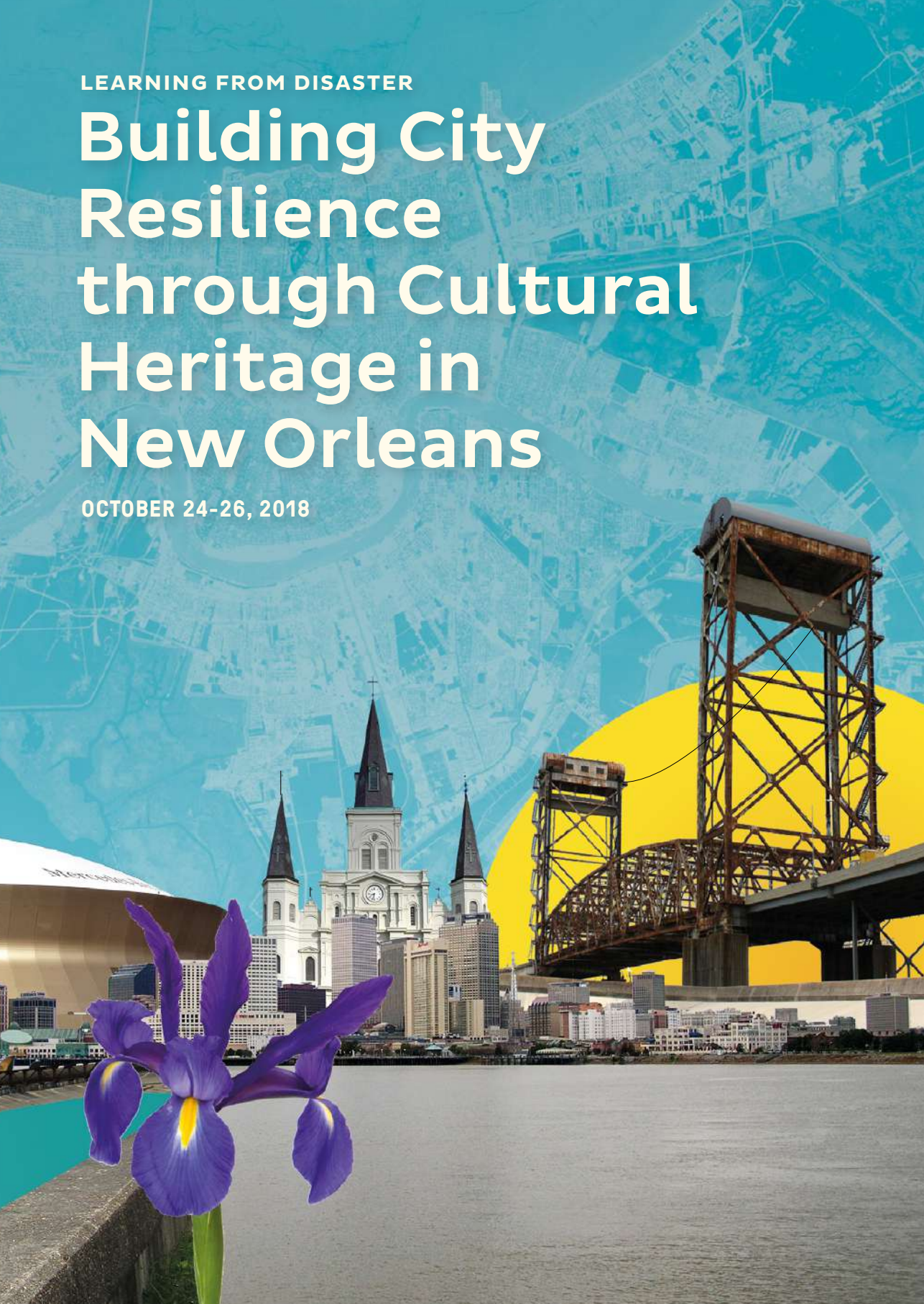
LEARNING FROM DISASTER

Building City Resilience through Cultural Heritage in New Orleans

OCTOBER 24-26, 2018



URBAN HERITAGE @ THE IDB

Over the last 40 years, the Inter-American Development Bank (IDB) has been a strategic partner for many countries in the region as they leverage cultural heritage to further sustainable and equitable development. The central tenet of these efforts is the promotion of heritage preservation and enhancement as a catalyst for economic and social progress, and as a means to strengthen cultural identity and a sense of place. This entails a complete set of actions that safeguard cultural heritage, while improving the quality of life of residents and generating benefits for the entire city. The IDB Housing and Urban Development (HUD) Division's urban heritage program embraces a multisector approach that combines strategic urban infrastructure, social and economic interventions, and leadership through a management structure that brings together various public, private, and civil society stakeholders. The program supports cultural heritage resilience, especially in cities vulnerable to the effects of climate change.

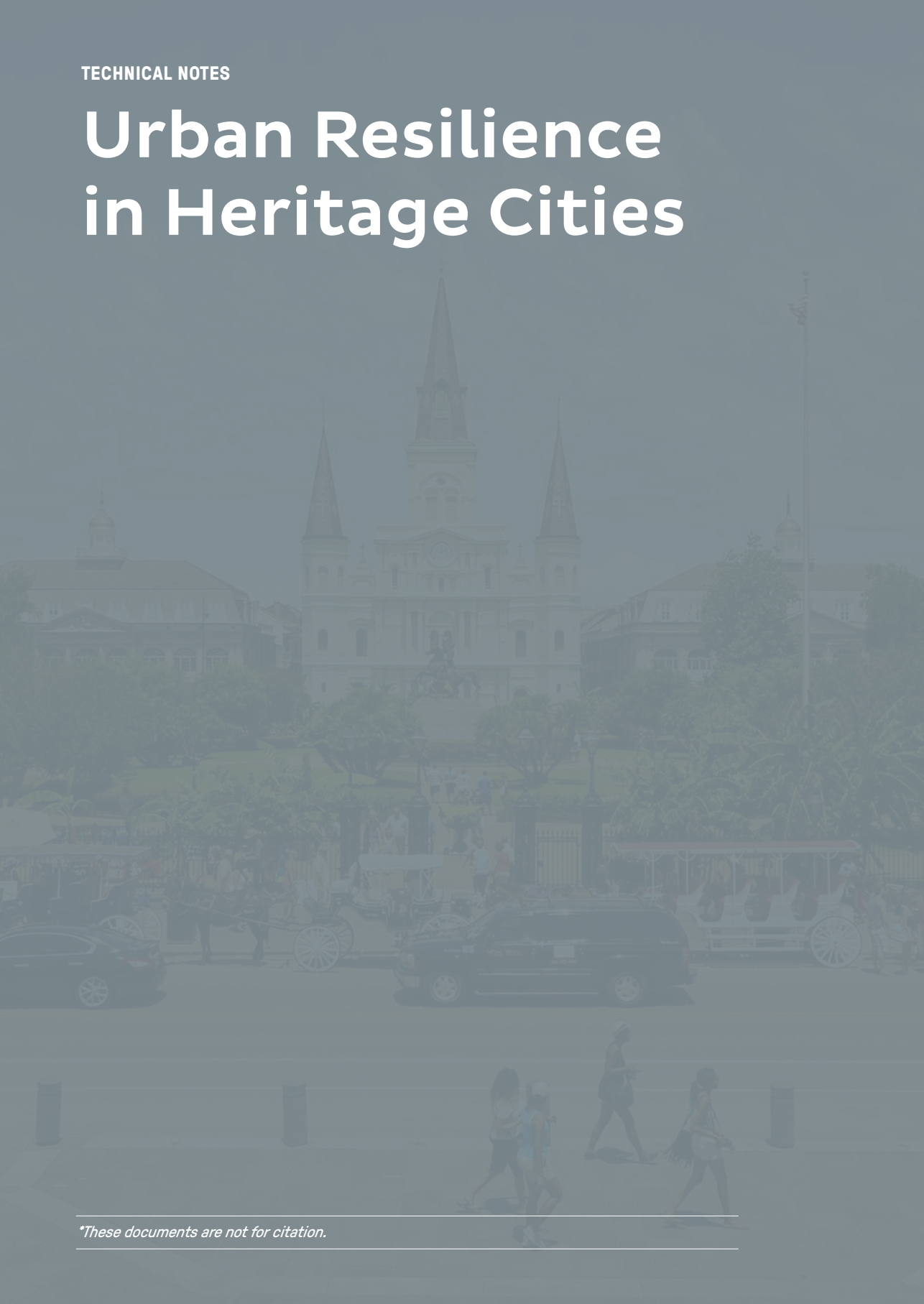
THIS ACTIVITY IS FINANCED BY THE IDB'S KNOWLEDGE, INNOVATION, AND COMMUNICATIONS' CUTTING EDGE PROGRAM.

LATIN AMERICA AND CARIBBEAN CITY OFFICIALS PARTICIPATION IS SPONSORED BY THE IDB CITIES NETWORK

IDB Network of Cities was created as part of the new Climate Change and Sustainable Development Sector within the Housing and Urban Development Division to share knowledge, lessons learned and good practices in environmental, economic and social sustainability. Currently, the Network incorporates more than 150 cities with a population of 160 million inhabitants, being mostly intermediate cities with a high growth rate. The Network provides support through meetings that promote innovation, good practices and exchange of knowledge with cities.

TECHNICAL NOTES

Urban Resilience in Heritage Cities



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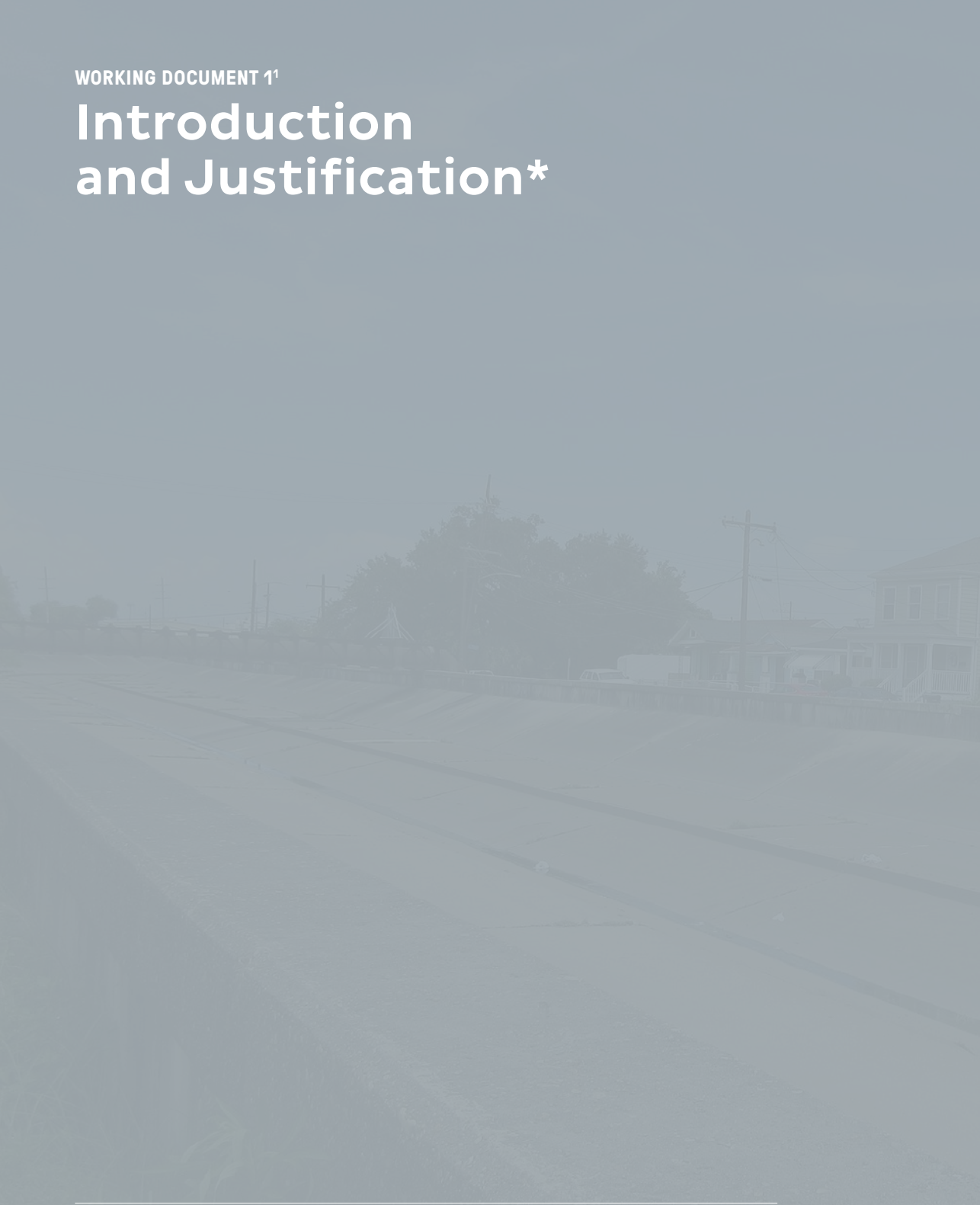
WORKING DOCUMENT 1[1]

