

Disaster at a Distance: Planning to Receive Long-Term Evacuations
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Disaster planning tends to concentrate on the epicenter of a potential catastrophe: what do we do if X event happens here? Tabletop exercises, evacuation routes, stockpiling emergency rations, medical supplies and fuel, and a host of other preparations all focus on surviving a local event. Much less remarked are the preparations necessary for an area that receives the evacuated population of a more distant disaster.

Most disasters in recent United States history have been relatively short-term. Wildfires, hurricanes, and the series of Richter 6 earthquakes in southern California caused death, damage, and temporary dislocation, but there was always a surviving infrastructure and the opportunity for people to return quickly and rebuild. The grounding of the commercial air fleet over North American skies immediately after the terrorist strikes on September 11, 2001, left many people stranded in areas far from home, but almost uniformly among supportive friends and strangers who united in the face of the national emergency. The strange new circumstance tested people's resilience and ingenuity, but only for a short-term. Even the individual survival advice takes as its starting point the need to survive in a disaster zone until help arrives or the ability to take oneself (and one's family) out of danger when all primary forms of transportation are unavailable.

One of the lessons of Hurricane Katrina has been that we need also to be prepared for diaspora: large-scale, long-term dislocations in the event of civil catastrophe. While the particular circumstances of the 2005 New Orleans evacuation -- large inhabited areas lying 14 feet below sea level and vulnerability to breaches in the levees -- are unlikely to

be found elsewhere, other large-scale catastrophes are possible. As we observed the centennial anniversary of the 1906 San Francisco quake, the media reverberated with speculation about the consequences of a larger earthquake in the San Francisco Bay area. The potential for a dirty bomb detonation in or near a populated area is one of the potential second-wave attacks envisioned by al-Qaeda. Accidents, near-accidents, and overlooked maintenance at nuclear power plants in Pennsylvania, New York, Ohio, and elsewhere remind us that nuclear disaster need not come at the hands of terrorists and could leave large swaths of land uninhabitable for months or years to come. Similar possibilities are forecast for chemical and biological attacks or accidents; there is even possible unpredicted volcanic activity.

Lessons of Katrina: Second-Tier Impacts

The primary lessons of Katrina have been well-documented and flogged through the media and the blogosphere: the failure to heed the warnings, born of local temperament and experience with hurricanes; unrecognized class-based assumptions that made no provisions for impoverished residents without personal vehicles; lack of coordination among local officials and regional planners; slow response by federal officials; absence of effective back-up plans for communications; ineffective rumor control; widespread looting.

Slowly, a second-tier set of impacts has emerged. Some were clearly evident in the first-tier effects and observed during the first days of the crisis. Over time, however, they can amplify considerably, morphing into long-term negative impacts on the receiving areas where displaced persons find themselves. Those phenomena fall into two

categories: impacts on individuals and impacts on communities. Some of the impacts on individuals will also have collective impacts on communities, while others will be purely personal, and still other entirely communal in nature.

In no particular order, the following are musings on some of the long-range elements of a diaspora. Some of them have possible solutions, or at least amelioration, in the advances of technology. Others will require social engineering, potentially being forced upon the communities receiving evacuees. The subjects presented here do not constitute an exhaustive or all-encompassing list by any means; they are offered as the beginning of a larger dialogue and exploration.

The Nature of the Diaspora

How the evacuation of a large-scale area occurs depends upon many factors: the elements of advanced warning, the nature and timing of the event itself, weather conditions, available pathways, or external conditions such as an oil embargo or other shortages. Broadly speaking, however, we can anticipate three broad types of evacuation communities.

