

**FY15 User Survey Report
for the
SC Lattice QCD Computing Project Extension II
(LQCD-ext II)**

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FY15 LQCD-ext II User Survey Report Change Log

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0.5	Initial draft for review by IPT	3/09/2016
0.9	Revised draft ready for public consumption	3/30/2016
1.0	Final version with feedback from USQCD All Hands Meeting	5/19/2016

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1 Executive Summary

In order to serve the USQCD user community in the best possible manner, anonymous online surveys are conducted on an annual basis by the LQCD-ext II Project to quantify the level of user satisfaction with the services provided by the LQCD computing project facilities. The LQCD-ext II Integrated Project Team (IPT) uses the results of these surveys to identify ways to improve and optimize services using the limited resources available to the project. Annual user surveys have been conducted by the LQCD, LQCD-ext, and LQCD-ext II projects since 2007. This report presents the results of the FY15 LQCD-ext II User Survey.

The FY15 LQCD-ext II User Survey was officially open from November 16, 2015 to January 15, 2015. The survey was designed to measure user satisfaction during the period from October 2014 through September 30, 2015. The online survey consisted of 29 questions designed to measure the level of satisfaction with: (a) the compute facilities operated and managed by the LQCD-ext II project team, and (b) the annual resource allocation process conducted and managed by the USQCD Scientific Program Committee.

The survey was distributed to all scientific members of the USQCD collaboration, with a focus on obtaining a response from USQCD Principal Investigators (PI's) and from the most active users at one of the three host facilities during the year. The FY15 survey was distributed to a total of 201 individuals; of these, responses were received from 66 individuals. 30 out of 35 PI's completed a survey for a response rate of 86%, compared to 74% in FY14. 32 of the 64 most Active Users completed a survey for a response rate of 50%, compared to 50% in FY14.

Questions related to facility operations were designed to quantify the level of satisfaction on a per-site basis. Results were then aggregated to obtain an overall score for the project. Table 1 shows the aggregate scores for the key facility measurement areas over time. The overall satisfaction rating, a KPI defined in the Project Execution Plan, was 97% in FY15, exceeding the target goal of 92%. Satisfaction ratings for Compute Facility Operations in FY15 were about the same as FY14, with a modest improvement perhaps in the area of User Documentation. User comments suggest that while overall satisfaction is very high, some improvement in documentation is sought.

Table 1. Satisfaction Ratings for Compute Facility Operations

Category	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15
Overall Satisfaction	82%	91%	96%	81%	87%	93%	94%	97%	97%
User Documentation	78%	92%	81%	73%	81%	89%	90%	88%	93%
User Support	86%	100%	92%	88%	92%	94%	98%	96%	99%
Responsiveness of Site Staff	89%	97%	98%	90%	90%	92%	98%	96%	99%
System Reliability	74%	90%	84%	76%	91%	89%	96%	96%	93%
Ease of Access	73%	74%	77%	76%	83%	92%	91%	91%	93%
Effectiveness of Other Tools	77%	72%	83%	86%	88%	92%	97%	97%	95%

Questions related to the annual allocation process operations were designed to gauge the level of satisfaction with several aspects of the allocation process, from the clarity of the Call for Proposals, through the transparency and fairness of the allocation process, to the extent to which the process maximizes scientific output. Table 2 shows the aggregate scores for the key measurement areas over time. Satisfaction ratings for the Resource Allocation Process in FY15 improved for Overall Satisfaction and were about the same as FY14 for other areas. Users expressed concern over how some allocations went unused while other proposals were turned down for allocations but were ready to run. There were also comments about introducing elections for some members of the Executive Committee and the Scientific Program Committee.

Table 2. Satisfaction Ratings for the Resource Allocation Process

Category	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15
Overall Satisfaction w/Allocation Process	69%	81%	84%	86%	84%	83%	97%	84%	91%
Clarity of Call for Proposals	79%	91%	93%	93%	93%	94%	99%	88%	88%
Transparency of Allocation Process	61%	64%	79%	86%	74%	86%	93%	83%	81%
Fairness of Allocation Process	63%	73%	88%	86%	93%	86%	96%	81%	84%
Proposal Process Helps Maximize Scientific Output	70%	78%	85%	79%	88%	80%	91%	85%	89%

2 Survey Methodology

The target audience for the LQCD-ext II User Survey includes members of the USQCD collaboration (e.g., Principal Investigators, faculty members, researchers, students and post-docs) who submit jobs to the LQCD Computing Facility at any of the three host sites, BNL, FNAL, and JLab; and/or whoever participates in the annual USQCD resource allocation process. Technical staff who are directly involved with operations at one of the LQCD host sites are excluded from survey participation. The survey was distributed to all known scientific members of the USQCD collaboration, with a particular focus on obtaining input from Principal Investigators and from active users who had submitted compute jobs to one of the three host facilities during the year.

The FY15 User Survey questions were defined by the project team in collaboration with the USQCD Executive Committee and the Scientific Program Committee. The same questions were used in 2015 as were used in 2014 and 2013. The survey consisted of 29 questions arranged into 4 sections designed to measure the level of satisfaction with the compute facilities operated and managed by the LQCD project team, and with the annual resource allocation process conducted and managed by the USQCD Scientific Program Committee. The survey sections are:

- Demographic Information: Questions 1-5
- User Satisfaction: Questions 6-13, 28
 - Question 6 measures the “Customer Satisfaction rating” KPI defined in the Project Execution Plan. The goal is to meet or exceed a rating of 92%.
- Helpdesk Evaluation: Questions 14-19
 - This evaluates the users’ impression of Helpdesk services to ensure it is consistent with the separate measurement of the “% tickets closed within 2 business days” KPI defined the Project Execution Plan.
- Allocations and Call for Proposals: Questions 20-27, 29

For satisfaction rating questions, responses of “very satisfied” and “satisfied” were considered as satisfaction responses. The questions, responses, and verbatim user feedback are in Section 6.

The survey was executed using the SurveyMonkey online service (surveymonkey.com). General requirements for the survey are that the online survey be easily accessible by members of the collaboration for a finite length of time, and that user responses remain anonymous to those analyzing and using survey results.

The 2015 User Survey was officially open from November 16, 2015 to January 15, 2015. Six email announcements and reminders were sent from the survey tool during this time to USQCD members who had not yet completed a survey.

- Of the 201 identified USQCD members, 66 non-technical members completed a survey. The USQCD membership list used has grown to include many people who are not actively using LQCD Compute facilities, so the total response rate is not considered.
 - Of the 201 members sent a survey invitation, 128 opened the invitation email, 65 did not, and 7 invitations bounced. Each bounced email was investigated and the invitation resent if a more recent email address was found for the user.
- 30 of 35 PI’s completed the FY15 survey
 - FY15 PI response rate was 86%.
 - Compare this to the PI response rate of 74% in FY14.

- 32 of the 64 most Active Users (as identified by site managers) completed the FY15 survey
 - FY15 Active User response rate was 50%.
 - Compare this to the Active User response rate of 50% in FY14.
- The 66 survey responses on individual questions in 2015 was a little more than the 61 responses in 2014.

Results of this survey are shared with the Integrated Project Team for further analysis and to identify areas for potential improvement and to implement corrective actions. Items with satisfaction rating less than 80% are considered issues requiring further analysis and attention. Since the total population of users is relatively small, as is the sample size of survey respondents, outliers may significantly affect the results of the survey. We also depend heavily on the small number of free-form text responses from users to identify potential opportunities for improvement, even in areas where the related satisfaction rating is high.

3 Survey Results Summary and Analysis

3.1 Demographics

These questions are designed to collect demographic data of the user community. The demographics in the FY15 survey are similar to past surveys. Among the total of 66 respondents:

- 43 users are employed by a university or a college and 23 by laboratories.
- 30 users are faculty members. Research scientists and post docs make up most of the rest.
- 25 users submit jobs daily. 22 users submit jobs occasionally or never.
- The most common submission rate by active users is in the 1 to 19 jobs per week range. There is a peak submission rate for more frequent submissions at 100 to 199 jobs per week.
- 41 users have submitted jobs at FNAL, 17 users have submitted jobs at JLab, 4 users have submitted jobs at BNL, and 1 user reported having submitted jobs at ALCF. 11 users skipped this question, not having submitted jobs during this timeframe.

3.2 Computing Facilities Operations

3.2.1 User Satisfaction Evaluation

Ratings associated with these questions assessed the overall user satisfaction with the LQCD facility and related satisfaction levels related to documentation, user support, system reliability, responsiveness of site support, accessibility, and tools support. Overall satisfaction rating for Compute Facility Operations in the FY15 survey is 97%, which exceeds our target rating of 92%. Detailed satisfaction ratings are in Table 3 below.

Table 3. User Satisfaction Ratings for Computing Facilities

Computing Facilities	FY15 Ratings
Overall Satisfaction	97%
Documentation	93%
User support	99%
Responsiveness	99%
Reliability	93%
Ease of access	93%
Other Tools	95%

The following figures shows the overall rating score trend over recent years. Figure 1 shows the Overall Satisfaction has remained at a high level in the past several years. Figures 2a-f show that the specific areas surveyed for the Compute Facilities likewise have remained at a high level in the past several years, and the satisfaction with User Documentation perhaps improving in FY15.

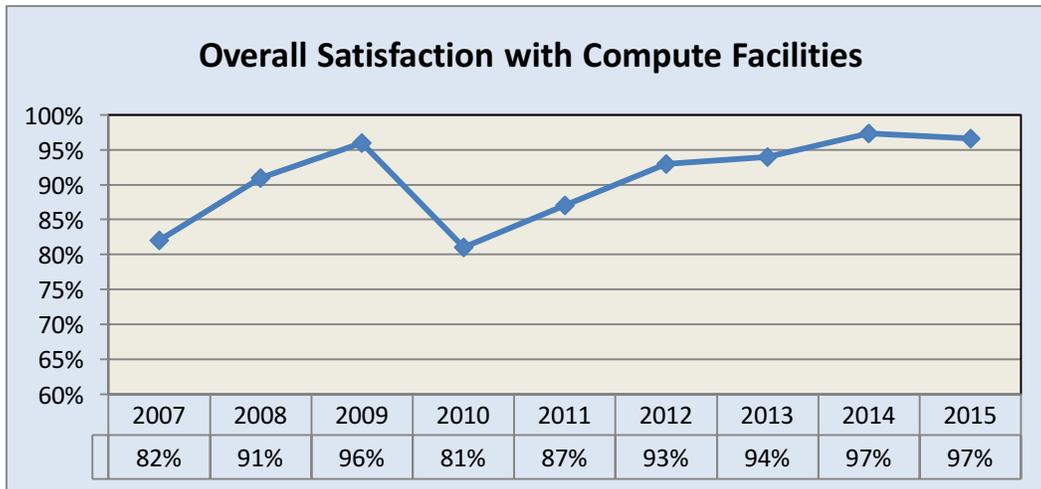
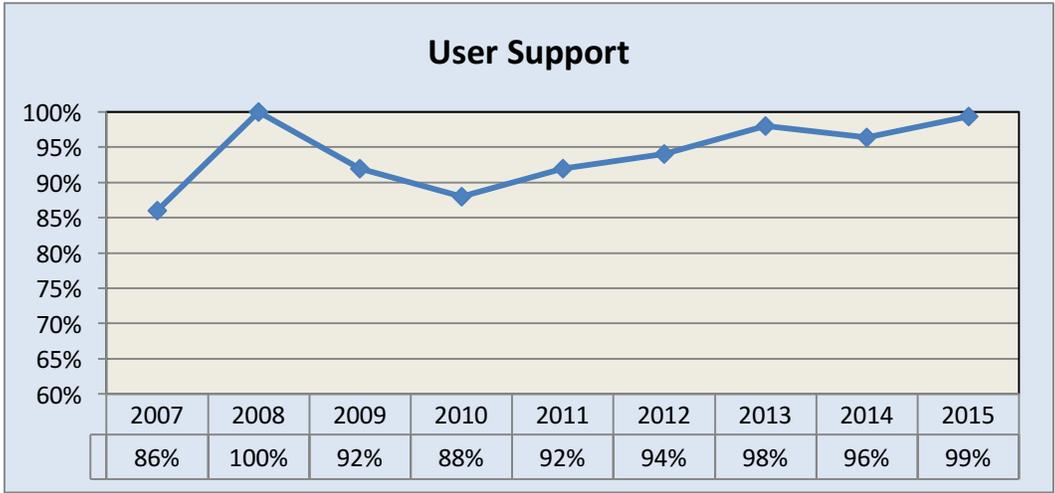
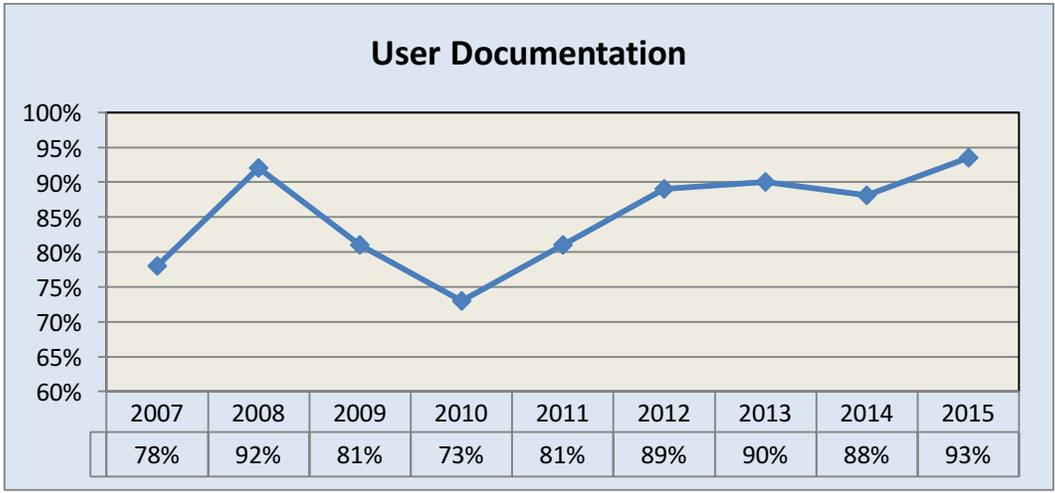
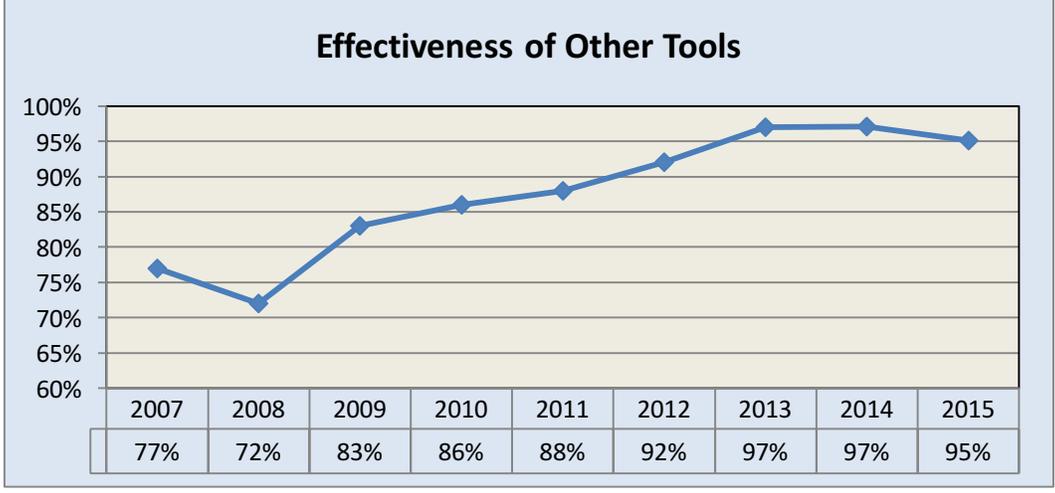
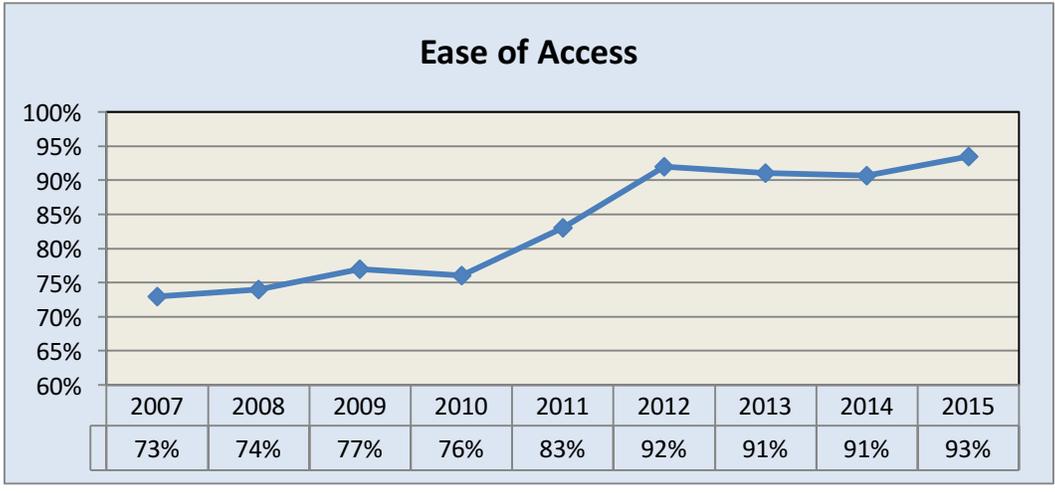
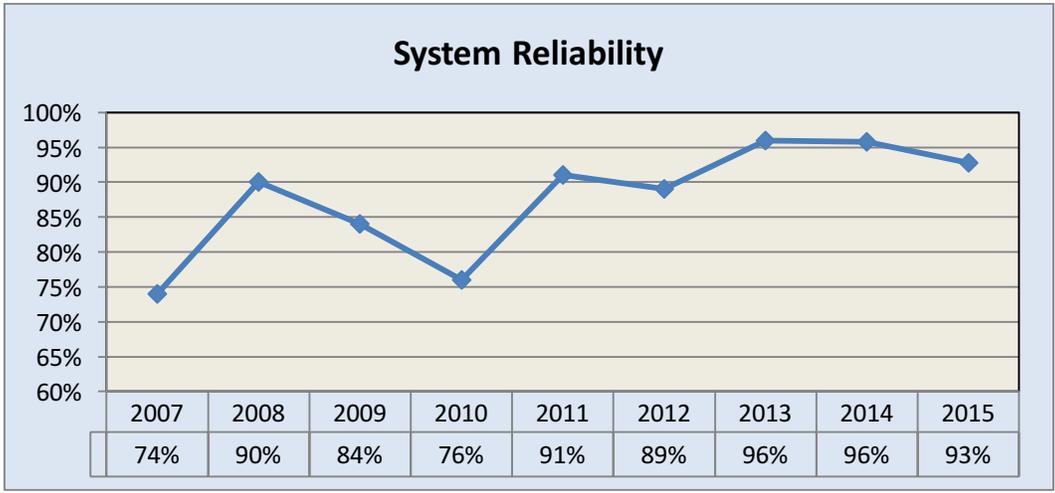


