SECTION 3 - SAFETY

INTRODUCTION

In general, it can be said that Tulare County is a relatively safe place to live. There are areas that were uncovered during the preparation of the Safety Element that would indicate a greater need for study, such as evacuation routes in mountain communities where no evacuation plans have been prepared with fire safety being paramount as a consideration. The Safety Element has been prepared with fire hazards and fire safety being the primary consideration. Those people living in outlying areas of the County, and that are not within immediate service distance of fire stations can reduce fire hazard problems through the use of suppression devices. Such devices would be installed in. homes, factories and other areas where sufficient water or chemical control of fires is possible. The hazards associated with vehicles passing through the County or within the County are also a major consideration of the Tulare County Fire Warden. Certain types of crime are in general as great if not greater than in other parts of the State. New means of communication and coordination among emergency service personnel are underway and it is evident that the County will continue to maintain levels of safety as great, if not greater, than at present.

It is estimated by the County Fire Warden that within the last 10 years, 50 lives have been lost, 250 people have been injured and \$12,556,570 worth of property has been destroyed or damaged. These figures are misleading, since the number of lives lost or saved may not show up in the County Fire Warden's records. (Figures for County area only)

Hazards to the environment are generally considered to be significant within the mountain areas of Tulare County as compared to statewide surveys undertaken by the California Division of Forestry. Tulare County is shown to have a high potential for fire danger. In addition, the increasing numbers of agricultural industries being located in scattered areas throughout the County would indicate that there is a need for greater consideration for fire safety measures where adequate access to fire services do not presently exist. It is through the land use planning process that many of these problems can be addressed and the Safety Element is framed with this in mind.

It was found that within the mountain areas, along stream bottoms and adjacent to roadways and in urban fringe areas, the fire hazard was greatest. Controlled burning may be necessary in some areas and removal of vegetation that is high in fuel loading potential should be removed.

Hazards due to geologic conditions, soil conditions, flooding and seismic potential are cited within the report. In some areas of Tulare County landslide potential is great and flood hazard is a major consideration in the land use planning process.

The County has invested considerable funds in the development of road networks, public works, public buildings, parks and other improvements. The private sector of the economy has invested heavily in the agricultural capability of the land itself. These investments are considered as value systems that are held to be important in the provision of disaster and fire services. Several cross sections were drawn through the County to indicate areas of high value that are of concern to residents in the County as well as people throughout the state and nation. It is these values that the Safety Element addresses.

Goal 3.A. To reduce the loss of life, and damage to or loss of personal property due to crime, fire, earthquakes, flooding and other disasters, natural and man-made.

- 3.A.1. Maintain an on-going active program designed to eliminate unfit, unhealthy, dangerous, structurally unsafe and fire hazardous housing units which are in such condition as to be reasonably beyond repair or rehabilitation. All departments or agencies having knowledge of such units or the vacancy of such units should notify the appropriate or concerned agencies (Building, Fire, Health and Sheriff).
- 3.A.2. Continue the program to have unsafe structures repaired or removed.
- 3.A.3. As part of the planning process, building permits being considered for a site having potential fire hazard shall be reviewed by the County Fire Warden. The Fire Warden may be requested to make recommendations to property owners regarding risk of hazard associated with the use of materials, types of structures, location of structures and subdivisions, road widths, location of fire hydrants, water supply and other important considerations regarding fire hazard that may be technically feasible but not included in present ordinances or policies.
- 3.A.4. The 30-foot brush clearance zone around homes should be extended to greater distances where homes are situated on or near slopes. A formula should be adopted which relates percent of slope to width of brush clearance required and the formula should be included within the County Zoning Ordinance.
- 3.A.5. The map titled "Fire Danger Rating Areas and Fire Incidence Patterns" included in Chapter III of the Safety Element is intended to be a general guide for land use recommendations to be brought before the Board of Supervisors when development is proposed in mountain and foothill regions of the County. Zone 410, indicated on the Fire Danger Rating Area Map, shall be related to vegetation and topographic conditions when recommendations are made to the Board of Supervisors in this zone. The Board of Supervisors recognizes that this zone is of value for residential uses if agricultural lands are to be conserved. (Fire hazard in Zone 410 is primarily due to wind and climatic factors.)
- 3.A.6. Encourage the development of building construction codes that are uniform for all wildland areas but that can be designed to fit specific wildland conditions.
- 3.A.7. Recognize that widths of fuel clearance roadways, as well as around buildings, are a function of fuel height, slope, and topographic "shape of the land." Subdivision and land division procedures should include close coordination with the County Fire Warden.
- 3.A.8. Enforce Chapter 70 of the Uniform Building Code as it relates to grading.

