Equitable Access to Information
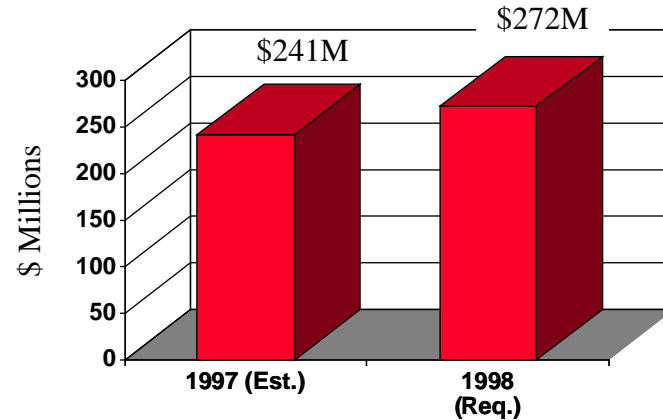
CIC Human Centered Systems
Working Group (HuCS)

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HuCS Activities

- Universal Access/Multimodal/Multilingual IT
- Collaboratories
- Knowledge Repositories
- Information Agents/Visualization
- Virtual and Augmentative Reality
- Applied Human Cognition Studies

Sample On-Going Projects

- ## Data-Centered Communities
  - NLM "Visible Human" Project
  - NSF/DARPA Linguistics Data Consortium

- ## NSF/DARPA/NASA Digital Libraries

- ## NSF/NSA/DARPA/CIA STIMULATE
  - Speech, Text, Image, and Multimedia Advanced Technology.

- ## Many HuCS labeled agency activities, e.g.
  - DARPA Data and Language Technologies
  - NSF Learning Technologies
  - ED Rehabilitation Engineering Centers
  - DOE Virtual Laboratories

HuCS in US R&D Context

- Access issues are amplified by large-scale networking.

- It is a change of perspective in the HPCC-to-CIC transition.

- There is a large "pull" from educational reform/information warfare/electronic commerce concerns.

- Increasing focus of applications on usability as much as on functionality.

- Collaboration over common data is rapidly increasing mode of general research.

- Human performance augmentation goal has overtaken classical automation goals.

New National HuCS Efforts

- Presidential Initiative on Universal Access

- NRC/NAS Study on Every-Citizen Access

- Government/Industry Partnership on Web Accessibility

HuCS & Equitable Access

- ## Digital Libraries
  - Interagency Research Initiative (Phase 1 and 2)
  - Other National Projects (e.g., LOC)

- ## STIMULATE/Universal Access
  - Multi-modal interfaces
  - Theories of collaboration/dialogue

- ## Telemedicine/Remote Access
  - Distribution of medical expertise/capability

- ## Emerging Multimedia Industry
  - Based on convergence of computation, communication, information