

**FEDERAL RESEARCH
DIVISION
(FRD)
LIBRARY**

**LIBRARY
OF CONGRESS**

ANNUAL REPORT

FY2019



OVERVIEW

The Federal Research Division (FRD), through administration of the Federal Research Program revolving fund, provides unbiased, authoritative research, analysis, and translations for the federal government, the District of Columbia, the Library of Congress, and federally funded contractors.

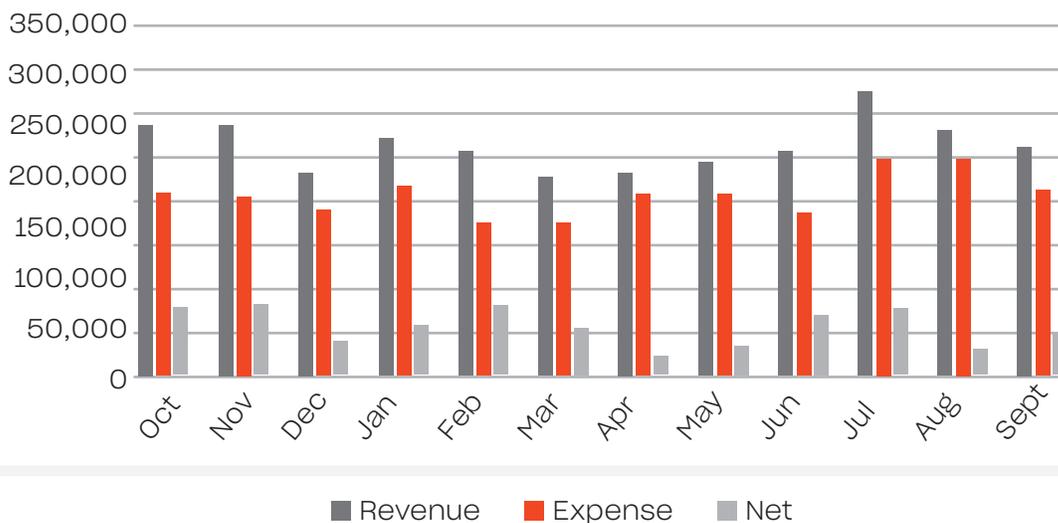
During fiscal year 2019, FRD completed 10 products for executive branch agencies and Federally Funded Research and Development Centers (FFRDCs), including the Department of Justice, Department of Defense, Department of Education, Department of Homeland Security, and MITRE Corporation. In addition, FRD began a number of projects in FY19 that are not yet completed and continued ongoing studies that originated in previous years. Operationally, FRD's headcount averaged 25 people.

FINANCIAL SUMMARY

FRD earned \$2,802,994 in FY2019, an increase of 3.6 percent over FY2018. Expenses for FY2019 were \$2,098,789, a 1.0 percent decrease from FY2018. The division's equity (cumulative results of operations) increased from \$585,302 on 10/1/2018 to \$1,426,558 on 9/30/2019. FRD experienced revenues in excess of expenses for all 12 months during the fiscal year. FRD ended FY2019 with \$3,748,595 in total available funds, a 30 percent increase above FY2018.



FRD Revenue and Expense FY2019



MARKETING AND SALES ACTIVITIES

FRD engages in proactive and strategic marketing and sales activities that are driven by research, outreach, sales presentations, and proposal development.

The research is designed to identify potential clients, new federal divisions, task forces or initiatives, emerging areas of federal research, and topics or groups with expanding research budgets.

The 2019 fiscal year held several accomplishments for marketing, including FRD having:

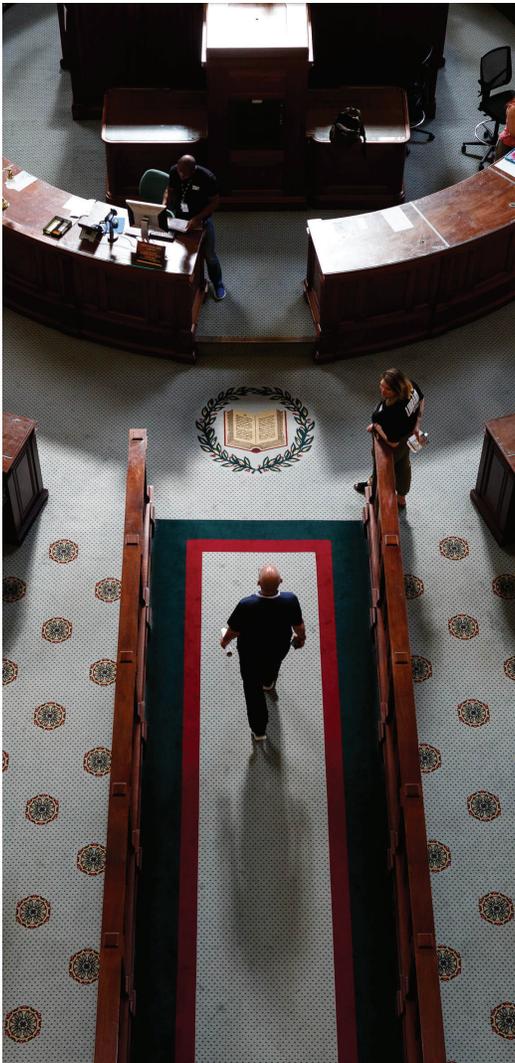
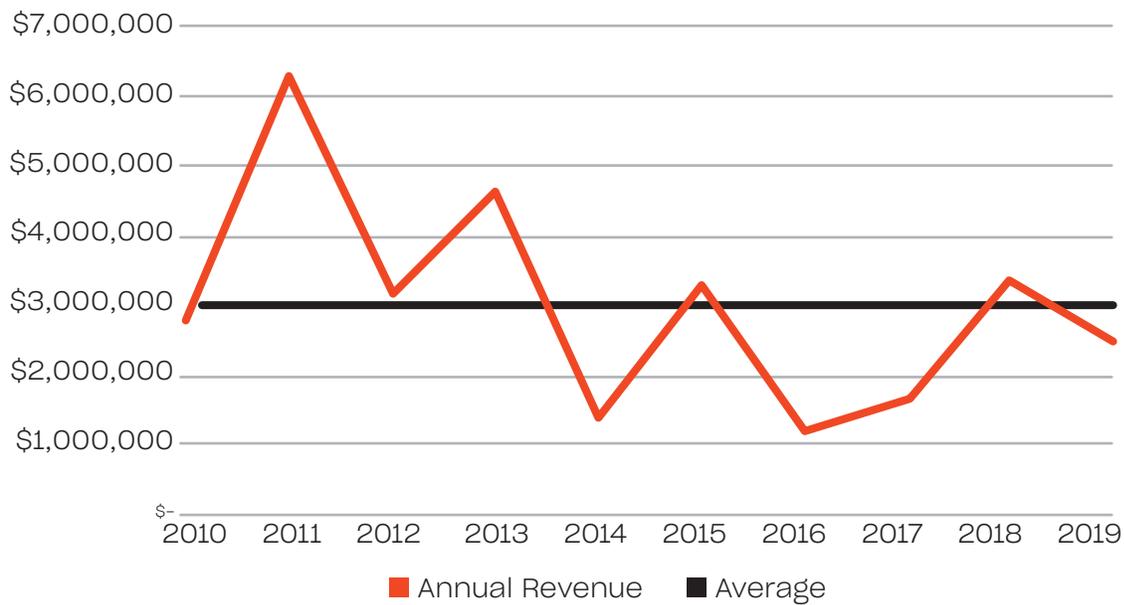
- Obtained approximately 60 percent of funding (\$1.5M) from repeat clients, a significant increase over FY2018 (30 percent). Repeat business is essential to the long-term health and stability of the division and represents an improvement in customer service and customer relationships.
- Acquired three new key clients: the U.S. Copyright Office, the U.S. Bureau of Prisons, and the U.S. Patent and Trademark Office. Each of these clients are expected to provide at least \$500,000 in revenue over the next five years.

- Maintained good working relationships with current key clients: the Office of Economic Adjustment, the Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking (SMART), and the U.S. Citizenship and Immigration Services.
- Continued to foster strong client relationships prior to submitting proposals, resulting in a proposal acceptance rate of nearly 90 percent.
- Assumed sales and financial oversight responsibilities for the Law Library of Congress (LLC) in fiscal 2019. Six agreements were signed during the fiscal year for a total revenue of \$425,000, significantly higher than the average revenue of \$225,000 over the previous five fiscal years.
- The table below outlines sales and marketing activity for FY2019 and the chart shows the incoming revenue patterns for the last 10 years.

| Activity | Number |
|--|----------------------|
| Client briefings | 30 |
| Proposals | 18 |
| Funding documents | 16 |
| Funding (as of 9/31/19) | \$2.50 million |
| Client tours | 20 |
| Total Marketing Activity/ Potential Funding | \$7.0 million |



