

Reimagining the ICCPC: Survey 1 - Perceptions of PB Codes and Design

Brian Meacham, Meacham Associates, USA

Preliminary Outcomes – Survey 1 – Brief Summary

Overview and Context

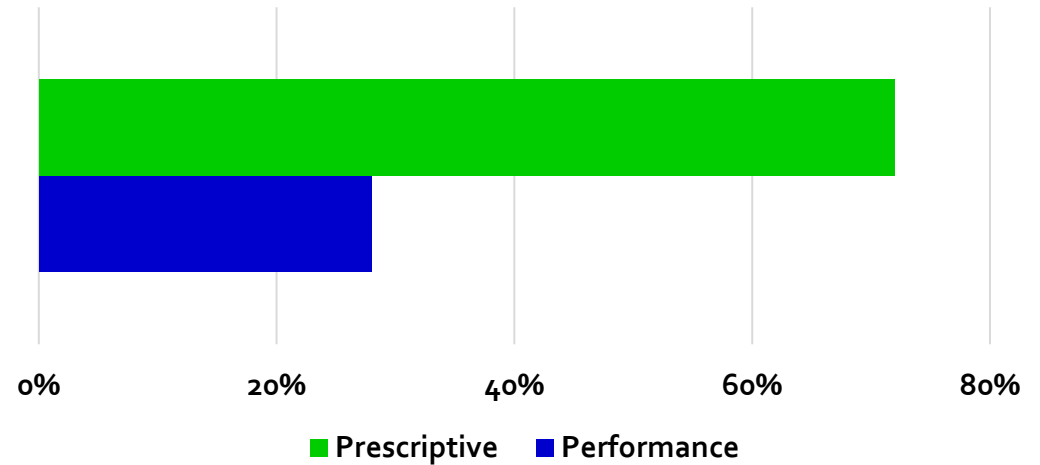
- Aim was to obtain perceptions – no right or wrong answer.
- Some comments about lack of definitions, but it was decided that as a first survey, not to bias by providing too many details. This means there may be different interpretations, but that is OK at this stage.
- Data are based on 170 total responses, but for several questions only about 110 responses. Total number for each question noted (N = _).
 - Note that percentages for each specific question are based on number responding to that question, not a percentage of the overall respondents.
- High percentage of USA respondents, so data are somewhat indicative of USA.
 - Will take time to parse USA only data and to compare between countries, disciplines, etc. That will come later

Demographics

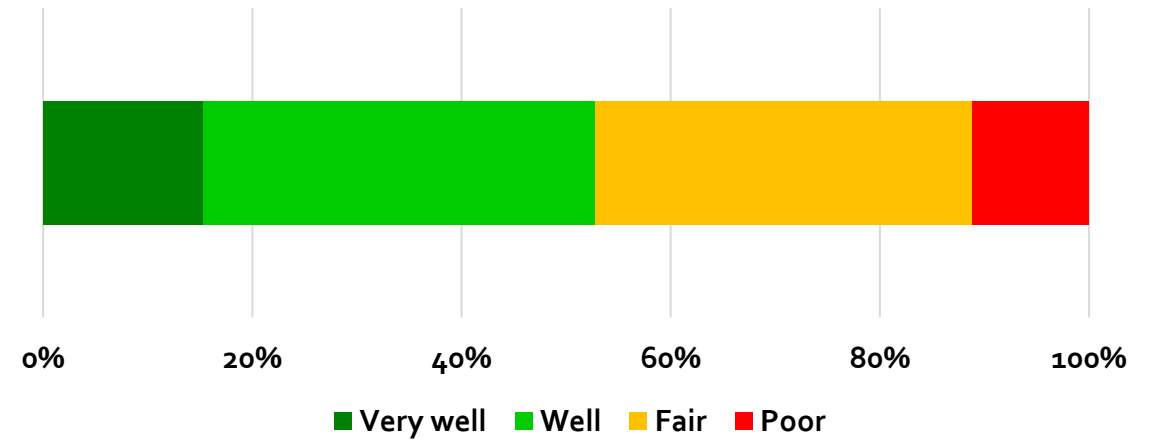
- 170 total respondents
 - 110 complete surveys
- 70% respondents from USA
 - 17 countries in total
- 80% with license / certification / registration
- 20% building code compliance review / verification / enforcement
 - 17% of those BCOs
- 28% consulting / engineering
 - 28% of those FPEs
- 50% with 25 year of experience or more

Baseline Information

- What type of regulatory system do you work in?

