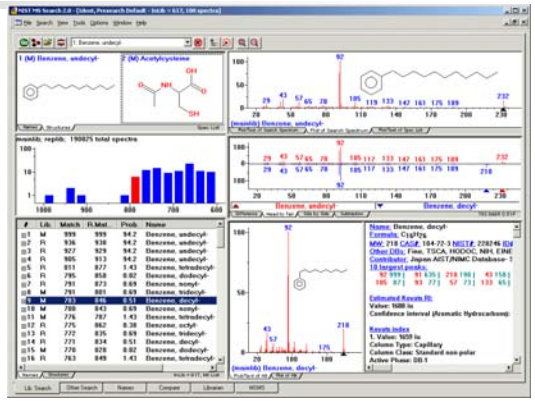
NIST Scientific Data



- All Labs; most divisions
- Standard Reference Data
  - 55 PC products available
  - 54 Online SRD systems out of 91 total NIST systems
  - 6,000 units sold/year
  - 130 M/year data downloads
  - $5.1 M in sales
  - $7.1 M in spending

Technical Areas for NIST SRD

- **Analytical Chemistry**
- **Atomic and Molecular Physics**
- **Biotechnology**
- **Chemical and Crystal Structure**
- **Chemical Kinetics**
- **Environmental data**
- **Fire**
- **Fluids**
- **International Trade**
- **Law Enforcement**
- **Materials Properties**
- **Optical Character Recognition**
- **Surface Data**
- **Text and Video Retrieval**
- **Thermophysical & Thermochemical**

