

Attachment A1

**Centers of Research Excellence in Science and Technology (CREST)
and Historically Black Colleges and Universities Research
Infrastructure for Science and Engineering (HBCU-RISE)
Monitoring System**

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CREST/HBCU-RISE: Crosswalk

Common Collection Categories	Staff and Project Participant Characteristics¹	Project Implementation Characteristics²	Project Outputs³
Questions			
1. Center/Award Information			
Center/Award Name		X	
Street Address 1 Street Address 2 City State ZIP Code	X		
Phone Number	X		
Fax Number	X		
E-mail Address	X		
URL	X		
Number of undergraduate students supported by the CREST center/HBCU-RISE award during the current reporting period		X	X
Number of graduate students supported by the CREST center/HBCU-RISE award during the current reporting period		X	X
2. Institutions			
Institution Name	X		
Type of Institution (Select one) <ul style="list-style-type: none"> • Federal Government • Industry • Local Government • Non-Profit • Other • State Government • University or College 	X		
City State/Region Country	X		
3. Participants			
Principal Investigator (PI)/Co-Principal Investigator (Co-PI)			
Name (First Name, Middle Name, Last Name)	X		

¹ Elements of these characteristics include name, address, date of birth, gender, ethnicity, race, disability status, class, major, grade point average, and project role.

² Elements of these characteristics include sources and amount of funds, fellowships, scholarships, traineeships, partnerships, training, and research methods.

³ Elements of these characteristics include research findings, publications, presentations, degrees granted, and educational materials.

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Staff and Project Participant Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Implementation Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Outputs</p>
<p>Cited-Only Information</p> <p>Is this person a former participant who is listed only because he or she is cited on a proposal, award, presentation, collaborative project, patent, activity, and/or conference that is listed for the current reporting period?</p> <ul style="list-style-type: none"> • Yes (<i>No other questions in the section are asked.</i>) • No (<i>All other questions in the section are asked. Lead PI's status defaults to No.</i>) 		X	
<p>Contact Information:</p> <p>Institution (Name, Type, City, State/Region, Country)</p> <p>Address at Institution</p> <p>City</p> <p>State/Region</p> <p>Country</p> <p>ZIP Code</p> <p>Phone Number</p> <p>Fax Number</p> <p>E-mail Address</p>	X		
<p>Demographic Information</p>			
<p>Gender: (Select one)</p> <ul style="list-style-type: none"> • Female • Male • Not Reported 	X		
<p>Ethnicity: (Select one)</p> <ul style="list-style-type: none"> • Hispanic or Latino • Not Hispanic or Latino • Not Reported 	X		
<p>Race: (Mark one or more)</p> <ul style="list-style-type: none"> • Black or African American • American Indian or Alaska Native • Native Hawaiian or Other Pacific Islander • Asian • White • Not Reported 	X		
<p>Disability Status: (Select one)</p> <ul style="list-style-type: none"> • Yes (Select Yes if any of the following apply: <ul style="list-style-type: none"> • Deaf or serious difficulty hearing • Blind or serious difficulty seeing even when wearing glasses • Serious difficulty walking or climbing stairs • Other serious disability related to a physical, mental, or emotional condition) • No • Do Not Wish to Provide 	X		

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Staff and Project Participant Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Implementation Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Outputs</p>
Citizenship: (Select one) <ul style="list-style-type: none"> • U. S. Citizen • Permanent Resident • Other Non-U.S. Citizen • Not Reported 	X		
Thrust Areas Mark one or more thrust areas in which this participant participated during the current reporting period: <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ... 		X	
Faculty/Postdoc			
Name (First Name, Middle Name, Last Name)	X		
Cited-Only Information Is this person a former participant who is listed only because he or she is cited on a proposal, award, presentation, collaborative project, patent, activity, and/or conference that is listed for the current reporting period? <ul style="list-style-type: none"> • Yes (<i>No other questions in the section are asked.</i>) • No (<i>All other questions in the section are asked.</i>) 		X	
Contact Information: Institution (Name, Type, City, State/Region, Country) Academic Rank: (Select one) <ul style="list-style-type: none"> • Professor • Associate Professor • Assistant Professor • Instructor or Lecturer • Postdoctoral Associate • Not Applicable Address at Institution City State/Region Country ZIP Code Phone Number Fax Number E-mail Address URL	X		
Demographic Information			
Gender: (Select one) <ul style="list-style-type: none"> • Female • Male • Not Reported 	X		

