PROGRAM HIGHLIGHTS

PROGRAM HIGHLIGHTS

The previous section provided a detailed look at seismic retrofit programs in several communities throughout the State of California. In this section we would like to give you a glimpse of some additional techniques used by jurisdictions throughout the State to promote retrofitting of privately-owned hazardous structures.

TOWN OF ARROYO GRANDE

POPULATION: **14,400**
URMS: **20**

The Town Council of Arroyo Grande instructed the building department to work with the owners of identified potentially hazardous buildings to retrofit such structures under a "reasonable" timeline. The city originally set a deadline of three to five years for completion of the work, but in recognition of the recent economic downturn, and in the spirit of cooperation on which the program is founded, the city building department is being **flexible with its deadline** for compliance.

The Building Department also provides **reduced permit fees** to owners performing retrofit work. Instead of charging building permit fees on the basis of the valuation of the work, a valuation which the Building Inspector feels is difficult for anyone to make, the city estimates how many inspections it will need to make during the construction process and **charges fees based on the number of inspections and other handling costs the city will incur.** The building department also **allows the continuance of non-conforming uses** and **waives other aspects of updated zoning regulations** such as parking requirements.

CONTACT

John A. Richardson	Chief Building Inspector	(805) 489-1303 x109 or 104

CITY OF BERKELEY

POPULATION: **106,000**
URMS: **517**

The City of Berkeley instituted an additional **1/2% transfer tax on property sales** which can either be paid to the city or used by the owner to pay for seismic retrofit work on the building. The city believes owners would rather see the monies go into their properties than into the city's tax coffers. The city estimates that on single-family homes the 1/2% tax would help cover the cost of such improvements as bolting structures to foundations, sheer wall improvements, chimney reinforcement and the like. The city also **waives permit fees** on seismic retrofit projects.

The City of Berkeley ordinance imposes a mandatory unreinforced masonry building (URM) retrofit program. Included in the ordinance is a requirement that owners of such buildings **post a clearly visible warning inside the main entrance of the building** stipulating as follows: "This is an unreinforced masonry building, which under State of California law, constitutes a severe threat to life safety in the event of an earthquake of moderate to high magnitude."

CONTACTS

Harry Attri	Chief of Codes and Inspections	(510) 644-6526
Sonali Bose	Finance Director	(510) 644-6476
Alan Goldfarb	Councilmember	(510) 644-6399

CITY OF INGLEWOOD

POPULATION: **112,500**
URMS: **60**

Inglewood has developed a program which presents **two options for reimbursement of construction costs** to property owners performing retrofit repairs. An owner may choose either to receive (i) reimbursement of up to $1,000 of the cost of preparation of plans and engineering studies and (ii) 25% of the actual cost of the required improvements **OR** (iii) reimbursement of up to $3,000 of the actual cost of engineering studies and plan preparation, (iv) 50% of any cost in excess of $3,000, and (v) the actual cost of plan checking, building permits and related taxes and fees. The city funds this program with CDBG monies. The predominant choice for reimbursement is the second program. Even though the first reimbursement option (i and ii) could potentially result in a larger rebate, property owners avoid it because of the Davis-Bacon Wage laws with which they would have to comply if they use CDBG monies to pay for construction. Owners generally feel that the additional cost associated with compliance would not be offset by the larger rebate. The city estimates the reimbursements will range from a minimum of $6,000 per building to a maximum of $12,000 per building. The seismic retrofit program is overseen by two departments: the Building Department handles the technical aspects of the program while the Department of Community Development and Housing handles the financial components.

CONTACTS

Jose Alvarez	Building Department	(310) 412-5294
Dianna Joe	Dept. of Community Development and Housing	(310) 412-5221

CITY OF LA VERNE

POPULATION: **31,100**
URMS: **9**

The City of La Verne has developed a program, to be funded with redevelopment agency monies, which will provide **property owners with a grant of up to 50% of cost** of engineering and construction for retrofitting. The city set a 5 year goal to complete the repairs, hoping to be able to fund 2 buildings a year at a cost of approximately $50,000. However, the number of structures retrofitted is dependent on the funds available each year. The city hopes that in addition to the seismic repairs, owners will be encouraged to do facade renovations/restorations.

CONTACT

Linda Christianson	Community Development Department	(714) 596-8706

CITY OF SAN DIEGO

POPULATION: **1,144,000**
URMS: **1,050**

The City of San Diego is unique when compared to the other communities pursuing seismic retrofit programs because it is currently not located in Seismic Zone 4 and therefore is not subject to SB 547, the "URM Law." Approximately 6 years ago, San Diego began a **voluntary review of the unreinforced masonry buildings in the community** with the **appointment of a City Manager's Committee on the seismic retrofit of older buildings.** Initially, the Building Inspection Department proposed a mandatory retrofit ordinance to the City Manager's Committee. It was soon obvious that such an ordinance would raise immediate opposition from property owners and would certainly not be approved by the city council. The City Manager's Committee is now considering an alternative voluntary ordinance with some mandatory aspects. There is disagreement between structural engineers, local architects and property owners on how, or even whether, the issue should be addressed. There is also some local controversy regarding the possibility that San Diego may be reclassified so it is included in Seismic Zone 4. San Diego does have an existing **requirement that may cause property owners to retrofit a structure when it changes use or occupancy to one more hazardous than the existing use.** There has been some voluntary seismic retrofit work done in San Diego by both private owners and public agencies. The city is interested in, but has been unable to identify, a source of funds which would allow it to make construction grants to owners of hazardous structures.

CONTACTS

Jean Libby	Building Inspection Department	(619) 236-7338
Peter López	Building Inspection Department	(619) 236-6087

CITY OF SAN JOSE

POPULATION: **782,000**
URMS: **150**

The City of San Jose has identified approximately150 privately-owned unreinforced masonry buildings (URMs) city-wide. Most of the buildings are almost exclusively commercial/retail, with a few providing low-cost housing on the upper floors. Many of the buildings are on the City Historic Resources Inventory. About half of the URMs are located in redevelopment areas. Fifty five of those, housing 121 businesses, are included in the redevelopment agency's retail focus area. San Jose has developed a multi-level set of programs to encourage retrofitting.

San Jose is **exempting permit fees** on retrofit projects, a program expected to cost the city approximately $250,000 and the redevelopment agency about $50,000. San Jose is also offering **design grants** to owners, a program to which the city and redevelopment agency are each contributing up to $1 million. The city council has approved procedures for forming a **Special Assessment district** to provide long-term, market-rate financing for retrofits.

For owners of retail structures in the redevelopment agency's focus area, San Jose has developed **two grant programs to offset construction costs** at a cost to the redevelopment agency of $4.6 million over 4 years. Retail buildings in the focus area have been ranked based on 4 criteria: historic significance, consistency with the downtown strategy plan, location within the retail focus area, and key building features such as strategic retail value, condition of building, retail desirability, building owners commitment, and tenant status. Owners of buildings receiving qualified ranking will be eligible for the basic grant. Owners of buildings receiving the highest ranking will be eligible for an additional grant, in exchange for which they will be asked to make a corresponding amount of tenant improvements. The agency also is developing a **tenant assistance program** for commercial and residential tenants located in retrofit assisted buildings.

San Jose also assigned one individual to act as **full time liaison with URM owners and the community.** The Liaison is a part of the City Manager's Department Office of Emergency Services. The Liaison provides information and answers questions about the programs offered by the city and the redevelopment agency, interacting with owners, tenants, the media, and other city departments. The Liaison also supplies the city council and the public with information on the progress which has been made towards retrofitting each of the identified buildings. The Liaison is expected to take a particularly active role in development of the financing district, working with the financing team, and explaining the program to and soliciting feedback from URM owners.

CONTACTS

Robert "Pi" Silverstein	Building Retrofit Program Liaison	(408) 277-4735
Noel Ameele	Redevelopment Agency Development Officer	(408) 277-4744

CITY OF SAN MATEO

POPULATION: 87,500
URMS: 12

The City of San Mateo adopted a mandatory retrofit ordinance in January, 1990. San Mateo **based its ordinance on the Los Angeles model, simplifying it by creating only 2 hazard categories and changing some of the time limits.** If an owner installs anchors he or she can take up to 8 years to complete the retrofit; otherwise, the owner must complete retrofit within 3 years. The majority of the buildings affected by this ordinance have historic designations or are contributors to a proposed historic district.

The ordinance also directly addresses the conversion of unused second floors in commercial buildings to residential use. In San Mateo's commercial district there is also an attempt to **tie some storefront improvement to retrofit projects.** Both second-floor conversion and storefront projects are handled through San Mateo's Housing and Economic Development Division. **Assistance in the form of grants and loans** is made available for use towards the retrofit of buildings participating in these programs.

Of San Mateo's 12 unreinforced masonry buildings (URMs), 1 has been retrofitted, 3 are presently undergoing retrofit construction, and engineering plans have been prepared for the remaining structures.

CONTACTS

Fred Cullum	Chief Building Offier	(414) 377-3390
Bob Muehlbauer	Housing and Economic Development	(415) 377-3393

CITY OF VACAVILLE

POPULATION: 73,000
URMS: 20

The City of Vacaville has established the "Key Building Loan Program," a **3%, 25 year loan program** to finance the cost of seismic retrofit. A property owner can also receive a 50% matching loan for tenant improvements. The total amount of these loans is based on underwriting criteria which include a loan-to-value determination, setting a limit on total debt on the structure of up to 80% of the estimated post-rehabilition property value. The city has an associated **facade loan program** providing up to $15,000 worth of funding for facade renovation. These programs are paid for out of redevelopment funds through incremental tax revenues, and therefore are limited to those buildings located in the redevelopment area.

CONTACT

David Gouin — Office of Housing and Redevelopment — (707) 449-5161

USING ZONING AS INCENTIVE TO RETROFIT

USING ZONING AS INCENTIVE TO RETROFIT 75

Local land use controls can be used to help reduce earthquake hazards. Incentives as well as controls on changes in building occupancy can complement both mandatory and voluntary unreinforced masonry building (URM) retrofitting ordinances. Typically, zoning is viewed in negative terms by many building owners because they perceive the emphasis is "thou shall not ... . " Planning Commissions and zoning administrators often reinforce this perception during the development review process, and public-private partnerships rarely are fostered through zoning. However, this relationship can change if zoning ordinances are used in a positive manner to implement General Plan policies by offering bonuses and other types of incentives to achieve specific public purposes. Notable examples include the density bonuses for affordable housing and transfer of development rights for historic preservation. Lessons learned from these programs may help local governments design similar initiatives to encourage property owners to retrofit and upgrade their hazardous buildings.

Where potential funding sources are limited and, due to bond issuance costs, the advantages of municipal borrowing are perceived as not that much more attractive than private credit, local governments may want to explore how zoning mechanisms can be structured to create specific incentives for retrofitting seismically-unsafe structures. In the preceding chapters, the CASE STUDIES and PROGRAM HIGHLIGHTS show that funding incentives alone may not be sufficient to ensure widespread program participation. Time limits on retrofitting have proven to be effective, particularly when combined with priority ranking systems. Any and all programs can be complemented by zoning incentives, which also could have time limits attached to them in order to reinforce the need to act.

TYPES OF INCENTIVES

As part of a voluntary retrofit program, or to make a mandatory upgrading program more attractive, five general types of incentives to facilitate seismic upgrading of URMs and other potentially hazardous buildings may be appropriate for local zoning ordinances:

- Density/intensity bonuses;
- Transfer of development rights;
- Reduction in development standards;
- Relief from nonconforming provisions; and
- Restrictions on new occupancy of a potentially hazardous URM or other potentially hazardous building.

