

The disaster after the disaster: The quicksand of post-disaster recovery funding

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ABSTRACT

The incidence of natural disasters is on a steep rise, as are the costs associated with recovering from such incidents. Financially, this trend is unsustainable. In the USA, for example, severe reductions have been imposed on the grant funds available for distribution by the Federal Emergency Management Agency. Compounding this, failure to understand the intricacies of complex and ever-changing federal regulations can lead to costly 'take-backs' by funding agencies. This paper discusses the importance of establishing a disaster cost-recovery strategy before disaster strikes. Such a strategy will increase the amount of financial assistance received and retained. The paper also discusses how understanding the differences between disasters and catastrophes can simplify the challenges of financial recovery. The paper

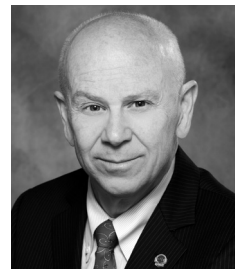
proposes 11 principles of disaster cost recovery, and explains how applying these principles can make the process less complicated and less stressful. While the paper focuses on the US experience, many of the principles discussed translate to other countries. All governments are bureaucracies, and all bureaucracies have their rules to be followed, especially when it comes to handing out money. When spending government funds, providing adequate and detailed documentation is a fact of life.

Keywords: FEMA, public assistance, audits, disaster, catastrophe, strategy, principles

INTRODUCTION

Is the likely long-term cost of federal disaster relief less than, equal to, or greater than the projected deficit of US Social Security over a similar time frame? In 2007, it was estimated that the potential deficit for the US Social Security programme was US\$4.9tn, while the potential deficit for US federal disaster spending might be as high as US\$7.1tn — a difference of US\$2.2tn over the same period.¹

According to the same article, 'the US\$82bn in emergency federal spending on Katrina and other proximate hurricanes in 2005 exceeded the fiscal year 2005 budget of all but five government agencies'



Michael Martinet

(namely, Health and Human Services, Social Security, Defense, Treasury (debt interest) and Agriculture).²

In January 2017, the Department of Homeland Security issued an audit of a special district in southern California, requiring it to pay back US\$31.7m, largely for multiple alleged failures to follow the district's own procurement regulations *and* those of the federal government after receiving a Federal Emergency Management Agency (FEMA) Public Assistance grant award of US\$41.3m.³ This was a nearly 77 per cent take-back.

This audit had nothing to do with the emergency response and everything to do with the 'business side' of how a local government agency exposed itself to a financially staggering risk because of its alleged failure to follow a confusing labyrinth of federal regulation — a confusing labyrinth of regulation for which it likely had little, if any, prior knowledge or understanding.

At the time of writing, the audit has not been finalised, and both the district and at least one of its contractors have retained separate legal counsel to help battle their way out of this undesirable predicament. However, even if the district and its contractor 'win' this battle with the auditors and FEMA, it will most likely cost them hundreds of thousands of dollars in legal and expert fees and staff time. Indeed, the disaster cost recovery consultant hired to try to extricate the district has privately commented that the district faces a bill of US\$250,000 for consultancy services alone, with no guarantee of success.

On 29th December, 2010, severe winter storms, flooding, debris flows and mudflows caused a break in the authority's wastewater pipeline. The authority selected an alternative method of repair instead of returning the sewer line to its pre-disaster condition, where a portion

of the pipeline was located in the Mojave riverbed. This alternative method placed most of the pipeline outside of the riverbed and along the streets of the city.

The auditors allege that the district failed to follow both the district's own procurement policies as well as those of the federal government, as embodied in Title 2 of the Code of Federal Regulations, Part 200.

The rules in Title 2 of the Code of Federal Regulations, Part 200 apply whenever a local government agency spends any US federal grant funds, from any federal agency, for any project. However, many local government procurement officials are unaware that these rules exist and apply in spite of whatever disaster proclamation might exist.