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Staff and Project Participant Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Implementation Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Outputs</p>
<p>Ethnicity: (Select one)</p> <ul style="list-style-type: none"> • Hispanic or Latino • Not Hispanic or Latino • Not Reported 	X		
<p>Race: (Mark one or more)</p> <ul style="list-style-type: none"> • Black or African American • American Indian or Alaska Native • Native Hawaiian or Other Pacific Islander • Asian • White • Not Reported 	X		
<p>Disability Status: (Select one)</p> <ul style="list-style-type: none"> • Yes (Select Yes if any of the following apply: <ul style="list-style-type: none"> • Deaf or serious difficulty hearing • Blind or serious difficulty seeing even when wearing glasses • Serious difficulty walking or climbing stairs • Other serious disability related to a physical, mental, or emotional condition) • No • Do Not Wish to Provide 	X		
<p>Citizenship: (Select one)</p> <ul style="list-style-type: none"> • U. S. Citizen • Permanent Resident • Other Non-U.S. Citizen • Not Reported 	X		
<p>Thrust Areas</p> <p>Mark one or more thrust areas in which this participant participated during the current reporting period:</p> <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ... • N/A 		X	
<p>Support</p> <p>Provide the number of months of direct or indirect support this participant received from the CREST center/HBCU-RISE award during the current reporting period.</p>		X	
<p>Student</p>			
<p>Name (First Name, Middle Name, Last Name)</p>	X		
<p>Cited-Only Information</p> <p>Is this person a former participant who is listed only because he or she is cited on a proposal, award, presentation, collaborative project, patent, activity, and/or conference that is listed for the current reporting period?</p> <ul style="list-style-type: none"> • Yes (<i>No other questions in the section are asked.</i>) • No (<i>All other questions in the section are asked.</i>) 		X	

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
<p>Contact Information:</p> <p>Institution (Name, Type, City, State/Region, Country)</p> <p>Address at Institution</p> <p>City</p> <p>State/Region</p> <p>Country</p> <p>ZIP Code</p> <p>Phone Number</p> <p>Fax Number</p> <p>E-mail Address</p> <p>URL</p>	X		
<p>Demographic Information</p>			
<p>Gender: (Select one)</p> <ul style="list-style-type: none"> • Female • Male • Not Reported 	X		
<p>Ethnicity: (Select one)</p> <ul style="list-style-type: none"> • Hispanic or Latino • Not Hispanic or Latino • Not Reported 	X		
<p>Race: (Mark one or more)</p> <ul style="list-style-type: none"> • Black or African American • American Indian or Alaska Native • Native Hawaiian or Other Pacific Islander • Asian • White • Not Reported 	X		
<p>Disability Status: (Select one)</p> <ul style="list-style-type: none"> • Yes (Select Yes if any of the following apply: <ul style="list-style-type: none"> • Deaf or serious difficulty hearing • Blind or serious difficulty seeing even when wearing glasses • Serious difficulty walking or climbing stairs • Other serious disability related to a physical, mental, or emotional condition) • No • Do Not Wish to Provide 	X		
<p>Citizenship: (Select one)</p> <ul style="list-style-type: none"> • Not Reported • Permanent Resident • Other Non-U.S. Citizen • U. S. Citizen 	X		

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Staff and Project Participant Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Implementation Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Outputs</p>
<p>Thrust Areas Mark one or more thrust areas in which this participant participated during the current reporting period:</p> <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ... • N/A 		X	
<p>Student-Specific Information</p>			
<p>Academic Level as of the September 1 20yy:</p> <ul style="list-style-type: none"> • Graduated between July 1 and Sept. 1 • Graduate Doctorate • Graduate Master's • Graduate Other • Undergraduate Senior • Undergraduate Junior • Undergraduate Sophomore • Undergraduate Freshman • Undergraduate Other 	X		X
<p>Area of Study: (Select one)</p> <ul style="list-style-type: none"> • Agricultural Sciences • Chemical and Biological Sciences • Computer and Information Sciences • Crosscutting Programs • Education • Engineering • English • Environmental Sciences/Renewable Natural Resources • Geosciences • International • Life Sciences • Mathematics • Natural Sciences • Physical Sciences • Science Statistics • Social, Behavioral Sciences • Other 	X		
<p>If the student received a degree during the current reporting period, enter the degree received, area of study, and (for students receiving a master's degree or Ph.D.) title of the thesis or dissertation.</p> <p>Degree Received: (Select one):</p> <ul style="list-style-type: none"> • Bachelor's • Master's • Ph.D. <p>Title of Thesis or Dissertation</p>	X		X

Common Collection Categories	Staff and Project Participant Characteristics	Project Implementation Characteristics	Project Outputs
Questions			
<p>Which of the following kinds of financial support did the student receive through the CREST center/HBCU-RISE award during the current reporting period? (Mark one or more):</p> <ul style="list-style-type: none"> • Tuition • Stipend • Other (Please specify): _____ <p>Financial Support Source: (Select one)</p> <ul style="list-style-type: none"> • NSF CREST/HBCU-RISE program • Other (Please specify): _____ 		X	
<p>Indicate the number of academic terms of support received through the CREST center/HBCU-RISE award during the current reporting period, by type of support:</p> <ul style="list-style-type: none"> • Tuition • Stipend • Other 		X	
<p>What was the student's status at the end of the current reporting period? (Mark one or more)</p> <ul style="list-style-type: none"> • Still in the CREST Program • Postdoctoral Position • Faculty Appointment • Research Appointment • Employment in Private Industry • Employment in Public Industry • Employment in K-12 Schools • Other (Please specify) _____ 		X	X
Other Personnel			
Name (First Name, Middle Name, Last Name)	X		
<p>Cited-Only Information</p> <p>Is this person a former participant who is listed only because he or she is cited on a proposal, award, presentation, collaborative project, patent, activity, and/or conference that is listed for the current reporting period?</p> <ul style="list-style-type: none"> • Yes (<i>No other questions in the section are asked.</i>) • No (<i>All other questions in the section are asked.</i>) 		X	
<p>Contact Information:</p> <p>Institution (Name, Type, City, State/Region, Country)</p> <p>Phone</p> <p>Fax</p> <p>E-mail Address</p>	X		
<p>Mark this checkbox if this individual fulfills the definition of a CREST participant (i.e., any individual who received the equivalent of at least one month's salary from the CREST project during the current reporting period).</p>		X	
Demographic Information			