Each of these incentives is described more specifically below; choice of the right "incentive package" should be based on local conditions and needs. To show how these provisions might be combined into a comprehensive package, an approach to implementing a zoning incentive program is attached. This can be used as a guide in designing local programs.

DENSITY/INTENSITY BONUSES

Where a number of URMs contribute to the historical or architectural character of a district or area, a city may want to offer specific increases in the maximum allowable building density or intensity to help offset the added costs of seismic upgrades. To encourage affordable housing, for example, the State requires that a 25% density bonus be provided, recognizing that the cost of providing such housing is greater than the cost of providing market-rate housing. Similarly, a number of communities allow taller or larger buildings if pedestrian amenities, such as plazas, are provided, or if parking is placed underground.

Within each zoning district, similarly-situated properties need to be equally treated so such provisions are not considered "spot zoning." To provide a strong legal foundation for this type of incentive, a community's General Plan policies should specifically identify the purposes to be achieved by a density/intensity bonus program (e.g. "to encourage seismic upgrades and conserve and enhance the community's historic and architectural resources"). The actual standards that would apply should be based on construction cost analysis and urban design and planning studies. As a starting point, local planners should consult the State of California Seismic Safety Commission's *Guidebook to Identify and Mitigate Seismic Hazards in Buildings*. (See: CONTACTS)

A density/intensity incentive program is more likely to work only where the base zoning "envelope" does not provide for substantial development potential but, instead, is geared to maintaining the existing scale of development. Where the zoning envelope is generous, there would be little incentive to participate in the retrofitting program.

TRANSFER OF DEVELOPMENT RIGHTS (TDR)

The rationale for allowing a property owner to transfer unused development rights to another site is based on the concept that there is a public purpose to be achieved in requiring a seismic upgrade, and the existing use of the building may not generate sufficient income to justify the retrofitting costs. TDR is particularly suited to designated or certified historic

structures where no intensification of use is contemplated or even allowed. Restrictions of the right of transfer could be imposed. For example, transfers might only be allowed to adjacent lots within the same zoning district, or they could be permitted to any lot within the same zoning district, or to lots in specific zones where intensification of development is envisioned. The value of the development right to be transferred should approximate the cost of the retrofitting, so again careful analysis of construction costs is needed as a basis for designing an equitable and effective TDR program.

REDUCTION IN DEVELOPMENT STANDARDS

As with the preceding incentives, the objective of allowing for a minor reduction in certain specified building or site development standards would be to offset the added costs associated with retrofitting older structures. Seismically safe structures offer obvious public benefits, so there is some justification for allowing for reduced standards. Again, though, the challenge will be to tie the reduction in standards to the upgrade cost, so a "windfall" is not created, and after paying for the costs of upgrading, owners of URMs face the same requirements as owners of newer buildings.

Provisions for a reduction in development standards should include a specific requirement that the reduction is necessary to meet building standards for seismic safety. Specific restrictions could apply, such as no increase in building height. A time limit could be set, requiring applications for a reduction in development standards to be submitted within a specified period of time following adoption of the zoning incentive program, to coincide with State or local time limits for upgrading URMs.

RELIEF FROM NONCONFORMING PROVISIONS

Because many URMs were built before current zoning ordinances were adopted, they may not conform to the development standards that now apply to new construction. For example, there may not be any on-site parking and the setbacks may be less than are now required of new construction. Most zoning ordinances state that such nonconforming structures may not be altered or enlarged unless the alteration or enlargement will result in the elimination of the nonconformity.

To provide relief from these nonconforming provisions, the following exemptions may be made for alterations or enlargements for purposes of seismic upgrade.

(1) Exterior or interior alterations or improvements may be allowed for purposes of retrofitting a structure occupied by a nonconforming use to meet building standards for seismic safety *(add appropriate reference to code or ordinance requirements)* without elimination of the nonconformity, provided there is no expansion of the use *(or an expansion not to exceed _____ percent)*.

(2) A nonconforming structure may not be altered or reconstructed so as to increase the discrepancy between existing conditions and the standards for front yard, side yard, rear yard, height of structure, driveways, or usable open space prescribed in the regulations for the district in which the structure is located unless such alteration or reconstruction is specifically required to meet local building standards for seismic safety *(add appropriate reference to code or ordinance requirement)*.

NEW OCCUPANCY OF A URM OR OTHER POTENTIALLY HAZARDOUS BUILDING

A zoning ordinance could require that any applicant for a discretionary zoning permit for occupancy of a URM, or of another potentially hazardous structure that does not conform to current building code standards for seismic safety, present a schedule for upgrading the structure to meet seismic standards within a stated period of time. The Planning Director could require that priority be given to upgrading that would reduce potential hazards which might affect adjacent structures or would reduce the risk of structural failure by improved bracing, foundation anchors or other types of retrofitting.

EXAMPLE OF AN INCENTIVE PROGRAM FOR SEISMIC HAZARD UPGRADING USING ZONING INCENTIVES

This program is presented in outline form to illustrate an approach to designing provisions for zoning incentives that will encourage privately-funded seismic upgrading of existing URMs and other potentially hazardous structures.

(1) Purpose. The purpose of the Seismic Hazard Upgrading Incentive Program for Unreinforced Masonry Buildings (URMs) and other potentially hazardous buildings is to provide financial incentives, consistent with State law *(requirement for mitigation programs)* to property owners and developers who undertake privately-funded upgrading of seismically hazardous structures.

(2) Who May Apply for an Incentive. A property owner of a URM identified by the city as potentially hazardous, pursuant to _____ *(add applicable reference)* may request that the city grant a density or intensity (FAR) bonus or an incentive of financial value equivalent to such density/intensity bonus and a regulatory concession or incentive.

(3) Types of Incentives. This section does not require the provision of direct financial incentives to finance seismic upgrading, but does provide for waiver of fees or dedication requirements. The following incentives and regulatory concessions or incentives are intended to ensure that the upgrading of seismically hazardous structures can be undertaken at a reduced cost:

(A) A reduction in site development standards or a modification of zoning code requirements or architectural design requirements which exceed the minimum building standards approved by the State Building Standards Commission, including, but not limited to, a reduction in setback and square-footage requirements and in the ratio of vehicular parking spaces that would otherwise be required.

(B) An increase in the maximum allowable density and/or intensity of land use, not to exceed _____ percent of the limit established by the base zoning district.

(C) Approval of a transfer of development rights to _____ *(specify whether the unused development rights may be transferred only to adjacent lots on the same block, to sites within the same district or to other sites or zoning districts specifically identified on the Zoning Map or in the General Plan).*

(The development rights that may be transferred could be limited to the "unused" rights on the site, and the ordinance should specify that restrictions on future development are officially recorded and bind future owners.)

(D) Approval of mixed use zoning in conjunction with a development project if commercial, office, industrial, or other land uses will reduce the costs of a seismic upgrade for an existing structure and if the commercial, office, industrial, or other land uses are compatible with the upgrading project and the existing or planned development in the area where the proposed upgrading will take place.

(E) Waiver of fees for zoning permits, site plan review, building permits and *(specify other types of permits).*

(F) Other regulatory incentives or concessions proposed by the developer or the city, which result in identifiable cost reductions.

(4) Seismic Upgrade Incentive Agreement Required. After City Council approval of a request of incentives, the property owner shall be required to enter into an agreement with the city to guarantee completion of the proposed seismic upgrade. This Seismic Upgrade Incentive Agreement shall include, but not be limited to, the following provisions:

(A) The components of the seismic upgrade shall be specified.

(B) The specific incentives that the city will make available to the property owner and any conditions pertaining to them shall be described.

(C) A commitment that seismic upgrade will be completed within a specified period of time. Security or compliance with these provisions shall be a promissory note in the amount of _____ percent of the construction costs, but not less than $_____, secured by a deed of trust against the property.

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LOCAL GOVERNMENT

FINANCING OPTIONS

LOCAL GOVERNMENT FINANCING OPTIONS

In order for a jurisdiction to implement a hazard reduction program in its community, it is often suggested that the jurisdiction offer some form of financial assistance as an incentive. The problem of financing retrofit of hazardous buildings, however, is both critical and intractable. This chapter discusses the problems associated with financing retrofit projects, and lists sources of public funds which could possibly be used for this purpose.

This chapter focuses strictly on the issue of financing, implicitly assuming that the policy issues have been discussed at the local level and that the jurisdiction has made the commitment to provide financial incentives to owners of hazardous structures. In much of the discussion, this chapter takes the perspective of owners rather than of local government. This is because we assume the readers will be primarily public sector professionals who are conversant with the local government perspective while perhaps less so with private sector rationale. This approach is not intended in any way to minimize the importance of local governments' perspectives and responsibilities, comprising the health, safety and economic welfare of the public, which form the primary incentive for this *Handbook*.

THE SCOPE OF THE FINANCING PROBLEM: ATTAINABILITY, AFFORDABILITY, AND ECONOMIC INCENTIVE

Some owners are able to fund retrofitting projects with their own cash. For those owners, access to financing is not a problem. Most owners, however, are unable to fund retrofitting projects themselves and need to rely to a greater or lesser extent on outside sources of funds.

To be useful it is important that financing be not just available, but also attainable and affordable. Sources of funds can and do exist which might seem to be available for retrofitting projects but which in fact are not attainable. The Rosenthal Bond program illustrates this problem most clearly. Rosenthal Bond funds were designed to be available for retrofit projects if the projects, by virtue of the retrofitting, generate additional revenue and this revenue is available to pay off the bonds. As retrofitting usually is not revenue generating, few if any projects can meet the criteria established by the funding source. To our knowledge Rosenthal Bond funds have never been used. In fact, very few people are aware of the program and the way in which it is meant to work. Many local governments, which are supposed to administer the program, have never heard of it. Various other problems, including subsequent changes in tax laws, have rendered the Rosenthal Bond program virtually useless.

A common hurdle to accessing available sources of funds is the fact that the buildings in need of retrofitting often do not meet the criteria established for these funds. Bank and bond

financing, for example, require that a specified loan-to-value ratio be present as a prerequisite to funding. Owners of highly leveraged buildings and buildings in depressed areas are often unable to meet these criteria and therefore do not have access to these types of financing. This problem is faced most acutely by owners of unreinforced masonry buildings (URMs) who are unable to obtain tenants because their buildings are considered hazardous. Subsequent to the Loma Prieta earthquake, the appraised value of URMs dropped precipitously because of their poor performance in that seismic event. Meanwhile, tenants began shying away from URM buildings, which had a negative impact on owners' cash flows. Owners in this situation would in fact see an increase in revenues as a direct result of retrofitting, as well as an increase in value to pre-quake levels. However, because these buildings generally carry a level of debt that is already based on their pre-quake values, their loan-to-value ratios are too high to permit the additional borrowing necessary for retrofitting projects.

Affordability of the project and its financing is the second major hurdle which trips up most owners considering retrofitting. As mentioned above, retrofitting is not necessarily revenue generating. It is also expensive. While it is commonly accepted that costs for post-earthquake repairs are significantly higher than the costs of retrofitting, owners have no mechanism allowing them to take into account the probability of their particular building being damaged in the next earthquake. Thus, owners who consider retrofitting out of concern about the safety and/or the long-term value of their property find themselves weighing the concrete expenses of retrofitting against perceived but unquantifiable benefits.