Figure 1. Overall Satisfaction Rating with LQCD Compute Facilities



Figures 2a-c. User Documentation, User Support, and Site Staff Responsiveness



Figures 2d-f. System Reliability, Ease of Access, Effectiveness of Other Tools

Table 4. Satisfaction Ratings for Compute Facilities by Site

FY15 Computing Facilities	All Sites	BNL	FNAL	JLab
Overall Satisfaction	97%	89%	100%	92%
Documentation	93%	83%	96%	94%
User Support	99%	100%	99%	100%
Responsiveness	99%	100%	99%	100%
Reliability	93%	100%	94%	89%
Ease of Access	93%	100%	95%	88%
Other Tools	95%	100%	93%	97%

Table 4 presents the satisfaction ratings broken down by site. The shaded regions indicate low values this year (yellow <88%, red < 80%) or improved values (green >92% this year after being lower last year). A KPI for the project is receive an Overall Satisfaction rating (blue) <= 92%.

BNL: The satisfaction rating for Documentation improved again in FY15 to go over 80%, and the overall satisfaction rating nearly reached the project-wide reference level of 92%.

FNAL: FNAL received satisfaction ratings of at least 92%, including the overall satisfaction rating. There were multiple positive remarks on facilities and support at FNAL.

JLab: JLab received satisfaction ratings of at least 92% in most cases, including most importantly the overall satisfaction rating. There were multiple positive remarks on facilities and support at JLab.

3.2.2 Helpdesk Evaluation

Questions were posed to determine the usage and efficacy of the helpdesk and support at each site. Users were asked to consider the last problem report they submitted:

- The most recent help needed was at site:
 - FNAL: 58.3%
 - JLab: 25.0%
 - BNL: 6.3%
 - None: 10.4%
 - Source: Question 14
- 100% of users responding knew how to ask for help.
 - Source: Question 15
- 97% (42 of 43) received an initial response to their help request within 1 working day.
- 86% of problems were solved using the initial response.
- 71% of problems were resolved within one day and about 100% of the problems were solved within 3 days.
- The Helpdesk-related project KPI is: 95% of tickets are resolved within 2 business days. We measure this directly, but this part of the survey could serve as a cross-check of users perception against the direct measures if we adjust the answers to questions 16 and 18 to allow more complete and fine-grained response and resolution time estimates.

3.3 Allocation Process and Call for Proposals (CFP)

Questions associated with the allocation process are designed to assess different aspects of the resource allocation process. The questions address the Allocation Process itself, clarity of Call for Proposals (CFP), allocation transparency and fairness, and the goal of maximizing the scientific output through the Allocation Process. Detailed satisfaction ratings by topic are in Table 5 below.

Table 5. User Satisfaction Ratings for the Allocation Process

Allocation and CFP Processes	FY15 Ratings
Overall Satisfaction with Proposal Process	91%
Clarity of the Call for Proposals	88%
Transparency of Allocation Process	81%
Fairness of Allocation Process	84%
Allocation Process Helps Maximize Scientific Output	89%

The overall satisfaction rating for the allocation process was 91%, returning to a level between the peak in FY13 and plateau in previous years, after a dip in FY14, as shown in Figure 3 below.

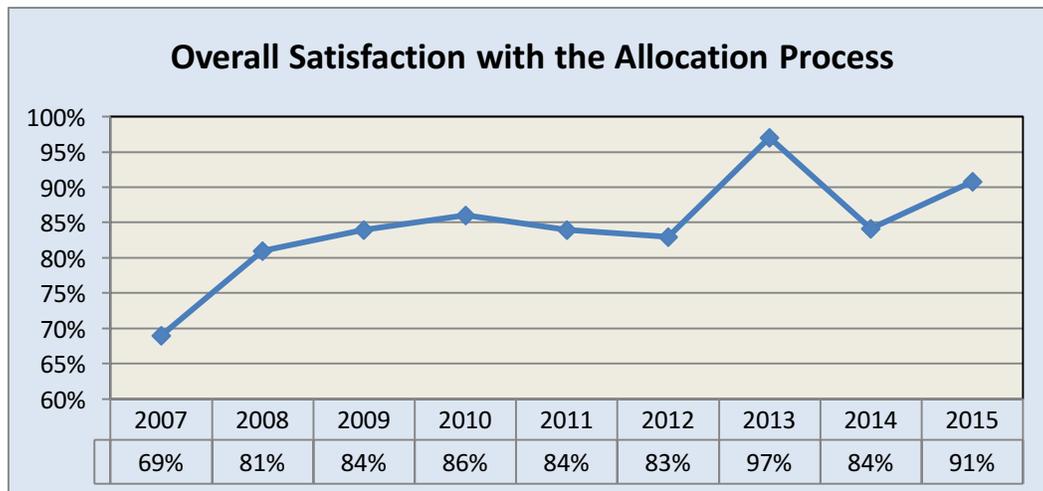


Figure 3. Overall User Satisfaction with the Allocation Process

This time profile for the other areas of the allocation process explored by the survey are presented in Figures 4a-d.

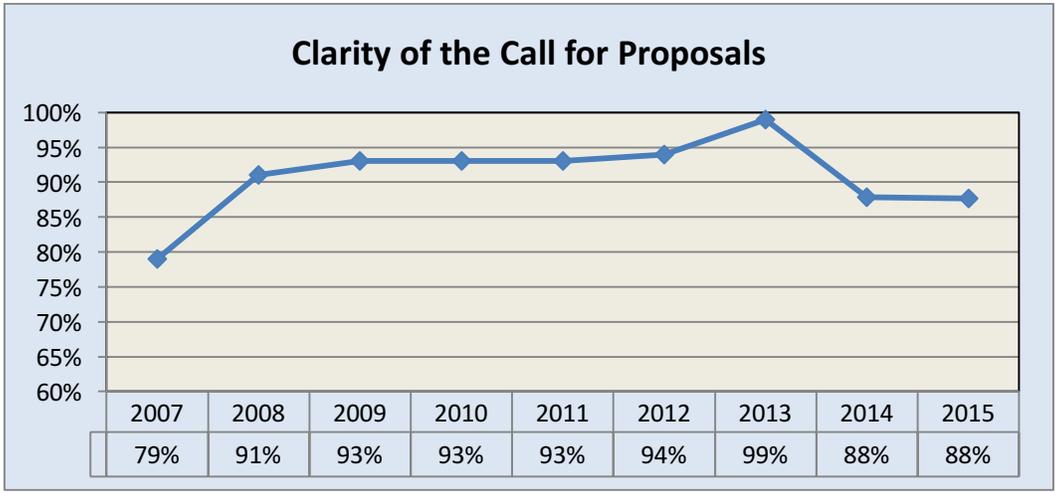


Figure 4a. Clarity of the Call for Proposals

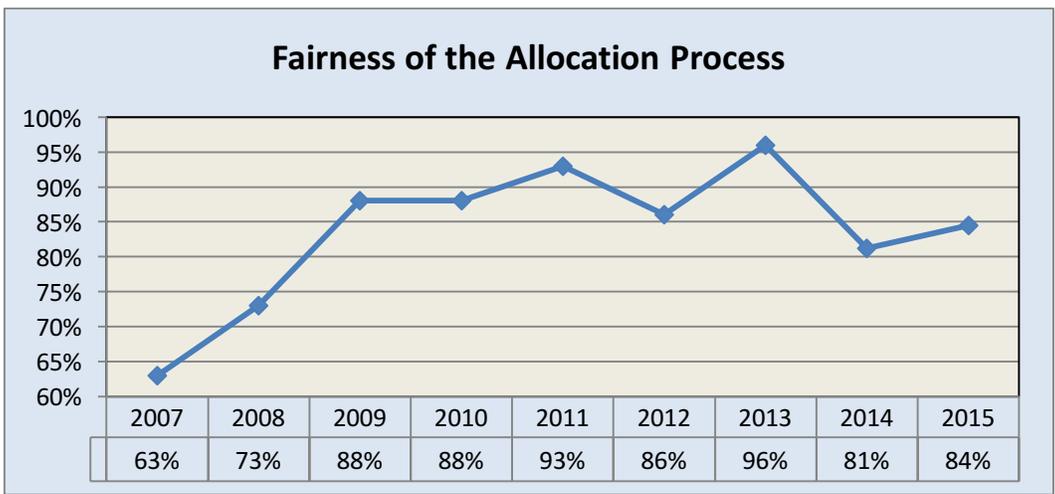
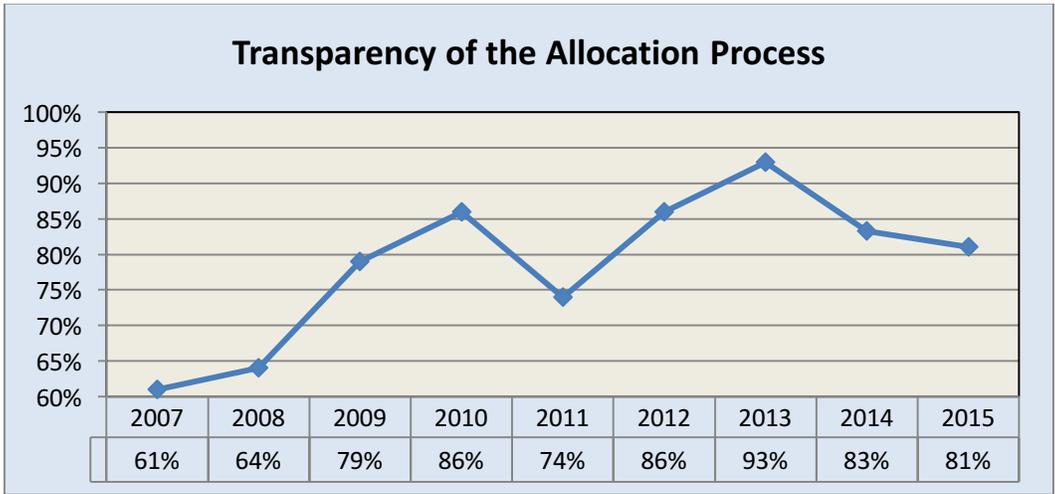


Figure 4b-c. Transparency and Fairness of the Allocation Process

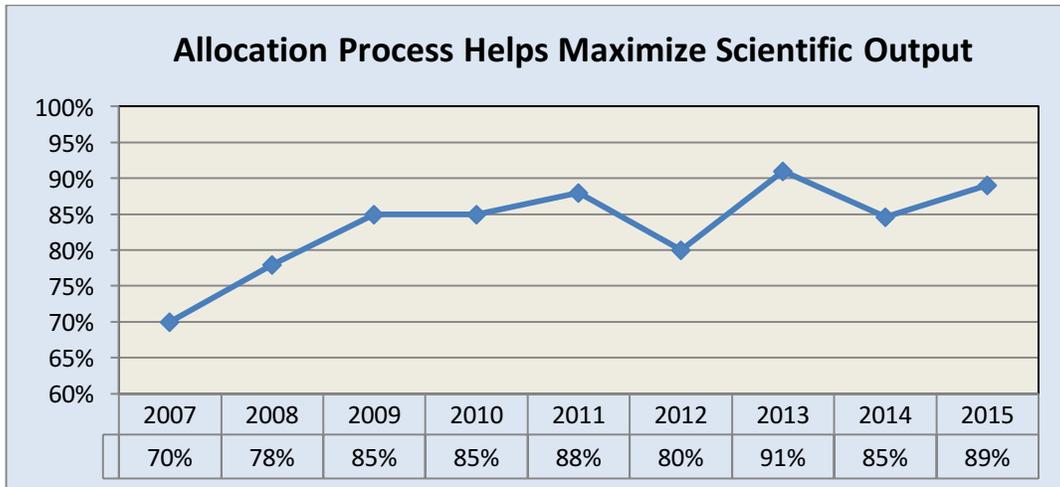


Figure 4d. Allocation Process Maximizes Scientific Output

Related user feedback included:

- Acknowledgement of the challenges of allocating over-subscribed resources
- Concern about some allocations not being used for a large part of the year while proposals that had been turned down were ready to run
- Concern about the EC and SPC having no elected members
- Suggestions to streamline or improve the allocation process

While the overall satisfaction with the allocation process noticeably recovered in 2015 after a dip in 2014, most of the specific areas related to the allocation process and call for proposals remained at about 2014 levels. With over-subscribed resources and only a very modest amount of new resources becoming available in 2015 (Pi0 Expansion), it is understandable that the focus of comments was mostly on how those resources were allocated or consumed.

4 Action Plan in Response to Survey Results

While the overall results of the user survey in FY15 are very positive, we have identified from the survey results a few areas that may be opportunities for improvement in the future. In addition, we describe the results of the FY14 Action Plans.

4.1 User Survey Methodology

We had PI response rate of 86% and an Active User response rate in FY15 of 50% which is typical of or better than recent years. We believe we can still do more to encourage Active Users and PIs to complete the survey though.