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Staff and Project Participant Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Implementation Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Outputs</p>
Gender: (Select one) <ul style="list-style-type: none"> • Female • Male • Not Reported 	X		
Ethnicity: (Select one) <ul style="list-style-type: none"> • Hispanic or Latino • Not Hispanic or Latino • Not Reported 	X		
Race: (Mark one or more) <ul style="list-style-type: none"> • Black or African American • American Indian or Alaska Native • Native Hawaiian or Other Pacific Islander • Asian • White • Not Reported 	X		
Disability Status: (Select one) <ul style="list-style-type: none"> • Yes (Select Yes if any of the following apply: <ul style="list-style-type: none"> • Deaf or serious difficulty hearing • Blind or serious difficulty seeing even when wearing glasses • Serious difficulty walking or climbing stairs • Other serious disability related to a physical, mental, or emotional condition) • No • Do Not Wish to Provide 	X		
Citizenship (Select one): <ul style="list-style-type: none"> • Not Reported • Permanent Resident • Other Non-U.S. Citizen • U. S. Citizen 	X		
Thrust Areas Mark one or more thrust areas in which this participant participated during the current reporting period: <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ... • N/A 		X	
<p>Contributor</p>			
Name (First Name, Middle Name, Last Name)	X		
Contact Information: Institution (Name, Type, City, State/Region, Country)	X		
<p>4. Accomplishments</p>			
<p>Proposals/Awards</p>			

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Staff and Project Participant Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Implementation Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Outputs</p>
Status <ul style="list-style-type: none"> • Proposal • Award 			X
Title			X
Thrust Area: (Select one) <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ... 		X	
Funding Source Type: (Select one) <ul style="list-style-type: none"> • Federal • State • University • Industry • Foundation • Other 			X
Funding Source Name			X
Was this an NSF funding source? (Select one) <ul style="list-style-type: none"> • Yes • No 			X
Type of Award: (Select one) <ul style="list-style-type: none"> • Research • Education • Other 			X
Center Award Amount (for Awards only)			X
Grant Award Amount (for Awards only)			X
Key Participants: <ul style="list-style-type: none"> Primary Participant <ul style="list-style-type: none"> Name (First Name, Middle Name, Last Name) Institution Participant/Contributor 2 <ul style="list-style-type: none"> Name (First Name, Middle Name, Last Name) Institution Participant/Contributor 3 ... 		X	
Description of How CREST/HBCU-RSE Contributed to This Accomplishment			X
Presentations			
Presentation Title			X

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
Thrust Area (Select one) <ul style="list-style-type: none"> • Education and Outreach • Thrust 1 • Thrust 2 • ... 		X	
Presentation Location Institution (Name, Type, City, State/Region, Country) <p>OR</p> Conference Name Conference Location (City, State)			X
Approximate Audience Size			X
Presentation Date			X
Key Participants: Primary Participant Name (First Name, Middle Name, Last Name) Institution Participant/Contributor 2 Name (First Name, Middle Name, Last Name) Institution Participant/Contributor 3 ...		X	
Description of How CREST/HBCU-RISE Contributed to This Presentation			X
<p>Publications</p>			
Publication Title			X
Thrust Area (Select one) <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ... 		X	
Publication Name			X
Publication Type: (Select one) <ul style="list-style-type: none"> • Book chapter or textbook • Article in refereed journal • Article in public proceedings 			X
Status of Publication: (Select one) <ul style="list-style-type: none"> • Accepted, Awaiting Publication • Other (Please specify): _____ • Published (Volume, Year) • Submitted, Under Review 			X

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
Citation: Page Number URL Other Citation			X
Key Participants: Primary Participant Name (First Name, Middle Name, Last Name) Institution Participant/Contributor 2 Name (First Name, Middle Name, Last Name) Institution Participant/Contributor 3 ...		X	
Description of How CREST/HBCU-RISE Contributed to This Publication			X
<p>Collaborative Projects</p>			
Collaborative Project Title			X
Thrust Area (Select one) <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ... 		X	
Key Participants: Primary Participant Name (First Name, Middle Name, Last Name) Institution Participant/Contributor 2 Name (First Name, Middle Name, Last Name) Institution Participant/Contributor 3 ...		X	
Description of How CREST/HBCU-RISE Contributed to This Collaborative Project			X

**Common
Collection
Categories**

Questions

**Staff and Project
Participant
Characteristics**

**Project
Implementation
Characteristics**

Project Outputs

Collaborative Partner(s):
 Institution 1 (Name, Type, City, State/Region, Country)
 Funding Source: (Mark one or more)