Owners must also consider the economic impact of retrofitting on tenants in their buildings. Few retail tenants can afford to interrupt their business for any length of time, and most feel that temporary relocation is impractical. Therefore, long-term retrofit projects causing major disruption would likely result in the loss of tenants. Increased lease rates required to pay for the project also are a concern. This is particularly difficult in the case of smaller buildings, where project costs per square foot are high because the fixed costs of retrofitting are spread over a smaller area. For all these reasons retrofit-only projects are uncommon. Retrofitting has mostly been undertaken in conjunction with larger remodeling projects, which are expected to result in revenues sufficient to compensate for the temporary loss of tenants as well as to at least pay for the project.

In many cases a major disincentive to retrofit is that it provides no net measurable economic benefit to owners. It has been argued that retrofitting property lessens liability exposure, rendering the decision to retrofit economically justifiable. This argument is weak for at least two reasons. First, although retrofit reduces liability exposure, it does not remove it entirely. The second reason relates to the way in which, as a practical matter, liability is handled by owners and insurers. (Note that we are discussing here liability insurance, not earthquake insurance which covers damage to property.) Owners who find themselves at increased

exposure to liability as a result of the hazardous condition of their buildings generally can deal with the matter by purchasing additional liability insurance. The incremental cost of this additional coverage is minuscule in comparison to the owners' other costs of doing business and, of course, to the cost of retrofitting. Insurance companies will offer the liability coverage, typically finding it less expensive to risk the loss than to determine the type of construction of each of the buildings owned by the businesses which it insures. Exposure to liability turns out to provide economic incentive to retrofit only to those large businesses which are self-insured. (See: LIABILITY IMPLICATIONS AND CONSIDERATIONS)

The most compelling way that jurisdictions can make an economic case for retrofit-only projects is by passing ordinances which require that owners either retrofit their property or face demolition. However, some skeptical owners have questioned the efficacy of such ordinances, doubting the political will of jurisdictions to actually carry them out.

Even when faced with the ultimate loss of their property, many owners will not retrofit either because the money to do so is not accessible to them, as discussed above, or because they simply cannot afford to make interest and principal payments on the financings. In discussions with property owners rebuilding in Santa Cruz we found that all but one relied heavily on 4% 30-year financing from the Small Business Administration. (Note that this source of funds is only available for earthquake recovery, not for preventive retrofitting.) All of these owners indicated that they could not have rebuilt their properties without these funds, and even with this low-cost source of financing most found the expense difficult to bear. One owner commented that he does not ever expect to break even, let alone reap economic rewards; he was undertaking the project on behalf of his heirs. Owners who are losing money or breaking even, and who are unable to raise lease rates or rents to pay for the retrofits, are unable to comply with retrofit ordinances. In some instances owners may be willing to raise rents but tenants would be unable to pay; in the case of owners of residential property, jurisdictions may not want or permit them to do so for policy reasons, particularly where affordable housing is at stake. Owners comment that it is unreasonable for jurisdictions to enact tough ordinances without suggesting the means to comply.

It is worth pointing out that the attitude expressed in the above paragraph, while common, is not necessarily appropriate. In many areas of the State healthy aftermarkets are occurring for URM buildings. Some owners are selling their properties, albeit at a loss, while others are attempting to retrofit. Gentrification and revitalization are occurring in some areas. In still other areas, rents are sufficiently high as a result of other market pressures that owners can afford to absorb as overhead the cost of retrofitting. In the City of Los Angeles, two-thirds of the 8,100 identified URMs have been strengthened or are under construction; less than 20% have been demolished.

BANK LENDING

Faced with a project which needs financing, most owners turn to their local bank. In the case of retrofit projects, the banks are likely to be less than eager to lend. Obvious concerns are credit issues, such as loan-to-value ratios and debt service coverage (the ratio of funds available to make payments, to the principal and interest payments themselves). In a bank's view, retrofit projects are particularly difficult unless the owners have built up enough equity to support the additional loan.

For the most part, the banks look as much if not more at the owner's cash flow and ability to repay the loan; the value of the collateral is a secondary issue, as the bank wants never to have to collect on it. Further, the value of the collateral is, in the bank's eyes, not its cost but its market value. The market value of the property, and thus the bank's collateral, will not necessarily be improved by a retrofit project.

One might argue that the banks should be concerned with their potential for loss when the "big one" hits. We suspect that, as with the liability insurers discussed above, large banks in particular consider it reasonable to take the risk associated with hazardous buildings in their loan portfolio, planning to write off in the future such losses as are incurred rather than to spend money now to prevent potential losses. The banks' loss experience with the Loma Prieta earthquake did nothing to belie this argument.

New bank lenders, ones not already associated with a property, have an even stricter test of the value of the collateral. Until the seismic retrofit is complete, the banker considers that at any moment the earthquake may happen and the structure collapse. From a collateral perspective, then, unless earthquake insurance is available the banker really can only count on the value of the underlying land, less demolition/clean-up costs, less existing loans. It is a rare property that can withstand this form of analysis, and it is a rare bank which today will make such a loan.

The bankers' logic is derived primarily from the perspective taken by bank regulators. Bank regulators painfully scrutinize banks' portfolios and apply harsh tests to determine their creditworthiness. Regulators apply the logic outlined above to the analysis of banks' portfolios, and require that more capital be set aside in reserve against riskier loans. Riskier loans are therefore more expensive for the banks, which must then choose either to forego them in favor of cheaper loans or to pass the added cost onto the borrower. Adding to the borrower's cost, of course, makes it harder for the borrower to pay, debt service coverage deteriorates, and both bankers and owners find themselves in a frustrating position from which bankers extricate themselves by simply withdrawing from the market.

Note that the regulators make no allowances for Community Reinvestment Act (CRA) loans; CRA loans have to meet ordinary credit criteria. However, if the projects could stand up to ordinary criteria we likely wouldn't be relying upon CRA to get them funded. CRA turns out to be a very weak lever with which to pry loans out of the banking community.

SOME SOURCES OF FUNDS

Owners unwilling or unable to use their own cash or to get bank funding will turn to local government to provide the funds for retrofitting. As mentioned above, this chapter does not address the issue of whether or not local governments should provide any amount of financing. Assuming that the policy decision is made to do so, as a practical matter local jurisdictions are no more able, and in many cases are less able, than property owners and banks to come up with the funds. This section mentions several sources of funds available for retrofitting privately-owned properties. These sources, highlighted in bold, are outlined in more detail later in this chapter.

One source of funds available to some jurisdictions is the **Community Development Block Grant Program** (CDBG) administered by local jurisdictions and funded by the U.S. Department of Housing and Urban Development (HUD). As CDBG is a grant program, the funds need not be repaid to HUD. In its own way CDBG is a very flexible source of funds, allowing jurisdictions to design and administer local retrofit programs. Los Angeles uses CDBG funds extensively for its retrofit program. However, the projects using this funding must comply with strict criteria; generally, the projects must benefit low- and moderate-income individuals. Most large cities (over 50,000 population) and urban counties receive "entitlements" under the CDBG program, funds to which they are entitled and which they receive each year. These funds generally are committed to existing programs. Diverting them to retrofit projects is a matter of political choice.

Owners of properties providing low- and moderate-income housing have perhaps the widest array of financing tools from which to choose. Most can use long-term tax-exempt bond financing which, in today's market, offers an interest rate about two-thirds of bank lending rates. The tax credit program, wherein owners can take direct deductions from their tax bill, is a very powerful tool. At various times the State and Federal governments may offer programs providing financing, subsidies, and/or incentives to property owners to construct, remodel or rehabilitate low- and moderate-income housing. Two State programs, the **California Housing Rehabilitation Program** and the **Marks-Foran Residential Rehabilitation Act**, are particularly applicable to retrofit projects. Most of the previous Federal programs have been replaced by a single new program, dubbed **HOME**. Various other agencies, both public and private, are available to provide funding for low- and moderate-income housing.

The financing processes and requirements for funding low- and moderate-income housing are very complex. An industry of bankers and consultants is poised to help eligible owners seeking such financing. Most owners nonetheless suffer from both the attainability and the affordability problem. Simply stated, the fundamental difficulty is that in order to afford to finance new projects, even at relatively low interest rates, owners need to raise rents. This, of course, could defeat the purpose of the housing, and may render it ineligible for these sources of funds. Further, because of the complexity of the field, it is generally not economical to seek financing of this sort for projects costing less than several million dollars.

Other sources of funds are available for particular types of properties. **Marks Historic Bond Act** funding is available to aid in the rehabilitation of historically or architecturally significant structures. The **Small Business Administration** offers a number of programs, the most applicable being a loan guarantee program for owner/tenants in seismically hazardous buildings.

In addition to the Federal and State programs mentioned above, bond financing can be an option for local jurisdictions wishing to offer market-rate financing to property owners in their community. **Special Assessment District** financing has proven useful in at least two cities, and **Mello-Roos Community Facilities District** financing, a similar technique, should also be helpful. However, both attainability and affordability can be problems with these types of financing. Possible additional sources of bond financing are **Tax Increment Financing** (also known as Tax Allocation Bonds) available to properties in redevelopment areas, taxable **General Obligation** bonds, which must be approved by a two-thirds vote, and **Public Purpose Bonds** which must be issued primarily for other public capital improvements allowing no more than 5% of the bond proceeds to be used for the purpose of retrofitting privately-owned property. The latter three techniques have never to our knowledge been applied for the purpose of retrofitting privately-owned property. A great deal of study, particularly on the part of bond counsel, and especially with regard to public purpose bonds, would need to be undertaken before these techniques could be recommended as sources of funds for local jurisdictions.

On the following pages you will find more detailed descriptions of the sources of funds highlighted in bold in this section. These sources of funds, although limited, are tools available to local governments interested in promoting retrofitting.

(Winter, 1991)

STATE AND FEDERAL PROGRAMS

CALIFORNIA HOUSING REHABILITATION PROGRAM

(Propositions 77, 84 and 107)

(California Government Code - Section 8878.15 et seq.)

General: The California Housing Rehabilitation Program (CHRP) is administered by the California Department of Housing and Community Development (HCD) and is funded by General Obligation Bonds sold by the California State Treasurer. The program is divided into four categories, with funds allocated to each of those categories and split between rural and non-rural projects. The table below shows the project categories and the amount of funding available under each. CHRP is open to any individual or public or private entity capable of owning, rehabilitating and managing rental housing. Funds are allocated on a competitive basis.

Program Category	Rural Appropriated ($MM)	Rural Used ($MM)	Non-Rural Appropriated ($MM)	Non-Rural Used ($MM)
Seismic retrofit of Unreinforced Masonry Buildings (URMs)	4.0	none	16.0	13.65
General rehabilitation and acquisition of projects requesting seismic retrofit	4.0	none	16.0	13.65
Nonseismic general rehabilitation and acquisition	13.8	2.1	18.3	18.3
Single Room Occupancy (SRO) hotel/model rehabilitation and acquisition	6.8	none	10.2	9.375

Benefits: Through the CHRP program, HCD provides low interest loans directly to project sponsors. The interest rate on these loans is 3% calculated on a simple basis. The minimum term for rehabilitation-only projects is 20 years. The minimum term for refinance/ rehabilitation or acquisition/rehabilitation is 30 years. Longer terms or 10-year extensions are sometimes available. Usually, annual interest-only payments are required with the principal due as a balloon payment at the end of the term.

***Types of Properties*:** CHRP loans may be used for various types of rental housing developments to be occupied by very low-income and other lower income households, with some funds specifically targeted for SROs.

***Jurisdiction's Responsibilities*:** The CHRP program does not require the participation of the municipality.

***Owner's Responsibilities*:** It is the owner's responsibility to submit a complete application on a timely basis. Proposals at the most advanced stages are more likely to be funded.

