

Region 2 Director's Report: The State of IEEE

Bill Walsh

2009 – 10 Region 2 Director

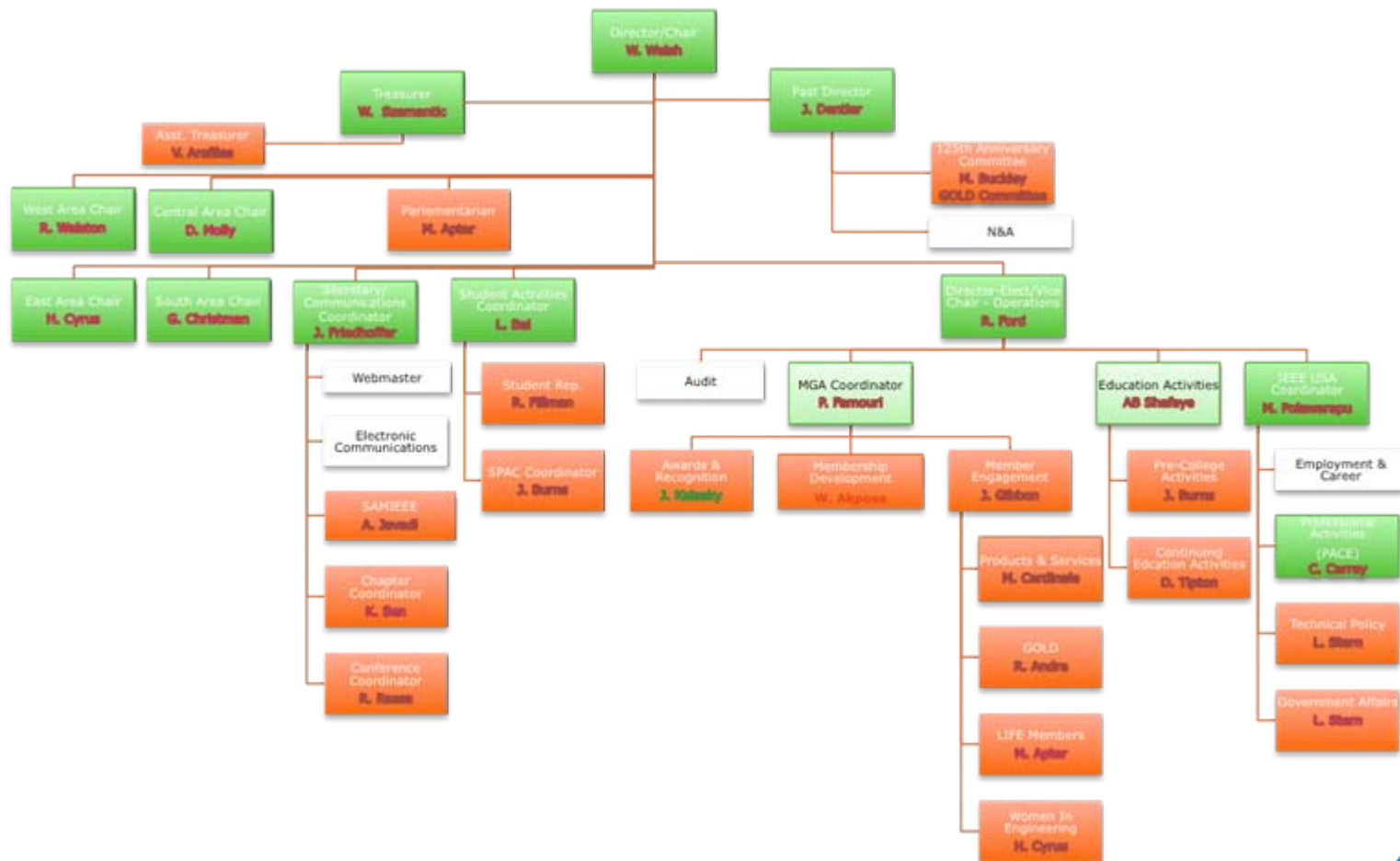
Region 2 Meeting
Youngstown, OH
18 – 19 April 2009

Agenda

- **Region 2 Organization**
- **Membership**
- **Publications**
- **Conferences**
- **Standards**
- **Financial Resources**
- **Other Activities**

Region 2 Organization







Region 2 Committee Organization - 2009



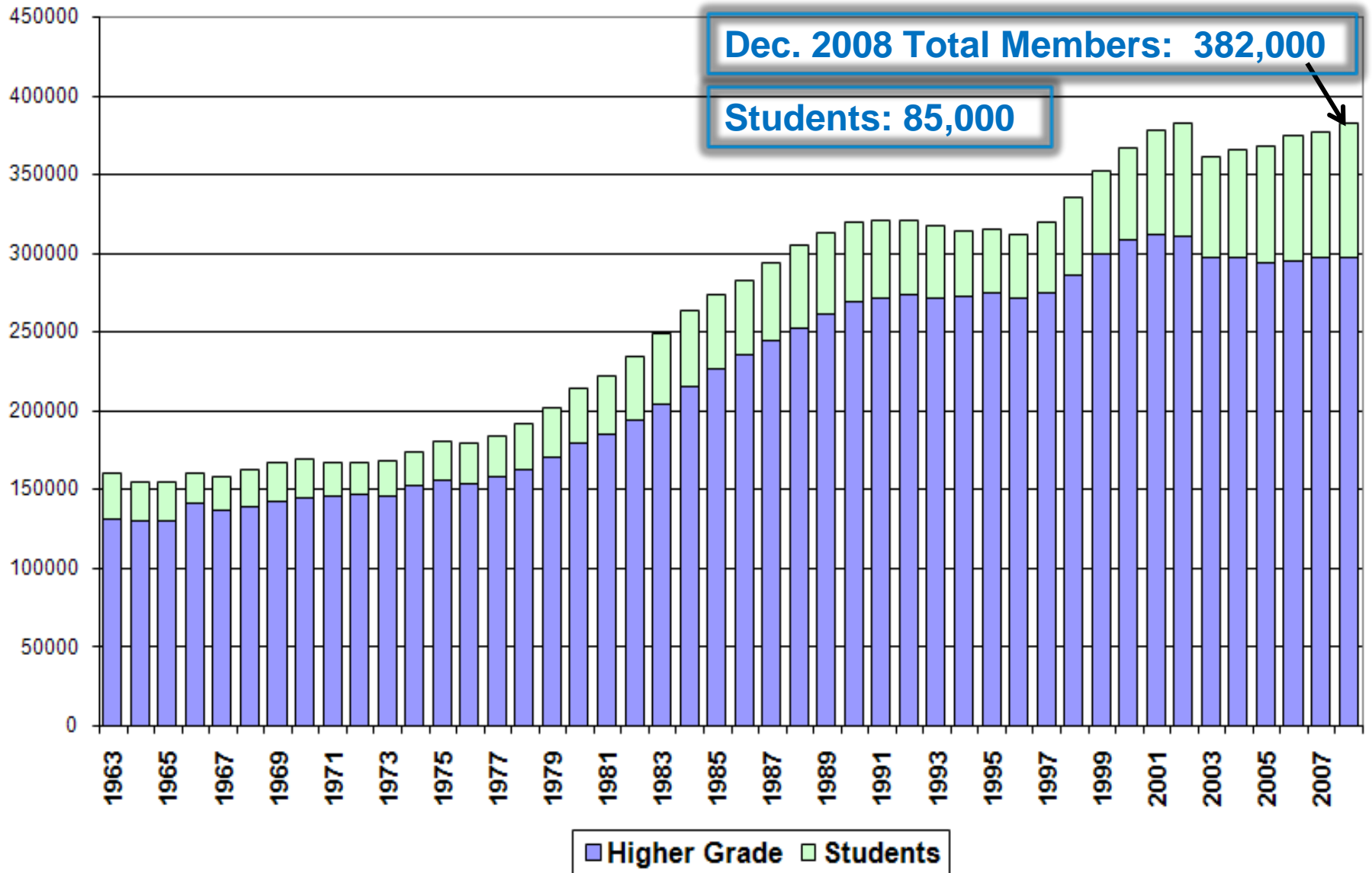


Membership

Membership Grew Once Again in 2008 to 382,400 in all!