- Federal
- State
- University
- Industry
- Other (Please specify): _____

NSF Programs Related to This Partner: (Mark one or more)
 (for institution type=University only)

<i>NSF Program</i>	<i>Center Name</i>
Centers for Learning and Teaching (CLT)	
Centers for Ocean Science Education Excellence (COSEE)	
Chemical Bonding Centers (CBC)	
Engineering Research Centers (ERC)	
Industry/University Cooperative Research Centers Program (IUCRC)	
Materials Research Science and Engineering Centers (MRSEC)	
Science of Learning Centers (SLC)	
Science and Technology Centers (STC)	
Partnerships for Research and Education in Materials (PREM)	
Integrative Graduate Education Traineeship Program (IGERT)	
Alliances for Graduate Education and the Professoriate (AGEP)	

Institution 2
 ...

X

Did the collaboration provide research for undergraduates? (Select one)

- Yes
- No

X X

Research for graduates? (Select one)

- Yes
- No

X X

Research for postdocs? (Select one)

- Yes
- No

X X

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Staff and Project Participant Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Implementation Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Outputs</p>
<p>Is this collaboration international? (Select one)</p> <ul style="list-style-type: none"> • Yes • No <p>If yes, was this collaboration planned as a part of your proposal or developed later during the award period? (Select one)</p> <ul style="list-style-type: none"> • Proposal • Award period 		X	X
<p>Patents</p>			
<p>Patent Title</p>			X
<p>Thrust Area: (Select one)</p> <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ... 		X	
<p>Year Submitted</p>			X
<p>Application Number</p>			X
<p>Allowed: (Select one)</p> <ul style="list-style-type: none"> • Yes • No 			X
<p>Patent Number</p>			X
<p>Key Participants:</p> <p>Primary Participant Name (First Name, Middle Name, Last Name) Institution</p> <p>Participant/Contributor 2 Name (First Name, Middle Name, Last Name) Institution</p> <p>Participant/Contributor 3 ...</p>		X	
<p>Description of How CREST/HBCU-RISE Contributed to This Patent</p>			X
<p>Activities</p>			
<p>Activity Title</p>			X
<p>Thrust Area: (Select one)</p> <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ... 		X	

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Staff and Project Participant Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Implementation Characteristics</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Project Outputs</p>
<p>Activity Type: (Select one)</p> <ul style="list-style-type: none"> • Research activities/findings • Education and HR activities/accomplishments • Attracting/attaining/retaining students • Integrating education and research • Working with K—12 students • Facilitating the transfer of knowledge • Developing or purchasing equipment/facilities • Safety activities 			X
Activity Start Date			X
Activity End Date			X
<p>Institutions Involved:</p> <p>Institution 1 (Name, Type, City, State/Region, Country)</p> <p>Institution 2</p> <p>...</p>		X	
<p>Key Participants:</p> <p>Primary Participant</p> <p style="padding-left: 20px;">Name (First Name, Middle Name, Last Name)</p> <p style="padding-left: 20px;">Institution</p> <p>Participant/Contributor 2</p> <p style="padding-left: 20px;">Name (First Name, Middle Name, Last Name)</p> <p style="padding-left: 20px;">Institution</p> <p>Participant/Contributor 3</p> <p>...</p>		X	
Highlights of Outstanding Accomplishments			X
Impact of Activity on Faculty, Students and/or the Scientific Community			X
Description of How CREST/HBCU-RISE Contributed to This Activity			X
Conferences Organized			X
Conference Title			X
Conference Topic			X
<p>Thrust Area: (Select one)</p> <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ... 		X	
Conference Start Date			X
Conference End Date			X

<p style="text-align: center;">Common Collection Categories</p> <p>Questions</p>	<p style="text-align: center;">Staff and Project Participant Characteristics</p>	<p style="text-align: center;">Project Implementation Characteristics</p>	<p style="text-align: center;">Project Outputs</p>
Conference Location: Institution (Name, Type, City, State/Region, Country) OR Conference Location (City, State)			X
Invited Speakers		X	
Undergraduate Participant Count		X	X
Graduate Participant Count		X	X
Postdoc Participant Count		X	X
Faculty Participant Count		X	X
Other Sponsoring Organization(s)		X	
Conference URL			X
Key Participants: Primary Participant Name (First Name, Middle Name, Last Name) Institution Participant/Contributor 2 Name (First Name, Middle Name, Last Name) Institution Participant/Contributor 3 ...		X	
Description of How CREST/HBCU-RISE Contributed to This Conference			X
5. Functional Budget			

**Common
Collection
Categories**

Questions

Budget data by source of support and functional area:

<i>Funds Allocated to</i>	<i>Source</i>								
	<i>NSF CREST</i>	<i>Other NSF</i>	<i>Other Funding</i>	<i>State</i>	<i>Local Government</i>	<i>Industry</i>	<i>University</i>	<i>Other</i>	<i>Total</i>
Education and Outreach									
Thrust 1									
Thrust 2									
...									
CREST/HBCU-RISE Administration									
Education Coordinator									
Outreach and Knowledge Transfer Coordinator									
Total									

**Participant
Characteristics**

**Project
Implementation
Characteristics**

Project Outputs

X

CREST/HBCU-RISE: Number of Respondents, Frequency of Response, and Annual Hour Burden

The estimated average number of annual respondents is 42 (31 CREST center PIs/program coordinators and 11 HBCU-RISE award PIs/program coordinators), with an estimated annual response burden of 1,648 hours. The Web-based data collection is an annual activity of the CREST/HBCU-RISE program. The respondents are either PIs or program coordinators. Generally, one PI or program coordinator per award completes the questionnaire. The estimated annual hour burden per respondent was determined using the burden information reported by respondents from the last two collection cycles.