***Limitations*:** Under this program, loan limits for rehabilitation-only projects are $15,000 per SRO unit, $25,000 per 0-2 bedroom apartment and $35,000 per 3+ bedroom apartment. An additional $10,000 per unit is allowed when the project includes both rehabilitation and acquisition. New construction is ineligible.

After rehabilitation under this program a project must comprise a rental housing development with assisted units. Rent limitations apply to all assisted units for the full term of the agreement, regardless of prepayment, sale or transfer.

The CHRP program includes significant relocation rights and obligations. A URM must meet the following requirements to be eligible for program funds:

(1) At least 50% of the gross floor area will be used for residential purposes
(2) The building has been identified as "potentially hazardous" by the local building department due to the need for seismic reinforcement, and is located in a jurisdiction that has inventoried its unreinforced masonry buildings and has adopted a mitigation ordinance.
(3) The building contains at least 6 residential units, and at least 70% of these units will be assisted units.
(4) The assisted units could not be reinforced without also reinforcing the nonassisted units or nonresidential space.

For nonprofit sponsors, total after-rehabilitation debt may not exceed 100% of after-rehabilitation value. For for-profit sponsors, after-rehabilitation debt may not exceed 90% of after-rehabilitation value. HCD publishes a chart listing the maximum allowable initial gross rent by county and unit type.

***Comments*:** Applications are accepted on an ongoing basis until all program funds have been committed. This program is very well suited for the rehabilitation of structures presently housing low-income residents, but remains limited in usefulness in many other aspects.

Property owners feel the requirements which must be met under this program are overly restrictive, particularly the percentage of residential units which must be reserved for low-income residents and the tenant relocation guidelines.

Contact: Department of Housing and Community Development
P.O. Box 952051, Sacramento, CA 94252-2051
(916) 445-6501

COMMUNITY DEVELOPMENT BLOCK GRANTS

General: Community development block grants (CDBG) provide Federal funding for programs that are designed and administered by local governments. CDBG funds flow through to municipalities in various ways dependent upon the size and location of the municipality. Large cities and urban counties, as well as some smaller cities, receive entitlement funds from this program on an annual basis. Municipalities under 50,000 in population, which are not qualified for entitlement funds, may apply to the State through a competitive process for funds in the "Small Cities" program.

The CDBG program is administered by the Department of Housing and Urban Development (HUD). Authorized under Title I of the Housing and Community Development Act of 1974 as amended, the primary objective of the program is to provide "decent housing and a suitable living environment and expanding economic opportunities, principally for persons of low and moderate income." Activities funded through CDBG must also meet one or more of the three National Objectives: (i) benefit to low and moderate income individuals, (ii) aid in the prevention or elimination of slums or blight, or (iii) address other community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community where other financial resources are not available to meet such needs.

Benefits: CDBG funds are among the most flexible sources of financing of eligible projects. Municipalities may design grant and loan programs tailored to their communities' needs.

Types of Properties: Many different types of properties can be served by CDBG funded programs. Designing a program which meets eligibility requirements may or may not be difficult, depending upon the complexity of the program being designed and on the activity and National Objective which the program is designed to meet. The table on the following pages, derived from HUD's *Guide to Eligible CDBG Activities*, outlines possible categories of programs for which a municipality might choose to use CDBG funds.

Jurisdiction's Responsibilities: Jurisdictions must design and administer CDBG-funded programs. Those jurisdictions which receive entitlement funds can use a portion of those funds for a seismic retrofit program. Non-entitlement municipalities must apply to the State through the State CDBG "Small Cities" program. Jurisdictions seeking to use CDBG funds for seismic retrofit programs should seek additional guidance from HUD.

Owner's Responsibilities: Owners need to meet the criteria established by the municipality for distribution of CDBG funds and must apply to the municipality for those funds.

Limitations: The National Objectives of CDBG are very specific for commercial and industrial buildings. Only certain activities are eligible under a CDBG-funded retrofit program. Under the "Small Cities" program, the maximum amount allowable per activity is $500,000.

Comments: Municipalities which receive entitlement funds generally direct most of those funds to ongoing programs. Retrofitting could be very expensive, requiring a large allocation of funds. Reprogramming funds from ongoing programs to a retrofitting activity could prove politically difficult. The "Small Cities" program for non-entitlement jurisdictions is very competitive. The program has $24 million to distribute annually, and receives anywhere from $35 to $75 million in applications. To have a reasonable chance of being accepted, "Small Cities" applications should address a number of CDBG objectives. Retrofitting alone is unlikely to be competitive.

Contact: Housing & Urban Development Department
Regional Office - Region IX
450 Golden Gate Avenue, San Francisco, CA 94102
(415) 556-5900
or
Your regional office

Eligible Activity	Objective	Qualifies If	Example
Housing Rehabilitation: **Rehabilitation of any publicly or privately owned residential property, including the conversion of non-residential property for housing, provided such rehabilitation meets a national objective**	Low/Moderate Housing	The housing to be rehabilitated is occupied or will be occupied by Low/Moderate income persons. Rental units must be occupied at affordable rents	Conversion of non-residential structures into permanent housing for Low/Moderate persons.
	Slum or Blighted Area	Housing rehabilitation for households not known to have Low/Moderate incomes qualifies if: (1) the structure rehabilitated is located within a designated slum or blighted area; (2) housing deterioration is one of the conditions which contributed to the deterioration of the area; and (3) the structure to be rehabilitated is considered substandard under local definition before rehabilitation (such definition being at least as stringent as standards used in the Section 8 Housing Assistance program)	Correction of substandard conditions in housing units located in designated blighted areas exhibiting housing deterioration
	Spot Blight	Housing rehabilitation for households not known to have Low/Moderate incomes qualifies if: (1) the structure rehabilitated is located within a designated slum or blighted area; and (2) the rehabilitation is limited to the extent necessary to eliminate specific conditions detrimental to public health and safety	Elimination of faulty wiring, falling plaster or other similar conditions that are hazardous to all potential occupants

Eligible Activity	Objective	Qualifies If	Example
Special Economic Development: **Commercial or industrial improvement carried out by the municipality or a nonprofit, including acquisition, construction, reconstruction or installation of commercial or industrial buildings or structures and other real property equipment and improvements, or assistance for private for-profit entities for an activity determined to be "necessary or appropriate" (as specifically defined by the regulations) to carry out an economic development project.**	Low/Moderate Area Benefit	The assistance is to a commercial business which serves a Low/Moderate income residential area	Assistance to neighborhood businesses such as grocery stores and laundromats, typically qualify
	Low/Moderate Jobs	The assistance is directly linked to the creation or retention of permanent jobs, at least 51% of which are for Low/Moderate income persons	Assistance to a manufacturer in financing an expansion which will create permanent jobs, at least 51% of which are for Low/ Moderate income persons
	Slum or Blighted Area	The assistance is to a business in a designated slum or blighted area and addresses one or more of the conditions which contributed to the deterioration of the area	A low-interest loan to a business as an inducement to locate a branch store in a redeveloping blighted area

Eligible Activity	Objective	Qualifies If	Example
Clearance: **Clearance, Demolition, Removal of Buildings and Improvements, Movement of Structures to Other Site**	Spot Blight	Clearance is undertaken to eliminate specific conditions of blight or physical decay on a spot basis not located in a slum or blighted area	Demolition of an abandoned and deteriorated structure

Other categories of activities which might usefully be explored, always bearing in mind CDBG's national objectives, are Relocation: payments and assistance to individuals, families, businesses, nonprofit organizations and farms; Historic Properties: rehabilitation, preservation and restoration programs; and Commercial or Industrial Rehabilitation: for private for-profit businesses to the extent that rehabilitation is limited to improvements to the exterior of the building and the correction of code violations.

THE HOME PROGRAM

General: The HOME Program, a new housing assistance program from the Department of Housing and Urban Development (HUD), was created under Title II (the Home Investment Partnerships Act) of the National Affordable Housing Act of 1990. The general purposes of HOME include:

- To expand the supply of decent and affordable housing, particularly rental housing, for low- and very-low-income Americans. Such housing includes existing rental housing made affordable through tenant-based rental assistance.
- To strengthen the abilities of State and local governments to design and implement strategies for achieving adequate supplies of decent, affordable housing.
- To provide both financial and technical assistance to participating jurisdictions, including the development of model programs for affordable low-income housing.
- To extend and strengthen partnerships among all levels of government and the private sector, including for-profit and nonprofit organizations, in the production and operation of affordable housing.

HOME funds are available to States, cities, urban counties and consortia (contiguous units of local government). Funding for the HOME program includes a $25 million set-aside for technical assistance. HOME funds are allocated by formula, with 60% of these funds available for cities, counties and consortia and 40% for States. Each participating jurisdiction will be required to set aside 15% of its formula allocation for development of projects owned, developed or sponsored by community housing development organizations (CHDOs). HOME funds may be used for a variety of activities to develop and support affordable housing. Eligible activities include: tenant-based rental assistance, assistance to first-time homebuyers and existing homeowners, property acquisition, new construction, reconstruction, moderate or substantial rehabilitation, site improvements, demolition, relocation expenses and other reasonable and necessary expenses related to development of non-luxury housing.

Benefits: The HOME program is not a categorical housing program requiring a specific housing activity. Instead, the HOME program provides States and local governments flexibility to decide what kind of housing assistance, or mix of housing assistance, is most appropriate to meet their housing needs.

Types of Properties: Many different types of properties can be served by HOME program funds. The HOME program is structured to encourage States and local governments to use HOME funds most efficiently by requiring the smallest State and local matching contributions for the most cost-effective housing activities.

Jurisdiction's Responsibilities: Before receiving HOME funds, a jurisdiction must prepare (and HUD must approve) a Comprehensive Housing Affordability Strategy (CHAS), submit a notice of intent to participate, and provide a program description.

Owner's Responsibilities: The HOME program is specifically designed to meet the housing needs of low- and very-low-income residents, so the residents of buildings whose owners are applying for HOME program funds must meet HUD income guidelines if the project is to be eligible.

Limitations: HOME funds may not be used to pay for any administrative costs of a participating jurisdiction. Other activities prohibited under the HOME program include public housing modernization, tenant subsidies for certain special mandated purposes under Section 8, matching funds for other Federal programs, Annual Contributions Contracts (ACCs), activities under the Low-Income Housing Preservation Acts of 1987 and 1990, and operating subsidies for rental housing. Additionally, the funds cannot be used to create a reserve to undertake those activities at a later date.

Comments: As cities have not received HOME funds in the past, there are no established programs dependent on this source. Using these funds for seismic retrofit projects therefore will not require reprogramming, which may make the HOME program more accessible for seismic retrofit projects than established funding sources such as CDBG. However, as it is a new Federal program, we have no track record from which to judge the availability of HOME funds for this purpose.

Contacts: Office of Affordable Housing Programs
U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, D.C. 20410
or
Housing and Urban Development Department
Regional Office - Region IX
450 Golden Gate Ave., San Francisco, CA 94102
or
Your HUD regional office

THE SMALL BUSINESS ADMINISTRATION (SBA)

General: The Small Business Administration (SBA) program most likely to be of interest to owners of seismically hazardous buildings is the Guaranty Loan Program. Loans are made by private lenders with a percentage of the loan amount (up to a maximum of $750,000) guaranteed by the SBA. Loan terms are dependent upon the use of the loan proceeds.

Benefits: Interest rates on SBA guaranteed loans range from prime rate plus 2.25% to prime rate plus 2.75%, depending on the term of the loan.

Types of Properties: This program is only suitable for small businesses that are owner/ tenants in seismically hazardous buildings. The proceeds from a loan through this program may be used for leasehold improvements.

Jurisdiction's Responsibilities: This program does not require the direct participation of the municipality.

