ASSOCIATION OF BAY AREA GOVERNMENTS

Representing City and County Governments of the San Francisco Bay Area

ABAG

AGENDA

ABAG EXECUTIVE BOARD MEETING NO. 391

Thursday, March 21, 2013, 7:00 PM

MetroCenter Auditorium
101 8th Street (at Oak Street)
Oakland, California

The ABAG Executive Board may act on any item on this agenda.
Agenda and attachments available at ABAG Home Page
For information, contact Fred Castro, Clerk of the Board, at (510) 464 7913.
Download Entire Agenda Packet

1. **CALL TO ORDER & PLEDGE OF ALLEGIANCE**
2. **PUBLIC COMMENT**
3. **ANNOUNCEMENTS**
4. **PRESIDENT'S REPORT**
5. **EXECUTIVE DIRECTOR'S REPORT**
6. **CONSENT CALENDAR**

   ACTION. Unless there is a request by a Board member to take up an item on the consent calendar separately, the calendar will be acted upon in one motion.

   A. Approval of Executive Board Summary Minutes

   Summary Minutes of Meeting No. 390 held on January 17, 2013.

   Attachment: Summary minutes

   B. Grant Applications

   With Board consent, ABAG will transmit the attached list of federal grant applications to the State Clearinghouse. These applications were circulated in ABAG's Intergovernmental Review Newsletter since the last Executive Board meeting.

   Attachment: Grant application

C. Appointments to Committees

President Mark Luce requests Board approval of re-appointments to the following committees:

Legislation and Governmental Organization Committee
Harry T. Price, Mayor, City of Fairfield
Linda J. Seifert, Chair, Board of Supervisors, County of Solano

Regional Planning Committee
Julie Combs, Councilmember Santa Rosa

Joint Policy Committee
Jean Quan, Mayor, City of Oakland

Administrative Committee
Pat Eklund, Mayor, City of Novato
Jean Quan, Mayor, City of Oakland

San Francisco Bay Restoration Authority
Roseanne Foust, Councilmember, Redwood City (South Bay Seat)
Keith Caldwell, Napa County Supervisor (North Bay Seat)
John Gioia, Contra Costa County Supervisor (East Bay Seat)
Dave Cortese, Santa Clara County Supervisor (Bayside City/County Seat)
John Sutter, Director, East Bay Reg. Park Dist. (Bayside City/Park District Seat)
Samuel Schuchat, Executive Officer, California Coastal Conservancy (Chair)

D. Contracts Approved by ABAG between $20,000 and $50,000

ABAG has entered into one contract with the University of California at Berkeley Fisher Center for Real Estate totaling $34,505 since the last Executive Board meeting.

Attachment: Contracts memo

E. Approval of Resolution No. 02-13 Endorsing the San Francisco Bay Area Water Trail

Staff requests Executive Board approval of Resolution No. 02-13 endorsing the San Francisco Bay Area Water Trail and encouraging shoreline jurisdictions to adopt local resolutions of support and integrate Water Trail policies into local plans to realize the vision of the San Francisco Bay Area Water Trail.

Attachments: Water Trail memo and Resolution

F. Authorization to Ratify Agreement with County of Marin to Provide Technical Support for Permit Writing

Staff requests Executive Board ratification of agreement with County of Marin and authorization for the Executive Director or designee to enter into agreement with the County to provide technical staff resources to the San Francisco Bay Regional Water Quality Control Board for permit writing assistance.

Attachment: County of Marin Technical Support memo

G. Authorization to Ratify Interagency Agreement with Sonoma County Water Agency

Staff requests Executive Board ratification of agreement with the Sonoma County Water Agency and authorization for the Executive Director or designee to enter into agreement with the Sonoma County Water Agency to provide technical staff resources to the San Francisco Bay Regional Water Quality Control Board.

Attachment: Sonoma County Water Agency Technical Support memo

H. Adoption of Resolution No. 03-13 Authorizing Filing of Notice of Categorical Exemption Under CEQA for San Pablo Avenue Green Stormwater Spine Project

Staff requests approval of Resolution No. 03-13 confirming CEQA Determination for San Pablo Avenue Green Stormwater Spine Project.

Attachments: San Pablo Avenue Green Stormwater Spine Project memo and Resolution

7. TRANSBAY CENTER PROJECT

Information. Maria Ayerdi-Kaplan, Executive Director, and Robert Beck, Senior Program Manager, Transbay Joint Powers Authority, will present the strategy and current status of the region's Transbay Transit Center Project.

Attachment: Transbay Center Project description

8. PLAN BAY AREA PROCESS AND SCHEDULE

Information. Miriam Chion, ABAG Planning and Research Director, will update the Board on Plan Bay Area and discuss the Public Hearing Schedule and release of the final draft document which will be released in compliance with Senate Bill 375.

Attachment: Plan Bay Area Process and Schedule memo

9. BAY AREA REGIONAL DISASTER RESILIENCE ACTION PLAN INITIATIVE

Information/ACTION. Danielle Hutching's Mieler, ABAG's Earthquake and Hazards Program Coordinator, will brief the Board on ABAG's Regional Resilience Initiative and request adoption of the Resilience Initiative Policy Papers and Action Plan. Staff will also request that the Executive Board refer the Initiative implementation phase to the Regional Planning Committee.

Attachment: Regional Disaster Resilience memo and Policy Papers

10. ADMINISTRATIVE COMMITTEE REPORT

Information/ACTION. ABAG President Mark Luce will report on the recent Administrative Committee Retreat held February 28-March 1, 2013.

11. LEGISLATION & GOVERNMENTAL ORGANIZATION COMMITTEE REPORT

Information/ACTION. Committee Chair David Rabbitt, Supervisor, County of Sonoma, will report on Committee activities and request Board approval of Committee recommendations.

Attachment: LGO Committee agenda

12. FINANCE & PERSONNEL COMMITTEE REPORT

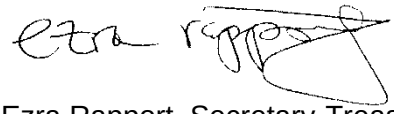
Information/ACTION. Committee Chair John Gioia, Supervisor, County of Contra Costa, will report on Committee activities and request Board approval of Committee recommendations.

Attachment: FP Committee agenda

13. ADJOURNMENT

The next meeting of the Executive Board is May 16, 2013.

Submitted:



Ezra Rapport, Secretary-Treasurer

ABAG Executive Board Roster

ABAG Executive Board Meeting Schedule

ABAG Calendar

SUMMARY MINUTES (DRAFT)

ABAG Executive Board Meeting No. 390
Thursday, January 17, 2013
Joseph Bort MetroCenter
101 8th Street, Oakland, California

1. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

President Mark Luce, Supervisor, County of Napa, called the meeting to order at approximately 7:00 p.m.

A quorum of the Board was present.

Representatives and Alternates Present	Jurisdiction
Councilmember Ronit Bryant	City of Mountain View
Jeff Buckley, Office of the Mayor	City of San Francisco
Councilmember Kansen Chu	City of San Jose
Supervisor David Cortese	County of Santa Clara
Mayor Pat Eklund	City of Novato
Supervisor John Gioia	County of Contra Costa
Councilmember Pedro Gonzalez	City of South San Francisco
Mayor Leon Garcia	City of American Canyon
Supervisor Scott Haggerty	County of Alameda
Councilmember Dave Hudson	City of San Ramon
William Kissinger	RWQCB
Councilmember Sam Liccardo	City of San Jose
Supervisor Mark Luce	County of Napa
Supervisor Eric Mar	County of San Francisco
Supervisor Karen Mitchoff	Count of Contra Costa
Mayor Julie Pierce	City of Clayton
Supervisor Dave Pine	County of San Mateo
Councilmember Joe Pirzynski	Town of Los Gatos
Kelly Pretzer, Office of the Mayor	City of San Francisco
Supervisor David Rabbitt	County of Sonoma
Councilmember Libby Schaaf	City of Oakland
Supervisor Linda Seifert	County of Solano
Joaquin Torres, Office of the Mayor	City of San Francisco
Supervisor Richard Valle	County of Alameda
Supervisor Mike Wasserman	County of Santa Clara

Representatives Absent	Jurisdiction
Councilmember Desley Brooks	City of Oakland
Supervisor Carmen Chu	County of San Francisco
Mayor Bill Harrison	City of Fremont
Councilmember Ash Kalra	City of San Jose
Mayor Harry Price	City of Fairfield
Mayor Jean Quan	City of Oakland
Mayor Tim Sbranti	City of Dublin
Supervisor Warren Slocum	County of San Mateo

President Luce led the Board and the public in the Pledge of Allegiance.

He welcomed new Board members: Supervisor Katie Rice, Marin County Board of Supervisors; American Canyon Mayor Leon Garcia, former Alternate to former Mayor Jack Gingles, representing Napa County Cities; Solano County Supervisor Linda Seifert, former Alternate to Barbara Kondylis, who is now the new Solano County representative to the Executive Board; Oakland Councilmember Libby Schaaf; and William Kissinger from the Regional Water Quality Control Board.

2. PUBLIC COMMENT

David Grabill, Santa Rosa, commented on the RHNA process.

President Luce commented on work proximity housing in Napa County.

There was no other public comment.

3. ANNOUNCEMENTS

President Luce recognized past Board members Susan Adams, Jack Gingles, Rose Jacobs Gibson, Susan Gorin, and Barbara Kondylis for their service to ABAG and the region. He also recognized Jane Brunner and Sepi Richardson who were not present. Mark Green was recognized later in the meeting.

There were no announcements.

4. PRESIDENT'S REPORT

President Luce welcomed new Board members and alternates attending their first meeting and wished all a happy and prosperous New Year. He and Vice President Julie Pierce look forward to working with members over the next year to tackle the issues facing cities and counties in the region. In the spring will begin another round of public hearings on Plan Bay Area, which includes first sustainable communities strategy for the region before action by the Executive Board in July. On February 27th we will host a Legislative Workshop and Reception in Sacramento. The annual Administrative Retreat will be in Napa February 28th-March 1st. The General Assembly and Business Meeting is on April 18th.

5. EXECUTIVE DIRECTOR'S REPORT

Ezra Rapport, ABAG Executive Director, noted that the agenda included an update on the Sustainable Communities Strategy.

6. ABAG CONSENT CALENDAR

President Luce recognized a motion by Karen Mitchoff, Supervisor, County of Contra Costa, which was seconded by Dave Cortese, Supervisor, County of Santa Clara, to approve the Consent Calendar, with the following changes: under Item 6.C., removing Sepi Richardson, Councilmember, City of Brisbane, from the Administrative Committee and Joint Policy Committee; and adding Desley Brooks, Councilmember, City of Oakland, and Eric Mar, Supervisor, City and County of San Francisco, to the RHNA Appeals Committee, whose members are eligible for per diem; adding Supervisor Mar to the Regional Prosperity Plan Steering Committee; and adding Supervisor Mar to the Administrative Committee, pending his appointment as a Representative from the City and County of San Francisco. The motion passed by consensus, with new members abstaining from voting on the Item 6.A., and with Pat Eklund, Mayor, City of Novato, abstaining from voting on Item 6.B.

A. Approval of Executive Board Summary Minutes**

Summary of Minutes of Meeting No. 389 held on November 15, 2012.

B. Grant Applications**

A list of grant applications was approved for submission to the State Clearinghouse, having been circulated in ABAG's "Intergovernmental Review Newsletter" since the last Executive Board meeting.

C. Appointment to Committees

President Luce requests Board approval of appointments to the following committees:

San Francisco Bay Restoration Authority—West Bay Seat:
San Mateo County Supervisor David Pine (Replaces Phil Ting, former SF Assessor)

Regional Planning Committee:
Walnut Creek Councilmember Kristina Lawson
Dublin Mayor Tim Sbranti
Oakland Councilmember Desley Brooks
Solano County Supervisor Erin Hannigan

Legislation and Governmental Organization Committee:
Fremont Mayor Bill Harrison

Finance and Personnel Committee:
Fremont Mayor Bill Harrison
Contra Costa County Supervisor Karen Mitchoff
San Mateo County Supervisor Dave Pine
Mountain View Councilmember Ronit Bryant

Administrative Committee:
San Mateo County Supervisor Dave Pine, Executive Board Alternate
San Francisco Supervisor Eric Mar (pending formal appointment as Executive Board member)

Metropolitan Transportation Commission:
Napa County Supervisor Mark Luce, ABAG President

California Council of Governments (CalCOG):
Napa County Supervisor Mark Luce, ABAG President

RHNA Appeals Committee:
Novato Mayor Pro Tem Pat Eklund
Napa County Supervisor Mark Luce
Clayton Mayor Julie Pierce
Palo Alto Mayor Greg Scharff
Oakland Councilmember Desley Brooks
San Francisco Supervisor Eric Mar (alternate)

Regional Prosperity Plan Steering Committee:
San Francisco Supervisor Eric Mar

D. Approval of Resolution No. 01-13 Authorizing Submittal of Grant Application to California Dept. of Water Resources for San Francisco Bay Region Integrated Regional Water Management Plan (IRWMP) Prop 84 Round 2 Implementation Projects

Authorized the Executive Director or designee to file IRWMP application, and, if funded to execute a grant agreement with the California Department of Water Resources for Prop 84 Round 2 Implementation Projects.

7. EXTENDED PRODUCER REPSPONSIBILITY

Heidi Sanborn, Executive Director, California Product Stewardship Council briefed the Board on extended producer responsibility issues and requested Board support in obtaining resolutions and letters of support from cities, towns, and counties in the region. The Council is a coalition of local governments founded in 2007 to promote producer responsibility for discarded computers, batteries, paints, and similar products with hazardous or toxic properties. Ms. Sanborn reported on the Council's work, including legislative advocacy, implementation support for recently enacted stewardship laws and support for the Council's strategic initiatives for 2013 and beyond.

President Luce recognized a motion by Mayor Eklund, and seconded by Dave Rabbitt, Supervisor, County of Sonoma, to endorse extended producer responsibility and to authorize sending a letter encouraging support of extended producer responsibility to member jurisdictions. The motion passed by consensus, with Mike Wasserman, Supervisor, County of Santa Clara, abstaining.

8. OVERVIEW OF ABAG FINANCIAL SERVICES

Clarke Howatt, ABAG Public Finance Director, presented a brief overview of the Agency's Financial Services Program with focus on the activities of the ABAG Finance Authority for Nonprofit Corporations and highlighting the Authority's highly successful program for financing affordable multi-family housing. Case studies of mixed-use, multi-family housing capital financing projects completed by the Authority on behalf of the City and County of San Francisco was presented.

9. REGIONAL PLANNING PROGRAM UPDATE

Miriam Chion, ABAG Acting Planning Director, provided an update on the Regional Priority Development Plan (PDA) Implementation Program and Priority Conservation Plan (PCA) Grant proposals, including SCS implementation funding, policies and strategies, coordination and advocacy, and regionally administered grants; and the

Members discussed alignment with jurisdictions, and opportunities and constraints; entitlement process and streamlining; in-fill development and grants; emphasis on open space and Priority Conservation Areas; advanced in-fill development related to jobs; elimination of Redevelopment resources.

JoAnna Bullock, ABAG Senior Regional Planner, reported on the Public Engagement Strategy for Plan Bay Area which includes open houses and formal comments, local elected official briefings, EIR public hearings, and other engagement opportunities.

Members discussed participation of elected officials at meetings; posting questions and answers on website; media open house; coordinating and scheduling open

houses, public hearings and meetings with elected officials; online engagement; timeframe and format of meetings.

Members directed staff to communicate with the Metropolitan Transportation Commission regarding coordinating with public officials when scheduling Plan Bay Area meetings.

President Luce announced a recess at 9:06 p.m.

10. BAY AREA REGIONAL PROSPERITY PLAN

Vikrant Sood, Program Manager, Regional Prosperity Plan, provided an overview of the three-year regional initiative grant from the U.S. Department of Housing and Urban Development (HUD) to the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC).

11. LEGISLATION & GOVERNMENTAL ORGANIZATION COMMITTEE REPORT

Committee Chair David Rabbitt, Supervisor, County of Sonoma, reported on Committee activities and asked Board approval of Committee recommendations and pending legislation, including the following: election of Supervisor Rabbit as Chair and Scott Haggerty, Supervisor, County of Alameda, as Vice Chair; report on new bills for consideration in the 2013 state legislative session, including SB 1 (Steinberg), sustainable communities investment authority—watch, SB 33 (Wolk), infrastructure financing districts, voter approval, repeal—support, SCA 9 (Corbett), local government, economic development, special taxes, voter approval—watch, SCA 4 (Liu), local government, transportation projects, special taxes, voter approval—support, SCA 8 (Corbett), transportation projects, special taxes, voter approval—support, AB 39 (Skinner/Perez), Proposition 39, implementation—watch, AB 48 (Skinner), firearms, ammunition, sales—watch, AB 22 (Bluemenfield), sidewalks, repairs—oppose; report on finalized legislation priorities for 2013 legislative session, including lowering the 2/3 supermajority vote threshold, and focus on SB 375 implementation; a report on 2013 legislative workshop and reception; and discussion on a proposal to Assemblymember Skinner relating to a Bay Area Regional Quality of Life/Sustainable Communities Initiative Funding Measure.

Members discussed supermajorities and upcoming statewide bonds.

President Luce recognized a motion Chair Rabbitt, which was seconded by Dave Pine, Supervisor, County of San Mateo, to accept the committee report. The motion passed unanimously.

12. FINANCE & PERSONNEL COMMITTEE REPORT

John Gioia, Supervisor, County of Contra Costa, reported on Committee activities and asked Board approval of Committee recommendations, including the following: approval of minutes of November 15, 2012 meeting; report on financial reports for October and November 2012; review of proposed Work Program, Budget and Membership Dues for Fiscal Year 2013-14; update on achieving more timely FPPC Form 700 compliance; and, in closed session, discussion of public employee performance evaluation for Executive Director.

President Luce recognized a motion by Supervisor Gioia, which was seconded by Joe Pirzynski, Councilmember, City of Los Gatos, to accept the committee report,

including FY 2013-14 Budget and Work Program and membership dues. The motion passed unanimously.

13. REPORT ON THE STATUS OF THE DESIGN AND RENOVATION OF 390 MAIN STREET

Andrew Fremier, Deputy Executive Director, Bay Area Headquarters Authority, gave a presentation on the 390 Main Street, San Francisco, focusing on the design of the physical plant and the status of the development project, as background for the closed session on the proposed real estate transaction.

The Board entered Closed Session.

14. CLOSED SESSION

The following item was discussed in closed session pursuant to the requirements of the Ralph M. Brown Act:

The ABAG Executive Board will meet in closed session pursuant to Government Code Section 54956.8 to confer with real property negotiators to discuss building co-location and the acquisition of real property:

Agency Negotiators: Ezra Rapport, Executive Director; Pat Jones, Assistant Executive Director; Kenneth Moy, Legal Counsel; Herb Pike, Finance Director; Brian Kirking, Information Services Director; and Administrative Committee.

MTC Negotiating Parties: Steve Heminger, MTC Executive Director; Adrienne Tissier, MTC Chair; Amy Worth, MTC Vice Chair; James Spering, MTC Commissioner; Bay Area Headquarters Authority/Metropolitan Transportation Commission.

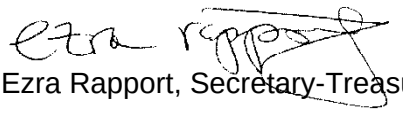
Under negotiation: Terms and conditions regarding proposed real estate exchange of ABAG Condominium interest at MetroCenter, 101 8th Street, Oakland for condominium interest at Regional Facility, 390 Main Street, San Francisco.

The Board returned to Open Session.

15. ADJOURNMENT

President Luce adjourned the meeting of the Board at approximately 9:48 p.m.

Submitted:



Ezra Rapport, Secretary-Treasurer

*** Attachments sent to ABAG Executive Board Members.*

For information on the L&GO Committee, contact Patricia Jones at (510) 464 7933 or PatJ@abag.ca.gov, or Kathleen Cha at (510) 464 7922 or KathleenC@abag.ca.gov.

All ABAG Executive Board meetings are recorded. To arrange for review of audio recordings, please contact Fred Castro, Clerk of the Board, at (510) 464-7913 or FredC@abag.ca.gov.

Blank Page

Association of Bay Area Governments
Executive Board
Thursday, March 21, 2013

Project Review

.1 Federal Grant Applications Being Transmitted to the State Clearinghouse

ABAG staff has transmitted the following federal grant applications to the State Clearinghouse. These applications were circulated in ABAG's Intergovernmental Review Newsletter since the last Executive Board meeting. No comments were received on these projects. If the Executive Board wishes to take a position on any of these projects, it should so instruct the staff.

Alameda

Applicant:	Port of Oakland				
Program:	Federal Aviation Administration				
Project:	Airport Improvement Program (AIP)				
Descriptiom	Runway Safety Area - Construction, Phase 2, South Field, OAK				
Cost:	Total	$16,131,034.00	Federal	$13,000,000.00	State:
			Applicant	$3,131,034.00	Local
					Other
Contact:	Kristi McKenney (510) 627-1178				
	ABAG Clearinghouse Numbe 15715				

Blank Page

MEMO

Submitted by: Herbert Pike, Finance Director

Subject: ABAG Contracts between $20,000 and $50,000

Date: March 6, 2013

Background

ABAG has entered into contract with the following consultant/contractor for contract amount between $20,000 and $50,000. This is for information only.

- ABAG entered into contract with The Regents of the University of California on behalf of the Fisher Center for Real Estate in the amount of $34,505 to perform complex economic research and analysis for the San Francisco Bay Area.

Recommended Action

No action is required.

Mailing Address: P.O. Box 2050 Oakland, California 94604-2050 (510)464-7900 Fax: (510) 464-7970 info@babag.ca.gov
Location: Joseph P. Bort MetroCenter 101 Eighth Street Oakland, California 94607-4756

Blank Page

Submitted by: Galli Basson, Water Trail Planner

Subject: Request recommendation to the Executive Board to adopt a resolution endorsing the San Francisco Bay Area Water Trail

Date: March 21, 2013

Executive Summary

The California State Legislature enacted the Water Trail Act (AB 1296) in 2005 establishing the San Francisco Bay Area Water Trail (Water Trail). The Water Trail is a growing network of launching and landing sites that allows non-motorized small boat users to enjoy the historic, scenic, cultural, and environmental richness of San Francisco Bay.

Implementation of the Water Trail is underway and is a joint effort led by the State Coastal Conservancy in partnership with the Association of Bay Area Governments, San Francisco Bay Conservation and Development Commission, and the California Department of Boating and Waterways. Water Trail implementation benefits from regional partnerships and support.

Water Trail staff presented an overview of the Water Trail program during the February 6, 2013 Regional Planning Committee (RPC) meeting. The RPC expressed support for the Water Trail program and voted to recommend that the Executive Board adopt a resolution endorsing the Water Trail. The RPC also asked Water Trail staff to continue to explore a trail connection with the Bay Delta.

Recommended Action

Executive Board adopts a resolution endorsing the Water Trail.

Next Steps

The Water Trail will use the adopted resolution to build partnerships and encourage shoreline jurisdictions to support and/or join the Water Trail.

Attachments

1. Resolution supporting the Water Trail

ASSOCIATION OF BAY AREA GOVERNMENTS
EXECUTIVE BOARD

RESOLUTION NO. 02-13

ENDORSING THE SAN FRANCISCO BAY AREA WATER TRAIL

WHEREAS, the California State Legislature enacted the Water Trail Act (AB 1296) in 2005 establishing the San Francisco Bay Area Water Trail, a growing network of launching and landing sites that allows non-motorized small boat users to enjoy the historic, scenic, cultural, and environmental richness of San Francisco Bay; and

WHEREAS, the Water Trail benefits the region by encouraging single-point, multiple-point and multi-day non-motorized boating excursions; promoting safe boating practices; increasing access for boaters of all abilities; fostering stewardship of the bay and trailhead facilities; reducing impacts to sensitive wildlife and habitat through education of boaters; providing economic benefits to waterfront and water-oriented businesses; and

WHEREAS, the Water Trail Act directs the State Coastal Conservancy to lead the funding and development of projects implementing the Water Trail; and

WHEREAS, the Water Trail Project Management Team consists of four public agencies including the State Coastal Conservancy, the San Francisco Bay Conservation and Development Commission, the Association of Bay Area Governments and the California Department of Boating and Waterways; and

WHEREAS, the Association of Bay Area Governments plays a primary role implementing the Water Trail through leadership of the education, outreach and stewardship program, including the creation of the logo, maps and website; working with specific site owners and managers to ready sites for official designation into the Water Trail network; and managing site-specific grants for enhancement activities; and

WHEREAS, implementation of the Water Trail benefits from regional cooperation and the combined efforts of local governments, public agencies, park and open space districts, private landowners, businesses, and environmental, recreational, and development interests and organizations.

ASSOCIATION OF BAY AREA GOVERNMENTS
RESOLUTION NO. 02-13

NOW, THEREFORE, BE IT RESOLVED, that the Executive Board of the Association of Bay Area Governments officially endorses the concept of the San Francisco Bay Area Water Trail, and encourages shoreline jurisdictions to adopt local resolutions of support and integrate Water Trail policies into local plans to realize the vision of the San Francisco Bay Area Water Trail.

The foregoing was adopted by the Executive Board this 21st day of March, 2013.

Mark Luce
President

Certification of Executive Board Approval

I, the undersigned, the appointed and qualified Secretary-Treasurer of the Association of Bay Area Governments (Association), do hereby certify that the foregoing resolution was adopted by the Executive Board of the Association at a duly called meeting held on the 21st day of March, 2013.

Ezra Rapport
Secretary-Treasurer

Approved as To Legal Form

Kenneth K. Moy
Legal Counsel

MEMO

TO: **ABAG EXECUTIVE BOARD**

FROM: **Judy Kelly, Director, San Francisco Estuary Partnership**

DATE: **March 7, 2013**

RE: **Request for Authorization to Ratify an Interagency Agreement with the County of Marin to Provide Technical Support for Permit Writing**

Executive Summary

ABAG/SFEP has historically provided institutional support for the San Francisco Regional Water Quality Control Board to assist with preliminary permit review for agency implementation of water quality projects within the San Francisco Bay-Delta region. We request ratification from the Executive Board for a new contract to fund a full time staff member to assist The County of Marin. The contract's scope of work calls for a dedicated ABAG staff to assist with processing applications for 401 Water Quality Certifications, Waste Discharge Requirements, programmatic maintenance, and Industrial Stormwater permits, and other County administered water quality protection activities under the County's National Pollutant Discharge Elimination System Stormwater permit. The agreement is funded for the amount of $ 325,013 and the agreement period is from November 2012 through July 2014. No ABAG match is required. The project will assist with implementation of the Comprehensive Conservation and Management Plan for the San Francisco Estuary.

Recommended Action

Ratification of the agreement with County of Marin approving the Executive Director or designee, entering into the interagency agreement with the County of Marin to provide technical staff resources to the San Francisco Bay Regional Water Quality Control Board (RWQCB) for permit writing assistance.

Mailing Address: P.O. Box 2050 Oakland, California 94604-2050 (510)464-7900 Fax: (510) 464-7970 info@babag.ca.gov
Location: Joseph P. Bort MetroCenter 101 Eighth Street Oakland, California 94607-4756

Blank Page

MEMO

TO: **ABAG EXECUTIVE BOARD**

FROM: **Judy Kelly, Director, San Francisco Estuary Partnership**

DATE: **March 7, 2013**

RE: **Request for Authorization to Ratify an Interagency Agreement with the Sonoma County Water Agency**

Executive Summary

ABAG/SFEP has historically provided institutional support for the San Francisco Regional Water Quality Control Board to assist with preliminary permit review for agency implementation of water quality projects within the San Francisco Bay-Delta region. We request ratification from the Executive Board for a new contract to fund a full time staff member to assist the Sonoma County Water Agency. The contract's scope of work calls for a dedicated ABAG staff to assist with processing applications for 401 Water Quality Certifications, Waste Discharge Requirements, programmatic maintenance, and Industrial Stormwater permits, and other Sonoma County Water Agency administered water quality protection activities under their National Pollutant Discharge Elimination System Stormwater permit. The agreement is funded for the amount of $ 336,628 and the agreement period is from March 2013 through June 2015. No ABAG match is required. The project will assist with implementation of the Comprehensive Conservation and Management Plan for the San Francisco Estuary.

Recommended Action

Ratification of the agreement with the Sonoma County Water Agency approving the Executive Director or designee, entering into the interagency agreement with the Sonoma County Water Agency to provide technical staff resources to the San Francisco Bay Regional Water Quality Control Board (RWQCB) for permit writing assistance.

Mailing Address: P.O. Box 2050 Oakland, California 94604-2050 (510)464-7900 Fax: (510) 464-7970 info@babag.ca.gov
Location: Joseph P. Bort MetroCenter 101 Eighth Street Oakland, California 94607-4756

Blank Page

MEMO

Submitted by: **Judy Kelly**
Director, San Francisco Estuary Partnership

Subject: **Adopt Resolution Confirming CEQA Determination for San Pablo Avenue Green Stormwater Spine Project**

Date: **March 1, 2013**

Executive Summary

The San Francisco Estuary Partnership (SFEP) is the project manager for a multi-city demonstration project to retrofit portions of the San Pablo Avenue right-of-way with green infrastructure facilities. Green infrastructure is a term describing an emerging stormwater management approach that emphasizes the use of landscaping and permeable surfaces to capture, treat, and slow stormwater runoff. The San Pablo Avenue Green Stormwater Spine Project includes the cities of Oakland, Emeryville, Berkeley, Albany, El Cerrito, Richmond, and San Pablo. The project builds on the successful rain gardens pilot project in El Cerrito completed in the summer of 2010. It also implements the Comprehensive Conservation Management Plan for the San Francisco Estuary, while contributing to greener infill development and more sustainable, livable communities.

The project is funded by the California Department of Transportation and grants from the EPA, the Department of Water Resources, and the California Strategic Growth Council.

ABAG, as the parent organization of the SFEP, is the Lead Agency responsible for compliance with the California Environmental Quality Act (CEQA). The SFEP staff has made factual findings to support a determination that the project is Categorically Exempt under CEQA's Section 15301, Class 1 exemption and ABAG's Legal Counsel concurs with staff conclusion that the project is therefore exempt.

Recommended Action

Adoption of the attached Resolution authorizing the filing of the Notice of Categorical Exemption under CEQA is requested.

Next Steps

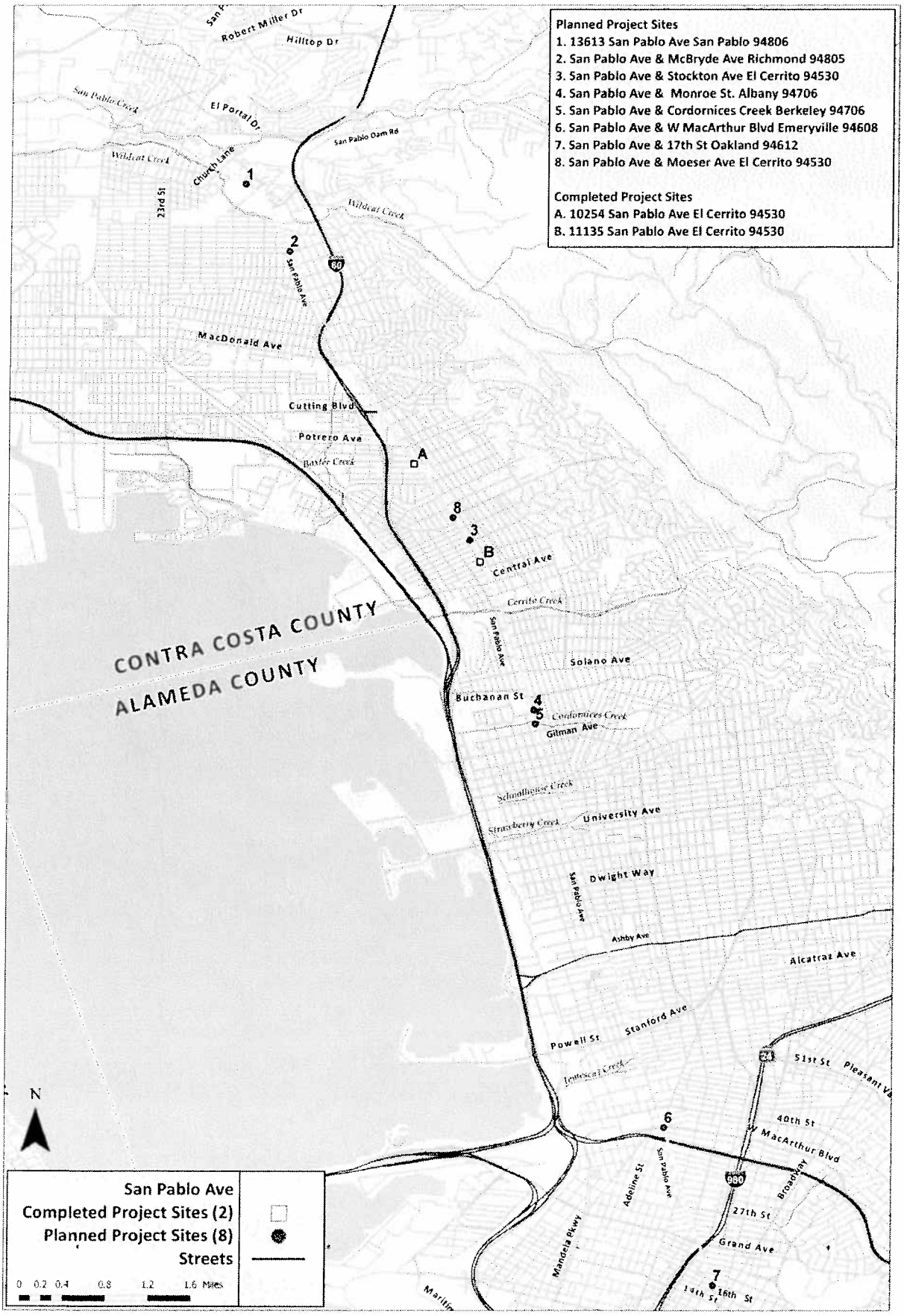
Upon adoption of the resolution, SFEP will file the Notice of Exemption with the Contra Costa County Clerk's Office and the Alameda County Clerk's Office.

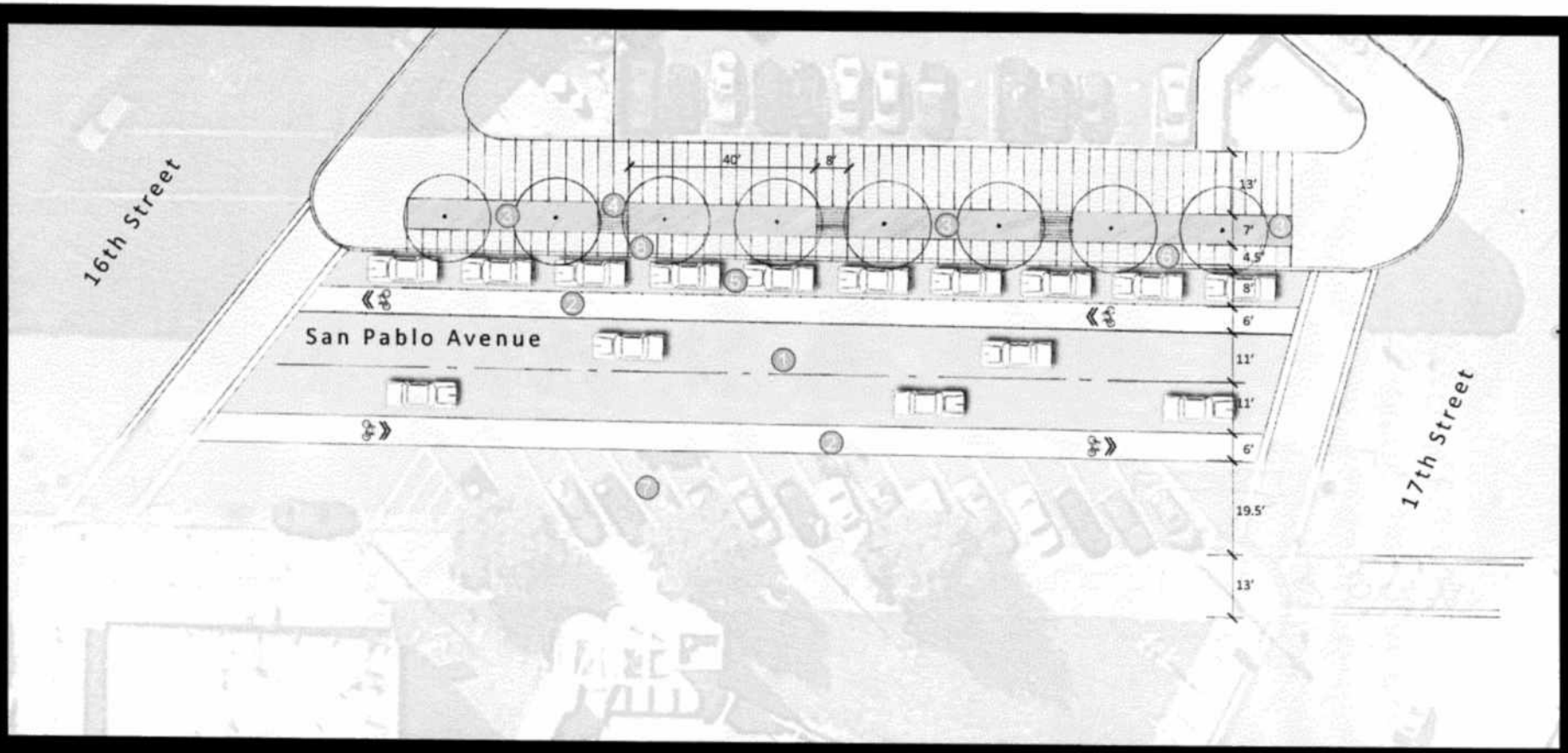
Mailing Address: P.O. Box 2050 Oakland, California 94604-2050 (510)464-7900 Fax: (510) 464-7970 info@babag.ca.gov
Location: Joseph P. Bort MetroCenter 101 Eighth Street Oakland, California 94607-4756

San Pablo Avenue Green Stormwater Spine
Selected Project Sites

November 2012

San Francisco Estuary Partnership





Stormwater Improvement Concept Plan

Scale: 1"=20'
January 2013

1. Existing median is removed and travel lanes remain as asphalt.
2. New painted bike lanes are proposed on both sides of the street (by others)
3. Stormwater planters and street trees accept runoff from both San Pablo Avenue and adjacent private property.
4. Boardwalks allow pedestrians to access parking and sidewalks.
5. Parallel parking configuration allows for greater space efficiency along the street.
6. A 4.5' egress zone allows pedestrians to safely exit their vehicles and pay parking meters.
   The existing ADA marked parking stall is retained at this location.
7. The east side of San Pablo Avenue could be converted to mirror west side improvements in the future.

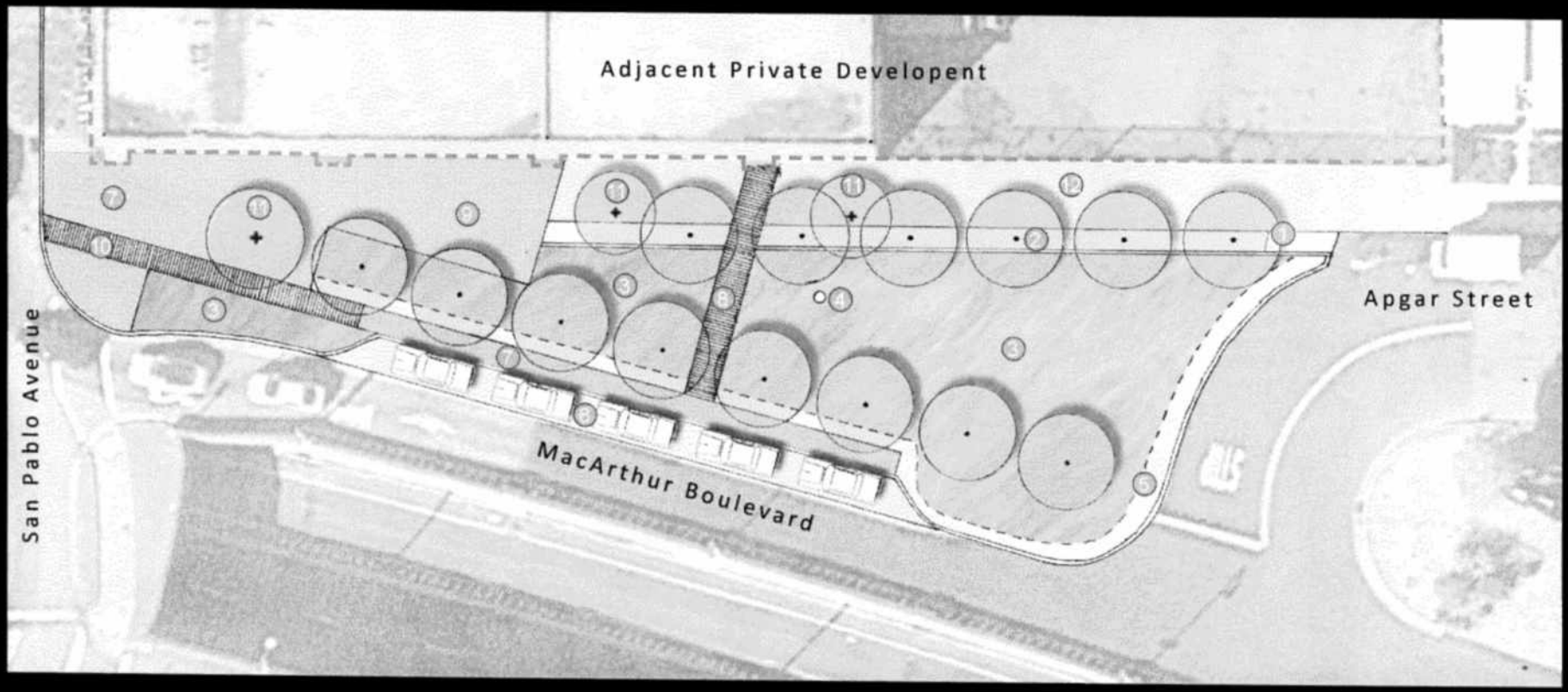
San Pablo Avenue Green Stormwater Spine Project

City of Oakland, California

(nev-a-non) Nevue Ngan Associates

QUADRIGA landscape architecture and planning, inc.

WILSEY HAM



Stormwater Improvement Concept Plan

Scale: 1"=20'
January 2013

1. Entry point of stormwater flow from Apgar Street.
2. Low-flow green gutter. Higher flows spill over a small retaining wall into larger adjacent rain garden.
3. Rain garden landscape area.
4. Existing sewer manhole location.
5. Side slope landscape transitions grade from street level to the basin's finished elevations.
6. On-street asphalt parking zone (Capacity is for five vehicles)
7. New sidewalk paving to match existing brick paving along San Pablo Avenue (by private development?)
8. Pedestrian boardwalk crossing over rain garden system.
9. Expanded sidewalk area overlooks rain garden cells and allow for addition space for cafe/plaza seating.
10. Overflow from rain garden system.
11. Existing street trees to remain.
12. Sidewalk zone to be paved with standard scored concrete.

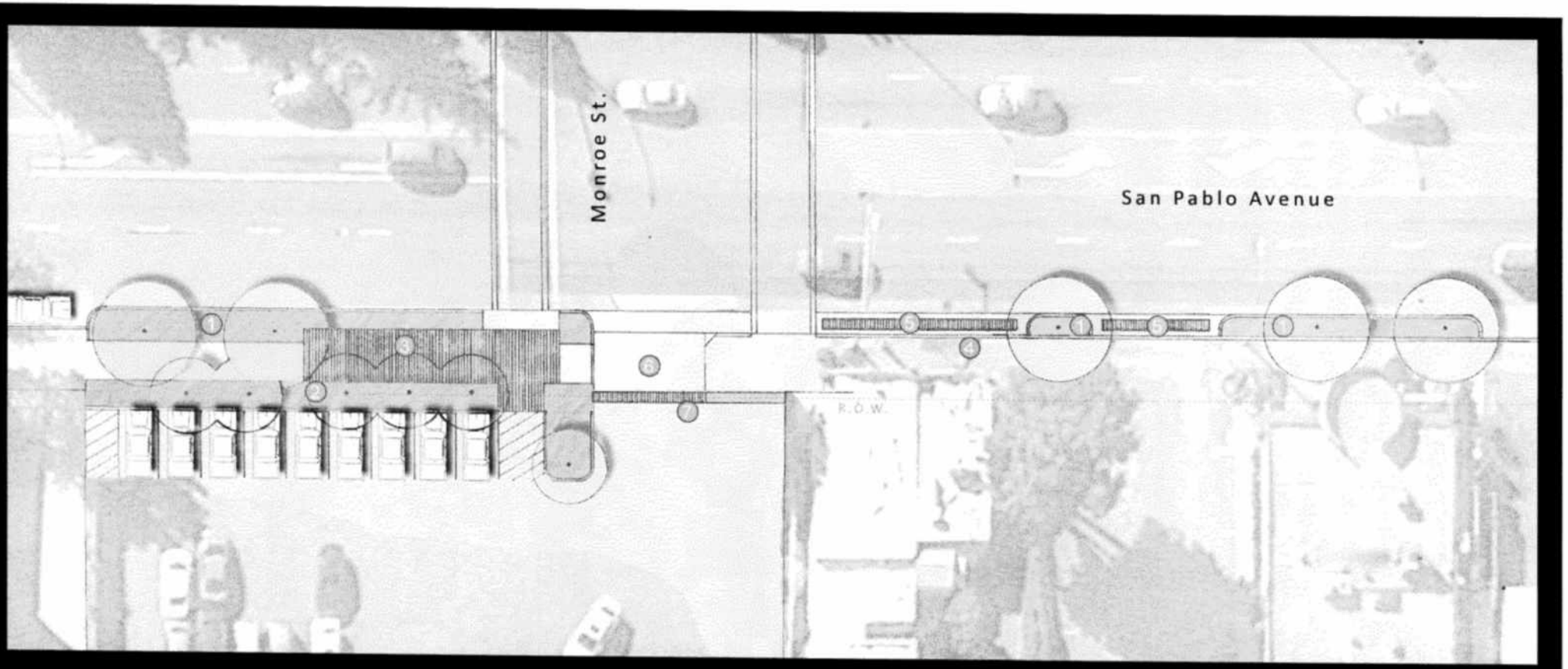
San Pablo Avenue Green Stormwater Spine Project

City of Emeryville, California

[nev-u-non] Nevue|Ngan|Associates

QUADRIGA landscape architecture and planning, inc.

WILSEY HAM



Stormwater Improvement Concept Plan

Scale: 1"=20'
January 2013

1. Stormwater curb extensions capture runoff from San Pablo Avenue.
2. Sidewalk planters capture stormwater from private parking lot. This will require acceptance and coordination of improvements with private owner.
3. A boardwalk allows stormwater to be stored under sidewalk zone using Silva Cell technology.
4. Existing bus stop remains in current location.
5. Stormwater overflow from stormwater curb extensions is captured within a series of grated green gutters within parking zones/ driveway zones.
6. Existing driveway is modified.
7. Combination speed bump and trench drain system conveys runoff into sidewalk stormwater planter.

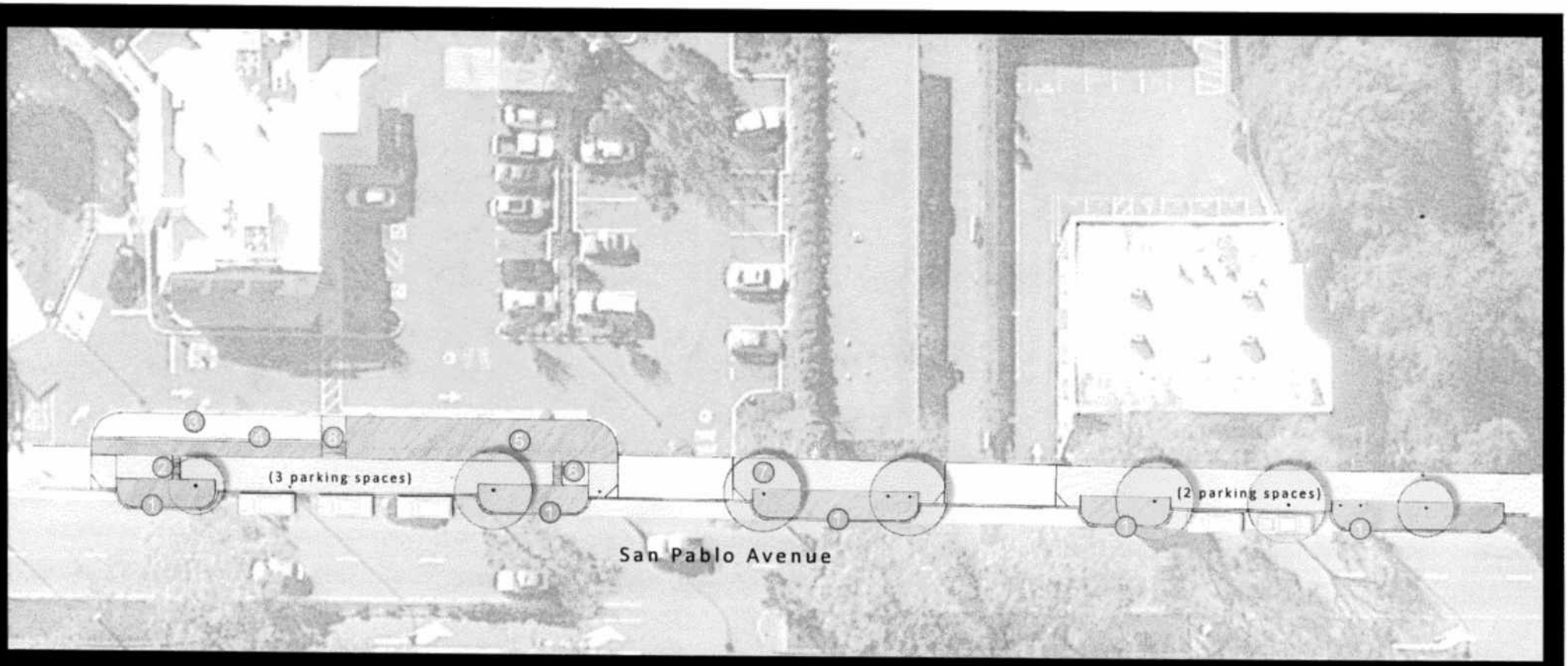
San Pablo Avenue Green Stormwater Spine Project

City of Albany, California

(nev-u-non) Nevue Ngan Associates

QUADRIGA landscape architecture and planning, inc.

WILSEY HAM



Stormwater Improvement Concept Plan

Scale: 1"=25'
January 2013

1. Stormwater curb extensions capture runoff from San Pablo Avenue.
2. Grated trench drains allow stormwater to flow into adjacent sidewalk planter.
3. Existing private landscaping/signage/utilities are retained.
4. Sidewalk planter accepts stormwater from San Pablo Avenue. A small concrete curb wall helps provide grade separation and protection of existing signs and utilities. This will require acceptance and coordination of improvements with private owner.
5. An existing vegetated swale is modified to capture stormwater from both San Pablo Avenue and McDonald's parking lot. This will require acceptance and coordination of improvements with private owner.
6. Grated trench drains allow stormwater overflow to flow into a stormwater curb extension in San Pablo Avenue.
7. All existing trees are retained with streetscape improvements.
8. Boardwalk allows stormwater to follow under pedestrian pathway.

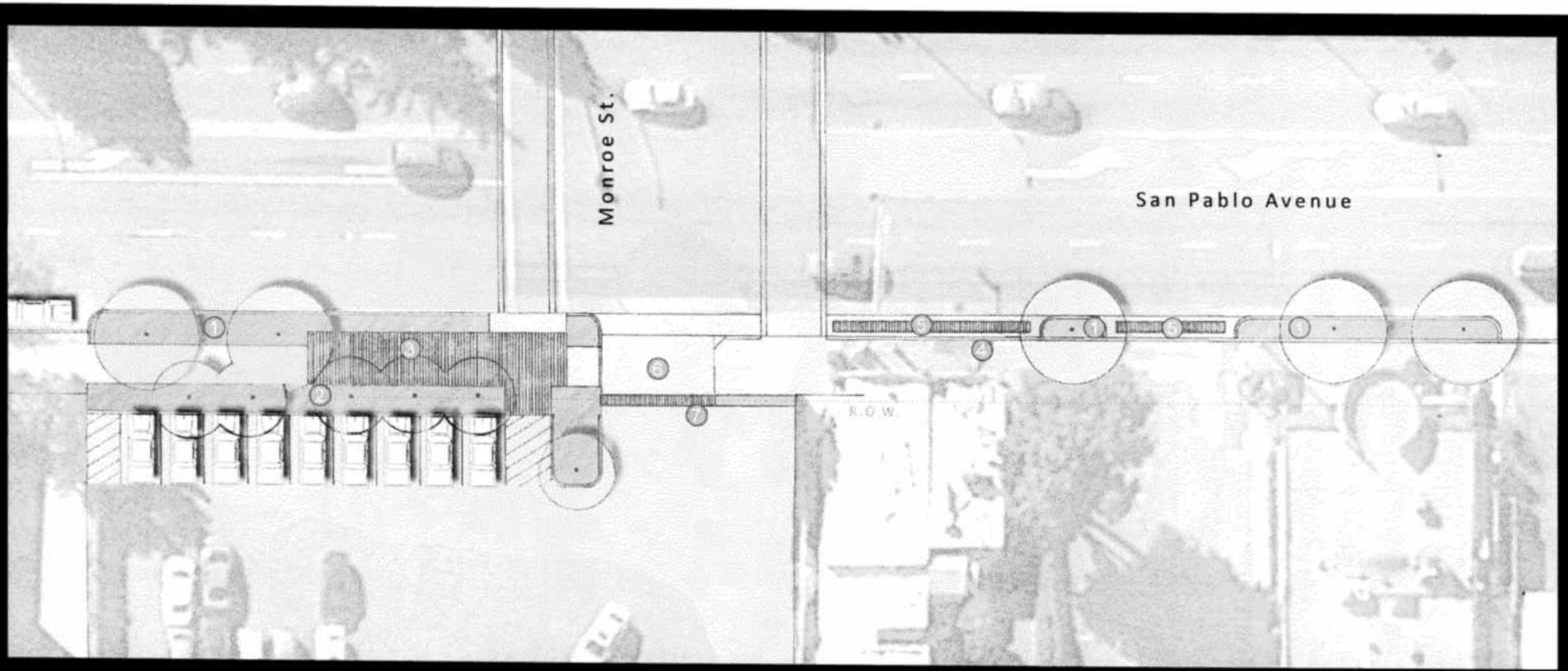
San Pablo Avenue Green Stormwater Spine Project

City of Berkeley, California

[nev-a-non] Nevue Ngan Associates

QUADRIGA landscape architecture and planning inc.