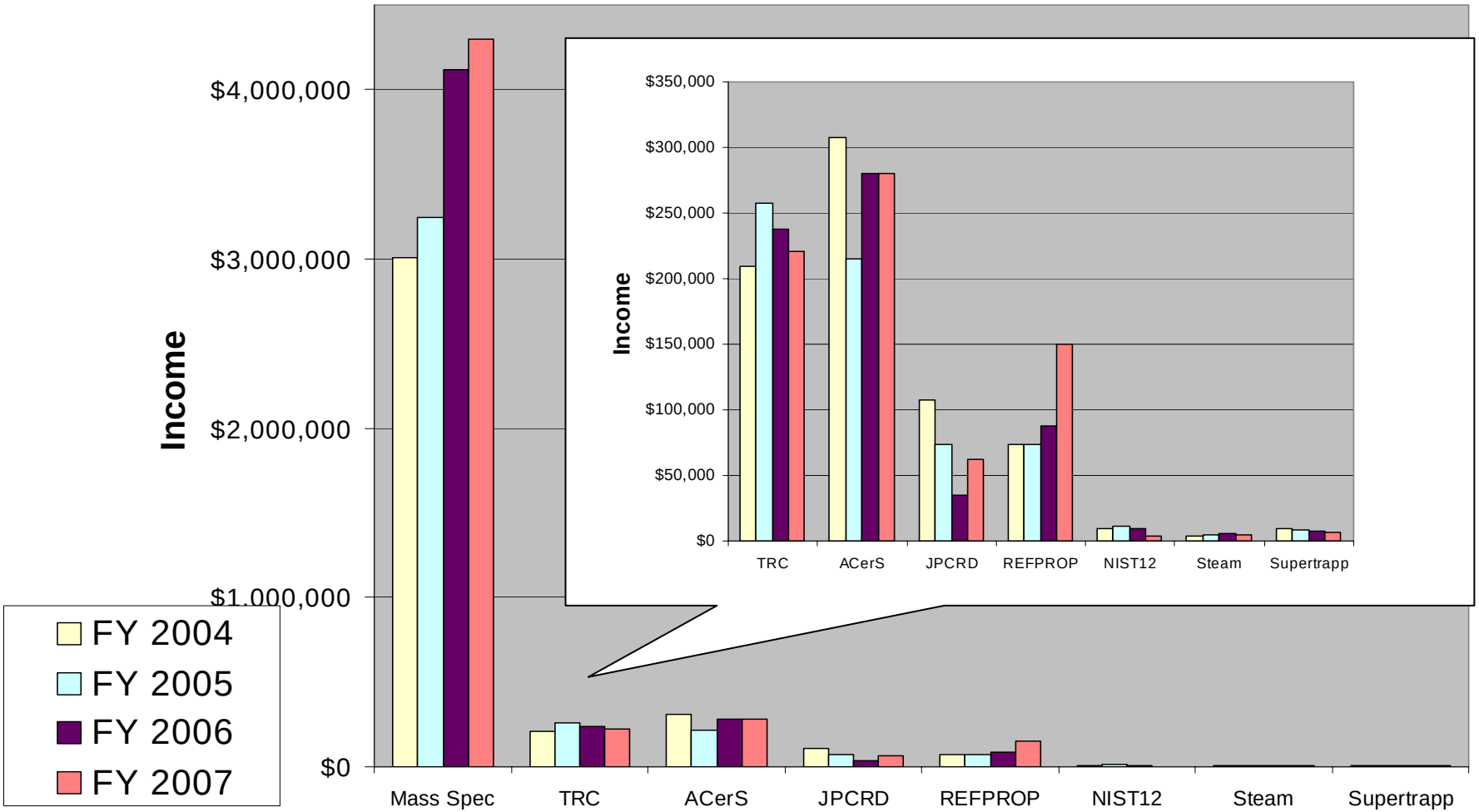
SRD Act PL 90-396

- Specifically authorizes the Secretary of Commerce to
  - Evaluated scientific data available to the public
  - Secure copyright to such data

