



Disaster Council

CONSENT CALENDAR

December 6, 2005

To: Honorable Mayor and
Members of the City Council

From: Disaster Council

Submitted by: Jesse Townley, Commission Chair, Disaster Council

Subject: Disaster Council Preparedness Proposals and Priorities for 2006

RECOMMENDATION

That Council direct the City Manager to continue the current momentum by retaining and supporting the work of City staff coordinating work in each of the following program areas: 1) Office of Emergency Services Revitalization; 2) Community Emergency Response Training (CERT) and the Neighborhood Preparedness Program; 3) Sheltering; 4) Unreinforced Masonry Buildings; 5) Public Warning and Communication Systems; 6) Small Business Outreach; 7) Emergency Water Delivery System; and 8) Transfer Tax Funding for Seismic Retrofits.

SUMMARY

In the two years since the last Disaster Council Report to the City Council, the city's disaster preparedness programs have suffered due to intense municipal budget pressures. Natural disasters like the recent Pakistani earthquake, the Asian tsunami, and Hurricanes Katrina and Rita have tragically underlined the importance of fully-funded preparedness efforts. Much of the Gulf Coast hurricane-related damage was predicted by both government and private parties, yet the funds to prepare comprehensive evacuation plans and physical protection (wetland and levees) were nonetheless cut. The 7/18/05 issue of New Orleans City Business states that a major earthquake in the San Francisco Bay Area is the number one most likely natural disaster in the US (number three is a Class 4 hurricane hitting the Gulf Coast, which obviously has now happened).

On a positive note, the Disaster Council is thrilled that the Soft Story Ordinance has been passed by the City Council and is being implemented. This new ordinance only covers buildings with five or more units, so we strongly support the future development of educational and outreach materials for smaller buildings (four units or fewer) that will enable owners to make informed choices about retrofitting their property.

The City has made concerted, effective efforts this past year to advance our preparedness in spite of the current fiscal crunch. It is crucial that we continue this life-saving work. This report discusses the City's preparedness efforts in the following areas and our recommendations:

Office of Emergency Services Revitalization

Revitalize the Office of Emergency Services (OES) and restore OES functionality. OES is woefully understaffed and severely limited in its capabilities to carry out the vital duties our city deserves and needs. Explore multiple funding sources to maximize funding and minimize impact on budget and community.

CERT and the Neighborhood Preparedness Program

Continue to train residents for response to emergencies in their neighborhoods. Conduct trainings in classrooms and in neighborhood settings. Emphasize in the CERT program the training of teams from neighborhoods whose members are likely to find themselves working together in an emergency. Incorporate in the CERT program a final exercise in which teams are challenged by a surprise-simulated emergency to which they must respond while being monitored and critiqued by professional firefighters. Expand the cache program to more neighborhood groups.

Sheltering

Instruct the City Manager to: (1) finalize the City's sheltering plan; (2) finalize written vendor agreements for post-disaster supplies and services; (3) hold a city-wide exercise to test the sheltering plan; (4) stock the highest priority shelters with the highest priority supplies, such as blankets, pursuing in-kind donations from local businesses where possible; and (5) obtain final signatures on the Memorandum of Understanding between the City and the Red Cross.

Unreinforced Masonry Buildings

Closely monitor the removal of City employees from the Corporation Yard's Category 1 unreinforced masonry building [URM] to ensure that no further delays occur. Ensure that Department Emergency Operations Centers and the radio transmitter be removed promptly and permanently as well.

Support and demand the aggressive enforcement of URM posting and notification requirements (regarding inherent danger) on all remaining URM buildings.

Acknowledge that reductions in Planning and Development staffing levels have slowed the enforcement of the URM retrofit compliance ordinance, and increase relevant staffing levels as soon as budgetary conditions permit.

Public warning and Communication Systems

Negotiate a multi-year contract with the vendor (FirstCall, Inc.) now supplying telephoned emergency warning service to the City of Berkeley. Continue negotiations with UC Berkeley to integrate emergency communications systems.

Small Business Outreach

Direct the City Manager to meet with City staff and community representatives to discuss new approaches to the business community and desired outcomes from the business preparedness planning process. Direct the City Manager to authorize staff to contact all new businesses with

disaster preparedness information. Encourage all pertinent business groups to discuss ways to make their members' workplaces and offices "disaster resistant."