3.A.9. Through the Building and Health Departments, enforce policies and objectives of the 1974 Housing and Community Development Act in order to insure safe and decent housing for low and moderate income families.

Implementation Programs:

- 3.AI.1. The Safety Element shall be amended in the near future to include policies and supported data on other safety risks of particular concern to Tulare County that were not included within this document. The Planning Department in conjunction with law enforcement and other agencies shall prepare Part II of the Safety Element to include concern and recognition for hazards related to mountain areas, water safety, ambulance dispatch, public protection in remote recreational areas and definition of roles of the various Public Safety Agencies in an overall safety program. All causes of unnatural deaths shall be considered upon preparation of Part II of the Element and additions thereto.
- 3.AI.2. The Planning department shall review ambulance franchising and dispatching operations and possibilities for utilization of adjacent County Emergency Services in order to upgrade any service deficiencies that may be causing higher death rates indirectly.
- 3.AI.3. Tulare County shall provide for adequate search and rescue operational capability to the Tulare County Sheriff's Department in mountainous areas. Of particular concern to the Tulare County Board of Supervisors are those areas on the eastern side of the Sierra Nevadas that cannot be adequately reached by highway access on all weather roads.
- 3.AI.4. Current County Disaster Plans should be revised to reflect programs to mitigate the potential loss of water on the west side of the Central Valley in the event of damage to the California Aqueduct in a geologic disaster.
- 3.AI.5. The Seismic Safety Element should be reviewed annually and should be comprehensively revised every five years or whenever substantially new scientific evidence becomes available.
- Goal 3.B. To protect and enhance the natural environment by reducing the level of hazard from natural and man-made causes, such as fires, flooding and criminal or negligent activity.

Policies:

3.B.1. In concert with the California Division of Forestry, National Park Service, National Forest Service, and Bureau of Land Management, encourage and promote the maintenance and/or widening of existing fuel breaks or controlled burning practices in order to bring about more effective fire suppression.

- 3.B.2. Construction of new fuel breaks shall be justified on a least cost-plus loss basis and within comprehensive watershed management plans.
- 3.B.3. Establish standards for locating and construction fuel breaks and greenbelts in concurrence with the County Planning and Building Department and federal agencies.
- 3.B.4. Continue to encourage weed abatement programs by existing fire service district in rural service centers and urban areas in order to promote fire safety; utilizing tax levies or other owner imposed costing devices to reimburse districts.
- Goal 3.C. To work, primarily through local law enforcement agencies, and in conjunction with the Federal and State governments acting through the California Criminal Justice Program to reduce the level of criminal activity and lower the risks to life and property associated with such activity.

Policy:

3.C.1. Encourage the enlistment of the aid of courts, prosecuting attorneys, and the general public to make present laws more effective in dealing with the problems of illegal use of fire and fire causing practices.

Implementation Program:

- 3.CI.1. Expansion of the Safety Element (Part II) shall also include adequate definitions of land use and its relationship to crime.
- Goal 3.D. To hold public hearings before the Board of Supervisors in all cases regarding the production, storage, utilization or transporting of nuclear material either within the County, or in adjacent counties which may be of concern to Tulare County residents, so as to inform the public of the potential risk of nuclear materials and their use and to elicit a response from them.

Policy:

- 3.D.1. Assure that public hearings are held at convenient times and places prior to construction of nuclear facilities in order to assess possible hazards to the County of Tulare.
- Goal 3.E. To disseminate information regarding these facilities having significant public safety hazards through the Emergency Services Office of the County.
- Goal 3.F. To reduce the hazards associated with the storage, transporting, and use of chemicals such as fuel and pesticides.

