SECURING GLOBAL CITIES

BEST PRACTICES, INNOVATION, AND THE PATH AHEAD

GLOBAL CITIES INITIATIVE

A Joint Project of Brookings and JPMorgan Chase

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EXECUTIVE SUMMARY

Today, more than half of the world's population lives in cities. Over the next 30 years, that figure will likely increase to 66 percent.[1] This breakneck pace of urban development, coupled with globalization and increased access to information, is changing geopolitics and global economic development.

Increasingly, cities are at the center of the world's economic activity. In the United States, for example, the largest 100 metropolitan areas account for three-quarters of U.S. GDP and two-thirds of the country's population. Integrated global networks, financial systems, and markets are dramatically changing how cities will develop in the future.

Connections among cities across the world are deepening through the flow of goods, people, technology, and ideas, bringing increased economic opportunity. Cities are also becoming more interconnected through international diasporas, multinational companies and supply chains, and worldwide communications and travel networks. As one indication, the aggregate amount of transnational investment, services, and trade in goods increased globally from $5 trillion in 1990 to $30 trillion in 2014 (growing from 24 to 39 percent of world GDP).[2] The interconnectedness of citizens, both physically and electronically, leads to ripple effects: what happens in one locale can quickly affect a distant locale too.

While these movements of people, goods, and ideas create new opportunities and have positive implications, they also create vulnerabilities. Cities in the United States and around the world find themselves at the nexus of society's most pressing issues, including terrorism, transnational violence, civil and ethnic unrest, organized crime, and technology-based crime, such as cyber threats.

Securing cities may be emerging as the central challenge of our day. Security for the individuals, communities, businesses, infrastructure, and institutions making up urban areas is crucial in its own right. It is also fundamentally important for economic growth and for cities to thrive. Some places can advance economically even while experiencing sustained high levels of violence, at least to a degree. But it is difficult to entice investors, inspire innovators, and keep mobile workforces content without a basic degree of safety.

It is these realities that have driven us to focus on the intersection of economic growth, security, and stability, building on the Global Cities Initiative, a joint project of Brookings and JPMorgan Chase. Through conversations with hundreds of practitioners, academics, civic leaders, and government officials over the course of the past year–dialogues that took place in a dozen cities in five countries–we have identified several best practices and principles that should inform the urban security mission.

1. CONTINUE TO REFINE COMMUNITY POLICING

Community policing is foundational in the urban security enterprise. It has helped drive major reductions in crime rates not only in many U.S. cities, but also in other countries from Latin America to Europe and beyond. It is also crucial in the fight against transnational crime and terrorism, largely for the intelligence it can provide when communities feel engaged in helping ensure their own safety. The concept includes methods such as: decentralized

organization of police with delegation of authority; stable assignments of officers in certain beats and neighborhoods, to foster relationships and communications; an emphasis on crime prevention rather than response (for example, patrolling more heavily in places and at times when crime is otherwise most likely to occur); analytics designed to identify and highlight patterns of crime, allowing for targeted strategies at the local level to address high-risk areas; and encouragement of assistance from the broader community—including local businesses—in identifying dangers as well as solutions to crime. Other simple tactical innovations have helped too, such as enhancing confidence and safety in public places like parks. Close cooperation between police and prosecutors is also important for ensuring that the latter are invested in cases, and that the former understand what kinds of evidence will hold up in court. Finally, sentencing as well as prison conditions need to be designed with the goal of lowering future crime rates. Ultimately, community policing and related activities need to shore up the rule of law and citizen security as preeminent concerns.

2. BREAK DOWN STOVEPIPES

Collaboration is needed to share intelligence and to address cross-jurisdictional threats, particularly for the purposes of stopping terrorism, but also for taking on organized crime and transnational criminal networks. Police forces need to work closely with national-level intelligence or security agencies, like MI5 in the United Kingdom and the FBI and CIA in the United States. This means, for example, determining which agencies take the lead on surveillance and on arrests, which are responsible for tracking any given suspect, how to obtain security clearances for some police officers, and how regular beat-patrol policemen can

help provide information about suspected terrorists through their normal jobs, even without extensive specialized training. Information sharing also requires compatible and secure cyber systems across different agencies—necessarily imposing further demands on resource requirements for the public safety mission. In a number of countries, a recent history of terrorist attacks has motivated authorities to cut through bureaucratic resistance and demand cooperation in these ways. Sometimes, however, authorities have acted even in the absence of a major catastrophic experience, though this takes decisiveness and foresight, and excellent leadership. Either way, once established, collaborative mechanisms and patterns of behavior need to be institutionalized and perpetuated.

3. ESTABLISH CLEAR STRATEGIES AGAINST ORGANIZED CRIME

In dealing with narcotics traffickers and other sophisticated, often transnational, criminal organizations, priorities are needed to sustainably reduce violence. Authorities can preferentially target those gangs, groups, or organizations that are the most violent. This latter tactic can weaken the worst of the worst, while also deterring the excessive use of violence by other organizations. Another key choice in attacking criminal networks and terrorist organizations is whether to target just the top leadership of these organizations, or instead to develop a more patient strategy emphasizing action against mid-level operatives. Evidence suggests that the latter approach is usually more effective. There can be times when removing one key leader makes a big difference (arguably this was true for Pablo Escobar in Colombia, the Shining Path movement in Peru, and to some extent al-Qaida). But it is generally important to extend targeting down a layer or two in an organization.

4. EXPLOIT NEW OPPORTUNITIES FROM TECHNOLOGY

Technology can aid criminals in protecting the content of their communications from authorities. Technology also creates new vulnerabilities, notably in the cyber realm. But it offers great advantages to police forces and other security organizations too. Helpful technologies include inexpensive closed-circuit TV, facial recognition technology, license-plate readers, smart phones and GPS trackers for police cars, acoustic gunshot detection systems and other advanced sensors, and unmanned aerial vehicles. Yet where technology has been effectively deployed, it has not been at the expense of officers on patrol. We found no examples of cities that were successful in fighting crime and terrorism unless they simultaneously maintained or increased police personnel and focused intensively on the quality and training of those personnel.

5. PROMOTE SOCIAL COHESION

To gain support from communities and address the root causes of crime and terrorism, authorities must promote social cohesion as a central element—not an afterthought—of the urban security effort. The neighborhoods and demographic groups most affected by crime and violence must be treated as essential allies. Moreover, education and employment opportunities must be expanded in urban areas suffering from lack of opportunity and hope in order to address the root causes of crime. Our research has uncovered several creative ideas—for example, using fire departments or national army outreach efforts in places where police departments may not be easily trusted, and engaging formerly incarcerated individuals or rehabilitated former members of violent gangs or groups to reach out to disenfranchised communities. The private sector can make inclusion a priority in hiring and retention policies. Public-private partnerships can also help steer private funds and energies to programs that promote inclusion.

6. PREPARE FOR "BLACK SWAN" EVENTS

Beyond dealing with omnipresent threats, it is crucial to be as ready as possible for one-time catastrophes. Most cities may never experience truly horrific events, but it is important not to take solace in such probabilities, and to prepare for disasters before they occur. Those catastrophes could be purely natural. They could also become complex emergencies that superimpose themselves upon, or help to create, violent or anarchic security conditions. They could take place in cities already suffering significant violence; they could also produce shocks that create a breakdown in order. Given the growth of megacities, they could also easily affect 10 times as many people in a single incident as have been directly threatened by the world's 21st century natural catastrophes to date. The private sector can have a role here too—as in Manila in the Philippines, where a consortium of utilities and other companies has organized to help authorities in emergencies, with a single point of contact and clear coordination channels.
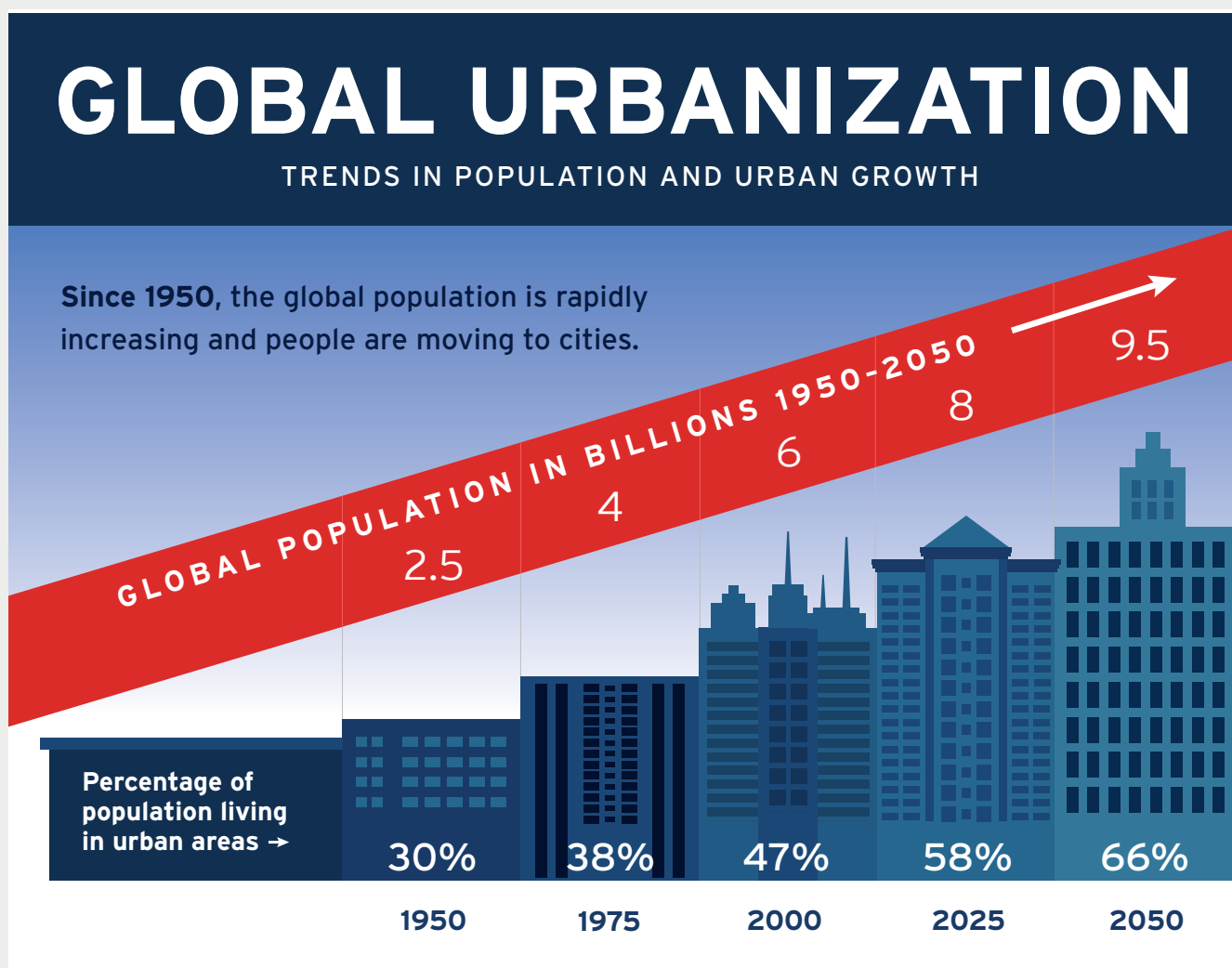
ENHANCE PUBLIC-PRIVATE PARTNERSHIPS

This theme is so central to our findings that it is interwoven throughout all six of the above principles, and hard to separate out from any of them. This paper attests to many examples of where it is working already—and argues strongly for expanding such efforts in the future. The importance of public-private collaboration bears emphasis in any summary of the core principles of the urban security enterprise.

INTRODUCTION

The task of securing global cities against violent threats is a crucial challenge of our day. Already, half of the humans on the planet live in urban areas; by 2050, the United Nations predicts that two-thirds of the world's population will do so. Of course, that will be a larger population overall as well—the mid-century human population is likely to approach or exceed 9 billion from its current 7.4 billion. These cities face threats not only from al-Qaida, ISIS (also known as ISIL or Daesh), the Taliban and like groups, but international drug cartels, human trafficking networks, arms traffickers and street gangs.

