



2016

CRDA Annual Report

2015-2016

This report shows the first year statistics of the CRDA, including usage, satisfaction, workshops, and grants.



CENTER FOR
RESEARCH DESIGN
AND **ANALYSIS**





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CRDA & Assessment Information

CRDA Overview

The Center for Research Design and Analysis (CRDA) is an academically-based, multidisciplinary research support and service center under the Office of Research & Sponsored Programs with the aim to elevate the research mission of TWU. The CRDA houses its own quantitative and qualitative research consulting lab, with a staff of seven part time statisticians and graduate research assistants, as well as additional as needed support from analysts, qualitative consultants, and grant and evaluation consultants. The Center’s experienced staff work with faculty and graduate students providing consulting expertise in survey design, needs assessment, program evaluation, sampling, research design, qualitative and statistical analysis, and report writing.

The CRDA not only provides qualitative, statistical and research design consulting to faculty and students working on grant proposals, research projects, or dissertations and theses, but CRDA also offers many research resources. The primary purpose of the Center is to provide faculty and students with the appropriate level of support needed for their qualitative and quantitative research. The CRDA provides training opportunities and instructional materials for faculty, staff, and students in the science and art of qualitative and quantitative analysis and methodology.

The CRDA was started in Fall of 2015. In the center’s first year (2015/2016), the CRDA staff worked a total of 8094.50 hours for 132 faculty and 142 students on their 271 projects and other questions regarding software, design, and analysis, as well as CRDA launch and maintenance needs. Usage details are described in the following report sections.

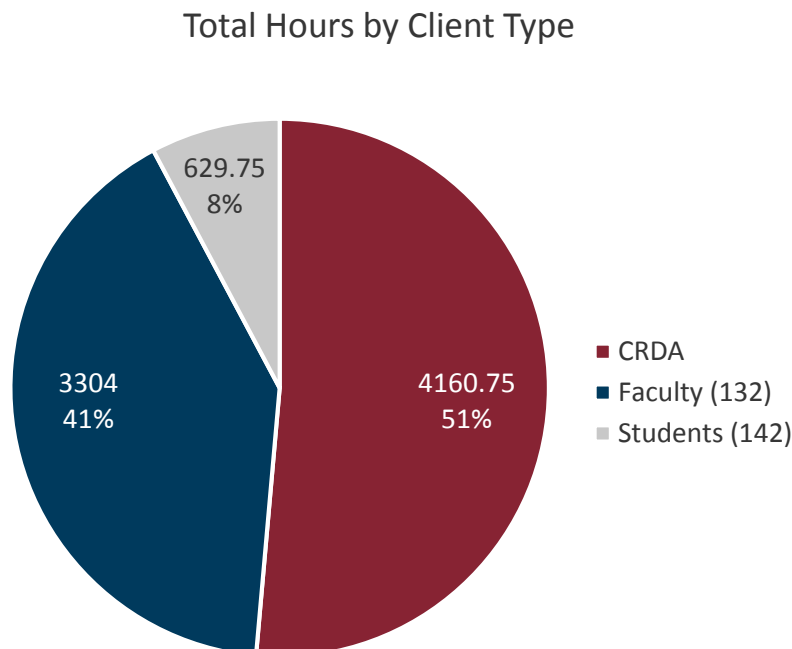
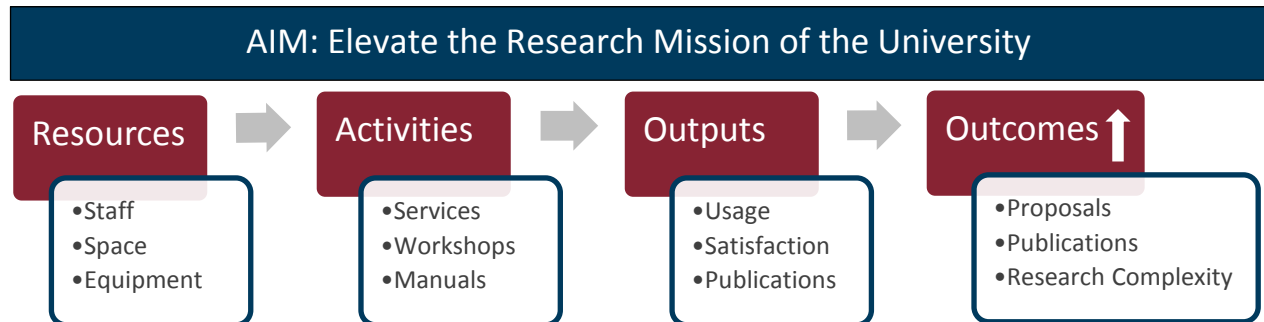


