

# Adaptation should secure communities, not property

By **Nick Michell** - July 18, 2017



Flooded I-10/I-610 interchange and surrounding area of northwest New Orleans and Metairie

*Against extreme shocks, communities within cities can remain, rebuild or relocate. **David Zetland** argues that the best solution is to convert human endeavour into climate-proof policies*

**E**ven the best resilience indices face a daunting paradox. The human forces they correctly rank highest—equity, community, opportunity, and networks of health and well-being—are hard or impossible to quantify. Consequently, many lower priorities that offer clear and simple metrics—GDP, bandwidth, elevation, greenspace ratios, power grids, tarred roads—rise up to fill the vacuum. Since cities can improve only what they can measure, there's a built-in bias to invest disproportionately into more concrete, clinics, culverts, pipes, pumps and permeable pavement.

Yet strip away this hard outer flesh of public and private infrastructure, and you find the unique and complex soft assets, the social capital that makes a city truly resilient. These linkages of tacit knowledge and informal institutions provide the city's nervous system, and its soul. It can be preserved, and integrated, whenever urban leaders value diversity and inter-dependency, and find ways to invest resources in the free decisions by groups of people.

Cities "work" when citizens can choose to trade goods and services, secure property rights, reduce the risk of fires, dispose of waste, and

improve public health free from outside congestion or social engineering. Each improvement can be traced back to citizens paying taxes to support municipal bureaucracy.

These human networks and environmental buffers can grow in symbiosis, but the institutional relationships unravel if conditions diverge. California's economy struggles with dying ecosystems, poisoned groundwater and constant battles over managing the State's 7,000 plus water systems. India's Cherrapunji, famed as "the wettest place on Earth" still experiences water shortages. Hurricane Matthew caused equal damage to both Haiti, where 1,000 people died and Cuba, which lost no one.

Abstract metrics not only fail to capture the essence of "resilience", they mislead professionals into "managing what can be measured", relying on top-down, command-and-control approaches, when bottom-up, community actions might provide much more resiliency at much lower costs. It may be hard to see that potential when one is trying to compare or aggregate communities on common measures that ignore their unique characters.

Many indices of urban resilience aggregate interchangeable units such as invested dollars, redundant connections, or annual flood risk. But people, skills and community cohesion are not interchangeable. Leaders recognise this in rhetoric ("The citizens of Rotterdam are the key to our resilient city" says its mayor Ahmed Aboutaleb), but forget it in practice ([The Resilience Network Initiative \(RNI\)](#) connects city governments and citizens with technology... to exchange information about stresses and shocks). Often the citizen is little more than an isolated data point or targeted market segment.

If you want to think about the difference, ask whether resilience measures focus on inanimate objects or dynamic people. Few people rank bridges and buildings over humans, yet it is surprising how many programmes do. That lopsided valuation reflects the biases of engineers who deal with material structures, insurers who pay for damages to things, and elites who keep assets in property. Those biases lead to programmes that treat cities as fortresses to defend instead of programmes that support dynamic human communities that can duck, pivot, retreat and recover from setbacks before moving ahead with life.



*Air National Guard members deliver water and food to stranded citizens in Metairie, Louisiana after the city was devastated by Hurricane Katrina*

Take, for example, the 'fortress' bias reflected in the mission of the [Connecting Delta Cities \(CDC\) network](#). To keep safe and livable, thirteen affluent and progressive cities claim to be "connected by a common goal: a climate-proof, resilient future for their residents and businesses." That locks CDC members into a future of remaining in place, rather than empowering communities to explore and choose their own best options.

"What's their alternative," you might ask? Wouldn't abandoning Jakarta, Venice, New Orleans, or Rotterdam mean losing the concrete embodiment of their history, culture and community?

Perhaps. But is it also possible to transplant the living essence of a city—its community—to a safer location? These questions depend on whether resilience focuses on streets or people.