Policy:

3.F.1. Instruct the public with respect to the necessity for a county-wide fuel-management program including dissemination of information on no-burn areas within the County.

Goal 3.G. To encourage and support the development of a County Disaster Plan, and to disseminate information about the plan to residents of the County.

- 3.G.1. Encourage fire and law enforcement department to periodically conduct joint training exercises with the goal of developing the best possible coordinated action in fire suppression and crowd control.
- 3.G.2. Maintain inventories of available resources to be used during disasters.
- 3.G.3. Continue to coordinate a public education program in order to foster public awareness of fire hazards with the intention of reducing injury and loss of life, damage to property and degradation of the natural environment, particularly in conjunction with the public school system and "critical facility" personnel.
- 3.G.4. Carry out education programs through the public and private schools, the libraries, police and fire departments, the news media, civic organizations, and through various related County departments such as the Planning Department and Building Department.
- 3.G.5. Seek to reach all age groups, socio-economic classes, and both urban and rural residents. Education programs should be offered in both Spanish and English languages as appropriate.
- 3.G.6. Carry out the recommendations contained in the county Flood Control Master Plan.
- 3.G.7. Instigate a Safety Committee, composed of members of various County departments and agencies with responsibility and authority in such matters. The Committee should perform various functions including, but not restricted to: Coordination of such agencies for efficiency in protection of public safety; uniform administration of safety requirements throughout the County; designation of sheet flow hazard and flood prevention areas of the County where Urban Improvement Facilities for storm drainage are necessary; adopting provisions which attempt to prevent safety requirements from becoming excessive economic burdens for the County. Suggested representation on this Committee include: California Division of Forestry; Public Works; California Highway Patrol; County Executive; Emergency Services Officer; Planning Department; Agricultural Commissioner; National Forest Service; National Parks Service; Bureau of Land Management; County Sheriff; and cities.

- 3.G.8. Continue to implement through the subdivision and zoning procedure, the recommendations contained within flood plain management studies already completed by the County Planning Department as part of the on-going safety requirements to be considered within the development process.
- 3.G.9. It is the policy of the County of Tulare, in conjunction with the Tulare County Association of Governments, to provide technical assistance to cities in preparing the Safety Element of their General Plans, if requested by those cities to do so.
- 3.G.10. During major disasters, the primary coordinating official on behalf of the Board of Supervisors shall be the Director of the Office of Emergency Services.
- 3.G.11. Support the following standards for use and development of areas of varying fire hazard and the County Planning Department is hereby instructed to apply the Fire Hazard Severity Scale as indicated below to proposed developments or uses within wildlands. The following minimum requirements should be met in relation to the three classes of Fire Hazard Severity as discussed within the context of the Safety Element.
 - a. Extreme Hazard extreme caution should be used in allowing development, particularly in critical facilities.
 - b. Moderate Hazard strict compliance with existing state statutes and local ordinances should provide adequate fire protection.
 - c. Minimum Hazard development should be allowed, with recommendations for mitigation of hazard by Fire Warden

Special conditions, even in areas of "Moderate Hazard," may exist which may demand special and specified requirements under which development or use of the area should occur.

Goal 3.H. To protect the health, safety and welfare of residents and to work with them in resolving problems of health and safety.

- 3.H.1. Recommends that each incorporated city within the County follow a similar program as outlined in this Safety Element and further recommends that the Safety Element be adopted by incorporated cities with modifications as necessary for their general plan program. The incorporated cities are encouraged to coordinate their adoption procedures and record keeping with the County.
- 3.H.2. Utilize the services of the County Counsel's Office to investigate methods of shortening procedures before a housing unit can be condemned and demolished.

- 3.H.3. Give those families that are asked to remove dilapidated units or to leave such units, consideration in the allocation of housing units that are produced by publicly assisted housing programs.
- 3.H.4. Encourage and assist families living in unsafe structures to find safer living units. It is policy to give priority, when possible, to locate those families in public housing programs.
- 3.H.5. Continue to upgrade preparedness strategies and techniques at all levels of government so as to be prepared when disaster, either natural or man-made occurs.
- Goal 3.1. To work in conjunction with the special districts towards the resolution of intergovernmental problems associated with disaster prevention and response.