Past Action Plan for the 2015 User Survey:

- Refresh the USQCD membership list beginning at least a month before the opening of the survey to ensure it is up-to-date when the survey opens. Also, refresh the PI and the Active Users lists to track the response rate for these groups. Evaluate success of the survey response based on these groups, not the entire USQCD membership list.
 - We refreshed the PI and Active Users list as planned, and continued to focus on the response rate for these groups to determine when survey was sufficiently complete.
 - We continued to manually synchronize the user survey list with the USQCD email lists, and ask colleagues for more recent email addresses when email bounces.
- Consider declaring completion of the survey a civic duty of all PIs and Active Users.
 - The EC and SPC communicated this to their membership and indirectly to the USQCD collaboration as a whole. This had a positive impact on the response rate.
- Make the ordering of choices consistent across the survey sections.
 - The ordering of choices in the Allocations Process and CFP section of the survey was fixed.
- Reconsider the definition of satisfaction rating to avoid ratings going down when clearly the mean values of responses go up and vice versa.
 - We considered this, but concluded that the disruption to the historical record (some of which may be difficult to adjust many years later) would not be worth the modest improvement in the satisfaction rating in edge cases.

Past Action Plan from 2015 DOE Annual Review:

- Augment the online user survey with a town hall or equivalent at the next USQCD All Hands Meeting. This will allow the project to gather input in a dialogue format that is free of some of the pitfalls of email.
 - While we have done this informally in the past with little participation by attendees, we will do so in a more focused manner in the 2016 USQCD All Hands Meeting in April 2016.

Future Action Plan for the 2016 User Survey:

- Consider why barely ½ of sent invitations are read. Is there a more pervasive problem with the online survey tool invitations being interpreted by email readers as junk mail?
- Since mid-career scientists tend to change institutions, and email addresses, frequently, the user survey invitation list may be made more consistent with less long-term effort by creating a portal for users to adjust their preferred contact information in one place for

USQCD and LQCD rather than having support staff react to bounced emails or detecting email inboxes no longer being read.

- Add another answer to Questions 16 and 18 to cover the response/resolution time period between 1 and 2 days, since the response times are not ordinal numbers. There is an answer for ≤ 1 day and an answer for 2-3 days. If we had a complete spectrum of answers, then we could compare the users' perception of the resolution time to the directly measured resolution time (on which a project KPI depends) to detect a significant inconsistency.

4.2 User Documentation

The satisfaction rating for Documentation for the BNL site, while improved, is somewhat low.

Past Action Plan for 2015 User Survey:

- BNL Site Staff: The documentation web pages went down due to the retirement of old hardware. We are working with Bob M to host this documentation at Columbia instead.
 - This was not accomplished as envisioned. However, there are fewer users of the BNL site compared to other LQCD sites, and these users were directed to the BG/Q experts when they had questions.

Future Action Plan for 2015 User Survey:

- BNL Site Staff: Setup an LQCD documentation site at BNL which can be used both for the BG/Q and for potential future LQCD clusters at BNL. Survey the BG/Q user community to identify their basic BG/Q documentation needs and supply that on the LQCD doc site, but direct users to the BG/Q experts for more detailed information.
- One user noted that documentation is generally out-of-date, and suggests maintaining explicit build examples for each site that are verified to currently work. This would reduce the support load on the facility staff. The IPT will look into this... perhaps we might better serve users by providing a documentation core that is regression tested..

4.3 Simplify Moving Projects from Site to Site

Future Action Plan for 2015 User Survey:

- As suggested in a few comments, the project may consider how to simplify the task of moving projects from site to site. This would help users be more flexible about which sites they are using during periods where resources may be more available on a different site than they are accustomed to using.

4.4 USQCD Collaboration Topics

Future Action Plan for 2015 User Survey:

- USQCD is considering how to better make use of resources when major allocations are not yet ready to run.
 - For instance, in the 2016 Call for Proposals, the SPC is instituting allocation management ideas used at NERSC to reduce allocations in future quarters if they are not consumed in the current quarter and no prior arrangements for a delay in consumption have been made.
- USQCD is considering the issue of elected members on the EC and SPC.

5 Detailed Survey Results

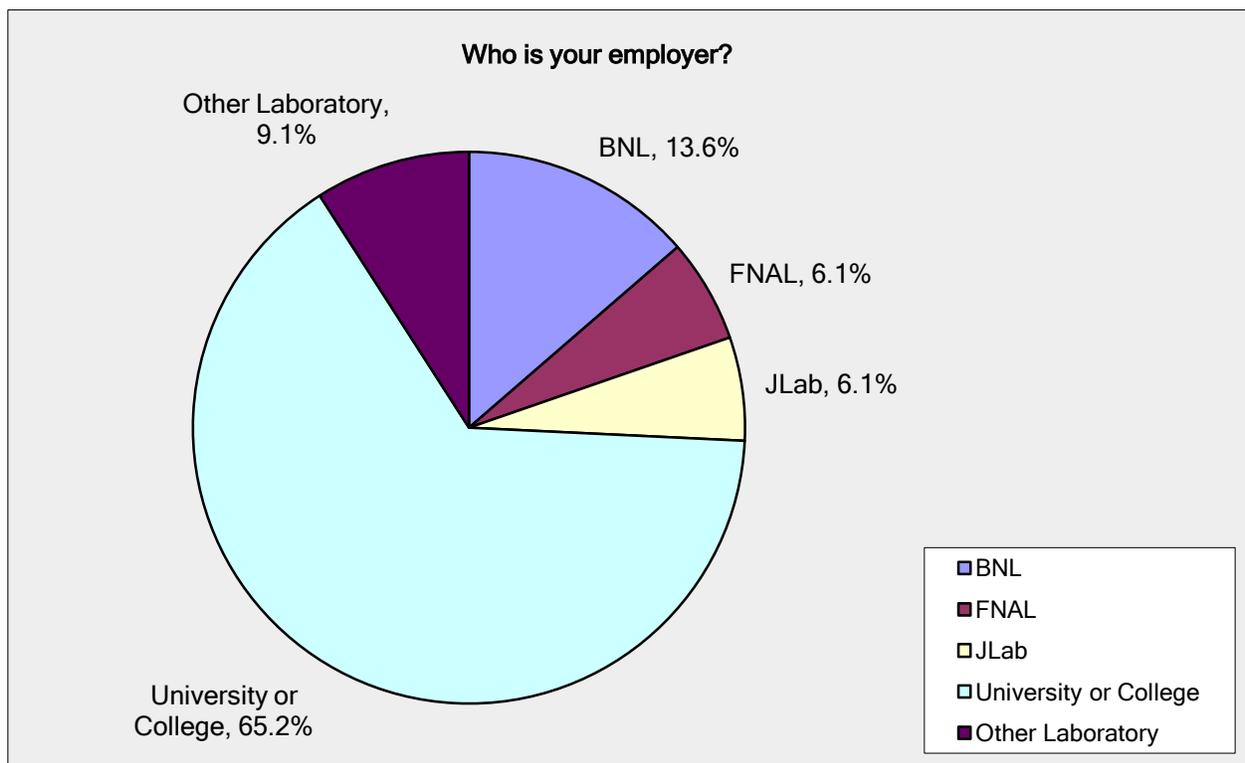
The questions, results, and user free-form feedback are presented below, organized one question per sub-section. Question N is in report sub-section 6.N. User free-form feedback is reproduced verbatim. These comments are extremely useful in providing additional insight into areas in which we are performing well and into potential areas for improvement.

5.1 Respondent Affiliations

Survey Question 1. Who is your employer?

- BNL
- FNAL
- JLab
- University or College
- Other Laboratory

Other Employer (please specify): [*text entry box*]



Employed by	Count
BNL	9
FNAL	4
JLab	4
University or college	43
Other Laboratory	6
<i>Answered Question</i>	66
<i>Skipped Question</i>	0

Other Employer (please specify):

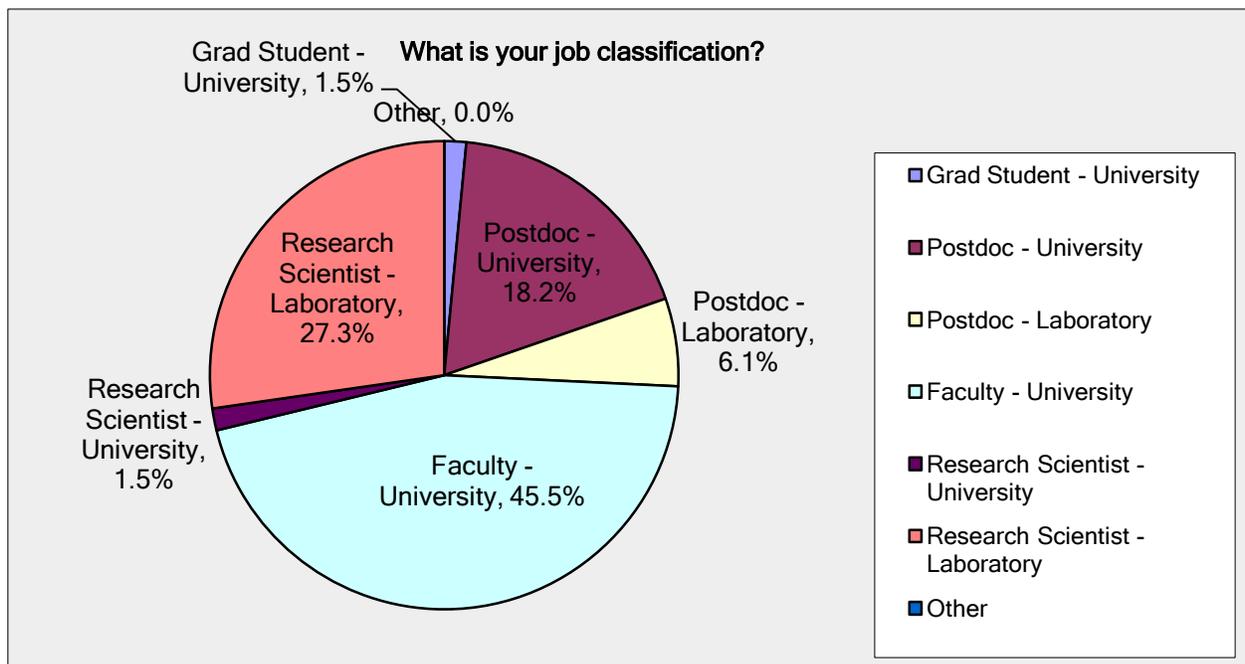
1. LBL
2. Univ of Iowa
3. Boston University
4. LBNL
5. Los Alamos National Lab
6. Central China Normal University

5.2 Respondent Job Classifications

Survey Question 2. What is your job classification?

- Grad student – University
- Postdoc – University
- Postdoc – Laboratory
- Faculty – University
- Research Scientist – University
- Research Scientist – Laboratory
- Other

Other Job Classification (please specify): [*text entry box*]



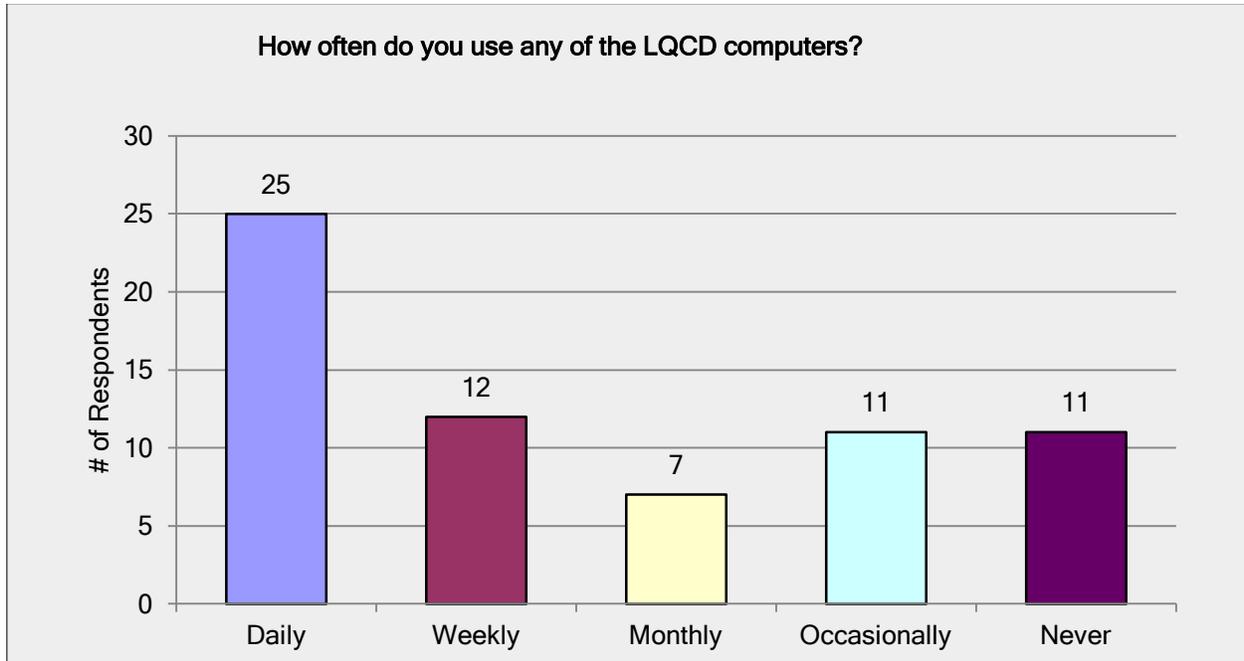
Job Classification	Count
Grad Student - University	1
Postdoc - University	12
Postdoc - Laboratory	4
Faculty - University	30
Research Scientist - University	1
Research Scientist - Laboratory	18
Other	0
<i>Answered Question</i>	66
<i>Skipped Question</i>	0

Other Job Classifications: (no comments)

5.3 Frequency of LQCD Computer Usage

Survey Question 3. How often do you use any of the LQCD computers?

- Daily
- Weekly
- Monthly
- Occasionally
- Never

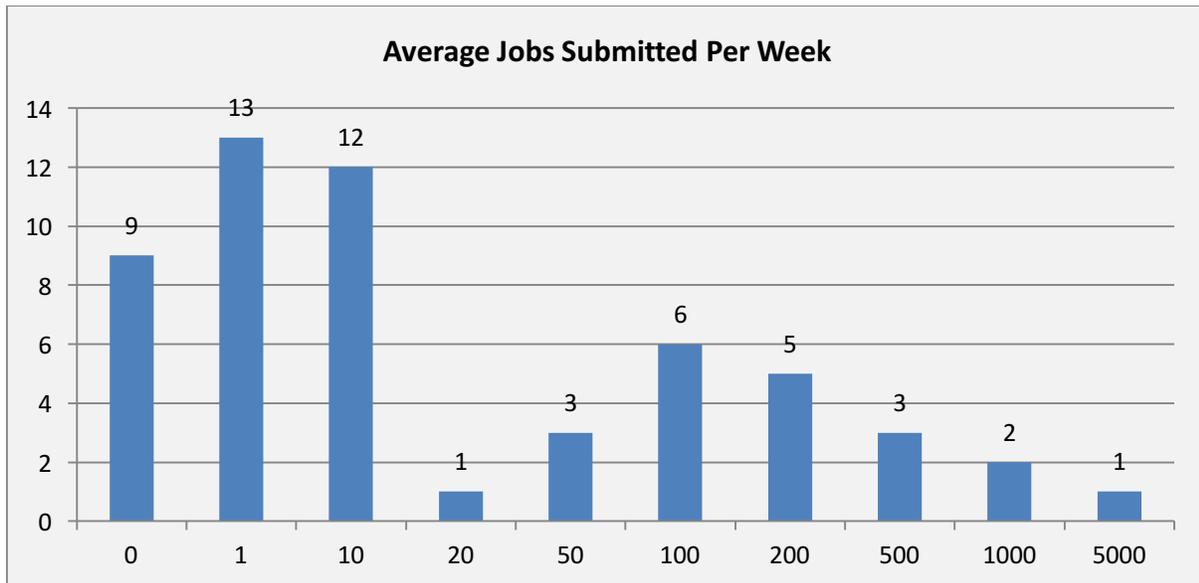


Usage	Freq.
Daily	25
Weekly	12
Monthly	7
Occasionally	11
Never	11
<i>Answered Question</i>	66
<i>Skipped Question</i>	0

5.4 Average Job Submission Rate

Survey Question 4. During periods when you are using the LQCD facilities, please enter the approximate number of jobs you submit on average in a given week.

