

Overview of IEEE Technical Activities

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2005 IEEE VP Technical Activities

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IEEE Organization



MEMBERS

Board of Directors

Assembly

PSPB

IEEE-USA

Educational Act.

Standards Assoc.

Regional Act.

Technical Act.

Executive Comm.

**Regions &
Sections**

**Societies &
Tech. Councils**

**Staff & Society
Executive Directors**

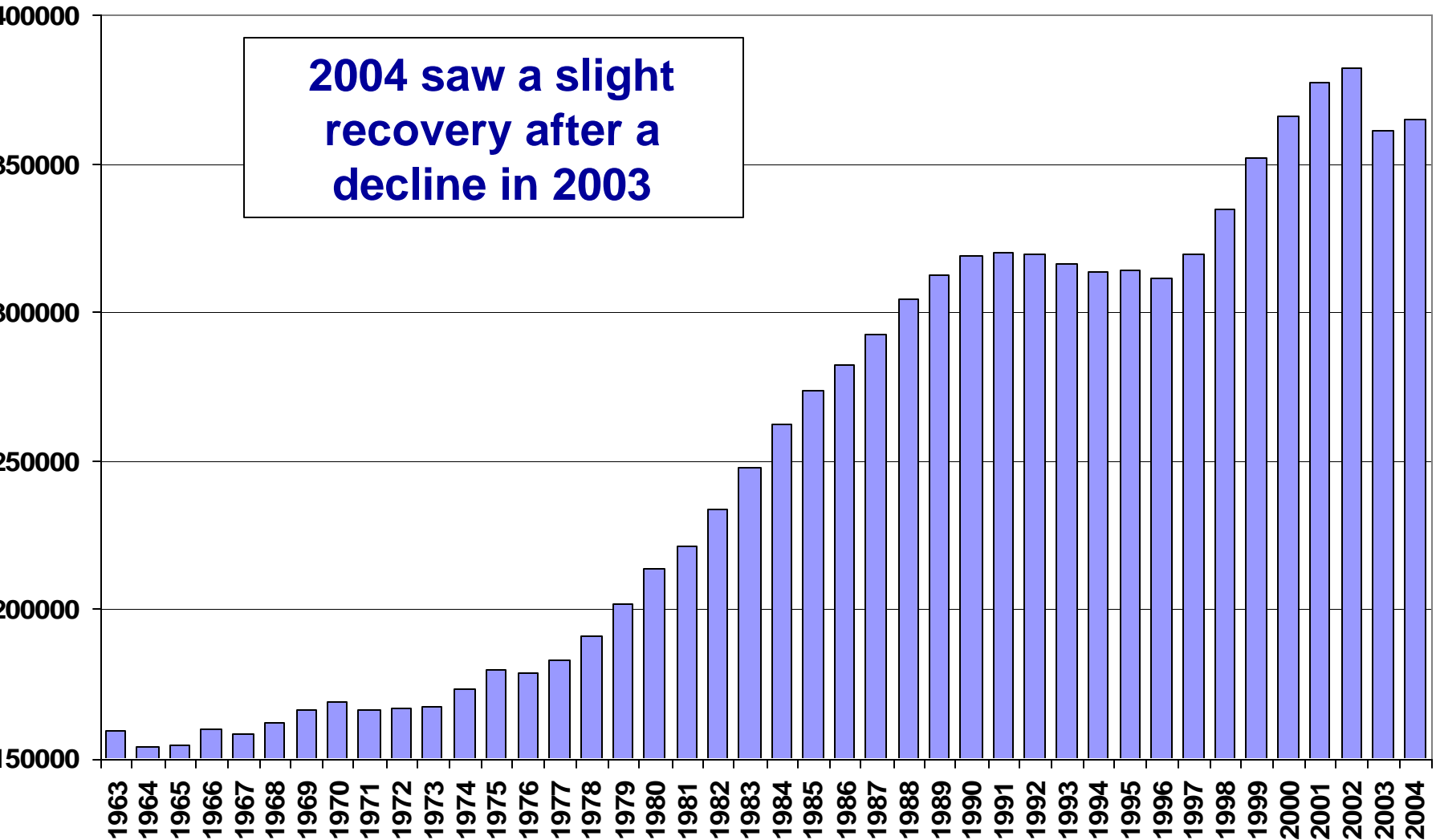
Primary Metrics

- **Society Membership**
- **Publications**
- **Conferences**
- **New Technologies/Publications/Conferences**
- **Finances**
-