Policies:

- 3.I.1. Develop better standards for numbering buildings on private driveways so as to assist emergency service personnel in locating structures in case of disaster.
- 3.I.2. Have a technically qualified communications officer to address the problem of communications within the County.

Implementation Program:

- 3.II.1. The Safety Committee, as proposed within this Element shall review the adequacy of joint agreements between safety and fire agencies where those agreements cross jurisdictional boundaries and County/City boundaries, with intent of providing the Board of Supervisors with more up-to-date information on the adequacy of these agreements and modifications that are appropriate regarding these agreements.
- Goal 3.J. To work in conjunction with the special districts, the State of California, or Tulare County Fire Warden to provide an adequate amount of essential manpower, equipment and facilities and budget in order to meet the safety needs of the County, cities under contract with the County and State, and obligations to neighboring counties and cities, the USDA National Forest Service, National Park Services, and the Federal Bureau of Land Management.

Policies:

3.J.1. Through the land use planning process and Building Department program, locate such structures as nursing homes, housing for the elderly, and other housing for the mentally and physically infirm within reasonable distance from fire stations.

- 3.J.2. Encourage further study and analysis of public expenditures vs. private expenditures of funds for on-site safety with the objective of the user/benefit concept in mind.
- 3.J.3. Encourage installation of a system of heat and/or smoke detection devices and encourage a sprinkler system and other fire suppression equipment including fire hoses and water storage tanks or fire hydrants for structures that exceed 7,500 square feet in floor area for the following facilities:
 - a. Critical facilities (public buildings).
 - b. Permanent industrial facilities employing ten or more people on a year-round basis.
 - c. Housing for the elderly, children and mentally inform.
 - d. Nursing homes and hospitals.
 - e. Structures where large amounts of chemicals or fuels are known to be stored and are considered to be significantly dangerous by the Fire Warden.
 - f. As required by the Fire Warden or legislation.
- 3.J.4. Encourage a system of heat and/or smoke detection devices for the following facilities:
 - a. Existing homes.
 - b. New homes to be constructed.
 - c. Structures with high value storage capacity.
 - d. Mobile homes.
 - e. Existing offices and other buildings.
- 3.J.5. Encourage fire alarm systems as referred to in this Element, to be tied directly and automatically to the Tulare County Fire Warden's alarm receiving center. This would apply to private companies that wish to have better protection as well as public buildings and other structures where the Fire Warden and/or the Building Inspector deem it necessary to have such protection.
- 3.J.6. Encourage the Tulare County Fire Warden to continue to increase his efforts toward inducing the public to reduce risk.
- 3.J.7. Assist in solving the incendiary problem by improving present law enforcement and investigation equipment; adapting equipment available in other fields; and

purchasing new equipment where needed. No-burn laws should be given greater emphasis particularly in areas outside of immediate response zones of fire stations.

- 3.J.8. Recommend a priority of consumptive uses for various water sources to insure availability of adequate supplies to meet public health and safety needs, and for resource protection. Suggested priority:
 - a. Potable water supply, fire protection, and domestic and agricultural uses.
 - b. Resource protection and preservation.
 - c. Industrial and commercial uses.
 - d. Water-oriented or water-enhanced recreation.
 - e. Air conditioning.

Priorities will vary by management zones.

- 3.J.9. Undertake, with Urban Boundaries, and particularly within Urban Improvement Areas, where storm and flood prevention improvements have not been installed, a vigorous program to install such facilities in accordance with a master drainage control plan for the area concerned. Priorities should be conditioned upon locations where flood and sheet flow hazard is greatest.
- 3.J.10. Encourage fire control agencies to keep fire data in a form that combines the following:
 - a. Number of fires by activity and area.
 - b. Number of users in the activity.
 - c. Number of fires by ignition index in State responsibility areas.
 - d. Any other methods determined by Safety Committee as necessary.

Damages and costs per fire should be computed and compiled by burn index and activity.

- 3.J.11. Recommend that the County Fire Warden maintain statistical information in a form that can be geographically indexed for cost-benefit analysis by the County Executive.
- 3.J.12. Require that water supply systems be related to the size and configuration of land developments. Standards as set forth in the current subdivision ordinance shall be maintained and improved as necessary.

