



# Executive Summary

## Baseline Survey Results for Services Transitioning in 2008

NSSC Baseline Customer Satisfaction Surveys  
December 2007

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# Introduction

## Background

- The NASA Shared Services Center (NSSC) began operations in March 2006 and is continuing to add new services
- Services will continue to transition in fiscal year 2008 from all ten NASA centers to the NSSC in the areas of:
  - Financial Management
  - Human Resources
  - Procurement
- The NSSC wants to understand satisfaction with current service delivery for those services that will transition to the NSSC in fiscal year 2008

## Objectives

- To measure customer perceptions of current service delivery
- To establish a baseline for performance that the NSSC can use to measure itself against after the transition of services
- To understand customer perceptions of the importance and usage patterns of services
- To set a standard for ongoing measurement of customer satisfaction

# Introduction – About the Surveys

- The NSSC Baseline Satisfaction Surveys are employee assessments of the centers’ current service quality. Responses will be used to set a satisfaction baseline and to assist in developing transition priorities and subsequent improvement initiatives
  - The baseline surveys follow a similar format to those that were conducted for services that transitioned in fiscal year 2006 and fiscal year 2007
- Separate surveys were deployed for four service areas (listed below with their target audience)

Survey	Target Audience
Benefits Counseling and Personnel Action Processing (PAP)	NASA employees (including supervisory level)
HR Systems Support	HR employees
Fund Balance With Treasury (FBWT)	NASA DCFOs
Accounts Receivable	NASA center project managers

- Most questions use a five-point response scale
- A web-based methodology, utilizing the Inquisite survey tool, was used to administer the surveys which were deployed from an NSSC server

## Introduction – About the Surveys (Cont'd)

- In most surveys, respondents were asked to identify their center, Mission Directorate or Mission Support area, grade level, and length of employment with NASA
- The surveys opened on December 4, 2007. The Benefits Counseling and Personnel Action Processing survey was closed at the end of business, December 18. The remaining surveys were closed at the end of business, December 20; reminders were sent on December 11 and December 18 to those invitees who had not responded
- Separate invitations were sent for each of the four surveys
- At the close of the survey, 510 responses were obtained representing an 11% response rate across all surveys (response rates for each survey are shown on the next page)
- Names of respondents are confidential and are not shared with the NSSC

## Introduction – About the Surveys (Cont'd)

The surveys were sent to NASA employees. The following table shows the number of invitations sent and responses received for each of the surveys.

Survey	Number Invited	Final Responses	Response Rate	Population	Sample Size Needed	Target Response Rate*	Margin of Error at 90% Confidence Interval
HR Benefits and PAP	4,118	434	11%	15,937	267	6%	3.89%
HR Systems Support	317	65	21%	412	164	52%	9.37%
FBWT	9	4	44%	9	9	100%	32.51%
Accounts Receivable	57	7	12%	57	48	84%	29.37%
<b>Totals</b>	<b>4,501</b>	<b>510</b>	<b>11%</b>				

\* To achieve statistical significance at a 90% confidence interval and 5% margin of error

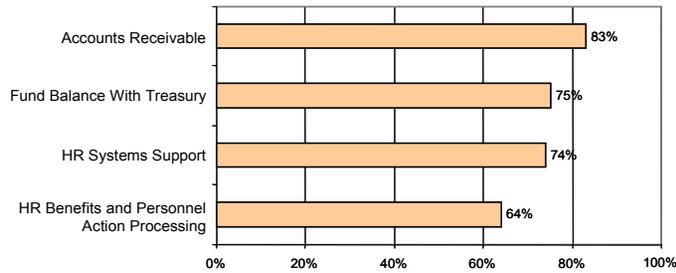
Note: Response rates for the surveys listed below are not large enough to meet traditionally desired levels of statistical significance. However, results provide directional guidance for the NSSC and should be used for that purpose.

- FBWT
- Accounts Receivable

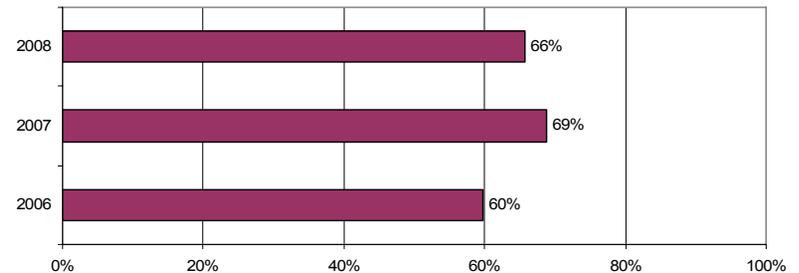
# Introduction – About the Surveys (Cont'd)

The following charts show how percent favorable ratings for overall satisfaction from the recent surveys compare to the baselines conducted for services transitioning in 2006 and 2007. Although different subjects are covered, the percent favorable ratings fall in the higher end of the range when compared to the 2006 and 2007 baseline surveys.

