

1. EASTERN CONTRA COSTA TRANSIT AUTHORITY-TRI DELTA TRANSIT

1.1 LOCAL PLANNING TEAM

Name	Title	Department
M. Wiggins	Compliance Manager	ECCTA
A. Diaz	Mgr. of Planning & Grants	ECCTA
R. Barnes	CEO	ECCTA
T. Tran	COO	ECCTA

Primary Point of Contact

Maceo Wiggins, Compliance Manager
801 Wilbur Avenue
Antioch, CA 94509
Telephone: 925-754-6622
e-mail Address: mwiggins@eccta.org

Secondary Point of Contact

Rashidi Barnes, Chief Executive Officer
801 Wilbur Avenue
Antioch, CA 94509
Telephone: 925-754-6622
e-mail Address: rbarnes@eccta.org

1.2 EXECUTIVE SUMMARY

The Eastern Contra Costa Transit Authority (ECCTA), also known as Tri Delta Transit, prepared this Local Hazard Mitigation Plan (LHMP) to reduce long-term risks to its passengers, employees, critical facilities, fleet, and essential operations. ECCTA is a Joint Powers Authority serving the cities of Antioch, Brentwood, Pittsburg, and Oakley, as well as unincorporated areas of Contra Costa County. The agency provides fixed route, express, and paratransit services throughout a 225 square mile service area with a population close to 400,000 residents.

ECCTA functions as a transportation lifeline for Eastern Contra Costa County. The agency delivers more than 2.5 million fixed route trips annually and provides more than 130,000 paratransit trips each year. ECCTA's primary facility at 801 Wilbur Avenue in Antioch, its bus parking lot at 1001 Wilbur Avenue, its fleet, radio communications systems, and other essential infrastructure support mobility for seniors, people with disabilities, youth, low-income riders, and transit reliant customers.

This LHMP is ECCTA's first stand-alone plan developed to meet the requirements of Title 44 of the Code of Federal Regulations (CFR) Section 201.6. While developed independently, the plan intentionally mirrors the structure, methodology, and hazard analysis approach used in Contra Costa County's 2024 Local Hazard Mitigation Plan. This alignment supports consistency across the region and allows ECCTA to be incorporated smoothly into the County's next LHMP update cycle while also ensuring the ECCTA planning process is consistent with the county's.

Purpose of the Plan

The LHMP identifies natural hazards that pose risk to ECCTA facilities and operations, evaluates the vulnerability of critical assets, and outlines strategies to reduce the impacts of future disasters. The plan establishes a foundation for mitigation investments and strengthens ECCTA's eligibility for hazard mitigation funding from state and federal programs.

Planning Approach

The plan incorporates information from Contra Costa County's 2024 LHMP, the California State Hazard Mitigation Plan, CalAdapt data resources, ECCTA's Public Transit Agency Safety Plan (PTASP), the Emergency Operations Center Plan, the Emergency Contingency Plan, facility maintenance documents, and other internal programs. ECCTA staff from operations, planning, maintenance, administration, and safety participated in plan development through the Safety Solutions Team (SST). The plan also uses the CDC Social Vulnerability Index and Census tract analysis to ensure that equity considerations are included throughout the planning process.

Internal ECCTA staff gave feedback on the planning approach and final review links SST, core planning leadership, and public/community input to ensure that the approach to hazard identification and mitigation planning is comprehensive and related directly to our ability to operate service during a hazard.

Hazard Risk and Vulnerability

The hazards evaluated in this plan include earthquakes, severe weather, dam and levee failure, flooding, landslides, wildfire, drought, sea level rise, tsunamis, and public health hazards. The risk assessment evaluates the exposure of ECCTA's critical facilities, its communications systems located at Kregor Peak, the agency's bus fleet, and other essential operational assets. Key vulnerabilities include potential damage to vehicles and facilities,

service disruptions caused by roadway failures, loss of radio communications during major seismic events, and increased emergency transportation demand if a disaster affects nearby transit systems and municipalities.

This plan also addresses the growing risks associated with sea level rise and climate change. ECCTA's primary facilities are located less than 1,000 feet from a major body of water, which causes long-term inundation, storm surge, and related flooding meaningful threats to facility operations, fleet circulation, and access routes. Evaluating the impacts and preparing the agency for the reality of sea level rise is therefore a necessary component of ECCTA's overall hazard vulnerability and long-term mitigation strategy.

Mitigation Strategy

This plan presents a set of mitigation actions that reduce the impact of hazards on ECCTA's operations and infrastructure. These actions include securing equipment and building components, improving emergency planning and SEMS and NIMS integration, strengthening the 801 Wilbur Avenue facility against potential flooding, developing a mobile Emergency Operations Center capability, maintaining and updating a Continuity of Operations Plan, and modernizing ECCTA's risk assessment methodology. All actions support ECCTA's long-term operational resilience and protect service continuity during emergencies.

