SF-424 Research and Related (R&R) Forms OMB Control Number 4040-0001

60-Day Federal Register Notice Period for Comments

The below table is an aggregation of comments received over the 60-day Comment period for the SF-424 Research and Related Form Family (4040-0001). Comments were received from the public, Federal agencies, and the Federal Demonstration Partnership.

ID	Form	Comment
1	SF424 (R&R) Application for Federal Assistance (Cover)	Addition of the State field to the "Person to be contacted on matters involving this application" section - To be consistent with the state field in other sections of the form and to prevent issues that could potentially cause another form update, this field should be conditionally required. It should only be required if the country is U.S., otherwise non-required
2	SF424 (R&R) Application for Federal Assistance (Cover)	Addition of the Zip/Postal Code field to the "Person to be contacted on matters involving this application" section - To be consistent with the state field in other sections of the form and to prevent issues that could potentially cause another form update, this field should be conditionally required. It should only be required if the country is U.S., otherwise non-required.
3	SF424 (R&R) Application for Federal Assistance (Cover)	FDP/JAD Recommendation: Business rules for the new fields should be consistent with the rules that are currently enforced for similar fields used in other sections of the R&R Cover Component, as noted here: Addition of the State and Province fields – The State field should be required if the country is USA; otherwise it should be optional. The Province field should be required if the country is Canada; otherwise it should be optional.
4	SF424 (R&R) Application for Federal Assistance (Cover)	Addition of the Zip Code field – The business rules for the new field should be consistent with the rules for the existing zip code fields included in other sections of the R&R Cover Component. The use of an extended zip code in our submitted xml should also be enforced, as is done on the Adobe forms themselves.
5	SF424 (R&R) Application for Federal Assistance (Cover)	Proposed New Attachment (Field 21) - Added new attachment slot for a Cover Letter Attachment. FDP/JAD Recommendation: Given the addition of this new attachment, the PHS Cover Letter form is no longer required and should be eliminated from the MetaGrantApplication schema (after allowing for a suitable transition period).

ID	Form	Comment
6	SF424 (R&R) Application for Federal Assistance (Cover)	On the SF-424 R&R Application for Federal Assistance form, HRSA recommends adding a section regarding delinquent debt similar to item 20 on the SF-424 (regular family form).
7	SF424 (R&R) Application for Federal Assistance (Cover)	Proposed New Field 3 – Added new field for tracking the Areas of Research. FDP/JAD Comment: If the field is to be used to ensure that the application is routed to the correct person/area within the agency, we suggest the existing Com9etition Id field (included in the Grant Submission header) or the Agency Routing Identifier (Field 4.b on the R&R Cover Component) could be used for this purpose.
8	R&R Other Project Information form	Change to existing field label 4.a. from "Does this project have an actual or potential impact on the environment?" to "Does this Project Have an Actual or Potential Impact - positive or negative - on the environment?" - A better format for this label would be "Does this project have an actual or potential impact on the environment? (Positive or negative impact)".
9	R&R Other Project Information form	Change to existing field label 4.b. from "If yes, please explain" to "If yes, please explain - Enter an explanation for the actual or potential impact (whether positive or negative) on the environment" - A better format for this label would be "If yes, please explain. (Enter an explanation for the actual or potential impact on the environment, whether the impact is positive or negative.)"

ID	Form	Comment
10	R&R Other Project Information form	Proposed New Field 1.d. – Added new question for indicating whether this is a clinical trial. FDP/JAD Recommendation: We recommend that the Agency-Defined Phase III Clinical Trial question and the Human Embryonic Stem Cells question (and its related Cell line fields) be moved from the PHS 398 Cover Page Supplement (an agency-specific form) to the R&R Other Project Information template. By doing this, an entire agency-specific form could be eliminated. We understand that current policy is to require that any information included on a government-wide R&R form be used by more than one agency. We further recognize that some guidance must be provided for determining what is in and what is out for the government-wide forms. When considering the overall burden associated with supporting an agency-specific form, the savings to be gained by its elimination justifies that an exception to the rule be made in this particular instance.
11	R&R Other Project Information form	Change to existing field label 4.a. – Change from "Does this project have an actual or potential impact on the environment?" to "Does this Project Have an Actual or Potential Impact - positive or negative - on the environment?" FDP/JAD Recommendation: - Change the label to "Does this project have an actual or potential impact on the environment (either positive or negative)?"
12	R&R Other Project Information form	Change to existing field label 4.b. – Change from "If yes, please explain" to "If yes, please explain - Enter an explanation for the actual or potential impact (whether positive or negative) on the environment" FDP/JAD Recommendation: - Change the label to "If yes, please enter an explanation for the actual or potential impact on the environment (whether the impact is positive or negative)."

