

Succeeding in Academia – Selecting and Applying for Grant Funding

COLLEGE of
AGRICULTURE and
APPLIED SCIENCES

UtahStateUniversity



Today

- Grant funding purposes
- Internal vs. external funding
- Finding funding opportunities
- How much funding is needed?
- Grant proposal life cycle
- Grant life cycle
- Grant proposal success strategies
- USU proposal resources
- Examples
- Project design – Logic models



Grant Funding Purposes

- Fund research
 - Primary data collection - Surveys, experiments, etc.
 - Purchase data from outside sources
 - Graduate student research - Stipend, insurance, tuition....
- Fund Extension programming
 - Program assistance – program coordinator or assistant – salary , benefits
 - Collect data, needs assessments, etc.
 - Program travel in state or nationally
- Other
 - Conference or other work-related travel
 - Needed equipment, tools or software
 - Publication costs, printing, etc.



Internal vs. External Funding

- Internal funding
 - Grants available from your institution
 - Department, college, or university level
- USU has several internal grants available
 - CAAS research, Extension, and focused (water funding)
 - <https://extension.usu.edu/employee/grants/index>
 - <https://caas.usu.edu/uaes/internal-resources/project-support>
 - USU seed grants
 - <https://research.usu.edu/rd/funding/seed-grants>



External Funding

- Grants from outside of your institution
 - Local, state, and federal governments and their agencies
 - USDA, NSF, NIH
 - Foundations
 - Ford Foundation, Pew Charitable Trust, etc.
 - International organizations
- Indirect costs
 - When you receive an external grant, your institution collects indirect costs of 30-60% of the grant amount
 - If you need \$100,000 to conduct the research, you must request \$160,000 in funding
 - Indirect costs are to pay for office space, phone, labs, equipment, etc.
 - Economists need very little, a desk and a laptop
 - Indirect costs can be lowered if the research is conducted off campus or considered a sponsored activity



USU's Current Indirect Rates

Type	Effective Period Dates	Rate(%)	Location	Applicable To
Prov.	07/01/2023 - 06/30/2026	46.00	On-Campus	Organized Research
Prov.	07/01/2023 - 06/30/2026	21.30	Off-Campus	Organized Research
Prov.	07/01/2023 - 06/30/2026	50.20	On-Campus	Instruction
Prov.	07/01/2023 - 06/30/2026	26.00	Off-Campus	Instruction
Prov.	07/01/2023 - 06/30/2026	27.80	On-Campus	Other Sponsored Activities
Prov.	07/01/2023 - 06/30/2026	21.80	Off-Campus	Other Sponsored Activities



Finding Funding Opportunities

- University/institution websites and college newsletters
 - CAAS and Extension send out regular funding announcements
 - USU send out by weekly “Funding Frontiers” newsletter
- US Federal grants at grants.gov
 - <https://www.grants.gov>
- State or local agencies
 - Utah Department of Ag and Food (UDAF)
 - <https://ag.utah.gov/grants/>
- International organizations
 - Examples include Bloomberg Philanthropies, Howard G. Buffett Foundation, Susan Thompson Buffett Foundation, Ford Foundation, Gates Foundation, Helmsley Charitable Trust, William and Flora Hewlett Foundation, Mastercard Foundation, Rockefeller Foundation



[appec-faculty] CAAS Research Funding Update (10/5/2023)



appec-faculty-request@lists.usu.edu <appec-faculty-request@lists.usu.edu> on behalf of

Bonnie <bonnie.schenk-darrington@usu.edu>

To: appec-faculty@lists.usu.edu

Friday, Oct 6, 2023

You can download the memo [here](#).

Funding Opportunities

[Undergraduate Research and Creative Opportunities](#)

The Undergraduate Research and Creative Opportunities Grant provides money for undergraduate students to conduct independent and faculty-mentored research across all disciplines. The URCO program includes a scholarship and funding for project expenses. Please reach out to your undergrad students and/or consider mentoring an undergrad in an URCO project. Applications are due October 15, 2023.

