CHAPTER 6.0

PUBLIC SAFETY ELEMENT

6.1 INTRODUCTION

The State of California Government Code Section 65302(g) requires a safety element in all city and county plans, as follows:

"The general plan shall include a safety element for the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence and other geologic hazards known to the legislative body; flooding; and wildland and urban fires. The safety element shall include mapping of known seismic and other geologic hazards. It shall also address evacuation routes, peakload water supply requirements, and minimum road widths and clearances around structures, as those items relate to identified fire and geologic hazards."

The effect of this legislation is to require local communities to be particularly cognizant of fire and geologic hazards and to incorporate in their planning programs various means for reducing loss of life, injuries, damage to property, and economic and social dislocations resulting from fire and dangerous geologic events, such as seismic activity or seismically induced liquefaction, as is the case in Fountain Valley.

In addition to the State's requirement to pay particular attention to fire and geologic hazards, Fountain Valley has potential flood problems related to the Santa Ana River, as well as hazardous materials and waste related to certain commercial and industrial uses. In addition, the City is concerned with the provision of police protection and services.

Although the City has no identified fire or geologic hazards, road widths and clearances around structures are reviewed by the Fire Department and the Building Department prior to City approval of new development.

The City is prepared to meet emergency situations. A multi-hazard functional plan includes an evacuation plan with traffic control points at every major arterial intersection, as shown in Figure 6-1. The Evacuation Plan provides guidance for the conduct of evacuation, dispersal or relocation operations during natural disasters, technological incidents, and nuclear defense emergencies. It also describes the organization and responsibilities for conducting evacuation operations.

The Emergency Operations Center provides a centralized focus of emergency management in the event of a major emergency or disaster within the City. The EOC operations are directed by the City Manager, emergency management staff (City Department heads), and representatives from organizations who are assigned emergency responsibilities (Red Cross, schools, hospitals, etc.). The EOC has three potential operations centers ranked in order of priority:

Primary: Police Station
         10200 Slater

Secondary: City Yard

Third: Recreation Center
       16400 Brookhurst

In addition to "fixed" facilities, the City has a mobile command vehicle capable of serving as a limited use EOC in a field environment. This vehicle is radio equipped, operational 24 hours and parked at the City Yard at 18240 Ward, Fountain Valley.
The primary EOC is located within the Police Department Squad Room and has 24 hour security. Strict control of non-departmental personnel is maintained at the lobby entrance by a sworn police representative.

The EOC is equipped with essential administrative supplies to sustain operations for an extended period of time. In addition, all necessary forms, i.e. Communications Message Forms, Separate journals for each Emergency Service, Shelter Registration Cards, Volunteer Registration Forms, Emergency Requisition Forms, Damage Assessment Survey Sheets for all possible contingencies are stocked in the EOC.

A separate "activation procedure" book has been developed and is kept at the Police Dispatch Center, the Police Squad Room (EOC itself) and in the office of the Emergency Preparedness Coordinator.

**Lines of Succession and Alternate Officials**

Provisions for preservation of local government are covered by the California Emergency Services Act (Government Code, Chapter 7 of Division 1 of Title 2). In the event of war-caused vacancies, the City Council will reconstitute itself in accordance with the provisions of that Act (Article 15, Section 8642, 8643 and 8644).

A successor to the position of City Manager (Director of Emergency Services/Civil Defense) is appointed by the City Council. Should the Director be unable to serve, individuals who hold permanent appointments to the following positions in government will automatically serve as Acting Director, in the order shown, and serve until a successor has been appointed by the City Council and seated. An individual serving as Acting Director shall have the authority and powers of the Director.

| Police Chief | First Alternate |
| Public Works Director | Second Alternate |
| Fire Chief | Third Alternate |
| Planning Manager | Fourth Alternate |

Depending on the nature of the disaster, the order of succession should be modified based on the following criteria:

| Fire Chief | Second Alternate |
| Hazardous Materials Incident | |
| Public Works Director | Second Alternate |
| Floods | |
| Police Chief | Second Alternate |
| Riots, civil disturbances | |

**Temporary Seat of Government**

City Council shall designate alternate sites which may be located outside City boundaries.

In the event the normal location of City Hall is not practical because of emergency conditions, the temporary seat of government will be as follows:

| Police Station | First Alternate |
| Fountain Valley Recreation Center | Second Alternate |
| Community Center | Third Alternate |

**Preservation of Vital Records**

Vital records are defined as those records that are essential to:

- Protect the rights and interests of individuals and organizations. Examples include vital statistics, tax records, license registers, and articles of incorporation.

- Conduct emergency response and recovery operations. Records of this type include utility system maps, locations of emergency supplies and equipment, Emergency Operating Procedures and personnel rosters.
Reestablish normal governmental functions. Included in this group are charter, statutes, ordinances, court records, and financial records.