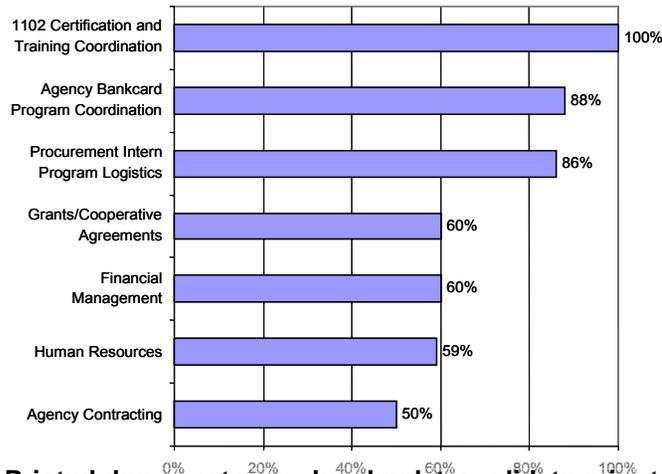
**2008 Services Baseline - Overall % Favorable**



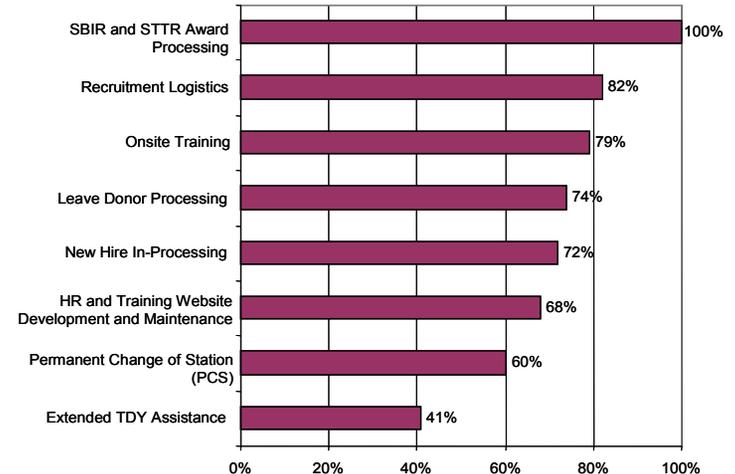
**Consolidated % Favorable**



**2006 Services Baseline – Overall % Favorable**



**2007 Services Baseline – Overall % Favorable**



## Introduction – About the Analysis

- The analysis is focused on establishing the baseline. In future years, further analysis should be performed to determine changes from the baseline
- For purposes of this analysis, all unanswered and “NA” responses are excluded from the percentages and means. This provides a truer picture of the results than if these items were included
- Demographic differences in overall satisfaction were examined for center, Mission Directorate or Mission Support area, and grade level. Charts showing these differences are included in the report
- Personal references in the verbatim comments are omitted. Typographical errors and spelling errors are corrected in the comments

# Overall Findings

- Overall satisfaction ratings for the services are quite positive, with all of the mean values for overall satisfaction falling in the positive range of the rating scale (above 3.5)
- Benchmarking overall satisfaction scores against the survey provider's database of internal customer satisfaction surveys shows that three surveys fall above the median
- The most common areas for improvement are communication with customers, accuracy of services, and process efficiency
  - Communication opportunities include informing customers about who to call/where to go for questions, providing a current list of services that are offered, being responsive to questions/issues, and proactively notifying customers of changes that affect them
  - Accuracy of services include being experts of the services provided and having the time and resources to understand customers' specific needs
  - Process efficiency includes enabling customers to work efficiently at their jobs by improving on-line tools, providing timely delivery of services, and reviewing the effectiveness of existing systems, policies and procedures
  - In last year's baseline surveys, process efficiency was also one of the most common areas for improvement along with accuracy of services
- NASA personnel performing the services today exhibit positive customer service attitudes including courtesy and willingness to help
- Services were consistently viewed as important and performance ratings are mostly positive or neutral

## Overall Findings (Cont'd)

- Customers ratings consistently indicate that “ perform services accurately” should be the top objective for the service delivery organizations
- Most survey results show variation in ratings across center and mission directorate or mission support area
  - In general, there were not consistent patterns in the results across demographic groups

# Implications

- For FBWT, it will be particularly important to ensure a successful transition. Verbatim comments suggest a high level of satisfaction with the current service and frustration with the decision to move it to the NSSC
  - High levels of accuracy will be required
  - Individualized attention and communication
- HR Systems Support and HR Benefits Counseling and personnel action processing have average to high average satisfaction. However, verbatims suggest that there are still many opportunities to improve service by improving communication, accessibility, and process efficiency. Each of these should be well within the sweet spot of shared services performance
- Accounts receivable has higher baseline performance also; however, the comments are not as animated as those around FBWT
  - Communication and efficient processes are areas of opportunity for this service

*Findings, Conclusions, and Analysis Samples by Survey*

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# Benefits Counseling and Personnel Action Processing Summary of Findings