- 0
- 1-9
- 10-19
- 20-49
- 50-99
- 100-199
- 200-499
- 500-999
- 1000-4999
- 5000 or more



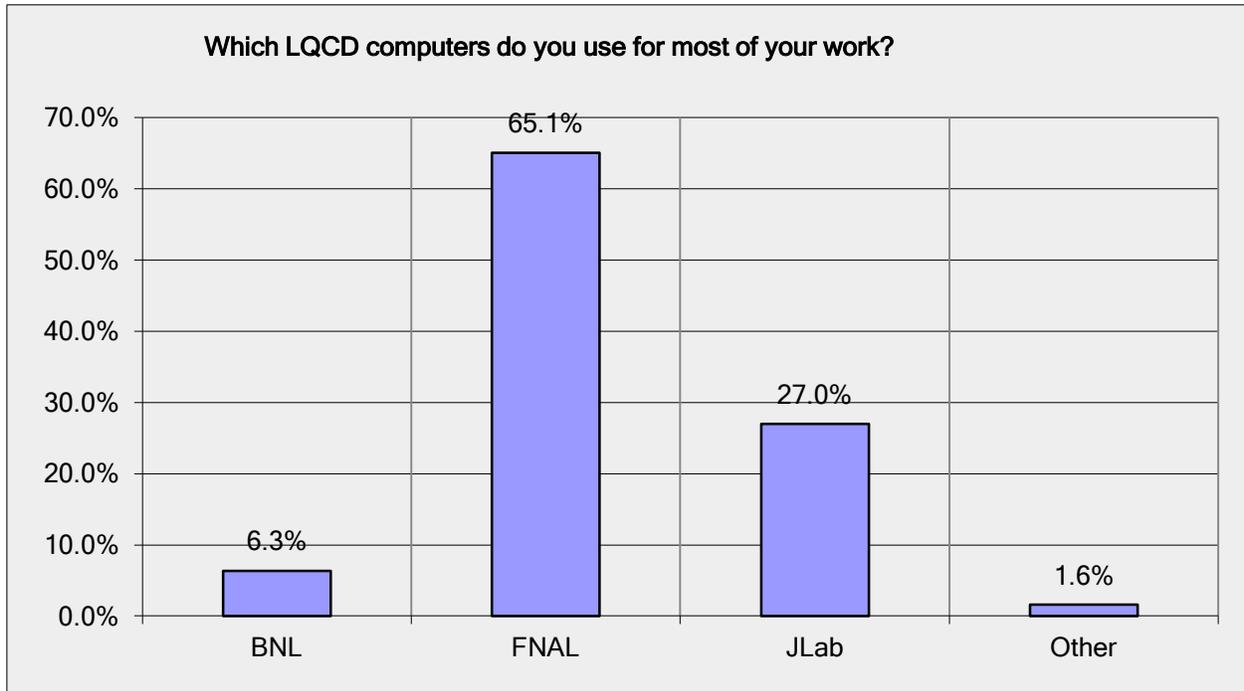
Avg. Jobs (<=)	Freq.
0	9
1	13
10	12
20	1
50	3
100	6
200	5
500	3
1000	2
5000	1
<i>Answered Question</i>	55
<i>Skipped Question</i>	11

5.5 Facility Usage

Survey Question 5. Which LQCD computers do you use for most of your work?

- BNL
- FNAL
- JLab

Other LQCD Computers (please specify): [*text entry box*]



Facility	Users
BNL	4
FNAL	41
JLab	17
Other	1
<i>Answered Question</i>	55
<i>Skipped Question</i>	11

User comments – Other LQCD Computers:

1. ALCF

Analysis Notes:

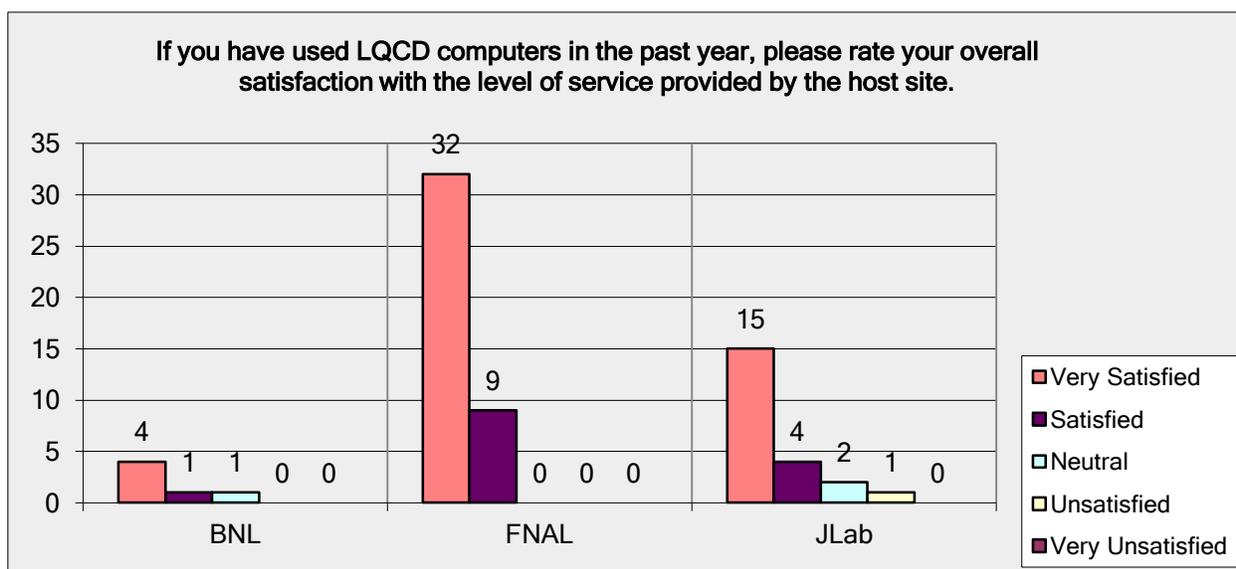
- Respondents could list more than one site in their response.
- Percentages shown in this plot are the fraction of the all selections made, and thus sum to 100%.

5.6 Overall User Satisfaction

Survey Question 6. If you have used LQCD computers in the past year, please rate your overall satisfaction with the level of service provided by the host site.

	Very Satisfied	Satisfied	Neutral	Unsatisfied	Very Unsatisfied	Not Applicable
BNL	0	0	0	0	0	0
FNAL	0	0	0	0	0	0
JLab	0	0	0	0	0	0

Comments: [*text entry box*]



Overall User Satisfaction	Users
<i>Answered Question</i>	55
<i>Skipped Question</i>	11

User Comments:

1. I have not been doing much production running recently.
2. My close collaborators, postdocs and graduate students submit the jobs for me almost always. My comments are based on feedback from them.
3. It does not seem like the jlab clusters (cpu & gpu) are run in a "professional" style. Part of this is that there are several generations of both CPU and GPU nodes, making the task difficult. However, the cluster for years (since 2009) has had significant problems in my experience running multi-node jobs, with many spurious slow-downs in performance and jobs which die for no clear reason. When new software is rolled out, it often is not put on all of the compute nodes, causing a couple "bad" nodes to eat through hundreds of jobs, killing them all. Managing the JLab machine requires a very high amount of personal involvement, and often the time feels wasted.

4. I'm quite happy with how JLab runs it's computing facility. However, I'm most satisfied, and impressed, with the disk and tape management. I using many disk and tape systems across the country, including LCF's. I will state that by far, JLab's is the best of them all. While the LCF's continue to support the horrible HSI system is beyond me, but JLab should be considered the role model.

Analysis Notes:

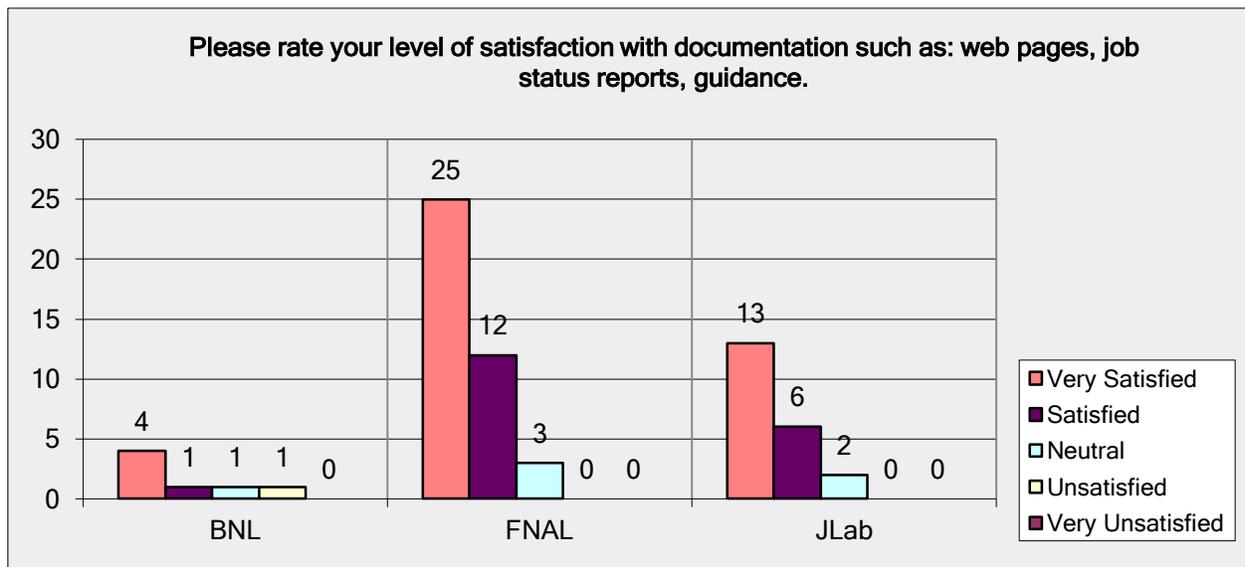
- Overall User Satisfaction rating = 96.6%, which exceeds the goal of 92%.
- This is the “Customer Satisfaction rating” KPI defined in the Project Execution Plan.

5.7 Documentation

Survey Question 7. Please rate your level of satisfaction with documentation, such as: web pages, job status reports, guidance.

	Very Satisfied	Satisfied	Neutral	Unsatisfied	Very Unsatisfied	Not Applicable
BNL	0	0	0	0	0	0
FNAL	0	0	0	0	0	0
JLab	0	0	0	0	0	0

Comments: [*text entry box*]



Documentation	Users
Answered Question	55
Skipped Question	11

User Comments:

1. My close collaborators, postdocs and graduate students submit the jobs for me almost always. My comments are based on feedback from them
2. The documentation generally is not up to date, or very helpful. What would be nice for example, would be explicit build examples that CURRENTLY work on the given machines, including all the module load calls, etc. The support staff at both JLab and FNAL are extremely helpful, in contrast, which often makes up for the poor documentation, but puts us in a position of continued reliance upon them for what seems like routine questions that could be better documented on the sites, thus a poor use of their time

Analysis Notes:

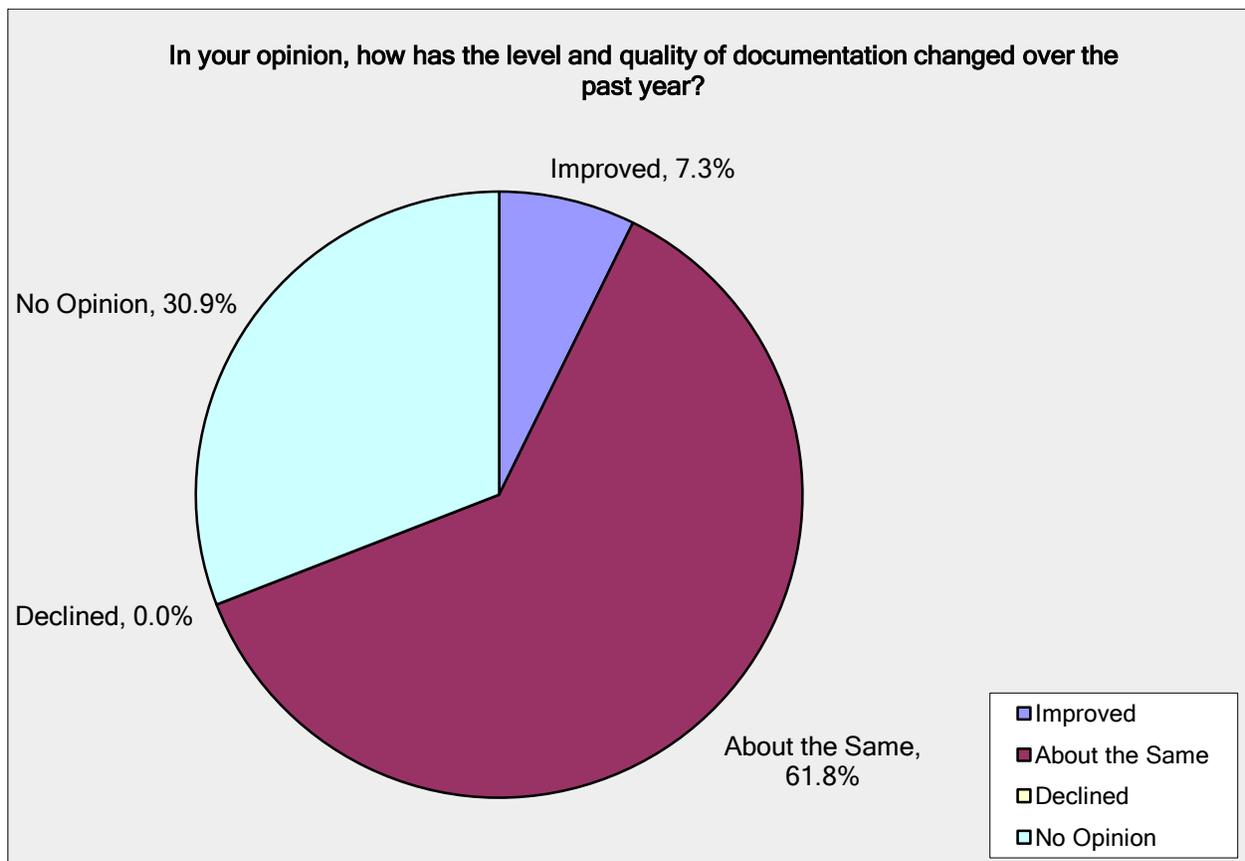
- Documentation User Satisfaction rating = 93.5%

5.8 Documentation Improvement over Past Year

Survey Question 8. In your opinion, how has the level and quality of documentation changed over the past year?

- Improved.
- About the same.
- Declined.
- No opinion.

Please provide feedback to help us better understand your answer: [*text entry box*]



Documentation Improvement	Users
Improved	4
About the same	34
Declined	0
No Opinion	17
<i>Answered Question</i>	55
<i>Skipped Question</i>	11

User Comments:

1. The quality of documentation and support at Fermilab for the LQCD clusters has always been extremely high, and this year was no exception.
2. I have not had much occasion to consult documentation

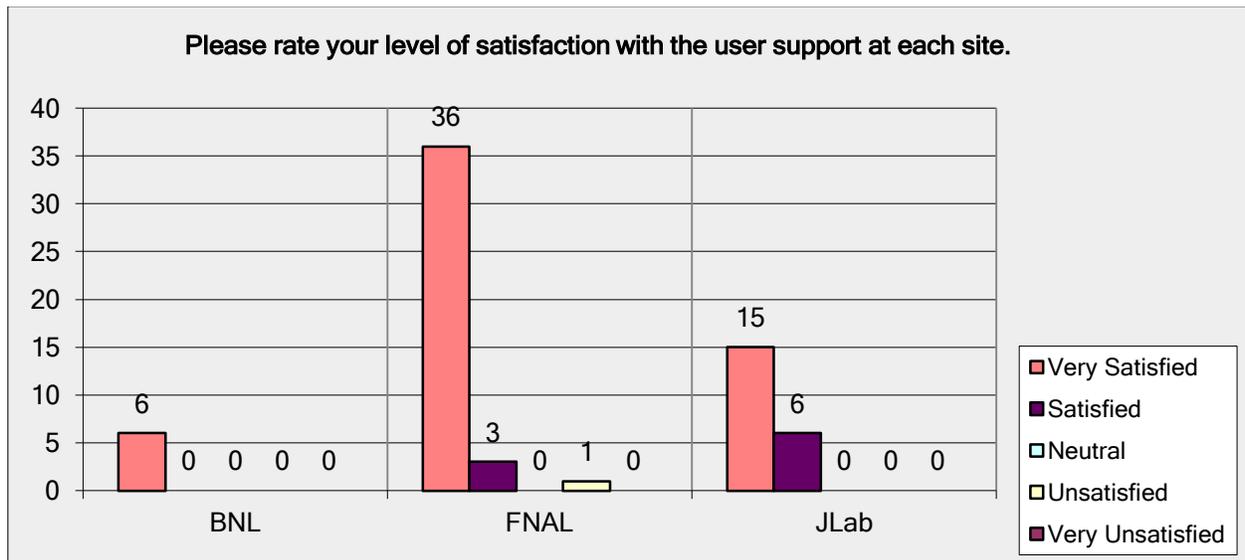
3. My close collaborators, postdocs and graduate students submit the jobs for me almost always. My comments are based on feedback from them.
4. I haven't looked at the documentation much personally, so I'm not qualified to respond!
5. I've always been able to find what I need.
6. I'm not a regular user of the documentation. As far as I remember, the layout and content of the webpages has remained more or less the same in recent times. Of course, additional documentation is provided whenever a new machine is commissioned. The new documentation has always been very helpful to me in getting started.