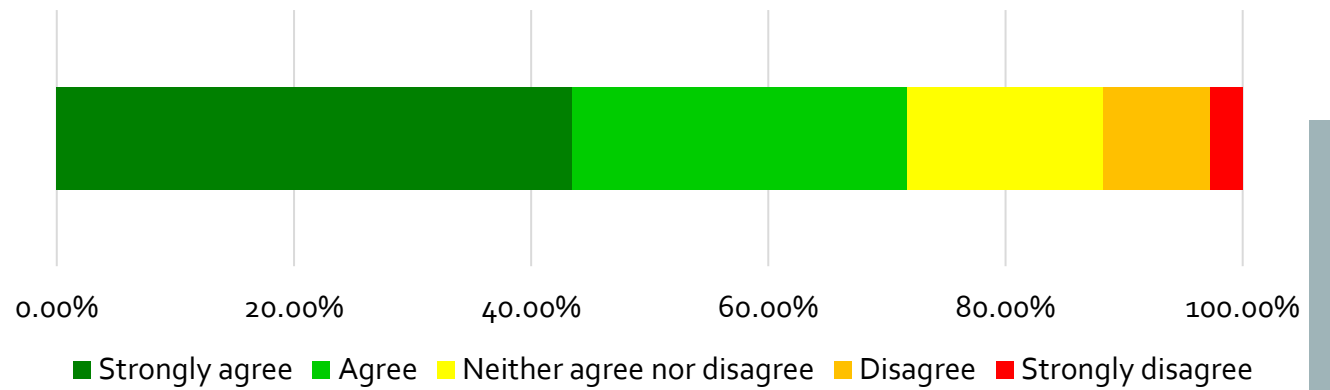


- How well do you think your current system is working in facilitating well-performing buildings?

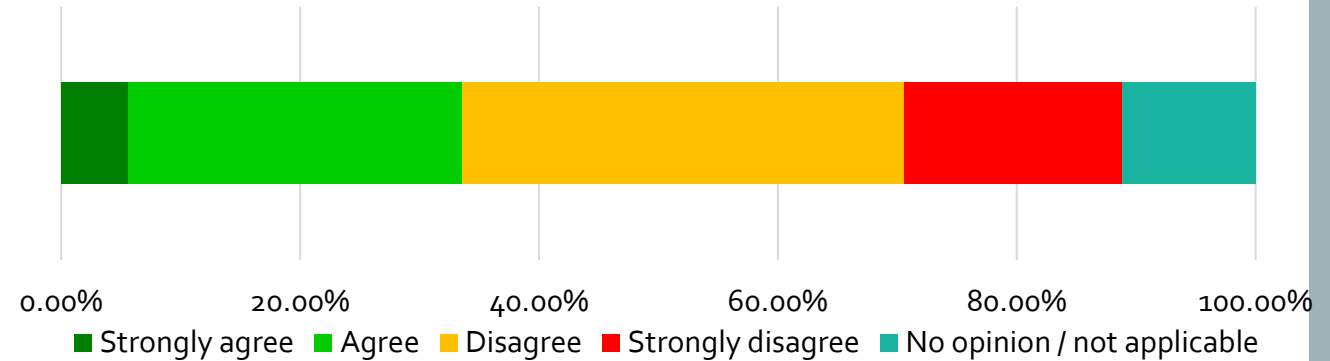


Views on Performance-Based Approach

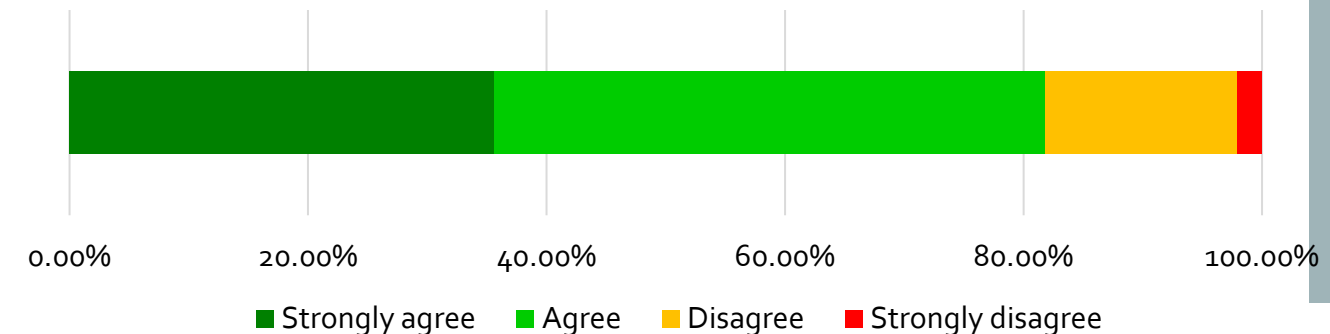
- I support the concept of PB codes & design