- Overall satisfaction (with Center HR services) is positive with 64% of respondents giving favorable ratings. The percent favorable for overall satisfaction is average compared to the other NSSC baseline surveys
- Customers gave the highest ratings (measured by mean) to:
  - Center HR personnel are consistently courteous
  - Center HR personnel are always willing to help me
  - The benefits-related service offerings at the center meet the requirements of my position
- Customers gave the lowest ratings (measured by mean) to:
  - I know who to call or where to go for my PAP-related questions or issues
  - Center HR personnel deliver error-free service
  - Center HR personnel tell me exactly when services will be performed
- Customers recognize the importance of Benefits Counseling and PAP and performance ratings are fairly positive
- The highest ratings on customer satisfaction drivers deal with attitudes of personnel (courtesy, willingness to help) and service offerings; the lowest ratings deal with communication and accuracy of service
- Customers believe the most important objective for Center HR personnel should be “perform services accurately”

# Benefits Counseling and Personnel Action Processing Summary of Findings (Cont'd)

- Efforts to improve in the following areas would result in the greatest payoff for Center HR customers
  - Knowing who to call/where to go for PAP-related questions or issues
  - Having efficient processes to deliver services
  - Delivering error-free service
- Key themes from verbatim comments
  - The most common areas suggested for improvement are:
    - » Improving response time to customer calls and problem resolution
    - » Increasing communications with customers about benefits, policies, and the services Center HR provides
    - » Providing sufficient staff to support customer needs and ensure a consistent level of quality
  - Comments about level of satisfaction focus on:
    - » Many positive experiences about HR support
    - » Some negative experiences regarding service quality and responsiveness
    - » Satisfaction with face-to-face contact with staff at center and increased concern about transferring services to NSSC

# Benefits Counseling and Personnel Action Processing Summary of Findings (Cont'd)

- Key themes from verbatim comments (cont'd)
  - Additional comments include the following ideas:
    - » The need for more one-on-one advice about benefits
    - » Concern about Center HR being understaffed
    - » Concern about keeping services on-site instead of being transferred to NSSC

# Benefits Counseling and Personnel Action Processing Conclusions

- Overall, Center HR is operating fairly well today
- The staff that provides HR services exhibits good customer service qualities including courtesy and willingness to help. The benefits-related service offerings at the center appear to meet the requirements of customers
- There is room for improvement in quality and accuracy of services, responsiveness to customer problems, and communication
- Frustration exists with the efficiency of processes, the use of the website, and the uncertainty about the transfer of HR Center services to NSSC

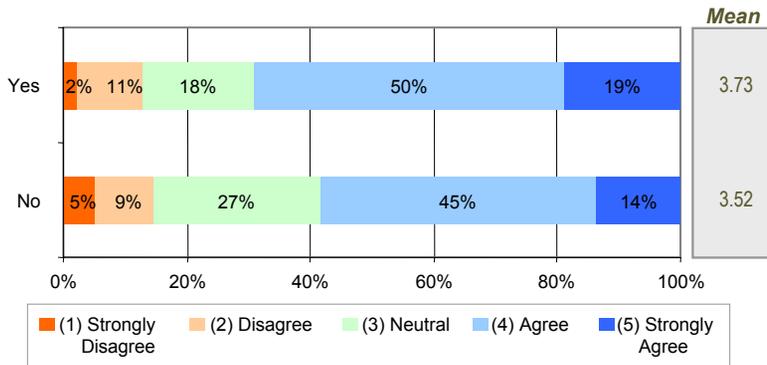
## Implications for the NSSC

- Investigate opportunities to improve the process efficiency, service quality, responsiveness, and communications
- Ensure that staff provide excellent customer service during and after the transition
- Ensure that staff are well-trained and knowledgeable about process details
- Provide effective and consistent communications about the process and its requirements
- Ensure that clear points of contact are established and communicated at the NSSC for this service

# Benefits Counseling and Personnel Action Processing Overall Satisfaction by Position and Center

## Overall Satisfaction by Position

- Based on the question: "Are you a Supervisor, Manager, or Administrative Officer?"



