

To: O&S Committee
From: Sharon Porter, Manager of Safety & Training
Reviewed By: *W.C.*

Date: June 23, 2011

SUBJECT: Multi-Jurisdictional Local Hazard Mitigation Plan

SUMMARY OF ISSUES:

CCCTA is recognized by the State of California, the Bay Area Region and Contra Costa County as a significant resource in hazard mitigation and has been part of the process in developing Emergency Operation Centers (EOC) throughout the region. CCCTA staff has received significant training in setting up and running an EOC and has participated in numerous region wide disaster exercises to hone those skills.

In an effort to ensure the viability of identified EOC's, ABAG in conjunction with MTC led a region wide planning process to identify the various potential hazards that may impact the Bay Area. This planning process also identified potential facility enhancements for each participant to help mitigate identified hazards. CCCTA participated in this region wide planning process and has received an Annex to the 2010 Association of Bay Area Governments Local Hazard Mitigation Plan (please see attached document). This Annex for CCCTA has identified several potential projects for facility improvements that will enhance CCCTA's ability in helping to mitigate disasters in the Bay Area.

ABAG is seeking to have the CCCTA Board of Directors approve the attached Annex by resolution at their next meeting. Approval of this Annex will provide CCCTA with the opportunity to apply for non-transit federal funds for making improvements identified in the Annex. Approval of the Annex does not require CCCTA to apply for these funds or to complete the identified projects; rather it merely affords the Authority to exercise the option should the Board deem any of the projects worthy of pursuing.

RECOMMENDATIONS:

Staff recommends the O&S committee approve this item and send a resolution to the full Board for approval

FINANCIAL IMPLICATIONS: None

OPTIONS:

- 1) Do Nothing
- 2) Support staff recommendation

ATTACHMENTS:

Annex to 2010 Association of Bay Area Local Governments
Local Hazard Mitigation Plan Taming Natural Disasters Central
Contra Costa Transit Authority

Annex to 2010 Association of Bay
Area Governments
Local Hazard Mitigation Plan
Taming Natural Disasters

Central Contra Costa Transit
Authority

Central Contra Costa Transit Authority

Table of Contents

Introduction	3
The Regional Planning Process	3
The Local Planning Process.....	3
<i>Review and Incorporation of Existing Information</i>	4
<i>Process for Updating Plan Sections</i>	4
<i>Public Meetings</i>	4
Hazard and Risk Assessment.....	5
Past Occurrences of Disasters (natural and human-induced).....	6
National Flood Insurance Program.....	6
Mitigation Goals and Objectives	6
Mitigation Activities and Priorities	7
<i>Existing Mitigation Activities</i>	7
<i>Future Mitigation Actions and Priorities</i>	7
Incorporation into Existing Planning Mechanisms	8
Plan Update Process.....	9
Mitigation Plan Point of Contact.....	10
Exhibit A - General County Connection Transit System Map	11
Exhibit B - CCCTA 2010 Mitigation Strategy Spreadsheet	12

Central Contra Costa Transit Authority

Introduction

Central Contra Costa Transit Authority (CCCTA) is a joint powers agency of 11 jurisdictions, including: the cities of Clayton, Concord, Lafayette, Martinez, Orinda, Pleasant Hill, San Ramon, Walnut Creek; the towns of Danville and Moraga; and the unincorporated areas of central Contra Costa County.

CCCTA operates County Connection and serves a dynamic and diverse modern suburban area that is geographically spread out. Serving such an area is both challenging and rewarding. CCCTA patrons are ethnically and economically diverse, and often transit dependent. Without CCCTA services, many central Contra Costa County residents would have no transportation available for work, school, medical appointments or to take advantage of recreational opportunities. For them CCCTA is a life sustaining service!

CCCTA is overseen by an 11-member Board of Directors, and provides both fixed-route and ADA paratransit services.

The proposed operating budget for 2011 includes over \$25,667,206 for fixed route and over \$5,992,340 for paratransit. The annual ridership is 5 million total for both services. The fleet includes 131 fully accessible buses and 58 passenger vans for paratransit services.

