

# 2008/2009 User Survey results

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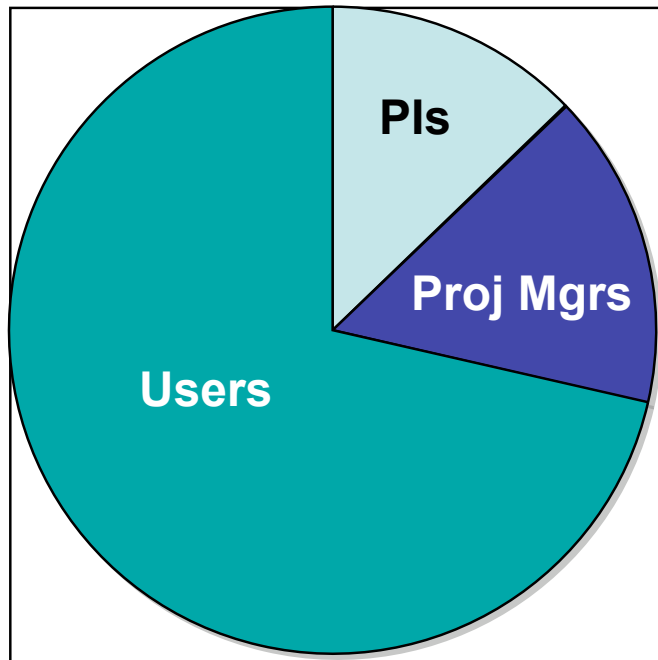
NERSC User Group Meeting  
October 7, 2009



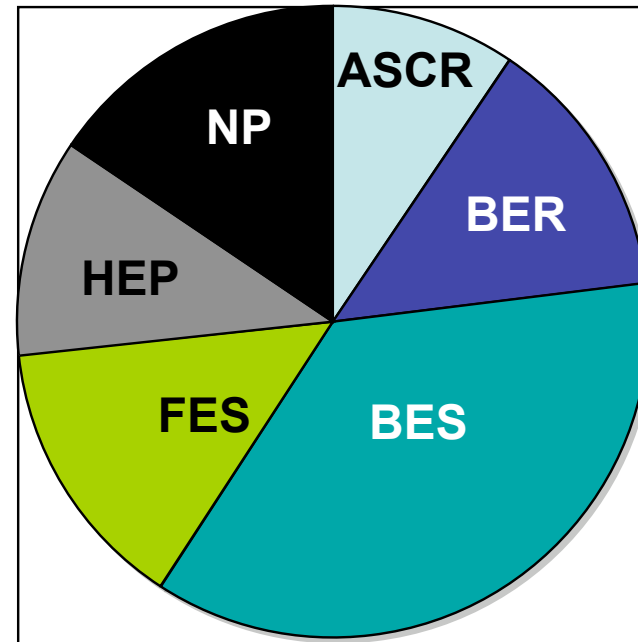
# Response Profile

**421 respondents**

- 77.4% “big user” response rate
- 36.6% “medium user” response rate
- 13.4% overall response rate



■ Pls 12.8%  
■ Proj Mgrs 15.7 %  
■ Users 71.5%



■ ASCR 9.3%  
■ BER 13.5%  
■ BES 35.9%  
■ FES 14.0%  
■ HEP 11.1%  
■ NP 15.4%

# 2008/2009 Survey Questions

- 94 satisfaction questions scored on a 7-point scale
- average score: 6.15

<b>Satisfaction score</b>	<b>meaning</b>	<b>Num times selected</b>
<b>7</b>	<b>Very satisfied</b>	<b>8,053</b>
<b>6</b>	<b>Mostly satisfied</b>	<b>6,219</b>
<b>5</b>	<b>Somewhat satisfied</b>	<b>1,488</b>
<b>4</b>	<b>Neutral</b>	<b>1,032</b>
<b>3</b>	<b>Somewhat dissatisfied</b>	<b>366</b>
<b>2</b>	<b>Mostly dissatisfied</b>	<b>100</b>
<b>1</b>	<b>Very dissatisfied</b>	<b>88</b>

# Areas of Highest Satisfaction

<b>Area</b>	<b>Num responses</b>	<b>Scores (7 = very satisfied)</b>
<b>HPSS Reliability and Uptime</b>	<b>157</b>	<b>6.68 / 6.63</b>
<b>Account Support</b>	<b>347</b>	<b>6.66</b>
<b>Timely initial response to consulting questions</b>	<b>326</b>	<b>6.60</b>
<b>Grid Job Monitoring</b>	<b>62</b>	<b>6.56</b>
<b>Overall: consulting and support services</b>	<b>386</b>	<b>6.56</b>
<b>NGF Uptime and Reliability</b>	<b>69</b>	<b>6.55</b>
<b>Network performance within NERSC</b>	<b>185</b>	<b>6.51</b>