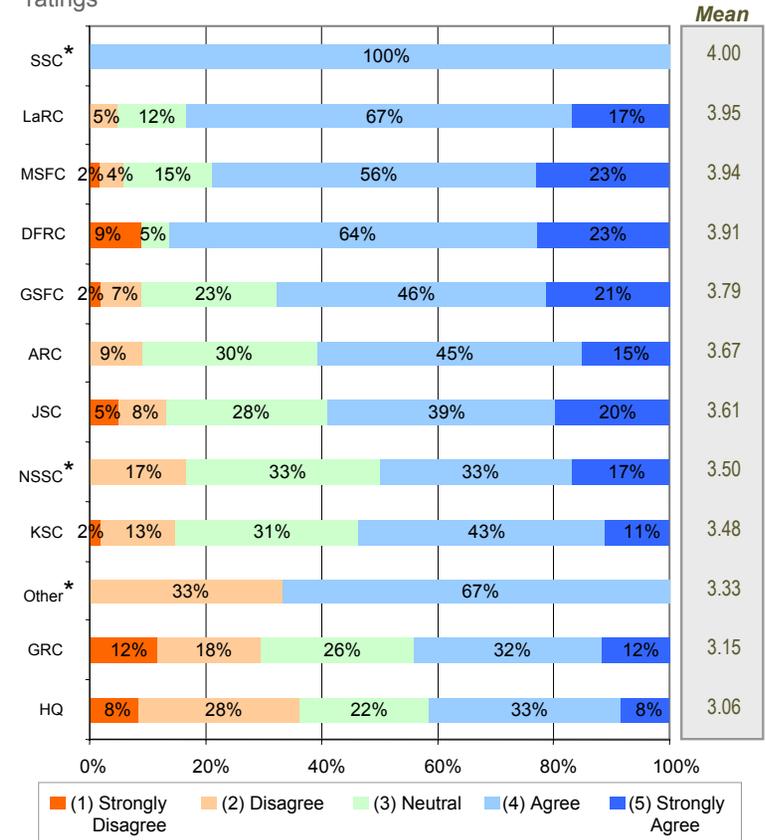
\* Represents fewer than 10 respondents

Note: Demographics are listed in descending order, by mean

**Overall Satisfaction Mean for Center HR Services: 3.63**

## Overall Satisfaction by Center

- Satisfaction with Center HR services varies across centers with SSC receiving the highest ratings and Headquarters receiving the lowest ratings



# HR Systems Support Summary of Findings

- Overall satisfaction (with JSC/MFSC services supporting HR systems) is positive with 74% of respondents giving favorable ratings. The percent favorable for overall satisfaction is average compared to the other NSSC baseline surveys
- Customers gave the highest ratings (measured by mean) to:
  - Personnel are consistently courteous
  - Personnel are always willing to help me
  - Personnel are available during the hours I need assistance
- Customers gave the lowest ratings (measured by mean) to:
  - Personnel deliver error-free service
  - Personnel openly communicate decisions or changes that affect me
  - Personnel tell me exactly when services will be performed
- Customers recognize the importance of HR Systems Support and performance ratings are fairly positive
- The highest ratings on customer satisfaction drivers deal with attitudes of personnel (courtesy, willingness to help) and availability; the lowest ratings deal with accuracy and communication
- Customers believe the most important objective for Center HR personnel supporting HR Systems should be “perform services accurately”

# HR Systems Support Summary of Findings (Cont'd)

- Efforts to improve in the following areas would result in the greatest payoff for HR Systems Support customers
  - Knowing who to call or where to go for questions or issues
  - Personnel openly communicating decisions or changes that affect me
  - Personnel delivering error-free service
- Key themes from verbatim comments
  - The most common areas suggested for improvement are:
    - » Provide better communications about current systems and when changes are made
    - » Timely and accurate response to customer needs
    - » Increase efficiency by requiring only one password and one log-in for systems/programs
  - Comments about level of satisfaction focus on:
    - » Many positive experiences about HR system support
    - » Some dissatisfaction regarding unclear and inefficient processes
    - » Frustration about number of passwords and log-ins for systems/programs

# HR Systems Support Summary of Findings (Cont'd)

- Key themes from verbatim comments (cont'd)
  - Additional comments include the following ideas:
    - » Provide additional support from IT specialists about new web-based HR systems and tools
    - » Work on making the HR website easier to navigate
    - » Evaluate the need for new or updated systems and provide the staff necessary to support these new systems

# HR Systems Support Conclusions

- Overall, HR Systems Support is operating fairly well today
- The staff that provides HR Systems Support exhibits good customer service qualities including courtesy, willingness to help, and availability
- There is room for improvement in accuracy of service and communication to customers
- There is also a need to better understand customer needs, incorporate their input before system changes are made, and notify customers once changes are implemented

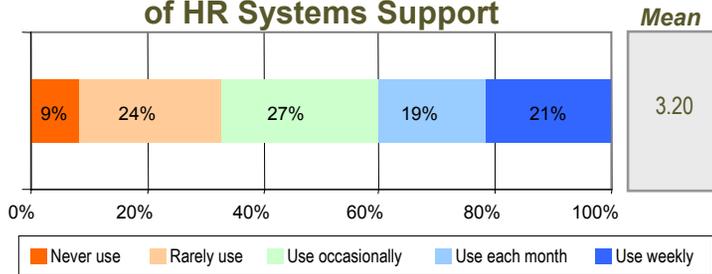
## Implications for the NSSC

- Investigate opportunities to improve the accuracy of services and improve communication with customers before and during system changes
- Ensure that staff provide excellent customer service during and after the transition
- Ensure that staff are well-trained and knowledgeable about process details
- Provide effective and consistent communications about the process and its requirements
- Ensure that clear points of contact are established and communicated at the NSSC for this service

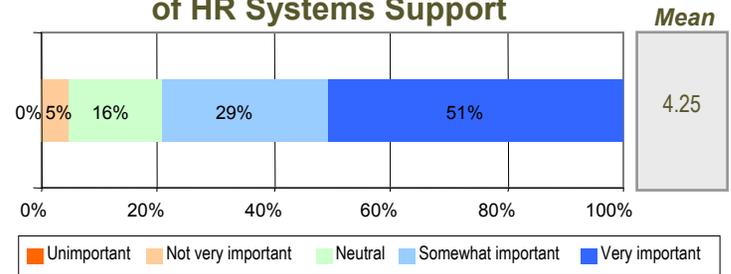
# Evaluation of HR Systems Support

**HR Systems Support** – System administration and reports from HR systems such as NASA Organizational Profile System (NOPS), NASA Employee Profile System (NEPS), Workforce Transformation Tracking System (WTTS), etc.