ID	Form	Comment
13	SF-424 R&R Project/Performance Site Location	The current instructions for the Congressional District field instruct users to enter values that result in invalid congressional districts (e.g., NC-ALL, 00-000, US-ALL, etc.). Given that the congressional district will be used for FFATA reporting, it seems counter productive to instruct users to provide invalid congressional districts. There has also been some indication that agencies plan to validate the extended zip code included on the Project/Performance Site template against the provided street address, citing FFATA compliance as justification for doing so. FDP/JAD Recommendation: Overall burden could be significantly reduced if a standardized method for reporting valid Congressional Districts was incorporated into the accompanying .DAT file. No deviations to how the field is populated, based on individual agency preferences, should be allowed. The SF424 Application Guide should also be changed to instruct users to enter valid congressional districts only. We further recommend that better guidance be provided on the correct usage of these fields for FFATA reporting and ask that such guidance be in-line with that provided on all other government-wide forms.
14	SF-424 R&R Budget (General Comment)	On the Research & Related Budget forms, please increase the character length on Section E. Participant/Trainee Support Costs box for the "Number of Participants/Trainees." The field is currently limited to three characters—so HRSA applicants attempting to enter a value greater than 999 Participants/Trainees find their applications "rejected for errors."
15	General Comment	The division and department names are entirely too short at 30 characters. In my experience, 30-40% of the names in user are longer than the allowed length. I think 128 characters would capture most names.

Multiple Form Versions

SF-424 Research and Related Budget Forms

Currently multiple budget forms exist within the R&R Form Family that contain exactly the same data fields. These forms differ only in the number of iterations allowed for the data collection (i.e., 5-year vs. 10-year budgets, 10 vs. 30 Subaward attachments).

The creation of new forms that serve no purpose other than to limit the number of allowable repeating loops (or iterations), as described above, imposes significant burden on those institutions/vendors within the S2S community that are called

upon to support those forms. Better ways of controlling the number of allowable iterations, while still accommodating individual agency practices, are suggested below in recommendations #2 and #3.

The R&R form family could be streamlined by eliminating the 5-year and 10-attachment budget forms after providing a suitable transition period to allow agencies and applicants to move to the remaining forms. By eliminating the redundant forms shown below, the number of budget-related forms could be reduced from 12 to 4.

SF-424 R&R Senior/Key Person Expanded Form

Multiple versions of the Senior/Key Person Expanded form also exist that differ only in the number of iterations allowed for key personnel (i.e., 8 vs 40-person).

The Senior/Key Person component could also be streamlined by removing the 8-person versions of the form, as shown below, thus reducing the number of supported forms from 3 to 1.

The savings entailed by eliminating these duplicative forms would be considerable to both Grants.gov and the applicant community

Redundant/Duplicative Forms

Form to be eliminated	Recommendation	Burden Reduction	Additional Recommendation
Research & Related Budget (5 yr)	Replace with Research & Related Budget 10YR version.	Reduces the number of supported forms from 2 to 1	# of years accepted by a specific FOA (5 vs. 10) could be controlled by the addition of an agency-defined parameter, thus eliminating the need to maintain separate forms that comply with agency-specific policy
RR FedNonFed Budget (5 yr)	Replace with RR FedNonFed Budget 10YR.	Reduces the number of supported forms from 2 to 1	See recommendation above
R & R Subaward Budget Attachment(s) Form (5 yr, 10 attachment)	* Replace with R & R Subaward Budget Attachment(s) Form 10 YR 30 ATT version. Note: This would reduce the number of supported forms from 4 to 1. Note: If the 5-year version must be retained, replace instead with R & R Subaward Budget Attachment(s) Form 5 YR 30 ATT version.	* Reduces the number of supported forms from 4 to 1 Note: If a 5-year version must be retained, we could still reduce the number of supported forms from 4 to 2 by eliminating the 10 attachment versions.	# of years and # of attachments accepted by a specific FOA could be controlled by the addition of 2 new agency-defined parameters, thus eliminating the need to maintain separate forms that comply with agency-specific policy