Figure 1: The global population is growing and urbanizing at a rapid rate, across all levels of income and development

GLOBAL URBANIZATION
TRENDS IN POPULATION AND URBAN GROWTH

Since 1950, the global population is rapidly increasing and people are moving to cities.

GLOBAL POPULATION IN BILLIONS 1950-2050

2.5   4   6   8   9.5

Percentage of population living in urban areas →

30%	38%	47%	58%	66%
1950	1975	2000	2025	2050

Source: United Nations Department of Economic and Social Affairs

Security is crucial in its own right. It is also fundamentally important for economic growth. Some places can advance economically even while experiencing sustained high levels of violence. But it is difficult to entice investors, inspire innovators, and keep mobile workforces content without a basic degree of safety. Particularly for cities at the middle-income level or above that seek to advance to higher echelons of prosperity within the global economy, it is important to make individuals, communities, and property as safe as possible. Gaining traction on this goal can create a virtuous cycle, in which greater prosperity makes possible further advancements in security (such as larger and better trained, equipped, and compensated police forces), which then further help the economy.

Of course, arguing that better security is good for growth, and that growth then provides the resource base from which authorities can often figure out more effective strategies for improving security in a virtuous cycle, seems like common sense. But it is also borne out by the data. Within the United States, microeconomic analysis shows that safer sections of the same city perform better economically, for example.[3] Potential economic benefits from further reductions in crime rates have been estimated in the low billions of dollars a year, per major metropolitan area in the United States.[4]

REUTERS/Philippe Wojazer

Looking around the world, it is often the safer cities like Berlin, Dubai, London, New York, Seoul, Shanghai, Singapore, and Tokyo that thrive. Promising cities that are unable to escape high violence rates, by contrast, often struggle, as in many parts of Africa, Latin America, and South Asia.
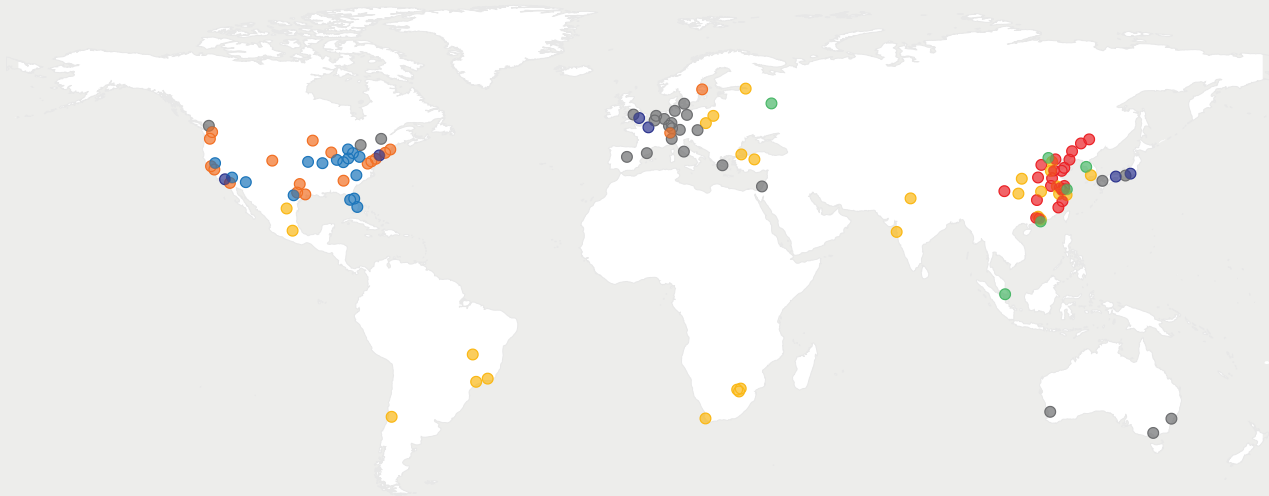

"Global urbanization means that cities are a key engine of worldwide economic growth."

Global urbanization means that cities are a key engine of worldwide economic growth. Trade, foreign direct investment (FDI), and globalization enhance prosperity. Moreover, there are enough common patterns in how these economic interdependencies operate, and in how cities succeed economically, that one can establish typologies of effective urban economic models. For example, a recent Brookings study for the Global Cities Initiative documented seven main archetypes of urban economies—demonstrating that all of today's major cities are global and interconnected, but contribute to global economic growth in distinct ways.[5] Consider a specific dimension of this growing network of interconnected global cities. In America's major urban areas, foreign-owned U.S. affiliates directly employ 5.6 million workers spread across many economic sectors. Most are in the nation's largest cities. FDI sustains about 5.5 percent of private employment in the average large metro area. Jobs in foreign-owned enterprises are relatively concentrated in manufacturing and advanced industries, even though the job functions are gradually becoming more services-oriented. In 2011, FDI was responsible for the employment of 18.5 percent of U.S. manufacturing workers. Many of these manufacturing activities were integrated into global supply-chain networks, often producing components that were later integrated into final products elsewhere (or vice versa).[6]

Figure 2: Seven types of global cities

GROUP NAME	METRO AREAS
🟣 Global Giants	London, Los Angeles, New York, Osaka-Kobe, Paris, and Tokyo
🟢 Asian Anchors	Beijing, Hong Kong, Moscow, Seoul-Incheon, Shanghai, and Singapore
🟠 Emerging Gateways	Ankara, Brasilia, Busan-Ulsan, Cape Town, Chongqing, Delhi, East Rand, Guangzhou, Hangzhou, Istanbul, Jinan, Johannesburg, Katowice-Ostrava, Mexico City, Monterrey, Mumbai, Nanjing, Ningbo, Pretoria, Rio de Janeiro, Saint Petersburg, Santiago, Sao Paulo, Shenzhen, Tianjin, Warsaw, Wuhan, and Xi'an
🔴 Factory China	Changchun, Changsha, Changzhou, Chengdu, Dalian, Dongguan, Foshan, Fuzhou, Haerbin, Hefei, Nantong, Qingdao, Shenyang, Shijiazhuang, Suzhou, Tangshan, Wenzhou, Wuxi, Xuzhou, Yantai, Zhengzhou, and Zibo
🔴 Knowledge Capitals	Atlanta, Austin, Baltimore, Boston, Chicago, Dallas, Denver, Hartford, Houston, Minneapolis, Philadelphia, Portland, San Diego, San Francisco, San Jose, Seattle, Stockholm, Washington D.C., and Zurich
🔵 American Middleweights	Charlotte, Cincinnati, Cleveland, Columbus, Detroit, Indianapolis, Kansas City, Miami, Orlando, Phoenix, Pittsburgh, Riverside, Sacramento, San Antonio, St. Louis, and Tampa
⚫ International Middleweights	Brussels, Copenhagen-Malmö, Frankfurt, Hamburg, Karlsruhe, Köln-Düsseldorf, Milan, Munich, Nagoya, Rome, Rotterdam-Amsterdam, Stuttgart, Vienna-Bratislava, Athens, Barcelona, Berlin, Birmingham (U.K.), Kitakyushu-Fukuoka, Madrid, Melbourne, Montreal, Perth, Sydney, Tel Aviv, Toronto, and Vancouver

Source: Redefining Global Cities, The Brookings Institution

But the same movements of people, goods, and ideas also create mutual vulnerabilities. The interconnectedness of citizens in today's world, both physically and electronically, means that the ripple effects of what happens in one place can quickly affect other places around the globe. Cities need to work together, within their own countries and across borders, rather than counting on national governments or international organizations to handle these common dependencies and vulnerabilities.

Whether it is the spread of disease, the movements of illicit money and goods through international criminal networks, the sharing of communications and resources among various diasporas, or the basic functioning of the globalized economy, the pace of activity in today's world is swift. This can be advantageous, but it can also pose huge challenges.[7]

In the pages that follow, we articulate best practices from around the world to help frame the conversation about how cities can become safer, largely by learning from each other. We focus on physical threats that can affect much or all of a community. Most of these are from man-made causes, but we also examine natural disasters, or complex catastrophes that could have both natural and human causes. Given this paper's scope, we do not focus directly on other enormously important issues such as domestic violence, mental health problems, and drug abuse— though we recognize that these scourges can affect not only individual families but the well-being of larger communities.

We intend this white paper to serve as a compact compilation of state-of-the-art practices, and include additional resources and references for those seeking further information. It is not a detailed manual, but rather a concise summary of some of the major concepts and most successful practices that cities around the world have developed to date.

Figure 3: Global transnational organized crime flows

Arrows show illegal flows of

→ Heroin
→ Cocaine
→ Firearms
→ Humans
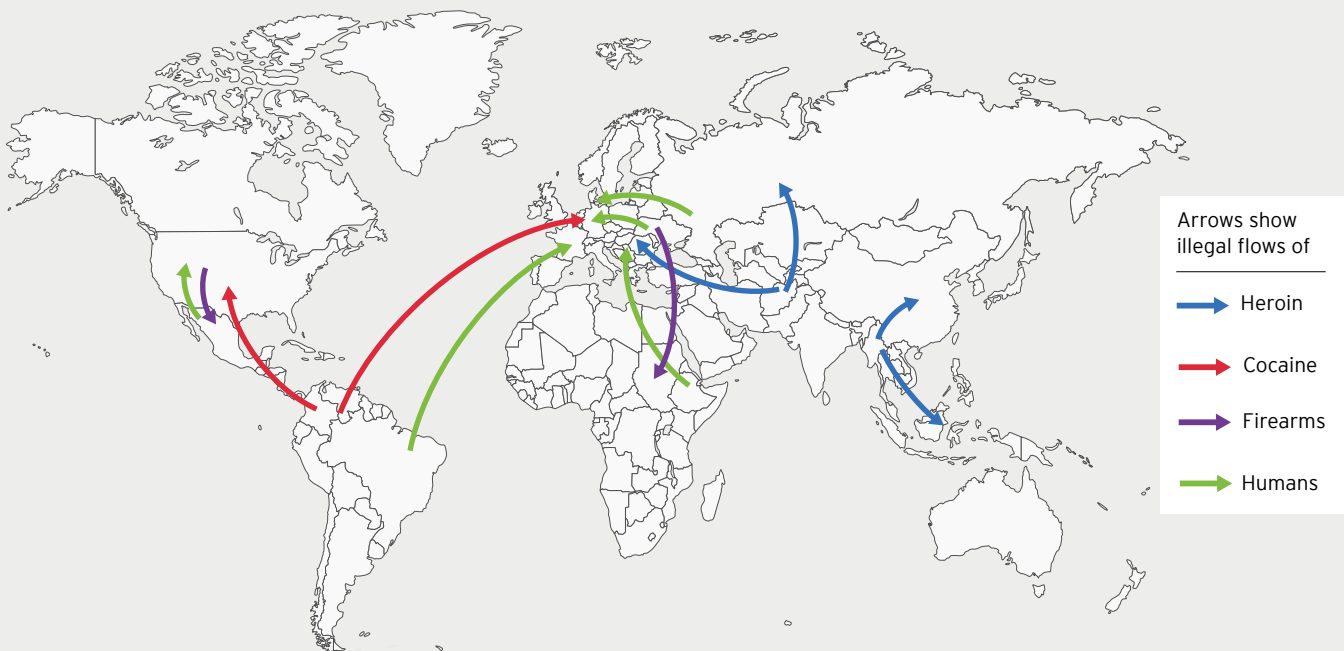
Source: United Nations Office on Drugs and Crime (UNODC)

GLOBAL DANGERS

What are the greatest dangers to citizens of the world's great cities (as well as its towns, villages, and rural areas)? It is also worth taking a step back to understand the broader state of violence—that is, the intentional harming of a person or persons by other people—on the planet today. A few of the most salient facts and figures include the following:[8]

Figure 4: Global annual fatalities (2015 or most recent year available)