The burden estimate is outlined below:

Respondent Type	Estimated Average Annual No. of Respondents	Estimated Average Annual Burden Hours Per Respondent	Estimated Annual Burden Hour Total
CREST center PIs/program coordinators	31	45	1,395
HBCU-RISE award PIs/program coordinators	11	23	253
Total	42	39.24	1,648

CREST/HBCU-RISE: Hour Burden Estimates by Each Form and Aggregate Hour Burdens

There is only one form. This form accounts for the entire annual response burden of 1,648 hours. The annual burden by form was calculated as follows:

Form Type	Respondent Type	No. of Respondents	Burden Hours Per Respondent	Total Burden Hours
CREST/HBCU-RISE data collection form	PIs/program coordinators	42	39.24	1,648
Total		42		1,648

CREST/HBCU-RISE: Estimates of Annualized Cost to Respondents for the Hour Burdens

The overall annualized cost to the respondents is estimated to be \$75,812. The following table shows the annualized estimate of cost to PI/program coordinator respondents, who are generally university professors. The estimated hourly rate is based on a report from the American Association of University Professors, “The Annual Report on the Economic Status of the Profession, 2017–18,” Survey Report Table 1. According to this [report](#), the average salary across all academic ranks and across all types of doctoral-granting institutions (public, private-independent, religiously affiliated) was \$95,176. When divided by the number of standard annual work hours (2,080), this calculates to approximately \$46 per hour. That rate and the corresponding total annual cost are indicated in the table below:

Respondent Type	No. of Respondents	Burden Hours Per Respondent	Average Hourly Rate	Estimated Annual Cost
PIs/program coordinators	42	39.24	\$46	\$75,812
Total	42			\$75,812

CREST/HBCU-RISE: Estimates of Costs to the Federal Government

Computing the annualized cost to NSF for the CREST/HBCU-RISE data collection was done by taking the projected budget for the next three years and calculating the cost for each of the following operational activities involved in producing, maintaining, and conducting the data collection:

Operational Activities	Cost Over Three Years
System Development (includes initial development of the database and Web-based application, and later changes requested by the program, e.g., increased reporting tools, additional validations)	\$148,113
System Maintenance, Updates, and Technical Support (system requires updates each year before opening the collection; maintenance is required to keep the system current with technology, e.g., database servers, operating systems)	\$266,603
Data Collection Opening and Support (e.g., online and telephone support to respondents and contacting respondents to encourage completion of the questions), Reporting (as defined by HRD), and Follow-up Activities (e.g., providing data to other consultants)	\$177,735
Three-Year Total for All Operational Activities	\$592,450

The annualized cost was computed as one-third of the total three-year cost; thus, the annualized cost to NSF for the CREST/HBCU-RISE data collection is \$197,483.

CREST/HBCU-RISE: Questions

1. Center/Award Information
Center/Award Name
Street Address 1 Street Address 2 City State ZIP Code
Phone Number
Fax Number
E-mail Address
URL
Number of undergraduate students supported by the CREST center/HBCU-RISE award during the current reporting period
Number of graduate students supported by the CREST center/HBCU-RISE award during the current reporting period
2. Institutions
Institution Name
Type of Institution (Select one) <ul style="list-style-type: none"> • Federal Government • Industry • Local Government • Non-Profit • Other • State Government • University or College
City State/Region Country
3. Participants
Principal Investigator (PI)/Co-Principal Investigator (Co-PI)
Name (First Name, Middle Name, Last Name)
Cited-Only Information Is this person a former participant who is listed only because he or she is cited on a proposal, award, presentation, collaborative project, patent, activity, and/or conference that is listed for the current reporting period? <ul style="list-style-type: none"> • Yes (<i>No other questions in the section are asked.</i>) • No (<i>All other questions in the section are asked. Lead PI's status defaults to No.</i>)

Contact Information: Institution (Name, Type, City, State/Region, Country) Address at Institution City State/Region Country ZIP Code Phone Number Fax Number E-mail Address
Demographic Information
Gender: (Select one) <ul style="list-style-type: none"> • Female • Male • Not Reported
Ethnicity: (Select one) <ul style="list-style-type: none"> • Hispanic or Latino • Not Hispanic or Latino • Not Reported
Race: (Mark one or more) <ul style="list-style-type: none"> • Black or African American • American Indian or Alaska Native • Native Hawaiian or Other Pacific Islander • Asian • White • Not Reported
Disability Status: (Select one) <ul style="list-style-type: none"> • Yes (Select Yes if any of the following apply: <ul style="list-style-type: none"> • Deaf or serious difficulty hearing • Blind or serious difficulty seeing even when wearing glasses • Serious difficulty walking or climbing stairs • Other serious disability related to a physical, mental, or emotional condition) • No • Do Not Wish to Provide
Citizenship: (Select one) <ul style="list-style-type: none"> • U. S. Citizen • Permanent Resident • Other Non-U.S. Citizen • Not Reported
Thrust Areas Mark one or more thrust areas in which this participant participated during the current reporting period: <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ...
Faculty/Postdoc
Name (First Name, Middle Name, Last Name)

Cited-Only Information

Is this person a former participant who is listed only because he or she is cited on a proposal, award, presentation, collaborative project, patent, activity, and/or conference that is listed for the current reporting period?