Introduction and Justification*



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[1]The notes presented in this document have been prepared by Jared Genova, Luis Saenz, Jesús Navarrete y Rodrigo Caimanque. The contents developed will be part of an IDB publication named "Cultural Resilience and the City" (Forthcoming, 2019).

1. Introduction

The concept of city resilience has grown over the past two decades to be arguably the most important framing device for future-oriented city planning efforts around the world. As worldwide focus on climate change and extreme events has become sharper, the practice of deliberately mitigating disaster risk and simultaneously catalyzing positive socio-economic change has increasingly become a priority of city governments, advocates, and planners. Meanwhile, the importance of cultural heritage as a driver in the socio-economic success of cities has also raised its profile among city planners and government officials.

Perhaps unsurprisingly, many cities with significant tangible, intangible, and natural heritage sites and practices are directly threatened by the effects of a changing climate in the form of extreme weather events, sea level rise, and aging infrastructural systems. Additionally, cities with significant and recognized cultural heritage are certainly not immune to the many social and economic stresses and pressures that are experienced in urban areas around the world. In many cases, the advanced age of culturally significant cities means that both social and infrastructural systems developed during eras without the benefit of modern technology or a focus on diverse social equity.

As a relatively new set of frameworks and combination of management practices for cities, the definitions of resilience and cultural heritage with respect to urban development and planning are also continuing to shift. It is currently uncommon to see frameworks for urban resilience and cultural heritage explicitly linked, with particular cases scat. This project seeks to use the case of New Orleans within a wider Latin American and Caribbean (LAC) context to explore the nexus of resilience planning and cultural heritage for municipal actors and development institutions.

The story of New Orleans, Louisiana is specifically used as a case study to share planning lessons learned throughout its culturally significant history in the face of major threats, including natural disasters, infrastructure failures, and socio-economic inequity and instability. Through the review of popular applied urban resilience frameworks and examples of cultural heritage protection and development in the New Orleans context, a more solidified connection between the two should emerge. A theoretical framework that recognizes the importance of cultural heritage in cities in eras of climate and social change can be built upon existing resilience frameworks and on these connections.

The purpose of this document is to provide an overview of the various resilience planning frameworks being applied at the city level and explore their connections to cultural heritage and practices. Examples of types of resilience approaches along with their successes and limitations will contextualize a case study that is significant for both its resilience planning and cultural heritage.

The present working document the first part of three that compose the key aspects to be addressed in the workshop: (1) the conceptual considerations; (2) The LAC cultural heritage context and; (3) the case of New Orleans. These three

parts will constitute an integrated IDB publication which will be improved and enriched with the discussion expected in New Orleans.

This project is coordinated by the Housing and Urban Development division of the Inter-American Development Bank (IDB). Research is being augmented by a field visit to New Orleans by LAC public sector officials and representatives of the IDB to study first-hand how New Orleans is reckoning with a tumultuous past and creating conditions for a resilient future.

2. Justification

Latin American and Caribbean (LAC) cities host a number of tangible and intangible cultural assets that give shape to a diverse urban heritage. The combination of indigenous and Hispanic cultures makes the LAC region a rich territory where multiple cultural resources intersect. Urban heritage includes not only the tangible assets found in buildings, plazas and urban cores built during pre-Hispanic and colonial times -mainly taking form in historic centers-, but also intangible heritage such as food, music, arts, crafts and cultural industries. The combination of these assets makes up for the local identity of each and every city across the region, making urban space in Latin America a rich and diverse locale.

Although abandonment, intraurban migration and subsequent decline have been the common reasons for the decline of heritage in LAC cities, natural hazards pose a 'new' challenge to LAC's urban heritage. Natural hazards such as earthquakes, hurricanes, fires, floods and landslides, all intensified by climate change, threat to erase hundreds of years of history and heritage. The LAC region, highly vulnerable to natural hazards, has found itself exposed to different types and intensity of risks across time and most recently. During the first months of 2017, "El Niño Costero" impacted Peru causing multiples floods across the country's coast, affecting among others Trujillo and its Historic Center -declared as National Heritage- and part of the Chan Chan Ruins, a World Heritage Site. Other cases, like the 2017 earthquakes in Mexico; storms in the Caribbean and Central America and landslides in Los Andes, are recent examples of the consequences of these hazards colliding with the vulnerabilities that characterize LAC's cities and heritage and their economic and social capital.

For over the past 30 years, multiple international organizations have alerted about the risks and natural hazards that may affect cultural heritage1. Since the 80's and 90's, institutions like the *Getty Conversation and the World Monument Fund (WMF)* have raised awareness about the importance of protecting cultural heritage from natural (and manmade) hazards and disaster risk, leading initiative like the Watch Program (WMF). During the 2000s, UNESCO's World Heritage Centre elaborated the report "Predicting and Managing the Effects of Clima-

[1] This work contributed to the design and setup of the 2030 Agenda, including components like the Sustainable Development Goals (SDGs; the Paris Accord, Habitat III and the Sendai Framework.

te Change on World Heritage" and in 2013, the ICOMOS (International Scientific Committee on Risk Preparedness (ICORP)) created a global platform for the reduction of disaster risk. Most recently in 2015, leading to the 2030 agenda definition and the Sendai Framework enactment, UNESCO published an Action Plan for the protection and safeguarding of culture against armed conflict, later updated in 2017 to include climate and disaster risk and action.

New Orleans is a natural choice for inclusion in this project not only because of its nationally and internationally recognized importance as a cultural and creative pioneer and its experience with major disasters, but also for its more recent investments in holistic resilience and hazard mitigation planning. For a city of fewer than 400,000 residents today, New Orleans' image in the global collective consciousness looms large. As the birthplace of jazz, the home of Creole cuisine and fine dining, and known around the world for its architecture, New Orleans' cultural heritage is the product of a diverse social and economic history that continues to sustain it today. Additionally, New Orleans shares a great deal of cultural, political, and geographic history with the rest of the Caribbean basin and Latin America. As one of the oldest post-colonial cities in North America—celebrating its 300th anniversary in 2018—and arguably one of the most geographically precarious, New Orleans has already flown many flags and weathered countless storms—both natural and manmade.

New Orleans is also an appropriate case study because of its variety of both successes and failures with regard to future-oriented, holistic urban planning and the support of cultural heritage and practices. There have been countless planning processes to shape the future of urban and community development in New Orleans since Hurricane Katrina's devastation, directly involving tens of thousands of residents. Why have so many people chosen to return to New Orleans and rebuild after disaster? What is the essence of New Orleans' and New Orleanians' resilience? There is a strong argument to be made that the city's cultural heritage, from the quotidian to the mythical, is at the heart of the city's strength and adaptability.

The impact of disasters and hazards on urban heritage in cities like New Orleans and LAC exceeds the impact on the built environment, impacting livelihoods, identities and the social fabric that shapes culture (World Bank, 2017). Although cultural heritage preservation has traditionally focused on the mitigation of risk and potential loss of values[2], because of the close relationship that culture and heritage have with the economic and social development in region's like LAC, preserving cultural heritage has to widen its focus. Promoting resilient heritage becomes an opportunity not only to preserve and protect cultural heritage, but to promote urban trajectories that can not only protect heritage but leverage and make livelihoods and economic and social development related to it more resilient.

[2] Heritage assets, understood as cultural resources, can be attributed economic value (similar to physical capital or natural capital).

WORKING DOCUMENT 2[1]

Conceptualization of Resilience and Heritage*

*These documents are not for citation.

[1]The notes presented in this document have been prepared by Jared Genova, Luis Saenz, Jesús Navarrete y Rodrigo Caimanque. The contents developed will be part of an IDB publication named "Cultural Resilience and the City" (Forthcoming, 2019).

1. Conceptual Framework: Urban Resilience and Cultural Heritage Origins and Linkage

1.1
CONCEPTUAL DEBATE

Resilience

There is no shortage of literature and discourse dedicated to the idea of resilience, as studied and applied across disciplines and scales. This project is focused specifically on the application of city resilience frameworks and the importance of cultural heritage. Originating in the field of psychology, resilience frameworks have more recently been developed and applied to the management and planning of cities, ranging from engineering strength matrices for infrastructure, to economic development indices, to social well-being goals. Rather than dwelling on individual definitions that every discipline has used for "resilience," this project is highlighting applied frameworks that are in use in cities today, ranging from elemental to fully holistic.

There are many overlapping, supporting and tangentially related frameworks—and corresponding definitions—in use around the world, including climate adaptation, climate mitigation, sustainable development, and disaster risk management, to name a few.[1] Simply put, all of these definitions and frameworks could be considered parts of city resilience. At the same time, the most common introduction and simultaneous criticism of resilience analysis and planning is that it has grown to encompass too many elements across too many disciplines, threatening its usefulness to planning and development discourse and application. At the same time, finding ways to combine efforts and find economies of scale to address complex challenges is imperative in the age of climate change. As our cities age, conditions become more extreme, and resources become scarcer, resilience frameworks offer insight into how we can manage increasing risks, but also improve living conditions for all during normal times.

Cultural Heritage

Like resilience, cultural heritage is an often discussed and somewhat irregularly defined concept that generally refers to tangible sites, objects, and property, as well as intangible practices, traditions, and rituals. Natural heritage is also regularly included when discussing heritage places or cities. UNESCO more clearly defines natural heritage as "natural sites with cultural aspects such as cultural landscapes, physical, biological, or geological formations."[2]

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[1] The Overseas Development Institute (2015) notes that though some of these definitions are used synonymously, especially resilience and adaptation, some scholars have pointed out that while adaptation is focused on actors, policies, and projects, resilience is more about systems thinking.

[2] Definition of the cultural heritage | United Nations Educational, Scientific and Cultural Organization.

While nuances may be present in definitions distinguishing culture and cultural heritage—usually separated by current culture and past heritage—it is likely more beneficial to take a more inclusive approach to heritage that includes elements of current or contemporary culture.