Figure 1. CRDA hours by client type. Numbers in parentheses reflect total number of individuals served.



Assessment Measures

To evaluate the effectiveness of the CRDA services, the resources and activities of the CRDA need to be focused toward the primary aim of elevating TWU's research mission. This report details the CRDA resources (inputs), activities, usage and satisfaction statistics (outputs). These measures will be reported annually to assess the potential outcomes described below.



Aim – Elevating the research mission of the University

According to TWU's Research Mission Statement, it is the special research mission of the Texas Woman's University:

- to support faculty and student efforts to expand the domain of human knowledge, imagination, and forms of expression, particularly in those disciplines in which the University awards the doctoral degree;
- to contribute to improvements in professional practice through dissemination of knowledge and through research, particularly in those disciplines and professions in which the University awards graduate degrees;
- to serve as a resource and depository for information and knowledge about women, their cultural diversity, and their particular contributions to the history and progress of the State of Texas, the nation, and the world;
- to collaborate with public and private agencies and corporations in research directed toward improvements in the quality of their products and services.

Inputs - Resources/Activities

The University provided \$182,744.08 (7433.25 hours; ~3.5FTE) in human resource capital, as well office and lab space, equipment, and software for each campus. Part-time and as needed staff were used to maximize the budget for a diverse set of services complimented by an experienced staff.

CRDA resources and activities:

- Provide Diverse CRDA Services & Experienced Staff
- Create Standard Processes & Manuals
- Identify Available Resources
- Offer Quality Workshops & Training Materials
- Conduct targeted Grant Promotion Activities
- Use Data to Make Decisions & Measure Effectiveness



Outputs – Use of services

Effective services and activities provided by the CRDA should lead to an increase in (or maintain high levels of):

- Use by recipients of internal funds (or applicants to internal funds)
- Use by recipients of external funds (or applicants to external funds)
- Use by projects with interdisciplinary collaborations
- Student publications/presentations
- Faculty publications/presentations
- Use of services earlier in research process (rather than just for analysis)
- User satisfaction with services & workshops provided

Outcomes – The observable measures of the aim to elevate the research mission at TWU.

Grant Proposals

- Increase the # of proposals submitted
- Increase the # of funded proposals
- Increase the proportion of federal research proposals
- Increase the proportion of NIH/federal proposals that are scored
- Increase the scores of federal proposals

Publications/Presentations

- Increase the number of faculty and student publications/presentations
- Increase the impact factors of journals faculty/students publish in
- Increase the citations of faculty publications

Overall

- Increase research/analysis complexity used by faculty and students

Student Research

- Decrease length of time to graduation
- Increase project strength/quality



CRDA Summary (Inputs)

Resources

To meet the objective of providing diverse and comprehensive research services, the University provided:

- \$182,744.08 (7433.25 hours; ~3.5FTE) human resource capital
- office and lab space for each campus
- equipment and software for each campus

Part-time and as needed experienced staff were used to maximize the budget for a diverse and comprehensive set of research and analytical services for both qualitative and quantitative research. The CRDA staff worked a total of 8094.50 hours. The CRDA staff track their work in real time detailed by project/task. The chart below shows the hours worked by each staff member.