The Regional Planning Process

CCCTA participated in the regional process led by ABAG workshops, conferences, and meetings in conjunction with the monthly meetings of the Metropolitan Transportation Commission. As part of this lengthy and comprehensive process, CCCTA participated in

- Two Transportation Response Plan (TRP) Steering Committee meetings held to solicit input from transit operators and other interested agencies, and
- The Transit Workshop on February 12, 2009 to review draft mitigation strategies and reach consensus on priorities for mitigation.

For more information on these meetings and for rosters of attendees, please see Appendix A and H in the ABAG Multi-Jurisdictional Local Hazard Mitigation Plan 2010 (MJ-LHMP). In addition, CCCTA has provided oral comments on the multi-jurisdictional plan and provided information on facilities that are defined as “critical” to ABAG.

The Local Planning Process

Representatives from five CCCTA departments met on a two occasions specifically to identify and prioritize appropriate mitigation strategies. Personnel involved in these meetings included the Director of Planning, the Manager of Safety and Training, the Director of Transportation, the Manager of Procurement, and the Facilities Superintendent. At the first meeting, the strategies that should be assigned a priority were identified, as well as the department responsible for implementing each strategy. At the second meeting, the draft priorities were assigned. Typically, each person was responsible for communicating existing efforts and thoughts on

Central Contra Costa Transit Authority

appropriate future action in their area of expertise. Finally, the draft priorities listing was provided to the five-member program team so that they could review the strategy priorities with the specific members of their department responsible for implementing them, as well as to review preliminary budgets and potential funding sources for strategies designated as “High” priority. The Director of Planning, for example, discussed the strategies with marketing staff and the Facilities Superintendent obtained input from the Director of Operations.

Review and Incorporation of Existing Information

This process involved consideration of both the hazard and risk information developed by ABAG and discussed in the overall multi-jurisdictional Local Hazard Mitigation Plan, as well as the assessments of the age and construction type of structures owned by CCCTA and described on page 5. These meetings also discussed the Business Plan and Capital Improvements Plan already in place at CCCTA, as well how these plans could be best integrated.

Process for Updating Plan Sections

CCCTA did not participate in the 2005 multi-jurisdictional Local Hazard Mitigation Plan. Thus, none of the sections in this Annex are updates of a prior Annex. .

Public Meetings

The public had two opportunities to comment on the draft Annex.

- (1) An opportunity for public comments on the DRAFT mitigation strategies was provided at a public meeting on September 22, 2009 at a publicly noticed workshop jointly held by MTC, ABAG, and several transit districts and advertised on the websites of ABAG, MTC, and several transit districts. No public comments were received from either the meeting or the internet posting.
- (2) The Draft Annex Strategies have been posted on both the ABAG website for several months. No comments have been received. The Draft Annex itself is being posted on the ABAG website and the CCCTA website for comment from January 15-January 31 providing the public with an additional opportunity to comment. Any comments received will be incorporated into the Annex.

The CCCTA Board will adopt the plan in a public meeting via an official Resolution upon approval by FEMA. The mitigation strategies will be integrated into the Emergency Operations Plan and Capital Improvement Plan of CCCTA.

CCCTA is committed to improving public participation when this plan is updated in five years. To improve this process, CCCTA will consider writing letters to the editor of local newspapers in its service area to promote wider public knowledge of the process.

Central Contra Costa Transit Authority

Hazard and Risk Assessment

The ABAG multi-jurisdictional Local Hazard Mitigation Plan, to which this is an Annex, lists nine hazards that impact the Bay Area, five related to earthquakes (faulting, shaking, earthquake-induced landslides, liquefaction, and tsunamis) and four related to weather (flooding, landslides, wildfires, and drought). All of these impacts CCCTA's planning region. However, in CCCTA's role as a transit agency, drought has no impact on the provision of transportation services. All relevant reports developed by CCCTA have been incorporated into this plan. No additional reports describe the hazard or risk to the CCCTA service area.