1.2m	440k	100k	30k
Vehicle Fatalities	**Homicide**	**Battle Deaths**	**Terrorism**
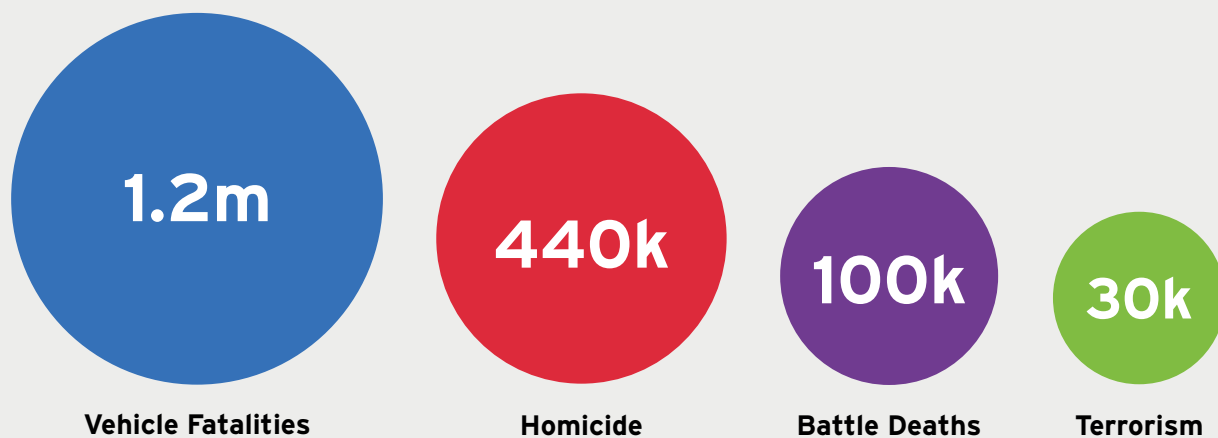
Source: World Health Organization, UNODC, Uppsala Conflict Data Program, START Global Terrorism Database

→ Even with President Vladimir Putin's aggressions against Ukraine in recent years, interstate conflict remains low and mild in intensity by historical standards. China's activities in the South China Sea, however concerning, do not presently broach the threshold of interstate war.

→ The picture is more muddled for civil war. It remains less prevalent and less deadly than in the worst periods of the Cold War and the 1990s, but it has ticked up considerably since the beginning of the so-called Arab spring in 2011, especially in the broad arc from the Sahel in Africa through the Middle East and to South Asia. Worldwide, an average of about 100,000 people a year die in civil wars.

→ Yet war and terrorism are not the primary security threats to most individuals on the planet today. Notably, each year, more than 400,000 people are murdered around the globe, according to the United Nations Office on Drugs and Crime.

→ Murder rates are highest in the Americas and in Africa, at least twice the global average. They are greatest in central and southern Africa, Brazil, Venezuela, Colombia, Central America, the Caribbean, and Mexico.

→ The least violent parts of the world include most of East Asia and western Europe, despite the terrorism threat afflicting the latter region of late. It is no coincidence that, of those developing countries that have succeeded best, the majority are in East Asia (such as South Korea, Taiwan, to an extent eastern regions of China). As noted earlier, countries and cities may be able to jumpstart economic growth simply by getting economic fundamentals largely right. But once they reach a middle-income level, it appears that a certain standard of safety and security is quite important for facilitating any further significant progress.

→ The "most improved" regions in recent decades include Colombia, former war-torn African states like Angola, Mozambique, Liberia, and Sierra Leone, and parts of Southeast Asia. They also include a number of major U.S. cities. Indeed, despite a recent uptick of about 10 percent from 2014 to 2015/2016, overall U.S. rates for violent crime are down by two-thirds nationwide from a quarter century ago, and rates for murder are down by about half. That said, there is significant cause for concern in some U.S. cities such as Baltimore, Chicago, and St. Louis.[9]

→ For perspective, motor vehicle accidents constitute an even bigger threat to individuals around the world than do deliberate acts of violence. The World Health Organization estimates that 1.2 million people a year die in such accidents worldwide. Almost 100 people a day die on the roads in the United States (or some 35,000 a year).[10] Vehicular safety is not within the scope of our project because it generally does not constitute an intentional act by one person that is designed to hurt another person. But in terms of the scale of the danger posed, it needs to factor centrally in the work of any government.

→ Despite the headlines, life has never been safer or more prosperous for a higher fraction of the world's population. But our progress is fragile. It is also uneven and incomplete.

"Despite the headlines, life has never been safer or more prosperous for a higher fraction of the world's population. But our progress is fragile. It is also uneven and incomplete."

MAJOR FINDINGS AND THEIR ANALYTICAL UNDERPINNINGS

The rest of this paper develops the thinking and the evidence behind each of the main results of our research. In general, we are distilling and highlighting what others have shared with us, based on best practices and best thinking in a variety of cities around the United States and the world. We recognize, of course, that our examples are only illustrative of many other cases where successes have been achieved elsewhere.

1. CONTINUE TO REFINE COMMUNITY POLICING

Community policing is foundational in the urban security enterprise. It has helped drive major reductions in crime rates not only in many U.S. cities, but also in other countries from Latin America to Europe and beyond. It is also crucial in the fight against transnational crime and terrorism, largely for the intelligence it can provide when communities feel engaged in helping ensure their own safety. The concept includes methods such as: decentralized organization of police with delegation of authority; stable assignments of officers in certain beats and neighborhoods, to foster relationships and communications; an emphasis on crime prevention rather than response (for example, patrolling more heavily in places and at times when crime is otherwise most likely to occur); analytics designed to identify and highlight patterns of crime, allowing for targeted strategies at the local level to address high-risk areas; and encouragement of assistance from the broader community—including local businesses—in identifying dangers as well as solutions to crime. Other simple tactical innovations have helped too, such as enhancing confidence and safety in public places such as parks. Close cooperation between police and prosecutors is also important for ensuring that the latter are invested in cases, and that the former understand what kinds of evidence will hold up in court. Finally, sentencing as well as prison conditions need to be designed with the goal of lowering future crime rates. Ultimately, community policing and related activities need to shore up the rule of law and citizen security as preeminent concerns.

Crime constitutes the greatest day-to-day violent threat to most citizens in most cities around the world. Crime manifests itself in many ways—in individual acts of murder, in drug cartels competing for markets, in gangs competing for turf, in various types of criminal groups establishing the credible threat of violence so as to coerce and extort payments from populations around them, and in domestic violence. Here, while recognizing the importance of all kinds of crime, we focus on those types of violent crime that are of most relevance to the broader community—those types that most affect the sense of safety and stability on streets, at public gathering spots, at business locations, and in other common spaces of urban areas.

POLICING INNOVATIONS IN THE 1990s AND 2000s, FROM BOSTON TO BOGOTÁ

Many of the breakthroughs in modern policing began roughly in the 1990s. These innovations tended to involve the concepts of community policing and of data-driven patrolling and outreach. Rather than sustaining routine patrols in a predictable way, and then responding to crimes on an ad hoc basis when they were reported, these newer methods focused on creating safe environments and on building bonds of trust between officers and citizens. They also tended

to strengthen the personal relationships between political leaders and police as well as other public safety organizations. These relationships could prove very beneficial not only for the immediate purpose of fighting crime, but for facilitating rapid, efficient responsiveness to crises when natural disaster or terrorism subsequently struck, as in London, New York, and elsewhere.

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The antecedents of community or neighborhood policing date to roughly the 1970s. In that decade, for example, the state of New Jersey provided incentives for municipalities and localities to emphasize foot patrols by police more frequently. This program was designed to foster communications and trust with communities, to create a greater sense of security, to discourage even small-scale nonviolent crime, and more generally to try to reduce "broken windows" and thereby create an atmosphere in which the rule of law prevailed.[11] There has been some evolution in thinking on the "broken windows" concept of policing over the years, because taken to an extreme it can condone police harassment of individuals in troubled neighborhoods. "Stop and

frisk" also remains controversial, especially when individuals are searched based solely on police officer hunches, a policy that often leads to heavy targeting of minorities.[12] Most other precepts of community policing remain well regarded.[13]

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As the concepts evolved, they were based on principles like these:

→ Decentralized organization of police with delegation of authority;

→ Stability of assignments of officers in certain beats and neighborhoods, to foster relationships, communications, and trust;

→ A demographic mix of police officers that reflects the diversity of the communities being served, and that includes many actual residents of those same communities, improving the odds that police would be seen as allies by local citizens—a goal that remains challenging for the United States, as well as other countries;[14]

→ An emphasis on crime prevention rather than response. This can include the use of tactics such as "dressing down" (that is, deploying police officers wearing polo shirts with police labels rather than full patrol gear and weaponry) in settings where police seek to make their presence known without appearing threatening;

→ Analytics designed to identify and highlight patterns of crime, allowing for targeted strategies at the local level to address high-risk areas;

→ Encouragement of assistance from the broader community–including local businesses–in identifying dangers, as well as solutions to crime;

→ Training police officers how to work with such communities as well as various groups within them– efforts that pull officers off their normal duties, and thus tend to drive resource requirements up for a police force, but that are nonetheless of paramount importance;[15]

→ Close teamwork with other authorities, including the intelligence community and border and immigration services, to understand broader patterns in criminal activity, including transnational crime. Nothing about community policing implies that law enforcement should become parochial or isolated from other key players. In addition, police must cooperate with mayors and also with each other, especially in jurisdictions where police unions as well as police commissioners vie for influence.

Results from such approaches have been impressive. For example, in 1995 Boston ranked 28th in safety among America's largest 50 cities. By 1997 it was 12th, after widespread adoption of the community policing model, and progress continued thereafter.[16] Community policing has of course varied in its specific concepts and tactics from place to place. For example, "Operation Ceasefire" in Boston applied designated teams of police in areas where the city's most violent gangs were found (Boston had some 61 gangs with some 1,300 members, according to field research). Those police sought to put pressure, using whatever legal means were at their disposal, on the most violent groups until the violence ceased, at which point they would move on to other law enforcement priorities. Gang members were arrested for even modest offenses, a practice that took away their sense of liberty and ability to make money. Once gang members tired of this suffocating police presence in their lives, they became less likely to engage in violent behavior–and the designated police teams could then focus on other concerns. Violence rates declined by well over half during the period of study in the mid-1990s, much more than in other cities at the time and more than could thus easily be explained using other theories or causal factors.[17] A similar concept used today in some cities such as Los Angeles and New York is to target not only the more violent gangs or groups in general, but their "shot callers and trigger pullers" specifically.