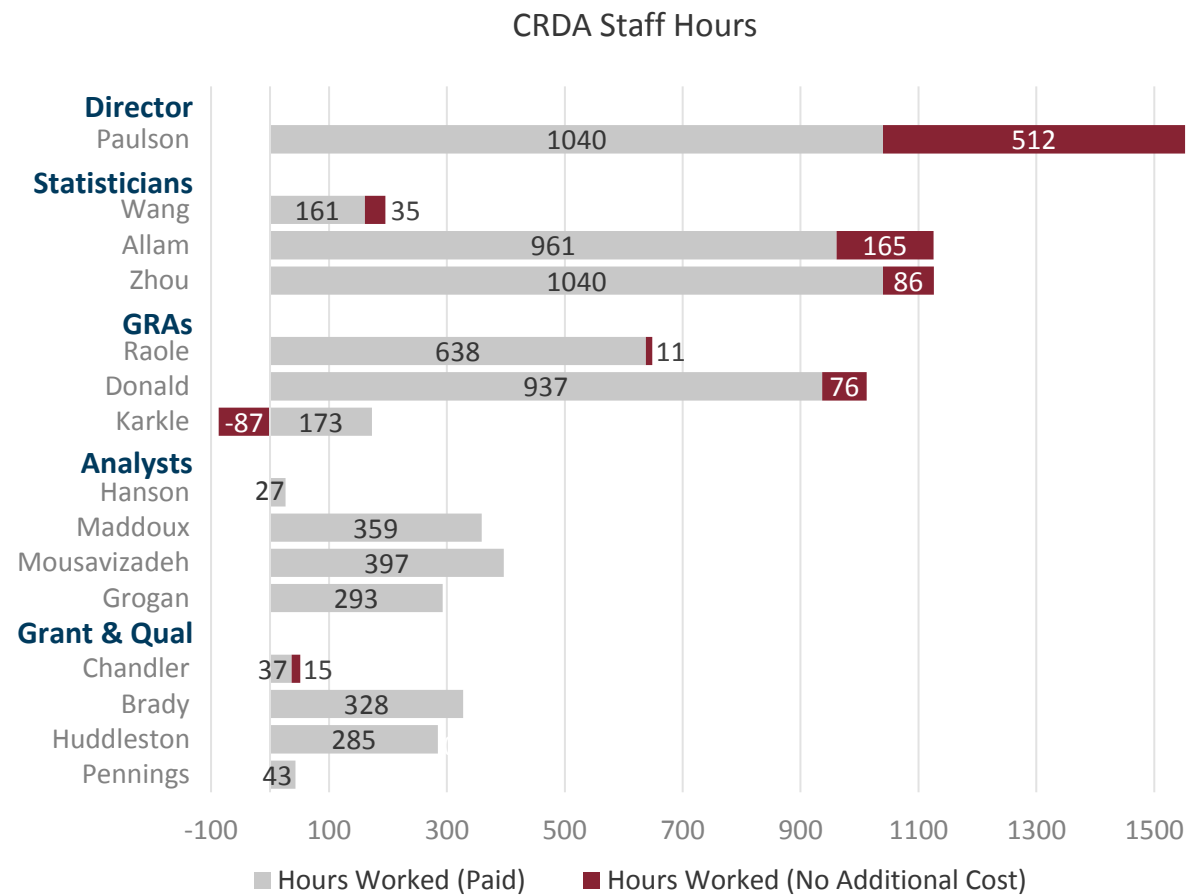


Figure 2. CRDA hours by staff member. Negative GRA Karkle hours were due to transition from Qualitative Inquiry Center to CRDA (including time tracking and processes) with resignation by the GRA in October 2015.



Activities

Half (51%, 4160.75 hours) of the hours were used for CRDA startup and maintenance activities. The largest proportion of this time went to creating standard processes and manuals (37%), as well as staff training (31%) and day to day tasks (22%).