[Forrest E. Mars, Jr., Chocolate History Grant](#)

The Forrest E. Mars, Jr., Chocolate History Grant has a special emphasis on uncovering and sharing chocolate's role in global history, as well as its influence on heritage and culture. Grant funds will be awarded for project(s) that investigate and/or educate on the history of chocolate and/or the chocolate making process, as well as the anticipated audience reach. The scholarship process is competitive, and the awards will be made based on merit as judged by a panel of experts. The educational impact will be at the forefront of this decision process, as will attention to equity, inclusion, and diversity in the proposal. Applications are due October 28, 2023.

[NSF Research Traineeship](#)

The NRT program seeks proposals that explore ways for graduate students in

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UDAF Grants



The Utah Department of Agriculture and Food administers several grants to help further the development of the state's agricultural industries. Information on open grants and previous grant programs can be found below.

OPEN GRANTS:

[Utah Grazing Improvement Program Grant](#)



How much funding is needed?

- Are grants an input or an output in your research process?
 - Input to conducting research
 - Output in terms of needed to secure university promotion/tenure
- How excited are you about the research project? And how excited can you remain about it without working on it for a few months?
 - Grants often dictate research areas/questions
- Are there other ways to answer the research question at hand which do not require grant funding?
 - Or are there other research questions you could answer instead?
- How much do you like managing finances, human resources, or both?
 - Manage grant funding, employees on the project, etc.
- How much do you like managing people?
 - Group project management, dealing with conflict, etc.



Grant (Proposal) Life Cycle

- Pre-proposal stage 1
 - Speak with SPO (sponsored programs office) about your plans
- Pre-proposal stage 2
 - Read every detail of the RFA (request for applications) and required documents
 - Underline/highlight important sections
 - What will be required and when? Timeline
 - What do previously funded projects look like? Read past accepted applications.
 - Is your project appropriate? Goals or priorities of the grantor
- Set your budget
 - Collaborator list and funding needs
 - Determines scope of work (SOW) that can be accomplished
 - May provide faculty/student salary or fund course teaching buyouts
 - Understand what cost items are not allowed per the RFA
 - Tuition, meals, etc.



Sample Grant Budget

REQUESTED FUNDING -- PROPOSAL BUDGET TEMPLATE

USU - VP FOR RESEARCH & GRADUATE STUDIES ~ DIVISION OF SPONSORED PROGRAMS

1415 Old Main Hill ~ Room 64, Logan, UT 84322-1415 : Phone (435) 797-1226 ~ Fax (435) 797-3543 ~ sponsoredprograms@usu.edu

Please fill in the applicable yellow &/or blue cells and then email your proposed budget(s) to Sponsored Programs with all other proposal documentation.

Revised: 07/10/2017

USU Control Number:
Principal Investigator:
Agency / Sponsor:

Kuall
Kynda Curtis
USDA NIFA

(**RED FIELDS ARE REQUIRED FOR CORRECT CALCULATIONS - Click in Cell to Activate Dropdown List)

Budget Created:
16-Oct-2023
1:52:04 PM

***F&A Base:

MTDC (Modified Total Direct Costs)

*** Research Type: On Campus - Sponsored Research

***Proposal Type:

New

Budget ID:

07/01/18

Budget Period Start:

06/30/19

Budget Period End:

06/30/20

Year 2

Year 3

Year 4

Year 5

TOTAL

LABOR DOLLARS	06/30/19	06/30/20	06/30/21	06/30/22	TOTAL
Principal Investigator	9,662.79	9,946.32	10,252.54	10,558.75	40,420.40
Co-Investigator 01	1,786.80	1,846.36	1,898.48	1,950.59	7,482.23
Co-Investigator 02	1,455.01	1,498.89	1,544.05	1,590.00	6,087.95
Co-Investigator 03	-	-	-	-	-
Co-Investigator 04	-	-	-	-	-
Other F/T Staff/Post Doc	-	-	-	-	-
Consulting (Extra Service Compensation)	-	-	-	-	-
Hourly Wage	-	-	-	-	-
Graduate Students** - AY Salary	18,000.00	18,000.00	20,000.00	20,000.00	76,000.00
Graduate Students** - Summer Salary	-	-	-	-	-
Undergraduate Students** - AY Wages	-	-	-	-	-
Undergraduate Students** - Summer Wages	-	-	-	-	-
PI, Co-I, Other F/T Staff Salary Dollars	\$ 12,904.60	\$ 13,291.57	\$ 13,695.07	\$ 14,099.34	\$ 53,990.58
Graduate Student Salary Dollars	\$ 18,000.00	\$ 18,000.00	\$ 20,000.00	\$ 20,000.00	\$ 76,000.00
Hourly Wage & Undergrad. Wage Dollars	\$ -	\$ -	\$ -	\$ -	\$ -
LABOR DOLLARS	\$ 30,904.60	\$ 31,291.57	\$ 33,695.07	\$ 34,099.34	\$ 129,990.58

