

Resilient By Design

BAY AREA CHALLENGE

Memo

TO: Members of the BCDC Design Review Board & Engineering Criteria Review Board

FR: Gil Kelley, Chair, Bay Area Resilient by Design Challenge Executive Committee

RE: Advice and counsel on the Bay Area Resilient by Design Challenge

I provide you with this memo to inform you about the emerging Bay Area *Resilient By Design Challenge* and to ask for your involvement as a design resource to advise on the elements of the year-long event planned for 2017, with a call for qualifications potentially released this fall. In the estimation of our partners, your body would be ideally suited for this role and we look forward to discussing our plans and ideas with you. We hope that you will find the RBD project as compelling and inspiring as we do.

At the end of this memo we have outlined specific questions for which we seek your advice and counsel.

Project Leaders:

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

Project Representatives:

Gil Kelley and Diana Sokolove, San Francisco Planning Department; Margie O'Driscoll, Competition Director

Project Description:

The Bay Area Resilient by Design Challenge (Design Challenge) invites the best global experts to engage with Bay Area government, 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 Design Challenge is inspired by both BCDC's Rising Tides Design competition and the impressive work that BCDC continues to perform through its Adapting to Rising Tides Program. 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 uncertainties.

Our 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 is 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.

Stage 1- Gathering Talent (3-5 months)

The core partner organizations' "Executive Committee" will develop a competition announcement, a design brief, and an RFQ calling for interdisciplinary design teams. Interdisciplinary design teams will be selected to compete in the challenge (final number to match funding, but goal of 5-10) 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

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.

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 3-5 “Design Opportunities,” which are their suggested design interventions based on the research undertaken in Stage 2. At the end of Stage 2, the Executive Committee and jury will choose one Design Opportunity for each team to pursue. Chosen design opportunities will represent a broad geographic mix and include multiple ecosystem typologies to ensure a comprehensive, regional approach.

Output: Interdisciplinary Teams develop 3-5 “Design Opportunities,” which are their suggested interventions based on the research they have undertaken. One “Design Opportunity” will be chosen for each team to move to the next stage. All proposed Design Opportunities will be available for the public to review and continue to build upon.

Stage 3 – Collaborative Design (5-6 months)

Teams will then independently develop their best possible intervention for the specific characteristics and vulnerabilities of their site(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.

Competition & Selection

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.

Action Requested of BCDC Design Review Board and Engineering Criteria Review Board Members:

We request the advice and counsel of the Board members on the following items:

- Professional skills to be *required* of teams submitting qualifications for the Design Challenge (and ideas for “optional” skills)
- Professional skills to be represented on the jury (i.e., architects, landscape architects, engineers, etc.)
- Potential names of local and international jurors (note that jurors may not participate on a design team)
- Evaluation of proposed Design Challenge timeline (outlined on pages 4-5)
Specifically, what are realistic “deliverables” from teams for this period of time and funding?
- Stipend amount awarded to design teams (Specifically, proposed funding for teams is \$100,000 for the “research phase” and \$100,000 for the “design phase.” Is this appropriate? Sufficient to solicit interest?)
- Review of winning criteria
- Deliverables at each phase of the Design Challenge (Specifically, what are realistic deliverables at each phase for the proposed team stipends?)