Long-Range Planning: Best Practices

- In what follows, I've collected a set of "best practices," drawn from my observations of the Canadian system, from a 2015 report of the U.S. National Academies, and from my previous experience, where I served as
  - A member and then co-chair of two U.S. Department of Energy/ National Science Foundation long-range planning efforts
  - A member of a U.S. National Academies' strategic planning effort
  - A member of the U.S. National Academies Board on Physics and Astronomy, where I oversaw strategic planning efforts across fields
  - Chair of the International Linear Collider Steering Committee and of the Space Telescope Institute Council

Long-Range Planning: Best Practices

- The committee needs a well crafted charge
  - Set scientific priorities within a specific funding envelope. One possibility is start with a flat budget, then vary ±10%, and include a "blue sky" scenario. Envelope must match political reality
  - Prioritize scientific opportunity, and leave program management to professionals. Keep room for new ideas
- The committee needs to be broadly based
  - Choose a respected chair, and make sure that the members reflect the diversity of Canada. Declare all conflicts
  - Avoid insularity by including members from the international community, from other fields of science, and even from industrial and/or policy circles. Embed a communicator in all deliberations

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- The committee must consult broadly
  - Use many methods: White papers, town meetings, social media. Interview proponents. Make sure the community feels it is heard
  - Consultations essential to build credibility and buy-in to the committee's final report
- The committee needs to reach consensus
  - Take the time this requires. Meet face-to-face. Go on a retreat. Build an «esprit de corps»
  - The committee needs to emerge form the process prepared to defend the decisions it makes

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- The committee's report needs to pack a punch! It should
  - Identify the "science drivers" – the questions that inspire the imagination and animate the public
  - Put forward a realistic plan to answer the questions and address the science, all within the budget envelope
  - Explain the rationale for all choices made
  - Identify compelling opportunities that would be possible with additional funding, and the losses that will occur with less
  - Explain the program's value to the Canadian citizen
  - Possibly frame the report in the language of "findings" and "recommendations"

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- The report must contain
  - A "plain English" companion («en langage clair») for the general public
  - An executive summary aimed at policy makers – not at technical experts!
    - Neither of these documents should be written by scientists
- When the report is finished, the committee needs to
  - Use the report to build support among fellow scientists, across the funding agencies, and in Parliament
  - Enlist the community to propagate the report in their home departments, to their Deans and VPRs, and even their MPs
  - Ensure that the community speaks with one voice