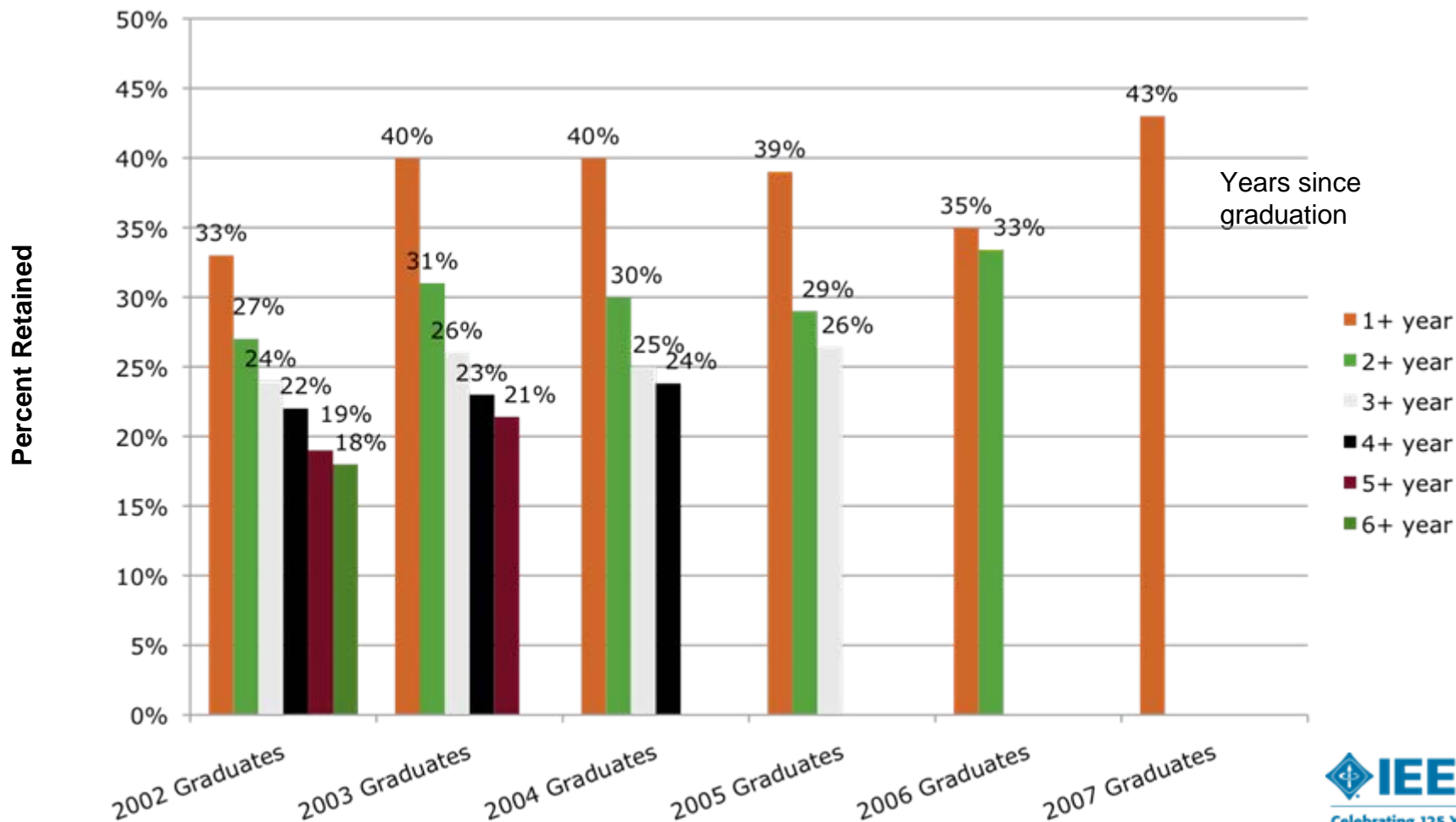
Snapshot	'08 vs '07 December	% Change	Dec '08	Dec '07	Nov '08	% Change Nov-Dec '08
Total IEEE Membership	 6,072	+ 1.6 %	382,400	376,328	374,858	+ 2.0%
• Higher-Grade	 (117)	- 0.1 %	297,165	297,282	292,517	+ 1.6%
• Students	 6,189	+ 7.8 %	85,235	79,046	82,341	+ 3.5%
Society Membership (including Affiliates)	 (3,041)	- 2.7%	336,878	346,283	328,880	+ 2.4%
• 24 Societies up	 4,146	Counts are an aggregate sum of the respective Societies' gains and losses				
• 14 Societies down	 (7,187)					