Mass Evacuation

Large-scale evacuations using organized transportation are possible with sufficient warning or slow development of an incident. Under controlled circumstances, large groups of individuals -- neighborhoods, housing estates, and even whole towns -- can be relocated more or less systematically under controlled circumstances by authorities. Even in cases of sudden devastation, whether by earthquake, tsunami, or terrorist attack, organization can be forged at the perimeter if authorities can set up in

time. Expecting a such a condition to occur is on the outside fringes of probability, perhaps, but there are a number of circumstances during which containment is possible: when the main arteries of transportation infrastructure are destroyed or degraded, slowing evacuation; when intelligence gives advance warning of a strike (such as the airborne distribution of a nerve agent or chemical toxins); when prediction models suggest a rapid spread from a disease epicenter (the movie Outbreak model), and the like.

Mixed Evacuation

Individual motivation may take over at the first signs of impending problems with people deciding to relocate to relatives' homes elsewhere in the country or simply traveling as far away as they can get. Early relocation will ease the strain of subsequent evacuation, but unless the early-leavers leave word with neighbors or others (asking the police to watch after the house as if they were on vacation), their absence in any planned evacuation may cause temporary confusion, overestimation of casualties, and other unanticipated problems. Immediate reaction to the crisis will place an emphasis on the living and the present first, and the dead and the absent only secondarily, so the impact in the critical stages is likely to be slight. Foreseeable problems might arise as concerned family members attempt to enter a sealed disaster area to check on loved ones they are unable to contact, and there are attenuated hazards for first-responders and rescuers checking for survivors.

Individual Panic

Desperation will occur during and in the immediate aftermath of the disaster. While hurricane evacuations in the South tend to be orderly because of frequent

opportunities to practice, areas that are not ordinarily in the path of large natural phenomena will be caught generally unaware. Visitors and new residents will not be aware of local plans or expectations. Residents who make preparations may hunker down to wait out the situation, only to find that their supplies are inadequate or that they do not address the needs of the present emergency: several days' supply of food and water are no protection against radioactive debris for instance.

Individual panic may also overtake a planned evacuation that seems to be too slow or is affected by a secondary crisis such as an aftershock. Panic or insurrection models make for some additional hazards to evacuees in the first instance and additionally to rescuers in the latter, but the human body can only run at full tilt so long. Cars trying to bolt an orderly evacuation line will soon become disabled, mired in impassable terrain, or caught in a huge traffic snarl of their own making. It is the diffusion of the leaving population that creates a longer-term problem, with more persons at risk of exposure to the elements, less efficient use of the relief resources being marshaled, and a greater geographic area in need of search, perhaps rescue, and coordinated transportation.

The Receivers

The logical choice of refuge in the short term is sturdy public buildings with large capacities: schools, athletic facilities (like the Superdome and the Astrodome), National Guard armories, and the like. They are mostly vacant, have considerable space to accommodate large numbers of people (although except for athletic stadiums, the sanitary facilities are generally inadequate for the number of people seeking refuge), and there are at least some facilities for cooking meals. Food, bedding, and other amenities generally

have to be brought in after the brunt of the crisis has passed. There is no privacy to speak of except that accorded by courtesy as strangers endure close-quarter living with persons of vastly different needs, habits, and quirks. Depending upon the situation (and the timing), college dormitories, military TDY barracks, fire stations, and other facilities can be pressed into service. The state of Alabama, for example, recently moved to create a network of shelters in community colleges.

Long-term relocations, however, require different accommodations. The aftermath of Hurricane Katrina showed multiple patterns: the FEMA Village of live-in trailers trucked from other locations; cruise ships (which ultimately served more relief workers than displaced residents); hotel accommodations subsidized by federal relief funds in far-flung cities; relatives sheltering family members both near and distant; strangers inviting in persons who became like family; others inviting in persons who sooner or later became a burden; individuals who simply lived out of their vehicles until other arrangements could be made.

Local faith communities are renowned for taking in people at need. In the event of mixed or panic evacuations, local houses of worship comprise an invisible archipelago of relief, at least in the short-term. They many may not be prepared for the long-term dislocation and will expend their own resources before turning to the local authorities for more assistance (throwing off initial estimates when the emissaries of the invisible archipelago arrive requesting assistance). Incorporating the faith community into readiness plans can help reduce the rough edges of ad hoc refuge.