- 3.J.13. Require that proposed developments or uses in wildland areas be subject to review by local fire agencies responsible for protecting development after they are constructed. After a thorough study of the possible hazards and risks that would be associated with completion and the use of the development, the local fire agencies should require that fire prevention and possible suppressions standards be met.
- 3.J.14. Development proposals passed by the Board of Supervisors or Planning Commission shall require fire standards be taken into consideration and met, particularly in regard to critical facilities.
- 3.J.15. Urge strengthening fire safety provisions of various codes including building, mechanical, electrical, and uniform fire code, to reflect greater concern for fire safety.
- Goal 3.K. To preserve and protect the national, State and Local unique places of interest and beauty that are within the jurisdiction of the County of Tulare.

Policy:

- 3.K.1. Environmental Impact Reports should be required on all projects in areas of extreme hazard as defined herein (a project is defined within the California Environmental Quality Act).
- Goal 3.L. To protect the agricultural resources that are necessarily of great value to people, not only in Tulare County, but throughout the nation and the world.
- Goal 3.M. To prevent serious injury and loss of life due to seismic activity.

- 3.M.1. Establish evacuation routes in cities and counties.
- 3.M.2. Review dam safety in light of study findings.
- 3.M.3. Open Space zoning in hazardous areas.
- 3.M.4. Recommendation for site investigations:
 - a. Landslides
 - b. Subsidence/settlement
 - c. Flooding
 - d. Local soils/geologic conditions

3.M.5. Chapter 70 of the Uniform Building Code 1973 edition, should be adopted and enforced. To insure this, entities involved should retain on a full or part-time basis, a qualified engineering geologist to review reports and perform other functions related to implementation.

Implementation Programs:

- 3.MI.1. New construction directly astride or across known faults, or fault zones, should be prohibited. Non-structural land uses however, should not be prohibited.
- 3.MI.2. The county should establish a Seismic Safety Review Committee to oversee the implementation of this element. This committee should be composed of the Director of Building and Safety, the Director of Public Works, the Planning Director, and the Director of the Office of Emergency Services and at least on representative from police and fire protection service agencies.
- 3.MI.3. Relate findings of Seismic Safety Element to Open Space, Land Use, Circulation, Safety, Housing, and Scenic Highways Elements.
- 3.MI.4. Review and update grading ordinances.
- 3.MI.5. Update zoning ordinance and make desired changes.
- 3.MI.6. Review subdivision requirements and make recommendations to the Boards of Supervisors and planning commissions on implications of the Seismic Safety Element and make desired changes.
- 3.MI.7. The California Department of Water Resources should review the Seismic Safety Element and forward comments regarding dams and the aqueducts to each county's Public Services Director.
- 3.MI.8. Caltrans should review the Seismic Safety Element with respect to Interstate 5 and other major highways and forward comments to the affected counties. Individual county circulation elements should then be revised, if necessary.
- 3.MI.9. Establish procedures for dealing with geologic reports and investigations particularly when critical facilities are involved.
- Goal 3.N. To prevent serious structural damage due to seismic activity to critical facilities and structures where large number of people are apt to congregate at one time.

Policies:

3.N.1 Establish a seismic safety review and monitoring program.