More recently, The IDB has launched a program called *Living Heritage (Patrimonio Vivo)* that is clear in the need to consider heritage as an evolving process rather than a snapshot in time. For example, one of the critical questions among those involved in preservation or safeguarding heritage is how to preserve without calcifying. By taking an approach that recognizes that culture vs. cultural heritage is not a zero-sum game and further development of current and still-developing culture can help create the heritage of the future or provide the resources to continue heritage practices, investment decisions can be simplified and made more inclusive. Equally important when considering a city or country's cultural heritage, there is a critical question of whose heritage has been prioritized and protected. In some cases, the cultural heritage and practices of the many is less visible than that of the few, so interrogating the types and manifestations of heritage to invest in is critical.

Why resilient heritage?

While there is not as much literature in active circulation about the nexus of resilience and cultural heritage, a variety of organizations have noted it as an important connection. UNESCO, for example, has called for leveraging culture and heritage for development, citing the many benefits it has, specifically including resilience: "Culture-led development also includes a range of non-monetized benefits, such as greater social inclusiveness and rootedness, resilience, innovation, creativity and entrepreneurship for individuals and communities, and the use of local resources, skills, and knowledge. Respecting and supporting cultural expressions contribute to strengthening the social capital of a community and fosters trust in public institutions. Cultural factors also influence lifestyles, individual behavior, consumption patterns, values related to environmental stewardship, and our interaction with the natural environment. Local and indigenous knowledge systems and environmental management practices provide valuable insight and tools for tackling ecological challenges, preventing biodiversity loss, reducing land degradation, and mitigating the effects of climate change."[3] Each of those "non-monetized benefits," such as social inclusiveness, social capital, trust in public institutions, environmental stewardship, climate change risk reduction, are generally considered elements of contemporary urban resilience planning, as illuminated in the next section.

(2018). Unesco.org. Retrieved 14 September 2018, from http://www.unesco.org/new/en/culture/themes/illicit-trafficking-of-cultural-property/unesco-database-of-national-cultural-heritage-laws/frequently-asked-questions/definition-of-the-cultural-heritage/

[3] UNESCO (2012) Culture as a driver and enabler of sustainable development.

Resilient Heritage under IDB's perspective

The Bank' working definition for "resilient heritage" is action-oriented and already inclusive of cultural processes that create and foster heritage: "Resilient heritage builds capacity and articulates effective strategies for the management of risk and the adaptation to climate change with the revitalization, preservation, and resilience of cultural heritage. In order to do that, resilient heritage seeks to strengthen and leverage local knowledge as capital to augment its capacity for response and adaptation to external shocks, especially within the care and use of ecological systems, for the wellbeing of future generations and their cultural and natural heritage."[4]

1.2
EXISTING FRAMEWORKS AS APPLIED DEFINITIONS: RESILIENCE PLANNING AND ACTION

There are three types of city resilience frameworks currently in popular application in cities around the world and each has found success applied both together and separately. Disaster risk reduction, urban-holistic, and social-ecological frameworks are all interrelated and as they are neither contradictory nor mutually exclusive, they are each valid approach for city planning and management. The following section looks at the how each framework type builds off of the next, especially regarding applied definitions and desired outcomes, while also highlighting unique but replicable elements. Examples of all frameworks are included as part of Annex 1.

- **DISASTER RISK REDUCTION AND MITIGATION (DRRM)** resilience frameworks are founded on one of the most popular and ubiquitous definitions of resilience, commonly citing the capacity of a system to "bounce back" to a previous state.[5] The most commonly used definition for this type of framework comes from the United Nations Office of Disaster Risk Reduction (UNISDR) and is used by many other UN agencies, including the UN Development Program (UNDP): "Disaster risk reduction is aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development."[6]. DRRM separates hazard risk and exposure risk, usually assuming that threats (hazards) are harder to mitigate than exposure to the hazards. Consequently, the action to be taken under disaster-focused frameworks is to reduce and mitigate exposure risk to vulnerable assets, such as settlements

[4] Translated from the original Spanish by the author. From Inter-American Development Bank. (2018). Patrimonio Vivo. Washington: BID

[5] Overseas Development Institute. (2015). A comparative overview of resilience measurement frameworks. London: ODI.

[6] Terminology - UNISDR. (2018). Unisdr.org. Retrieved 4 September 2018, from https://www.unisdr.org/we/inform/terminology

and critical infrastructure systems, particularly in disadvantaged or disinvested communities. Disaster-focused frameworks are often preferred choices because of their relative simplicity to measure effectiveness and the ability to directly align investments to mitigation efforts, like in the case of the US Federal Emergency Management Agency (FEMA).

- **URBAN-HOLISTIC RESILIENCE FRAMEWORKS** deliberately go beyond the disaster risk reduction framing to be useful across dimensions of urban (and sometimes rural) management. With respect to DRR frameworks like UNISDR's Sendai Framework, for example, urban-holistic resilience frameworks deliberately include more types of benefits, more akin to UNDP's Sustainable Development Goals (SDGs)[7]. Essentially, the desired social co-benefits that are noted in DRR frameworks become part of the critical core resilience goals—while also calling for reduced risk to natural hazards. A report by the United Nations Climate Change Secretariat in 2017 called for a better integration of climate change adaptation, disaster risk reduction, and sustainable development frameworks for action.[8] The urban-holistic approach is the first applied attempt at that charge. Critical to urban-holistic frameworks is the idea that acute shocks and long-term stresses exist in cities, and they exacerbate each other. Thus, reducing risk to hazards is important, but not enough. Stresses, such as poverty, inequality, and aging infrastructure all make shocks worse, just as unmitigated shocks create greater stresses. The two examples included in this document (see Annex 1) illustrate the wide-ranging nature of urban-holistic frameworks, including a diversity of end users, in this case a development agency and individual cities.

- **THE SOCIAL-ECOLOGICAL APPROACH FRAMEWORK** for resilience is focused on the systems level and, in some ways, simplifies the urban-holistic definition of urban resilience while inviting more complex analysis. This approach defines resilience as the capacity of a system to deal with change and continue to develop.[9] This definition emphasizes the ability to adapt in the face of change and disturbance, or to shift into something new and different, transforming out of something undesirable.

- **MONITORING AND EVALUATING RESILIENCE** - As a potentially nebulous concept when not paired with adequate organizational infrastructure, city

[7] The UNDP Sustainable Development Goals are not explicitly highlighted here as a resilience framework because they do not have an explicit and already-designed application to cities. Only one goal mentions cities, aiming to "make cities and human settlements inclusive, safe, resilient and sustainable."

[8] UN Secretariat. (2017). Opportunities and options for integrating climate change adaptation with the Sustainable Development Goals and the Sendai Framework for Disaster Risk Reduction 2015–2030. Bonn: United Nations Climate Change Secretariat.

[9] ODI ibid.

resilience has also been approached as sets of indicators. These indicator sets attempt to measure progress against and effectiveness of resilience approach frameworks. A 2015 study by the Overseas Development Institute (ODI) analyzed 17 different sets of resilience indicators and their application, including those used by city administrators, academics, philanthropic organizations, and development agencies. The study was clear in mentioning the limitations of indicators—ranging from quantitative data are rarely enough to tell a story to indicators are easily manipulated as loose proxies for city values.[10] While currently a quickly evolving field, the development of measuring and reporting city resilience protocols through indicator sets has yielded some interim best practices. The examples included in Annex 1 are aligned with aforementioned resilience planning and action frameworks and each exhibit useful and replicable qualities.

The city resilience frameworks and indicators currently in wide application today build upon each other and have been proven useful in cities around the world. However, none of the examples of frameworks or indicators have been demonstrated to be both easy to align investments to and be fully comprehensive. Indicators unique to city resilience are relatively new and still evolving. It is important to note that the range of indicators in terms of content and complexity is as large and varied as the cities they are intended for consequently universal comparison across urban areas is still very difficult. However, there are some qualities of indicators sets that deserve note and should be encouraged, including the application flexibility of the UNISDR Scorecard and the relative nuance of the City Resilience Index.

The same applies to the frameworks themselves. Each type of framework has important merits. Disaster risk reduction frameworks are practical and both shocks (hazards) as well as investments are easily identifiable, making progress more measurable. Urban-holistic frameworks are useful because of their flexibility and ability to conceptually connect a wider variety of urban management aspects. Additionally, urban-holistic frameworks recognize the criticality of addressing social and economic stresses to both reducing costs of shocks and improving quality of life in steady-state conditions. Social-ecological frameworks, while generally more academic in nature, have the ability to expand the possibilities of urban-holistic frameworks and also illustrate complex systems theory with natural examples.

[10] ODI ibid.

TABLE 1

Currently Applied Resilience Frameworks Summary

Source: Author's elaboration

FRAMEWORK TYPES	MAIN CHARACTERISTICS
DISASTER RISK REDUCTION (AND MITIGATION)	Exposure to natural hazards is reduced or adapted to, ultimately lessening impacts by shocks City systems return to normal after shocks faster (bounce back) Other benefits are desirable, but secondary Cultural heritage has been rarely addressed explicitly, except in relation to building and housing stock.
URBAN-HOLISTIC	Includes principles of disaster risk reduction Wide range of shocks and stresses are addressed across social, economic, and ecological Aims for cities and constituent systems to "thrive" in the face of shocks and stresses Cultural heritage and practices are indicated as elements of resilient cities, but specific preservation and development strategies are rare.
SOCIAL-ECOLOGICAL	Includes principles of both disaster risk reduction and urban-holistic frameworks Uses parallel examples in natural systems to illustrate social and economic characteristics Includes the goal to transform or evolve, rather than thrive in current state Cultural heritage and practices are indicated as elements of resilient cities, but specific preservation and development strategies are rare.

While examples exist of each framework type being used to success, they all have a common limitation: a lack of guidance on understanding cross-disciplinary connections and interdependencies. Arguably what makes resilience a compelling concept is the idea that it is greater than the sum of its parts, building resilience when, for example, crime rates are reduced after major investments in early childhood education and after-school programs. Arup City Resilience Index begins to unpack this idea, but stops short of making it convincingly actionable. Unfortunately, we are also regularly limited by common city management systems, which are usually governed by budgets that have very specific applications, and our political cycles. Hopefully, holistic resilience frameworks can help to put pressure on these inflexible management systems, developing more resilient characteristics. Additionally, with more ubiquitous framework and indicator use around the world, cities should be able to unlock greater opportunities for funding and joint management of systems. In the meantime, using specific frameworks, like disaster risk reduction, where appropriate, and

more comprehensive ones, like urban-holistic and social-ecological, where possible, will continue to help cities transcend the complexity of threats and take advantage of opportunities.