WILSEY HAM



Stormwater Improvement Concept Plan

Scale: 1"=20'
January 2013

1. Stormwater curb extensions capture runoff from San Pablo Avenue.
2. Sidewalk planters capture stormwater from private parking lot. This will require acceptance and coordination of improvements with private owner.
3. A boardwalk allows stormwater to be stored under sidewalk zone using Silva Cell technology.
4. Existing bus stop remains in current location.
5. Stormwater overflow from stormwater curb extensions is captured within a series of grated green gutters within parking zones/ driveway zones.
6. Existing driveway is modified.
7. Combination speed bump and trench drain system conveys runoff into sidewalk stormwater planter.

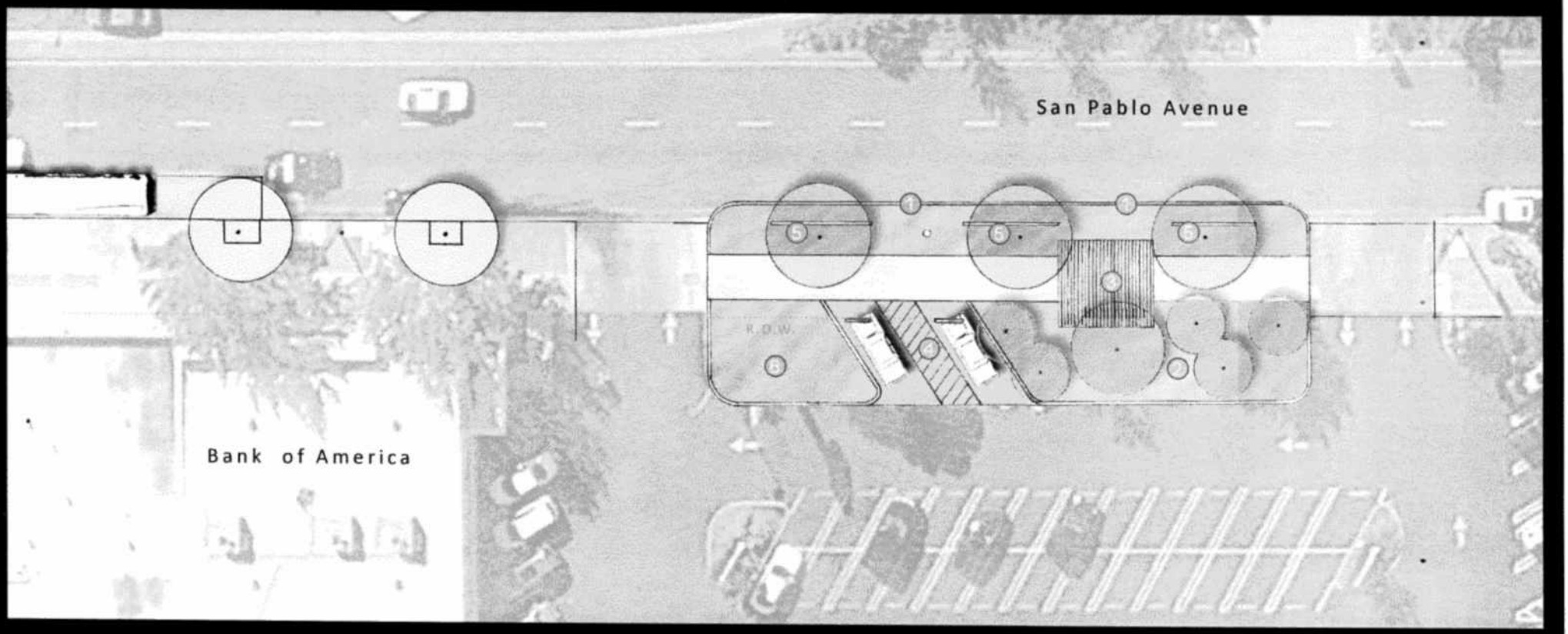
San Pablo Avenue Green Stormwater Spine Project

City of Albany, California

[nev-ə-hən] Nevue|Ngan|Associates

QUADRIGA landscape architecture and planning, inc.

WILSEY HAM



Stormwater Improvement Concept Plan

Scale: 1"=20'
January 2013

1. Stormwater curb extensions capture runoff from San Pablo Avenue.
2. Sidewalk rain garden captures stormwater from private parking lot. This will require acceptance and coordination of improvements with private owner.
3. A boardwalk allows stormwater to be connected between the curb extension and rain garden.
4. Existing ADA accessible parking spaces to remain at current location.
5. Existing large canopy street trees to remain. Stormwater facility is graded to allow existing street trees to remain.
6. Sidewalk rain garden captures stormwater from private parking lot. Existing signs and utilities will need to be protected.

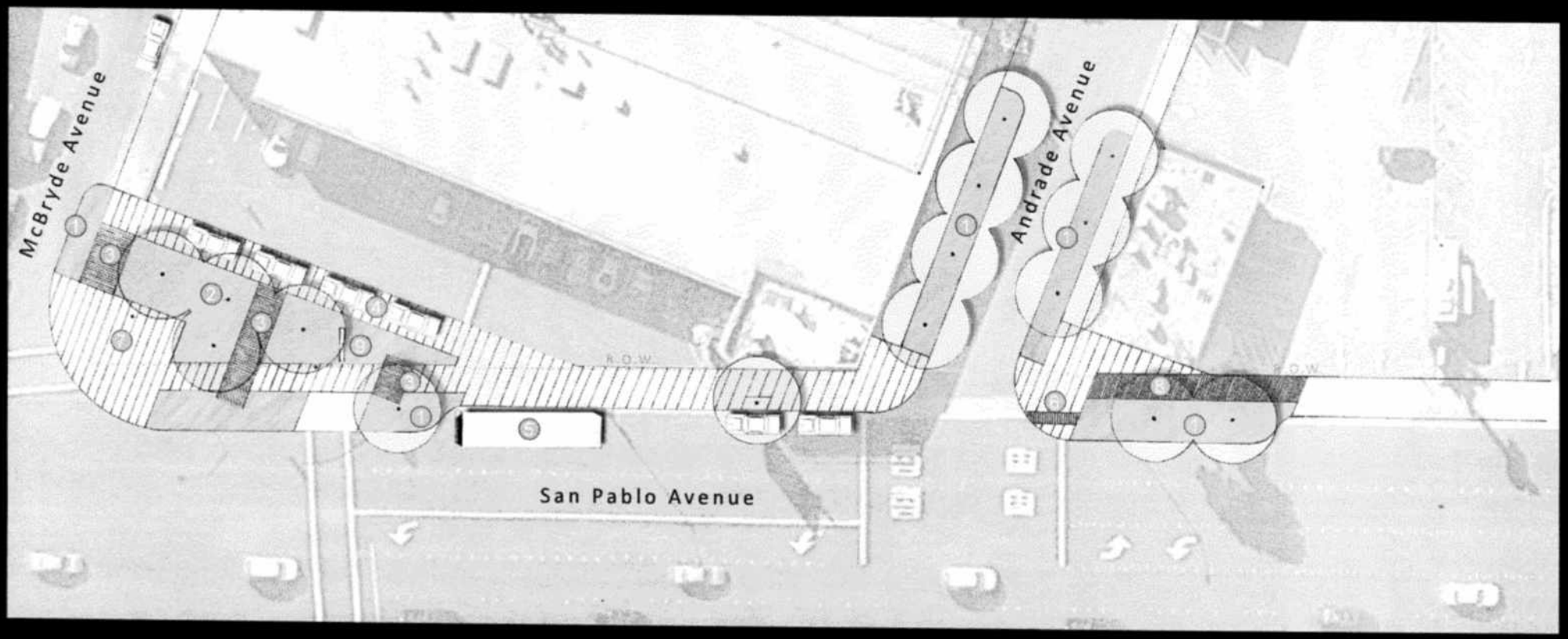
San Pablo Avenue Green Stormwater Spine Project

City of El Cerrito, California

(nev-u-non) Nevue|Ngan|Associates

QUADRICA landscape architecture and planning inc

WILSEY HAM



Stormwater Improvement Concept Plan

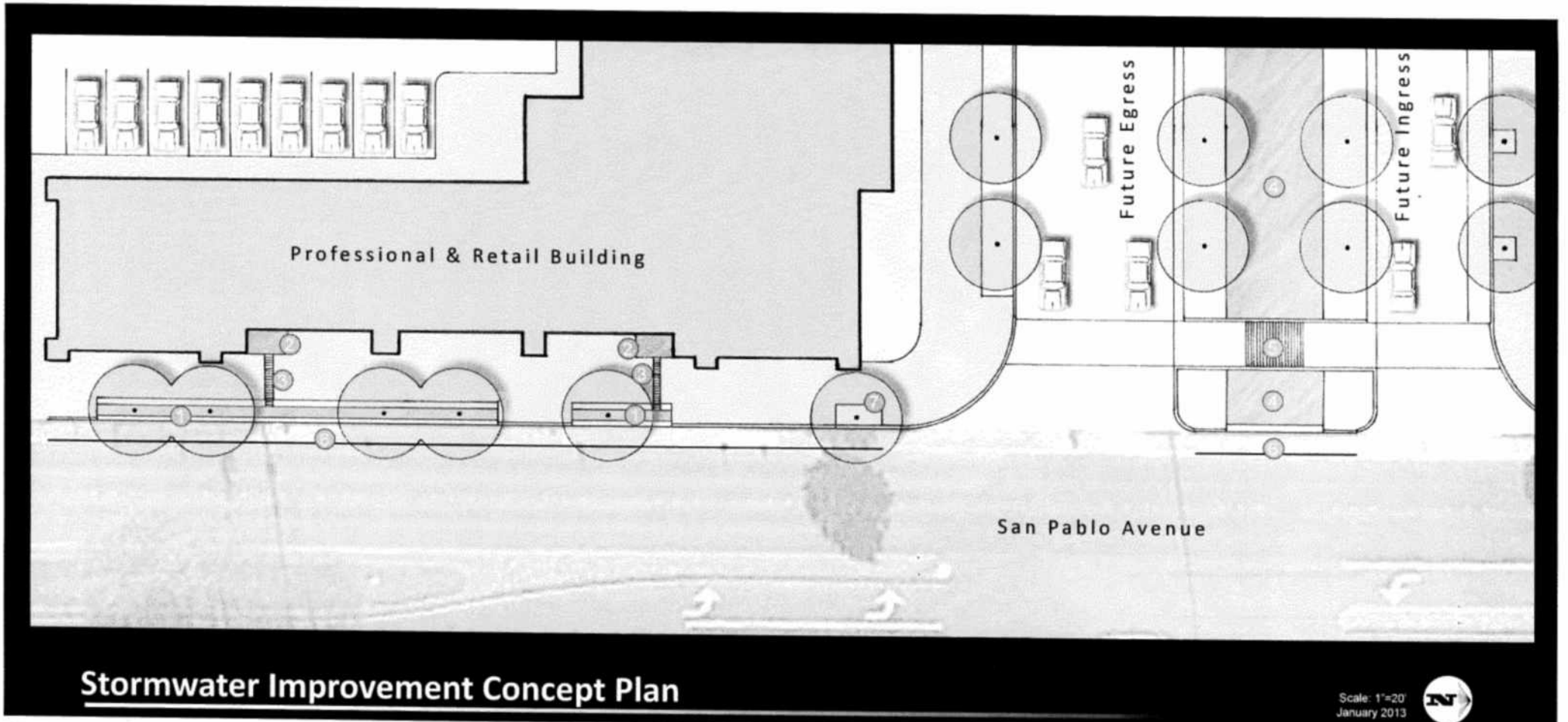
Scale: 1"=25'
January 2013

- Stormwater curb extensions capture runoff from San Pablo Avenue, Andrade Avenue, and McBryde Avenue.
- A new rain gardens capture stormwater from private parking lot. This will require acceptance and coordination of improvements with private owner.
- Boardwalks allow stormwater to be connected between the curb extensions and rain garden.
- Existing parking spaces are modified to allow for only parallel parking, however, additional parallel parking is allowed on McBryde Avenue
- Existing bus stop is adjusted to this location.
- Trench drains used for stormwater conveyance.
- A new corner plaza for placemaking opportunity (art, pedestrian seating, other amenities by others).
- Boardwalk allows for additional stormwater storage adjacent to stormwater curb extension.
- Existing private signage/utilities are to be protected within rain garden.

San Pablo Avenue Green Stormwater Spine Project

City of Richmond, California

(nev-u-non) Nevue|Ngan Associates
QUADRIGA landscape architecture and planning, inc.
WILSEY HAM



Stormwater Improvement Concept Plan

Scale: 1"=20'
January 2013

1. Stormwater planters capture runoff from San Pablo Avenue. Each planter has a flush curb condition next to bike lane for sheet flow of stormwater.
2. Future potential improvements include sidewalk planters that capture stormwater from a portion of private rooftop.
3. Future potential improvements include trench drains that convey rooftop stormwater overflow to street stormwater planters.
4. A large street median rain garden captures runoff from San Pablo Avenue. The rain garden entry has a flush curb condition next to bike lane for sheet flow of stormwater.
5. A boardwalk allows for stormwater conveyance under the pedestrian crossing
6. Existing bike lane is retained.
7. Existing street tree is retained.

San Pablo Avenue Green Stormwater Spine Project

City of San Pablo, California

[nev-G-non]
Nevue|Ngan|Associates
QUADRIGA
WILSEY HAM

ASSOCIATION OF BAY AREA GOVERNMENTS
EXECUTIVE BOARD

RESOLUTION NO. 03-13

AUTHORIZING THE FILING OF A NOTICE OF CATEGORICAL EXEMPTION UNDER CEQA FOR THE SAN PABLO AVENUE GREEN STORMWATER SPINE PROJECT

WHEREAS, the Association of Bay Area Governments (ABAG) is the home agency for the San Francisco Estuary Partnership (SFEP), a coalition of resource agencies, non-profits, citizens, and scientists working to protect, restore, and enhance water quality and fish and wildlife habitat in and around the San Francisco Bay Delta Estuary; and

WHEREAS, SFEP has secured funding from the Department of Water Resources for San Pablo Avenue Green Stormwater Spine Project (Project) that consists of the installation of green infrastructure to the municipal stormwater infrastructure along San Pablo Avenue in the Counties of Alameda and Contra Costa; and

WHEREAS, seven (7) municipalities (Oakland, Emeryville, Berkeley, Albany, El Cerrito, Richmond, and San Pablo) with stormwater infrastructure on San Pablo Avenue have agreed to participate in the Project and have identified eight (8) sites for the installation of green infrastructure; and

WHEREAS, DWR funding requirements include documentation of compliance with the California Environmental Quality Act (CEQA); and

WHEREAS, SFEP staff and ABAG's Legal Counsel recommend that ABAG make the findings contained in, and authorize the filing of, the attached Notice of Categorical Exemption for the Project.

ASSOCIATION OF BAY AREA GOVERNMENTS
RESOLUTION NO. 03-13

NOW, THEREFORE, BE IT RESOLVED, that the Executive Board of the Association of Bay Area Governments hereby:

1. finds that the San Pablo Avenue Green Stormwater Spine Project is categorically exempt from the California Environmental Quality Act pursuant to CEQA Guidelines §15301 as set forth in Notice of Categorical Exemption attached to this resolution; and

2. authorizes the Executive Director, or his designee, to file the Notice of Categorical Exemption with the Counties of Alameda and Contra Costa.

The foregoing was adopted by the Executive Board this 21st day of March, 2013.

Mark Luce
President

Certification of Executive Board Approval

I, the undersigned, the appointed and qualified Secretary-Treasurer of the Association of Bay Area Governments (Association), do hereby certify that the foregoing resolution was adopted by the Executive Board of the Association at a duly called meeting held on the 21st day of March, 2013.

Ezra Rapport
Secretary-Treasurer

Approved as To Legal Form

Kenneth K. Moy
Legal Counsel

Transbay Transit Center

TJPA

TRANSBAY JOINT POWERS AUTHORITY

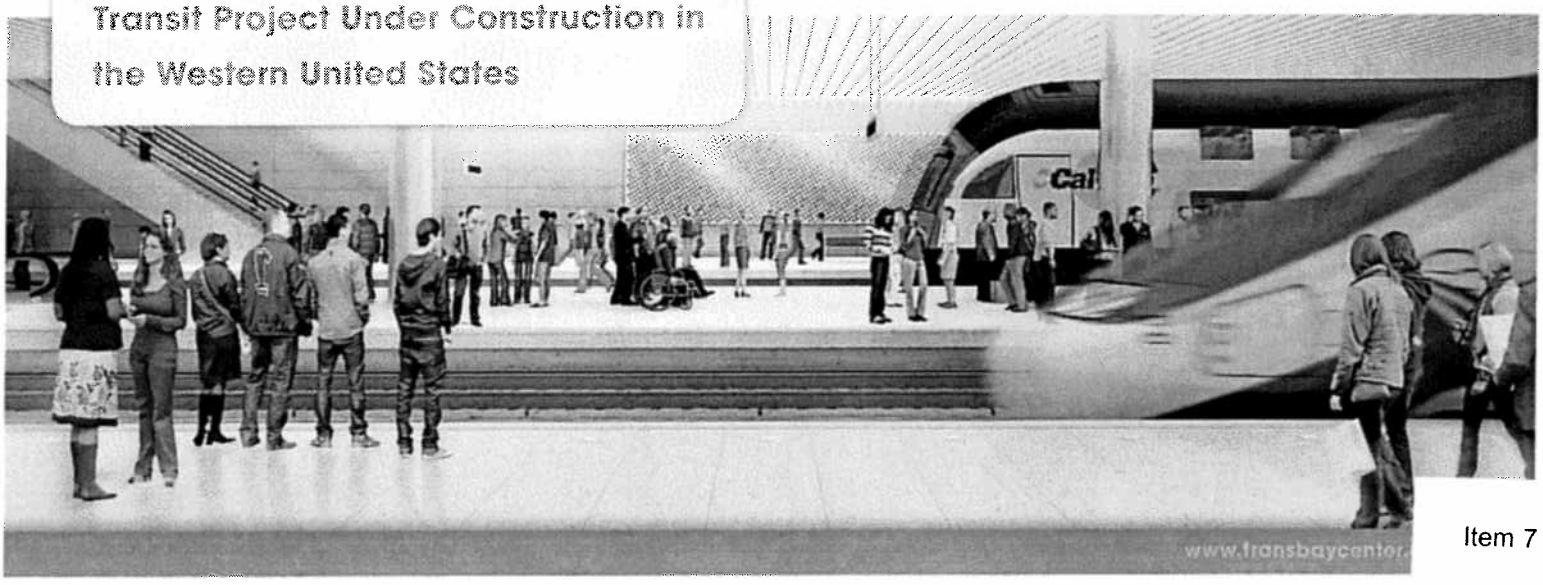
Building the First Modern Multi-Modal Transportation Station in the United States

The Transbay Transit Center Project will centralize the region's transportation network by making transit connections between all points in the Bay Area fast and convenient for more than 100,000 passengers per day. The Project will replace the current bus terminal with a new multi-modal transportation center—the "Grand Central Station of the West"— and house eleven transit systems under one roof. The new Transit Center will make public transit a convenient option as it is in other world-class cities and return San Francisco to a culture of mass transit.

As the northern terminus for high speed rail in California and the first modern high speed rail station to be constructed in the United States, the $4.2 billion project will create a modern regional transit hub and:

- Stimulate the economy by creating more than 125,000 jobs
- Generate more than $87 billion in Gross Regional Product and $52 billion in personal income through 2030
- Create a demand in transit use through intermodal connections for eight Bay Area counties and Southern California
- Serve as the San Francisco terminus for California High Speed Rail Service which will reduce California CO2 emissions by 1.4 percent statewide
- Serve up to 45 million passengers per year
- Use cutting edge designs and technologies to achieve LEED certification
- Feature a fully accessible city park and utilize natural light to conserve water and energy
- Reduce carbon dioxide emissions by more than 36,000 tons each year from the Caltrain commuter rail extension alone

The Transbay Project is the Largest Transit Project Under Construction in the Western United States



TRANSBAY TRANSIT CENTER

The Transbay Transit Center in downtown San Francisco will transform transportation in California and stimulate the economy. As the largest approved public transportation project under construction in the Western US, the Center will connect eight counties of the Bay Area through eleven transit systems: AC Transit, Amtrak, BART, Caltrain, Golden Gate Transit, Greyhound, MUNI, SamTrans, WestCAT Lynx, Paratransit and future High Speed Rail from San Francisco to Los Angeles.

More than 125,000 jobs will be created by the Transbay Transit Center Project.

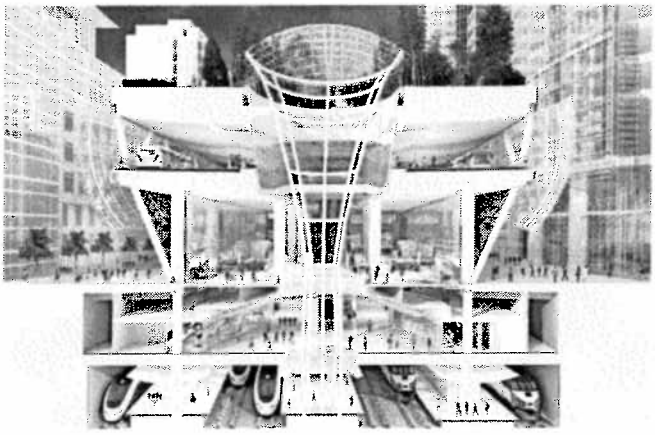
THE PROJECT

The project consists of three interconnected elements:

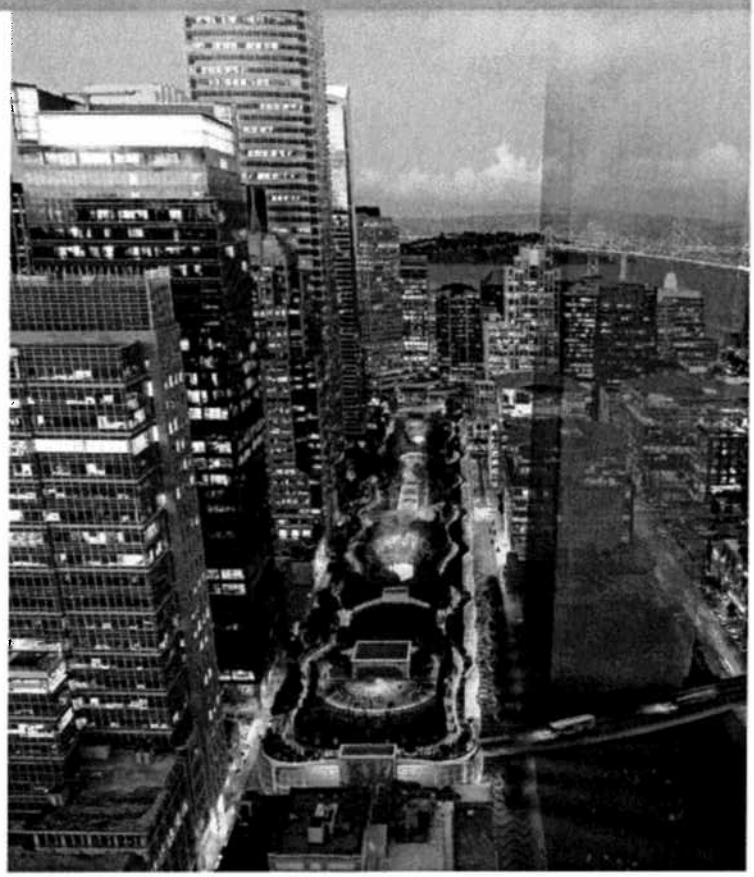
- Replacing the outdated Transbay Terminal
- Extending Caltrain and California High Speed Rail underground into the new downtown Transit Center
- Creating a new neighborhood surrounding the new Transit Center with homes, offices, parks and shops

FUNDING

The Transbay Transit Center and the Caltrain Downtown Rail Extension Program are being funded through local, regional, state and federal sources. To deliver public transportation improvements as quickly as possible, the project is being built in two phases. The first phase is fully funded at a cost of $1.6 billion and will be completed in 2017. While local and regional funds were used to complete early elements of the first phase, a $400 million federal economic stimulus grant and a $171 million federal loan cleared the way for construction to begin in 2010. TJPA is actively seeking new and innovative sources to fully fund the program's second phase.



The rail level of the new Transit Center will serve both Caltrain commuter rail service and High Speed Rail service to Los Angeles.



The new Transbay Transit Center Project will create 2,600 new homes and office and retail opportunities.

Did you know?

- Bay Area residents are filling 90% of jobs created by the project
- Construction workers on the project are representative of the Bay Area's ethnic diversity
- 23% of all contracts/subcontracts have been awarded to small businesses and disadvantaged businesses
- No reported work-related accidents in more than 28,000 craft hours

FEATURES OF THE TRANSBAY TRANSIT CENTER

The Transbay Transit Center features "City Park", a 5.4-acre fully-accessible public park that will sit atop the facility—one of many environmentally-friendly building features. The LEED Gold Certified Transit Center will incorporate green building strategies including solar shading, wind power and the use of natural light to conserve water and energy. The design of the Transit Center will feature a surrounding retail "Main Street", 2,600 new homes, neighborhood parks as well as artworks by local artists that have been incorporated into the design of the Center.

MEMO

DATE: March 12, 2013

TO: ABAG Executive Board

FROM: Ezra Rapport, Executive Director

RE: Plan Bay Area Process and Schedule

Thank you for your patience as MTC and ABAG staff worked to schedule the many meetings that come with the release of the Draft Plan and companion Environmental Impact Report (DEIR). This memo reviews the past direction we have received from you and lists key milestones and dates.

The Draft Plan presents the same forecast and land use distribution pattern that were developed in the Preferred Scenario. The Draft Environmental Impact Report includes an analysis of five difference land use alternatives.

Please note that the Draft Plan and Draft Environmental Impact Report will be presented to the Joint MTC Planning and ABAG Administrative Committees at its April 5th meeting. Given that these documents will be released following the March Executive Board meeting, ABAG and MTC staff will provide a brief overview of the Draft Plan documents. Staff will also provide an overview of the key messages and recent forecast by the Department of Finance.

Plan Bay Area Schedule

Dates	Milestone
March 22	Release of Draft Plan Bay Area (begin 55-day comment period)
March 29	Release of Draft Plan Bay Area Environmental Impact Report (begin 45-day comment period)
April 5	Presentation of Draft Plan and DEIR to Joint MTC Planning and ABAG Administrative Committees
April-May	Various comment opportunities, presentations, public hearings, etc.
May 16	Close of Comment Period (Draft Plan, DEIR)
Late May	Present summary of comments to ABAG and Commission
June 20	Joint ABAG-MTC Adoption of Final EIR, Final Plan Bay Area, and conformity analysis

Plan Bay Area Engagement

The release of the Draft Plan and Draft Environmental Impact Report will spur elected official briefings and a third and final round of public meetings, polling and community engagement that are scheduled to take place before and after the release of the draft document.

There will be a total of four separate types of meetings conducted between now and the final adoption of the SCS this summer.

1. Elected Official Briefings
2. County wide workshops – Open House/Formal Hearing
3. Focus group meetings hosted by CBOs
4. Hearings on the draft EIR

1. Elected Official Briefings

Pursuant to SB 375, there should be at least one information meetings in each county (depending on population) within the region to present the draft Plan Bay Area to elected officials and solicit and consider their input and recommendations. The elected official briefings will take place before or during county Congestion Management Agency as follows:

Schedule of Elected Official Briefings

Date and Time	Location
Monday, April 8, 2:30 pm	Sonoma County: 2550 Ventura Avenue, Santa Rosa
Wednesday, April 10, 6:00 pm	Solano County: 675 Texas Street, Room 6004, Fairfield
Thursday, April 11, 6:30 pm	San Mateo County: 1250 San Carlos Avenue, San Carlos
Wednesday, April 17, 1:30 pm	Napa County: 625 Burnell Street, Napa
Wednesday, April 17, 6:00 pm	Contra Costa County: 2999 Oak Road, Walnut Creek
Tuesday, April 23, 11:00 am	San Francisco: 100 Van Ness Ave, 26th Fl San Francisco
Thursday, April 25, 2:30 pm	Alameda County: 1333 Broadway, Suite 200, Oakland
Thursday, April 25, 5:00 pm	Marin County: 750 Lindaro St, Suite 200 San Rafael
Thursday, May 2	Santa Clara County: 3331 North First St, Bldg B1 San Jose

2. County wide workshops – Open House/Public Hearing

The spring 2013, public meetings, polling and community engagement will be the third series of outreach efforts designed to provide opportunities and methods to comment. We are combining the third round of workshops and the formal public hearings on the draft Plan Bay Area in one event. This final round will satisfy the outreach requirements of SB 375. On December 14, 2012, this joint Open

House/Public Hearing format was approved by the joint MTC Planning/ABAG Administrative Committee.

The Open House will start at approximately 6 pm and run to approximately 7:30 pm. Members of the public can come and view displays, ask questions of staff and them move into the Public Hearing that will start at approximately 7:00 pm. MTC Commissioners and ABAG Executive Board members will preside over the formal public hearing portion of the meetings for the purpose of taking comments from the public. A court reporter will transcribe comments. For those that cannot stay for the public meeting or who prefer not to speak public, we will have a "comment station" where participants can submit their comments directly for inclusion in the public record. The schedule of the public meetings is listed below.

Schedule for Open House/Formal Hearings

Date	**Location**
Monday, April 8	Napa County: Elks Lodge, Napa
Monday, April 8	Sonoma County: Friedman Center, Santa Rosa
Thursday, April 11	San Francisco: Hotel Whitcomb, Civic Center
Monday, April 22	Solano County: Fairgrounds, Vallejo
Monday, April 22	Contra Costa County: Marriott, Walnut Creek
Monday, April 29	Marin County: Marin Center, San Rafael
Monday, April 29	San Mateo County: Holiday Inn Crowne Plaza, Foster City
Wednesday, May 1	Alameda County: Mirage Ballroom, Fremont
Wednesday, May 1	Santa Clara County: Downtown Hilton, San Jose

3. Focus group meetings hosted by CBOs

After a competitive procurement, MTC contracted with a group of CBOs at the beginning of the public participation process to engage communities of concern in the development of Plan Bay Area. These CBOs listed below will co-sponsor focus groups with MTC and ABAG on Plan Bay Area as cited below

Schedule for CBO Focus Group Meetings

Date	**Location**
Thursday, February 7	South Hayward Parish, Hayward
Wednesday, March 6	Housing Leadership & Peninsula Conflict Resolution Center, Redwood Shores
Thursday, March 7	Dixon Family Services, Dixon
Tuesday, March 12	KBBF Radio, Santa Rosa

Thursday, March 14	Chinatown CDC, San Francisco
Friday, March 15	VIVO, San Jose
Tuesday, March 19	San Jose Downtown Association, San Jose
Wednesday, March 20	Richmond Main Street, Richmond
Thursday, March 21	Marin Grassroots, Marin Jose
Wednesday, March 27	POWER, San Francisco

4. **Hearings on the draft EIR**

There will be a total of three hearings on the draft Environmental Impact Report around the region to present the findings and hear comments on the draft document. These will be formal public hearings to comply with CEQA, with a brief staff presentation and the balance of the meeting dedicated to hearing from the public. The schedule of the hearings is as follows:

Schedule for draft EIR Hearings

Date	**Location**
Tuesday, April 16, 10 a.m.	San Rafael, Embassy Suites
Tuesday, April 16, 7 p.m.	Oakland, Joseph P. Bort MetroCenter
Wednesday, April 17, 1 p.m.	San Jose, Martin Luther King, Jr. Library, San Jose State

MEMO

Date: March 21, 2013

To: ABAG Executive Board

From: Danielle Hutchings Mieler, Earthquake and Hazards Program Coordinator

Subject: Bay Area Regional Disaster Resilience Action Plan Initiative

Summary of Resilience Initiative

The San Francisco Bay Area has a large earthquake in its future which will heavily impact some areas of our region. We must be resilient to natural disasters—able to absorb their impact, bounce back from their effects, and adapt to changing conditions creatively. It is no longer enough to respond to disasters when they occur and rebuild when they impact us; we must incorporate disaster resilience into our long-range community plans.

To address the natural hazards in our future ABAG's Resilience Initiative, in conjunction with Bay Area cities and counties, and a wide range community partners, has worked to understand the capacity of the region to undertake a coordinated regional recovery process. Through a series of workshops and interviews, stakeholders identified priority actions that can improve the region's resilience to natural disasters and speed our post-event recovery and ABAG's Administrative Committee determined some very high and high priorities for implementation. The focus of the actions is those pre-event recovery activities that can be taken at regional and local levels.

Initiative Outcomes

The outcome of this initiative is a series of papers which assess the Bay Area's regional recovery capacity, including:

- Issue papers identifying recovery and resilience issues for the region on governance, housing, infrastructure, and economy and business.
- An action plan prioritizing actions that can be taken by the region and local governments to improve our regional recovery capacity around the four topic areas of governance, housing, infrastructure and the economy.

Proposed Priorities for Implementation

The ABAG Administrative Committee determined the following draft very high and high priorities for the Implementation Phase of the Resilience Initiative with staff input. The related Resilience Initiative strategy is referenced and secured project funding is noted.

Very High Priority

1. (Action G-5) Develop findings and an ordinance package on recovery for local jurisdictions to implement.

High Priority

2. (Action H-6, H-9) Establish affordable financing mechanisms to facilitate seismic mitigation of multi-family residential properties vulnerable to damage in earthquakes, and increase the number of retrofitted single-family homes by providing financial incentives for homeowners to retrofit
3. (Action G-5) Create an information gathering system and clearinghouse at the regional level to collect damage information from local governments and special districts, consolidated, and utilized to help develop a post-disaster regional recovery plan.
4. (Action H-2) Identify a framework for siting of temporary housing after a disaster that facilitates permanent housing recovery.
5. (Action H-3) Develop a regional framework for utilizing FEMA post-disaster housing subsidies to build permanent housing that aligns with the PDA framework.

Success in implementing these priorities will depend on strong relationships with partner agencies and organizations. Staff will develop a plan for strengthening relationships with local, regional, state and federal partners with important roles in this work, including the Bay Area Urban Areas Security Initiative (UASI), California Emergency Management Agency (CalEMA), and FEMA.

Next Steps

In the coming months staff will actively pursue several of these priorities as follows:

1. (Action G-5) *Sample ordinance package:* Efforts to develop an ordinance package for local governments are underway. Staff proposes the following approach for this effort.
    a. Gather existing recovery and resilience ordinances and best practices from Bay Area cities.
    b. Meet with select individual cities to better understand their needs, the support ABAG can provide, identify barriers to implementation, and solutions to address those barriers.
    c. Vet the toolkit with local government partners
    d. Vet the toolkit with disaster recovery professionals to identify additional needed ordinances that should developed future phases of the project
    e. The end result will be an online toolkit of sample ordinances in Word format to be downloaded and edited, accompanied by fact sheets that include information about the purpose of the ordinance, why it is needed, guidelines for implementation, and some case studies highlighting the success or challenges cities have had implementing specific ordinances.
2. (Action G-5) *Information gathering system and clearinghouse:* Staff will meet with CalEMA to better understand how post-disaster damage assessments are performed in California and how that information is collected and transmitted to the State Emergency Operations Center. Staff will also examine the potential to gather recovery managers from local cities and counties to be trained in FEMA best practices for performing damage assessments.
3. Staff will organize meetings with appropriate officials at CalEMA, FEMA, UASI and other organizations to share the findings of the Resilience Initiative and identify opportunities for collaboration.

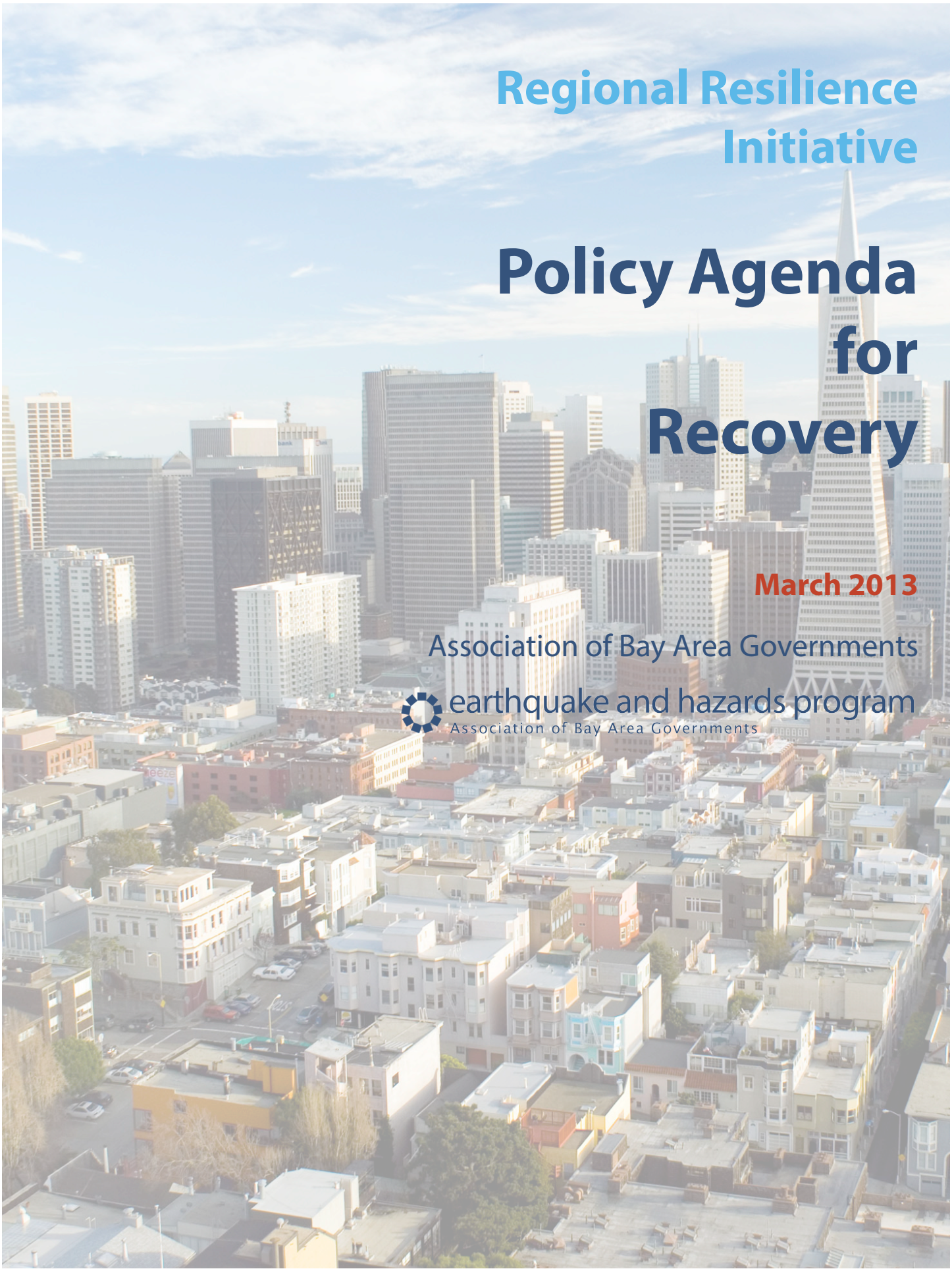
Recommended Actions

- Adopt the Resilience Initiative Policy Papers and Action Plan
- Refer the Resilience Initiative Implementation Phase to the Regional Planning Committee

Attachments

(1) Bay Area Regional Disaster Resilience Initiative Policy Papers and Action Plan

Blank Page



Regional Resilience Initiative

Policy Agenda for Recovery

March 2013

Association of Bay Area Governments

earthquake and hazards program
Association of Bay Area Governments

Regional Resilience Initiative

Policy Agenda for Recovery

March 2013

Paper 1: Executive Summary and Methodology

Paper 2: Background and Context

Paper 3: Governance Policy Paper

Paper 4: Housing Policy Paper

Paper 5: Infrastructure Policy Paper

Paper 6: Economy and Business Policy Paper

Paper 7: Action Plan

earthquake and hazards program
Association of Bay Area Governments

Credits

Principal Authors

Danielle Hutchings Mieler
Earthquake and Hazards Program Coordinator
Dana Brechwald
Earthquake and Hazards Specialist

ABAG Executive Staff

Ezra Rapport
Executive Director
Patricia M. Jones
Assistant Executive Director
Kenneth Moy
Legal Council
Miriam Chion
Planning and Research Director

ABAG Executive Board Leadership

Mark Luce
President
Supervisor, City of Napa
Julie Pierce
Vice President
Mayor, City of Clayton
Mark Green
Immediate Past President
Mayor, City of Union City

ABAG Regional Planning Council

Erin Hannigan
Supervisor, County of Solano
John Holtzclaw
Sierra Club
Tim Sbranti
Mayor, City of Dublin
Jeremy Masden
Executive Director, Greenbelt Alliance
Allen Fernandez Smith
Executive Director, Urban Habitat
Nate Miley
Supervisor, County of Alameda
Desley Brooks
Councilmember, City of Oakland
Julie Pierce
Mayor, City of Clayton
Harry Price
Mayor, City of Fairfield
Mark Ross
Vice Mayor, City of Martinez
Kristina Lawson
Councilmember, City of Walnut Creek
Pixie Hayward Schickele
California Teachers Association
Carol Severin
East Bay Regional Parks District Board of Directors
James P. Spering
Supervisor, County of Solano
Egon Terplan
Planning Director, SPUR
Karen Mitchoff
Supervisor, Contra Costa County

ABAG Publication Staff

Kathleen Cha
Senior Communications Officer, Editorial Assistance
Leah Zippert
Communications Officer, Editorial Assistance
Halimah Anderson
Communications Officer, Editorial Assistance
Victoria Rutherford
Communications Assistant

Project Consultants

Arrietta Chakos
Urban Resilience Strategies
Paula Schulz
Natural Hazards Mitigation

A special thanks to all participants in our workshop series, who provided the basis for our Policy Papers.

Thanks also to our interviewees, who provided detailed input essential to the development of these papers:

Doug Ahlers
Adjunct Lecturer in Public Policy, Harvard Kennedy School
Renee Domingo
Director of Emergency Services and Homeland Security, City of Oakland
Rich Eisner
Regional Administrator, Director of Earthquake and Tsunami Programs, Governor's Office of Emergency Service (retired)
Peter Ohtaki
Executive Director, California Resiliency Alliance
Julie Pierce
Mayor, City of Clayton
Sue Piper
Communications Director, City of Oakland (retired)
Chris Poland
Chairman and Senior Principal, Degenkolb Engineers
Laurel Prevetti,
Assistant Planning Director, City of San Jose
Bruce Riordan
Staff Consultant, Joint Policy Committee
Julie Sinai
Director, Local Government and Community Relations, University of California, Berkeley
Tom Tobin
President, Earthquake Engineering Research Institute
Will Travis
Staff Consultant, Joint Policy Committee (retired)

This project was generously funded by the Bay Area Urban Area Security Initiative (UASI)

ASSOCIATION OF BAY AREA GOVERNMENTS
Mailing Address: P.O. Box 2050, Oakland CA 94604-2050
Location: Joseph P. Bort MetroCenter, 101 8th Street, Oakland CA
(P) (510) 464-7900 (F) (510) 464-7979

ABAG Publication # P13001EQK

Regional Resilience Initiative

Introduction and Executive Summary

Clockwise from top left: http://www.freeimageslive.co.uk; www.nbcnews.com; quake.abag.ca.gov; www.earthquake.usgs.gov

earthquake and hazards program
Association of Bay Area Governments

Resilience Initiative Overview

This document and the six papers that follow represent the culmination of the analysis phase of the Regional Resilience Initiative undertaken by the Association of Bay Area Governments (ABAG). The goal of ABAG's Regional Resilience Initiative is to develop a sustainable process through which stakeholders in the Bay Area can progressively build resilience through collaborative planning for long-term disaster recovery. Through the Initiative, we have identified sector-specific recovery issues that may require jurisdictional coordination and collaboration. We have sought to understand the current capacity of the region to implement a coordinated recovery around these issues, and identified recommended actions needed to improve this capacity. Our focus has largely been on planning for long-term recovery.

Disaster recovery, as in past disasters, can span decades. Anticipating post-disaster issues and acting now to support post-disaster recovery is essential. Communities can work in concert with mitigation and disaster response initiatives to create a more sustainable and resilient region—one that has the ability to prepare and plan for adverse events, absorb and recover from their impacts and successfully adapt in the face of change. [1]

Building disaster resilience is an on-going, dynamic process where we seek to continually improve our capacity to respond to and recover from natural disasters. We also recognize that disaster resilient regions must be socially, economically, and environmentally resilient and that resilient regions are composed of resilient individuals, organizations, and communities.

To facilitate an effective and coordinated regional recovery from disasters, local governments, special districts, and regional, state and the federal government must come together in collaboration with key actors, such as businesses, nonprofit institutions, community leaders, and infrastructure agencies to determine responsibilities and decision-making structures.

1 Adapted from Disaster Resilience: A National Imperative. National Academies of Engineering, 2012.

How will Bay Area leaders work together to plan for and address the impacts of a major Bay Area Earthquake?

While regional governance structures for coordination are well-established for disaster response, developing regional governance for long-term recovery is needed for large-scale disasters because:

- A common vision for regional recovery will instill investment confidence in residents, businesses and the larger global community that the Bay Area will recover;
- Damage to regional infrastructure systems will require coordinated and prioritized decision-making about restoration and reconstruction;
- Many cities will simultaneously face similar decisions about rebuilding housing, restoring business and financing restoration. Crafting consistent and effective practices and leveraging mutual resources can facilitate a more uniform recovery across the region;
- A coordinated regional recovery will further existing goals for a more sustainable, equitable and prosperous region.

A major Bay Area earthquake will leave lasting impacts on our region, altering our built environment, economy, and many other characteristics that make the Bay Area unique. How will Bay Area leaders work together to plan for and address the impacts? Who are the major players in this work? How will cities and counties come together with business, nonprofit, and community partners to rebuild our region and restore our economy? What is the message and image we will send to the outside world after an earthquake? Will it be one of competition for limited resources or will we work together in the interest of the entire region and collectively advocate for our common needs? How will priorities be set?

Stakeholders indicate that a financing strategy to address rebuilding of the Bay Area's economy, infrastructure and housing is a regional necessity. In addition, advocacy for state and federal funding, along with needed legislative and

regulatory authority could be successfully crafted through an inclusive process. How we come together as a region to grapple with these questions and build regional resilience is the focus of these papers.

The papers are organized around the four Policy topics that emerged from our process: Governance, Housing, Infrastructure, and Economy and Business.

Governance

Recommendations from ABAG's Regional Resilience Initiative interview process confirm both the research and workshop findings that regional coordination and decision-making can speed disaster recovery and improve resilience if accomplished prior to the event. There is region-wide agreement that crises are the worst time to come together to craft public policy. Though many small and large cities make up the region, we are one economy, with shared physical and social systems. Environmental issues and regulations cut across jurisdictions and require coordination among levels of government and agencies well before these systems are disrupted. More than half of the Bay Area residents cross county lines to commute to work, making housing workers a regional concern.[2] Many assets are regional, including our transportation, power, sewer, water and communications systems.

The overarching goal of the Governance paper is to develop forums for **regional communication and collaboration**. Our recommendation is to accomplish this through three goals – **create a regional resilience policy forum, develop regional resilience leaders,** and **use information and data analytics for disaster resilience**.

No regional coordinating body or disaster recovery framework is currently in operation to facilitate sharing and decision-making in the aftermath of a major disaster, although Federal Emergency Management Agency (FEMA)'s National *Disaster Recovery Framework* and California Emergency Management Agency (CalEMA)'s *Regional Emergency Coordination Plans* may provide guidance on such a framework. Jurisdictions independently work their way through the FEMA regulatory system and make recovery decisions on their own, based on their current situation. The urgency for quick action and competing demands for time may inhibit decision-makers' awareness of and access to information about other actions occurring around the Bay Area, and knowledge about where building decisions fit within regional context. This can lead to fragmented recovery efforts and competition for federal funds. This is particularly an issue with the restoration and recovery of regional assets, such as infrastructure systems. A forum to help coordinate and guide jurisdictions within the region could not only speed restoration of regional services but expedite jurisdictional recovery as well, and ensure that the recovery process fits with larger regional goals for residents and businesses.

Governance Goals

- *Regional communication and collaboration*
- *Create a regional resilience policy forum*
- *Develop regional resilience leaders*
- *Use information and data analytics for disaster resilience*

Helping staff and officials understand what may be asked of them before the disaster hits can help ensure that those involved have adequate powers and tools and are prepared for what they may be expected to contribute in the post-disaster recovery phase. Identifying champions or new types of professionals who deeply understand recovery needs and have the ability to move between departments and influence officials can also greatly assist recovery if they are given appropriate roles and forums to use their skills.

In addition, jurisdictions need many different types of information after a disaster. For example, local officials must have essential damage assessment information for utilities, government, and private sector organizations to assist with decisions about outages, damaged infrastruc-

2 *The Bay Area Regional Economic Assessment. A Bay Area Council Economic Institute Report, October 2012.*

ture, transportation disruptions, red-tagged buildings, and related debris and transportation issues. The same damage impact information can support decisions about long-term sheltering, temporary housing, and expedited disaster assistance. Information needs may range from information on individual buildings to a general picture of damage in other parts of the region.

Housing

One of the most seismically active regions in the country, California has developed strong building codes that will largely prevent loss of life in a major earthquake. These codes were developed over many decades and have been continually improved as earthquakes have demonstrated the need for new techniques and stricter codes. Still, these codes cannot guarantee that even a new building will be habitable or restorable after earthquakes, and many older buildings built before modern codes have not been upgraded and may need to be demolished due to extreme earthquake damage. The challenge for policy makers during the recovery framework is to maintain affordable housing while also improving the seismic resilience of existing housing so that quality affordable housing can survive an earthquake or other disaster.

The first goal of the Housing paper is to **facilitate rapid housing recovery that fulfills regional goals of enhanced quality of life**. Some disaster projections forecast the loss of more than 150,000 housing units across the region. One possibility is to focus replacement housing construction within Priority Development Areas (PDAs), locally-nominated and regionally-supported infill development opportunity areas within existing communities.[3] PDAs are generally areas where there is local commitment to develop more housing along with amenities and services to meet the day-to-day needs of residents in a pedestrian-friendly environment served by transit. These qualities that make neighborhoods an enjoyable place to live also promote more resilient communities and supporting these services after an earthquake will be key to ensuring that residents can remain in their homes.

Housing Goals

- *Facilitate rapid housing recovery that fulfills regional goals of enhanced quality of life*
- *Promote housing mitigation to reduce housing loss and expedite recovery*

The second goal is to **promote housing mitigation to reduce housing loss and expedite recovery**. Seismically vulnerable multi-family buildings pose particular challenges for local governments and are expected to account for two-thirds of housing losses.[4] These buildings are not easy to identify and retrofits can be expensive, but the benefits of retrofitting are significant. Rebuilding multi-family housing post-earthquake is generally very slow, taking several years longer than for single-family homes and affordable units are often rebuilt above market rate, resulting in loss of affordable housing options. In some cities soft-story buildings are clustered together, creating potential for widespread loss of housing in concentrated areas.

Older single-family homes will likely account for nine percent of overall housing losses after each major earthquake.[5] Single-family homes are generally relatively easy and affordable to retrofit. However, owners who embark on retrofit projects often quickly become perplexed by the lack of retrofit standards for some types of homes and the inconsistent array of retrofitting techniques proposed by contractors. Owners are further discouraged by the lack of incentive programs enjoyed by residents for energy retrofits. An estimated two-thirds of single-family retrofits are done improperly,[6] a waste of homeowners' money that provides inadequate seismic benefits and

3 Association of Bay Area Governments, FOCUS Program http://www.bayareavision.org/initiatives/prioritydevelopmentareas.html

4 Preventing the Nightmare (update), Association of Bay Area Governments, 2003.

5 ibid

6 Preventing the Nightmare: Technical Appendix B, Association of Bay Area Governments, 1999 and False Sense of Security, Contra Costa Times, 2006.

Infrastructure Goals

- *Increase technical understanding of region-wide system vulnerabilities*
- *Increase ways to share risk information to collectively increase regional system resilience*

creates a false sense of security. Quality retrofits benefit not only homeowners and their families, but entire communities when they can get back on their feet faster after earthquakes.

Infrastructure

In the wake of a major disaster, the recovery of our major infrastructure systems will play a large role in our ability to recover quickly and effectively. Many recovery activities are highly dependent upon these systems. For example, the movement of goods - including supplies for rebuilding and daily goods and food for resuming daily lives - depends on a workable transportation system. People will not be able to stay in their homes if water and wastewater services are not available, and businesses will not be able to reopen. Repairing failed infrastructure systems and restoring their services are vital to the recovery of the Bay Area after a disaster, and failure to do so quickly and efficiently will result in widespread and long ranging, potentially devastating impacts.

The first goal of the infrastructure paper is to **increase technical understanding of region-wide system vulnerabilities**. Currently, few individuals understand how systems are interdependent. The knowledge that is available is largely based on speculation, not on rigorous analysis. The region needs peer-reviewed technical studies to better understand system vulnerabilities and what consequences may result from cascading failures.

The second goal is to **increase ways to share risk information to collectively increase regional system resilience**. To better understand interdependencies,

Economy and Business Goals

- *Retain big business*
- *Keep small and neighborhood serving businesses open*
- *Minimize supply chain disruption and keep goods moving*

we must improve sharing of risk information among service providers and regional stakeholders before a disaster occurs. We also have to participate in collaborative planning and accelerate mitigation. This sharing and collaboration is vital to an effective recovery. Communication and information sharing also allows for informed prioritization of infrastructure recovery. Understanding upstream and downstream interdependencies for repairs, as well as which systems key community resources rely upon, can be used to develop an appropriate timeline for streamlined recovery. Understanding priorities and system interdependencies allows providers to identify primary repairs to minimize interdependency and restore certain portions of systems quickly.