The audit report states that the district failed to:

- 'perform cost/price analyses of bid proposals to ensure fair and reasonable costs;
- follow its own procurement policy *and* [emphasis added] federal regulations when evaluating and selecting its contractors;
- include all mandatory federal provisions in contracts to document rights and responsibilities of the parties;
- maintain records sufficient to detail the significant history of its procurements;
- maintain an adequate contract administration system that included careful review of invoices; or
- include a ceiling price in time-and-material contracts that contractors exceed at their own risk'.⁴

According to the audit:

'The Authority did not perform cost/price analyses, as required, in awarding and modifying its engineering contract.

It did not develop independent estimates before receiving proposals or perform cost analyses for every procurement action, including contract modifications.

For example, when the Authority approved Contractor C's change order requests, it accepted the contractor's own assessment of costs incurred and funds needed, without verification. These oversights violate 2 CFR, §200.323(a).

The Authority was not able to verify Contractor C's costs billed because Contractor C did not itemise the costs by the agreed-upon tasks in its invoices.

The Authority modified all three contracts (engineering, construction, and construction management) multiple times, including 15 modifications to the contract with Contractor C alone, escalating its value to more than three times the original bid price of US\$410,520 to US\$1,282,809.

Because of these numerous modifications, Authority officials were not able to track the contract ceilings and paid Contractor C, on multiple occasions, more than the amount the contract authorised'. This alleged oversight violates 2 CFR, §200.318(b) and 2 CFR §200.318(I).⁵

To be fair, this pipeline project had its share of complications. First, the pipeline had to be relocated because of environmental issues. Once the decision to relocate the pipeline was made, the method of construction changed from trenching to tunnelling at a substantially higher cost. In the tunnelling process, the contractor discovered two separate plumes of contaminated soil, which further increased the costs.

These problems notwithstanding, the auditors allege that the district failed to properly procure the three contracts for this project.

The auditors further allege improper accounting in so far that invoices from one project in question were paid for with funds for a distinctly separate other project.

These compound issues can and do often arise in construction projects of all types and federal regulations must be followed or the project funding may be jeopardised.

The complexity of the laws (the Stafford Act 1988) and regulations (Title 44 CFR, Part 206 and Title 2 CFR, Part 200, and others) can be likened to the complexity of the US Tax Code, with the added feature that FEMA has the authority to interpret the regulations.

The very scary part is that this particular audit is nowhere close to the record. The initial audit findings for a rural county in Texas⁶ were US\$44.5m; a transit district in New Orleans had an initial audit finding of US\$62m;⁷ a high school in New Orleans had an initial audit finding of US\$82m;⁸ and a Midwest university had an initial audit finding of US\$83m.⁹ These are all staggering numbers, guaranteed to make the news both in print and in broadcast. Even if such audits are ultimately defeated, much of the reputational damage to the local agency and its staff is done upon publication.

If the preceding citations were not enough to produce fatal-onset insomnia, consider the following: on 24th July, 2017, nearly 12 years after Hurricane Katrina ravaged the Mississippi-Louisiana Gulf Coast region, the Department of Homeland Security auditors published an audit entitled, 'FEMA Should Disallow US\$2.04 Billion Approved for New Orleans Infrastructure Repairs'.¹⁰

Although FEMA declined to take the money back, the case illustrates the 'almost-forever-at-risk' aspect to Public Assistance grants. As a case in point, in 2014, FEMA itself initiated a 'claw-back'

of US\$275m from cities and counties in Florida following the series of hurricanes that struck the state between 2004 and 2005.

The cost of disasters is continuing to spiral out of control, at the local, the state and federal levels of government. Furthermore, the matter of recovering the cost of disasters, at the same time, is getting ever more complex.

The common perception is that FEMA is the one-stop-shop for disaster relief in the USA, but nothing could be further from the reality. Approximately 17 different US federal agencies provide post-disaster relief. Notable among these many agencies are the Federal Highway Administration, the Federal Transit Authority, the US Department of Agriculture, the US Department of Housing and Urban Development, and the US Army Corps of Engineers.