Each level of government down to the departmental level is responsible for designating a custodian for vital records, and ensuring that vital records storage and preservation is accomplished.

The City Clerk is the designated custodian of vital records.

Public Safety Facilities are shown in Figure 6-1.

**Goal**

6.1 Minimize hazards to public health, safety and welfare resulting from natural and man-made hazards.

**Policies**

6.1.1 Improve the City’s ability to respond to large scale emergencies.

6.1.2 The City shall update, on a regular basis, the multi-hazard functional plan to ensure that emergency response and evacuation routes are accessible throughout the entire City.

6.1.3 Educate and coordinate preparation of private sector emergency plans.

**6.2 GEOLOGIC HAZARDS**

**Seismic Conditions**

Fountain Valley, like most cities in California, is located in a seismically active region. It can be expected, therefore, that a significant seismic event will affect the community. The timing and magnitude of such an event cannot be predicted, although planning efforts for emergency response must be based on the certainty of such an event.

Abrupt movements along faults are the cause of earthquakes. These movements can result in both primary and secondary hazards. Primary hazards result directly from ground motion and include ground rupture along the trace of the fault and ground shaking. Secondary hazards result from the interaction of the shaking and existing ground instabilities. They include settlement, landslides, and liquefaction (a sudden loss of strength in water-saturated sediments).

Earthquake shaking at a particular site is a function of both distance to the fault and site geology. The majority of the Fountain Valley planning area has been classified in terms of intensity as an 8 on the Rossi-Forel Intensity Scale on a scale of 1 to 10; 10 being most likely to suffer surface fault rupture, liquefaction or other ground failure. Fountain Valley has a high potential of ground failure including liquefaction and settlement due to the high content of ground water. The City could suffer shocks strong enough to cause severe structural damage.

**Area Faults**

Fountain Valley is fortunate not to have any faults within the City's boundaries although liquefaction could cause a major threat to the area should a significant seismic event occur. In the last 60 years, the vicinity around Fountain Valley has experienced fifteen earthquakes ranging in Richter Scale readings from 4.5 to 6.5 magnitude. Most of these events have been attributed to the two faults located nearest to the planning area; the Newport-Inglewood Fault, which angles from offshore near Dana Point inland through the City of Newport Beach, on into Los Angeles County through Long Beach, and into Torrance, and; the Whittier-Elsinore Fault, which follows a general line easterly of the Santa Ana Mountains into Mexico, as shown on Figure 6-2, Regional Seismicity.
Other faults outside of Orange County could cause significant damage in Fountain Valley as well. Faults located in the 50 mile radius of Fountain Valley are the San Andreas, San Jacinto (including Imperial and Superstition Hills), Norwalk, Malibu-Coast-Raymond, Palos Verde, San Gabriel and Sierra Madre-Santa-Susana-Cucamonga (including "San Fernando") faults. Any fault located within a fifty-mile radius is considered noteworthy and should be considered as a potential hazard that could cause minor to moderate damage depending on the magnitude.

Alquist-Priolo Special Studies Zones

The Alquist-Priolo Special Studies Zone Act was signed into law in 1972. The purpose of this Act is to prohibit the location of most structures for human occupancy across the traces of the active faults within a Special Studies Zone, thereby minimizing the hazard of fault rupture for future occupants of the area. Unless proven otherwise, the area within 50 feet of an active fault is presumed to be underlain by that fault. Because Fountain Valley does not have known faults extending within its boundaries, there are no Special Studies Zones located within the City.

Liquefaction

Liquefaction is a process whereby strong earthquake shaking causes sediment layers that are saturated with groundwater to lose strength and behave as a fluid. This subsurface process can lead to near-surface or surface ground failure that can result in property damage and structural failure. Ground water which is less than ten feet to the surface can cause the highest liquefaction susceptibility. Groundwater ten to thirty feet below the surface can create a moderately high to moderate susceptibility. Groundwater thirty to fifty feet deep can create a moderate to low susceptibility, see Figure 6-3.

Ground water in Fountain Valley is less than ten feet from the surface probably due to the swampland that existed within the planning area in the early 1900’s, therefore, liquefaction in Fountain Valley has a very high potential.

Seismic Seiches

Seismic seiches are waves which can occur in a body of water as a result of seismic shaking. Seiching has been known to occur within storage tanks located near a fault, as it did in the 1971 San Fernando earthquake. In extreme cases, such waves can rupture a water tank. Fountain Valley has a large waste water treatment facility located within its city limits that has a high probability of being damaged and/or shutdown. In addition there are five (5) waste water pipelines that run to and from this treatment facility.