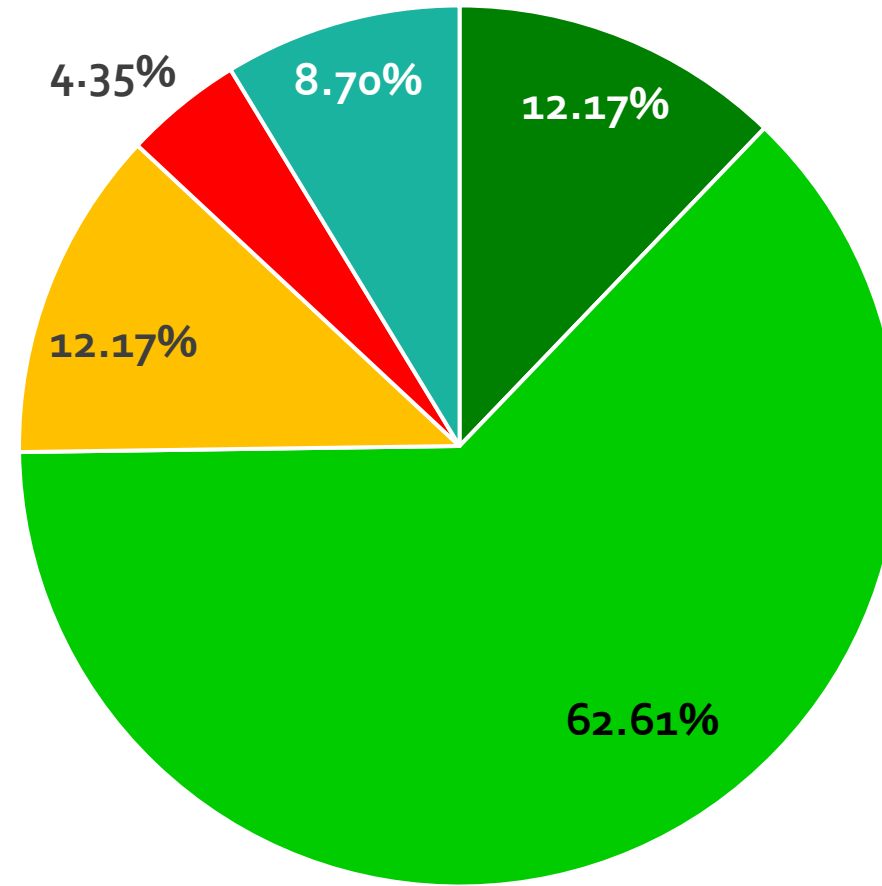
- I think the current PB approach – available or in use – is adequate



