplinary emergency responders, command posts, agencies, and Bay Area governmental officials for the duration of an emergency response operation. The Bay Area can also re-establish sufficient communications infrastructure within the affected areas of an incident, whatever the cause, to support ongoing life-sustaining activities, provide basic human needs, and transition to recovery.
Goal 4 Strengthen CBRNE Detection, Response, and Decontamination Capabilities
Objective 4.1 Improve Public and Private Services and Resources Management through Fire Incident Response Support: Fire service agencies across the Bay Area can dispatch initial fire suppression resources within jurisdictional response time objectives, and firefighting activities are conducted safely with fire hazards contained,

controlled, extinguished, and investigated, with the incident managed in accordance with local and state response plans and procedures.
Objective 4.2 Strengthen Mass Search and Rescue Capabilities: Public safety personnel in the Bay Area are able to conduct search and rescue operations to locate and rescue persons in distress and initiate community-based search and rescue support-operations across a geographically dispersed area. The region is able to synchronize the deployment of local, regional, national, and international teams to support search and rescue efforts and transition to recovery.
Objective 4.4 Strengthen On-Scene Security and Protection through Explosive Device Response Operations: Public safety bomb squads in the Bay Area are able to conduct threat assessments; render safe explosives and/or hazardous devices; and clear an area of explosive hazards in a safe, timely, and effective manner. This involves the following steps in priority order: ensure public safety; safeguard the officers on the scene (including the bomb technician); collect and preserve evidence; protect and preserve public and private property; and restore public services.
Objective 4.6 Enhance Environmental Response/Health and Safety through WMD/HazMat Response and Decontamination Capabilities: Responders in the Bay Area are able to conduct health and safety hazard assessments and disseminate guidance and resources, including deploying HazMat response and decontamination teams, to support immediate environmental health and safety operations in the affected area(s) following a WMD or HazMat incident. Responders are also able to assess, monitor, clean up, and provide resources necessary to transition from immediate response to sustained response and short-term recovery.
Objective 4.7 Strengthen Operational Coordination Capabilities: The Bay Area has a fully integrated response system through a common framework of the Standardized Emergency Management System, Incident Command System and Unified Command including the use of emergency operations centers, incident command posts, emergency plans and standard operating procedures, incident action plans and the tracking of on-site resources in order to manage major incidents safely, effectively and efficiently. EOCs in the Bay Area can effectively plan, direct and coordinate information and activities internally within EOC functions, and externally with other multi-agency coordination entities, command posts and other agencies to effectively coordinate disaster response operations.
Objective 4.8 Improve Environmental Response/Health and Safety through Responder Safety and Health: The Bay Area can reduce the risk of illnesses or injury to first responder, first receiver, medical facility staff member, or other skilled support personnel as a result of preventable exposure to secondary trauma, chemical/radiological release, infectious disease, or physical/emotional stress after the initial incident or during decontamination and recovery.
Objective 4.9 Enhance On-Scene Security and Protection through Emergency Public Safety and Security Response: Public safety agencies within the Bay Area are able to keep the public and critical infrastructure safe by securing a particular incident scene and maintaining law and order following an incident or emergency to include managing the criminal justice prisoner population.
Goal 5 Enhance Medical and Public Health Preparedness
Objective 5.1 Enhance Emergency Triage and Pre-Hospital Treatment: Emergency medical services (EMS) resources across the Bay Area can effectively and appropriately be dispatched (including with law enforcement tactical teams) to provide pre-hospital triage, treatment, transport, tracking of patients, and documentation of care appropriate for the incident, while maintaining the capabilities of the EMS system for

