

LQCD-ext III User Survey Results and Actions

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FNAL
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FY20 User Survey Results 1 of 2

- FY19 performance; 118 surveys sent; 71 responses received= 60% response rate
 - Our response rate slightly increased from 54% to 60% and we hope to see larger increases in the future
- The FY2020 initial Annual User Survey opened from September 22 to October 22, 2020
 - Responses were low therefore the survey was resent on October 28 to November 11
- The online survey consisted of 39 questions designed to measure the level of satisfaction with:
 - (a) the Compute Facilities operated and managed by the LQCD-ext. III project team
 - (b) the annual Resource Allocation and Call for Proposal process conducted and managed by the USQCD Scientific Program Committee

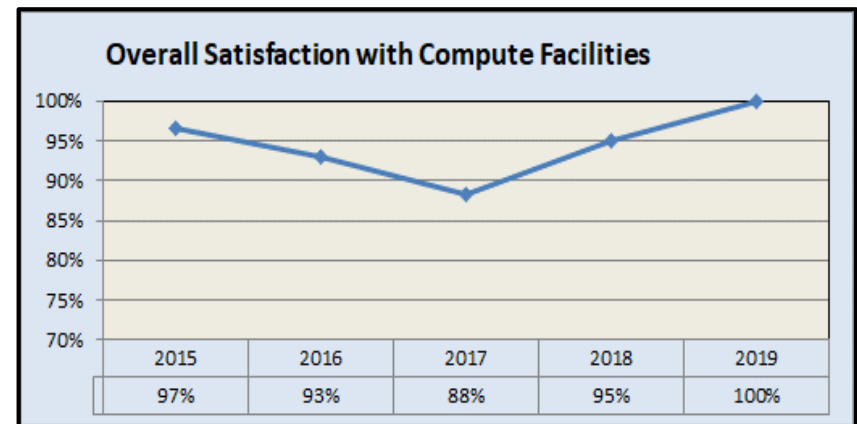
FY20 User Survey Results 2 of 2

- This year we added the JLab Xeon PHI KNL and GeForce GPU equipment to question 5 which asked, “Which LQCD computer did you use for most of your work.”
 - This gave people the opportunity to let us know which participants were using JLAB computers and provided a vehicle for those participants to comment and provide suggestions that were taken under consideration by the Project Team and USQCD leadership.
- Overall comments provided positive feedback that reassured the project team and USQCD leadership that we are providing valuable services while also bringing to light necessary changes and reinforcing the changes that were underway.

2020 User Survey Results

➤ Compute Facilities Performance

- All categories within Compute Facilities increased
- KPI: 92% or greater



FY19 Compute Facility Performance	BNL	FNAL
Overall Level of Service Satisfaction	100%	100%
User Documentation	96%	100%
User Support	100%	100%
Responsiveness of Site Staff	100%	100%
System Reliability	100%	100%
Ease of Access	96%	100%
Effectiveness of other Tools	92%	100%

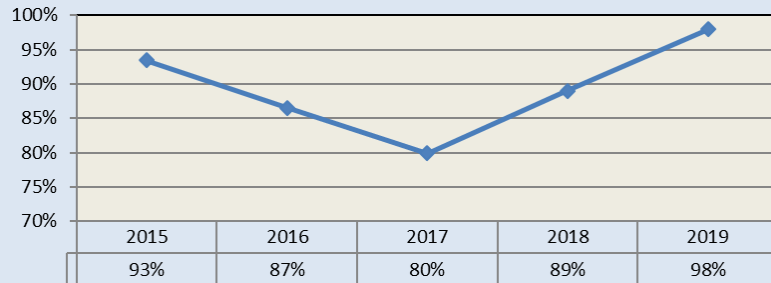
FY18 Compute Facility Performance	BNL	FNAL
Overall Satisfaction (KPI goal $\geq 92\%$)	95%	96%
User Documentation	80%	96%
User Support	95%	96%
Responsiveness of Site Staff	90%	96%
System Reliability	95%	96%
Ease of Access	95%	96%
Effectiveness of other Tools	90%	83%