Funding Received by Year

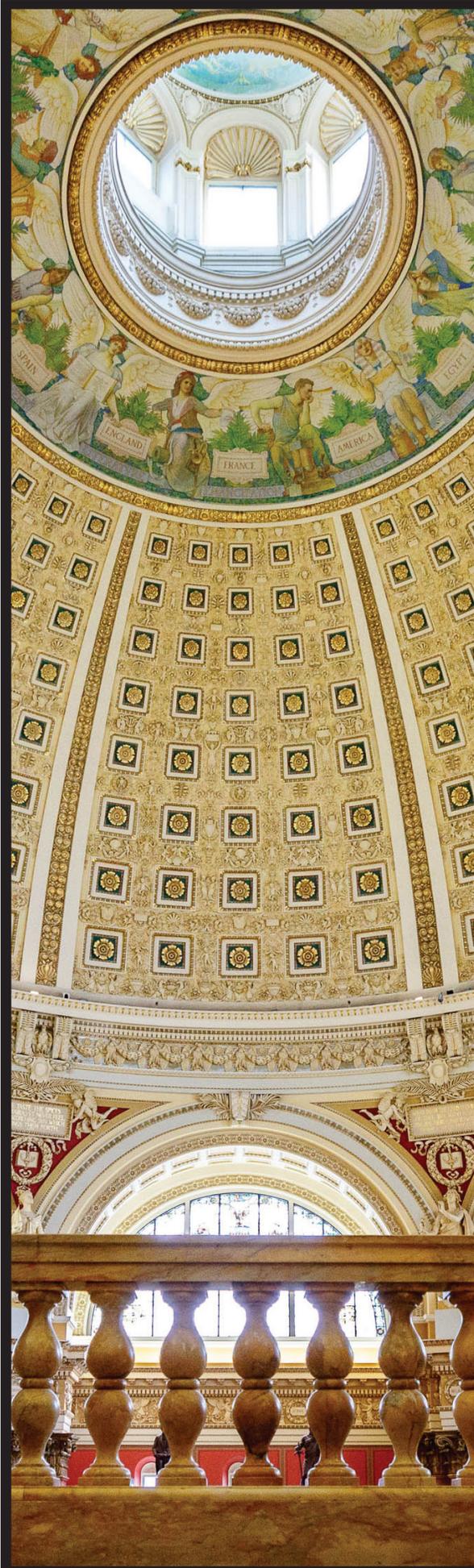


INTRA-LIBRARY PARTNERSHIPS

FRD partnered with four Library of Congress divisions in fiscal 2019. Through an agreement with the Department of State, FRD worked with the Preservation Division and the National Audio-Visual Conservation Center (NAVCC) to conduct seismic research and analysis. FRD is also working with the U.S. Copyright Office on the digitization of its historic Record Book collection, reviewing and scoring the metadata to ensure its accuracy. In FY 2019, an agreement facilitated by FRD led to the digital military law collection of the Judge Advocate General's Legal Center and School being housed within the Law Library.

STAFF CHANGES

FRD started fiscal year 2019 with a staff of 21, including ten permanent researchers, three permanent overhead positions, and eight expert appointments. In order to increase production, mitigate risk, and expand expertise, FRD continued a program of hiring through expert appointments and short-term not-to-exceed (NTE) positions. These experts and NTEs bring FRD specialized knowledge and skills in the fields of technology, law, and data analysis. During fiscal 2019, two expert appointments and six NTEs were on board and assigned to billable projects, thereby increasing the financial margins while minimizing overhead.



STAFF RECOGNITION

Patrick Miller earned a temporary promotion as project manager for the U.S. Copyright Office (USCO) Record Book collection digitization and metadata analysis project. Patrick was selected for his experience working with digitization projects and is responsible for a staff of eight working onsite within the USCO offices.

The Defense Spending by State: Fiscal Year 2017 report completed for the Office of Economic Adjustment of the Department of Defense was presented at the Brookings Institute in March. The staff members involved in completing the report were **Vega Bharadwaj**, **Katarina David**, **Wm. Noël Noël**, and **Alan Stone**.

In July, **Kris Hassinger**, **Ann Marsteller**, **Wm. Noël Noël**, and **Helene Zakia** presented FRD's research findings at the 2019 National Symposium on Sex Offender Management and Accountability in Chicago, Illinois.

Marieke Brock presented her findings on gender-based violence at HHS Office on Women's Health: Female Genital Mutilation/Cutting Dissemination & Transition Meeting in August.

In September, **Vega Bharadwaj** and **Wm. Noël Noël** presented a case study of USASpending.gov data at the U.S. Treasury Department for an audience of Senior Accountable Officials (SAOs). This presentation covered FRD's use of spending data to complete the *Defense Spending by State: Fiscal Year 2017* report under contract with the Office of Economic Adjustment.

STRUCTURE OF THE DIVISION

Late in FY 2019, the FRD reorganization plan came into effect, resulting in four research sections that are better able to service the interests of our clients than the previous unitary structure. These sections are Defense and National Security, Healthcare and Business, Law and Criminal Justice, and Science and Technology.



COMPLETED PRODUCTS

During the fiscal year, FRD continued to provide customized research and translation services to agencies from across the spectrum of the U.S. government and authorized federal contractors on a cost-recovery basis. The division delivered the following reports to its clients:

Study of the Marine Electronics Industry

OCTOBER 2018

FRD produced a study detailing aspects of the marine electronics industry.

Patrick Miller, Everett Roberts, and Alan Stone prepared the report.

A Study of Federal Research and Evaluation Offices: Final Report

ORIGINALLY SUBMITTED JULY 2018, REVISED OCTOBER 2018

The Research and Evaluation Division (RED) within the U.S. Citizenship and Immigration Services (USCIS) Office of Policy and Strategy (OPS) partnered with FRD to gather and analyze information relating to the management and functions of select federal research and evaluation (R&E) offices.

The objective of this exploratory project was to inform RED's understanding of the structures, operations, and decision-making processes of select R&E offices, including commonalities and differences, to provide better information for RED's development path. The main report supplies a synthesis of findings illuminating and comparing the inner workings and processes of 14 distinct federal R&E offices. It summarizes and reconciles, to the extent possible, information obtained during earlier research stages, which included a broad literature review and interviews with key decision makers representing most of the profiled offices. A second summary report was distributed across the broader government research and evaluation community.