* Full all persons that are paid on an hourly wage basis, and whose benefits will be calculated at the "Hourly Wage Rate" in the Hourly Wages row. (e.g., Non-Student (See definition below) Hourly Technicians, Research Associates, etc.) Hourly wages whose benefit rate is calculated at the Staff Rate should go in Other F/T Staff line.

** An employee is considered a student if he/she is registered for 6 credits in an undergraduate program or 3 credits in a graduate program.

FRINGE BENEFITS

For information related to Graduate Student Insurance Click the Link: [Student Insurance](#)

RATES	Faculty/Staff	Hourly Wage	Students
Faculty/Staff Benefits	45.50%	46.00%	46.50%
Hourly Wages/Student Summer Benefits	8.30%	8.30%	8.30%
Student Academic Year (AY) Benefits	0.80%	0.80%	0.80%
Graduate Student Health Insurance	1.440.00	1.440.00	1.600.00
Affordable Care Act (ACA) Premiums	1,602.00	1,730.00	1,869.00
FRINGE BENEFITS	\$ 7,417.59	\$ 7,988.12	\$ 8,397.21
LABOR & FRINGE DOLLARS	\$ 38,322.19	\$ 39,279.69	\$ 42,092.28

TRAVEL	06/30/19	06/30/20	06/30/21	06/30/22	TOTAL
Domestic Travel	2,000.00	3,000.00	-	3,000.00	8,000.00
Foreign Travel	-	-	-	-	-
TRAVEL	\$ 2,000.00	\$ 3,000.00	\$ -	\$ 3,000.00	\$ 8,000.00

OTHER DIRECT COSTS

Materials/Parts	-	-	-	-	-
Other Direct Costs	4,000.00	4,000.00	-	-	8,000.00
Administration Fees	-	-	-	-	-
USU Service Centers	-	-	-	-	-
Equipment/Capital Expenditures of \$5k or more	-	-	-	-	-
Scholarships & Grants-In-Aid	-	-	-	-	-
Stipends**	-	-	-	-	-
Human Research Subject Incentives	-	-	-	-	-
Tuition & Fees (See Comment)	-	-	-	-	-
OTHER DIRECT COSTS	\$ 4,000.00	\$ 4,000.00	\$ -	\$ -	\$ 8,000.00

PARTICIPANT SUPPORT COSTS (These costs are for (non-employee) participation in conferences, meetings, symposia, training activities, and workshops.)

Stipends	-	-	-	-	-
Travel	-	-	-	-	-
Subsistence	-	-	-	-	-
Other	-	-	-	-	-
PARTICIPANT SUPPORT COSTS	\$ -	\$ -	\$ -	\$ -	\$ -
SUBTOTAL USU'S COSTS	\$ 44,522.19	\$ 46,279.69	\$ 42,092.28	\$ 45,833.53	\$ 178,727.70

CONTRACTUAL**	06/30/19	06/30/20	06/30/21	06/30/22	TOTAL
a. Sub-Awards 1st \$25,000	29,041.00	18,983.00	1,976.00	-	50,000.00
b. Sub-Awards > \$25,000	15,374.00	41,589.00	61,531.00	55,230.00	173,724.00
c. USURF Sub-Awards 1st \$25,000	-	-	-	-	-
d. USURF Sub-Awards > \$25,000	-	-	-	-	-
e. Vendor(s) (Non-Individual)	-	-	-	-	-
f. Consultant(s) (Individual)	-	-	-	-	-
g. Honorarium	-	-	-	-	-
CONTRACTUAL	\$ 44,415.00	\$ 60,572.00	\$ 63,507.00	\$ 55,230.00	\$ 223,724.00

**TO COMPLETE THE CONTRACTUAL SECTION PLEASE FOLLOW THESE GUIDELINES... In the Sub-Awards, and USURF Sub-Award For single year and/or multi year proposals put the 1st \$25,000 (of each sub) in line a. or c.; all amounts over the 1st \$25k go in line b. or d. (For examples on how to complete this section, click on the Sub-Award Examples Tab.)