2020 User Survey Results: Compute Facilities

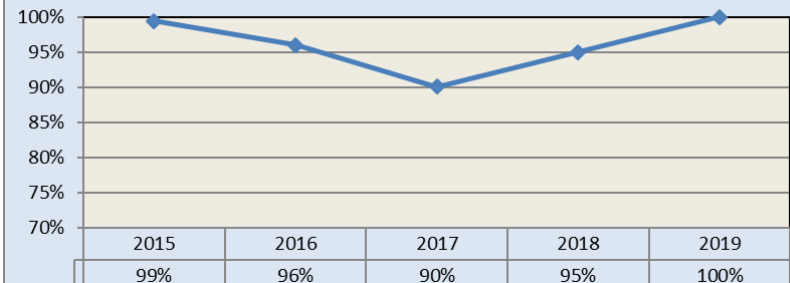
Every Category Improved

➤ Compute Facilities Performance Categories

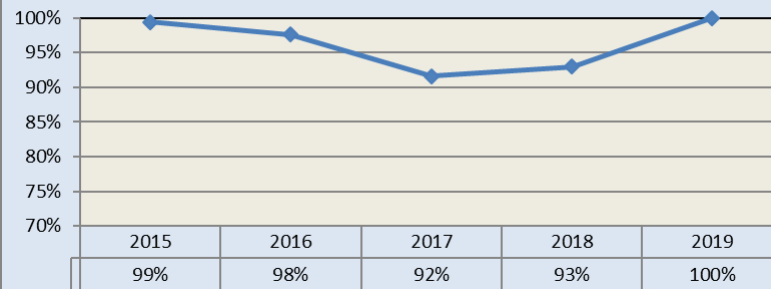
User Documentation



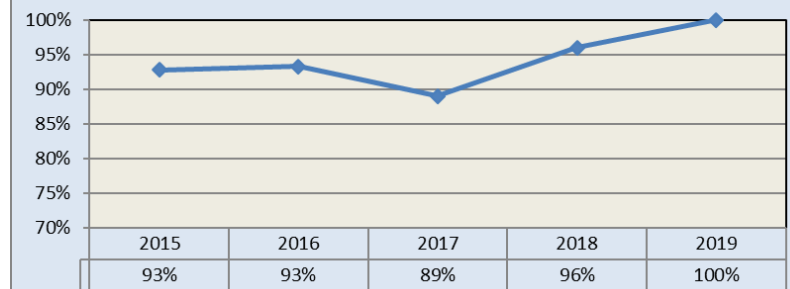
User Support



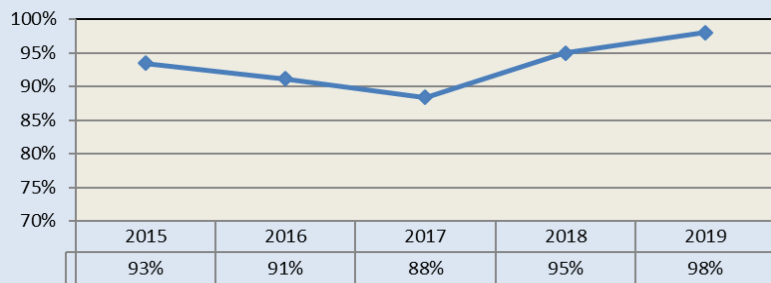
Responsiveness of Site Staff



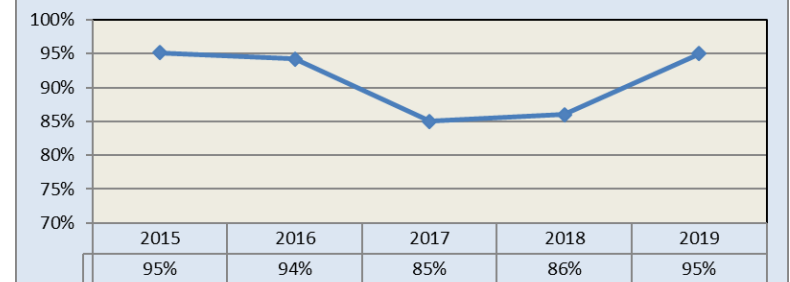
System Reliability



Ease of Access



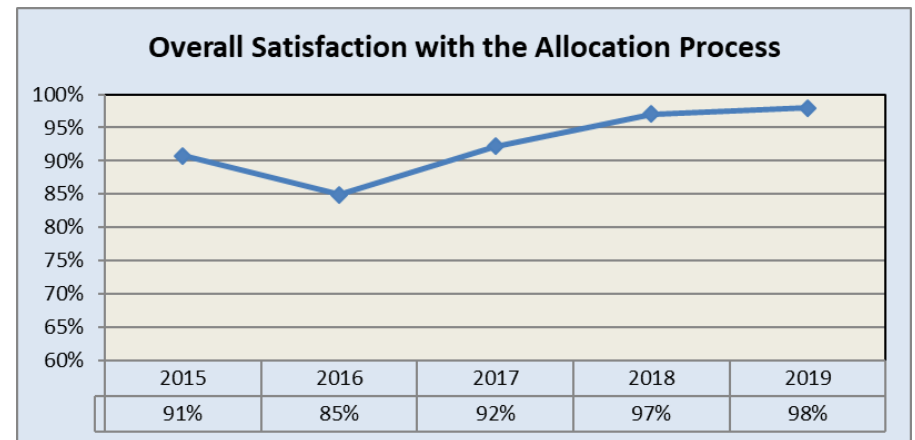
Effectiveness of Other Tools



2020 User Survey Results

➤ Allocation and CFP Processes

- Overall satisfaction with the Allocation process improved
- No KPI



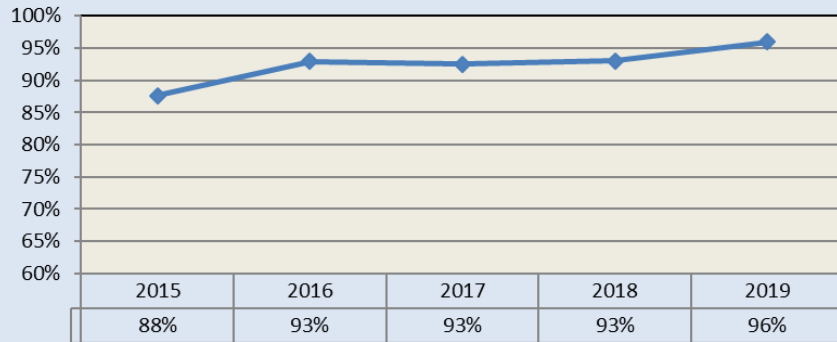
FY19 Allocation and CFP Processes	
No set KPI Goal	General Population
Overall satisfaction with Call for Proposal and Clarity Process	98%
Overall satisfaction with the Allocation process	96%
Call for Proposal process allocates time to right project, right scale	96%
Transparency of Resource allocation process	96%
Fairness of the Resource Allocation process	96%

FY18 Allocation and CFP Processes	
No set KPI Goal	General Population