# Areas of Lowest Satisfaction

Only two questions scored lower than 5.5  
(compared with 10 last year)

<b>Area</b>	<b>Num Responses</b>	<b>Scores</b> 4 = neutral 5 = somewhat satisfied
<b>Bassi Batch Wait Time</b>	<b>129</b>	<b>4.71</b>
<b>Franklin Uptime</b>	<b>302</b>	<b>4.91</b>



# Areas of Increased Satisfaction from 2007/2008

<b>Area</b>	<b>Num Responses</b>	<b>Scores</b> 7 = very satisfied 6 = mostly satisfied	<b>Score Change</b>
<b>PDSF: ability to run interactively</b>	<b>53</b>	<b>6.15</b>	<b>+0.60</b>
<b>Grid job monitoring</b>	<b>62</b>	<b>6.56</b>	<b>+0.48</b>
<b>Franklin disk and I/O</b>	<b>282</b>	<b>5.60</b>	<b>+0.46</b>
<b>PDSF queue structure</b>	<b>52</b>	<b>6.21</b>	<b>+0.33</b>
<b>Jacquard queue structure</b>	<b>95</b>	<b>6.17</b>	<b>+0.25</b>
<b>Network connectivity</b>	<b>395</b>	<b>6.28</b>	<b>+0.15</b>



# Areas of Decreased Satisfaction from 2007/2008

<b>Area</b>	<b>Num Responses</b>	<b>Scores</b> 6 = mostly satisfied 5 = somewhat satisfied	<b>Score Change</b>
<b>Franklin Batch Wait Time</b>	<b>299</b>	<b>5.55</b>	<b>-0.30</b>
<b>24x7 Operations Support</b>	<b>346</b>	<b>6.17</b>	<b>-0.17</b>
<b>NERSC web site</b>	<b>348</b>	<b>6.28</b>	<b>-0.10</b>





# Changes in Satisfaction for Active MPP Respondents

Item	Num who rated this item as:							Total Responses	Average Score	Std. Dev.	Change from 2007
	1	2	3	4	5	6	7				
GRID: Job Monitoring				2	2	12	34	62	6.56	0.76	0.48
Franklin: Disk configuration and I/O performance	7	5	13	31	26	105	72	259	5.58	1.46	0.43
OVERALL: Network connectivity		1	6	11	23	105	159	305	6.30	0.94	0.17
WEB SERVICES: NIM web interface			3	4	15	106	154	282	6.43	0.75	0.15
OVERALL: Available Computing Hardware	2	4	7	17	42	129	109	310	5.95	1.13	-0.17
SERVICES: Computer and network operations support (24x7)		3	10	14	21	84	131	263	6.15	1.14	-0.20
Jacquard: Uptime (availability)	1		1	2	4	36	45	89	6.28	0.86	-0.21
OVERALL: Hardware management and configuration	3	1	11	18	57	129	74	294	5.76	1.13	-0.22
Jacquard: Overall	1	1	2	6	5	46	29	90	5.97	1.15	-0.29
Franklin: Batch wait time	4	5	18	21	55	112	61	276	5.53	1.32	-0.32



