



**UNITED STATES
CONSUMER PRODUCT SAFETY COMMISSION
4330 EAST WEST HIGHWAY
BETHESDA, MD 20814**

This document has been electronically approved and signed.

**THIS MATTER IS NOT SCHEDULED FOR A BALLOT VOTE.
A DECISIONAL MEETING FOR THIS MATTER IS SCHEUDLED ON MARCH 18, 2020.**

Date: March 4, 2020

TO : The Commission
Alberta E. Mills, Secretary

FROM : Mary T. Boyle, Executive Director
John G. Mullan, General Counsel

SUBJECT : FY 2020 Midyear Review

In the attached memorandum, the Executive Director summarizes staff's Midyear Review recommendations to align the FY 2020 Operating Plan with the FY 2020 enacted appropriation, and presents options to allocate future unexecuted balances, should balances be available, to support existing project work.

Please indicate your vote on the following options:

- I. Approve the FY 2020 Midyear Review, as drafted.

Signature Date

- II. Approve the FY 2020 Midyear Review, with the following specified changes:

Signature Date

III. Do not approve the FY 2020 Midyear Review.

Signature

Date

IV. Take the other action specified below:

Signature

Date

Attachment:

Executive Director's Memorandum on the Fiscal Year (FY) 2020 Proposed Operating Plan and Alignment Midyear Review



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This document has been electronically approved and signed.

March 4, 2020

TO: The Commission

THROUGH: Alberta E. Mills, Secretary
 John G. Mullan, General Counsel

FROM: Mary T. Boyle
 Executive Director

SUBJECT: Fiscal Year (FY) 2020 Proposed Operating Plan Alignment and Midyear Review

This memorandum summarizes staff’s recommendations to align funding levels of the FY 2020 Operating Plan, approved by the Commission on October 16, 2019, with the FY 2020 Consolidated Appropriations Act, enacted on December 20, 2019. The memorandum also provides staff’s proposed projects for the allocation of future unexecuted balances, should they become available, to support existing project work.

The enacted FY 2020 CPSC appropriation is \$132.5 million, which is \$5.5 million more than the FY 2020 Operating Plan level of \$127.0 approved by the Commission. Additionally, staff anticipates that approximately \$3 million in unexecuted balances will be available.

The Commission’s decision on how to allocate these funds will be incorporated into the FY 2020 Operating Plan previously approved by the Commission.

Final Enacted FY 2020 Operating Level

Recommendation #1: Align the FY 2020 Operating Plan with the FY 2020 Enacted Appropriation

As set forth in Table 1, staff recommends that the Commission align the FY 2020 Operating Plan funding levels with the final enacted appropriation level:

Table 1. FY 2020 Enacted Appropriation Adjustments to Operating Plan (dollars in thousands)

FY 2020 Request/Operating Plan	\$ 127,000
VGB Grant Increase	\$500
Salaries (Fully Funds 539 FTE)	\$2,007
Enterprise Data Analytics – Data Lake	\$700
Enterprise Data Analytics – Enterprise Business Intelligence Use Case	\$300
CPSC.gov Redesign/Modernization	\$1,100
Enterprise IT Security Improvements	\$800
IG FISMA Audit	\$93
FY 2020 Enacted Appropriation	\$ 132,500

As a threshold matter, staff recommends that \$2.6 million of the \$5.5 million be allocated for nondiscretionary requirements, including a \$0.5 million increase, available until expended, for the Virginia Graeme Baker Pool and Spa Safety Act (VGB) grant program and associated administrative costs. We also propose allocating \$2.0 million to fully fund 539 FTE and an additional \$0.093 million to increase funds for the OIG FISMA audit as requested by the Inspector General.

With the remaining \$2.9 million, staff recommends a targeted approach to focus on the agency's information technology (IT) needs in several areas. Specifically, staff recommends allocating \$1.0 million for Enterprise Data Analytics. This includes \$0.7 million to develop a data lake and \$0.3 million for an additional pilot use case on enterprise business intelligence. Each project is discussed in more detail in Attachment 1.