Plan Maintenance

ECCTA will review this plan periodically and update it every five years, or sooner after major hazard events or operational changes. Future plan maintenance will incorporate updates from the PTASP, facility condition assessments, and ECCTA's asset management and fleet replacement planning efforts. ECCTA will also involve the public and partner agencies in future reviews and updates. For the purposes of this plan, ECCTA held a public meeting on 4-13-2026 where it presented the potential hazards, our risk assessment and goals and objectives for the plan.

Commitment to Implementation

ECCTA is committed to hazard mitigation as an essential part of its long-term planning and operations. Prior to submitting the plan for approval, the ECCTA Board of Directors will formally adopt the plan. Implementation will be overseen by the Compliance Manager with active support from leadership and staff across the organization. By planning proactively for natural hazards and coordinating with regional partners, ECCTA strengthens its ability to provide safe and reliable transportation before, during, and after disasters.

This Hazard Mitigation Plan is a stand-alone plan developed by the Eastern Contra Costa Transit Authority (ECCTA), a Joint Powers Authority formed under California Government Code §6500 et seq., to meet the requirements of 44 CFR §201.6 for local jurisdictions. Although submitted independently of the Contra Costa County 2024 Local Hazard Mitigation Plan update process, this plan is intentionally aligned with and builds upon the structure, hazard identification, risk assessment framework, and mitigation strategy contained in the County's LHMP to ensure consistency across the region.

1.3 JURISDICTION PROFILE

1.3.1 Overview

Eastern Contra Costa Transit Authority (ECCTA), also known as Tri Delta Transit, was formed in August of 1976 under the provisions of the California Joint Exercise of Powers Act, Government Code Sections 6500 et seq.

ECCTA represents the Cities of Brentwood, Antioch, Pittsburg and the county of Contra Costa. Oakley incorporated as a city and joined the Joint Powers Agency (JPA) in 1999. ECCTA is responsible for providing public transit fixed route and paratransit service within an approximate 225 square mile service area with a population of nearly 400,000 people.

ECCTA operates fixed route, express route and local paratransit services. The management, maintenance, oversight of the service contract, bus stop maintenance for the approximately 700 bus stops in the system, bus shelter ownership and maintenance, planning and marketing for fixed route, express and paratransit services is provided by ECCTA. Service operations are provided under a contract with Transdev. We are currently in the process of transitioning to a new service provider and expect that process to be completed in 2026.

ECCTA owns a facility at 801 Wilbur Avenue, Antioch, California and a bus parking lot located at 1001 Wilbur Avenue in Antioch, California. The facility was constructed in 1984 and expanded in 2004. This facility includes administration offices, operations offices, a dispatch area, driver's room, classroom space, maintenance bays and stores, fuel island, mechanical bus washer, security system, parking for all ECCTA vehicles and employees and other amenities.

The bus parking lot was constructed in 2003 and includes security cameras and assigned parking spaces for 24 paratransit buses and 40 fixed route buses.

ECCTA currently does not own nor maintain off-street passenger facilities. However, ECCTA buses provide service to a large bus transfer center at the Pittsburg/Bay Point BART station and three Park & Ride lots.

This plan was prepared utilizing the 2024 Contra Costa County (CCC) Hazard Mitigation Plan and adopts the 5 goals from this plan and incorporates them into this plan. This plan also leverages the 2024 key elements identified in the CCC plan so that this document is consistent in its analysis and goals as the 2024 plan:

- **Community Profile:** Demographics (including underserved population), social, and economic data, as well as existing and future land use descriptions, are updated to reflect the status of Contra Costa County and its jurisdictions.
- **Hazard Risk Assessment:** Outlines the process of measuring the potential loss of life, personal injury, economic injury, and property damage resulting from natural hazards. In this section, the process focuses on the following elements – hazard identification, vulnerability identification, and cost evaluation.
- **Mitigation Strategy:** The mitigation strategy describes how the community will accomplish the overall purpose of the planning process. In this section, mitigation goals and objectives were reevaluated and updated; and mitigation actions were updated, identified, evaluated, and prioritized.
- **Plan Maintenance:** The Hazard Mitigation Plan requires monitoring, evaluation, and updating every five (5) years. This section includes a schedule for annual monitoring and evaluation of the programmatic outcomes established in the Plan and for producing a formal Plan revision every five (5) years.
- **Appendices:** Includes the Contra Costa County's mitigation actions, stakeholder and public engagement details and supporting documentation, and the plan adoption.
- **Annexes:** This Plan includes no annex(es) as it is a standalone plan.

This document shall be submitted to the county so that ECCTA can be included in the 2028 plan revision. Until then, this will serve as ECCTA's Hazard Mitigation Plan and has been developed using the CCC 2024 plan and its annexes.

1.3.2

1.3.2 Population

ECCTA serves Antioch, Oakley, Brentwood and Pittsburg/Bay Point in Eastern Contra Costa County, a region with a combined population of nearly 400,000 residents. The residential population in ECCTA’s service area has expanded significantly and according to “Plan Bay Area 2040,” a regional transportation planning study made by the Metropolitan Transportation Commission, the population of ECCTA’s service area is expected to grow at an average of 1 percent per year. The cities of Antioch and Pittsburg currently have the highest population and make up nearly 50 percent of the entire population. Brentwood is in a close third and, along with Oakley, have been the fastest growing cities in the ECCTA service area.