Figure 5: City homicide rates, (per 100,000 people), 1990 - 2014
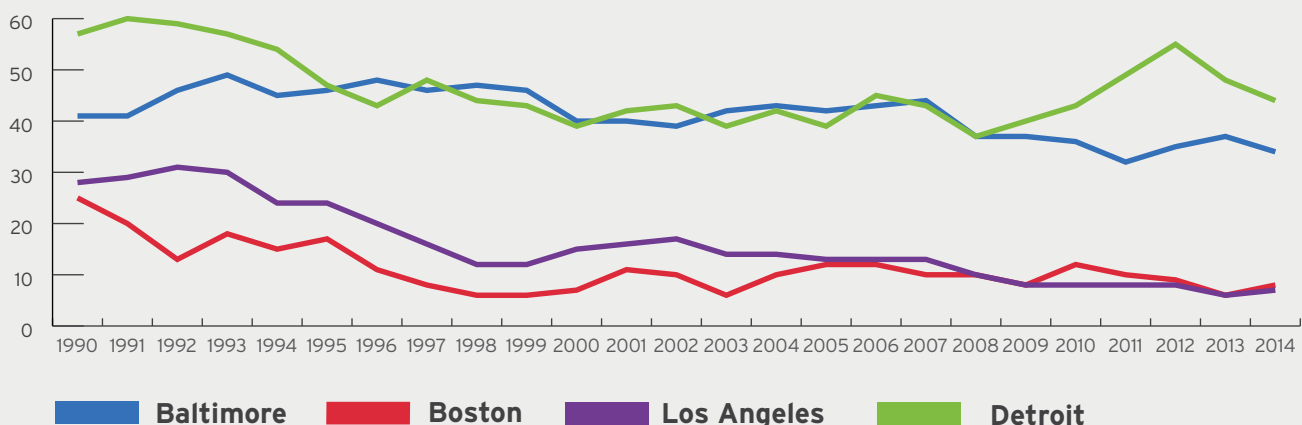
Source: Uniform Crime Reporting Statistics, U.S. Department of Justice, U.S. Census

Ryan Rodrick Beiler / Shutterstock.com

Los Angeles has showed the way with another innovation–gang intervention workers. These individuals, generally formerly incarcerated individuals, are paid to act as go-betweens and mediators with gangs. This is crucial in a city with an estimated 450 gangs and 45,000 gang members, according to official estimates.[18] The Los Angeles experience of the last generation or so has also demonstrated that any notion of a broad-brush "war on gangs" does not work. Efforts must be more selective, and more focused on community relations. Indeed, today the LA Police emphasize the importance of a "Community Safety Partnership."[19] This approach is succeeding even though Los Angeles deploys only about 60 percent as many police officers, per civilian population, as does New York or Chicago. (Los Angeles has about 10,000 sworn officers serving 3.8 million inhabitants; New York City has 35,000 serving 8.4 million. For the sake of comparison, the Los Angeles County Sheriff's Department has about 9,000 sworn deputies, serving a land area 10 times greater than the city with a roughly comparable population.)[20] Los Angeles has cut its murder rate by more than half since 2002 (even factoring in the uptick through mid-2016), and by more than two-thirds since the early 1990s. It has generally reduced other crime rates by 25 percent to 50 percent or more this century, as well.[21]

Baltimore has attempted similar efforts through its "Safe Streets" program, by which ex-offenders are hired to help with patrols and with community relations.[22] Unfortunately, in recent years, Baltimore shows the limits of such programs, unless they are embedded within a broader and well-resourced strategy. In that city's case, the area is afflicted by many struggling schools, serving poor and often segregated populations who tend to face poor job prospects and challenging family structures. Exacerbating the situation are financial constraints–a weakening tax base, and a recent reduction of federal funds that had been used to foster police reform and better police training.

Detroit, though still one of the most crime-plagued of American cities, offers additional lessons on the value of public-private collaborations. Private investors led by Quicken Loans and Rock Ventures devoted considerable resources and technology to creating a safer inner-city environment in recent years.[23] They installed thousands of cameras and deployed hundreds of security officers–albeit individuals without arrest powers, and very limited authorities to use weapons– to create a closely monitored downtown where the firms had numerous investments. They developed relationships with police that facilitated information sharing and quick response to incidents.

They also helped create a "Greenlight" concept that was applied to other, smaller private establishments. With this program, gas station and convenience store owners and others began to install security cameras (often at a cost of several thousand dollars to themselves, once lighting and related improvements were included) that were then monitored by police.

Private security forces at places such as the Detroit Medical Center and Wayne State University also began to synchronize and closely coordinate their patrolling, training, and planning efforts in conjunction with police. In these ways, a financially beleaguered and crime-ridden city has begun to see reductions of 30 to 50 percent in many categories of serious crime in a number of neighborhoods.

U.S. cities were not the only places where innovation took place, of course. Especially in the 2000s and thereafter, for example, Colombia saw great progress. Much of it is attributable to military progress against the Revolutionary Armed Forces of Colombia (Fuerzas Armadas Revolucionarias de Colombia) or FARC insurgency, but a good deal resulted from making cities safer block by block and street by street. Police who were better vetted, trained, and equipped made a difference. So did simple tactical innovations—such as improving visibility with street lights and well-trimmed hedges, and carrying out patrols when crime was most likely to occur.[24]

"Police who were better vetted, trained, and equipped made a difference. So did simple tactical innovations—such as improving visibility with street lights and well-trimmed hedges, and carrying out patrols when crime was most likely to occur."

DETERRING CRIME AND RECIDIVISM

In fighting crime, how individuals are handled once arrested is vitally important, as it can deter future crime, ensure dangerous people are incarcerated, and reduce the risk of recidivism—or not. Close cooperation between police and prosecutors is very important for ensuring that the latter are invested in cases, and that

the former understand what kinds of evidence will hold up in court. Where collaboration and communication are strong, as in Detroit and New York today, conviction rates tend to be higher—making deterrence more effective, and making it less likely that guilty individuals will evade convictions and return quickly to the street.

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It is also crucial that sentences be commensurate with crimes committed and that paroled individuals be carefully supervised.[25] Longer sentences keep violent criminals off the street. The belief that sentences will be long, especially for gun-related and other violent crimes, may help deter violence too, though data on this issue is not yet conclusive. Sentences of variable length, contingent on good prisoner behavior, may help reduce recidivism in many different settings and countries.[26] In some jurisdictions, convicted individuals are allowed to work to reduce their sentences by 10 or 20 percent through a multitude of approaches—good behavior and participation in sessions focused on education, family counseling, financial management, elimination of substance abuse, and related matters.[27] Participation in such job training and substance abuse education programs is also very important for reducing the risks of a return to jail.[28] Moreover, there must be a clear logic to the way sentences are

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established in the first place. In the United States today, there is considerable variability in typical length of sentences for given types of crimes. This situation bears reassessment.[29]

In summary, community policing is a multidimensional and evolving concept. But its main precepts are solid and widely accepted today. Intensive community engagement, careful use of empirical data about when and where crime occurs, human-to-human contacts between authorities and communities, and a preventive rather than a responsive approach to law enforcement have proven to be the correct foundational principles for policing in general, and metropolitan security in particular.

"In summary, community policing is a multidimensional and evolving concept. But its main precepts are solid and widely accepted today."

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2. BREAK DOWN STOVEPIPES

Collaboration is needed to share intelligence and to address cross-jurisdictional threats, particularly for the purposes of stopping terrorism, but also for taking on organized crime and transnational criminal networks. Police forces need to work closely with national-level intelligence or security agencies, like MI5 in the United Kingdom and the FBI and CIA in the United States. This means, for example, determining which agencies take the lead on surveillance and on arrests, which are responsible for tracking any given suspect, how to obtain security clearances for some police officers, and how regular beat-patrol policemen can help provide information about suspected terrorists through their normal jobs, even without extensive specialized training. Information sharing also requires compatible and secure cyber systems across different agencies— necessarily imposing further demands on resource requirements for the public safety mission. In a number of countries, a recent history of terrorist attacks has motivated authorities to cut through bureaucratic resistance and demand cooperation in these ways. Sometimes, however, authorities have acted even in the absence of a major catastrophic experience, though

this takes decisiveness and foresight, and excellent leadership. Either way, once established, collaborative mechanisms and patterns of behavior need to be institutionalized and perpetuated.

A number of cities around the world have experienced the scourge of terrorist attacks in recent years.[30] The list includes most major cities in Iraq, Israel, Jordan, Lebanon, Libya, Syria, and Turkey; western European cities ranging from Berlin to Brussels to London to Madrid to Nice; several cities in Australia, Canada, and the United States; and a number of regions in Africa and Asia. More than 55 percent of all attacks tabulated by the U.S. Department of State in 2015 took place in just five countries: Afghanistan, India, Iraq, Nigeria, and Pakistan. About 74 percent of all deaths due to terrorist attacks took place in five countries—that same list, but with Syria replacing India. Still, attacks occurred in a total of 92 countries, underscoring the global character of this threat, with annual fatalities from terrorism generally in the range of 20,000 to 30,000 of late.[31] Al-Qaida, ISIS and their self-acclaimed affiliates get the most headlines. But terrorist groups

Figure 6: Terrorist attacks by concentration and intensity, 1970 - 2015
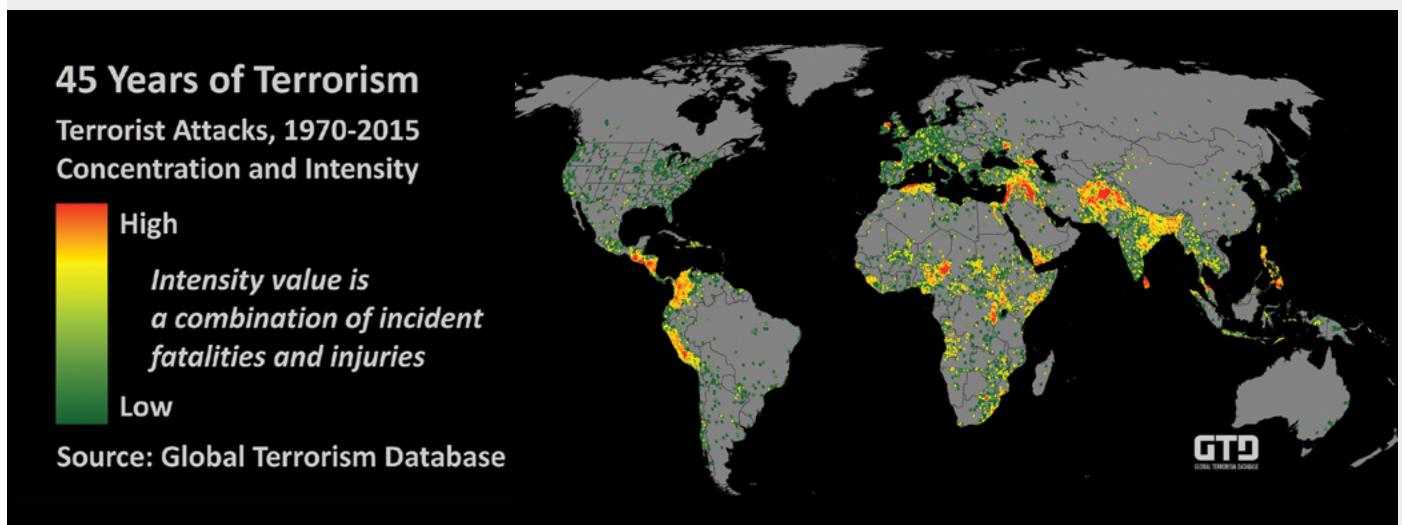
Source: START Global Terrorism Database

include the Afghan and Pakistan Taliban organizations as well as Lashkar-e-Taiba, the PKK in Turkey, Hamas and Hezbollah, white supremacists in the United States, the IRA (through the 1990s), Chechen separatists in Russia, the Shining Path in Peru, and Aum Shinrikyo in Japan.

Several key principles and best practices tend to guide police departments, intelligence agencies, and other key organizations in cities that are most effective in this domain. In the period after 9/11, for example, New York took a number of important steps to address the terrorism risk. It fielded more than 1,000 officers to do intelligence and counterterrorism work.[32] It recruited David Cohen, former deputy director of operations at the CIA, as deputy commissioner for intelligence. His presence and connections helped cut through bureaucratic barriers on matters such as information sharing between federal authorities and local police, as well as gaining security clearances for certain police officers.[33] New York also increased the diversity of its ethnic and linguistic bench with 45 languages spoken by NYPD personnel. It deployed 130 or more police officers to the FBI-led Joint Terrorism Task Force for New York, and it began to station officers overseas in regions that were often the source of terrorist

threats to New York.[34] Other principles emerged too, from New York and elsewhere. For example, regular beat-patrol policemen were trained to help with the counterterrorism mission through their normal jobs even without extensive specialized training. Laminated "cheat sheets" combined with short counterterrorism courses for regular police officers can provide one workable approach.

