

# Computing Community Consortium

## Response to the June 17 Reverse Site Visit Review Panel Report

August 8, 2014

### Introduction:

We thank the members of the review panel and the NSF representatives for the time and effort invested in reviewing the Computing Community Consortium (CCC).

We were very pleased with the positive feedback from the committee during the interactive session of the site visit as well as the written report:

*The panel was extremely pleased with the progress of the CCC so far, and believes that as an institution the CCC is well on its way to transitioning from a startup mode to a stable operating mode: The CCC has instituted a sound leadership succession plan with a highly-capable leadership team in place, and its activities appear to have had significant impact. The panel recognizes these achievements and commends the CCC leadership for its efforts.*

We are also quite pleased with the report's overall assessment of the CCC:

*The panel unanimously recommends continued NSF support of the CCC, and wishes to extend its gratitude to the CCC leadership for its work on behalf of the entire computing research community.*

We appreciate the many recommendations in the report, which will help the CCC continue on its path as:

*an incredibly valuable resource for the computing community [that] is already carrying out activities that support its mission to "catalyze the computing research community and enable the pursuit of innovative, high-impact research.*

Finally, we understand that the panel's recommendations are to be taken as constructive suggestions to further improve our visibility, leadership, and impact within the computing research community:

*These recommendations should be taken in the context of the panel's strong belief in the continuing importance of the CCC's mission, the panel's admiration of the CCC's successes, and the panel's hope that the CCC will expand its reach even further.*

As noted by the committee:

*Despite its best effort, the panel recognizes that its evaluation may be based on limited understanding of various details, and thus it expects that some of its recommendations may need tweaking.*

With that in mind, we briefly respond to each recommendation from the report below. This response is organized using the summary prepared by the site review committee at the end of their report.

### **Responses to Specific Recommendations:**

- A. Establish the CCC as a credible and trustworthy voice** by casting a broader network and by adopting more transparent processes for leadership identification and selection **(6, 7)** and by leveraging the reach and capacity of existing organizations **(9, 10)**.

**(6) Document the current processes used for nominations and selections for the Council and Executive Committee, make these documents publicly available, and update them as needed.**

The processes used for selection and nominations are described in our bylaws, which were first created this past year as a part of our transition from startup mode to steady state operation. Now that we have approved the bylaws, we will publish them on the website. As we continue to evolve the organization, the Executive Committee will re-evaluate the bylaws periodically.

We will consider ways to make these processes as open and transparent as possible. As the committee noted:

*There are many good reasons for this type of selection process, including careful selection for potential leadership ability as well as many kinds of diversity.*

We agree and will strive to create processes that achieve an appropriate balance between maintaining the effectiveness of the CCC members and CCC leadership, and the transparency and openness of the processes by which they are selected.

**(7) Consider ways that allow the nomination and selection process for council members to “cast a broader net” without adverse impact on CCC effectiveness.**

Each year, we work hard to “cast a broad net” for nominations of new members to the Council through open calls, through CRA mailings, and through our individual and organizational networks. As our networks grow—in particular, our network of past council members and past event participants—we expect this will happen more naturally. Indeed, we are already seeing the beginnings of this process. To help in the interim, we will continue with strong outreach to SIGs, Department Chairs, PIs of major awards, and other computing organizations.

**(9) Increase community engagement and connections with existing organizations.**

We are constantly working on increasing community engagement. We have recently been doing more through CRA by having a presence in every issue of the Computing

Research News. We have also been working with other organizations to ensure awareness of the CCC: e.g., through participation in the CRA Leadership Summit (which includes ACM, IEEE CS, CSTB, and SIAM, among others), presentations to Boards of different organizations, and so forth.

We already use many of these conduits to publicize our activities and reports. We will continue to do this; we will also explore other channels, such as cross publishing.

**(10) Strive to better engage industry, computing professional organizations, and NSF program offices outside of CISE. Each one of these constituencies should provide valuable and distinct perspectives on the future research opportunities in computing.**

We have been working on outreach beyond CISE, and have made great strides recently. NIH, for instance, has approached us about doing a workshop to help foster new healthcare and computing discussions and collaborations. We have opened communications with the Engineering Directorate and have participated in some of their workshops, where appropriate. With respect to industry, we have attempted to reach beyond the “usual players” through bringing industry participants to our workshops. Over the past year, we have had industry experts from places like Microsoft and Google, but also from large companies like Adobe and Boeing, and smaller companies like Motoman and Otherlab. We have also received industrial (financial) support for some of our workshops. We do always ensure that there is representation from industry on the Council. Currently, there are 4 Council members whose career has predominately been in industrial research.

