

NIST

Advanced Technology Program

**George A. Uriano
Director, ATP**

**Technology Administration
Department of Commerce**

ATP AUTHORIZING LEGISLATION

1988 Omnibus Trade Act

1992 American Technology Preeminence Act

- **Assist U.S. businesses to create and apply generic technology to:**
 - **Commercialize significant new scientific discoveries and technologies rapidly**
 - **Refine manufacturing technologies**
- **Cooperate with Other Agencies**

GOAL

Assist U.S. businesses to develop *PRE-COMPETITIVE* *GENERIC* technologies. These technologies are:

- **ENABLING -- offer many potential applications; provide technical basis for process- and product-specific applications**
- **HIGH VALUE -- offer significant long-term benefits to the economy by enhancing economic growth and increasing productivity**

ATP ELIGIBILITY

- **Joint ventures**
 - No more than 5 years
 - NIST share must be less than 50%
- **Individual companies**
 - No more than 3 years
 - Up to \$2 million total
- **No direct funding to universities, government agencies or non-profit independent research institutes**

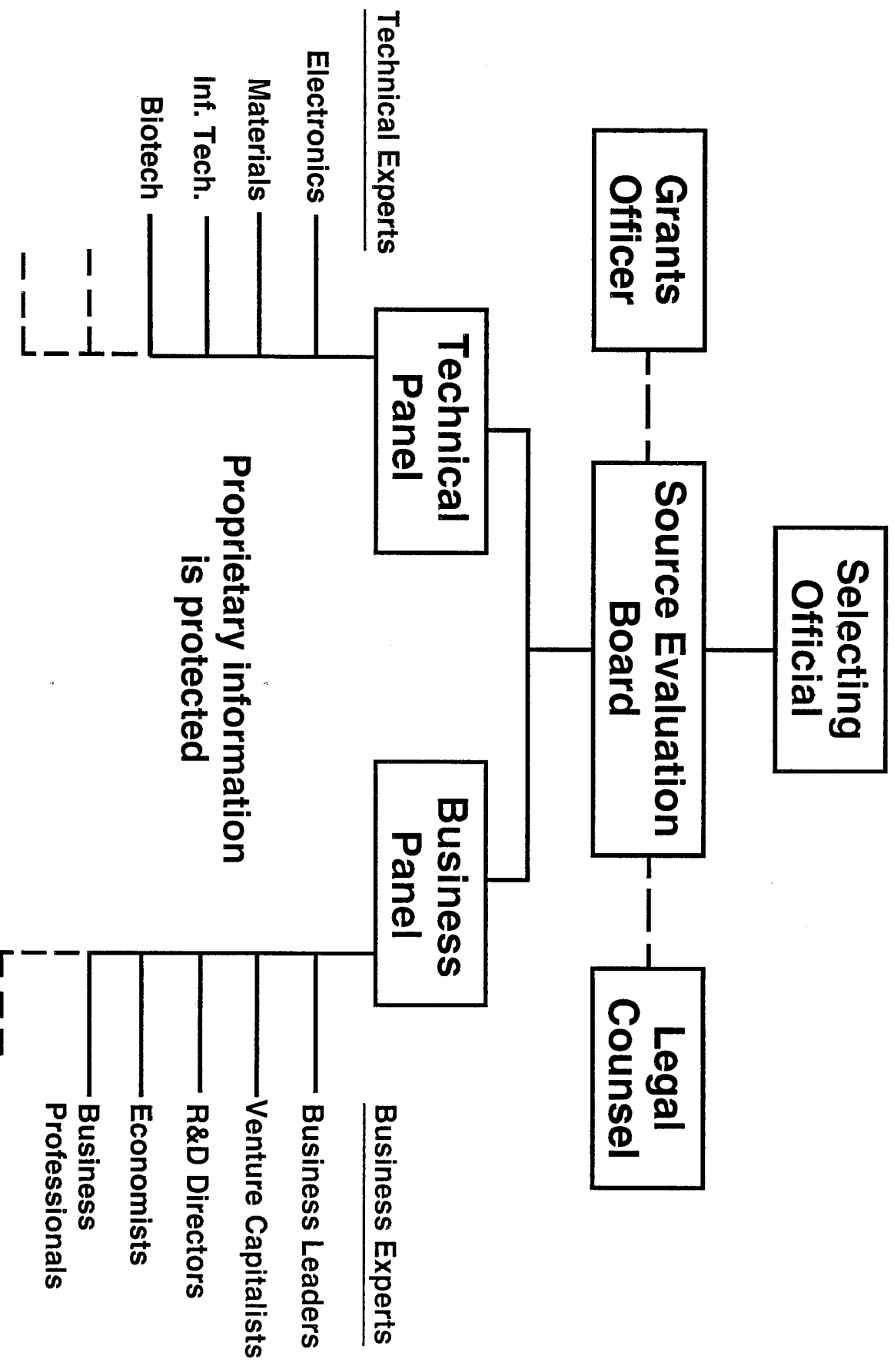
INTELLECTUAL PROPERTY, LICENSING, AND ROYALTY PROVISIONS

- **Seek balance between public good and business incentives**
- **With some exceptions, recipients may generally elect to obtain title to inventions**
- **Recipients may generally establish claim to copy-rights**
- **Government may obtain nonexclusive royalty-free license for its own use**

SYNERGISM BETWEEN ATP AND NIST INTRAMURAL PROGRAMS

- Unique and Long-Standing NIST Mission - - Technical Assistance to Industry to Develop Commercially Important Technologies - - Reinforces ATP Mission
- Long History of NIST / Industry Cooperation - - Enables Strong Technical Support to ATP Awardees
 - Research Associate Program
 - CRADAS
- Substantial Technology / Assessment Capabilities - - Crucial to ATP Proposal Evaluation
- ATP Serves as Technology Forecasting Sensor and Driver for NIST Intramural Programs
- ATP Uses NIST Administrative Systems at Marginal Cost - - Personnel, Accounting, Contracting, Legal, Security, etc.

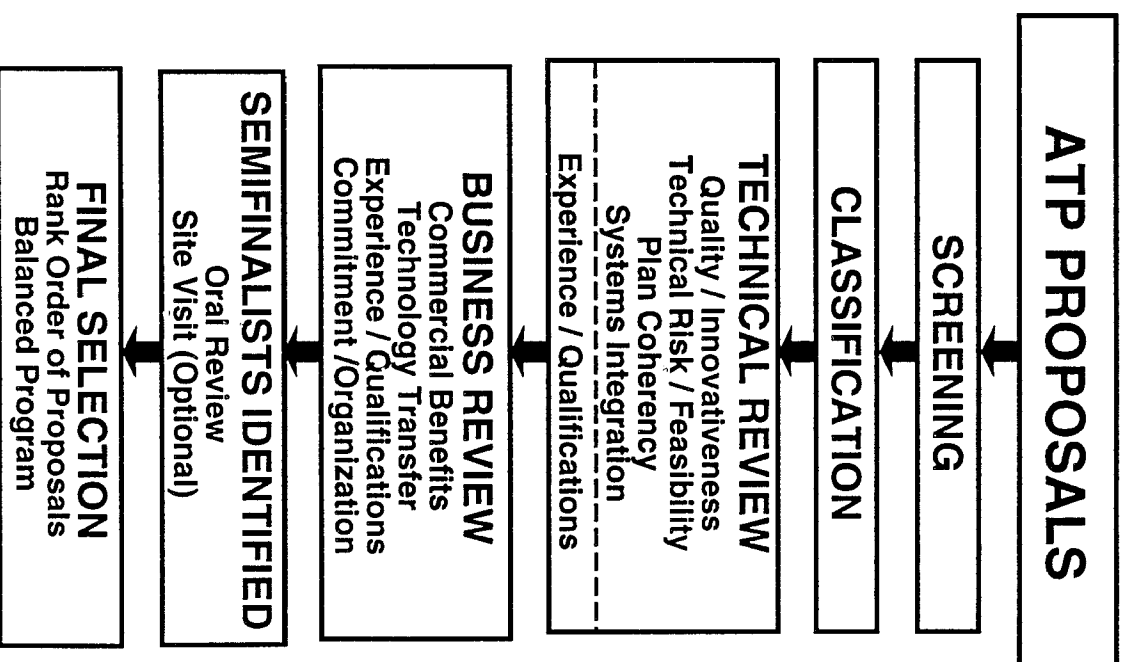
SELECTION PROCESS MANAGEMENT



ATP SELECTION CRITERIA (Weight)