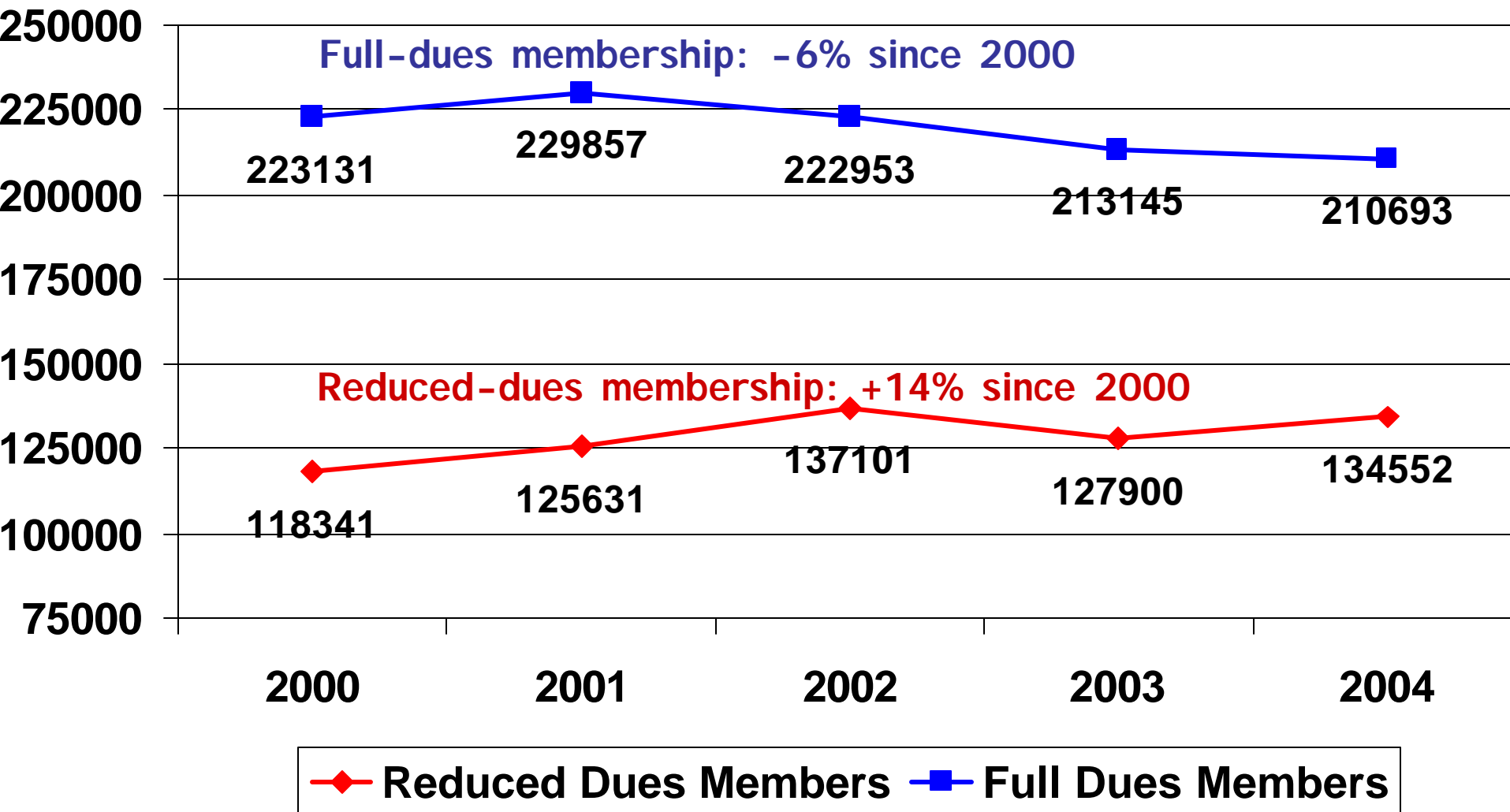
Membership

IEEE Membership is up 1.2% to 365,483

Total Membership - 1963 to 2004



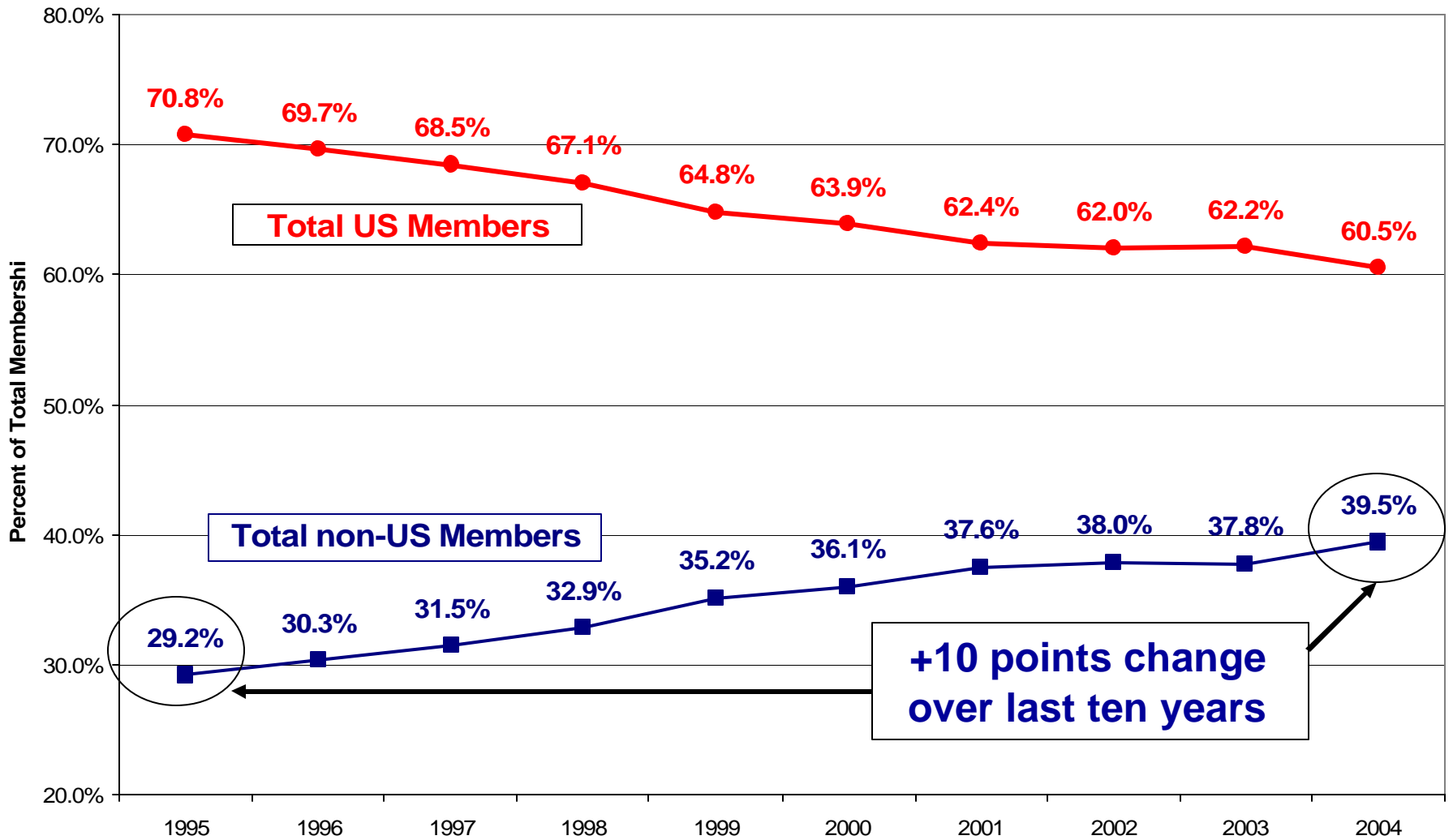
Membership by Dues Categories



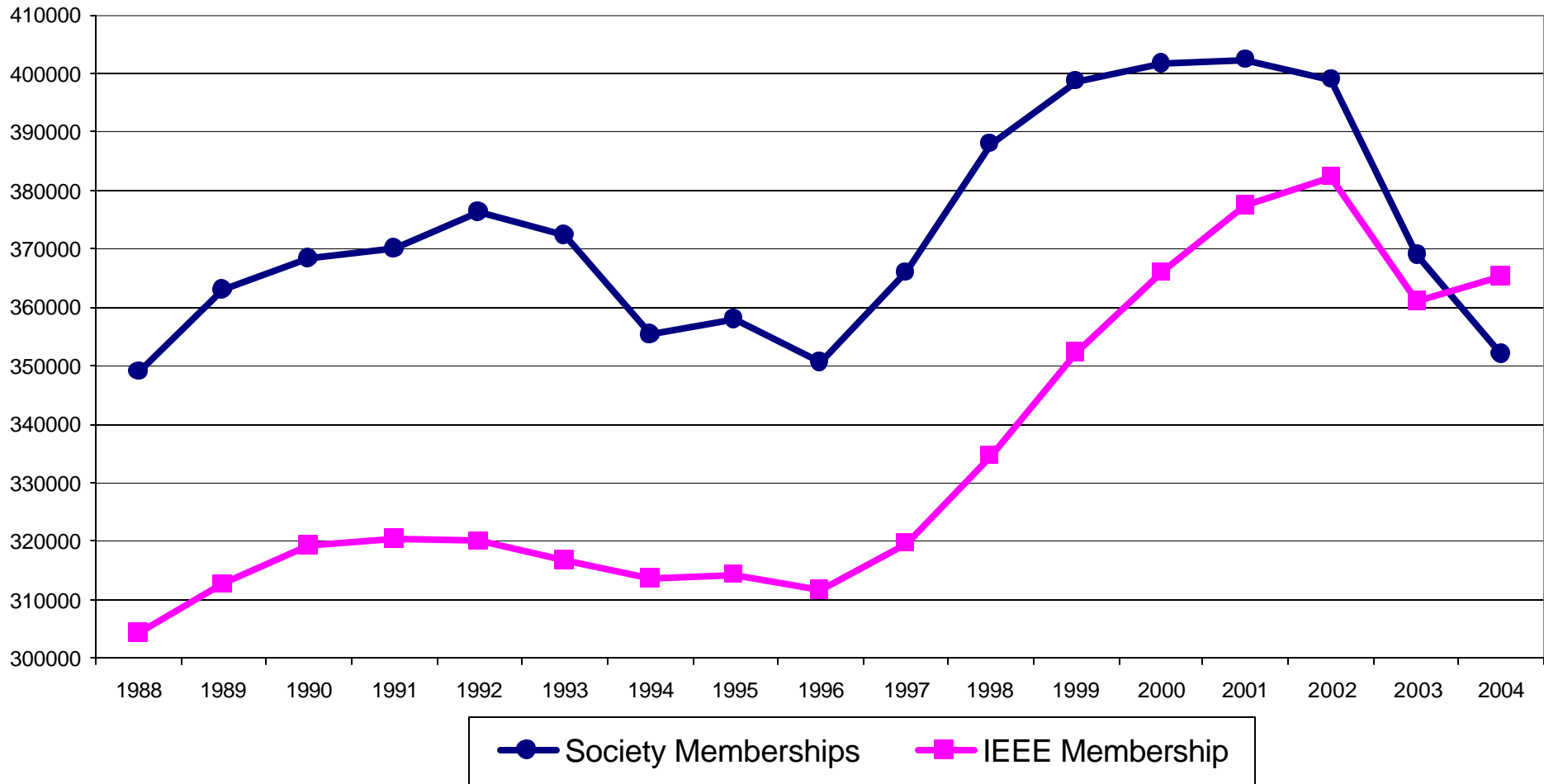
Membership by Region

Region	Final 2004	Final 2003	% Change
Region 1	39,952	41,305	-3.2%
Region 2	34,070	34,476	-1.2%
Region 3	30,720	31,252	-1.7%
Region 4	24,732	24,983	-1.0%
Region 5	30,127	30,659	-1.7%
Region 6	61,540	62,111	-0.9%
<i>US Subtotal</i>	<i>221,141</i>	<i>224,786</i>	<i>-1.6%</i>
Region 7	15,107	14,865	+1.6%
Region 8	53,471	50,295	+6.3%
Region 9	12,216	11,654	+4.8%
Region 10	63,548	59,538	+6.7%
<i>Non-US Subtotal</i>	<i>144,342</i>	<i>136,352</i>	<i>+5.9%</i>
Total IEEE	365,483	361,138	+1.2%

Total Membership Trend - US vs non-US



Society Membership Trends



Society Memberships Declined 4.6% in 2004 & 12% In Last 3 yrs - Why ?

- 1) Natural consequence of the success of I EL
- 2) Probable contributing factor: I EEE website makes joining a society (after joining or renewing I EEE membership) nearly impossible
- 3) "Membership is too expensive" is no. 1 reason for non-renewal.
- 4) Engineers' salaries have not kept up with inflation lately
- 5) Poor PR
- 6) OTOH, some (SSIT, GRSS, UFFC-S and RAS) increased membership in 2004 - skill or luck?

