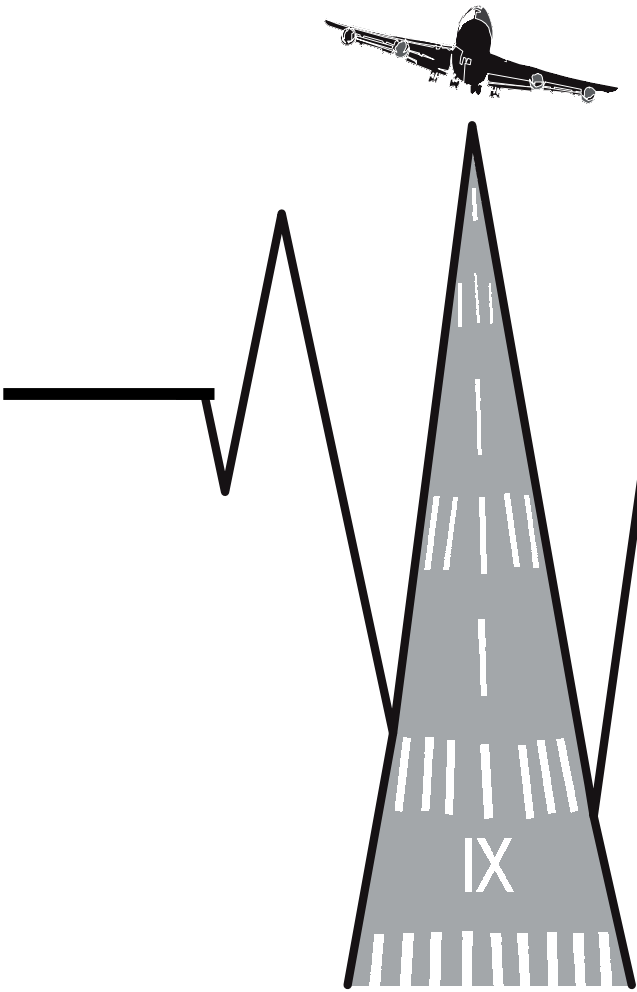


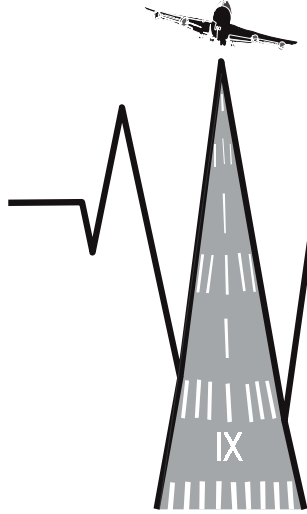
# Don't Wing It



Airports and  
Bay Area  
Earthquakes

**DECEMBER 2000**

**ASSOCIATION OF BAY AREA GOVERNMENTS**



# Don't Wing It

## Airports and Bay Area Earthquakes

Using Airport Vulnerability Data and Response Capability to  
Improve Planning for Post-Earthquake Transportation Disruptions  
in the San Francisco Bay Region

**DECEMBER 2000**

### **ASSOCIATION OF BAY AREA GOVERNMENTS**

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**MTC** METROPOLITAN  
TRANSPORTATION  
COMMISSION



**ABAG** ASSOCIATION  
OF BAY AREA  
GOVERNMENTS

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## BACKGROUND AND OBJECTIVES ...

These materials build on two reports on the vulnerability of the region's transportation system to earthquakes published by ABAG –

- *Riding Out Future Quakes* – October 1997
- *Riding Out Future Quakes – Ideas for Action* – March 1999

The *Riding Out Future Quakes* project was initiated by ABAG and Caltrans following the Northridge and Loma Prieta earthquakes. We learned that we need our transportation systems to be functional after earthquakes for two principal reasons:

- Emergency responders need to use transportation systems, including airports, after earthquakes.
- Transportation system disruptions, including disruptions to airports, can have a severe impact on a region's economy for months, if not years.

As a second step in the planning process, ABAG held a series of five subregional workshops discussing hypothetical road and rail closures resulting from selected scenario earthquakes in October and November 1998. "Tabletop" disaster drills and extensive discussion led to identification of the major issues, interagency dependencies, and areas of potential conflict likely to face transportation providers, governments, utilities and businesses as they struggle to address the transportation impacts after a large earthquake. The *Riding Out Future Quakes – Ideas for Action* report is both the proceedings of those workshops, as well as a tool to inspire innovative planning for minimizing transportation disruption following future earthquakes. One conclusion of these workshops was the importance of airports in the region's response and recovery to earthquakes.

At the same time, MTC is continuing to test and refine the Trans Response Plan (TRP) which integrates response and recovery efforts among all modes of transportation. The TRP coordinates the activities of MTC, Caltrans, State and local Offices of Emergency Services, and other transportation providers, including transit agencies and airports.

Our work on airports and earthquakes has five principal overall *objectives*:

- To develop a *long-term partnership* among air transportation providers, users, the earthquake research community, and earthquake responders to foster cooperation for response and recovery.
- To assess the *vulnerability of our air transportation system* to liquefaction and land-side access issues given the scenario earthquakes considered likely Bay Area.
- To assist in *collaborative planning for emergency response* among the airports, emergency responders, and cargo and passenger carriers. Emergency responders are depending on our airports for delivering disaster cargo and disaster relief workers.
- To identify methods for *minimizing long-term impacts* of reduced land-side access and airport damage following future earthquakes, thereby minimizing impacts on airport business, the cargo industry, and our regional economy.
- To *increase public awareness* and support of emergency planning activities at and among airports.

As a first step in this process, ABAG has been actively involved in the discussion of earthquake issues as part of the *Regional Airport System Plan (RASP) Update 2000* process. In addition, ABAG held a workshop on October 10, 2000, to discuss the potential problems outlined in this report and to begin the process of developing strategies to cope to earthquake-related disruptions to airports.

- What are the options for bringing relief aircraft into the region if all runways at one or more major airports are damaged beyond immediate repair?
- What kinds of concerns should airport safety managers be addressing? What specific Bay Area earthquake issues should be included in their earthquake plans?
- What are the potential problems and solutions related to land-side access?
- How should emergency plans be improved to deal with areas likely to be damaged in an earthquake?
- If an airport lifeline network is established, what are the critical land-side components of that network (control towers, runways, key access routes, etc.)?