Meaghan Flattery was the researcher and Alan Stone served as project manager.



The Economic Power of Women Business Owners

NOVEMBER 2018

The National Women's Business Council (NWBC) is a federal advisory body that serves as an independent source of advice and policy recommendations to the executive and legislative branches on economic issues of importance to women business owners. It also advises women entrepreneurs on major issues by means of data, engagement, and news. The goal of this report is to support the Council in developing a knowledge base about the contributions of women business owners to the U.S. economy and potential opportunities for them in the future. It provides a high-level situational analysis, exploring major issues and developments affecting women entrepreneurs, to inform the NWBC's framework for defining research priorities and engagement efforts.

Malinda Goodrich was the researcher, author, and project manager of this report.

Is Cannabis a Gateway Drug? Key Findings and Literature Review

DECEMBER 2018

The gateway hypothesis contends that using cannabis causes an individual to progress to using harder illicit drugs, such as cocaine or heroin. While many of the studies reviewed in this analysis did find statistically significant associations between cannabis use and later use of other illicit drugs, there is not yet conclusive evidence to say that cannabis is a gateway drug. Our analysts found that baseline data on drug use and a range of socioeconomic covariates should be obtained from the study participants and longitudinal data collected on these factors. Crucially, specific data on use of cannabis and other illicit drugs should not derive from voluntary responses to questionnaires, as prior research has found that people often under report their own drug use in such self-reported formats.

The researchers on this report for the National Institute of Justice were Wm. Noël Noël and Dr. Judy Wang. The expert reviewers were Dr. Mary Amanda Dew and Dr. Tomoko Steen, and Kris Hassinger was the project manager.



U.S. Department of Education, Equity Assistance Centers Program Client Survey for the 2018 Fiscal Year

DECEMBER 2018

This report, prepared on behalf of the U.S. Department of Education's Office of Elementary and Secondary Education (OESE), provides a review of the responses to the department's Equity Assistance Centers (EAC) Program Client Survey for the 2018 fiscal year. Administered in earlier years by FRD as a paper survey, since 2017 the EAC client survey has been administered and scored electronically using SurveyMonkey.

Patrick Miller, Colin Wood, and Ramón Miró prepared the final report. Ramón Miró was the FRD project manager and Mi-Hwa Saunders was the department's project manager.

Defense Spending by State: Fiscal Year 2016

ORIGINALLY RELEASED AUGUST 2018, REVISED VERSION SUBMITTED JANUARY 2019

This report for the U.S. Department of Defense (DOD), Office of Economic Adjustment (OEA) documents the results of a state-by-state analysis of spending by the DOD during fiscal year 2016 in the 50 states and the District of Columbia. The findings are presented in graphs and tables, and they include a range of indicators, such as total spending figures, categories of goods and services on which funds were spent, major defense vendors, and numbers of defense personnel. FRD collaborated closely with the DOD Office of Economic Adjustment to produce this report.

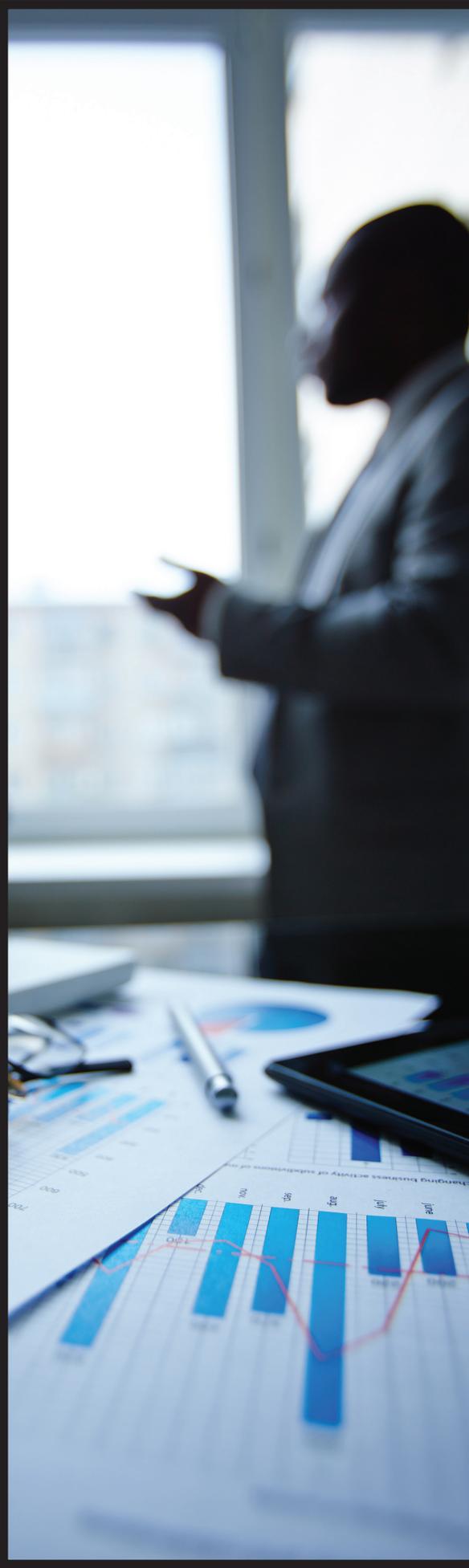
The analysts involved were Katarina David, Wm. Noël Noël, and Colin Wood. Alan Stone served as project manager.