Though Katrina forced, by far, the largest and longest displacement in American history, there was still an understanding that there would be a return. In that regard, the

displacement was similar to other temporary decampments. The protracted period of time needed to assess the damage, repair the ruptured levees, and restore minimum public services has been far greater than anticipated or desired, and the aftermath has provided a hint of what might be the tasks of dealing with a more permanent dislocation. The area around Houston, Texas, opened its doors to the evacuees from the Gulf Coast and absorbed the lion's share of displaced persons; it recorded elevated levels of crime shortly afterwards. Welcome wore thin there and elsewhere, for a variety of reasons explored below. Social services in a number of areas were strained by the need (unanticipated in the state and local annual budgeting) to help sustain the large number of poverty-stricken people. The evacuated wondered if they would be able to return home or whether they should, or could, set down new roots in the communities where they found themselves.

Communications

The greatest need in a disaster, and often the greatest weakness, is accurate and comprehensive information. The same is true during the aftermath. From the standpoint of evacuees and their families, the greatest concern is for family members who are separated by the events. Perhaps the worst-case scenario is an evacuation occurring when parents are separated from their children (during the school day, e.g.) and evacuation patterns move out of practical necessity in opposite directions. Similar concerns attend the fate of elderly relatives in nursing homes and assisted living facilities.

Initially, all communications infrastructure will be overloaded: the Katrina storm destroyed the broadcast network, and in the wake of 9/11 attacks, what communications

networks that were not linked to the radio mast of the Twin Towers were quickly overloaded. Emergency personnel will be concerned entirely with rescue and evacuation, so census-taking and communication with registries will be a second-tier responsibility.

In the absence of a clear plan of action, external agencies including FEMA, the Red Cross, the Salvation Army, and other ad hoc groups will place demands on the local infrastructure, especially police and shelter facilities, merely in their search for information to help reunite families. Pets will add an additional burden in this regard, howsoever heartwarming the media's Incredible Journey stories may be. A network approach would be the most effective with a modicum of advanced planning. However, we should also prepare for a contingency in which the disaster is so sudden and so overwhelming that the best-laid plans are inadequate, and the various agencies will be playing catch-up for the first weeks of diaspora.

The Internet does not require a physical presence in the area for it to be effective. Federal-level planning can designate a single coordinating website and dozens of ancillary management stations throughout the country to coordinate census and contact efforts from afar. Local and regional coordinators can build in census-taking and reporting duties

The more a local community has a plan including definite responsibilities for taking and maintaining a census of evacuees in their area, the easier this will be. It is an activity that can easily reside within the faith community, a simple piggyback upon its solace and new arrival outreaches. Local Scout troops, Kiwanis, or Blue Star Auxiliary (or their equivalents) are other logical possibilities. The certainty of the assignments -- even though people's first instincts will be to render food and shelter types of aid -- will

make other logistical elements of the arrival run much smoother. Many of the attendant needs discussed below can be identified, quantified, and reported to central coordinating agencies, shortening the time between need and relief. Having an established census can also identify at-capacity and under-utilized receiving areas, enabling the transfer of evacuees from over-stressed towns and sites to those with available resources.

Preparation and dissemination of a stock of pre-devised and printed questionnaire forms (names, addresses, medical needs, “seeking separated relatives,” skills, employers, other considerations) may help reduce uncertainty in the initial onset. Unaffected communities with those stocks will be able to send them readily to unprepared communities in other areas should the disaster occur in another region of the country in the event that Internet transmittal and printing is somehow not available in the new sites.