This mix of agencies makes the cost-recovery process ever more complicated because the city, county or other local government agency must make requests for financial assistance to the appropriate agency. Improper grant applications can result in a denial of grant funds. Local government agencies applying for funding can also get caught in the regulatory cross-fire between agencies.

The present paper ignores the hyper-complexities of funding by multiple federal agencies in order to focus on FEMA's Public Assistance programme, which is frankly confusing enough.

Most communities rarely have to deal with FEMA and its complicated regulations. These communities may have a large disaster only once in 10, 20 or even 50 years, or more. In these disaster-free interludes, government staff move on and experience with disaster grant funding can be quickly forgotten. Layered upon the ever-decaying base of knowledge of FEMA regulations are the relatively

constant changes in the Public Assistance programme. These changes in regulations are irregular, but continue at a rate of two to four significant changes each year. To take just one example, since it was first published in January 2016, the Public Assistance Program and Policy Guide has been revised four times.

THE NEED FOR A COST-RECOVERY STRATEGY

There are many reasons for local government agencies to develop a cost-recovery strategy, not least because there are so many competing variables to manage effectively. Disaster recovery is often a years' long process in which most agencies have little or no recent experience and the amount of money in play will equal or exceed many years of their usual capital improvement budgets.

Why is a disaster cost-recovery strategy so important?

First, there are some policies and procedures that will help make the disaster cost-recovery process easier, but some of these can only be done before disaster strikes. For instance, many local governments lease or rent buildings to or from others, including other government agencies, private nonprofits and private owners. In these lease or rental agreements, it is very important to clearly spell out who is responsible for any damage caused by disaster. The normal 'operations and maintenance' clauses may not be specific enough to assure that the building owner will be responsible for such costs, and eligible to receive federal funding. It can be easy to fix the lease agreement(s), but these fixes must be in place before the disaster happens.

A second important reason for having a disaster cost-recovery strategy is develop guidelines for priority-setting for recovery projects. Not all disaster-caused damages

are eligible for FEMA reimbursement. As such, purchasing insurance may be one way to minimise post-disaster losses. With FEMA, however, insurance can be a complicated element. Thus, when structuring an insurance package, it is wise to involve someone with specialised experience in order to maximise cost recovery and minimise any ‘penalty’ for duplication of benefits, as FEMA will not pay for reimbursable items also covered by insurance.

A key third reason for developing a cost-recovery strategy is to maximise the fiscal benefit of the value of donated labour, donated equipment and donated materials. Since 25th June, 2018, FEMA policy on ‘Public Assistance Donated Resources’ allows local governments to claim the monetary value of these donated resources. However, as with all else FEMA-related, strict procedural and documentary requirements must be followed in order to take advantage of this credit against the local cost share.

A fourth inescapable reason to have a pre-disaster cost-recovery strategy in place is *stress*. When local governments are hit by a disaster, it is not unusual for staff to be overwhelmed by events. Some government employees themselves may be victims of the disaster; many employees will be working long and arduous shifts; and everyone in the community will want normality restored quickly. Stress always accompanies disaster, and when humans are stressed, they are more likely to make mistakes that can slow the recovery process.

This is usually coupled with the staff having to work with a set of federal regulations that at times will seem arbitrary and capricious. Perhaps inevitably, there will also be a high turnover of both state and federal workers, making the administrative process even more difficult. It is extremely difficult to learn and follow unfamiliar rules and regulations in the aftermath of

chaos. Having a strategic disaster cost-recovery plan in place in advance will go a long way to reducing stress after a disaster occurs.

CATASTROPHES ARE NOT DISASTERS

Catastrophes are different from run-of-the-mill disasters. Often, multiple jurisdictions are affected, overwhelming both state and federal agencies. For this reason, one can only expect limited assistance at the local level. Even in the best-prepared situations, staff in the local agency will be overwhelmed.