Cooperation and collaboration across jurisdictions and functions are key. Yet, given differences in authorities and responsibilities, there is no 'one size fits all' approach. In the United Kingdom, for example, counterterrorism cooperation is aided by the fact that there are only about 50 police departments in the entire country and just a small number of key national-level players. Regular, intense coordination meetings are employed by the relevant actors to prioritize and coordinate their efforts. For example, Britain's regular weekly meeting with MI5 and SO15 of the London Police Department is used to prioritize top suspects and top concerns for followup.[35]

Coordination and collaboration is more complex in France, with roughly a dozen organizations involved in one way or another with intelligence-gathering responsibilities alone. The Charlie Hebdo, Bataclan,

Figure 7

COUNTERTERRORISM INNOVATIONS IN NEW YORK CITY

Strategic Leadership
(for example, hiring David Cohen of the CIA)

Human Resources Management
→ Training officers in counterterrorism and intelligence
→ Gaining security clearances for some police personnel
→ Strategic deployments abroad
→ Increasing ethnic and linguistic diversity of personnel

Collaborating with Joint Terrorism Task Force
(NYPD deployed 130+ officers after 9/11)

and Nice tragedies have led to closer cooperation between national and local police authorities.[36] Analysts have suggested that France may still need to institutionalize these better practices, streamline the number of organizations involved, and create a centralized national counterterrorism center. Although the Nice attacker was known to local police given his personal history, national authorities did not have him on their radar. A more robust system of coordination might have stood a better chance of alerting the latter to the dangers he posed.[37]

Counterterrorism is not exclusively a responsibility for any single level of government—or for individual countries working by themselves. Close, fast, and thorough intelligence coordination and information sharing across borders is crucial. Sharing sensitive information through multilateral mechanisms is sometimes difficult, since intelligence analysts and agencies wish to protect the most sensitive sources and methods. As a result, bilateral sharing will often be the most useful means of sharing crucial information between countries. The role of multilateral cooperation will often be to establish common legal frameworks for counterterrorism efforts, institute standards for using biometrics and other specific technologies to control borders, and maintain terrorist watchlists on secure, reliable platforms.

Whatever the country or city, substantial resources are generally needed. For example, one case officer per suspect is typical in Britain, which in recent years added 25 percent to its intelligence budget even as overall national spending was declining, in order to ensure adequate coverage of threats. Success in Medellín was associated with greater devotion of resources to that city by central authorities.[38] Human intelligence is crucial to the counterterrorism enterprise, including the recruiting of sources and double agents—again, much of this is manpower-intensive work.[39] Both the quantity and the quality of intelligence operatives matter significantly. Israel, for example, has found that hiring very highly

talented individuals for the intelligence services (and compensating them well) helps a great deal. It also places a high premium on the rigorous, specialized training of these individuals once recruited.[40] In the most counterterrorism-minded U.S. cities, best practices often include tough after-action reviews in which participants scrutinize and critique their performance so that subsequent situations will be handled even better.

It is also important that governments carry out good exercises to deepen cooperation and build relationships between key individuals and organizations before a crisis. Often, this can and should happen at the metropolitan level. The exercises should challenge participants with realistic, yet stressful and somewhat creative, scenarios. Officials in Los Angeles attribute much of their progress in cooperating across police, sheriff, fire, state, and other jurisdictions to the natural "exercises" they have conducted in fighting forest fires, which require wrestling with issues of who will command a given operation and how collaboration will be organized. For normal, planned exercises, trying conditions should sometimes be assumed, such as the possibility that the 911 system is overwhelmed or hacked, police radios are jammed, or poisonous chemicals are released from a nearby storage site in a way that complicates response.

Responsiveness by private citizens and businesses is important too. In cities like Washington, D.C., the metropolitan police departments, FBI, and Department of Homeland Security give business owners and facility managers instruction on how to deal with an active shooter and other related threats. Prominent facilities can consider measures like using metal detectors and banning or searching bags—already routinely done at many major gatherings like sports events, some run by public officials and some privately.[41] The latter are additional examples by which public-private partnerships are crucial to the metropolitan security agenda—a theme we have seen often throughout our discussions and research.

Often, collaboration against terrorism in key cities, larger jurisdictions, and countries happens only after serious attacks. These create a shared memory in which no one thereafter wants to be the person who prevented information sharing that could have prevented another tragedy. Other transformative experiences can play a similar role. For example, in Los Angeles, the combination of the 1992 riots after the Rodney King verdict, combined with the so-called Rampart scandal involving much of the police force later in the decade, collectively helped give rise to the "consent decree" on federal oversight of a police overhaul in 2001.[42]

Dubai, Abu Dhabi, and other parts of the United Arab Emirates have been exemplary in promoting collaboration even before a major calamity occurs. For roughly a decade, Dubai has run an events security committee designed to foster timely information sharing and close cooperation in providing security for key events that showcase the Emirates and draw large attendance. Its public-private partnerships—including airlines, hotels, and other major private-sector establishments—work very well in this regard. Dubai has certain characteristics, including its wealth, strong central government, and tight controls on small arms, that may make its circumstances somewhat unique. Nonetheless, many of its decisions and practices can be useful models for others.[43]

For many cities, a two-step process for improving urban and metropolitan security seems necessary. The first step is often to impose more cooperative forms of behavior and more information sharing through force of personality (including with pressure from elected leaders), perhaps after a tragedy. The second step is then to try to institutionalize these better practices. In the United States, the USA Patriot Act, succeeded by the Freedom Act, created authorities and requirements along these lines, largely by breaking down what had been legal or bureaucratic barriers to information sharing.

In extreme situations, some emergency powers may be important to prevent attacks that appear imminent. After the November 2015 Bataclan tragedy in France, for example, additional measures were employed. They included allowing police to detain suspects without making an arrest for a number of hours, conducting some raids without warrants, and putting suspects under temporary house arrest even without judicial authorization. Demonstrations can be banned and certain threatening groups disbanded, as well, though these kinds of powers require careful supervision, and restraint by authorities.[44] France has also taken a hard legal line against those who have gone to the Levant or other parts of the Middle East without following proper legal procedures, generally prosecuting those who later return home.

"Often, collaboration against terrorism in key cities, larger jurisdictions, and countries happens only after serious attacks."

In summary, the central points of this section concern resources and collaboration. Both are needed to protect metropolitan areas from organized crime and terrorism. The need for adequate human resources is also relevant to regular policing. But the need for collaboration across geographic zones, several layers of government, and numerous functionalities of government is especially distinctive when confronting threats that operate across long ranges and multiple jurisdictions themselves. Finally, the need to devote adequate resources to technology, and benefit from innovations within that realm, is worthy of its own discussion. It is a topic to which we turn below, though first, we examine some of the most effective tactics that have been employed against large-scale criminal syndicates.

3. ESTABLISH CLEAR STRATEGIES AGAINST ORGANIZED CRIME

In dealing with narcotics traffickers and other sophisticated, often transnational, criminal organizations, priorities are needed to sustainably reduce violence. Authorities can preferentially target those gangs, groups, or organizations that are the most violent. This latter tactic can weaken the worst of the worst, while also deterring the excessive use of violence by other organizations. Another key choice in attacking criminal networks and terrorist organizations is whether to target just the top leadership of these organizations, or instead to develop a more patient strategy emphasizing action against mid-level operatives. Evidence suggests that the latter approach is usually more effective. There can be times when removing one key leader makes a big difference (arguably this was true for Pablo Escobar in Colombia, the Shining Path movement in Peru, and to some extent al-Qaida). But it is generally important to extend targeting down a layer or two in an organization.

There remains a debate over how to fight drugs and the violence often associated with them. Some of the contentious matters concern decriminalization–that is, whether nonviolent users and possessors of modest amounts of illegal narcotics should be treated as serious criminals. Another important issue, in the context of counterinsurgency campaigns such as those in Colombia and Afghanistan in recent years, is whether governments should seek to eradicate production of illegal narcotics before creating alternative economic opportunities for those currently depending on the cultivation of poppy or coca for their livelihoods.

Counterinsurgency doctrine has tended to argue that premature eradication efforts may wind up driving low-level narcotics producers into the arms of an insurgency, since they will likely feel disenfranchised from a government that has deprived them of their

income. By this logic, eradication strategies must be coupled with, if not preceded by, broader economic conversion efforts. Some would argue against eradication and emphasize interrupting the refining, transporting, and selling of product.[45]

In addition, there are significant policy debates about how and when to target narco-trafficking organizations with intensive law enforcement efforts. Some organizations, most notably traffickers in East Asia, use far less violence than many in Central America, Colombia, and Mexico. As such, the question arises as to whether certain forms of law enforcement or military activity can be used to shape the incentive structures of the narcotraffickers. One could preferentially target only those organizations that are the most violent. This latter tactic can weaken the worst of the worst, while also deterring the excessive use of violence by other organizations.[46]

A final and related policy choice is whether to target the top leadership of these organizations, or instead to develop a more patient strategy against mid-level operatives, developing leads on a number and then pursuing many at once in a given sweep or sting. Evidence suggests that organizations can usually be weakened most effectively with the latter approach. Whether they be terrorist organizations or criminal networks, there can be times when removing one or a few key leaders makes a big difference (arguably this was true for Pablo Escobar in Colombia, for the Shining Path movement in Peru, and to some extent for al-Qaida).[47] But for established organizations, if high-value targeting is to be depended upon as a tactic, it will generally need to be extended down a layer or two in an organization and be conducted persistently and doggedly.

The Colombian government took this approach under Presidents Álvaro Uribe Vélez and Juan Manuel Santos

Calderón in their relentless fight against the FARC as well as other extremist organizations. Dozens of extremist leaders were killed or captured. It resembled in some ways the approach adopted by U.S. General Stanley McChrystal and Admiral William McRaven against terrorist targets in the Middle East when they led the Joint Special Operations Command (and, in McRaven's case, U.S. Special Operations Command in Tampa). Their approaches did not always produce immediate positive effects on the course of an overall war, but they did respectively weaken the FARC and al-Qaida over time, creating broader opportunities down the road.[48]

In addition to employing solid foundational concepts such as community policing for day-to-day law enforcement work, metropolitan authorities and others charged with urban and national security need sophisticated operational concepts for trying to control, weaken, or dismantle large criminal organizations.

"In addition to employing solid foundational concepts such as community policing for day-to-day law enforcement work, metropolitan authorities and others charged with urban and national security need sophisticated operational concepts for trying to control, weaken, or dismantle large criminal organizations."

THE MEDELLÍN MIRACLE

It is informative to consider in greater detail the ongoing progress in Medellín, Colombia. This case study blends elements of counter-crime and counter-narcotics strategies, together with elements of promoting social cohesion.

Medellín, the country's second-largest city after the capital of Bogotá, and former stronghold of the infamous Pablo Escobar, has turned into a thriving place to live—an urban area of 2.5 million people, situated in a valley at 5,000 feet altitude with a splendid climate. Understanding the Medellín story shows how far Colombia writ large still has to go—but also provides a remarkable model for how to take the country forward to the next level of prosperity and safety. Colombians

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have done most of this through their own labors and sacrifices. Through a program known as Plan Colombia, now called Peace Colombia, and more recently a free trade deal, the U.S. role has been crucially important this century, too.

Since 1991, Medellín has cut its homicide rate twentyfold. Back when Escobar and his associates ruled the streets with brutality, Medellín and its 1.5 million inhabitants experienced some 6,000 homicides a year. Today, Medellín still experiences violence. But murders are down to 500 a year or less, comparable to some American cities, and as noted, 95 percent less per 100,000 inhabitants than was the case a quarter century ago. Other crime statistics show progress, too. In the last half decade or so, rates of car theft have been cut in half, and rates of motorcycle theft by a quarter, according to the police.[49]

What made these developments possible? Identifying the core causes is important for knowing how to sustain the Medellín miracle while also spreading the model to the rest of Colombia and the region.

Step one took place in the early 1990s, when U.S.-assisted operations tracked and killed Escobar, also taking down a few other key drug kingpins. This was based on good intelligence and commando operations.

Step two followed later in the decade and brought down the homicide rate to about 3,000 a year. It included some additional raids, plus temporary ceasefires with certain cartel leaders and other criminals.