Economy and Business

The impact of an earthquake on the economy has one of the farthest-ranging implications for disaster recovery in the Bay Area. Without a swift and strong economic recovery, the Bay Area will suffer from a protracted recovery with slow repopulation in heavily damaged areas, slow rebuilding of homes and businesses, loss of revenue from business, tourism, and taxes, and the potential relocation of major industries. Estimates are that a repeat of the 1906 earthquake would cause $120 billion in direct economic

building related losses. [7] We have seen repeatedly in disasters that areas with the fastest economic recovery are those which already have strong economies and cultivate conditions to help businesses thrive before a disaster.

The Economy and Business paper identifies three post-disaster goals: **retain big business, keep small and neighborhood serving businesses open**, and **minimize supply chain disruption and keep goods moving**. The Bay Area regulatory environment, including zoning, permitting and environmental regulations may also inhibit businesses after a disaster, making it too difficult to stay or re-open. Businesses have identified a lack of consistency between regulatory agencies' policies at the local, regional and state level and commented that this situation limited their ability to expand within the region under normal business conditions.[8] The challenges of post-disaster recovery will elicit calls for regulatory relief. With large volumes of rebuilding happening simultaneously, the capacity of regulatory agencies could potentially slow down the process.

Small and locally serving businesses remain an important component of a strong region and are especially vulnerable to closure after a disaster. An estimated twenty-five percent of small businesses do not re-open following severe disruptions from a major disaster.[9] One reason why small businesses are so likely to fail is that they tend to operate with small profit margins and limited reserve funds, which means that even a short period without cash flow may have a significant impact on business. Small businesses also may not be eligible for SBA loans, which require businesses to demonstrate that loans can be repaid—a challenge when disasters disrupt business operations.

7 Kircher, Charles, et al, 2006. When the Big One Strikes Again—Estimated Losses due to a Repeat of the 1906 San Francisco Earthquake. Earthquake Spectra, Volume 22, No. S2, pages S297–S339. Note: similar losses are expected for a Hayward fault scenario earthquake.

8 The Bay Area Regional Economic Assessment. A Bay Area Council Economic Institute Report, October 2012.

9 California Seismic Safety Commission, March 2012. Post-Disaster Rapid Economic Recovery Plan Project – Leading Practices and Potential Steps for a Rapid Post-Disaster Economic Recovery," Report by Deloitte Consulting.

Other potential barriers to economic recovery include the disruption of vendors and supply chains to and from the region and the repercussions for national and international markets. Business disruption has upstream and downstream impacts on supply chains that can exacerbate impacts on the economy. For example, disruption of a manufacturing business may limit global supply of a particular product, disrupting the economy far beyond the impacted area. While the Bay Area's share of the manufacturing industry is not particularly concentrated, what is manufactured here is highly specialized and focused on sophisticated equipment design and development. Disruption of this specialized manufacturing could have global economic impacts.

Papers Structure and Format

This suite of papers seeks to provide a high-level analysis of the major goals for increasing resilience through a regional forum along with recommended actions for reaching these goals. The papers are structured into three general categories:

Theory—*Resilience Background and Context*

This paper provides the overall background and theory behind planning for resilience. It places disaster resilience planning in context with other types of resilience and sustainability efforts, particularly ongoing climate change planning and national resilience efforts. This paper also touches upon current state of disaster planning in the Bay Area and identifies major hazards of concern for the Bay Area.

Assessment—*Regional Governance, Infrastructure, Housing, and Economy and Business Policy Papers*

This suite of four papers examines the major issues of governance, infrastructure, housing, and economy and business. The four papers follow a similar format presenting significant goals for regional disaster recovery planning, and identifies regional actions that can be taken to address these issues. The regional decision-making paper serves as the foundation for the three other topic papers, as the goals and actions outlined there set the context for more easily

implementing sector-specific recommended actions.

Action—*Action Plan*

The action plan summarizes and prioritizes the actions identified in each of the four issue papers. The actions are analyzed for feasibility and include discussion of how to implement our recommended regional policy platform.

Methodology

The Regional Resilience Initiative was convened over an 18-month period. Stakeholder workshops were held throughout the process to solicit input on the major topic areas of housing, economy and business, including goods and services, and infrastructure. A final policy forum was held in October 2012 in conjunction with ABAG's Fall General Assembly, which focused on coordinated regional governance for long-term recovery and identified ways to increase shared understanding, opportunities for coordination, and tools for communication that will lead to regional strategies before an event that may improve the post-disaster recovery process.

In addition, the team conducted interviews in the summer of 2012 with key resilience stakeholders, thought leaders, and elected officials closely involved with exploring new public approaches on resilience. A complete list of our interviewees can be found on the credits page in the beginning of the suite of papers.

The work was also periodically reviewed by ABAG's Regional Planning Committee and will be formally adopted by ABAG's Executive Board in 2013. •

Regional Resilience Initiative

Background and Context

Photo source: www.fema.gov

earthquake and hazards program
Association of Bay Area Governments

Introduction

The research conducted through the Regional Resilience Initiative at ABAG may offer larger lessons for other communities facing similar regional resilience issues, but is grounded in the unique context of the Bay Area and the factors that characterize our region and vulnerabilities. The research perspective is also based in the Earthquake and Hazards Program's grounding in resilience and recovery theories, definitions, and tools, which gives these papers their unique voice. This paper provides the background ideas for the rest of the work, as well as paints our regional context's picture. Each of the subsequent papers comes from the point of view expressed in this paper.

The definitions and theory presented here may also help the region establish a baseline understanding of what resilience means, hopefully engaging a wider variety of stakeholders. While it is not necessary to be fully engaged with all the concepts laid out here to implement actions towards increased resiliency, this paper may provide the narrative that some need to further explore the topic of disaster resilience.

The first part of this paper defines of "resilience" and relates it to sustainability and disasters. With many definitions of resilience in use, we felt it was useful to define within this paper what constitutes resilience and a resilient region. The paper then describes the importance of planning to recover, as well as some of the tools that can be leveraged to address recovery and resilience. We then address where recovery fits within the context of the umbrella of resilience, which also includes mitigation and response.

The second part of the paper describes the Bay Area's unique conditions, including our assets and vulnerabilities. Understanding general trends and characteristics of the Bay Area, as well as a sense of the potential threats, allows stakeholders to better predict the types of issues we will face after a major disaster. The Bay Area enjoys a high quality of life with many natural and man-made resources and assets. By understanding what makes our region unique, we can plan to preserve and enhance our quality of life, despite major disruptions.

The following papers in this suite, with their high-level goals and specific recommended actions, all emerged from the foundation herein, which guided our process and set the context for the Resilience Initiative work.

Defining Disaster Resilience

Resilience itself is not a new concept. Cities and counties have been and are currently pursuing various strategies to become more resilient, but may use a wide range of language to define, understand and communicate what they are doing.

Resilience may combine aspects of environmental sustainability, economic strength, risk management, emergency preparedness, and strong social communities; however a major aspect of defining resilience as a region is coming to a common understanding about what a desired resilient state looks like. It is ultimately not important that every county, jurisdiction, and special district in the Bay Area use the same definition of resilience, but it is helpful to have an overarching common concept to use to begin to create a usable and common language within the region.

Below are some widely accepted definitions of many of the elements we feel contribute to resilience to help create a platform for regional understanding.

Sustainability

Sustainability and resilience are tightly integrated concepts – a sustainable region is inherently more resilient, and a resilient region is inherently more sustainable. Sustainability is commonly defined as "meeting the needs of the present without compromising the ability of future generations to meet their own needs." [1] California's *State Hazard Mitigation Plan* further defines sustainability using a vision by the National Commission on the Environment, which states that sustainability is "a strategy for improving the quality of life while preserving the environmental

1 *Our Common Future, Bruntland Commission (1987)*

Resilience and sustainability have a symbiotic relationship. Increasing the sustainability of a community can increase resilience to disasters.

potential of the future," of "living off interest rather than consuming natural capital."[2] Sustainability largely refers to the way that a society uses resources and the implications of those actions on various systems, scales, and timeframes.

The term sustainability is often used to speak about environmental issues, but can be expanded to also include social and economic sustainability. This basic pyramid of environmental, social, and economic sustainability is often referred to as the "triple bottom line." Expanding on this thought can include any valuable resource that a community relies upon for its quality of life, including physical, historical, and cultural resources. This multiple-resource approach to sustainability is particularly beneficial to use in the context of resilience, as resilience addresses not just protecting the built environment or physical world but maintaining and enhancing economies, social systems, and any number of other resources as well.

Resilience and sustainability have a symbiotic relationship. Increasing the sustainability of a community can increase resilience to disasters. For example, resilience to disasters cannot be maximized if environmental sustainability is not valued – in many instances, the degradation of the environment in fact can contribute to disaster vulnerability, such as the loss of wetlands increasing vulnerability to hurricanes or sea level rise. In addition, disasters that destroy or dramatically alter resources render communities unsustainable, since they impact the long-term ability of the community to access and use resources. Increasing resilience to disasters thus inherently increases the sustainability of a community, as it helps maintain access to resources, now and in the future.

Resilience

There are many specific definitions of resilience in academic literature, but we have found that all definitions share common characteristics. The National Academies Committee on Increasing National Resilience to Hazards and Disasters defines resilience as "the ability to prepare and plan for, absorb, and recover from or more successfully adapt to actual or potential adverse events."[3] California's *State Hulti-Hazard Mitigation Plan* similarly defines resilience as "the ability of a system to absorb shock and maintain its structure and functions with a minimum loss… (and) resume pre-event functionality in a relatively short time."[4] From these definitions, we can gather that the inherent attributes of resilience are that it is a function, not an end state (it is an ability); it helps to minimize negative impacts of large events; and it facilitates the quick resumption of an operable state to a system, which may be similar to the previous state or superior to the previous state.

The San Francisco Planning and Urban Research Association's (SPUR) *Resilient City* initiative defines "seismic resilience" specifically around the concept of resilience to a major earthquake. The organization's definition is the "ability of a city to remain safe and usable after a major earthquake. A resilient city is able to contain the effects of earthquakes when they occur, carry out recovery activities in ways that minimize social disruption, and rebuild following earthquakes in ways that mitigate the effects of future earthquakes." [5]

While the exact definition of resilience may vary in its specifics in terms of describing its focus and scope, the Community and Regional Resilience Institute (CARRI) gives us a language of five core concepts to anchor every definition:

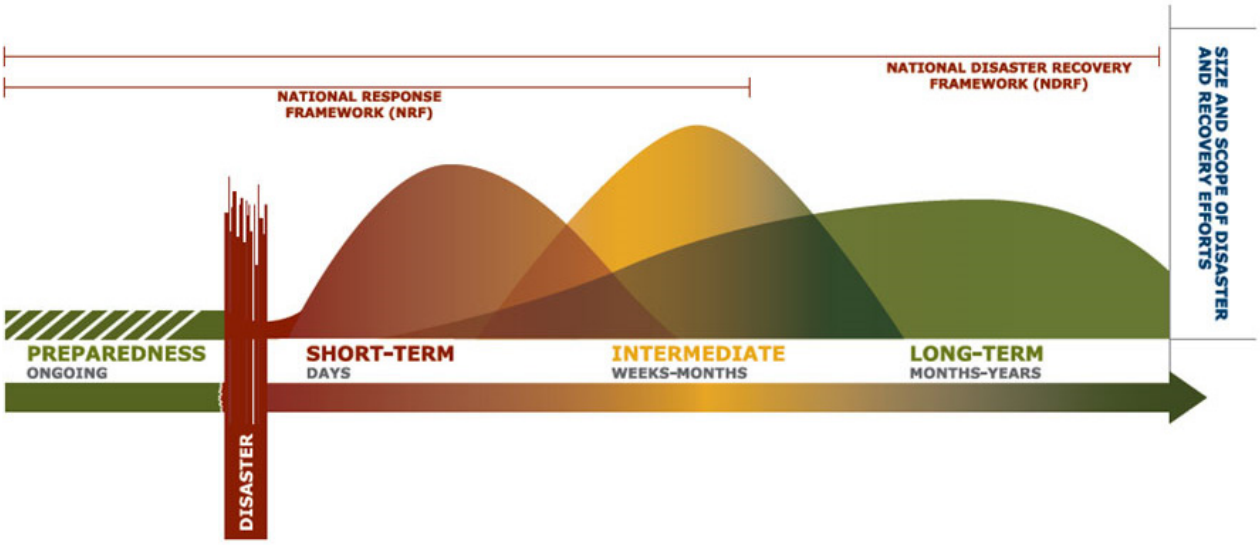
- Resilience is an **attribute** of the community, system, region, etc
- Resilience is **continuing**, an inherent and dynamic aspect of the system

2 *State Hazard Mitigation Plan, p. 102 (2010)*

3 *Disaster Resilience: A National Imperative (2012). The National Academies Committee on Increasing National Resilience to Hazards and Disasters and Committee on Science, Engineering, and Public Policy*

4 *California State Hazard Mitigation Plan (p. 102) http://hazardmitigation.calema.ca.gov/docs/2010_SHMP_Final.pdf*

5 *Defining what San Francisco needs from its seismic mitigation policies, (2009). SPUR.*



Disaster Recovery Continuum, Federal Emergency Management Agency's National Disaster Recovery Framework, p. 8

- Resilience involves elements of **adaptation** and can easily adapt to new variables
- Resilience puts systems on a positive **trajectory** relative to its pre-disaster state
- Resilience is **comparable** and **relative** – it is possible to compare systems' ability to be resilient. [6]

It is helpful to examine a few other factors that contribute to a state of resilience or that help to explain how resilience is defined. First is the concept of scale – the state of being resilient is greatly enhanced when it exists at multiple scales, ranging from the individual, neighborhood, community, city, county, and region to the state and federal levels. Second, for our purposes we also wish to emphasize adaptability and the ability to recognize opportunities for growth and improvement as a key element of resilience – the ability to see a disruption as a chance for transformation – to "build back better."[7] Lastly, as discussed above, it is important to see resilience and sustainability as highly interconnected.

Resilience can also be viewed through the complete life cycle of a disaster: beginning with mitigating a system to be able to withstand or adapt during a disaster, continuing with response immediately after a disaster. An effective and resilient response effort understands how actions undertaken during the response phase have implications for the long-term health and recovery of the system. Resilience continues throughout short-term and long-term recovery, and effectively shortens the period of time between the disaster and full recovery. Lastly, in a resilient society, the long-term recovery phase includes the integration of mitigation measures in rebuilding practices, effectively beginning the life cycle again.

Similar to the term "sustainability," the term "resilience" applies more to a "philosophical perspective than a scientific concept."[8] An understanding of the many definitions and attributes of resilience helps to form the baseline concept of regional resilience, despite variations that neighborhoods, communities, cities, counties, infrastructure providers, and businesses may define in terms of system boundaries and scale within their own definition of resilience.

Defining a Disaster

It is also helpful to understand what we mean by the term "disaster." In general, the types of disasters considered are those that are due to natural hazards, have disruptive

6 Definitions of Resilience: An Analysis. (2009). Plodinec, M.J. Community and Regional Resilience Institute (CARRI)

7 State of California Multi-Hazard Mitigation Plan, California Emergency Management Agency (2010). http://hazardmitigation.calema.ca.gov/docs/2010_SHMP_Final.pdf

8 Disasters by Design: A Reassessment of Natural Hazards in the United States (1999). Joseph Henry Press.

consequences on one or more built environment, social, or economic system (man-made system), and are large enough to cross jurisdictional boundaries or overwhelm the capacity of a single jurisdiction or entity to overcome, making them regional in nature.

Disasters and their consequences can take on many forms and characteristics. Disasters can be "fast," such as a sudden earthquake or tornado; "slow," such as long-term degradation due to sea level rise or changes in weather patterns; or "hybrid," when fast and slow disasters occur simultaneously and a sudden event is exacerbated or compounded by existing slow disasters.[9] The impact of the disaster can be low or high, and can range in geographic scale. [10] Impacts can also vary based on pre-existing conditions – if a community has a strong economy and is on a general upward trajectory in terms of quality of life and well-being, an impact may be much less devastating than in a community dealing with disinvestment and lowering of quality of life.

It should be noted that natural hazards are not in themselves disasters. In *Disasters by Design*, a natural hazard – an extreme, low-probability phenomena – has the potential to cause a disaster when it strikes a human collective, but is not in and of itself a disaster. The disaster emerges at the point of intersection between the hazard and man-made systems, and only if the hazard causes negative impacts on the systems. This interrelationship is a complex one with many variables – for example, man-made systems often create a negative feedback system that increases the frequency or strength of a natural hazard, such as when paving over wetlands reduces its ability to attenuate hurricanes and major storms; additionally the consequences of a natural hazard become more severe as man-made systems become more complex. The trauma and consequences of a disaster are inherently defined, reshaped, and redirected by human actions and perception. [11]

It is also worth examining the difference between a disaster and a catastrophe. Webster's dictionary defines a catastrophe as a disastrous event that results in a final end or conclusion. This definition implies a disaster that is insurmountable and where recovery to a pre-disaster or equivalent state is not feasible. According to thinking by San Francisco author Rebecca Solnit, in her book *A Paradise Built in Hell: The Extraordinary Communities That Arise in Disaster*, communities can overcome disasters, but by definition they cannot overcome catastrophes. The defining element that differentiates a disaster from a catastrophe is resilience. The elements that allow a community or system to adapt and overcome a disaster prevent any one event from becoming catastrophic and insurmountable.[12]

Objectives of Planning for Recovery

Why plan to recover?

After a disaster, many people in positions of authority face immense pressure to quickly make decisions and ensure that recovery action is taking place. The public expects quick restoration of the life they had previously known, and this pressure can often lead to decisions that are uncoordinated, not fully considered, stopgap in nature, or do not align with a community's agreed-upon long-term goals. Communication among various levels of authority and different systems may be lacking. Outside interests or financial constraints may place additional pressure on decision-makers. Decisions may be made without public input or public consideration. Outdated rules and regulations may present unforeseen problems, with no public policy tools available for change. Many ad-hoc groups may arise and make decisions of their own without awareness of or regard for other groups. Outside experts with little or no knowledge of local issues may come in to contribute their opinion, without sufficient knowledge of the local social context and with little regard to follow-through and consequences.

9 Envirenew Resilience Part 1 Report: Creating Resilient Communities (2012) http://quake.abag.ca.gov/wp-content/documents/resilience/toolkit/Envirenew%20Resilience%20Part%201%20Report_Creating%20Resilient%20Communities.pdf

10 Ken Topping (2012)

11 Disasters by Design: A Reassessment of Natural Hazards in the United States (1999). Joseph Henry Press.

12 A Paradise Built in Hell: The Extraordinary Communities That Arise in Disaster (2009), Penguin Books.

Many issues may arise in the recovery phase that can have repercussions in the community for decades.

Planners can play a large role in how quicly and effectively rebuilding happens and what the vision is for the process and outcome of rebuilding.

While specific recovery actions cannot be known or implemented until after a disaster, when the full consequences are assessed and the immediate needs of the community are met, there are many actions that can be taken before a disaster that assist and expedite recovery, such as adopting a Long Term Recovery Plan, creating a Recovery Task Force, and adopting a Recovery and Reconstruction Ordinance.

It is possible, however, to begin to understand, anticipate, and put planning tools in place before a disaster to minimize or eliminate many of these issues and conflicts. The region, as well as individual jurisdictions, has many tools at its disposal to "plan for recovery." Planning for recovery can result in an expedited recovery, due to coordinated communication, pre-approved recovery plans, and established planning systems and frameworks. Resilience and recovery planning in advance of a disaster may also result in a recovery phase that requires far less repair or restoration investment, because interjurisdictional efforts are not duplicated, money is spent in a coordinated manner, and pre-disaster mitigation has lessened damage. Anticipating where people will live and creating a post-disaster housing plan means fewer displaced residents, which can contribute to a more stable economy post-disaster. Planning with businesses on how to retain their services after a disaster can also stabilize the local economy, and minimize disruption to people's everyday lives.

Planning for recovery can also identify and prioritize actions for vulnerable populations and anticipate their unique needs. Lastly, the process of planning for disaster recovery before a disaster happens can result in a shared vision for the future, as stakeholders and residents begin to understand how they want their region to grow and what it could look like if a disaster expedites change and renewal. This can also result in a more empowered and informed public.

What planning/policy/legislative tools are available to support disaster recovery planning?

There are many tools currently in use today that can be used by stakeholders to plan for recovery. In considering these tools, we must keep in mind that the post-disaster decision-making landscape will likely be significantly different than the current landscape and so the way these tools are used may change. In examining existing tools it is also useful to consider which tools are not helpful or useful or may hinder recovery, and to begin to identify new tools that may be needed for long-term disaster recovery.

Planners largely have tools for managing land use, housing distribution, and the urban character in the recovery phase. Planners can play a large role in how quickly and effectively rebuilding happens, and what the vision is for the process and outcome of rebuilding. Some planning tools are below.

- General plans and specific plans: These will guide the vision of the city with or without a disaster, but must make it clear that in the event of a disaster, the vision will still be followed.
- Zoning tools such as overlay districts, nonconforming use regulations, special use permits, etc: Review existing zoning through the lens of recovery and rebuilding to identify potential conflicts or issues.
- Zoning for temporary housing and temporary commercial spaces: Temporary zoning has major implications for reconstruction and land use decisions. Understanding how this will work before a disaster will greatly aid recovery.
- Buyouts and financial incentives for where to build/not build, easements, etc.: Have a plan for where a buyout program might be a possibility and where funding might come from.

- Other tools: Historic preservation/historic district ordinances, historic landmark designations, and associated state and federal tax credits.

Who conducts this work?

Traditionally, work around disasters has been largely conducted by emergency managers. Yet as the practice of recovery planning evolves, the work involves new and different stakeholders throughout the recovery process. In addition to emergency managers, elected officials, city managers, county administrators, city/county attorneys, planners, community development staff, economic development staff, finance staff, and many other players in day-to-day government operations will likely play a large role in the recovery process. Additionally, a new type of professional is emerging that engages in recovery planning as a large percentage or all of their job. These professionals are largely still defining their role and developing support for their positions. The *National Disaster Recovery Framework* from FEMA identifies the role of a Recovery Manager and Recovery Coordinator at the local, state, and tribal levels along with a Federal Disaster Recovery Coordinator position within FEMA. These FEMA-designated roles can help inform what recovery professionals may look like.

As recovery planning evolves, these new professionals, as well as existing staff who will perform beyond their daily duties after a disaster, will need outlets for sharing information, learning new skills and knowledge, and making connections with other recovery professionals. The region needs a forum to gather these professionals including hosting lectures, learning events, and networking events, publishing newsletters, conducting research, setting standards for newly-defined tasks and job roles, and helping to match professionals to jobs and needy cities to professionals.

Schools may also begin to develop curriculum and new degrees, similar to the newly developed Graduate Programs in Sustainable Management at the Presidio Graduate School of Management.

A new type of professional is emerging that engages in recovery planning as their job. These professionals are largely still defining their role and developing support for their positions.

Mitigation and response planning to facilitate recovery

Appropriate and robust pre-disaster mitigation can mean the difference between a speedy, stabilized recovery process and a city or area that does not ever fully recover. Most disasters will cause the greatest amount of damage, by far, to the built environment. Damage to the built environment can cause injuries and deaths, displace residents from their homes and employees and employers from places of business, and disrupt the provision of basic services. Damages to infrastructure can impede the flow of people and goods and have spillover effects on multiple sectors. While not all damages can be anticipated and mitigated against, structurally mitigating homes and other buildings to withstand ground shaking can significantly lessen overall damage to the built environment, and mitigation to infrastructure can reduce loss of service.

Mitigating damages means a more intact built environment after a disaster, greater stability for residents and businesses, and far less money required for physical repairs. If people are able to stay in their homes because of minimal damage, they are less likely to leave the area and also do not require temporary housing. Minimizing physical damage to businesses allows them to begin functioning again more quickly and keeps the economy more stabilized.

While mitigation to buildings now may require an upfront investment, the money spent pre-disaster will likely prevent a much larger outlay of money that would be required post-disaster to make repairs or rebuild in a tightened and competitive construction market. One federally-sponsored study on multi-hazard mitigation efforts states that for every dollar invested in pre-event risk reduction, four

The Resilience Triangle illustrates the typical disaster cycle of sudden loss and recovery, with the triangle representing economic loss. Mitigating before a disaster reduces the size of the triangle, minimizing economic loss. Source: Conceptualizing and Measuring Resilience (Tierney and Bruneau, 2007)

FIGURE 1 The Resilience Triangle

dollars in response and recovery funds are saved.[13] Keeping the built environment more intact through mitigation also preserves the character of the urban area, maintains existing affordable housing, and minimizes the likelihood of a significant change in demographics after a disaster.

The way disaster response is conducted also has lasting impacts on long-term recovery. Traditionally, these two phases have been seen as separate. However, the connection between response and recovery should be made explicit, since they so heavily influence one another. Disaster response procedures set up structures, timelines, and precedents that can carry long into recovery.

Where emergency housing is located impacts where rebuilding and new development goes. Structures for decision-making may be set up hastily and place important decisions in uninformed hands or leave out important stakeholders. Short-sighted and compartmentalized decisions made to expedite rebuilding may not be coordinated regionally or fit in with long-term goals. Hours-long delays in decision-making during the response phase can translate into months-long delays during the recovery process. Actions during response can easily set a community on a difficult or unintended recovery path unless there is clear-sighted, long-term thinking taking place during response and communicated widely and effectively.

Quick, confident, and coordinated actions that foresee the long-term future, however, can be very powerful in instilling confidence and faith in residents and business leaders. If the community trusts that recovery will be effective and beneficial, people will be more likely to stay in the region. Transmitting this message quickly is highly important – if people perceive incompetence, lack of coordination, delay, or contentiousness in decision-makers, they will quickly lose confidence in the recovery of their community and are far more likely to leave. The same is true for businesses – small and large alike.

Quick, confident, and coordinated actions that foresee the long-term future can be very powerful in instilling confidence and faith in residents and business leaders.

Context

While the concepts of resilience and recovery planning may be largely universal and relatable to many different locations and conditions, the unique characteristics of the Bay Area allow us to tailor our understanding to the specific needs and vulnerabilities we face. The following briefly describes many of the major components of the Bay Area's assets and vulnerabilities – what we want to protect and preserve, what we can leverage for a successful recovery, and what types of threats we can anticipate that will disrupt our quality of life.

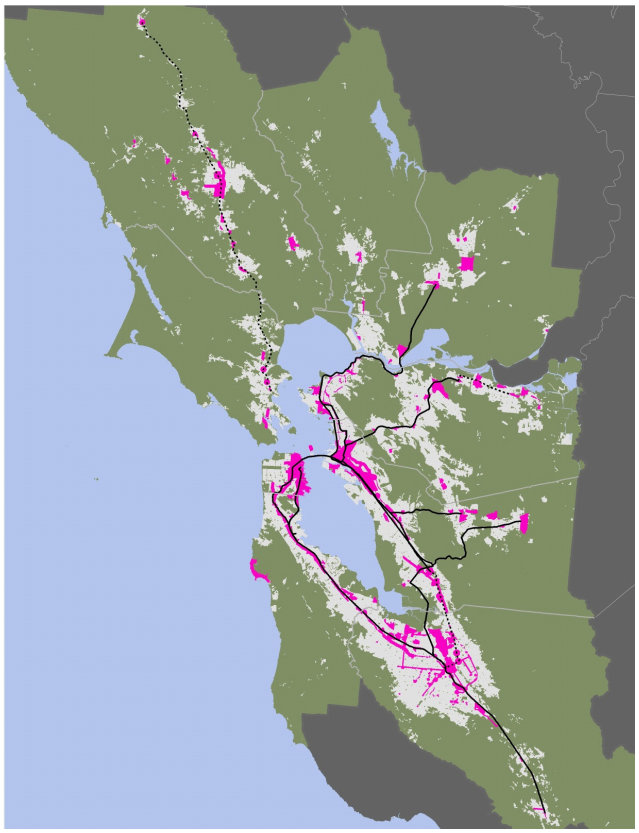
13 Natural Hazard Mitigation Saves: An Independent Study to Assess the Future Savings from Mitigation Activities. Multihazard Mitigation Council/National Institute of Building Sciences, (2005)

Bay Area Overview[14]

The focus of this study is the greater 12-county Bay Area, which combines the 9-county San Francisco Bay Area, consisting of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties, plus the counties of Santa Cruz, Monterey, and San Benito around Monterey Bay. The greater Bay Area is extremely diverse in every sense of the word - it is culturally rich, with a large diversity of ethnic groups; it is geographically diverse, with the bay, salt marshes, estuaries, wetlands, and hills and valleys, all shaped by major and minor faults; and its urban character ranges from downtown San Francisco with its high-density, highly urban form to the preserved farmland and rural areas to the North and South including the area around Monterey Bay. This diversity is what makes our region a unique, beautiful, and desirable place to live, but this is also what creates many unique challenges to building regional resilience.

Population

In 2010, the greater 12-county Bay Area had a population of 7.88 million people, with 7.15 million people located in the San Francisco Bay Area and 732,000 people in the Monterey Bay Area. The three most populous cities in the San Francisco Bay Area are San Jose (Population: 946,000), San Francisco (Population: 805,000) and Oakland (Population: 391,000). The three biggest cities in the Monterey Bay Area are Salinas (Population: 150,000) Santa Cruz City (Population: 60,000) and Watsonville (Population: 51,000). While the core area around the San Francisco Bay is densely populated and has a highly urbanized character especially in the big three cities (San Jose, San Francisco and Oakland), the area north of the San Francisco Bay and around Monterey Bay have a lower population density and a more rural character, dominated by open space and agricultural land. The greater 12-county Bay Area population is expected to grow by 1.98 million people or 25% in the next 25 years taking the overall population to 9.86 million by 2035. The majority of this growth will be focused in the core urban areas around the San Francisco Bay within the urban growth boundaries to protect open space and agricultural land.

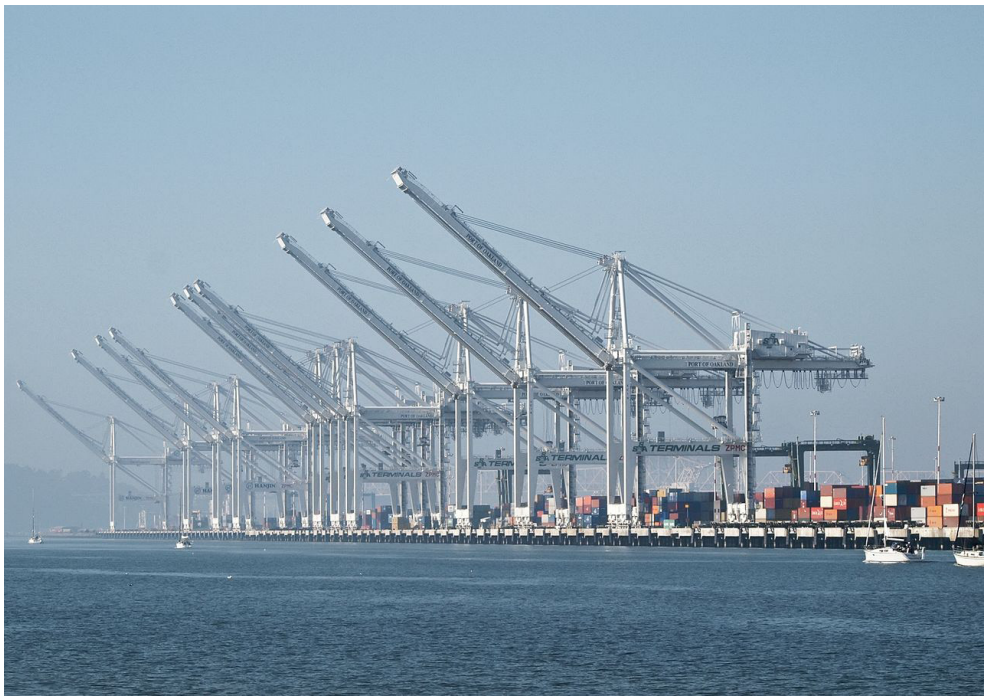


Bay Area map, illustrating areas of urbanized land (grey), non-urbanized land (green), and Priority Development Areas for future growth (pink).

Jobs and Economy

The greater 12-county Bay Area was home to around 3.71 million jobs in 2010. A large majority of jobs (3.39 million) are located in the San Francisco Bay Area with the biggest employment centers in San Francisco (569,000 jobs), San Jose (375,000 jobs) and Oakland (190,000 jobs). The Monterey Bay Area had a total of 329,000 jobs. San Francisco has the highest proportion of jobs to population, making it an employment hub for the region. The biggest employment sectors in the San Francisco Bay Area in 2010 were Professional Services, Government, Leisure and

14 Source for the following numbers are: ABAG (2012): Plan Bay Area, Jobs-Housing Connection Scenario (Draft) and AMBAG (2011): Envisioning the Monterey Bay Area, A Blueprint for Sustainable Growth and Smart Infrastructure, unless marked differently.



The Port of Oakland is the fourth busiest container port in the U.S., handling over 2 million freight tons annually. Photo source: Flickr user ingridtaylar

Hospitality and Manufacturing and Wholesale. The biggest employment sectors for the Monterey Bay Area were Educational Services and Health Care and Social Assistance, Retail Trade, Agriculture and Fishing and Professional Services.[15]

With the economy expected to grow in the next decades, employment for the 12-county Bay Area is expected to increase by 22% to 4.72 million jobs in 2035. A large proportion of those new jobs will be concentrated in the employment centers of San Jose, San Francisco and Oakland or in the development corridors that stretch along both sides of the San Francisco Bay.

The employment growth will be driven by the Knowledge-Based sector, which includes professional services, Information and Finance, the Health and Education sectors and the Leisure and Hospitality sectors. Many major corporations are headquartered throughout the region. Silicon Valley and the broader South Bay is home to many leading IT and high-tech companies making it a world-class business location. There are four national laboratories, over 30 public and nearly 50 private colleges and universities, and over a dozen seminaries. Students, faculty, visiting lecturers, and researchers come to the Bay Area from around the world to take advantage of the rich resources these facilities provide, and they also contribute greatly to our economy by being major regional employers.

15 *US Census (2010)*

Regional Infrastructure

The regional transportation system in the greater Bay Area is divided between the San Francisco and Monterey areas with some linkages between. The highly urbanized core area around the San Francisco Bay is serviced by multiple transit options, such as Bay Area Rapid Transit (BART), Amtrak, or the regional rail system operated by Caltrain as well as inter-county light rail and ferries. The areas outside the core area such as the North Bay, West Peninsula or the areas south of San Jose, are more dependent on bus services or the personal use of the automobile and the network of highways.

Much of this transportation system has been retrofitted over the 20 plus years since the 1989 Loma Prieta earthquake. Weaknesses, however, still exist and according to a recent study by the San Francisco Planning and Urban Research Association (SPUR), the failure or significant damage to any of these regional transportation systems could temporarily paralyze San Francisco or a wider regional area.[16] In addition to maintaining the currently existing infrastructure and its public transit network, expansion compatible with future population growth of the greater

16 *Lifelines: Upgrading Infrastructure to Enhance San Francisco's Earthquake Resilience. SPUR (2009)*

The Oakland Hills Firestorm in 1991 killed 25 residents and destoryed almost 4,000 homes. The economic loss has been estimated at over $1.5 billion. Source: www.sfgate.com

Bay Area is crucial. Developments in this direction are already being made with the planned expansion of BART to San Jose.

In general, there is a regional priority to increase non-auto modes of transportation, including walking, biking, and public transportation. Besides various transit improvements the region has seen developments to improve 'bikeability' with the San Francisco Bay Trail, which covers almost the entire shoreline of the San Francisco Bay. This improvement not only meets regional goals of sustainable development, but also provides alternate transit routes post-disaster.

The region has three major airports – San Francisco, San Jose and Oakland International, as well as Monterey Regional and Sonoma County Airports. San Francisco and Oakland International are directly connected to BART, while San Jose International is also well connected to other public transport.

The Bay Area has three ports located in Oakland, Richmond, and San Francisco. The Port of Oakland is the fourth busiest container port in the U.S., handling over 2 million freight units annually, and is served by the Burlington Northern Santa Fe and Union Pacific Railroads. Oakland loads and unloads over 99% of the containerized goods that move throughout Northern California. The Port of Richmond handles oil tankers and associated shipping, as well as automobiles and other dry and liquid bulk goods, and is the leading port in the San Francisco Bay Area in tonnage of automobiles and bulk liquids. The port has five city-owned and ten private terminals and is served by the Burlington Northern Santa Fe and Union Pacific Railroads.

The Port of San Francisco handles mainly cruise ships, passenger ferries, and commercial and sport fishing activities on the northern waterfront. Fisherman's Wharf is the center of Northern California's commercial and sport fishing fleets, and is a key tourist destination. Pier 45 houses the West Coast's largest concentration of commercial fish processors and distributors. All three ports play a major part in the regional economy, not only as hubs of trade, but also as employment centers.

The region has five major oil refineries in Benicia (Valero), Martinez (Shell and Tesoro), Richmond (Chevron), and Rodeo (ConocoPhillips), and depends on multiple power plants, wastewater treatment plants, waste management locations, and an extensive telecommunications system located throughout the Bay Area. The majority of the Bay Area depends on Pacific Gas and Electric (PG&E) for power (some jurisdictions, including Palo Alto, Marin, and Alameda, generate their own), while multiple entities provide water, wastewater, and waste services, which vary widely in size and scope. Both the San Francisco Bay and Monterey Bay Areas are serviced by a dense network of PG&E gas transmission pipelines.

Natural and Manmade Hazards Affecting the Bay Area

While the focus of this Initiative was on the effects of earthquakes on the region, other natural and manmade hazards can have regional consequences requiring a recovery effort similar to that for an earthquake. These threats include tsunamis, firestorms and windstorms, prolonged rain events with widespread flooding and landslides, droughts, pandemics, terrorist attacks, catastrophic events caused by aging infrastructures and systems failures and technological disasters.

There is a need for additional assessment capabilities and studies of impacts particularly to infrastructure from earthquakes and other major disasters, including vulnerability of the Bay Area water supplies to Delta levees and flooding from a super storm, to better determine restoration requirements, timelines, and costs in advance of an event. There is also a need to identify vulnerable neighborhoods that might be most heavily impacted by various earthquake events in the Bay Area. Focusing on areas that may suffer significant structural damage, housing and business loss could stimulate pre disaster recovery planning and discover organizational, programmatic, financial, and legislative gaps.

Earthquakes

The region is particularly vulnerable to large earthquakes. There are numerous major active faults in the region with a combined thirty year probability of a major earthquake in excess of sixty percent. Two fault systems pose significant risk in the Bay Area. The Hayward Fault runs about 74 miles long mainly along the western base of the hills on the east side of San Francisco Bay through densely-populated Richmond, El Cerrito, Berkeley, Oakland, San Leandro, Hayward, Fremont, and San Jose.

The San Andreas Fault, which cuts through Tomales Bay in Marin, runs offshore as it passes San Francisco and returns to shore as it passes through the San Francisco Peninsula,

Crews work to stabilize a hillside after heavy rains caused a landslide in densely popualted North Beach, San Francisco, forcing evacuations.
Photo source: www.sfgate.com

is the other significant regional threat. A large magnitude earthquake on either the Hayward or San Andreas Faults would cause significant damage to the region.

Soil liquefaction is a significant problem throughout much of Bay Area. Large areas around the Bay have been filled and now support residential and commercial buildings and infrastructure assets. Often the soils compaction at these sites is not sufficient to prevent liquefaction. Underground infrastructure assets—water and sewer pipes, natural gas and liquid fuel pipelines, power distribution lines, and communications cables and equipment are particularly vulnerable to liquefaction, as well as above ground structures. Deep soil basins, such as in Silicon Valley, can amplify ground shaking. Bridges, tunnels, and roadways will be impacted by disaster damage and debris. Large proportions of older buildings are not retrofitted for earthquakes and will be at risk, and others will be subject to land and mudslides. Along the coastal areas, there is the threat of tsunamis. For detailed information on earthquake and tsunami threats and impacts, see the ABAG website at http://quake.abag.ca.gov/.

Catastrophic Rain Events and Major Floods

So-called "pineapple express" storms which start off the ocean near Hawaii can cause a "super storm" that can result in a rapid "mega flood" which, in turn, could trigger a

catastrophic failure of many of the old and degraded levees in the 1100-mile area in the Sacramento-San Joaquin Delta, originally built to control floodwaters and increase farmland. Such a flood would submerge hundreds of square miles, impacting and washing away communities and some of the region's (and the nation's) most productive farmland.

Fire and Windstorms

Between late November and early March strong Pacific storms can bring both substantial rainfall (saturating and weakening soil) and strong wind gusts that can cause trees to fall on power lines, sometimes affecting hundreds of miles of coast and interrupting essential services for up to several days in some more remote localities. In the spring and fall, strong offshore winds often develop. These winds are an especially dangerous fire hazard in the fall when vegetation is at its driest. Examples of firestorms are the 1923 Berkeley Fire and the 1991 Oakland-Berkeley Hills Fire (Tunnel Fire). In the last 120 years, there have been over 100 significant urban/wildland interface fires in the East Bay hills alone.

Mudslides and Landslides

Some geologically unstable areas have been extensively urbanized, and can become mobile due to changes in drainage patterns and grading created for development. These are usually confined to small areas, but there have been larger problems in the Santa Cruz Mountains.

Climate Change

In coming years, the Bay Area will be subject to increasing effects of climate change. The extensive coastline and bay shoreline will be subject to rising sea level, leading to more frequent and more severe temporary flooding as well as eventual permanent inundation. The Bay Area will also experience more frequent and more severe storms and storm surges, increased risk for wildfires, and increased temperatures, heat waves, and air pollution. Increased snowmelt earlier in the season could flood the delta, and beaches will experience increased erosion and sand loss.

Sea level rise will put many regional assets at risk, including transportation, water, and power infrastructure, and will impact shoreline ecosystems and recreational space. Existing flood control measures will soon become inadequate, bearing greater loads and experiencing overtopping.

Multiple Hazards

Some locations in the Bay Area are located in areas that have conditions that make them susceptible to multiple hazards. In the case of earthquakes, many areas will experience not just ground shaking, but liquefaction, landsliding, surface fault ruptures, or tsunamis. Many of the same areas that will experience sea level rise are also areas that are highly vulnerable to liquefaction, and so will need to consider multiple hazards in the future. Fire ignitions after an earthquake due to damaged natural gas valves may cause significant damage in areas particularly susceptible to firestorms. In planning for recovery and resilience, hazards must be considered together, as planning efforts may be wasted if all hazards are not considered.

Disaster recovery is not separate from many of the tasks that cities pursue today – it is the process of city-building and economic development, amplified and intensified.

Conclusion

We have placed the work of the Regional Resilience Initiative and the papers that have resulted from this initiative in context and embedded in theory helps to validate our work. This standard definition and theory of resilience within the region provides a platform for all additional work initiated by this project and helps create a baseline standard for discussing the idea of resilience. We can expand the conversation around resilience beyond the well-known realms of mitigation and response also encourages new professionals to join in the conversation, which helps ensure a more complete recovery process. Disaster recovery is not separate from many of the tasks that cities pursue today – it is the process of city-building and economic development, amplified and intensified. Resilience is largely

about maintaining and improving the Bay Area's quality of life, despite natural events that may have the potential to disrupt our most significant systems. Presenting this more holistic vision allows resilience-building actions to become more integrated into all aspects of developing and planning for our region. •

Regional Resilience Initiative

Governance Policy Paper

Photo source: http://www.freeimageslive.co.uk

earthquake and hazards program
Association of Bay Area Governments

Introduction

A major Bay Area earthquake will have lasting impacts on our region, altering our built environment, economy, and many other characteristics that contribute to the Bay Area's high quality of life. How will Bay Area leaders work together to plan for and address the impacts? Who are the major players in this work? How will cities and counties come together with business, nonprofit and community partners to rebuild our region and restore our economy? What is the message and image we will send to the outside world after an earthquake? Will it be one of competition for limited resources or will we work together in the interest of the entire region and collectively advocate for our common needs? How will priorities be set?

Stakeholders who participated in ABAG's Regional Resilience Initiative process indicate that a financing strategy to address rebuilding of the Bay Area's economy, infrastructure and housing is a regional necessity. In addition, advocacy for state and federal funding, along with needed legislative and regulatory changes could be successfully crafted through a consensus process. ABAG's role has been to examine how we come together as a region to grapple with these questions and build regional resilience.

Governance in the context of this paper refers to the broad spectrum of regional actors, stakeholders, and institutions that will be involved in regional recovery from an earthquake. This paper addresses the major issues uncovered during the Regional Resilience Initiative about setting priorities, making decisions, and implementing policy. Our key recommendation is to facilitate a regional resilience policy forum to enhance resilience. The desired end product is a region that makes coordinated decisions and works for common resilience goals, at both the jurisdictional and the regional levels.

The San Francisco Bay Area governance structure is complex, with: 101 cities, nine counties, and hundreds of special districts with overlapping jurisdictional boundaries. Four regional agencies are responsible, respectively, for land use (Association of Bay Area Governments), transportation (Metropolitan Transportation Commission), air quality (Bay Area Air Quality Management District), and shoreline development planning, programming, and regulation (Bay Conservation and Development Commission). The agencies connect through the Joint Policy Committee (JPC). As well, many other organizations and agencies have a stake in our region's recovery, including state and federal agencies, businesses, nonprofits, and faith-based and community organizations. Their interests should be folded into local and regional discussions and planning efforts.

The Bay Area has already developed a nationally recognized structure for emergency response to disasters. The planning that supports this response includes diverse stakeholders. [1] The long-term recovery process, however, is more complex and less defined. Few jurisdictions have developed recovery plans and even fewer plans or studies have been performed to develop a regional recovery process. The time period for recovery can last decades, and all levels of government and the private sector have roles to play. The recently released *National Disaster Recovery Framework* from Federal Emergency Management Agency (FEMA) provides some guidance for recovery roles and responsibilities, but maintains the emergency response in the city-county-state-federal structure. As a region with an interconnected economy, the Bay Area has a long history of effective planning across counties. How should we organize to continue this tradition to build a more resilient region and plan our recovery from earthquakes and other regional scale disasters?

Long term disaster recovery begins immediately after a disaster. A recovery plan needs to be adopted by the region with an assertive strategy for securing supplemental

1 During the 1991 Oakland-Berkeley Hills Fire (Tunnel Fire), regional first responders could not effectively coordinate to fight the blaze. Consequently, Bay Area legislators, Tom Bates and Nicholas Petris, sponsored legislation requiring the California Office of Emergency Services (now CalEMA) to develop a Standardized Emergency Response System (SEMS)—a comprehensive system for multi-agency and multi-jurisdictional response to emergencies. This system was taken to scale and adapted nationally as the National Incident Management System (NIMS). Through SEMS aid and resources are requested by cities to the county, by counties to the state, and finally by states to the federal government. Response coordination is organized and managed effectively. In addition, the Urban Areas Security Initiative has developed five Regional Emergency Coordination Plans.

federal assistance. Given the federal deficit and increasing frequency of climate change related disasters, this assistance will be increasingly difficult to obtain in the future; consequently, the regional recovery plan will need to be comprehensive, detailed, and as accurate as possible. Community and elected leaders must recognize that few Bay Area assets, whether housing or infrastructure, are insured for earthquake damages. The region will rely upon a recovery plan that is funded from local, state, and federal sources – but also needs to provide security such that private property and business owners choose to re-invest.

Jurisdictions can and should plan for their own recovery. To adequately address regional recovery objectives, we need more than a few local plans. We need a coordinated regional effort that balances the needs and priorities of cities and counties. Only through coordination can a recovery plan be expedited that includes interjurisdictional and local priorities.

We recognize that regional agencies simultaneously grapple with similar questions about strengthening the regional economy and adapting to a rising bay. It is ABAG's intention that these efforts coalesce into a unified campaign to build resilience to all major threats. The recommendations are crafted as a regional policy agenda specific to earthquake risks, but can have a great impact if also applied to support and strengthen regional policy around all threats. Many of the recommendations are similar to those made by other policy bodies to address other regional disasters or threats.

The Overarching Goal: Regional Communication and Collaboration

Recommendations from ABAG's Regional Resilience Initiative interview process confirm both the research and workshop findings that regional coordination and decision-making can speed disaster recovery and improve resilience if accomplished before the unexpected occurs. There is region-wide agreement that crises are the worst time to come together to craft public policy. Though many small and large cities make up the region, our economy shares physical and social systems. Environmental issues and regulations cut across jurisdictions and require coordination among levels of government and agencies well before these systems are disrupted. More than half of the Bay Area residents cross county lines to commute to work, making housing workers a regional concern.[2] Many assets are regional, including our transportation, power, sewer, water, and communications systems.

Our ability to recover from a disaster as a region is uneven. The capacity to fully prepare for disruptions is a challenge for many local jurisdictions given current economic difficulties. This uneven ability can impede a consistent, region-wide recovery. Many municipalities don't have the financial resources to fund or manage disaster recovery; all would benefit from a regional approach to overcome resource disparities and support regional neighbors. Best practices and technical assistance for planning can be effectively provided at a region-wide level to coordinate regional information in support of local decisions and needs. Examining recovery at a regional level can strengthen restoration of local economies, address environmental concerns, and project confidence that encourages private sector business and financial institutions to continue to invest in the region.

The Regional Resilience Initiative's participants agreed that more region-wide coordination could support resilience-building at the local level. Bay Area leaders coming together to identify and address these issues now will reduce disaster impacts and promote an accelerated recovery that is equitable and strengthens our economy. Though commonly agreed upon issues emerged in the process and are presented below, findings from the stakeholder participation process must be further explored to plan better implementation and overcome barriers to disaster recovery. Our recommended actions begin to suggest ways in which to prioritize further research and action.

The overarching drive towards increased regional communication and collaboration, facilitated by the region while driven by jurisdictions, spurs ABAG's recommended actions in this paper, the other issue papers, and the Ac-

2 *The Bay Area Regional Economic Assessment. A Bay Area Council Economic Institute Report (October 2012)*

tion Plan. Improved regional communication will help facilitate our recommended actions, and in mutual support, each of our recommended actions work to increase regional communication. All issues and recommendations laid out aim to use a regional forum to increase collaboration to enhance jurisdictions' ability to be more resilient to disasters.

Goal #1: Create a Regional Resilience Policy Forum

No regional coordinating body or disaster recovery framework is currently in operation to facilitate sharing and decision-making in the aftermath of a major disaster, although FEMA's *National Disaster Recovery Framework* and California Emergency Management Agency (CalEMA)'s *Regional Emergency Coordination Plans* may provide guidance on such a framework. Jurisdictions independently work their way through FEMA regulatory system and make recovery decisions on their own, based on their current situation. The urgency for quick action and competing demands for time may inhibit decision-makers' awareness of and access to information about other actions occurring around the Bay Area, or where their rebuilding decisions fit within the regional agenda. This can lead to fragmented recovery efforts and competition for federal funds, particularly an issue with the restoration and recovery of regional assets, such as infrastructure systems. A forum to help coordinate and guide jurisdictions within the region could not only speed restoration of regional services but expedite jurisdictional recovery as well and ensure that the recovery process fits with larger regional goals.

G-1: Use existing intergovernmental committees to convene jurisdictions and facilitate communication around disaster recovery collaboration

The Joint Policy Committee (JPC) is tasked with overseeing and coordinating the work of the four regional agencies, including Association of Bay Area Governments (ABAG), the Bay Conservation Development Commission (BCDC), Metropolitan Transportation Agency (MTC), and the Bay Area Air Quality Management District (BAAQMD). Since recovery spans all four agencies, the JPC, as one option, is uniquely poised to facilitate a regional conversation around recovery, including local stakeholders from all four agencies.

Additionally, ABAG's Regional Planning Committee (RPC) is an existing body that convenes regularly to bring together regional stakeholders around planning issues in the Bay Area. The RPC seeks to represent the greater interests of the Bay Area and find planning solutions that consider and accommodate a wide variety of Bay Area stakeholders. Since the Committee is composed of Bay Area elected officials representing jurisdictions and special districts, with a diverse stakeholders and the nonprofit community, the perspectives and opinions uniquely represent the local perspective, yet seek regional solutions. Such an existing body, along with a staff-level task force, could serve as the structure for convening jurisdictions and facilitating recovery planning that comes up from the jurisdictions, rather than down from the region.

The role of a regional convener is to create a forum for policy discussions and information sharing, as the jurisdictions direct the content. Such a regional facilitator could involve varied stakeholders, convene in person on a regular basis, provide timely information, and facilitate projects and initiatives designated by the stakeholders. Desired outcomes would be more involved and informed stakeholders, consensus on major recovery decisions, and a coordinated regional policy platform. Providing a platform to develop disaster recovery planning could facilitate regional, state, and federal policy changes that benefit all jurisdictions.

G-2: Examine the feasibility of a regional disaster recovery framework

Case Study: Houston-Galveston Area Council

Following Hurricane Ike in 2008 the Houston-Galveston Area Council of Governments (HGAC), a 13-county region with more than 5.7 million people, helped rebuild its region. The COG's robust databases on infrastructure and household information provided decision makers with damage estimates for the whole region within days. The COG acted as an impartial mediator as funding and programmatic decisions were made, and facilitated regional discussions about economic development and needed structural protections such as seawalls.

We had people and staff who were not heavily impacted by the storm, while a lot of our communities were literally digging out—trying to clear roads and get sewage plants back online—we were able to focus on some of those high-level needs we knew would be important as people moved at the federal and state levels to allocate disaster funds.

– Chuck Wemple, HGAC's economic development program director

Within a broader forum, a regional disaster recovery framework could allow jurisdictions to develop procedures for making decisions about operations or processes as well as financial management issues that cross jurisdictional boundaries or are too cumbersome for one jurisdiction to manage alone. Jurisdictions will make many decisions independently based on their unique needs, and will largely run their recovery process within their own boundaries. Agreeing upon larger regional goals can help the Bay Area present a coordinated coalition to better attract and utilize resources and assistance.