Despite this growth, attracting choice transit users in a dispersed suburban and partially rural low-density environment such as east Contra Costa County is a very difficult task. Even with the Bay Area’s severe congestion problem, it is very difficult both operationally and economically to provide a transit alternative that meets these criteria. As a result, ECCTA primarily serves those who don’t own a motor vehicle or live in a household with a vehicle, but lack reliable regular access, or “Transit Reliant” passengers. These markets include a broad demographic group of seniors, persons with disabilities, youth, and low-income persons.

Maps showing population demographics and other related details have been adopted from the 2024 Contra Costa County Local Hazard Mitigation Plan and are incorporated here by reference.

1.3.3 Governance

ECCTA is governed by an eleven-member Board of Directors supported by a professional staff of thirty-six (44) maintenance and administrative employees and approximately two hundred and twenty (220) Transdev staff and operators. The Board includes two representatives from each of the four incorporated cities, two representatives from the county and one at-large member elected by the other members of the Board.

During the fiscal year just completed (FY2025), ECCTA operated 139,500 revenue hours for fixed route service, covering 1,754,000 revenue miles and serving 1,115,000 passengers. During the same fiscal year, ECCTA provided 81,300 passengers with paratransit services which covered 1,244,000 revenue miles and 63,000 revenue hours. Additionally, ECCTA provided 12,500 revenue hours, covering 354,000 revenue miles, and serving 51,400 passengers on TNC Services for its Mobility on Demand program.

ECCTA received grants for operating and capital purchases from the State Transportation Development Act (TDA), the Federal Transit Administration (FTA), State Transit Assistance (STA), Regional Measure 2 (RM2) funds, Regional Measure 3 (RM3) funds AB 664 funds, and Low Carbon Transit Operating Program (LCTOP). ECCTA also receives local operating assistance from Contra Costa County sales tax funds known as Measure J.

1.3.4 Assets

Table 1-1 summarizes the critical assets of the district and their value.

Asset	Value
Property	
7 acres of land	\$5M
Critical Infrastructure and Equipment	
Kregor Peak in Clayton, CA -the facility is owned by Contra Costa County and leased to ECCTA. ECCTA owns radio and microwave equipment located on this land to operate the bus tracking and radio systems on vehicles.	\$15,000
Total:	\$5,015,000

Asset	Value
Critical Facilities	
801 Wilbur Avenue, Antioch, CA (main facility)	\$43.5M
1001 Wilbur Avenue, Antioch, Ca (bus parking lot)	\$1.5M
Oakley Park & Ride Lot (no building just land at this time)	\$880,000
Antioch Park & Ride Lot (no building just land at this time)	\$530,000
Total:	\$46.4M
Revenue & Non-Revenue Vehicles	
40 Foot Motorcoaches (52)	\$25M
Cutaway Vehicles (50)	\$5.3M
Medvan, supervisor, Maintenance and Other Rubber Tired Vehicles & Related (29)	\$1.1M
Total:	\$31.3M

1.3.5 Changes in Priority

ECCTA’s overall hazard mitigation priorities have not significantly changed since the past plan update. Mitigation actions from the prior plan we reviewed, agendized, and discussed along with current goals at the ECCTA Safety Solutions Team (SST), an internal committee made up of front line and administrative staff who lead safety activities at ECCTA. This review by SST was designed to ensure inclusive feedback from planning, administrative and front-line staff while identifying and planning to mitigate hazards we can reasonably foresee we may encounter in the course of normal revenue service.

1.4 CAPABILITY ASSESSMENT

1.4.1 Planning and Regulatory Capabilities

All hazard mitigation plans are required to identify goals for reducing long term vulnerabilities in the Hazard area. Central to this effort, staff have consulted key stakeholders and reviewed a wide range of documents to re-affirm ECCTA’s capability to address hazards.

Jurisdictions develop plans and programs and implement rules and regulations to protect and serve residents. When effectively prepared and administered, these plans, programs and regulations can support the implementation of mitigation actions. In addition to those maintained by the county, the following existing ECCTA codes, ordinances, policies, programs or plans are applicable to this hazard mitigation plan:

- Hazard Mitigation Plan—last updated 2018
- Emergency Operations Plan—complete revision in 2022
- Facility Maintenance Plan—last updated 2019
- Hazard Assessment Checklist—last updated 2021
- Emergency Contingency Plan—last updated 2024
- Hazard Communication Plan—last updated 2024

1.4.2 Fiscal, Administrative and Technical Capabilities

Fiscal capability is an indicator of a jurisdiction’s ability to fulfill the financial needs associated with hazard mitigation projects. An assessment of fiscal capabilities is presented in Table 1-2. Administrative and technical capabilities represent a jurisdiction’s staffing resources for carrying out the mitigation strategy. An assessment of administrative and technical capabilities is presented in Table 1-3.

