

**FOR IMMEDIATE RELEASE**

June 18, 2013

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**CITY PLANNING RELEASES TWO FEDERALLY FUNDED STUDIES TO GUIDE CLIMATE RESILIENCE EFFORTS IN COASTAL URBAN AREAS**

June 18, 2013 – City Planning Commissioner Amanda M. Burden today announced the release of two reports that will help New York City and other urban waterfront communities improve their resilience to coastal flood risks and promote livable, sustainable neighborhoods.

[\*Designing for Flood Risk\*](#) identifies key principles to guide the design of new buildings in flood zones to facilitate construction that can not only withstand coastal flood events, but also supports the vibrancy of the urban public realm.

Recognizing the distinct character and needs of higher-density urban environments, the report provides recommendations for how regulations and individual project design can incorporate these principles.

[\*Urban Waterfront Adaptive Strategies \(UWAS\)\*](#) provides a systematic assessment of the coastal flood hazards that face New York City, a thorough survey of coastal protection and adaptation strategies that may be suitable for different shoreline and neighborhood types, and a framework for evaluating coastal protection alternatives. The report is intended to serve as a resource for planners, policymakers, and communities within New York City, the region, and elsewhere in the coastal United States.

The two studies, begun prior to Hurricane Sandy, were funded by the United States Department of Housing and Urban Development (HUD) under the Sustainable Communities Regional Planning Grant to the New York - Connecticut Sustainable Communities Consortium. These studies support the six Livability Principles of the Partnership for Sustainable Communities, and complement the rest of the consortium's work program, which encourages transit-oriented development along the regional transit network, much of which is located within or near the coastal area. Both studies informed *A Stronger, More Resilient New York*, the report of Mayor Bloomberg's Special Initiative for Rebuilding and Resiliency (SIRR), released on June 11, 2013, aiding the analysis and recommendations for coastal protection and providing urban design principles to guide the implementation of recommendations for buildings. *Designing for Flood Risk* also strongly shaped the Department of City Planning's proposed Flood Resilience Text Amendment, which would enable buildings to be constructed and retrofitted for flood resilience based on the latest flood maps issued by the Federal Emergency Management Agency (FEMA), while mitigating the potential negative effects of elevated buildings on ground-floor activity and quality of the streetscape. This proposal began the public land use review process on May 20, 2013.

City Planning Commissioner Amanda M. Burden said, "Descending on the city during the course of these studies, Hurricane Sandy served as a stark reminder that climate risks are not just a concern of the future. As the city recovers and rebuilds from the devastation wrought by this storm, these reports will continue to inform short- and long-term planning for the design of our waterfront and communities. Our design guidelines for buildings in the flood zone, along with our proposed zoning changes in public review, provide a roadmap for flood zone construction that supports the vitality and character of neighborhoods. While New York City is unique in many respects, the challenges we face are shared by numerous communities in the region, as well as elsewhere around the world. These studies illustrate that we can increase the resilience of coastal cities while transforming urban waterfronts in ways that make cities not only safer, but also more vibrant, healthy, and prosperous."

"Helping coastal communities rebuild from Sandy and prepare for climate change is a defining challenge for planners today" said Robert Pirani, Vice President for Energy and Environment at Regional Plan Association. "The easily understood strategies and concepts conveyed in the Department of City Planning's *Urban Waterfront Adaptive Strategies* and *Designing for Flood Risk* make terrific guides for community leaders and design professionals throughout the metropolitan area and beyond."

Executive Director of the New York Chapter of the American Institute of Architects Rick Bell said, "The American Institute of Architects New York Chapter commends the City Planning Department for the two reports, *Designing for Flood Risk* and *Urban Waterfront Adaptive Strategies*, that add significant thought, analysis and information to the post-Sandy roadmap to a resilient New York. Growing out of the Vision2020 waterfront planning and the City's Waterfront Action Agenda, strategies for making buildings more resilient join with principles addressing community character and visual connectivity. Access and volumetric articulation are concepts that - coupled with respect for context - inform the creation of newly resilient neighborhoods."

Metropolitan Waterfront Alliance President and CEO Roland Lewis said, "Based on a recognition of the diversity and complexity of our city's shoreline, the *Urban Waterfront Adaptive Strategies* report is a new, valuable tool for our

coastal city to help guide our efforts of living with the water that surrounds us, not fighting against it. In the wake of Hurricane Sandy coastal resiliency is a mandate, but we must also continue to connect with our incredible harbor and our waterways. The *Urban Waterfront Adaptive Strategies* report will help us find the way.”