- Suggested representatives for this program include: Economic Development, Commercial District Representatives (Telegraph Avenue Association, Downtown Berkeley Association, etc.), Chamber of Commerce, Office of Emergency Services, Neighborhood Services Liaisons, and UC Berkeley representatives.
- Identify resources and services offered by the City and other partners to encourage checklists to new businesses. Provide business preparedness manuals.
- Plan a forum to provide information on low-cost preparedness actions for up to 100 businesses or more.

Emergency Water Delivery System

Complete the bidding and fulfillment process for the emergency water delivery system that has been extensively researched and is being paid for by Measure Q money.

Transfer Tax Funding for Seismic Retrofits

Direct the City Manager to continue efforts to adopt effective seismic retrofit standards applicable to residents receiving the transfer tax rebate.

FISCAL IMPACT

1. Office of Emergency Services Revitalization: Moderate short-term fiscal impact mitigated by huge post-disaster fiscal savings of health care, housing, reconstruction, economic, environmental, legal, and infrastructure costs.
2. CERT and the Neighborhood Emergency Preparedness Program: No fiscal impact is related to the caches as all Council districts have a cache paid for by Measure Q funds. Furthermore, all 8 cache groups have had one one-site training. It would be wise to plan and budget for refresher on-site trainings, and enlarge the sizes of the groups trained. Modest fiscal impact is expected for trainings at cache locations, estimated at 9 firefighter hours for each such cache training. Modest fiscal impact for staff effort to enlist neighborhood "teams" to register for future centralized CERT trainings.
3. Sheltering: No additional fiscal impacts provided existing City staff levels are maintained.
4. Unreinforced Masonry Buildings: No fiscal impacts at this time except that current, reduced staffing levels are negatively affecting the pursuit of additional revenues through the administrative citation process.
5. Public Warning and Communication Systems: No increase in cost, and possible modest savings, from the present aggregate annual cost of about \$17,000 (about \$15,000 for FirstCall, Inc. and about \$2,000 for SBC, Inc.). No increase in cost to the City for UC Berkeley integrating its system with surrounding emergency responders.
6. Small Business Outreach: It is possible the costs of the forums could be shared with other partners such as UC Berkeley, Berkeley Chamber of Commerce and local businesses. Reprinting of brochures and manuals would be minimal costs.
7. Emergency Water Delivery System: No fiscal impact from the General Funds due to the system being funded by an already existent bond.

8. Transfer Tax Funding for Seismic Retrofits: No fiscal impact at this time.

CURRENT SITUATION AND ITS EFFECTS

Office of Emergency Services Revitalization

This is our top priority. Years of budget reductions cut OES from 4 FTE (Full-Time Equivalencies) in FY 2002 to 1.2 FTE in FY 2005. The hard-working OES is very restricted by this inadequate staffing and is unable to do more than a minimum of community-wide disaster preparedness and planning tasks. This fiscal neglect has severe post-disaster effects, as seen most recently in the US in the Hurricane Katrina preparation and response. The problems and many of the solutions are well-known. Unfortunately, the financial resources have been repeatedly cut due to city-wide budget issues.

CERT and the Neighborhood Preparedness Program

Refresher trainings on a 2-3 year basis that involve a wider group are advisable to increase the value of the investments already made. The lack of a team training emphasis deprives people of the opportunity to work in advance with residents they will likely be involved with in a real emergency.

Sheltering

A team of City staff met regularly in 2004 and 2005 to develop a written sheltering plan. They continue to revise it and hope to have all departmental reviews and signatures obtained by spring 2006. Having a written plan is a significant advance in the City's disaster preparedness. Now the City needs to finalize and act on that plan.

Our last report to you in January 2004 noted that the plan was expected to result in finalized vendor agreements for post-disaster supplies and services so that those could be rapidly delivered to the city even if vendor managers with signing authority were not readily available after the earthquake or fire. This has not yet occurred.

The plan was supposed to be tested with a city-wide multi-department sheltering exercise last summer. The exercise has still not occurred, apparently due to inadequate budgeting of staff time and money in that direction.

This plan prioritizes the various locations available as shelters, which should make it possible to focus on stocking the highest priority shelters with items of greatest life-safety value after a disaster. However, City staff has not published a list of desired items for the shelters. Doing so would make it more possible to attract donations of such items by local businesses.

Meanwhile, there is progress to report. The City has essentially completed a negotiation with the Red Cross on a Memorandum of Understanding [MOU] that will entitle the City to Red Cross reimbursement for a significant portion of its immediate post-disaster sheltering costs. In addition, in 2004, approximately 25 to 30 City staff were trained by the Red Cross in shelter operations, in addition to the Berkeley citizens who received the same training through the CERT program.