Historical IEEE Membership Trends - 1963 to 2008





Graduating Students Post Graduation Retention

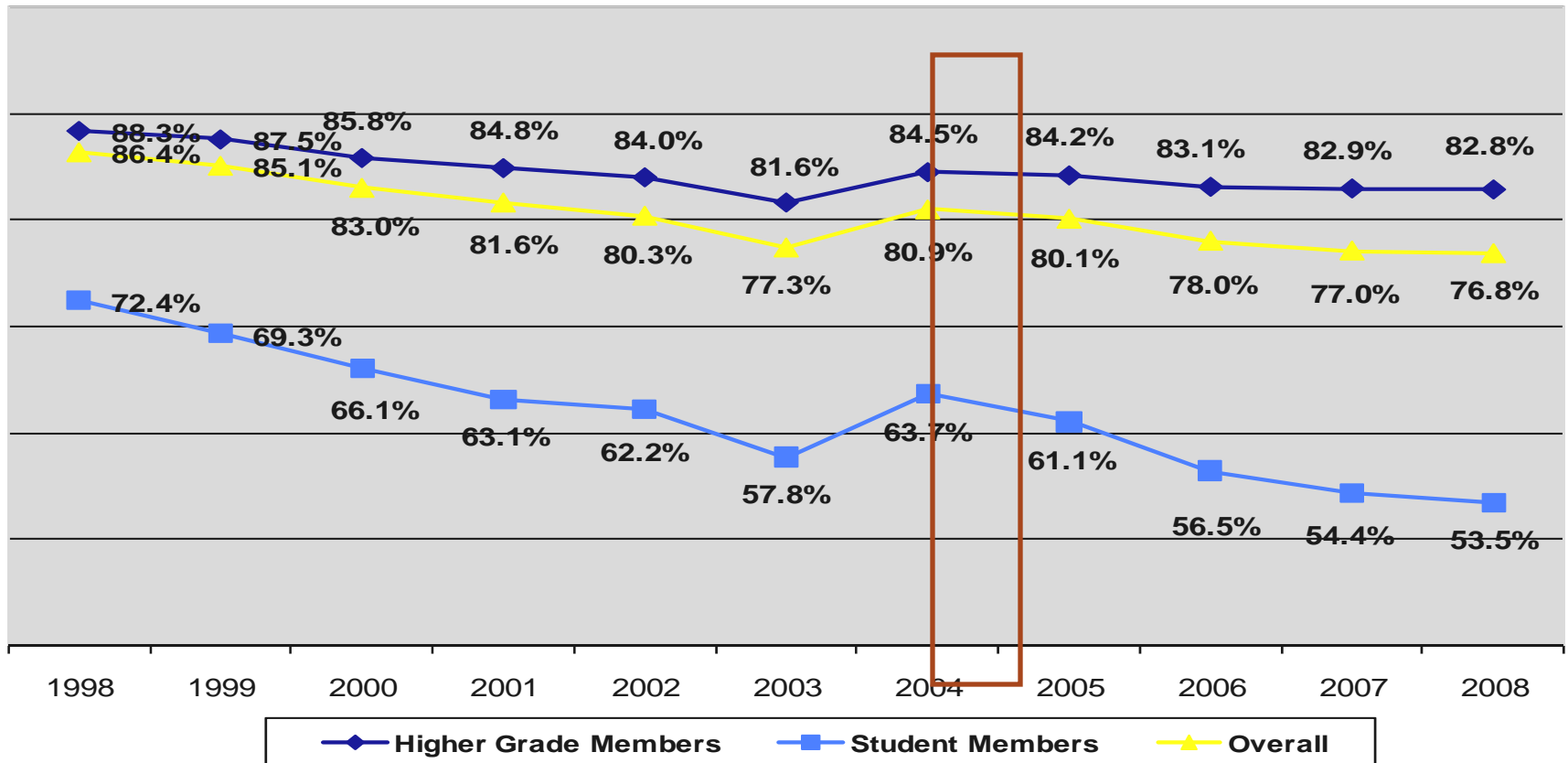


Renewal Rates 1998 to 2008

2008 total retention down 0.2%

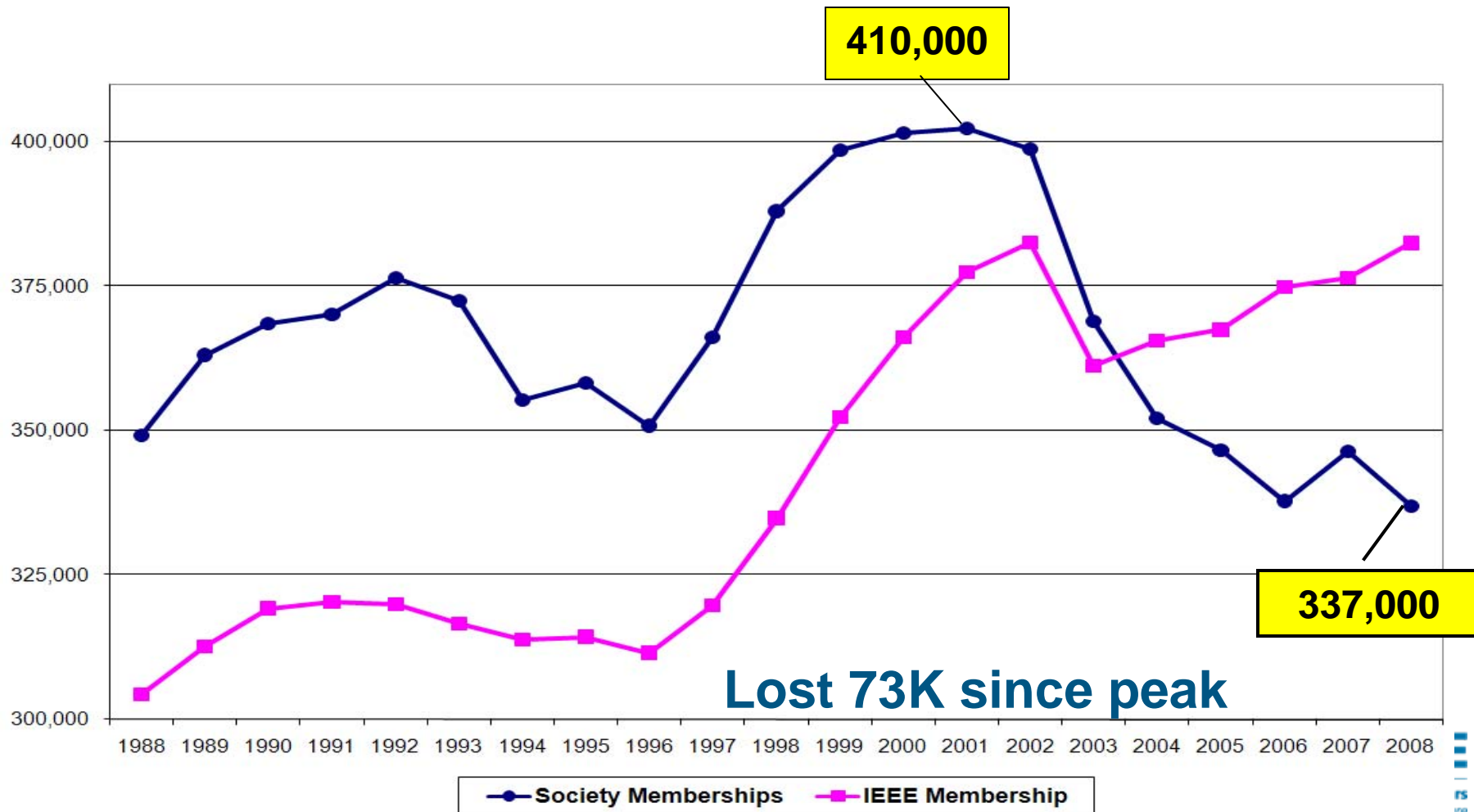
As of 14 Dec 08:

395,358 active – 87,931 (22.2%) left = 307,427 active



- The "Student Members" line includes ONLY students who renewed as students (not graduates).
- 2003 to 2007 Higher Grades rates have been adjusted to account for Life Member terminations.

Society Memberships vs. IEEE Membership 1988 - 2008



IEEE Membership

Strengths

- MGA focus on the member
- Broad offering of member products and services
- Many opportunities for members to engage in IEEE and network with other members
- IEEE local presence worldwide
- Opportunities for professional recognition
- Contact Center responsiveness
- Successful member recruitment through grass roots volunteers
- Membership research and analysis capabilities

Weaknesses

- Perceived cost for value of membership, products and services
- New member, student retention
- Member interface for join/renew
- Complexity of IEEE makes it difficult for members to find their “professional home”
- Insufficient focus on nonmember vols, conference attendees, etc.
- Not consistently viewed as global organization.
- Student/young professional strategy

IEEE Membership

Opportunities

- Implementation of MGA vision
 - Inspire, Enable, Empower, Engage
- Increase member satisfaction and relevance
- Focus on 1ST yr member experience for improved retention
- Alternate membership model
- Leadership development
- Marketing to conference attendees, authors, volunteers
- Awareness of opportunities for members to benefit humanity
- Next generation member experience

Threats

- Impact of economic climate on members reducing joins/renews
- Access to technical IP outside of membership
- Development of compelling next generation member products & services
- Alternate membership model leads to decreased revenues/members
- Compliance issues with our international presence
- Lack of consistent member interface across organization

Value of Membership?

www.ieee.org/web/membership/home/index.html

Knowledge

- Knowledge is becoming free via IEL, Google Scholar...

Community

- Need not be a member to participate in conferences, section/chapter meetings...