Table 1-2. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Capital Improvements Project Funding	Manager of Grants & Planning
Authority to Levy Taxes for Specific Purposes	Director of Finance & Accounting
User Fees for Water, Sewer, Gas or Electric Service	No- Not relevant to ECCTA
Incur Debt through General Obligation Bonds	No- Not relevant to ECCTA
Incur Debt through Special Tax Bonds	No- Not relevant to ECCTA
Incur Debt through Private Activity Bonds	No- Not relevant to ECCTA
State-Sponsored Grant Programs	Yes- Mgr. of Planning & Grants
Development Impact Fees for Homebuyers or Developers	Yes- Mgr. of Planning & Grants
Federal Grant Programs	Yes- Mgr. of Planning & Grants
Other	No

Table 1-3. Administrative and Technical Capability

Staff/Personnel Resource	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Compliance Manager
Engineers or professionals trained in building or infrastructure construction practices	No	
Planners or engineers with an understanding of natural hazards	Yes	Compliance Manager
Staff with training in benefit/cost analysis	Yes	CFO, Compliance Manager
Surveyors	No	
Personnel skilled or trained in GIS applications	Yes	Compliance Manager
Scientist familiar with natural hazards in local area	No	
Emergency manager	Yes	Compliance Manager
Grant writers	Yes	Mgr. of Planning & Grants
Other	No	

1.4.3 Education and Outreach Capabilities

Outreach and education capability identifies the connection between government and community members, which opens a dialogue needed for a more resilient community. An assessment of education and outreach capabilities is presented in Table 1-4.

Table 1-4. Education and Outreach

Criterion	Response
Do you have a Public Information Officer or Communications Office?	Yes
Do you have personnel skilled or trained in website development?	Yes
Do you have hazard mitigation information available on your website?	No
• If yes, please briefly describe	N/A

Criterion	Response
Do you utilize social media for hazard mitigation education and outreach? • If yes, please briefly describe	No N/A
Do you have any citizen boards or commissions that address issues related to hazard mitigation? • If yes, please briefly specify	No N/A
Do you have any other programs already in place that could be used to communicate hazard-related information? • If yes, please briefly describe	Yes Have used in the past- ECCTA web site and submit approval from ECCTA Board of Directors at public Board meeting.
Do you have any established warning systems for hazard events? • If yes, please briefly describe	Yes Have an employee hot line and would use 511 to distribute information. Also, all buses have radios and core staff have agency issued personal mobile devices

1.4.4 Adaptive Capacity for Climate Change

Given the uncertainties associated with how hazard risk may change with a changing climate, a jurisdiction’s ability to track such changes and adapt as needed is an important component of the mitigation strategy. Table 1-5 summarizes the District’s adaptive capacity for climate change. Climate change impacts us all and its effects have impacts on all the

Table 1-5. Adaptive Capacity for Climate Change

Criterion	Jurisdiction Rating
Technical Capacity	
Jurisdiction-level understanding of potential climate change impacts <i>Comments/Additional Information: None provided</i>	Low
Jurisdiction-level monitoring of climate change impacts <i>Comments/Additional Information: None provided</i>	Low
Technical resources to assess proposed strategies for feasibility and externalities <i>Comments/Additional Information: None provided</i>	Medium
Jurisdiction-level capacity for development of greenhouse gas emissions inventory <i>Comments/Additional Information: None provided</i>	Low
Capital planning and land use decisions informed by potential climate impacts <i>Comments/Additional Information: None provided</i>	Low
Participation in regional groups addressing climate risks <i>Comments/Additional Information: None provided</i>	Medium
Implementation Capacity	
Clear authority/mandate to consider climate change impacts during public decision-making processes <i>Comments/Additional Information: None provided</i>	Low
Identified strategies for greenhouse gas mitigation efforts <i>Comments/Additional Information: None provided</i>	Low
Identified strategies for adaptation to impacts <i>Comments/Additional Information: None provided</i>	Low
Champions for climate action in local government departments <i>Comments/Additional Information: None provided</i>	Low
Political support for implementing climate change adaptation strategies <i>Comments/Additional Information: None provided</i>	Low

Criterion	Jurisdiction Rating
Financial resources devoted to climate change adaptation <i>Comments/Additional Information: None provided</i>	Low
Local authority over sectors likely to be negative impacted <i>Comments/Additional Information: None provided</i>	Low
Public Capacity	
Local residents knowledge of and understanding of climate risk <i>Comments/Additional Information: None provided</i>	Low
Local residents support of adaptation efforts <i>Comments/Additional Information: None provided</i>	Low
Local residents' capacity to adapt to climate impacts <i>Comments/Additional Information: None provided</i>	Low
Local economy current capacity to adapt to climate impacts <i>Comments/Additional Information: None provided</i>	Low
Local ecosystems capacity to adapt to climate impacts <i>Comments/Additional Information: None provided</i>	Low

1.5 HAZARD MITIGATION PLAN INTEGRATION

The information on hazards, risk, vulnerability and mitigation contained in this hazard mitigation plan is based on the best available data. Plan integration is the incorporation of this information into other relevant planning mechanisms, such as general planning and capital facilities planning. It includes the integration of natural hazard information and mitigation policies, principles and actions into local planning mechanisms and vice versa. Additionally, plan integration is achieved through the involvement of key staff and community officials in collaboratively planning for hazard mitigation.