1.3
HERITAGE FOR RESILIENCE & RESILIENT HERITAGE

Across the three types of frameworks, cultural heritage is not currently highlighted prominently as a critical element of city resilience, however efforts to integrate DRM and Cultural Heritage are being carried out by different leading institutions:

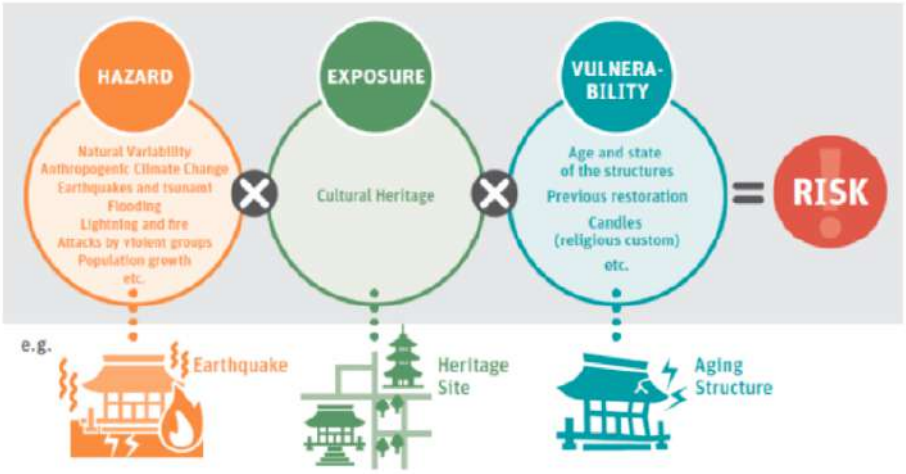
- Within disaster risk reduction and mitigation frameworks, the clearest definition of the benefits of investments in cultural heritage comes from the 4th Session of the Global Platform for Disaster Risk Reduction, led by UNESCO and UNISDR11. UNISDR here calls for the protection of cultural heritage for both the disaster recovery phase and the longer-term resilience-building phase of the DRRM process. Of particular note is the psycho-social support that strong cultural heritage fosters and its personal and community-wide benefits.
- Most recently, joint efforts between ICCROM, UNESCO, the World Bank and GFDRR, have laid the ground for a comprehensive integration of DRM into cultural heritage policy and management. Following a DRRM framework, this alliance has published valuable documents and case studies that serve as precedents for this endeavor. According to these studies, in the context of cultural heritage, "risk is calculated as the result of the interaction of one or multiple hazards with a specific exposure having a certain degree of vulnerability. The equation becomes more complex when cultural heritage is the exposure because many factors -such as the age and state of the structures, previous restorations, etc. – affect the level of vulnerability". The study notes on the importance of recognition the different characteristics of heritage assets, especially in regards to whether they are tangible or intangible, and movable or not (World Bank, 2017).

[11] : "Therefore, the protection of cultural heritage should be promoted, not only because of its intrinsic historic or artistic value, but also because of the fundamental spiritual and psycho-social support and the sense of belonging it provides to communities during the disaster recovery phase, as well as the contribution it makes towards building resilience to the increasing frequency and intensity of disasters and adaptation to climate change." Heritage and Resilience. (2013). ICOMOS. Global Platform for Disaster Risk Reduction

Figure 1

CHT Risk Calculation

Source: (World Bank, 2017)



- Within the **urban-holistic** 100 Resilient Cities City Resilience Framework framework and City Resilience Index (CRI) indicators, cultural heritage is mentioned within the "Economy & Society: Promote Cohesive and Engaged Communities" definition: "Create a sense of collective identity and mutual support. This includes building a sense of local identity, social networks, and safe space; promoting features of an inclusive local cultural heritage; and encouraging cultural diversity while promoting tolerance and a willingness to accept other cultures.[12]". The definition only goes as far as saying the promotion of "an inclusive cultural heritage" is important, but does not describe how to define it or foster it.
- A recently released report by the British Council, in collaboration with 100 Resilient Cities, details some of the ways culture contributes to building a resilient city within the CRF, generalized from the experience in Athens: "Culture contributes to the economic dimension of resilience by generating income and employment, and driving facets of entrepreneurship, innovation, new technologies and tourism. Culture is an accelerator to the social dimension of resilience by strengthening the social capital of a city. Culture can also embrace the environmental dimension of resilience by providing insight and tools for raising awareness about ecological responsibility. Culture in its many forms brings both monetized and intrinsic value to the process of resilience through its emphasis on creativity, heritage, the promotion of local knowledge systems and the protection of cultural diversity.[13] "

[12] Resources - 100 Resilient Cities. (2018). 100 Resilient Cities. Retrieved 4 September 2018, from https://www.100resilientcities.org/resources/

[13] Athens City Resilience Through Culture. (2018). British Council and 100 Resilient Cities.

- Finally, the social-ecological framework approach could easily be applied to cultural heritage assets and practices, as it could be translated into qualities of the city-system, but the GRAID framework does not explicitly address methods. Among the Seven Principles of Building Resilience, "cultural groups" are mentioned as actors in maintaining diversity and redundancy, but cultural heritage is not explicitly addressed at a critically high level.

Because of the lack of an explicit vision for how cultural heritage can be fostered to build urban resilience, this project seeks to begin the process of developing one. Based on a review of the aforementioned commonly applied urban resilience frameworks and definitions, certain elements of holistic urban resilience are clearly linked to cultural practices and cultural heritage investment but are not always explicitly described. Investing in cultural heritage and targeting the processes that enable its future development can promote the following resilience-building elements:

TABLE 2

Co-benefits of cultural heritage investment for Urban Resilience

Source: Author's elaboration

RESILIENCE BUILDING ELEMENTS	RESULTS OF INVESTING IN CULTURAL HERITAGE
Psycho-social health benefits	To support residents during critical response and recovery phases of disaster
Cultural diversity	To increase community tolerance and social-ecological principles of response diversity
Social cohesion (and rootedness)	To unite and strengthen community ties to people and the environment in the face of shocks and stresses
A culture of preparedness and adaptation	To acculturate through repetition the ability to respond to a changing environment and society
Strong sense of place	To develop residents' pride of place and to increase the city's profile in the global cultural imaginary
Economic development/secondary investment	To create stability that is attractive to further development investment
Ecological sustainability	To ensure natural resources for passing on cultural heritage
Global stewardship	To understand the global implications of local actions

Each of these elements is inherently resilience building insofar as each has multi-scalar benefits, from personal resilience to global resilience, and all benefit the community and city scale. Whether using a disaster risk reduction, urban-holistic, or social-ecological resilience framework, these elements are important to building city resilience and satisfy different definitions of action and

benefits. The opposite is also true, in as much as investing in each of these resilience-building elements can promote the development of more robust cultural heritage and practices, fostering a population more equipped to participate in the disruption, expression, and repetition that builds and strengthens cultural practices into heritage.

WORKING DOCUMENT 3[1]

The LAC Cultural Heritage in Context*

*These documents are not for citation.

[1]The notes presented in this document have been prepared by Jared Genova, Luis Saenz, Jesús Navarrete y Rodrigo Caimanque. The contents developed will be part of an IDB publication named "Cultural Resilience and the City" (Forthcoming, 2019).

1. Urban Resilience in Heritage Contexts in LAC

Following DRM's framework: risk = hazards x vulnerability, this section gives a general overview of the main hazards and vulnerabilities to which cultural heritage is LAC is exposed to, according to secondary information analysis. Finally, an initial analysis and presentation of cultural heritage and DRM frameworks across the region are presented, in an attempt to overlay the on-stage components from which LAC city's and countries could strengthen heritage's resilient and disaster risk mitigation strategies.

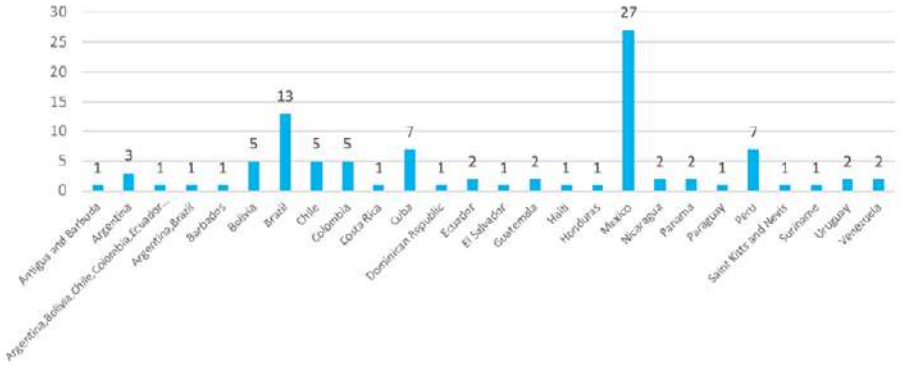
1.1
CULTURAL HERITAGE IN LAC CITIES

Latin America and the Caribbean (LAC) are home to an ample cultural heritage that takes form in natural and cultural assets, both tangible and intangible. As of today, there are 1092 properties on the World Heritage List, 141 (12.9%) of which are located un LAC. Of these 141 properties, 96 correspond to cultural assets whilst 38 to natural assets and 7 missed properties. The 96 cultural sites are distributed across the region as explained in Figure 1. Mexico is the country that holds the greatest number of inscribed properties, followed by Brazil, Peru and Cuba. On the other hand, among all LAC countries a very few do not have properties inscribed in UNESCO's heritage list, including Bahamas, Dominica, Granada, Jamaica and others.[1]

FIGURE 2

LAC World Cultural Heritage Sites Map

Source: Author's elaboration based on UNESCO WHS List



[1] A total of 5 cultural sites are listed as in risk by UNESCO in LAC; (i) Caribbean Coast Fortification in Panama; (ii) the Salitreras de Humberstone and Santa Laura offices located in Chile; (iii) the archaeological zone of Chan Chan, in Peru; (iv) the Coro and its Port in Venezuela and; (v) The City of Potosí located in Bolivia. Main reasons for being listed as in-risk sites include lack of preservation and general deterioration.

LAC's World Urban Heritage is spread among a vast number of cities and settlements across the region but specially concentrated in historic centers. Cities combine the pre-Columbian heritage with influences from Colonial times in the 16th century. According to the IADB, tangible urban heritage in LAC can be classified in four groups: (i) Cities; (ii) Historic centers; (iii) Historic neighborhoods and; (iv) Monumental complexes. Most of the regions urban heritage is concentrated in historic centers, home of a rich collection of buildings, monuments and historic sites. There are 42 cities in the region that have their historic center inscribed by the UNESCO as World Heritage (See Annex 4) and 60 sites in total, including cities, centers, neighborhoods and monumental complexes. In all, the region is home to X cities considered as World Heritage Cities by UNESCO's City Program (see Annex 7).

TABLE 4

Urban World Heritage Sites in LAC (organized based on IADB's classification)

Source: Author's elaboration based on UNESCO database

Region	Country	Historic City	Historic Center	Historic Neighborhood	Monumental Complexes
Central America and Mexico	Guatemala		1		
	Panamá		1		
	Mexico	2	7		7
Caribbean	Barbados		1		
	Cuba		4		1
	Dominican Republic	1			
	Curaçao		1		
South America	Argentina				3
	Chile	1		1	1
	Uruguay		1	1	
	Bolivia	1	1		1
	Brasil	3	5		4
	Colombia		2		
	Ecuador		2		
	Paraguay				1
	Perú		3		
	Venezuela		2		
	Surinam	1			
Total		9	31	2	18

Historic centers and urban heritage are categorized under international classifications, as well as under local agreements, increasing the regions vast heritage. Besides the UNESCO World Heritage classification, many countries in the region

have developed local classifications to protect and safeguard urban heritage, including Historic Centers. In all, almost 600 historic centers (IDB, 2018) across the region have been declared as Historic Sites and Heritage by local legislation. In Colombia (among others including Brazil, Mexico and Central America) the national government enacted a national policy in 2013 that creates a framework for the development of Local Conservation Plans to safeguard historic centers in 44 cities across the country. These cities range in size, as well as in technical, financial and institutional capacities, thus presenting diverse challenges and opportunities.

As in the rest of the world, cultural heritage plays an important role as a reflection of cultural, historical, and social values in LAC. However, cultural heritage is also important in promoting economic development, and can be a valuable accelerator for economic growth mainly through the promotion of cultural tourism. In LAC, tourism is a growing sector of the economy: in 2017 the tourism sector generated a total GDP contribution of 8.6% and 15.2% respectively (including direct and indirect effects), 7.3% and 19.8% of total exports, and 6.3% and 12.9% of capital investments (WTTC). In line with these figures, many cities across the region invest in cultural events and industries, and in cultural heritage with the purpose of improving their image and attracting new tourists and investors. Because of social and cultural diversity across and within LAC countries, the relevance and value vary but in all its essential pillar of sustainable development.

