

2008/2009 User Survey results

Francesca Verdier

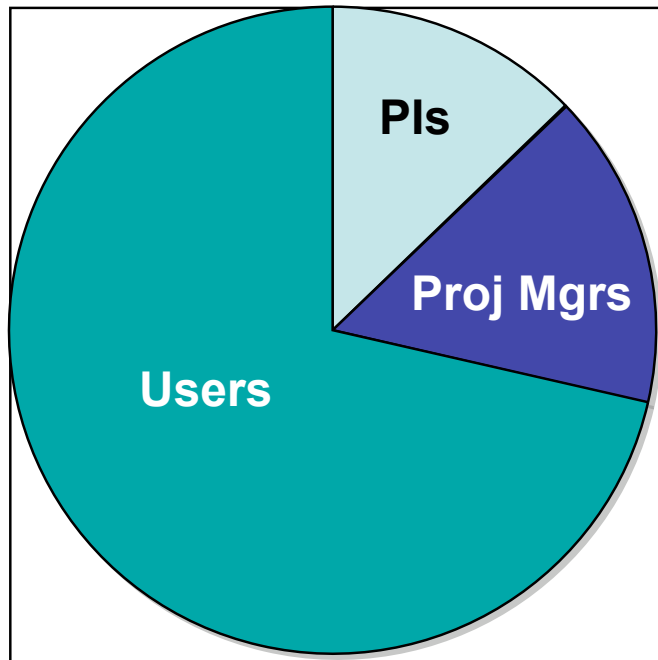
NERSC User Group Meeting
October 7, 2009