Defense Spending by State: Fiscal Year 2017

ORIGINALLY RELEASED DECEMBER 2018, REVISED VERSION PROVIDED MARCH 2019.

This report for the U.S. Department of Defense (DOD), Office of Economic Adjustment (OEA) documents the results of a state-by-state analysis of spending by the DOD during fiscal year 2017 in the 50 states and the District of Columbia.

The analysts involved were Katarina David, Wm. Noël Noël, and Carson Sievert. Alan Stone served as project manager.



L1 Intracompany Transferee Visa Program: Key Findings from the L1 Benefit Integrity Project

JULY 2019

This report, prepared on behalf of the U.S. Department of Homeland Security, Citizenship, and Immigration Services (USCIS), examines the characteristics of petitioners and beneficiaries covered under the L-1 Intracompany Transferee Visa Program. The study focused in particular on the USCIS pilot of the Targeted Site Visit and Verification Program and the resulting findings with respect to L-1B off-site employment. It further highlights the actions USCIS took after the pilot ended to remedy some of the issues that were discovered. FRD researchers Nyle Hamidi and Ramón Miró performed much of the research on site at USCIS headquarters, where they interviewed several L-1 program subject matter experts and were granted access to internal USCIS case management information systems.

Ramón Miró was the project manager.

Foreign Financial Activities Research

COMPLETED AUGUST 2019

FRD researchers generated five reports profiling foreign financial activities. The project required extensive knowledge of multiple languages in addition to English.

Kirill Abramov, Everett Roberts, Alan Stone, and Helene Zakia were the researchers. Alan Stone served as project manager.

Underage Marriage

COMPLETED AUGUST 2019

This project consists of a tool that FRD developed for the U.S. Citizen and Immigration Services (USCIS), which assists USCIS staff to access information concerning age-related marriage laws throughout the United States and its principal territories. The tool is based on a repository of data extracted from state and territory laws regarding the ability of minors to marry and relevant penalties for unlawful underage marriage. Additionally, the tool captures and tracks information about proposed legislation.

Marieke Brock captured data from existing laws, Meaghan Flattery captured data about proposed legislation, Kris Hassinger built the tool, and Helene Zakia fact-checked the data.



MITRE Tax Revenue Recovery

COMPLETED SEPTEMBER 2019

This report involved federally funded research for the not-for-profit MITRE Corporation. The IRS has published some information on the underpayment gap of federal individual income tax, but state governments do not appear to publish state individual income tax underpayment gaps. State and local governments do publish property tax-collection numbers and gaps by year. This report located the 2018 property tax underpayment gaps for select wealthy and innovative city- and county-level governments. It gave a rough estimate of select wealthy and innovative state individual income tax-underpayment-gap numbers by using the proportion of gap-to-received-tax-dollars derived from available federal numbers. The end of the report contains a number of appendices, which provide additional information on the various jurisdictions covered, as well as a brief overview of methodologies used to estimate tax gaps.

Bridey Heing and Liz White were the researchers and Helene Zakia served as the project manager.

PROJECTS STARTED IN FY19

(not yet complete or completed in 2020)

Baseline Study of Unmanned Vehicle Technologies

COMPLETED JUNE 2020

FRD completed a series of five reports on the topic of component technologies for unmanned vehicles.

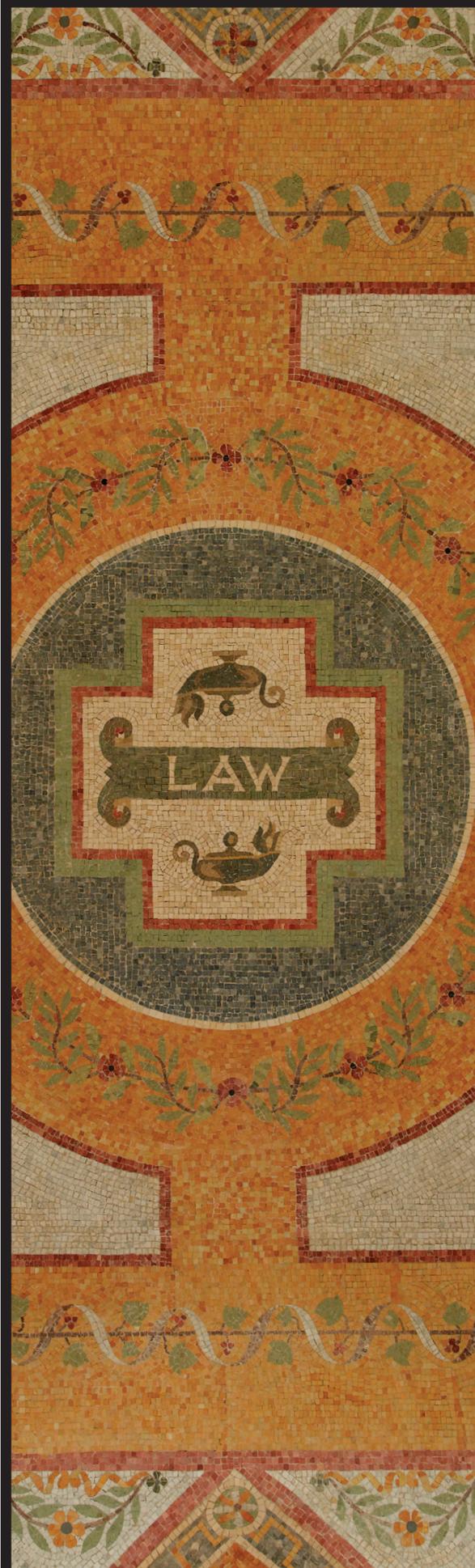
Kirill Abramov, Jesse Berman, John Kim, Michael McMaster, Alan Stone, and Helene Zakia were the researchers. Alan Stone served as project manager.