1.5.1 PAST PLAN INTEGRATION

In the performance period since adoption of the previous hazard mitigation plan, ECCTA made progress on integrating hazard mitigation goals, objectives and actions into other planning initiatives. The following plans and programs currently integrate components of the hazard mitigation strategy and both were recently updated in 2022 and 2023:

- **Emergency Operations Center Plan**—Has established policies and procedures for ECCTA to assist, respond and recover from a hazardous event. ECCTA participates in local, regional and state exercises to test emergency readiness. Staff also take specific training related to their roles in the EOC.
- **Emergency Contingency Plan**—Allows ECCTA to plan mitigation strategies before and after a disaster.
- **Safety Solutions Team** – Planning specifically includes an SST meeting for discussion and feedback, This meeting includes two (2) members of the broader planning team for the LHMP. This ensures front line staff are aware and incorporating LHMP thinking into the agency SMS.

1.5.2 Potential Future Integration

As this hazard mitigation plan is implemented, Eastern Contra Costa Transit Authority-Tri Delta Transit will use information from the plan as the best available science and data on natural hazards. The capability assessment presented in this plan identifies codes, plans and programs that provide opportunities for integration. The area-wide and local action plans developed for this hazard mitigation plan include actions related to plan integration, and progress on these actions will be reported through the progress reporting process described in Volume 1. New

opportunities for integration also will be identified as part of the annual progress report. The capability assessment identified the following plans and programs that do not currently integrate goals or recommendations of the hazard mitigation plan but provide opportunities to do so in the future:

- **Safety & Security Plan**—Identifies current safety and security vulnerabilities and is used as a means to prioritize mitigation projects.
- **Facility Maintenance Plan**—Gives ECCTA a current view of the state of repair of its facility in order to plan and budget for future capital improvements to mitigate current damage and to address possible future damage. We intend to explore the incorporation of ISO55000 Asset Management into the current planning cycle.
- **Continuity of Operations Plan (COOP)**—ECCTA does not have a completed COOP for post disaster recovery and intends to develop one as a mitigation planning action during this planning cycle.

1.6 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

There have been no past incidents or disasters that have disrupted transportation services in Eastern Contra Costa Transit Authority-Tri Delta Transit. Other hazard events that broadly affected the entire county area, including Eastern Contra Costa Transit Authority-Tri Delta Transit, are included in the 2024 Contra Costa County Plan.

1.7 HAZARD VULNERABILITY, IMPACT ASSESSMENT & HAZARD RISK RANKING

This plan provides a risk assessment for each identified hazard of concern. These hazards are summarized below based on relative risk ranking. ECCTA has adopted hazard identification, risk assessment methodology, probability framework, and hazard list contained in the 2024 Contra Costa County Local Hazard Mitigation Plan (LHMP), which is incorporated by reference into this document. Using the County’s hazard rankings and analytical framework as a baseline, ECCTA applied its internal risk assessment process to evaluate how these hazards specifically affect ECCTA facilities, assets, workforce, and transit operations.

The below tables 1-7- through 1-7-3 outline the probability of occurrence, extent/impact and the catastrophic factor. At a core level the risk is likelihood of occurrence X consequence = risk score. ECCTA then evaluated the county risk scores using our own operational and service lens and concludes with a Hazard risk ranking that shows the delta between ECCTA’s risk assessment for its activities versus the county.

Table 1-7-1. Probability of Occurrence

Probability	Description	Probability Factor
High	Significant hazard event is likely to occur annually.	3
Medium	Significant hazard event is likely to occur within 25 years.	2
Low	Significant hazard event is likely to occur within 100 years.	1
Unlikely	There is little to no probability of significant occurrence, or the recurrence interval is greater than every 100 years.	0

Table 1-7-2. Extent Factor

Probability	Description	Extent Factor
High	Historical and/or probabilistic models/studies for this hazard indicate the possibility of a high-intensity incident.	3
Medium	Historical and/or probabilistic models/studies for this hazard indicate the possibility of a medium-intensity incident.	2
Low	Historical and/or probabilistic models/studies for this hazard indicate the possibility of a low-intensity incident.	1
Unlikely	Historical and/or probabilistic models/studies for this hazard indicate the possibility of little to no intensity.	0

Table 1-7-3. Catastrophic Factor

Probability	Description	Extent Factor
High	Catastrophic hazard event is likely to occur at least once in 10 years.	3
Medium	Catastrophic hazard event is likely to occur at least once between 11 and 50 years.	2
Low	Catastrophic hazard event is likely to occur at least once in 51 or more years.	1
No Impact	Virtually no probability that this hazard could be catastrophic.	0

Table 1-6 presents a local ranking for Eastern Contra Costa Transit Authority-Tri Delta Transit of all hazards of concern for which this hazard mitigation plan provides a risk assessments. This ranking summarizes how hazards vary for this jurisdiction from those adopted by Contra Costa County. As described in detail below, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and the economy that mirrors the county assessment, but ranks them by risk to this agency by adding a modifier to the risk score. For example, Tsunami is not a major concern for ECCTA. Our location combined with the shape of the SF Bay limits our risk to Tsunami, while other parts of the county have measurable risk exposure. These scores were presented to our Safety Solutions Team (SST) for discussion and follow up prior to completing this plan and finalizing the risk register.