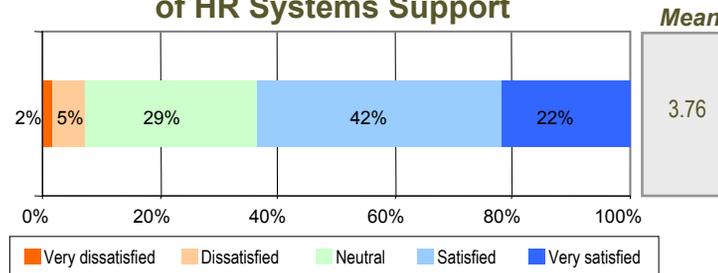
**Customer ratings on the use of HR Systems Support**



**Customer ratings on the importance of HR Systems Support**



**Customer ratings on the performance of HR Systems Support**



# Fund Balance With Treasury

## Summary of Findings

- Overall satisfaction (with FBWT) is positive with 75% of respondents giving favorable ratings. The percent favorable for overall satisfaction is average compared to the other NSSC baseline surveys
- Customers gave the highest ratings (measured by mean) to:
  - I know who to call or where to go for FBWT-related questions or issues
  - FBWT personnel are easy to contact
- Customers gave the lowest ratings (measured by mean) to:
  - FBWT personnel have efficient processes to deliver services
  - I feel confident with FBWT personnel's ability to support my position
  - FBWT personnel tell me exactly when services will be performed
  - FBWT personnel deliver error-free service
- Customers recognize the importance of FBWT and performance ratings are very positive
- The highest ratings on customer satisfaction drivers deal with availability of personnel (knowing who to call, ease of contact); the lowest ratings deal with efficiency, customer advocacy, communication, and accuracy
- Customers believe the most important objective for FBWT personnel should be “perform services accurately”

# Fund Balance With Treasury Summary of Findings (Cont'd)

- Payoff values could not be calculated due to small sample size
- Key themes from verbatim comments
  - The most common areas suggested for improvement are:
    - » Being proactive at running analyses and identifying problems with potential solutions
    - » Effective reconciling of transactions daily; concern exists about the future ability of the NSSC to effectively reconcile cash transactions
  - Comments about level of satisfaction focus on:
    - » Positive experiences with FBWT services
    - » Satisfaction with current service at the Regional Finance Office and concern about the economic viability of transferring services to the NSSC
    - » Satisfaction with increasing levels of competence and hope that the FBWT team will continue to improve
  - Additional comments include the following:
    - » Concern about moving the FBWT function to the NSSC when all appears to be working well at the RFO