A decision-making structure or framework could also speed the transition between disaster response, which has an existing regional system, and disaster recovery, where a system needs to be developed. Facilitating a transition ensures that communication and coordination take place and that decisions made during disaster response are considered in recovery, and allows recovery stakeholders to communicate their goals and priorities during the response phase. Often, decisions made during response have long-term repercussions on recovery, such as when rebuilding is allowed to take place in highly vulnerable areas, driven by the desire to return to "normal" as fast as possible. Having a structure in place for communication and decision-making that has consensus-driven goals during the response phase can help avoid mistakes in recovery. Certainly, rebuilding in recovery must take into account future hazard mitigation, as well as long term community sustainability.

A regional recovery framework must incorporate input from a wide variety of stakeholders. The roles of local, state, and federal agencies and regional organizations in recovery vary and overlap; cities and local jurisdictions must integrate the practical application of resources from the public and private sectors and institutions that are partnering in the recovery collaboration. Outreach to local community political leaders is also needed in recovery planning, along with boosted public outreach and education campaigns for community resilience, with defined recovery guidance measures and standards.

This framework may take the form of a written recovery plan, outlining procedures, roles, and tasks for all stakeholders involved, similar to FEMA's recently released *National Disaster Recovery Framework*. It should align with and incorporate other established recovery structures and concepts, such as the National Academy of Science's *Disaster Resilience: A National Imperative*. Model post-disaster recovery plans, such as those released by the American Planning Association, San Francisco's *Resilient City Initiative*, and Florida's *Post-Disaster Redevelopment Planning: A Guide for Florida Communities* could also serve as templates for a regional plan.

This framework should also be flexible enough to consider other long-term growth issues, such as economic chal-

lenges, environmental sustainability, sea level rise, and other threats to the Bay Area's long-term quality of life. However, the final product should be guided by stakeholders' needs. The framework can provide information to help local jurisdictions identify staff and leadership roles as a part of local recovery plans, with guidance on how to fulfill those roles. If operational authority at both the regional and local levels is identified before a disaster, responsibility and accountability are defined, ensuring that the recovery process succeeds.

G-3: Integrate resilience policy into existing current plans and practices

Many elements that support resilience and recovery can be integrated into existing regional and local work. The region should seek ways to integrate resilience work with existing projects to facilitate increased resilience without significant additional resources. Regionally, disaster resilience policy should be incorporated into ABAG's Sustainable Communities Strategy (SCS), the Joint Policy Committee's work on climate change, and other regional initiatives towards sustainability, economy, land use planning, and quality of life. These efforts create a regional vision with the potential to effectively guide disaster recovery.

For example, through Plan Bay Area[3] the Bay Area has already begun developing a vision for its future which will be carried out over the coming decades to create a more sustainable, equitable, prosperous place to live. The plan is a blueprint for sustainable future growth; this vision could be incorporated as we rebuild damaged neighborhoods and cities. The Bay Area has a rich history of visioning and implementing plans. We decided to reroute the Cypress freeway to better connect the Port of Oakland and enhance the West Oakland neighborhood; the Embarcadero and Central freeways in San Francisco were torn down to better connect the city with the waterfront and revive nearby neighborhoods. We know that such decisions can take years to reach and are hotly contested. However, having a common vision and guiding principles before a disaster can help guide and hasten our decision making process after the disaster.

Local leaders already grapple with difficult issues in their daily work, including finding affordable housing solutions, attracting good jobs and businesses, competing with other jurisdictions for tax dollars, providing services for residents, and reducing greenhouse gas emissions. Language and policy on recovery can be integrated into existing city-level documents to formalize policy and procedures rather than requiring new initiatives.

Discussion of recovery can be integrated into the General Plan's Community Safety Element during a routine General Plan update, and Climate Adaptation Plans can be updated to acknowledge liquefaction as a threat that is often concurrent with areas vulnerable to sea level rise. Such efforts provide a solid basis for policy and action for disaster recovery. Robust, well-developed plans for the future adopted now can serve as blueprints for the future, whether or not a disaster hits. If a disaster does hit, the plans serve as a framework already in place for a recovery plan and reduce the need for a lengthy planning process after a disaster, which delays recovery.

Goal #2: Develop Regional Resilience Leaders

Initiative stakeholders felt that disaster recovery was well handled by emergency managers. However, long-term recovery can extend years or even decades after response ends and requires many specific capabilities and expertise in addition to those required of an emergency manager. Disaster recovery actively requires input from the whole community and requires coordination among a wide range of departments over a very long period of time. It also re-

3 Plan Bay Area is an integrated regional land use and transportation plan that combines the Sustainable Communities Strategy (SCS), Regional Transportation Plan (RTP), and Regional Housing Needs Allocation (RHNA) into a single vision for the Bay Area. This plan identifies anticipated growth and where it should be focused in coordination with jobs and transportation. Jurisdictions participate by nominating Priority Development Areas (PDAs) to focus future growth. ABAG and MTC presented multiple growth scenarios and solicited feedback from ABAG Executive board as well as the general public to arrive at the preferred growth plan, the Jobs-Housing Connection Strategy.

quires knowledge, understanding of and coordination with state and federal agency policies, programs and both public and private funding sources.

In the recovery phase, many local government staff and officials will find themselves conducting similar tasks and fulfilling similar roles as they do today – only with the added pressure of how to permit quickly the rebuilding of housing, businesses, their own buildings, their economy, and major infrastructure systems. Everyday tasks will become elevated with higher stakes, more and impassioned input, and extreme pressure on quick implementation. The fiscal base of many cities will be severely damaged, necessitating the layoff of staff. They may also find that they are asked to perform tasks well beyond the original scope of their jobs. Helping staff and officials understand their post-disaster responsibilities before disaster hits can help ensure that adequate authorities and tools and are prepared for what may be needed in the recovery phase. Identifying champions and professionals with expertise in recovery policy and are adept in working with senior officials can assist recovery in strategic roles that leverage their skills.

G-4: Lead reconnaissance missions for local leaders, staff, and community stakeholders to areas undergoing disaster recovery

Many of our local leaders who have led their jurisdictions to greater resilience began to do so after they experienced firsthand the disaster recovery process, such as visiting New Orleans after Hurricane Katrina. Many of our region's earthquake planning champions were staff and elected officials during the Loma Prieta earthquake and the Oakland-Berkeley Hills Fire (Tunnel Fire); they vividly remember the challenges they faced in responding to and recovering from those disasters with little training or planning. For those who haven't experienced them firsthand and without recent local disasters in recent collective memory, disaster recovery tends to be abstract. It becomes easy to ignore risks and focus on short-term, urgent issues. However, seeing, speaking to, and relating to official counterparts in disaster-stricken cities can make tangible the reality of the recovery process and spur action at home. Experiencing the aftermath of a disaster can be a strong motivator for elected and community leaders to assume new responsibilities and guide action in their jurisdictions.

Professional groups already conduct such reconnaissance trips. The Earthquake Engineering Research Institute's (EERI) *Learning from Earthquakes* Program sends out reconnaissance teams into the field after major disasters to assess damage, document initial observations, and assess the need for follow-up research. The region could consider working with EERI to expand reconnaissance teams to include local and community leaders and appropriate staff. SPUR also leads annual learning trips for members, which could be geared towards disaster recovery as suitable.

Goal #3: Use Information and Data Analytics for Disaster Resilience

Jurisdictions need many different types of information after a disaster. Local officials must have essential damage impact information for utilities, government, and private sector organizations to assist with decisions about outages, damaged infrastructure, transportation disruptions, and related debris and transportation hazards issues. The same damage impact information can support decisions about long-term sheltering, temporary housing, and expedited disaster assistance. Information needs may range from information on individual buildings to a general picture of damage in other parts of the region.

Activities underway in the Bay Area support this information sharing, and existing technologies can be leveraged for this purpose to expand current efforts. More focused development of and integration with existing capabilities are called for to advance a system that communicates a common operating picture and supports regional situational awareness.

G-4: Establish and maintain a recovery clearinghouse to house resources for pre-disaster recovery planning and post-disaster recovery guidance

Currently, there is no central repository for information on long-term recovery, so knowledge distribution throughout the region is uneven and lacking. Many stakeholders simply don't have sufficient information to plan for recovery and don't know where to find the information. The region could benefit from an informational clearinghouse to house and share case studies, best practices, model ordinances, checklists, recovery plans, financing strategies, and other forms of guidance to help stakeholders better understand the recovery process and to have easily accessible tools to enact relevant policy, before and after a disaster. A sample of such information was shared at ABAG's 2012 Fall General Assembly for all participants and regional members.

The clearinghouse should not just collect information, but direct stakeholders to the information they need most at the times they need it most –for example, just-in-time checklists, ordinances, and other information readily accessible to them immediately after a disaster strikes. The clearinghouse should allow for contributions and updated content from the users within the region as it is developed, which can be vetted and organized by clearinghouse managers. Staff can also provide technical assistance so users can understand what kind of resources and information is available to them at critical points in their recovery process. For example, distributing FEMA reimbursement checklists before money is spent to ensure that jurisdictions comply with reimbursement requirements.

In addition to collecting information and tools, the clearinghouse should manage regional hazards data and data on the recovery process. Data by itself, such as building damage data, does little for stakeholders who need to make decisions quickly and under immense pressure in the post-disaster period. The data needs to be analyzed to tell its story and find its role in the larger disaster and recovery narrative. Specialized analysis can detect trends and patterns of land and building damage, population movement, and recovery trends; such analysis can inform policy decisions and plans and incite action. For example, mapping analysis can indicate to jurisdictions areas of concentrated damage, where significant demolition and rebuilding will need to occur, and where services for residents will need to be concentrated. At a regional scale, identifying jurisdictions with disproportionately severe damage can help inform where funding for rebuilding may go. Elected officials and the media can use maps, charts, or tables, or even narratives and statistics to convey understandable damage and recovery data. Analyzing data and crafting useful messages for varied stakeholders requires technical skills as well as understanding of who needs what information, at what time, and how to convey it effectively.

ABAG's Planning Group currently manages and analyzes land use, planning, and population data for the region and uses this data to work with local jurisdictions to meet long-term regional goals. Expanding the type of data sets it manages and analysis it performs to include disaster data, such as HAZUS™ results or vulnerability analysis before a disaster, and damage data after a disaster, would enable local jurisdictions to more fully understand disaster planning implications without major significant resources. •

Regional Resilience Initiative

Housing Policy Paper

Photo source: www.nbcnews.com

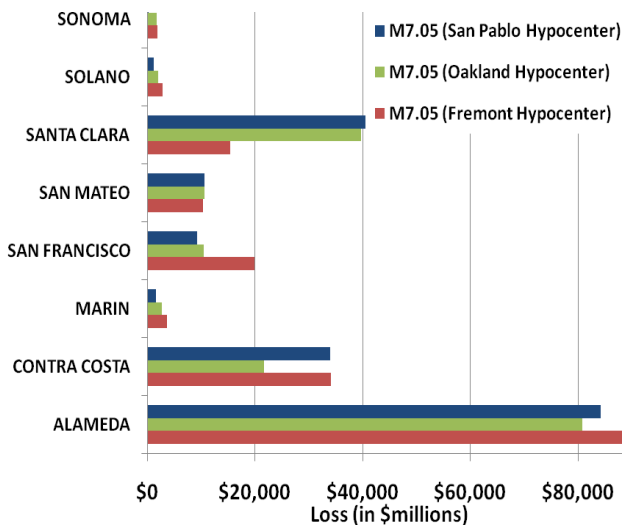
earthquake and hazards program
Association of Bay Area Governments

Background

As one of the most seismically active regions in the country, California has developed strong building codes that will largely prevent loss of life in a major earthquake. These codes were developed over many decades and have been continually improved as earthquakes have demonstrated the need for new techniques and stricter codes. However, these codes do not guarantee that even a new building will be inhabitable after earthquakes and many older buildings built before modern codes have not been upgraded.

In a major earthquake on the Hayward or San Andreas faults, it is estimated that five percent of the Bay Area's housing stock—approximately 150,000 units—will be immediately and permanently damaged.[1] Nearly two-thirds of these losses will be in multi-family apartment buildings. Approximately $85-90 billion in direct residential building-related economic losses are expected in this scenario.[2] Compounding the problem, fires that occur after an earthquake can consume many more units, especially if fire suppression systems are not upgraded to survive an earthquake.

Rebuilding and repairing damaged housing after an earthquake in the Bay Area will be particularly challenging since only six to seven percent of the loss from ground shaking will be covered by residential earthquake insurance.[3] This is in contrast to disasters in other areas where a greater proportion of losses would be covered by insurance. For example, if the same earthquake were to occur in the Midwest, 60-80 percent of losses would be covered by insurance because earthquake coverage is part



The Bay Area is dramatically underinsured for future earthquakes. Source: 1868 Hayward Earthquake: 140-Year Retrospective, RMS (November 2010)

of a standard insurance policy.[4] In Hurricane Katrina, 50 percent of losses were covered due to the availability of and requirements for flood insurance under the National Flood Insurance Program.

While the greatest loss of housing in the Bay Area will occur primarily along either the Hayward or San Andreas fault, the impact will be felt region-wide. Following the earthquake, many uninhabitable units may be demolished quickly or abandoned. To accommodate displaced persons, temporary housing in offsite locations may need to be constructed. Displaced residents will seek alternate housing options across the region, impacting commute patterns and housing prices, and small business recovery. Housing is the key to a strong region and will impact the recovery of businesses and the strength of our regional economy.

It is particularly important to consider the needs of low-income residents, who have fewer resources to handle the challenges of a major earthquake. Low-income residents who live in flatland neighborhoods in cities such as Richmond, Oakland, San Leandro, and Hayward and parts of San Francisco will be particularly impacted due to liquefaction, proximity to the fault, and the preponderance of vulnerable housing types in these neighborhoods. Some low-income residents may be permanently displaced out-

1 Shaken Awake! Estimates of Uninhabitable Dwelling Units and Peak Shelter Populations in Future Earthquake Affecting the San Francisco Bay Area, ABAG, (2003); and ABAG Housing Data,(2009)

2 1868 Hayward Earthquake: 140-Year Retrospective, RMS (November 2010). Modeled loss estimates consider post-event loss amplification. All loss estimates are for property insurance coverage only. All losses above include shake and fire following earthquake. Note: This estimate includes losses for Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties only. Similar losses are expected for a San Andreas fault scenario earthquake.

3 Ibid.

4 Ibid.

side of the region due to loss of affordable housing options and temporary loss of jobs. In some of these areas, it will be difficult to rebuild housing in-kind and future climate change effects like sea level rise, storm surges, increased flooding, and liquefaction may make the decision to rebuild in certain areas unattractive.

The challenge for policy makers is to address the present need to create and maintain affordable housing while also improving the seismic resilience of existing housing so that quality affordable housing can be maintained for the long-term. Looking to the region's Priority Development Areas (PDAs) as defined in Plan Bay Area (see sidebar), is a good place to start for reconstruction. Before the earthquake these neighborhoods of regional significance can be strengthened and made more resilient to provide quality housing options and preserve regional investments for many years to come. After the earthquake, these neighborhoods can provide a blueprint for planning and reconstruction for the region. Some of the recommendations in this paper are verytechnical and specific, reflecting the advanced state of knowledge in the region on housing mitigation and recovery needs. A major barrier to implementation of many of these needs is adequate financing and public will.

Goal #1: Facilitate a rapid housing recovery that fulfills regional goals of enhanced quality of life

PDA's provide a good framework for aligning investments to improve the region's disaster resiliency with regional goals for future increased housing and transportation choices, economic prosperity, and environmental enhancement. The qualities that make PDAs and neighborhoods enjoyable places to live can also promote more resilient communities. Using the PDA framework after an earthquake to guide the rebuilding process will help us achieve regional goals and can expedite rebuilding.

Policy makers have already begun to invest in PDAs by improving transit and infrastructure and encouraging policies to promote compact, complete communities. Further investment to retrofit existing housing and require stronger building standards for new construction will improve the seismic resilience of these neighborhoods and will ensure that good affordable housing options are maintained even after major earthquakes.

When the earthquake strikes, homeowners with adequate insurance coverage and access to capital will be able to quickly rebuild their homes. Regional leaders can help ensure that earthquake insurance is a sensible investment for every homeowner. Homeowners who lack insurance coverage will struggle to repair and rebuild their homes and may abandon their equity rather than paying their mortgage, delaying recovery of the region.

Priority Development Areas

ABAG and MTC have developed, with other regional agencies, local governments, and other stakeholders, *Plan Bay Area*, the region's first Sustainable Communities Strategy (SCS), an integrated long-range transportation and land-use plan for the San Francisco Bay Area. A cornerstone of the SCS are Priority Development Areas (PDAs): locally-nominated and regionally-supported infill development opportunity areas within existing communities.[1] They are generally areas where there is local commitment to develop more housing along with amenities and services to meet the day-to-day needs of residents in a pedestrian-friendly environment served by transit. Over the next 30 years, the 169 PDAs in 72 jurisdictions across the region are expected to accommodate 80percent of new housing and 66 percent of new jobs on little more than four percent of the region's land.[2]

1 San Francisco Bay Area FOCUS Program. http://www.bayareavision.org/initiatives/prioritydevelopmentareas.html

2 Jobs-Housing Connection Strategy. http://scs.abag.ca.gov/pdf/JHCS/May_2012_Jobs_Housing_Connection_Strategy_Main_Report.pdf

While permanent housing is being built, temporary housing will be necessary. Policy makers must develop solutions for temporary and interim housing that maintain community synergy and encourage residents to invest in the Bay Area, and that are coordinated with plans for the region's long-term housing recovery.

H-1: Identify areas where mitigation and recovery resources are particularly important

Some areas will rebuild much faster than others and likely require fewer resources to do so due to prevailing market strength and current levels of investment (e.g. San Francisco). Areas with lower household incomes, lower savings rates, and limited access to financing will face longer housing reconstruction times than other areas. It is estimated that a disproportionate number of vulnerable populations live in earthquake vulnerable neighborhoods across the region, particularly in cities along the Hayward fault. Multifamily housing in particular tends to take longer to rebuild and is often not rebuilt as affordable housing.

Incorporating future land use planning and development feasibility into disaster planning can result in more mitigation and recovery resources devoted to places that especially need them. By overlaying information on hazard zones with vulnerable housing type, vulnerable populations, locations of subsidized housing units, and PDAs, policy makers can direct policies and allocate resources to the places that need it most; strengthening housing, reducing individual losses, shortening housing reconstruction timelines, minimizing economic disruption and promoting long-term regional growth and economic goals.

H-2: Explore interim housing solutions that encourage residents to invest in the Bay Area's recovery

If possible, while homes are being repaired, residents should be enabled to remain in their home or neighborhood through shelter-in-place policies.[5] When residents remain, local businesses are more likely to stay in business, and families are more likely to quickly return to the routine of school and work. Regional plans to provide neighborhood support centers can enable families to remain in place by providing centralized food and water distribution, access to generators and medicine, and other needed services and supplies. Neighborhood support centers facilitate maintenance of existing neighborhood support networks.

Many residents in uninhabitable buildings will seek temporary emergency shelter and then rental or temporary housing until their homes are rebuilt or they find alternate permanent housing. When temporary housing solutions are needed, counties should strive to accommodate displaced residents within their own counties to help maintain access to jobs and schools while preserving community fabric. In addition, the siting of temporary housing should be carefully considered as it has important impacts on the locations and timing of permanent housing solutions and the long-term recovery of neighborhoods.

H-3: Use *Plan Bay Area* as a framework to directing resources for permanent replacement of housing

When housing needs to be reconstructed on a large scale, regional leaders can use *Plan Bay Area* and the SCS framework and the identified areas for growth (PDAs) to guide post-earthquake planning and development. PDAs have plans for building that in some cases are ready to be executed and an earthquake can be an opportunity to implement these plans. This will have the dual benefit of stimulating recovery while achieving our regional vision.

5 *Safe Enough to Stay, SPUR (2012)*

A soft-story residential building is one that has large openings on the first floor, typically for parking or commercial space, with residential units on the upper floors. In some cases, the first floor may also contain residential units. Most were built prior to 1990. Photo source: www.chandler-properties.com

Regional leaders should also work with other disaster prone areas to reform the Stafford Act to allow Federal Emergency Management Agency (FEMA) to help pay for permanent replacement housing, not just interim housing. Certainly, the region will be looking to state and federal housing finance assistance to construct new replacement units.

H-4: Address the problem of underinsured homes with more realistic hazard insurance availability

To reduce the need for government assistance and stimulate rebuilding, policymakers can ensure that damaged homes are repaired and rebuilt more quickly by ensuring that more homeowners are covered by adequate hazard insurance. Policymakers should work with the California Earthquake Authority (CEA) to reduce both its annual premium and deductibles. The CEA has made some changes to make its porducts more affordable and is undertaking a research program that may allow for additional significant premium reductions for homes that have been seismically strengthened, providing both incentive for retrofit and benefit to homeowners. Earthquake insurance policies for renters, however, are a good value and their use should be more widely encouraged.

Goal #2: Promote housing mitigation to reduce housing loss and expedite recovery

Multi-family buildings

Seismically vulnerable multi-family buildings, such as soft-story buildings, pose particular challenges for local governments. These buildings are not easy to identify and retrofits are expensive, but the benefits of retrofitting are significant. Rebuilding multi-family housing post-earthquake is generally very slow, taking several years longer than for single-family homes, and affordable units are often rebuilt as market rate units, resulting in the loss of affordable housing options. In some cities, soft-story buildings are clustered together, leading to the potential for widespread loss of housing in concentrated areas. Because of the large number of residents living in multi-family soft-story buildings across the region (an estimated 100,000 dwelling units), regional solutions may be beneficial. Further work is needed region-wide to accurately identify soft-story buildings and make the cost of retrofitting more affordable.[6]

6 Development of Simplified Guidance for Seismic Rehabilitation of Soft-Story Wood-Frame Buildings (ATC 71-1). This soon-to-be-released document will provide guidance for addressing seismic retrofit requirements for soft-story wood-frame buildings in seismically active regions. The project will also develop practical

Policy makers in cities with particularly large numbers of soft-story buildings such as Oakland, Berkeley and San Francisco have made progress in identifying potentially vulnerable buildings, but have had limited success to date in encouraging owners to retrofit these buildings. This is in part because the size and complexity of the retrofit may trigger requirements for additional upgrades to meet building codes, which can increase the total cost of the project and may exceed the value of the property.

Better awareness of seismic issues by tenants and prospective buyers may help create market-driven incentives for owners to retrofit. Financial assistance programs can make retrofitting more feasible while providing a vehicle for education about seismically vulnerable buildings.

A revolving loan program through a voluntary assessment district, similar to those being developed for solar installations under the PACE program,[7] has potential to provide financing to as many owners as possible. These loans are paid back in first position on property tax bills. The loan payments stay with each building and not with their originating owners, so when the buildings change hands, loans can be transferred to new owners and spread out over 30-year loan periods. The seismic improvements enhance the value of the building and help secure the existing mortgages. No sources of capital, however, have been identified to initiate such a program.

H-5: Encourage accurate identification of soft-story buildings

Owner notification and evaluation programs such as those taking place in Berkeley, Oakland, San Francisco, and Alameda are part of a broader societal trend recognizing the seismic vulnerabilities of soft-story buildings and placing liability on building owners. This exposure is something that owners will have to take into account when deciding how they will operate their buildings.[8] Future phases of such programs may include mandatory retrofit requirements. While politically difficult, these programs will likely serve the cities', the building owners', and the residents' best interests in the long run.

While each of these cities has begun the process of identifying soft-story buildings in their city, better tools are needed to refine these assessments, and other cities with significant numbers of soft-story buildings need to begin this process to identify buildings in their cities. ABAG can assist by sharing best practices and lessons learned from other cities already embarking on this process.

H-6: Establish affordable financing mechanisms to facilitate seismic mitigation of multi-family residential properties vulnerable to damage in earthquakes

We recommend that policymakers work together to find creative financing mechanisms to facilitate retrofit of residential properties. One possible avenue to explore is working through ABAG's Finance Authority to utilize the PACE program for seismic retrofits and to lobby the federal government to provide the initiating capital.[9] In addition to PACE, a suite of policies and incentives can be adopted by cities wishing to encourage seismic retrofit.[10] Other

model code provisions for seismic retrofit of soft-story wood-frame buildings that can be adopted by cities.

7 Property Assessed Clean Energy (PACE) is a means of financing rooftop solar panel installation and other energy improvements through issuance of bonds to investors and then making loans to consumers which are repaid via an annual assessment on their property tax bill over the assigned term (typically 15 or 20 years). One of the most notable characteristics of PACE programs is that the loan is attached to the property rather than an individual. Recent legislation (AB 184, Swanson) has broadened the use of PACE to seismic retrofits. The residential PACE program is currently on hold nationwide pending a ruling by the Federal Housing Finance Agency that PACE assessments pose unusual and difficult financial risk for lenders, servicers, and mortgage securities investors without community benefits (PACEnow.org).

8 Personal communication, Ken Moy, ABAG legal counsel

9 AB184 (Swanson) allows PACE to be used for seismic retrofits, but it is not currently being implemented. Cities wishing to implement these programs must also come up with the initial funds to be distributed as loans.

10 Samant, Laura and Tom Tobin. Memo to the Advisory Committee, Community Action Plan for Seismic Safety, "Incentives to Encourage Seismic Retrofits: Options for San Francisco". San Francisco, CA. 5 Sept. 2008. http://www.sfcapss.org/PDFs/Incentives_to_Encourage_Seismic_Retrofits.pdf

Single family homes with living space over garages may exhibit soft-story conditions, where the garage lacks the interior walls of the living space above it and may be unable to support the living space above it during an earthquake.
Photo source: quake.abag.ca.gov

existing programs that can be tapped for seismic retrofits include the California Earthquake Authority (CEA), local Community Development Block Grants (CDBG), transfer tax rebates (see case study on page 8), and the Strong Motion Instrumentation Program fee (SMIP) fund, an assessment on building permits, a portion of which can be retained by each jurisdiction for appropriate earthquake programs.[11] In addition, local governments working together with lending institutions, insurance companies, and other government agencies before future earthquakes could design new coordinated lending processes.

Single Family Homes

Older (typically pre-World War II) single-family homes will likely account for nine percent of overall housing losses after each major earthquake.[12] Single-family homes are generally relatively easy and affordable to retrofit. However, owners who embark on retrofit projects often quickly become perplexed by the lack of retrofit standards for some types of homes and the inconsistent array of retrofitting techniques proposed by contractors. An estimated two-thirds of single-family retrofits are done improperly,[13] a waste of homeowners' money that provides inadequate seismic benefits and creates a false sense of security. Owners are further discouraged by the lack of incentive programs enjoyed by residents for energy retrofits.

Quality retrofits benefit not only homeowners and their families, but entire communities when they can get back on their feet faster after earthquakes. Local policymakers can work with state and national policymakers to implement the following policies that would encourage more and higher quality home retrofits.

H-7: Reduce personal and community losses by increasing resilient building and retrofit practices

While the California Building Code has adopted, by reference, a standard for retrofit of single-family homes for the retrofitting of homes not requiring an engineer,[14] it only applies to very specific housing types that have crawl spaces with walls less than four feet in height. Adoption of this standard was an important step for residential seismic risk reduction, but there remain broad categories of single-family dwellings that are not covered by a retrofit building code. Clear and comprehensive guidelines for the retrofit of all remaining single-family dwellings are needed. This lack of a standard means that permits will be issued for voluntary seismic retrofits that may not be adequate. Local policy makers should encourage efforts by CEA and FEMA to develop recommendations for future evaluation and retrofit codes and standards.

11 Public Resources Code Section 2700-2709.1

12 Preventing the Nightmare (update), Association of Bay Area Governments. (2003)

13 Preventing the Nightmare: Technical Appendix B, Association of Bay Area Governments (1999), and (2006) False Sense of Security, Contra Costa Times (2006).

14 Chapter A3 of the International Existing Building Code.

Older (usually pre-WWII) houses are often not bolted to their foundations and lack bracing on the wood framed exterior walls enclosing the crawl space (cripple wall). Damage can include the home sliding off its foundation or the collapse of the cripple walls. Photo source: Danielle Hutchings Mieler

H-8: Improve the quality of non-engineered retrofits by developing a statewide retrofitting license for contractors, or providing contractor training

Similar to a plumbing or electrical license or the Home Improvement Certification category (which was allowed to sunset on January 1, 2004) a retrofitting license or certification would help ensure that contractors performing seismic retrofits are properly trained and licensed. Implementation would require action by the California State License Board to develop new regulations. A new class of license, or a certification within the existing license, would provide a new skilled class of contractors who could advertise their services and who would be better trained. This would greatly benefit owners by increasing the likelihood that work is performed properly and by allowing owners recourse for work not performed properly.

A first step in implementation is to organize best management practices in a structural design bulletin to help inform the industry of the complexity of this type of work and add credibility to the need for a specialty license.

Bay Area local governments may not be able to wait for state action to implement this policy. An interim step might be to establish a regional certification program for pre-disaster retrofit and post-disaster repair that would address the most vulnerable Bay Area building types. This certification should build on previous ABAG efforts to train contractors on proper retrofitting techniques for a small class of single-family home. Bay Area cities and ABAG should develop improved retrofit training for single-family homes and encourage homeowners to hire contractors that have been properly and adequately trained.

Future training should:

- Include testing to ensure comprehension;

Case Study: Berkeley Transfer Tax Rebate

Berkeley has a model incentive program that could be emulated by other local governments. Berkeley raised the transfer tax from one to 1.5 percent and then offered to refund new homebuyers the 0.5 percent difference if it was used to seismically strengthen their home. Since its implementation, 600-800 homeowners have taken advantage of the program. Costs to the City are very low since the owners themselves are effectively paying for their retrofits through tax refunds.

The City of Oakland successfully implemented a similar program from 2008-2010 during which 360 retrofit permits were issued, compared to only six prior to the program. These programs demonstrate the effectiveness of incentives, that they do not have to cover the full cost, and time of sale is a very effective way to reach homeowners when it is easy to add the cost of the retrofit to the mortgage or alternatively lower asking prices.

- Require refresher courses every three years coincident with building code updates to disseminate new knowledge and information, and;
- Provide certification of completion to the retrofit installer who took the training, rather than a company to ensure that the individual on site during construction has actually been trained.

H-9: Increase the number of retrofitted homes by providing financial incentives for homeowners to retrofit

Financial incentives not only make retrofitting more affordable, they can also improve the quality of retrofits by setting a minimum standard that retrofits must achieve in order to receive assistance, and create opportunities to educate communities about the prudence of seismic retrofitting.

Regional agencies could consider including seismic improvements in any funding made available to support implementation of the Sustainable Communities Strategy. Funding seismic upgrades of existing buildings would help ensure the long-term sustainability of PDAs.

We recommend that policy makers also endorse the involvement of the insurance industry in developing owner incentives for retrofitting structures. As required by state law,[15] the California Earthquake Authority (CEA) has set aside approximately $20 million from annual investment income for residential mitigation efforts. The CEA is developing a statewide mitigation program that may provide financial incentives to consumers that retrofit their houses and provide training to retrofit contractors. ABAG could use the results of Recommended Action H-1 (**Identify areas where mitigation and recovery resources are particularly important**) to identify the most vulnerable residential structures and provide a list of target neighborhoods to CEA for funding consideration. •

15 *California Insurance Code section 10089.37*

Regional Resilience Initiative

Infrastructure Policy Paper

Photo source: www.earthquake.usgs.gov

earthquake and hazards program
Association of Bay Area Governments

Background

In the wake of a major disaster, the recovery of major infrastructure systems will play a large role in our ability to recover quickly and effectively. Many recovery activities are highly dependent upon these systems. For example, goods movement - including supplies for rebuilding and daily goods and food for resuming daily lives - depends on a workable transportation system. People will not be able to stay in their homes if water and wastewater services are not available, and businesses will not be able to reopen. Repairing failed infrastructure systems and restoring their services are vital to the recovery of the Bay Area after a disaster, and failure to do so quickly and efficiently will result in widespread and long ranging, potentially devastating impacts.

Many of our significant infrastructure systems are vulnerable to damage in earthquakes.[1] The majority of the Bay Area population resides along two transportation corridors along major fault lines. Highway 101, connecting the South Bay to the Peninsula and the North Bay, parallels the San Andreas Fault and Highways 580 and 880, linking the South Bay to the East Bay and Solano County, are situated on and adjacent to the Hayward fault.

Nearly every major east-west connection that the Bay Area depends on upon for water, power, gas and transportation crosses several major faults. Hundreds of streets underlain with transmission lines also cross faults. In an earthquake, these major lifelines transmission systems will be damaged by significant lateral movement caused by crossing fault lines. East Bay Municipal Utility District (EBMUD) estimates that 40 percent of its customers will be without water, and that it could take as many as 50 days to restore full service.[2] Similarly San Francisco Public Utilities Commission estimates that until its Hetch-Hetchy pipeline retrofit is complete in 2014, a major earthquake could cause catastrophic failure of the pipeline, which could take as long as 60 days for full repair.[3] The liquefaction prone margins of the Bay will cause additional infrastructure damage, particularly for sewer treatment plants, the Port of Oakland and the San Francisco and Oakland airports.

Many issues will impact our ability to quickly repair damaged infrastructure. These warrant further understanding and study now, before a disaster, so stakeholders are better prepared to face the complex task of restoring infrastructure systems when disaster hits.

The major infrastructure systems included in the recommendations set forth in this paper are:

- Power systems
  - Electricity generation and transmission
  - Oil and natural gas pipelines
- Water and wastewater
  - Treatment
  - Transmission systems
- Transportation systems
  - Local roads
  - Highways
  - Public transportation systems – buses, rail and ferries;
- Telecommunications systems
  - Phone and data lines

Other significant infrastructure systems in the Bay Area not included in this initial study include gas refineries, airports and ports. Each system depends on physically or virtually linked elements to stay operational. These elements range from the people who operate and control the systems; mechanical and electrical equipment; transmission lines; buildings that house operations and equipment; and information systems that process large amounts of data. In a disaster, all these elements are vulnerable to damage from ground shaking, liquefaction, landslides, fire, or flooding, and damage to just one portion of the system may cause complete failure in all or part of the system, cutting off services to customers. Cascading systems' failure is a norm in metropolitan disruptive events due to tightly coupled infrastructure mechanics.

1 This section is largely adapted from 1868 Hayward Earthquake: 140-Year Retrospective, RMS November 2010. Modeled loss estimates consider post-event loss amplification.

2 "EBMUD: A Decade of Seismic Mitigation Progress – More Work to Do." Presented at ABAG's Regional Planning Committee, December 3 2008 by Bill Cain.

3 City and County of San Francisco Emergency Response Plan, Earthquake Annex. (April 2008).

Infrastructure systems are interdependent and will not be able to be fully restored without the repair of corresponding, upstream structures. For example, treating wastewater is dependent upon power systems to operate pumps and other equipment. Because of such dependencies and links, it can be very difficult to make assumptions about how disasters will impact a particular system or how recovery will take place if the impacts to lateral or upstream system are unknown. Interdependencies also create new or exacerbate existing failures over time if not promptly resolved. The implications of delayed recovery due to interdependencies are largely unknown. Salient lessons in social restoration and recovery can be found from recent regional disasters such as the 2011 Tohoku earthquake and 2012 Superstorm Sandy and can be applied in other disaster-prone regions.

The fragmented nature of infrastructure system ownership and regulations exacerbate barriers to recovery planning and impact the ability to address the vulnerability of the interdependency of physical systems. Many utility systems are privately or jointly owned and vary widely in size, control, access to resources, accountability, age, seismic standards, guidelines, and code requirements. In total, there are over 500 special districts with overlapping jurisdictions that provide services within the Bay Area. The California Utilities Emergency Association represents California utilities on emergency related issues, but currently there is no forum for utility leaders to coordinate with other owners within the Bay Area and plan for recovery and restoration, so providers may not have a comprehensive understanding of how their systems fit in with other systems. Multiple owners or service providers can lead to a wide variety of practices, technologies, and mitigation standards within any given sector. This diversity creates problems with understanding, anticipating, and coordinating disaster recovery activities.

Goal #1: Increase technical understanding of region-wide infrastructure system vulnerabilities

Currently, few understand the ways in which systems are interdependent. The information that is available is largely based on speculation, not rigorous analysis. The region needs peer-reviewed technical studies to better understand system vulnerabilities and what consequences may result from cascading failures. Some of this information is considered confidential for security reasons; however, information should be shared at levels of detail sufficient to understand how to resolve issues post-earthquake.

New technologies can assist with gathering technical data for analysis, but may increase vulnerability as operators of interdependent infrastructure systems become more reliant on virtual systems to monitor and control infrastructure. While technology has the potential to provide greater and more sophisticated information on system performance, it also introduces new interdependencies on power and IT systems because of reliance on computer servers. For example, Pacific Gas and Electric (PG&E)'s Smart Grid system provides better, more accurate information about the power system if it is operational. But reliance on specialized technology can make systems more difficult to restore and requires improved human expertise and intervention in crises, which can impede restoration and recovery.

We need a detailed understanding of how interdependencies interact and what impacts might occur in disruptions due to disasters. The following actions suggest how this might be done.

I-1: Establish regional baseline assessment and system performance standards to identify vulnerabilities and define interdependencies

Current methods for evaluating system performance in a disaster typically involve the use of an earthquake scenario to anticipate ground shaking and what damage and loss may occur. This loss estimate is then reviewed together with interviews of staff with technical expertise in different system components and operations. Performance findings for multiple system components and their links then

need to be aggregated to comprehensively understand the workings of the complete system. This approach leads to a qualitative and holistic understanding of vulnerabilities, but is limited by incomplete human understanding and interpretation. [4]

Other analytic tools include computer modeling of systems using software programs that generate disaster loss estimates based on specific disaster scenarios, including HAZUS or systems' visualization applications developed for the defense industry. These methods provide a vulnerability snapshot of systems and system components. Elements of these assessments include information on component fragility, system fragility, and critical data on functionality, repair time, and repair cost.

It is crucial to note that smaller service providers may lack resources to use existing tools effectively, or may not have accurate results due to lack of technical expertise in failure studies. Both qualitative and quantitative analyses offer data on typical systems' failures operators may encounter in disasters, which can support improved crisis response and provide powerful motivation to implement pre-disaster recovery planning.

The region needs to establish common tools for evaluation and assessment, and build consensus around the type of analysis and how to present findings. One way to begin this is to establish common earthquake scenarios for evaluating systems so consequences can be compared and interdependencies are defined across the region. San Francisco's Lifelines Council utilizes a repeat of the 1906 earthquake as its assessment scenario; this 7.9 San Andreas Fault earthquake falls within San Francisco Planning and Urban Research (SPUR)'s definition of an "Extreme" earthquake scenario.

SPUR's *Resilient City* reports typically base recommendations on an "Expected" earthquake, defined as a 7.2 San Andreas quake, the same used for San Francisco's Community Action Plan for Seismic Safety program. Both of these scenarios are appropriate for San Francisco, but other scenarios such as a Hayward Fault event, may be more useful for planning in other Bay Area locations. Therefore, utilizing multiple planning scenarios may be productive for regional planning purposes. The common earthquake scenarios should be severe enough and present a wide enough scope of damage to be realistic and useful, but should not be so extreme that mitigation strategies would be seen as too costly.

We need to, as a region, assess the existing state of infrastructure systems, much of which is aging, deteriorating, and functioning at capacities beyond their original design, which all increase vulnerability. ABAG has helped lead local efforts to assess infrastructure in Priority Development Areas (PDAs), but this effort should be expanded and considered through the lens of seismic vulnerability. Considering that much of our infrastructure is buried or difficult to acquire data on, new methods should be identified and shared for quantifying in-situ conditions. Such assessment techniques include remote sensing technologies, sensors, use of cameras and video cameras, and component testing. Existing assessments done by utilities should also be collected and made publicly available.

Regional infrastructure stakeholders could conduct and share research on evaluations, best practices, and recommendations for effective and uniform analysis of vulnerabilities. This might include common assumptions about what magnitude of earthquake to use as the basis for analysis and mitigation, and improve regional understanding about possible disaster losses.

I-2: Conduct a regional assessment of system interdependencies and the consequences of cascading failures

Similar to San Francisco Lifelines Council's current lifeline qualitative review, the region should conduct a high-level assessment of Bay Area infrastructure systems to identify and assess critical interdependencies. The study could be based on a standardized earthquake scenario or scenarios and identify and assess lifeline systems by performance

4 This approach is similar to the one taken by the San Francisco Lifelines Council for their Lifelines Interdependency Study. For more information on this approach, see http://sfgsa.org/index.aspx?page=4964

Transmission lines carrying power and phone services to the city of San Francisco. Sutro tower is perhaps the city's most well-known antenna tower in the city, transmitting television signals to residents since 1973. Photo source: Window Snyder, www.dec.net

(similar to SPUR's performance categories) along with peer-reviewed approaches. Then communities can prioritize system improvements based on defined performance targets that suggest key mitigation actions.

Understanding vulnerabilities is a first step that must be followed by defining disaster consequences. Infrastructure failures have direct and indirect economic, environmental, and societal consequences, ranging from lost revenue to a store without power to public health issues due to lack of wastewater treatment.

We need better tools to understand the short and long-term consequences to the regional economy from infrastructure failures, including how time and geographical scales impact economic consequences. Attempting to understand the number of people who will be directly affected and the severity of the consequences can also be a significant motivator for developing a better recovery plan.

I-3: Evaluate the usefulness of creating performance targets to establish region-wide performance goals for all infrastructure systems

In addition to better understanding vulnerabilities and risks, providers need to have a more accurate understanding of feasible timelines for recovering their systems, interdependent systems, and the consequences of these timelines. Many providers' anticipated recovery timelines make assumptions about the performance of interdependent systems, and may not be accurate or feasible. Providers need a better understanding of how factors outside of their control may impact their ability to quickly restore service. Providers also need to better understand potential trigger points and cascading effects of delays in recovery. Is there a point when a delay triggers a much larger consequence, either within their system or in an interdependent system?

Interdependencies may also change as time passes. For example, a system that has generator capacity for three days is not dependent upon power for this time, but once the generator fuel runs out, they become dependent on the power grid or short-term fuel supply if power is not yet restored. This type of delayed interdependency or failure is not well understood.

SPUR has created categories of expected performance for lifelines within San Francisco, as well as goals and targets for recovery of infrastructure systems within four hours, three days, 30 days, and four months and beyond after a disaster. ABAG suggests considering developing similar performance categories at a regional level using peer-reviewed evaluation methodology to provide clear expectations and goals for all utility providers, as well as provide a useful tool for evaluating the current state of systems and com-

Collapse of the upper deck of the reinforced-concrete Cypress Street Viaduct in Oakland following the 1989 Loma Prieta Earthquake. The collapse resulted in 42 fatalities. Photo source: www.nasa.gov

municating this information with other providers. SPUR also provides a table for identifying target states of recovery as compared to expected current status, and a similar table using regional performance goals could be widely utilized by regional infrastructure providers.

I-4: *Identify strategies to reduce interdependencies and develop plans to assist with implementation*

Concurrent with examining vulnerabilities and impacts, research could be conducted to identify cost-effective, feasible strategies to mitigate interdependencies, including system redundancy or backup, "islanding" vulnerable systems to limit their impacts, or creating smaller, self-contained "districts" of systems rather than one large, vulnerable system. This study should include identifying existing policies and regulations that impede or assist recovery as well as identifying what policies and regulations are need to propel infrastructure recovery.

Critical to reducing interdependencies is breaking down barriers of confidentiality. Currently, many providers have begun their own internal analysis of their systems to understand their own vulnerabilities. While being mindful of security, proprietary and liability issues, summary results of these analyses should be shared with other providers to develop a common operating picture. This can help providers understand how other sectors and providers' assumptions and timelines will impact their own restoration efforts.

Providers and regional coordinating bodies (such as that suggested below in Recommended Action I-5) could also benefit from understanding if their risk and vulnerability assessment tools are powerful and technically accurate enough to gain an adequate understanding of likely consequences from a disaster and be able to plan appropriate mitigation actions.

Goal #2: Increase ways to share risk information to collectively improve regional infrastructure system resilience

As previously identified, to better understand interdependencies the industry must improve risk information sharing among service providers and regional stakeholders before a disaster occurs. We also have to participate in collaborative planning and accelerate mitigation. This sharing and collaboration is vital to an effective recovery.

By understanding interdependent failures that occur and identifying cross-system "hot spots," communities,

facilitated by regional coordinating bodies, can best and most quickly repair all services, not just individual systems. Strategic repairs on a region-wide basis will enhance and expedite Bay Area recovery.

One way to begin to understand this is to seek lessons from past disasters on the process of infrastructure system recoveries and what providers learned after the fact. These lessons may come from Bay Area providers who recall the recovery process after Loma Prieta in 1989, or they may come from the 20 east coast states hit by Sandy. Examining the recovery process in past disasters inevitably reveals interdependencies and impacts and can also uncover missed opportunities for efficiency to implement now before a future disaster.

Communication and information sharing also allows for informed prioritization of infrastructure recovery, allowing key nodes such as hospitals, support centers, emergency housing, and government buildings to recover first. Understanding upstream and downstream interdependencies for repairs as well as which systems key community resources rely upon can to develop an appropriate timeline for streamlined recovery. Understanding priorities and system interdependencies allows providers to identify primary repairs to minimize interdependency and restore certain portions of systems quickly. Regional performance categories, as discussed above, can be utilized as a tool to make prioritizations based on the performance category.

I-5: Establish a senior leadership forum on infrastructure resilience issues to convene providers and stakeholders

Infrastructure providers and the region's jurisdictions need a forum in which to share and gain situational awareness, spark mitigation programs and create new or utilize existing decision-making and prioritization tools. Currently, there are many sources of information available to infrastructure decision-makers - ranging from Caltrans, other providers, news reports, and crews working on the ground. Organized assistance can also help to identify cross-sectoral specific data needs and ways to circulate risk studies among providers. Tapping a third-party, neutral convener can offer impartial perspectives in prioritizing policy and strategic actions as well as providing a central information hub. A committee team can engage other stakeholders for decision-making and program prioritization, including the broader community.

There are already other mechanisms in place that serve this type of function, including the Bay Area Emergency and Security Information Collaborative (BAESIC), California Water Agency Response Network (CalWARN), and the Bay Area Water Multi-Agency Coordination Group, but these are sector-specific. Bringing existing groups together and developing a larger forum based on these smaller existing models can leverage current actions. The committee team could also consider using the California Earthquake Clearinghouse, an existing body that compiles damage information after a disaster for use by government agencies, non-profit organizations, and academia, as a conduit to collect and distribute infrastructure damage information after a disaster. •

Regional Resilience Initiative

Economy and Business Policy Paper

Photo source: quake.abag.ca.gov

earthquake and hazards program
Association of Bay Area Governments

Background

The impact of an earthquake on the economy has one of the farthest-ranging implications for disaster recovery in the Bay Area. Without a swift and strong economic recovery, the Bay Area will suffer from a protracted recovery with slow repopulation in heavily damaged areas, slow rebuilding of homes and businesses, and loss of revenue from business, tourism, and taxes. Estimates are that a magnitude 7.0 earthquake on the Hayward fault would generate $90-96 billion in direct commercial building related economic losses across eight of the Bay Area counties.[1] We have seen repeatedly in disasters that areas with the fastest economic recovery are those which already have strong economies and cultivate conditions to help businesses thrive before a disaster. Just as individuals who maintain a healthy lifestyle recover more quickly from illness, a strong economy has the potential to rebound quickly from an earthquake or natural disaster.

The major keys to economic recovery after a disaster are keeping residents employed, creating an environment that motivates big businesses to stay in the region, and keeping small businesses open. Keeping residents in the Bay Area and in their homes and able to meet their daily needs is also a high priority so employers have a work force available to maintain business momentum.

Currently and historically, the Bay Area region enjoys a strong local economy that is one of the most prosperous in the country and is continuing to improve despite a slow national economy. Of the major metropolitan areas within California, the Bay Area has the highest real GDP per capita, outpacing San Diego, Los Angeles, and the United States as a whole.[2] As a recognized center of innovation

University of California, Berkeley and other major reserach institutions contribute to the knowledge-based regional economy. Photo source: oep.berkeley.edu

and one of the largest concentrations of people and wealth in the United States, the Bay Area economy is critical not only to the entire region, but to the state and federal governments as well, providing tax revenue and cutting edge innovation technology for all sectors of the U.S. economy, including defense.

The Bay Area functions as a single economic unit, meaning that among the counties in the region there is a high degree of interconnectedness between where people work and live. Jobs as well as housing are distributed widely throughout region, and only 53 percent of residents work in the county in which they live. All of the counties and sub-regions are highly dependent on one another for their economic functioning and on the region's transportation network. San Francisco, as the major jobs center, has the largest net inflow of workers, while more suburban Contra Costa County has the largest net outflow.

1 1868 Hayward Earthquake: 140-Year Retrospective, RMS November 2010. Modeled loss estimates consider post-event loss amplification. All loss estimates are for property insurance coverage only. All losses above include shake and fire following earthquake. Note: This estimate includes losses for Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties only. Similar losses are expected for a San Andreas fault scenario earthquake.

2 The following section is largely adapted from The Bay Area Council Economic Institute Report The Bay Area: A Regional Economic Assessment (October 2012)

The Bay Area economy supports innovative, highly productive technology companies, which in turn support many other job industries. The region has significantly higher levels of concentration than the nation and the state in several key sectors: computer systems design and equipment, semiconductors and other electronic equipment, magnetic and optical media, software, space research and technology, communications equipment, industrial machinery, scientific research, pharmaceuticals and medicine, information services, and beverages. Competitiveness in these areas supports jobs throughout the region and at all levels of the economy. The region is also characterized by a highly productive tourism sector, with higher than national average concentrations of accommodation and food services and the arts, entertainment, and recreation industries.

These industries benefit from a highly skilled and educated labor force, which is present in large numbers in the Bay Area. This concentration of skilled workers in turn attracts more skilled workers and businesses to employ them. The region also benefits from many research universities, private and federal laboratories, investment capital, and a business environment that encourages innovation and entrepreneurship. The local economy also benefits from the high quality of life in the Bay Area—the top reason new companies tend to locate here is because the founders live here or want to live here, suggesting that many business owners have strong ties to the region. However, the success of the region has also created drawbacks, such as high housing costs and long commutes to jobs.

Overcoming Barriers to Economic Recovery

Despite the strong regional economy, there will still be many issues impacting economic recovery after a disaster. For example, the economy will not just need to maintain its current strength, but will need to be even more profitable after an earthquake than before. After the 1989 Loma Prieta earthquake severely damaged Santa Cruz's downtown area, an economist determined that businesses in the Pacific Garden Mall needed to do 35 percent more post-disaster business to afford to move back into replacement buildings because of the increased costs of new construction. This is a single example of what will need to be overcome to create a good business environment.

The Bay Area functions as a single economic unit - among the counties in the region there is a high degree of interconnectedness between where people work and live.

Goal #1: Retain Big Businesses

The Bay Area Council's (BAC) Regional Economic Assessment, largely focused on the biggest economic players in the region, has identified impediments to regional economic growth and prosperity. These impediments will likely be exacerbated in a disaster. For example, housing costs are already very high, stemming from lack of supply. This supply will decrease when a major earthquake damages a large portion of the existing housing supply, and the cost of new construction will likely increase costs for replacement housing. If housing costs go up so that workers can no longer afford to live in the Bay Area, businesses will lose their labor force.

The Bay Area regulatory environment, including zoning, permitting and environmental regulations may also inhibit businesses after a disaster, making it too difficult to stay or rebuild. In the Bay Area Council's report, businesses identified a lack of consistency between regulatory agencies' policies at the local, regional and state level and commented that this situation limited their ability to expand within the region. These challenges will likely be highlighted after an earthquake when large amounts of rebuilding happens simultaneously, potentially overwhelming the capacity of regulatory agencies and slowing the process. The California Seismic Safety Commission has identified potential obstacles, regulations, and other impediments that can be resolved to help business quickly return to normal operations

following a catastrophic event in California such as a major earthquake.[3] Many commercial buildings may be damaged beyond repair. Services will be needed to facilitate business relocation to available space throughout the region. Policy makers can make use of recommendations from this study to improve business and economic recovery.

Other factors likely to impact economic recovery include the dependency of businesses on our regional infrastructure systems—water, sewer, power, and access to broadband and communication—which are key to business operation and continuity. Ongoing infrastructure disruptions or unreliability will challenge businesses. Public transit, roads and highways are essential for the workforce to travel to work, particularly when more than half of Bay Area residents reside in a different county than where they work.[4] The recovery of the education sector is also key—K-12 schools not only provide education to children, but provide the daycare that allows parents to return to work. Long schools closures due to structural damage or prolonged shelter use will delay return of employees to work.

Goal #2: Keep Small and Neighborhood Serving Businesses Open

The BAC study focused on the leading industries and business in the Bay Area, but small and locally serving businesses remain an important component of a strong region and are especially vulnerable to closure after a disaster. An estimated 25 percent of small businesses do not re-open following severe disruptions from a major disaster.[5] Many of these businesses provide the day-to-day necessities for residents such as groceries, shopping, doctors' offices, pharmacies, and restaurants. Essential services are mandatory for getting residents to remain or return. Until essential goods and services are available, people will stay away.

One reason why small businesses are so likely to fail is that they tend to operate with small profit margins and limited reserve funds, which means that even a short period without cash flow may have a significant impact on business. Small businesses also may not be eligible for Small Business Administration (SBA) loans, which require businesses to demonstrate that loans can be repaid. This is difficult to do with small profit margins, and particularly when your building, supplies and materials (means of production) have been damaged or destroyed. Businesses need to secure funding right away in order to plan to rebuild, but with the lack of availability of SBA loans and the fact that many small businesses cannot take on more debt, many businesses will fail if they can't secure funding. In addition, it is estimated that only about 15 percent and 20 percent of the commercial losses of a major Hayward Fault earthquake will be reimbursed by insurance.[6]

As part of the recovery process from Hurricane Sandy, New York City is offering bridge loans of up to $25,000 for small business owners needing quick capital to avoid small business closures and help businesses get back on their feet.[7] The Louisiana Bridge Loan Program after Katrina was a similar program to provide "gap funding" to businesses waiting on other types of funding. Over $55 million has been loaned to date.[8] Loans of this type can be facilitated at the regional level in the aftermath of a major disaster.