Form to be eliminated	Recommendation	Burden Reduction	Additional Recommendation
R & R Subaward Budget Attachment(s) Form 5 YR 30 ATT	* Replace with R & R Subaward Budget Attachment(s) Form 10 YR 30 ATT version.		See recommendation above
R & R Subaward Budget Attachment Form 10 YR 10 ATT	* Replace with R & R Subaward Budget Attachment(s) Form 10 YR 30 ATT version.		See recommendation above
R & R Subaward Budget (Total Fed + Non-Fed) Attachment(s) Form (5 yr, 10 attachment)	** Replace with R & R Subaward Budget (Total Fed + Non-Fed) Attachment(s) Form 10 YR 30 ATT version. Note: If the 5-year version must be retained, replace instead with R & R Subaward Budget (Total Fed + Non-Fed) Attachment(s) Form 5 YR 30 ATT version.	** Reduces the number of supported Fed + Non-Fed Subaward forms from 4 to 1 Note: If a 5-year version must be retained, we could still reduce the number of supported forms from 4 to 2 by eliminating the 10 attachment versions.	See recommendation above
R & R Subaward Budget (Total Fed + Non-Fed) Attachment(s) Form 5 YR 30 ATT	** Replace with R & R Subaward Budget (Total Fed + Non-Fed) Attachment(s) Form 10 YR 30 ATT version.		See recommendation above
R & R Subaward Budget (Total Fed + Non-Fed) Attachment Form 10 YR 10 ATT	** Replace with R & R Subaward Budget (Total Fed + Non-Fed) Attachment(s) Form 10 YR 30 ATT version.		See recommendation above
Research & Related Senior/Key Person Profile (8 person) and R&R Senior/Key Person Expanded (8 person)	Replace with Research And Related Senior/Key Person Profile (Expanded) (40 person version)	Reduces the number of supported forms from 3 to 1	

FDP/JAD Recommendation

- 1. Reduce the number of forms that differ only in the number of budget periods and/or iterations allowed for the same data collection by eliminating the forms shown above.
- 2. To be consistent, change 'Year' to 'Period' across all applicable budget forms (i.e., change the wording on the '10 Year R&R Subaward Budget Attachment(s) Form' to '10 Period R&R Subaward Budget Attachment(s) Form').
- 3. Add New Parameters to R&R Budget forms: As long as multiple budget forms exist, agencies will continue to choose the 5-period versions of the forms for

- most FOAs so as to avoid the perception that more budget periods are allowed. They will also continue to choose the 10 attachment Subaward versions to discourage the perception that larger applications are okay. A better and less burdensome approach would be to add a couple of new parameters that could be set by the agencies to control the number of allowable periods and/or Subaward attachments for that specific FOA.
- 4. Allow agencies to pass in the maximum number of periods as well as the maximum number of Subaward attachments allowed by the opportunity. Grants.gov could then use these agency-defined parameters to restrict the number of budget periods and the number of attachments by dynamically updating the Max Allowed. This would eliminate the need to maintain multiple versions of the same form, while still accommodating agency-specific requirements.

Older Forms used by active funding opportunities

Older forms are often used on active funding opportunities, even though newer versions of each form exist. The continued use of these older forms significantly adds to the burden of the research community given that we must maintain and test 2 (and sometimes 3) versions of each form. When you factor in the additional time required to train faculty on the use of these different versions, the burden continues to mount (i.e., original burden of x hours is now x hours times 2 or 3 for each change made to an existing form).

Note: It should also be emphasized that the retention of these older forms also places an undue burden on Grants.gov staff.

Examples of older forms that are being used on active FOAs

Form to be retired	Justification for their retirement
Attachments-V1.0	Replaced by Attachments-V1.1
R&R Budget-V1.0	Replaced by R&R Budget-V1.1
RR_KeyPerson-V1.1	Replaced by RR_KeyPersonExpanded_1_2-V1.2
RR_OtherProjectInfo-V1.1	Replaced by RR_OtherProjectInfo_1_3-V1.3
RR_OtherProjectInfo_1_2-V1.2	Replaced by RR_OtherProjectInfo_1_3-V1.3
RR_PerformanceSite-V1.1	Replaced by PerformanceSite_1_4-V1.4
PerformanceSite_1_2-V1.2	Replaced by PerformanceSite_1_4-V1.4
RR_SF424-V1.1	Replaced by RR_SF424_1_2-V1.2

The R&R Form Family could be further streamlined if these older, obsolete forms were no longer available for use. By retiring the older forms identified above we could substantially reduce the burden placed on our S2S systems by eliminating the need to maintain and test the code necessary to support these older forms.