There is real progress to report in the filling of the earthquake supply containers at each of Berkeley's public schools, though the progress always seems too slow and too dependent on volunteer energies for a life-safety matter. The Berkeley Unified School District [BUSD] funded and has completed a partial stocking of the containers. A group of three volunteers has met weekly during the past school year with the spokesperson for BUSD, to organize and inventory those supplies.

This spring, BUSD supplied cases of drinking water to each container. The containers now have at least rudimentary equipment for first aid, light search and rescue, fire suppression, grounds safety, sheltering, and command center activities. Some glaring absences remain due to incomplete purchase and delivery arrangements. Most schools are still without toileting equipment, for example. Other shortages are due to persistent BUSD communications lapses regarding expectations and responsibilities. For example, the water barrels remain empty at most schools and copies of the school emergency plans are not yet in the containers.

The past two summers, Berkeley Fire Department did not send firefighters to examine the containers, because the containers were so incomplete and so unorganized that the firefighter inspection would have been a waste of time. However, going forward, the commitment made in the December 2002 Memorandum of Understanding between the City and BUSD, that firefighters would check completeness and that the BUSD Superintendent would report their results to the School Board each year, will begin to be an effective tool to maintain and improve preparedness.

The City has not yet begun to use any of the containers to stock supplies to meet its sheltering responsibilities. To date, all supplies have been purchased by BUSD, and they will be primarily useful in managing the life-safety issues of the first twenty-four hours. Significant storage space is available to the City, especially at two school sites identified as high value in the City's sheltering plan: Berkeley High and the old adult school on University. The Disaster Council wants the City's shelter planning team to determine priorities for longer-term sheltering supplies [e.g., the week between the disaster and the arrival of the Red Cross] and make plans to purchase or seek donations of the highest priority items. These items should be stored at all the highest priority shelters, not just those sited at schools.

Unreinforced Masonry Buildings

The Disaster Council's last report to the City Council was in January 2004. At that time, we said:

"Thanks to the enforcement of the URM ordinance, there is only one occupied URM left in the two highest risk categories. However, our celebration of that achievement is tempered because that single remaining occupied URM belongs to the City -- it is the landmarked Facilities Maintenance Building in the Corporation Yard. Despite the efforts of City staff and the urging of the Disaster Council, 28 City employees still work there. The building is also, ironically, designated the Emergency Operations Center for both the Public Works and the Parks, Waterfront, and Recreation Departments and it houses their radio transmitter. Now that the City

Council has approved the construction of temporary buildings this spring, it is imperative that no further delays be tolerated. The recent URM collapse in Paso Robles and the ensuing crushing death of two people make all too vivid the potential cost of delay."

Twenty-two months later, the exact same conditions continue. Now the temporary buildings are expected to be available in January 2006. We beseech you in the strongest terms to ride this issue and make it your own, to ensure that these employees are out of danger in fact by this winter and that the Emergency Centers and transmitter are permanently relocated, so that critical departments are able to function through a disaster. A number of the City's highest priority emergency shelters are on Parks and Recreation properties, and Public Works will, of course, be vital to restoration of the City's critical infrastructure after a disaster. If the earthquake happened tomorrow, not only would a number of City workers die in that building, those who survived would be unable to use their Emergency Center because it would be buried under a large pile of broken masonry. Note that since the URM retrofit standards are only life-safety standards, the Corporation Yard building will not be fit to house Emergency Centers even after retrofitting, since the standards are only designed to ensure that the occupants can escape with their lives, not to keep the building fit for continued occupancy after a major earthquake.

As to privately-owned URMs, there is both progress and reason for concern. Of the 91 URMs on the City's list in January 2004, 50 remain and 5 new ones have been added. Unfortunately, the rate of progress in this area has slowed very significantly in recent months as staff has taken on new issues [such as soft-story retrofitting] with reduced staffing. The City has provided the Planning Department with wide-ranging enforcement tools, such as the administrative citation process, yet the staffing is not sufficient for speedy resolution of safety hazards or for optimum use of those enforcement tools. As another example, the Planning Department inspected a number of URMs to ensure that their owners had posted the legally-required warnings, and did fine some owners for failure to post, but has not found the resources to do follow-up visits and really push the notice requirements and associated fines such that compliance would reach acceptable levels. A revision to State URM law allowing awards to private parties who assist with enforcement of the notification requirements may make some difference, but not as a sure thing and not until awareness of it has spread.