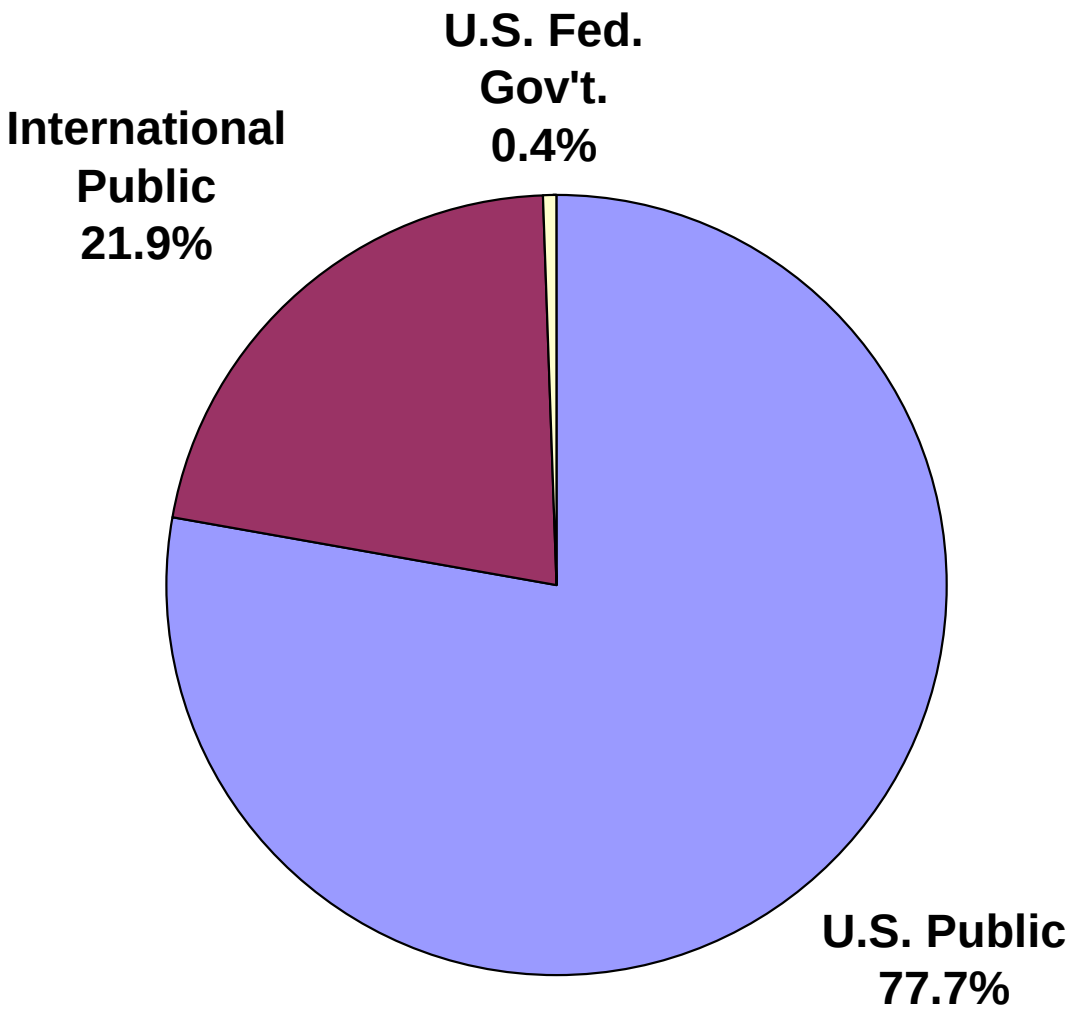
NIST Standard Reference Data-Licensing

- Terms
  - Limited to termination date or specific version
  - Requires acknowledgement of copyright
  - Scientific acknowledgement of NIST name
  - Prohibits further redistribution – secondary distributors
  - Non-transferrable
  - SRD disclaimer-best efforts, no guarantee
- Mass Spectrometry – over 40 distributors
- REFPROP/other fluids – over 40 distributors

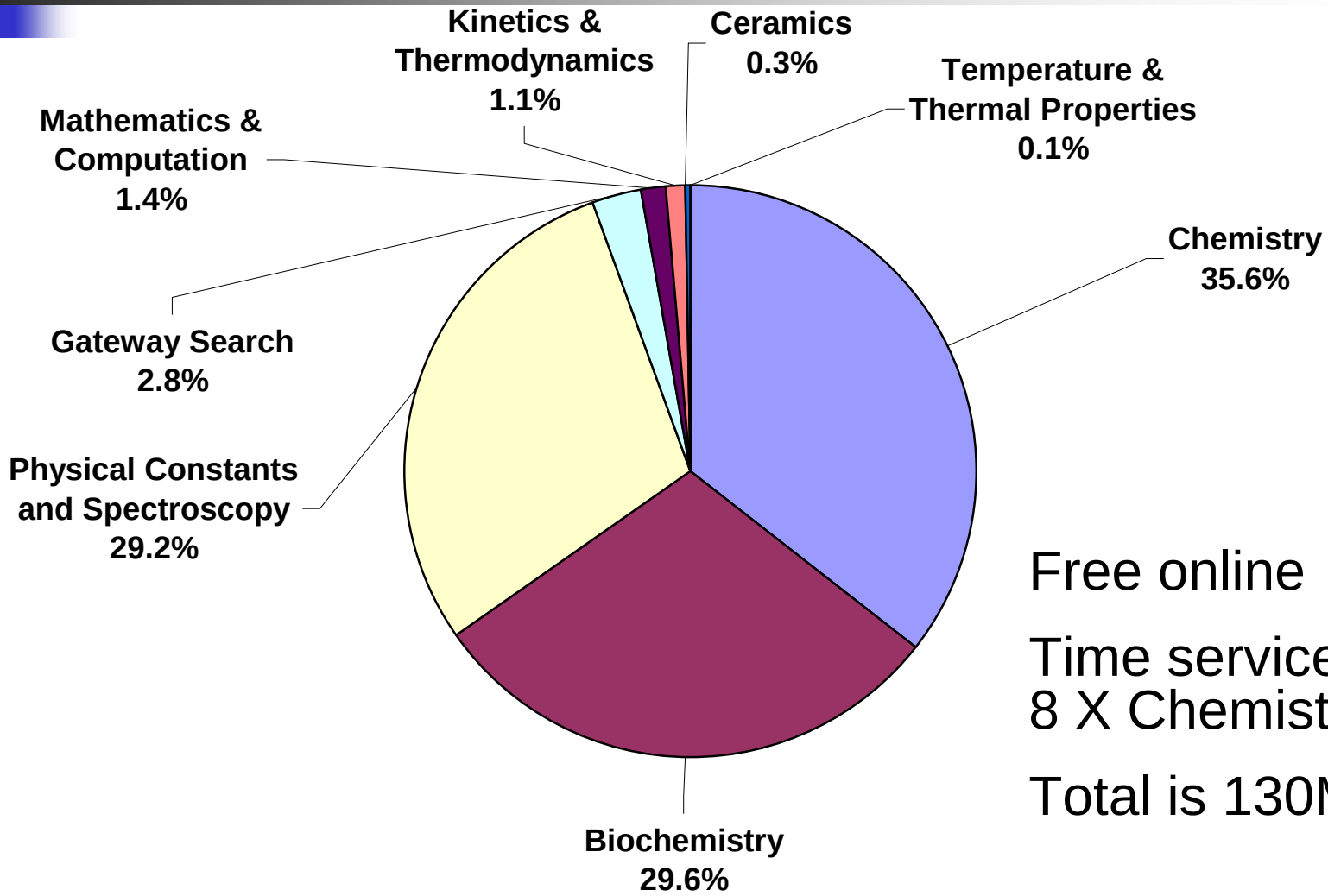
SRD Purchased Products



SRD Customers



Data Downloads (excl. Time)