- I think it is possible to develop a robust & appropriate PB system



The Current Framework for PB Codes and Design is Appropriate

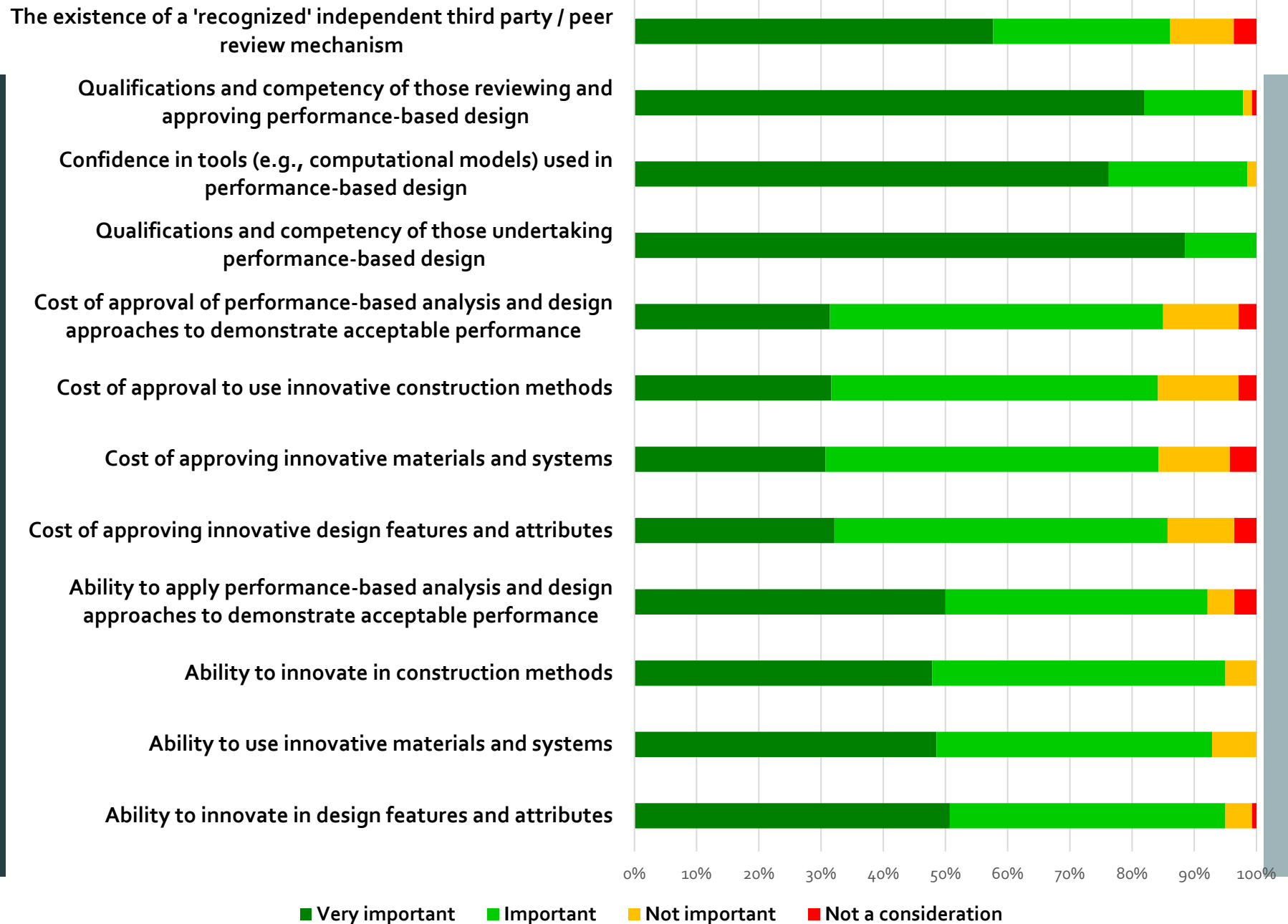


- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Insufficient knowledge or experience with performance-based systems to express opinion

Issues / Attributes of Performance Systems Compared with Prescriptive

- The overall ability to innovate is higher (84%)
- Innovation occurs more often (82%)
- The overall flexibility in the design and construction process is higher (81%)
- The qualifications and competency of practitioners is most critical (75%)
- The importance of peer / independent review is higher (75%)
- The qualifications and competency of review and approval authorities is most critical (70%)
- The risk of missing something important in the review process is higher (56%)