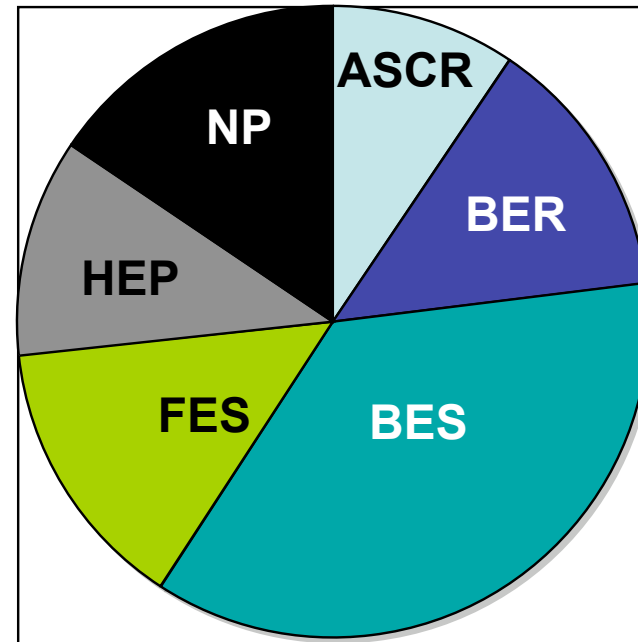
Response Profile

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

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

Areas of Highest Satisfaction

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



Areas of Lowest Satisfaction

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

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



Areas of Increased Satisfaction from 2007/2008