continued operations up to and including for mass casualty incidents.
Objective 5.3 Strengthen Medical Countermeasure Dispensing: With the onset of an incident, the Bay Area is able to provide appropriate medical countermeasures (including vaccines, antiviral drugs, antibiotics, antitoxin, etc.) in support of treatment or prophylaxis (oral or vaccination) to the identified population in accordance with local, state and federal public health guidelines and/or recommendations.
Objective 5.8 Enhance Fatality Management: Bay Area agencies, e.g., law enforcement, public health, healthcare, emergency management, and medical examiner/coroner) are able to coordinate (to ensure the proper recovery, handling, identification, transportation, tracking, storage, and disposal of human remains and personal effects; certify cause of death; and facilitate access to mental/ behavioral health services to the family members, responders, and survivors of an incident.
Goal 6 Strengthen Emergency Planning and Citizen Preparedness Capabilities
Objective 6.1 Strengthen Emergency Public Information and Warning Capabilities: The region has an interoperable and standards-based system of multiple emergency public information and warning systems that allows Bay Area leaders and public health and safety personnel to disseminate prompt, clear, specific, accurate, and actionable emergency public information and warnings to all affected members of the community in order to save lives and property concerning known threats or hazards.
Objective 6.2 Enhance Critical Transportation Capabilities: The Bay Area can provide transportation (including infrastructure access and accessible transportation services) for response priority objectives, including the evacuation of people, including those with access and functional needs, and animals, and the delivery of vital response personnel, equipment, and services into the affected incident areas to save lives and to meet the needs of disaster survivors.
Objective 6.3 Improve Mass Care: Mass care services, including sheltering, feeding, and bulk distribution, are rapidly, effectively and efficiently provided for the impacted population, including those with access and functional needs, in a manner consistent with all applicable laws, regulations and guidelines.
Objective 6.4 Increase Community Resiliency: The Bay Area has a formal structure and process for ongoing collaboration between government and nongovernmental resources at all levels to prevent, protect/mitigate, prepare for, respond to and recover from all known threats and hazards.
Goal 7 Enhance Recovery Capabilities
Objective 7.1 Strengthen Infrastructure Systems: The Bay Area can provide accurate situation needs and damage assessments by utilizing the full range of engineering, building inspection, and code enforcement services in a way that maximizes the use of resources, aids emergency response, implements recovery operations, and restores the affected area to pre-incident conditions as quickly as possible. The Bay Area can coordinate activities between critical lifeline operations and government operations to include a process for getting the appropriate personnel and equipment to the disaster scene so that lifelines can be restored as quickly and as safely as possible to support ongoing emergency response operations, life sustainment, community functionality, and a transition to recovery
Objective 7.2 Enable Economic Recovery: During and following an incident, the Bay Area can estimate economic impact, prioritize recovery activities, minimize business disruption, and provide individuals and families with appropriate levels and types of relief with minimal delay.

To: **Bay Area UASI Approval Authority**

From: **Tristan Levardo, CFO**

Date: **November 8, 2012**

Re: **Item 8A: FY2010 Interoperable Emergency Communications Expenditure Report**

Action or Discussion Item:

Discussion

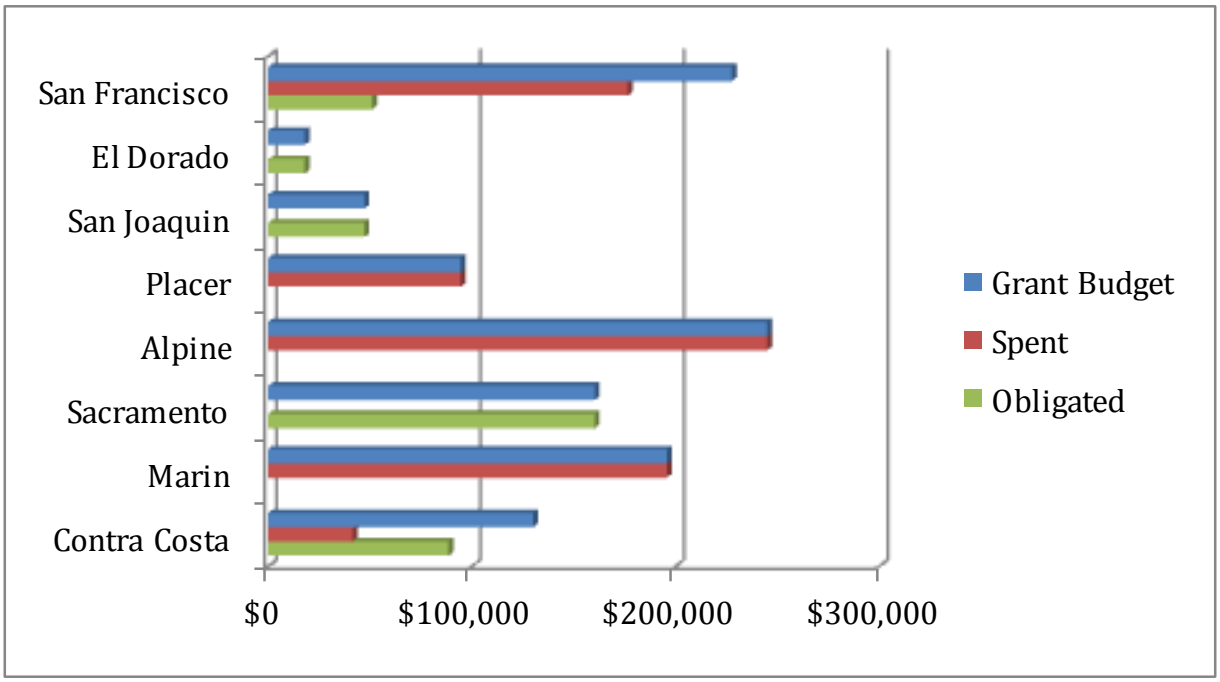
Summary

The Interoperable Emergency Communications Grant Program (IECGP) provides funding support to improve regional interoperable emergency communications, including communications in collective response to natural disasters, acts of terrorism, and other man-made disasters. The performance period for this grant expires on March 31, 2013, while subrecipients are given up to December 31, 2012 to accomplish their deliverables. Match requirement of 25% is applied on equipment expenditures only.

Financial Information:

Jurisdiction	Grant Budget	Match Budget	Spent	Actual Match	Obligated	Balance for Reallocation	% Spent
Contra Costa	$130,000		$41,500		$88,500		32%
Marin	195,727		195,727				100%
Sacramento	160,273	$28,158			160,273		
Alpine	245,000	81,667	$245,000	$81,667			100%
Placer	94,500	31,500	94,500	31,500			100%
San Joaquin	50,000				47,250	$2,750	
El Dorado	124,500	6,000			18,000	106,500	
San Francisco	227,632		176,537		51,095		78%

Total	$1,227,632	$147,325	$753,264	$113,167	$365,118	$109,250	61%



Alpine, Marin and Placer Counties have completed their projects. El Dorado has returned unused funds of $ 106,500 due to unsuccessful attempts to award a contract. The rest of the jurisdictions have reported that projects are all underway.

Staff Recommendation:

N/A

Action Requested of the UASI Approval Authority:

Information Only

To: **Bay Area UASI Approval Authority**

From: **Tristan Levardo, CFO**

Date: **November 8, 2012**

Re: **Item 8B: Travel Expenses paid during the period July to September 2012**

Action or Discussion Item:

Discussion

Travel Expenses

The table below summarizes all travel expenses incurred by the Management Team for the period of July 1 through September 30, 2012.