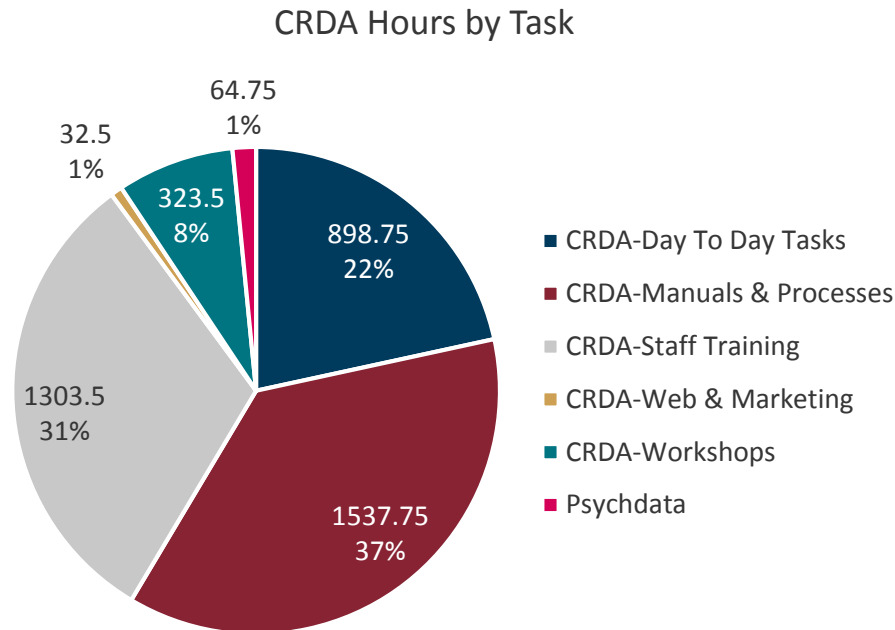


Figure 3. CRDA hours by task category.

Create Standard Processes & Manuals

- Created complete post data processes, checklist, and manuals for students (and faculty) to work relatively independently through data cleaning, missingness, outlier assessment, assumption testing, recoding, as well as developing an analysis plan, conducting the analyses, and creating appropriate layterms, results, tables, and figures.
- Piloted post data processes with three cohorts of face-to-face students.
- Piloted post data processes with remote students.
- Created extensive qualitative research resources, including Nvivo special features

Identify Available Resources

- To maximize human resources of the CRDA, existing resources such as Nvivo Basic video tutorials, SPSS videos, were identified and reviewed. These resources are incorporated into existing processes and learning materials.

Use Data to Make Decisions & Measure Effectiveness

- Refined existing time tracking processes and visual basic reporting to create an intermediate solution for gathering data regarding CRDA usage.
- Start long term processes and databases for usage data.



Conduct Targeted Grant Promotion Activities

- Increased proposal development time with director and research teams
- Templates created for power, sampling plans, and analysis plans for grant proposals
- CRF workshop on creating measureable outcomes
- Cross promoted pre-award services between CRDA and ORSP
- As needed experienced grant consultants in areas of evaluation, health research, and education research
- As needed grant writer/editor provided when requested by ORSP

Offer Quality Workshops & Training Materials

2015/16 workshops offered included:

- Reliability and Validity
- Online Surveys and Psychdata
- Data Management
- Qualitative Coding and Analysis
- Nvivo Advanced



Project Usage Summary (Outputs)

Project Type/Tenure Rank

Half (49%, 3933.75 hrs) of the hours were used for 132 faculty and 142 students on their 271 projects or other CRDA related requests. The majority of these hours went to faculty projects (3304 hrs) as services and processes were well defined from previous ORSP work. Student services and requests were a total of 629.75 hours.

As shown in Table 1, the majority of faculty hours were from professors and associate professors on tasks associated with journal article development. “Faculty research” is predominantly made up of research design tasks that will likely lead to data for publication or pilot studies for grant proposals.

The majority of student hours were on tasks associated with dissertations. Student work is designed to be more independent so that fewer hours are needed per student project.

Table 1. Number of projects and hours by project/request type and tenure rank.