U.S. Department of Education, Equity Assistance Centers Program Client Survey for the 2019 Fiscal Year

COMPLETED MARCH 2020

FRD prepared the FY2019 report on behalf of the U.S. Department of Education, Office of Elementary and Secondary Education (OESE). Since 2017, the EAC client survey has been administered and scored electronically using SurveyMonkey. In 2019, OESE awarded FRD additional funding to redesign the final report to include new graphics and expanded narrative content.

Vega Bharadwaj, Bailey Cahall, Bridey Heing, Patrick Miller, Ramón Miró and Liz White are preparing the final report, scheduled for delivery March 2020. Ramón Miró is the project manager.



Research and Analysis Supporting SMART Office Mission.

In October 2018, FRD began work for the U.S. Department of Justice, Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking (SMART). The project offers professional research support to provide baseline, foundational, and detailed information and analysis on sex offender issues that will inform policy decision makers. The original scope for 12 reports in three stages was modified after work was underway. This resulted in a shift in the statement of work from four literature reviews and six critiques, to four literature reviews with in-depth critiques of their methodology on the following topics:

1. *Implementation Challenges for States—Summary and Assessment of Research* • DELIVERED TO CLIENT JANUARY 2020;
2. *Claimed Impacts on Registered Sex Offenders—Summary and Assessment of Research* • PROJECTED DELIVERY TO CLIENT IS MAY 2020;
3. *Overview and Assessment of SORNA Research and Literature* • PROJECTED DELIVERY TO CLIENT IS JULY 2020; and
4. *Overview of Military Processes and Procedures upon Release/Transfer to a Civilian Community* • AFTER SEVERAL MONTHS' RESEARCH SMART POSTPONED TOPIC 4.

The research team is Marieke Brock, Bailey Cahall, Meaghan Flattery, Wm. Noël Noël, Catherine Schwartzstein, Kennedy Ukelegharanya, Megan Williams, and Helene Zakia. Malinda Goodrich was the project manager for Phase 1 and Phase 2 and Helene Zakia is the current project manager for Phase 3.

United States Copyright Office (USCO) Historic Record Book Collection

USCO intends to digitize its 26,728-volume Record Book collection. The collection contains copyright applications and copyright-related material that spans the years 1870 to 1977. In 2019, FRD analysts reviewed and scored the metadata produced from digitization to ensure that it accurately reflects the record images. FRD staff are expert at digitizing, as well as reviewing digitized images and corresponding metadata. Patrick Miller and Katarina David are the project managers.