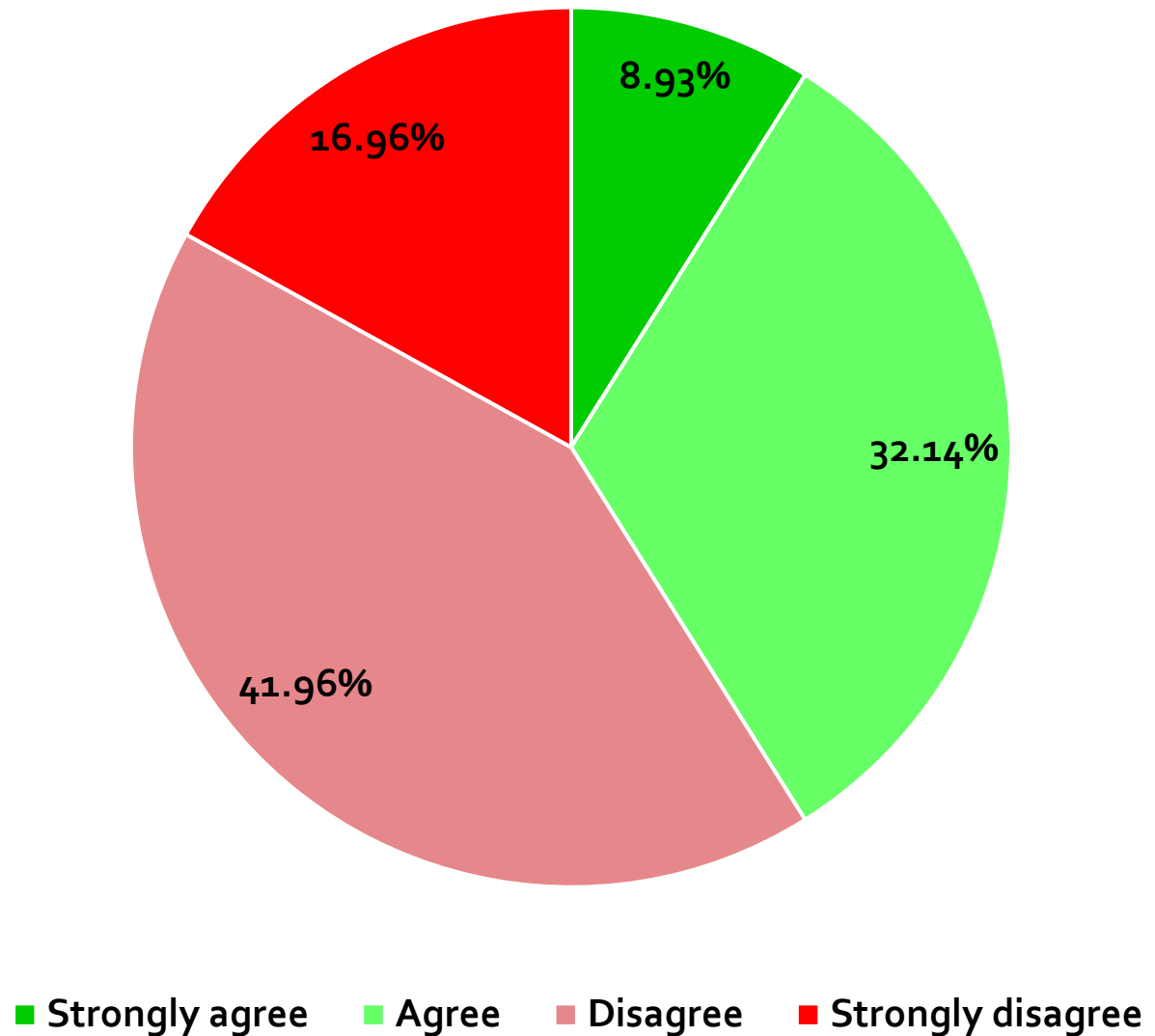
The Relative Importance of the Listed Attributes



***Highly
Desirable***
Forms of
Benchmarks to
Demonstrate
Compliance /
Verify
Performance

- Quantitative values that can be readily measured and verified by agreed methods (67%)
- Quantitative values that can be readily calculated and verified by agreed methods (66%)
- Deterministic values, derived from testing (46%)
- Qualitative statements which are detailed and unambiguous (38%)
- Quantitative risk values (34%)

I think the expertise, capability, data, tools and methods are currently adequate to support robust performance-based designs for most or all aspects of building design.



Key *Preliminary* Summary Points

- Distribution of response from different sectors good, but overall, more data would be better.
 - Survey will stay open if more people want to respond.
- Only a little more than half think current system works well or very well (performance or prescriptive)
- More than 80% believe that a robust PB building code system can be developed and implemented.
- Qualifications, competency, ability to innovate, increasing confidence in verification are key issues.
- Quantification of performance, strong linkage to methods of design and verification / compliance are critically-important issues.
- Peer review, investment in training and education, critical.

Thank you!

- I would like to express my sincere appreciation to all who took the time to complete Survey 1 and provide their perceptions of, and comments on, performance-based codes and design. This input will be very helpful in reimagining the ICCPC. For anyone else who would like to add their input, Survey 1 will remain open until September 30. Also, please watch for future surveys, roundtable discussion and workshops. Thank you!