	Total Projects	Total Hours	Average Hours/Project
Project/Request Type			
Faculty			
Faculty Research	80	733.00	9.16
Grant Proposal	26	345.25	13.28
Journal Article	87	2191.00	25.18
Faculty Inquiry	1	1.50	1.50
Student			
Dissertation	67	494.75	7.38
DNP	5	40.50	8.10
Thesis	5	24.25	4.85
Capstone	1	16.00	16.00
Honors Thesis	2	15.75	7.88
Student Inquiry	62	38.50	0.62
Staff Research	2	33.25	16.63
Tenure Rank			
Adjunct Faculty	7	11.50	1.64
Associate Clinical Professor	8	286.00	35.75
Associate Professor	75	1081.25	14.42
Assistant Clinical Professor	10	70.00	7.00
Assistant Professor	49	624.50	12.74
Professor	87	1693.00	19.46
Other	9	112.25	12.47
Unknown	26	55.25	2.13



Campus/Department/College

The majority of project hours were for Houston (44%) and Denton (38%) related projects or requests. The large proportion of Houston hours is related to additional grant funded hours by Dr. McFarlane's Houston Foundation Grant (649.75 hours).

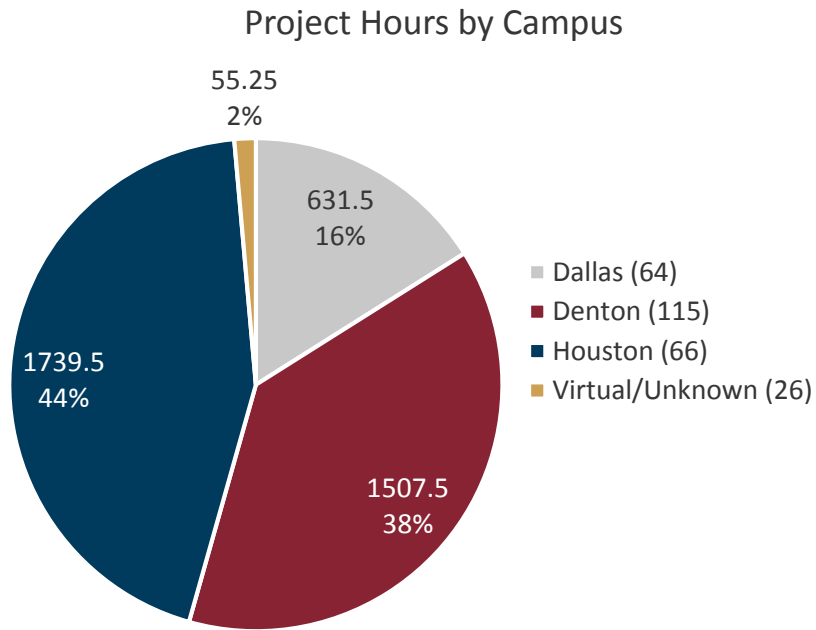


Figure 4. CRDA project hours by campus. Numbers in parentheses reflect total number of individuals served.

As shown in Table 2, the College of Health Sciences and the College of Nursing were the largest users of the CRDA services. Departments with relatively high projects (> 5) and hours (> 80 hours) included,

- Nursing
- Physical Therapy
- Health Studies
- Occupational Therapy
- Nutrition & Food Sciences
- Family Sciences
- Communication Sciences & Disorders
- Arts (Dance & Music)
- Biology



Table 2. Number of projects and hours by college and department.