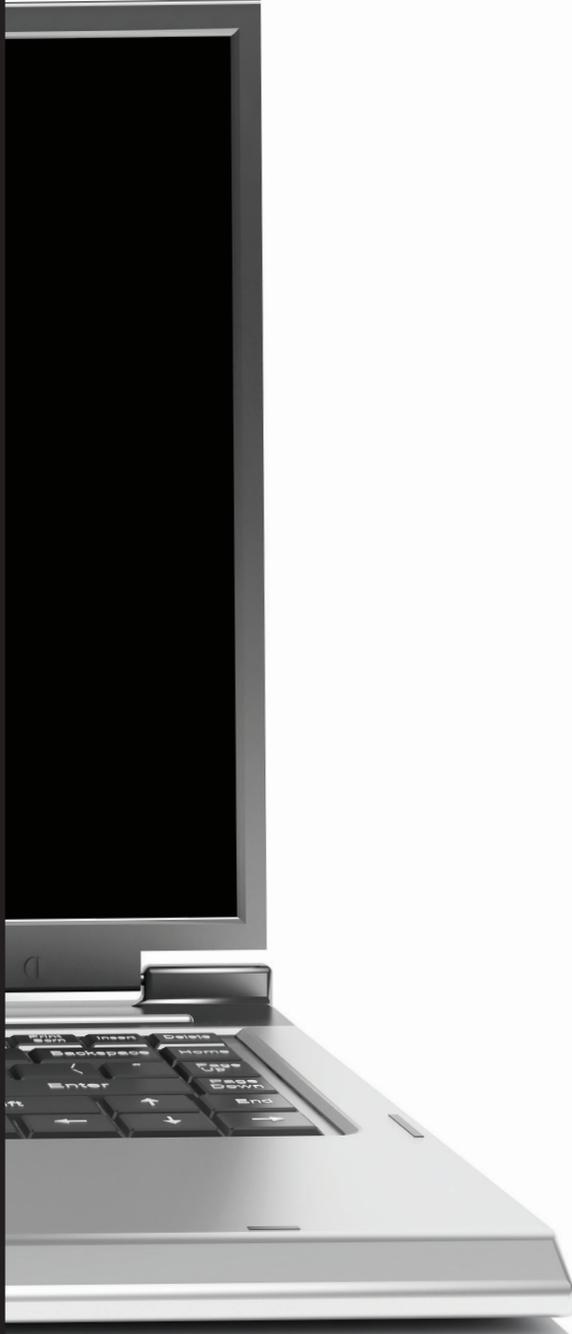
- FRD attended USCO Record Book collection digitization and metadata project meetings. We created a workbook system to track and score the accuracy of metadata corresponding to record images and completed the assigned review of two groups of ten books. FRD described its efforts in reports to USCO in:

- 
- Results review reports,
 - Digitization best practices paper,
 - Weekly progress reports, and
 - Lessons learned report.
- At USCO's request, FRD reexamined the records using a larger sample size and created a sampling scheme to select records for examination. The division prepared level-of-effort, sampling rate, and confidence-interval calculations to ensure random selection of records.
 - FRD provided expert advice to the creation of an USCO-OCIO QA tool. The tool will be used to help ingest and analyze large image and metadata files.
 - FRD reviewed and made corrections to thousands of cards from USCO's Virtual Card Catalog (VCC) copyright.gov/vcc. The VCC is an index of copyright registrations and other copyright-related works. FRD analysts compared card images to data in comma-separated value (CSV) files, made file corrections, and reported outcomes.

Treatment of Female Correctional Officers in the Federal Bureau of Prisons Workplace

FRD is currently conducting this study on behalf of the U.S. Department of Justice, Federal Bureau of Prisons (BOP). BOP has engaged FRD to conduct a review of all agency policies and practices related to hostile workplaces, harassment, and misconduct as they pertain to female agency staff. At the conclusion of the research, FRD will report on whether staff and management are appropriately complying with these policies. The research includes a systematic review of agency policy documents, interviews with BOP subject matter experts, and an agency-wide sample survey of female BOP employees. The survey will ask respondents about their views on the agency's system for preventing and responding to sexual misconduct, including respondents' views on workplace conditions that contribute to sexual harassment, the agency's system for reporting workplace sexual harassment and the agency's response to reports of workplace sexual harassment. A final report is scheduled for spring 2021.

The researchers are Vega Bharadwaj, Marieke Brock, Briday Heing, Patrick Miller, Wm Noël Noël, Liz White, and Helene Zakia. Ramón Miró is the project manager.



PROJECTS ONGOING IN FY2019

Started before FY2019, not yet completed, or completed in FY2020

U.S. Intellectual Property and Counterfeit Goods—Landscape Review of Existing/ Emerging Research

COMPLETED FEBRUARY 2020

This report supports the U.S. Patent and Trademark Office (USPTO) in its research and analytical efforts related to domestic and international counterfeit trade. The report comprised seven sections addressing the overall magnitude of the markets, the impacts on the U.S. economy, the role of the private sector in limiting exploitations, trends in trade via small parcels, risks to public health and safety, consumer attitudes toward counterfeit products, and the use of social media to facilitate the sale of counterfeit goods.

Vega Bharadwaj, Marieke Brock, Bridey Heing, Ramón Miró, and Noor Mukarram researched and wrote the report. Marieke Brock also served as project manager.

Defense Prisoner of War/Missing in Action Accounting Agency (DPAA)

In 1992, FRD created The Vietnam–Era Prisoner–of–War/Missing–in–Action Database, an online index to relevant documents, and has linked the entries to pdfs of the original documents. The project is ongoing and involves Vega Bharadawaj, Meaghan Flattery, Catherine Schwartzstein, Liz White, and OCIO programmers. Malinda Goodrich is the Project Manager. FRD projects for DPAA are listed below:

In FY2019, FRD had to create pdfs of the original records associated with reel 344 of the Vietnam–era POW/MIA database. Catherine Schwartzstein converted all 454 records into pdfs from microfilm and Malinda Goodrich linked them to the appropriate index records. FRD posted the updated reel 344 on the division website in December 2019.

- FRD received Shipment 146 from DPAA in March 2019, indexed it in November and December, and posted it on the division website in December 2019.
- FRD received Shipment 147 from DPAA in December 2019, indexed it in January 2020, and anticipates posting it on the division website in April 2020.