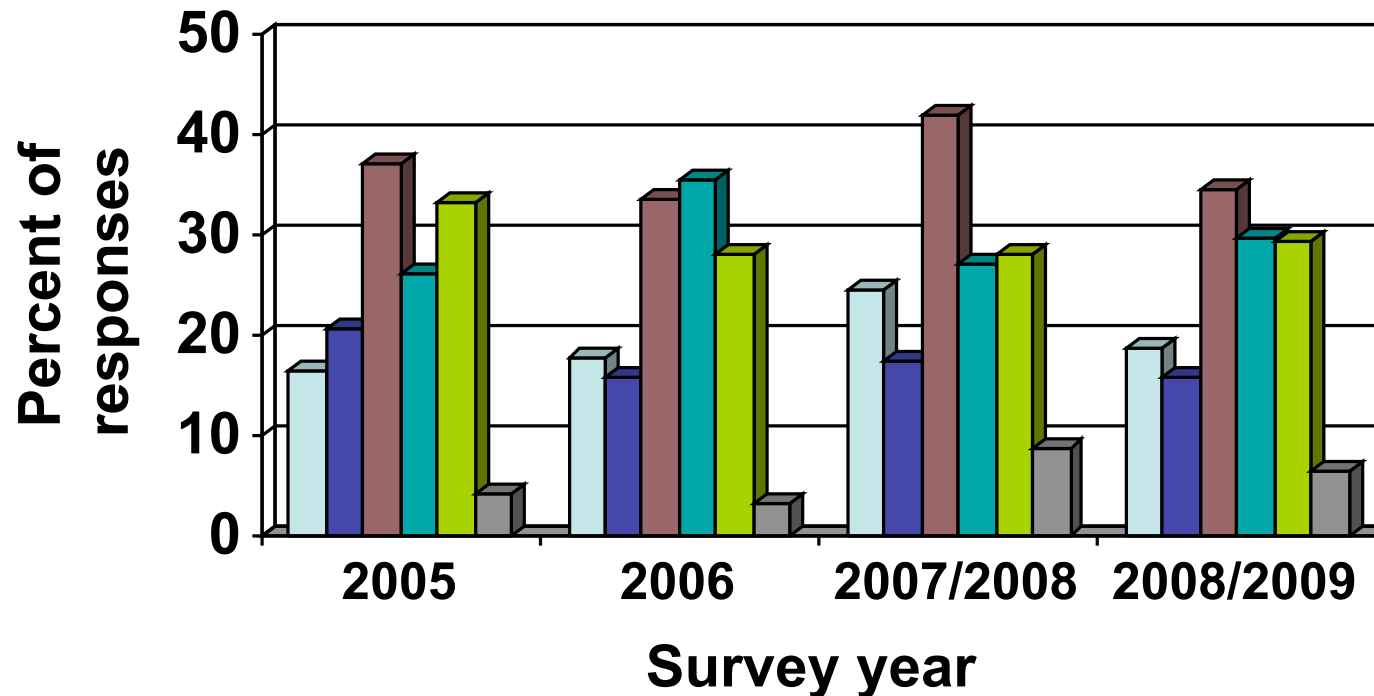


# Satisfaction Patterns for Different MPP Respondents

Item	Large MPP Users:			Medium MPP Users:			Small MPP Users:		
	Num Resp	Avg Score	Change 2007	Num Resp	Avg Score	Change 2007	Num Resp	Avg Score	Change 2007
GRID: Job Monitoring	13	6.54	-0.04	26	6.54	0.46	11	6.64	0.56
SERVICES: Account support	67	6.54	-0.17	130	6.63	-0.07	77	6.79	0.09
OVERALL: Security	72	6.12	-0.23	145	6.44	0.07	82	6.55	0.19
WEB SERVICES: NIM web interface	71	6.35	0.07	135	6.44	0.16	76	6.49	0.21
OVERALL: Network connectivity	74	6.08	-0.05	147	6.35	0.22	84	6.40	0.28
SERVICES: Computer and network operations support (24x7)	67	5.96	-0.39	128	6.14	-0.21	68	6.37	0.02
Jacquard: Batch queue structure	14	5.50	-0.42	36	6.17	0.25	31	6.39	0.47
NETWORK: Remote network performance to/from NERSC	67	5.94	-0.12	90	6.19	0.13	51	6.37	0.32
Jacquard: Disk configuration and I/O performance	13	5.31	-0.67	33	6.30	0.32	31	5.97	-0.01
HPSS: User interface	44	5.82	-0.14	53	6.02	0.06	29	6.38	0.42
OVERALL: Available Computing Hardware	73	5.62	-0.51	151	5.98	-0.14	86	6.20	0.07
OVERALL: Hardware management and configuration	72	5.64	-0.34	142	5.75	-0.23	79	5.89	-0.09
Franklin: Ability to run interactively	56	5.75	0.17	108	5.67	0.09	46	5.93	0.36
Bassi: Batch queue structure	18	5.17	-0.40	58	5.53	-0.03	33	5.94	0.37
OVERALL: Data analysis and visualization facilities	42	5.40	-0.08	75	5.51	0.03	43	6.00	0.50
Franklin: Disk configuration and I/O performance	70	5.41	0.27	133	5.60	0.46	56	5.71	0.57
Jacquard: Batch wait time	15	4.60	-0.87	38	5.37	-0.10	33	5.91	0.44
Franklin: Batch wait time	73	5.45	-0.40	142	5.49	-0.36	61	5.70	-0.14
Bassi: Batch wait time	18	3.61	-0.85	64	4.48	0.03	35	5.23	0.77

# Where do you do Vis and Data Analysis?

- All or most at NERSC    ■ Half at NERSC
- Half or more at NERSC    ■ Most elsewhere
- All elsewhere    ■ Don't need





# What does NERSC do best?

**130 responses, from which:**

- 50.0% - excellent support services, responsive staff**
- 38.5% - excellent HPC resources**
- 15.3% - good software support, easy to use environment**

*Nersc is good at communicating with its users, provides large amounts of resources, and is generally one of the most professional centers I've used.*

*Organization is top notch. Queuing is excellent.*

*The quality of the technical staff is outstanding. They are competent, professional, and they can answer questions ranging from the trivial to the complex.*

*Getting users started! it can take months on other systems.*



# What can NERSC do to make you more productive?

**113 responses, from which:**

- **35.4%** - improve Franklin stability and performance
- **32.7%** - provide more or different computing resources
- **14.2%** - provide more or better data storage
- **14.2%** - improve job scheduling

*For any users needing multiple processors, Franklin is the only system. The instability, both planned and unplanned downtimes, of Franklin is \*incredibly\* frustrating. Add in the 24 hour run time limit, it is amazing that anyone can get any work done.*

