

File No.: 16-0612

Agenda Date: 8/23/2016 Item No.: 2.2.

# BOARD AGENDA MEMORANDUM

## SUBJECT:

Presentation from City and County of San Francisco Staff Regarding the Bay Area-Wide Resilient by Design Project.

# **RECOMMENDATION**:

Receive Information on the Resilient by Design project, presented by City and County of San Francisco staff.

## SUMMARY:

District staff, in coordination with the City and County of San Francisco, is providing information on the Bay Area Resilient by Design Challenge, a year-long event planned for 2017, with a call for qualifications potentially released in the first quarter of 2017. The Bay Area Resilient by Design (RBD) challenge partners believe that the District Board is ideally suited to provide guidance and feedback on the effort and look forward to discussing the plans and ideas with the Board. Future Board engagement would provide overarching support in addition to District Interim CEO support of the effort. Resilient by Design details are as follows.

#### Project Leaders:

The San Francisco Planning Department, BCDC (San Francisco Bay Conservation and Development Commission); California Coastal Conservancy; Bay Area Regional Collaborative; SPUR, SFEI (San Francisco Estuary Institute), the Mayors of Richmond, San Francisco, Oakland and San Jose and representatives of many other local and regional governments.

#### Project Description:

The Bay Area Resilient by Design Challenge (Design Challenge) invites global experts to engage with Bay Area governments, community leaders, elected officials, designers and the private sector to develop visionary, yet realistic solutions that can respond to the effects of climate change and seismic vulnerabilities on our communities, environment, and infrastructure.

The RBD challenge format is modeled after the successful "Rebuild by Design" competition in the New York-New Jersey-Connecticut region following Hurricane Sandy, which CNN named "one of the 10 best ideas of 2013." As an interdisciplinary, design-driven effort, the final design solutions in the NY region developed strong community support for major infrastructure projects designed to provide local governments with compelling typologies for future planning and design in the wake of climate

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## uncertainties.

The Bay Area RBD Challenge will capture the creativity, imagination, and entrepreneurship of the Bay Area that will make a lasting impact on our shared future.

Key Objectives:

- Create innovative and implementable design solutions that provide resilience through the end of the century and capture the imagination of the public;
- Enrich locales that reflect the Bay Area's diverse population and geographies;
- Enhance the ecological and economic vitality of the Bay and the region;
- Create opportunities for collaboration among a wide variety of stakeholders; and
- Improve access to the Bay for everyone.

#### Key Aspects and Features:

#### Equitable:

By addressing both vulnerabilities and community needs, the Design Challenge will provide invaluable expertise and realistic solutions to the challenges faced by many underserved communities around the Bay. In addition, design teams will create comprehensive community engagement plans to ensure equitable treatment and engagement of all stakeholders. The intense engagement with communities will ensure that the final designs reflect the community's vision, and thus will have broad and long-term public support for implementation.

#### Interdisciplinary:

Design teams self-select and could include architects, designers, landscape architects, engineers, hydrologists, seismologist, ecologists, public finance experts, and community engagement specialists.

Teams are chosen based on their qualifications and approach, not a solution to a defined problem. Teams work collaboratively with government agencies and community stakeholders to uncover the vulnerabilities and opportunities in the region and co-develop solutions.

#### Research-Based:

Teams are led through an extensive research phase to inform decision-making among all individuals and stakeholders. This research phase includes investigation of environmental, social, and economic vulnerabilities.

#### Regional:

Climate change and seismic vulnerability affects neighborhoods, regional assets, and interdependent systems. It does not recognize political boundaries. The design solutions will uncover and account for these social, economic, and environmental interdependencies.

# Replicable:

The Design Challenge will create prototypical design-driven solutions for varied ecosystems and typologies that can be replicated in this region or others.

## Collaborative:

The Design Challenge is managed through a coalition of government, private, and non-profit partners. It offers an unprecedented opportunity for Bay Area leaders and community advocates to work side-by-side to impact our shared future.

## Community-Driven:

Community and neighborhood participation and feedback are an integral part of the design development process. Stakeholders will work together with experts and government officials toward a shared vision for their communities and the region.

## Implementable:

The design solutions will be visionary yet realistic, based on proven technologies and existing design and engineering norms. Design solutions will be required to have the preliminary support of government permitting agencies *and* the community for which they are designed to enhance.

# Comprehensive:

Design-driven solutions will enhance everyday life within our communities -- not just in times of climate events. Designs reflect interventions for multiple problems, addressing short- and long -term needs. The design solutions will be comprehensive and provide multiple benefits. The solutions may contain both hard and soft infrastructure and address social needs (e.g., jobs, housing). Project designs may address issues such as economic development goals, housing, public access, and ecological health.

#### Lasting Impact:

The Design Challenge will set a new standard for innovative ways to engage the public on climate adaptation. The process will drive change in culture and everyday awareness of some of the most complex challenges of our time.