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



Areas of Decreased Satisfaction from 2007/2008

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



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

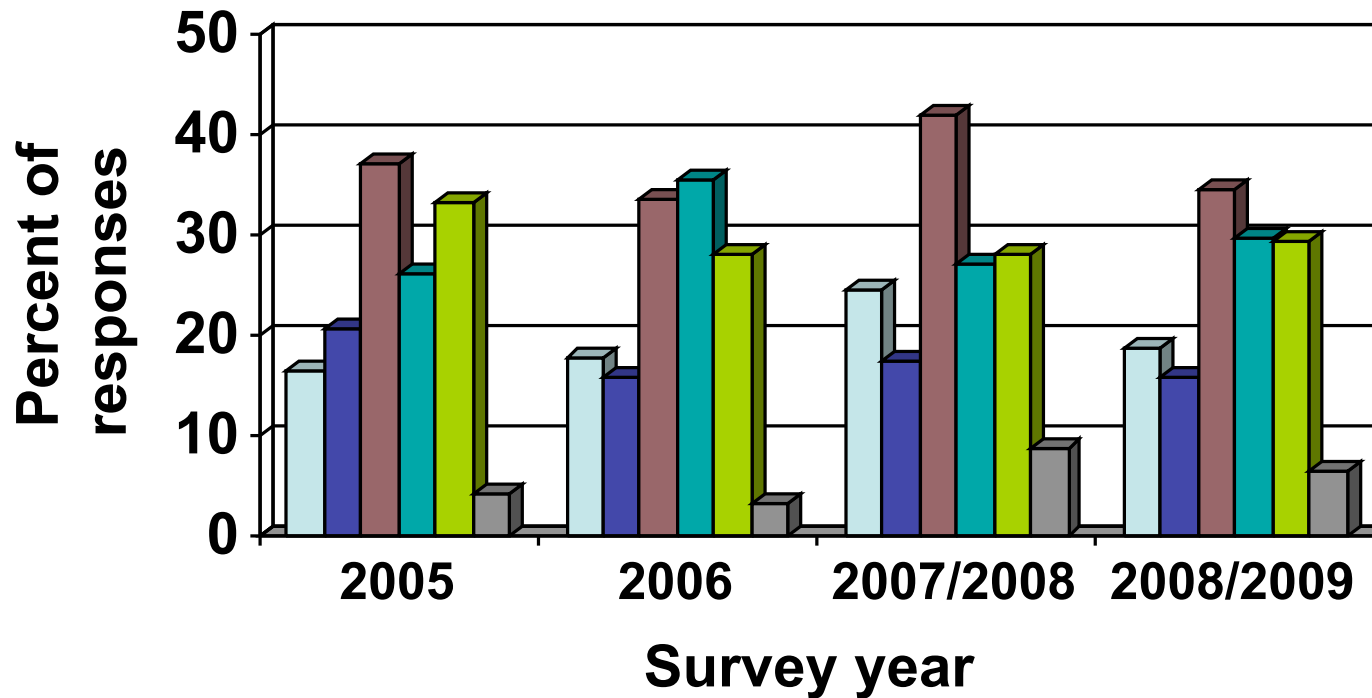


Satisfaction Patterns for Different MPP Respondents

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.*

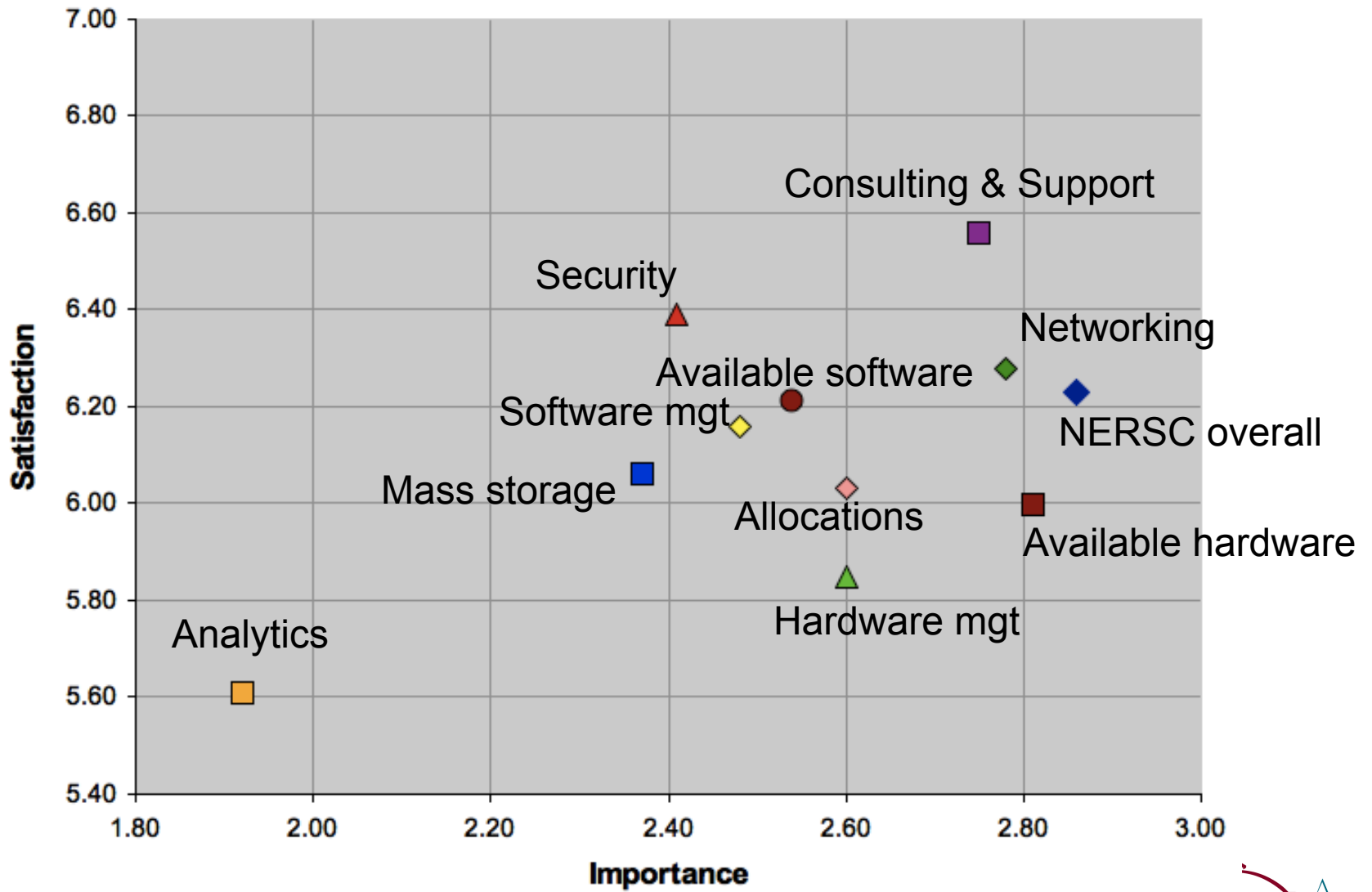
Highly reliable, very stable, high performance architectures like Bassi and Jacquard.