In the past couple of years, auditors from the US Department of Homeland Security have repeatedly singled out states for alleged failures to support local governments properly during the disaster cost-recovery process. This imposes an even greater burden upon local governments to be better prepared and knowledgeable of the pertinent federal regulations.

Local governments need to understand that FEMA and other federal agencies see disasters from a very different perspective. What local governments consider to be an ‘emergency’ situation may not be considered urgent by FEMA.¹¹

Disaster recovery is extraordinarily difficult. ‘Political pressure and public scrutiny to “get money out the door” are heightened.’¹² Media interest in recovery efforts is high and increases around major anniversaries (eg one year after the event) and any notable failures in programme implementation.

‘Public expectations about the amount, pace, and flexibility of recovery funding are rarely met, because public officials tend to set unrealistic targets before they fully understand recovery issues.’¹³ Complications from conflicting agency policies and interpretations of regulations are often an inherent part of the process.

Local government agencies often also contribute to the problems because of failures to know, understand and follow federal regulations. Local agencies may also exercise their right to do ‘improved’ projects with federal grant funds; however, these ‘improvements’ can trigger the application of even more regulations than would apply with the basic project.

‘Receiving and spending recovery money can take a long time. Many process aspects of disaster recovery take years, often due to factors outside local government’s control.’¹⁴ For instance, some federally funded construction projects must be delayed until an environmental impact report (EIR) has been prepared. An EIR itself can add a year or more to the total project time.

‘Government leaders leading recovery are confronted with a magnitude of resources and complexity of tasks they are (appropriately) unprepared to administer, so they often misjudge resources and skills required to deliver.’¹⁵ A disaster may create *ad hoc* public works projects that under the best of circumstances will take a decade or more to complete.

‘Effective recovery governance requires commitment to bold organisational changes that leaders are often too risk-averse to make. Recovery is not “business as usual” for a government and therefore cannot rely on business-as-usual governance.’¹⁶

PRINCIPLES FOR EFFECTIVE DISASTER COST RECOVERY

Principle 1

Local governments must understand that both the state and federal governments have substantially different perspectives and motivations versus those of local governments. None are inherently wrong, but all are different. Ultimately, the burden

is on local officials to make the process work, because it is the community that has suffered damages and unlike the state and federal officials, the locals cannot walk away.

Furthermore, local concepts and positions on recovery will not typically be well organised, cogent or cohesive. Within the community, people will be divided on what to do and how the ‘to-do’ list is prioritised. It is difficult for state and federal agencies to assist when the locals are not crystal clear on what is needed and what the community wants. At this point in time, democracy and consensus may be required, but they are not advantages to quick recovery.

Principle 2

Cost-recovery procedures should be simple as possible, while still meeting FEMA requirements. In the middle of a disaster, complexity is not a friend. Specific and detailed plans may represent the correct way to deal with a problem, but if they do not reflect what is done on a daily basis, the plans will not be followed. Trying to follow complex and unfamiliar processes will slow the locals down and is unlikely to achieve the desired results.

Complex, and unfamiliar solutions will be error-prone under disaster-induced time constraints. People operating under stress make mistakes, especially when working with unfamiliar procedures. The more complex the solution, the more likely the chances of errors being made. Additionally, small errors will compound to create new unanticipated problems. Finally, those who are knowledgeable and trained may not be the persons available to perform the required, unfamiliar tasks.

Principle 3

Cost-recovery procedures should be routine before a disaster occurs. Untested and/or unused procedures are likely to fail

in an actual disaster. When stressed, humans revert to previously learned behaviours. Therefore, if the locals were not doing things necessary to meet FEMA requirements before a disaster, they are unlikely to change processes rapidly and completely when the disaster occurs. Ideally, the policies, procedures and processes developed for effective cost recovery should also provide everyday benefits or they will not take root and last until a disaster happens. To make procedures routine and effective, the State of Maryland espouses the concept of ‘dual use, daily use’.