Other factors that decrease the odds of a small business staying open after a disaster include being a younger or less established business, being in a highly competitive or low-growth industry, having only one location, and leasing

3 March, 2012 California Seismic Safety Commission "Post-Disaster Rapid Economic Recovery Plan Project – Leading Practices and Potential Steps for a Rapid Post-Disaster Economic Recovery," Report by Deloitte Consulting LLP

4 Bay Area Council Economic Institute Report The Bay Area: A Regional Economic Assessment (October 2012)

5 March, 2012 California Seismic Safety Commission "Post-Disaster Rapid Economic Recovery Plan Project – Leading Practices and Potential Steps for a Rapid Post-Disaster Economic Recovery," Report by Deloitte Consulting LLP

6 RMS, 2008. 1868 Hayward Earthquake: 140 Year Retrospective

7 http://www.nyc.gov/html/sbs/nycbiz/downloads/pdf/home/Emergency_Loan_FAQ.pdf

8 The Council of State Governments 2007 Innovations Awards Program http://ssl.csg.org/innovations/2007/2007applications/Southapplications2007/07S48LADISASTERRESPONSE.pdf

Case Study: Santa Cruz Pacific Garden Mall

Local governments can look to Vision Santa Cruz as a successful model that supported local downtown businesses, provided temporary storefronts and rebuilt the downtown in a new way that strengthened local business for the future. After the Loma Prieta earthquake in October 1989, the city, together with downtown businesses, scrambled to set up tents and other temporary structures to enable local businesses to reopen in time for the holiday shopping season. The temporary downtown opened the day after Thanksgiving, just over a month after the earthquake. Holiday events and a farmers' market kept the downtown active as a destination for residents.

Photo source: Charles Eadie

as opposed to owing the business.[9] Many of these factors often apply to locally-owned, small businesses.

The federal Economic Development Agency (EDA) has various tools available to support local and regional Economic Development Districts (EDDs) in post-disaster long-term economic recovery, such as: support to develop long-term recovery strategies and integrate recovery planning into local Comprehensive Economic Development Strategies (CEDS); resources to hire a regional disaster response coordinator as a full-time EDD staff member; funds to establish revolving loan funds (RLFs); assistance for public infrastructure improvements; and technical assistance.[10]

In California, small businesses make up 99.2 percent of the state's employers and 82 percent of private sector jobs. [11] Projecting similar numbers on the Bay Area, the impact of small business loss has the potential for more widespread impacts in job losses, lost tax revenue for local governments and loss of revenue for vendors.

While there is clearly a need to identify and pursue innovative solutions to business disruption following a disaster, there is perhaps a greater need to find practical solutions to limit impacts on small businesses through economically feasible pre-disaster preparedness and mitigation initiatives. Small businesses may recognize they are located in vulnerable buildings, but often do not have the resources to undertake costly retrofits and have difficulty securing financing to do so. Some may opt to purchase insurance to provide coverage for limited damage or business disruption rather than invest in structural mitigation projects. The development of new strategies for integrating hazard mitigation and risk reduction actions into long-term economic development is crucial to maintaining small business in the post-disaster environment.

Goal #3: Minimize Supply Chain Disruption and Keep Goods Moving

Other potential barriers to economic recovery include the disruption of vendors and supply chains to and from the region and the repercussions for national and international markets. Business disruption has upstream and downstream impacts on supply chains that can exacerbate impacts on the economy. For example, disruption of a manufacturing business may limit global supply of a par-

9 Dahlhamer, J., and Tierney, K. (1996). Winners and Losers: Predicting Business Disaster Recovery Outcomes Following the Northridge Earthquake. University of Delaware Disaster Research Center.

10 July 2011, NADO Research Foundation, "Resilient Regions – Integrating Economic Development Strategies, Sustainability Principles and Hazard Mitigation Planning"

11 California Seismic Safety Commission, March 2012. Post-Disaster Rapid Economic Recovery Plan Project – Leading Practices and Potential Steps for a Rapid Post-Disaster Economic Recovery," Report by Deloitte Consulting

Shipping containers moving goods to and from the Port of Oakland, a major component of goods movement for the region. The Port of Oakland is the second-largest port in the State of California. Photo source: Monaca Noble, Smithsonian Environmental Research Center

ticular product, impacting the economy far beyond the original area. While the Bay Area's share of the manufacturing industry is not particularly concentrated, what is manufactured here is highly specialized and focused on sophisticated equipment design and development.[12] Disruption of this specialized design and manufacturing could have global economic impacts or affect long-term growth in the region.

The consequences of impacts to specialized manufacturing can be seen in Japan after the 2011 Tohoku earthquake and tsunami. The shutdown of specialized parts manufacturing plants in Japan led to assembly plant shutdowns in US. Because of their specialized nature, the lack of even small parts can shutter an entire plant if there is no alternative. Often, highly specific parts can't be made just anywhere – Japan in this case had specialized producers with patented production processes. While others could learn to produce a similar product, quality is an issue and certifying quality from another producer can take up to a year. The lack of production of automobiles in the US due to the loss of parts from Japan led to a constrained auto supply worldwide, impacting global prices. This event raised awareness of the economic challenges of recovery beyond the immediate concerns for protecting human life and property but to protecting economic interest, as it continues to impact domestic and multi-national business operations.

The 2011 Tohoku earthquake has had long-term economic consequences such as loss of market share, higher unemployment, and loss of businesses entirely.[13]

On the other side of the supply chain, inability to get goods into the damaged area can cause a shortage of goods for daily needs as well as materials and labor for rebuilding. Many businesses today operate with a "just-in-time" model for goods deliveries, stocking only enough to last until the next delivery. The transportation and shipping industries are key in a "just-in-time" era – businesses need fast availability of goods in constrained environments. After a disaster, small or no stockpiles coupled with an inability to deliver new goods can have major implications on response and recovery. For example, many hospitals store limited quantities of medical supplies and rely on frequent regular deliveries of supplies.

Many may also have no requirement for suppliers to develop continuity of operations plans to enable supplies to be delivered after a major disaster, when they are needed most. Similar issues arise around groceries and food supplies - most grocery stores have limited stockroom supply and will quickly run out of food after a disaster if new deliveries cannot be made. Even banks and financial insti-

12 March, 2012 California Seismic Safety Commission "Post-Disaster Rapid Economic Recovery Plan Project – Leading Practices and Potential Steps for a Rapid Post-Disaster Economic Recovery," Report by Deloitte Consulting LLP

13 (March 30, 2011) Japan earthquake impact hits U.S. auto plants. CNN Money. http://money.cnn.com/2011/03/28/autos/japan_earthquake_autos_outlook/index.htm

tutions often have very little cash supply on hand and may not have enough cash to cover their immediate expenses, much less be able to distribute cash to residents. This may become a serious issue if lack of power or broadband makes cash the only viable currency for purchasing goods. It is unknown how these types of shortages may impact the price of goods, but history shows that a constrained market raises prices for everyday goods.

The construction industry will also likely feel a shortage as building supplies such as wood, steel, cement, and aggregate become more difficult to import at the same time as demand increases due to extensive rebuilding and repair. The shortage of construction materials and skilled labor could increase the cost of rebuilding over pre-disaster prices and render insurance payouts insufficient.

Recommended Actions

The field of economic recovery from disasters is largely unexplored and unknown. As more frequent and larger disasters put more strain on local, regional, national, and worldwide economies, more detailed research and actions will likely emerge. At this stage, our recommendations are largely policy-level and rely on the basic assumption that a strong pre-disaster regional economy will help the economy recover quickly and come back stronger after a disaster. Some additional disaster-specific actions have been identified to support this process.

EB-1: Encourage the development of best practices that support business continuity and facilitate restoration of regional economies

Concrete knowledge on economic recovery is limited, particularly within the context of the Bay Area. We recommend partnering with research bodies such as the Bay Area Council (BAC), the California Seismic Safety Commission (CSSC) and research institutions such as UC Berkeley and Stanford to continue to conduct Bay Area-specific research and studies on specific actions that local governments or regional groups can take to expedite economic recovery. We recommend implementing findings from the CSSC and conducting a more thorough survey on existing best practices, both specific to the Bay Area and from other disasters within the US. Best practices already identified by CSSC and others include:

- Provide expedited permits and create a system for requesting additional temporary skilled staff through mutual aid agreements with other government agencies to ensure fast processing of permits to help businesses rebuild quickly and minimize costly downtime
- Identify temporary space for retail and commercial businesses to quickly relocate temporarily, helping to minimize disruption and downtime.
- Provide bridge financing to assist small businesses
- Create a "toolkit" for distribution, and include a) employee preparedness at home, b) continuity plan template, c) disaster recovery plan template, d) roadmap of what to do based on each part of the disaster cycle, e) "Everything a Business Needs to Know about Government Programs and Planning Before, During, and After an Emergency" pamphlet and guidebook.

We recommend research focused around our first two issues in particular - getting large businesses to stay in the region and keeping small businesses open.

EB-2: Support pre-disaster economic development through existing regional best practices

Several regionally-focused groups have conducted extensive research on how to best maintain and grow the Bay Area's economy. ABAG has conducted extensive economic research through its Plan Bay Area, Jobs-Housing Connection Strategy, and is currently developing a Regional Prosperity Plan. ABAG is also developing a Regional Policy Background Paper on Economic Development which will include recommended actions for continued economic growth.

The Bay Area Council's Economic Assessment report outlines actions designed to strengthen today's economy, and a strong and nimble economy today will provide a basis for a strong regional economic recovery after an earthquake. We recommend that the region implement the BAC's six recommended areas for attention to ensure that the Bay Area's economy is strong before a disaster. In particular, the BAC's first recommended strategy of identifying a public-private focal point for regional economic strategy could be a strong tool in recovering the Bay Area economy and ensuring that decisions of elected officials benefit businesses and residents alike. Harmonizing regulations across the region has been identified as a potential stumbling block and can also foster a more even economic recovery, ensuring that businesses have the flexibility to recover in a uniform business climate.[14]

The research and recommended strategies around economic growth should also be considered through the lens of preparing for disaster recovery. Further study could be utilized to identify and prioritize existing strategies that strengthen the economy in areas that may be particularly susceptible to disruption from a major disaster. These strategies should also help drive recovery plans to ensure that economic recovery aligns with the region's larger economic goals.

$ **EB-3**: Implement the recommendations of the Resilience Initiative's Decision-Making, Housing, and Infrastructure Policy Papers

Many of the key factors in economic recovery are closely linked to the issues laid out in the Initiative's issue papers on housing, infrastructure and regional decision-making. Strengthening these areas will bolster our overall economy and ability to recover quickly. These recommended actions also support issues identified in BAC report as necessary for a strong regional economy.

14 California Seismic Safety Commission, March 2012. Post-Disaster Rapid Economic Recovery Plan Project – Leading Practices and Potential Steps for a Rapid Post-Disaster Economic Recovery," Report by Deloitte Consulting

We recommend a particular focus on strengthening housing for recovery, as our housing stock is such an important resource for the strength of the economy, and is both largely uninsured and highly vulnerable to damage. Protecting our housing stock allows residents and workers to stay in the region and maintains housing affordability.

Expedited repair of infrastructure systems also allows businesses to reopen sooner, since they cannot operate without basic services and employees cannot reach their places of work without a working transportation system. In addition key transportation corridors could be identified and made accessible to goods movement companies to improve supply chain continuity.

Implementing recommended actions about regional decision-making will help build political consensus on recovery priorities across the region, contributing to the sense that jurisdictions are working together for the common good of the region. This will instill confidence in businesses to continue to invest in the Bay Area, and instill confidence in residents that they will continue to have jobs and a high-quality place to live. Positive messaging about the pace of recovery will also be needed to bolster business confidence.

$ **EB-4**: Explore innovative financial incentives to support disaster resilience initiatives for small business

Pre-disaster funding directed toward hazard mitigation for small business is currently limited to conventional lending practices which generally are either not available or not cost-effective for small business owners. Additionally, earthquake or business interruption insurance can be prohibitively expensive for small businesses operating with a small profit margin. There is a need to engage Chambers of Commerce, Economic Development Departments, lending institutions, the insurance industry and federal agencies, such as the Economic Development Administration, and the Historic Trust

Main Street Program, in a discussion of potential strategies to support pre-disaster hazard mitigation incentives for small businesses. At the local level, Business Improvement Districts, revolving loan programs, or pooled financing should be explored. •

Regional Resilience Initiative

Action Plan

Photo source: www.baybridgeinfo.org

earthquake and hazards program
Association of Bay Area Governments

Introduction

This paper consolidates the recommended actions identified through ABAG's Regional Resilience Initiative process and explored in detail in our Regional Decision-Making, Housing, Infrastructure, and Business and Economy Policy Papers into one Action Plan. Organized by those four topic areas, this paper categorizes actions, sets priorities and identifies initial implementation tasks.

In general, actions associated with the Decision-Making Policy Paper serve as a platform to support and facilitate topic-specific actions. We recommend regional policy makers begin implementing many of the decision-making recommendations in the near-term, while simultaneously pursuing easily achievable strategies from the other categories. Many of the more complex recommendations will require coordinated regional policy before being enacted. Implementing the decision-making recommended actions will help with more even implementation across the region, increasing resilience as a whole.

Implementation Level

In this paper, each action has been identified by the level at which it can be initiated and implemented – regional, local, or both. Many actions will need to be developed and initiated through a regional effort, led by a regional body such as ABAG, MTC, or the JPC. For certain actions, this regional work will then spur community-specific actions at the local level with policy, assistance, or information-sharing. The focus of this work is on regional-level initiatives, therefore very few actions are recommended for local initiation prior to regional resolution. Planning and technical guidance for those local actions will be available from the region.

Action Categories

Recommended actions are also categorized by type based on thematic similarity. The categories of actions are as follows:

Facilitation: These types of actions create forums and frameworks to facilitate action, but do not necessarily generate a concrete resilience action. They depend upon enabling participants to discover, communicate, and collaborate to implement concrete actions. These actions also help to build relationships, which is crucial to building resilience.

Education/Information: Education and Information actions actively seek to gather and communicate new information to assist stakeholders and encourage voluntary actions to plan for recovery or to increase resilience.

Evaluation: In many cases we may not have a clear picture on what the status or effectiveness of existing programs, policies, or resources. Evaluation tasks help to better understand our current level of resilience and set a baseline against which to track future work.

Policy Development: This category seeks to develop policy which supports resiliency capacity building and that can be adopted at the regional level or serve as a model for adoption at the local level. The goal is to provide tools that can be easily utilized by jurisdictions as well as establish consistent baseline policy for the entire Bay Area.

Further Study/Research: Many of the recommended actions require additional understanding or technical research on best practices or development of tools before specific actions should be implemented. Actions in this category warrant additional resources for study.

Program and Operation: These actions require a program with stakeholder support, resources, public involvement, and a defined outcome. Many of these types of actions will require local-level programs, with the region providing assistance and coordination.

Timeframe

Each recommended action is assigned a general timeframe for implementation. The reasoning behind the timeframes is below:

Short-Term: These are items that can be easily accomplished in the near-term with few additional resources or research. Many of these actions require organizational changes or slightly changed or expanded scopes of work rather than entirely new scopes of work. These changes could be completed within 1-5 years.

Medium-Term: Actions in this category require a bit more effort to implement. They may require some level of resources, additional research, or depend on another task or action to be accomplished before they are feasible. They may require setting up a new program or operation, or staff to plan for implementation. These actions could be completed within 5-10 years.

Long-Term: This category encompasses the most complex actions which may require substantial resources, research, or preparatory work. They may require broad coordination or change of political will that may take years to accomplish. These actions may be subdivided into phases to make them more achievable. Actions in this category may take up to 20 years to complete.

How to Use This Document

Each action is summarized in a quick overview table, enabling the reader to easily see the timeframe, categories, and level of implementation. This is followed by a text summary of the meaning of the action and initial implementation tasks. This document also contains two larger tables – a summary table at the beginning of the document showing all of the recommended actions at-a-glance (see below) and an initial implementation timeline following. This "timeline" helps to organize the actions to prepare for the development of a detailed implementation plan.

Recommended Actions Summary

Recommended Action	Level of Implementation	Short-term	Medium-term	Long-term
Decision-Making				
G-1: Use existing intergovernmental committees to convene jurisdictions and facilitate communication around disaster recovery collaboration	Regional	√		
G-2: Examine the feasibility of a regional disaster recovery framework	Regional		√	
G-3: Integrate resilience policy into current plans and practices	Regional, local			√
G-4: Lead reconnaissance missions for local leaders, staff, and community leaders to areas undergoing disaster recovery	Regional, local	√		
G-5: Establish and maintain a recovery clearinghouse to house resources for pre-disaster recovery planning and post-disaster recovery guidance	Regional, local	√		
Housing				
H-1: Identify areas where mitigation and recovery resources are particularly important	Regional, local	√		
H-2: Explore interim housing solutions that encourage residents to invest in the Bay Area's recovery	Regional, local			√
H-3: Use Plan Bay Area as a framework to directing resources for permanent replacement of housing	Regional, local			√
H-4: Address the problem of underinsured homes with more realistic hazard insurance availability	Regional, local		√	
H-5: Encourage accurate identification of soft-story buildings	Regional, local	√		
H-6: Establish affordable financing mechanisms to facilitate seismic mitigation of multi-family residential properties vulnerable to damage in earthquakes	Regional, local		√	
H-7: Reduce personal and community losses by increasing resilient building and retrofit practices	Local	√		

Recommended Action	Level of Implementation	Short-term	Medium-term	Long-term
Housing				
H-8: Improve the quality of non-engineered retrofits by developing a statewide retrofitting license for contractors, or providing contractor training	Regional		√	
H-9: Increase the number of retrofitted homes by providing financial incentives for homeowners to retrofit	Regional, local		√	
Infrastructure				
I-1: Establish regional baseline assessment and system performance standards to identify vulnerabilities and define interdependencies	Regional		√	
I-2: Conduct a regional assessment of system interdependencies and the consequences of cascading failures	Regional	√		
I-3: Evaluate the usefulness of creating performance targets to establish region-wide performance goals for all infrastructure systems	Regional			√
I-4: Identify strategies to reduce interdependencies and develop plans to assist with implementation	Regional			√
I-5: Establish a senior leadership forum on infrastructure resilience issues to convene providers and stakeholders	Regional	√		
Economy and Business				
EB-1: Encourage best practices that support business continuity and facilitate restoration of regional economies	Regional		√	
EB-2: Support pre-disaster economic development through existing regional best practices	Regional, local	√	√	√
EB-3: Implement the recommendations of the Resilience Initiative's Decision-Making, Housing, and Infrastructure Policy Papers	Regional, local	√	√	√
EB-4: Explore innovative financial incentives to support disaster resilience initiatives for small business	Regional, local		√	

Initial Implementation Guide

Recommended Action	Initial Implementation Tasks
Short-Term (Completed in 1-5 years)	
G-1: Use existing intergovernmental committees to convene jurisdictions and facilitate communication around disaster recovery collaboration	• Convene the Joint Policy Committee (JPC) and/or Regional Planning Committee (RPC) to discuss potential formation of disaster recovery forum • Identify potential roles and organizing structure for forum • Identify goals and objectives for forum • Recruit "champion" within RPC or JPC to help gather stakeholders • Coordinate with other similar initiatives, such as the Joint Policy Committee's Climate Action and Energy Resilience Project
G-4: Lead reconnaissance missions for local leaders, staff, and community stakeholders to areas undergoing disaster recovery	• Identify potential funding sources • Identify leaders to attend, such as ABAG's RPC members or other groups • Establish a MOU with the Earthquake Engineering Research Institute (EERI) to expand their program to include local stakeholders
G-5: Establish and maintain a recovery clearinghouse to house resources for pre-disaster recovery planning and post-disaster recovery guidance	• Identify a staff lead, with funding, to begin research and resource collection • Examine platforms for sharing, including websites, Base Camp, and file-sharing systems
H-1: Identify areas where mitigation and recovery resources are particularly important	• Gather vulnerable population data to input into GIS • Secure funding for ABAG staff time
H-5: Encourage accurate identification of soft-story buildings	• Share regional best practices and lessons learned • Begin drafting policy language based on existing ordinances that is easily adoptable by jurisdictions
H-7: Reduce personal and community losses by increasing resilient building and retrofit practices	• Establish a technical team to research and develop standard guidelines for single-family retrofits • Engage with the California Earthquake Authority and FEMA to coordinate efforts
I-2: Conduct a regional assessment of system interdependencies and the consequences of cascading failures	• Utilize ABAG's existing Lifelines Committee to oversee a system assessment • Research best practices for interdependencies assessments • Partner with San Francisco Lifelines Council to avoid duplicating efforts • Develop scenario and work plan
I-5: Establish a senior leadership forum on infrastructure resilience issues to convene providers and stakeholders	• Identify existing groups that may be able to expand to take on this responsibility • Establish goals and objectives for forum
EB-2: Support pre-disaster economic development through existing regional best practices	• Identify topics for further research • Identify appropriate research teams or partnerships with research institutions to establish programs of study
EB-3: Implement the recommendations of the Resilience Initiative's Decision-Making, Housing, and Infrastructure Policy Papers	• Identify short-term tasks in previous recommendations that most effectively support the regional economy and begin implementation
EB-4: Explore innovative financial incentives to support disaster resilience initiatives for small business	• Identify private sector partners to begin conversations about incentives • Explore best practices and case studies around financing incentives

Recommended Action	Initial Implementation Tasks
Medium-Term (Completed in 5-10 years)	
G-2: Examine the feasibility of a regional disaster recovery framework	• Look at existing recovery plans and frameworks to establish best practices and ensure integration • Work with regional recovery forum to establish a working group tasked with development of a recovery framework • Establish stakeholder input process to solicit feedback from local jurisdictions
H-4: Address the problem of underinsured homes with more realistic hazard insurance availability	• Establish contact with the California Earthquake Authority and engage in discussions
H-6: Establish affordable financing mechanisms to facilitate seismic mitigation of multi-family residential properties vulnerable to damage in earthquakes	• Engage lobbyists and prepare a policy platform around PACE funds and upholding AB184 • Identify best practices and sources of funding for seismic retrofit funding • Explore innovative public/private partnerships for funding sources
H-8: Improve the quality of non-engineered retrofits by developing a statewide retrofitting license for contractors, or providing contractor training	• Organize best management practices to inform state licensing • Establish a regional certification program for pre-disaster retrofit and post-disaster repair, building on ABAG's previous efforts
H-9: Increase the number of retrofitted homes by providing financial incentives for homeowners to retrofit	• Work with One Bay Area Grant managers to establish language for seismic improvements in grant qualifications • Partner with the California Earthquake Authority to utilize their mitigation funding effectively • Implement Recommended Action H-1 to identify high priority areas for mitigation funding
I-1: Establish regional baseline assessment and system performance standards to identify vulnerabilities and define interdependencies	• Research best practices for assessing infrastructure vulnerabilities and baseline conditions • Establish a working group to identify standard earthquake scenarios and educate infrastructure providers on how to use the scenarios for assessment purposes • Provide a platform for providers to share their own research and best practices
EB-1: Encourage best practices that support business continuity and facilitate restoration of regional economies	• Identify topics for further research • Identify appropriate research teams or partnerships with research institutions to establish programs of study

Recommended Action	Initial Implementation Tasks
Long-Term (Completed in 10-20 years)	
G-3: Integrate resilience policy into existing current plans and practices	• Incorporate resilience discussions into the second iteration of the SCS • Identify best practices for jurisdictions and develop a guide to assist in implementation
H-2: Explore interim housing solutions that encourage residents to invest in the Bay Area's recovery	• Identify best practices shelter-in-place policies and the development of neighborhood support centers • Develop pre-disaster temporary sheltering plans and policies
H-3: Use Plan Bay Area as a framework to directing resources for permanent replacement of housing	• Consider the feasibility of adopting the SCS as the regional housing recovery plan
I-3: Evaluate the usefulness of creating performance targets to establish region-wide performance goals for all infrastructure systems	• Develop a technical team to examine SPUR and other existing performance categories for feasibility • Conduct necessary research on the Bay Area's infrastructure systems to develop categories tailored to our specific Bay Area needs
I-4: Identify strategies to reduce interdependencies and develop plans to assist with implementation	• Develop a technical research team composed of engineers and other mitigation experts • Research existing policy and develop recommendations based on technical research

Governance

G-1: Use existing intergovernmental committees to convene jurisdictions and facilitate communication around disaster recovery collaboration

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
G-1: Use existing intergovernmental committees to convene jurisdictions and facilitate communication around disaster recovery collaboration	Regional	√		

Action Category					
Facilitation	*Education/ Information*	*Evaluation*	**Policy Development**	*Further Study/ Research*	*Program and Operation*

Utilizing an existing body such as the Joint Policy Committee (JPC) or Association of Bay Area Government (ABAG)'s Regional Planning Committee (RPC), create a regional forum for conversation and sharing, letting jurisdictions drive the content. The desired outcome would be more involved and informed stakeholders, consensus around major recovery decisions, and a coordinated regional policy platform.

Initial Implementation Tasks:

- Convene the Joint Policy Committee (JPC) and/or Regional Planning Committee (RPC) to discuss potential formation of disaster recovery forum
- Identify potential roles and organizing structure for forum
- Identify goals and objectives for forum
- Recruit "champion" within RPC or JPC to help gather stakeholders
- Coordinate with other similar initiatives, such as the JPC Climate Action and Energy Resilience Project

G-2: Examine the feasibility of a regional disaster recovery framework

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
G-2: Examine the feasibility of a regional disaster recovery framework	Regional		√	

Action Category					
Facilitation	*Education/ Information*	*Evaluation*	**Policy Development**	**Further Study/ Research**	**Program and Operation**

Within a regional forum, a regional disaster recovery framework could allow jurisdictions to develop procedures for making decisions surrounding operations or processes as well as financial management issues that cross jurisdictional boundaries or are too cumbersome for one jurisdiction to manage alone. This framework may take the form of a writ-

ten recovery plan, outlining procedures, roles, and tasks for all stakeholders involved, similar to FEMA's recently released National Disaster Recovery Framework.

Initial Implementation Tasks:

- Look at existing recovery plans and frameworks to establish best practices and ensure integration
- Work with regional recovery forum to establish a working group tasked with development of a recovery framework
- Establish stakeholder input process to solicit feedback from local jurisdictions

G-3: Integrate resilience policy into existing current plans and practices

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
G-3: Integrate resilience policy into existing current plans and practices	Regional, local			√

Action Category					
Facilitation	**Education/ Information**	*Evaluation*	**Policy Development**	*Further Study/ Research*	*Program and Operation*

Many elements that support resilience and recovery can be integrated into existing work, at the regional level and within jurisdictions. At a regional level, disaster resilience policy should be incorporated into ABAG's Sustainable Communities Strategy (SCS), the Joint Policy Committee (JPC)'s work on Climate Change, and other regional initiatives towards sustainability, economy, land use planning, and quality of life. Language and policy on recovery also can be integrated into existing county and city-level documents including General Plans and Emergency Operations Plans to formalize policy and procedures rather than requiring new initiatives.

Initial Implementation Tasks:

- Incorporate resilience discussions into the second iteration of the SCS
- Identify best practices for jurisdictions and develop a guide to assist in implementation

G-4: Lead reconnaissance missions for local leaders, staff, and community stakeholders to areas undergoing disaster recovery

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
G-4: Lead reconnaissance missions for local leaders, staff, and community stakeholders to areas undergoing disaster recovery	Regional, local	√		

Action Category					
Facilitation	**Education/ Information**	**Evaluation**	*Policy Development*	*Further Study/ Research*	**Program and Operation**

Experiencing the aftermath of a disaster can be a strong motivator for elected officials and other leaders to assume new responsibilities and guide action in their jurisdictions, as well as learn new tools and skills for their own recovery process. The region could consider working with EERI to expand its reconnaissance teams to include local and community leaders and appropriate staff.

Initial Implementation Tasks:

- Identify potential funding sources
- Identify leaders to attend, such as ABAG's RPC members or other groups
- Establish a MOU with EERI to expand their program to include local stakeholders

G-5: Establish and maintain a recovery clearinghouse to house resources for pre-disaster recovery planning and post-disaster recovery guidance

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
G-5: Establish and maintain a recovery clearinghouse function to house resources for pre-disaster recovery planning and post-disaster recovery guidance	Regional, local	√		

Action Category					
Facilitation	**Education/ Information**	*Evaluation*	*Policy Development*	*Further Study/ Research*	**Program and Operation**

The region needs an informational clearinghouse to house and share case studies, best practices, model ordinances, checklists, and other forms of guidance to help stakeholders better understand the recovery process and to have easily accessible tools to enact relevant policy, before and after a disaster. Another role for the clearinghouse could be compiling an inventory of existing and newly created recovery-related Bay Area plans and assessing pre-and post-event mitigation and recovery investments to help leverage community improvements as well as managing regional hazards data and data tracking recovery after the disaster does occur.

Initial Implementation Tasks:

- Identify a staff lead, with funding, to begin research, resource and hazards data collection
- Develop an initial ordinance package to assist local governments with recovery policies
- Examine platforms for sharing, including websites, Base Camp, and file-sharing systems

Housing

H-1: Identify areas where mitigation and recovery resources are particularly important

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
H-1: Identify areas where mitigation and recovery resources are particularly important	Regional, local	√		

Action Category					
Facilitation	**Education/ Information**	*Evaluation*	*Policy Development*	**Further Study/ Research**	**Program and Operation**

By overlaying information on vulnerable housing type and vulnerable populations with hazard and Priority Development Areas policy makers can direct policies and allocate resources to strengthen housing, reduce individual losses, shorten housing reconstruction timelines, minimize economic disruption and promote long-term regional growth and economic goals.

Initial Implementation Tasks:

- Gather vulnerable population data to input into GIS
- Secure funding for ABAG staff time

H-2: Explore interim housing solutions that encourage residents to invest in the Bay Area's recovery

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
H-2: Explore interim housing solutions that encourage residents to invest in the Bay Area's recovery	Regional, local			√

Action Category					
Facilitation	**Education/ Information**	*Evaluation*	**Policy Development**	*Further Study/ Research*	**Program and Operation**

If possible, while homes are being repaired, residents should be enabled to remain in their home or neighborhood through shelter-in-place policies. When residents remain, local businesses are more likely to stay in business, and families are more likely to quickly return to the routine of school and work. Regional plans to provide neighborhood support centers can enable families to remain in place by providing centralized food and water distribution, access to generators and medicine, and other needed services and supplies. Neighborhood support centers facilitate maintenance of existing neighborhood support networks.

Initial Implementation Tasks:

- Identify best practices shelter-in-place policies and the development of neighborhood support centers
- Develop pre-disaster temporary sheltering plans and policies

H-3: Use *Plan Bay Area* as a framework to directing resources for permanent replacement of housing

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
H-3: Use Plan Bay Area as a framework to directing resources for permanent replacement of housing	Regional, local			√

Action Category					
Facilitation	**Education/ Information**	*Evaluation*	**Policy Development**	*Further Study/ Research*	**Program and Operation**

When housing needs to be reconstructed on a large scale, regional leaders can use *Plan Bay Area* and the SCS framework and the identified areas for growth (PDAs) to guide post-earthquake planning and development. PDAs have plans for building that in some cases are ready to be executed and an earthquake can be an opportunity to implement these plans. This will have the dual benefit of stimulating recovery while achieving our regional vision.

Initial Implementation Tasks:

- Examine the feasibility of adopting the SCS as the regional housing recovery plan

H-4: Address the problem of underinsured homeowners with more realistic hazard insurance availability

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
H-4: Address the problem of underinsured homeowners with more realistic hazard insurance availability.	Regional, local		√	

Action Category					
Facilitation	**Education/ Information**	*Evaluation*	**Policy Development**	*Further Study/ Research*	**Program and Operation**

Policymakers can ensure that damaged homes are repaired and rebuilt more quickly by ensuring that more homeowners are covered by adequate hazard insurance coverage. Policymakers should work with the California Earthquake Authority to reduce both its annual premium and deductibles. Earthquake insurance policies for renters, however, are a good deal and their use should be more widely encouraged.

Initial Implementation Tasks:

- Establish contact with the California Earthquake Authority (CEA) and engage in discussions

H-5: Encourage accurate identification of soft-story buildings

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
H-5: Encourage accurate identification of soft-story buildings	Regional, local	√		

Action Category					
Facilitation	**Education/ Information**	**Evaluation**	**Policy Development**	*Further Study/ Research*	**Program and Operation**

Owner notification programs such as those taking place in Berkeley, Oakland, and Alameda are part of a broader societal trend recognizing the seismic vulnerabilities of soft-story buildings and placing liability on building owners. This exposure is something that owners will have to take into account when deciding how they will operate their buildings.[1] San Francisco, in 2012, embarked upon a ten-year mandatory evaluation and retrofit program for soft-story multi-family buildings.[2] While politically difficult, this mandatory program will likely serve the City's, the building owner's, and the residents' best interests in the long run.

Initial Implementation Tasks:

- Share regional best practices and lessons learned
- Begin drafting policy language based on existing ordinances that is easily adoptable by jurisdictions

H-6: Establish affordable financing mechanisms to facilitate seismic mitigation of multi-family residential properties vulnerable to damage in earthquakes

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
H-6: Establish affordable financing mechanisms to facilitate seismic mitigation of multi-family residential properties vulnerable to damage in earthquakes	Regional, local		√	

Action Category					
Facilitation	**Education/ Information**	*Evaluation*	**Policy Development**	*Further Study/ Research*	**Program and Operation**

1 Personal communication, Ken Moy, ABAG legal counsel

2 Applies to three or more story, 5 or more unit soft-story wood frame residential buildings, phased in four categories based on geological hazard and use.

We recommend that policymakers work together to find ways to utilize the PACE program for seismic retrofits and to lobby the federal government to provide the initial pot of money. In addition to PACE, a suite of policies and incentives can be adopted by cities wishing to encourage seismic retrofit. In addition, local governments working together with lending institutions, insurance companies, and other government agencies before future earthquakes could design new coordinated lending processes.

Initial Implementation Tasks:

- Engage lobbyists and prepare a policy platform around PACE funds and upholding AB184
- Identify best practices and sources of funding for seismic retrofit funding
- Explore innovative public/private partnerships for funding sources

H-7: Reduce personal and community losses by increasing resilient building and retrofit practices

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
H-7: Reduce personal and community losses by increasing resilient building and retrofit practices	Local	√		

Action Category					
Facilitation	**Education/ Information**	*Evaluation*	**Policy Development**	*Further Study/ Research*	**Program and Operation**

Clear and comprehensive guidelines for the retrofit of all remaining single-family dwellings are needed. This lack of standard means that permits will be issued for voluntary seismic retrofits that may not be adequate. The California Earthquake Authority and FEMA are working to develop recommendations for future evaluation and retrofit codes and standards and local policy makers should encourage their effort.

Initial Implementation Tasks:

- Establish a technical team to research and develop standard guidelines for single-family retrofits
- Engage with the California Earthquake Authority and FEMA to coordinate efforts

H-8: Improve the quality of non-engineered retrofits by developing a statewide retrofitting license for contractors, or providing contractor training

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
H-8: Improve the quality of non-engineered retrofits by developing a statewide retrofitting license for contractors, or providing contractor training	Regional		√	

Action Category					
Facilitation	*Education/ Information*	*Evaluation*	*Policy Development*	*Further Study/ Research*	**Program and Operation**

Similar to a plumbing or electrical license or the Home Improvement Certification category, a retrofitting license or certification would help ensure that contractors performing seismic retrofits are properly trained. Implementation would require action the by the California State License Board to develop some new regulations. Bay Area local governments may not be able to wait for state action to implement this policy. An interim step might be to establish a regional certification program for pre-disaster retrofit and post-disaster repair that would address the most vulnerable Bay Area building types.

Initial Implementation Tasks:

- Organize best management practices to inform state licensing
- Establish a regional certification program for pre-disaster retrofit and post-disaster repair, building on ABAG's previous efforts

H-9: Increase the number of retrofitted homes by providing financial incentives for homeowners to retrofit

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
H-9: Increase the number of retrofitted homes by providing financial incentives for homeowners to retrofit	Regional, local		√	

Action Category					
Facilitation	**Education/ Information**	*Evaluation*	*Policy Development*	*Further Study/ Research*	**Program and Operation**

Financial incentives not only make retrofitting more affordable, they can also improve the quality of retrofits by setting a minimum standard that retrofits must achieve in order to receive assistance, and create opportunities to educate communities about the prudence of seismic retrofitting. Regional agencies could consider including seismic improvements to the One Bay Area Grant Program which provides funding to support implementation of the Sustainable Communities Strategy (SCS). We recommend that policy makers also endorse the involvement of insurance industry in developing owner incentives for retrofitting structures.

Initial Implementation Tasks:

- Work with One Bay Area Grant managers to establish language for seismic improvements in grant qualifications
- Partner with the California Earthquake Authority to utilize their mitigation funding effectively
- Implement Recommended Action H-1 to identify high priority areas for mitigation funding

Infrastructure

I-1: Establish regional baseline assessment and system performance standards to identify vulnerabilities and define interdependencies

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
I-1: Establish regional baseline assessment and system performance standards to identify vulnerabilities and define interdependencies	Regional		√	

Action Category					
Facilitation	*Education/ Information*	**Evaluation**	*Policy Development*	**Further Study/ Research**	*Program and Operation*

The region needs to establish common tools for evaluation and assessment, and build consensus around the type of analysis and how to present findings. One way to begin this is to establish common earthquake scenarios for evaluating systems so consequences can be compared and interdependencies are defined across the region. We need to, as a region, assess the existing state of infrastructure systems, much of which is aging, deteriorating, and functioning at capacities beyond their original design, which all increase vulnerability. Regional infrastructure stakeholders could conduct and share research on evaluations, best practices, and recommendations for effective and uniform analysis of vulnerabilities.

Initial Implementation Tasks:

- Research best practices for assessing infrastructure vulnerabilities and baseline conditions
- Establish a working group to identify standard earthquake scenarios and educate infrastructure providers on how to use the scenarios for assessment purposes
- Provide a platform for providers to share their own research and best practices

I-2: Conduct a regional assessment of system interdependencies and the consequences of cascading failures

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
I-2: Conduct a regional assessment of system interdependencies and the consequences of cascading failures	Regional	√		

Action Category					
Facilitation	*Education/ Information*	**Evaluation**	*Policy Development*	**Further Study/ Research**	*Program and Operation*

Similar to San Francisco Lifelines Council's current lifeline qualitative review, the region should conduct a high-level assessment of Bay Area infrastructure systems to identify and assess critical interdependencies. The study could be based

on a standardized earthquake scenario or scenarios (see above) and identify and assess lifeline systems by performance (similar to SPUR's performance categories) along with peer-reviewed approaches. Then communities can prioritize system improvements based on defined performance targets that suggest key mitigation actions.

Initial Implementation Tasks:

- Utilize ABAG's existing Lifelines Committee to oversee a system assessment
- Research best practices for interdependencies assessments
- Partner with San Francisco Lifelines Council to avoid duplicating efforts
- Develop scenario and work plan

I-3: Evaluate the usefulness of creating performance targets to establish region-wide performance goals for all infrastructure systems

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
I-3: Evaluate the usefulness of creating performance targets to establish region-wide performance goals for all infrastructure systems	Regional			√

Action Category					
Facilitation	*Education/ Information*	**Evaluation**	**Policy Development**	**Further Study/ Research**	*Program and Operation*

San Francisco Planning and Urban Research (SPUR) has created categories of expected performance for lifelines within San Francisco, as well as goals and targets for recovery of infrastructure systems within four hours, three days, 30 days, and four months and beyond after a disaster. We could consider developing similar performance categories at a regional level using peer-reviewed evaluation methodology to provide clear expectations and goals for all utility providers, as well as provide a useful tool for evaluating the current state of systems and communicating this information with other providers.

Initial Implementation Tasks:

- Develop a technical team to examine SPUR and other existing performance categories for feasibility
- Conduct necessary research on the Bay Area's infrastructure systems to develop categories tailored to our specific Bay Area needs

I-4: Identify strategies to reduce interdependencies and develop plans to assist with implementation

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
I-4: Identify strategies to reduce interdependencies and develop plans to assist with implementation	Regional			√

Action Category					
Facilitation	**Education/ Information**	*Evaluation*	**Policy Development**	**Further Study/ Research**	*Program and Operation*

Concurrent with examining vulnerabilities and impacts, research could be conducted to identify cost-effective, feasible strategies to mitigate interdependencies, including system redundancy or backup, "islanding" vulnerable systems to limit their impacts and impacts to them, or creating smaller, self-contained "districts" of systems rather than one large, vulnerable system. This study should include identifying existing policies and regulations that impede or assist recovery as well as identifying what policies and regulations are need to propel infrastructure recovery.

Initial Implementation Tasks:

- Develop a technical research team composed of engineers and other mitigation experts
- Research existing policy and develop recommendations based on technical research

I-5: Establish a senior leadership forum on infrastructure resilience issues to convene providers and stakeholders

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
I-5: Establish a senior leadership forum on infrastructure resilience issues to convene providers and stakeholders	Regional	√		

Action Category					
Facilitation	**Education/ Information**	*Evaluation*	*Policy Development*	*Further Study/ Research*	*Program and Operation*

Infrastructure providers and regional communities need a forum in which to share and gain situational awareness, spark mitigation programs and create new or utilize existing decision-making and prioritization tools. Tapping a third-party, neutral convener can offer impartial perspectives in prioritizing policy and strategic actions as well as providing a central information hub. A committee team can engage other stakeholders for decision-making and program prioritization, including the broader community.

Initial Implementation Tasks:

- Identify existing groups that may be able to expand to take on this responsibility
- Establish goals and objectives for forum

Economy and Business

EB-1: Encourage best practices that support business continuity and facilitate restoration of regional economies

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
EB-1: Encourage best practices that support business continuity and facilitate restoration of regional economies	Regional		√	

Action Category					
Facilitation	*Education/ Information*	*Evaluation*	*Policy Development*	**Further Study/ Research**	*Program and Operation*

Concrete knowledge on economic recovery is limited, particularly within the context of the Bay Area. We recommend partnering with research bodies such as the Bay Area Council (BAC), the California Seismic Safety Commission (CSSC) and research institutions such as UC Berkeley and Stanford to continue to conduct Bay Area-specific research and studies on specific actions that local governments or regional groups can take to expedite economic recovery. We recommend implementing findings from the CSSC and conducting a more thorough survey on existing best practices, both specific to the Bay Area and from other disasters within the US. We recommend research focused around our first two issues in particular - getting large businesses to stay in the region and keeping small businesses open.

Initial Implementation Tasks:

- Identify topics for further research
- Identify appropriate research teams or partnerships with research institutions to establish programs of study

EB-2: Support pre-disaster economic development through existing regional best practices

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
EB-2: Support pre-disaster economic development through existing regional best practices	Regional, local	√		

Action Category					
Facilitation	**Education/ Information**	*Evaluation*	**Policy Development**	**Further Study/ Research**	*Program and Operation*

Several regionally-focused groups have conducted extensive research on how to best maintain and grow the Bay Area's economy. ABAG has conducted extensive economic research through its Plan Bay Area, Jobs-Housing Connection Strategy, and is currently developing a Regional Prosperity Plan. ABAG is also developing a Regional Policy Background Paper

on Economic Development which will include recommended actions for continued economic growth. The Bay Area Council (BAC)'s Economic Assessment report also outlines actions designed to strengthen today's economy, and a strong and nimble economy today will provide a basis for a strong regional economic recovery after an earthquake.

Initial Implementation Tasks:

- Prepare an implementation plan for current best practice recommendations, identifying appropriate stakeholders, fora, and funding sources for implementation projects

EB-3: Implement the recommendations of the Resilience Initiative's Decision-Making, Housing, and Infrastructure Policy Papers

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
EB-3: Implement the recommendations of the Resilience Initiative's Housing, Infrastructure and Regional Decision-Making Issue Papers	Regional, local	√		

Action Category					
Facilitation	**Education/ Information**	**Evaluation**	**Policy Development**	**Further Study/ Research**	**Program and Operation**

Many of the key factors in economic recovery are closely linked to the issues laid out in the Initiative's issue papers on housing, infrastructure and regional decision-making. Strengthening these areas will bolster our overall economy and ability to recover quickly. These recommended actions also support issues identified in BAC report as necessary for a strong regional economy.

Initial Implementation Tasks:

- Identify short-term tasks in previous recommendations that most effectively support the regional economy and begin implementation

EB-4: Explore innovative financial incentives to support disaster resilience initiatives for small business

Recommended Action	Level of Implementation	Short-Term	Medium-Term	Long-Term
EB-4: Explore innovative financial incentives to support disaster resilience initiatives for small business	Regional, local		√	

Action Category					
Facilitation	**Education/ Information**	*Evaluation*	**Policy Development**	**Further Study/ Research**	*Program and Operation*

Pre-disaster funding directed toward hazard mitigation for small business is currently limited to conventional lending practices which generally are either not available or not cost-effective for small business owners. Additionally, earthquake or business interruption insurance can be prohibitively expensive for small businesses operating with a small profit margin. There is a need to engage Chambers of Commerce, Economic Development Departments, lending institutions, the insurance industry and federal agencies, such as the Economic Development Administration, and the Historic Trust Main Street Program, in a discussion of potential strategies to support pre-disaster hazard mitigation incentives for small businesses. At the local level, Business Improvement Districts, revolving loan programs, or pool financing should be explored.

Initial Implementation Tasks:

- Identify private sector partners to begin conversations about incentives
- Explore best practices and case studies around financing incentives

LEGISLATION & GOVERNMENTAL ORGANIZATION COMMITTEE

Committee Chair: *Supervisor David Rabbit—Sonoma County*
Committee Vice Chair: Supervisor Scott Haggerty—Alameda County

Staff: Patricia Jones – Assistant Executive Director 510/ 464-7933; FAX 510/464-7970; PatJ@abag.ca.gov
Kathleen Cha – Senior Communications Officer 510/ 464-7922; KathleenC@abag.ca.gov

Thursday, March 21, 2013 – 3:30 p.m. to 5:00 p.m.

ABAG Large Conference Room B, MetroCenter, 101 Eighth Street, Oakland

AGENDA*

1.	**OPEN AGENDA** Committee members may raise issues for consideration; members of the public may speak.	Information/ Action
2.	**APPROVAL OF MINUTES** Committee will review and approve the minutes of the January 17, 2013, L&GO meeting.	Information/ Action
3.	**NEW LEGISLATION PROPOSED IN 2013 STATE LEGISLATIVE SESSION—FOR CONSIDERATION** **SB 391 (DeSaulnier) California Homes and Jobs Act of 2013** **SB 792 (DeSaulnier) Regional Entities: Bay Area** **AB 416 (Gordon) California Air Resources Board: Local Emission Reduction Program** **AB 453 (Mullin) Sustainable Communities** **AB 662 (Atkins, Dickinson, Mitchell, Perea, Ting &Torres) Local Government: Infrastructure Financing Districts** **AB 745 (Levine) Land Use: Housing Element** **AB 1002 (Bloom) Vehicles: Registration Fee—Sustainable Communities Strategy** **AB 1080 (Alejo) Community Revitalization and Investment Authorities** **AB 185 (Roger Hernandez) Open and Public Meetings: Televised Meetings** **ACA 8 (Blumenfield) Local Government Financing: Voter Approval** **SCA 11 (Hancock) Local Government: Special Taxes—Voter Approval**	Information/ Action
4.	**FOR CONSIDERATION: PROPOSED SAN FRANCISCO ORDINANCE AMENDING THE BUILDING CODE:** **To Establish A Mandatory Seismic Retrofit Program for Wood-frame Buildings of three or more stories and containing five or more dwelling units**	Information/ Action
5.	**FOLLOW-UP ON FEBRUARY 27th LEGISLATIVE WORKSHOP AND RECEPTION ON SACRAMENTO**	Information/ Action
	ADJOURNMENT Next meeting is scheduled for **May 16, 2013.**	Action
	Agenda and other written materials are available at ABAG/Front Desk, 101 8th Street, Oakland, or at *http://www.abag.ca.gov/meetings*	

* The Committee may take any action on any item on the agenda

** Full California Bill Texts and actions can be read and printed out from state website: **www.leginfo.ca.gov**.

ABAG

ASSOCIATION OF BAY AREA GOVERNMENTS

Representing City and County Governments of the San Francisco Bay Area

LEGISLATION
2013 State Legislative Session
Legislation & Governmental Organization Committee
March 11, 2013

Bill Author	Subject	Status	Staff Recommendation	L&GO Position	Legislation Summary
*NEW BILLS					**Bold Face/Shading in Legislation Summary indicates change/ amendments.**

Bills to be reviewed are listed in numeric order with Assembly bills listed first, followed by Senate bills

	New Bills				
SB 391 DeSaulnier	**California Homes and Jobs Act of 2013**	SEN Transportation and Housing Committee Hearing 4/9	Support		**The bill would make legislative findings and declarations relating to the need for establishing permanent, ongoing sources of funding dedicated to affordable housing development. The bill would impose a fee of $75 to be paid at the time of the recording of every real estate instrument, paper, or notice required or permitted by law to be recorded. By imposing new duties on counties with respect to the imposition of the recording fee, the bill would create a state-mandated local program. The bill would require that revenues from this fee be sent quarterly to the Department of Housing and Community Development for deposit in the California Homes and Jobs Trust Fund, which the bill would create within the State Treasury. The bill would provide that moneys in the fund may be expended for supporting affordable housing, administering housing programs, and the cost of periodic audits, as specified.** *This bill would result in a change in state taxes for the purpose of increasing state revenues within the meaning of Section 3 of Article XIII A of the California Constitution, and thus would require for passage the approval of 2/3 of the membership of each house of the Legislature.*
SB 792 DeSaulnier	**Regional Entities: Bay Area**	SEN Transportation and Housing Com	Watch		**This bill would require the joint policy committee to prepare a regional organization plan for the affected regional entities. The organization plan would include a plan for consolidating certain functions that are common to the regional entities and reducing overhead costs.**

Bill Author	Subject	Status	Staff Recommendation	L&GO Position	Legislation Summary
					The bill would require the joint policy committee to hold at least one public hearing in each county of the region and to adopt a final plan by June 30, 2015. The bill would also require the joint policy committee to develop and adopt public community outreach programs and to maintain an Internet Web site. The bill would require the joint policy committee to conduct a review of the policies and plans, and associated regulations, of each regional entity, including an assessment of the consistency of the policies, plans, and regulations among the regional entities with the requirements of Senate Bill 375 of the 2007-08 Regular Session. The bill would provide that the joint policy committee shall be responsible for ensuring that the sustainable communities strategy for the region integrates transportation, land use, and air quality management consistent with that legislation. The bill would also require the joint policy committee to appoint an advisory committee on economic competitiveness with specified members from the business community to adopt goals and policies related to the inclusion of economic development opportunities in the plans of the regional entities. By imposing new duties on the joint policy committee, the bill would impose a state-mandated local program.
AB 416 Gordon	**California Air Resources Board: Local Emission Reduction Program**	**ASM Natural Resources Com.**	Support		This bill would create the Local Emission Reduction Program and would require money to be available from the general fund, upon appropriation by the Legislature, for purposes of providing grants to develop and implement greenhouse gas emission reduction projects in the state. The bill would require the state board to award moneys under the program to eligible recipients, as specified, and would permit the state board to give consideration to the ability of a project to, among other things, create local job training and job creation benefits and provide opportunities to achieve greenhouse gas emission reduction in ways that increase localized energy resources. This would include projects/ opportunities that decrease air or water pollution; reduce the consumption of natural resources or energy; provide opportunities to achieve greenhouse gas emission reductions in ways that increase localized energy resources; increase the reliability of local water supplies; increase solid waste diversion from landfills; achieve greenhouse gas emission reductions in ways that reduce vehicle miles traveled; prevent conservation of agricultural, forest, and

					open space lands to uses that result in higher greenhouse gas emissions.
AB 453 Mullin	**Sustainable Communities**	**ASM Local Government Com. Hearing 4/3**	Support		*Existing law establishes the Strategic Growth Council and appropriated $500,000 from the funding provided by the initiative to the Natural Resources Agency to support the council and its activities. The council is required to manage and award grants and loans to a council of governments, metropolitan planning organization, regional transportation planning agency, city, county, or joint powers authority for the purpose of developing, adopting, and implementing a regional plan or other planning instrument to support the planning and development of sustainable communities.* **This bill would make a local agency formation commission eligible for the award of financial assistance for those planning purposes.**
AB 662 Atkins, Dickinson, Mitchell, Perea, Ting, and Torres	**Local government: infrastructure financing districts**	**ASM Local Government Com**	Support		*Existing law authorizes the creation of infrastructure financing districts, as defined, for the sole purpose of financing public facilities, subject to adoption of a resolution by the legislative body and affected taxing entities proposed to be subject to the division of taxes and voter approval requirements. Existing law prohibits on infrastructure financing district from including any portion of a redevelopment project area.* **This bill would delete the prohibition on infrastructure financing district including any portion of a redevelopment project area.**
AB 745 Levine	**Land Use: Housing Element**	**ASM Housing and Community Development**	Watch		**This bill would authorize a city or county to request the appropriate council of governments to adjust a density to be deemed appropriate if it is inconsistent with the city's or county's existing density.** *The Planning and Zoning Law requires a city or county to adopt a comprehensive, long-term general plan that includes various mandatory elements, including a housing element that, in turn, is required to contain, among other things, an inventory of resources and constraints relevant to meeting the city's or county's housing needs. That law also requires a city's or county's inventory of land suitable for residential development to be used to identify sites that can be developed for housing that are sufficient to provide for the city's or county's share of the regional housing need, and for that purpose, requires a city or county to determine (1) whether each site in the inventory can accommodate some portion of its share, as specified, and (2) the number of housing units that can be accommodated on each site, as specified. That law requires a city or county, for the number of units calculated to accommodate its share of the regional housing need for lower income households, to*

					either provide a prescribed analysis demonstrating how the adopted densities accommodate this need, or deem certain densities appropriate to accommodate housing for lower income households, based on specified classifications.
AB 1002 Bloom	**Vehicles: Registration Fee—Sustainable Communities Strategy**	**ASM Transportation**	Support		**This bill would, in addition to any other fees specified in the Vehicle Code and the Revenue and Taxation Code, impose a fee of $6 to be paid at the time of registration or renewal of registration of every vehicle subject to registration under the Vehicle Code, except as specified. This bill would require the Department of Motor Vehicles, after deducting all costs incurred pursuant to that provision, to remit all moneys realized pursuant to that provision for deposit in the Sustainable Communities Strategy Subaccount which is hereby established in the Motor Vehicle Account and made available, upon appropriation by the Legislature, for implementation of sustainable communities strategies.** *Existing law imposes a registration fee to be paid to the Department of Motor Vehicles for the registration of every vehicle or trailer coach of a type subject to registration, except those vehicles that are expressly exempted from the payment of registration fees. Existing law, until January 1, 2016, imposes a $3 increase on that fee, $2 of which is to be deposited into the Alternative and Renewable Fuel and Vehicle Technology Fund and $1 of which is to be deposited into the Enhanced Fleet Modernization Subaccount.*
AB 1080 Alejo	**Community Revitalization and Investment Authorities**	**ASM Housing and Community Development**	Support		**This bill would authorize certain public entities of a community revitalization and investment area, as described, to form a community revitalization plan within a community revitalization and investment authority (authority) to carry out the Community Redevelopment Law in a specified manner. The bill would require the authority to adopt a community revitalization plan for a community Revitalization and investment area and authorize the authority to include in that plan a provision for the receipt of tax increment funds.**
AB 185 Roger Hernandez	**Open and public meetings: televised meetings**	**ASM Local Government**	Watch		**The bill would provide that an audio or video recording of an open and public meeting made at the direction of a local agency may be erased or destroyed 2 years after the recording.** **The bill would require a local agency that collects a**