CCCTA owns four critical facilities at its headquarters location at 2247 Arnold Industrial Way in Concord, including an office building, maintenance building, fuel island, and paratransit building.

Earthquake: None of these facilities are in an Alquist-Priolo Fault Rupture Study Zone. However, they are all in the next to highest tier of earthquake shaking potential. All of these facilities are in areas of low to very low liquefaction susceptibility mapped by the U.S. Geological Survey; the areas have not been evaluated for liquefaction susceptibility by the California Geological Survey. While the areas in which these facilities are located also have not been evaluated for earthquake-generated landslides, the areas are flat and this should not be a concern.

Tsunami: The December 2009 version of the CalEMA tsunami evacuation planning maps indicated that none of the CCCTA facilities are in this area.

Flooding: None of these facilities are in the 100-year flood plain or in other flood-prone areas.

Landsliding: None of these facilities are in an area of existing landslides.

Wildfire: None of these facilities are in an area subject to high wildfire threat, but one (the Franklin facility) is in a wildland-urban interface threat area.

Dam Failure Inundation: None of these facilities are in an area subject to dam inundation.

Delta Levee Failures: The CCCTA facilities are not in an area protected by Delta levees.

Drought: The operations of CCCTA are not significantly impacted by drought conditions.

Hazards Conclusion: The only significant hazards to these facilities are earthquake shaking and a potential for wildland-urban interface fire. This conclusion was based on the hazard exposure information for CCCTA's facilities, as well as past occurrences of disasters impacting the CCCTA service area described in the following section.

Risk Assessment: The buildings at the Concord facility are all relatively new, having been constructed between 1985 and 1991. However, because these buildings are braced steel frame constructed before the design changes following the Northridge earthquake, damage to these buildings may occur in a major earthquake. Buildings essential for occupancy after an earthquake due to the presence of an EOC or communications equipment are of greatest concern. Damage to underground fuel tanks is less likely, but also a concern.

Finally, roadway damage in CCCTA's service area may result in disruptions of service that may necessitate rapid and continuing communication with buses that may be disrupted due to damaged communications equipment or to the buildings in which this equipment is housed.

Central Contra Costa Transit Authority

Repetitive Loss Properties

The CCCTA buildings are not repetitive loss properties for flooding.

Past Occurrences of Disasters (natural and human-induced)

The Loma Prieta Earthquake of 1989 is an example of the kind of large-scale disaster which can strike the Bay Area. It killed 63 persons, injured 3,757, and displaced over 12,000 persons. With over 20,000 homes and businesses damaged and over 1,100 destroyed, this quake caused approximately \$6 Billion of damage. Reconstruction continues some two decades later as the replacement for Oakland-Bay Bridge is still several years from completion.

More information on State and Federally declared disasters in Contra Costa County and the CCCTA service area can be found at <http://quake.abag.ca.gov/mitigation/ThePlan-D-Version-August10.pdf>

The CCCTA service area has experienced a number of different disasters over the last 50 years, including numerous earthquakes, floods, droughts, wildfires, energy shortages, landslides, and severe storms. In addition to the declared disasters noted in Appendix D, the two most locally significant incidents that have impacted CCCTA in the last several years include:

- The Loma Prieta Earthquake in October 1989 was a magnitude 6.9 earthquake whose most spectacular result near the CCCTA service area was the partial collapse of the Oakland-San Francisco Bay Bridge and the Cypress freeway. CCCTA provided bus bridges from the Concord, Pleasant Hill, and Walnut Creek BART Stations to the Oakland Ferry, as well as to Bayfair Mall in San Leandro.
- As a result of the Oakland Hills Fire of 1991, CCCTA also provided emergency transportation in the form of bus bridges from the Concord, Pleasant Hill, and Walnut Creek BART Stations to Bayfair Mall in San Leandro.

National Flood Insurance Program

As transit agency, CCCTA is not eligible to participate in the National Flood Insurance Program (NFIP).

