

# Update from the Subcommittee on Transitioning from the Exascale Project

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# Charge: Goals

- **Overall:** “to provide **guiding strategies and approaches** that will be key to **ensuring future U.S. leadership**, and more generally, U.S. leadership in the full range of disciplines stewarded by ASCR”
- **Subcommittee:** “to identify the key elements of the Exascale Computing Project (ECP) that need to be transitioned into **ASCR's research program** or other **new SC/ASCR initiatives** after the end of the project.”

# Charge: Subcommittee Actions

- **Examine:**

- ECP lessons learned for **managing large collaborations**,
- ASCR's historic **fundamental research investments** in applied mathematics, computer science and computational partnerships at the National Labs,
- **new Research and Development priorities** in artificial intelligence, quantum information systems and strategic computing.

- **Recommendations (R):**

- for **capturing the lessons learned** from ECP
- **supporting** the software and hardware technologies and application development from ECP activities
- informing ASCR's **future investment strategy** for its basic research programs

# Subcommittee Members

- Jay Barhan, Glaxo Smith Kline
- Alan Edelman, MIT
- Roscoe Giles, Boston U. (chair)
- Fred Johnson, DOE/Retired
- Sandy Landsberg, DoD HPCMP
- Richard Lethin, Reservoir Labs (ASCAC)
- Juan Meza, NSF (UC Merced)
- Dan Reed, U. Utah (ASCAC)

# Status

- Formation of the subcommittee this year
- Gathering Information
  - ECP All Hands Meeting (1-15-19)
  - ECP leadership team meeting (3-21-19)
- Future meetings with stakeholders
- Summer (July or August) Workshop
- Draft Report in September

# Some of what we are hearing...

- ASCR support for medium and long term research
  - Base research program starved by special thrusts? – what should we do?
- Need for sustaining benefits of ECP
  - Software, Hardware, Applications
- Workforce impact - ECP and facilities
  - People, knowledge, and skills
  - Support for research/science
- Incorporation of management lessons for large projects
  - Models for large scale accountable R/D
  - Relation with ASC
  - Relations with Industry

ASCAC Discussion....