Green categories are excluded from F&A calculation when using MTDC base.

FACILITIES & ADMINISTRATION (F&A) CALCULATION

Total Direct Costs	\$ 88,927.19	\$ 106,851.69	\$ 105,599.28	\$ 101,063.53	\$ 402,451.70
Modified Total Direct Costs	\$ 73,568.19	\$ 85,262.69	\$ 84,068.28	\$ 83,833.53	\$ 326,732.70
Facilities & Administration Costs	\$ 31,337.92	\$ 27,801.91	\$ 18,773.09	\$ 19,525.09	\$ 97,438.00
TOTAL BUDGET	\$ 120,275.11	\$ 134,633.60	\$ 124,372.35	\$ 120,588.62	\$ 499,889.69
Waived F&A	\$ -	\$ -	\$ -	\$ -	\$ -

F&A Base:	MTDC
PROVISIONAL RATES EFFECTIVE JULY 1, 2017 - JUNE 30, 2018	
FEDERALLY NEGOTIATED F&A RATES	On Campus Off Campus
Organized Research	42.60% 21.81%
Instruction & Training	50.40% 26.00%
Other Sponsored Activities	26.00% 18.40%

* For proposals that include cost share complete the USU Cost Share Budget Template and submit to Sponsored Programs with your other proposal documentation.



Grant (Proposal) Life Cycle

- Make a list of all the documents you will need to prepare and assemble
 - Create spreadsheet of all required documents and the responsible party
- Assemble your team
 - Collaborators, university faculty, graduate students, industry or agency partners, etc.
- Play to your strengths and focus on the proposal itself, delegate the rest
 - College or university may have a grants specialist to help
- Assemble everything at least two weeks before the deadline
 - Check that all details have been attended to
 - SPO will need 5 days or more to move proposal through approval channels, and submit the proposal to the grantor



Sample Grant Documents Spreadsheet

	A	B	C	D	E	F	G	H	I	J	K	L
1	AFRI Grant Needs											
2	National Parks project		Status		Finalized	To Katie						
3	1.	Project Summary	Done		Done	Yes						
4	2.	Project Narrative	Done		Done	Yes						
5	3.	Bibliography and References	Done		Done	Yes						
6	4.	Facilities and other Resources	Done		Done	Yes						
7	5.	Equipment	Done		Done	Yes						
8	6.	Key Personnel Roles	Done		Done	Yes						
9	7.	Logic Model	Done		Done	Yes						
10	8.	Management Plan	Done		Done	Yes						
11	9.	Data Management Plan	Done		Done	Yes						
12	10.	Documentation of Collaboration	Done		Done	Yes						
13	11.	Budget Forms PDF - subs	Done		Done	Yes						
14	12.	Budget justification	Done		Done	yes						
15	Combined Conflict of Interest doc		Done		Done	Yes						
16	PI Current and Pending each		Done		Done	Yes		5 total				
17	PI Biosketch each		Done		Done	Yes		5 total				
18												
19	Pis		Kynda	Ros	Ole	Sue	Stacey					
20		Scope of work	NA	NA	NA	Yes	Yes					
21		Budget	Yes	NA	NA	Yes	Yes					
22		Budget justification	Yes	NA	NA	Yes	Yes					
23		USU subcontract form	NA	NA	NA	Yes	Yes					
24		Letter of commitment	NA	NA	NA	Yes	Yes					
25		USDA PDF budget form (for all four years)	NA	NA	NA	Yes	Yes					
26		Current and pending form	Yes	Yes	Yes	Yes	Yes					
27		Conflict of interest form	Yes	Yes	Yes	Yes	Yes					
28		Biosketch (2 pages, not including pubs)	Yes	Yes	Yes	Yes	Yes					
29												
30												
31												
32												
33												