Mitigation Goals and Objectives

The goal of the ABAG MJ-LHMP is to maintain and enhance a disaster-resistant region by reducing the potential for loss of life, property damage, and environmental degradation from natural disasters, while accelerating economic recovery from those disasters. This goal is unchanged from the 2005 plan and continues to be the goal of CCCTA in designing its mitigation program.

Central Contra Costa Transit Authority

The specific goals of the mitigation program of CCCTA are consistent with this goal. They are to:

- Ensure the safety and security of CCCTA's employees and passengers
- Minimize disruption of service to CCCTA's passengers
- Minimize damage and loss of CCCTA's equipment and buildings
- Speed recovery from any disruption to provide service to CCCTA's passengers as quickly as possible

Mitigation Activities and Priorities

Existing Mitigation Activities

CCCTA was not a participant in the 2005 ABAG-led Local Hazard Mitigation Plan. However, CCCTA has been committed to hazard mitigation for many years.

CCCTA has utilized, and will continue to utilize, the latest code standards during the design and construction of any future buildings or facilities.

Future Mitigation Actions and Priorities

As a participant in the 2010 ABAG multi-jurisdictional planning process, the staff of CCCTA helped in the development and review of the comprehensive list of mitigation strategies in the overall multi-jurisdictional plan.

However, the decision on specific priorities for CCCTA was made the team identified in the section on the Planning Process, and reviewed by CCCTA's General Manager. The decision on the priority was made based the hazards and risks present in the CCCTA service area, as well as the hazards and risks specific to CCCTA facilities, and past occurrences of natural disasters. The priority decisions were based on a variety of criteria, not simply on an economic cost-benefit analysis. These criteria include being technically and administratively feasible, politically acceptable, socially appropriate, legal, economically sound, and not harmful to the environment or our heritage. The decision was also made to best leverage the implementation mechanisms available to CCCTA, including the Capital Improvements budget and the Emergency Operations Plan.

Representatives from multiple departments then met to review progress on the mitigation, to identify and prioritize additional mitigation strategies to be a specific focus for the 2010-2015 periods. These draft priorities will be then reviewed by CCCTA's General Manager. The draft priorities will be provided to the CCCTA Board for adoption pending approval of this LHMP by FEMA.

The CCCTA Planning Department staff also prioritized specific LHMP mitigation tasks for the next 5 years. The highest priority for CCCTA during the next five years is to have an upgraded

Central Contra Costa Transit Authority

communication system to ensure that bus drivers can be contacted and buses rerouted more smoothly when the transportation network is disrupted.

This list includes implementation process, funding strategy, and responsible agency. The full list is included as an attachment to this Annex. In particular, CCCTA plans to focus on obtaining funding to ensure that:

- CCCTA will continue to upgrade and anchor its nonstructural systems (GOVT a-4). The leads on the strategy are Safety, Planning, and IT.
- CCCTA will continue to assess the structural integrity of CCCTA facilities (GOVT a-1 and INFR a-1) and perform any needed upgrades are handled as part of maintenance (GOVT a-2 and INFR a-4). The leads on this strategy are Planning and Operations.
- CCCTA is currently seeking funding to have a back-up mobile emergency operations center (INFR a-21, GOVT c-9, and GOVT c-7). The leads on this strategy are the Safety Manager and the Facilities Manager. The estimated cost is \$200,000.
- CCCTA staff have taken ATC-21 training and others to ensure that facilities are inspected so that it can respond quickly as necessary and appropriate after an incident (INFR f-1). This task is led by Maintenance. Funding may be needed if upgrades are needed. The need for future funding is currently under study.

The timetable for these strategies is 5-10 years, depending on the economic recovery of the Bay Area.

The specific strategy priorities of CCCTA are included in the CCCTA spreadsheet attached to this LHMP.

Incorporation into Existing Planning Mechanisms

CCCTA has, and will continue to use, a variety of project-specific mechanisms to ensure that the projects and mitigation strategies identified as existing or having relatively high priorities in this LHMP Annex are implemented. CCCTA will incorporate the goals, objectives and strategies identified in this annex in the annual Capital Improvement Program, as well as into the Emergency Operations Plan.