1.2
CHALLENGES FOR PRESERVING URBAN HERITAGE IN LAC

According to UNESCO (2017), LAC heritage faces a series of challenges for its conservation and "puesta en valor" that must be seen as an opportunity to enhance its economic and social potential, contributing to sustainable urban development. Challenges include: (i) Attend all heritage including colonial, modern and pre-columbine; (ii) integrate heritage to its changing urban context, especially extensive urbanization, and fragmented and inequal cities; (iii) continue to promote urban regeneration especially through public space; (iv) strengthen the inclusion of diverse actors and new associations/citizenships under the leadership of the public sector; (v) give response to housing needs in heritage areas under gentrification and abandonment challenges. However, this list is not necessarily extensive and excludes other factors and hazards and pressures that threaten its conservation.

Urban heritage in LAC faces similar challenges to those in other regions of the world (Amirtamasebi, 2015). Rapid urbanization in LAC[2], accompanied by globalization, has triggered a harmful process against cultural heritage and local identities in the region, evidenced in the deterioration and abandonment of

[2] Urban population during the 1950s accounted for 40% of total population, as of today LAC is the second most urbanized region of the world with over 80% of its population living in urban areas.

its heritage sites, citizen misappropriation, the struggle and lagging of cultural industries and the depopulation of central and historic areas towards new urban lifestyles. The process of economic and social decline usually starts with abandonment and lack of maintenance of historic structures, leading to physical obsolescence. This is followed by out migration of the local population to the peripheral areas and newer parts of the city, while the rise of crime, pollution and social segregation, making these areas home to vulnerable segments of the urban population. These changes in demographics and intra-urban migration are then coupled with lack of effective governance, efficient land-use plans, ineffective transportation patterns, and deficient maintenance of historic structures and neighborhoods.

During the 20th century, many of the residences and monuments within the regions' historic centers were abandoned in favor of new centralities. As the following figure demonstrates, sprawl and peri-urbanization have become common patterns for urban growth in LAC, sapping the vitality of historic city cores. Businesses followed higher income residents to the suburbs, which led to lower income households and informal businesses taking over some of the historic buildings, while others were left vacant. To make housing affordable, new residents subdivided the historic buildings, while informal commerce set up in public spaces. Due to lack of maintenance and abandonment of buildings, historic structures deteriorated and became physically obsolescent, which was eventually followed by economic decline and social problems such as insecurity, prostitution and crime.

The risk faced by LAC's heritage resides in the social and physical vulnerability that shape heritage, and the institutional challenges to preserve it. On the one hand the eminent decay over time, secondly the threats that urbanization and its externalities pose, like population shifts, urban voids, decay, insecurity, lack of ownership; and thirdly, due to the evolution and positive shift to better quality of like standards that pushes heritage away. Human-created hazards such as unsustainable tourism, uncontrolled urbanization, and poor management already constitute serious threats cultural heritage in LAC. New risks like climate change and natural disasters make preservation even more complex and challenging, especially for cities located in countries and areas with high exposure to natural hazards and with weak cultural and disaster risk management institutional and normative frameworks, and insufficient resources (Gad Bigio, et al., 2014). LAC countries are inhabited by higher income residents; real-estate values are high, and regulations and institutions are stronger for their protection and conservation. Conversely, in lower-middle- and low-income countries, heritage are mostly inhabited by poorer populations; real-estate values are low, and resources for conservation are rarely sufficient.

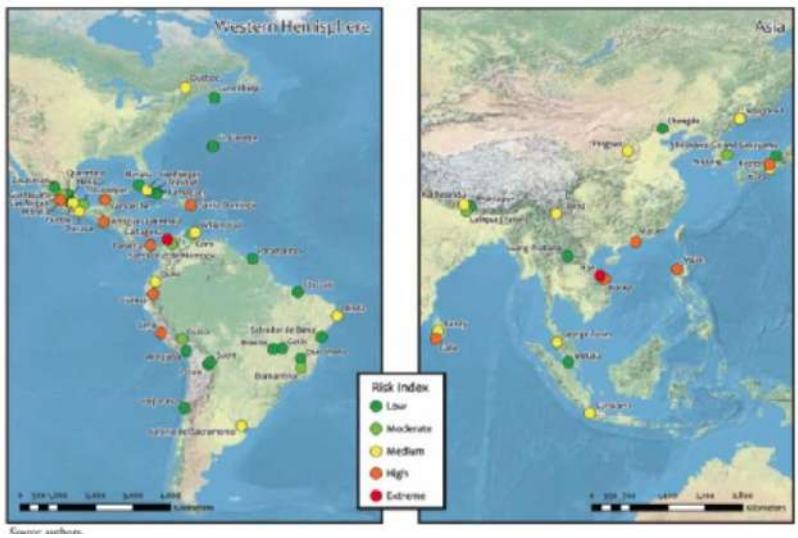
A recent study by the World Bank overlaid World Heritage Cities (WHC) in LAC, with climate change and natural disaster risks, offering a valuable overview of natural hazards and risk to heritage (Gad Bigio, et al., 2014). Coastal cities across LAC (e.g., Cartagena, Santiago de los Caballeros, Rio de Janeiro), are exposed to

increasing sea-level rise, storms, flooding and coastal erosion risks threating to affect cultural heritage located near the coasts. Other cities in the region may be exposed to the impacts of increased precipitation and extreme weather vents, usually manifested in flooding, landslides or even glacier melt (e.g. Quito). Cities in LAC where heritage lays are usually more vulnerable than modern cities across the region due the fragility of the historic urban fabrics because of their form, materiality and lack of maintenance, as well as the fragility of historic buildings usually located in these areas.

FIGURE 4

Assessing Multi-hazard risks in World Heritage Cities in LAC (Cartagena red)

Source: (Gad Bigio, et al., 2014)



1.3

ASSESSING URBAN HERITAGE RESILIENCE IN LAC

Urban risk in Latin America is driven by two main factors: natural hazards and weak urban management (Watanabe, 2012). Exposure to natural hazards varies across countries but all are equally intensified by climate change, as evidence during the recent years. These hazards are intensified and increased by the cities weak capacities to plan and regulate urban development, from location in hazardous areas, lack of provision of social housing to building regulations[3]. In the context of cultural heritage in LAC; heritage sites are mainly exposed to risks due to their location and to the limitations that city and national government

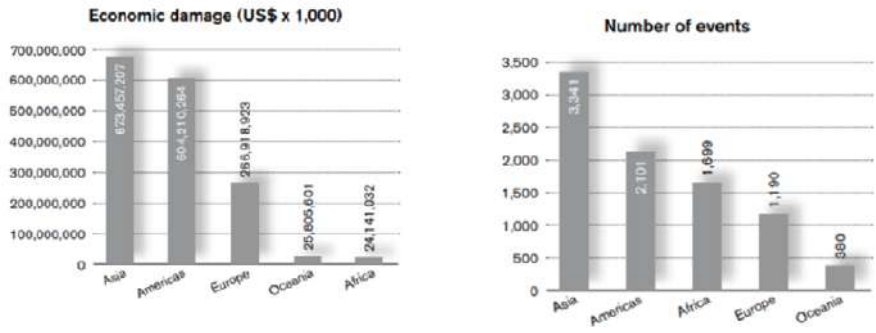
[3] More than 110 million urban dwellers live in informal settlements across LAC that are highly vulnerable to disasters. Approximately 80% of the impacts of disasters in the region are felt in the cities, affecting the poorest populations hardest (Watanabe, 2012).

have to preserve and protect heritage, especially in anew scenario where climate change and other natural hazards are exposing heritage to new challenges. This section presents a general overview of the main hazards to which heritage and cities in LAC are exposed to, the vulnerabilities and state of conservation of World Heritage Sites as an illustration of the region's heritage vulnerabilities and finally makes a description of the main institutional frameworks related to heritage and disaster risk management.

1.3.1
Common natural hazards in LAC cities and potential exposure to Cultural Heritage

Natural hazards in LAC, especially those exacerbated by climate change, are becoming more frequent and intense (Gad Bigio, et al., 2014). As a result, historic heritage sites that have long standing for hundreds of years across the region are now threatened by new challenges (World Bank, 2017). Climate change and natural disasters are already intensifying complex tests related to heritage preservation, and specific geographic locations and urban development characteristics and conditions make heritage sites more vulnerable (WB, 2017). According to the World Bank, LAC region is second only to Asia in terms of number of disaster events and economic damage caused by disasters.

FIGURE 5
Global Data on Disaster
Source. (World Bank, 2012)



Among natural hazards commonly classified -biological, geophysical, meteorological, hydrological and climatological- LAC cities are exposed to all (World Bank, 2012)[4]. LAC region and its cities faces a wide variety of natural hazards. Most of these, are exacerbated not only by climate change and variability but especially by El Niño/ENSO (El Niño/La Niña Southern Oscillation) phenomenon. According to the World Bank's Natural Disaster Hotspots study (Dilley et al. 2005), indicates that seven among the world's top 15 countries exposed to three or more haz-

[4] For the purpose of this analysis, we will focus on the later four.

ards are located in LAC, and 15 among the top's 60 countries exposed to two or more hazards are LAC. El Salvador, Jamaica, the Dominican Republic and Guatemala, all have more than 90% of their GDP and their population in Areas at Risk (World Bank). These countries, located in Central America and the Caribbean are exposed to natural hazards, especially geophysical and hydrometeorological.

According to the World Risk Index (WRI), global hotspots for disaster risk are found in Oceania, Southeast Asia, Central America and Central and West Africa. These areas have very high danger-exposure levels due to the threat of natural disasters such as earthquakes, hurricanes, flooding, drought and/or sea level rise, alongside frequently high levels of vulnerability." Among all countries analyzed within the LAC region, 9 are ranked as in "very high" level or risk by the GRI, 3 in high risk, 5 at medium and only 6 in low. Central American and Caribbean countries lead the very high-level group ranking, with Chile is the lone South American (Bündnis Entwicklung Hilft, 2017).

TABLE 5

World Risk Index for LAC countries located in "very high" and "high" levels of Risk (2012-2016)

Source: (Bündnis Entwicklung Hilft, 2017)

Country	Rank	Risk	Exposure	Vulnerability	World Heritage Rank
Guatemala	4	20.46	36.3	56.36	
Costa Rica	7	17.16	42.61	40.28 (L)	
El Salvador	9	16.74	32.6	51.36 (M)	
Nicaragua	14	14.88	27.23	54.64	
Jamaica	19	12.08	25.82	46.79	
Haiti	21	11.89	16.26	73.11	
Chile	22	11.74	30.95	37.93 (L)	
Dominican Republic	26	11.34	23.14	49.01	
Honduras	31 (VH)	10.82	20.01	54.09	
Suriname	48	8.48	18.12	46.80	
Ecuador	60	7.66	16.15	47.45	
Panama	67 (H)	7.43	16.45	45.15	

Between 1970 and 2011, the Americas accounted for 2,537 events, equivalent to 24% of all events, only second to Asia (ECLAC, 2014). Among subregions, South America accounted for 33% of all events, followed by North America (29%), Central America and Mexico (22%) and the Caribbean (16%). Among these regions, the most common hazard from where disaster was originated corresponds to meteorological and hydrological hazards, which represented between 65% and

91% of all events (Table 6). Across continental subregions there is a general distribution of all originating events, with a range between 20-25% accounting for geophysical events, and between 65-80% corresponding to meteorological and hydrological. Hurricanes and storms were the main originating event in Mexico and the Caribbean, while Flooding in Central and South America.