Medical and Mental Health Needs

Loss of contact with medical and mental health care providers was a dire problem during and after the Katrina evacuation. In a telephone survey begun five months after the storm, the rate of suspected mental health problems was thirty percent (“double the usual” determined by an earlier national survey), although respondents’ answers also indicated a strengthening of resilience and resolve (Associated Press, 2006c). Those findings were made during a time when New Orleans was in the process of clearing and rebuilding storm-damaged areas, offering the possibility of return, or at least a choice to return. The prospect of a long-term or permanent dislocation may produce more serious and enduring mental health impacts. This can include increasing mental health concerns within the population at a time when services are strained or completely unavailable

(Associated Press, 2006b; Turner, 2006). In some areas, the arrival of large numbers of refugees may exacerbate a local situation already strained by a lack of resources (Jackman, 2006).

Persons forced to leave home or evacuate from an area without being allowed to return home will be separated from sustaining pain, mood-leveling, hormone, and other medicines for an unknown period of time. They may not be able to obtain temporary relief in the evacuation's way-stations. Upon arrival at a long-term refuge, a number of logistical problems will confront them. Patients will almost certainly be separated from doctors and therapists, making renewal of prescriptions problematic. It is even conceivable that doctors' credentials will not be recognized in the areas where they arrive, though the AMA and other regional groups will have the facilities to buffer such problems in fairly short order.

At some point in time, a national medical registry coupled with a reasonably secure biometric identification system may obviate the present difficulties, but those systems are still some years off. There is an interim technology -- the implantable chip that contains medical history and other data -- that is at the threshold of acceptance, but neither the chip nor the technology to read it is widely disseminated. Validation of the legitimacy of prescriptions will follow hard upon the identification of needs through whatever census mechanism is in operation; even in the absence of a structured census-taking, the need will identify itself on an ad hoc basis. In the short-term, con artists with and without drug dependencies will attempt to take advantage of these conditions to game the system (as below), and local medical personnel will most likely err on the side of compassion.

A large population influx will place a strain on the stock of local pharmacies, which tend to order within certain parameters based on their customer base, allowing for new prescriptions. Standard orders are placed on a weekly or semi-weekly basis, and although the supply chain will undoubtedly adjust quickly once new needs are quantified, the initial blitz of elevated demand will affect both newcomers and residents with shortfall. Emergency transports can be done from stocks in outlying areas, but there will be logistical and security measures to be devised on short notice.

Articulate patients who can identify their medical problems and treatment regimen should have a fairly easy time making the adjustment. Psychiatric and other mental health patients may have more difficulty, as it is easier to start anew with a physician than with a psychiatrist or therapist when one's entire history of counseling is lost or unavailable. A similar but even more difficult problem faces those without a framework for communicating easily, such as autistic children and mentally impaired adults. Still another problem may emerge as individuals who had been barely functioning at a competent level become unhinged by the trauma of the event and relocation. Without reference to a diagnosis, their behavior will be the only marker of a psychiatric difficulty and may be confused at first with criminal behavior. Both law enforcement and the medical community could find themselves dealing with large numbers of traumatic stress disorders, some clear, some perhaps masked.

In the event of a massive population dislocation, we should anticipate that drug dealers would seize upon it as a moment of opportunity: widespread attempts to obtain drugs under fraudulent guise should be expected. (Drug addicts may do the same, but the larger and more capable enterprises will most likely be from the purveyors.) The

developing network of pharmacy chains with their own national databases may mitigate to some degree, but the opportunity for fraud is still prevalent. There is also an elevated danger of attempts to hijack new shipments of drugs coming into areas where evacuees are staged.

In some of the more isolated areas, medical personnel may be exposed to a whole host of addictions and schemes to which they have never been exposed; in the more populated areas, pharmacy-hopping is almost certain to be a feature of the early days, as addicts and dealers try to take advantage of the confusion that attends the dislocation. While law enforcement will eventually catch up with these schemes, the criminal element will nevertheless place an additional demand on a system already taxed to accommodate the rapid influx of population.