# Fund Balance With Treasury Conclusions

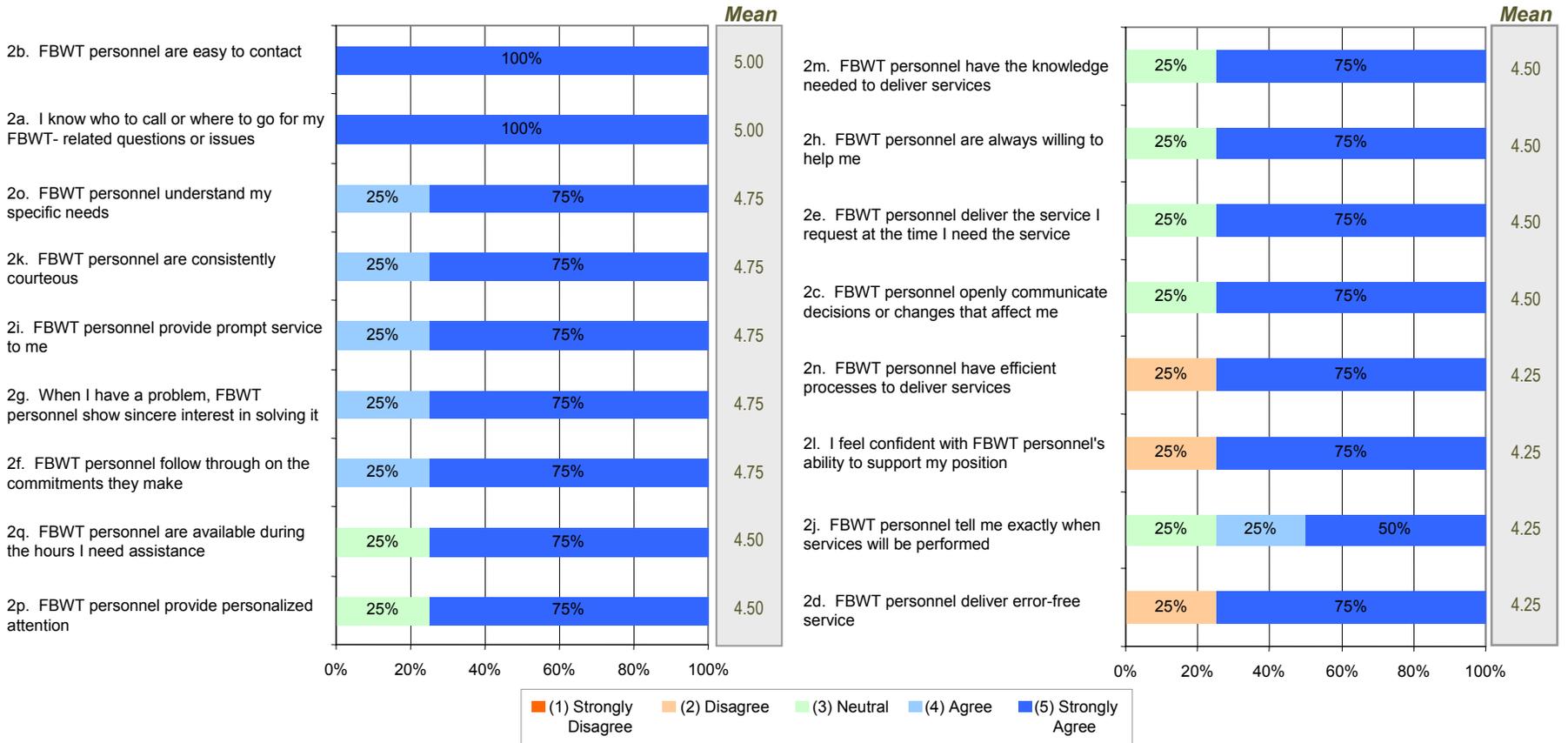
- Overall, FBWT is operating well today
- The staff that provides FBWT services exhibits good customer service qualities including ease of contact, courtesy, willingness to help, follow through on commitments, prompt service, and communication
- There is room for improvement in efficiency of processes, being a customer advocate, and accuracy
- Concern exists about the effectiveness of transferring services to the NSSC

## **Implications for the NSSC**

- Investigate opportunities to improve the process efficiency and accuracy of services
- Effectively reconcile cash transactions daily
- Be a customer advocate and work to understand their specific needs
- Ensure that staff provide excellent customer service during and after the transition
- Ensure that staff are well-trained and knowledgeable about process details
- Provide effective and consistent communications about the process and its requirements
- Ensure that clear points of contact are established and communicated at the NSSC for this service

# Fund Balance With Treasury Customer Satisfaction Drivers

**Please rate your level of agreement with the following statements**  
(Questions are listed in descending order, by mean)



# Accounts Receivable Summary of Findings

- Overall satisfaction with Accounts Receivable is very positive with 83% of respondents giving favorable ratings. The percent favorable for overall satisfaction is high compared to the other NSSC baseline surveys
- Customers gave the highest ratings (measured by mean) to:
  - Center Accounts Receivable personnel are always willing to help me
  - Center Accounts Receivable personnel are easy to contact
  - When I have a problem, Center Accounts Receivable personnel show sincere interest in solving it
- Customers gave the lowest ratings (measured by mean) to:
  - Center Accounts Receivable personnel have efficient processes to deliver services
  - Center Accounts Receivable personnel understand my specific needs
  - Center Accounts Receivable personnel tell me exactly when services will be performed
- Customers recognize the importance of Accounts Receivable and the performance rating is fairly positive
- The highest ratings on customer satisfaction drivers deal with attitudes of personnel and availability (willingness to help, ease of contact); the lowest ratings deal with efficiency and communication
- Customers believe the most important objective for Accounts Receivable personnel should be “perform services accurately”

# Accounts Receivable Summary of Findings (Cont'd)

- Efforts to improve in the following areas would result in the greatest payoff for Center Accounts Receivable customers
  - Openly communicating decisions or changes that affect customers
  - Understanding customers' specific needs
  - Having efficient processes to deliver services
- Key themes from verbatim comments
  - The most common areas suggested for improvement are:
    - » Maintaining effectiveness of services
    - » Accurately tracking project funding
    - » Having enough time to assist customers
  - Comments about level of satisfaction focus on:
    - » Positive experiences about the current service
    - » Concern with the new accounting system's lack of flexibility and its impact on what Accounts Receivable provides

# Accounts Receivable Summary of Findings (Cont'd)

- Key themes from verbatim comments (cont'd)
  - Additional comments include the following ideas:
    - » Concern about the effectiveness moving Accounts Receivable services to NSSC and its impact on timely problem resolution of customer issues
    - » Concern about the number of accounting and reporting data systems/reports that are requested and its impact on service quality to NASA project managers.