Principle 4

Cost-recovery procedures should be standard throughout the agency. Even though the employees of each department will have different disaster-related tasks, the fundamentals of cost tracking, and damage documentation should be the same regardless of the work being done. If there are different procedures for each department, the cost-tracking process becomes geometrically more difficult. All documentation should be done with FEMA’s standard end requirements in mind.

Principle 5

Local government cannot rely only on a single technology solution. First, most disaster response management software is designed with the response, and only the response in mind. Very little disaster response management software is designed for the cost-recovery process. No ‘expert’ software systems can provide a substitute for real-world experience in dealing with the disaster cost-recovery process. There are too many wildcard variables to rely on current software. Therefore, local agencies must have solid experience or well qualified and experienced outside help to navigate the cost-recovery process. There are some databases out there, but they are

still learning and none of them are ‘state of the art’, although some are better than others.

Principle 6

The incident command system (ICS) is an excellent way to manage on-scene incidents, emergency operations centres and department operations centres. However, it was not designed for the often years’ long recovery and financial cost-recovery processes that follow disasters. First, ICS is very top-heavy with management, a luxury easily achieved and defended during an active, but short-term crisis. However, the cost-recovery process typically lasts for years and the financial and administrative personnel within an agency can seldom access the kind of staffing overhead usually found in the disaster response environment.

Most ICS trained staff have little to do with cost recovery and, in the long haul, disaster cost-recovery staff seldom if ever use ICS. Secondly, ICS was designed to track incident activity and resources, not to handle the heavy infrastructure damage to roads and bridges, facilities and utilities that makes up the largest part of disaster cost-recovery funding.

Principle 7

No matter how well the locals prepare, they will still have to improvise. For all the commonality in disasters, every disaster has unique challenges that are often difficult, if not impossible to anticipate. The backgrounds of FEMA staff, particularly the Disaster Assistance Employees, may range from minimal to extensive. This alone will cause substantial variations in how projects are handled and the locals will need to approach these variable situations with an open and adaptable mind. Even if a local government has a good disaster cost-recovery plan, not everything will go according to plan. This explains

the need for improvisation as the recovery progresses.

As a part of the overall disaster recovery, the projects will always take longer to complete than expected. According to a July 2014 report on FEMA efficiency: 'Moreover, there are currently 40 open disasters that are over ten years old and represent tens of millions in unliquidated obligations to disasters going as far back as 1994'.¹⁷ Project delays can often cause additional unanticipated problems due to cost escalations caused by labour, equipment and materials shortages.

Principle 8

Large-scale disaster cost recovery may require outside professional assistance if local staff lack recent experience with the Public Assistance programme. FEMA Public Assistance grants are very different from any other federal grant. FEMA uses many temporary employees with varying degrees of experience. There is a high rate of turnover among this combined temporary and permanent workforce, which hampers continuity of operations and consistent application of the rules. This ongoing rotation of personnel will adversely affect local government's best efforts at efficiency, continuity and timely completion of projects.

FEMA Public Assistance grants are often deobligated after the work is done because of a failure to properly follow the complex regulations which apply. FEMA Public Assistance grants are often deobligated after they are awarded because of eligibility issues. Not all damage is automatically eligible. Some damage is never eligible; some damage may be partially eligible; some damage once eligible may be later determined ineligible depending on interpretation of the rules.

Principle 9

All FEMA decisions are subject to audit by the DHS Office of Inspector General

(OIG). Not all Project Worksheets are audited by the OIG, but all Project Worksheets are subject to an audit, often years after the projects are completed and paid for. The audit findings can be minimal, and more of an administrative nuisance, but frequently audit findings seek to take back millions and tens of millions of dollars from local agencies. Evidence of this can be found in Public Law 113-3, which now limits some project completion times.

In addition, FEMA can and does seek to deobligate funding years after the disasters occur. FEMA also can and does deobligate committed funds when projects are not completed in a timely manner. Furthermore, the larger the disaster and the larger the individual project, the more likely the chance of an audit.