FDP/JAD Recommendation

- 1. A clearly defined process for retiring older forms should be established. As a part of this process, older forms should be eliminated from the MetaGrantApplication schema as newer versions of the same form are implemented (after allowing for a suitable transition period to give agencies and applicants time to move to the new form). This would ensure that agencies could no longer use older forms in active FOAs and eliminate the need for our S2S systems to continue to support them, substantially reducing our testing and training burden.
 - a. Note: Grants.gov would also need to provide an easier, less burdensome way for agencies to search for older forms in open FOAs and replace those forms with their newer counterparts.

Comments On Non-SF-424 R&R (4040-0001) Forms

PHS Cover Letter form (agency-specific)

FDP/JAD Recommendation

1. Form should be eliminated at the conclusion of a suitable transition period to allow agencies and applicants time to move to the new SF424 R&R Cover Component which contains a new field for attaching the Cover Letter (Item 21).

PHS Cover Page Supplement form (agency-specific)

FDP/JAD Recommendation

1. Move the Phase III Clinical Trial and Human Embryonic Stem Cell questions (and the associated cell line fields) to the Other Project Info template. By moving these fields, the entire PHS Cover Page Supplement could be eliminated, resulting in a significant reduction in burden to the S2S community. See the R&R Other Project Information section for further information about this recommendation.

Disclosure of Lobbying Activities (SF-LLL) form (agency specific)

FDP/JAD Recommendation

1. Form should be eliminated since an attachment slot for SF-LLL is included on the SF424 R&R Cover Component (Item 18).

Additional Technical Recommendations

Eliminate Schema Inconsistencies and Adopt Best Practices

A considerable burden is placed on the applicant community by the use of inconsistent schemas and inconsistent values. For applicants who submit via the

Adobe forms, this increase in burden takes the form of additional training time. For the S2S community the additional burden results from the need to maintain and test customized code and inhibits our ability to re-use existing code.

Schema inconsistencies

In many instances the S2S schemas are constructed in inconsistent ways. Several examples are cited here:

- 1. R&R 5-year Budget vs. R&R 10-year Budget In the 5-year version, the budget periods are hard coded; in the 10-year version they are not (preferable). This is apparently a carry-over from the PureEdge days and should get better over time given that GDITs current approach is to use the looping structure (which we prefer). It should be noted, however, that these inconsistencies in the schema add to the burden of maintaining and testing our S2S code.
- 2. Attachments v1.1 and Other v1.1 Both forms are in the SF424 R&R form set and both serve essentially the same purpose. Each uses different narrative types and the syntax of each is different:
 - Attachments allows 0 to 15 attachments
 - Other allows 0 to 100 attachments
 - One uses att1, att2, att3, etc. and the other uses a looping structure.
- 3. For the R&R Budgets, we see the following variations:

```
RR_Budget-V1.1 (each budget period is explicitly defined)
```

```
<xs:element name="BudgetYear1"</pre>
```

```
type="RR_Budget:BudgetYear1DataType"/>
```

<xs:element name="BudgetYear2" type="RR_Budget:BudgetYearDataType"
minOccurs="0"/>

<xs:element name="BudgetYear3" type="RR_Budget:BudgetYearDataType"
minOccurs="0"/>

<xs:element name="BudgetYear4" type="RR_Budget:BudgetYearDataType"
minOccurs="0"/>

<xs:element name="BudgetYear5" type="RR_Budget:BudgetYearDataType"
minOccurs="0"/>

While subaward budgets use:

```
RR_SubAwardBudget-V1.2 – supports up to 10 RR_Budgets 
<xs:element ref="RR_Budget:RR_Budget" minOccurs="0" maxOccurs="10"/>
```

The problem with this inconsistent approach is that users cannot see all the differences in a subaward. So they inadvertently grab an old subaward budget and try to submit it with another form that uses the other tagging method.

Inconsistencies in tag names and valid field values

There are also many instances where inconsistent values and/or tag names are used across forms (e.g., R&R Personal Data uses a different set of Citizenship values than does the PHS Fellowship Supplement). We realize that the values used in the .DAT

files come from the agencies and that Grants.gov does not have the leeway to change the provided values. However, Grants.gov could point out to the agencies involved that inconsistent values are being used, thus adding to the overall burden. The use of these inconsistent values again leads to increased coding and testing time in our S2S code and imposes an additional training burden on applicants who use the Adobe forms.