Over the long-term, various forms of trauma will creep to the surface. In one of the first comparison studies, the children who fled Katrina demonstrate a higher rate of physical and emotional problems than does a comparison group of children living in the inner city of Los Angeles (Dewan, 2006). People who girded their loins to meet the emergency may suffer deferred stress symptoms even once they reach seemingly solid ground. Those who suffer from addictions and dependencies may make it through the disaster on sheer nerve, but relapse when the enormity of the situation hits them. There is no immediate gauge of the impact of large new numbers of people entering local AA or Al-Anon groups. Nor do we realize the longer-term strain on members in sobriety accustomed to helping members through the familiar substance abuse problems now finding themselves confronted with emotional problems including traditional substance-based forms compounded by disaster-related trauma.

In the event that the disaster involves radiation exposure, either from a Chernobyl-like accident or a dirty bomb attack, the medical situations will be both acute and long-lasting. The closest model we have is Chernobyl, whose woefully inadequate Soviet-era records understated the problem. The effects are slowly manifesting themselves over time, with a growing number of cases straining medical systems in the new Ukraine (Associated Press, 2006a). The medical communities in the receiving areas will bear the brunt of the initial impact (all but the crisis cases treated in emergency triage facilities, presumably), and unless there are long-term preparations, they will also bear the brunt of the longer-term cases with little or no support.

Managing Criminal Populations

Three separate categories of criminals will be displaced by the event: those who are incarcerated at the time of the event; those who are under community supervision, either in lieu of incarceration or under release conditions; and active criminals not under the control of the authorities. Despite Hollywood's penchants for jailbreak scenarios, it is more likely that the populations of jails and prisons will be part of an organized evacuation. When their removal takes place in the order of evacuation is not clear because the facilities share the features of both containment and facilities; incarceration sites may be resupplied and their residents kept in place until the general rescue and removal operations are complete. The extent of structural damage and the ability of the authority to maintain adequate staff for supervision under conditions of emergency are wild cards in this scenario.

Offenders in the community, both active and under nominal supervision, will pose the greatest problem for the receiving communities. While many are not necessarily going to continue their ways in new locations, the experiences of Houston in the wake of Katrina suggest the need for extra vigilance in receiving communities. The nature of the census (assuming one exists) allows canny offenders to assume new identities, at least in the short-term. While AFIS and DNA databases will eventually remove the cover of an assumed identity, any such classification still rests upon apprehension for new criminal offenses or suspicious activity. The sheer volume of need will prevent mass validation of identities: the first response of the authorities will be the humane treatment and relocation of those whose lives have been devastated.

Any subsequent validation, even those involving checking criminal histories with AFIS, will be a long, sporadic process that offers a window of opportunity for some offenders to simply disappear, their own identities perhaps counted among the dead and missing of the disaster. If their new lives are law-abiding, the net gain to society may be positive. If the individuals continue their antisocial ways, they will eventually be identified and returned to their former bad name. A slightly different path might open up for those who wish to escape prior debts, but the economic dislocation of a mass-casualty event and relocation of an entire area's population will have economic repercussions far exceeding the sum of individual debtors who "disappear." They will have more protection in the larger national effort to relieve the economic dislocation than will the criminal element that resumes their misdeeds under other names.

Some criminals will be temporarily unable to provide the goods and services they did in their home territory: drug trafficking supply lines will be disrupted, and dealers

may find themselves in virgin territory or relocated to areas already under franchise. The former brings the possibility of the introduction of new drugs into previously unaffected areas (assuming such truly exist any more), or areas where the drug was previously less accessible. Bringing in a new drug creates a more vulnerable criminal due to greater visibility and earlier interdiction by law enforcement, but there may still be collateral damage inflicted upon the receiving communities. Potentially much more dangerous is the relocation of displaced dealers into established territories: it poses the possibility of sudden eruptions of street violence as the newcomers contend with established markets for turf, a replay of the late 1980s and early 1990s conflicts wrought by the appearance of crack cocaine.

Sex offenders are a particular danger, as they will be going into a location where their identity is unknown, operating among a population with its natural defenses down, opening its doors to help the innocent. At the time of this writing, a number of states are experiencing difficulty tracking their released sex offenders even without catastrophe. A single newcomer with unusual behavior will stand out in an area; the same person mixed in with a large evacuated population has much greater cover, and thus has much more potential opportunity. That same condition also provides new opportunity for residents with predilections that previously had been held in check.