# Accounts Receivable Conclusions

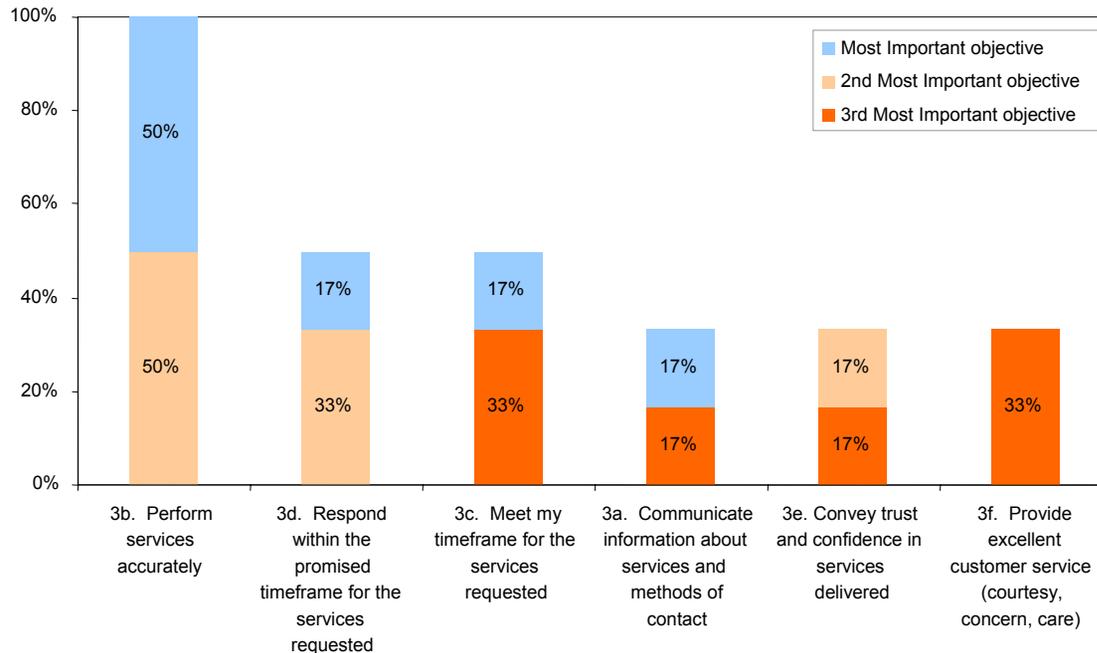
- Overall, Center Accounts Receivable is operating well today
- The staff that provides Accounts Receivable services exhibits good customer service qualities including willingness to help, ease of contact, and sincere interest in resolving customer problems.
- There is room for improvement in efficiency of processes, communication to customers, and understanding customers' specific needs
- Concern exists about the new accounting system and about transferring Accounts Receivable services to the NSSC

## **Implications for the NSSC**

- Investigate opportunities to improve the efficiency of operations when delivering services
- Establish strong relationships with customers to identify their specific needs
- Ensure that staff are well-trained and knowledgeable about process details
- Provide effective and consistent communications about when services are to be performed
- Ensure that clear points of contact are established and communicated at the NSSC for this service

# Accounts Receivable Most Important Objectives – Customer View

**How should Center Accounts Receivable personnel rank their three most important objectives to you as a customer**



(How to read this chart: 50% of customers who answered the survey thought “Perform services accurately” should be the most important objective, 50% thought it should be the second most important objective, 0% thought it should be the third most important objective)

# Benchmark Comparison

The results on overall satisfaction are compared to the survey provider's benchmarks for other internal customer satisfaction surveys which include prior baseline and broad-based surveys.

- Three of the four services from this baseline fall in the first two quartiles

	Survey	Score	Rank
Top quartile	NASA SBIR/STTR Awards	4.50	1
	NASA Fund Balance With Treasury	4.50	
	Utility 6 Media Productions	4.35	2
	Pharmaceutical 1 Facilities	4.28	3
	NASA Recruitment Logistics	4.23	4
	Utility 5 IT	4.19	5
	NASA Accounts Receivable	4.17	
	NASA Procurement Intern	4.14	6
	Utility 1 Travel	4.11	7
	Industrial - Relocation *	4.10	8
	Aerospace/Defense 1 Finance/Admin A	4.08	9
	Aerospace/Defense 1 Finance/Admin B	4.04	10
	NSSC 1102 Certification and Training Coord.	4.00	11
	High Tech 2 Shared Services *	4.00	12
	Utility 6 IT (End User)	3.95	13
	Utility 6 Operational Support	3.95	14
	Oil & Gas IT	3.93	15
NASA Onsite Training	3.93	16	
Utility 6 Payroll	3.92	17	
2nd quartile	Utility 2 CADD	3.88	18
	Aerospace/Defense 1 Accounting A	3.85	19
	Travel/Hospitality Finance *	3.85	20
	Utility 1 Document Mgt.	3.83	21
	NASA Leave Donor Processing	3.83	22
	NASA HR Systems Support	3.82	
	Utility 6 IT (Applications)	3.81	23
	NSSC PCS	3.80	24
	NSSC Agency Purchase Card	3.80	25
	Utility 2 Real Estate	3.80	26
	Utility 1 (Mgt)	3.79	27
	NSSC Off-Site Training	3.77	28
	Utility 1 IT	3.77	29
	Utility 2 Electronic Document Mgt.	3.77	30
	Utility 2 Document Management	3.76	31
	NASA HR and Training Website	3.76	32
	Utility 2 Facilities	3.75	33
Travel/Hospitality IT *	3.73	34	