Principle 10

The situation is not likely to improve much. As a federal agency, FEMA is pulled in many competing directions at the same time. FEMA is charged with the rapid distribution of funding for disaster cost recovery. At the same time, FEMA is charged with carefully determining the eligibility of each individual project. These two goals are often incompatible. As a result, FEMA often distributes funding first and then later takes it back when a project is deemed ineligible for one of a variety of reasons.

Even if FEMA were a perfectly run and model federal agency, it would still be a federal agency with all of the challenges faced by any federal agency, including persistent staffing shortages, relentless budgetary constraints, constantly changing political agendas, perpetual staff transitions and unceasing modifications to regulations.

But FEMA's mission is even more difficult, because it almost always operates under a critical spotlight of crisis. Even if it were a 'perfect' federal agency, it would be

difficult to measure up to the expectations of the public and the media to deal with usually unsolvable crises in an immediate turn-around timeframe.

There is therefore a substantial burden on local government agencies to be as well prepared as possible to know what to do and how to do it, with respect to disaster cost recovery. Somehow, the system works, albeit in an often painful and limited fashion. However, it works much better when local government is knowledgeable about the process and prepared for the cost-recovery process before disaster strikes.

Principle 11

In the event of a disaster, local government agencies will be on their own more than they will want to be. The state offices of emergency services/emergency management will likewise be overwhelmed, but in a different way. Their staffing and funding are predicated on the normal flow of disasters. A catastrophic disaster will also overwhelm their ability to be all things to all agencies. This will require patience and understanding on the part of all stakeholders. They will bring in staff from other state departments, but these are unlikely to be seasoned disaster recovery veterans.

The same thing will happen with FEMA. FEMA will bring in personnel from across the country. Public Assistance contractors will be brought in, but they will be on temporary assignments. Disaster Assistance Employees will be hired, but again they are unlikely to be seasoned professionals with years of experience. Furthermore, all this hiring will take precious time.

This is not a criticism of any agency; this is life. No level of government can afford to keep excess staff on the payroll for years waiting for the next catastrophic disaster. It is therefore important to understand that the process will be difficult in spite of

everyone's best intentions. Again, this leads back to the necessity to be as well prepared as possible before the disaster. There is hope, but it is irrevocably tied to hard work, effective planning and diligent preparation.

SOLVING THE PROBLEM

What can be done to defend local government agencies against these losses and such mega-migraine headaches?

Awareness of the potential for problems related to disaster cost recovery is the first important step. Some finance professionals, procurement officials and emergency managers across the State of California, and other states, are developing an awareness of the Public Assistance programme and its unique challenges.

Progressive agencies across California are reviewing their procurement policies to bring them into compliance. For example, Santa Clara County, CA is just finishing its first disaster cost recovery plan, while a city in northern California is developing a long-term strategic disaster cost recovery plan. The Controller's Office in the City of San Francisco has devoted 2.5 full-time staff members to various aspects of planning and preparedness for disaster cost recovery; and a major city in southern California has adopted a disaster purchasing plan to give it leeway for procurement during a disaster. The cities of Cedar Rapids, IA and Houston, TX, have both recognised that disaster recovery, particularly after a major disaster needs special expertise not always found in the cities' pre-disaster staff and hired full-time disaster recovery managers.

Dozens of cities, counties, special districts and educational institutions are providing training programmes for their staff to raise levels of awareness and encourage action within their agency.

So far, however, these efforts have been piecemeal, agency-by-agency endeavours.

Yet virtually every public agency in the USA is exposed to one sort of disaster or another; some have multiple exposures; and still others have a much more severe and focused risk than others. It may well be time for a unified effort through the leadership of statewide or regional organisations. National groups, such as leagues of cities or counties, could organise and drive the necessary work for the benefit of their member agencies.

But whether or not such widespread organisational effort takes root, every public agency needs to analyse its own threats and take the appropriate course of action to reduce these financial risks before a disaster happens.

No one of sound financial mind would be without some level of fire, automobile and medical insurance. By contrast, many local government agencies are effectively naked, with no protection whatsoever for even the most basic aspects of the disaster cost-recovery process.

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