Membership Puzzles

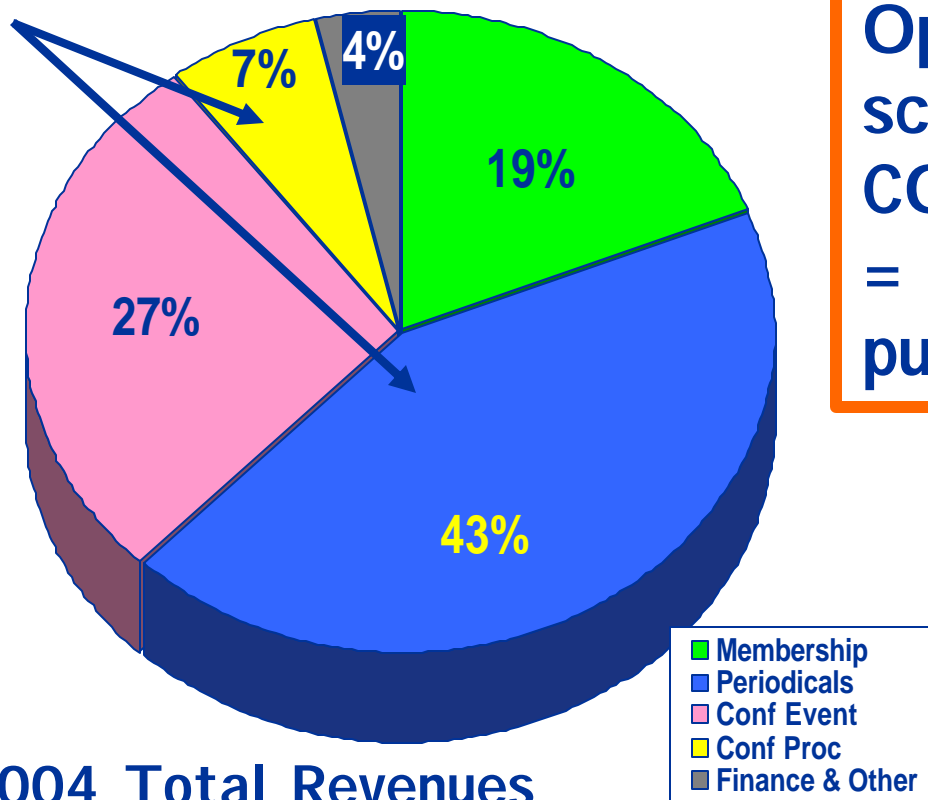
- ~60,000 members have “free” access to Xplore. Why do they join/renew?
- 61% of student members have “free” access to IEEE pubs. Why do they join/renew?
- 44% of members don't join a society. Why?
- ~2 million scientists, engineers and students have “free” access to IEL. How do we attract them?

Publications

IEEE's Revenues From Operations¹

Publications = 50%

Publications Business



2004 Total Revenues
~\$260 Million

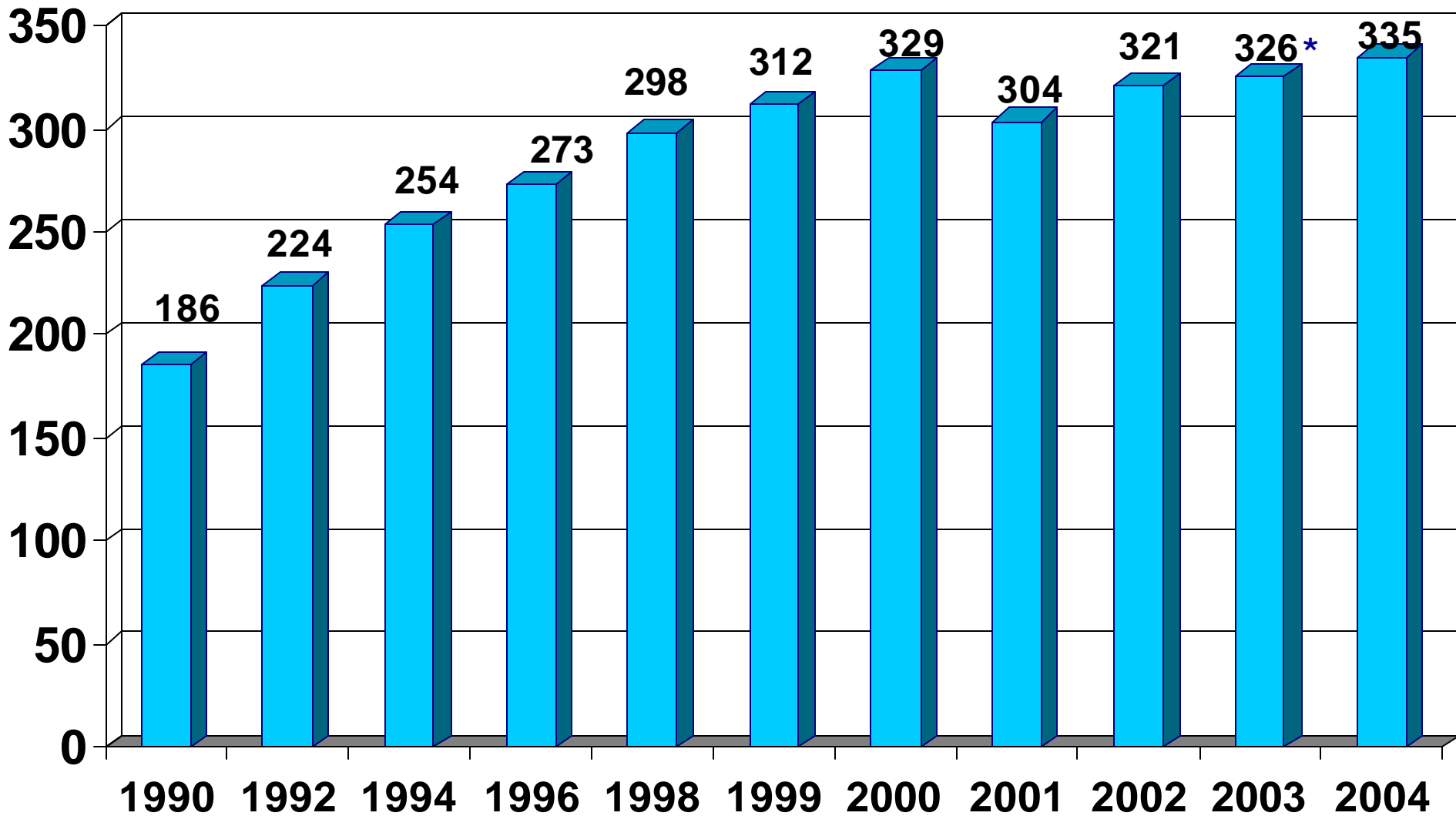
Open access (NIH) +
scholar.google.com +
COUNTER compliance
= trouble for IEEE's
pubs business