	Survey	Score	Rank
3rd quartile	NSSC New Hire In-Processing	3.69	35
	Utility 4 Office Services	3.69	36
	Utility 6 Supply (Strategic Sourcing)	3.69	37
	Utility 2 Environmental Affairs	3.68	38
	Utility 6 Supply (Operations)	3.68	39
	Utility 2 IT	3.66	40
	Utility 2 Telecom	3.65	41
	NSSC Financial Management	3.64	42
	NASA HR Benefits and Personnel Action Processing	3.63	
	Aerospace/Defense 1 Accounting B	3.63	43
	Utility 1 HR (Employees)	3.61	44
	Utility 6 A/P	3.61	45
	Utility 1 Telecom	3.57	46
	Pharmaceutical 2 IT	3.56	47
	Utility 1 A/P	3.55	48
	Utility 4 Real Estate	3.51	49
	High Tech 1 - IT	3.50	50
Utility 1 Real Estate	3.50	51	
4th quartile	Utility 1 Fleet	3.47	52
	NSSC Human Resources	3.43	53
	Utility 4 Fleet	3.41	54
	Utility 3 HR	3.39	55
	NSSC Grants/Cooperative Agreements	3.38	56
	Pharmaceutical 1 HR	3.27	57
	Industrial - IT *	3.23	58
	Industrial - Payroll *	3.23	59
	Utility 2 Supply Chain	3.23	60
	Utility 6 HR Mgrs/Generalists	3.23	61
	Utility 1 Supply Chain	3.16	62
	Entertainment 1	3.05	63
	NSSC Extended TDY	3.00	64
	Aerospace/Defense 1 HR (mgrs/generalists)	2.93	65
	High Tech 1 - Europe	2.87	66
	Aerospace/Defense 1 HR (employees)	2.76	67
	NSSC Financial Disclosure	1.67	68

Source: Service Provider Data

Red = Current Baseline, Blue = Prior Baseline and Broad-Based Results

# Customer Service Examples

The following verbatim comments provide examples of positive and negative customer service practices that exist today.

## Positive Customer Service

- HR Personnel are doing an excellent services and support. Correspondence and documents that I received from HR are evidence of their superior job (Benefits and PAP)
- I am satisfied with the current level of service (Accounts Receivable)
- Our current FBWT personnel are excellent hence I have no suggestions on how they can improve (FBWT)
- I have always interacted with courteous, professional people that either solve my issues and/or, if they don't know the answer, find it and get back to me (HR Systems Support)

## Negative Customer Service

- Very UN satisfied. I hope NSSC does a better job. This is our livelihood we're talking about and no response is unacceptable. I put in an electronic request for retirement numbers over 2 weeks ago and have heard nothing from them (Benefits and PAP)
- NASA seems to have too many accounting and reporting data systems/reports that are requested within the financial management community at the expense of being able to provide the necessary and adequate service to NASA project managers (Accounts Receivable)
- Be subject matter experts of their domain; be proactive at running analyses; bring problems, with potential solutions, to management's attention early; stay on top of the details and reconcile daily (FBWT)
- Too many new or updated systems are being deployed at one time. With so many projects being deployed within the same timeframe, the workforce is stretched thin. The HRIS community needs to consider how it impacts programs outside of this area before making it a priority (HR Systems Support)

## Overall Recommendations

- Share the results of the survey with NSSC staff, survey respondents, and key constituents as planned
- Use survey findings to plan for a successful transition of services, and monitor progress of specific services after the transition
- Use results to educate NSSC staff on where the bar is set for performance
- Use constructive comments received in the verbatim comments to target areas for improvement
- Continue with ongoing program of customer satisfaction measurement and compare future results to the baseline survey

# Appendix: Statistical Definitions

## Definitions

- Margin of Error
  - A measurement of the accuracy of the results of a survey
  - A margin of error of plus or minus 3.5% means that the responses of the target population as a whole would fall somewhere between 3.5% more or 3.5% less than the responses of the sample (a 7% spread)
  - Lower margin of error requires a larger sample size
- Confidence Level
  - A measure of the precision of an estimated value. In sampling, the confidence level (usually expressed as a percentage) indicates how often the true value can be expected to be within the margin of error
  - A 90% confidence level means that if all possible samples of the same size were taken, 90% of them would include the true population mean within the interval created by the margin of error around the sample mean
  - Higher confidence level requires a larger sample size
- Example
  - If a poll reports that 78% of Americans eat peanut butter and the margin of error is stated to be 3%, and the confidence interval is 95%, we can expect that the true value of peanut butter eaters is somewhere between 75% and 81% for 95% of the samples