Grant Life Cycle

- Wait for a decision on your proposal
 - Perhaps start working on the project, things that can be done with out the data/results at hand
- When you receive the result of the proposal
 - If not funded, look for another funding source
 - If funded, assemble your team and get started
- Submit reports (quarterly, annual, etc.) on time
- When the grant period ends, submit your final report and other deliverables on time
- Be grateful to the funder
 - Often must note the grantor and agreement number on all outputs (papers, presentations, Extension materials, etc.)
- Make yourself available to review proposals for the funder



Grant Success Strategies

- Follow the directions in the RFP – dot your i's and cross your t's
 - Documents needed
 - Length of the written proposal,
 - Style guidelines (font size, etc.),
 - Sections required
 - Budget sections required, funding limits, restrictions, etc.
- Make sure your abstract and early pages of the proposal clearly express what the project will do and why it's important
- Look over several examples of successful proposals in advance
 - Ask colleagues for theirs, request from grantor, etc.
- Know your institutions guidelines, timelines, and software for external grant submissions

Many proposals are not funded because they were missing elements, certain documents were too long, etc.



USU Proposal Resources

- USU Sponsored Programs office
 - Information on proposal systems, document preparation, benefits and F&A rates, etc.
 - <https://research.usu.edu/spo/>
 - USU uses the Kualu submission system
- CAAS and USU Extension have proposal assistance resources
- If research involves human subjects, the IRB (internal review board) will need to approve in advance of data collection (surveys, experiments, etc.)
 - <https://research.usu.edu/irb/>
 - All project personnel will need to be IRB certified to conduct research, which involves taking an 8-12 module course online



USDA AFRI Example

The Agriculture and Food Research Initiative (AFRI) is the nation's leading competitive grants program for agricultural sciences.

The National Institute of Food and Agriculture (NIFA) awards AFRI research, education, and extension grants to improve rural economies, increase food production, stimulate the bioeconomy, mitigate impacts of climate variability, address water availability issues, ensure food safety and security, enhance human nutrition, and train the next generation of the agricultural workforce.

AFRI was established by Congress in the 2008 Farm Bill and re-authorized in the 2018 Farm Bill. The program was re-authorized to be funded at \$700 million a year. The Consolidated Appropriations Act of 2022 funds AFRI at \$445 million.

NIFA provides AFRI grants to support research, education and extension activities in six Farm Bill priority areas:

- Plant Health and Production and Plant Products;
- Animal Health and Production and Animal Products;
- Food Safety, Nutrition, and Health;
- Bioenergy, Natural resources, and Environment;
- Agriculture Systems and Technology;
- and Agriculture Economics and Rural Communities.

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USDA AFRI Example

- Program website:
<https://www.nifa.usda.gov/grants/programs/agriculture-food-research-initiative-afri>
- RFA: <https://www.nifa.usda.gov/sites/default/files/2023-07/FY23-AFRI-FAS-RFA-MOD2.pdf>