- Yes (*No other questions in the section are asked.*)
- No (*All other questions in the section are asked.*)

Contact Information:

Institution (Name, Type, City, State/Region, Country)

Academic Rank: (Select one)

- Professor
- Associate Professor
- Assistant Professor
- Instructor or Lecturer
- Postdoctoral Associate
- Not Applicable

Address at Institution

City

State/Region

Country

ZIP Code

Phone Number

Fax Number

E-mail Address

URL

Demographic Information

Gender: (Select one)

- Female
- Male
- Not Reported

Ethnicity: (Select one)

- Hispanic or Latino
- Not Hispanic or Latino
- Not Reported

Race: (Mark one or more)

- Black or African American
- American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander
- Asian
- White
- Not Reported

Disability Status: (Select one)

- Yes (Select Yes if any of the following apply:
 - Deaf or serious difficulty hearing
 - Blind or serious difficulty seeing even when wearing glasses
 - Serious difficulty walking or climbing stairs
 - Other serious disability related to a physical, mental, or emotional condition)
- No
- Do Not Wish to Provide

<p>Citizenship: (Select one)</p> <ul style="list-style-type: none"> • U. S. Citizen • Permanent Resident • Other Non-U.S. Citizen • Not Reported
<p>Thrust Areas</p> <p>Mark one or more thrust areas in which this participant participated during the current reporting period:</p> <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ... • N/A
<p>Support</p> <p>Provide the number of months of direct or indirect support this participant received from the CREST center/HBCU-RISE award during the current reporting period.</p>
<p>Student</p>
<p>Name (First Name, Middle Name, Last Name)</p>
<p>Cited-Only Information</p> <p>Is this person a former participant who is listed only because he or she is cited on a proposal, award, presentation, collaborative project, patent, activity, and/or conference that is listed for the current reporting period?</p> <ul style="list-style-type: none"> • Yes (<i>No other questions in the section are asked.</i>) • No (<i>All other questions in the section are asked.</i>)
<p>Contact Information:</p> <p>Institution (Name, Type, City, State/Region, Country)</p> <p>Address at Institution</p> <p>City</p> <p>State/Region</p> <p>Country</p> <p>ZIP Code</p> <p>Phone Number</p> <p>Fax Number</p> <p>E-mail Address</p> <p>URL</p>
<p>Demographic Information</p>
<p>Gender: (Select one)</p> <ul style="list-style-type: none"> • Female • Male • Not Reported
<p>Ethnicity: (Select one)</p> <ul style="list-style-type: none"> • Hispanic or Latino • Not Hispanic or Latino • Not Reported

<p>Race: (Mark one or more)</p> <ul style="list-style-type: none"> • Black or African American • American Indian or Alaska Native • Native Hawaiian or Other Pacific Islander • Asian • White • Not Reported
<p>Disability Status: (Select one)</p> <ul style="list-style-type: none"> • Yes (Select Yes if any of the following apply: <ul style="list-style-type: none"> • Deaf or serious difficulty hearing • Blind or serious difficulty seeing even when wearing glasses • Serious difficulty walking or climbing stairs • Other serious disability related to a physical, mental, or emotional condition) • No • Do Not Wish to Provide
<p>Citizenship: (Select one)</p> <ul style="list-style-type: none"> • Not Reported • Permanent Resident • Other Non-U.S. Citizen • U. S. Citizen
<p>Thrust Areas Mark one or more thrust areas in which this participant participated during the current reporting period:</p> <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ... • N/A
<p>Student-Specific Information</p> <p>Academic Level as of the September 1 20yy:</p> <ul style="list-style-type: none"> • Graduated between July 1 and Sept. 1 • Graduate Doctorate • Graduate Master's • Graduate Other • Undergraduate Senior • Undergraduate Junior • Undergraduate Sophomore • Undergraduate Freshman • Undergraduate Other