5.9 User Support

Survey Question 9. Please rate your level of satisfaction with the user support at each site.

	Very Satisfied	Satisfied	Neutral	Unsatisfied	Very Unsatisfied	Did Not Use
BNL	0	0	0	0	0	0
FNAL	0	0	0	0	0	0
JLab	0	0	0	0	0	0

Comments: [*text entry box*]



User Support	Users
Answered Question	55
Skipped Question	11

User Comments: (no comments)

Analysis Notes:

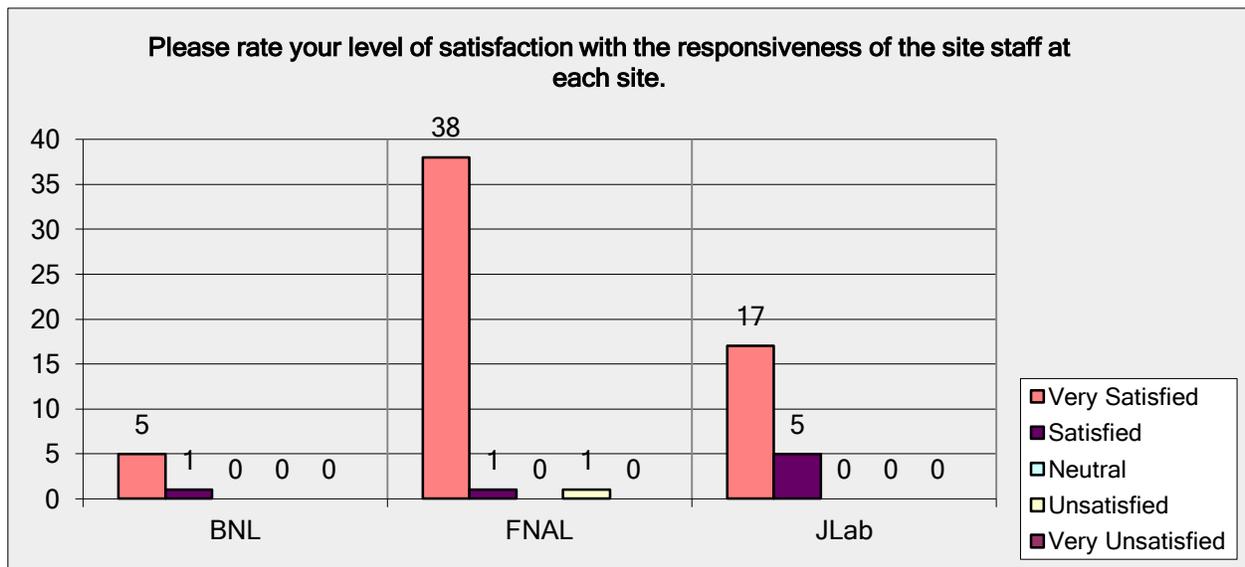
- User Support User Satisfaction rating = 99.4%

5.10 Responsiveness

Survey Question 10. Please rate your level of satisfaction with the responsiveness of the site staff at each site.

	Very Satisfied	Satisfied	Neutral	Unsatisfied	Very Unsatisfied	Did Not Use
BNL	0	0	0	0	0	0
FNAL	0	0	0	0	0	0
JLab	0	0	0	0	0	0

Comments: [*text entry box*]



Reliability	Users
Answered Question	55
Skipped Question	11

User Comments:

1. It is amazing how quickly the FNAL people respond, even on weekends and evenings.
2. My close collaborators, postdocs and graduate students submit the jobs for me almost always. My comments are based on feedback from them.

Analysis Notes:

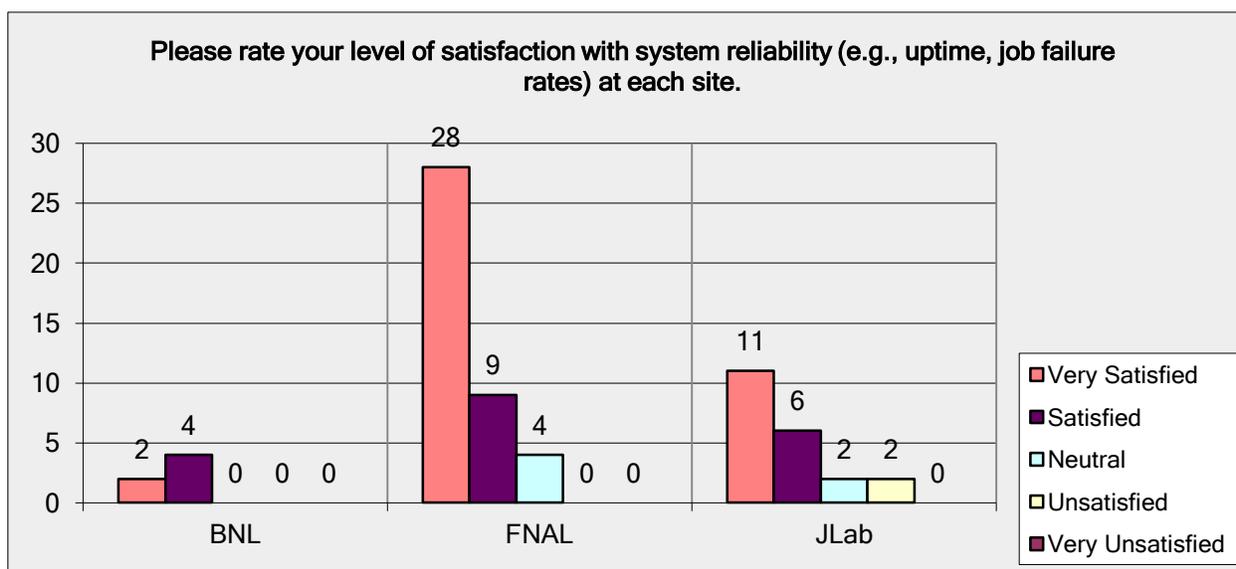
- Responsiveness User Satisfaction rating = 99.4%

5.11 Reliability

Survey Question 11. Please rate your level of satisfaction with the reliability (e.g., uptime, job failure rates) at each site.

	Very Satisfied	Satisfied	Neutral	Unsatisfied	Very Unsatisfied	Did Not Use
BNL	0	0	0	0	0	0
FNAL	0	0	0	0	0	0
JLab	0	0	0	0	0	0

Comments: [*text entry box*]



Responsiveness	Users
Answered Question	55
Skipped Question	11

Comments:

1. Every time I use smaller resources elsewhere (e.g. university clusters), I'm more impressed by how smoothly and reliably I am able to use the Fermilab resources by comparison.
2. My close collaborators, postdocs and graduate students submit the jobs for me almost always. My comments are based on feedback from them.
3. Since 2009, I have had a very frustrating time managing JLab. It is the beast I know, so I keep requesting my main allocation at JLab, but the machine needs more TLC. I HIGHLY recommend the cluster is taken down (weekly, every two weeks, or some thing similar) for routine maintenance. The machine very frequently will have unexplained job failures. I have spent an inordinate amount of time writing scripts to catch failed jobs, inexplicably idling jobs, etc., to kill and re-run them. Mind you, the same executable, with effectively identical input scripts can work very smoothly for a week, and then all of

a sudden, jobs will just start failing. It is not clear why this is happening (I assume it is not clear, else it would have been fixed already - I have been complaining about this since 2009).

4. The well-in-advance of planned downtimes at Fermilab helped me plan and prepare for them.

Analysis Notes:

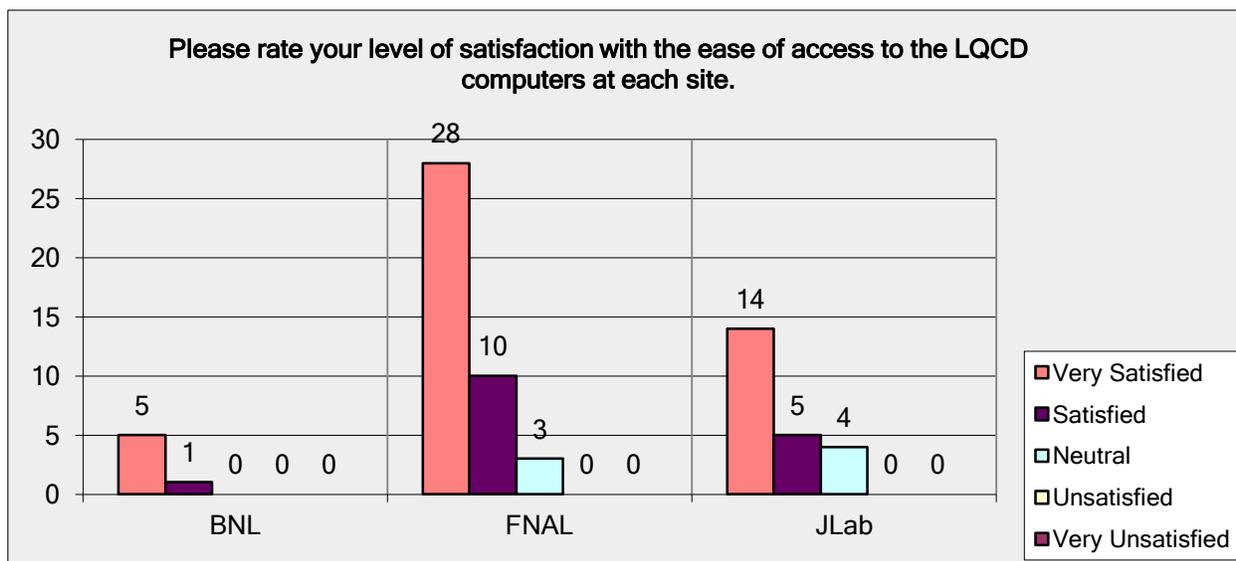
- Reliability User Satisfaction rating = 92.7%

5.12 Ease of Access

Survey Question 12. Please rate your level of satisfaction with the ease of access to the LQCD computers at each site.

	Very Satisfied	Satisfied	Neutral	Unsatisfied	Very Unsatisfied	Did Not Use
BNL	0	0	0	0	0	0
FNAL	0	0	0	0	0	0
JLab	0	0	0	0	0	0

Comments [*text entry box*]



Ease of Access	Users
Answered Question	55
Skipped Question	11

Comments:

1. My close collaborators, postdocs and graduate students submit the jobs for me almost always. My comments are based on feedback from them.
2. JLab's double login is very irritating. I would prefer an Nth crypto card, or the kerberos style login of FNAL.
3. A common access method across lattice sites would be helpful. I find kerberos particularly convenient once you have overcome the hurdle of setting it up.
4. There's a strange problem that hasn't been (fully) solved that I can't figure out if it's on my end or FNAL's end regarding rsync and downloading large amounts of data. This is a minor problem that has had workarounds, so it's not a huge deal.
5. Quite easy to access.
6. ...though I must say, I wish there was a uniform system of logging in: BNL uses SoftKey, FNAL uses Kerberos, JLab uses password...

Analysis Notes:

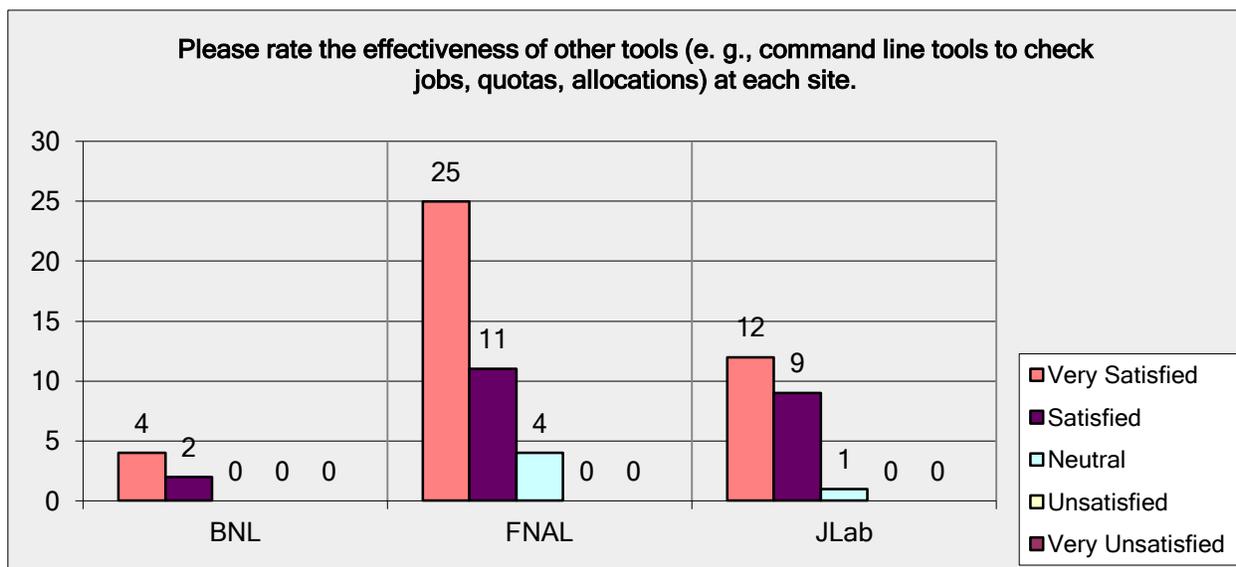
- Ease of Access User Satisfaction rating = 93.4%

5.13 Effectiveness of Other Tools

Survey Question 13. Please rate the effectiveness of other tools (e. g., command line tools to check jobs, quotas, allocations) at each site.

	Very Satisfied	Satisfied	Neutral	Unsatisfied	Very Unsatisfied	Did Not Use
BNL	0	0	0	0	0	0
FNAL	0	0	0	0	0	0
JLab	0	0	0	0	0	0

Comments [*text entry box*]



Other Tools	Users
Answered Question	55
Skipped Question	11

Comments:

1. My close collaborators, postdocs and graduate students submit the jobs for me almost always. My comments are based on feedback from them.
2. More experience with JLab, and not enough at FNAL as yet to make sensible assessment
3. This is a bold statement. By far, JLab's interactive monitoring system is the best within USQCD. None other come close. I can see all aspects of the computing, the jobs, the quotas, the disk/tape access, the allocation usage, job scheduling, all within a few clicks. FNAL does not compare - most of the important info is hidden, and BNL's is non-existent.
4. Both FNAL and JLab use the PBS queueing system. It is useful, though I wish there was a "qdel -u phedge" sort of command, so that in case I accidentally submitted 1000 bad jobs, I could delete all of them in one go. Maybe there is and I just don't know about it.