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

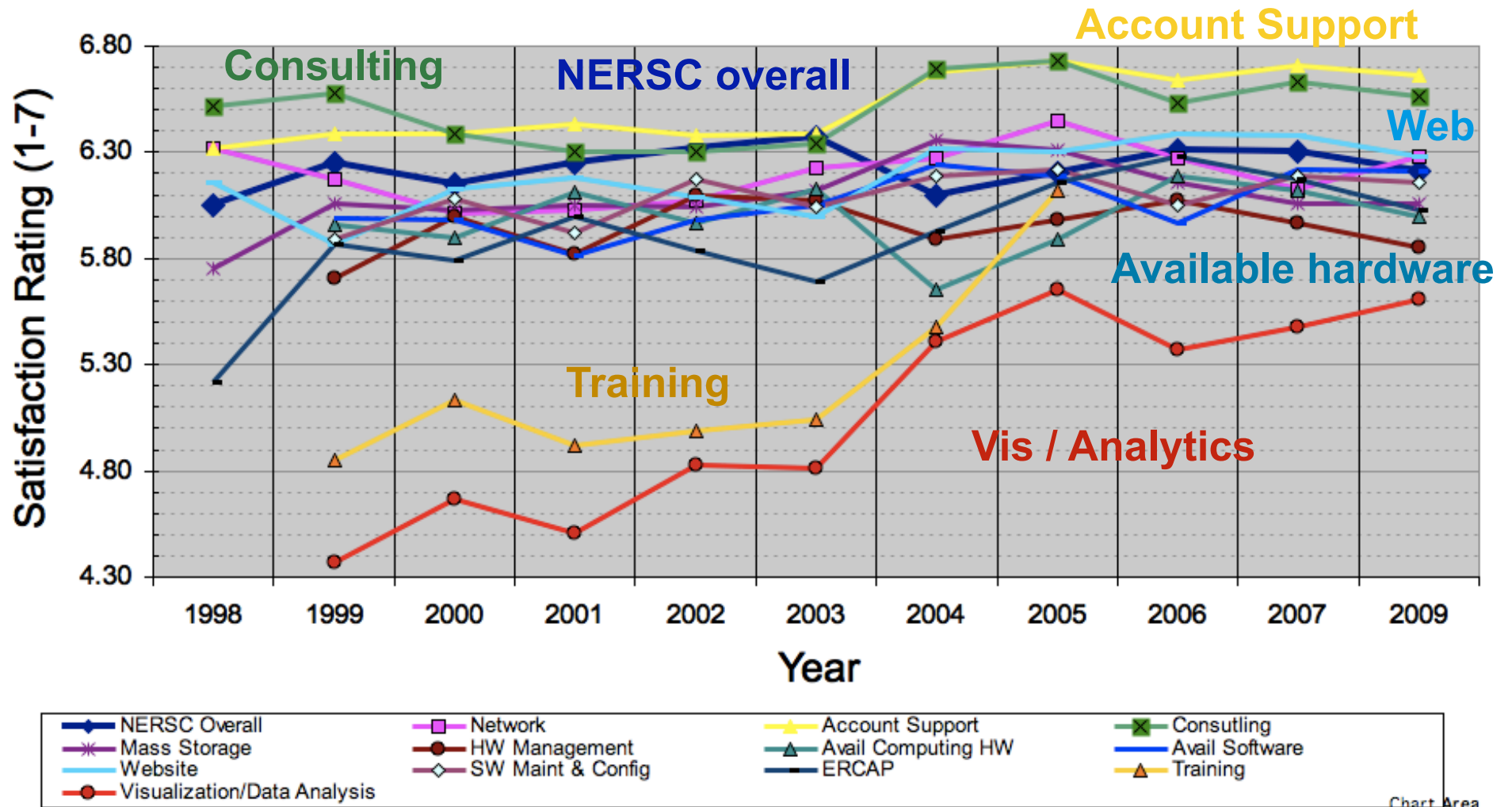
Enhance the computing power to meet the constrained the needs of high performance computation. Allocate more time!