- **Scientific and technical merit (20%)**
- **Broad-based benefits (20%)**
- **Technology transfer benefits (20%)**
- **Experience and qualifications (20%)**
- **Level of commitment and organizational structure (20%)**

ATP SELECTION PROCESS



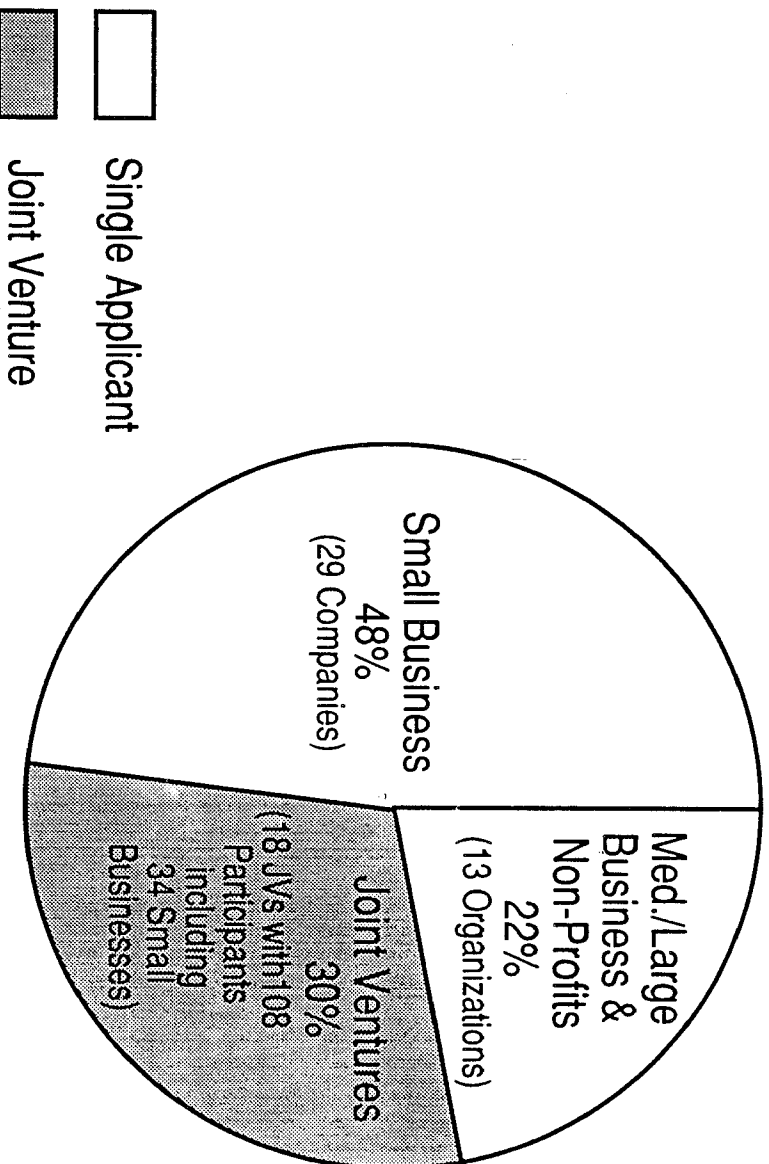
ADVANCED TECHNOLOGY PROGRAM

Important Statistics - - 3 Competitions

| | |
|------------------------------|-----------------|
| Proposals Submitted | 660 |
| Participating Organizations* | 1232 |
| Total ATP Funding Requested | \$1 B |
| Total Estimated Cost-Share | \$1 B |
| Number of Awards | 60 |
| (Joint Ventures) | (18) |
| (Single Applicants) | (42) |
| Participating Organizations* | 150 |
| Total ATP Funds Committed | \$187 M |
| Total Estimated Cost-Sharing | \$210 M |
| Award Size - - Range | \$500K - \$20 M |