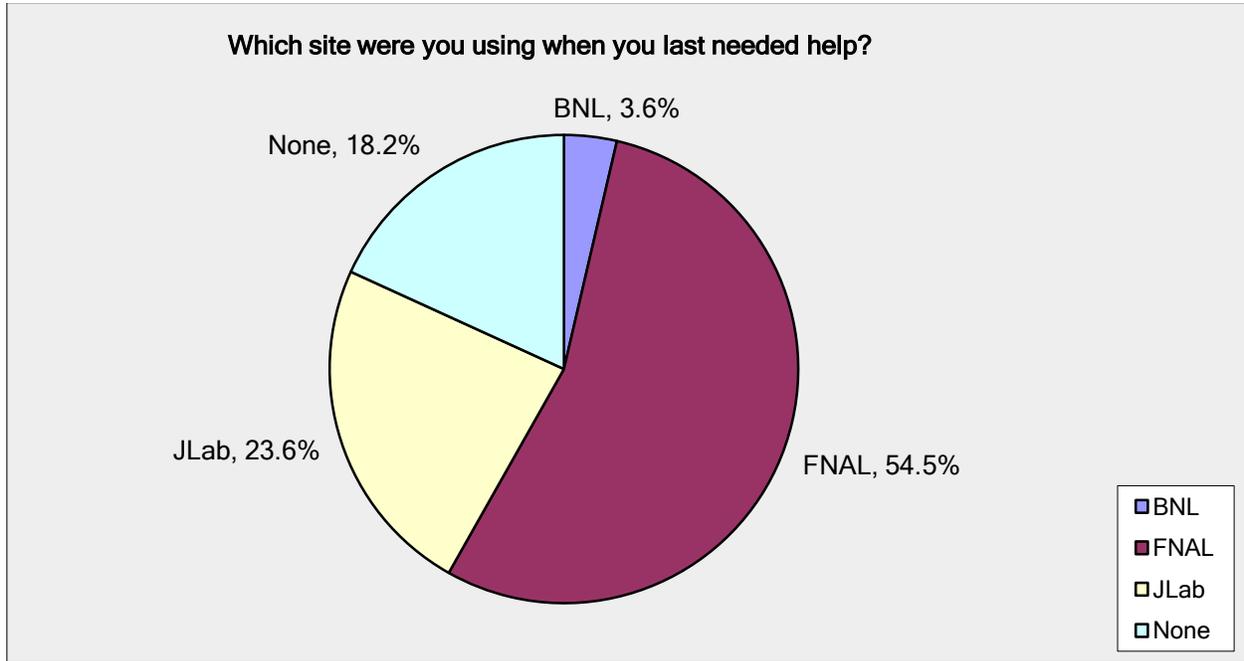
Analysis Notes:

- Other Tools User Satisfaction rating = 95.1%

5.14 Site Used when Help Last Needed

Survey Question 14. Which site were you using when you last needed help?

- BNL
- FNAL
- JLab
- None



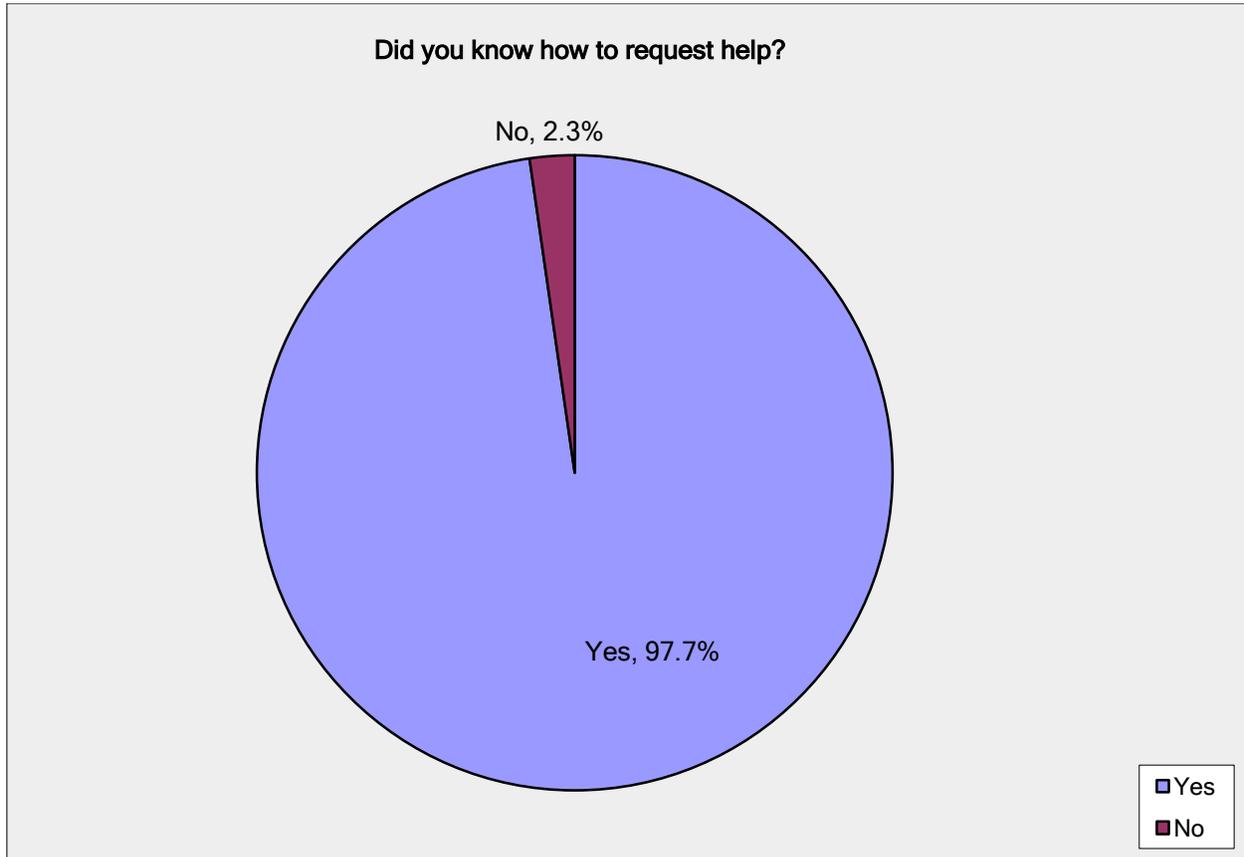
Help asked	Count
BNL	2
FNAL	30
JLab	13
None	10
<i>Answered Question</i>	55
<i>Skipped Question</i>	11

5.15 Requesting Help

Survey Question 15. Did you know how to request help?

- Yes
- No

Please provide feedback to help us better understand your answer: [*text entry box*]



Knows	Count
Yes	43
No	1
<i>Answered Question</i>	44
<i>Skipped Question</i>	22

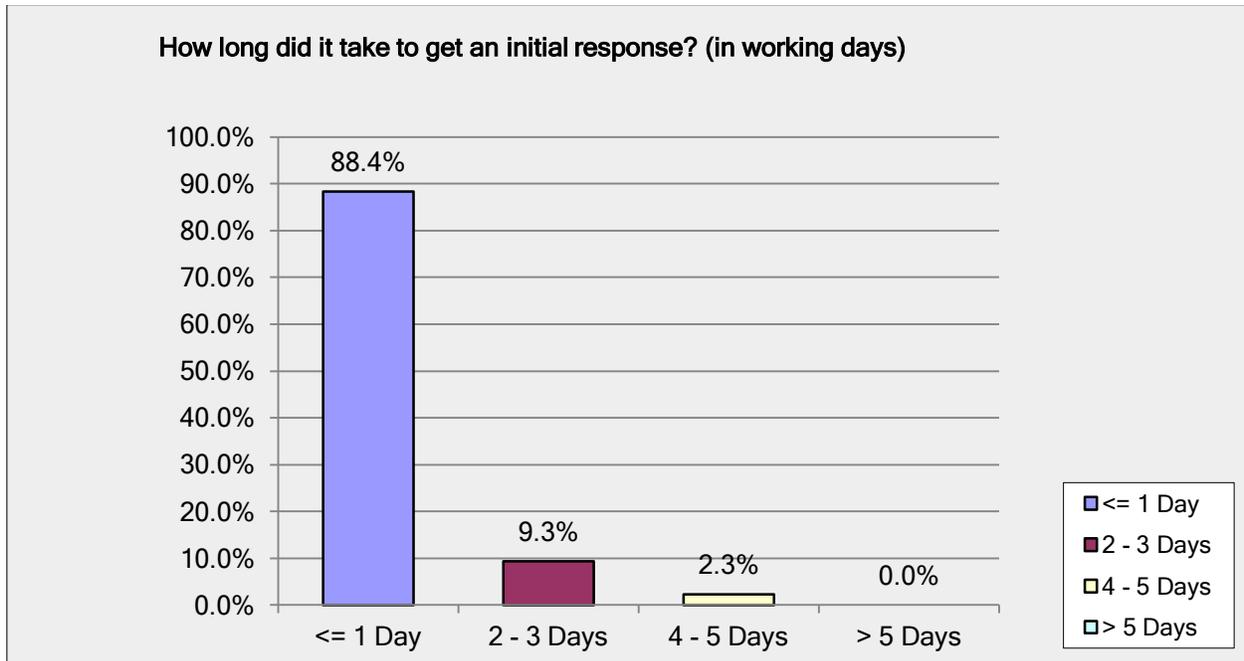
User Comments:

1. I submitted a CCPR via the website and received a reply the same day
2. The problem reporting system link is at the top of the most important web-page one uses for the computing system.
3. Since I'm offsite, I generally prefer to call up. All the labs have a HelpDesk number on their webpages.

5.16 Initial Response Time

Survey Question 16. How long did it take to get an initial response? (in working days)

- <= 1 Day
- 2 – 3 Days
- 4 – 5 Days
- > 5 Days



Days	Freq.
<= 1 day	38
2-3 days	4
4-5 days	1
>5 days	0
<i>Answered Question</i>	43
<i>Skipped Question</i>	23

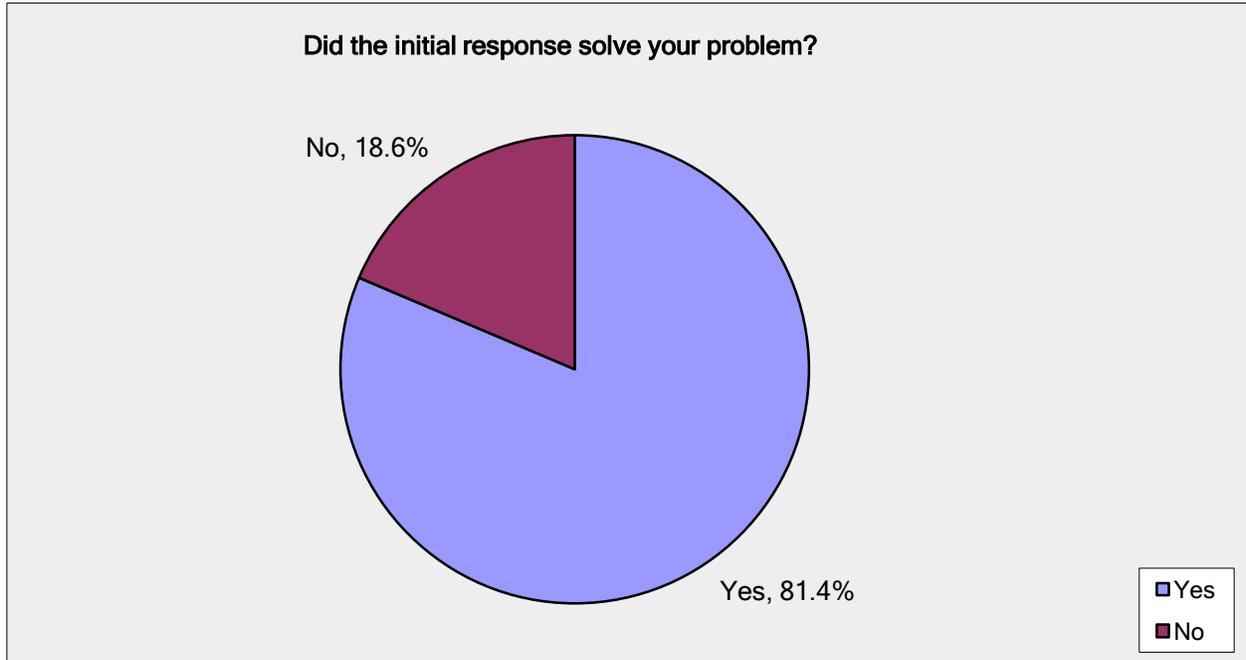
Analysis Notes:

- The weighted mean of response times reported in this survey question is 0.78 days.
 - This assumes the following durations for the selections: 0.5 day, 2.5 days, 4.5 days, 10 days.

5.17 Closing Tickets on Initial Response

Survey Question 17. Did the initial response solve your problem?

- Yes
- No

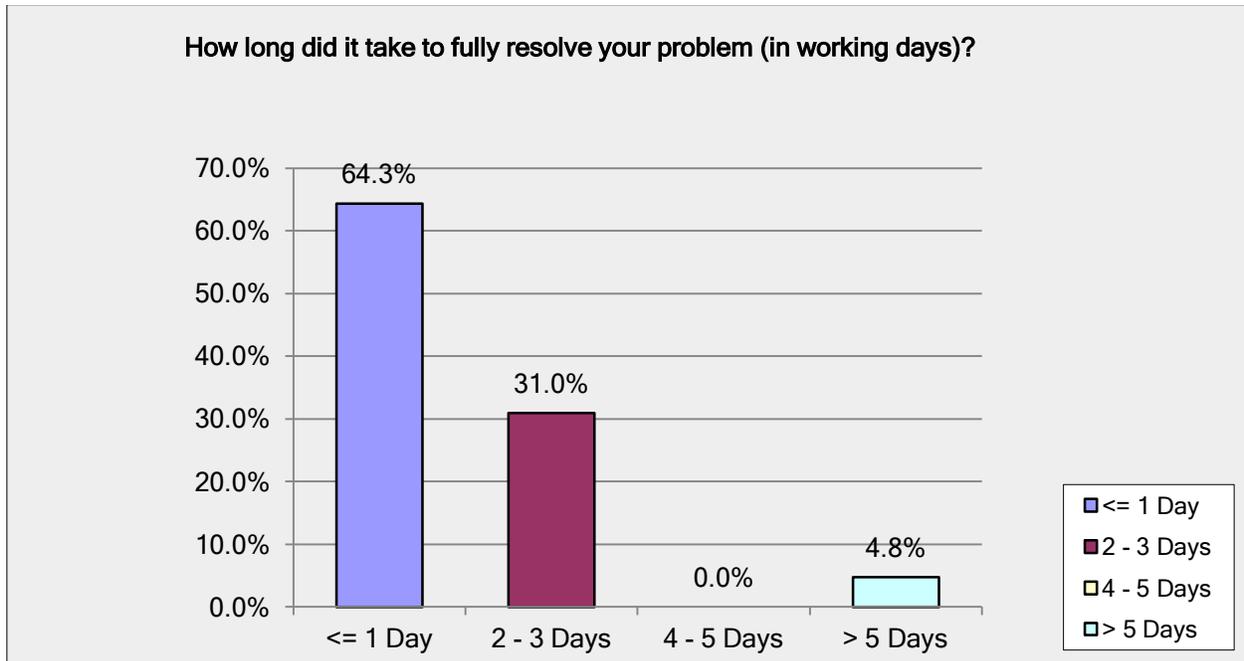


Closed?	Count
Yes	35
No	8
<i>Answered Question</i>	43
<i>Skipped Question</i>	23

5.18 Time Needed to Resolve a Ticket

Survey Question 18. How long did it take to fully resolve your problem (in working days)?

- <= 1 Day
- 2 – 3 Days
- 4 – 5 Days
- > 5 Days



Days	Freq.
<= 1 day	27
2-3 days	13
4-5 days	0
>5 days	2
<i>Answered Question</i>	42
<i>Skipped Question</i>	24

Analysis Notes:

- The weighted mean of resolution times reported in this survey question is 1.57 days.
 - This assumes the following durations for the selections: 0.5 day, 2.5 days, 4.5 days, 10 days.