<p>Area of Study: (Select one)</p> <ul style="list-style-type: none"> • Agricultural Sciences • Chemical and Biological Sciences • Computer and Information Sciences • Crosscutting Programs • Education • Engineering • English • Environmental Sciences/Renewable Natural Resources • Geosciences • International • Life Sciences • Mathematics • Natural Sciences • Physical Sciences • Science Statistics • Social, Behavioral Sciences • Other
<p>If the student received a degree during the current reporting period, enter the degree received, area of study, and (for students receiving a master's degree or Ph.D.) title of the thesis or dissertation.</p> <p>Degree Received: (Select one):</p> <ul style="list-style-type: none"> • Bachelor's • Master's • Ph.D. <p>Title of Thesis or Dissertation</p>
<p>Which of the following kinds of financial support did the student receive through the CREST center/HBCU-RISE award during the current reporting period? (Mark one or more):</p> <ul style="list-style-type: none"> • Tuition • Stipend • Other (Please specify): _____ <p>Financial Support Source: (Select one)</p> <ul style="list-style-type: none"> • NSF CREST/HBCU-RISE program • Other (Please specify): _____
<p>Indicate the number of academic terms of support received through the CREST center/HBCU-RISE award during the current reporting period, by type of support:</p> <ul style="list-style-type: none"> • Tuition • Stipend • Other
<p>What was the student's status at the end of the current reporting period? (Mark one or more)</p> <ul style="list-style-type: none"> • Still in the CREST Program • Postdoctoral Position • Faculty Appointment • Research Appointment • Employment in Private Industry • Employment in Public Industry • Employment in K-12 Schools • Other (Please specify) _____
<p>Other Personnel</p>
<p>Name (First Name, Middle Name, Last Name)</p>

<p>Cited-Only Information</p> <p>Is this person a former participant who is listed only because he or she is cited on a proposal, award, presentation, collaborative project, patent, activity, and/or conference that is listed for the current reporting period?</p> <ul style="list-style-type: none"> • Yes (<i>No other questions in the section are asked.</i>) • No (<i>All other questions in the section are asked.</i>)
<p>Contact Information:</p> <p>Institution (Name, Type, City, State/Region, Country)</p> <p>Phone</p> <p>Fax</p> <p>E-mail Address</p>
<p>Mark this checkbox if this individual fulfills the definition of a CREST participant (i.e., any individual who received the equivalent of at least one month's salary from the CREST project during the current reporting period).</p>
<p>Demographic Information</p>
<p>Gender: (Select one)</p> <ul style="list-style-type: none"> • Female • Male • Not Reported
<p>Ethnicity: (Select one)</p> <ul style="list-style-type: none"> • Hispanic or Latino • Not Hispanic or Latino • Not Reported
<p>Race: (Mark one or more)</p> <ul style="list-style-type: none"> • Black or African American • American Indian or Alaska Native • Native Hawaiian or Other Pacific Islander • Asian • White • Not Reported
<p>Disability Status: (Select one)</p> <ul style="list-style-type: none"> • Yes (Select Yes if any of the following apply: <ul style="list-style-type: none"> • Deaf or serious difficulty hearing • Blind or serious difficulty seeing even when wearing glasses • Serious difficulty walking or climbing stairs • Other serious disability related to a physical, mental, or emotional condition) • No • Do Not Wish to Provide
<p>Citizenship (Select one):</p> <ul style="list-style-type: none"> • Not Reported • Permanent Resident • Other Non-U.S. Citizen • U. S. Citizen
<p>Thrust Areas</p> <p>Mark one or more thrust areas in which this participant participated during the current reporting period:</p> <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ... • N/A

Contributor
Name (First Name, Middle Name, Last Name)
Contact Information: Institution (Name, Type, City, State/Region, Country)
4. Accomplishments
Proposals/Awards
Status <ul style="list-style-type: none"> • Proposal • Award
Title
Thrust Area: (Select one) <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ...
Funding Source Type: (Select one) <ul style="list-style-type: none"> • Federal • State • University • Industry • Foundation • Other
Funding Source Name
Was this an NSF funding source? (Select one) <ul style="list-style-type: none"> • Yes • No
Type of Award: (Select one) <ul style="list-style-type: none"> • Research • Education • Other
Center Award Amount (for Awards only)
Grant Award Amount (for Awards only)
Key Participants: <ul style="list-style-type: none"> Primary Participant <ul style="list-style-type: none"> Name (First Name, Middle Name, Last Name) Institution Participant/Contributor 2 <ul style="list-style-type: none"> Name (First Name, Middle Name, Last Name) Institution Participant/Contributor 3 ...
Description of How CREST/HBCU-RSE Contributed to This Accomplishment
Presentations
Presentation Title

<p>Thrust Area (Select one)</p> <ul style="list-style-type: none"> • Education and Outreach • Thrust 1 • Thrust 2 • ...
<p>Presentation Location Institution (Name, Type, City, State/Region, Country)</p> <p>OR</p> <p>Conference Name Conference Location (City, State)</p>
<p>Approximate Audience Size</p>
<p>Presentation Date</p>
<p>Key Participants:</p> <p>Primary Participant Name (First Name, Middle Name, Last Name) Institution</p> <p>Participant/Contributor 2 Name (First Name, Middle Name, Last Name) Institution</p> <p>Participant/Contributor 3 ...</p>
<p>Description of How CREST/HBCU-RISE Contributed to This Presentation</p>
<p>Publications</p>
<p>Publication Title</p>
<p>Thrust Area (Select one)</p> <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ...
<p>Publication Name</p>
<p>Publication Type: (Select one)</p> <ul style="list-style-type: none"> • Book chapter or textbook • Article in refereed journal • Article in public proceedings
<p>Status of Publication: (Select one)</p> <ul style="list-style-type: none"> • Accepted, Awaiting Publication • Other (Please specify): _____ • Published (Volume, Year) • Submitted, Under Review
<p>Citation: Page Number URL Other Citation</p>