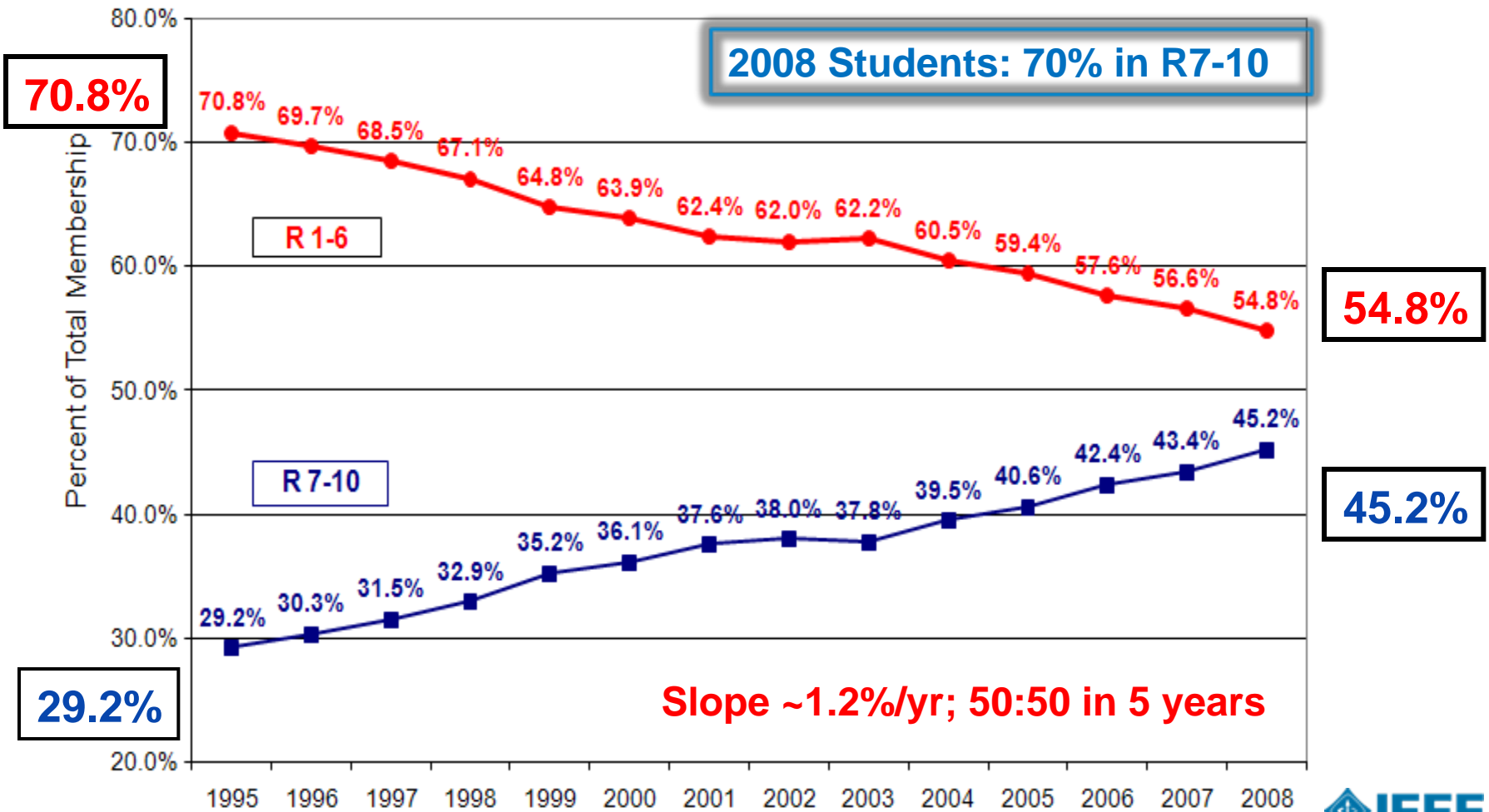
Profession

- Discounts on courses, career & employment resources, networking and organizational skills
-

Intangibles

- *Leading and supporting humanitarian, societal, and community activities*

Global Membership 1995 to 2008



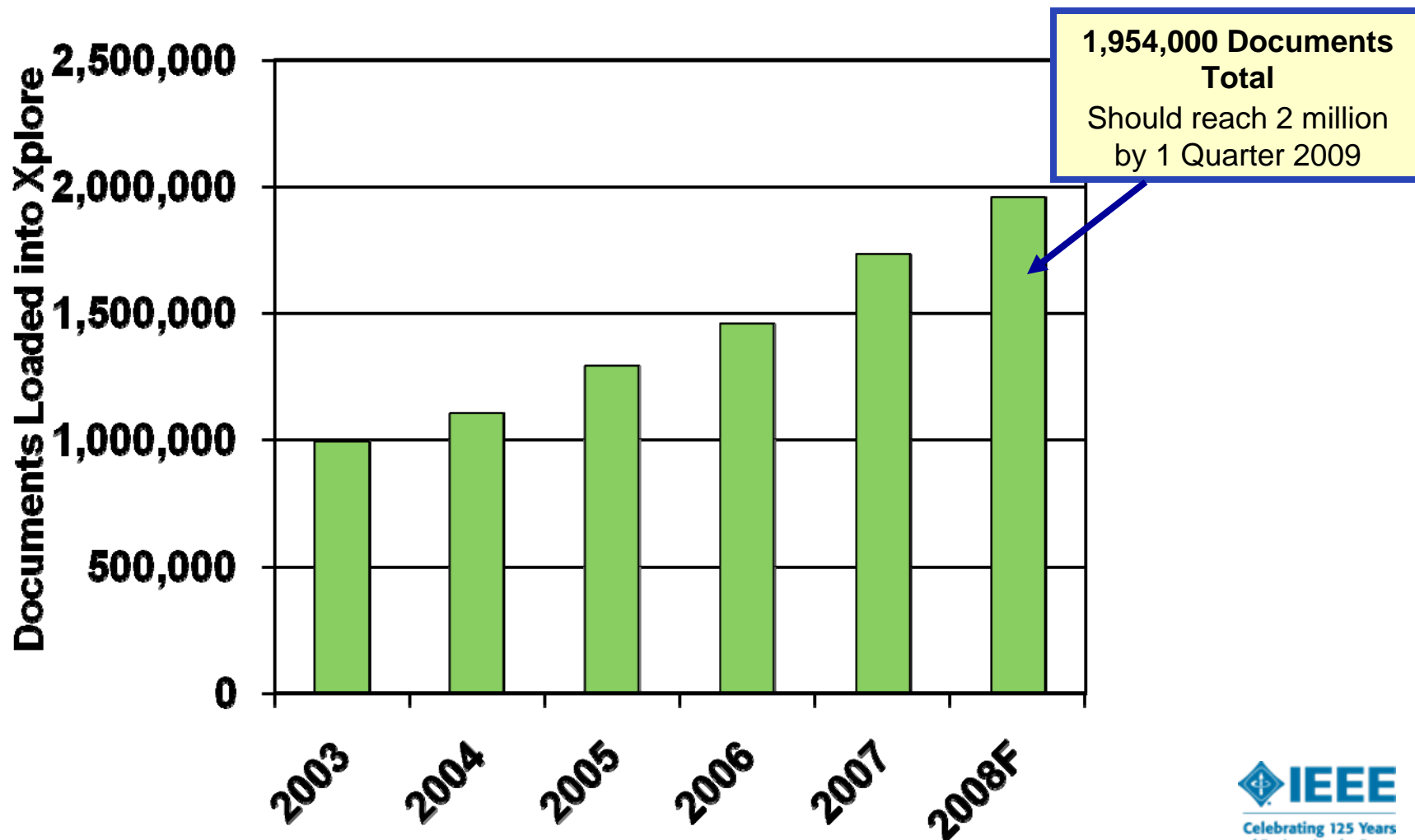


Publications

IEEE Publications

- **> 1,954,000 documents in IEEE Xplore® digital library**
 - **Number has doubled in last 5 years**
 - **Now includes Expert Now Web Courses, IEEE Standards Online, Draft IEEE Standards**
- ▣ **171,390 articles published in 2008 (up 6.4% over 2007)**
 - **32,250 refereed journal articles; 139,000 conference articles from more than 850 IEEE-related conference proceedings annually; 140 new standards**

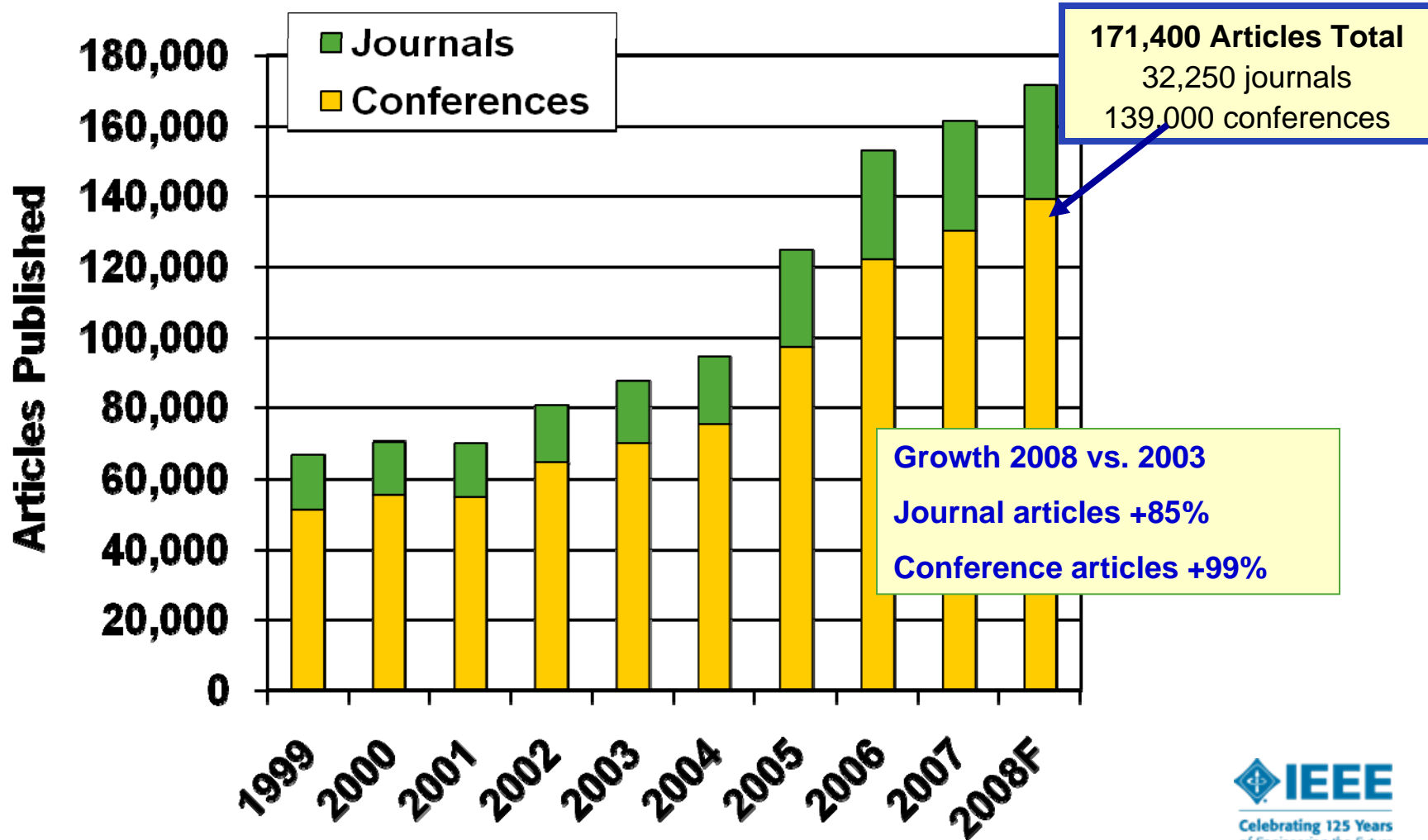
The IEEE Xplore Digital Library Has Doubled in Size in the Last 5 Years