Employee	Destination	Travel Dates	Total Charges	Funding Source	Purpose
Craig Dziedzic	Boston, MA	6/16-23/12	1,028.60	FY10 UASI	Leadership Initiative Training
Craig Dziedzic	San Diego, CA	7/8-11/12	1,077.24	FY10 UASI	Quarterly UASI Meeting
Kevin Jensen	San Diego, CA	7/8-11/12	311.60	FY10 UASI	Quarterly UASI Meeting
Craig Dziedzic	Washington, D.C.	7/28-8/1/12	1,923.80	FY10 UASI	National Preparedness Conference
Mary Landers	Washington, D.C.	8/6-11/12	1,926.35	FY10 UASI	FEMA Symposium
Mary Landers	Seattle, WA	9/7-20/12	1,089.74	FY10 RCPGP	RCPGP Workshop
Frances Culp	Seattle, WA	9/7-20/12	1,221.85	FY10 RCPGP	RCPGP Workshop

Employee	Destination	Travel Dates	Total Charges	Funding Source	Purpose
Kevin Jensen	Los Angeles, CA	9/13/12	425.60	FY10 UASI	UASI Meeting
	Total		$ 9,004.78		

Staff Recommendation:

N/A

Action Requested of the UASI Approval Authority:

Information Only

To: Bay Area UASI Approval Authority

From: Janell Myhre, Regional Program Manager

Date: November 8, 2012

Re: Item 9: UASI FY13 Project Proposal Update

Recommendations:
UASI FY 2013 Project Proposal Update: Discussion Only

Action or Discussion Items:
Discussion Only.

Discussion/Description:
The UASI FY13 project proposal process is underway. As an update, the first informational email was released October 12th, 2012. The second update email followed on November 2nd, 2012. The email audience was the Bay Area region UASI groups, local jurisdictions and stakeholders.

Reminder/Updates:

- 30 day trial period to prepare and develop proposals.
- Proposal submission dates open 11/12 and close at 5pm, 11/30.
- Proposals will not be accepted for any reason after 5pm on November 30th, 2012.
- Approval Authority (AA) members can review proposals using the following timeframe:
    - 12/3, Monday: Receive of a list of their jurisdiction's proposals.
    - 12/3, Monday- 12/7, Friday: Opportunity to review proposals and ensure they are aligned with their jurisdiction's strategies.
    - 12/5, Wednesday, noon: Communicate Interoperable Communications proposal changes.
    - 12/7, Friday, COB: Communicate all other proposal changes.
    - Communicate proposal changes to Janell Myhre, Janell.Myhre@sfgov.org, 415-353-5244.
    - Monday, 12/10, noon: Proposals are submitted to the Workgroup Leaders.
- Regional project concepts have been reviewed with the Advisory Group for consideration and possible early adoption.
- Core City project proposals use the same on line proposal template and must be submitted no later than 5pm on November 30th, 2012.

Hub KICK OFF meetings dates and locations are confirmed. Announcement flyers have been released to the region (Attachment A). Hub voting members are being identified. Confirmation of the Hub voting members is being sought from each UASI Approval Authority member. The Hub proposal selection meetings are expected to be held in January 2013.

All Hub participants will be welcomed to participate in evaluating this year's UASI proposal process. This feedback will be used to build upon and improve next year's project proposal process.

SAVE the DATE

To: All UASI Stakeholders

What: **FY13 Project Proposal Training**

- Proposal submission process and template
- Role of the Workgroups, Hubs, and Advisory Group in proposal vetting, prioritization, and selection
- Funding criteria
- Questions

When: North Bay - 2-4pm, Wed, November 7th, 2012
East Bay - 10-12n, Friday, November 9th, 2012
South Bay - 10-12n, Wed, November 14th, 2012
West Bay - 10-12n, Thurs, November 15th, 2012

Where: All Training site specifics attached

Who: All Stakeholders eligible for UASI funding and personnel tasked with completing UASI project proposal forms

NOTE: Updates on meeting specifics will be sent in follow-up e-mails to: HUB OES Managers, UASI Advisory Group and Work Group members

To: **Bay Area UASI Approval Authority**

From: **Janell Myhre, Regional Program Manager**

Date: **November 8, 2012**

Re: **Item 10: Regional Catastrophic Preparedness Grant Program (RCPGP) Update**

Recommendations:

RCPGP Update: Discussion Only.