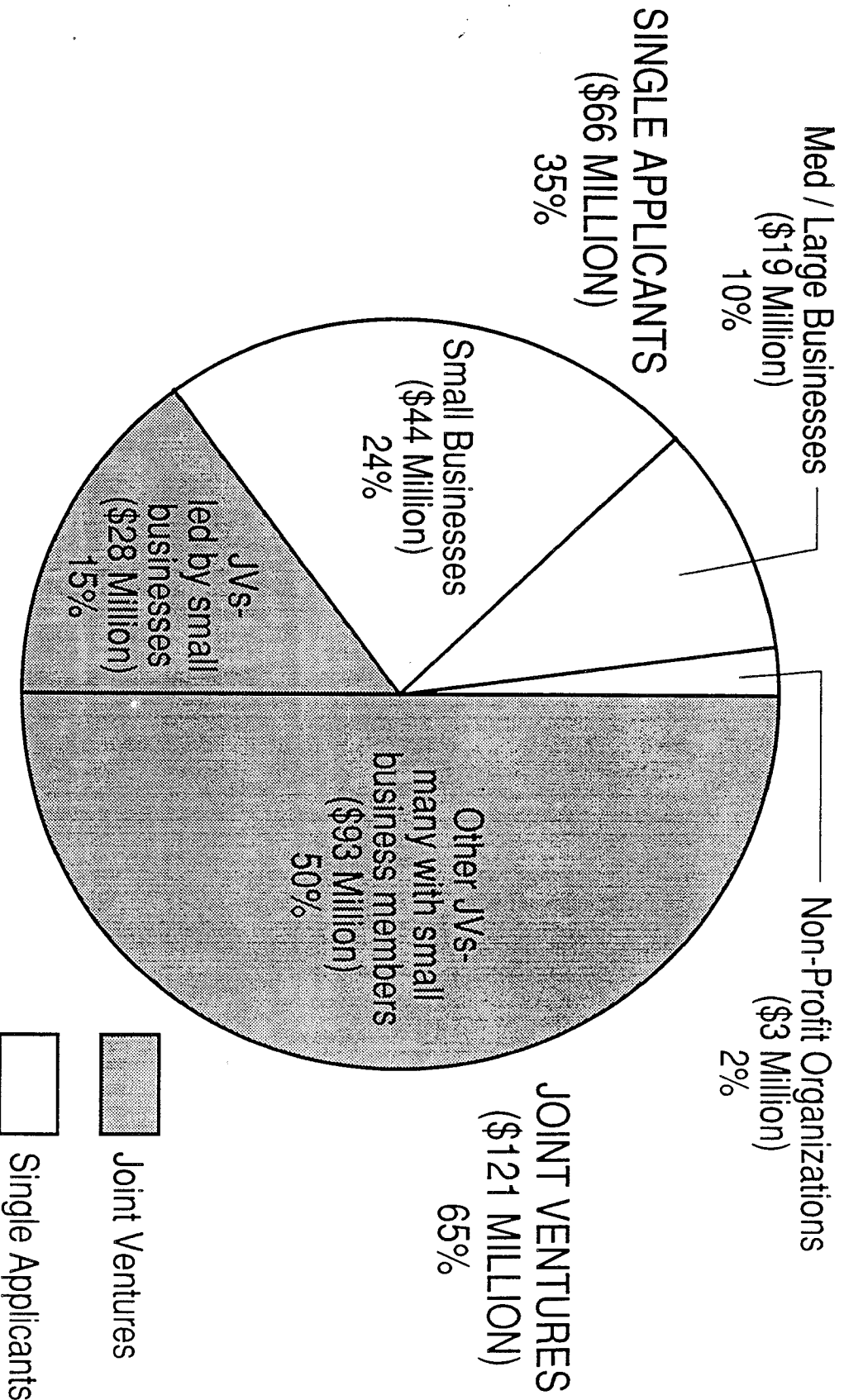
* Excludes Subcontractors

ATP 60 AWARDEES BY TYPE OF ORGANIZATION



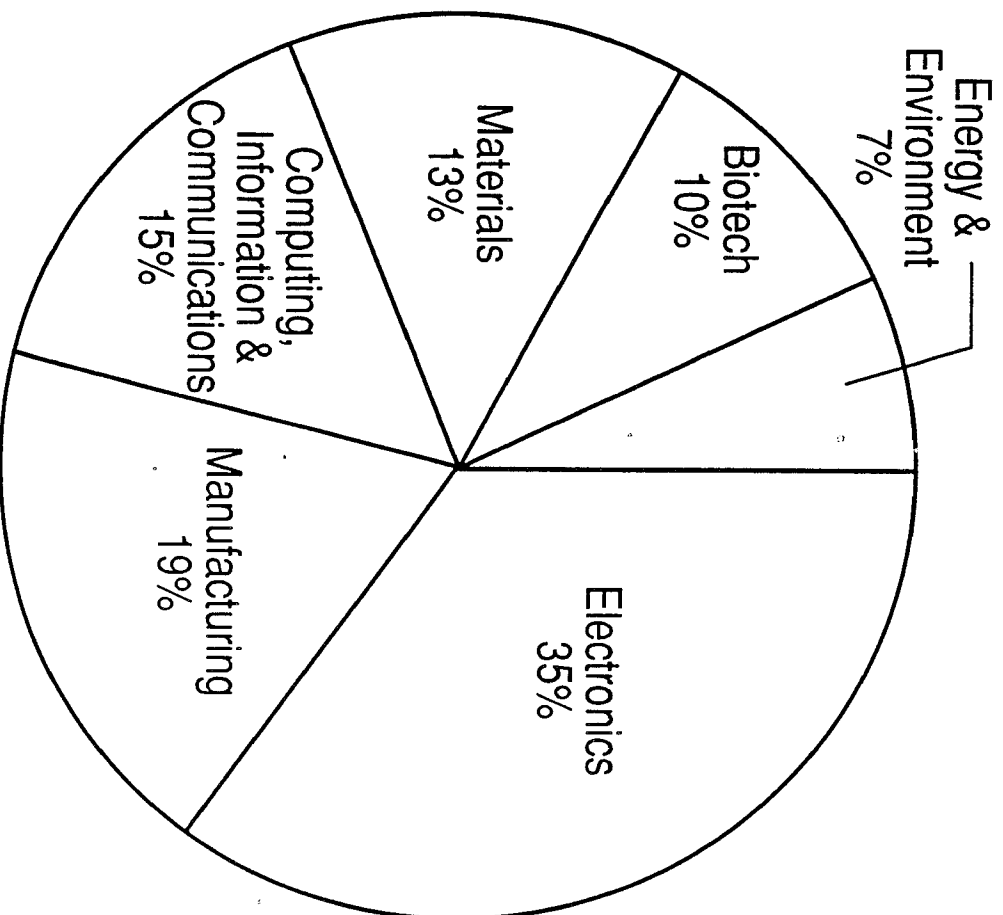
\$187 MILLION OF ATP FUNDS AWARDED

By Type of Organization

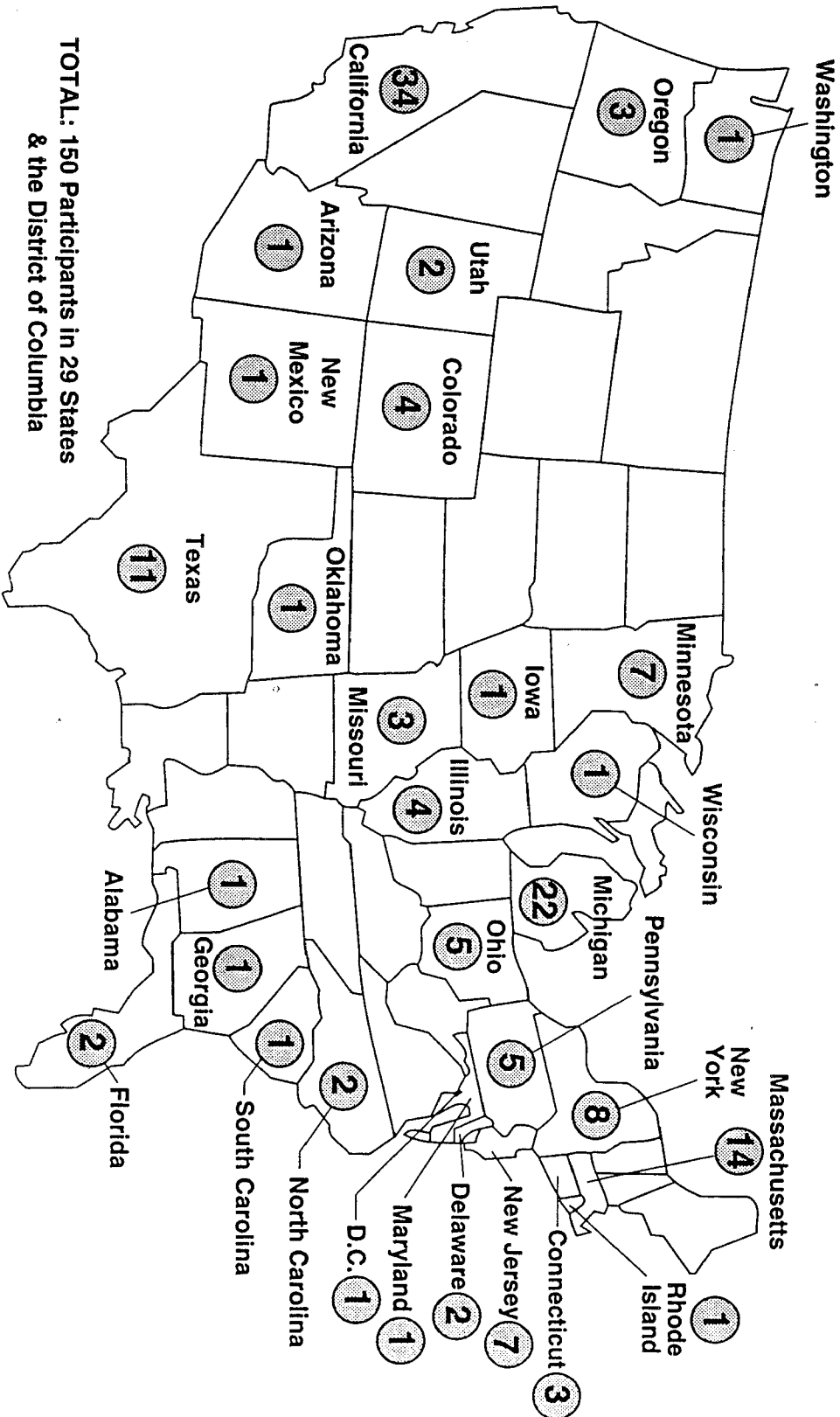


TECHNOLOGIES FUNDED BY ATP

As a percent of \$187 M Awarded



ATP PARTICIPANTS* BY STATE



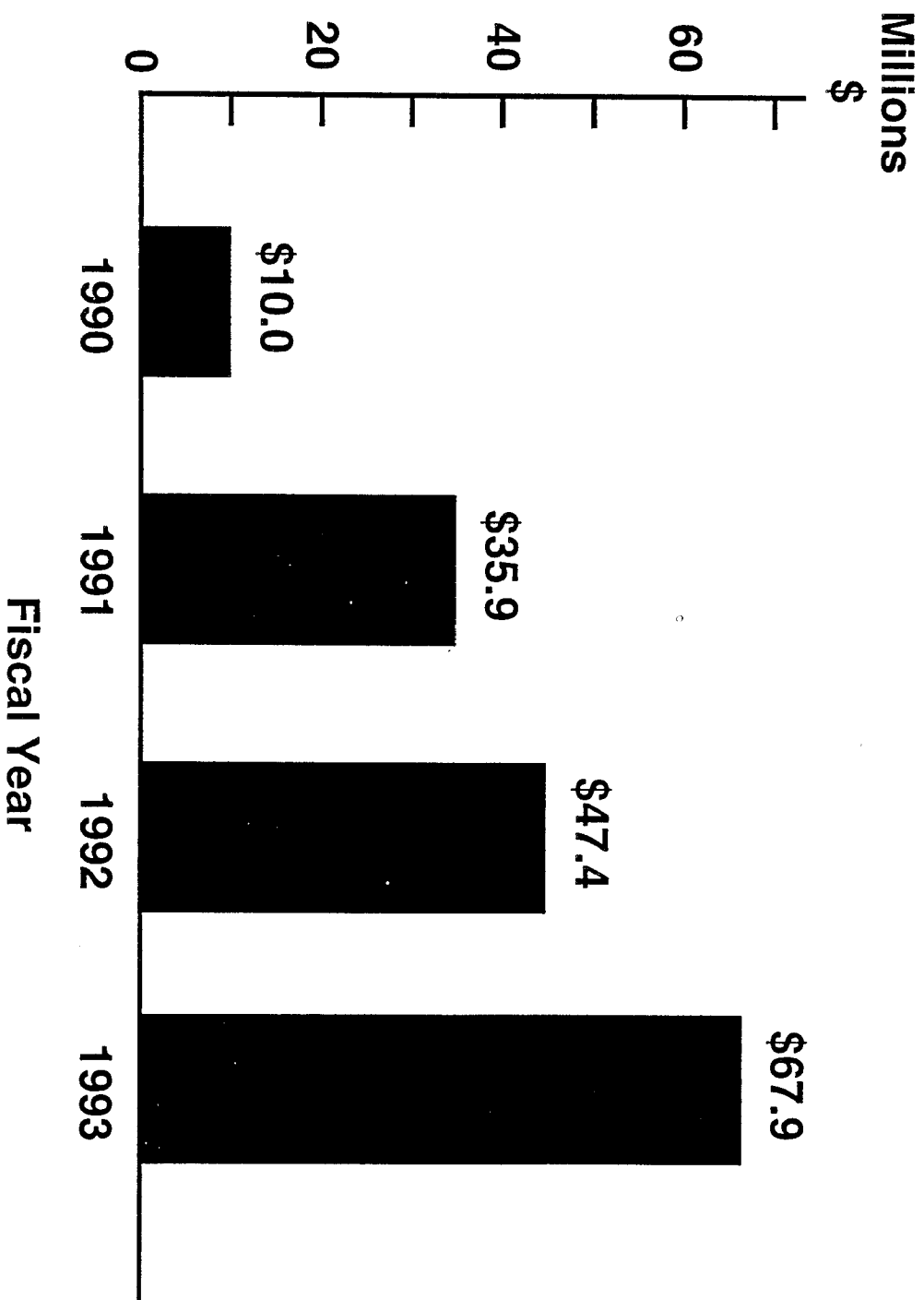
TOTAL: 150 Participants in 29 States