TABLE 6

LAC disasters by region and origin, 1970-2011 (%)

Source: (ECLAC, 2014)

Hazard		Central America	Mexico	Caribbean	South America
Geophysical	Earthquakes	11.5	12.2	2.4	9.8
	Mass movements	4.4	5.1	1.2	13.4
	Volcanic eruptions	5.2	4.1	2.0	3.7
	Subtotal	21.0	21.3	5.6	26.9
Meteorological and hydrological	Hurricanes and storms	23.0	38.1	57.9	8.1
	Flooding	38.3	27.9	27.6	45.9
	Droughts	7.1	3.6	4.9	5.7
	Extreme temperatures	1.4	7.6	0.0	5.0
	Subtotal	69.7	77.2	90.5	64.8
Biological	Epidemics and plagues	9.3	1.5	3.9	8.4
Total		**100.0**	**100.0**	**100.0**	**100.0**

LAC has been home to many major natural disasters since the beginning of the 20th century. Among those Haiti's 2010 earthquake stands out as the deadliest of all events (200.000 killed), droughts in Brazil during the 80s accounted for the most affected people (more than 30 million) and the recent 2010 earthquake in Chile account for the most damage, with over 30,000 US million if estimated economic losses.

TABLE 7

Major natural disaster in LAC since 2008 (organized by type and total damage)

Source: Author's elaboration based on EM-DAT (2018)

Year	Disaster type	Country name	Total deaths	Total affected	Total damage ('000 US$)
2014	Drought	Brazil		27000000	5.000.000
2018	Drought	Argentina			3.400.000

2012	Drought	Brazil		4000000	1.460.000
2010	Earthquake	Chile	562	2671556	30.000.000
2017	Earthquake	Mexico	467	1456250	8.300.000
2010	Earthquake	Haiti	222570	3700000	8.000.000
2016	Earthquake	Ecuador	673	389511	2.000.000
2013	Extreme temperature	Chile			1.000.000
2017	Flood	Peru	200	2188505	3.200.000
2007	Flood	Mexico	22	1655000	3.000.000
2011	Flood	Colombia	273	1487523	2.320.000
2015	Flood	Chile	178	193997	1.500.000
2013	Flood	Argentina	52	350000	1.300.000
2008	Flood	Brazil	200	1752391	1.110.000
2016	Flood	Argentina		85769	1.002.000
2011	Flood	Brazil	978	1215600	1.002.000
2011	Flood	El Salvador	35	300000	1.000.000
2010	Flood	Colombia	418	2796560	1.000.000
2017	Storm	Puerto Rico	66	750000	68.000.000
2017	Storm	Cuba	10	10000000	13.200.000
2005	Storm	Mexico	47	2969571	7.910.000
2010	Storm	Mexico	43	555075	5.900.000
2013	Storm	Mexico	210	172000	5.702.000
2008	Storm	Cuba	7	499464	3.572.000
2016	Storm	Cuba		190000	2.600.000
2014	Storm	Mexico	19	144135	2.541.500
2005	Storm	Cuba	20	2600000	2.100.000
2016	Storm	Haiti	546	2100439	2.000.000
2017	Storm	Dominica	64	71393	1.456.000

Dating back to 2008, natural and man-made disasters have had considerable effected on cultural heritage in LAC. Table 8 presents a list of recent disaster that had significant damage in cultural heritage. In each case, the impact went beyond direct damage to heritage assets to include considerable economic losses (direct and indirect) and impacts on livelihoods.

TABLE 8

Major disasters with impacts in Cultural Heritage

Source: Author's elaboration based on EM-DAT and various sources

Year	Country	Hazard	Descriptions
2017	Mexico	Earthquake	Ciudad de Mexico, Puebla

2017	Perú	Floods	Trujillo, Ruinas de Chan Chán.
2017	Puerto Rico	Huracane	San Juan
2010	Chile	Terremoto	Curicó y Talca

1.3.2
Assessing Urban Heritage resilience in LAC

According to UNESCO's State of Conservation (SOC) report, since the 1980s a total of 68 properties located in the LAC region have been examined by the World Heritage Committee (UNESCO, 2014). These 68 properties represent 52.7% of all the properties of this region inscribed on the World Heritage List and are located in 23 States Parties. 65% of these properties are cultural; 31% are natural and 4% mixed. Properties of the LAC region represent 14% of all properties examined through the SOC process and 13% of the properties inscribed on the World Heritage List.

Latin America and the Caribbean cultural heritage are subject to a number of main groups of threats more than any other region (UNESCO, 2014). This include climate change and severe weather events, sudden ecological or geological events, biological resources use/modification, transportation infrastructure as well as social/cultural uses of heritage. On the contrary, it seems to be significantly less subject to physical resources extraction than other regions.

75% of LAC cultural properties analyzed by the SOC are threaten by a lack of management and institutional factors (UNESCO, 2014). This threat not only includes the lack of document or system, but also inadequate ones, or lack of implementation. The second most reported threat in the region relates to housing (43%) such as the development pressures on the historical centers for example, or uncontrolled urban development. All the relevant secondary factors reported affect a significant percentage of the properties: inadequate or inexistent legal framework (41%), lack of or insufficient financial resources (26%) or human resources (21%). The negative impact of tourism/visitor/recreation is also high across LAC and affects 29% of the properties examined. This factor should be observed in relation with the 21% of the properties impacted by the development of major visitor accommodation and associated infrastructure, adding up to 40%, locating tourism as the 4th highest threat factor.

TABLE 9

Distribution of properties on LAC region examined through the SOC process between '85 and '13

Source: (UNESCO, 2014)

Threats	Number of properties affected	% of properties affected
Management systems/ management plan	51	75%
Housing	29	43%

Legal framework	28	41%
Impacts of tourism/visitor/recreation	20	29%
Ground transport infrastructure	19	28%
Financial resources	18	26%
Illegal activities	15	22%
Human resources	14	21%
Land conversion	14	21%
Major visitor accommodation and associated infrastructure	14	21%
Identity, social cohesion, changes in local population and community	14	21%
Management activities	14	21%
Effects arising from use of transportation infrastructure	12	18%
Storms	11	16%
Livestock farming/grazing of domesticated animals	10	15%

Natural hazards and threats have had an important impact in cultural heritage in LAC. The LAC region is the only one where storms represent a high threat to the properties, impacting 16% of the properties examined. In addition to this, although it is not one of the major threats to World Heritage in the region, it is worth noting that properties have been affected by earthquakes, much more than other regions in the world, including Europe. According to the SOC Report, since 1985, 12% of all properties examined in the region have been affected by such geological event while it represents a threat to 2-6% of the properties in other regions (UNESCO, 2014).

Lastly, LAC cultural heritage presents a high cumulative impact of factors compared to other regions. Globally, on average there are 5.1 threats reported per property examined through the SOC process, however in Latin America and the Caribbean this rate increases to 6.3.

1.3.3
Cultural Heritage and Disaster Risk Management institutional and normative frameworks

The international community has designed guidelines and recommendations that seek to help countries to develop laws, policies and administrative practices that protect the cultural and heritage (Prott, 1998). UNESCO has established various treaties which include: (i) the convention for the protection of cultural property in the event of armed conflict and rules of procedure for the implementation of the Convention (1954); (ii) Convention to prohibit and prevent the import, export or illicit sale of cultural property (1970); (iii) Convention on the protection of the world cultural and natural heritage (1972); (iv) Convention for

the safeguarding of the intangible cultural heritage (2003). Additionally, there are a total of eleven recommendations relating to the protection of the cultural heritage, as well as recommendations in other fields, which are binding for Member States and their subsequent transmission to the authorities National (Prott, 1998).

Based on international practice countries in LAC have commitment to the protection of cultural heritage by creating normative structures aligned with international frameworks. With the creation of the Convention on the protection of the World Cultural and Natural Heritage in 1972, countries began a process of maturity in matters of legislation and institutional frameworks related to cultural heritage, which, although are different for each of the countries of LAC, they were responsible for promoting analysis, guidance and implementation of measures that will help to safeguard of the National Cultural heritage.

A two-phase policy framework can be found across LAC countries: firstly, policies aimed at monitoring and building inventories of cultural assets and secondly policies aimed at the development of actions that protect and preserve the cultural heritage. In regard to the first group, countries have adopted regulations that seek to implement tools for the elaboration of heritage inventories, in order to identify, document and display all goods and cultural manifestations. This is required to build knowledge, ownership, valuation and strengthening management on heritage at local and national level. The classification of heritage can be divided into three main groups: first, movable cultural property; second, immovable cultural property; and third, intangible cultural manifestations. Some of the most significant examples in LAC are those carried out by countries like Brazil, Guatemala, Mexico, Colombia and Chile, where efforts to make a registration on the types of heritage, has been standardized through registration systems that provides analysis and definition. Many inventories have not been conducted on digital platforms, but online list can be found for some countries with ease.

The second group of policies aims for the protection of the cultural heritage, mainly focused on the preservation, sustainability and promotion of heritage at the national and local levels. Normative frameworks in this group includes laws, decrees, plans and projects that follow a regular and hierarchical management scheme, and seek to generate commitment from different actors to safeguard heritage. In LAC, some countries have emphasized the protection of historic monuments, while others focused their efforts on the protection of the urban environment, including historic areas. Initially heritage conservation followed a building-element approach, with disregard to the context and environment surrounding the monuments and buildings. This particularly change with the introduction of the Charter of Venice, that gave framework to the first initiatives to safeguard historic centers, like the case of Mexico, Barrio de San Telmo in Buenos Aires, the Colonial Lima among others. This paradigm change generated a shift and evolution on the practice of protecting heritage, opening the door for restoration, conservation and reconstruction (Gutiérrez Viñuales, 2009).

Most LAC countries count with a lead institution in charge of Cultural Affairs, however not all of them include heritage management as a core division or department. It should be noted that the countries of LAC have established departments of Government whose main objective is to contribute and promote the sustainable development of the heritage from the formulation and adoption of policies, plans and programs. These institutions have focused on promoting heritage and culture, and are in charge of specific tasks ranging from the generation of policy or technical and administrative standards to the protection of the heritage field, by means of specific actions for the care of heritage property.

Although the region counts with solid institutional and normative frameworks for cultural heritage conservation on the one hand and disaster risk reduction on the other, such have not been integrated. An ample number if not all countries in LAC have built valuable conservation frameworks and policies to preserve their cultural heritage over the last century, building on UNESCO's conventions and guidelines. Good examples of this can be seen in countries like Mexico, Brazil, Chile and Guatemala, were the national government, private sector and the academia have successfully institutionalized heritage preservation and conservation not only in national legislation but via local initiatives like the ones led by Mexico City, Ciudad de Guatemala and a number of cities in Brazil. On the other hand, but most recently, countries across LAC have created and solidified frameworks for Disaster Risk Reduction (DRR) and even in some cases already for Climate Change Adaptation (CCA). Best practices include Colombia, Chile and Mexico. However, the region is lagging in connecting and integrating both frameworks to further protect urban heritage and develop adaptation and resilient capacities that can withstand shocks and stresses, mainly from exacerbated natural hazards.

Resilience, as a concept and policy framework has yet to be institutionalize in planning and policy across LAC, however efforts led by the international community and specific cities are strong precedents. Currently, 16 cities across Latin America are members of the 100 Resilient Cities network (The Rockefeller Foundation, 2018) [5]. One particular case that stands out is the City Resilience Plan of Santiago de los Caballeros in the Dominican Republic. Although not included in UNESCO's WHS list, Santiago is one of the oldest cities in LAC, one hit hardly by earthquakes during its history and currently exposed to hydrological and climatological hazards as most of the region. Santiago's Plan includes as one of its main pillars the promotion of culture and tourism, and as one of its principal goals to: (i) Rehabilitate the Historic Downtown and (ii) Develop a Municipal Cultural Agenda, that includes the recovery of archi-

[5] The list includes: Ciudad Juarez, Guadalajara, Colima and Mexico City in Mexico, Medellin and Cali in Colombia, Panama City, Santiago de los Caballeros in the Dominican Republic, Quito in Ecuador, Salvador, Rio de Janeiro and Porto Alegre in Brazil, Buenos Aires and Santa Fe in Argentina, Montevideo in Uruguay and Santiago in Chile.

tectural heritage. Santiago's Plan offers a good example of the co-benefits that resilience and cultural heritage have when linked together, and the opportunities that these synergies can bring for investing in cultural heritage while levering resilience and economic development.