5.19 Feedback on Helpdesk

Survey Question 19. Regarding helpdesk services, do you have any comments or suggestions for improvement? If so please specify. [*text entry box*]

Helpdesk feedback	Users
<i>Answered Question</i>	5
<i>Skipped Question</i>	61

User Comments:

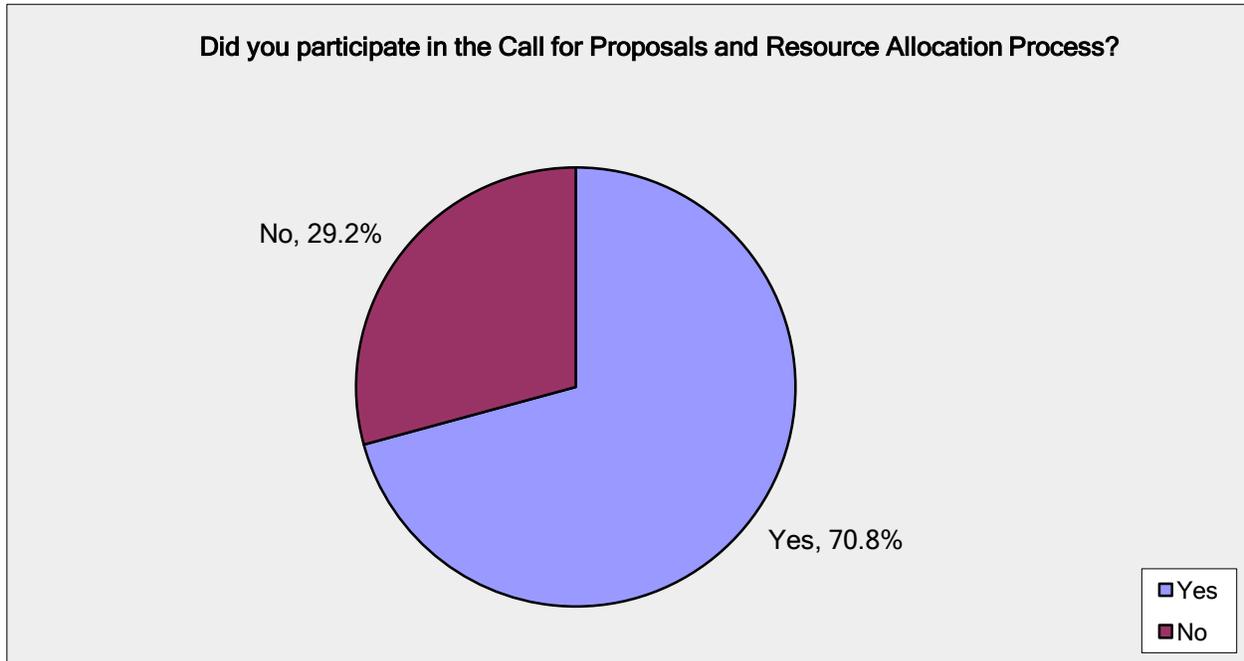
1. Keep up the good work!
2. Take the time to "professionalize" the jlab clusters, even if it means less compute cycles. The reduce human time required to babysit jobs would be worth significantly more than the lost number of compute cycles, many of which are wasted anyways from inexplicably idling jobs that don't self delete.
3. The LQCD admin help at Fermilab is generally excellent.
4. I want to be clear about the response to #18. The problem is an intermittent problem that was unclear what the cause was, and ultimately it is not a huge issue.
5. user support at FNAL is outstanding!

5.20 Participation in the Call for Proposals and Resource Allocation Process

Survey Question 20. Did you participate in the Call for Proposals and Resource Allocation Process?

- Yes
- No

Comments: [*text entry box*]



Time to prepare CFP	Users
Yes	46
No	19
<i>Answered Question</i>	65
<i>Skipped Question</i>	1

User Comments:

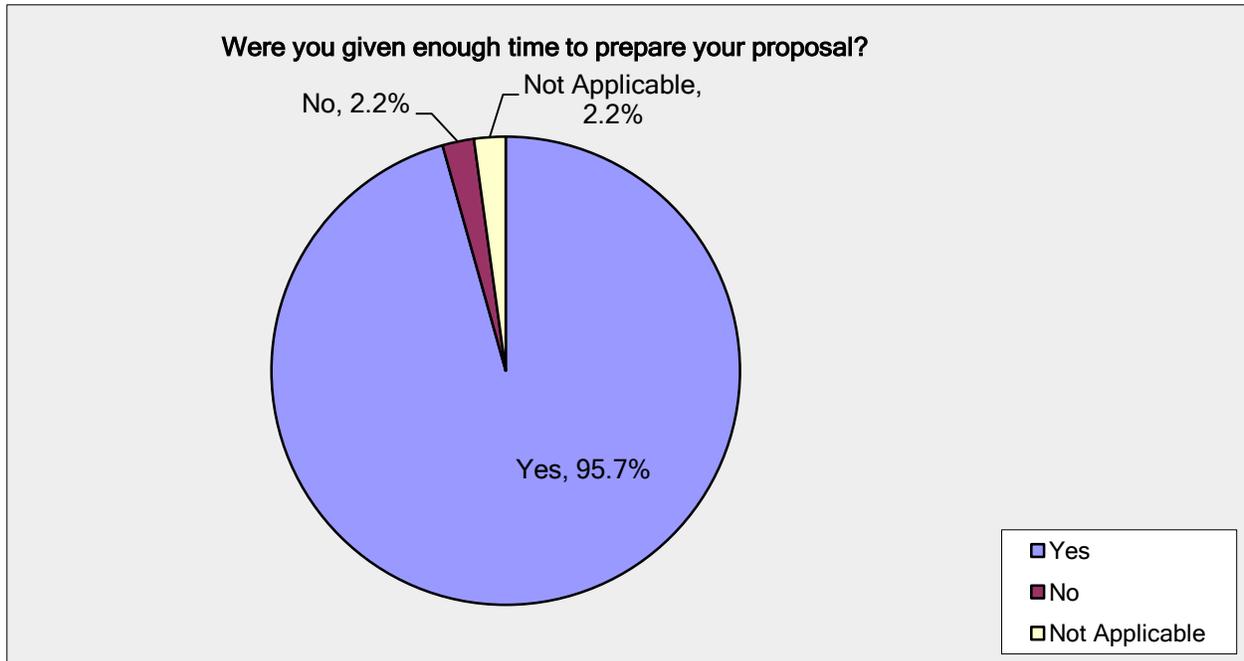
1. I have been a co author on various proposals
2. I participated by helping others, rather than by putting in a proposal of my own. I may be a Co-PI. Don't remember
3. As usual, well handled.

5.21 Sufficient Time to Prepare Proposal

Survey Question 21. Were you given enough time to prepare your proposal?

- Yes
- No
- Not Applicable

Comments: [*text entry box*]



Time to prepare CFP	Users
Yes	44
No	1
Not Applicable	1
<i>Answered Question</i>	46
<i>Skipped Question</i>	20

User Comments:

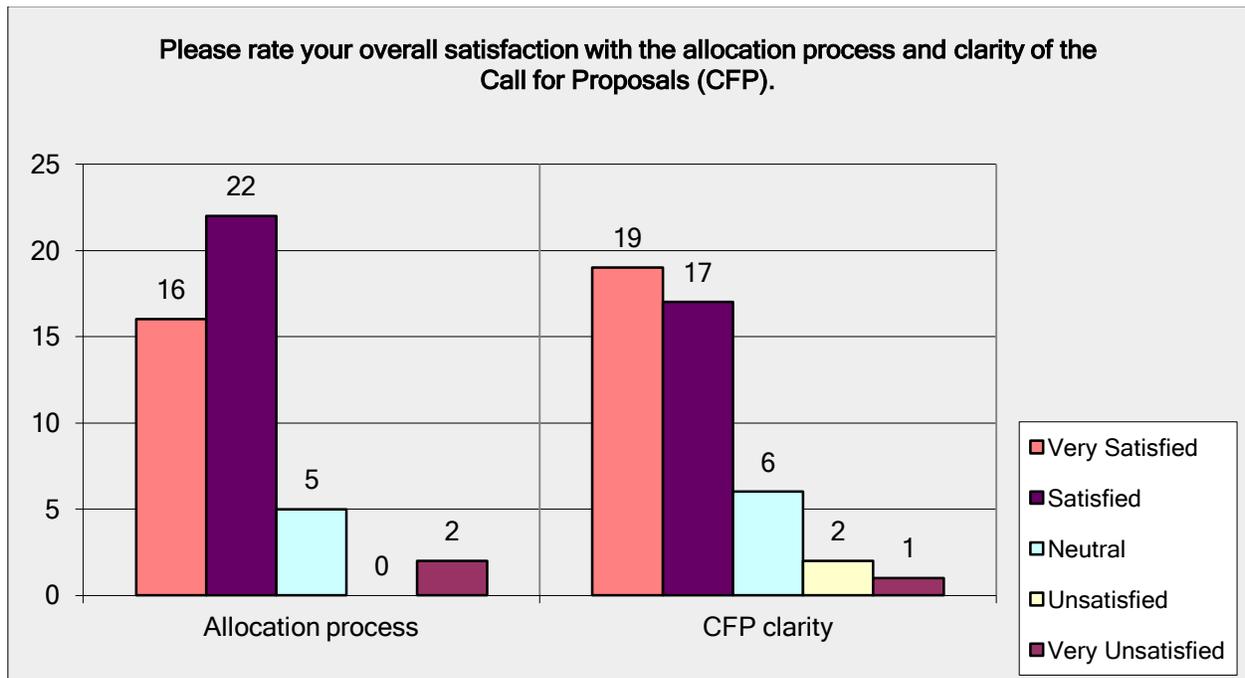
1. It's due around the same time every year, so one can begin preparing even before receiving the call for proposals.

5.22 Overall Satisfaction with the Allocation Process and Clarity of CFP

Survey Question 22. Please rate your overall satisfaction with the allocation process and clarity of the Call for Proposals (CFP).

	Very Satisfied	Satisfied	Neutral	Unsatisfied	Very Unsatisfied	No Opinion
Allocation process	0	0	0	0	0	0
CFP clarity	0	0	0	0	0	0

Comments: [*text entry box*]



Allocation, CFP Clarity	Users
Answered Question	45
Skipped Question	21

User Comments:

- The allocation process seems to have been overtaken by "special interests" with little regard for those groups who do not have members on the allocations and/or executive committee. There are/were unwritten rules not conveyed to the USQCD members at large which led me into a mess this summer. This year, there was some collective decision not to award time to "nucleon structure" proposals. 2 out of 6 groups were given an option to merge their proposals to give them a better chance and not getting their allocations cut. The other 4 groups were not given such an opportunity, and were effectively zeroed out in time. These 4 groups were not even doing traditional "nucleon structure". The charge to cut nucleon structure seemed to be led by people not working on such projects, as appeared to those watching the allocations meeting remotely.

2. Treatment of "leadership-class", as opposed to dedicated resources, can be a little confusing
3. This year's large over-subscription of requests compared to available resources made the SPC's job particularly difficult, but as far as I can tell it was handled well.
4. Current treatment of INCITE resources is problematic

Analysis Notes:

- Allocation Process User Satisfaction rating = 90.8%
- CFP Clarity User Satisfaction rating = 87.6%

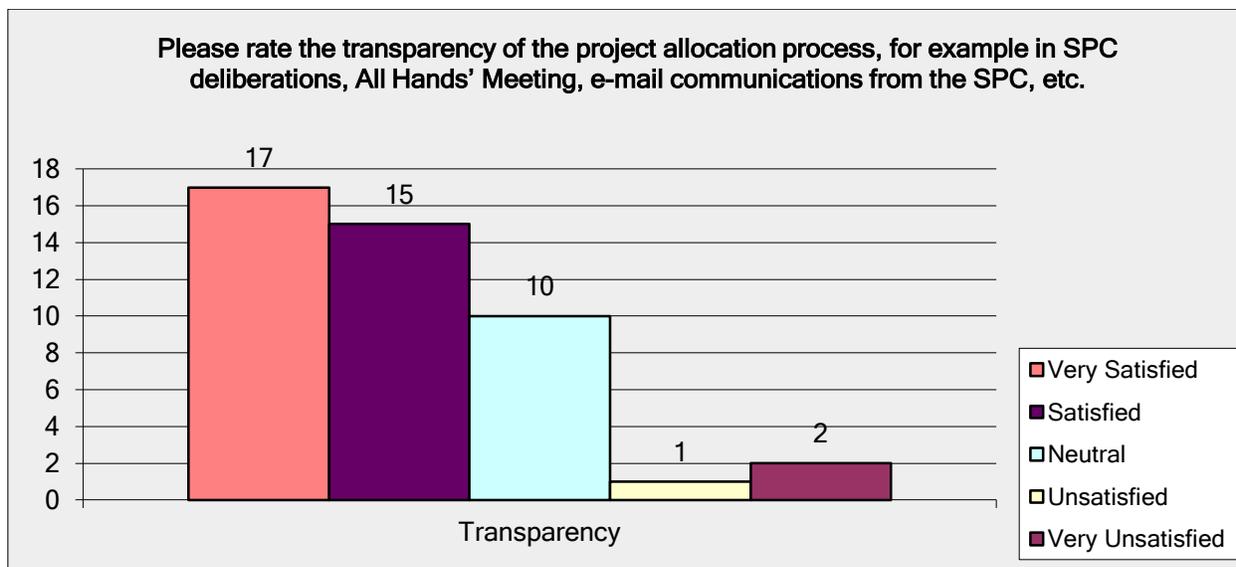
5.23 Transparency of the Allocation Process

Survey Question 23. Please rate the transparency of the project allocation process, for example in SPC deliberations, All Hands' Meeting, email communications from the SPC, etc.

Very Satisfied Satisfied Neutral Unsatisfied Very Unsatisfied No Opinion

Transparency 0 0 0 0 0 0

Comments: [*text entry box*]



Transparency of Alloc. Process	Users
<i>Answered Question</i>	45
<i>Skipped Question</i>	21

User Comments:

1. I found it very transparent this year.
2. As mentioned above, after the proposals were received, shortly before the All Hands Meeting, 2 of 6 "nucleon structure" groups were given an opportunity to join proposals to have a chance of receiving funding. The other 4 groups were effectively zeroed out. At least 2 of these 4 were not even proposals for conducting nucleon structure studies, but aimed at "fundamental symmetries". To make matters more unpalatable, a very significant GPU allocation was given to one group. What makes this frustrating is that that group could have performed their calculations nearly as efficiently with CPUs and available multi-grid inverters, and had no real need for GPU time. Other projects that can not use the CPUs and need the GPUs, such as my project, were effectively zeroed out. My USQCD time is a laughable amount compared to what is needed for the project, and most of my resources now come independently of USQCD. To put the icing on the cake, that group which received a very large GPU allocation (at JLab) as of now (1 Jan 2016) has used 68,958 hours out of an awarded 2,589,000. This took resources from other groups, and now JLab looks very bad since the GPUs are so poorly utilized. If the other

groups had been given awards, they would have been able to make use of these precious resources. The current situation was also predictable, so it is not clear why the allocations committee made this decision

3. It was useful that the SPC provided information to the PIs regarding this year's large over-subscription in advance of the All Hands' Meeting.
4. Better feedback from the SPC on the strengths and weaknesses of each proposal would be valuable
5. Emails from SPC were occasionally a bit on the late side.