¹ Omits Investment Returns on Reserves; Source: IEEE Audited Financials

Conferences

IEEE Conferences

IEEE Society/Council Sponsored/ Co-Sponsored Conferences



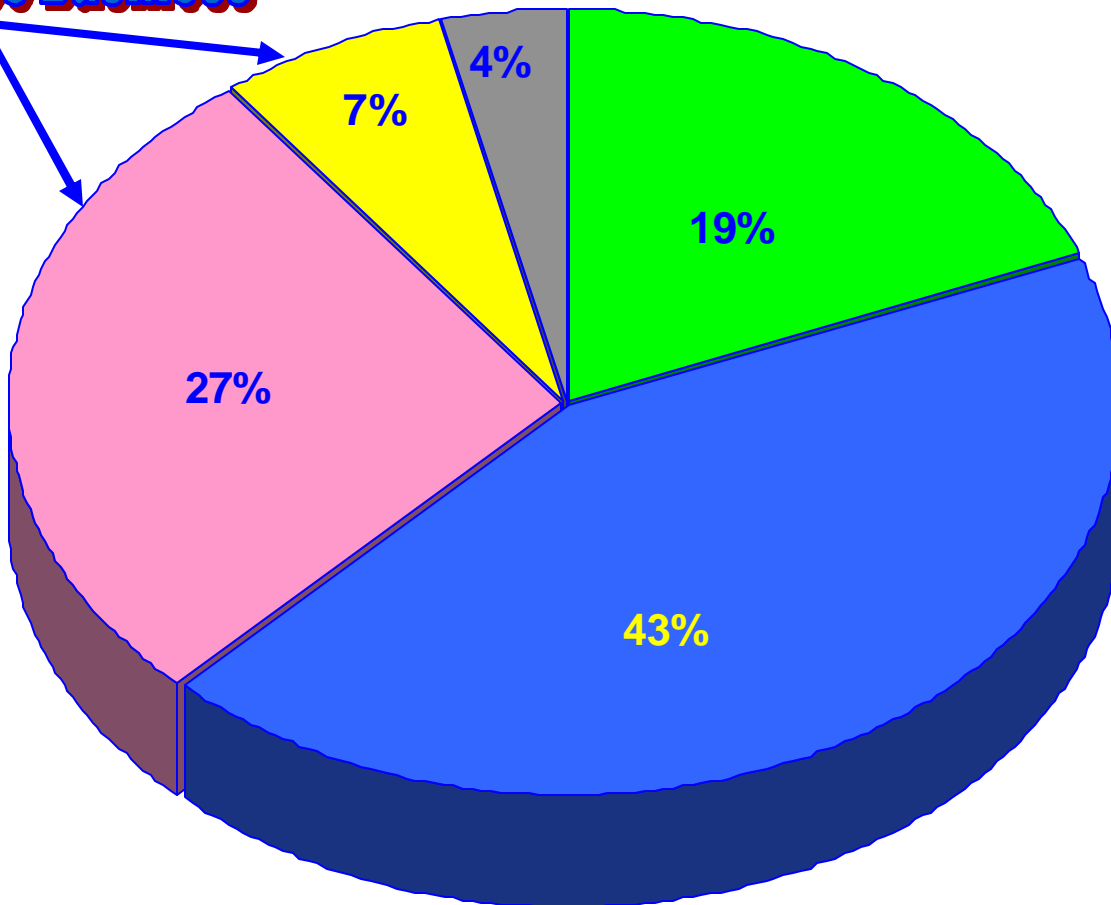
**NOTE: 4 Conferences Cancelled in 2003 due to SARS*