Save scratch files still longer.

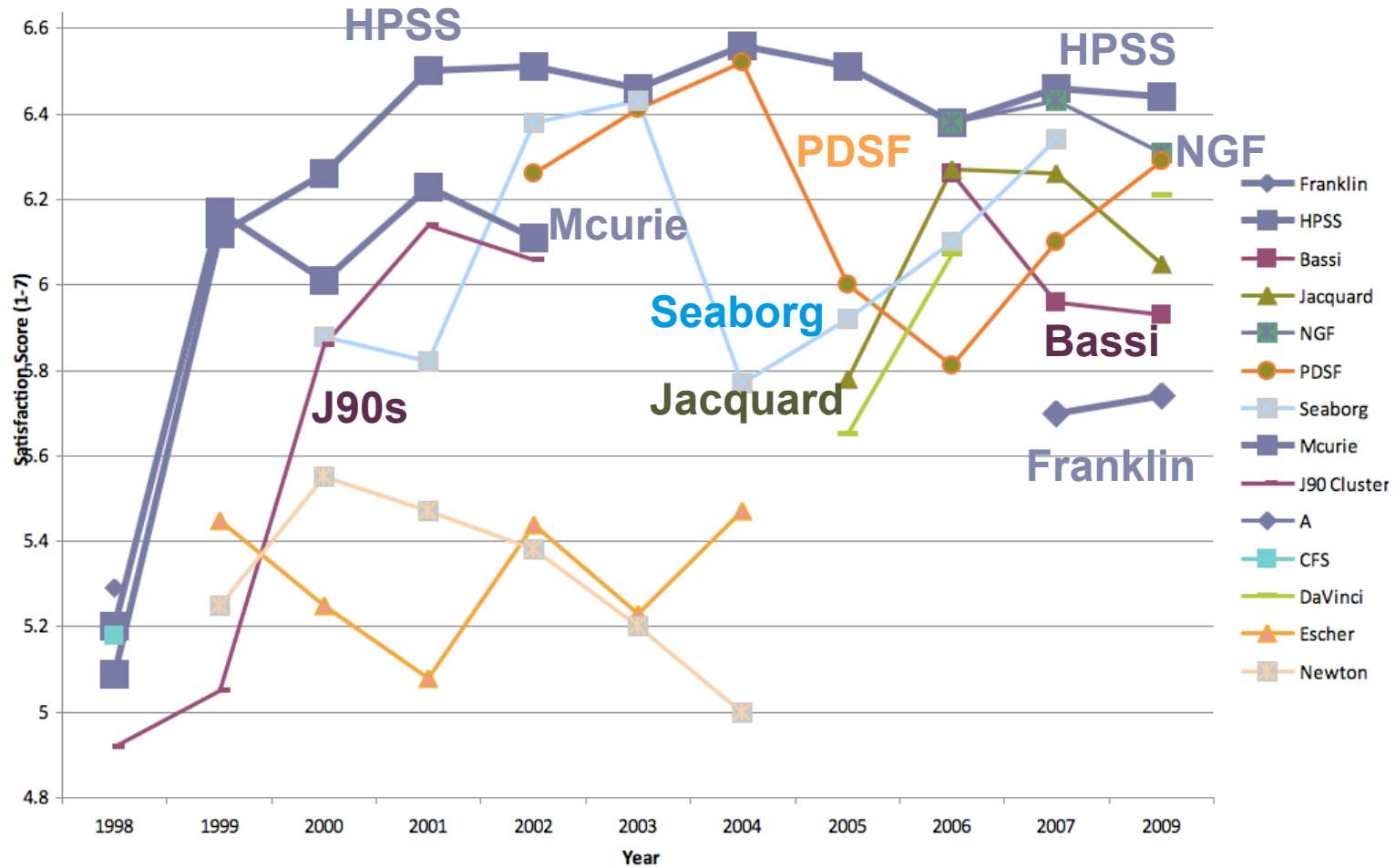
Satisfaction vs. Importance



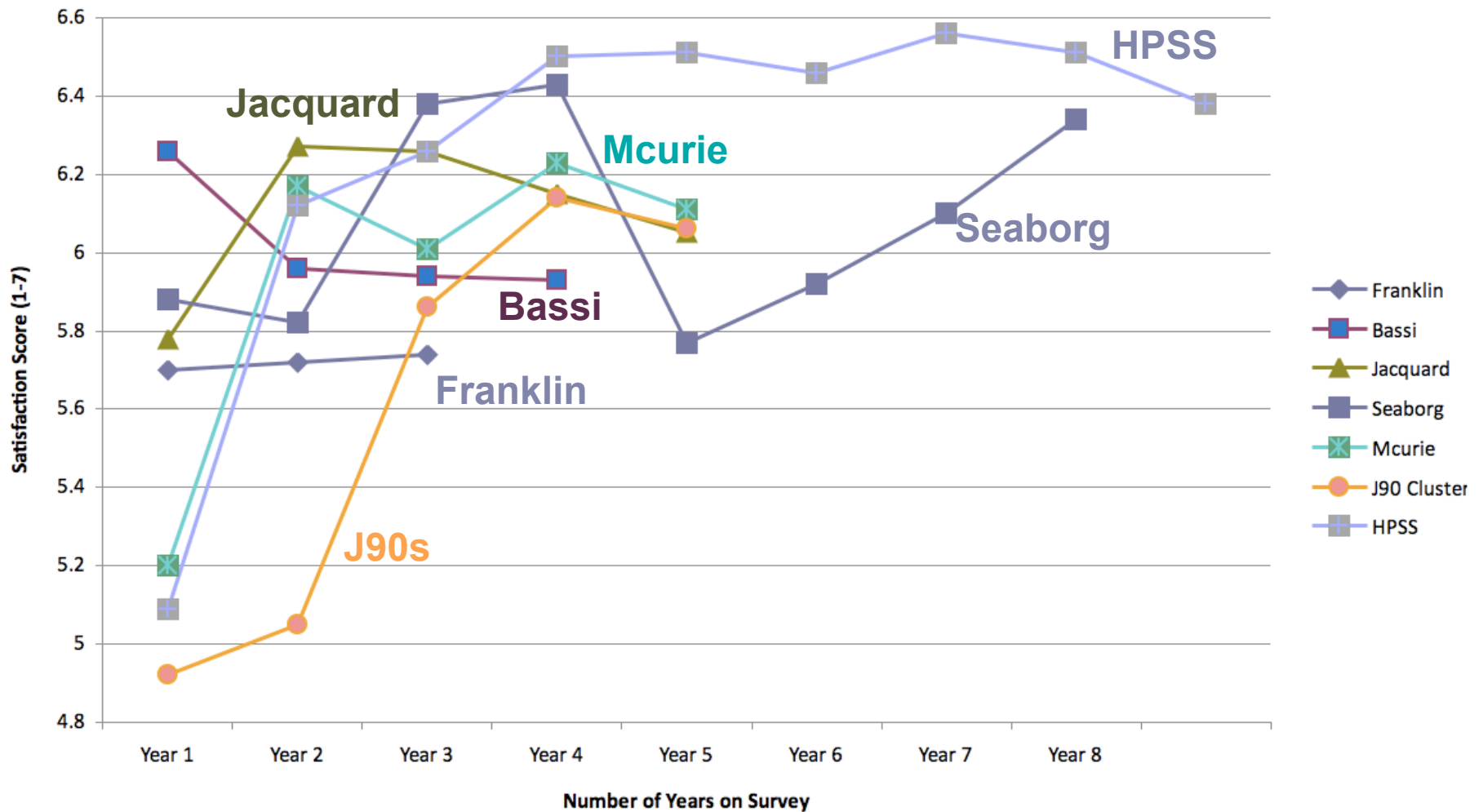