A further problem exists for local authorities: any sudden increase in criminal activity overall, or a particularly heinous crime like child abduction and murder, may quickly change the tenor of the community response to the newcomers. Human nature will likely ascribe the blame for a heinous event to the newcomer community, especially if the perpetrator is not quickly apprehended. Police and other officials will have to deal

with the crime itself as well as with the spillover frictions between resentful, long-time residents and newcomers unfairly tarred by the sins of a few.

Local enforcement capacity may also be strained by other factors if police and rescue personnel who volunteered to be part of the original relief effort are absent when the evacuees arrive. Courts, detention, and jail capacities may be strained by an influx of gang members, drug turf violence, or simply the volume of new offenders. Similar impacts on medical facilities may result from new violence or simply an increased number of patients.

Epidemic and Contagion

A special challenge to the law enforcement and medical communities is an evacuation under plague conditions. In the event of terrorist strike by widespread release of a highly contagious ebola or Marburg-type virus, attempts at planned evacuation may give way to panic. Under such conditions, all newcomers will be suspected: creating refuge for the displaced population will be a matter of establishing an effective quarantine. Medical examinations and certification can be provided for those removed under planned or controlled conditions, but those who flee in panic and scatter are both suspect and potential targets of vigilante actions.

The same biohazard protection afforded to first responders in the epicenter will be needed as well for those who manage the evacuation and the placement of the evacuated population. Whether there is a sufficient stock, whether that stock can be promptly delivered in the areas where it is needed (including the need to hold some in reserve for assignment to newly-identified outbreak areas, while there is a crying need for protection

in the identified areas), and whether the transportation network will be nimble enough to move needed supplies to newly-identified areas are all open questions in need of exploration and planning.

Logically, a medically-defined evacuation would call for a receiving area that allows a natural quarantine: tent cities to begin with, FEMA trailers as soon as the logistics allow. The amenities of such places will be scant at first, requiring a separate logistical effort to provide stores, schools, medical clinics, and the like. To avoid people making parallels to concentration camps, and to calm fears of areas receiving refugees, these areas must clearly be transitional housing rather than an end-destination. The overriding focus must be the thorough medical examination of all residents and placing the sick or exposed in real medical quarantine. The healthy must be moved as quickly as possible to unaffected areas and with some recognizable certification of their state of health to reassure the receiving areas. Census mechanics and the security problems of a plague evacuation will be considerably more difficult than those of other disasters. The natural impulse to facilitate reunification of families must be tempered by public safety needs and will require an investment in alternate forms of quasi-reunification -- dedicated communications networks or web-based capacities that allow healthy individuals to communicate with their afflicted loved ones. Whether the strain created by mass numbers will allow the expected communication with health care providers (as we have come to expect in the course of normal events) is highly problematic and may require new management efforts.

Local Capacities

The post-Katrina focus on placing evacuated children in schools was a natural product of the catastrophe occurring at the end of August, the beginning of the school year. Mid-year disasters will cause an even greater dislocation. With Katrina evacuees, there have been secondary issues with insufficient classroom capacity, the impact on school ratings under No Child Left Behind testing, and the integration of students with different levels of preparation at the same nominal grade level. Those same issues would attend a longer-term evacuation as well.

There is a long history of American schools using trailers as classrooms to absorb temporary bubbles in school-age population, so the physical dimensions of school attendance may be the easiest problem to solve. Greater difficulties will lie in matching capable teachers to the new school-age population. In planned relocations and new residential facilities along the FEMA Village model, new school facilities can be created specifically for the incoming population, but in other receiving areas where the new population is absorbed by whatever means are available, the existing schools will be under greater stress to accommodate the new students.