Owner's Responsibilities: The owner must initiate this process by contacting the SBA. An applicant must have an historical earnings and cash flow record which demonstrates an ability to repay the loan. An acceptable tangible net worth is required to demonstrate that the business operates on a sound financial basis.

Limitations: The SBA requires sufficient assets be pledged as collateral. Although the SBA does not set minimum loan amounts, it is unusual to find a lender willing to participate in loans for amounts under $50,000.

Comments: A decision on a loan package is usually made within 10 working days after it is received by the SBA, not including the bank's processing time. A list of local lending institutions that participate in this program can be obtained from the SBA. This program can prove helpful to owners who can qualify for a loan but have been unable to find a bank willing to provide one. The Guaranty Loan Program will be of little help to owners who need some type of subsidy in order to afford a retrofit project.

Contact: Small Business Administration
San Francisco District Office
211 Main Street, San Francisco, CA
(415) 744-6820
or
Your district office

BOND PROGRAMS

GENERAL OBLIGATION BONDS

(California Government Code - Section 43600 et seq. for cities)
(California Government Code - Section 29900 et seq. for counties)

General: AB 1001 (Chapter 658, Statues of 1991) allows the use of General Obligation (GO) bonds to finance the seismic retrofit of privately-owned hazardous structures. GO bonds are repaid from property and other general taxes levied throughout a jurisdiction so they must be used to finance projects with a public benefit.

Benefits: The funds from sale of GO bonds can be used to provide financing to owners of hazardous structures on any terms established by the municipality.

Types of Properties: A GO-funded loan program can be designed to finance retrofit of any type of property, assuming the project provides a public benefit.

Jurisdiction's Responsibilities: The jurisdiction must design and administer the program, issue the bonds, and make bond payments.

Owner's Responsibilities: The owner must agree to meet the requirements of the program.

Limitations: As with any GO bond, the issue must be approved by a two-thirds vote. General Obligation bonds are also subject to a jurisdiction's statutory debt limit.

Comments: To our knowledge, this financing mechanism has not been used by local governments to fund retrofitting of privately-owned structures.

Contact: Financial Advisor, Investment Banker, and/or Bond Counsel

MARKS-FORAN RESIDENTIAL REHABILITATION ACT
(California Health and Safety Code - Section 37910)

General: The Marks-Foran Residential Rehabilitation Act authorizes cities, counties, housing authorities and redevelopment agencies to issue tax-exempt revenue bonds to finance residential rehabilitation. The rehabilitation program should be based on a public improvement plan reviewed and adopted by a citizens committee. Any work pursued with funding from this program must comply with a municipality's rehabilitation standards. The funds from such a Marks-Foran bond issue can be used to provide long-term, low-interest loans to owners of residential property.

Benefits: Marks-Foran bonds provide loans at tax-exempt rates to property owners.

Types of Properties: Single-family and multi-family residential properties qualify for Marks-Foran bond financing. Commercial properties may qualify if located in a designated residential rehabilitation area.

Jurisdiction's Responsibilities: The sponsoring municipality must designate an area for residential rehabilitation, must design and administer the loan program, and must issue the bonds.

Owner's Responsibilities: Property owners must apply for funding and demonstrate ability to repay loans.

Limitations/Comments: Up to 20% of loans for absentee-owned property and up to 40% of loans for owner-occupied property may be used for general property improvements not required by such local rehabilitation standards. Funds can also be used for architectural, engineering, appraisal, origination and other fees.

Contact: Financial Advisor, Investment Banker, and/or Bond Counsel

MARKS HISTORIC BOND ACT
(California Health and Safety Code - Section 37600 et seq)

General: The Marks Historical Rehabilitation Act of 1976 allows a city, county, city and county or a redevelopment agency to issue bonds to finance the rehabilitation of historic properties. The project may comprise acquisition, relocation, reconstruction, restoration, renovation or repair of the historical property for any of four purposes, one of which is to provide for the safety of occupants or passersby. Prior to issuing bonds under this program, a municipality must adopt a historical rehabilitation financing program and designate historical rehabilitation areas.

Benefits: Provides tax-exempt financing to aid in the rehabilitation of historically or architecturally significant structures.

Types of Properties: Property must be "historical property" as defined by the Marks Act, (such as property listed on existing national, State or local historical registers or official inventories).

Jurisdiction's Responsibilities: A jurisdiction must adopt an historical rehabilitation financing program, setting forth the architectural and/or historical criteria to be used in selecting historical properties which may be eligible for rehabilitation financing. The jurisdiction's legislative body must designate historical rehabilitation areas using specified criteria. The jurisdiction must also allow affected citizens to participate in the planning and implementation of the historical rehabilitation financing program and in the designation of historical rehabilitation areas, providing for a maximum of citizen participation, including the establishment of a citizens advisory board.

Owner's Responsibilities: Owner must provide documentation that the structure meets the criteria for selection as an historically/architecturally significant building.

Limitations: Loans made under a Marks Historic Bond Act program must meet the following criteria:

(1) outstanding loans on the project property, including the loan for rehabilitation, cannot exceed 90% of the post-rehabilitation value of the property
(2) repayment period cannot exceed 40 years or 4/5 of the expected economic life of the property, whichever is less
(3) loan must be used only for historical rehabilitation work as defined in the Act.

Comments: A seismic retrofit program designed around historically significant buildings may be an appropriate option for a community with a traditional downtown area that contains a number of historically significant structures and a high concentration of seismically hazardous structures. A municipality's historical rehabilitation financing program may include a public improvement portion. Such infrastructure improvements must take place within a designated rehabilitation area. A rehabilitation agency can also buy historical properties with this financing.

Contact: Financial Advisor, Investment Banker, and/or Bond Counsel

MELLO-ROOS COMMUNITY FACILITIES DISTRICT
(California Government Code - Section 53311 et seq.)

General: The Mello-Roos Community Facilities District Act of 1982, subject to certain limitations, allows jurisdictions to provide market rate loans to private property owners to finance seismic retrofit work. Mello-Roos is therefore useful as an alternative to private financing mechanisms, particularly when private financing is limited.

Mello-Roos bonds are payable from and secured by a special tax on the properties in the district, so a jurisdiction is not legally liable for the debt incurred under this type of issue. The special taxes are generally collected with property taxes, and are in place only so long as they are needed to pay principal and interest on the bonds. The interest on Mello-Roos bonds issued to finance seismic rehabilitation of private properties is exempt from California State taxes but is subject to Federal taxation. Mello-Roos financings are similar to Special Assessment financings. (See: SPECIAL ASSESSMENT DISTRICTS)

Benefits: Mello-Roos bonds can provide financing at rates comparable to bank lending rates. Mello-Roos districts are geographically flexible, and can be designed to include all owners who are interested in and qualify for the financing. Depending on the guidelines for membership (e.g. value to lien requirements, etc.) Mello-Roos financing may be easier to qualify for than traditional financing.

Types of Properties: Mello-Roos bonds can be used to finance the retrofit of all types of privately owned, seismically hazardous structures.

Jurisdiction's Responsibilities: As a prerequisite to establishing a seismic retrofit Mello-Roos district, a municipality must adopt a mandatory retrofit ordinance which sets specific code requirements. The ruling legislative body of the jurisdiction must also adopt a resolution of intention to establish the district, levy the special tax, and issue the bonds. The legislative body must within 60 days hold a public hearing on the formation of the district and the issuance of bonds, and then must submit the matter to a vote. The issue requires a "yes" vote from all property owners included in the district. The jurisdiction generally assembles and works with a financing team to help establish criteria for allowing property owners to join the district, to help work with the owners of URMs and other seismically hazardous structures, and to bring the bonds to market. Once the bonds have been issued, the jurisdiction's responsibilities include monitoring of construction and administration of the district.

Owner's Responsibilities: Owners must decide to become members of the district and demonstrate their ability to meet criteria established for membership in the district.

Limitations: Some limitations to the use of Mello-Roos financing to pay for seismic safety work on privately owned buildings are:

(1) financing may be used to pay only for work necessary to comply with locally adopted seismic retrofit standards
(2) financing cannot be used to demolish, replace or repair a building unless it is located in the disaster area declared as a result of the Loma Prieta earthquake of October 1989
(3) all work financed on historical buildings must be done in accordance with the State Historical Building Code
(4) the district must be authorized by a 100% "yes" vote (i.e. the district may only include the properties of those owners who want to participate in, and who qualify for, the Mello-Roos program)
(5) Mello-Roos bonds may only be issued for this purpose prior to October 17, 1994

Mello-Roos bonds may be used to finance work on privately owned buildings. They cannot finance the retrofit of public buildings, because properties owned by government agencies are exempt from the taxes which are levied on properties in a Mello-Roos district.

Comments: Mello-Roos financings for the purpose of seismic retrofitting have generally been considered for use by general law cities and counties, although charter cities may use them as well. Membership in the district is voluntary so there are likely to be few compliance problems. To be certain a property owner is serious about joining the district, a jurisdiction may want to require potential members to submit preliminary plans, an engineer's estimate, and a sizeable non-refundable deposit, and make current all property tax payments. A Mello-Roos financing may require a significant amount of staff time, but there are few hard costs to the jurisdiction; all fees may be passed through to the district members. One of the more difficult efforts associated with a Mello-Roos financing may be determining the guidelines for membership in the district, such as setting value-to-lien ratios. The time necessary to establish a Mello-Roos district depends on the community and the commitment of the building owners. If the community has experience with Mello-Roos issues and the owners have already done engineering studies, then the bond can be issued relatively quickly. On the other hand, it is possible the establishment of a district could take several years. Proceedings to issue bonds can be concurrent with efforts to establish a district, which can shorten the overall timeline. An experienced municipality with a few well-prepared owners may theoretically be able to complete the formation of a district and issue bonds in 6 months or less. The legislation surrounding Mello-Roos financing is frequently updated; bond counsel should be consulted for the most current information. (See: CASE STUDY - CITY OF WEST HOLLYWOOD)

Contact: Financial Advisor, Investment Banker, and/or Bond Counsel

PUBLIC PURPOSE BONDS

General: Many communities issue bonds and other forms of obligations to finance projects which serve a "public purpose" such as construction or remodeling of public buildings. Subject to certain restrictions, tax laws permit up to 5% of the proceeds of such a financing to be used for unrelated private purposes. Financing the seismic retrofitting of a privately owned building theoretically could be one use of this 5% portion.

Benefits: These funds can be obtained without undertaking a separate financing, and would be available at the same low rate as the general issue.

Types of Properties: A funding program of this type can be designed to meet the needs of a jurisdiction for the retrofitting of any type of structure.

Jurisdiction's Responsibilities: The jurisdiction would prepare the financing as it would any other issue, working with its financing team and private owners to ensure that the financing is marketable and complies with tax laws. The jurisdiction will also be responsible for bond repayment.

Owner's Responsibilities: The owner must work with the jurisdiction and the financing team and meet the criteria established by the jurisdiction.

Limitations: Less than 5% of the proceeds of a public purpose financing may be used on private projects.

Comments: To our knowledge this technique has never been used. This type of program would be particularly well suited for communities which expect to issue a public purpose financing and which have a small number of structures in need of seismic retrofitting. Note that the 5% limit is not designed for this purpose; rather, it is a built in "buffer" in case a portion of a financing accidentally is used inappropriately. Bond counsel needs to be consulted about the appropriateness of using the 5% portion in a planned manner to finance seismic upgrade of privately-owned hazardous structures.

Contact: Financial Advisor, Investment Banker, and/or Bond Counsel

SPECIAL ASSESSMENT DISTRICT

(California Street and Highways Code - Section 5000 et seq., 10000 et seq. and 8500 et seq.)