Action or Discussion Items:

Discussion Only.

Discussion/Description:

A grants timeline is provided (Attachment A) for the RCPGP and UASI grant projects for which the Medical & Public Health/Regional Catastrophic Planning Team (RCPT) serves as the advisory body.

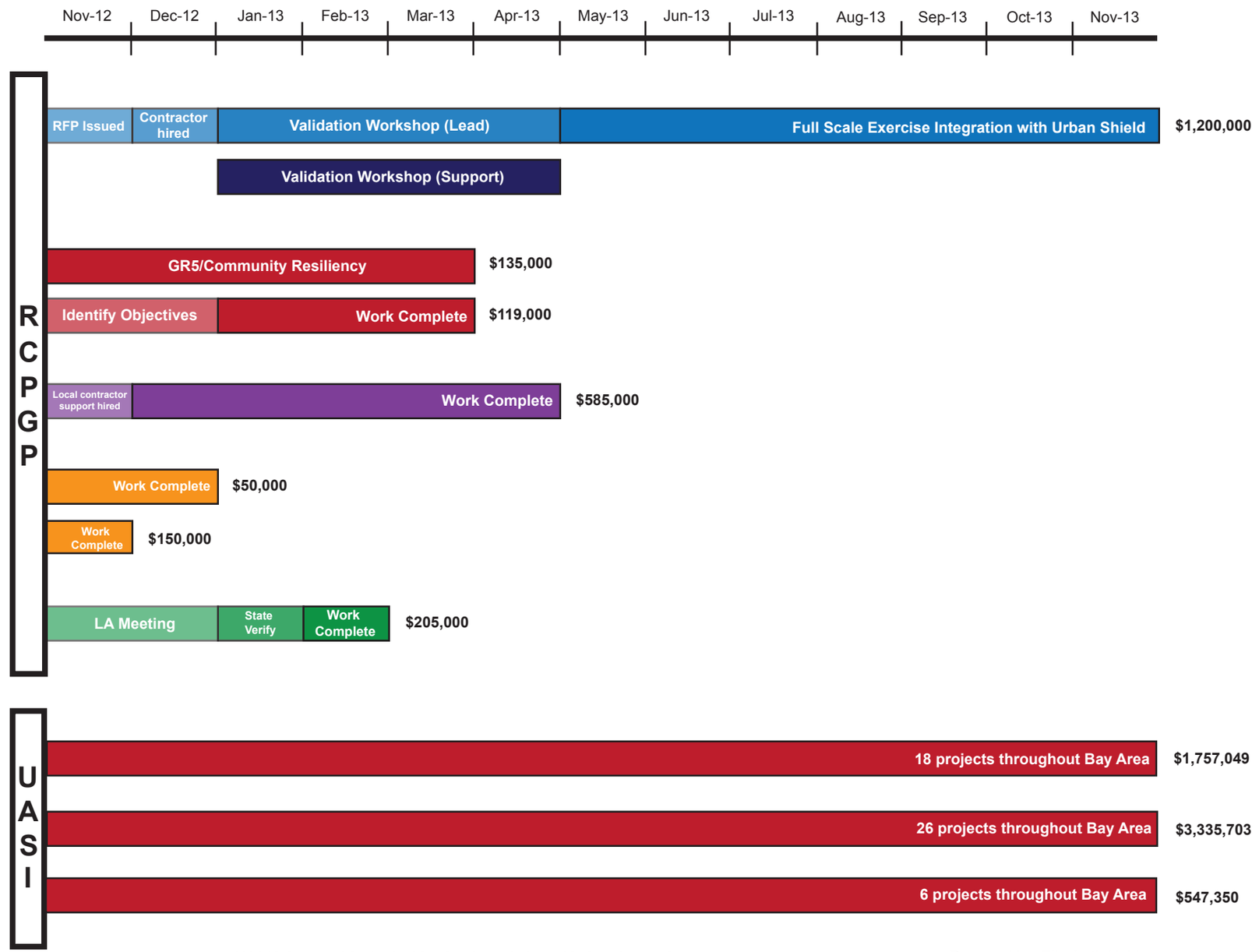
An update on the Statewide Debris Removal project will be presented to the Approval Authority in December 2012. An update on the San Francisco Planning and Urban Research (SPUR) and Association of Bay Area Governments (ABAG) will be presented to the Approval Authority in February 2013.