Table 1-6. Hazard Risk Ranking

Rank (County)	Rank (ECCTA Adjusted)	Hazard	Type	Risk Rating Score (Probability x Impact)	Category Notes
1	1	Earthquake	Natural		
3	3	Severe weather	Natural		
4 (Tie)	4	Flood	Natural		
8	ECCTA - Marginal	Dam and levee failure	Natural		ECCTA - Marginal
4 (Tie)	ECCTA - Marginal	Landslide	Natural		ECCTA - Marginal
2	2	Wildfire	Natural		
5	ECCTA - Marginal	Drought	Natural		
7	ECCTA - Marginal	Sea level rise	Natural		
9	ECCTA - Marginal	Tsunami	Natural		ECCTA - Marginal
6	5	Pandemic/Hazmat	Natural		ECCTA - Marginal

Below is a narrative summary of the lesser impactful events ordered into three categories, Tier 1, minimal/marginal to ECCTA, Tier 2, Systemic or specific context and Tier 3, Core hazards ECCTA has identified. These risk are outlined in the table above and summarized in the narrative below.

Tier 1 – Tier one are items that do not pose meaningful impacts to ECCTA but may impact the broader county and require mutual aid or similar from ECCTA to ensure continuity of operations

- Tsunami – ECCTA facilities are inland and outside of the zone in CALOES2.0 as a Tsunami impact zone. Regional disruption may occur and ECCTA would provide mutual aid to any transit agency in our county that requires assistance as our fleet, facility and staff are unlikely to be impacted.
- Landslide – ECCTA does have a facility located on a mountain/hilltop and as such a specific landslide in that region would impact our communications. However, this risk is relatively low. ECCTA has no other facilities in a landslide zone. Regional disruption may occur and ECCTA would provide mutual aid to any transit agency in our county that requires assistance as our fleet, facility and staff are unlikely to be impacted.
- Dam & Levee Failure – ECCTA facilities are inland and outside of the zone in CALOES2.0 as a dam & Levee failure impact zone. Regional disruption may occur and ECCTA would provide mutual aid to any transit agency in our county that requires assistance as our fleet, facility and staff are unlikely to be impacted.
- Sea Level Rise - ECCTA facilities are within 800 feet of a large, freshwater river however we are outside of the impact zone in CALOES2.0. Regional disruption may occur and ECCTA would provide mutual aid to any transit agency in our county that requires assistance as our fleet, facility and staff are unlikely to be impacted. In addition, our overall climate change posture will mitigate ECCTAs impact/contribution.

Tier 2 – Tier two are items that are macro level, long term challenges not directly caused by an incident

- Drought - ECCTA facilities are not directly impacted by drought. Regional disruption may occur and ECCTA would provide mutual aid to any transit agency in our county that requires assistance as our fleet, facility and staff are unlikely to be impacted. Most likely impacts are increased costs for water and employee stress.
- Pandemic – Global health pandemics, such as the recent COVID-19 pandemic have taught us that the most likely impacts are people based and that ECCTA will serve as a community lifeline for those who lack mobility options. ECCTA would provide mutual aid to any transit agency in our county that requires assistance as our fleet, facility and staff are unlikely to be impacted. Most likely impacts are increased costs for water and employee stress.

Tier 3 – Tier three are meaningful, noted risks that have the highest consequence for and are directly applicable to ECCTGA assets, facilities and service

- Earthquake – Earthquakes remain the primary hazard for most of the county and are our top risks.
- Wildfire – Wildfires, in particular in central Contra Costa County are relatively high risk given the geography and climate of the county, in particular it Lafayette/Concord/Orinda corridor.
- Flood – ECCTA is located 800 feet form a large body of water, Sacramento-San Joaquin Delta. Flooding carries the risk of damaging our facility and/or our revenue vehicle fleet.

Noted vulnerabilities within the district include the following associated with Tier 3 risks:

- ECCTA owns and operates 100+ buses and support vehicles. These vehicles may become damaged or destroyed in an event. If this occurs, they must be replaced in order to continue providing service to passengers. Roadway damage in the service area causing interruption of service
- The equipment and supplies located in ECCTA’s main building located on Wilbur Avenue is valued at approximately \$780,000 and may become damaged or destroyed in an event.
- During an event it is anticipated that transit agencies located closer to the major fault lines most likely to rupture, specifically BART, will require ECCTA’s assistance to transport passengers in and out of their service area to ECCTA’s service area where approximately 10,000 BART daily passengers live. Costs associated to providing this service at ECCTA’s current operating costs per hour could impact the ability to restore regular service to passengers if costs are not reimbursed in a timely manner.
- Kregor Peak in Clayton California is where ECCTA’s main radio tower is located. This area is in an active earthquake area and there is concern ECCTA will lose all bus radio communications in a large earthquake disaster.