General: Special Assessment District financing is similar to Mello-Roos Community Facilities District financing. (See: MELLO-ROOS COMMUNITY FACILITIES DISTRICT) Almost all Special Assessment proceedings are conducted under the Improvement Act of 1911, or the Municipal Improvement Act of 1913 used in conjunction with the Improvement Bond Act of 1915. The 1911 Act and the 1913 Act are general purpose acts that can be used, within certain limitations, by cities and counties to make market rate loans available to property owners to finance the seismic retrofitting of privately owned buildings.

Special Assessment financing presents an alternative to private financing mechanisms for owners of seismically hazardous buildings. Assessments levied on properties in a district are in proportion to the financing received for their retrofit projects. Bonds are issued based upon the total of unpaid assessments. A lien is created against each parcel with an unpaid assessment and the assessments are recorded in the county recorder's office. Assessments are collected in the same manner as property taxes and can be pre-paid in full within 30 days. The interest on Special Assessment bonds issued to finance the seismic retrofitting of privately owned buildings is exempt from California State taxes but is subject to Federal taxation.

Benefits: Special Assessment bonds can provide financing, at rates comparable to bank lending rates, to owners of seismically hazardous structures. Depending on the guidelines for membership, this financing may be easier to qualify for than traditional financing.

Types of Properties: Special Assessment bonds can be used to finance the retrofit of all types of privately owned, seismically hazardous structures.

Jurisdiction's Responsibilities: Prior to establishing a Special Assessment district, the governing body of a municipality must adopt an ordinance mandating seismic retrofitting of affected buildings and a procedural ordinance. The ruling legislative body also must adopt a resolution of intention to establish the district, levy assessments and issue bonds. An Assessment Engineer then prepares a report describing, among other things, the method used for determining the assessment to be levied against each property. After a 60-day notice period, the legislative body must hold a public hearing on the formation of the district and the issuance of the bonds. Unless owners of at least half the parcels protest, the legislative body can then adopt resolutions forming the district and authorizing issuance of the bonds. The jurisdiction generally assembles and works with a financing team to help develop guidelines

for district membership. The municipality then offers district membership, in accordance with the developed guidelines, to all owners of seismically hazardous buildings. Membership can be voluntary.

Owner's Responsibilities: Owners must elect to participate in the district, obtain engineering and construction cost estimates, and demonstrate their ability to meet criteria established for membership.

Limitations: The following are some limitations applicable to any Special Assessment procedure:

(1) The money raised must be used for a public purpose, such as improved public safety.
(2) The total of the assessment cannot be greater than the sum of the cost of improvement and the expenses related to the bond financing.
(3) The assessment on any parcel must be proportionate to the benefit received by that parcel.
(4) The owner of a parcel assessed must be given an opportunity for a hearing on the extent of benefit his or her parcel is judged to receive.

Comments: Special Assessment financing for the purpose of seismic retrofitting has generally been considered for use by charter cities and counties, although general law jurisdictions may use this technique as well. As membership in a Special Assessment district may be voluntary, the jurisdiction should encounter few compliance problems. To be certain that a property owner is serious about joining the district, a jurisdiction may want to require potential members to make a sizable non-refundable deposit and to make current all property tax payments. A Special Assessment district may require a significant amount of staff time, but there are few hard costs to the jurisdiction as all fees may be passed through to district members. One of the more difficult efforts associated with a Special Assessment financing may be determining the guidelines for membership in the district, such as setting value to lien ratios.

In 1989, the City of Torrance established a Seismic Safety Assessment district to finance approximately $680,000 worth of seismic retrofit projects. Torrance used a combination of the 1913 and 1915 Acts to finance the retrofitting of 7 of the 40 privately owned structures in the city which were designated as seismically hazardous. (See: CASE STUDY - CITY OF TORRANCE) In 1991, the City of Long Beach used the same method to finance approximately $17.4 million worth of seismic retrofit projects on 307 parcels throughout the city. (See: CASE STUDY - CITY OF LONG BEACH). The interest rate on the Torrance bond issue was 10.75% while the rate on the Long Beach issue was 11.3%.

The time it takes to establish a Special Assessment district depends upon the experience of the community with such districts, the number of properties to be included in the district, and the commitment of the building owners. A smaller, experienced jurisdiction should theoretically be able to establish the district and issue the bonds in less than 6 months. By contrast the Long Beach financing took 18 months to complete.

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TAX INCREMENT FINANCING OR TAX ALLOCATION BONDS

(California Health and Safety Code - Section 33670)

General: Tax Allocation bonds are normally issued by redevelopment agencies to finance the revitalization of blighted and economically depressed areas. While to our knowledge they have not been issued for this purpose, Tax Allocation bonds theoretically can also be used to finance seismic retrofit projects. The "tax increment revenue" used to make principal and interest payments on the bonds is the portion of future property taxes that reflects an increase in the project area's assessed valuation due to the redevelopment work.

Benefits: Tax Allocation bond funds can be used for programs ranging from grants to low-interest long-term loans.

Types of Properties: These funds can be used to finance the retrofit of any structure located in the redevelopment district.

Jurisdiction's Responsibilities: The redevelopment authority of the jurisdiction must develop program guidelines for distributing funding, must issue bonds, administer the program, and make bond payments.

Owner's Responsibilities: An owner must qualify for funds under local program guidelines.

Limitations/Comments: Tax Allocation bonds have not, to our knowledge, been used to fund programs aimed at financing retrofitting of privately-owned seismically hazardous structures. The bonds issued to finance this type of program will likely be Federally taxable because of the emphasis on investment in privately owned buildings. It is unclear whether seismic retrofitting alone will generate sufficient tax increment revenue to cover bond payments.

Contact: Financial Advisor, Investment Banker, and/or Bond Counsel

CALIFORNIA STATE

SEISMIC LEGISLATION

CALIFORNIA STATE SEISMIC LEGISLATION

In 1986 the legislature of the State of California enacted a comprehensive law addressing the hazards posed by unreinforced masonry buildings (URMs) which mandated certain actions be taken by January of 1990. Three months before that deadline the San Francisco Bay Area experienced the Loma Prieta earthquake. In the two years which followed, much legislation was proposed to address various aspects of seismic safety. The following discussion highlights legislation which passed into law during that period and which provides incentive for retrofitting privately-owned seismically hazardous structures.

THE URM LAW

In response to the danger posed by the great number of potentially hazardous buildings in California, in 1986 the State legislature enacted the unreinforced masonry building law (Chapter 250, Statutes of 1986: SB547 [Alquist]; Government Code Section 8875 et seq.) The backbone of the State's efforts to address seismically hazardous structures, this legislation, commonly known as the "URM Law," is aimed at mitigating the hazards posed by URMs. The URM Law applies to all jurisdictions in California's Seismic Hazard Zone 4, the region of highest earthquake activity in the nation. Seismic Hazard Zone 4 runs along California's coast from parts of San Diego County in the south through Humboldt County in the north, as well as inland in parts of the State, and contains several areas with a 60% or higher chance of a major earthquake occurring within the next thirty years. Seismic Hazard Zone 4 includes 365 jurisdictions containing roughly 80% of the State's population.

The URM Law spells out three tasks which local jurisdictions in Seismic Hazard Zone 4 are required to accomplish. The first step, which was to be completed by January 1, 1990, requires jurisdictions to identify all URMs which are "potentially hazardous." These are defined in the law as buildings "constructed prior to the adoption of local building codes requiring earthquake resistant design of buildings and constructed of unreinforced masonry wall construction." The law does not require local jurisdictions to identify warehouses and similar buildings with few occupants (excluding those used for emergency services or supplies), residential buildings with five or fewer living units, or structures which are historically or architecturally significant.

The second step required by the URM Law is development and implementation of a mitigation program. Each jurisdiction is free to develop its own program, the only requirement being that legal owners be notified that their buildings are potentially hazardous. The third step, which was also to be accomplished by January 1, 1990, is submission of the information collected and the mitigation plan to the California Seismic Safety Commission.

Note that the Seismic Safety Commission's primary function is to advise the governor and the legislature and coordinate the responsibilities of State agencies on issues regarding seismic safety. The Commission is responsible for establishing programs for earthquake hazard mitigation, and was required by the URM Law to develop an advisory report for local jurisdictions to use when complying with that law. While the Seismic Safety Commission collects the information submitted by local jurisdictions, the URM Law does not give the Seismic Safety Commission any regulatory authority to approve that material. As of June 1992, all but a handful of communities had complied with the requirements of the URM Law.

ENFORCEMENT OF LOCAL ORDINANCES

Case law clearly spells out the authority of local governments to conduct surveys of seismically hazardous structures and to require retrofitting (See: LIABILITY IMPLICATIONS AND CONSIDERATIONS). In addition, California legislation makes it clear that local jurisdictions have the right to abate potentially hazardous buildings (AB1279: Hauser: 1989-90 Legislative Session: Chaptered 90-192). This legislation states that the local jurisdiction's enforcement agency may order a building retrofitted to local building standards if the building is identified by the jurisdiction as being "potentially hazardous to life in the event of an earthquake," and (1) in the event of an earthquake the hazardous condition "would endanger the immediate health and safety of residents or the public," (2) the condition can be corrected with current technology, and (3) the owner has not complied with an abatement order of the enforcement agency. If the owner does not comply, the enforcement agency may apply to the superior court for appointment of a receiver who will obtain a lien against the property and act to abate the hazard in accordance with procedures set out in the legislation.

CONCERNS OF LOCAL JURISDICTIONS: GIFT OF PUBLIC FUNDS, SEPARATION OF CHURCH AND STATE, AND LIABILITY

Much of this *Handbook* is based on the assumption that jurisdictions have decided to provide retrofitting funds to property owners, and are looking for ideas as to how they might do so. In California the question often arises of whether a particular financing program violates the State constitution's prohibition against a "gift of public funds." This question is directly addressed in some of the legislation enabling particular financing techniques, where the legislation expressly declares that the loans made pursuant to the legislation should not be construed to be gifts of public funds. Local jurisdictions need to consult with their attorneys to ensure that any financing programs which they design, whether or not pursuant to specific legislation, do not violate the constitutional prohibition.

The issue of "separation of church and State" also comes to the minds of those designing financing programs, querying whether it is appropriate for local agencies to provide assistance to religious institutions. The legal questions may be complex. With respect to the constitutional question, so long as a program is designed to finance retrofit of all buildings and not just those put to religious use, in general there is no Federal or State prohibition against local agencies providing assistance to religious institutions. This is articulated in Everson v. Board of Education, 330 U.S. 1, 18 (1946), a case which questioned the use of public tax dollars for parochial school children's transportation to school. In his opinion, Justice Black wrote that the First Amendment "... requires the State to be neutral in its relations with groups of religious believers and non-believers; it does not require the State to be their adversary. State power is no more to be used so as to handicap religions than it is to favor them." The use of taxes in that case was upheld since the government was not being discriminatory.

Where bond financing is involved, the regulations are somewhat different. Generally, if a program is bond financed, it must be designed to finance the retrofit of all buildings not just those put primarily to religious use or, for that matter, to other prohibited use; whether or not a building may be provided bond financing must be decided by bond counsel on a case-by-case basis. The main concern with bond financing, however, is the *type of work* that may be financed rather than which buildings may be eligible. Whether or not a program is being bond financed, local agencies again are advised to seek the opinion of counsel when putting together a financing program to ensure that they are in compliance with these and other relevant State and Federal statutes.