Examples of inconsistencies in the tag names and valid values

	Examples of inconsistencies in the tag names and values					
No.	Field	R&R Form	Tag Name/Valid Values	Comments		
1.	Citizenship field	R&R Personal Data	 US Citizen Permanent Resident Other non-US Citizen Do Not Wish to Provide 	Citizenship		
		PHS 398 Fellowship and PHS Career Award Supplement	 U.S. Citizen or noncitizen national Permanent Resident of U.S. Permanent Resident of U.S. Pending Non-US Citizen with temporary visa 	values are different across forms		
2.	Ethnicity field	R&R Personal Data	Do Not Wish To Provide option is inconsistent from all the other tags included on the form (i.e., 'to' is lowercase for all the other tags)	Difference in case		
		PHS 398 Fellowship	Tagname is ResourceSharingPlan			
3.	Resource Sharing Plans tag name	PHS 398 Research Plan and PHS Career Award Supplement	Tagname is ResourceSharingPlans	Difference in tag name		
	Targeted/Planned Enrollment tag name	PHS 398 Research Plan	Tagname is TargetedPlannedEnrollmentTable	D:#		
4.		PHS 398 Fellowship and PHS Career Award Supplement	Tagname is TargetedPlannedEnrollment	Difference in tag name		
5.	Degree field	R&R Senior/Key Person Expanded	Allows string between 1 and 75 characters	Free form entry as opposed to pre-defined list		
		NSF Cover page template	Uses its own defined list of degrees	NSF list is different from		
		PHS 398 Fellowship	Uses its own defined list of degrees – maximum of 50 characters	the one below (although there is considerable overlap between the two lists)		

Country list not always current

The Country list included in the Meta schema is not always current. Consequently, new countries might not be included. This makes it difficult to accurately report on international collaborations.

FDP/JAD Recommendation

- 1. Grants.gov should work with the JAD team to establish documented standards that are based on industry-wide best practices. Once established, Grants.gov staff should ensure that GDIT and any other contracting organizations with which they work enforce the use of these documented standards. When new forms/schemas are proposed, Grants.gov should leverage off of the collaborative partnership that has been established with JAD by asking that JAD resources review proposed forms/schemas for consistency and accuracy (to identify misspellings, use of inconsistent values, etc). Not only would this reduce the burden placed on Grants.gov staff, it would also reduce the burden that is currently imposed on the S2S community as a result of these inconsistencies.
 - a. Note: While outside the purview of Grants.gov, adoption of these established standards by all the federal agencies would further reduce the overall burden to the S2S community by eliminating the need for us to customize our S2S code to meet agency-specific expectations in terms of how our submitted xml is structured (i.e., valid xml should be recognized as such, regardless of internal procedures used to process our submitted xml).
- 2. Identify an official source to be used for maintaining standardized lists of State and Country codes, as well as for Citizenship data. We also recommend that the Country list be updated more frequently than once a year to ensure that new countries are added in a timely manner.

Adobe Forms and Schema dependencies

Every now and then a new version of an existing form (and its associated schema) is created when there is really no difference in the schema itself (except for the form version). This usually happens when Grants.gov releases a fix to correct problems in the underlying business rules associated with an existing Adobe form. Nevertheless, the S2S community must treat these new versions as if they were an entirely new schema. This places an unnecessary burden on the S2S community by requiring that we maintain and test what is essentially duplicate code.

FDP/JAD Recommendation

Ideally, newer versions of existing schemas should only be created if there are
actual changes to the schema itself (i.e., the addition or deletion of fields or
functional changes). We realize that this might be problematic for agencies since
they may rely on the different form versions in order to know how to handle the
difference in form functionality. For S2S, the additional burden associated with
changes to the version when no schema changes have been made could be easily
offset by more timely removal of older forms from the MetaGrantApplication
schema.

Different Rules Applied to Adobe Forms and the S2S Schemas

In some instances there are differences between the business rules that are enforced on the Adobe forms and those that are enforced by the schemas. These differences can cause our S2S submissions to fail once they reach the agency. We then have to go back and change our code – even though it is valid according to the schema. To prevent this, the same business rules should be applied to both the forms and the schemas. A couple of examples of where different rules are applied are shown here:

• On the SF424 R&R Cover Component and the Project/Performance Site form, the DUNS Number entered on the Adobe forms must be *exactly* 9 or 13 digits (no special characters or letters are allowed, nor does it allow 11-12 digits). In the S2S schema, the DUNS Number tag allows any string that is between 9 and 13 characters (including special characters and letters).

On the R&R Adobe forms, if the Country is USA the zip code must be a minimum of nine-digits. In the S2S schemas, this nine-digit minimum is not enforced.