1.8 STATUS OF PREVIOUS PLAN ACTIONS

The table below summarizes the status prior actions,.

Table 1-7. Status of Previous Plan Actions

Item	Complete	Note	Carry Over	Action Item
1— Shelving, computer systems, filing cabinets, etc. identified in ECCTA’s critical facilities will be anchored	Y		X	ECCTA-7
2— Improve/Update SEMS and NIMS plans	Y	Updated 2023	X	ECCTA-3
3— Install Hardened Communication Systems in ECCTA’s EOC	Y	ECCTA has an embedded and MANP system		ECCTA-4
4— Update ECCTA’s Emergency Operations Plan	Y	Updated 2022	Y	ECCTA-6

1.9 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED ACTIONS

Table 1-8 lists the actions that make up the Eastern Contra Costa Transit Authority-Tri Delta Transit hazard mitigation action plan. Table 1-9 identifies the priority for each action, including those which remain as ongoing or as action items for periodic updated during the period covered by the plan. Table 1-10 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 1-8. Hazard Mitigation Action Plan Matrix

Applies to new or existing assets	Hazards Mitigated	Objectives Met	Lead Agency	Estimated Cost	Sources of Funding	Timeline
ECCTA-1 —Where appropriate, support retrofitting or relocation of structures in high hazard areas, prioritizing structures that have experienced repetitive losses.						
Existing	All Hazards	Ongoing	ECCTA COO	High	HMGP, PDM, FMA	Short-term
ECCTA-2 —Actively participate in the plan maintenance protocols outlined in this hazard mitigation plan.						
Existing	All Hazards	Ongoing Review in 2027	ECCTA Compliance Manager	Low	Staff Time, General Funds	Short-term
ECCTA-3 —Improve SEMS and NIMS plans and integrate information from the update to the hazard mitigation plan, as appropriate.						
Existing	All Hazards	Ongoing Review in 2027	ECCTA Compliance Manager	Low	Staff Time, General Funds	Short-term
ECCTA-4 —Maintain EOC hardware and develop alternative for replacing decommissioned mobile EOC						
Existing	All Hazards	Ongoing	ECCTA Compliance Manager and COO	Low	General Funds, IT Support, possible FEMA/DHS grants	Long-term
ECCTA-5 —Mobile EOC- will need to plan for alternate comms in case radio tower damaged/destroyed						
Existing	All Hazards		ECCTA COO and ECCTA Compliance Manager	High	General Funds, Staff Time, HMGP, possible FEMA/DHS grants	Long-term
ECCTA-6 —Maintain and revise as needed a Continuity of Operations Plan						
Existing	All Hazards	Ongoing Review in 2027	ECCTA Compliance Manager with all other management staff participating in the planning.	Low	General Funds, Staff Time, possible FEMA/DHS grants	Long-term
ECCTA-7 —Continue to anchor shelving, computer systems, filing cabinets in ECCTA’s critical facilities						
Existing	Earthquake		ECCTA COO	Low	General Funds, Staff Time	Short-term
ECCTA-8 —Harden Facility to Address Flooding from Delta						
New	Flood		ECCTA COO & ECCTA Compliance Manager	High	General Funds, Staff Time, possible FEMA/DHS grants	Medium term
ECCTA-9 – Modernize Risk Assessment Process – Updated ISO 31000 process training to staff						
New	All Hazards		ECCTA Compliance Manager with all other management staff participating in the planning.	Low	Staff Time	Short-Term
ECCTA10 – Facility/Asset Risk and Security Plan						
	All Hazards		Facilities Manager Compliance Manager	Medium	General Funds, Staff Time, possible FEMA/DHS grants	Short-Term

Note: * = Indicates lead agency

Prioritization of risk elements is based on the overall driver. For example, report/planning items share similar characteristics so ECCTA-2, -3, -6 and -9 are all prioritized in order of impact and are largely staff driven. Other critical areas ECCTA-1, -8, -7 and -4 are capital intensive but critical actions to protect asserts needed and at-risk during hazards. As capital intensive and requiring grant support these are high cost and high consequence actions under the above-referenced risk assessment framework adopted by the county. Other lower ranking projects fall in after critical, low-cost high consequence planning and high cost high consequence capital intensive activities.