Liability is an issue which frequently comes up in discussions of seismic retrofit, with arguments being made for liability as both an incentive and a disincentive to retrofit. (See: LIABILITY IMPLICATIONS AND CONSIDERATIONS). Jurisdictions may be concerned about their potential liability as a result of the use of public funds to install equipment and construct improvements on private property. California law spells out conditions under which public agencies are liable for injuries caused by dangerous conditions of public property. In 1990 a bill was passed (SB2819: Robbins: 1989-90 Legislative Session: Chaptered 90-1318) which provides that seismic safety or fire sprinkler improvements "which are owned, built, controlled, operated, and maintained by the private owner of the building in which the improvements are installed are not public property or property of a public entity solely because the improvements were financed, in whole or in part, by means of the formation of a Special Assessment district."

SPECIAL ASSESSMENT, MELLO-ROOS AND GENERAL OBLIGATION BONDS

Having decided to offer financing to private owners of hazardous buildings, an obvious next step is for the jurisdiction to identify sources of funds which can be used for that purpose. Special Assessment District financings (California Street and Highways Code - Section 5000 et seq., 10,000 et seq. and 8500 et seq.) and Mello-Roos Community Facilities District financings (California Government Code - Section 53311 et seq.) have recently been explored as sources of loan funds. Generally speaking, these techniques allow local jurisdictions to form districts composed of properties which will participate in the seismic project being financed. A tax or assessment is levied on participants in the district, and bonds are issued which are repaid from the proceeds of the tax or assessment.(See: LOCAL GOVERNMENT FINANCING OPTIONS - MELLO-ROOS COMMUNITY FACILITIES DISTRICTS and SPECIAL ASSESSMENT DISTRICTS)

Special Assessment District and the more recent Mello-Roos District financing mechanisms were designed and have routinely been used to finance public infrastructure, facilities and services. Because the legislation enabling such financings did not originally contemplate their use to fund work on privately-owned structures, the techniques are not easily applied for such use. Nonetheless, Special Assessment bond financing has already been used by certain cities to finance seismic retrofit of privately owned hazardous buildings (See: CASE STUDIES - CITY OF LONG BEACH AND CITY OF TORRANCE) and several jurisdictions are at various stages in the process of creating Mello-Roos districts for that purpose (See: CASE STUDY - CITY OF WEST HOLLYWOOD). Legislation has been passed, and continues to be proposed, aimed at allowing, clarifying, and simplifying use of these techniques to finance retrofit of private structures.

The Mello-Roos legislation was the first to be amended for this purpose. Shortly after the Loma Prieta earthquake in 1989, legislation was passed allowing Mello-Roos districts to be used by jurisdictions located in a disaster area to finance the repair of buildings damaged or destroyed by the earthquake (SBX27: Mello: 1989-90 First Extraordinary Session of the Legislature: Chaptered 90-29X). This legislation also provided for financing of "work deemed necessary to bring buildings, including privately owned buildings, into compliance with seismic safety standards or regulations." This work may be financed through a tax levy on properties in the Mello-Roos district, provided that all the votes cast on the question are in favor of the tax. Work financed using Mello-Roos must be certified by local building officials as necessary to bring the building into compliance with seismic safety standards or regulations. All such work on qualified historical buildings must comply with the State Historical Building Code. Demolition of a building and its replacement with a new building can not be financed, nor can construction of a new building except in Federally declared disaster areas.

Recently legislation was passed to clarify ambiguities regarding the use of Special

Assessment techniques to finance seismic retrofit of privately-owned properties. (AB1700: Farr: 1991-92 Legislative Session: Chaptered.) This legislation states that cities and counties may issue bonds, incur debt and make loans to owners of private buildings for "seismic strengthening of unreinforced buildings and other buildings." The strengthening must be done in accordance with a plan approved by a jurisdiction's building official or drawn up by a registered civil engineer or a licensed architect, one of whom must certify that the work "is necessary for seismic safety reasons or is otherwise legally required for completion of the work or occupancy of the building." As with the Mello-Roos legislation discussed above, demolition and new construction are not permitted, work on historical buildings must be done in accordance with the State Historical Building Code, and "no lot, parcel, or building shall be included in the district without the owner's consent." Addressing a concern regarding affordable housing, the legislation specifies that to the extent funds are used to retrofit residential buildings containing affordable units for lower income households, the owner must enter into an agreement to maintain the number and level of rents of those units. To qualify to issue bonds and make loans under the program, the legislation requires a jurisdiction to have completed its inventory of URMs and to have adopted a mitigation ordinance in accordance with the URM Law.

The least expensive form of loan financing available to government entities is General Obligation bonding: issuance of bonds which are guaranteed by the full faith, credit and taxing power of the issuing jurisdiction. As with Special Assessment and Mello-Roos financings, tools originally designed for public finance, General Obligation bonds have been examined as possible vehicles to provide funding for retrofit of privately owned structures. Legislation was passed (AB1001: Brown: 1991 Legislative Session: Chaptered 91-0658) stating that a city or county may issue bonds for the purpose of seismic strengthening of unreinforced and other buildings. Use of this tool is subject to many of the same conditions described above such as certification that the work is necessary, preservation of low-income housing units, and jurisdictional compliance with the URM Law. Primarily because in California General Obligation bonds must be approved by a two-thirds vote, this technique has not yet been tested.

REDEVELOPMENT AGENCIES

In many cases URMs and other privately-owned seismically hazardous buildings are concentrated in one geographic area within a jurisdiction, such as an old downtown area. Often these geographic areas fall within the purview of a redevelopment agency. As compared with agencies throughout the country, redevelopment agencies in California have uniform structures and powers and generally have the ability to raise more types of revenues.

As a result, in California redevelopment agencies are important resources. Subsequent to the Loma Prieta earthquake, legislation was passed authorizing redevelopment agencies to take those actions they determine necessary to seismically strengthen specified buildings, including historical buildings, in order to bring them into compliance with seismic building code standards (AB356: Cortese: 1989-90 Legislative Session: Chaptered 90-933).

STATE REACHING OUT DIRECTLY TO PROPERTY OWNERS

The discussions above focus on State actions to help local jurisdictions effect retrofitting in their communities. The State also has taken steps to provide incentives directly to property owners. Two such steps are particularly noteworthy.

It is well known that in 1978 California voters passed Proposition XIII, amending the State constitution to limit the amount of *ad valorem* property taxes on real property to 1% of "full cash value." Full cash value is defined as "the county assessor's valuation of real property ... or ... the appraised value of real property when purchased, newly constructed or a change in ownership has occurred ...." Under Proposition XIII construction undertaken to retrofit hazardous properties could result in increased property taxes, a considerable disincentive to property owners. In 1990 a measure was put on the ballot and the State constitution was amended (SCA33: Rogers: 1989-90 Legislative Session: Chaptered 90-R-57) excluding from the definition of "new construction" seismic retrofitting improvements or improvements utilizing earthquake hazard mitigation technologies. Thus, private owners undertaking seismic retrofitting projects are exempt from the higher property taxes which otherwise would result from new construction.

Many jurisdictions are using disclosure of a building's seismically hazardous condition as an incentive for owners to retrofit (See for example: CASE STUDY - CITY OF PALO ALTO). The idea is twofold: that tenants of a building identified as hazardous might take action to encourage the owner to retrofit, and that the market value of the property will fall once it becomes known that the structure is hazardous, leading the owner to undertake retrofitting in order to maintain or restore the property's value. The State is in the process of taking steps to require disclosure by sellers of residential and commercial properties' seismic condition (AB2959: Klehs: 1989-90 Legislative Session: Chaptered 90-1499 and AB 1968: Arieas: 1991-92 Regular Session: Chaptered 859, respectively). This is particularly significant because it pertains to transfers of all types of residential and commercial property, not just those hazardous structures identified pursuant to the URM Law.

The material described above is but a sample of the many pieces of legislation pertaining to the retrofitting of seismically hazardous structures. Among other things, the California State legislature also has addressed seismic safety of affordable housing, historically significant

structures, and public, hospital, and school buildings, as well as speaking to the issue of earthquake insurance. Additional information on State legislation in this area is available from the Seismic Safety Commission of the State of California. (See: CONTACTS)

FUTURE DIRECTIONS IN HAZARD MITIGATION

Six years have passed since the State's URM Law became effective. Since then, 90 percent of the URM buildings affected by that law have been included in hazard reduction programs. Since the law gave considerable discretion to local governments by allowing them to tailor their own hazard reduction programs, there is quite a wide variation in the effectiveness level of the 190 local programs. The State plans to continue to monitor the status of local government compliance with the URM Law each year. In the meantime, the Seismic Safety Commission has recommended in *California at Risk 1992-1996*, that the State begin to focus on other facilities that pose unacceptable levels of earthquake risk.

Three seismic hazard guidebooks for building owners are currently being developed by the Commission. The first guidebook will disclose typical seismic hazards to buyers of residential buildings. (A publication entitled *Home Buyers Guide to Earthquake Hazards* is currently available from the Bay Area Regional Earthquake Preparedness Project; see: CONTACTS) A similar guidebook is also planned for commercial buildings. These guidebooks will rely on the real estate and lending markets to adjust to a greater awareness of seismic hazards. The guidebooks may spur many owners to reduce seismic hazards voluntarily at the time of sale, much the way owners treat termite repairs. The Commission has plans to issue a third handbook for URM building owners to help them retrofit.

One of the major stumbling blocks in addressing hazardous buildings other than URMs is the lack of uniform standards for seismic hazard evaluations, retrofits, and repairs. Lacking standards, most governments are reluctant to require hazard reduction for non-URM buildings, owners are discouraged from evaluating their buildings, and design professionals do not offer consistent advice. There are several efforts to develop new seismic standards. The Office of the State Architect and the Building Standards Commission must develop uniform seismic retrofit guidelines for State government buildings by January 1, 1993. These could eventually become the basis for future standards. The National Science Foundation, the Federal Emergency Management Agency and the Seismic Safety Commission have research programs focussed on this effort. SB 597 (Alquist) proposes to expand this effort to include key private building concerns in the development of new seismic evaluation and retrofit standards.

Hazardous materials are often stored in older buildings that may collapse in earthquakes or otherwise cause leaks capable of endangering the public. The Chemical Emergency Planning and Response Commission, the Office of Emergency Services, and the State Fire Marshall will soon be considering regulatory measures to ensure that seismic safety in buildings storing acutely hazardous materials is addressed.

Two fires caused major losses after the April 1992 Petrolia Earthquakes. These were a stirring reminder of the great fire after the April 1906 earthquake. In Petrolia, four critical minutes were lost when the doors of its firehouse were jammed shut after the first earthquake. By the time fire fighters extricated their equipment, the adjacent building was burning out of control. The Seismic Safety Commission will be asking the State Fire Marshall and other fire safety regulators to consider a statewide program to modify firehouse doors that may stick in earthquakes.

In 1991, the Building Safety Board recommended establishing a major program to reduce earthquake risk in hospitals built prior to the Hospital Seismic Safety Act. The program would address hospital buildings like those that collapsed and killed patients in the 1971 San Fernando Earthquake. The Seismic Safety Commission will be seeking legislation to create this program in the coming years.

In 1991, the legislature passed AB 1964 (Areias) to set a goal of reducing hazards in unreinforced masonry, State-owned government buildings by the year 2000 in conjunction with the Commission's recommended policy on acceptable levels of earthquake risk. This proposal was considerably less ambitious than that offered by the risk policy, which recommends addressing earthquake hazards in all major State government buildings by the year 2000. Governor Wilson vetoed this bill because the State does not yet know the scope of the problem. The Legislature will probably reconsider the need to set a goal once an inventory of State buildings is developed. In the meantime, the Commission plans to encourage State agencies to disclose to the public known seismic hazards in and around existing State government buildings. The State owns a number of buildings that were identified more than a decade ago as posing serious collapse hazards in earthquakes.