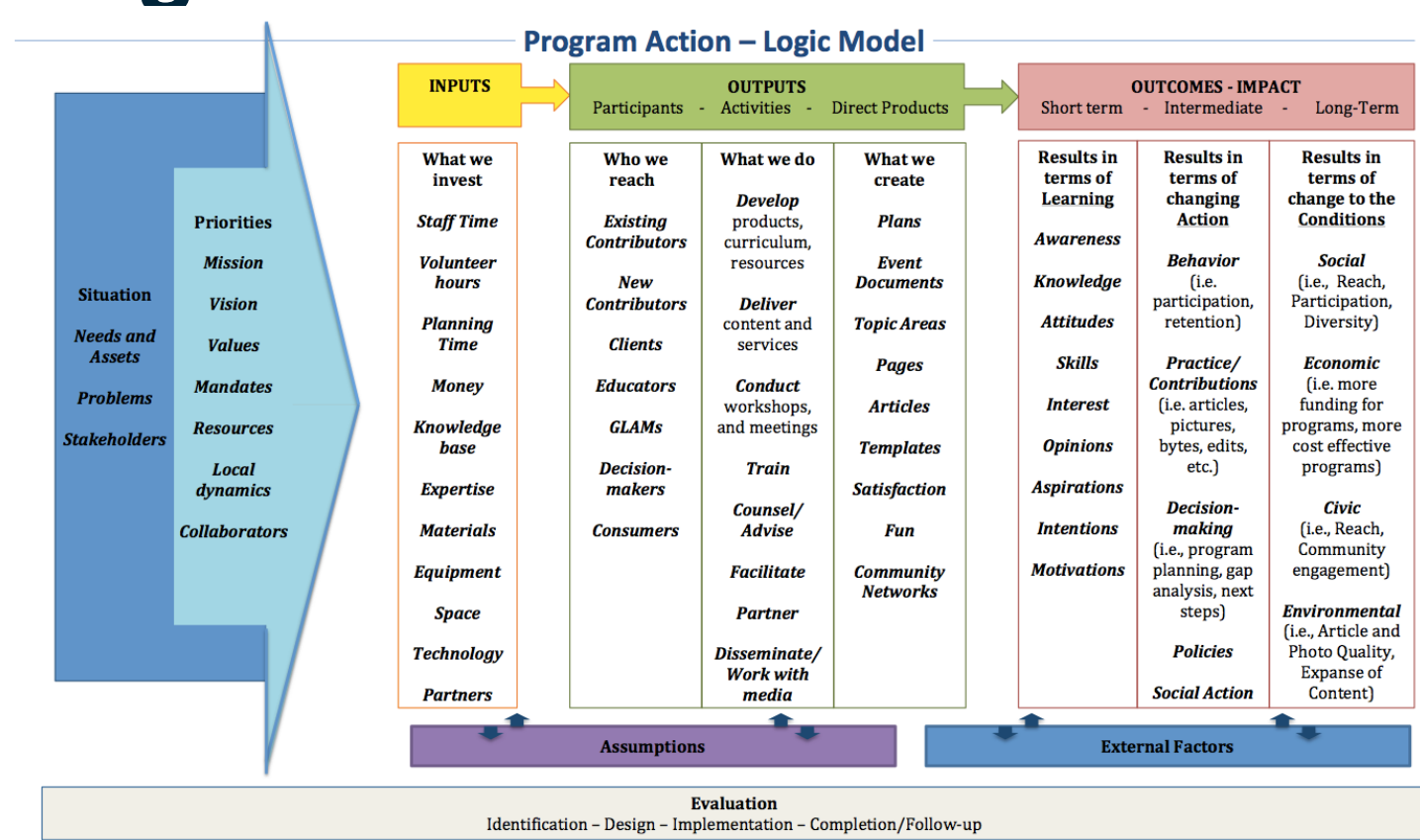


Project Design

- Federally funded research and/or Extension projects almost always require a Logic Model at application
- A Logic Model is a graphic illustration of the relationship between the project's resources, activities, and its intended impacts
 - Relationship between planned work and intended results
- The model Identifies
 - Inputs – Staff time, volunteers, materials, etc.
 - Activities – Workshops, delivered meals, etc.
 - Outputs – Papers, fact sheets, number of participants, etc.
 - Outcomes (impacts) – Benefits to the population served – new skills, change in behavior or attitudes, new knowledge, etc.



Logic Model Format



Logic Model adapted and modified from UW Extension (2003). Program Development and Evaluation Logic Model. Available at: <http://www.uwex.edu/ces/pdande/evaluation/pdf/LMfront.pdf> (Retrieved 6/22/2013)



Outcomes

- Outcomes should be SMART
 - **S**pecific - target the population served and the issue of concern
 - **M**easurable - expressed in a way that can be measured
 - **A**ction-oriented – something that the organization can act on and impact
 - **R**ealistic and relevant – something that is within the realm of possibility for the organization, and related to the problem the program addresses
 - **T**imed – indicate when the outcome will be achieved
- Outcomes are often divided up into three categories:
 - Initial or short-term: Change in knowledge, attitude, or skills
 - Intermediate or mid-term: Change in behavior or action resulting from new knowledge
 - Long-term: Change in life condition and/or status



Project Design-Logic Model Resources

- USU Extension: <https://extension.usu.edu/employee/program-evaluation/>
- University of Kansas: <https://ctb.ku.edu/en/table-of-contents/overview/models-for-community-health-and-development/logic-model-development/main>
- University of Wisconsin: <https://logicmodel.extension.wisc.edu>
- Americorps: https://americorps.gov/sites/default/files/document/2014_10_23_Logic_ModelSlides_ORE.pdf



Next

- June 5: Finding and Collecting Data
- June 19: Managing the Tenure Process
 - Last webinar



Questions?

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