Table 1-9. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
ECCTA-1	TBD	TBD		Y	Y	N	1	1
ECCTA-2	TBD	TBD		Y	Y	Y	5	5
ECCTA-3	TBD	TBD		Y	Y	Y	7	7
ECCTA-4	TBD	TBD		Y	Y	N	4	4
ECCTA-5	TBD	TBD		Y	Y	N	6	6
ECCTA-6	TBD	TBD		Y	Y	Y	4	4
ECCTA-7	TBD	TBD		Y	Y	N	3	3
ECCTA-8	TBD	TBD		Y	Y	N	2	2
ECCTA-9	TBD	TBD		Y	Y	N	9	9
ECCTA-10	TBD	TBD		Y	Y	N	10	10

a. See the introduction to this volume for explanation of priorities.

Table 1-10. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building
All hazards	ECCTA-10, 9, 8	ECCTA-1, 9, 8, 7, 6			ECCTA-3, 4, 5, 6	ECCTA-1, 8		ECCTA-2, 3, 6, 9
Dam and Levee failure								ECCTA-2, 3, 6, 9
Drought								ECCTA-2, 3, 6, 9
Earthquake		ECCTA-1, 7, 8						ECCTA-2, 3, 6, 9
Flood	ECCTA-1, 8	ECCTA-1, 8			ECCTA-8		ECCTA-8	ECCTA-2, 3, 6, 9
Landslide	ECCTA-1	ECCTA-1, 8						ECCTA-2, 3, 6, 9

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building
Severe weather	ECCTA-1	ECCTA-1, 8						ECCTA-2, 3, 6, 9
Tsunami								
Wildfire	ECCTA-1	ECCTA-1, 8						ECCTA-2, 3, 6, 9

a. See the introduction to this volume for explanation of mitigation types.

1.10 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

ECCTA will need to conduct a more detailed security and hazard review of its primary facility located at 801 Wilbur. Numerous building improvements and equipment additions to ECCTA’s facility have been made recently and a threat/risk assessment should be made to determine the risk to the facility and employees in the event of a disaster. Once major facility repairs have been completed in 2026, staff will develop a plan to conduct a more detailed security, safety and hazard review and align this view with our Asset Management Program and Fleet Replacement Program. This is intended to coincide with a condition assessment of the facility and its subcomponents under the ECCTA Asset Management planning process.

1.11 REVIEW AND INCORPORATION OF RESOURCES

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex. In 2025, ECCTA updated its Public Transit Agency Safety Plan, a USDOT requirement that shares many similarities with this hazard mitigation plan. This updated plan has been incorporated here by reference and the criticality assessment has been used to complete the assessment of risk and vulnerability under this plan. Our annual review and update of our PTASP will include updates to this annex where applicable and appropriate. This plan also adopts the risk assessment and identification method from the PTASP to ensure standardized risk assessment across ECCTA planning and risk mitigation activities.

- **2010 Local Hazard Mitigation Plan**—Accepted/approved by FEMA on March 24,2011. This plan was used as ECCTA’s guideline for completing this plan to ensure follow through with the recommendations made in the 2010 plan to help mitigate ECCTA’s vulnerabilities in the event of a natural disaster. The 2010 Plan was also used to ensure ECCTA will comply with plans for what was forecasted for future projects/issues.
- **Emergency Operations Plan**—After the BART fire in Oakland had shut down their service, ECCTA realized it needed to update its Emergency Operations Plan. While that event did not disrupt ECCTA’s service it did require ECCTA’s Operations Department to provide more service, more quickly for ECCTA passengers riding to and from the Pittsburg BART Station. MTC funded a consultant to completely revise ECCTA’s Emergency Operations Plan in 2016. This revision included tactics and measures for ECCTA to follow in responding to an event and perform mitigation strategies for future “like” events as well as for all hazards..
- **Facility Maintenance Plan**—Referred to current use of maintenance performed on/at facility to mitigate future wear and tear. This plan was updated to reflect the mitigation strategies performed (bolting

shelving areas) as outlined in the 2010 Local Hazard Mitigation Plan. This plan now reflects the mitigation work performed as well as a maintenance schedule to ensure the work is properly maintained.

- **Hazard Assessment Checklist**—Every year this checklist is performed for all job positions. Mitigates any possible restrictions to performing job duties safely and also mitigates any problems with shop/facility equipment. This checklist was updated describing the parameters used for mitigation functions described in the 2010 Local Hazard Mitigation Plan.
- **Emergency Contingency Plan**—This plan is regularly updated to assist staff in mitigating any future environmental problems as well as how to mitigate a spill and clean-up procedures. This plan was updated using the new checklists added to ECCTA’s 2016 Emergency Operation Plan. These checklists have specific work to be performed in order to respond, recover and mitigate from an environmental/chemical event.
- **Hazard Communication Plan**—Helps to identify hazards in the workplace and has a training plan to mitigate environmental disasters from and/or after they happen. Using the updates to ECCTA’s 2016 Emergency Operations Plan, this plan updated it’s identification of hazards and updated it’s training plan to respond, recover and mitigate hazards in the workplace.
- **Hazard Mitigation Plan Annex Development Tool-kit**—The tool-kit was used to support the development of this annex including past hazard events, noted vulnerabilities, risk ranking and action development.

DRAFT