To many, the notion of moving a city appears absurd. But if moving communities from Miami, Manila and Mumbai seems preposterous, recall how few blinked when Maldivian islanders had to relocate, striving despite limited funds to keep traditions and communities intact. If retreat makes sense at that level, why not scaled up to megacities?

Stepping back, one can see other advantages. People-centric resilience strategies arguably deliver more value per dollar spent, facilitate adaptation to evolving circumstances, and prioritise the community's continued well-being over material (but doomed) private assets. Romantics, vested interests, and engineers will howl at such a shift in priorities. But their opposition runs against the logic of preserving, and empowering, the community's choice.

History also favours mobility. Migration, by push or pull, is a dominant human choice. Our species has persisted far longer than any settlement, largely because we are ready and able to seek refuge and opportunity in greener pastures, on higher ground.

We should not assume that our wealth or technology will save us, as the costs and risks of a fortress mindset (or professional hubris) are rising with temperatures, weather variation, and sea levels. Even worse, those costs fall disproportionately on the poor who tend to live in more vulnerable areas with less material and logistical means to cope with risk.

To be sure, citizens will face costs, whether leaving, or staying. The relevant question of resilience is "how life can go on in the face of

adversity,” and the community must be allowed to answer that question with solutions reflecting bottom-up priorities.

Cities, and networks within those cities, should decide their own fate. In Amsterdam, New York, or Venice, landowners can afford to invest in protection against rising sea levels; residents of Jakarta or Dhaka are likely to need outside help. But in all cases, local communities, linked by socio-economic class, should drive decisions about how to spend money. Those with skin in the game will “get things done” because they experience success or failure.

In contrast, interference by federal or regional governments can divert communities from tackling relevant problems. Both Newark, New Jersey, and Washington DC are vulnerable to sea level rise, but the mighty US Congress (occupying the city’s highest ground) impedes Washington DC from defending itself and its most vulnerable residents: the relatively poor living in DC’s low-lying, southeastern neighbourhoods.

In sum, urban resilience depends not on infrastructure, but on communities. Communities can best decide whether to defend their physical history, or transplant their traditions and networks to safer places, where their communal soul can evolve and grow.

---

### **Flood imprisoned, or flight enabled?**

#### ***In the aftermath of disaster questions of resilience are no longer rhetorical***

In 2005, Hurricane Katrina struck the Gulf Coast region, displacing over 1 million people, hammering 1 million homes, killing over 1,000 people, and causing economic damages of US\$150 billion. These costs were only partially addressed by Federal spending (half went to temporary relief) and US\$30 billion paid by insurance companies, leaving at least US\$75 billion in private losses.

Many groups clamoured to “build it back stronger”. But would locals have favoured reconstruction if they had to pay US\$150,000 each out of their own pockets?

Ed Glaeser argued they should be free, and empowered, to choose. He estimated that residents, many with annual average incomes of US\$20,000, would be better off receiving cash (he used US\$120,000 per person) and the option to move elsewhere. Entire neighbourhoods could have easily resettled this way, thereby maintaining the essence of their culture and community.

While the programme only paid people who stayed put, those incentives didn’t prevent 20 percent of New Orleans’s population from leaving the city.

Ironically, much of the city was settled by uprooted but intact communities (“Cajuns” are originally from Acadia, Nova Scotia). Boat people are resilient precisely because they can transfer “infrastructure” to a new location at a low cost; New Orleans’s Lower Ninth Ward used to consist of fishing camps and piers over marshy land that was drained and settled.

The rebuilding of New Orleans suggests inner strength, but it mostly served grandstanding politicians, civil engineering firms, and tourists. It did little for the poor, and less for future security. The Mississippi Delta region faces a triple threat from sinking land, rising seas, and intensifying storms.

A resilient community would escape, but current policies seem more interested in nailing residents’ feet into doomed ground.

---

\*David Zetland is an Assistant Professor at Leiden University College and author of *Living with Water Scarcity*. He lives in Amsterdam, where he is working on a project about adaptation to climate change, *Life Plus 2 Meters*, which has just published its first book.

**Nick Michell**