Regional Logistics Plan update:

The short term Logistics Project Manager selection is complete. A conditional offer has been made. Contract negotiations are in process.

In the October 24th meeting, the RCPT agreed the $200K RCPGP Restoration of Lifelines project will be re-allocated to position consultant staff in the three (3) Major Cities to ensure their Logistics Appendix to the Regional Logistics Plan is robust and accurate. This strengthens the Bay Area capabilities to respond in a catastrophic event by supporting both the most logistically vulnerable locations in the Bay Area (Major Cities), as well as supporting the Operational Areas by allowing the core consultant staff to work more closely with them on their regional plan appendices.

RCPT/PUBLIC HEALTH & MEDICAL PLANNING GROUP



DHS GOALS

Goal 5
Enhance medical and public health preparedness

Goal 6
Strengthen emergency planning and citizen preparedness capabilities

Goal 7
Enhance recovery capabilities

PROJECT MANAGERS

- Medical & Health PM
- Elizabeth Holden
- Mary Landers
- Julie Linney
- Tom Perry
- Logistics PM

* staff funded positions not included

Prepared by: Elizabeth Holden

To: **Bay Area UASI Approval Authority**

From: **Barry Fraser, Interim General Manager**

Date: **November 8, 2012**

Re: **Item 11: Report from the Bay Area Regional Interoperable Communications System Joint Powers Authority (BayRICS Authority)**

Recommendations:

Receive and File Report

Action or Discussion Items:

Report from the Interim General Manager of the BayRICS Authority on the activities and progress of the BayRICS Authority for the month of October 2012.

Discussion/Description:

BayRICS Authority activities in a number of key areas are described below.

1. Administration

The BayRICS Authority Board of Directors held its regular meeting on November 1, 2012. Anticipated action items at that meeting include approval of BayLoop Maintenance and Monitoring Agreement; reports on T-Band spectrum givebacks mandated in H.R. 3630; the hiring of a permanent general manager; and selection of a new BayRICS Secretary. A new Secretary must be named because former BayRICS Secretary Deputy Dave Kozicki has transferred to a new position with the Alameda County Sheriff.

Financial Audit: All FY 2011-2012 year-end closing tasks have been completed and an accountant has been retained to prepare an annual audit, as specified in Section 3.03 of the BayRICS Joint Powers Authority Agreement. Staff will provide copies of the audit to the Approval Authority when completed.

2. Bay Area Urban Area Security Initiative (UASI) 2013 Funding Requests

Staff has submitted three requests for funding to Bay Area UASI for the 2013 grant cycle. These requests include:

Item	Description	Duration	Cost
1	BayLoop Maintenance and Network Monitoring	Jan. - Dec. 2014	$240,000
2	BayRICS Regional Technical Consultant	Ongoing, as-needed services as determined in consultation with Technical Advisory Committee (TAC)	$100,000
3	Supplement any State/Local Implementation Grant Program (SLIGP)	July 2013- Dec. 2014 - Additional Funding for FirstNet Integration Planning for BAUASI Region	$100,000
	TOTAL		$440,000

These funding requests were discussed at the October 25, 2012 UASI Advisory Committee meeting, but no final recommendations were made at that meeting.

3. Sites and Backhaul Status

Jurisdictions are continuing to qualify sites through the zoning approval process, where required. However, site activities have slowed somewhat, due to a lack of clarity about FirstNet's programmatic goals and scaling back of Motorola efforts in order to preserve funding. Discussions with BART, CENIC and other fiber providers have slowed for similar reasons.