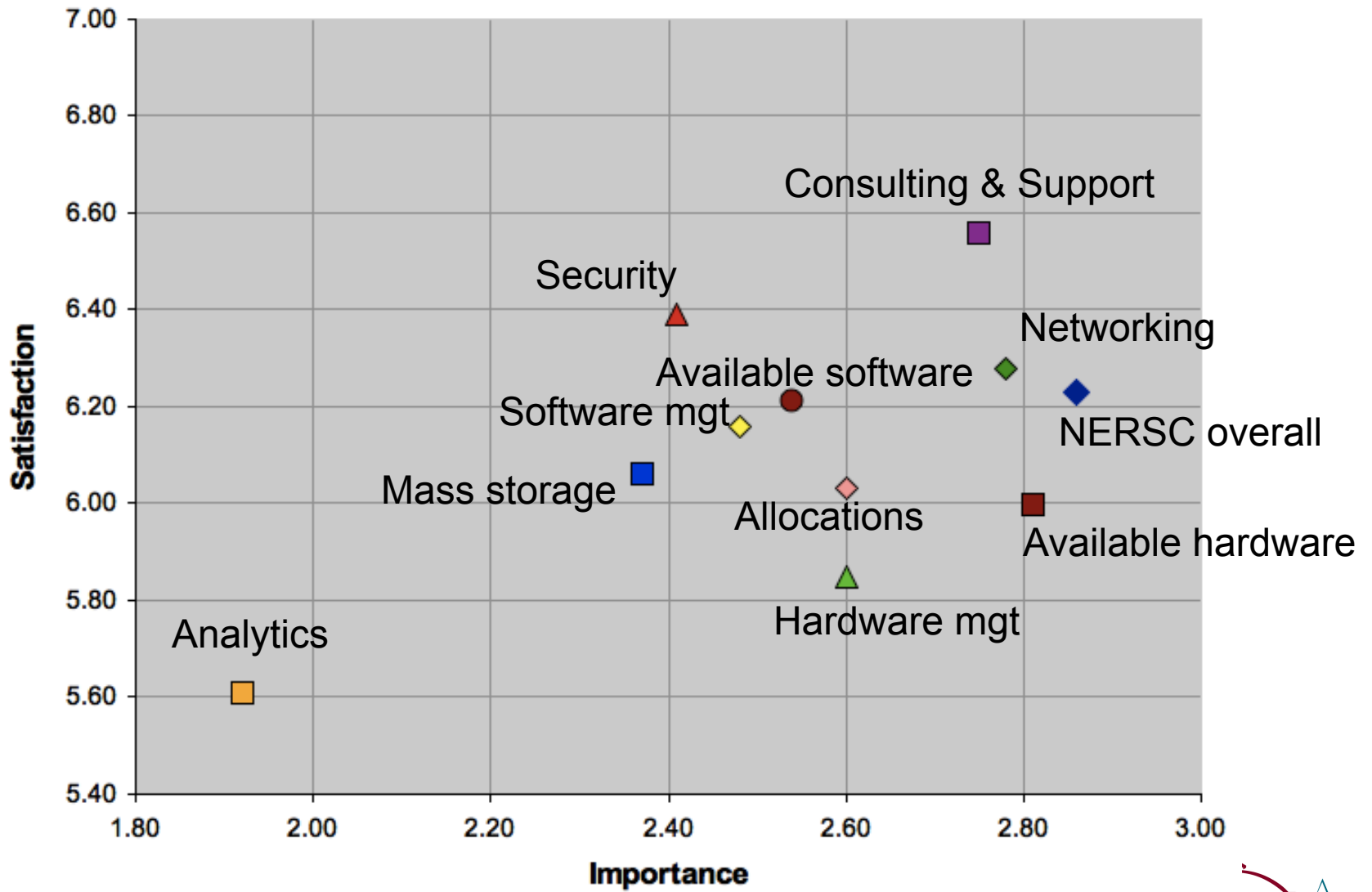
*Highly reliable, very stable, high performance architectures like Bassi and Jacquard.*

*it would be useful if it was easier to see why a job crashed. I find the output tends to be a little terse.*

*Enhance the computing power to meet the constrained the needs of high performance computation. Allocate more time!*