Bill Author	Subject	Status	Staff Recommendation	L&GO Position	Legislation Summary
					franchise fee from the holder of a state franchise that provides PEG channels to televise the open and public meetings of its legislative body and any of its advisory committees, if financially feasible, and to only use the franchise fees for that purpose. The bill would require that these franchise fees be used to cover the necessary expenses, as defined, for implementing the televising of the local agency's open and public meetings. The bill would authorize, if franchise fee moneys in excess of that necessary to televise these meetings are available, the use of such fees to provide live streaming of these meetings on the Internet. **By imposing new duties on local public officials to televise open and public meetings, the bill would impose a state-mandated local program.** *Existing Law: The Ralph M. Brown Act requires that an audio or video recording of an open and public meeting made at the direction of a local agency is subject to inspection pursuant to the California Public Records Act and may be erased or destroyed 30 days after the recording. Existing law requires that any inspection of an audio or video recording shall be provided without charge on equipment made available by the local agency.* *The Digital Infrastructure and Video Competition Act of 2006 provides that cities, counties, cities and counties, or joint powers authorities receive state franchise fees in exchange for the use of public rights-of-way for the delivery of cable and video services provided within their jurisdictions, based on gross revenues, pursuant to a specified formula, from state franchise holders that provide public, educational, and governmental access (PEG) channels.*
ACA 8 **Blumenfield**	**Local Government Financing: Voter Approval**	**ASM** **From Printer—may be heard in Committee March 16**	Support		**This measure would similarly lower to 55% the voter-approval threshold for a city, county, or city and county to incur bonded indebtedness, exceeding in any year the income and revenue provided in that year, that is in the form of general obligation bonds to fund specified public improvements and facilities, or buildings used primarily to provide sheriff, police, or fire protection services.**
SCA 11 **Hancock**	**Local government: special taxes: voter approval**	**SEN** **Referred to Coms. on GOV. & Finance and Elections &**	Support		*The California Constitution conditions the imposition of a special tax by a local government upon the approval of 2/3 of the voters of the local government voting on that tax, and prohibits a local government from imposing an ad valorem tax on real property or a transactions tax or sales tax on the sale of real property.* **This measure would instead condition the**

		Constitutional Amendments			**imposition, extension, or increase of a special tax by a local government upon the approval of 55% of the voters voting on the proposition. The measure would also make conforming and technical, nonsubstantive changes.**
	Bills Previously Considered				
SB 1 Steinberg	**Sustainable Communities Investment Authority**	**SEN Referred to Committee on Government and Finance Hearing 3/13**	Support	**Watch**	This bill would authorize certain public entities (a city, county, city and county, or a special district) of a Sustainable Communities Investment Area to form a Sustainable Communities Investment Authority (authority) to carry out the Community Redevelopment Law—to administer economic development and affordable housing programs. The bill would require the authority to adopt a Sustainable Communities Investment Plan for a Sustainable Communities Investment Area and authorize the authority to include in that plan a provision for the receipt of tax increment funds provided that certain economic development and planning requirements are met. (*bill says that a "Sustainable Communities Investment Area shall include the following: 1)Transit priority project areas; 2) Areas that are small walkable communities...")* The bill would authorize the legislative body of a city or county forming an authority to dedicate any portion of its net available revenue, as defined, to the authority through its Sustainable Communities Investment Plan. The bill would establish prequalification requirements for entities that will receive more than $1,000,000 from the Sustainable Communities Investment Authority and would require the Department of Industrial Relations to monitor and enforce compliance with prevailing wage requirements for specified projects within a Sustainable Communities Investment Area. The bill would deposit moneys received by the department from developer charges related to the costs of monitoring and enforcement in the State Public Works Enforcement Fund. By depositing a new source of revenue in the State Public Works Enforcement Fund, a continuously appropriated special fund, the bill would make an appropriation.
SB 33 Wolk	**Infrastructure Financing Districts: Voter Approval—Repeal**	**SEN Re-referred to Government and Finance Com**	Support LCC Support	**Support**	*A measure to update Infrastructure Financing District law, making it a more useful tool for helping cities maintain, repair, and rebuild critical infrastructure and create economic development:* This bill would revise and recast the provisions governing infrastructure financing districts. The bill would eliminate the requirement of voter approval for creation of the district and for bond issuance, and

Bill Author	Subject	Status	Staff Recommendation	L&GO Position	Legislation Summary
		Hearing 3/13			would authorize the legislative body to create the district subject to specified procedures. The bill would instead authorize a newly created public financing authority, consisting of 5 members, 3 of whom are members of the city council or board of supervisors that established the district, and 2 of whom are members of the public, to adopt the infrastructure financing plan, subject to approval by the legislative body, and issue bonds by majority vote of the authority by resolution. The bill would authorize a public financing authority to enter into joint powers agreements with affected taxing entities with regard to nontaxing authority or powers only. The bill would authorize a district to finance specified actions and projects, and prohibit the district from providing financial assistance to a vehicle dealer or big box retailer. The bill would create a public accountability committee to review the actions of the public financing authority. This bill would specify that the date on which the district would cease to exist would not be more than 40 years from the date on which the public financing authority adopted the resolution adopting the infrastructure financing plan. The bill would also impose additional reporting requirements after the adoption of an infrastructure financing plan.
SCA 9 Corbett	**Local Government: Economic Development—Special Taxes – Voter Approval**	**SEN Referred to Coms. on GOV. & Finance and Elections & Constitutional Amendments**	Support	**Watch**	This measure would provide that the imposition, extension, or increase of a special tax by a local government for the purpose of providing funding for community and economic development projects requires the approval of 55% of it voters voting on the proposition. *(resolution to propose constitutional amendment for vote by people of California)*
SCA 4 Liu	**Local Government: Transportation Projects: Special Taxes – Voter Approval**	**SEN Referred to Coms. on GOV. & Finance and Elections & Constitutional Amendments**	Support LCC Watch MTC recommends support (with possible amendment)	**Support**	This measure would provide that the imposition, extension, or increase of a special tax by a local government for the purpose of providing funding for local transportation projects requires the approval of 55% of it voter voting on the proposition. *(resolution to propose constitutional amendment for vote by people of California)*
SCA 8 Corbett	**Transportation Projects: Special Taxes – Voter Approval**	**SEN Referred to Coms. on GOV. & Finance and Elections & Constitutional Amendments**	Support LCC Watch	**Support**	This measure would provide that the imposition, extension, or increase of a special tax by a local government for the purpose of providing funding for transportation projects requires the approval of 55% of its voters voting on the proposition. *(resolution to propose constitutional amendment for vote by people of California)*
***AB 39 Skinner &**	**Proposition 39: Implementation**	**ASM Committee on Natural**	Support	**Watch**	Amended 2/27 This bill would require the State Energy Resources Conservation

Bill Author	Subject	Status	Staff Recommendation	L&GO Position	Legislation Summary
John A Perez		**Resources**			and Development Commission (Energy Commission) to administer grants, no-interest loans, or other financial assistance to an eligible institution, defined as a public school providing instruction in kindergarten or grades 1 to 12, inclusive, for the purpose of projects that create jobs in California by reducing energy demand and consumption at eligible institutions. This bill would continuously appropriate for prescribed fiscal years an unspecified amount to the Energy Commission for this purpose in each year that at least that amount of money is transferred to the Job Creation Fund. This bill would require the Energy Commission to administer the grants, no-interest loans, or other financial assistance program to ensure that projects satisfy the prescribed criteria that apply to all expenditures from the Job Creation Fund. This bill would require an eligible institution that receives a grant, no-interest loan, or other financial assistance to report the amount of energy saved to the Energy Commission and to compute the cost of energy saved as a result of implementing projects funded by the grant, as prescribed. This bill would set forth certain criteria to be used to prioritize projects to be funded from moneys in the Job Creation Fund relative to public schools, school districts, public colleges and universities, and other public buildings and facilities. This bill would require moneys for job training and workforce development to be available from the Job Creation Fund, upon appropriation by the Legislature, to the California Conservation Corps, Certified Community Conservation Corps, Youth Build, and other existing workforce development programs, as specified, consistent with the requirements of the California Clean Energy Jobs Act. This bill would require moneys for *public-private partnerships* to be available from the Job Creation Fund, *upon appropriation by the Legislature, for assistance to certain local governments to establish and implement Property Assisted Clean Energy programs or similar financial and technical assistance consistent with the requirements of the California Clean Energy Jobs Act.*
AB 48 Skinner	**Firearms: Ammunition—Sales**	**ASM Committee on Public Safety**	Watch	**Watch**	**Amended 2/4 to include:** This bill would exempt an individual in the state who sells, transfers, or furnishes ammunition to certain specified law enforcement individuals from those identification and reporting requirements. This bill would make it a misdemeanor, punishable by a fine of not more than $1,000 or imprisonment in a county jail not to exceed 6 months, or by both that fine and imprisonment, to knowingly manufacture, import, keep for sale, offer or expose for sale, or give or lend any device that is capable of converting an ammunition feeding device into a large-capacity magazine. The bill would revise the definition of "large-capacity

					magazine" to mean any ammunition feeding device with the capacity to accept more than 10 rounds, including a readily restorable, as defined, disassembled large-capacity magazine, and an oversize magazine body that appears to hold in excess of 10 rounds. This bill would require anyone in the state, prior to selling, transferring, or otherwise furnishing ammunition to an individual or business entity in this state or any other state to require proper identification, as prescribed, to be an authorized firearms dealer, and to report the sales to the Department of Justice. An individual who fails to make the required report or who knowingly makes a report with false or fictitious information would be guilty of a misdemeanor. The bill would require the department to alert local law enforcement entities in the community in which the purchaser resides if an individual purchaser who is not a peace officer obtains more than ____ rounds within a 5-day period. *(By creating a new crime, this bill would impose a state-mandated local program.)*
AB 22 Blumenfield	**Sidewalks: Repairs**	**ASM Local Government Committee**	Oppose LCC Watch	**Oppose**	*Under existing law, the Improvement Act of 1911, the owners of lots or portions of lots fronting on any portion of a public street or place are required to maintain any sidewalk in such condition that the sidewalk will not endanger persons or property and maintain it in a condition that will not interfere with the public convenience in the use of those works or areas, except as to those conditions created or maintained by persons other than the owner. This law imposes a duty of repair on the abutting property owners for defects in sidewalks, regardless of who created the defects, but does not of itself create tort liability to injured pedestrians or a duty to indemnify municipalities, except where a property owner created the defect or exercised dominion or control over the abutting sidewalk.* **This bill would prohibit a city, county, or city and county that has an ordinance in operation that requires the city, county, or city and county to repair or reconstruct streets, sidewalks, or driveways that have been damaged as a result of tree growth from repealing the ordinance without the concurrence of the local electorate by majority vote. The bill would also declare that this is a matter of statewide concern.**

FILE NO. 130119 DRAFT ORDINANCE NO.

[Building Code - Mandatory Seismic Retrofit Program - Wood-Frame Buildings]

Ordinance amending the Building Code, to establish a Mandatory Seismic Retrofit Program for wood-frame buildings of three or more stories and containing five or more dwelling units where the permit to construct was applied for prior to January 1, 1978, and the building has not been seismically strengthened; establishing a fee for administering the program; adopting environmental findings, and findings of local conditions under California Health and Safety Code, Section 17958.7; establishing an operative date; and directing the Clerk of the Board to forward the legislation to specified State agencies.

NOTE: Additions are *single-underline italics Times New Roman*; deletions are ~~*strike-through italics Times New Roman*~~. Board amendment additions are double-underlined; Board amendment deletions are ~~strikethrough normal~~.

Be it ordained by the People of the City and County of San Francisco:

Section 1. General Findings.

(a) At a duly noticed public hearing held on _____, the Building Inspection Commission considered this ordinance.

(b) The Planning Department has determined that the actions contemplated in this ordinance comply with the California Environmental Quality Act (California Public Resources Code Section 21000 et seq.). Said determination is on file with the Clerk of the Board of Supervisors in File No. _____ and is incorporated herein by reference.

(c) In Section 19160 of the California Health & Safety Code, the State Legislature declared that because of the generally acknowledged fact that California will experience moderate to severe earthquakes in the foreseeable future, increased efforts to reduce

earthquake hazards should be encouraged and supported. California Health and Safety Code Section 19161 authorizes each city, city and county, or county to assess the earthquake hazard in its jurisdiction and to identify buildings that are potentially hazardous to life in the event of an earthquake. Health and Safety Code Section 19162 authorizes the governing body of any city, city and county, or county to establish by ordinance seismic retrofit standards for these buildings.

(d) Among the potentially hazardous buildings identified in Health and Safety Code Section 19161 are wood-frame, multi-unit residential buildings constructed before January 1, 1978 having soft, weak or open front wall lines (a "soft-story condition"). These conditions generally arise in a building because the first story has perimeter walls that have large openings for garage doors or windows, has few interior partitions, and/or is constructed of materials that have deteriorated over time.

(e) In enacting Health and Safety Code Section 19160 et seq., the State Legislature found that residential buildings with a soft-story condition are particularly vulnerable to severe damage and collapse. Their collapse can ignite fires that threaten trapped occupants and neighboring buildings in the event of an earthquake and could complicate emergency response. In addition, these buildings are an important component of the State's housing stock that are in jeopardy of being lost in the event of a major earthquake. Soft-story residential buildings were responsible for 7,700 of the 16,000 housing units rendered uninhabitable by the Loma Prieta earthquake and over 34,000 of the housing units rendered uninhabitable by the Northridge earthquake. As noted in subsection (j) of Health and Safety Code Section 19160, the Association of Bay Area Governments estimates that soft-story residential buildings will be responsible for 66 percent of the uninhabitable housing following a seismic event on the Hayward fault. In subsections (l) and (n) of Health and Safety Code Section 19160, the Seismic Safety Commission recommended to the State Legislature that

any mandatory mitigation programs adopted significantly reduce unacceptable hazards in buildings by 2020 and the Legislature stated its intent that local jurisdictions be encouraged to address the seismic safety of soft-story residential buildings and to initiate efforts to reduce the seismic risk in these vulnerable buildings.

Section 2. Findings of Local Conditions Under California Health and Safety Code Section 17958.7.

(a) The Applied Technology Council (ATC) is a nonprofit organization that develops and promotes state-of-the-art, user-friendly engineering resources and applications to mitigate the effects of natural and other hazards on the built environment. Beginning in 1998, ATC was contracted to perform a study called the San Francisco Community Action Plan for Seismic Safety (CAPSS), which was initiated by the San Francisco Building Inspection Commission. Under CAPSS, ATC, together with the CAPSS Public Advisory Committee, studied buildings in San Francisco that are vulnerable to collapse or severe damage in an earthquake.

(b) The purpose of the CAPSS study was to develop earthquake safety policy recommendations founded on clear technical bases. "Here Today, Here Tomorrow," ATC's first policy report under CAPSS, was published in February 2009 and focused on the City's wood-frame structures that have five or more residential units, three or more stories, and were built before the adoption of codes regulating earthquake-resistant construction. It was determined that the possible collapse of many of San Francisco's wood-frame, multi-story buildings containing residential units represents one of the most significant earthquake impacts to the City. The final CAPSS report, issued December 31, 2010, also addressed other vulnerable building types that present risks to the people of the City and County of San Francisco.

(c) In 2010, the San Francisco Planning and Urban Research Association (SPUR) published a white paper entitled "The Resilient City – Part I," containing SPUR's recommendations regarding how San Francisco can prepare for and rebound quickly from a major earthquake. As noted in the Preface to "Here Today – Here Tomorrow," there has been significant cooperation and communication between the CAPSS Public Advisory Committee and SPUR's hazard mitigation task force. The CAPSS recommendations were strongly influenced by SPUR's vision of city-wide mitigation actions to be taken to assure San Francisco's speedy recovery after a future earthquake .

(d) At the request of participants in the CAPSS project, in May 2009 the Federal Emergency Management Agency (FEMA) commissioned ATC to prepare guidelines for the seismic retrofit of so-called soft-story wood frame buildings. Technical advisors to the CAPSS project had concluded that existing engineering procedures were not adequate to fully evaluate the complex behavior of these vulnerable buildings, and were not necessarily yielding optimal retrofit designs. Those advisors recommended that new evaluation and design procedures were needed to ensure more reliable, cost-effective engineering practices for evaluation and retrofit and to provide guidance for practical and enforceable retrofit regulations.

(e) In May 2012 FEMA issued a guidelines document entitled FEMA P-807, Seismic Evaluation and Retrofit of Multi-Unit Wood-Frame Buildings with Weak First Stories, which details procedures for the analysis and seismic retrofit of vulnerable wood-frame buildings that are common in Northern and Southern California and the Pacific Northwest. The guidelines are suitable for implementation through model code provisions that ensure uniform application and enforcement. The retrofit requirements contained in this Ordinance allow the use of FEMA P-807 and other approved methodologies. The retrofit provisions of FEMA P-807 focus on projects in which work is limited to the first story and the second floor diaphragm. Such

retrofits can improve performance and reduce risk of collapse but will not necessarily provide a comprehensive building retrofit to a specific performance objective.

(f) In early 2010, then Mayor Newsom convened a Soft-Story Retrofit Task Force with the aim of crafting a mandatory seismic retrofit program for weak-story buildings in San Francisco, including consideration of a phased implementation program and possible financing mechanisms. In 2011, Mayor Lee initiated the Earthquake Safety Implementation Program (ESIP) to implement the recommendations of the CAPSS program, including completing the development of an ordinance for retrofit of weak-story buildings. That work has resulted in the mandatory seismic retrofit program established in this ordinance.

(g) There are approximately 4,300 wood-frame buildings in San Francisco that were built before January 1, 1978, having five or more dwelling units and three or more stories. The CAPSS analysis determined that at least 2,800 of these may have a weak-story condition or similar vulnerability. These vulnerable buildings can be found throughout the City, most notably in the Mission, Western Addition, Richmond, North Beach, and Marina neighborhoods.

(h) California Health and Safety Code Section 19161(a)(2) has set January 1, 1978 as a benchmark date for characterizing wood-frame, multi-unit residential buildings. This January 1, 1978 date supersedes the date of May 21, 1973 found in the San Francisco Building Code that was previously used to distinguish obsolete structural designs from acceptable structures of this building type. Under the California Health and Safety Code, buildings constructed after January 1, 1978 are considered to have been designed to meet a life safety standard in the code-basis earthquake, which has a two percent chance of occurring in any 50-year period. In San Francisco, the code-basis earthquake is similar to a magnitude 7.9 earthquake on a nearby segment of the San Andreas fault.

(i) Buildings located within the City's potential liquefaction zones may not perform as well as buildings outside these mapped areas. These liquefaction zones are identified in the Official Map of the State of California's Seismic Hazard Zones, which was signed by the State Geologist and released on November 17, 2000. Notwithstanding these possible local geological impacts, buildings in these areas will benefit significantly from the seismic retrofit requirements of this ordinance.

(j) The CAPSS study estimates that as they now stand, 43 to 85 percent of the most vulnerable multi-unit, wood-frame buildings would be posted with a red UNSAFE placard ("red-tagged") following a magnitude 7.2 earthquake on a nearby segment of the San Andreas fault, representing 1,200 to 2,400 red-tagged buildings. Red-tagged buildings are uninhabitable and may not be occupied after an earthquake until they are either repaired or replaced. A quarter of the red-tagged buildings, representing 300 to 850 multi-unit buildings, would be expected to collapse. The CAPSS study estimates that with appropriate seismic retrofit the overall rate of collapse in a 7.2 San Andreas fault earthquake drops dramatically.

(k) The CAPSS study found that about 58,000 people live in the subset of 2,800 buildings with the largest perimeter wall openings. These buildings house close to 2,000 businesses that employ an estimated 7,000 people. Without retrofit, the heavy damage that these buildings are likely to sustain and the fires resulting from the earthquake would kill and injure many people and disrupt many neighborhoods for years after an earthquake. This disruption would displace tens of thousands of people from their homes and neighborhoods and thus they could not contribute to bringing communities back to life. Small businesses along neighborhood shopping streets would suffer severe impacts. Many of these buildings contain rent-controlled apartments that might be rebuilt as condominiums rather than apartment buildings or, if rebuilt as apartments, would be exempt from rent control. The

demographics and character of neighborhoods that experience substantial damage could change significantly.

(l) A resilient city is a city that can rebound from a natural disaster and quickly resume normal function. The purpose of this ordinance is to promote the resiliency goals as identified in the Community Safety Element of San Francisco's General Plan, as well as to protect the health, safety, and welfare of San Francisco residents by reducing the possible collapse, major structural damage, loss of housing stock, or risk of fire caused by an earthquake to the most vulnerable wood-frame, residential buildings. This ordinance requires retrofits that will greatly increase the probability of a building being safety occupiable within 24 hours of an expected moderate earthquake, using standards that limit retrofit costs. This moderate earthquake has a magnitude of 7.2 on the Peninsula segment of the San Andreas Fault. For most of the City, the shaking associated with this scenario is expected to occur at least once during the useful life of a structure and more than once if the structure is renovated periodically to extend its useful life.

(m) As the CAPSS study showed, the seismic retrofitting of multi-unit, wood-frame buildings as required by this ordinance would dramatically reduce the consequences of earthquakes to San Francisco by substantially reducing the collapse hazard and allowing up to 58,000 San Franciscans to remain in their homes rather than be relocated to temporary or emergency housing. It would retain significant amounts of housing, preserve architectural and cultural attributes, contribute to sustainability through conservation of energy and resources, improve public safety, and shorten the time that the City requires to recover from large earthquakes.

Section 3. The San Francisco Building Code is hereby amended by adding Chapter 34B, to read as follows:

CHAPTER 34B

MANDATORY EARTHQUAKE RETROFIT OF WOOD-FRAME BUILDINGS

Section 3401B. Purpose and Intent. The purpose of this Chapter is to promote the health, safety, and welfare of San Francisco residents as well as the ability of the City and County of San Francisco to recover from a major earthquake by reducing the possibility of collapse, major structural damage, or risk of fire caused by an earthquake to certain wood-frame buildings.

In furtherance of this purpose, this Chapter establishes seismic retrofit requirements intended to significantly reduce the collapse risk of residential buildings with critically vulnerable first stories and to increase the likelihood that these buildings will be structurally safe to occupy shortly after an earthquake. The engineering criteria established by this Chapter generally limit the structural retrofit work to the ground story, where the most critical vulnerabilities are typically located, thereby improving building performance while limiting retrofit costs and impacts.

Section 3402B. Scope. This Chapter shall apply to existing buildings, including mixed-occupancy buildings, that are Type V (wood-frame) construction of three or more stories and containing five or more dwelling units and for which a permit for construction of a new building was applied for before January 1, 1978.

Exceptions:

1. A building that has been seismically strengthened to meet or exceed the standards of Section 1604.11 of this Code or its predecessor provisions within 15 years prior to the operative date of this Chapter is exempt from this Chapter upon the submittal of documentation showing that such work was properly permitted, completed, and maintained as required by this Code, and that the Department has approved such documentation.

2. A building that has completed voluntary seismic strengthening under the provisions of Administrative Bulletin AB-094 is exempt from the requirements of this Chapter.

Section 3403B. Definitions.

In addition to the definitions in Chapter 2 of this Code, the following definitions shall apply for purposes of this Chapter:

DWELLING UNIT. A dwelling unit shall include any individual residential unit within either an R-1 or an R-2 occupancy building. It shall also include a guestroom, with or without a kitchen, within either a tourist or residential hotel or motel but shall not include a "housekeeping room." A dwelling unit shall include an area that is occupied as a dwelling unit, whether such is approved or unapproved for residential use.

STORY. The first story of any building shall be considered a story, whether or not previously exempted from story count under an earlier edition of the San Francisco Building Code.

Section 3404B. Compliance Requirements.

3404B.1. General. The owner of each building subject to this Chapter shall comply with the reporting requirements of this section. If the building is not exempt and does not meet the minimum criteria specified in this Chapter, the owner shall cause the building to be retrofitted to conform to such criteria according to the compliance deadlines set forth in Table 34B-A. Notice of the compliance requirements shall be given by the Department pursuant to Section 3405B.4.

3404B.2. Screening Form. The owner of a building who has been notified that their building is within the scope of this Chapter as well as all other owners of buildings that may be subject to this Chapter shall engage an architect or engineer to submit to the Department within the time limits set forth in Table 34B-A a properly completed Screening Form.

3404B.2.1. Required information. The Screening Form to be developed by the Department shall be used to determine whether a building is or is not subject to the requirements of this Chapter, and to assign a building to the appropriate Compliance Tier. The Screening Form shall be completed by an architect as defined in Section 5500 of the California Business and Professions Code or by a civil or structural engineer registered pursuant to the provisions of Section 6700 et seq. of the California Business and Professions Code.

The submitted Screening Form shall include:

1. all information required by the Department to be determine compliance requirements, and

2. whether the building is exempt based based on the exceptions in Section 3402B of this Chapter, and

3. a Declaration, based on a review of building information, of:

(a) whether the building is exempt because it is outside the scope of this Chapter based on its year of construction, number of dwelling units, or number of stories, or

(b) if not exempt, the appropriate Compliance Tier.

3404B.2.2. Evaluation Form. The optional Evaluation Form to be developed by the Department shall be used to determine if an existing building is exempt because the building meets the criteria of Section 3406B.2 of this Chapter. The Evaluation Form shall be completed by an architect as defined in Section 5500 of the California Business and Professions Code or by a civil or structural engineer registered pursuant to the provisions of Section 6700 et seq. of the California Business and Professions Code. The Evaluation Form shall include:

1. dates and scope of any seismic retrofit work, and

2. plans and other information as the Department may require that are sufficient to support the Declaration below, and

3. shall be accompanied by a completed Screening Form and a Declaration of whether the building is is exempt because it satisfies the evaluation criteria given in Section 3406B.2 of this Chapter.

3404B.3. Compliance Tiers.

1. Tier I: Buildings that contain a Group A, E, R-2.1, R-3.1 or R-4 occupancy on any story.

2. Tier II: Buildings containing 15 or more dwelling units, except for buildings covered in Tier I or Tier IV.

3. Tier III: Buildings not falling within the definition of another tier.

4. Tier IV: Buildings that contain a Group B or M occupancy on the first story and buildings that are in mapped liquefaction or landslide zones, except for buildings covered in Tier I.

3404B.4. Application for a building permit. For each non-exempt building, the owner or the owner's authorized agent shall submit to the Department an application for a building permit accompanied by the necessary permit submittal documents indicating the proposed seismic retrofit. A permit for this seismic retrofit work may include minor ancillary work but shall be separate from any other permits for building repairs, renovations, or alterations unless such work is triggered by or integral to the seismic retrofit work. No work other than is required under current codes shall be triggered by this seismic retrofit work.

3404B4.1. Compliance deadlines. Compliance deadlines for the submission of the Screening Form, optional Evaluation form, building permit application, and for completion of seismic retrofit work are given in Table 34B-A. No transfer of title shall alter the time limits for compliance.

3404B4.2. Certificate of Final Completion and Occupancy. A Certificate of Final Completion and Occupancy indicating completion of the required seismic retrofit work shall be obtained upon completion of required seismic retrofit work.

3404B4.3. Damaged Buildings. Notwithstanding the provisions of the Table 34B-A Compliance Deadlines, if an as-yet unretrofitted building subject to this Chapter suffers damage from an earthquake or subsequent fire caused by the earthquake that renders the building uninhabitable, results in structural damage that triggers retrofit under regulations adopted by the Department of Building Inspection, or results in "disproportionate damage" as defined in this Code, such building shall comply with the requirements of this Chapter within one year of such damage. The Department may grant an extension of this time period for good cause. Compliance with the provisions of this Chapter does not supersede the requirement to comply with Section 3405.3 of this Code when otherwise required by this Code.

3404B.5. Historic Preservation. If any portion of the seismic retrofit work will be visible from the exterior of the subject property and the San Francisco Planning Department determines that the building is a historic resource, or if the interior of the building has been given landmark status, the seismic retrofit work shall be conducted in accordance with guidelines developed by the San Francisco Planning Department, taking into account provisions of the California Historical Building Code.

3405B. Program Implementation and Administration; Fee.

3405B.1. Administrative Bulletin. The Department shall prepare an Administrative Bulletin detailing the procedural and implementation requirements for this Chapter. Such procedures shall be generally consistent with the requirements set forth in this Chapter. The Administrative Bulletin may require sign-posting and other public information that the Department determines is necessary or appropriate.

3405B.2. Compliance Deadlines.

TABLE 34B-A

Compliance Deadlines (in years[1]).

Compliance Tier	Submission of Screening Form and Optional Evaluation Form	Submittal of Permit Application with Plans for Seismic Retrofit Work	Completion of Work And Issuance of CFC[2]
I	1	2	4
II	1	3	5
III	1	4	6
IV	1	5	7

[1]All time periods are in years measured from 60 days after the operative date of this Chapter.

[2]All time limits and extensions of Chapter 1A of this Code are applicable, except that all work is to be completed by December 31, 2020, as recommended in California Health & Safety Code Section 19160(l).

3405B.3. Administrative Fee. The fee for services provided by the Department under this Chapter shall be the Standard Hourly Rate for Plan Review and Administration set forth in Table 1A-D of this Code. A minimum fee corresponding to one hour for plan review and administration is payable when the Screening Form required by Section 3404B.2 is submitted or for two hours when a voluntary Evaluation Form is submitted with the Screening Form. Additional fees may be charged at the Standard Hourly Rate for additional work and will be payable within 30 days of the Department's notice that payment is due.

3405B.4. Notice.

3405B.4.1. Service of notice on owner. No later than 60 days after the operative date of this Chapter, the Department shall send a notice in accordance with Section 102A.4.2 of this Code to the owner of each building believed to be within the scope of this Chapter. The notice shall inform the owner of the requirement to comply with the provisions of

this Chapter, and shall be accompanied by a Screening Form and an informational letter or brochure. Any person who believes that a building that is within the scope of this Chapter has not been so identified by the Department may notify the Department of the address or location of such building. If the Department determines upon review of the building and/or building records that the building may be within the scope of this Chapter, the Department shall provide notice to the owner as provided in this Section.

3405B.4.2. Failure to give or receive notice. If the owner of a building within the scope of this Chapter has knowledge that they own such a building, then the failure of the Department to issue the notice required by this Section, or the failure of the owner to receive such a notice, shall not relieve the owner of the obligation to comply with the requirements of this Chapter within the time limits set forth in Table 34B-A. For a building not known to the Department to be within the scope of this Chapter and whose owner or owners have no knowledge that the building is within the scope of this Chapter, the time limits set forth in Table 34B-A shall commence upon an owner having actual or constructive notice that the building may be within the scope of this Chapter. In no case, however, shall the final completion date be extended without the approval of the Board of Examiners after hearing an appeal pursuant to Section 3405B.5.

3405B.4.3. Notice to public on Department's website. A list of the buildings by street address and by block and lot for which notice has been given under this Section shall be maintained and made public on the Department's website.

3405B.5. Appeals. The owner of any building subject to this Chapter may appeal to the Board of Examiners any determination made by the Department with respect to compliance with the technical requirements of this Chapter. Such appeal shall be in accordance with the provisions of Section 105A of this Code. The time limits for compliance established by Table 34B-A shall not be extended during any appeal period unless specifically

approved by the Board of Examiners. Any person may appeal a determination of the Director related to this Chapter to the Building Inspection Commission pursuant to Chapter 77 of the San Francisco Administrative Code.

3405B.6. Enforcement. Whenever any required action has not been completed within the time limits set forth in Table 34B-A, the Department shall abate the violation in accordance with Section 102A of this Code.

3405B.6.1. Posting of notice. An enforcement action shall, in every case, include the Department posting of the building with a standard Department notice stating as follows:

"This building is in violation of the requirements of the San Francisco Building Code regarding earthquake safety."

This notice shall not be removed until the building is in compliance with this Chapter. This notice shall also be recorded against the title of the building.

3406B Engineering Criteria for Evaluation and Retrofit.

3406B.1. General. This Chapter requires that evaluation and/or retrofit of buildings within its scope be undertaken using the engineering criteria established in this section.

3406B.2. Engineering Criteria. A proposed seismic evaluation and/or retrofit plan shall demonstrate that the building satisfies one of the following:

1. FEMA P-807, Seismic Evaluation and Retrofit of Multi-Unit Wood-Frame Buildings With Weak First Stories, as detailed in an Administrative Bulletin to be prepared pursuant to 3406B.3 of this ordinance, with the performance objective of 50 percent maximum probability of exceedance of Onset of Strength Loss drift limits with a spectral demand equal to 0.50 S_{MS}, or

2. ASCE 41-13, Seismic Evaluation and Rehabilitation of Existing Buildings, with the performance objective of Structural Life Safety in the BSE-1E earthquake, or

3. ASCE 41-06, Seismic Rehabilitation of Existing Buildings, with the performance objective of Structural Life Safety in the BSE-1 earthquake with earthquake loads multiplied by 75 percent, or

4. for evaluation only, ASCE 31-03, Seismic Evaluation of Existing Buildings, with the performance level of Life Safety, or

5. for retrofit only, 2012 International Existing Building Code (IEBC) Appendix A-4, or

6. any other rational design basis deemed acceptable by the Department that meets or exceeds the intent of this Chapter.

3406B.3. Alternative Retrofit Criteria. A proposed seismic retrofit plan which fails to meet the criteria of 3406B.2(1) or 3406B.2(5) shall be deemed to comply with this Chapter if, with the approval of the Department, it satisfies the intent of FEMA P-807, Section 6.4.2 with a maximum acceptable drift limit probability of exceedance of 70 percent.

3406B.4. Administrative Bulletin for Technical Requirements. The Department shall develop and publish one or more Administrative Bulletins that detail the technical requirements to be used for the evaluation and retrofitting of buildings required to meet the criteria established in Section 3406B.2.

3406B.5. Conformance Period. Any building retrofitted in compliance with this Chapter and properly maintained, shall not, within a period of 15 years after the operative date of this Chapter, be identified as a seismic hazard pursuant to any local building standards adopted after the date of the building seismic retrofit unless the building incurred disproportionate damage, or otherwise has been damaged or altered so that it no longer meets the engineering criteria under which it was retrofitted.

Section 4. The City intends to consider the creation of an optional special tax financing program to provide financing for the seismic retrofit work required by Chapter 34B. Under this program, the City would issue bonds to finance the required seismic retrofit work on participating properties, and each participating property would pay special taxes in an amount sufficient to pay its share of the debt service on the bonds. The financing would be optional; only those properties that choose to participate in the program would receive the benefit of the financing and would be obligated to pay special taxes.

Section 5. Reporting. The Department shall maintain current information about program implementation, including number of buildings at each stage of compliance and program administration and budget, and shall annually provide a report to the Mayor and the Board of Supervisors.

Section 6. Undertaking for the General Welfare. In enacting and implementing this ordinance, the City is assuming an undertaking only to promote the general welfare. It is not assuming, nor is it imposing on its officers and employees, an obligation for breach of which it is liable in money damages to any person who claims that such breach proximately caused injury.

Section 7. Severability. If any section, subsection, sentence, clause, phrase, or word of this ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of the ordinance. The Board of Supervisors hereby declares that it would have passed this ordinance and each and every section, subsection, sentence, clause, phrase, and

word not declared invalid or unconstitutional without regard to whether any other portion of this ordinance would be subsequently declared invalid or unconstitutional.

Section 8. Effective and Operative Date. This ordinance shall become effective 30 days after the date of passage and operative 60 days after the date of passage.

Section 9. This section is uncodified. In enacting this ordinance, the Board intends to amend only those words, phrases, paragraphs, subsections, sections, articles, numbers, punctuation, charts, diagrams, or any other constituent part of the Building Code that are explicitly shown in this legislation as additions, deletions, Board amendment additions, and Board amendment deletions in accordance with the "Note" that appears under the official title of the legislation.

Section 10. Directions to Clerk of the Board. The Clerk of the Board is directed to forward this ordinance to the State Building Standards Commission after final passage, as required by Health and Safety Code Section 17958.7. The Clerk is further directed to send a copy of the finally-passed ordinance to the California Department of Housing and Community Development for informational purposes, as required by Health and Safety Code Section 19165.

APPROVED AS TO FORM:
DENNIS J. HERRERA, City Attorney

By: Judith A. Boyajian
JUDITH A. BOYAJIAN
Deputy City Attorney

n:\land\as2013\1300302\00824548.docx

ABAG FINANCE AND PERSONNEL COMMITTEE

Thursday, March 21, 2013
ABAG Conference Room B
MetroCenter—8th and Oak Streets
Oakland, CA

		Recommendation***
1.	**Call to Order**	
2.	**Public Comments**	Information
3. 3.a	**Election of Committee Chair and Vice-Chair** **Potential Appointment of Representative to Administrative Committee**	Action
4.*	**Minutes of January 17, 2013 Meeting**	Action
5.*	**Financial Reports – ABAG** *The December 2012 and January 2013 Financial reports will be presented and reviewed.*	Action
6.*	**Potential Financial Impacts of Affordable Care Act on ABAG** *Staff will provide an oral report on the potential impacts. The PowerPoint presentation on this subject is attached.*	Information
7.*	**Allocation of Funds received from Class-Action Settlement** *Staff requests Committee approval to receive and distribute funds received from two class action settlements.*	Action
	THE FOLLOWING ITEMS WILL BE DISCUSSED IN CLOSED SESSION PURSUANT TO THE REQUIREMENTS OF THE RALPH M. BROWN ACT.	
8.	**Public Employee Performance Evaluation** *Title: Executive Director*	Action/Information
9.	**Adjournment**	Action
*	Attachments enclosed with packet.	
**	Supporting documentation will be sent under separate cover.	
***	The Committee may take action on any item on the agenda, which action may be the recommended action, any other action or no action.	

ABAG FINANCE AND PERSONNEL COMMITTEE

Summary Minutes

January 17, 2013

Members Present	Jurisdiction
Supervisor John Gioia, Interim Chair	County of Contra Costa
Supervisor David Cortese	County of Santa Clara
Supervisor Scott Haggerty	County of Alameda
Supervisor Mark Luce	County of Napa
Mayor Julia Pierce	City of Clayton
Supervisor David Rabbitt	County of Sonoma

Members Absent
None

Officers and Staff Present
Ezra Rapport, Executive Director
Patricia Jones, Assistant Executive Director
Kenneth Moy, Legal Counsel
Herbert Pike, Finance Director
Clarke Howatt, Financial Services Director
Susan Hsieh, Assistant Finance Director
Vice Mayor David E. Hudson — City of San Ramon
Fred Castro, Clerk of the Board

1. The meeting was called to order by Supervisor Luce, President of ABAG at 5:08 pm. Because the Chair and Vice-Chair are no longer members of the Board, and four new members will be joining the Committee at the next meeting, it was agreed Supervisor Gioia would act as interim Chair until elections are held at the next meeting.

2. There were no public comments.

3. Summary Minutes of the November 15, 2012 meeting were approved. /M/Haggerty/S/Cortese/C/approved.

4. Pike provided an overview of the Financial Reports for the months of October and November, 2012. /M/Haggerty/S/Luce/C/approved.

5. Staff presented the Proposed Work Program, Budget and Membership Dues for FY 2013-14. A review of the impacts of the Affordable Care Act on future health care act on projected health care costs and related taxation of medical benefits was requested for the next meeting. /M/Rabbitt/S/Luce/C/recommending the Executive Board to accept and forward to the General Assembly.

6. Castro reported on new procedures being proposed to ensure more timely compliance with filing of FPPC Form 700 all designated elected officials and staff.

7. Closed Session. No reportable action.

8. Meeting adjourned.

TO: Finance and Personnel Committee

DT: February 10, 2013

FM: Herbert Pike, Finance Director

Re: Financial Reports --December 2012

The following are highlights of the financial reports for December 2012.

Overall Summary (Figures 3, 4, 7 & 8)

December 2012 represents the sixth month of the new fiscal year, the half-way point. The most significant issue has been the increase in outstanding receivables reaching over $7.5 million as of the end of November. Receivables were reduced by $945 thousand during the month of December, but they still remain some $1.85 million higher than the prior year. Accounting remains committed to further reducing receivables and is taking all measures possible to issuing invoices and following up on delinquent accounts as quickly as possible. This should result in a continued decline in overall receivables over the next several months. In addition, some new project-funded staff is being hired that should result in more overhead recovery for ABAG. Major new projects, most notably BayREN, should require resources to be diverted from overhead expense to project funding which should further reduce the net overhead rate for the Agency. There is also an on-going review to determine if certain charges absorbed as Agency expense might more properly be expensed to indirect overhead which would improve the Agency's equity position.

Cash on Hand (Figure 1)

Cash on hand increased to $2.14 million as of December 31st from $2.06 million on November 30th. The increase of $73 thousand is attributed primarily to the reduction in receivables. The December balance includes approximately $1.37 million invested in the Local Agency Investment Fund (LAIF). Currently, ABAG does not hold any other investments. The December 31st cash balance is approximately $754 thousand less than the prior year. This is attributable to a high amount in receivables and a drop in general fund equity, the latter reflecting unrealized overhead recovery and some unanticipated personnel costs.

Receivables (Figure 2)

Receivables from grant and service programs amounted to about $6.56 million on December 31st, a decrease of $945 thousand from the month prior. While the trend of increasing receivables was reversed, the total is still too high being some $1.85 million higher than a year prior. There are a multitude of contributing factors, including belated billing in previous months, higher grant volume, more complex reporting requirements necessitated by higher accountability standards and slowed reimbursements from the state and federal grantors. Accounting is committed in its endeavors to approach prior year receivables standards by increased monitoring

and more timely follow up on delinquent receivables and by constantly striving for more timely invoicing.

Actual vs. Budgeted Expenses (Figure 9)
Total expenses through December 31st, the sixth month of the new fiscal year, amounted to about $13.09 million, or 53.9 percent, of the adjusted, budgeted annual expense of $24.30 million for FY 2012-13. This appears to reflect the frenzy of activity that accompanied the ending of several major projects. It exceeds the 50.0 percent (six-twelfths) average and is opposite the normal trend where there is usually a slight lag in the onset of new expenses in the new fiscal year. One particular accelerating expense is the closing of the project where Trash Capture Devices in numerous jurisdictions within the region receive grant subsidies for their installation.

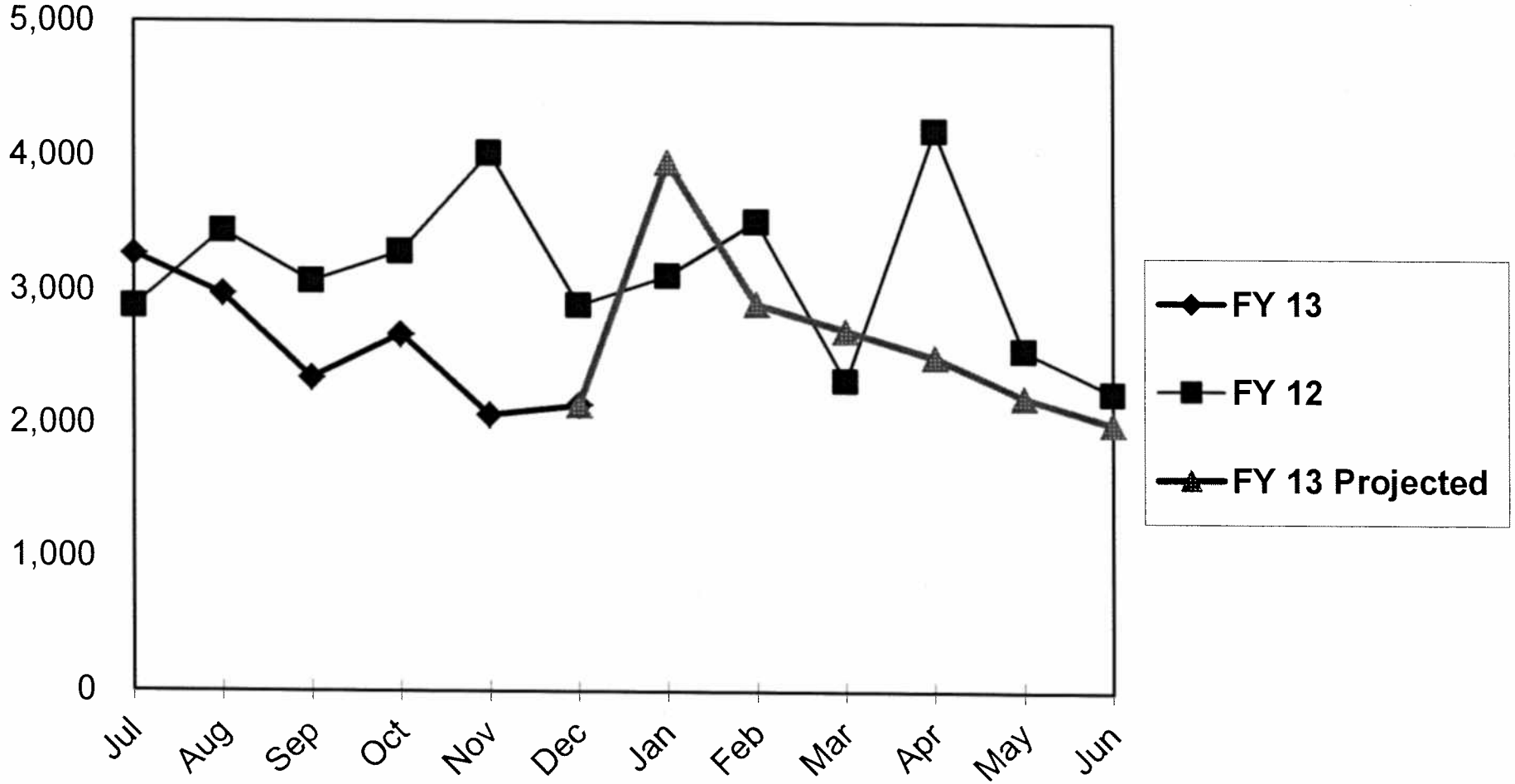
Actual vs. Budgeted Revenues (Figure 10)
As of December 31st, total revenues amounted to about $12.64 million, or 51.9 percent, of the adjusted, budgeted annual revenue of $24.35 million for FY 2012-13. That is slightly in excess of the normal 50.0 percent projected (six-twelfths). This is attributable to the higher level of expenditures noted above. The less than expected first half recoveries of overhead expense and some unforeseen and unbilled labor costs have contributed to the variance between expenditures and revenues. It is expected that this variance will be moderated by recent announcements that some significant, new projects are being awarded to ABAG that may cause some overhead staff to be diverted to direct project expense, as well as less leave taken during the second half of the fiscal year.

Fund Equity (Figure 5)
As of December 31st, general fund equity was approximately $706 thousand, a decrease of $288 thousand from the prior month. The Agency's restricted fund equity, consisting of capital, self-insurance, building maintenance and reserves, is $610 thousand. Total fund equity of $1.32 million is $513 thousand less than the year prior. Much of this loss may be expected to be offset by increased grant staffing and greater overhead recovery during the remainder of the fiscal year.

Indirect Cost (Figure 6)
The Agency's actual indirect cost (overhead) rate was 44.33 percent, or 1.38 percent above target. The increase in December was anticipated because leave usage (vacation) is high while much of the overhead expense (fixed costs such as rent, insurance and other operational costs) continues. With an anticipated decline in leave usage during the remainder of the fiscal year, the rate is expected to decline toward the budgeted rate of 42.95 percent by the end of the year. The realization of new projects should also contribute toward an overall reduction in the rates.

ABAG Financial Indices

Figure 1--*Cash on Hand--FY 12 and FY 13 ($'000)*

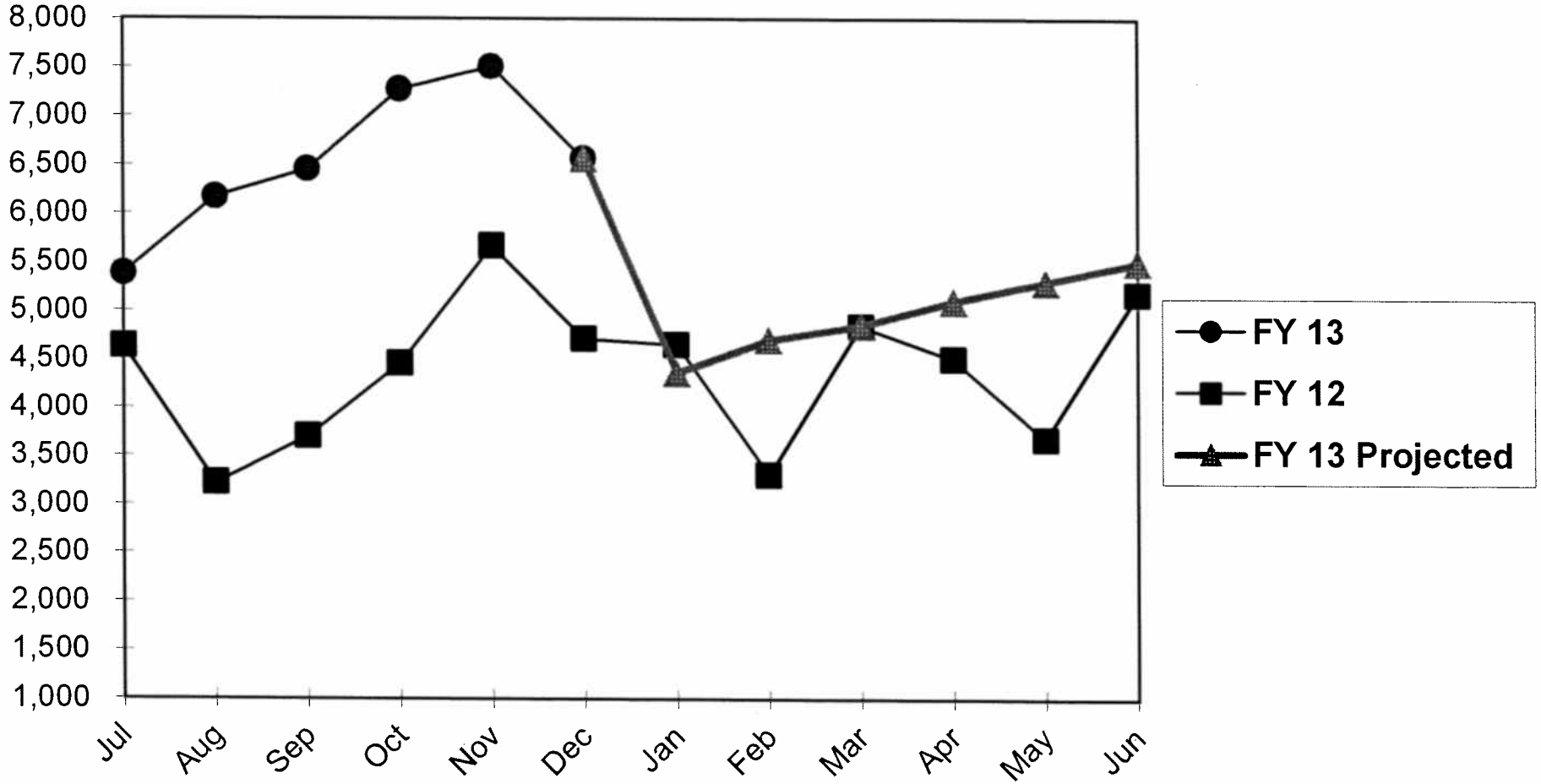


Represents the sum total of cash deposited at our bank and the Local Agency Investment Fund. This chart shows fluctuation patterns of cash on hand for the current and prior fiscal years.