IEEE's Revenues From Operations¹

Conferences = 34%

Conference Business

34%



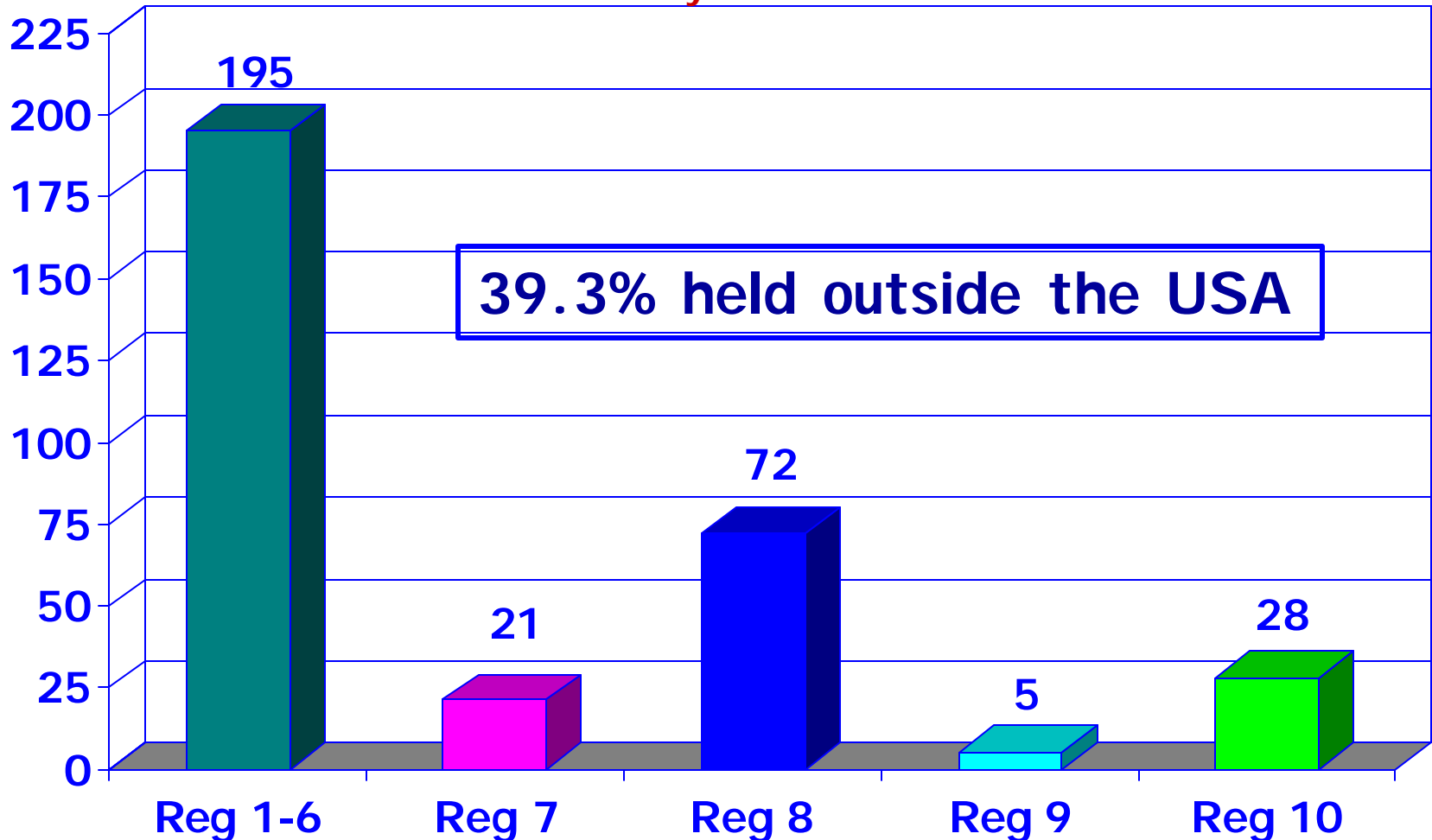
- Membership
- Periodicals
- Conf Event
- Conf Proc
- Finance & Other

2004 Total IEEE Revenues ~\$260 M

¹ Omits Investment Returns on Reserves; Source: IEEE Audited Financials

Where 2002 IEEE (Co)Sponsored Conferences Were Held

May 2003



Transnational Scorecard (1)

	Regions 1-6 (U.S.)	Regions 7-10 (Non-U.S.)
IEEE Membership	61%	39%
Society Membership	55%	45%
BoD Membership	79%	21%
TAB Membership	87%	13%
S/C AdCom Membership	72%	28%
OU Meeting Attendees	88%	12%

Transnational Scorecard (2)

	Reg. 1-6	Reg. 7-10
Conference Location	58%	42%
Conference Chairs	62%	38%
Standards Wkg Grp Chairs	91%	9%
IEL Subscribers	20%	80%
Xplore Usage <small>(pdf downloads)</small>	22%	78%
Editors-in-Chief	75%	25%
Authors	34%	66%

New Technologies

Proposed New Societies/Councils

AdHoc Committees

- **Life sciences/Biomedical**
- **Systems Engineering**
- **CAD**
- **Earth Observations***
- **Product Safety Society -done**

* IEEE is now recognized as an NGO of interest in GEO, an organization that promotes the development of a sustained earth observation system to understand and address global environmental and economic challenges (GRSS)

Future New Entity Possibilities

Focus Groups

- **Portable Information Devices**
- **Organic Electronics**
- **Security/Biometrics**
- **Global (homeland) Security**
- **Digital Intellectual Property**

New Publications in 2004

- **IEEE Transaction on Automation Science and Engineering**
- **IEEE/ACM Transaction on Computational Biology and Bioinformatics**
- **IEEE Transactions on Dependable and Secure Computing**
- **IEEE Distributed Systems Online**
- **IEEE Geoscience and Remote Sensing Letters**

Future Publications

- **New in 2005**
 - **IEEE Transactions on Industrial Informatics.**
 - **IEEE/OSA Journal of Display Technology**
- **Confirmed for 2006**
 - ***IEEE Trans on Information Forensics and Security**
- **Proposed for 2006**
 - **Journal of Product Safety Engineering**
 - **IEEE Computational Intelligence Magazine**
 - **IEEE Electromagnetic Compatibility Letters**
 - **IEEE Trans on Haptics, Augmented, and Virtual Reality**

New Conferences

- 2005 IEEE Int'l Workshop on Measurement Systems for Homeland Security Contraband Detection & Personal Safety (IMS 2005)
- OCEANS 2005 - EUROPE
- 2005 IEEE Power Electronics Education Workshop (PEEW 2005)
- 2005 IEEE Electric Ship Technologies Symp. (ESTS 2005)
- 2006 IEEE Radio and Wireless Symposium (RWS)
- 2005 2nd IEEE Consumer Communications and Networking Conference (CCNC)
- 2005 3rd IEEE Int'l Conf. on Industrial Informatics (INDIN)

Who Creates New Technologies?

“Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it’s the only thing that ever has.”

Margaret Mead

“Everything that is really great and inspiring is created by the individual who can labor in freedom.”

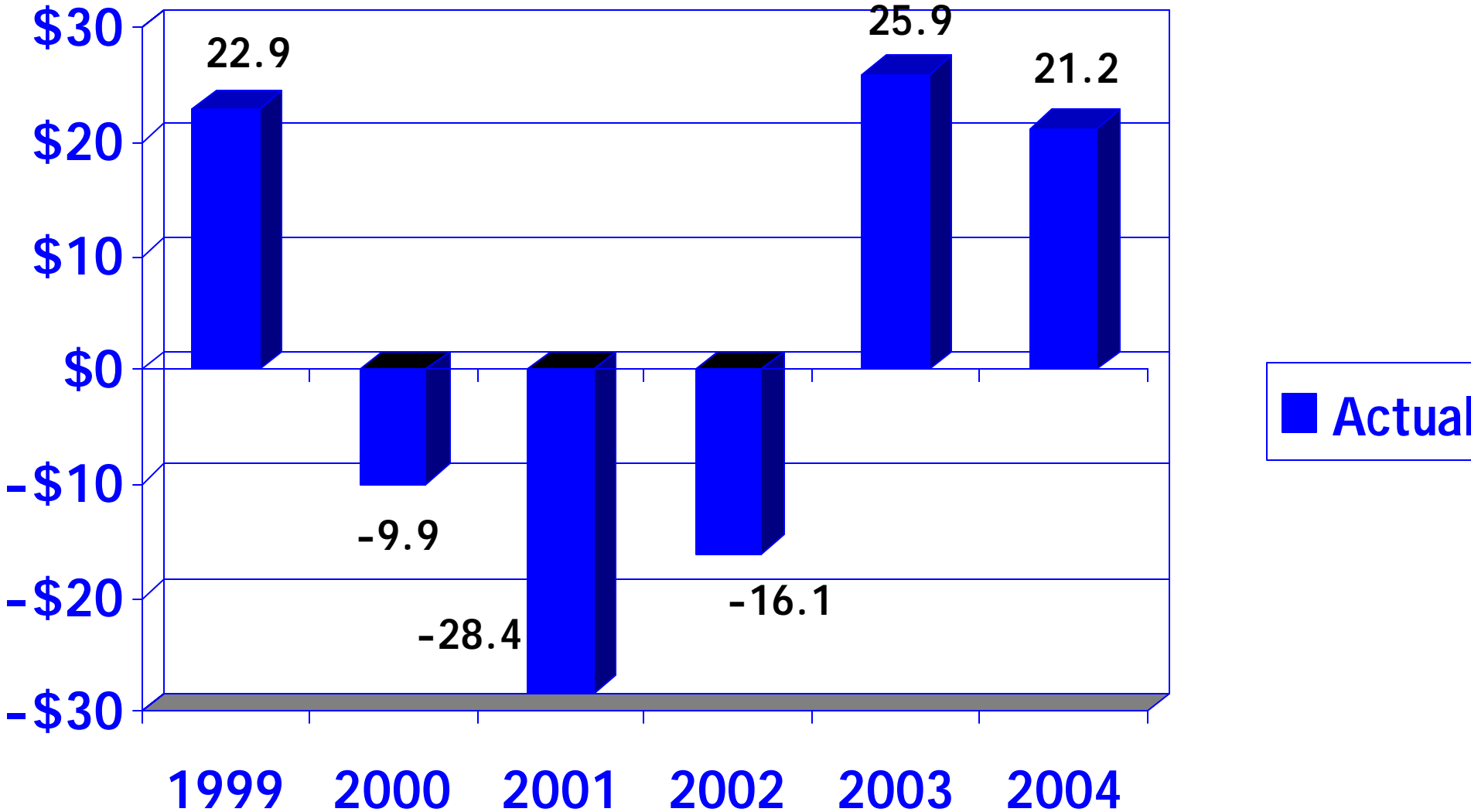
Albert Einstein

Finances

Financial Results

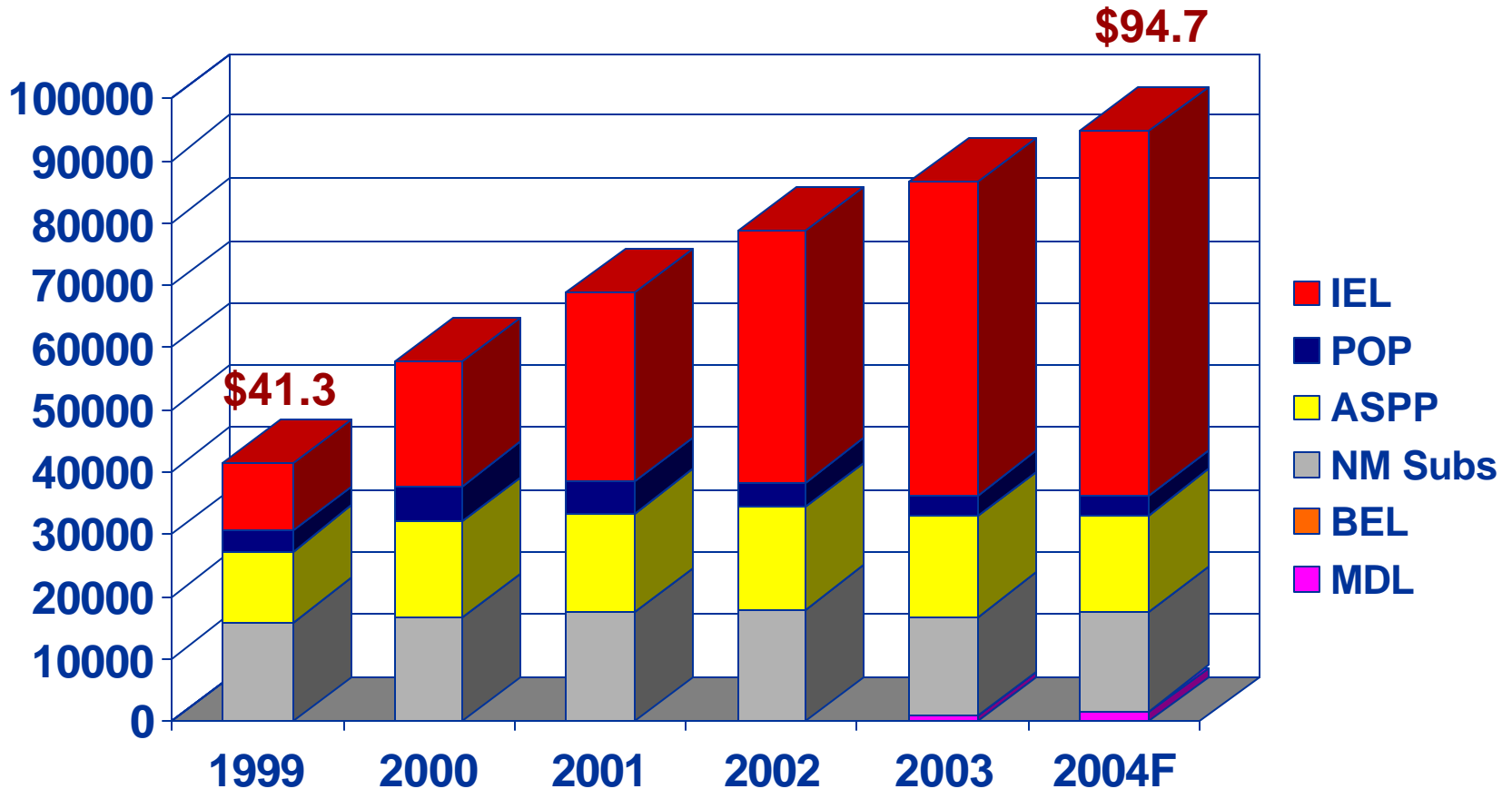
IEEE Net (with investment returns)

Millions of Dollars



IEEE Portfolio Sales

1999-2004F in \$ millions / 129% growth in 5 years



Revenue by Dues Category

\$ = 000

Category	2000	2001	2002	2003	2004
Students	\$ 930	\$ 1,006	\$ 1,108	\$ 1,732	\$ 1,784
HG Reduced Dues Members	1,086	1,024	1,401	1,736	1,952
Full Dues Members	18,624	19,197	21,933	22,924	23,131
Total Dues Revenue	20,640	21,227	24,442	26,392	26,867

? = \$475K

Membership Dues

“Membership is too expensive” is the no. 1 reason for non-renewal

Bylaws I -108: Dues “increases shall be made in accordance with the rate of inflation, in the United States based on the Consumer Price Index (CPI) for the preceding calendar year, rounded up to the nearest whole dollar.”

How does increasing dues every year make sense?

Why not increase revenues other ways, instead?

Dues revenues x CPI = <\$1M/year, but, actual dues revenues increased only \$475K in 2004

\$0.5M = ~\$5 average conf. reg. fee increase

\$0.5M = ~8 new IEL sales (~1% increase)

\$0.5M = ~100 new Enterprise sales (out of 100K sales prospects)

IEEE Enterprise

- Launched June 30, 2004
- A flexible, cost effective new way for business to search and access IEEE information
- Instant desktop access to over a million articles from IEEE journals and conference proceedings
- Not available to Academics
- Three access levels available
 - Level 1 - \$4,995: 350 downloads (\$14.28/article)
 - Level 2 - \$9,995: 800 downloads (\$12.50/article)