Satisfaction by Year



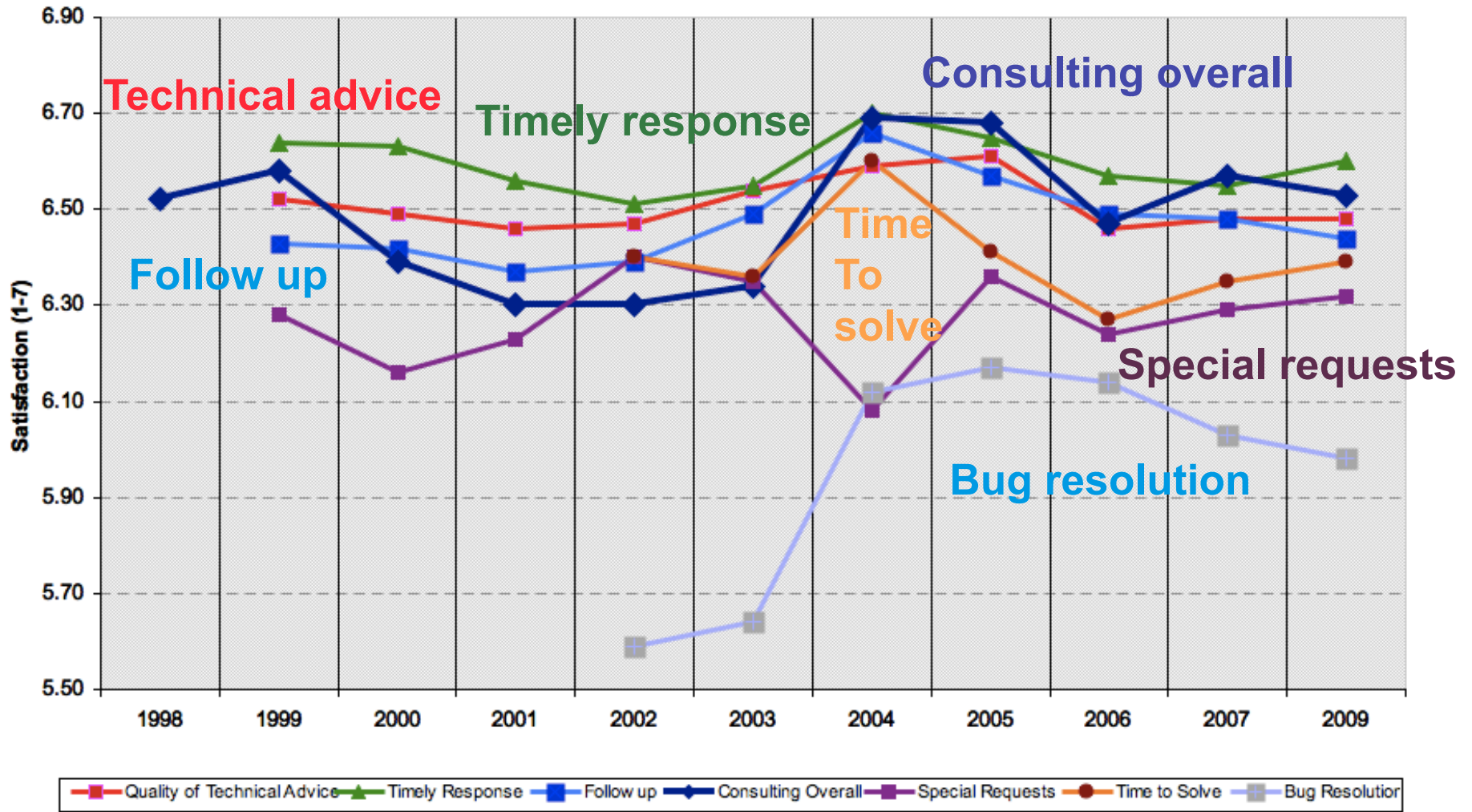
Satisfaction with HPC Systems



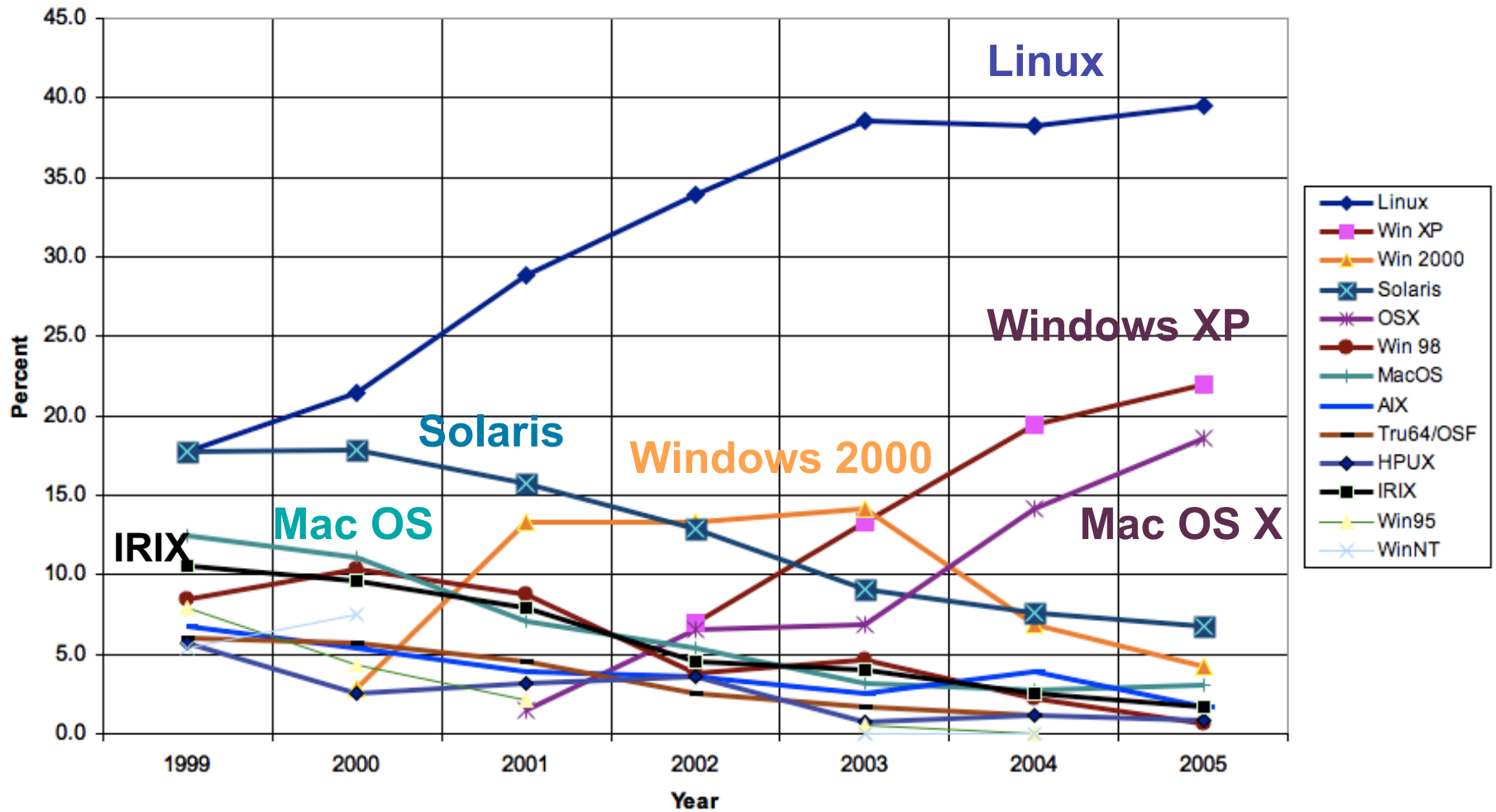
Satisfaction with HPC Systems by Number of Years on Survey



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?**