- B. Articulate the value proposition of the CCC to the research community by developing concise strategic and implementation plans (1, 2), informative assessment criteria and metrics (3), and longitudinal evaluation (13, 14).**

**(1) Develop and publicize a more concise strategic plan focused on specific goals and strategies intended to support the mission of the CCC.**

**(2) Articulate and maintain a well-thought-out implementation/execution plan to institutionalize and guide CCC’s operational, decision-making, and evaluation processes.**

We view the Strategic Plan as a living document that is revisited and revised as necessary. It is typically reviewed each year with the new council members. What we have found is that our plans each year must often *adapt in response* to new opportunities or disruptive changes in the federal funding or science policy environments. Rather than developing and maintaining a static Strategic Plan, we feel we can be more agile by focusing instead on articulating our key strategic priorities every year in our annual report and in our Implementation Plan, then using those priorities to guide our decisions and focus areas for the coming year. We will strive to do so going forward.

**(3) Align the evaluation criteria and metrics of CCC activities with its mission and goals.**

**(13) Engage in longer-term evaluations of the CCC activities, individually and collectively: The CCC should develop creative means to evaluate the long-term outcomes of its activities (longitudinal evaluation).**

**(14) Plan for an evaluation near the end of the current award, and consider making the results of this evaluation public.**

We agree that assessment is important, both for improvement of ongoing activities as well as documenting the contributions and impact of the CCC over its lifetime. We have begun putting procedures in place to assess individual activities to help us improve the quality of our workshops and will work to make this “standard operating procedure.”

As the panel appreciated, quantitative assessment of impact can be difficult, since the impact of a CCC activity is rarely known for several years. We are cataloging our impact where it is well noted, and we are looking at ways to get a better understanding of the greater impact in the community and at federal agencies.

We are discussing possibilities for a meaningful evaluation of the CCC in the long term. Prior to our last renewal, we did undertake an external assessment. However, we found this was at best marginally useful, as there are few organizations like CCC and thus no “standard rubric” for assessment. We will continue to search for ways that we think a meaningful evaluation of the CCC can be accomplished before the next renewal proposal.

- C. **Establish a compelling CCC Brand** by adopting a purposeful multi-pronged communications strategy **(5)** and by setting expectations of exceptional utility and significant prestige attached to CCC products **(11, 12)**.

**(5) Develop a more purposeful communication strategy and should consider the impact of that strategy on the identity and perception of the “CCC Brand”.**

The CCC has a new identity, as of July 20, 2014, following the development of a new mission statement last year. This identity was developed as a part of CRA’s rebranding strategy. While the new brand does link us to CRA, our home, it also provides us with a new look and message to be portrayed to the community. We are still going through the process of developing the new web site. As we do, we are consciously architecting it to reflect our mission and our brand.

With the new look and new direction for CCC, our next step will be to look for additional opportunities to develop more effective communications strategies, including some of the suggestions outlined in the RSV report.

However, we are also conscious that our impact is not only through our “outward face” to the computing research community, but also our activities and connections within the federal science funding ecosystem. This network has been essential to our past success and we thus will balance our outward communication efforts with maintaining and developing this network (as recommended by the RSV) in the coming years.

**(11) Develop a Best Practices Report for those planning or considering proposing workshops.**

We have also recognized the value of many such “best practices” documents and have begun to create them. This will include a “How to / Best Practices” manual for running a visioning activity (from planning through report dissemination).

**(12) Elevate the prestige of workshop reports so that they are viewed as a major contribution to the community.**

We have been told explicitly that our current workshop reports and activities have high recognition and impact within the federal agencies and among science leadership. We will continue considering strategies for further dissemination of our reports as part of our broader discussion on communications. Once reports are written, we will work with organizers and communications experts to determine the proper channels for their dissemination, the appropriate publication avenues and briefings, etc. While we do want to ensure appropriate prestige of our reports, we don’t want to lose our agility / timeliness by overly extending or complicating the process.

- D. Ensure a sustainable and effective institutional operation** by adopting clear internal lines of communication, responsibilities, and control along with clear expectations **(4, 8)**.

**(4) Develop a clear, written statement of expectations of Council members that exemplifies the various ways in which council members could/should support the CCC mission and activities.**

In our recruitment and on-boarding sessions for new Council Members, we share expectations and examples of different ways to participate in the council, and we have an open discussion about ideas and activities new council members would like to be involved in.