Source: ABAG -INDICES 2012-12.xls

ABAG Financial Indices

Figure 2--*Accounts Receivable--FY 12 and FY 13 ($'000)*



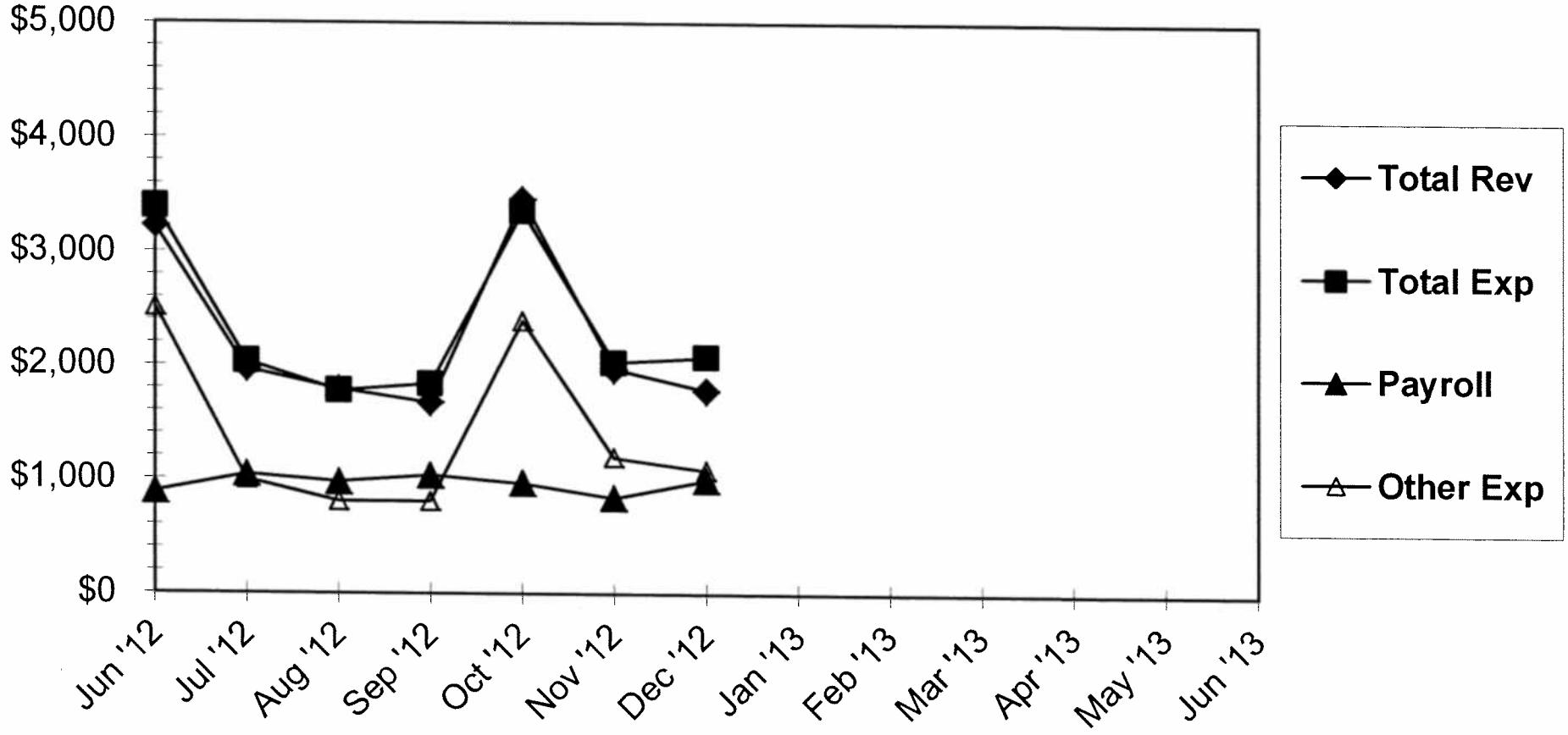
Accounts receivable include receivables generated by grants and service programs over two fiscal years. Reflects the reasonableness of our receivable levels; usually have about six weeks' worth of annual revenues in receivables.

Source: ABAG - INDICES 2012-12.xls

ABAG Financial Indices

Figure 3--*Current Month Revenues & Expenses*

FY 12-13 ($'000)

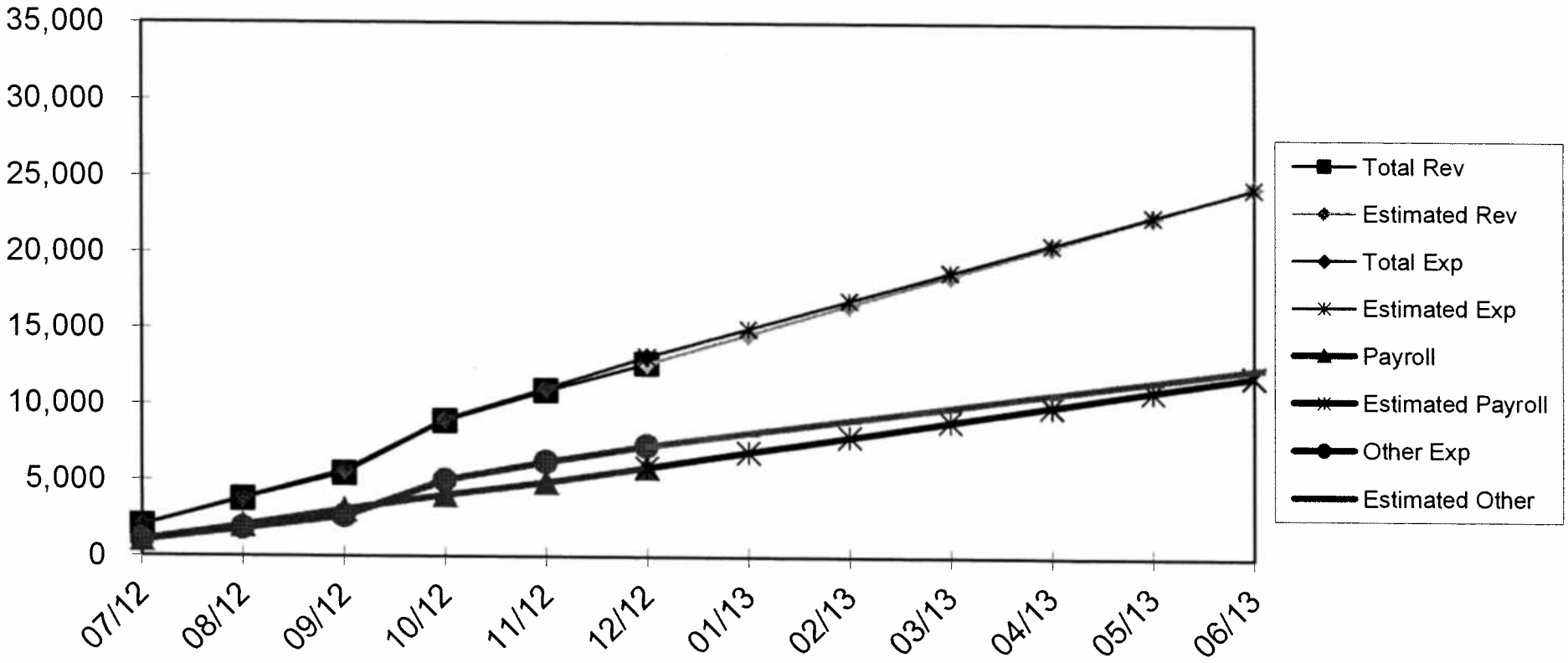


Presents month by month total revenues, total expenses, payroll and other expenses for the current fiscal year. The difference between total revenues and total expenses lines represents the overall current month net surplus (or deficit) for the Association.

Source: ABAG - INDICES 2012-12.xls

ABAG Financial Indices

Figure 4--Year-to-date Revenues & Expenses
FY 12-13 ($'000)



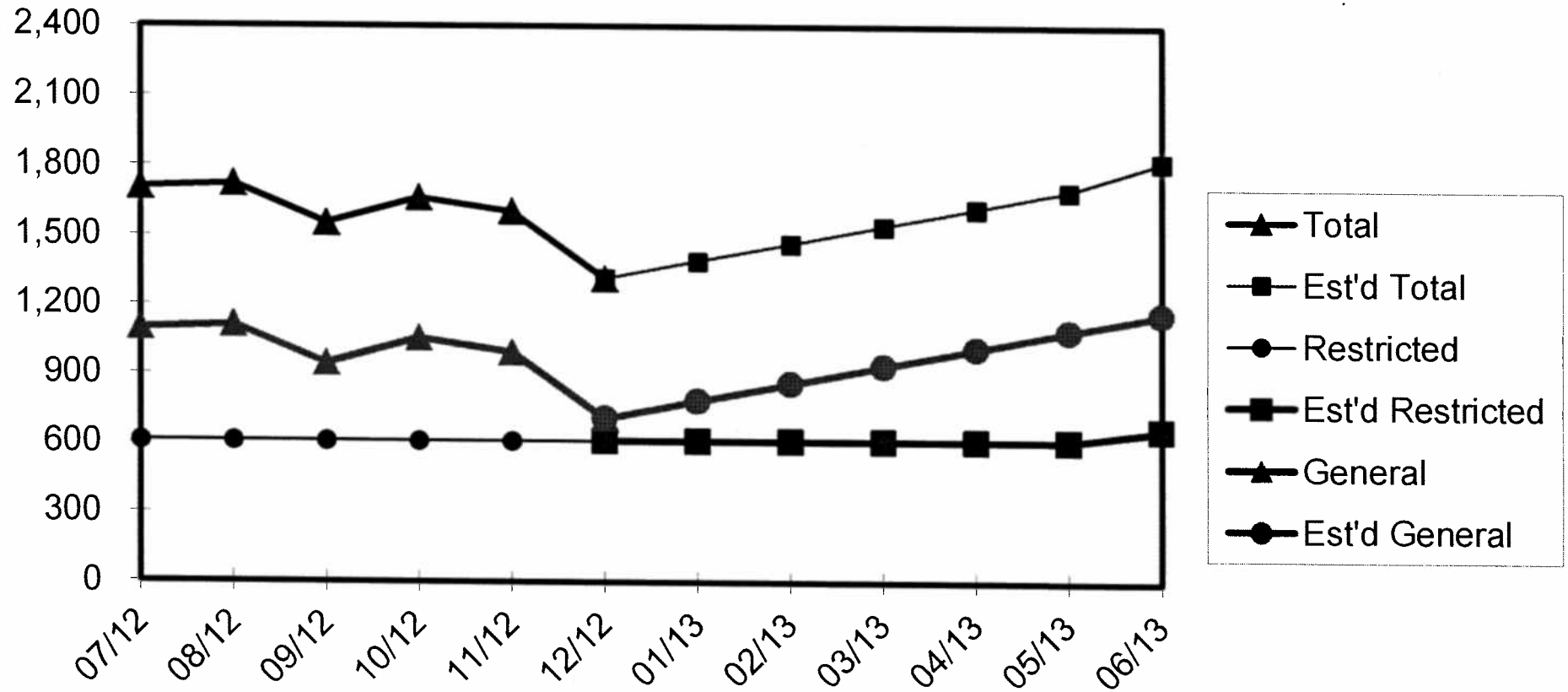
Presents year-to-date total revenues, total expenses, payroll and other expenses for the current fiscal year. The difference between total revenues and total expenses lines represents the overall year-to-date net surplus (or deficit) for the Association.

Source: ABAG - INDICES 2012-12.xls

ABAG Financial Indices

Figure 5--*Fund Equity*

FY 12-13 ($'000)

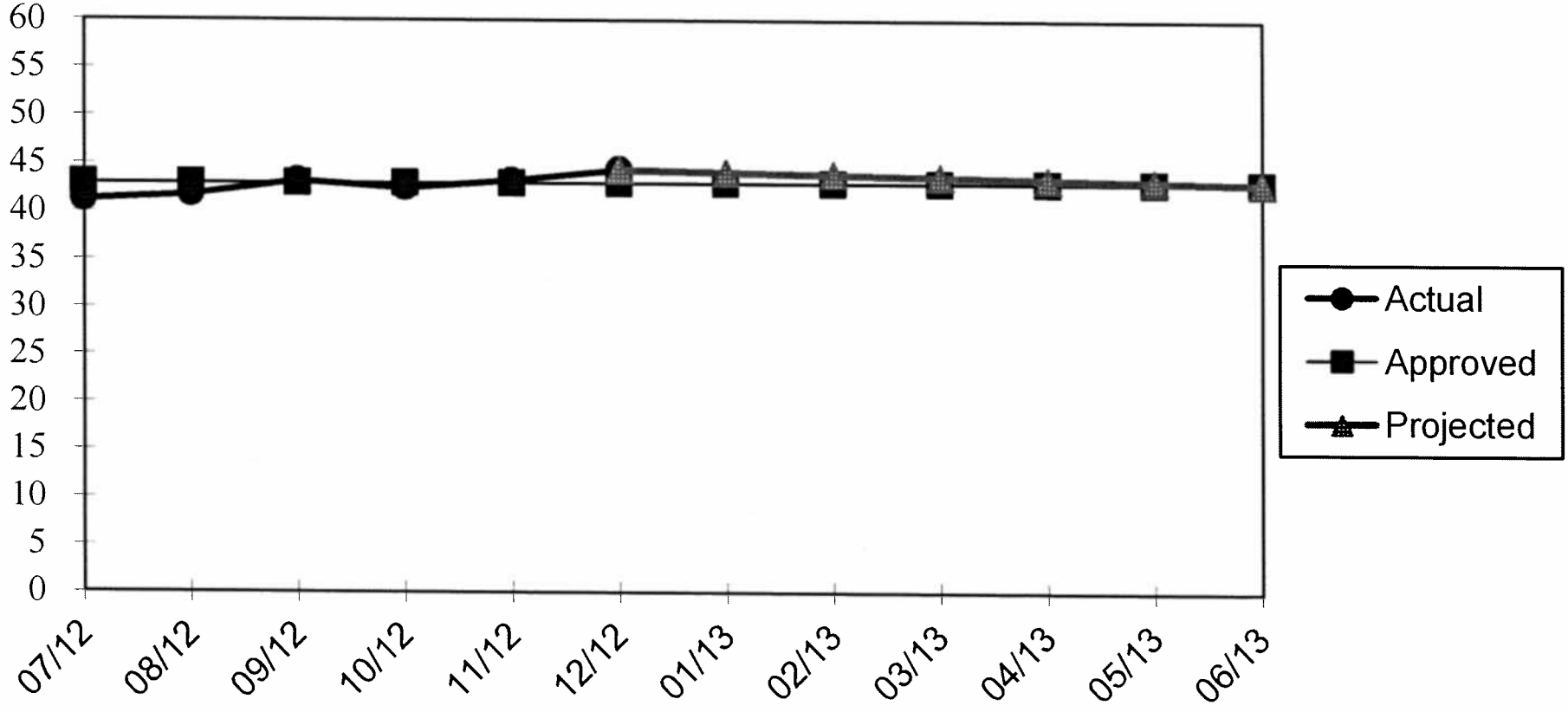


Presents general, restricted and total fund equities for the current fiscal year. General fund equity represents unrestricted equity. Restricted equities include building improvement interest, building maintenance, self-insurance, capital and contingency reserve. These restricted equities represent the Association's equities set aside for specific purposes. Total equity is the sum total of general and restricted equities.

Source: ABAG - INDICES 2012-12.xls

ABAG Financial Indices

Figure 6--*Indirect Cost Rate (% of Direct Labor Cost)*
FY 12-13



Shows a comparison between the actual indirect cost rate and the approved rate. The approved indirect cost rate is computed by dividing total estimated overhead expenses by total projected direct labor cost for a fiscal year. This rate is used as a standard overhead cost rate to allocate indirect costs to all projects. This process is performed in accordance with an indirect cost plan, which is prepared annually in accordance with OMB Circular A-87.

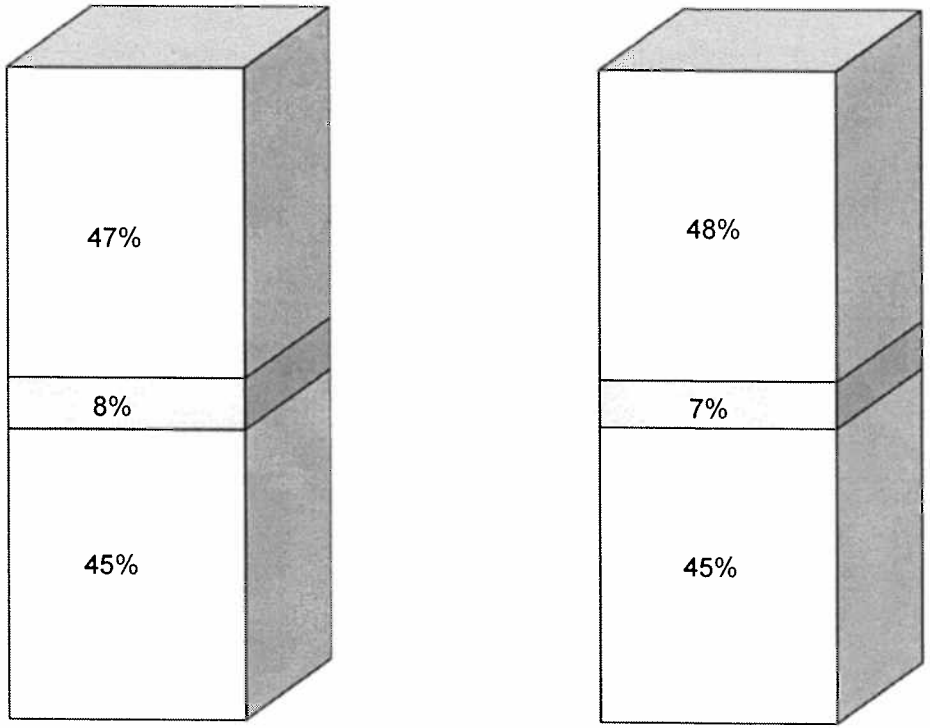
Source: ABAG - INDICES 2012-12.xls

ABAG Financial Indices

Figure 7-- Composition of Expenses FY 12--FY 13

Year to Date

($'000)



	FY12-13 Expenses (Total $13,091)	FY11-12 Expenses (Total $12,671)
Consultants	$6,214	$6,015
Others	$1,043	$922
Payroll	$5,834	$5,734

This chart compares expenses for current and prior fiscal year. It groups expenses into three broad categories--payroll costs, consultants and other expenses.

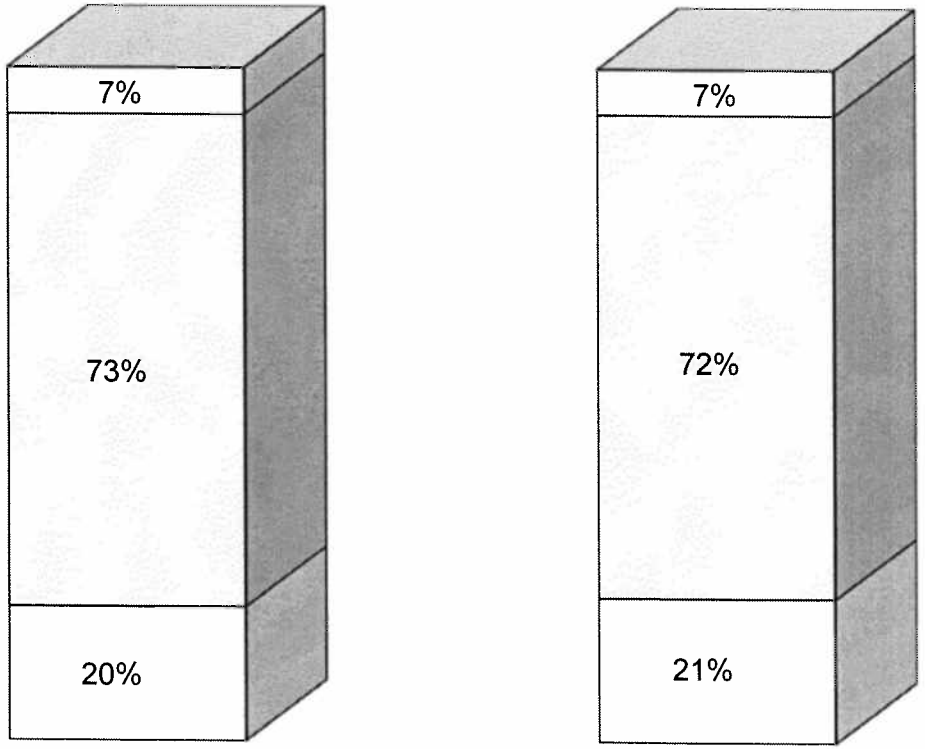
Source: ABAG - INDICES 2012-12.xls

ABAG Financial Indices

Figure 8-- Composition of Revenues FY 12--FY 13

Year to Date

($'000)



	FY 12-13 Revenue (Total $12,635)	FY 11-12 Revenue (Total $12,860)
☐Membership	$865	$866
☐Grants	$9,274	$9,256
☐Services & Others	$2,496	$2,738

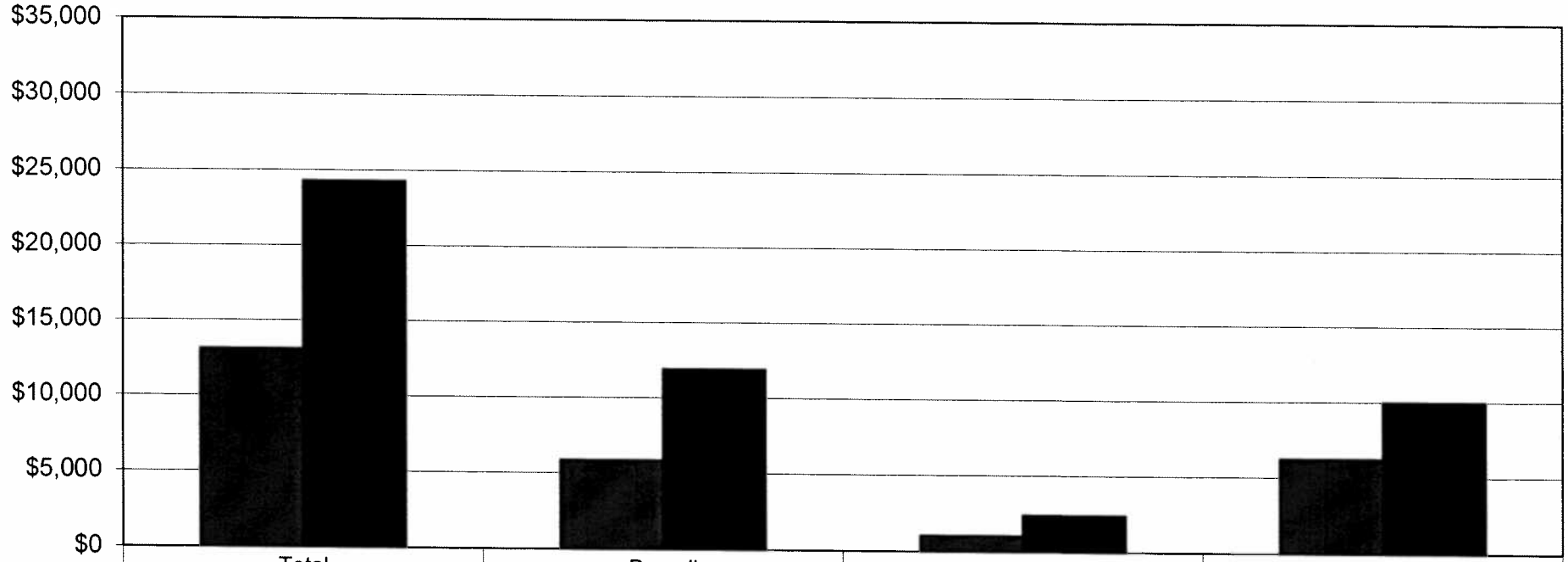
Presents a breakdown of total revenues into four main sources--membership, grants, services and others. This chart compares revenue sources between current and prior fiscal year.

Source: ABAG - INDICES 2012-12.xls

ABAG Financial Indices

Figure 9--*Actual vs Projected Expenses--FY 12-13*

Year to Date ($'000)



	Total	Payroll	Other	Consultants
■Actual	$13,091	$5,834	$1,043	$6,214
■Projected	$24,300	$11,902	$2,398	$10,000

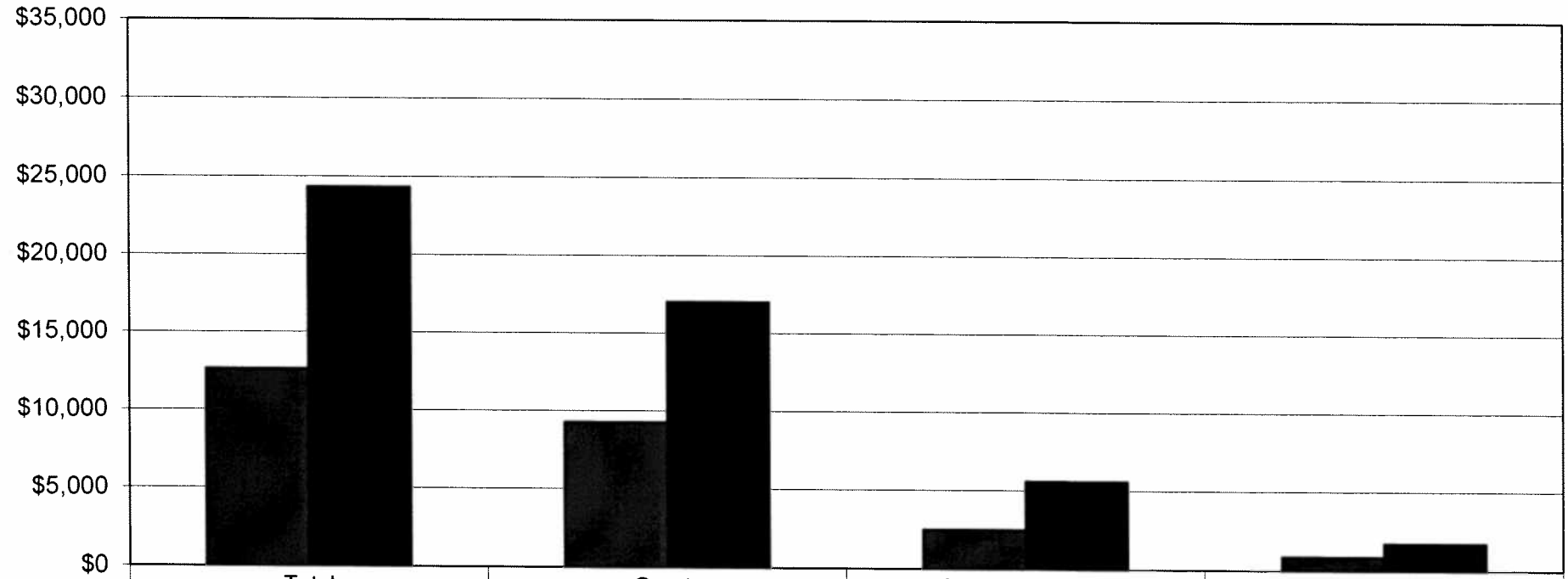
Presents a comparison of actual and budgeted/projected total expenses as well as component categories: payroll costs, consultants and other expenses.

Source: ABAG - INDICES 2012-12.xls

ABAG Financial Indices

Figure 10--*Actual vs Projected Revenues--FY 12-13*

Year to Date ($'000)



	Total	Grants	Services & Other	Membership
■ Actual	$12,635	$9,274	$2,496	$865
■ Projected	$24,350	$17,024	$5,600	$1,726

Presents a comparison of actual and budgeted/projected total revenues as well as component categories: membership dues, grants, services and other.

Source: ABAG - INDICES 2012-12.xls

TO: Finance and Personnel Committee

DT: March 11, 2013

FM: Herbert Pike, Finance Director

Re: Financial Reports --January 2013

The following are highlights of the financial reports for January 2013.

Overall Summary (Figures 3, 4, 7 & 8)

January 2013 represents the seventh month of the new fiscal year (58.33 percent). The backlog in receivables that peaked at $7.5 million at the end of November appears to have dissipated with the most recent receivables falling below $4 million, almost $200 thousand less than the year prior. The more pressing issue now appears to be the continued loss in net general fund equity. Some of this loss appears to be related to the imbalance between overhead expense incurred and overhead recovery realized; the under recovery of overhead is over $64 thousand through January. A more significant factor appears to be the negative balance in the payroll clearing account in the amount of $426 thousand. This reflects the cost of payroll less that charged out to projects. Much of this is leave that should be at least partially offset by the lower incidence of holidays and vacation taken during the second half of the fiscal year. Other factors can be the drawdown of overall leave due to various leaves, especially when individuals retire, when they go on extended sick and/or family leave, and other such incidents. Finally, it can just be an uptick in the general usage patterns such as average sick leave usage increasing due to the average age of staff. Accounting is reviewing these various factors to identify if there are one or two significant factors that should be adjusted such that the billable rates charged out on an hourly basis can fully offset the annual payroll costs.

Cash on Hand (Figure 1)

Cash on hand increased to $3.96 million as of January 31st from $2.14 million on December 31st. The increase of $1.82 million is attributed primarily to the decrease in receivables. The January balance includes approximately $968 thousand invested in the Local Agency Investment Fund (LAIF). Currently, ABAG does not hold any other investments. The January 31st cash balance is approximately $847 thousand more than the prior year.

Receivables (Figure 2)

Receivables from grant and service programs amounted to about $4.36 million on January 31st, a decrease of $2.20 million from the month prior, $3 million from two months prior. The $4.36 million is $289 thousand less than the receivables of the year prior. It appears we have caught up on the backlog that had plagued us for months, but Accounting is cognizant of its need to stay continuously diligent to stay current in its invoicing and follow-up on delinquent accounts. We

also need to be cautious that the current "sequestration" of federal funds does not trickle down and cause undue delay in reimbursement from our grantors.

Actual vs. Budgeted Expenses (Figure 9)
Total expenses through January 31st, the seventh month of the new fiscal year, amounted to about $14.68 million, or 60.4 percent, of the adjusted, budgeted annual expense of $24.30 million for FY 2012-13. This appears to reflect the frenzy of activity that accompanied the ending of several major projects. It exceeds the 58.3 percent (seven-twelfths) average and is opposite the normal trend where there is usually a slight lag in the onset of new expenses in the new fiscal year. One particular accelerating expense is the closing of the project where Trash Capture Devices in numerous jurisdictions within the region receive grant subsidies for their installation.

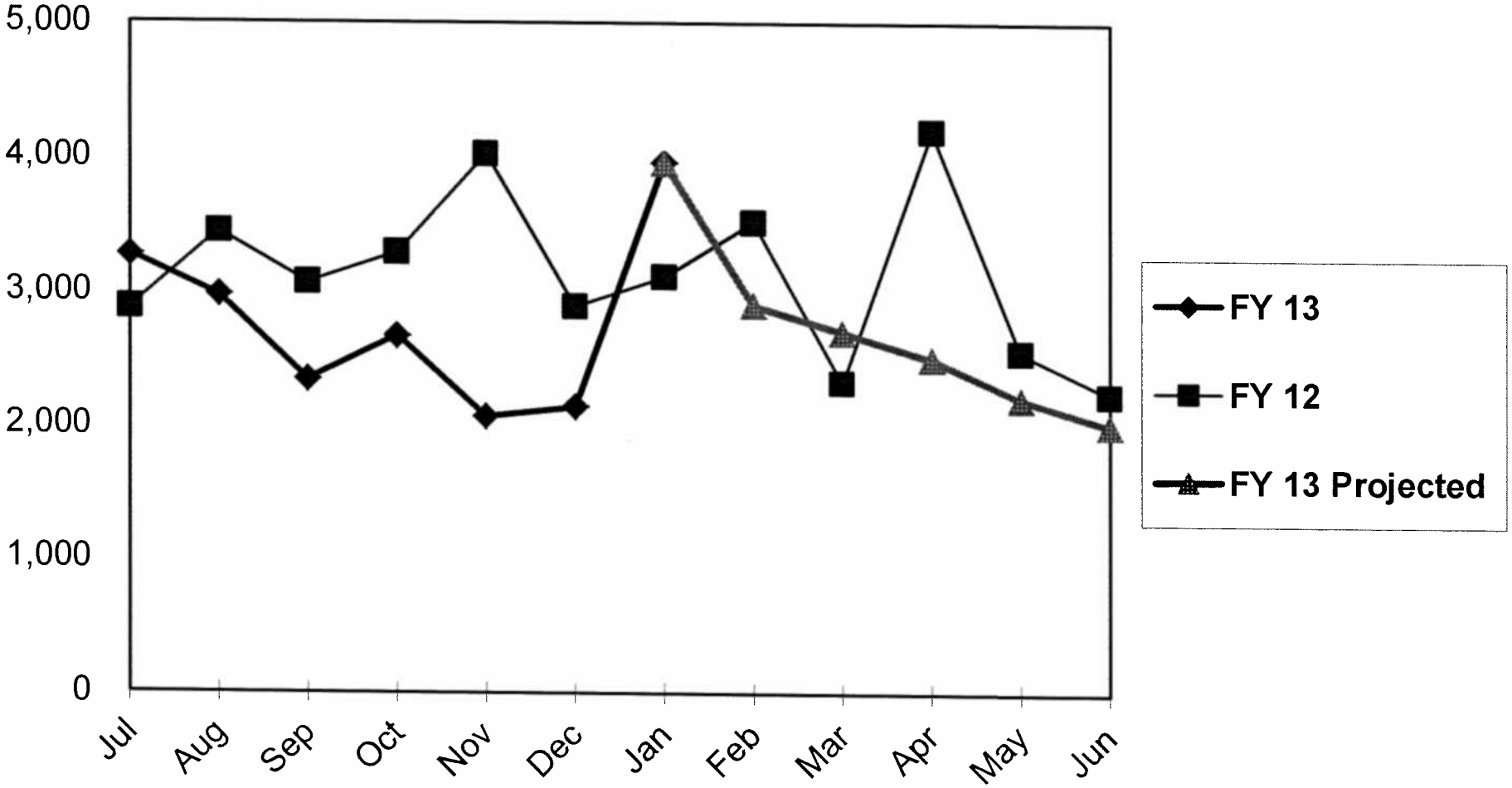
Actual vs. Budgeted Revenues (Figure 10)
As of January 31st, total revenues amounted to about $14.18 million, or 58.2 percent, of the adjusted, budgeted annual revenue of $24.35 million for FY 2012-13. The overview above tries to identify what may be driving the difference between actual expenses and revenues to date. Some actions already underway should mitigate the variances realized to date such as reduced leave usage which allows a greater portion of the payroll cost to be recovered through charges to grants, some large new projects, e.g. BayREN, that should draw down personnel resources away from general overhead and into project specific billing, and redirecting some personnel charges from Agency Admin to specific projects.

Fund Equity (Figure 5)
As of January 31st, general fund equity was approximately $665 thousand, a decrease of $41 thousand from the prior month. The Agency's restricted fund equity, consisting of capital, self-insurance, building maintenance and reserves, is $610 thousand. Total fund equity of $1.275 million is $467 thousand less than the year prior. Much of this loss may be expected to be offset by increased grant staffing and greater overhead recovery during the remainder of the fiscal year.

Indirect Cost (Figure 6)
The Agency's actual indirect cost (overhead) rate was 44.57 percent, or 1.62 percent above target. The increase in January was unexpected. Following some additional analysis, it was discovered that some staff had been remiss in charging some of their direct time to certain projects, instead charging to the general overhead project. Those individuals have been contacted and their hours charged are being revised. With an anticipated decline in leave usage and better monitoring of hours charged by staff during the remainder of the fiscal year, the rate is expected to decline toward the budgeted rate of 42.95 percent by the end of the year. The realization of new projects should also contribute toward an overall reduction in the rates.

ABAG Financial Indices

Figure 1--*Cash on Hand--FY 12 and FY 13 ($'000)*

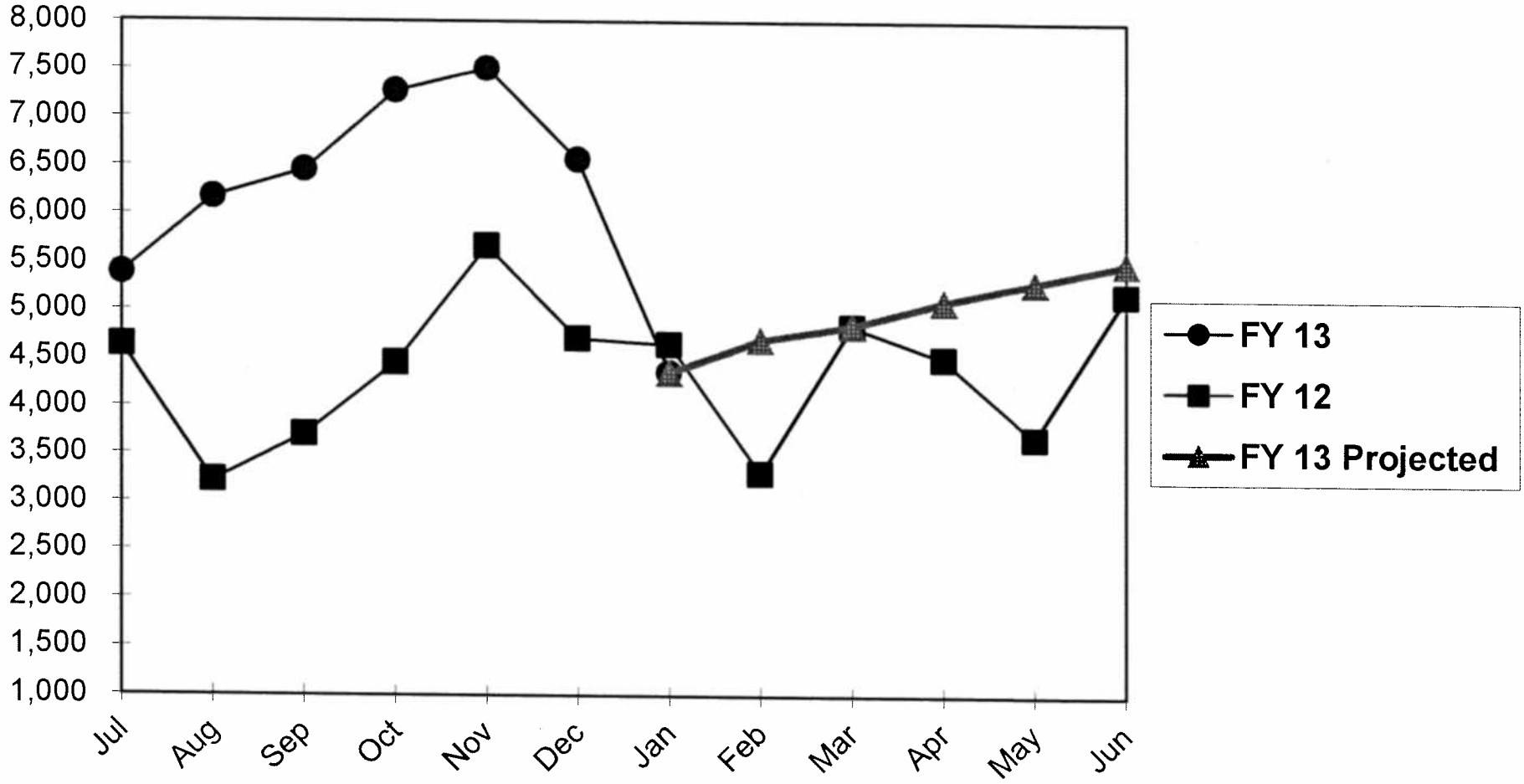


Represents the sum total of cash deposited at our bank and the Local Agency Investment Fund. This chart shows fluctuation patterns of cash on hand for the current and prior fiscal years.

Source: ABAG -INDICES 2013-01.xls

ABAG Financial Indices

Figure 2--*Accounts Receivable--FY 12 and FY 13 ($'000)*



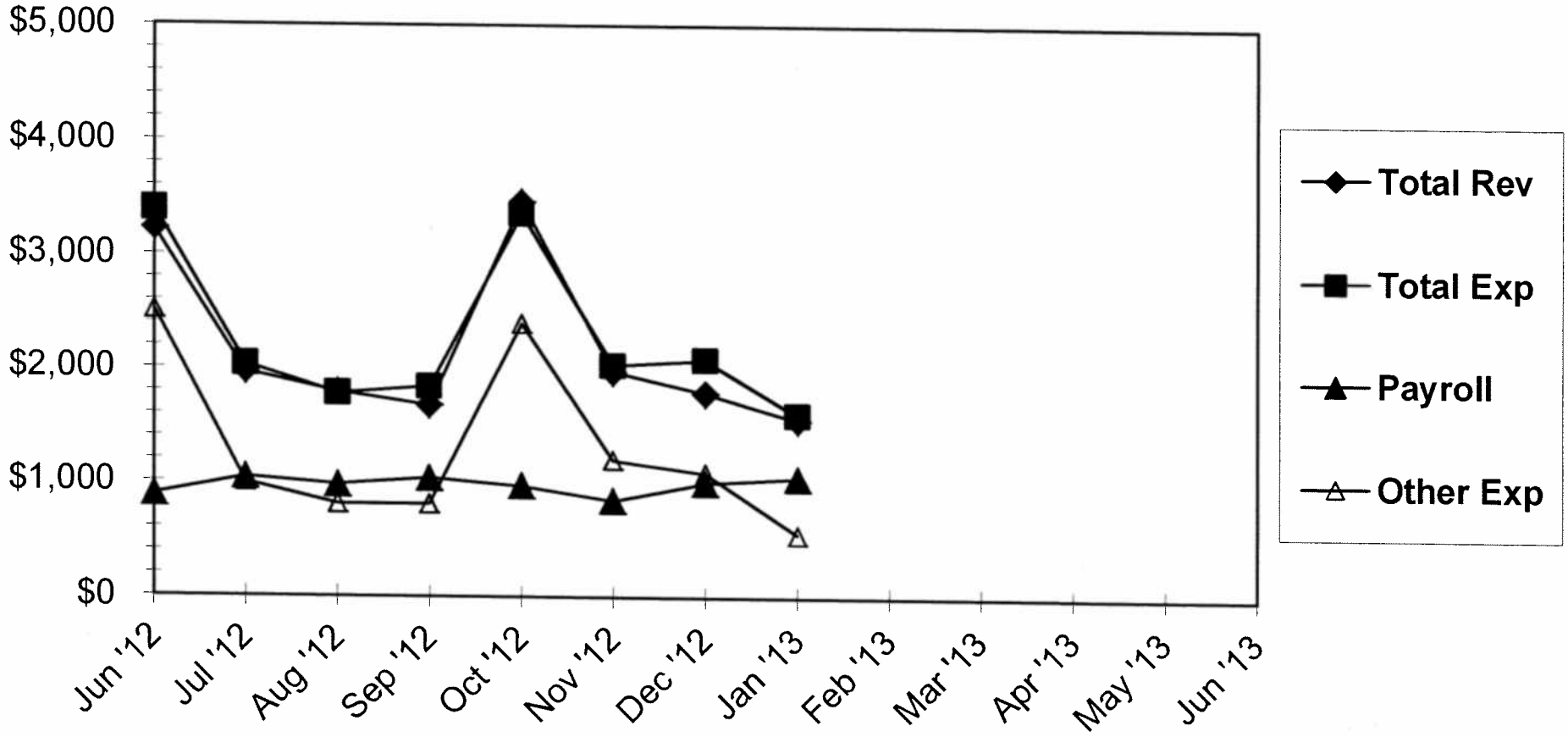
Accounts receivable include receivables generated by grants and service programs over two fiscal years. Reflects the reasonableness of our receivable levels; usually have about six weeks' worth of annual revenues in receivables.

Source: ABAG - INDICES 2013-01.xls

ABAG Financial Indices

Figure 3--*Current Month Revenues & Expenses*

FY 12-13 ($'000)

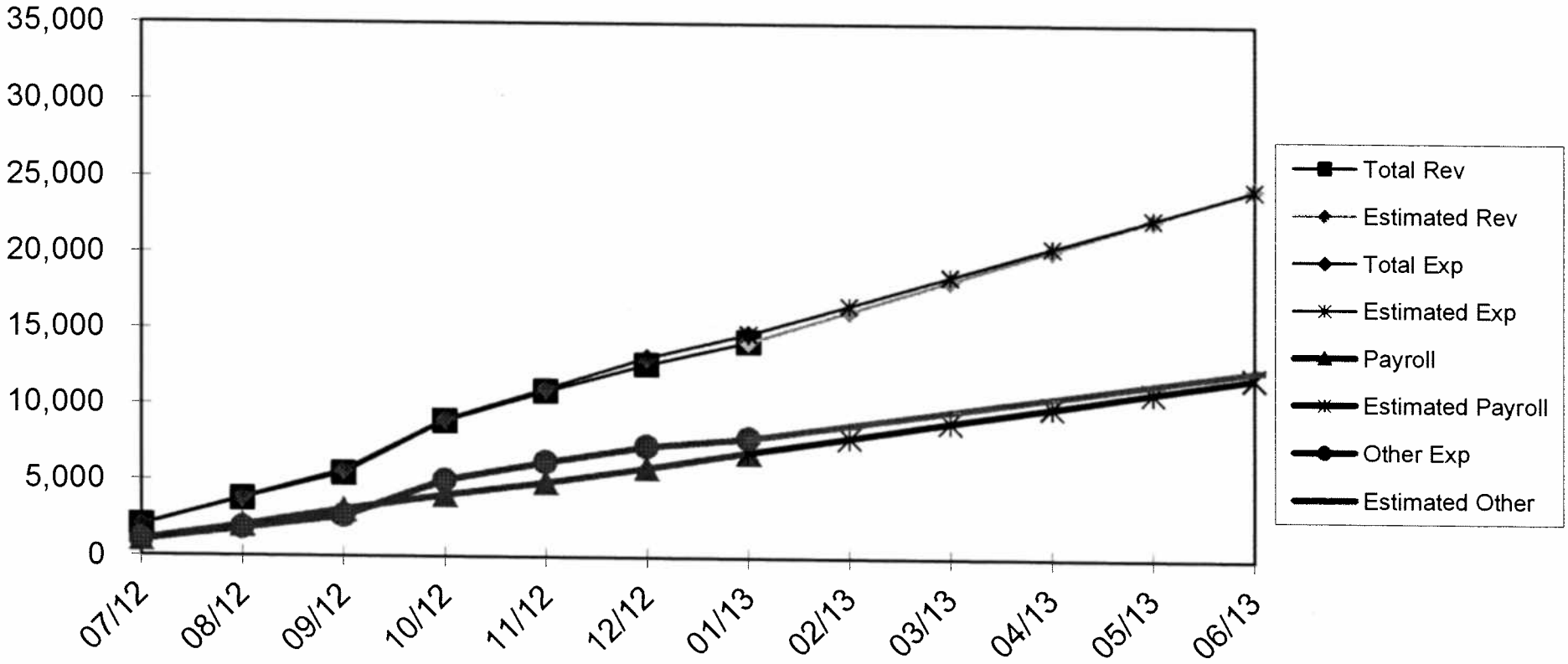


Presents month by month total revenues, total expenses, payroll and other expenses for the current fiscal year. The difference between total revenues and total expenses lines represents the overall current month net surplus (or deficit) for the Association.

Source: ABAG - INDICES 2013-01.xls

ABAG Financial Indices

Figure 4--Year-to-date Revenues & Expenses
FY 12-13 ($'000)



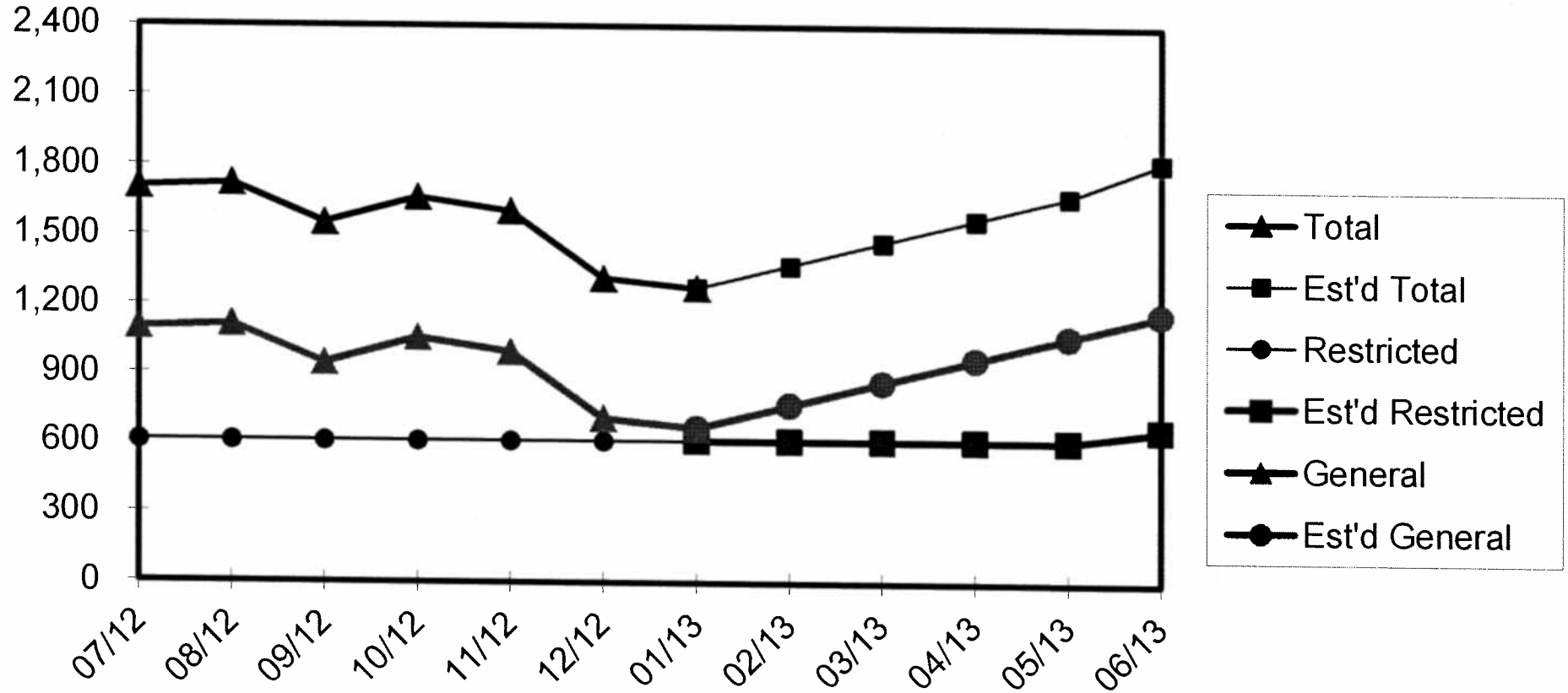
Presents year-to-date total revenues, total expenses, payroll and other expenses for the current fiscal year. The difference between total revenues and total expenses lines represents the overall year-to-date net surplus (or deficit) for the Association.

Source: ABAG - INDICES 2013-01.xls

ABAG Financial Indices

Figure 5--*Fund Equity*

FY 12-13 ($'000)

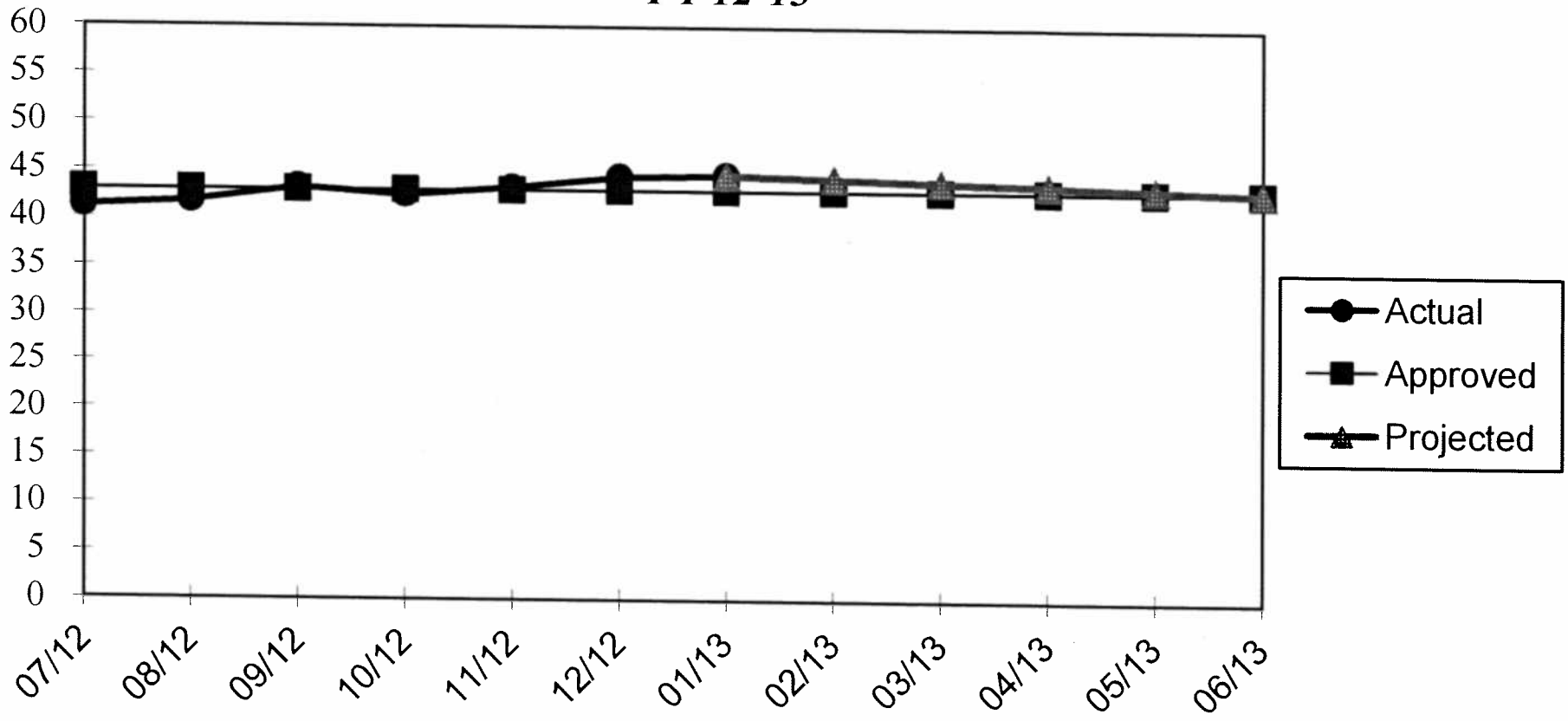


Presents general, restricted and total fund equities for the current fiscal year. General fund equity represents unrestricted equity. Restricted equities include building improvement interest, building maintenance, self-insurance, capital and contingency reserve. These restricted equities represent the Association's equities set aside for specific purposes. Total equity is the sum total of general and restricted equities.

Source: ABAG - INDICES 2013-01.xls

ABAG Financial Indices

Figure 6--*Indirect Cost Rate (% of Direct Labor Cost)*
FY 12-13



Shows a comparison between the actual indirect cost rate and the approved rate. The approved indirect cost rate is computed by dividing total estimated overhead expenses by total projected direct labor cost for a fiscal year. This rate is used as a standard overhead cost rate to allocate indirect costs to all projects. This process is performed in accordance with an indirect cost plan, which is prepared annually in accordance with OMB Circular A-87.