- 3.N.2. Consideration of seismic and secondary hazard aspects in the environmental impact assessment process.
- 3.N.3. Seismic aspects must be addressed in the environmental reporting process.
- 3.N.4. Section 65402 (Planning Law) and Section 11525 (Subdivision Map Act) of the Government Code require that developments be submitted for governmental review. The local governments should enforce these provisions taking into account recommendations from the Seismic Safety Element Report.
- 3.N.5. A Building Code enforcement program should be initiated.
- 3.N.6. Consideration should be given to the possibility of developing a "dangerous building ordinance."
- 3.N.7. The local governments, assisted by the County Building and Safety Departments, should initiate a vigorous inspection program of all un-reinforced masonry structures.
- 3.N.8. A review committee should be established by the Board of Supervisors to consider the desirability of initiating condemnation proceedings against un-reinforced masonry structures found to be unsafe.
- 3.N.9. Structures of more than four (4) stories should utilize a dynamic analysis procedure for assessing structural design requirements.
- 3.N.10. A building strong-motion instrumentation program should be instituted for buildings over six (6) stories in height with an aggregate floor area of 60,000 square feet or more, and every building over ten (10) stories in height regardless of floor area.
- 3.N.11. Critical facilities constructed prior to 1948 should be reviewed by a structural engineer for potential hazards. Since many of these structures have regional impact, the source of funding for the inspection program ought to be at the regional level.
- 3.N.12. Adopt the Uniform Building Code, 1973 Edition, with the following modifications: Seismic Zones V1, V2, S1, and S2N utilize Zone II of the UBC; Seismic Zones V3, V4, C1, C2, S2, S3, S4, S3N, S4N, S2S, S3S, and S4S remain in the UBC Zone I3.
- 3.N.13. Critical facilities are to be designed at double the seismic design forces in Zones V1, V2, V4, C2, S1, S4, and S2N; and at 1-1/2 the seismic design forces in Zones V3, C1, S2, S3, S3N, S4N, S2S, S3S, and S4S.

Implementation Program:

3.NI.1. For critical facilities, the bracing and anchorage of all mechanical and electrical equipment should be designed for lateral seismic forces equal to 20% of its total dead load in seismic zones V1, V2, SI, and S3N; and 40% in zones V3, V4, C1, C2, S2, S3, S4, S3N, S4N, S2S, S3S, and S4S.

Goal 3.0. To insure the continuity of vital services and functions during seismic activity.

- 3.O.1. Establish an Emergency Services Program for each county. Objectives of the program should be part of the "Management Philosophy" of each county. Included in such a program should be:
 - a. To coordinate a structural hazards inspection program and establish for each counties' Board of Supervisors the necessary criteria for mitigation of hazards.
 - b. To provide a basis for control and direction of emergency operations.
 - c. To release a disaster information in concurrence with county Boards of Supervisors during or immediately after a disaster.
 - d. To provide for the continuity of government in the event of a geologic disaster.
 - e. To coordinate, repair, and restore essential systems and services as required in an emergency.
 - f. To provide for the protection, use and distribution of remaining resources as well as surplus property available from the Federal Government for local government use.
 - g. To coordinate operations with the Civil Defense Emergency Operations of other jurisdictions as necessary.
- 3.O.2. Emergency communication centers, fire stations, and other emergency service facilities should be examined as to their earthquake resistant capacities. If found below acceptable standards, a program to mitigate potential hazards should be immediately established.
- 3.O.3. Review water transfer facilities, utility transfer facilities, and commodity transfer facilities, in light of study findings.

3.O.4. Establish public investment and capital improvement safeguards for hazardous areas.

Implementation Program:

3.OI.1. Emergency Services Program

- a. Implement emergency service requirements of Seismic Element in a declared disaster and coordinate activities of police, fire, civil defense and volunteer activities.
- b. Prepare geologic disaster information release programs for use in emergencies.

Goal 3.P. To educate the community about seismic activity.

Policies

- 3.P.1. Develop an Earthquake Disaster Plan.
- 3.P.2. Community programs that train volunteers to assist police, fire, and civil defense personnel how to perform effectively after an earthquake, should be supported.
- 3.P.3. Emergency procedures should be identified for public and private utility districts.
- 3.P.4. Establish a public relations and education program to create community awareness.
- 3.P.5. Property reports should be furnished to prospective buyers of property.

Implementation Programs:

3.PI.1. The county should develop an information release program to familiarize the citizens of the region with the Seismic Safety Element. School districts and agencies related to aged, handicapped and seismically susceptible industries should be encouraged to develop education programs relative to seismic awareness.

3.PI.2. Education

- a. Present seismic study findings using slide presentations and workshop meetings to schools, agencies related to aged, handicapped, etc., and seismically susceptible industries.
- b. Establish appropriate media for reaching different segments of county communities (Spanish-speaking) and conduct presentations.

- c. Present findings to appropriate civic groups.
- d. Make available to builders and developers findings of the Seismic Safety Element.
- e. Encourage State, Federal and other governmental agencies to intensify research on seismic and other geologic hazards.