### **Urban Waterfront Adaptive Strategies (UWAS)**

*UWAS*, which began in May 2012, builds upon New York City’s work through [PlaNYC](#), the City’s long-term sustainability plan; the [Waterfront Vision Enhancement Strategy \(WAVES\)](#), which consists of [Vision 2020, the City’s comprehensive waterfront plan](#) and the [New York City Waterfront Action Agenda](#); and other projects and initiatives to increase the resilience of the city’s built environment, infrastructure, and natural resources. In addition, *UWAS* complements the final SIRR report, [A Stronger, More Resilient New York](#).

*UWAS* provides an invaluable tool for planners of urban waterfront areas in New York and beyond, by laying out a risk-based, flexible process for identifying, evaluating and implementing potential coastal protection strategies. *UWAS* recognizes that urban waterfronts face risks from coastal hazards today and that these risks will only increase with future sea level rise. Furthermore, the risks facing waterfront communities vary and require a range of strategies at different scales. The report identifies a range of potential adaptive strategies, from interventions inland, at the shoreline, or in the water, and analyzes each for their ability to protect waterfront communities by blocking storm surge and high tides or absorbing destructive wave forces. Potential costs and benefits associated with each strategy are examined, both in terms of risk reduction and financial costs as well as the impact on or benefit to the city’s livability and sustainability. The report also lays out a framework by which communities can narrow the list of strategies to consider for a given geography and identify which strategies provide the greatest range of benefits with respect to direct and indirect costs. This information is intended to help guide challenging decisions facing coastal communities about how to foster a resilient city that can withstand and recover from climate hazards with minimal harm, while retaining a high quality of life for its residents and a vibrant economy.

### **Designing for Flood Risk**

*Designing for Flood Risk*, which began in October 2011, examines strategies for making buildings more resilient to the effects of climate change, in particular flooding. As part of this work, DCP studied the urban design implications of building-scale flood protection standards on neighborhoods within coastal areas, including co-hosting two design charrettes – one before and one after Hurricane Sandy – with the Mayor’s Office of Long Term Planning and Sustainability (OLTPS), the Department of Buildings (DOB), and the American Institute of Architects (AIA). The purpose of this study is to identify urban design principles to guide new construction to achieve higher flood-resistant standards, as well recommendations for how zoning can incorporate these principles. This study was instrumental in informing the Department of City Planning’s [Flood Resilience Zoning text amendment](#), which was referred on May 20th, 2013, that proposes zoning changes in flood zones to accommodate flood-resistant building construction.

The study recognizes the challenges that are posed to maintaining a vibrant public realm when elevating or floodproofing buildings in designated flood zones. Efforts to increase the resilience of buildings must be accomplished in a way that maintains and enhances the quality of the public realm, by using the best tools available to influence the built environment. To this end, *Designing for Flood Risk* establishes a set of urban design principles which can be used to guide flood-resistant construction and zoning that minimizes the streetscape impact of floodproofing. The urban design principles outlined are:

- Visual Connectivity
- Façade Articulation
- Inviting Access
- Neighborhood Character

These principles explore and explain the various ways in which architectural elements can be utilized in fostering a livable, resilient city. Ensuring visual connectivity between elevated buildings and the street by implementing porches, stoops, and generous access features can create a safe and interesting pedestrian experience, promoting walkable neighborhoods. By setting back buildings and utilizing landscaping or other design solutions, voids in an active streetscape can be buffered and made pleasant. Furthermore, by respecting the surrounding built context of a building, designers can produce buildings that are consistent with existing massing, fenestration, rooflines, and other architectural elements to maintain neighborhood character.

While the study focuses on New York City and its regulations, the issues and strategies identified are relevant to other dense, urban environments as well. These same analyses and strategies will be applicable elsewhere within the metropolitan region, particularly in areas where denser, transit-oriented development is expected. Because much of the regional transportation network is located near the coastline, many opportunities for sustainable growth in the region will need to incorporate flood-resistant construction measures. The principles outlined in this study can inform these efforts to create vibrant, active, and resilient neighborhoods.

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### **Department of City Planning**

The Department of City Planning (DCP) promotes strategic growth, transit-oriented development, and sustainable communities in the City, in part by initiating comprehensive, consensus-based planning and zoning changes for

individual neighborhoods and business districts, as well as establishing policies and zoning regulations applicable citywide. It supports the City Planning Commission and each year reviews more than 500 land use applications for actions such as zoning changes and disposition of City property. The Department assists both government agencies and the public by providing policy analysis and technical assistance relating to housing, transportation, community facilities, demography, waterfront and public space.