Overall Satisfaction with the Proposal Process	97%
Clarity of the Call for Proposals	93%
Allocation Process Helps Maximize Scientific Output	97%
Transparency of the Allocation Process	93%
Fairness of the Allocation Process	85%

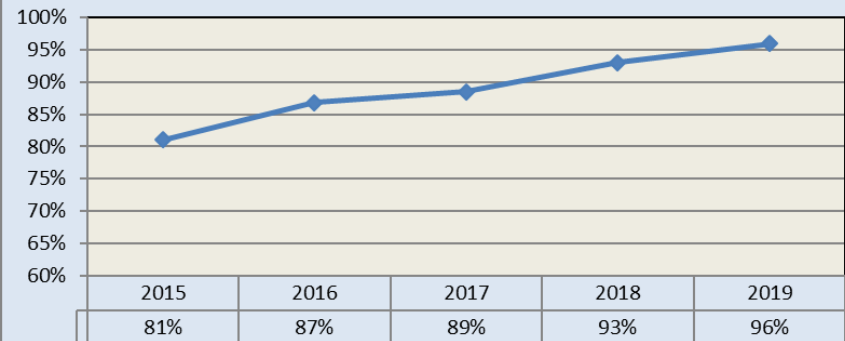
2020 User Survey Results: Allocation and CFP Processes

➤ Allocation and CFP Categories

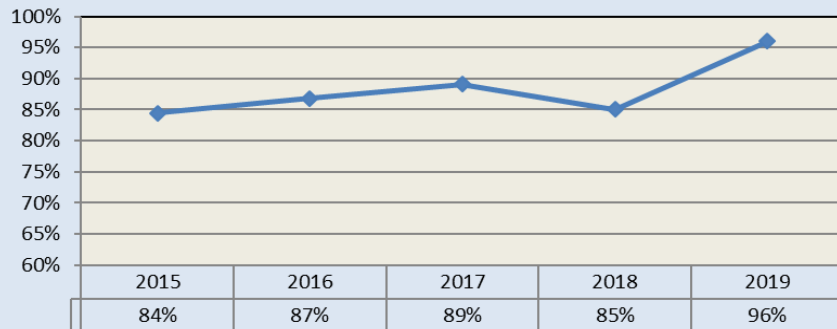
Clarity of the Call for Proposals



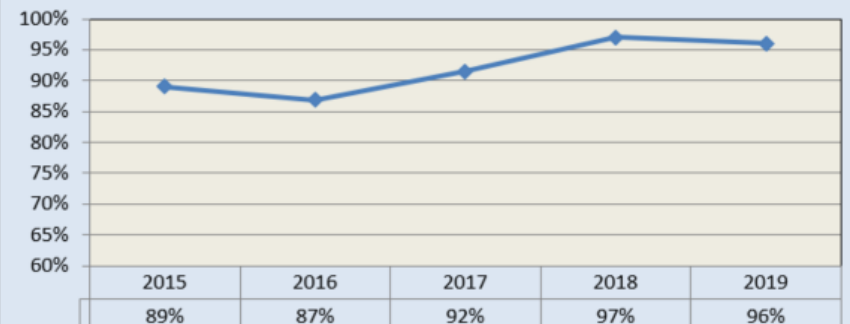
Transparency of the Allocation Process



Fairness of the Allocation Process



Allocation Process Helps Maximize Scientific Output



Only category that
slightly decreased

2020 User Survey Results: Help Desk

➤ Help Desk

- KPI is 3 days or 95% of tickets responded to within 3 business days

FY19 Helpdesk: KPI is 3 days or 95% of tickets responded to within 3 business days	BNL	# of Responses	Total responses	FNAL	# of Responses	Total responses
What was the response time after you entered your ticket? (in working days)?						
<= 1 day					1	
1 day					3	
2 days						
3 or more days	0	1				
Total	96%	1	25	100%	4	17