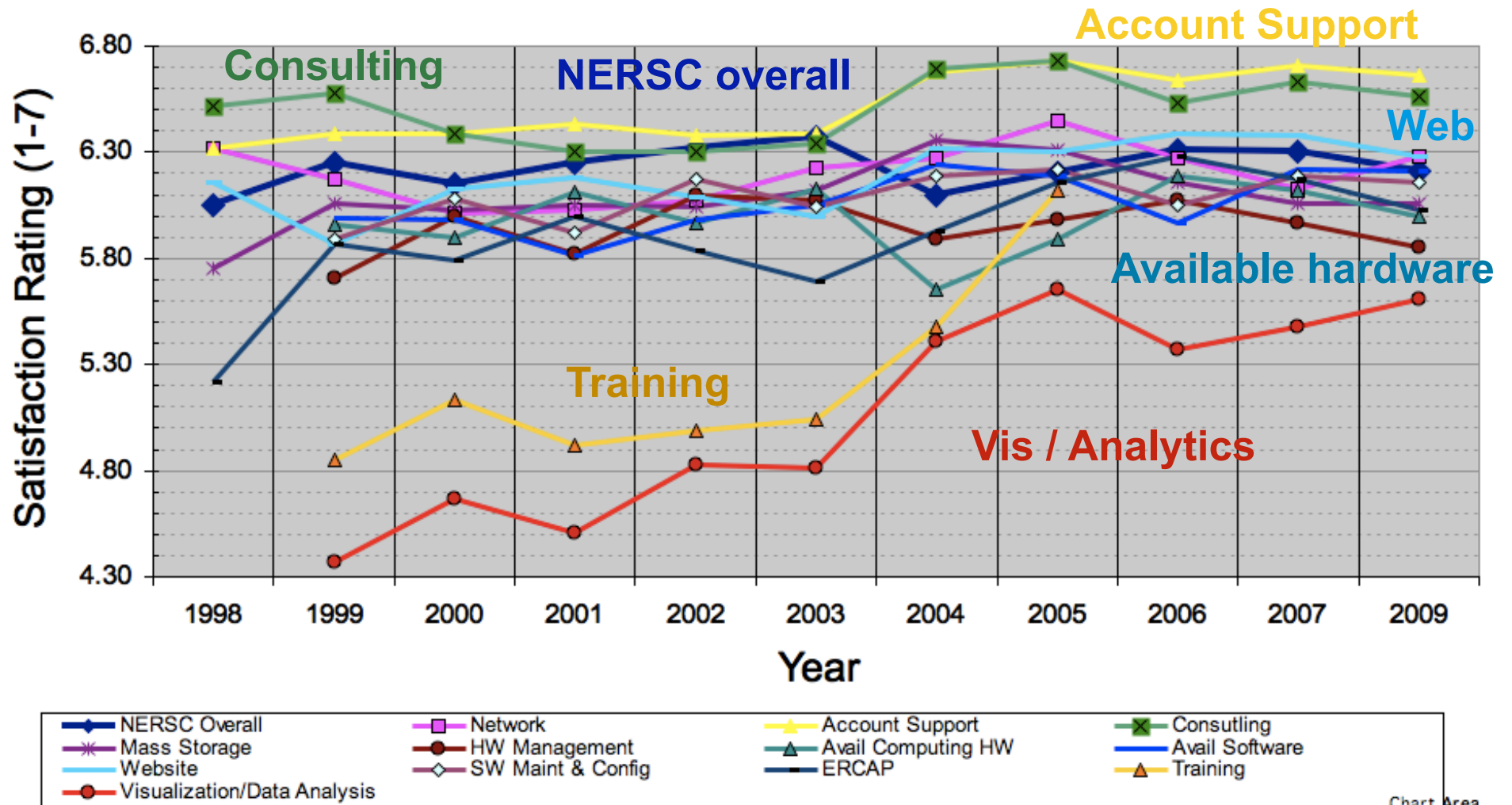
*Save scratch files still longer.*

# Satisfaction vs. Importance



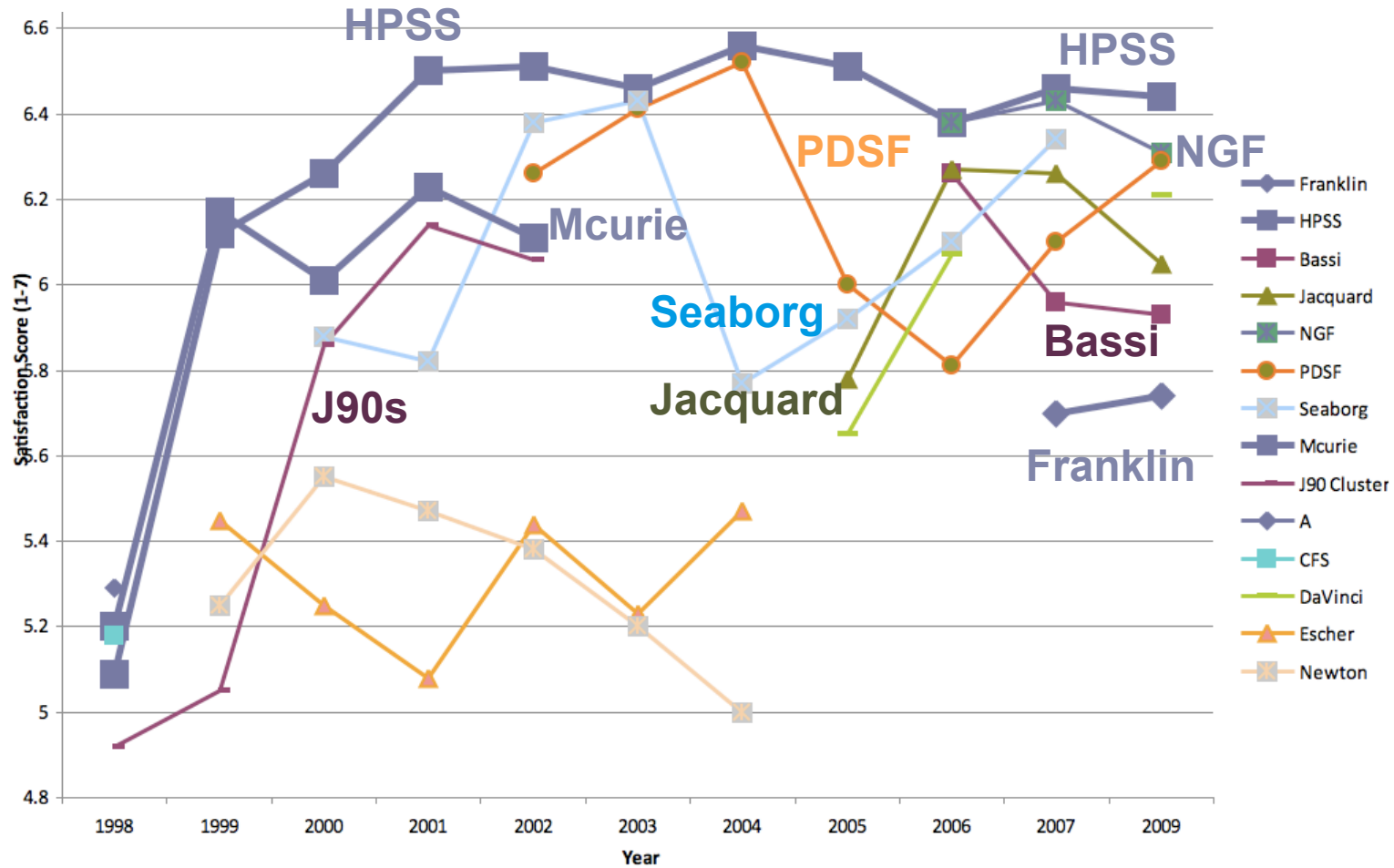


# Satisfaction by Year

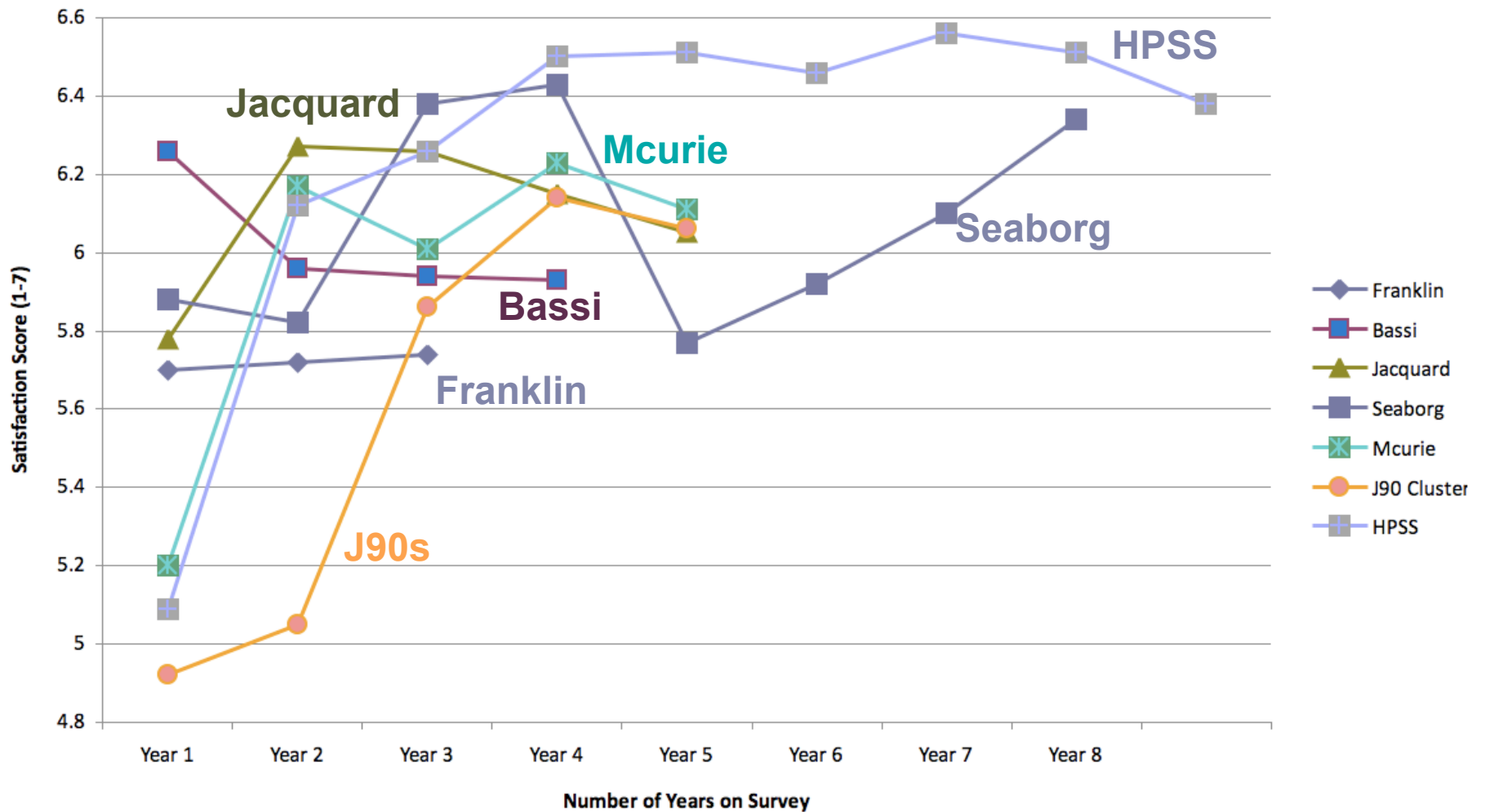