	Total Projects	Total Hours	Average Hours/Project
College of Arts & Sciences	30	330.00	11.00
School of the Arts	6	90.50	31.00
Dance	4	57.00	14.25
Music	2	33.50	16.75
Drama	0	0.00	0.00
Visual Arts	0	0.00	0.00
Biology	8	86.50	10.81
Chemistry & Biochemistry	0	0.00	0.00
English, Speech, & Foreign Languages	3	51.00	17.00
Fashion & Textiles	0	0.00	0.00
General Studies	0	0.00	0.00
History and Government	1	6.75	6.75
Mathematics & Computer Sciences	0	0.00	0.00
Multicultural Women's and Gender Studies	3	25.75	8.58
Psychology & Philosophy	7	61.75	8.82
Sociology & Social Work	2	7.75	3.88
College of Health Sciences	129	1698.00	13.16
School of Management	2	3.75	1.88
MBA Executive Track	2	3.75	1.88
Health Systems Management	0	0.00	0.00
School of Occupational Therapy	38	399.00	10.50
School of Physical Therapy	35	523.25	14.95
Communication Sciences & Disorders	10	99.00	9.90
Dental Hygiene	3	21.00	7.00
Health Care Administration	0	0.00	0.00
Health Studies	21	428.00	20.38
Institute for Women's Health	0	0.00	0.00
Kinesiology	6	32.50	5.42
Nutrition & Food Sciences	17	191.50	11.26
College of Professional Education	18	185.25	10.29
School of Library & Information Studies	1	8.25	8.25
Family Sciences	9	105.50	11.72
Master of Arts in Teaching	0	0.00	0.00
Reading	2	6.75	3.38
Reading Recovery	0	0.00	0.00
Teacher Education	6	64.75	10.79
College of Nursing	58	1556.00	26.83
McFarlane Grant Funded*	16	945.00	59.06
Other	42	611.00	14.55
Other	36	164.50	15.61
Center for Faculty Excellence	1	15.50	15.50
IT	1	5.25	5.25
Research & Sponsored Programs	2	54.50	27.25
Staff	3	34.00	11.33
Unknown	29	55.25	1.91



Effective Services & Activities

Year 2 the CRDA is building a relational database to capture more detailed information regarding clients and projects. Thus, future years of the CRDA will measure effectiveness of the services and activities provided by the CRDA, as well as use the data to prioritize needs. Effectiveness is expected to be shown as an increase in (or maintain high levels of):

- Use by recipients of internal funds (or applicants to internal funds)
- Use by recipients of external funds (or applicants to external funds)
- Use by projects with interdisciplinary collaborations
- Student publications/presentations
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Outcome Measures

Year 1 Outcomes

As year 1 data is baseline for many of the CRDA measures, grant proposal services were supported and measured prior to the formation of the CRDA, thus FY15 is a valid baseline for comparison. Measures collected in FY15 include the:

- Number of proposals submitted
- Number of funded proposals
- Funding ratio of research proposals

CRDA impact toward the aim of elevating the research mission of the university would be shown as an increase in these three measures from year to year. In addition, effective CRDA services would be shown as a greater awarded funding ratio from year to year, particularly for proposals using CRDA services compared to proposals not using CRDA services.

The number of research proposals decreased from 60 to 56. A large proportion of FY16 proposals are still pending so the number awarded and funding ratios are not comparable across years, however 14 research proposals were awarded in FY15 and to date 11 of the research proposals in FY16 were awarded with 35 pending.

For research proposals, the awarded funding ratio for FY15 was greater for proposals using research and statistical consulting services compared to proposal not using those services (33% vs. 21%). While not final, FY16 is showing a similar trend (23% vs. 19%). These differences indicate that CRDA grant services increase the likelihood of award for research proposals.