As shown in the attached list, CCCTA's specific mitigation strategies and priorities will be implemented as part of the Authorities' annual Emergency Operations Plan and Capital Improvements Plan. The Emergency Operations Plan outlines equipment needs in an emergency and operations procedures, while the Capital Improvement Plan identifies the overall budgeting needed for major facilities improvements over a ten-year period. There are no other planning mechanisms available to CCCTA that are appropriate to incorporate this plan.

Thus, for example, CCCTA has identified a need to improve communications. The Emergency Operations Plan supports this need as integral to the mission of CCCTA, while the Capital Improvements Plan is the funding mechanism for processing the request. CCCTA is looking at the Capital Improvement Program for minor upgrades of the communication system, but also is

Central Contra Costa Transit Authority

in the process of seeking grant funds and preparing grant applications for the larger communication system needed.

CCCTA is also looking for funding from a grants process to hire a structural engineering firm to reevaluate the structural integrity of its Concord facility. This assessment would include both the buildings and tanks. The cost of any needed upgrades can only be estimated following the initial assessment.

The final strategies and Annex will be adopted in the same resolution adopting the overall LHMP on following Approval Pending Adoption by FEMA.

Ongoing integration of the policies and programs identified in this Local Hazard Mitigation Plan will occur at CCCTA within the Planning Department.

CCCTA will continue to work with MTC and the transit districts in the Bay Area to encourage them to adopt the Local Hazard Mitigation Plan and to ensure that these mitigation plans are incorporated into an overall regional planning process.

Plan Update Process

As required Disaster Mitigation Act of 2000, CCCTA will update this plan annex at least once every five years, by participating in a multi-agency effort with ABAG and other agencies to develop a multi-jurisdictional plan.

The Planning Department will ensure that monitoring of this Annex will occur. The plan will be monitored on an on-going basis. However, the major disasters affecting the CCCTA service area, legal changes, notices from ABAG as the lead agency in this process, and other triggers will be used. For example, if a structural engineer determines that a major risk exists at more or more buildings or tanks at the CCCTA Concord facility, the priority associated with upgrading those facilities will be re-evaluated. Finally, the Annex will be a discussion item on the agenda of the meeting of department heads at least once a year in April. At that meeting, the department heads will focus on evaluating the Annex in light of technological and political changes during the past year or other significant events. The department heads will be responsible for determining if the plan should be updated.

CCCTA is committed to reviewing and updating this plan annex at least once every five years, as required by the Disaster Mitigation Act of 2000. The Planning Department will contact ABAG four years after this plan is approved to ensure that ABAG plans to undertake the plan update process. If so, the agency again plans to participate in the multi-jurisdictional plan. If ABAG is unwilling or unable to act as the lead agency in the multi-jurisdictional effort, other agencies will be contacted, including the County's Office of Emergency Services. Counties and agencies should then work together to identify another regional forum for developing a multi-jurisdictional plan.

CCCTA is committed to public participation. All CCCTA Board meetings are open to the public and the public is invited to comment on items on the Board Agenda. The public will continue to

Central Contra Costa Transit Authority

be involved whenever the plan is updated and as appropriate during the monitoring and evaluation process. Prior to adoption of updates, CCCTA will provide the opportunity for the public to comment on the updates. A public notice will be posted prior to the meeting to announce the comment period and meeting logistics. CCCTA is committed to improving public participation in the update process over the next five years. To improve this process, CCCTA will consider writing letters to the editor of local newspapers in its service area to promote wider public knowledge of the issues related to disaster mitigation and the planning process.