The City is aware of the dangers of seismic activity, seismically induced liquefaction, and seiches. The City addresses these concerns with preventive measures to retrofit vulnerable structures, as noted in the policies that follow, and with emergency preparedness. The City maintains a detailed multi-hazard functional plan as well as citizen education programs, also noted in the General Plan policies.

Goal

6.2 Minimize hazards to public health, safety and welfare resulting from geotechnical hazards.

Policies

6.2.1 The City shall promote increased public awareness regarding seismic safety.

6.2.2 Coordinate and cooperate with other agencies within the County to assist in the mitigation of geologic and seismic hazards.

6.2.3 Develop a program to identify and rehabilitate seismically vulnerable structures within the City.

6.3 FLOODING

Virtually all of the City of Fountain Valley is within the 100 year floodplain, with a small portion of the City on the western edge within the 500 year floodplain, as reflected on Figure 6-4.
Figure 6-3
Fountain Valley
Figure 6-4

Flood Hazard Potential
Fountain Valley

LEGEND

- 100 YEAR FLOOD HAZARD AREA
- 500 YEAR FLOOD HAZARD AREA
The Santa Ana River, which carries runoff from large portions of Orange, Riverside, and San Bernardino Counties, provides the greatest flood hazard potential for Fountain Valley. Areas directly adjacent to the Santa Ana River may be expected to be flooded by water ranging from 1 to 3 feet in depth in the event of a 100-year storm.

Another potential flood problem related to the Santa Ana River is the possible failure of Prado Dam, induced by seismic or other forces. This is one of the several contingencies addressed by the Fountain Valley Multihazard Functional Plan, as well by the City's disaster preparedness citizen education programs.

The Federal Emergency Management Agency (FEMA) National Flood Insurance Program's Flood Insurance Map shows that the Federal Government has determined that Fountain Valley is almost entirely in the Federal Insurance Agency Hazard Zone and is subject to widespread flooding.

Recently the U.S. Army Corps of Engineers appropriated $80 million for the first phase of improvements to the Santa Ana River; the federal government has approved a total of $1.4 billion over a ten year period. The flood control project would include widening a portion of the Santa Ana River near the river's mouth, creating a water-storage area below Irvine Lake, and building a new dam in the vicinity of Mentone.

Goal

6.3 Minimize risk and damage from flood hazards within the City.

Policies

6.3.1 Maintain siting and development standards to reduce risk and damage from flood hazards within the City.

6.3.2 The City shall cooperate with local, State and Federal flood control agencies to reduce the potential for flood damage in the City of Fountain Valley.

6.3.3 The City shall increase public awareness of flood hazards.

6.3.4 Minimize the adverse effects of urbanization upon drainage and flood control facilities.

6.4 FIRE

Fire prevention, fire protection, emergency medical aid and citizen safety protection within the City are provided by the City of Fountain Valley Fire Department. The City of Fountain Valley maintains a comprehensive Automatic Aid Agreement for fire protection and emergency medical aid services with the contiguous cities of Santa Ana, Costa Mesa, Newport Beach, Huntington Beach, Westminster and the County of Orange. This agreement provides the shortest possible emergency response time, and includes training, arson investigation, communications and weekly administrative coordination between all entities.

The City of Fountain Valley is signatory to the California Mutual Aid Fire Protection System. This agreement was established to provide assistance for major emergency incidents anywhere in the State.

Goal

6.4 Minimize fire losses and damage within the City.

Policies

6.4.1 Increase the Fire Prevention Division's ability to provide service and effectiveness in delivering and administering programs to both the Department and the community.
6.4.2 Enhance the City's fire protection capabilities.

6.4.3 Develop new and expand existing public fire safety education programs (including disaster preparedness), continue to be proactive in public safety education.

6.5 HAZARDOUS WASTE

Proper hazardous waste management constitutes one of the state's major environmental concerns. Hazardous chemicals play an important role in our modern society. They contribute to the manufacture of a vast array of consumer products (i.e., television, computers, automobiles, and medicines) and the convenience of consumer services (i.e., dry cleaners, automotive repair). While these goods and services add to our quality of life, they also cause the generation of hazardous waste. Reducing our reliance on hazardous materials would reduce the generation of waste.

Releases of explosives and highly flammable materials and toxic chemicals in gaseous form have caused injuries and fatalities statewide. When toxic materials have entered either surface or ground water supplies, serious health effects have resulted. Releases of hazardous chemicals have been especially damaging when they have occurred in highly populated areas or along heavily traveled transportation routes.

Hazardous waste will continue to be generated, however, since some materials have no substitutes. For this reason, comprehensive planning is necessary to identify and promote programs for the reduction of hazardous waste and the safe management of wastes that remain after treatment or recycling.

Hazardous waste can be categorized into five major groups: hazardous material, hazardous waste, infectious waste, radioactive material and nuclear materials (San Onofre Nuclear Generation Station or SONGS). Sources of hazardous material include manufacturing and service industries, nuclear plants, agriculture, military bases, hospitals, schools and households.