WORKING DOCUMENT 4[1]

The case of New Orleans*

**These documents are not for citation.*

[1]The notes presented in this document have been prepared by Jared Genova, Luis Saenz, Jesús Navarrete y Rodrigo Caimanque. The contents developed will be part of an IDB publication named "Cultural Resilience and the City" (Forthcoming, 2019).

1. Case Study: New Orleans, Louisiana

Around the world, the shocks and stresses that threaten our cities are only compounded by the fragility of our cities' cultural heritage. It sometimes takes a major shock to expose this fragility, especially in places that we take for granted as tenacious cultural icons. For New Orleans, Hurricane Katrina in 2005 was the major shock that made it clear that the heritage city's future was not a given.

The New Orleans resilience story does not begin with Hurricane Katrina, but rather more than 300 years earlier, when Native Americans were finding ways to adapt to a challenging deltaic landscape of cypress swamps, tropical diseases, regularly breached natural river levees, and severe storms. For early settlers of the Mississippi River Delta region, a culture of response and adaptation was critical for survival. Very quickly after Europeans arrived in the Gulf Coast and Southeast Louisiana, it became clear that while the natural environment held great bounties and potential trade linkages to the rest of the continent, it was also to be a major threat to daily life in the colony.

For generations, living with water and a shifting environment was a part of cultural heritage in Louisiana, expressed through architecture, the built environment, and water management techniques. Throughout three centuries of boom and bust economic cycles and aggressive infrastructure development, much of that culture of response and adaptation to a changing swampy environment was gradually transferred to engineering advances, such as levees, pumps, air conditioning, and mosquito repellent. These advances made further development of the city possible, but arguably helping Louisianans to forget critical strategies for living in a swampy delta for decades. Recent years, especially since Hurricane Katrina, have seen a rekindling of this culture, thanks in part to large-scale resilience planning efforts and education programs to reconnect New Orleanians and Louisianans to their natural heritage.

Amid the threat of natural disasters and extreme social conditions, including slavery, oppression, massive immigration, and extractive economic practices and policies, diverse New Orleanians created other creative cultural practices that became the heritage we know today. From Mardi Gras, to second lines, to jazz, to bounce music, to shotgun houses, to Bourbon Street, to gumbo, to po-boys, to étouffée, New Orleans has a well-developed, diverse, and recognizable cultural heritage that was born out of response, adaptation, resilience, and celebration through major shocks and stresses. Today, the city's resilience in the wake of disasters like Hurricane Katrina's flooding is arguably directly attributable to its strong and unique cultural heritage.

1.1
NATURAL AND SOCIAL HISTORY OVERVIEW

Often dubbed the northernmost Caribbean city for cultural and geographic reasons, New Orleans sits within North America's largest river and delta com-

plex—the Mississippi—and at a series of natural and engineered entrances to the Gulf of Mexico. The land that New Orleans sits on today is some of the newest land in the world, having been carried down the Mississippi River as silt for approximately 7,000 years and deposited on the edge of the continental shelf. Southeast Louisiana's location on the warm waters of the Gulf of Mexico and its deltaic soil composition create conditions that elevate the risk posed by major storms, floods, and unstable ground, which serve only to underscore the importance of New Orleans as a commercial port and cultural icon. From the 18th through the 20th centuries, hurricanes, fires, and tropical disease outbreaks periodically decimated New Orleans, but the port city continued to grow and develop under French, Spanish, and United States control. By the 19th century, New Orleans was the nation's largest slave trading port, with a staggering amount of wealth built on the backs of slaves. The city grew quickly under United States control after the Louisiana Purchase in 1803, becoming the largest city in the South and one of the richest in the country. Beginning with slavery, extending to commodities such as cotton, and eventually rising again in oil and gas exploration, New Orleans has a long history of resource extractive economies as a port city.

New Orleans developed a strong and diverse African American cultural heritage that we celebrate today as unique to New Orleans. This was generated through major waves of immigration from the Caribbean and at least through the mid-19th century, a large, imported slave population from West Africa, and the South's largest population of free people of color, The second half of the 20th century saw a declining population as major industries did not site in New Orleans and trade traffic was diverted to other growing ports like Houston and Miami. New Orleans' restrictive geography also did not allow it to develop the extent of suburban sprawl that Atlanta or Houston did, so investment dollars went elsewhere. The city's population peaked in the early 1960s above 600,000 people, and was only around 400,000 at the time of Hurricane Katrina.

1.2
CONTEMPORARY SHOCKS AND STRESSES

Hurricanes

New Orleans, if absent from prominent national and international consideration for much of the latter part of the 20th century, was thrust back into the foreground in August 2005 as massive Hurricane Katrina was forecast to make a direct hit in Southeast Louisiana. Hurricane Katrina and the subsequent infrastructure failures that caused more than 80% of the city to flood are the most well-known shocks in the city's recent history and served to re-expose many of the underlying stresses experienced for generations, but other major shocks since Katrina have continued to serve as a reminder that threats are always possible. Just weeks after Katrina, Hurricane Rita swept through Lou-

isiana, in 2008, Hurricane Ike threatened the Gulf Coast and Hurricane Gustav incited a mandatory evacuation in New Orleans. In 2012, Hurricane Isaac stalled over New Orleans and power outages plagued the region for more than a week.

Other Shocks

Hurricanes and related infrastructure failures, including broken levees, pumps, and canals, are not the only shocks that New Orleans and its people have endured recently. In 2010, BP's Deepwater Horizon oil drilling platform exploded, causing oil to gush from an offshore well for almost five months into the Gulf of Mexico off Southeast Louisiana. The disaster had wide-reaching effects on health and livelihoods and long-term consequences are only beginning to be fully understood. In February 2017, an EF-3 tornado touched down in New Orleans East for the first time, challenging New Orleanians' ideas of what types of hazards are possible in Southeast Louisiana. Other shocks are not just local. The financial crisis that began in 2008 sent a shock to the New Orleans economy and the subsequent recession arguably tempered a post-Katrina economic boom.

Contemporary Stresses

The recession that followed the 2008 economic shock is emblematic of one type of longer-term stress that a city experiences, but others are not linked directly to a single shock and can last generations. Many of the stresses experienced today in New Orleans cannot be separated from the legacy of slavery and racism. By the early- to mid-19th century, New Orleans was the site of the continent's largest slave trading market and the large-scale development of the city is due in large part to the oppressive and extractive economic practices of a plantation economy. Today, more than 150 years after the abolition of slavery, generational poverty still persists along racial lines in New Orleans, with African-American residents earning substantially less than white counterparts, experiencing higher levels of unemployment, and lower educational attainment. This is compounded by latent structural racism and the continued presence of overt racist attitudes.

The city's geography also creates long-term stresses for the city. Without the benefit of silt-recharging deposits from the Mississippi river, the deltaic soils of Greater New Orleans are gradually compacting and sinking, known as land subsidence. The shifting and sinking soils regularly cause infrastructure problems, cracking streets and breaking pipes. Some of the drained swamps upon which the city is built today sit at more than 10 feet below sea level, surrounded by levees and served by aging drainage pumps. Combining land subsidence and the effects of climate change, Southeast Louisiana is experiencing the highest level of relative sea level rise in the world. Some of these stresses can lead to shocks, especially considering the aging water, sewer, energy, and transportation infrastructure, which can contribute to a sense of instability for development investment and only compounding the original problem.

1.3
THE NEW ORLEANS RESILIENCE PLANNING STORY

Soon after the devastation of the floods of Hurricane Katrina, countless charities, non-profit organizations, advocacy groups, and philanthropic institutions pledged money, volunteer labor, development projects, and more to New Orleans. These efforts were critical to enabling the city to stabilize after catastrophe and to set the pace for recovery and rebuilding for years to come. Relatively few groups, however, pledged planning support, and those that did early on fell victim to many of the classic pitfalls of top-down and crisis-induced decision-making processes.

Post-Katrina Planning Processes

Planning immediately after any major disaster is often a fraught and divided exercise, when the most vulnerable are almost certainly unable to participate or even be evaluated fairly and in a vacuum of policy and leadership, external interests with organized agendas can quickly gain power. The post-disaster period is also often appropriately a time of heightened emotions and fears, so radical changes can be quickly rejected. In New Orleans, the Bring New Orleans Back Plan was the first major report released after Katrina and it called for the investigation of shrinking the footprint of the city. In a time of crisis when thousands of families—mostly African American—could still not return home, the delivery of this message was seen as insensitive, reactionary, and racist, ruining any attempt to enact the plan's proposals.

The Unified New Orleans Plan (UNOP) was an attempt to bring together different divided groups after the fiasco of the Bring New Orleans Back Commission's report. The major innovation during the UNOP process was mass community engagement, including meetings conducted in cities around the country to serve those who still had not been able to return home after Katrina. The Rockefeller Foundation was a major funder for this planning process, which resulted in massive participation rates and detailed descriptions of visions for the future of the city.

Recovery Infrastructure Investments

Since Hurricane Katrina and the catastrophic failure of critical flood protection infrastructure, New Orleans has been the site of massive infrastructure investments, including a $14.5 billion overhaul and upgrade of the regional storm surge risk reduction system. Known as the Hurricane and Storm Damage Risk Reduction System (HSDRRS), the engineered improvements have significantly shortened the surge-exposed length and increased the height of levees, canal walls, and gates in five Southeast Louisiana parishes, including New Orleans. Additionally, major drainage infrastructure investments to increase the capacity of the city's stormwater system were planned and began implementation. Other investments, such as public housing redevelopments, public space improvements, and street reconstructions also flourished during

this time due to a massive amount of federal recovery funding directed to the city and state in the years after Katrina.

1.4
RESILIENCE PLANNING IN NEW ORLEANS

New Orleans has used a variety of resilience frameworks in its planning evolution since Hurricane Katrina. Of the three framework types depicted in the part 1 of these documents, the City of New Orleans has directly utilized disaster risk reduction and mitigation (DRRM) and urban-holistic frameworks since Hurricane Katrina. Some civil society and academic organizations are using social-ecological frameworks, but they have not yet been actively used in city government contexts.

Because of the clear threat posed by hurricanes and other major disasters, disaster risk reduction and mitigation frameworks have been regularly employed. The predominance of the US Federal Emergency Management Agency (FEMA) and US Army Corps of Engineers funding during recovery and particularly FEMA's focus on hazard mitigation in the wake of storms helped bolster DRRM framework use among the City of New Orleans Office of Homeland Security and Emergency Preparedness (NOHSEP).

These frameworks along with the experience of Hurricane Katrina have yielded preparedness, response, and hazard mitigation plans for the City that govern federal pass-through funding and private property investments, such as home elevations, in areas that experience regular flooding losses.

The Greater New Orleans Urban Water Plan was one of the first attempts to address water management as an existential issue for the region. Released in 2013, it was funded and developed outside of city government to address stormwater and groundwater as critical to the region's urban resilience. It laid the groundwork for more comprehensive social and ecological planning processes.

Resilient New Orleans

In 2013, at a meeting of the Clinton Global Initiative, the Rockefeller Foundation pledged $100 million to investing in the resilience of cities worldwide. At the launch, Former President Bill Clinton and Judith Rodin, President of the Rockefeller Foundation were joined by then-New Orleans Mayor Mitch Landrieu, reaffirming the city's relationship with the Rockefeller Foundation and commitment to future-oriented resilience planning.