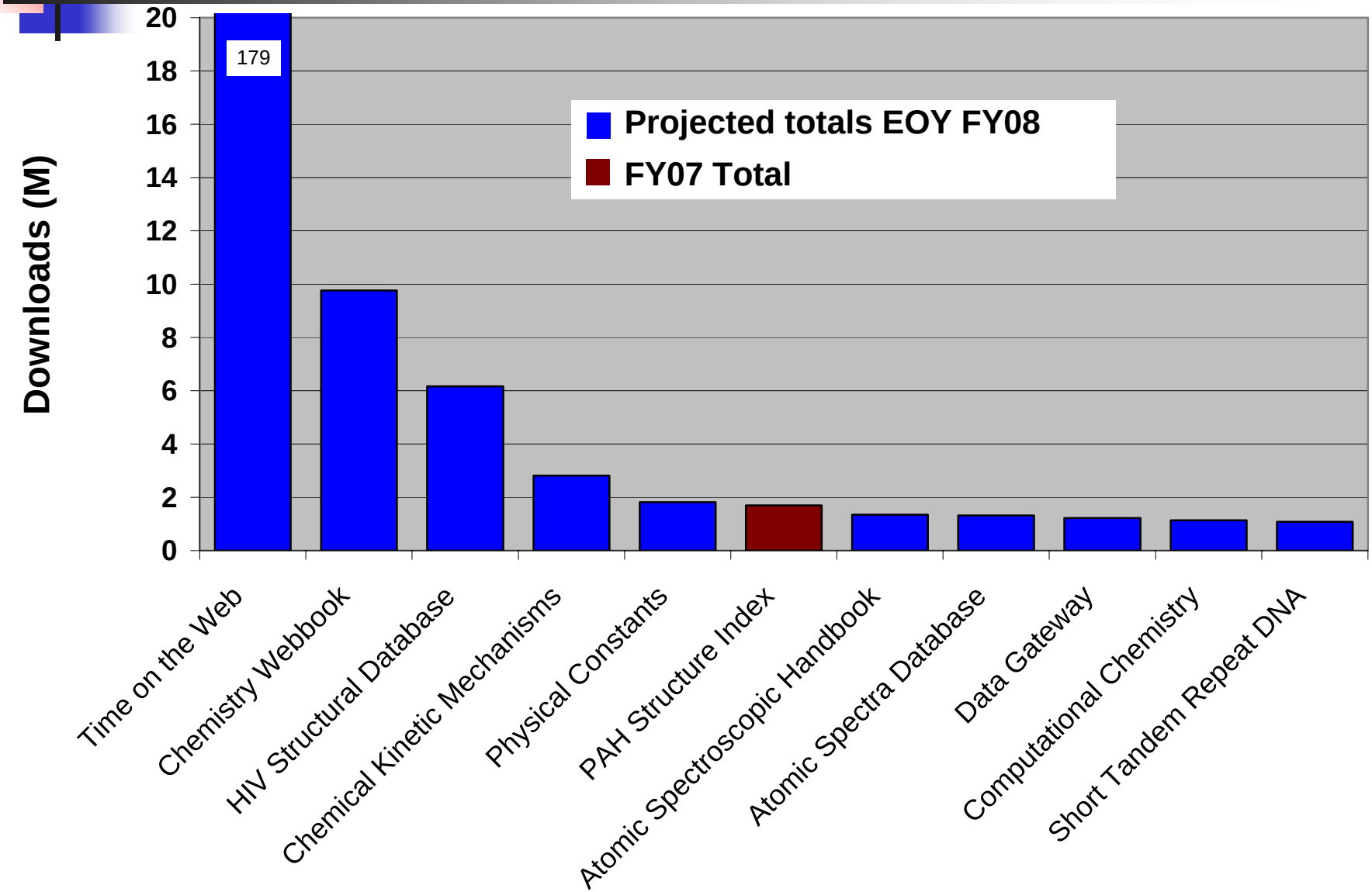


Free online

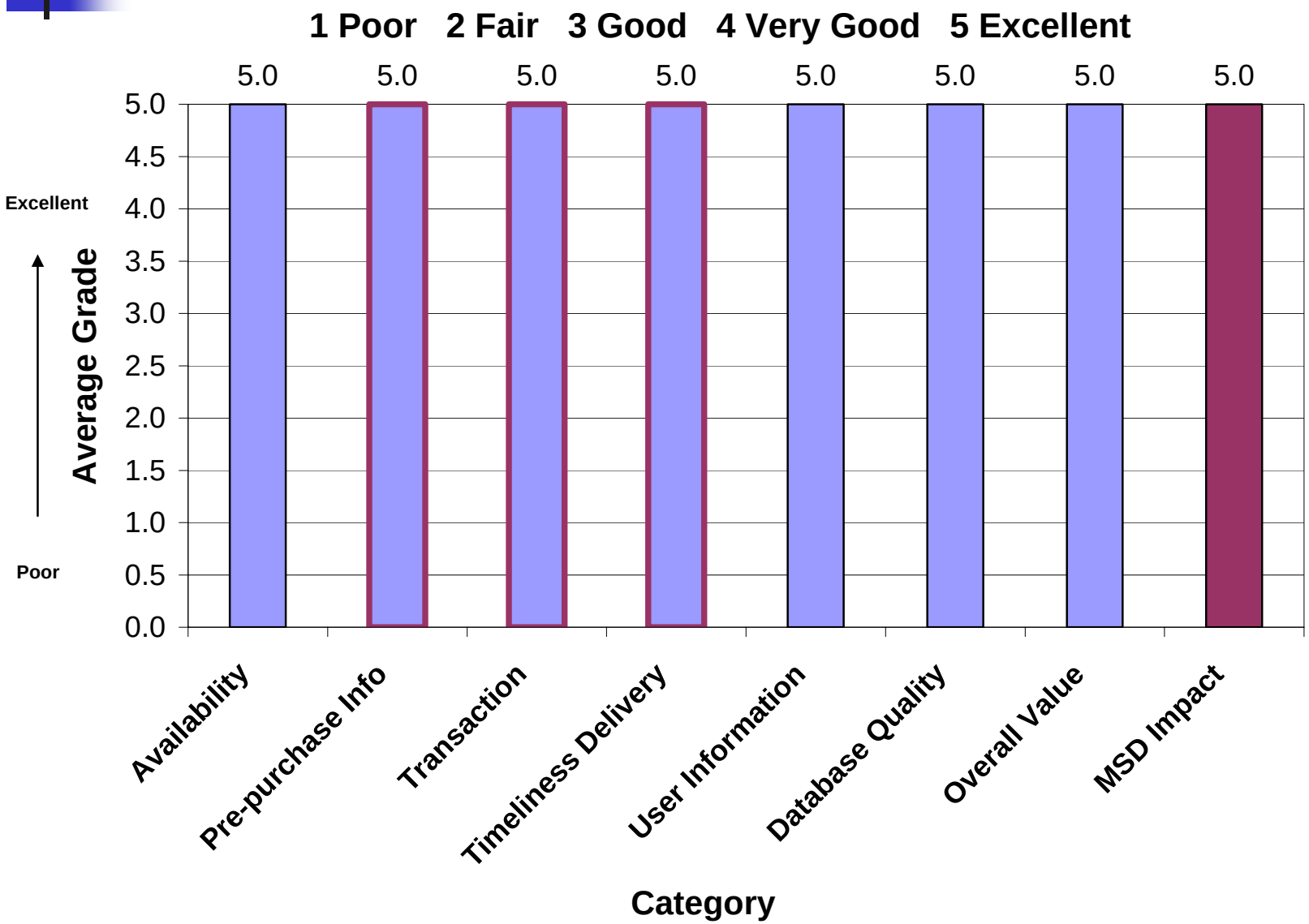
Time services are 8 X Chemistry

Total is 130M

Free Online Systems



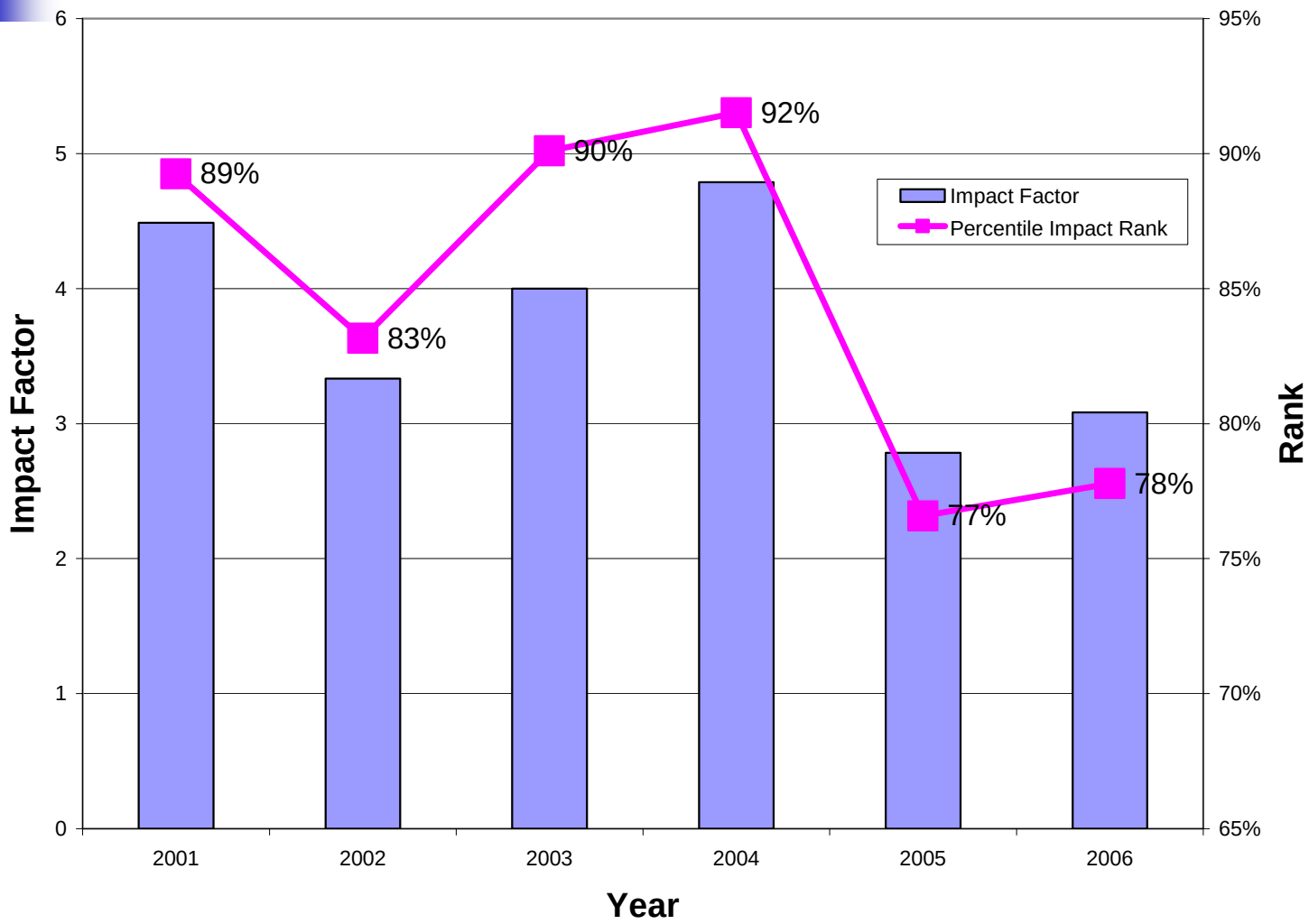
Customer Satisfaction



SRD Impact Studies

- REFPROP (1987 – 1996)
  - Benefit-to-Cost Ratio = 3.9
- Ceramic Phase Diagrams (1985 – 2001)
  - BCR = 10.0

Journal of Physical and Chemical Reference Data

- NIST partner with American Institute of Physics
- Co-editors Allan Harvey and Don Burgess
- 25 – 30 articles; 2000 pages per year
- 4000 citations per year
- Citation half-life >10 years
- High impact factor over the years
  - Average number of citations for “recent” articles

JPCRD Impact Factor