Source: Total documents by year loaded into Xplore (includes Standards, IET, & legacy material)

IEEE is Publishing More Quality Content Than Ever

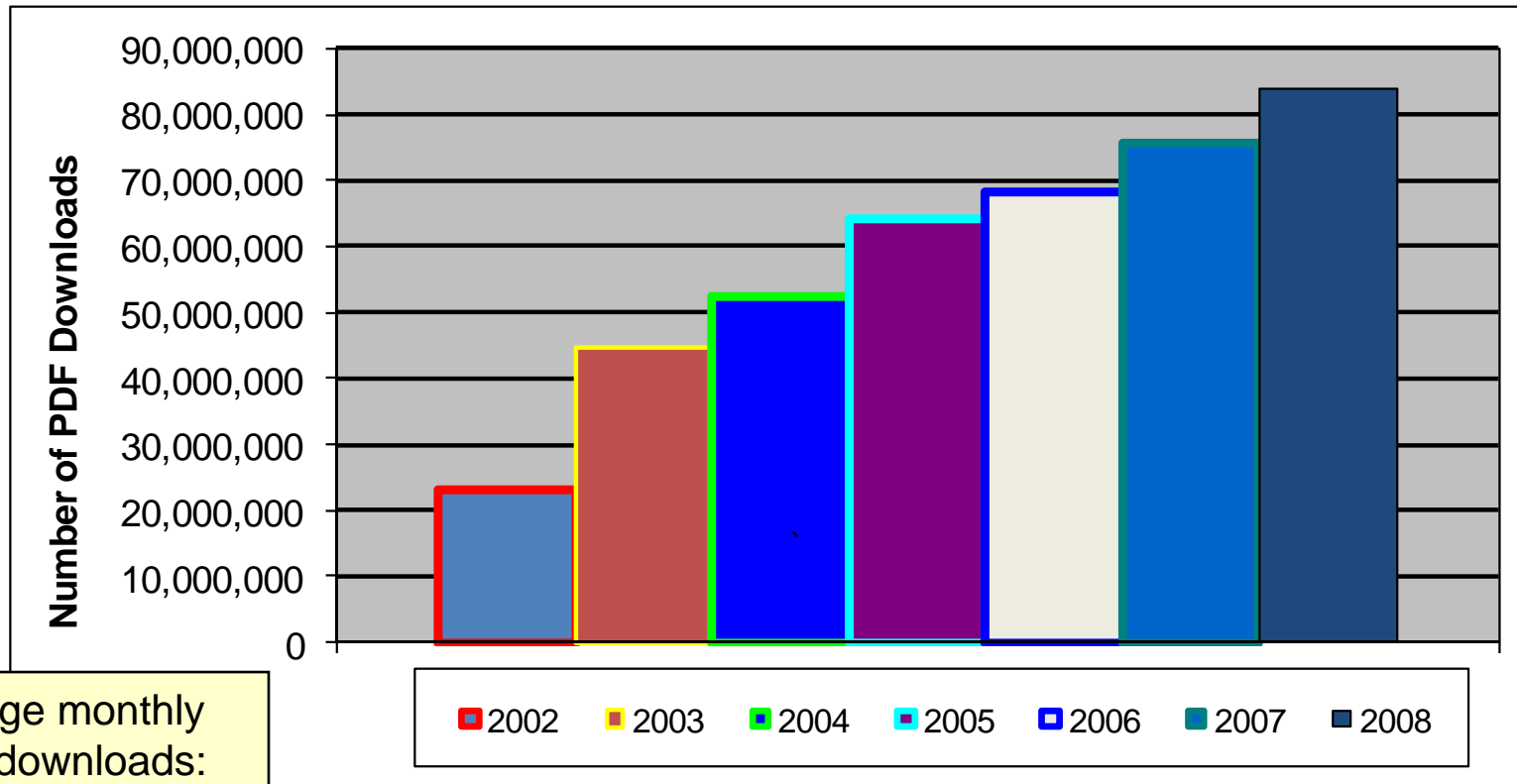
Number of articles has more than doubled since 1999



Source: Articles published by IEEE by year of publication

Growing Use of Our Content Also Confirms Its Usefulness

Downloads Exceeded 83 Million in 2008: An 11% growth over 2007



Average monthly PDF downloads:

2003 = 3.7 M

2004 = 4.4 M

2005 = 5.3 M

2006 = 5.7 M

2007 = 6.3 M

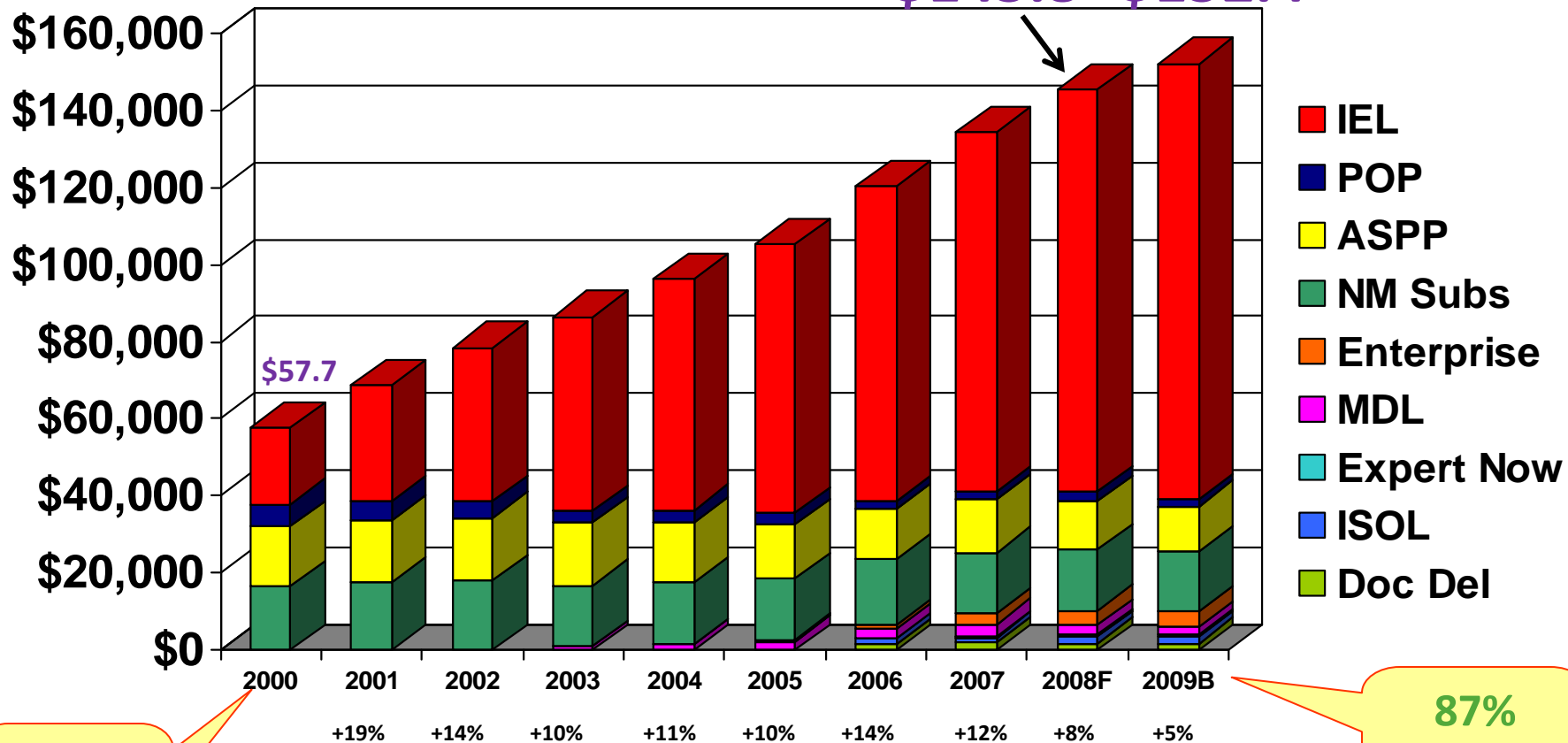
2008 = 7.0 M

Source: Total number of articles downloaded by all users of IEEE Xplore

Web-Based Products Transformed IEEE's Pubs Revenue Stream

2000-2009B in \$ millions earned

\$145.8 \$152.4



20% Online

(Total Publications Package revenue, all media. Excludes Society-only products.)

87% Online

The Switch to Electronic Delivery Extends IEEE's Reach Like Never Before

*IEEE now has almost 3,000 online customers with over 4,300 sites
More than three times the 1,250 sites we had at the end of 2003*

<i>Data as of 12/31/2008</i>	Academic	Corporate	Government	Total	% mix Region
Asia Pacific	958	194	88	1,240	29%
Europe, Middle East, Africa	816	361	63	1,240	29%
Latin America	258	25	6	289	7%
North America	368	1015	160	1,543	36%
Total	2,400	1,595	277	4,312	
% mix customer type	56%	37%	7%		

**Customer Sites Have More Than
Tripled in the Last Five Years**

IEEE's Publishing Program

Strengths

- Single largest producer of content in our fields
 - 30% of all articles indexed
- Reputation for useful, authoritative content
 - Patent use, Citation impact
- Broad reach into markets for potential users & authors
- Wide range of affordable subscription options
- Large source of IEEE net surplus due to cost effective and reliable production and delivery systems

Weaknesses

- Inconsistent levels of quality control and timeliness
- Uncoordinated strategy to expand content for new market segments
 - e.g. "practicing engineers" or "applications" like Biometrics
- Confusion for members and customers from uncoordinated business rules
- Slow to introduce new products, Xplore features, author tools

IEEE's Publishing Program

Opportunities

- User need for “knowledge to solve problems” – not just articles
- Ability to leverage membership as source for content and evaluations
- Large audience of qualified users is attractive to advertisers
- Interest from other associations to partner to create center for non-profit technology content
 - Scitopia.org, AIP, IBM, etc.

Threats

- Three giant commercial competitors who compete with all aspects of IEEE
 - Elsevier, Springer, and Wiley all offer publications, conferences, and “membership” in their user communities
- Growing mandates to make research “open access”
- IEEE's lack of nimble and coordinated decision making
- Less resources than competitors to invest in R&D for new products and tools



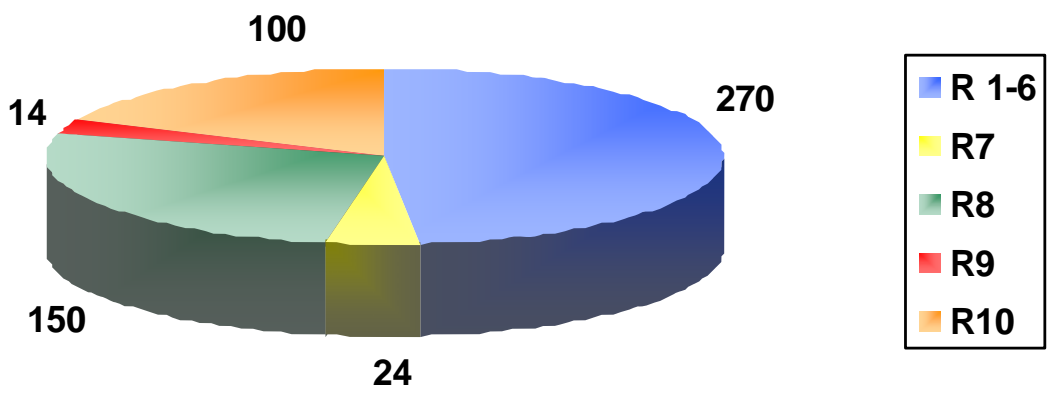
Conferences

IEEE Conferences

- In 2008 IEEE...
 - Sponsored over 900 conferences
 - ~560 financially sponsored (52% in R7-10)
 - ~350 technically cosponsored (84% in R7-10)
 - In 62 countries
 - Touched approximately 400K attendees
 - **>100K presentations**
 - Generated over \$100 million in revenue

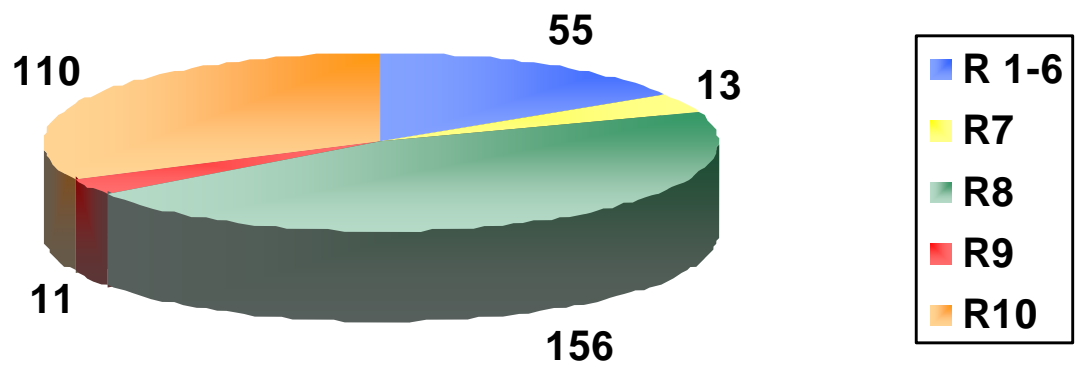
IEEE Conference Locations...

Financially Sponsored



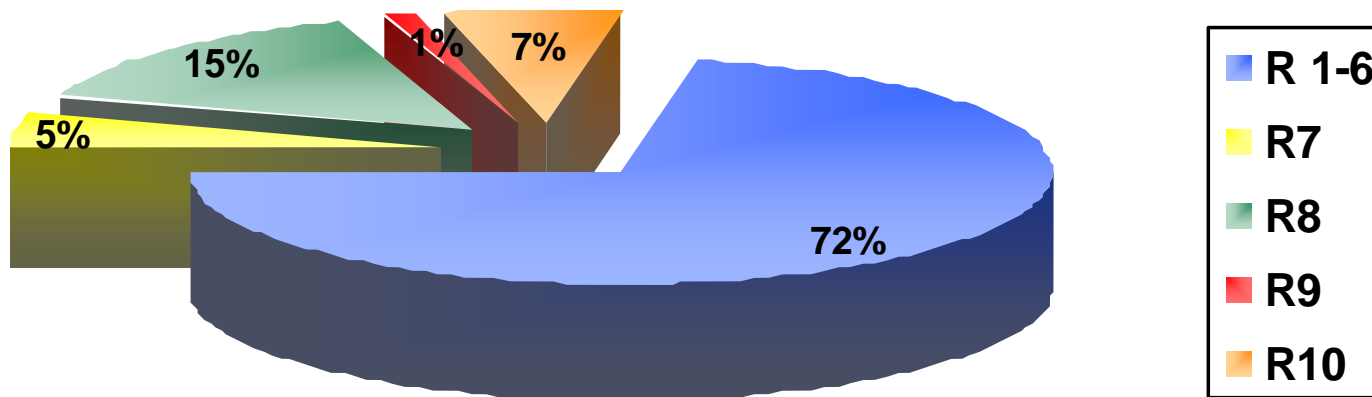
52% held in Regions 7-10

Technically Co-Sponsored



84% held in Regions 7-10

IEEE Conference Budgeted Surplus Distribution by Region



Surplus still driven by Regions 1-6

Conferences

Strengths

- **Quality of Technical Content**
- **Relationship with and Model that benefits academia**
- **Networking for today's engineers**
- **IEEE Brand**
- **International Volunteers, Authors and Attendees**