Step three was the Uribe revolution of the early 2000s. This campaign had some roots in the work of Uribe's predecessor, President Andres Pastrana, who together with President Bill Clinton and President George W. Bush created a U.S.-Colombia collaboration called "Plan Colombia." It brought far more resources to the counterinsurgency and counter-crime fights, in the form of a larger and better trained military,

Figure 8: Dramatic decline in Medellín's homicide rate (annual murders per 100,00 people), 1990 - 2015
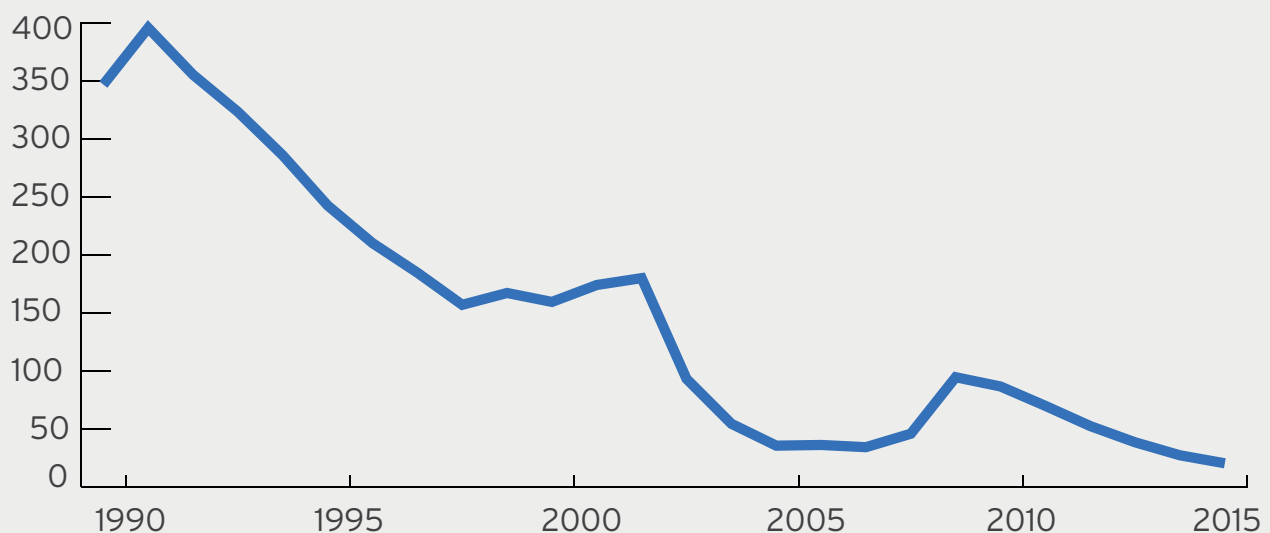
Source: Agencia de Cooperación e Inversión de Medellín y el Área Metropolitana

key precision-strike technology, and much higher tempo of operations. The nation's violence levels as a whole dropped in half, as did the FARC's estimated size and capacity; trends were even more pronounced in Medellín.

Step four is the largely untold story. It is how Medellín, under recent mayors like Anibal Gaviria and the incumbent, Federico Gutierrez, have worked with other local and national authorities to cut violence rates even more during the decade of the 2010s. To be sure, progress has continued throughout Colombia, and the FARC has agreed to a peace deal under President Santos. But in much of the nation, homicides have plateaued at rates that remain higher than the Latin American average and far above the world average. Kidnapping and robbery remain serious concerns as well. Americans still face travel advisories when voyaging to Colombia; insecurity discourages tourism, and investment, in many places.

Not so in Medellín, at least not to nearly the same degree. The city remains afflicted by serious crime, including the kind of extortion common in much of Colombia. Drug production in the surrounding region has increased of late.[50] But the sense of progress and positive momentum is palpable—not only in the crime statistics but in urban renewal projects, new libraries and community centers in the city's most difficult neighborhoods, impressive public transportation systems ranging from buses to a modest subway system to gondolas that arc up and down the city's mountains, and booming business. A few key initiatives have driven this recent progress:

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➔ Under Mayor Aníbal Gaviria Correa and former Minister of National Defense Juan Carlos Pinzón, some 2,000 police officers were added to Medellín in recent years. Their presence made possible the city's data-driven "hot spots" strategy that focused resources on high-crime areas. The country as a whole still does not have enough police. For example, Bogotá, a city of New York's population, has only half the number of New York's of police officers. But after Gaviria and his associates developed a serious plan, Pinzón sensed an opportunity and deployed the big increase to Medellín;[51]

➔ The increase in police personnel has been complemented by ongoing investments in technology, much of it funded locally. That includes new vehicle fleets for the police force, equipped with GPS trackers in part to cut down on police misbehavior and corruption; closed-circuit TV cameras at numerous key public sites, increasingly empowered by facial-recognition technology; and smart phones for police, allowing for better dispatching and faster data searches. While encrypted smart-phone apps help the criminals too, security officials we spoke with in Medellín believe that technology trends help them even more;

➔ As noted, Gaviria and Gutierrez, like their predecessors, avoided classic Latin American political debates about whether security should take precedence over fighting poverty. They have gone after both issues at once. Medellín still has a long way to go in expanding education and employment opportunities while fighting homelessness and drug addiction and improving prison conditions. But targeted programs like those focused on infrastructure and public transit have created a greater trust between authorities and the populations they seek to protect. Growing public trust plus some innovations like anonymous tip hotlines encourage communities to cooperate more with police in providing information and other assistance in the ongoing effort to make Medellín safer.[52]

4. EXPLOIT NEW OPPORTUNITIES FROM TECHNOLOGY

Technology can aid criminals in protecting the content of their communications from authorities. Technology also creates new vulnerabilities, notably in the cyber realm. But it offers great advantages to police forces and other security organizations too. Helpful technologies include inexpensive closed-circuit TV, facial recognition technology, license-plate readers, smart phones and GPS trackers for police cars, acoustic gunshot detection systems and other advanced sensors, and unmanned aerial vehicles. Yet where technology has been effectively deployed, it has not been at the expense of officers on patrol. We found no examples of cities that were successful in fighting crime and terrorism unless they simultaneously maintained or increased police personnel and focused intensively on the quality and training of those personnel.

Technology changes the opportunities for criminals and terrorists, but also offers new tools to authorities. Those charged with the public security mission should know that there are many advantages available to them. They should also continue to foster links to the entrepreneurial and high-tech private sector communities so as to engage in dialogue with innovators about which additional capabilities could prove useful, once invented and refined, in the future.

Many trends in technology are inexorably helping criminals and terrorists. Developments in encryption technology are indeed making it easier for outlaws to conduct covert planning and other coordination.[53] Communications software such as Telegram and WhatsApp, as well as easy access by criminals and extremists to inexpensive and expendable phones, make it far harder to track people and to listen to their conversations with each other.[54] It is probably not realistic to think that authorities can stop these trends, regardless of what type of legal vehicles they might wish to employ (such as mandating that phones built

or sold within their own territories have "back doors" that allow authorities to search them when necessary, which is a controversial idea).

Technology also can create specific vulnerabilities, and sites where special attention is required to ensure security. For example, further demonstrating the important role of the private sector in many countries, nuclear power plants need to observe careful standards for providing adequate well-trained guards, who are vetted carefully for possible criminal or terrorist links, and empowered by good surveillance systems.[55] Cyber systems in general are often vulnerable too.

On balance, technology may help law enforcement even more than it helps criminals or extremists. Authorities are able to employ closed-circuit TV and automatic license-plate readers to track movements along key arteries. They can carefully study crime data by zone and neighborhood to figure out how to deploy police assets most efficiently, frequently updating their priorities as circumstances and crime patterns shift. They can conduct big-data analyses of money flows
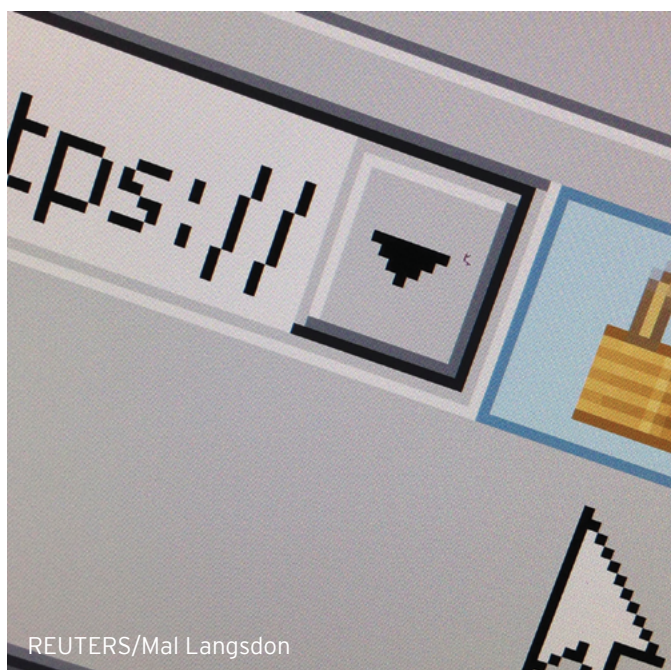
REUTERS/Mal Langsdon

and telephone communications networks as well.[56] Sensors and associated software can help triangulate sounds to determine the origin of gunshots in parts of cities where it is worth the trouble and expense of deploying such capabilities as well, using a capability known as "Shotspotter" or a related system.[57] Private firms can contribute as well, sharing information with police and even directly sharing video feeds, as is increasingly common for example in Detroit today.

Authorities can benefit from phone technology, too. Smart phones for police, and tablet computers in patrol cars, as have been recently deployed throughout New York City, can facilitate rapid data searches and rapid notifications of suspicious activity.[58]

New capabilities are becoming available all the time. Someday soon, for example, it may be possible to create "sensor swarms" in which individual citizens,

through their phones (and possibly through sensors deployed on their phones) provide a form of crowd intelligence that allows for rapid detection of explosions, gunshots, or even the release of toxic agents.

A final word on this subject concerns privacy and civil liberties. In the United States, there has been great debate over the USA Patriot Act, including Section 215 and the issue of storing data. The 2015 Freedom Act renewed most of these authorities but led to a change in how data related to phone conversation forensics would be stored—with private phone companies now to hold it unless government agencies gain access with warrants. The U.S. experience demonstrates that any government agency in a democracy that is handling potentially sensitive data about its citizens needs a credible system of oversight, and possible redress, to prevent abuses, and to retain the confidence and trust of the civilian population.[59]

5. PROMOTE SOCIAL COHESION

To gain support from communities and address the root causes of crime and terrorism, authorities must promote social cohesion as a central element— not an afterthought—of the urban security effort. The neighborhoods and demographic groups most affected by crime and violence must be treated as essential allies. Moreover, education and employment opportunities must be expanded in urban areas suffering from lack of opportunity and hope in order to address the root causes of crime. Our research has uncovered several creative ideas—for example, using fire departments or national army outreach efforts in places where police departments may not be easily trusted, and engaging formerly incarcerated individuals or rehabilitated former members of violent gangs or groups to reach out to disenfranchised communities. The private sector can make inclusion a priority in hiring and retention policies. Public-private partnerships can also help steer private funds and energies to programs that promote inclusion.

There may also be a case for additional resources in the United States and other countries to help metropolitan areas simultaneously strengthen policing while also addressing the underlying challenge of social cohesion. Both are crucial for achieving the broad goal of securing the world's cities.

In the aftermath of the Ankara, Berlin, Brussels, Istanbul, Orlando, Paris and San Bernardino tragedies, among others, many good ideas have been floated to improve defenses against terrorists who are poised to strike. Belgium needs more resources for police work, including staking out suspects. Europe needs terrorist watch lists that are better automated and integrated. France may benefit from the creation of an agency like the U.S. National Counterterrorism Center. Police forces and national intelligence agencies need to work together more effectively in general, creating overlaps at the juncture where traditional police work ends and counterterrorism begins. We need to use technology

such as closed-circuit TV, as well as simpler but time-tested methods like bomb-smelling dogs, more effectively in unhardened public places like subway stops and the external lobbies of airports. Restricting terrorist organizations' revenues and ability to store, move, and use funds requires global coordination.

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These ideas are crucial, but they are also insufficient. For fighting terrorism and more traditional crime, authorities and other parties need to work together to build social cohesion, especially among groups that may feel ostracized. Put differently, we collectively need to help create a sense of connectedness and common purpose with communities that may often feel disenfranchised, powerless, and without access to opportunity. For example, within many countries, the inability to develop programs encouraging assimilation of immigrants has led to substantial pockets of alienated citizens, including many Muslims in Europe. In the United States, communities with high

levels of unemployment—particularly among young people—may present a greater challenge to social cohesion and stability.