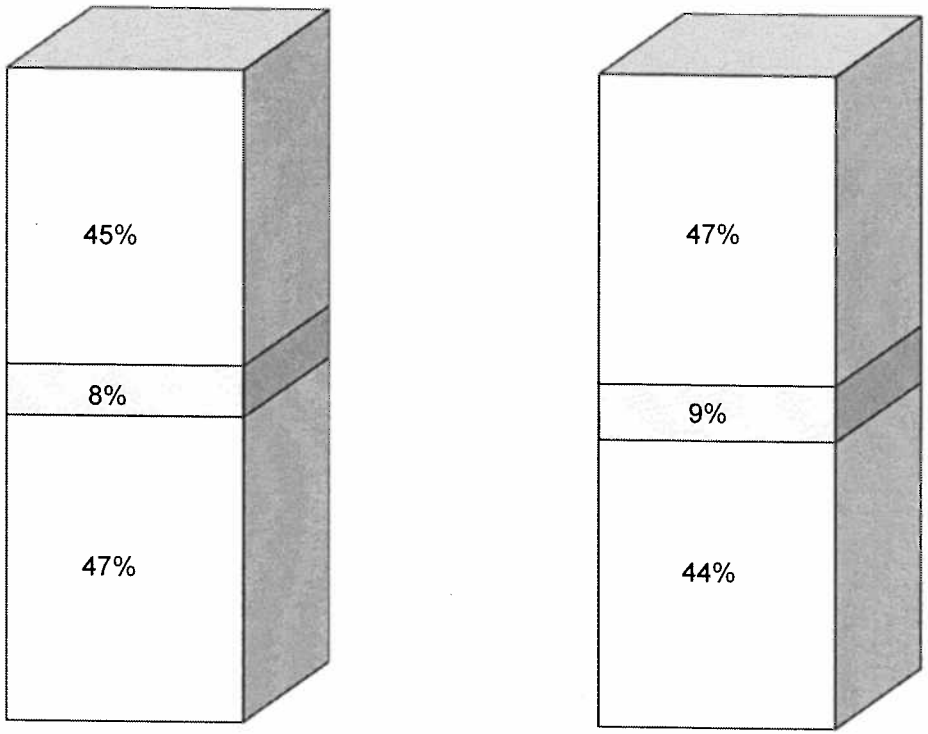
Source: ABAG - INDICES 2013-01.xls

ABAG Financial Indices

Figure 7-- Composition of Expenses FY 12--FY 13

Year to Date

($'000)



	FY12-13 Expenses (Total $14,677)	FY11-12 Expenses (Total $15,473)
Consultants	$6,632	$7,314
Others	$1,170	$1,349
Payroll	$6,875	$6,810

This chart compares expenses for current and prior fiscal year. It groups expenses into three broad categories--payroll costs, consultants and other expenses.

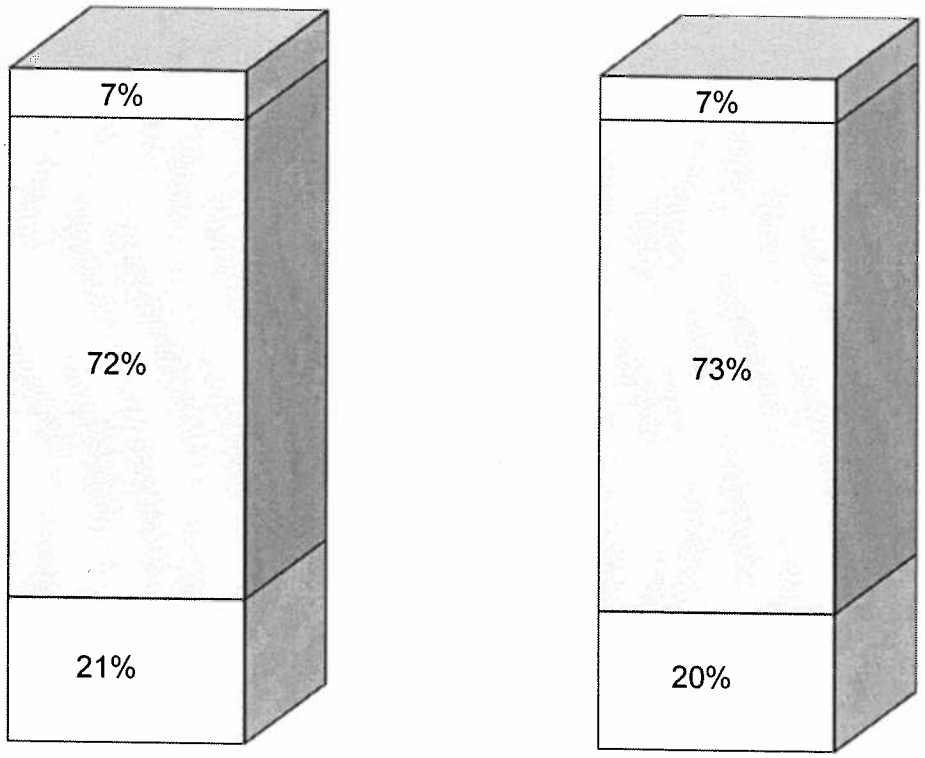
Source: ABAG - INDICES 2013-01.xls

ABAG Financial Indices

Figure 8-- Composition of Revenues FY 12--FY 13

Year to Date

($'000)



	FY 12-13 Revenue (Total $14,180)	FY 11-12 Revenue (Total $15,575)
Membership	$1,006	$1,010
Grants	$10,152	$11,394
Services & Others	$3,022	$3,171

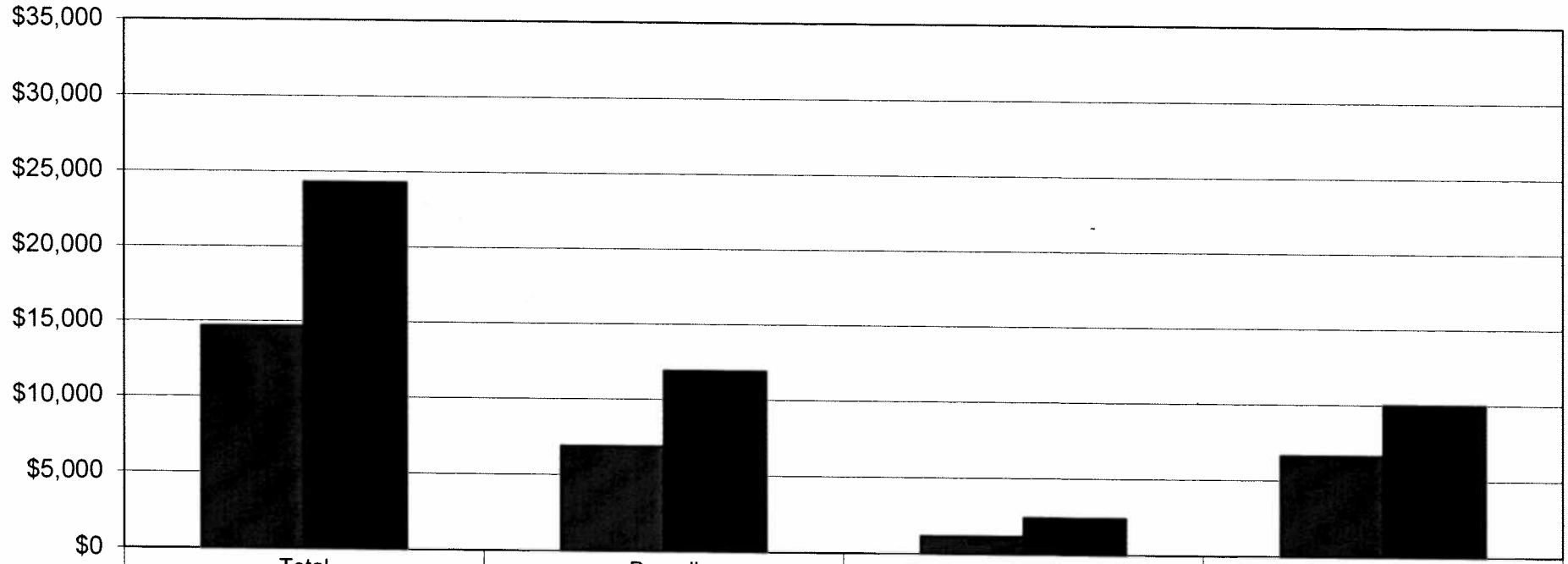
Presents a breakdown of total revenues into four main sources--membership, grants, services and others. This chart compares revenue sources between current and prior fiscal year.

Source: ABAG - INDICES 2013-01.xls

ABAG Financial Indices

Figure 9--*Actual vs Projected Expenses--FY 12-13*

Year to Date ($'000)



	Total	Payroll	Other	Consultants
■ Actual	$14,677	$6,875	$1,170	$6,632
■ Projected	$24,300	$11,902	$2,398	$10,000

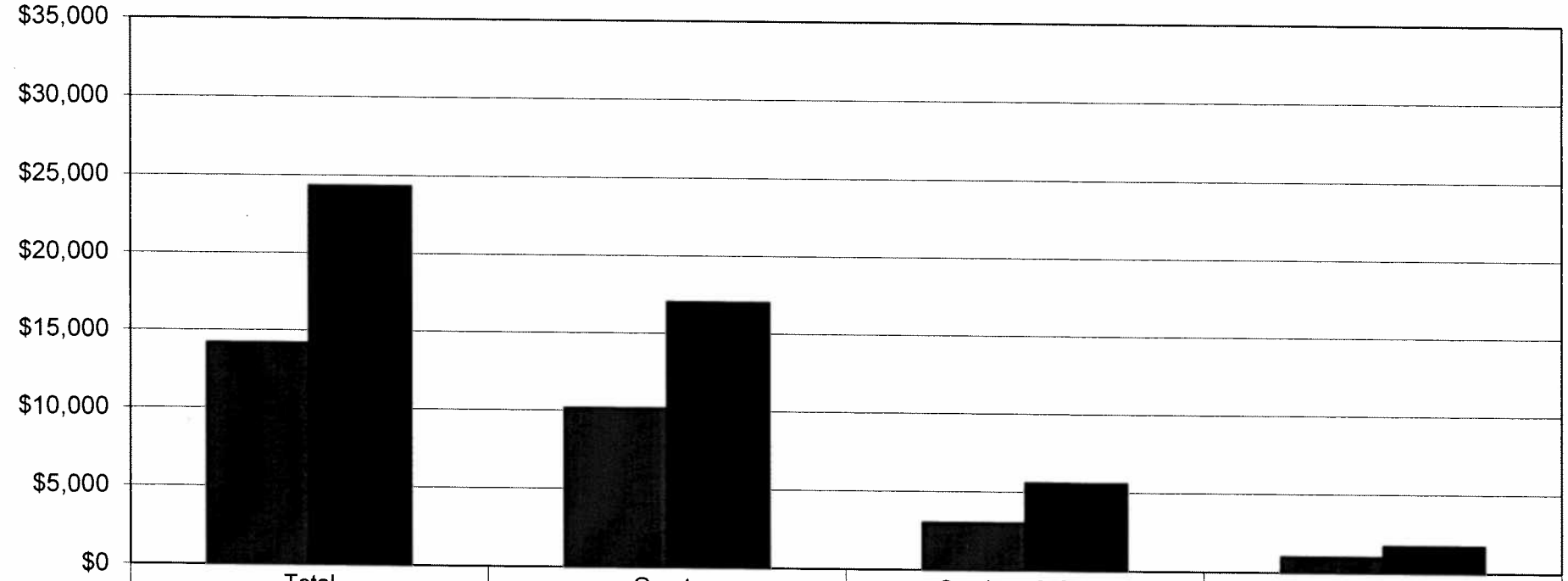
Presents a comparison of actual and budgeted/projected total expenses as well as component categories: payroll costs, consultants and other expenses.

Source: ABAG - INDICES 2013-01.xls

ABAG Financial Indices

Figure 10--*Actual vs Projected Revenues--FY 12-13*

Year to Date ($'000)



	Total	Grants	Services & Other	Membership
■ Actual	$14,180	$10,152	$3,022	$1,006
■ Projected	$24,350	$17,024	$5,600	$1,726

Presents a comparison of actual and budgeted/projected total revenues as well as component categories: membership dues, grants, services and other.

Source: ABAG - INDICES 2013-01.xls

ASSOCIATION OF BAY AREA GOVERNMENTS
FINANCE & PERSONNEL COMMITTEE

TABLE OF FINANCIAL REPORT DATA ELEMENTS
(thousands of dollars)

FOR THE MONTH ENDED JANUARY 31, 2013

Description	Year-To-Date Actual	Year-End Estimate
ASSETS		
Cash	3,959	2,000
Receivables	4,356	5,500
REVENUES		
Membership Dues	1,006	1,726
Grants	10,152	17,024
Charges for Services	3,022	5,600
Total Revenues	**14,180**	**24,350**
EXPENSES		
Salaries and Related Benefits	6,875	11,902
Consultant Services	6,632	10,000
Other Expenses	1,170	2,398
Total Expenses	**14,677**	**24,300**
Change in Net Assets	(497)	50
Beginning Net Assets	1,772	1,772
Ending Net Assets	1,275	1,822
NET ASSET BREAKDOWNS		
Unrestricted	665	1,162
Restricted	610	660
Total Net Assets	1,275	1,822
INDIRECT OVERHEAD		
Approved Overhead	42.95%	42.95%
Overhead Rate %	44.57%	42.95%

ASSOCIATION OF BAY AREA GOVERNMENTS
FINANCE & PERSONNEL COMMITTEE

TABLE OF FINANCIAL REPORT DATA ELEMENTS
(thousands of dollars)

Index Description	Jan-13	Dec-12	Nov-12	Oct-12	Jan-12	Dec-11
Cash	3,959	2,135	2,062	2,669	3,112	2,889
Receivables	4,356	6,560	7,505	7,273	4,645	4,708
Payroll Cost-YTD	6,875	5,834	4,840	4,003	6,810	5,734
-Month	1,041	994	837	961	1,076	986
Total Other Expense-YTD	7,802	7,257	6,178	4,989	8,663	6,937
-Month	545	1,079	1,189	2,391	1,726	1,262
Total Expenses-YTD	14,677	13,091	11,018	8,992	15,473	12,671
-Month	1,586	2,073	2,026	3,352	2,802	2,248
Total Revenues-YTD	14,180	12,635	10,852	8,884	15,575	12,860
-Month	1,545	1,783	1,968	3,452	2,715	2,240
Fund Equity-General	665	706	996	1,054	1,182	1,269
Total Restricted	610	610	610	610	560	560
Total Fund Equity	1,275	1,316	1,606	1,664	1,742	1,829
Approved Overhead	42.95%	42.95%	42.95%	42.95%	42.95%	42.95%
Overhead Rate %	44.57%	44.33%	43.20%	42.43%	37.64%	37.89%

F&PC AGENDA ITEM #5-D

To: **ABAG Finance & Personnel Committee**

From: **Herbert Pike**

CC: **Ezra Rapport, Executive Director**

Date: **3/21/2013**

Re: **Potential Financial Impacts of Affordable Care Act on ABAG**

Information is still being collected in order to identify the prospective financial and administrative impacts of the Affordable Care Act. Guidelines are under development at both the State and federal levels. An oral report will be made at the meeting to try and explain the range of changes that are in the offing and a timeline for those changes. As meaningful information is found, it will be compiled and distributed at the meeting. In the meantime, the attached PowerPoint presentation was presented at the recent Annual Meeting of the California Society for Municipal Finance Officers. It is somewhat confusing and focuses on avoidance of penalties and additional reporting requirements. There appeared little or no review of the potential impact of "Cadillac" coverage impacts. While the definition of "Cadillac" coverage is still forthcoming, efforts will continue to compile as much additional information as possible for a report at the Committee meeting.

WHITE NELSON DIEHL EVANS LLP
Certified Public Accountants & Consultants

WELLS FARGO INSURANCE

How the 2010 Health Care Bills Are Currently Affecting Cities and Other Government Agencies

F&PC AGENDA ITEM #6

Presented by:
Mike Ludin, White Nelson Diehl Evans LLP
Daniel Kopti, Wells Fargo Insurance Services USA, Inc.

February 21,2013

Together we'll go far

Agenda

- Patient-Centered Outcomes Research Trust Fund Fee
- Individual Mandate
- Insurance Exchanges
- Employer Shared Responsibility
- Liability for $2,000 Per Year Penalty
- Liability for $3,000 Per Year Penalty
- Who is a Full-Time Employee
- Effective Date
- Questions

Patient-Centered Outcomes Research Trust Fund Fee

- Payable by the insurance carrier for any group insurance policy
- Payable by the employer for any self-insured group health plan
  - Not including health flexible spending arrangements, if maximum reimbursement does NOT exceed the greater of (i) 2 times the participant's salary reduction, or (ii) the amount of the participant's salary reduction plus $500
  - Not including self-insured dental or vision care plans, if employees have the right to elect NOT to receive the coverage, AND employees who elect the coverage must make a contribution
  - Includes health reimbursement arrangements (HRAs)
- Filing Requirement
  - Submit IRS Form 720 by July 31, 2013 for plan years ending between October 1, 2012 and December 31, 2012 (inclusive)
  - Submit IRS Form 720 by July 31, 2014 for plan years ending between January 1, 2013 and December 31, 2013 (inclusive)

Patient-Centered Outcomes Research Trust Fund Fee

- Amount of Fee
  - For plan years ending between October 1, 2012 and September 30, 2013 (inclusive) - $1 multiplied by the average number of covered lives (employees and family members)
  - For plan years ending between September 30, 2013 and October 1, 2019 (inclusive) - $2 multiplied by the average number of covered lives (employees and family members) (subject to inflation adjustment)
- Options for Calculating the Average Number of Covered Lives
  - Actual count method – number of covered lives for each day of the year, divided by the number of days in the year
  - Snapshot method – number of covered lives on one (or more) days in each quarter, divided by the number of days; days chosen in quarters 2, 3 and 4 must fall within 3 days of the date chosen for the first quarter (example – January 5, April 3, July 2, October 6)

Individual Mandate

- U.S. citizens and legal residents are required to have "minimum essential coverage" beginning on January 1, 2014
  - Constitutional according to the U.S. Supreme in the case of National Federal of Independent Business v. Sebelius
  - Minimum essential coverage can be obtained from employer-sponsored group health plans (including grandfathered plans), individual-market insurance policies, or certain governmental programs (including Medicare, Medicaid, TRICARE, others)
  - Limited exceptions apply (e.g., Native Americans, certain religious groups, individuals unable to obtain coverage costing less than 8% of household income, individuals with household income below tax filing threshold, short (< 3 month) lapses, expatriates)
- Tax penalty for noncompliance is:
  - Greater of
    - a percentage of income in excess of taxpayer's filing threshold (1.0% in 2014, 2.0% in 2015, and 2.5% in 2016 and beyond); or
    - a flat dollar amount ($95 in 2014, $325 in 2015, $695 in 2016, and adjusted for inflation thereafter)

Insurance Exchanges

- Insurance exchanges will begin operating in the fall of 2013, for coverage that will become effective on January 1, 2014
  - Employers are required to notify employees about the availability of coverage from the exchange; March 1 deadline has been postponed
- Each exchange will act as a clearinghouse or intermediary between individuals and the following sources of medical coverage:
  - Medicare for those age 65 or over, disabled, or with end-stage renal disease (i.e. kidney transplant or kidney dialysis)
  - Medicaid for the poor (i.e. those with household income below 138% of Federal Poverty Level for states like California that adopt ACA's Medicaid expansion, or 100% of FPL for states that do NOT adopt ACA's Medicaid expansion)
  - Individual insurance policies, with five Actuarial Value coverage tiers available (60% AV bronze, 70% AV silver, 80% AV gold, 90% AV platinum, catastrophic)

Insurance Exchanges

Tax Credit Guidelines

Federal Poverty Level	Max Premium as % of AGHI	Estimated Plan Actuarial Value
100% - 133%	2%	100%
134% - 150%	3.0% - 4.0%	94%
151% – 200%	4.0% - 6.3%	87%
201% – 250%	6.3% - 8.05%	73%
251% - 300%	8.05% - 9.5%	70%
301% - 400%	9.5%	70%
>400%	Unlimited *	60%
* Not eligible for subsidized exchange coverage		

Federal Poverty Levels (2013)

Family Size	Medicaid Eligibility 100% FPL*	Medicaid Eligibility 138% FPL	Exchange Subsidy up to 400% FPL
1	$11,490	$15,856	$45,960
2	$15,510	$21,404	$62,040
3	$19,530	$26,951	$78,120
4	$23,550	$32,499	$94,200
5	$27,570	$38,046	$110,280
6	$31,590	$43,594	$126,360
7	$35,610	$49,142	$142,440
8	$39,630	$54,689	$158,520
* For family units of more than 8 members, add $4,020 per additional person			

Insurance Exchanges

State	Exchange Approach	Medicaid Expansion
Alabama	Federal	Not expanding
Alaska	Federal	Pending
Arizona	Federal	Expanding
Arkansas	Partnership	Pending
California	**State**	**Expanding**
Colorado	**State**	**Expanding**
Delaware	Partnership	**Expanding**
D.C.	**State**	**Expanding**
Florida	Pending	Pending
Georgia	Federal	Not expanding
Hawaii	**State**	**Expanding**
Idaho	**State**	Pending
Illinois	Partnership	**Expanding**
Indiana	Federal	Pending
Iowa	**State**	Pending
Kansas	Federal	Pending
Kentucky	**State**	Pending
Louisana	Federal	Not expanding
Maine	Federal	Not expanding
Maryland	**State**	**Expanding**
Massachusetts	**State**	**Expanding**
Michigan	Partnership	Pending
Minnesota	**State**	**Expanding**
Mississippi	**State**	Not expanding
Missouri	Federal	Pending

State	Exchange Approach	Medicaid Expansion
Montana	Federal	Pending
Nebraska	**State**	Pending
Nevada	**State**	Pending
New Hampshire	Federal	Pending
New Jersey	Federal	Pending
New Mexico	**State**	Pending
New York	**State**	**Expanding**
North Carolina	Partnership	Pending
North Dakota	Federal	Pending
Ohio	Partnership	Pending
Oklahoma	Federal	Not expanding
Oregon	**State**	**Expanding**
Pennsylvania	**State**	Pending
Rhode Island	**State**	**Expanding**
South Carolina	Federal	Not expanding
South Dakota	Federal	Unlikely in 2014
Tennessee	Federal	Pending
Texas	Federal	Not expanding
Utah	**State**	Pending
Vermont	**State**	**Expanding**
Virginia	Federal	Pending
Washington	**State**	**Expanding**
West Virginia	Partnership	Pending
Wisconsin	Federal	Pending
Wyoming	Federal	Pending

Sources: Associated Press, Urban Institute, Kaiser Family Foundation, and HHS (as of 1/15/13)

Insurance Exchanges

- Every U.S. citizen and resident alien will be able to purchase an individual medical insurance policy from the exchange
- An individual and his/her family will qualify for a federal subsidy towards the cost of individual insurance purchased from an exchange if:
  - The individual has household income below 400% of the Federal Poverty Level; and
  - The individual does not qualify for free Medicaid coverage (i.e. household is above 138% of the Federal Poverty Level, or above 100% of FPL in states that do not adopt Medicaid expansion); and
  - Either of the following requirements is met:
    - The individual is NOT eligible for an employer's medical plan that provides minimum essential benefits and a minimum actuarial value of 60%; or
    - The individual is eligible for an employer's medical plan that meets the above criteria, but he/she is not covered by that plan, and the employer's plan is not "affordable" (i.e. the employee contribution for individual (not 2-party or family) coverage under the cheapest medical plan option from the employer exceeds 9.5% of the employee's household income)

Employer Shared Responsibility

If the employer does NOT maintain a group medical plan, and at least one full-time employee receives a federal subsidy to purchase insurance from an insurance exchange

Employer pays a penalty of $2,000 annually ($166.67 per month) for each full-time employee

- Exclude first 30 full-time employees

Applicable large employer

- 50 or more full-time-equivalent employees (based on 30 or more hours per week)

If the employer maintains a group medical plan, but (1) a full-time employee is NOT offered coverage under the plan, or (2) single coverage under the plan is not affordable to a full-time employee (i.e. employee contributions exceed 9.5% of household income)

Employer pays a penalty of $3,000 annually ($250 per month) for each full-time employee who receives a federal subsidy to purchase individual insurance from an insurance exchange

Employer Shared Responsibility

- On January 2, 2013, IRS released proposed regulations on Employer Shared Responsibility under the Patient Protection and Affordable Care Act (ACA)
- Under ACA's Employer Shared Responsibility, an employer may be subject to a tax penalty if it does not offer affordable health coverage that provides a minimum level of coverage to all of its full-time employees
- Employers are NOT required to change their group health plans to conform to ACA's Employer Shared Responsibility, but they may be subject to a tax penalty if they fail to comply
  - IRS will contact the employer to obtain information before assessing the penalty, and will notify the employer later if a penalty is assessed
  - The employer is NOT required to self-report any penalty under ACA's Employer Shared Responsibility on a tax return

Employer Shared Responsibility

Threshold Issue – Who is an employee?

- ACA's Employer Shared Responsibility imposes obligations on an employer with respect to its common law employees
  - In a common law employee-employer relationship, the employer has the right to direct and control the individual who performs the services, not only regarding the result to be accomplished, but also the details and means by which the result is accomplished
  - IRS uses a 20-factor test in determining who is a common law employee; refer to IRS Publication 15-A and Revenue Ruling 87-41
  - Employer and employee may file Form SS-8 with IRS to request an official determination of common law employee status
- If a worker is NOT a common law employee of the employer, then the worker is ignored under ACA's Employer Shared Responsibility

Employer Shared Responsibility

Threshold Issue – Does the "small employer" exemption apply?

- ACA's Employer Shared Responsibility does NOT apply to an employer that qualifies for the small employer exemption
- The small employer exemption applies if the employer had an average of fewer than 50 full-time and full-time-equivalent (FTE) employees in the previous calendar year
  - Special transition rule for 2014 – rather than use the full 12-months of 2013 to determine whether the small employer exemption applies for 2014, the employer may use any consecutive 6-month period in 2013 (such as 1/1/2013 to 6/30/2013)

Employer Shared Responsibility

- In determining whether the small employer exemption applies:
  - For each calendar month, count the number of full-time employees (i.e. employed an average of 30 or more hours of service per week) including seasonal employees
  - Add the number of FTE employees in the calendar month (i.e. counting all hours of service by non-full-time employees in the calendar month up to 120 hours for each employee, and dividing by 120); retain any fraction in the result
  - Determine the sum of all calendar months in the previous calendar year, and divide by the number of calendar months; round any fraction down to the next whole number
- Seasonal worker rule – An employer qualifies for the small employer exemption if the sum of full-time and FTE employees exceeds 50 for only 4 months (or 120 calendar days) or less (not necessarily consecutive months or days) during the preceding calendar year, and the employees in excess of 50 who were employed in that 4 month (or 120 calendar day) period are seasonal workers

Liability for $2,000 Per Year Penalty

- For any calendar month, an employer must pay a tax penalty of $166.67 (i.e. $2,000 over 12 months) for each full-time employee if both of the following requirements are met:
  - The employer does NOT maintain a group health plan for that month that offers minimum essential coverage

    Note: An employer is deemed NOT to maintain a group medical plan if fewer than 95% of all full-time employees (and their children up to age 26) are offered coverage under the plan
  - The employer has received a Section 1411 Certification with respect to at least one full-time employee (indicating that the employee is receiving a premium tax credit to help pay for individual insurance coverage from an Insurance Exchange)
- The first 30 full-time employees are ignored for penalty purposes

Liability for $2,000 Per Year Penalty

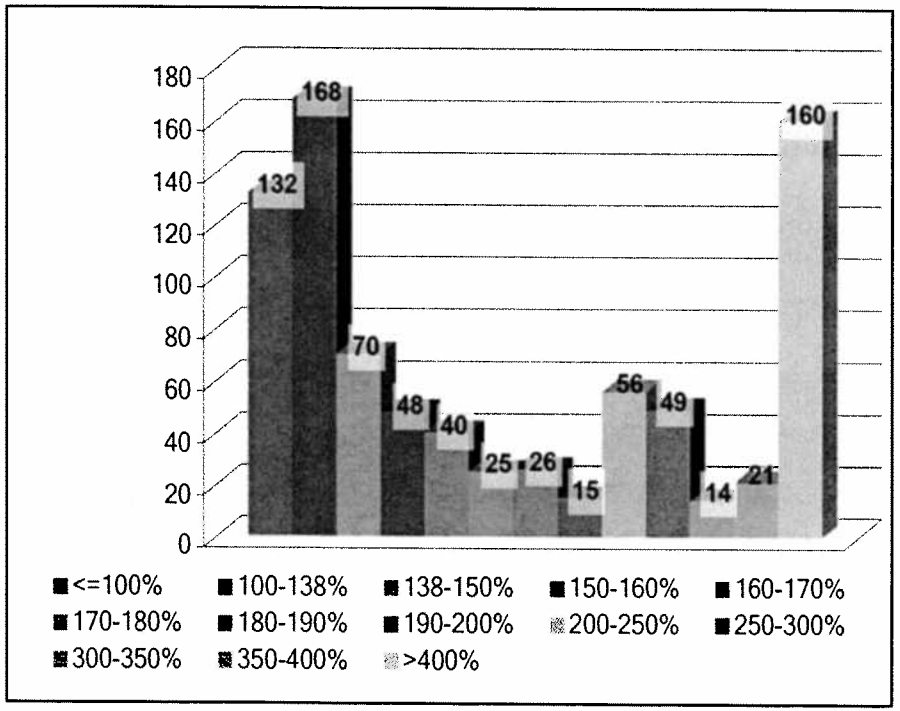
- Can an employer save money by terminating its group medical plan and paying the $2,000 tax penalty for each full-time employee?
  - For almost all employers, the answer is "yes"
  - Note that employee pre-tax contributions to the plan save the employer on FICA taxes, which need to be factored into the net savings
- Follow-up question to answer: Where will employees obtain medical coverage?
  - Employees in lowest paid group will qualify for free Medicaid coverage
  - Remaining employees can obtain individual insurance through a state insurance exchange
- Ultimate question to answer: What role does the group medical plan have in the organization's human resources strategy for recruiting and retaining employees

Liability for $2,000 Per Year Penalty

Employee Modified Adjusted Gross Household Income Distribution for Sample Employer

- Key Considerations
  - This slide shows where employees' anticipated household income currently fall in relation to the Federal Poverty Level.
  - Employees >138% and <400% of the FPL will have access to varying levels of subsidies.
  - Employees <138% of the FPL will be eligible for Medicaid.

Employee Distribution by Federal Poverty Level



Liability for $3,000 Per Year Penalty

- For any calendar month, an employer must pay a tax penalty of $250.00 (i.e. $3,000 over 12 months) for each full-time employee if:
  - The employer offers, to at least 95% of its full-time employees (and their children up to age 26), the opportunity to enroll in minimum essential coverage under a group health plan for that month; AND
  - The employer has received a Section 1411 Certification with respect to the full-time employee (indicating that the employee is receiving a premium tax credit to help pay for individual insurance coverage from an Insurance Exchange) AND
- The amount of this penalty for any month is capped at the number of the employer's full-time employees for the month (minus 30), multiplied by $166.67; the cap ensures that the tax penalty for an employer that offers coverage cannot exceed the tax penalty the employer would pay if it did NOT offer coverage

Liability for $3,000 Per Year Penalty

- An employee can receive a Section 1411 Certification in these circumstances if:
  - The employee's modified adjusted gross household income is less than 400% of Federal Poverty Level, AND
  - The employee does NOT qualify for free Medicaid coverage, AND one of the following is met:
  - The employee is NOT eligible for coverage under the employer's group medical plan (providing minimum essential coverage), OR
  - The employee is eligible for such coverage but the employee is NOT covered by that plan, AND the coverage is either NOT affordable OR does NOT provide minimum value (i.e. at least a 60% actuarial value)

Liability for $3,000 Per Year Penalty

- An employee's coverage under the group health plan is "affordable" if the employee's required contribution for the lowest cost, self-only coverage under the plan does not exceed 9.5 percent of the employee's household income for the year, as determined under one of the following safe harbors
  - Form W-2 safe harbor – The employee's household income is deemed to be his/her Form W-2 box 1 wages for that year (adjusted, as necessary, for the employee's period of coverage during the year)
  - Rate of Pay safe harbor – The employee's household income is deemed to be 130 hours multiplied by his/her hourly rate of pay as of the first day of his/her coverage during the year
  - Federal Poverty Line safe harbor – The employee's household income is deemed to be 100% of the Federal poverty line for a single individual in the state in which he/she is employed ($11,170 in 2012 for DC and all states other than Alaska and Hawaii)

Who is a Full-Time Employee

- A "full-time employee" means an employee with an average of at least 30 hours of service per week
  - An "hour of service" means each hour for which an employee is paid, or entitled to payment, for the performance of duties for the employer; and each hour for which an employee is paid, or entitled to payment, for a period during which no duties are performed due to vacation, holiday, illness, incapacity (including disability), layoff, jury duty, military duty, or leave of absence
  - Hours of service do NOT include work performed outside of the U.S., even if the employee is a U.S. citizen
- For employees paid on an hourly basis, the employer must calculate his/her actual hours of service from records of hours worked and hours for which payment is made or due

Who is a Full-Time Employee

- For employees paid on a non-hourly basis, the employer must calculate his/her hours of service by using one of the following methods (unless the method clearly understates an employee's hours of service):
  - Actual hours of service, from records of hours worked and hours for which payment is made or due
  - Days-worked equivalency, where the employee is credited with 8 hours of service for each day in which the employee would be credited with at least one hour of service
  - Weeks-worked equivalency, where the employee is credited with 40 hours of service for each week in which the employee would be credited with at least one hour of service
- The employer may apply different methods for different classifications of non-hourly employees, provided the classifications are reasonable and consistently applied, and without regard to what other members of the same controlled group of companies are doing

Who is a Full-Time Employee

- Determining which employees are full-time employees under ACA's Employer Shared Responsibility is administratively burdensome
- Employers can eliminate this administrative burden by doing the following:
  - Allow ALL employees to obtain coverage under the employer's group health plan (for example, a high deductible health plan) that provides minimum essential coverage for employees and their dependent children
  - Verify that coverage is affordable and provides minimum value for each employee
- Problem with this strategy – Employer contributions to assure affordable coverage may be costly in the aggregate

Who is a Full-Time Employee

- Employers can limit the administrative burden of determining which employees are full-time, by doing the following:
  - For those employees who are NOT eligible for coverage under the group medical plan, rely on front-line supervisors to limit their hours of service to below 30 per week
  - Periodically monitor the employer's human resources information system to verify that these ineligible employees are properly treated as NOT full-time
  - For the remaining employees who are eligible for coverage under the group health plan, verify that their coverage is affordable and provides minimum value for each employee
- Problem with this strategy – Front-line supervisors may give greater priority to the employer's business needs, compared to the employer's desire to avoid penalties under ACA's Employer Shared Responsibility

Who is a Full-Time Employee

- **For on-going employees** (i.e. those employed for at least one standard measurement period), the employer determines each employee's full-time status by looking back at the standard measurement period (at least 3 months and not more than 12 consecutive months)
  - Employees who are employed an average of *at least* 30 hours of service per week during the standard measurement period must be treated as full-time employees for a stability period (at least 6 consecutive calendar months but no shorter than the standard measurement period) that begins immediately after the standard measurement period and any administrative period (which is no longer than 90 days)
  - Employees who are employed an average of *fewer than* 30 hours of service per week during the standard measurement period may be treated as NOT a full-time employee for that stability period

Who is a Full-Time Employee

- Example of on-going employees

Standard Measurement Period	Administrative Period	Stability Period
11/1/2012 – 10/31/2013	11/1/2013 – 12/31/2013	1/1/2014 – 12/31/2014
11/1/2013 – 10/31/2014	11/1/2014 – 12/31/2014	1/1/2015 – 12/31/2015
11/1/2014 – 10/31/2015	11/1/2015 – 12/31/2015	1/1/2016 – 12/31/2016

- The employer may use standard measurement periods, administrative periods, and stability periods that differ in length, or in their starting and ending dates, for different categories of on-going employees:
  - Collectively bargained and non-collectively bargained employees
  - Each group of employees covered by a different collective bargaining agreement
  - Salaried employees and hourly employees
  - Employees who primary places of employment are in different states

Who is a Full-Time Employee

- **For new employees** (i.e. those employed for less than one standard measurement period):
- If a new employee is reasonably expected at his/her start date to be employed an average of 30 hours of service or more per week, then the employee must be treated as a "full-time employee" at the end of his/her initial three full calendar months of employment

Who is a Full-Time Employee

- If a new employee is variable hour or seasonal, the employer may determine the employee's full-time status by using an initial measurement period (at least 3 months and not more than 12 consecutive months) that begins on any date between the employee's start date and the first day of the first calendar month after the start date
  - "Variable hour employee" means an employee if, based on the facts and circumstances on his/her start date, the employer cannot determine whether the employee is reasonably expected to be employed an average of at least 30 hours of service per week during the initial measurement period because his/her hours are variable or otherwise uncertain
  - "Seasonal employee" is not defined by the proposed regulations

Who is a Full-Time Employee

- Employees who are employed an average of *at least* 30 hours of service per week during the initial measurement period must be treated as full-time employees for a stability period (at least 6 consecutive calendar months but no shorter than the initial measurement period) that begins immediately after the standard measurement period and any administrative period (which is no longer than 90 days)
- Employees who are employed an average of *fewer than* 30 hours of service per week during the standard measurement period may be treated as NOT a full-time employee for that stability period
- Examples of new employees who are variable hour or seasonal

First Day of Work	Initial Measurement Period	Administrative Period	Stability Period
2/15/2014	3/1/2014 – 2/28/2015	3/1/2015 – 3/31/2015	4/1/2015 – 3/31/2016
7/05/2014	8/1/2014 – 7/31/2015	8/1/2015 – 8/31/2015	9/1/2015 – 8/31/2016

Who is a Full-Time Employee

- Special rules for determining whether new employees are full-time
  - The administrative period includes any period between the employee's start date and when his/her initial measurement period begins, as well as the period between the end of the initial measurement period and the start of the stability period
  - The initial measurement period and administrative period together cannot extend beyond the last day of the first calendar month beginning on or after the first anniversary of the employee's start date; note that the first example below is compliant, but the second example violates this rule

First Day of Work	Initial Measurement Period	Administrative Period	Stability Period
2/15/2014	3/1/2014 – 2/28/2015	3/1/2015 – 3/31/2015	4/1/2015 – 3/31/2016
2/15/2014	3/1/2014 – 2/28/2015	3/1/2015 – 4/30/2015	5/1/2015 – 4/30/2016

Who is a Full-Time Employee

- **What happens if the employee's hours of service change during the stability period, and the employee is still actively working for the employer?**
- General rule – the employee continues to be treated as full-time (or as NOT full-time) for the entire stability period, as determined under the look-back measurement period
- Exception – If the position of employment or other employment status of a new variable hour or seasonal employee materially changes before the end of the initial measurement period, and the employee would have reasonably been expected to be a full-time if he/she had begun employment in the new position or status, then the employee must be treated as full-time by no later than the earlier of the following:
  - The first day of the fourth month following the change in position or status, or
  - The first day of the first month following the end of the initial measurement period (and associated administrative period), but only if the employee is determined to be full-time based on the initial measurement period

Who is a Full-Time Employee

- **What happens if the employee's hours of service drop to zero during the stability period because of a leave of absence or termination of employment?**
- General rule – A full-time employee is no longer treated as full-time, beginning on the first day of the calendar month after his/her last hour of service as an active employee
- Unclear whether the full-time employee continues to be treated as full-time during an unpaid FMLA leave, unpaid USERRA leave, or unpaid leave on account of jury duty

Who is a Full-Time Employee

- **What happens when an employee resumes actively working for the employer after an unpaid leave of absence or termination of employment?**
- General rule – The employee is treated as a new employee and NOT as a continuing employee, if the employee did not have an hour of service for the employer:
  - For a period of at least 26 consecutive weeks immediately preceding the resumption of services, OR
  - If chosen by the employer, for a shorter period (measured in weeks) of at least four consecutive weeks that exceeds the number of weeks of that employee's period of employment with the employer immediately preceding the period in which the employee was not credited with an hour of service

Who is a Full-Time Employee

- If the employee is treated as a continuing employee upon resuming active work for the employer, then the employee retains the status (as full-time or NOT full-time) that he/she had with respect to any stability period that is underway
- A continuing employee who is treated as full-time will be treated as having been offered coverage under the employer's group health plan upon resumption of services if he/she is offered coverage as of the first day that the employee is credited with an hour of service, or (if later) as soon as administratively practicable
- The fact that the employee is treated as a continuing employee does NOT mean that the employee must be treated as full-time during the period in which he/she had no hours of service

Who is a Full-Time Employee

- **What effect does an employee's unpaid absence have on the hours worked by the employee during the standard measurement period?**
- General rule - The absence will count as zero hours of service during the period of absence, making it more difficult for the employee to satisfy the 30-hours per week threshold for "full-time employee" status
- Exception - If the employee is absent on unpaid FMLA leave, unpaid USERRA leave, or unpaid leave on account of jury duty, then the absence must NOT be factored into the employee's measurement period
- Exception - If the employer is an educational organization, and the employee is absent on an employment break period, then up to 501 hours of an employment break must NOT be factored into the employee's measurement period

Who is a Full-Time Employee

- Averaging Rule #1 - If the employee is treated as a continuing employee upon resuming active work for the employer, then the employer determines the employee's average hours of service during the look-back measurement period after excluding:
  - Any unpaid FMLA leave, unpaid USERRA leave, or unpaid leave on account of jury duty that takes place during the measurement period ("special unpaid leave"), and
  - For educational organizations, any employment break period that occurs during the measurement period,
- and by using that average as the average for the entire measurement period
- An "employment break period" is a period of at least four consecutive weeks (not including unpaid FMLA leave, unpaid USERRA leave, or unpaid leave on account of jury duty) during which an employee of an educational organization is NOT credited with hours of service for the employer

Who is a Full-Time Employee

- Averaging Rule #2 – Alternatively, if the employee is treated as a continuing employee upon resuming active work for the employer, then the employer may determine the employee's average hours of service for the measurement period by crediting the employee with hours of service for:
  - Any unpaid FMLA leave, unpaid USERRA leave, or unpaid leave on account of jury duty that takes place during the measurement period ("special unpaid leave"), and
  - For educational organizations, any employment break period that occurs during the measurement period
- at a rate equal to the average weekly rate at which the employee was credited with hours of service during the weeks in the measurement period that are NOT part of the special unpaid leave or employment break period

Effective Date

- ACA's Employer Shared Responsibility is effective on January 1, 2014 for all employers that do not qualify for the small employer exemption
- Special rule for cafeteria plans with fiscal years:
  - IRS is allowing employers to amend their cafeteria plans (by 12/31/2014) to allow employees who previously elected NOT to participate in the employer's group medical plan, to begin participating in the plan effective 1/1/2014
  - IRS is allowing employers to amend their cafeteria plans (by 12/31/2014) to allow employees covered under the employer's group medical plan to cancel their election, effective 12/31/2013, so that they can purchase individual insurance coverage through an Exchange

Effective Date

- Special transition rule for 2014 for employers with a fiscal year plan in existence on 12/27/2012
  - For any employee eligible to participate in the plan based on its terms on 12/27/2012, the employer is NOT subject to any tax penalty under ACA's Employer Shared Responsibility for the period in 2014 preceding the start of the fiscal year, if the employee is offered affordable, minimum value coverage beginning on the first day of the 2014 fiscal year

Effective Date

- Special transition rule for 2014 for employers with a fiscal year plan in existence on 12/27/2012
  - For any employee who is NOT eligible to participate in the plan based on its terms on 12/27/2012, but who is offered affordable, minimum value coverage beginning on the first day of the 2014 fiscal year, the employer is NOT subject to any tax penalty under ACA's Employer Shared Responsibility for the period in 2014 preceding the start of the fiscal year, but only if:
    - The fiscal year plan (including all other fiscal year plans with the same plan year) was offered to at least one-third of the employer's full-time and part-time employees at the most recent open-enrollment period preceding 12/27/2012, OR
    - The fiscal year plan (including all other fiscal year plans with the same plan year) covered at least one-quarter of the employer's full-time and part-time employees on any day between 10/31/2012 and 12/27/2012

Questions?

To: **ABAG Finance & Personnel Committee**

From: **Herbert-Pike**

CC: **Ezra Rapport, Executive Director**

Date: **3/21/2013**

Re: **Allocation of Funds received from Class-Action Settlement**

Staff Recommendation:

Authorize Executive Director to execute documents affirming tentative agreement dividing proceeds of $505,679.94 equally between the Association of Bay Area Governments and the Bay Area Rapid Transit District.

Background:

On April 10, 2012, ABAG received a wired proceeds of $495,679.94 deposited into its checking account. The funds were the result of a class-action settlement of the case SEC vs GE Funding Capital Market Services, Inc. (C.A. No. 2: 11-cv-07465-WJM-MF in the US District Court, District of New Jersey). The wire was sent by GE Funding Capital Market Services, Inc. The funds are a penalty assessment against GE Funding Capital Market Services, Inc. for the alleged investment of funds under their control whereby the Treasury believes the investment yield was too low. The surplus investment proceeds covering beyond the debt service payment would have been paid to the Treasury. ABAG was named by the Court as the beneficiary of the settlement as the bond transaction arose with Association of Bay Area Governments as the issuer. BART was the real party in interest, and the structured financing set up by ABAG used BART's award of a federal grant as the security for the transaction. In the judgment of the two agency directors, equity considerations called for a sharing of the windfall award. There is another $10,000 anticipated in settlement funds arising from this same action expected before the end of the month, bringing total anticipated receipts to $505,679.94. All funds received to date have been deposited and placed in a liability account pending authorized allocation of the funds.

Mr. Rapport advised BART that ABAG was the recipient of said funds and subsequently reached a tentative agreement with the Executive Director of BART to split the funds equally between the two entities. Upon execution of the agreement, ABAG Accounting will issue a check to BART in the amount of $252,839.97 from the liability account and move the other $252,839.97 to ABAG unrestricted funds. Further discussion regarding the potential use of these windfall funds to supplement ABAG's unrestricted reserve, cover shortfalls in existing projects, or pay liabilities incurred by ABAG through the operation of its enterprise will be brought before the Committee at a later date.

Executive Board

PRESIDENT	Supervisor Mark Luce, County of Napa
VICE PRESIDENT	Councilmember Julie Pierce, City of Clayton
IMMEDIATE PAST PRESIDENT	Mayor Mark Green, City of Union City
SECRETARY-TREASURER	Ezra Rapport
LEGAL COUNSEL	Kenneth K. Moy

County of		Representative	Alternate
ALAMEDA	**	Supervisor Richard Valle	Supervisor Keith Carson
ALAMEDA	**	Supervisor Scott Haggerty	Supervisor Nathan Miley
CONTRA COSTA	*	Supervisor Karen Mitchoff	Supervisor Candace Andersen
CONTRA COSTA	*	Supervisor John Gioia	Supervisor Mary Piepho
MARIN	**	Supervisor Katie Rice	Supervisor Susan L. Adams
NAPA	**	Supervisor Mark Luce	Supevisor Bill Dodd
SAN FRANCISCO	**	Supervisor Eric Mar	To Be Appointed
SAN FRANCISCO	**	To Be Appointed	To Be Appointed
SAN MATEO	*	Supervisor Warren Slocum	To Be Appointed
SAN MATEO	*	Supervisor Dave Pine	To Be Appointed
SANTA CLARA	**	Supervisor Mike Wasserman	To Be Appointed
SANTA CLARA	**	Supervisor David Cortese	Supervisor Joe Simitian
SOLANO	*	Supervisor Linda Seifert	Supervisor Erin Hannigan
SONOMA	*	Supervisor David Rabbitt	Supervisor Susan Gorin

Cities in the County of		Representative	Alternate
ALAMEDA	*	Mayor Bill Harrison (Fremont)	Mayor Michael Sweeney (Hayward)
ALAMEDA	*	Mayor Tim Sbranti (Dublin)	Mayor Marie Gilmore (Alameda)
CONTRA COSTA	**	Mayor Julie Pierce (Clayton)	Councilmember Brandt Andersson (Lafayette)
CONTRA COSTA	**	Councilmember Dave Hudson (San Ramon)	Councilmember Ben Johnson (Pittsburg)
MARIN	*	Mayor Pat Eklund (Novato)	Vice Mayor Daniel Hillmer (Larkspur)
NAPA	*	Mayor Leon Garcia (American Canyon)	Vice Mayor Ann Nevero (St. Helena)
CITY OF SAN FRANCISCO	*	Mayor Edwin Lee	Jeff Buckley, Office of the Mayor
CITY OF SAN FRANCISCO	*	Jason Elliott, Dir, Legislative/Government Affairs	Kelly Pretzer Office of the Mayor
CITY OF SAN FRANCISCO	*	Joaquin Torres, Office of the Mayor	Gillian Gillett, Office of the Mayor
SAN MATEO	**	Councilmember Pedro Gonzalez (S San Francisco)	To Be Appointed
SAN MATEO	**	Vice Mayor Richard Garbarino (S San Francisco)	Councilmember Nadia Holober (Millbrae)
SANTA CLARA	*	Councilmember Joe Pirzynski (Los Gatos)	Councilmember Gilbert Wong (Cupertino)
SANTA CLARA	*	Councilmember Ronit Bryant (Mountain View)	Mayor Greg Scharff (Palo Alto)
SOLANO	**	Mayor Harry Price (Fairfield)	Mayor Jack Batchelor (Dixon)
SONOMA	**	To Be Appointed	To Be Appointed
CITY OF OAKLAND	*	Mayor Jean Quan	To Be Appointed
CITY OF OAKLAND	*	Councilmember Libby Schaaf	To Be Appointed
CITY OF OAKLAND	*	Councilmember Desley Brooks	To Be Appointed
CITY OF SAN JOSE	*	Councilmember Sam Liccardo	Councilmember Rose Herrera
CITY OF SAN JOSE	*	Councilmember Kansen Chu	Councilmember Donald Rocha
CITY OF SAN JOSE	*	Councilmember Ash Kalra	Mayor Chuck Reed

Advisory Members	Representative	Alternate
RWQCB	William Kissinger	Terry Young

* Term of Appointment: July 1, 2012 - June 30, 2014

** Term of Appointment: July 1, 2011 - June 30, 2013

Blank Page

ABAG CALENDAR – March & April 2013

ASSOCIATION OF BAY AREA GOVERNMENTS [ABAG]
Joseph P. Bort MetroCenter, 101 Eighth Street, Oakland, CA 94607-4756

ABAG Receptionist: 510/464-7900 **ABAG FAX:** 510/464-7985 **E-mail:** info@abag.ca.gov
URL: http://www.abag.ca.gov

MARCH

Bay Area Regional Prosperity Plan Steering Committee
3/8 @ 12 pm, MetroCenter, Auditorium

ABAG / BAAQMD / MTC Joint Policy Committee
3/15 @ 10:00 am, MetroCenter, Auditorium

Legislation & Governmental Organization
3/21 @ 3:30 pm, MetroCenter, ABAG Conference Room B

Finance & Personnel Committee
3/21@ 5:00 pm, MetroCenter, ABAG Conference Room B

EXECUTIVE BOARD
3/21@ 7:00 pm, MetroCenter, Auditorium

APRIL

Regional Advisory Working Group
12/4 @ 9:30 am, MetroCenter, Auditorium.

Regional Planning Committee (RPC)
4/3 @ 1:00 p.m., MetroCenter, Auditorium.

Bay Trail Steering Committee
4/11 @ 1:30 pm, MetroCenter, ABAG Conference Room B

ABAG Power Executive Committee
4/17 @ 12 Noon, MetroCenter, ABAG Conference Room B

ABAG Spring General Assembly
4/18 @ 8:30 am., Jack London Square Pavilion, 98 Broadway, Oakland, CA

San Francisco Restoration Authority Governing Board
4/24 @ 12 Noon, MetroCenter, Room 171

Regional Airport Planning Committee (RAPC)
4/26 @ 9:30 am, MetroCenter, Auditorium

** ABAG programs for which a fee is charged and pre-registration is required. To register or for further information, contact **ABAG Receptionist** at 510/464-7900.

For ABAG Training Center information contact **Chanell Gumbs** at 510/464-7964.

Blank Page

ABAG CALENDAR – March & April 2013

ASSOCIATION OF BAY AREA GOVERNMENTS [ABAG]
Joseph P. Bort MetroCenter, 101 Eighth Street, Oakland, CA 94607-4756

ABAG Receptionist: 510/464-7900 **ABAG FAX:** 510/464-7985 **E-mail:** info@abag.ca.gov
URL: http://www.abag.ca.gov

MARCH

Bay Area Regional Prosperity Plan Steering Committee
3/8 @ 12 pm, MetroCenter, Auditorium

ABAG / BAAQMD / MTC Joint Policy Committee
3/15 @ 10:00 am, MetroCenter, Auditorium

Legislation & Governmental Organization
3/21 @ 3:30 pm, MetroCenter, ABAG Conference Room B

Finance & Personnel Committee
3/21@ 5:00 pm, MetroCenter, ABAG Conference Room B

EXECUTIVE BOARD
3/21@ 7:00 pm, MetroCenter, Auditorium

APRIL

Regional Advisory Working Group
12/4 @ 9:30 am, MetroCenter, Auditorium.

Regional Planning Committee (RPC)
4/3 @ 1:00 p.m., MetroCenter, Auditorium.

Bay Trail Steering Committee
4/11 @ 1:30 pm, MetroCenter, ABAG Conference Room B

ABAG Power Executive Committee
4/17 @ 12 Noon, MetroCenter, ABAG Conference Room B

ABAG Spring General Assembly
4/18 @ 8:30 am., Jack London Square Pavilion, 98 Broadway, Oakland, CA

San Francisco Restoration Authority Governing Board
4/24 @ 12 Noon, MetroCenter, Room 171

Regional Airport Planning Committee (RAPC)
4/26 @ 9:30 am, MetroCenter, Auditorium

** ABAG programs for which a fee is charged and pre-registration is required. To register or for further information, contact **ABAG Receptionist** at 510/464-7900.

For ABAG Training Center information contact **Chanell Gumbs** at 510/464-7964.

Blank Page