Mitigation Plan Point of Contact

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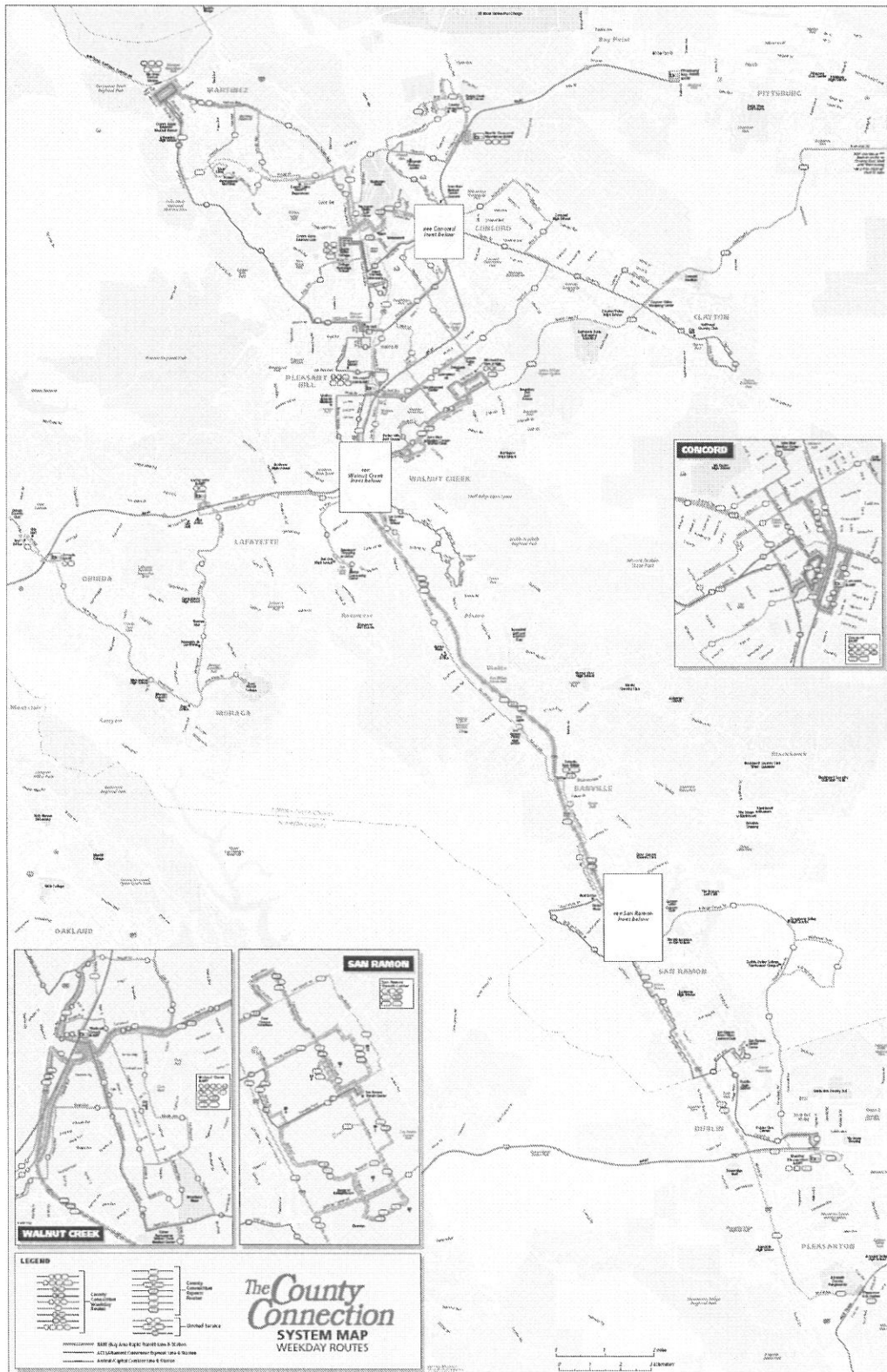
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Central Contra Costa Transit Authority

Exhibit A - General County Connection Transit System Map



For more detailed maps, see <http://cccta.org/> and click on “Maps and Schedules.”

Central Contra Costa Transit Authority

Exhibit B - CCCTA 2010 Mitigation Strategy Spreadsheet

[Available on LHMP CD or at <http://www.abag.ca.gov/bayarea/eqmaps/mitigation/strategy.html>]