SURA IT Program & Strategy

Prepared for discussion at the

SURA CIO's Meeting

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Washington, DC

Planning Context

- SURA funds provided to IT Projects
  - but there is no coherent strategy
- No current responsive mechanism for applying for funding
- No clarification of policy for use of SURANet proceeds for IT and networking projects
- Opportunity exists to energize SURA through major information technology initiatives
- Current IT Committee not viewed as representative

Motivating Factors

- Marine and Coastal Sciences Initiative
    - remote sensing network, data collection, delivery, reduction, analysis
- Telemedicine
- IT2 -- Research into IT
- Engine that Drives Research
- Necessary Element of All Future Research

SURA Mission; the CIO's Perspective

- SURA's mission is to enable (through collaboration) member universities to compete with leading research universities via the power of collaboration

- Advances in Information Technology, Computational Science, Communications and the Internet will be the primary drivers of successful research in the next decade.

- Therefore the most effective role for SURA to play is to enable member universities to utilize the most advanced information technology capabilities.

The Imperative to Move Boldly

- Other Regions are organized and moving quickly
  - NYSERNET, CALREN, MREN
- Major leadership opportunities already lost
  - Application incubators, Abilene roles, Advanced research opportunities
  - NGIX is the only major 'win' thus far
- Leadership will require major investment
  - Only by using SURANet proceeds as investment can we generate resources to provide national leadership

IT Strategy Goals

- Development and deployment of an AUP-free regional networking infrastructure.

- Development and deployment of middleware and applications necessary to enable science through collaboration.

- Sponsoring collaborations that leverage institutional strengths to enhance members' research capacity.

- Influencing the national IT and networking agenda.

Regional Networking Infrastructure

- Further development of the Crossroads initiatives
  - MAX & SOX
  - Connecting the SURA gigapops
  - Low-cost commodity internet access & 'last mile'
- Extra-regional connectivity
- Connecting to Federal Labs
- Providing connectivity options for those member institutions in geographically disadvantaged areas of the region (a "Dirt Roads" initiative?).

Middleware and Applications
(Support for Research Agenda)

- Continuation of support for existing efforts
    - Digital Library initiatives
    - SURA ViDe efforts
- Examination of other common middleware and services needs of the region
    - regional security and authentication services (offered from the gigapops?)
- Remote instrumentation management tools
- Learning and collaboration tools & applications
    - (ex.. A regional alliance with Blackboard)

Sponsoring Collaborations

- Incent inter-university IT application & research efforts
  - Corporate partnerships also a priority (refresh investment fund?)
- Commit SURA funding for:
  - Proposal development
  - Pilot & feasibility studies
  - Matching funds on major grants
- Provide support (stipends, scholarships, sabbatical support, etc) for:
  - faculty, scientists, graduate students, IT staff developers
- SURA granted a percentage stake in commercial exploitation

Driving the National Agenda

- Develop successful program efforts in the majority of PITAC research efforts

- SURA Crossroads Initiatives become leading Internet2 Meta-POPs

  - bandwidth, middleware, applications (and services?)

- SURA labs & research initiatives are recognized for national leadership in application of & innovation in information technology in support of science

- SURA seeks out and supports regional IT leadership in Congress

Establishing National Leadership Funding Requirements (annually)

- Regional Network Infrastructure ($2.0M)
- Middleware & Applications ($.5M)
- Sponsoring Collaborations ($.75M)
- Driving the National Agenda ($.25M)

Note: Funding at these levels will require SURA to:
  - re-examine guidelines on spending
  - explore funds replenishment options, if current level of investment capital is deemed necessary/desirable