Public Warning and Communication Systems

Berkeley now relies for emergency warning and notification entirely upon the directed automated telephone service supplied by a vendor (FirstCall, Inc., Baton Rouge, LA). The service began in June 2004 under a one-year contract that expired in May 2005, and was technically out of effect for at least two months thereafter. The contract was renewed only after public and City staff support was voiced. Negotiating for a multi-year contract should eliminate annual down periods due to contract expiration, and might result in modest savings. The renewal date should be July or later.

Currently Berkeley Police cannot speak directly to UC Berkeley Police via radio. All information is relayed through the two forces' communication centers, slowing down reaction times in emergency situations. Local municipal police departments (Berkeley, Oakland, Albany,

and Richmond) recently altered their radio systems to communicate directly with each other. It is unknown if other UC Berkeley emergency responders can communicate directly with their municipal counterparts.

Emergency Water Delivery System

After the next major earthquake on the Hayward Fault, depending on the location and severity of the quake, underground water mains will be damaged or destroyed by the movement of the earth. The City decided to evaluate pumping water from the San Francisco Bay up the hill to wherever there are fires after a major earthquake. Fire after a major earthquake is a known and constant hazard, and often accounts for more damage than the actual earthquake. This fact, coupled with the Berkeley hills' tendency to burn on a cyclical basis, makes fire suppression capability doubly important.

Transfer Tax Funding for Seismic Retrofits

A Disaster Council subcommittee is working with staff from the City Manager's and Planning and Development offices, along with experts in seismic retrofit work, to revise the Transfer Tax Ordinance that provides rebates for seismic retrofits to houses. Currently there are no established standards for this retrofit work. Permits issued for this work may not provide an adequate level of strengthening. We are developing some recognized retrofit standards for contractors and homeowners to follow in order to obtain the transfer tax rebate. Developing and adopting specific standards and details will help insure that seismic retrofit work provides the proper level of protection for the public.

BACKGROUND

Office of Emergency Services Revitalization

OES is a part of the Berkeley Fire Department. A number of years back it was a part of the City Manager's Office. OES coordinated many successful community safety initiatives over the years (often in cooperation with the Disaster Council), including emergency caches in every district and public school, coordinating city-wide exercises and shelter planning, working on unsafe building ordinances, doing major outreach and education efforts to special needs populations, and securing federal grants for major community preparedness programs like Disaster Resistant Berkeley. It presents Community Emergency Response Training (CERT) to the community and City staff, and is instrumental in training neighborhoods to look after themselves after a major disaster, thereby reducing loss of life and property post-disaster.

CERT and the Neighborhood Emergency Preparedness Program

The federal CERT programs, after which local CERT trainings are supposed to be modeled, call for the training of teams. Some Berkeley residents have experienced team training either because they happened to take CERT courses with neighbors or because they were able to do so in Oakland's CORE (Citizens of Oakland Respond to Emergencies) program. Berkeley OES personnel have commented in Disaster Council meetings that Berkeley's CERT program should conform to the national objective of training neighborhood teams. Local residents who experienced it speak highly of the team training approach. The Disaster Council unanimously endorses this concept.

Sheltering

Depending on forecasting assumptions, City staff expect to shelter between 4,000 and 18,000 people after a major earthquake. Planning efforts now can significantly improve the safety outcome for those needing sheltering and improve the City's ability to be reimbursed for its sheltering expenditures.

The City and BUSD have a Memorandum of Understanding by which each entity contributed \$20,000 to the purchase of containers for the stocking of emergency supplies at the schools. Pursuant to the MOU, the City is entitled to use a portion of the containers for its own supplies and, after a disaster, to use any of the supplies not needed by the schools. If a disaster occurs during non-school hours, all of the supplies are available to the City.

Unreinforced Masonry Buildings

In a major earthquake, URMs are prone to collapse. In 1989, all owners of URM buildings in Berkeley received notice that their buildings were on the City's URM inventory, and in 1991, the City mailed them deadlines for retrofitting the buildings. All work was to be completed by December 2001.

The administrative citation process, approved in November 2002, was designed to make enforcement feasible. In 2003, all remaining URMs were placed in formal enforcement proceedings, meaning that the owners were located through title searches and sent notice and orders which were also recorded with the City Clerk. Thus, owners' efforts to comply are now within the context of these proceedings, which lay the groundwork for imposing fines should that become necessary.