Some will reject this argument on the grounds that poverty per se does not cause terrorism or crime. For example, the 9/11 hijackers were generally fairly well-educated individuals who were not poor. This kind of sweeping argument oversimplifies the problem and misses a broader, if less tangible, point—individuals who lack a sense of belonging to a society do tend to be more likely candidates for extremism or criminality.[60] Moreover, communities need to be engaged in helping protect themselves, which requires that trust be established with authorities.

The United States is fortunate to have relatively few problems with Islamic extremism. On the whole, Muslim-American communities (as well as Christian Arab-American communities) are key domestic allies in the struggle against extremism at home. They help provide information on would-be terrorists in their midst; they do not typically shelter, aid, or condone the thinking of such extremists. Most of all, they provide

role models and hopeful visions to youth. Because U.S. terror watch lists have improved since 9/11, and because of the hard work of border and immigration agencies, the country is also often able to limit the movements of suspected terrorists to the United States from abroad. Geography helps, too.

The United States in general benefits from an immigrant population that is less likely to be incarcerated than native-born Americans, by a ratio of at least two to one. That is, immigrants commit less than half as many crimes per person on average.[61] However, empirical studies suggest that refugee populations languishing in poor conditions may be more prone to radicalization.[62] As noted, crime rates in the nation's inner cities and among minority populations are often quite high. Again, efforts to create social cohesion, belonging, and opportunity are key.

None of this is to suggest that the United States should be complacent about its own social cohesion. Terrorism has been increasing of late in very serious ways, globally and domestically.[63] More than 70 individuals

Figure 9: Promoting social cohesion in global cities

- → Invest in youth engagement programs
  See: Cadets program in the U.K.

- → Improve community/government relations
  See: Montgomery County, Maryland

- → Recruit law enforcement from at risk communities
  See: Dearborn, Michigan

- → Expand employment training and placement programs
  See: Honduran cities

- → Improve immigrant integration
  See Amman, Jordan

- → Utilize trusted services for outreach in difficult neighborhoods
  See: Columbus, Ohio

were arrested on American soil over the 2014–2015 period on suspicion of interest in supporting ISIS or otherwise conducting extremist activity, for example. The country suffered the San Bernardino and then the Orlando tragedies in late 2015 and 2016 as well.[64]

How can we promote social cohesion? Many approaches can be useful, and instructive. In Montgomery County, Maryland, where one-third of the million-person population is foreign-born, a coalition of faith leaders, school officials, and law enforcement officers collaborate to try to identify and help would-be radicals before they turn to dangerous ways. The Montgomery County police attend meetings on interfaith matters and related issues—coming to listen more than to take charge of conversations. Moreover, the County has 24-hour on-call interfaith response teams that can respond publicly or privately in situations involving hate crimes with religious or cultural dimensions.[65] These are examples of cooperation not just between public and private sectors, but with the nongovernmental and non-profit sectors as well.

In Dearborn, Michigan, police forces recruit individuals of diverse ethnic and religious backgrounds. Specific groups, such as Bengalis and eastern Europeans, are well represented in police forces to ensure close outreach to relevant immigrant communities. Cultural training is given so that immigrant behavior patterns will be correctly understood by authorities. (In this regard, some express concern about the Department of State's Countering Violent Extremism program because it can convey the sense of overemphasizing security and creating adversarial relationships—though this may be a perception that is reparable rather than an inherent flaw in the program.) Metro ID cards are issued even to undocumented immigrants in some parts of the city. They often have the effect of calming nerves in tense situations by increasing a sense of familiarity and facilitating communication with individuals whose spoken English may be weak.

In Columbus, Ohio, fire departments conduct outreach programs in difficult neighborhoods. They recognize that their role in society can be less polarizing to some than certain types of police outreach. (Depending on the country at issue, it may sometimes work best to rely on fire departments, the national army, or an independent organization that may receive public funding but operate separately for outreach.) Such programs can work in two ways: they might provide jobs and they can help improve the reputation of the government, and society as a whole, among potentially disaffected youth.[66]

Many places in Britain are taking a similar approach. The military's "Cadets" program for children aged 12 to 18 offers nearly 50,000 adolescents at a time a sense of belonging and training in basic skills like outdoorsmanship—and creates a potential source of connectivity to the country and its institutions (without creating any obligation for military service thereafter).[67] Such programs can improve the government's image in key neighborhoods, while also helping create the kinds of communications between community leaders and authorities that produce intelligence leads when things go wrong.

Non-governmental organizations can play valuable roles, too. They can help with community and neighborhood watch programs, as for example with the Catholic Church's efforts in Guatemala. NGOs can look for opportunities to foster reconciliation between different gangs or other criminal groups to try to break a cycle of violence—focusing on areas of common interest and concern, like water development projects in cities or countries without dependable water sources. They can also help mediate between such groups directly—as with neutral nongovernmental mediators in peace talks in Nepal.[68]

Fast-growing cities with high percentages of unemployed people, especially unemployed young men, tend to have substantially higher crime rates.[69]

Thus, it makes sense to try to find resources for job creation and better education in relevant skills. This can help keep people involved in constructive, rather than criminal, pursuits. Another benefit is to give young adults a sense of achievement. A third is to connect them to society in some way that provides a sense of mutual benefit and collaboration.

Several of the above ideas to include job creation, conflict mediation strategies, and community outreach are showing promising signs in Honduras. Until recently, it was the country with the highest homicide rate in the world. Violence rates in Honduras remain high, but several key urban areas have reduced crime rates by more than half in the last two to three years with a combination of these types of innovations including numerous job creation activities.[70]

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It is worth noting that many economic development strategies, such as improving a metropolitan area's competitiveness for global trade and investment, do not tend to produce many jobs initially.[71] Patience is required. Ideally, economic development and

"The private sector can also help promote social cohesion. For example, it can take deliberate steps to foster diverse and inclusive workplaces that reflect the populations in the countries where they operate."

improving urban security ultimately will go hand-in-hand in a virtuous cycle—with more development providing a stronger revenue base for things like police departments, and also producing more jobs for otherwise marginalized populations, thus further improving the security environment. But this dynamic may not take hold immediately. Thus, again, the case is often strong for job creation programs that in the short term can create a greater sense of social cohesion. Another example of this approach is the Trust Team program in the United Kingdom, which organizes young unemployed individuals to plan and implement 12-week service projects, often some kind of construction of a facility usable by their communities.[72]

The private sector can also help promote social cohesion. For example, it can take deliberate steps to foster diverse and inclusive workplaces that reflect the populations in the countries where they operate. Companies can also seek to show a degree of courage in where they open stores and carry out recruiting efforts, not shying away from difficult or potentially dangerous neighborhoods. This will not always be a realistic recourse, but it can be a worthy aspiration in certain situations.

It is also important to foster integration of different communities within cities. Failing that, it is important at least to limit the size of those areas where authorities are reluctant to venture and that effectively become breeding grounds for the disenfranchised. Engaging with areas like Molenbeek in Brussels or neighborhoods in Paris with large numbers

of immigrants, who may feel cut off from society and often struggle to find work and education as well, is a good principle.

When settling new populations, such as refugees that have recently come to Europe from the broader Middle East, it is generally best to distribute these individuals and families throughout various existing neighborhoods, rather than have refugees be concentrated in new and isolated housing for tens of thousands.[73] Integration increases the chances of assimilation and social cohesion, reducing the odds of the creation of what amount to segregated sanctuaries where bad actors can take root and take shelter, as for example in Molenbeek. Jordan's role in hosting Syrian refugees (perhaps more than a million, most integrated into existing communities) is exemplary in this regard.

"Building social cohesion is difficult, and often the strides forward are slow to come and hard to measure. It is usually manpower-intensive work. It is always painstaking. Results are inevitably imperfect. Sometimes, it simply fails. But in a longer-term sense, it is essential to the task at hand."

An intriguing type of effort to build social cohesion focuses on interrupting the cycle of violence that can develop in many cities. Once a given group, gang, or family loses a member to violence, a retaliatory cycle can ensue. As such, focusing on key individuals– trying to find ways to get them out of the cycle of violence–may be a very effective approach to what one might think of as repairing social cohesion. This approach is used in Richmond, California. There,

formerly incarcerated individuals are asked to join a fellowship program involving intensive oversight and mentoring. It includes therapy on topics ranging from drug remediation to marriage counseling to financial management, as well as work programs with stipends and educational opportunities. Recidivism and violence rates associated with individuals in these programs decline by 20 to 50 percent, based on studies to date.[74] Interestingly, some of these approaches are not unlike those used in so-called disarmament, demobilization, and reintegration (DDR) programs employed around the world to help individuals who had previously been combatants in civil wars to move on to new and peaceful lives.[75]

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Building social cohesion is difficult, and often the strides forward are slow to come and hard to measure. It is usually manpower-intensive work. It is always painstaking. Results are inevitably imperfect. Sometimes, it simply fails. But in a longer-term sense, it is essential to the task at hand.

PRISON POLICY

Often prisons that are crowded and unruly intensify the sense of anger and disenfranchisement that many incarcerated individuals may have already felt, reducing the odds that they will be inclined to establish productive lives once released. Such conditions can also bring together groups, gangs, or criminal networks and tighten their bonds—making it easier for them to collaborate in new criminal activity once back on the street (or even to help orchestrate crimes while incarcerated). Conditions like these help explain why some prisons have been called "terrorist universities."[76]

Some policies, beyond the simple matter of ensuring humane conditions, can help counter these risks. Iceland, and at a much larger scale Japan, are sometimes described as "shame" societies that rely more on creating strong social expectations of behavior—and finding ways to admonish and chastise criminals who violate these expectations—than on systemic punishment. Iceland in particular has a very lenient criminal justice system, in terms of the nature of the prison experience and the length of sentences, and very low crime rates.[77]

Even if these ideas are not easily transferrable to countries with more complex demographics, and much higher crime rates, there may be principles inherent in the above cases that can be applied elsewhere. For example, in New York, providing educational opportunities to inmates, lowers the chances they will return to jail once

released by about two-thirds. The programs were controversial for their expense, but appeared to deliver solid results.[78]

Where to house extremists within prison systems is another matter of concern. One possible approach is to group them together and isolate them from other inmates, so that they are less well positioned to indoctrinate and recruit more followers to their cause. But this practice can have downsides. If extremists are in close proximity with each other, they can plan future plots and tighten their networks while within prisons.

There is no simple answer. Perhaps the only broad point that can be offered with some confidence is that adequate resources are needed—to make prisons humane, prevent excessively dense concentrations in small spaces, provide job-training opportunities for inmates, and improve the professionalism of guards who are often the best eyes and ears into what is transpiring within prisons.

Helping formerly incarcerated individuals learn stronger family and parenting skills may be especially important, for their own lives and those of their children too. Studies of radicalism in the West Bank, for example, show that parental influence is very important in reducing the risks that someone will engage in extremist behavior.[79] James Wilson and George Akerlof, among others, suggest that marriage may tend to discourage dangerous behavior among men.[80]

6. PREPARE FOR "BLACK SWAN" EVENTS

Beyond dealing with omnipresent threats, it is crucial to be as ready as possible for one-time catastrophes. Most cities may never experience truly horrific events, but it is important not to take solace in such probabilities, and to prepare for disasters before they occur. Those catastrophes could be purely natural. They could also become complex emergencies that superimpose themselves upon, or help to create, violent or anarchic security conditions. They could take place in cities already suffering significant violence; they could also produce shocks that create a breakdown in order. Given the growth of megacities, they could also easily affect 10 times as many people in a single incident as have been directly threatened by the world's 21st century natural catastrophes to date. The private sector can have a role here too—as in Manila in the Philippines, where a consortium of utilities and other companies has organized to help authorities in emergencies, with a single point of contact and clear coordination channels.

Cities also need to prepare for the unlikely, even the unthinkable. Beyond dealing with threats that are always present, it is crucial to be as ready as possible for catastrophes. Those catastrophes could be purely natural, as with an earthquake, tsunami, hurricane or typhoon. They could also become complex emergencies in which a natural disaster superimposes itself upon, or helps to create, anarchic or violent security conditions. They could also produce such severe shocks as to lead to a breakdown in order.[81] The possibility of such events is one further reason that cities need to take the urban planning mission seriously, since cities with poorly constructed transportation arteries and fragile infrastructure will be particularly vulnerable to large-scale disasters.