- Database migration. In 2019, the legacy software (CuadraSTAR Star database and Inquiry search engine) that has housed the DPAA Vietnam-era data since 1992 became a security concern for the Library of Congress, which required that these two applications be terminated as soon as replacement systems are in place. In 2019, FRD approached DOD DPAA for additional funding to support the migration of the data from the old database to a new one and update the site's user interface. This migration work (which consists of pulling data from the legacy software, finding an appropriate format in which to store it, cleaning the data, and programming a new system to house and post the data) began in October 2019. The anticipated completion data for the new website launch is April 2020.

Consumer Financial Protection Bureau (CFPB)

FRD staff and expert linguists performed work for the bureau, for which Malinda Goodrich was the initial project manager and Patrick Miller is the current project manager.

- FRD checked (audited or translated) non-English-language consumer financial information items for the CFPB Office of Financial Education (OFE). The auditing of translations ensured the integrity and quality of CFPB's communications with non-native-English speakers who might be consumers, industry, regulators, or other stakeholders. In FY2019, FRD provided audited or translated financial information items for CFPB in Spanish, Chinese, Vietnamese, Korean, Tagalog, and Haitian Creole.
- FRD audited or translated non-English-language information items for the CFPB Office of Consumer Response (CR). In 2019, FRD provided Spanish-language audits or translations of consumer financial information items for CFPB-CR.

Federal Housing Finance Agency (FHFA)

FRD audited or translated non-English-language information items for FHFA. In 2019, FRD produced a glossary and style guide for FHFA in Vietnamese, Chinese, and Korean. Patrick Miller was the project manager on this work.

The Army's Judge Advocate General's Legal Center and School (TJAGLCS)

In 2019, FRD continued its 17-year partnership with the U.S. Army Judge Advocate General School (JAGS). FRD provides digital preservation and online access to military legal resources by digitizing and posting items to FRD's Military Legal Resources webpage. Katarina David is a subject matter expert, Liz White is the researcher, and Patrick Miller is both subject matter expert and project manager on the work with JAGS.

- **Malmedy Massacre Record of Trial.** Volume 7. This volume contains primary-source World War II trial evidence, including photographs, identification cards, and a watercolor painting. The book was presented to Ellis F. Burton, Assistant Army Judge Advocate and chief prosecutor of the Malmedy Massacre War Crimes Trial. Volume 7 was added to FRD's Malmedy Massacre Record of Trial subpage. The subpage contains trial background information and links to 15 more trial volumes. Katarina David is the subject matter expert who converted the 15 National Archive and Record Administration volumes and added them to the FRD Military Legal Resources website.

[loc.gov/rr/frd/Military_Law/Malmedy_trial.htm](https://www.loc.gov/rr/frd/Military_Law/Malmedy_trial.htm)

- **United States of America vs. Tomoyuki Yamashita.** Record of Trial. This World War II case against a Japanese general helps to set a precedent for commanders taking responsibility for the actions of their subordinates. FRD's Liz White converted four microfilm reels into pdfs for posting to the FRD Military Legal Resources webpage.

[loc.gov/rr/frd/Military_Law/military-legal-resources-home.html](https://www.loc.gov/rr/frd/Military_Law/military-legal-resources-home.html)

- **World War II Board of Review Decisions.** In 2019, FRD staff digitized volumes 24-81, plus a table and index, for the Board of Review Decisions Holdings, Opinions, and Reviews. In addition, FRD staff digitized 12 volumes, as well as cumulative index and tables, of the Board of Review and Judicial Council Holdings, Opinions, and Reviews.

[loc.gov/rr/frd/Military_Law/Board-of-Review_Holdings-Opinions-Reviews.html](https://www.loc.gov/rr/frd/Military_Law/Board-of-Review_Holdings-Opinions-Reviews.html)

Other titles that were digitized and added to the Military Legal Resources website include:

- *Lore of the Corps,*
- *Commandant's Annual Report, 2019*
- *Criminal Law Handbook,* and
- *Operational Law Handbook.*

Titles that FRD continued digitizing and posting to the FRD Military Legal Resources website include: *Military Law Review,* *The Army Lawyer,* and *Manuals for Courts-Martial.*





NIJ: Celebrating More Than 50 Years

ANTICIPATED DELIVERY DATE: APRIL 2020

Started in the spring of 2018, this booklet is for the National Institute of Justice (NIJ), the research, development, and evaluation arm of the U.S. Department of Justice, and it highlights the key achievements and milestones NIJ has accomplished since its creation in 1968. To gather information for this report, FRD interviewed several senior staff at NIJ, reviewed dozens of NIJ publications, and consulted a variety of open-source collections. The booklet, organized by decade, lists the key innovations in order of initial development. Many NIJ initiatives are ongoing, so each section ends with a page focused on additional achievements occurring within those years. Given the visual nature of the final product, FRD has worked with an outside designer to create the overall layout of the booklet.

Meaghan Flattery was the researcher, while Bailey Cahall served as the project manager.

LIBRARY LIBRARY
OF CONGRESS

101 Independence Ave. SE
Washington, DC 20540
[loc.gov](https://www.loc.gov)