Using the guidance of the 100 Resilient Cities City Resilience Framework, the City of New Orleans undertook extensive research into the many post-Katrina planning processes. This was made to find common themes and then consulted with stakeholders across the public, private, non-profit, philanthropic, and civil society sectors to identify short-term actions for long-term results. The resulting strategy, *Resilient New Orleans, was comprised of 41 actions across three major visions: Adapt to Thrive, Connect to Opportunity, and Transform*

City Systems—addressing environmental, socio-economic, and organizational resilience together for the first time.

The 10th anniversary of Hurricane Katrina, known locally as K10, was a major multi-day event organized by the mayor's office that began with the launch of Resilient New Orleans as a symbolic pivot from recovery to resilience. At that launch, New Orleans became the first city in the world to release a dedicated city resilience strategy1. Resilient New Orleans was awarded the American Planning Association's National Planning Award for a Best Practice in 2016 because of its holistic and comprehensive approach to applied planning practices. Since then, cities around the world have leveraged the New Orleans planning experience to develop their own resilience strategies. As of September 2018, 27 official city resilience strategies have been released across the Americas using the same or similar methods and frameworks to New Orleans. Thirteen of the 27 are from Latin America.

Building on Resilient New Orleans

Since the launch of Resilient New Orleans, the City has been able to leverage the concepts of resilience planning to secure funding, launch projects, and set up monitoring structures for resilience programs. After incubating a resilience team in a quasi-governmental agency, the New Orleans Redevelopment Authority, a formal Office of Resilience and Sustainability was set up in the city government structure to address the implementation of the strategy's actions and those inspired by the visions. Because the City went through the process of developing a holistic resilience strategy, it was able to leverage the work done to apply for funding opportunities, including to federal government agencies like the Department of Housing and Urban Development. The goals of the strategy were leveraged into more than $200 million worth of infrastructure, social, and service delivery projects within two years.

To support ongoing projects and the development of future strategies, the City of New Orleans is a member of a variety of peer-city networks. This includes the 100 Resilient Cities Network, C40, the Urban Sustainability Directors Network, the Green Infrastructure Exchange, and ICLEI. Each network offers peer learning opportunities and the ability to share successes. The City leveraged the resources and expertise of the C40 network, among others, to deliver on an original resilience strategy commitment: the development of a greenhouse gas mitigation plan. In 2017, the City released Climate Action for a Resilient New Orleans, adding climate action to the resilience portfolio to complement other implicit adaptation programs.

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[1] New York City's OneNYC (2015) has also been called the world's first resilience strategy as it also utilized the 100 Resilient Cities City Resilience Framework, but its original genesis was before a specific resilience lens was applied. Resilient New Orleans was conceived as a resilience strategy and applied framework.

Since then, the City has engaged with partners to develop tools and data platforms to continue to support decision-making. The Climate Smart Cities Tool and the Adaptation Support Tool both help policymakers analyze physical infrastructure interventions with climate and stormwater scenarios. Both utilize public data that the City has collected on the built environment and various city management systems.

1.5
NEW ORLEANS: RESILIENT HERITAGE CITY

Types of Cultural Heritage in New Orleans

New Orleans cultural heritage has been written about extensively and figures prominently as iconic American regionalism. Rather than detail the origin of each example of cultural heritage, for the purposes of this project, it is helpful to populate tangible, intangible, and natural heritage categories with New Orleans examples.

The tangible cultural heritage of New Orleans includes what many associate as the "look" of the city, including unique regional architecture styles and urban development patterns. The French Quarter's Spanish and French creole architecture, the many historic districts, the oldest streetcar lines in the world, and prominent public monuments are a few examples that contribute to New Orleans' sense of place.

The intangible cultural heritage of New Orleans is even more extensive, including countless ephemeral forms of art and expression. These include Jazz, Mardi Gras parades, Social Aid and Pleasure Clubs, Mardi Gras Indian events, second line parades, the legacy of the creole French language and regional English dialects, and distinctive food. New Orleans hosts more than 130 festivals every year, from the world-famous Jazz and Heritage Festival (Jazz Fest), to Fried Chicken Fest, to Tet, the Vietnamese New Year, there are events held with exceptional regularity to showcase cultural practices and heritage.

The natural heritage of New Orleans is arguably the foundation of both the tangible and intangible culture of the city. It is anchored by the Mississippi River, which forms a crescent shape, giving the city one of its nicknames. The city exists where it does because of easy commercial access to both the Gulf of Mexico and the Mississippi River. The inland, swampy fresh or brackish waterways known as Bayous also make up a significant cultural idea of New Orleans as a city on the edge.

Like many old port cities, the cultural development of New Orleans was largely unplanned and chaotic, receiving people from all over the world into a complex class system. Some of the phenomena we know as New Orleans' cultural heritage today were created in a piecemeal, informal, and functionally marginalized way. Most of the aforementioned intangible cultural heritage was created without means and without formal patronage. Carole Rosenstein observed that much of the expression that is taken for granted as New Orleans'

cultural heritage was not formally planned or invested in, but rather made in spite of the systems that could do such things:

> *Poor people create and maintain New Orleans' indigenous forms of jazz and performance: jazz funerals, second lines, Indian gangs. One of the things that makes these expressions so aesthetically, socially, and culturally rich is their multivalence, but an important part of what they are responses to the sadness and rage that poverty and racism breed. And one of the reasons why these forms are so powerful is that they are created and performed in spite of poverty and racism. These forms assert the power of living in the face of dying, abundance in the face of scarcity, control in the face of disempowerment, pride in the face of disrespect.*[2]

Herein lies the heart of the resilience of New Orleans. The strong cultural heritage that was formed in the wake of major shocks and during long periods of stress has contributed to the persistence and strength of the city. Without the strong sense of pride and place, New Orleans might not be here today.

It is the sense of place that has made New Orleanians create an indelible link between the city's geography and expression of cultural heritage. In 2005, immediately after Hurricane Katrina, the New York Times interviewed Monk Boudreaux, a Mardi Gras Indian Chief, in Texas, to where he had evacuated:

> *Mr. Boudreaux, now safe with his daughter in Mesquite, Tex., stayed put through the storm at his house in the Uptown neighborhood; when he left last week, he said, the water was waist-high. He chuckled when asked if the Mardi Gras Indian tradition could survive in exile. "I don't know of any other Mardi Gras outside of New Orleans," he said.*[3]

Cultural Planning and Development Efforts

The public and quasi-public sectors are very active in New Orleans from both regulatory and promotional perspectives on the city's cultural heritage. The modern historic preservation movement in the United States was arguably born in the French Quarter of New Orleans in the 1960s out of a different form of pride of place and continues to drive architectural preservation efforts today. The City of New Orleans regulates construction and renovation on historic structures through the Vieux Carre Commission (VCC) in the French Quarter and

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[2] Rosenstein, Carole. Cultural Policy and Living Culture in New Orleans after Katrina. Civic Engagement in the Wake of Katrina. Koritz, Amy and Sanchez, George, Eds. Ann Arbor, MI: University of Michigan Press, 2009

[3] Ratliff, B. (2005). Jazz Musicians Ask if Their Scene Will Survive. Nytimes.com. Retrieved 1 October 2018, from https://www.nytimes.com/2005/09/08/arts/music/jazz-musicians-ask-iftheir-scene-will-survive.html

the Historic District Landmarks Commission (HDLC) in designated areas around the city. The City of New Orleans Office of Cultural Economy hosts a Planning Map that includes districts like those controlled by HDLC, but also catalogues tangible cultural heritage sites and the locations of regular cultural events, such as parade routes. The office also actively promotes cultural events and attempts to connect them to other City initiatives to increase impact. The office has also released reports on the economic impact of cultural production and events as well as engaged culture workers to better advocate for their fair treatment.

Other notable groups include the Arts Council of New Orleans, whose mission cites the celebration of the city's "multicultural heritage:"

> *Working in partnership with the City of New Orleans, community groups, and other nonprofit organizations, we work to elevate our arts ecosystem, expand and create opportunities for diverse artistic expression, and bring the community together through programming and events that celebrate our rich multicultural heritage.*

The Arts Council's mission is remarkable because it actively recognizes the importance of fostering new artistic expression for the benefit of cultural heritage. The Arts Council, which acts as a quasi-public agency, has also partnered directly with the City's Office of Resilience and Sustainability to promote a culture of awareness and adaptation through artistic representations of living with water.

1.6 CHALLENGES

Tensions between Preservation and Change

One of the most prevalent challenges in considering cultural heritage is the tension between preservation and evolution. One of the clearest examples of the tension is found in architectural preservation, which is sometimes unforgiving of new technologies, such as photovoltaic cells, storm shutters, or roof clips, even if they are designed to increase energy efficiency and protect structures in the face of extreme conditions. Cuisine is another example, where in New Orleans it was difficult to find Cajun country food until only a few decades ago due to the stark divide between city and country. When traditionally creole restaurants began introducing Cajun-spiced food, it was surprisingly controversial among certain social circles.

When considering investment in cultural heritage, the New Orleans case has proven that it is critical to create spaces—both physical and social—where cultural expression can continue to develop and adapt even as the heritage is celebrated.

Honoring tradition is very important to a strong cultural heritage, but that does not mean that traditions should be held as sacred and untouchable. In New

Orleans, a good example is the recent controversy over the removal of public monuments to Confederate heroes and oppressors of black New Orleanians. Former Mayor Mitch Landrieu ordered their removal from some of the most prominent spaces in the city in accordance with current cultural norms that judge them as overly lionizing of people and ideas that represent oppression. Cultural heritage and cultural expression should continue to be in constant dialogue so as to not calcify.

Primacy of "Cultural Economy"

The most common way to address cultural heritage in New Orleans and some other cities with dominant tourist economies is through the "cultural economy." In New Orleans, it is common enough that a City Office of Cultural Economy was created in the years after Katrina. A focus on cultural economy has the potential to benefit the city and those who produce cultural practices like music, art, or parades. However, it also creates conditions that can lead to extractive economic arrangements, whereby those who create the cultural good are not compensated as much as those who market the good. Intellectual property protections are limited Much has been written in the social sciences about cultural appropriation, but the focus on cultural economy opens the door for cultural appropriation for capital accumulation, which can only serve to exacerbate the aforementioned stresses of poverty and racial divisions.

Additionally, the cultural economy usually privileges tourist tastes and desires over those of local residents. By investing in what visitors think a form of cultural heritage "should be," the previously discussed problem of freezing a cultural practice in time is much more likely. By investing in and creating infrastructure for a specific "authentic" experience, it has the potential to hold back creative expression that alters or evolves the "authentic" experience. Also, by foregrounding the economic potential for a cultural expression, it can take it out of physical and cultural context:

> *Unlike the cultural assets of some other places, those in New Orleans are rooted firmly in its communities. Rather than its museums and symphony halls, it is the people, neighborhoods, local organizations, and small businesses of New Orleans that make it culturally distinct.*[4]

Measuring the value of cultural heritage is an evolving art. Until the non-monetizable benefits of cultural heritage, including city resilience value, can be reliably measured, framing culture in terms of economic impact is not going anywhere. Until then, the economics of cultural heritage can and should be optimized to benefit culture producers and culture bearers.

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[4] Rosenstein, Carole. Cultural Policy and Living Culture in New Orleans after Katrina. Civic Engagement in the Wake of Katrina. Koritz, Amy and Sanchez, George, Eds. Ann Arbor, MI: University of Michigan Press, 2009.

IDB
Inter-American Development Bank

City of New Orleans