The State government is at a critical stage of the URM hazard reduction effort. Despite a significant budget deficit, the State is faced with the costs of retrofitting its own buildings and bridges, as are most local governments. Private building owners and local governments are looking to the State for both a firm commitment and assistance. Most cities, counties, and building owners have expressed a willingness to take more effective steps to reduce their hazards if affordable financing and standards are made available. Accomplishing needed retrofits will take an equally firm commitment from private lending institutions statewide. Increased public awareness as well as financial and insurance pressures will come to bear upon most URM building owners over the next decade to address the seismic hazards in their

buildings. The success of the URM Law and future hazard reduction efforts will be influenced by future earthquakes, the perception of risk, and how they, in turn, influence the public's willingness to allocate money for hazard reduction.

LIABILITY IMPLICATIONS AND CONSIDERATIONS

LIABILITY IMPLICATIONS AND CONSIDERATIONS

BACKGROUND

In examining the issue of retrofitting of unreinforced masonry buildings, the question of potential tort liability is often brought up, sometimes as a disincentive for action (because determining that a building has a problem creates more liability than not knowing about a problem), and sometimes as an incentive for action (that fear of potential liability might act as an economic incentive for action).

The discussion in this chapter is limited to potential ***tort liability***. A tort is a civil (as opposed to a criminal) wrong, other than a breach of contract, for which courts award damages. Thus, this discussion does not define liability in the broader, non-legal, context of the prospect of direct building or contents damage.

In assessing the potential for liability, one must understand that there are ***4 elements of a tort***, each of which must be proven:

- a pertinent duty must be imposed on the building owner;
- the building owner must have violated that duty;
- the victim must have been injured or suffered damages; and
- there must be a causal connection between the building owner's negligence and the harm suffered by the victim.

The ***concept of negligence*** is usually based on the rule of reasonableness. How would a reasonable person have acted under similar circumstances? Could the injury or loss have been foreseen? What was the apparent magnitude of the risk? What were the relative costs and benefits of action vs. inaction?

Finally, the remarks in this chapter must be prefaced by noting the fact that after extensive research in the caselaw of 50 States, ABAG was unable to identify a single case where a public or private entity was held to be liable under traditional tort law for personal injury or physical damage directly resulting from earthquakes. Most cases are settled out of court, including the potential cases from the Loma Prieta earthquake in October 1989. In addition, if and when such a case makes it to trial, it will take approximately 2 more years to become an appellate court decision, and only appellate court decisions become legal precedent. However, ***there is a very high probability that under the appropriate circumstances, liability will be imposed on either public or private entities for personal injury or property damage resulting from an earthquake.*** The majority of this chapter spells out, in as clear a manner as possible, those circumstances for ***private*** building owners. As stressed below, the liability of the local government associated with those private buildings is exceedingly small.

THE ANALYSIS

The most expeditious way to explain the operation of liability rules is to use a specific scenario. Therefore, assume the City Council of the City of Forward, California directs the implementation of a program to survey its entire city to determine the location of all unreinforced masonry buildings (as directed by California law) and, in addition, its downtown area to determine the location of all concrete buildings built between 1950 and 1970 (determined by the city to be most likely to be the non-ductile concrete buildings prone to pancake collapse in earthquakes). The program is implemented by the building department utilizing in-house engineers and other design professionals. The building department, develops a list, including address and owner, and submits the list to the City Council. The City Council notifies the owners of the identified properties, but does not require retrofit of the buildings.

PRIVATE OWNER LIABILITY

(a) No Remedial Action

Building owner Art receives the report and ignores it, doing nothing. A magnitude 7 earthquake strikes the City of Forward and there is significant personal injury and property damage on the property of the passive owner. If the injured parties can prove that the damages were caused in whole or in part by the dangerous conditions identified in the survey, there is a very high probability that liability will be imposed. The property owner has been placed on notice of the dangerous conditions of his property, and his callous reaction to such notice serves as both a legal and a social policy ground for recovery by the plaintiffs. In fact, under the circumstances, the plaintiffs may be able to recover punitive damages.

(b) Owner Study - No Remedial Action

Building owner Brenda receives the notice, engages her own experts, and has them develop a set of recommendations for retrofit. The experts determine that the building is reasonably safe. A magnitude 7 earthquake strikes the area and personal injury and property damage result. This building owner has some liability exposure. Depending on the process by which she selected the design and engineering professionals that she hired, and the directions given to those professionals in evaluating the building, her actions in following these recommendations appear reasonable and non-negligent. However, if there was negligence involved in selecting an unskilled design professional or instructing the professional in a way which clearly militates against a finding of earthquake hazards, that action may be judged negligent and be a source of liability.

(c) Owner Study - Remedial Action

Building owner Clean-Up receives the notice, engages appropriate experts, and implements a retrofit. The earthquake strikes, and personal injury and property damage occur. Is the building owner liable? Mere compliance with the recommendations of the design professionals will not absolutely bar the imposition of liability. However, if the design professionals selected were skilled, it is unlikely that liability will be imposed.. On the other hand, if the building owner had knowledge of a major defect which the designers overlooked, and it is this defect which causes either personal injury or property damage, liability will likely be imposed for such injuries or damage.

LOCAL GOVERNMENT LIABILITY

To explore the issue of the liability of the local government associated with private buildings, it is necessary to change the scenario somewhat.

(d) Decision to Survey

Would the City of Future have exposed itself to potential liability had it ***not*** conducted the survey? More specifically, Dale (the owner of a building) and his customers are severely injured in a moderate earthquake. The owner claims that he would have retrofitted his building had he been notified by the city that a problem existed.

If the city is in the portion of California covered by the California law requiring identification of unreinforced masonry buildings (with certain exceptions, including single-family homes), the city has a mandatory duty to undertake that portion of the earthquake building survey. The city is liable for its failure to comply with a mandatory duty unless it has exercised "reasonable diligence" to discharge that duty.

One possible defense might be that the city did not have sufficient funds to undertake the inventory activities mandated by the State statute in the then current fiscal year. The harm suffered MAY be of the type against which the statute is designed to protect. The issue is foggy because the statute does not require the retrofitting of buildings. Therefore, its primary purpose is to inform and educate property owners. A foreseeable, and desirable, result would be remedial action by the property owner. At the present time, there is no reported case which would help determine if this apparent but secondary purpose of the statute is one on which the plaintiff can base a claim that the statute was "designed" to protect against the injuries and damages which would result from an unreinforced masonry building failure in an earthquake.

The next question is whether the local government has exercised reasonable diligence in the discharge of its duty. In this situation, the City of Future's use of due diligence to locate existing funds or to seek new funds to finance compliance with the law are presumed facts. Therefore, the immunity ought to apply. However, if funds become available in the future, it will be unreasonable for the local government to refuse to comply and immunity would no longer apply.

Even if the mandatory duty doctrine applies, it may be very difficult for Dale and his customers to prove that the failure of the City of Future to inventory the affected building proximately caused the injury which occurred. First, he would have to prove that the retrofit would have retrofitted the building. Second, he must prove that the retrofit would have prevented the particular harm which is the subject of the lawsuit.

With respect to those types of private buildings which are ***not*** constructed of unreinforced masonry, the question becomes: is there a legal duty on the city to conduct such a survey? A decision to implement such a program by the policy making body of the jurisdiction (in this case, the City Council) should fall under the discretionary immunity provisions of Government Code Sections 830 and 835.

(e) Inspection Process

Is the City of Future liable if the survey program is undertaken, but the inspections themselves or the consequent recommendations were conducted negligently? The California Government Code Section 818.6 immunizes local governments for an inspection process. The immunity would probably extend to the recommendations resulting from such inspections.

THE "ACT OF GOD" DEFENSE

Throughout this discussion, some may assume that the earthquake, being a natural, unpredictable and awe-inspiring event, is an "act of God" for which no liability should be imposed. This is not true.

The "act of God" defense is not triggered by the occurrence of a natural catastrophe which sets into motion a chain of events causing the injury or damage. If the natural catastrophe is one which is reasonably foreseeable and for which reasonable precautions can be taken, then the "act of God" defense is not available. The reasonable building owner must assume that a major earthquake will strike at or near its building while that building is in its ownership. It will be fruitless for the owner of a building to state that the injuries and damages that might result from the failure of its building during an earthquake could not be foreseen by it. Mass

media have disseminated information on earthquake hazards and the technical expertise necessary to evaluate and mitigate some of those hazards is available. The courts will conclude that it is only reasonable to expect responsible property owners to take some precautionary measures.

ECONOMIC ISSUES ASSOCIATED WITH LIABILITY EXPOSURE

Another issue surrounding liability to owners is related to the extent to which property retrofit, by lessening liability exposure, acts as an economic incentive to retrofit. The economic argument is weak for at least two reasons. First, although retrofit reduces the liability exposure, it does not remove it entirely. The second reason relates to, in a practical manner, how liability (whether for earthquakes or other risks) is handled. A typical building owner might have $2 million in comprehensive general liability insurance coverage (CGL). As a result of learning of the hazard at its building, it might increase its CGL from $2 million to $10 million. The incremental cost of such an increase in coverage is minuscule in comparison to its other costs of doing business. Insurance companies offering GLC will typically find it more expensive to determine the type of construction of those buildings owned by the businesses it covers than the risk of loss. However, in the case of large companies which are self-insured, such risks are more likely to have economic weight. As a practical matter, however, these large businesses are unlikely to own the unreinforced masonry buildings typically being discussed for retrofit. They are more likely to own the non-ductile concrete buildings prone to collapse. Liability exposure may function as an economic incentive for these owners.

AUTHORITY OF LOCAL GOVERNMENTS TO CONDUCT SURVEYS AND REQUIRE RETROFITTING

Another legal issue, not associated with liability, surrounds the authority of local governments to conduct surveys and require retrofitting. Unlike the liability issues, there is clear caselaw in this area. Specifically, the police powers case of Barenfield v. City of Los Angeles, 162 Cal.App. 3d 1035, 209 Cal.Rptr. 8 (1984) clearly establishes this authority. It is important to note that the case was determined prior to the passage of the California law requiring many local governments in California to survey unreinforced masonry buildings and notify owners.

The city enacted a local ordinance which required the owners of all buildings constructed prior to October 6, 1933 which have unreinforced masonry bearing walls (with exceptions not applicable to this case) to take remedial actions designed to reduce earthquake-related

hazards. Each of the plaintiffs owned one or more buildings subject to the ordinance. Each of them received an order from the city requiring them to (1) perform seismic retrofitting of the building(s), or (2) submit a structural engineering analysis indicating that the building(s) meet the ordinance standards, or (3) install temporary safeguards so as to qualify for an extension of time to comply with (1), or (4) demolish the building(s). Plaintiffs sued claiming the ordinance constituted an unconstitutional taking of private property without compensation.

In support of its motion, the city offered evidence that unreinforced masonry buildings pose a safety threat to the public and that the ordinance bore a reasonable relationship to the objective of making the public more safe from this hazard. The plaintiffs offered evidence questioning whether the ordinance's provisions had a reasonable relationship to increased safety. The trial court granted the city's motion for summary judgment.

The appellate court noted that the issue of the reasonableness of the ordinance's provisions was brought into question by the plaintiffs' evidence. However, as challenge to the constitutionality of an enactment, the court must defer to the legislature's judgment unless it is manifestly unreasonable, arbitrary or capricious. ***The court also upheld, without exposition, the ordinance's regulation of private property use as a valid exercise of the city's police powers and not as a taking.***

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