# Design Challenge Process:

#### Pre-launch:

Raise \$5-6M to support organization and pay stipend to design teams. Build community, government and private sector support.

> The District committed to contribute \$99,841.00 to this effort in 2016 toward

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development of a primer document that will be use in requesting for proposals from prospective design teams. The primer documents is expected to include information on: background; our challenge; design guiding principles; resiliency and design; overview of the bay; society and equity; economy; environment; governance; and strengths, weaknesses, opportunities, threats to the Bay. The funding is being contributed through the District-Aquatic Science Center's Water Resources and Aquatic Ecosystem Protection Memorandum of Understanding (2016) as a climate change adaptation/mitigation component.

# Stage 1 - Gathering Talent (3-5 months)

The core partner organizations' "Executive Committee" will develop a competition announcement, a design brief, a list of approximately a dozen design opportunity areas around the Bay, and an RFQ calling for interdisciplinary design teams. Chosen design opportunities will represent a broad geographic mix and include multiple ecosystem typologies to ensure a comprehensive, regional approach.

Interdisciplinary design teams will be selected to compete in the challenge (final number to match funding, but goal of 510) based on the diversity of team expertise (i.e. architects, engineers, designers, landscape designers, community specialists, academics, etc.) and their particular approach to resilience.

# Output: 10 Interdisciplinary Design Teams will be chosen to participate

> The District may participate on a design team for the RBD challenge.

# Stage 2 - Collaborative Research: Examining the Region's Economic, Social and Physical Vulnerabilities (4-5 months)

As a divergence from a more typical RFQ process, design teams collaborate to develop a deep understanding of the region's needs, characteristics, plans, and ideas before identifying the specific problems for which they will propose solutions.

To facilitate both data-driven and experiential learning, the *Research Advisory Group*, a group of diverse academic and nonprofit leaders, will lead design team members on bus tours, walking tours, panel discussions, and face-to-face meetings with community members, environmental leaders, and government agencies and academics, including in-depth visits and meetings in the selected design opportunity areas.

Together, design teams will explore the interdependencies of large-scale infrastructure

planning, housing, economic development, transportation, tourism, insurance, vulnerable populations, environmental justice, ecology, and conservation. Teams will collaborate to ensure that the best knowledge, ideas, and networks will benefit each project.

Teams will then work independently and conduct their own research to develop their suggested design interventions within their selected design opportunity area, based on the research undertaken in Stage 2.

*Output: Interdisciplinary Teams develop their suggested interventions based on the research they have undertaken.* 

# Stage 3 - Collaborative Design (5-6 months)

Teams will then independently develop their best possible intervention for the specific characteristics and vulnerabilities of their design opportunity area(s) by integrating community and stakeholder input. To ensure the intervention is implementable, teams will work with local government and community stakeholders to incorporate existing plans, local ideas and needs into the final designs.

Each proposed design opportunity will require individualized needs for consultation and government agency cooperation, which may include community leaders, large institutions, and infrastructure and permitting agencies. To achieve a comprehensive design approach, teams will undertake further analysis of their geographic area of interest, ranging from community stakeholders' long-term social goals to infrastructural engineering issues. They will work side-by-side with public works agencies and a *Government Advisory Group* to test their ideas, redesign, and refine.

Each team will work with the Executive Committee and its partners to create comprehensive community engagement plans. Additionally, teams will hold at least two public meetings: one for the public to learn more about the proposals and give feedback, and one to demonstrate how this feedback influenced the final designs. The intense engagement with stakeholders will ensure that the final designs reflect the community's vision, and thus will have broad and long-term public support for implementation.

*Output: Teams will create place-based, design-driven solutions that are designed together with government agencies and community stakeholders.* 

# Stage 4 - Competition & Selection (1 month)

Design teams submit their final deliverables - including design proposals, cost-benefit analyses, implementation plans, and demonstration of stakeholder support for long-term

implementation - to the Executive Committee and Jury. These entities will review and determine if the projects are implementable, have demonstrated community inclusivity, and other criteria defined during Stage 1. The winning designs will receive public recognition (and potentially other prizes) by elected officials who, along with other government agencies, will develop plans for implementation.

Output: Governments will have a blue-print of replicable interventions to address resiliency challenges throughout the Bay Area. Stakeholders will support these efforts because they participated early in the process and helped shape the outcomes.

# FINANCIAL IMPACT:

There are no fiscal impacts associated with receiving information and discussing the Resilient by Design challenge. The District committed to providing \$99,841.00 toward the effort in Fiscal Year 2016 as described above.

#### CEQA:

The recommended action does not constitute a project under CEQA because it does not have a potential for resulting in direct or reasonably foreseeable indirect physical change in the environment. Any resulting projects that are awarded funding as part of the challenge will require the lead applicant to address CEQA and secure permits as determined necessary prior to implementing a project.

#### ATTACHMENTS:

Attachment 1: Design Challenge

# UNCLASSIFIED MANAGER:

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