& the District of Columbia

* "Participants" includes joint venture members, and excludes subcontractors, informal collaborators with joint ventures, and collaborators and strategic partners of single applicants.

ATP TECHNOLOGY AREAS

- Machine Tools
- Image Recognition & Processing
- Semiconductor Processing
- Genetic & Tissue Engineering
- Flat Panel Displays
- Lasers, Optics & Electro-optics
- High Performance Computers
- Optical Communications
- Ceramics, Composites, & Polymers
- Automated Mfg. & Robotics
- Motor Vehicle Assembly
- Plastic Recycling
- Superconductors
- Energy Conservation & Distribution
- X-ray Lithography & Optics
- Optical & Magnetic Storage
- Printed Wiring Boards
- Illumination

ATP BUDGETS



THE ATP IS UNIQUE !

- Broad Scope
- Focus on High-Risk Generic Technologies
- Direct Funding of Companies Only
- R&D Priorities Set by Industry
- Cost Sharing Required for All Projects
- Selection Based on Both Technical and Business Merit
- Automatic Sunset Provisions - - Funding Limit on Single-Company Projects
- Promotes Cooperative Research and Strategic Business Alliances
- Substantial Support to Small Businesses (Including Startups)
- Intellectual Property Rights Assigned to Awardees
- Proprietary Information Protected