- Both FNAL & BNL met the KPI goal

2020 User Survey Feedback (1 of 4)

The following are just a few of the changes or responses to questions that were made on the survey. Keep in mind that implemented changes were based on input that you provided. Thank you!

- ❖ The Skylake cluster was not conducive to project development. Short, single test jobs had to wait for users with dozens of queued jobs. The cluster has 64 nodes and at times large jobs were received that asked for 16 or 32 nodes. In order to give small jobs a chance to get scheduled we kept a small queue (50 jobs per user)
- Response: [As of January 20th, 2021, the team decided to allocate 2 nodes for a dedicated debug partition on the Skylake cluster.](#) This of course means that the Sky partition will have only 62 nodes for production running, instead of 64.

2020 User Survey Feedback (2 of 4)

- ❖ Tape and Disk space: I understand how valuable these resources are but being able to store data longer would be valuable.
 - Response: Historically, data on tape has been kept until the end of life for that media type. There have been several storage discussions and based on the questions and feedback that we have received. [The USQCD leadership team has put together a Data Management Plan, which covers both tape and disk storage, that will apply a coherent rule across all sites.](#) We hope this will assist everyone.

- ❖ USQCD resources are useful in training the next generation of workforce students. However, sometimes it takes longer for students to be able to finish analysis. Universities don't usually have a big storage facility to accompany LQCD computing needs. More disk space to work with and longer tape storage would be very helpful (and make data sharing more likely to happen).
 - Response: The USQCD site managers follow the storage allocations as defined by the SPC during the CfP process. Once defined, changes to the allocations need to go through the SPC. The site managers will honor storage allocation changes as approved by the SPC. [The recent Data Management Plan put together by the USQCD leadership applies a coherent rule across all sites](#)

➤ Call for Proposal

- ❖ I really appreciate many new initiatives taking place with SPC. However, it is still useful in the CfP to specify how the decisions will be made. Although it will be good to get written feedback (it's probably impossible given everyone is busy), at least receive some feedback on how SPC rates each of the proposals and how the final decision is made? This information be sent to the PI.?
 - Response: We try to describe the process for our deliberations in the CfP but realize we do not publish a metric as such. In allocating resources for different proposals with similar physics objectives, there are two factors that are taken into consideration.
 - The first is the overall balance of the USQCD program.
 - The second is that key quantities, multiple calculations of related quantities play an important role. So, in that sense we view proposals not only as competing but also as complementary. The questions we send to PIs sometimes reflect that effort. We agree that it would be good to send more "personalized" feedback to the individual proposals, and as is observed it is largely the pressure of time that has prevented that.
 - The CfP was modified to include additional information regarding the awards procedure, how proposals are selected, and the communication that is sent to the proponents.

2020 User Survey Feedback 4 of 4

- ❖ Not sure how we would know whether the process allocates time to the right project at the right scale"
 - Response: Whether the process allocates time to the right project at the right scale is, of course, a judgment matter. To help members understand the process, the 2021 CfP has been updated to spell out the deliberations of the SPC. To help members judge the outcome of the allocation process, [we will put the approved proposals on a password-protected site, available only to members of USQCD](#); this has been done in the past, but access will be made easier to find than in the past few years.
- ❖ I have not been satisfied with the administration of the JLab cluster. There was a very unfortunate incident with /cache and /volatile partitions where all files were deleted. This led to significant extra work and frustration getting our jobs restarted and recovering data. Help from JLab personnel was lacking or unsatisfactory in this effort.
 - Response: This comment references the Lustre filesystem event that resulted in the deletion of files under /volatile and /cache. The /volatile area in particular is not backed up, so there is no mechanism to recover deleted files. The /cache area is backed by tape after a waiting period, which varies based on tape system load. [After the deletion event, the system was evaluated, and changes were made to decrease the likelihood of a similar incident.](#) These include restricting the number of systems with privileged filesystem access to a single administrative machine, increasing the logging of file change events, and reviewing system disk management software for weaknesses that could lead to unexpected file removal. We reviewed the online documentation about data retention policies for /volatile, /work, /cache, /home, and /scratch to ensure that the backup policies were noted.

***Thank you for keeping
our systems busy!***

Questions?