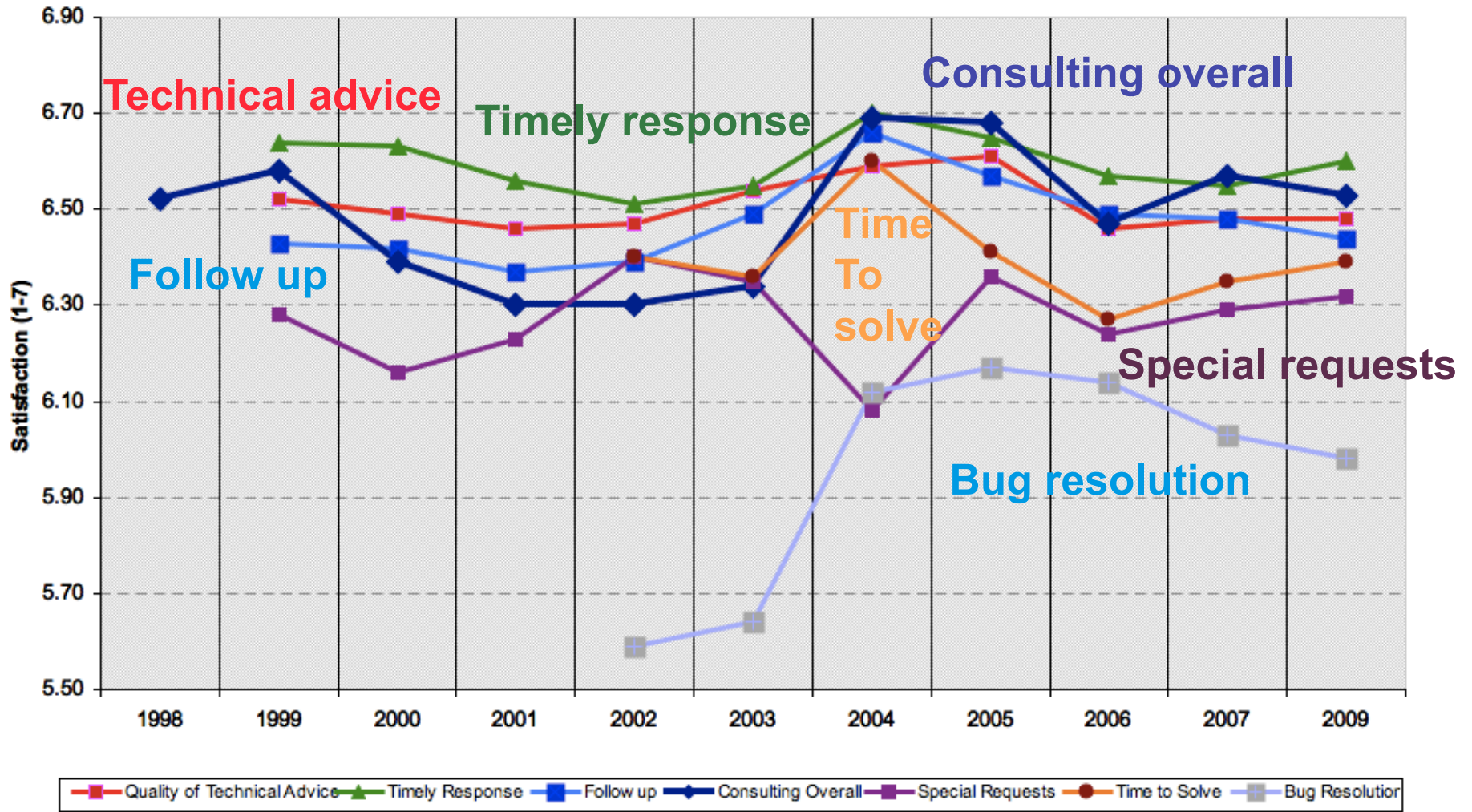
# Satisfaction with HPC Systems



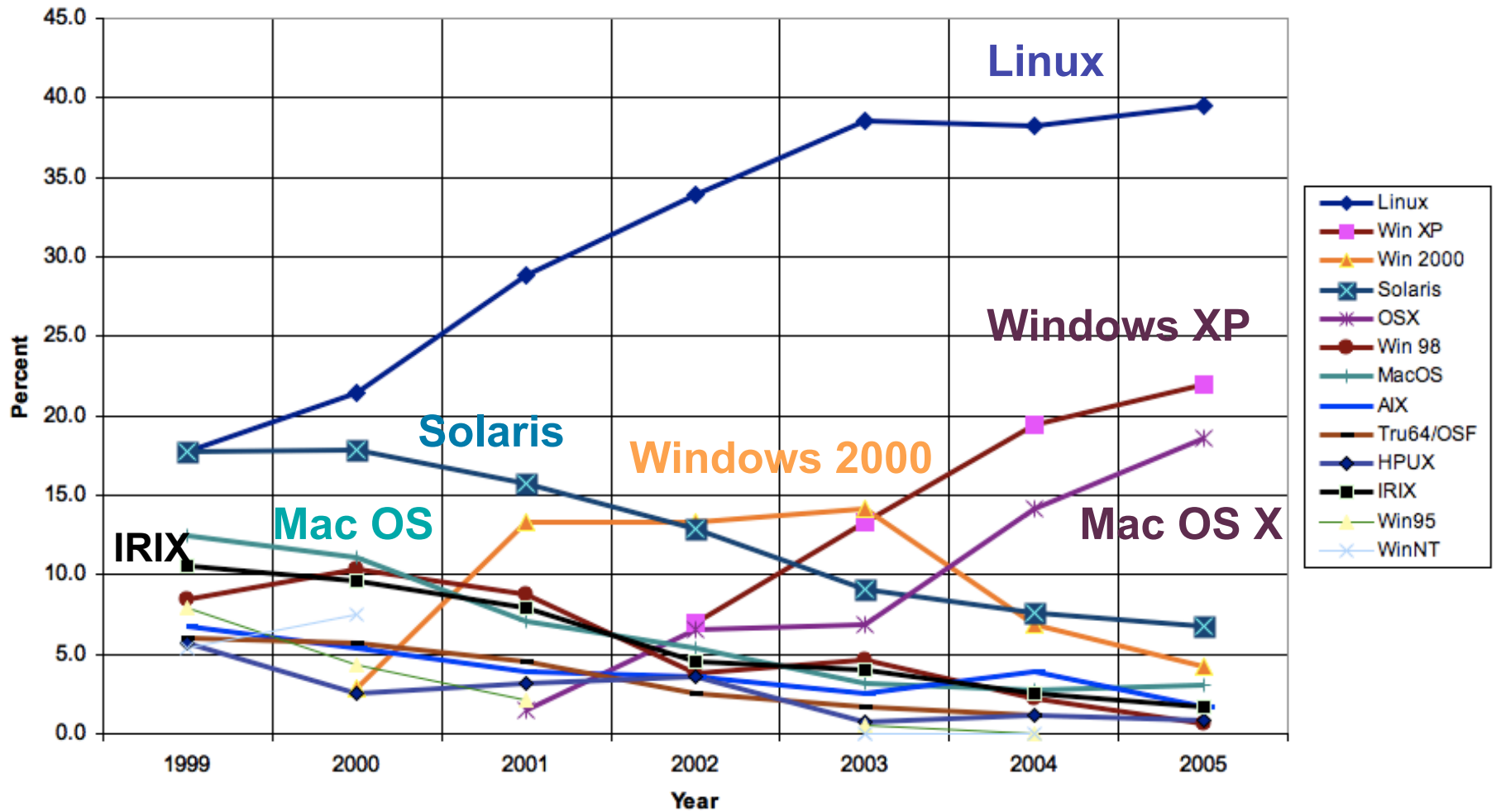
# Satisfaction with HPC Systems by Number of Years on Survey



# Satisfaction with Consulting by Year



# OS Used to Connect to NERSC





# Questions for the NUG Town Meeting

- **Is the survey too long?**
- **Do you like the format?**
- **Does this survey allow you to give the feedback you want?**
- **Do you like the 7-point scale? The leadership facilities use a 5-point scale. Should all 3 DOE SC facilities use the same scale?**