Motorola has submitted a "Route Modification Request" with the NTIA on October 9, 2012. The modification is a formal request for changes to the original grant application, including (1) reducing the number of sites, (2) eliminating the public access system, (3) revising budget line items and matching requirements and (4) adding the costs of some site and infrastructure work into the grant budget. The modifications are currently under review at NTIA and Motorola is addressing questions as they arise.

4. Regional and State Planning

The State of California has announced a series of public forums with stakeholders in November and December to discuss the Nationwide Public Safety Broadband Network, FirstNet and organizing California's governance structure to support network development in the state. Staff will participate in these activities and report on progress.

5. 700MHz Spectrum Waiver, Spectrum Act and FirstNet Update

FirstNet Board Update

Staff assisted Chair Lucia in drafting a letter to FirstNet Board Chair Samuel Ginn to request a meeting with BayRICS leadership prior to the next FirstNet Board meeting. Chairman Ginn's provided a response on October 24, 2012, stating that the FirstNet Board will be in touch with BayRICS as quickly as possible to discuss Bay Area projects. BayRICS staff has made efforts to contact other FirstNet Board members to introduce the BayRICS Authority and provide additional information if requested.

Staff is also working with the six other BTOP public safety grantees to set up meetings with FirstNet. Grantees have discussed a joint briefing to be held immediately before or after the next FirstNet Board meeting, in Washington DC. Staff has been informed that the next FirstNet meeting will likely take place on December 11 or 12, 2012. Details and confirmation of the meeting place and time are not available.

NTIA Notice of Inquiry (NOI)

Staff has drafted comments in response to the NTIA NOI on conceptual architecture model and applications development. These comments are due on November 1, 2012. In addition, BayRICS staff and Technical Advisory Committee (TAC) Chair Ahsan Baig participated in a working group to draft comments for the 21 former waiver recipients, who have renamed their group as the Early Builders Advisory Committee (EBAC).

UASI Approval Authority and Management Team Tracking Tool

November 8, 2012 Approval Authority Meeting

Special Request Items/Assignments						
#	**Name**	**Deliverable**	**Who**	**Date Assigned**	**Due Date**	**Status / Comments**
1	Bay Area UASI Website Presentation	Presentation	Elizabeth Holden	6/14/12	12/13/12	Elizabeth Holden will give a presentation on the Bay Area UASI website project.
2	Statewide Debris Removal Plan	Presentation	Mary Landers	11/1/12	12/13/12	UASI Management Team member will report on the Statewide Debris Removal Plan project
3	Urban Shield	Presentation	Dennis Houghtelling and staff	11/1/12	12/13/12	
4	Presentation on Land-Use Recovery Strategy and Regional Resilience Initiative Gap Analysis	Presentation	Elizabeth Holden, SPUR, and ABAG representatives	11/1/12	2/14/13	
5	Presentation of Bay Area THIRA	Presentation	Catherine Spaulding and Jason Carroll	10/4/12	12/13/12	
Regular Items/Assignments						
#	**Name**	**Deliverable**	**Who**	**Date Assigned**	**Due Date**	**Status / Comments**
A	UASI Quarterly Reports	Report	Tristan Levardo		12/13	11/8 IECGP & Quarterly Travel Report 12/13 FY 09 UASI Expenditure Report
B	UASI Advisory Group Report	Report	Mike Sena, Chair		12/13	Update from the Advisory Group Meeting
C	BayRICS JPA Progress Report	Report	Barry Fraser		12/13	Update from the BayRICS JPA
D	RCPT Advisory Group	Report	Janell Myhre		12/13	Update on the status of RCPGP projects.
E	Ad Hoc Legislative Committee	Report	Renee Domingo			Update and report from the Ad Hoc Legislative Committee.
F	Budget reallocations under $250,000	Report	Tristan Levardo		3/14/13 and biannually thereafter	