As noted in the previous site visit:

*The CCC has established subcommittees and task forces to (a) improve the structure and operation of the CCC organizationally (subcommittees) and (b) advance specific areas of interest for the field (task forces). A key goal of these subcommittees and task forces has been to define specific portfolios and expectations for Council members. Subcommittees include Visioning; Government*

*and Public Outreach; Research Community and Student Outreach; and Council Membership. Task forces include Health Information Technology; Computational Sustainability; and Big Data.*

We have continued to evolve this structure. Indeed, one of our current objectives is to strengthen the delegation of tasks to committee members.

We will strive to articulate committee member roles more effectively, while being careful not to create distinct roles that only certain people can fill or otherwise limit our agility or flexibility.

**(8) Adopt a reporting structure that reflects the singularly central role that the CCC Director must play, especially in a self-sustaining operating mode.**

The role of the Director (and staff) is in fact quite well defined and we find that the current structure works quite well. The Director and Chair, together with the executive committee, make all decisions related to the CCC and are not hindered in any way by the interplay of the CCC Council and the CRA. We are continuing to evolve the role of director as we continue the transition to “stable operating mode” and expect that the prominence and responsibility of this position will continue to grow with time.

**Other Comments:**

Some of the recommendations above were created in response to specific concerns articulated in the RSV report. In particular, in recommendation 4, the RSV committee suggested better documentation of committee roles. The RSV committee additionally noted:

*One area of concern is the absence of clearly stated expectations for the Council members' roles and duties, which might lead to inconsistent levels of contribution by these members and reduced CCC capacity. The panel felt that the senior leadership is experienced enough to manage potential problems due to non-responsive members and that the term-limited membership in the Council will partly mitigate the negative impact of any low-performing members. That said, the panel believes that setting expectations has many other “positive” effects.*

One of the key attributes of the CCC is its openness to ideas and discussion. To encourage this atmosphere, we focus on positive leadership and inclusiveness and do not want to create a situation where there is some stigma attached to a council member who was perceived as underperforming or underactive. We do make it clear, during onboarding and during Council meetings, that we expect every council member to be involved. But, we emphasize that members of the council are volunteers, and as such we must be careful to respect their individual capacities. It is indeed the case that there are disparities in council engagement and activity. This is to be expected and happens for many reasons – level of interest and background in ongoing activities, the natural ebb and flow of other (non-CCC) duties, and, in some cases, individual capacity.

Although rotation does provide an opportunity to replace someone who is less engaged, it is also an opportunity to bring in new blood, sometimes by replacing Council members who have in fact been exemplary.

The committee also expressed a concern about our production of white papers in recent years:

*Reports and white papers: The CCC is nimble enough to be very useful in writing necessary reports (NRC studies are excellent but not quick; it can take three years from start to final report). This ability to write high-quality reports very quickly leverages the CCC members' excellent human network; often a Council member knows someone who can provide expert inputs for a given research area, even when that expertise is not explicitly represented in the current Council membership. The panel is concerned, however, by the drop from 29 white papers (in the period from 2008-2010) to two white papers (in the period from 2011 to date).*

While we do not dispute the change in output, the context for prior white papers is important to understand. In particular, much of the early production of white papers was driven by specific requests for such papers. For example, a series of "Big Data" white papers was developed in response to a request from OSTP for such input. Thus, while we will continue to look for opportunities to produce white papers in areas of national or community interest, we will continue to do so selectively and when we see a clear path for the impact of these products.

### **Conclusion:**

We are grateful to the reverse site visit committee for positive comments about the CCC, and their many constructive recommendations. As noted in our responses above, many of these recommendations echo our own thinking and we will use the committee's suggestion to guide our future evolution.

In closing, we appreciate the reserve site visit committee's recognition of the past impact of the CCC:

*These recommendations should be taken in the context of the panel's strong belief in the continuing importance of the CCC's mission, the panel's admiration of the CCC's successes, and the panel's hope that the CCC will expand its reach even further.*

We view the CCC as a continuing "work in progress." The preparation for the RSV, our discussion of the RSV report, discussions with our colleagues at NSF, and the generation of this document has been a productive and helpful enterprise, and we again thank the RSV committee for their time and efforts.

As the CCC evolves, we will continue to seek opportunities to enhance our credibility, to better communicate our value and successes to the computing research community, and to innovate our practices to better serve all of our constituencies.