 - Level 3 - \$17,495: 1,750 downloads (\$10/article)

Rebates to Sections, Chapters, and Societies

- Rebates of 20% of the initial price and 15% of the renewal price shall be credited to OUs that are the procuring cause of the new or renewal license of IEEE Enterprise and the IEEE/IEE Electronic Library (IEL).
- 20% of IEL → \$21K; 20% of Enterprise → \$1K to \$3.5K
- When an OU and IEEE staff are jointly the procuring cause of a new license, 14% of the initial price shall be credited to the OU.
- When an OU is the procuring cause of a new IEL license in IHS' territory (such as Corp. NA and Academic/Corp/Gov't markets in RoW), a \$3500 rebate (not 20%) shall be credited to the organizational unit.

Section and Society Participants

- **2005 Pilot Program participants**
 - 5 sections and 2 societies
 - **Bangalore** – **Computer Society**
 - **Beijing** – **EMBS**
 - **Brazil**
 - **Northern California**
 - **Ottawa**

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Thank you.

**Questions?
Comments?**



IEEE Web Sites

- **IEEE Volunteer Resources**
www.ieee.org/organizations/vols/
- **IEEE Technical Activities**
www.ieee.org/tab/
- **Society and Technical Council Pages**
www.ieee.org/organizations/tab/society.html
- **Periodicals and Authors information**
www.ieee.org/products/periodicals.html
- **Conference Database**
www.ieee.org/conferencesearch/
- **IEEE Membership**
www.ieee.org/membership/

IEEE Quick Facts

- Over 365,000 members
- Over 68,000 student members
- Approximately 40% of members from outside US
- Over 29,000 affiliates
- 307 sections
- 1,446 chapters
- Over 1,300 Student Branches
- 39 IEEE Societies plus 3 Technical Councils
- 128 Periodicals
- Over 550,000 pages published in 2004
- More than 1,100,000 documents in the IEL
- Over 300 Conferences each year
- \$260M Revenues