Teachers from the disaster-stricken area will wish to be reunited with their families, and the logistics of the evacuation will almost certainly divide the population in unusual ways. Even if teachers evacuate with their students during the school day, reunification efforts will sunder the classes as the census efforts transport students to wherever their parents are as a result of the evacuation. Once arrived at a stable haven, however, the teachers will be able to supplement the area's teaching cadre.

The need to work -- to earn money, to normalize life to the degree possible -- will be paramount for almost everyone in the diaspora community, but states may need to devise ways to suspend or modify licensing rules in order to accommodate them. The same will be true for medical licenses, as medical personnel and mental health care professionals will almost certainly be needed. The potential for criminal fraud, though small in probable numbers, is an important consideration in screening and cross-checking claims of licensure in the disaster-affected state. Less acute considerations will attend the acquisition of licensure for the other occupations that are regulated. One consideration will be the need to mount “crash courses” in the new location’s rules for those ready and willing to work in their profession.

Localities will also be affected in a number of other ways. Local police will find themselves dealing with a host of emotional difficulties and behaviors related to the evacuation. Whether or not they recognize them as such, and whether there are social work and mental health services available as a backstop if they do, remains problematic. As with teachers, one can assume that some mental health professionals will be part of the diaspora, and will be seeking to reestablish themselves in their new locations.

Local Economies

Though the essay speaks in terms of long-term diaspora, the extent of displacement and the length of relocation -- perhaps permanently -- will not be known in the first few weeks. Some in the diaspora may use their first refuge as a jumping-off point, staying for a while, using the time to assess other options, and then moving on. Areas that receive the displaced populations will also receive infusions of federal and

state emergency funds. There may be a temporary depletion of food and medical supplies as the demands of the new arrivals overwhelm existing stocks. It should be possible to rectify that situation fairly easily by redirecting shipments bound for other locations (some of which would have been in the disaster area). With or without a coordinated census, chain stores -- groceries and pharmacies -- will be able to restock quickly by communicating with their central supply depots. Similar support may be available to building supply stores that will be tapped for new shelter construction.

The local housing market will be saturated, and emergency funds will boost the local economy almost overnight. As with all booms, however, the specter of a trailing bust is ever-present. Even if a return to the disaster area is impractical because of radiation, the first relocation for safety may not be the new home of all evacuees. A rise in population does not translate into an expansion of available jobs: economic necessity and other options may lure the new residents elsewhere.

Booms may turn to bust, which is not exactly a shocking revelation in American history. A disaster-based boom is an artificial one, bringing a quick flood of money into areas that receive evacuees, but not necessarily creating a new foundation for the local economy. Boom conditions of this sort should be considered ephemeral; they are not necessarily negative unless they trigger profligate spending in the receiving community. That simple fact should be a fundamental lesson for second-tier disaster planning: local residents should recognize the windfall for what it is, and avoid spending or making new commitments that will outlast what may be a short-lived bounce.

The unknown factor in the matter is the decisions that will be made by corporations with assets in the disaster zone. Some jobs may disappear forever; others

may be shifted to manufacturing or service centers elsewhere in the country. Some workers may be able to relocate to jobs in other areas, but it is equally possible that the new capacities will simply hire residents in that locality, leaving displaced workers jobless. Part of the sucker punch of the disaster may be the necessity for many evacuees to find new means of making a living. Such opportunities are likely to be scant in the areas that are the first-level receiving communities for the displaced populations, encouraging second- and third-stage migrations to other areas. Such movements may ease local pressures but create new complications in terms of managing the documentation of the diaspora and management of relief efforts.

Katrina dispersed a large number of persons living at or below the poverty level, and communities have been hard put to absorb a population dependent upon public resources. Another type of disaster may well create another such population as local infrastructure and economies cannot expand quickly enough to accommodate the overwhelming need. Government assistance will mitigate the problem somewhat, but the federal purse is not limitless. Katrina strained FEMA's ability to pay for hotel accommodations, which has since ended. A more long-term diaspora would need, and planning should encompass, an alternative form of financing for more stable housing.