Funding Ratios by Year and CRDA Support Status

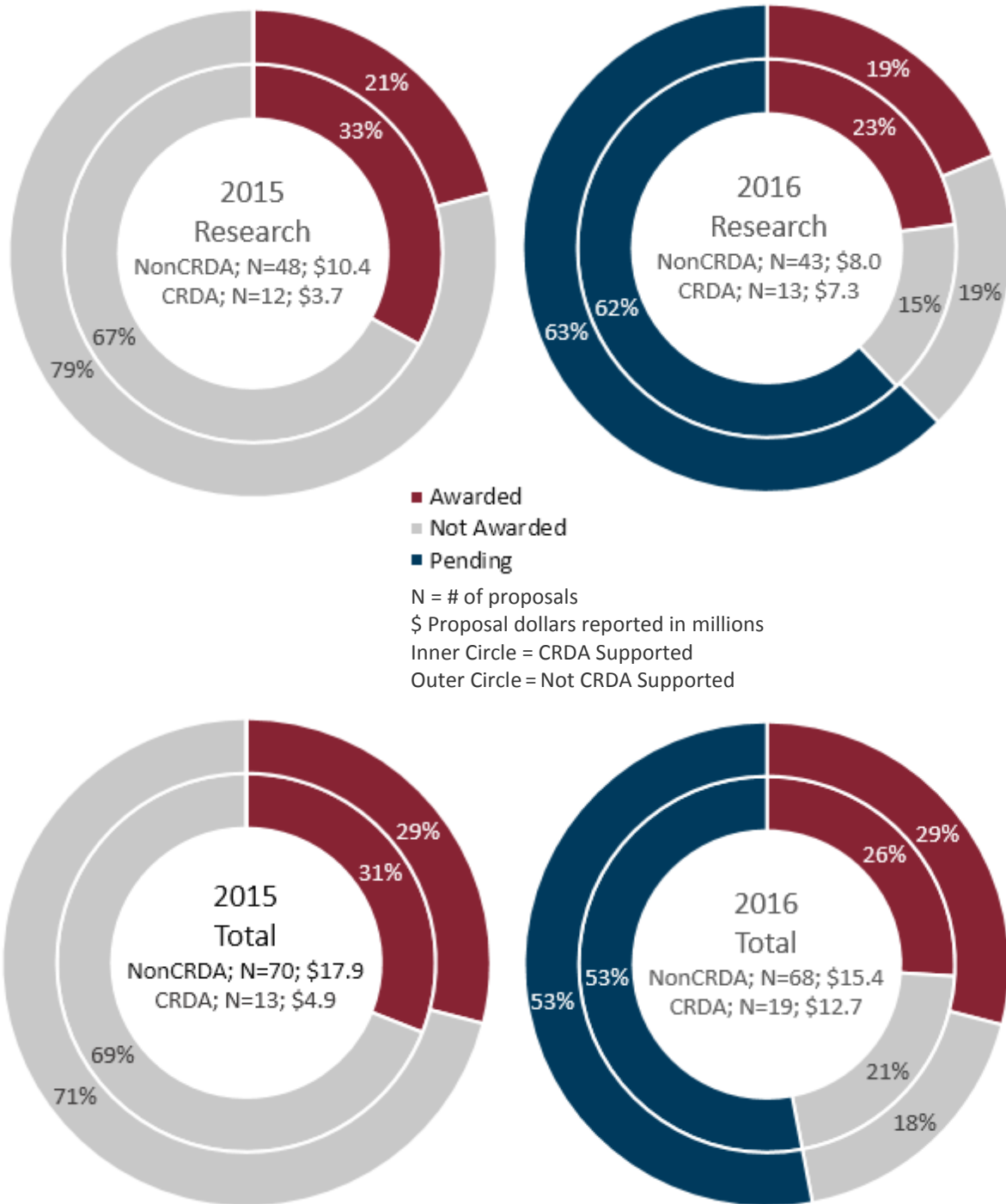


Figure 5. FY2015 and FY2016 research and total funding ratios, proposals, and dollars for proposals supported by CRDA and not supported by CRDA.



Potential Future Outcomes

Year 2 the CRDA is building a relational database to capture more detailed information regarding clients and projects and will combine that data with data from ORSP, Sedona, and Institutional Research & Data Management to measure additional outcomes toward the CRDA aim of elevating the research mission. These potential future outcomes include:

Grant Proposals

- Increase the proportion of federal research proposals
- Increase the proportion of NIH/federal proposals that are scored
- Increase the scores of federal proposals

Publications/Presentations

- Increase the number of faculty and student publications/presentations
- Increase the impact factors of journals faculty/students publish in
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Student Research

- Decrease length of time to graduation
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