Weaknesses

- **Weak and Inflexible Infrastructure to support End Users and Organizers**
- **Global Business/Economic Operational Support**
- **Easy to get IEEE technical co-sponsorship (use of IEEE logo)**

Conferences

Opportunities

- Citations
- Organizer training and development
- Conferences that address emerging technologies
- Mergers and acquisitions of unaffiliated conferences

Threats

- Economic Uncertainty
- Low barrier to entry
- Maintaining quality as business expands
- Evolution to virtual conference/social networking
- Tech cosponsored conferences competing with IEEE sponsored conferences



Standards

Standards Pipeline and Membership Continue Growth

- 950 active stds; 563 projects under development
- Standards Pipeline: The core metric
 - 2008 approved projects: at a 7-year high
 - 2008 approved standards: at a 10-year high
 - 2008 Standards Published: 90 (up from 84 in 2007)
- SA Membership: Increased industry engagement
 - Corporate: 2008:132 (1998:10)
 - Individual: 2008:7440 (1998:2107)
 - *In 95 countries*
 - *About 3 in 10 are from foreign countries*
 - *Canada is second largest source of individual members, followed by United Kingdom, Japan, and Korea (South)*

株式会社 ネット・O2



IEEE-SA CORPORATE MEMBERSHIP





Solid State System
Flash Disk Innovators



Panasonic



IEEE-SA

Strengths

- Global recognition of the IEEE standards brand
- International adoption and use of IEEE standards by key organizations, companies, governments
- IEEE technical expertise and depth differentiates IEEE as an SDO
- Established ability to dynamically manage business & financial objectives to ensure positive net income, reserves
- Strong global presence in standards development & corporate membership

Weaknesses

- Difficult for newcomers to find their way through IEEE when engaging in or initiating standards work
- Institute-wide needs can challenge OU growth
- Difficulty in creating adequate traction when pursuing standards programs involving new technologies

IEEE-SA

Opportunities

- Develop new products/services supporting the complete standards life cycle
- Branding improvements
- Develop tomorrow's standards developers in today's universities and emerging economies
- Provide e-tool set for standards developers
- Launch "green" technology standards programs
- Pilot remote global governance meetings

Opportunities, cont.

- Build on existing international outreach and collaboration activities, including relationships with international standards communities

Threats

- Leveraging of standards process by individuals and companies
- Timing of open access & successful new businesses
- THE ECONOMY: ability to invest in new businesses
- Competition within the global standards development communities

Standards and Members

Can Sections Be Involved??

- MGA Proposal to establish a capability to facilitate a Section's ability to acquire and provide information regarding IEEE standards to its local membership.
- Section-based standards program that offers:
 - Access to Standards information
 - Section Web Page links to IEEE SA web resources
 - Section and individual interaction with specific standards working groups
 - Recognition of Sections and members for contributions to Standards development
 - Recognition of Section's value to local industry

Continuing Education and Certification

Continuing Education: Potential New Revenue Stream

- Members expect continuing education from IEEE but rate IEEE low in its ability to deliver
- Viability of certification programs still to be determined
 - Watch CSDA, Wireless and Biometrics in 2009
- Current investment in ExpertNow, Webinars and capturing content at conferences is limited
 - ExpertNow revenue near \$1M, module count increasing, but customers want more
- IEEE Partners Program growing slowly and breaking even, but serves a small number of members
 - 1258 in 2008 vs. 435 in 2007
- Societies, Sections and EA all offer continuing education opportunities, but marketing coordination is needed

IEEE Technical Professionals Express Need for Continuing Education

- 70% of technical professionals surveyed say continuing education is important to career advancement and to their companies
- 50% have participated in continuing education in the past 12 months
- 50% say they are likely to purchase online self-paced training in the coming year; 20% purchased in the prior year

Source: IEEE survey of 564 technical professionals, (301 US, 263 International)
July 2008

IEEE Education Partners Program

- Program offers IEEE members a 10% discount on courses through partnerships with academia and industry
- The program is offered as a Member benefit.

IEEE Education Partners Program

- The program generated \$125K in revenue in 2008 far exceeding our revenue projection of \$55K.
- A surplus of \$20K was realized in 2008 through this program
- 1258 IEEE members took courses through this program in 2008 compared with 435 IEEE members taking courses in 2007
- 1523 courses were taken by members in 2008 compared with 601 courses taken by IEEE members in 2007

IEEE Education Partners: Why are we doing this?

- Aligns with the IEEE Core Value: Professional Growth
 - IEEE Education Partners Program contributes to the professional growth of engineers, scientists, and technologists
- Aligns with the IEEE's Long Range Plan Goal B
 - *"The IEEE will improve professional competencies through shaping the education of students and professionals"*
- Addresses the IEEE Member Satisfaction Survey results identifying continuing education as an area of high interest

Investment in IEEE Expert Now Limited But Offers Opportunity

Expert Now modules increasing modestly, though customers want more

- Expert Now met sales targets set by EAB and IEEE Marketing and Sales for 2008
- ▣ Projected 2009 revenue for IEEE Expert Now is \$1M
- ▣ Customers include 7 institutional subscription, 4 academic subscriptions

Financial Resources

Financially Sound: IEEE Operations Are Net Positive

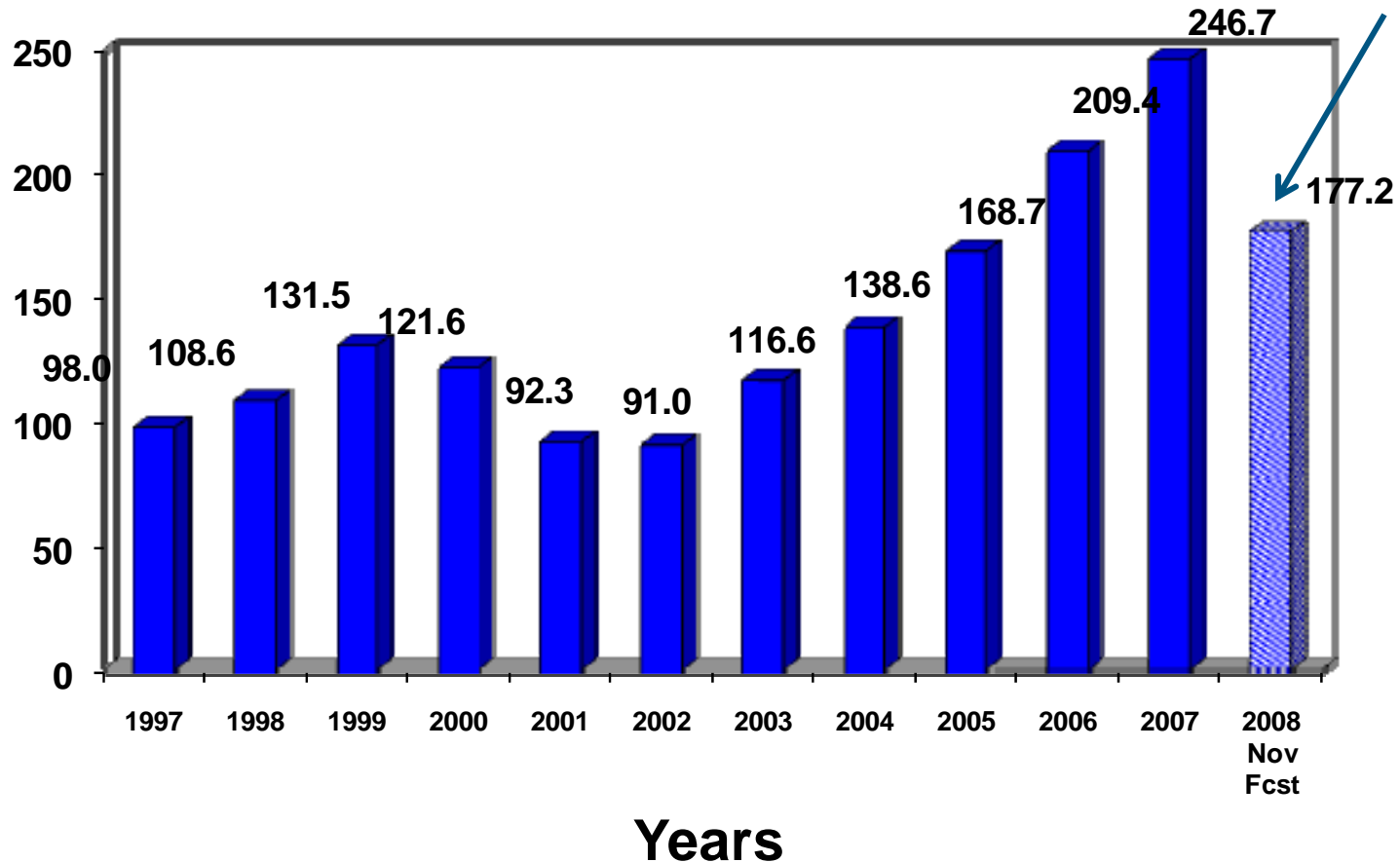
<i>Entire IEEE</i> (\$millions)	2003 Actual	2004 Actual	2005 Actual	2006 Actual	2007 Actual	2008 Nov Fcst*
Revenue	234.0	265.9	289.6	309.3	323.2	332.8
Expense	224.6	255.0	267.0	290.1	305.8	332.2
Net Before Invest Returns/Spending Rule	9.4	10.9	22.6	19.2	17.4	0.6
Misc*					3.5	
Invest Mkt Fluctuation	16.2	11.1	7.5	21.5	16.4	(70.1)
Net, Total	25.6	22.0	30.1	40.7	37.3	(69.5)