<p>Key Participants:</p> <p>Primary Participant Name (First Name, Middle Name, Last Name) Institution</p> <p>Participant/Contributor 2 Name (First Name, Middle Name, Last Name) Institution</p> <p>Participant/Contributor 3 ...</p>
Description of How CREST/HBCU-RISE Contributed to This Publication
Collaborative Projects
Collaborative Project Title
<p>Thrust Area (Select one)</p> <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ...
<p>Key Participants:</p> <p>Primary Participant Name (First Name, Middle Name, Last Name) Institution</p> <p>Participant/Contributor 2 Name (First Name, Middle Name, Last Name) Institution</p> <p>Participant/Contributor 3 ...</p>
Description of How CREST/HBCU-RISE Contributed to This Collaborative Project

Collaborative Partner(s):

Institution 1 (Name, Type, City, State/Region, Country)

Funding Source: (Mark one or more)

- Federal
- State
- University
- Industry
- Other (Please specify): _____

NSF Programs Related to This Partner: (Mark one or more)

(for institution type=University only)

<i>NSF Program</i>	<i>Center Name</i>
Centers for Learning and Teaching (CLT)	
Centers for Ocean Science Education Excellence (COSEE)	
Chemical Bonding Centers (CBC)	
Engineering Research Centers (ERC)	
Industry/University Cooperative Research Centers Program (I/UCRC)	
Materials Research Science and Engineering Centers (MRSEC)	
Science of Learning Centers (SLC)	
Science and Technology Centers (STC)	
Partnerships for Research and Education in Materials (PREM)	
Integrative Graduate Education Traineeship Program (IGERT)	
Alliances for Graduate Education and the Professoriate (AGEP)	

Institution 2

...

Did the collaboration provide research for undergraduates? (Select one)

- Yes
- No

Research for graduates? (Select one)

- Yes
- No

Research for postdocs? (Select one)

- Yes
- No

Is this collaboration international? (Select one)

- Yes
- No

If yes, was this collaboration planned as a part of your proposal or developed later during the award period? (Select one)

- Proposal
- Award period

Patents

Patent Title
Thrust Area: (Select one) <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ...
Year Submitted
Application Number
Allowed: (Select one) <ul style="list-style-type: none"> • Yes • No
Patent Number
Key Participants: <ul style="list-style-type: none"> Primary Participant <ul style="list-style-type: none"> Name (First Name, Middle Name, Last Name) Institution Participant/Contributor 2 <ul style="list-style-type: none"> Name (First Name, Middle Name, Last Name) Institution Participant/Contributor 3 ...
Description of How CREST/HBCU-RISE Contributed to This Patent
Activities
Activity Title
Thrust Area: (Select one) <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ...
Activity Type: (Select one) <ul style="list-style-type: none"> • Research activities/findings • Education and HR activities/accomplishments • Attracting/attaining/retaining students • Integrating education and research • Working with K—12 students • Facilitating the transfer of knowledge • Developing or purchasing equipment/facilities • Safety activities
Activity Start Date
Activity End Date
Institutions Involved: <ul style="list-style-type: none"> Institution 1 (Name, Type, City, State/Region, Country) Institution 2 ...

<p>Key Participants:</p> <p>Primary Participant Name (First Name, Middle Name, Last Name) Institution</p> <p>Participant/Contributor 2 Name (First Name, Middle Name, Last Name) Institution</p> <p>Participant/Contributor 3 ... </p>
Highlights of Outstanding Accomplishments
Impact of Activity on Faculty, Students and/or the Scientific Community
Description of How CREST/HBCU-RISE Contributed to This Activity
Conferences Organized
Conference Title
Conference Topic
Thrust Area: (Select one) <ul style="list-style-type: none"> • Education and Outreach • Thrust Area 1 • Thrust Area 2 • ...
Conference Start Date
Conference End Date
Conference Location: Institution (Name, Type, City, State/Region, Country)
OR
Conference Location (City, State)
Invited Speakers
Undergraduate Participant Count
Graduate Participant Count
Postdoc Participant Count
Faculty Participant Count
Other Sponsoring Organization(s)
Conference URL
Key Participants: <p>Primary Participant Name (First Name, Middle Name, Last Name) Institution</p> <p>Participant/Contributor 2 Name (First Name, Middle Name, Last Name) Institution</p> <p>Participant/Contributor 3 ... </p>
Description of How CREST/HBCU-RISE Contributed to This Conference

5. Functional Budget

Budget data by source of support and functional area:

<i>Funds Allocated to</i>	<i>Source</i>								
	<i>NSF CREST</i>	<i>Other NSF</i>	<i>Other</i>	<i>State</i>	<i>Local</i>	<i>Industry</i>	<i>University</i>	<i>Other</i>	<i>Total</i>
Education and Outreach									
Thrust 1									
Thrust 2									
...									
CREST/HBCU-RISE Administration									
Education Coordinator									
Outreach and Knowledge Transfer Coordinator									
Total									