Analysis Notes:

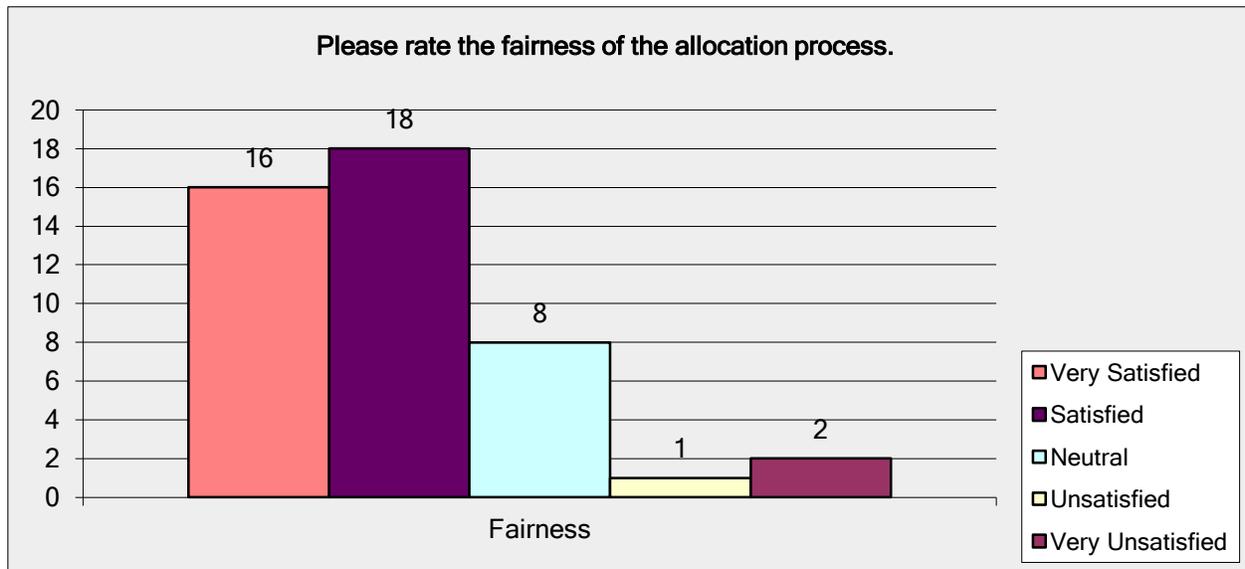
- Transparency of Allocation Process User Satisfaction rating = 81.0%

5.24 Fairness of the Allocation Process

Survey Question 24. Please rate the fairness of the allocation process.

	Very				Very	No
	Satisfied	Satisfied	Neutral	Unsatisfied	Unsatisfied	Opinion
Fairness	0	0	0	0	0	0

Comments: [text entry box]



Fairness of Alloc. Process	Users
Answered Question	45
Skipped Question	21

User Comments:

1. See above. USQCD is run by an executive committee of unelected members. The allocations committee is also not elected. This year, it seems all projects without a strong voice on either/or the allocations committee or the executive committee received extremely poor support from USQCD. I am a young tenure-track researcher who is starting his own project (not part of one of the existing major efforts) and I definitely feel as though I receive next to zero support from USQCD.
2. SPC grappled seriously with the crunch in resources.

Analysis Notes:

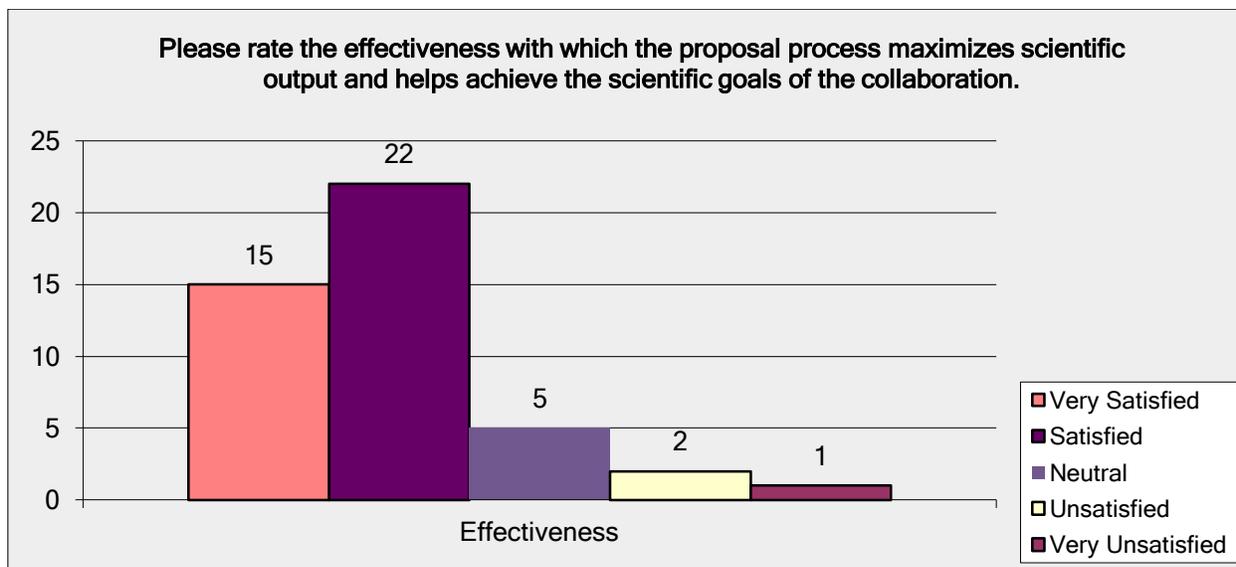
- Transparency of Allocation Process User Satisfaction rating = 84.4%

5.25 Effectiveness of the Allocation Process in Maximizing Scientific Output

Survey Question 25. Please rate the effectiveness with which the proposal process maximizes scientific output and helps achieve the scientific goals of the collaboration.

Effectiveness Very Satisfied Satisfied Neutral Unsatisfied Very Unsatisfied No Opinion

Comments: [*text entry box*]



Effectiveness of Alloc. Process	Users
Answered Question	45
Skipped Question	21

User Comments:

1. We clearly have requests for more time than is available, but SPC does its best to consider needs and quality of proposals.
2. I consider this to be challenging. One must assume that the proposals cover all of the important areas that deserve computational resources, which is the case most of the time. On the other hand, we see instances where multiple proposals are submitted to address the same, or very similar, areas. This requires the SPC to best determine how to optimize the program. Last year was perhaps the most challenging due to static or declining hardware resources. It is possible that the effectiveness of the proposal process needs to be evaluated under such conditions.
3. Since the unelected executive committee and allocations committees decide the scientific goals and allocations, the process supports the goals of groups who have an "old boy" on the committees.
4. The process is quite demanding, compared to, say, PRACE in Europe.

Analysis Notes:

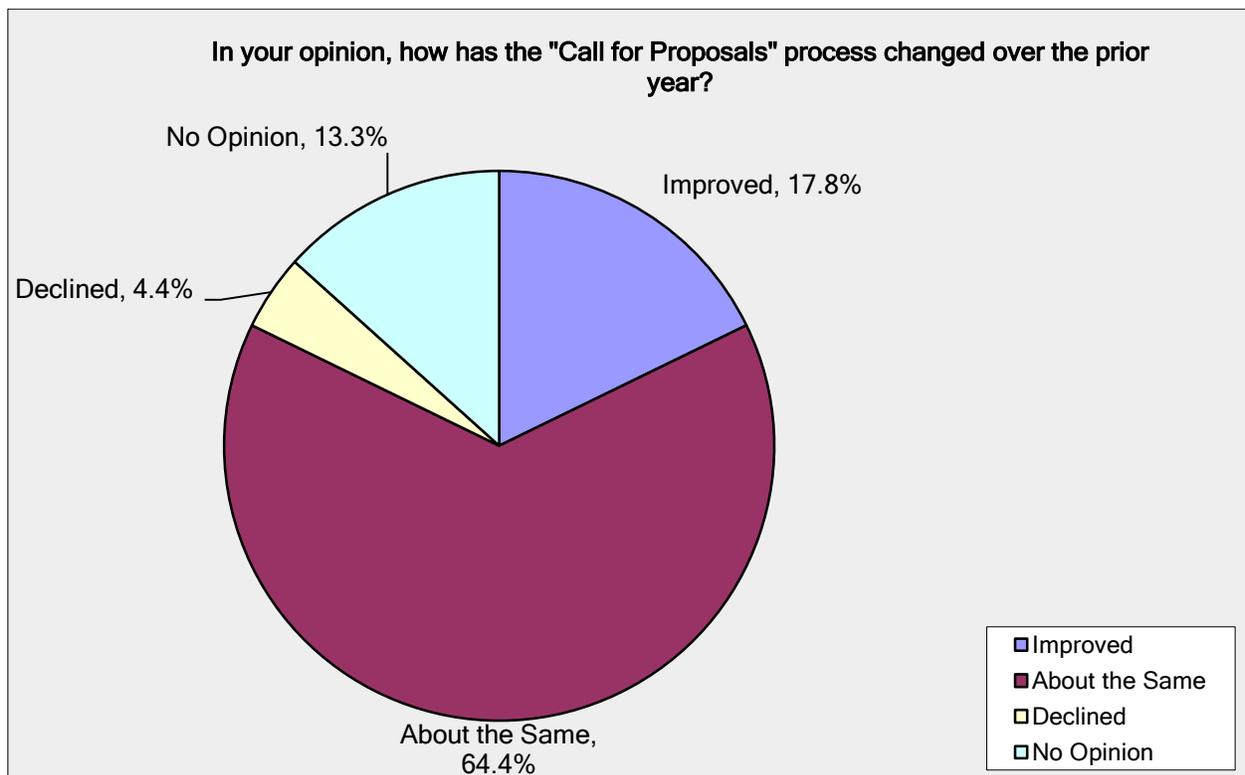
- Transparency of Allocation Process User Satisfaction rating = 89.1%

5.26 Call for Proposals Process Improvement Over Past Year

Survey Question 26. In your opinion, how has the "Call for Proposals" process changed over the prior year?

- Improved
- About the Same
- Declined
- No Opinion

Please provide additional information to help us better understand your answer: [*text entry box*]



Call for Proposals Process Improvement	Users
Improved	8
About the same	29
Declined	2
No Opinion	6
<i>Answered Question</i>	45
<i>Skipped Question</i>	21

User Comments:

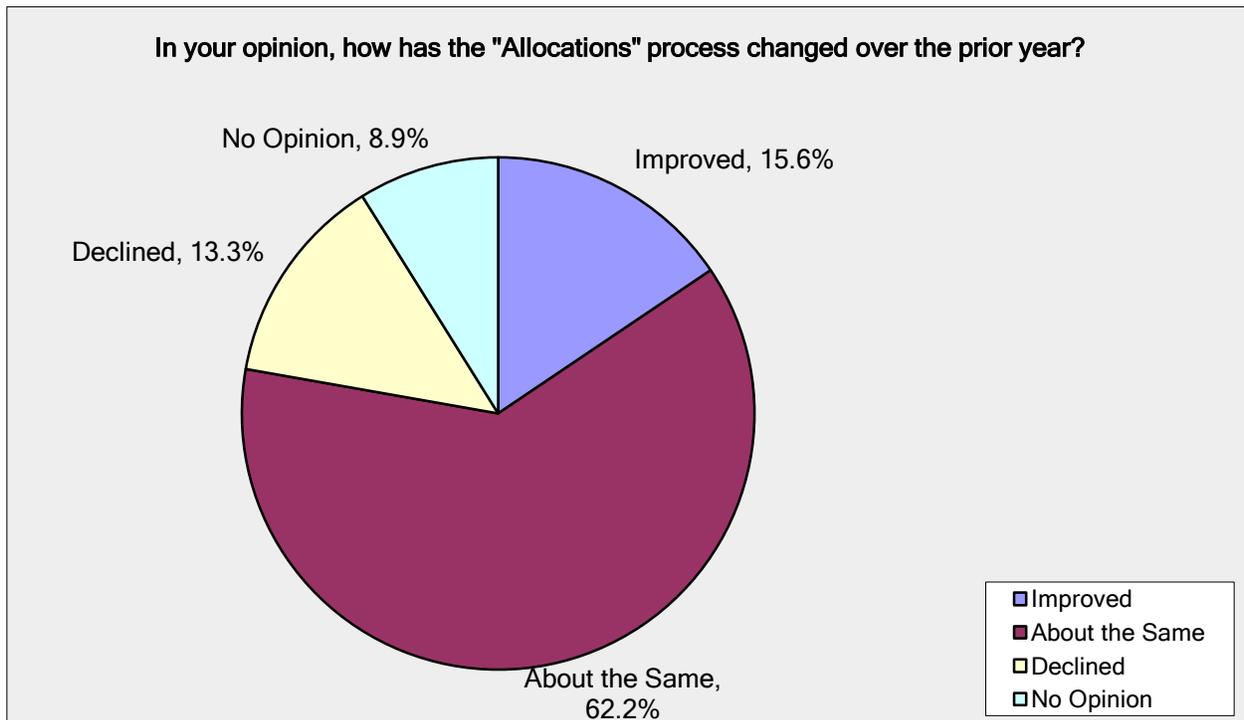
1. There was an issue about ORNL time.
2. Haven't been involved for long.
3. This year felt particularly unorganized. Also, as mentioned above, special treatment was given to some groups, and other groups were zeroed out or effectively zeroed out.
4. More clarification re. INCITE resources vs. the previous year.

5.27 Allocation Process Improvement Over Past Year

Survey Question 27. In your opinion, how has the "Allocations" process changed over the prior year?

- Improved
- About the Same
- Declined
- No Opinion

Please provide additional information to help us better understand your answer: [*text entry box*]



Allocations Process Improvement	Users
Improved	7
About the same	28
Declined	6
No Opinion	4
<i>Answered Question</i>	45
<i>Skipped Question</i>	21

User Comments:

1. With available resources not keeping pace with demand, the SPC's task is more difficult and the decisions that it has to make become more challenging. I can see that this has been taken seriously by the SPC, and more active efforts were made to optimize the science program (combining proposals).

2. It no longer seems clear why there is an All Hands meeting. Projects are not even presented anymore in the level of detail as before, and when they are, it seems to have no effect on the outcome of the allocations. It feels a waste of time and money to go to the meeting.
3. The ratio allocated/requested declined significantly and put severe stress on the system.

5.28 Comments on Operation of LQCD Facilities

Survey Question 28. We value your opinion greatly. Please share with us any additional comments or suggestions regarding the operation and use of the LQCD computing facilities.
[*text entry box*]

General Comments	Users
<i>Answered Question</i>	9
<i>Skipped Question</i>	57

User Comments:

1. In the past, we have switched between JLAB and FNAL from one allocation year to the next. This creates downtime when trying to get started on new platforms. The last cycle, our allocation on the gpu side remained at FNAL, which was very helpful being able to start at 100% from day 1 of the allocation year.
2. These facilities are very important for progress in lattice field theory in the US.
3. I haven't done any remote computing for over twelve years, but I am slowly writing a class B-/C+ request and I think I know what I have to do so that you won't throw it back at me.
4. The LQCD facilities are a vital resource. First obviously for their substantial contribution to the LQCD computational campaign. However a unique feature is the ability to get quick access for new projects and to develop software/algorithms. In the university context getting accounts and small allocation is automatic. I would like to see a similar approach to all members of USQCD. Namely a single request to get accounts on one or more of the LQCD facilities and an automatic small allocation. This should be persistent from year to year with a minimal email response to a single source.
5. Thank you for supplying reliable machines for research. I hope these resources do not go away.
6. Hard to implement, but a common environment and versions of compilers etc across comparable sites would help.
7. Need more computing resources
8. The BNL facility has a good machine (BG/Q half-rack) but the I/O performance is miserable -- for example, it does not support parallel writes.
9. I only wish the LCF's could learn more from USQCD. Many aspects of NERSC system is quite nice. But still, being able to see allocation usage of all projects against their target strongly influences my day-to-day decision making for my own project.

5.29 Comments on the Call for Proposals and Resource Allocation Processes

Survey Question 29. Please share with us any additional comments or suggestions regarding the Call for Proposals and Resource Allocation processes.

[*text entry box*]

General Comments	Users
<i>Answered Question</i>	6
<i>Skipped Question</i>	60

User Comments:

1. I saw the resources were not fully used and sometimes no jobs were running. That happened especially in the first quarter of the allocation year. I suggest some modification to the current allocation process so that the usage of the computer is more balanced. SPC and executive committee should stick to their timeline announced in the CFP.
2. Without more hardware, it is hard to satisfy everyone.
3. The call for proposals and allocation process is in general very good. But I would suggest that small allocation be done very quickly and the discussion at the All Hands Meeting be focussed exclusively on large allocation and the discussion of major USQCD priorities.
4. If USQCD is going to serve the community, then it seems the executive committee and allocations committee should be served by elected members. My experience this year leads me to believe it serves more as an old boys club than a real committee sponsoring competition and scientific progress.
5. Feedback on rating/funding of proposal. Final allocations made listed on the passwd protected USQCD website
6. It's a tough job. There are not enough resources to go around. It would be nice to make it easier to move around projects, but this is a highly non-trivial problem that no LCF has solved. However, if it were easier to move around projects, it might make load balancing of systems that much easier. Still, in a "perfect" world when all the systems are under constant load, it may not matter as much.