The world's worst tragedies of the 21st century have been terrible—but they have not been nearly as bad as could have been imagined. For one thing, each tended to intensively affect populations ranging from

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about 1 million to 5 million. (That was generally true as well in the 1990s.[82]) That is admittedly a large number of individuals. But in terms of the demand imposed on response systems, things could have been far worse—and might be worse in the future, if a huge metropolitan area is directly hit by catastrophe.

Megacities with many millions of people, especially those that have developed dependencies on fragile infrastructure, could be exponentially more vulnerable to catastrophe than smaller cities. A megacity five times larger than a more traditional metropolitan area, if subject to an extreme event, might suffer much more than five times the damage and casualties. Citizens would not be able to flee for the countryside easily, as a backup plan to their urban existence, if that countryside were 20 or 30 miles away (rather than two or three miles), and if millions of other souls stood in their path as they sought to escape. Water, food, and medical supplies could become scarce very fast; sanitation systems could break down in ways that lead to acute health crises. Large mobs could form in remote and weakly governed areas of a megacity that would be particularly difficult for authorities to control.[83] The sheer size of cities could make it far harder to reach into their interior, dense, and weakly governed spaces.[84]

"Megacities with many millions of people, especially those that have developed dependencies on fragile infrastructure, could be exponentially more vulnerable to catastrophe than smaller cities."

Recognizing these realities, and sobered by the experience of the severe 2013 typhoon, a consortium of utilities and other companies in the Philippines organized itself into a group ready to help authorities in emergencies. They created a single point of contact and clear coordination channels. They have also taken the prudent step of figuring out how to help protect and provide for the families of their own workers, knowing that workers will be far more dependable and available in crises if confident that their own loved ones are being taken care of. This example underscores the broader point that the nongovernmental and private sectors—including utilities companies, phone and other communications interests, transportation companies, grocery stores, hospitals, relief and other charitable organizations—need to be engaged in planning for, and if necessary conducting, disaster response.

Consider a few recent cases that illustrate the magnitude of response requirements. The 2004 – 2005 American response to the tsunami in the Indian Ocean, which killed about 300,000 and displaced another 1.1 million, was most notable for its airlift and naval operations. The U.S. airlift effort averaged more than 250 tons a day of supplies—the equivalent of perhaps half a dozen flights of large transport aircraft—though it involved in various ways 35 C-17 airlifters, 24 C-5s, 21 C-130 tactical airlifters, and a number of other planes. Nearly 20 Navy ships were also employed.[85] The terrible earthquake in Haiti in 2010 was of a roughly comparable scale in terms of those acutely affected, and in terms of the needed response. It killed more than 200,000, injured more than 300,000, and left some 2 million homeless and destitute, many in the capital city of Port-au-Prince with its population of nearly 1 million.

Hurricane Katrina in and around New Orleans in 2005 led to the deployment of 45,000 National Guard personnel for response in Louisiana and Mississippi, and nearly 20,000 active-duty personnel as well.[86] Initially, however, the overall government effort led by FEMA was marred by many difficulties and proved controversial. The storm intensively affected a region of 5 million people, with the city of New Orleans itself having a population shy of 1 million. The United States learned a great deal about command and control, and logistics operations, from Katrina. Global cities that

have not experienced a similar event should consider undertaking realistic exercises that are designed to reveal the fault lines in how they would organize and coordinate responses to similar situations, and how they would access adequate capacity for needed relief efforts.

In a world of increasing numbers of megacities of 10 to 20 million people or more, a future disaster could affect several times as many people, and require several times as much response capacity, both locally and internationally. There will be nearly 40 megacities in the world by 2025. Maneuvering in these spaces is very difficult; law enforcement and relief operations can be extremely stressed in any emergency, especially a cascading crisis in which multiple things go wrong and build on each other. Populations in these cities are often far too distant from rural areas for any concept of escaping the city to be practical in an emergency. Yet populations in these spaces depend for survival on the proper functioning of water, sanitation, and power infrastructure as well as food, medical, and fuel supplies that may be disrupted.[87]

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For example, modern cities—because they are often larger, more prosperous, and more likely to have electricity—now have more complex and longer food supply chains. These supply chains often rely on refrigeration and freezing. These developments are good things—but they also create much greater vulnerabilities than before, should infrastructure fail.[88] Food supplies are frequently more perishable today; stocks in a typical home could be much smaller as well.

What can we do about this problem? Reducing the number, and size, of megacities may hold some appeal but is not a realistic recourse. Ways of making huge metropolitan areas better able to withstand shocks must be at the heart of any strategy. Surely enhancing resilience and redundancy in basic infrastructure makes sense. For example, the ability to reboot electrical systems or revert to a limited amount of backup power if power grids are brought down by cyber attacks or transformer failures is important. One more option is to keep power grids off the main internet to complicate the task of cyberattack against them, although this can increase costs and create other challenges. This broad problem is a complex task that the United States itself has hardly mastered.

But it is also necessary to be ready to provide relief to many millions of individuals. Indeed, it may also be necessary in an extreme case even to relocate large populations. A nuclear power plant accident that disperses large amounts of radioactivity into the atmosphere, for example, could create the need to evacuate a megacity, depending on wind patterns.[89] Conceivably, certain other toxic spills, floods, or even pandemics could produce similar conditions. Concerned about this possibility and other dangers at the time of the Fukushima disaster, Japan was quick to request assistance from the United States in 2011. Tokyo provided an admirable example of willingness to acknowledge the need for help in a way that other states should seek to emulate when under similar stress. Public-private collaboration, and advance planning and establishment of communications

channels, can help authorities access private-sector assets when, in an extreme event, publicly-owned capacities prove grossly inadequate.

An additional way to foster resilience is to use good principles of urban planning rather than to allow slums to mushroom without control or coherence. Admittedly, it might be too much to apply something like the Copenhagen model to the world writ large. Greater Copenhagen only has about 2 million people; it is notable for a "finger model" of development in which most construction must occur within a mile of a railway station. This creates arteries of development and transportation (where bicycles often predominate for transportation), separated by green spaces that remain undeveloped. The goal here was not building resilience to disaster so much as enhancing quality of life. But those green spaces could help limit the scale of any mass pandemonium and concentration of crowds.[90] In other cities, even if such a model were not practical, building a number of large boulevards, ensuring access points for government officials throughout a city from which security could be established and relief provided in a crisis, and avoiding single failure points in key infrastructure can help achieve resilience in a catastrophe.

Limiting the rate of growth of cities, when possible, is also an avenue to consider—not only for making sure infrastructure can keep up with demand, but also for reducing crime. Larger cities do not necessarily have higher crime rates. However, cities that grow quickly do tend to see higher crime rates, perhaps because their police forces and other institutions cannot keep up, perhaps because faster growth tends to correspond to less regulated growth and thus to the formation of densely populated and weakly governed areas.[91] Keeping infrastructure and public services aligned with a city's growth is therefore an important concern.

In severe disaster conditions, there could be a case for using military organizations to lead massive responses. Often, only such organizations have the logistics, transportation, and communications capacities to operate systematically and effectively in a potentially very austere environment. Their ability to restore order in an anarchic environment could be important too, especially if regulated and guided by civilian authorities. Many cities and countries should plan for the possibility of having to take care of millions of people on short notice. If they do not have that capacity themselves, they should work with foreign partners to think of how forces could be pooled, should a major disaster afflict any one of them.

But if it is true that military organizations could sometimes be the sole candidates for handling a response to massive disaster, it is also true that in complex emergencies, military forces must work hand in hand with police and also civilian authorities as well as nongovernmental organizations. The latter could be needed for food, water, and health care. They could also be needed to adjudicate property disputes, help with reconstruction, and recreate local governing authorities. One coordination mechanism that could be of use is the civil-military operations center (CMOC) often used in past stabilization operations—a single geographic command and control headquarters where various agencies have key representatives to plan and also implement their overall effort.[92] The private sector, especially larger establishments with substantial physical assets at their beck and call, could have a major role to play in providing relief and other help, as well. And of course, in any of these kinds of massive disaster operations, the goal of a military organization should be to work itself out of the job of providing relief and restoring order as quickly as possible.

CONCLUSION

The evolution of human society in the 20th and 21st centuries has improved the lives of more people than was ever previously imaginable. At the same time, it has also led to a sheer number of individuals on the planet that was never previously conceivable.

The global human population only reached 1 billion shortly after 1800 and only attained the 2 billion mark early in the 1900s—but now totals 7.4 billion, headed toward at least 9 billion later this century. That mass of humanity benefits from many aspects of modern technology. Yet, it is also increasingly dependent on fragile infrastructure and often weak governance structures. People are individually safer than ever before, but at the same time, civilization itself faces massive vulnerabilities. Globalization and urbanization have produced prosperity, yet they also increase the velocity of instability and insecurity in modern civilization.

In short, in today's and tomorrow's worlds, the importance of promoting urban and metropolitan security is greater than ever. Fortunately, we know a great deal more about how to protect human beings in general, and urban dwellers in particular, than ever before—as well as the communities in which they live, the businesses and institutions where they work or attend school or associate, the infrastructure upon which they depend for their survival and their quality of life. But the most promising approaches to protecting metropolitan regions are often still only employed in a limited number of places. There is much more work to be done in spreading and generalizing them worldwide, while also continuing to innovate and improve best practices through smart uses of technology, public-private partnerships, and other enablers.

In this context, cities can and should communicate directly with each other, at public and private and nongovernmental levels—as indeed they are beginning to do already. It is cities and metropolitan areas that know firsthand how to prioritize their different security

needs in a way that is responsive to their citizens and their economic development strategies. Cities also are often the best placed to integrate the roles of local and regional police forces, infrastructure protection agencies (like port and airport authorities), first responder organizations, national intelligence capabilities, and other national or federal security institutions in efforts designed to promote the safety, security, social cohesion, and prosperity of their communities. They also know their private sector businesses, universities, hospitals, and other key institutions.

Of course, there are important roles for national authorities too, as our research has underscored. These roles can range from intelligence gathering and sharing, especially in regard to transnational criminal or terrorist networks, to helping fund local efforts when metropolitan areas may lack the requisite resources, to planning for and handling any large-scale disasters.

The principles and concepts we have explored in this paper—including community policing, selective and triaged counternarcotics strategies, integrated and coordinated counterterrorism operations, smart use of technology, promotion of social cohesion, preparation against massive disaster, and enhanced development of public-private partnerships—include a rich body of best practices and good ideas from around the world. There is every reason to think that by sharing, and further improving, such practices and ideas, we can continue to make the world a safer place. But there is also no basis for complacency, and there is much that can go wrong if we fail to step up to the challenge.

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ABOUT THE SECURING
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Securing Global Cities is a year-long project that examines the intersection of globalization and security in today's urban areas. It is co-chaired by General Raymond Odierno (ret.), former Chief of Staff of the U.S. Army and Senior Advisor at JPMorgan Chase & Co., and Michael O'Hanlon, senior fellow and director of research in the Brookings Institution's Foreign Policy program.

This collaborative project recognizes that the dramatic growth of the world's cities is creating new challenges for governance and economic performance, and aims to develop a collection of best practices to help cities think through the key elements of integrated security strategies. Over the last year, the project co-chairs have convened experts and practitioners from a number of the cities around the world in the United States, other OECD nations, and the developing world to compare experiences and recommendations for enhancing security in major urban areas.

Securing Global Cities considers different types of urban security challenges–from terrorists to narcotraffickers and other international criminal networks, to gangs, street criminals, and natural disasters–and examines the various tools that governments can deploy to address these problems. These tools include reformed and strengthened police forces, justice systems, paramilitary and military institutions, intelligence capabilities, and a range of other instruments.

A joint project of the Brookings Institution and JPMorgan Chase, Securing Global Cities is part of the Global Cities Initiative, launched in 2012 to strengthen the international economic competitiveness and connections of metropolitan areas. Securing Global Cities resides in the Center for 21st Century Security and Intelligence in the Foreign Policy program at Brookings.

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