*The Nov Forecast for purposes of this schedule, includes preliminary (\$70.1M) in total investment fund loss (-26.29% as of 31-Dec-08).

*Misc: is change in Accounting Principle Pension Related
Note: Net before invest returns include initiative spending.

IEEE Reserves (\$Millions)

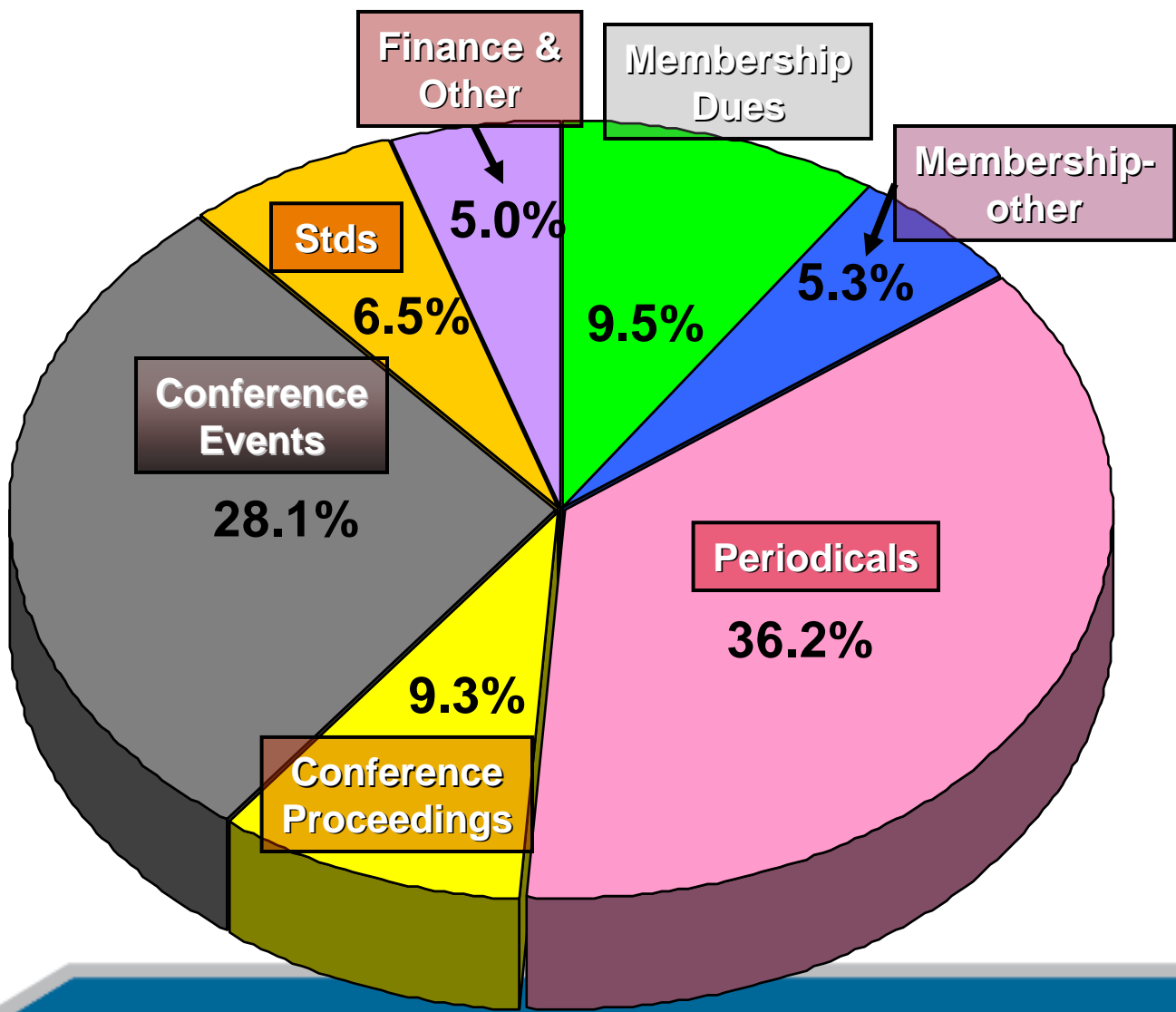
Nov. 08
Forecast



Note: The 2008 November forecast for purposes of this chart includes a preliminary \$(70.1M) total investment fund loss or -26.29% as of 31-December-2008. Does not include the potential impact on Reserves from the Sections, Regional Offices and Standards Working Groups that based on prior years should have a positive impact on Reserves.

IEEE Revenues From Operations¹

2007 Operating Revenue ~\$332 Million



¹ Does not include Investment Returns

Future Revenue Source Possibilities

- Certification of competency, including courses leading to certification
- Standards - certification of product compliance & educational products
- Continuing education – tutorials, short courses, workshops...
- Presentations online (conferences, short courses, DLs...)
- More & larger exhibits; trade shows
- Outside sponsorship of humanitarian, sustainability & similar activities
- Advertising (online ads, especially; partner with Google?)
- Data & IP (Xplore) related services; data mining for ???
- Expert services, white papers, market surveys, technology trends info

John Vig, 18 Nov 2008

Some Current Activities

2009 Ad Hoc Committees

- **Public Visibility**
- **125th Anniversary**
- **India**
- **China & Emerging Markets**
- **Sustainability**
- **“Green” Initiatives**
- **Humanitarian**
- **IEEE as a Model Global Association**
- **Contributions to Disaster Relief**
- **IEEE Student Honor Society**
- **Eta Kappa Nu**

- **IEEE As a Business**
- **Finance & Inequities**
- **Advertising**
- **Presentations Online**
- **Technology to Reduce Travel Expenses**
- **Technical Co-Sponsorship**
- **OU-OU Conferences and Educational Activities Cooperation**
- **Quality of Conference Articles in IEEE Xplore**
- **IT Transition**



Celebrating 125 Years
of Engineering the Future

125th Anniversary Celebration

- **Goals:** Increase awareness of contributions of IEEE, its members and the profession
- Kickoff at Sections Congress; tool kit; 8 Section events
- Website: www.ieee125.org or www.ieee.org/125
- Change the World student competition
- Opportunity for all groups to contribute – by organizing celebrations, using the anniversary mark, mentioning as often as possible, promoting the student competition

**So, what makes all these
IEEE achievements, and
more, possible. . . and makes
IEEE successful?**

The Answer: Volunteers!

>200K of Them!

- Publication editors
- Reviewers
- Authors
- Conference organizers
- Conference TPC/reviewers
- Committee chairs
- Region, Section, Chapter officers, committees
- Standards working group members, board members
- Newsletter editors & contributors
- IEEE major board and committee members
- Student Branch officers and committee members
- Society & council officers, committee members,
- IEEE Foundation members
- Accreditation activities members
- Book authors & editors
- Tutorial developers

And the list goes on...

Thank You!