Hazardous wastes can be solids, liquids, gases or sludges. A major issue concerning hazardous wastes is the potential of an accidental release occurring. It can occur during any stage of handling, but particularly during storage and disposal.

Hazardous material incidents differ from other emergency situations because of their unpredictable nature and the possibility of long-range toxic effects. The circumstances and geographic features in the vicinity of incidents varies greatly. Incidents may occur at fixed facilities where the opportunity for development of site specific safety plans is possible. Fountain Valley has had hazardous materials incidents at fixed facilities. Hazardous materials incidents may also occur at any place along any transportation route and in the case of illegal dumping, may occur in remote areas.

The Los Angeles region, of which Orange County is considered a part, is the third highest hazardous waste generation area in California according to the Department of Health and Services (DOHS).

The increasing volume and variety of hazardous materials that are generated, stored or transported within Fountain Valley can create risk to human health and the environment. The City of Fountain Valley is particularly vulnerable to hazardous materials accidents caused by transportation accidents. The City is divided by the I-405 Freeway and contains heavily traveled routes both north and south. The City estimates that one out of every ten trucks is carrying some form of hazardous material. To address this issue, the City has established a multi-hazard functional plan, part of which specifically addresses threat involved in the manufacture, storage, disposal and transportation of hazardous waste.
Industrial and commercial businesses are located throughout the City and process, store and/or manufacture a wide variety of hazardous materials. The most vulnerable area of the City is the east side, from Warner Avenue, south to Garfield Avenue and along the Santa Ana River. The largest firm posing a threat is the Orange County Sanitation District. Radiological materials are also used in hospitals and industrial applications. Some transportation of radioactive materials occurs on various routes throughout the City.

In addition, there are some abandoned oil distribution lines located throughout the City, and there are natural gas lines which parallel the freeway.

A disclosure ordinance has been adopted which requires businesses to inform the Fire Department of the types, amounts and processes used in manufacturing and storage within the City.

In accordance with State Law, the City of Fountain Valley has prepared, adopted and submitted to the County of Orange a household hazardous waste element which identifies a program for the safe collection and disposal of household hazardous wastes generated by households in the City.

Goal

6.5 Effective management and disposal of hazardous waste on a Citywide level.

Policies

6.5.1 Cooperate with Federal and State hazardous waste management plans to protect the health and welfare of the public, the environment and the economy of the City of Fountain Valley through comprehensive programs that ensure safe and responsible management of hazardous waste and materials.

6.5.2 Ensure the effective management and disposal of hazardous waste on a Citywide level.

6.5.3 Promote public participation and education in the implementation of the programs identified in this Element and the County's Hazardous Waste Management Program.

6.6 LAW ENFORCEMENT

Staffing

The City Police Force is presently headquartered in the City's Civic Center, at 10200 Slater Avenue. Currently, the City of Fountain Valley Police Department has 65 authorized sworn officers which is approximately one (1) police officer for every 1,000 residents of the City. The City standards for officer training are those set forth under the State guidelines of Police Officers Standards and Training (POST).

The Police Department is divided into three divisions: Patrol (dispatchers, traffic and K-9), Administration (records and crime lab), and Investigation (which includes the Law Enforcement Apprehension Program or LEAP, vice, narcotics, burglary and property investigation).

The City also employs civilian personnel who are hired for pay or on a volunteer basis for performing administrative tasks and auxiliary duties. In addition, the City has a new program, called Retired Seniors Volunteer Program, or RSVP, an auxiliary patrol group of senior citizens who are well trained, donating their time to perform activities such as residential vacation checks, business and residence security inspections, and parking enforcement for specific problems such as handicapped and fire zone violations. The senior volunteers do not carry weapons nor are they assigned to any activity which could pose any danger.
Special programs which are offered to the community by the Police Department include: the Law Enforcement Apprehension Program (LEAP), Drug Abuse Resistance Education (DARE), and the Crime Prevention Program. In addition, a Neighborhood Watch Program is in effect in the community, every resident in the City is a member of the program, although not all residents participate. Neighborhood meetings and a newsletter are distributed through this program. Additional programs offered through Neighborhood Watch are the Disaster Preparedness (in support of the City's goals and objectives), and Child Awareness Programs, as well as a Baby Sitting Clinic.

The Neighborhood Watch office is located in the Police Station at the Civic Center and all costs associated with the office operations are funded through the Police Department.

Goal

6.6 A safe and secure environment for the City's residents, workers and visitors.

Policies

6.6.1 Enhance the City police protection capabilities.

6.6.2 The City shall continue to encourage and expand community programs to assist police protection.

6.6.3 The Police Department will continue to review development proposals to determine the impacts of such development on emergency services.