Burnout

A high burnout rate from recovery personnel is a lesson learned from the collapse of the World Trade Center towers: the helpers and rescuers will find themselves in need of assistance. A tertiary network of relief, respite, recreation, and assistance will be necessary for those who come to help the displaced populations. The faith community

will be first-line bulwark in the receiving areas, as the initial focus will be on the disaster area personnel. Red Cross volunteers and others will also find themselves absorbing the emotional trauma of the displaced. While all have some experience on a smaller scale, the sheer weight of the volume may erode the helpers' stamina.

We are accustomed to flocks of grief counselors descending whenever there is a school shooting, but those are temporary events, affecting a relatively small portion of the entire population in most cases. The trauma is confined, with the remainder of the community intact, stable (if shaken), and familiar; those conditions will not attend a massive population dislocation, especially when families are separated.

Miscellaneous Concerns

In this day and age, we must anticipate that a proportion of the evacuees will include undocumented immigrants. Humanitarian concerns in the epicenter areas likely will not ask about citizenship or conditions of entry. Even if illegal immigrants are discovered, the mechanics of evacuation are unlikely to include provisions for prosecution and deportation. Second-level follow-up, however, may be different. The post-Katrina rebuilding of New Orleans has been accomplished with the help of large numbers of illegal immigrant laborers, and the identified dislocations discussed above constitute an even better opportunity for undocumented immigrants than for native lawbreakers.

FEMA villages and other quickly-built housing may rapidly deteriorate. Unless there is an adequate pre-planning survey, some housing may be poorly sited, as some FEMA trailers were in staging areas, leading to swift physical deterioration from water.

No community wants a shanty-town; no one forced from their homes and lives wants to live in one. Where rapid housing construction is required because of volume, it would be prudent to have contingency plans for either further dispersal or a plan to reinforce and upgrade the facilities, possibly in rotation.

Long-term communications challenges will include the ability to deliver mail, reconstruct financial records, notify creditors and debtors, coordinate insurance claims, and the like. The census infrastructure, with Internet communications and perhaps some other options such as corporate representatives visiting the various sites on a traveling circuit, should facilitate these efforts. The problem of volume may, however, create additional difficulties. There is no way to anticipate the exact dimensions that might occur; the backstop provisions for these sorts of problems lie in the hands of the Congress and the legislatures.

Katrina brought to our attention the uncertainty of residency in the face of long-term diaspora. Many evacuees returned to New Orleans to vote in the local elections, but the reconstruction efforts were already well underway when they did so. There is no precedent for declaring that a disaster area is unsalvageable or for voiding residency and voter eligibility. The status of displaced voters is of considerable interest to the receiving communities, especially where large numbers of evacuees can easily upset the balance of politics dramatically. While prisons and college communities share similar concerns over their temporary populations, the liminal state of the voters of a disaster area -- particularly during the early stages of damage assessment -- comprises a special concern. The franchise is a fundamental right of citizenship regardless of economic status or even

dislocation, but there are practical problems of managing the process that must be addressed in advance.

Perhaps the most important concern in a long-term diaspora is the potential for turning “evacuee” into “refugee.” Compassion fatigue has set in post-Katrina in some locations (at the same time that life-long friendships seem to have been forged in others). The United States has, on several notable occasions, evidenced episodes of unkindness toward displaced persons. The most vivid of these episodes is that of the Okies, farmers displaced from their lands in the Dust Bowl during the Great Depression. John Steinbeck’s novel The Grapes of Wrath paints a stark portrait of their plight; the potential for evacuees’ needs outlasting the good will of the communities that receive them is a real possibility. A long-term or permanent displacement from areas blighted by disaster should be treated as a national emergency, and the resettlement and mitigation of victims a national priority. The best preparation for such a worst-case scenario is an open planning process, clearly defining areas of responsibility, mapping out contingency plans, and looking as far over the horizon as possible to determine needs, resources, and possibilities.

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