In the past three years, the number of Senior Analyst positions in the Planning and Development Department has been reduced from five to three. The work of the missing two Analysts has been necessarily spread among the remaining staff, with consequent slowdowns.

Public Warning and Communication Systems

The service involves a computerized database of landline phone numbers and those cell phone numbers that have been personally submitted for inclusion in the database. In case of emergency, calls will be placed simultaneously to thousands of phones in the affected areas of the City upon authorization by selected City emergency staff. Phones in the affected areas receive a call with a warning about the emergency and verbal instructions on what to do.

After considerable research, the system just described has been decided upon as the least costly and most effective warning system for the City. Of the two other proposed systems, the traveler's advisory radio 1610 AM is too slow to respond to emergencies and its coverage is inadequate, and a Citywide siren system was rejected on technical and financial grounds.

Communications incompatibility between emergency responders is a serious and consistent problem. Every disaster from 9/11/01 NYC to Hurricane Katrina shows the tragic and easily avoidable results of communications incompatibility.

Small Business Outreach

In 2003 a jointly sponsored UC Berkeley and City forum of over 100 business and community representatives heard from a distinguished array of public utilities and seismic technical advisory specialists outlining the risks and critical pre-disaster mitigation measures to be taken to secure Berkeley's ability to survive disasters. Follow up was allowed to terminate due to lack of funding.

Emergency Water Delivery System

The basic system, which uses mobile pumps and large diameter, heavy-duty hoses, is in use overseas and northern New Jersey. The various vendors have been visited and evaluated by staff and a demonstration of the system occurred in spring 2005. RFPs for the pumps and hose/fittings were sent out in late June. Berkeley Fire Department and other stakeholders will evaluate the vendor proposals and recommend a vendor(s) to the City Council in January 2006.

Transfer Tax Funding for Seismic Retrofits

Because there are no adopted established standards and details for seismic retrofit work for houses, much of the work currently being performed may not provide an adequate level of protection for the homeowner. Revisions are needed to help ensure that seismic retrofit work performed under the transfer tax program provides an adequate level of protection for the homeowner. Developing and adopting standards and details are necessary to achieve this proper level of protection.

RATIONALE FOR RECOMMENDATION

Office of Emergency Services Revitalization

This will ensure that our community will lose fewer lives, that there will be economic opportunities and property after major natural or man-made disasters, and that the community will be better prepared for disaster.

CERT and the Neighborhood Emergency Preparedness Program

In a team training one can learn to work well with the people with whom one is likely to work in an actual emergency, when good judgment, speed and effective communications are vital.

Finally, people who have taken both CERT and CORE trainings have commented very favorably about the value of the "final exam" of the CORE training – the monitored and critiqued realistic simulated emergency to which they must respond. We should note that the materials for this final exercise have been used for at least 10 years by Oakland. In the interest of economy, we recommend that Berkeley staff or concerned citizens approach Oakland seeking permission to use some of the training materials (manuals and a video) that they have developed.

Unreinforced Masonry Buildings

It is morally indefensible that the City requires private owners to retrofit their buildings while permitting 28 of its own employees to continue to work in a high-risk category URM. It is foolhardy to allow the Public Works Emergency Operations Centers and radio transmitter to remain in a URM, even when retrofitted to a life-safety standard.

At a minimum, even if reduced staffing slows enforcement of retrofitting, it should not be allowed to slow enforcement of the posting requirements, which empower tenants and other building users to make choices about their own safety and to press for retrofitting. And since the major earthquake could come at any time, the sooner the staffing levels support more enforcement of the retrofitting requirements, the better.

Public Warning and Communication Systems

The City's residents are dependent on this system for emergency warnings. The contract that assures its continued existence should not be allowed to lapse. Ensuring compatibility between the Berkeley Police Department and the UC Berkeley Police Department is common sense, life-saving, and low-cost.

Small Business Outreach

New businesses open and new managers take over at Berkeley businesses every day. Without frequent reminders and guidelines, disaster preparedness gets overlooked and the City's economic viability is compromised.

Emergency Water Delivery System

This is a common sense solution to the foreseeable disaster of earthquake-inspired fires in a highly flammable area. It costs the General Fund nothing beyond minimal training and administration costs, as the bulk of the funds come from an already existent bond.

Transfer Tax Funding for Seismic Retrofits

This ensures that the transfer tax rebates pay for retrofits that are effective and potentially life-saving.

CITY MANAGER

The City Manager refers these recommendations to the budget process.

CONTACT PERSON

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