In addition, staff recommends allocating \$1.9 million to address IT shortfalls identified in Appendix A of the FY 2020 Performance Budget Request to Congress. Of the \$1.9 million, we recommend that \$1.1 million be allocated to modernize and redesign the agency website and \$0.8 million be allotted for information security improvements. These projects are also described more fully in Attachment 1.

Allocating Unexecuted Balances

Recommendation #2: Authorize Projects to Fund from Unexecuted Balances, if Available

In addition to aligning the FY 2020 Operating Plan with the FY 2020 enacted levels as set forth in Recommendation # 1, we are also proposing recommendations to allocate potential unexecuted balances. Similar to past practice, and given the uncertainty of the amount of year-end unexecuted balances, staff presents a prioritized list of projects for funding consideration. Currently, staff anticipates that approximately \$3 million in unexecuted balances will need to be reallocated. Because unexecuted balances are unplanned and not recurring, staff's recommendations for reallocation of unexecuted balances are generally limited to nonrecurring requirements, such as contracts. Staff has identified almost \$4 million in projects for funding consideration and listed them in priority order (Table 2 below). The prioritization of the projects is consistent with the staff's approach in Recommendation #1 to focus on resolving IT shortfalls first, followed by program requests. If authorized by the Commission, the agency would fund the recommended projects in priority order, subject to available unexecuted balances and acquisition feasibility. Projects that are not funded this fiscal year could be revisited in a future fiscal year, subject to resource availability and identified needs.

Staff recommends that the Commission approve the projects in Table 2, as listed in priority order, subject to available unexecuted balances this fiscal year. Attachment 2 provides a detailed description of each proposed project.

Table 2. Recommended Projects *(dollars in thousands)*
(See Attachment for a detailed description of each project.)

Rank	Org	Project	Amount
1	EXIT	Legacy Applications Modernization – Web NEISS	\$800
2	EXHR	Online Clearinghouse Query Tool	\$200
3	EXC	New Fast Track Portal	\$600
4	EXC	Modernization of Integrated Field System – Phase II	\$250
5	EXHR	ROV Debris Penetration – Full-Scale Testing and Evaluation	\$200
6	EXHR	IoT Intergovernmental Collaboration and Research	\$100
7	EXHR	IoT/Connected Consumer Products - Evaluation of Software/Firmware Vulnerabilities	\$250
8	OCM	Safety Campaigns	\$600
9	EXHR	Gas Appliance CO Sensors Testing	\$200
10	EXHR	Magnet Strength Measurement Research	\$150
11	EXHR	3D Printer Exposures and Physical Testing	\$150
12	EXHR	Smart Toy Age Grading Research	\$250
13	EXHR	Chemical Hazards Exposure Research	\$150
14	EXHR	Bath Tub Test Method Development	\$50
Total			\$3,950

Attachments:

1. Recommendation #1 – Adjustments
2. Recommendation #2 – Detailed Project Descriptions

Recommendation #1 – Adjustments

Adjustment	Amount (in \$000)	Description
VGB Grant Increase	\$500	This provides a \$0.5 million increase to the \$0.8 million included in the FY 2020 Operating Plan to bring the FY 2020 VGB funding to \$1.3 million level in the enacted FY 2020 appropriation. Total VGB Grant and associated administrative no-year funding available for obligation is \$2.3 million. This includes prior year balances of \$1.0 million and the FY 2020 appropriated amount of \$1.3 million.
Salaries	\$2,007	This increase fully funds 539 FTE to include the 3.1% pay raise in FY 2020.
Enterprise Data Analytics – Data Lake	\$700	This project aligns with the preliminary GSA Center of Excellence Data Strategy and Implementation Plan and establishes an agency data lake to store and provide access to agency data assets for analytical and reporting purposes. This involves the identification and establishment of critical data assets and replication mechanisms into a cloud-based scalable and extensible data lake. The project will also include the implementation of data management and governance best practices and support the development of internal skills for data owners to provide mission oriented data stewardship. Ultimately, this will provide a secure, expandable platform to house properly documented and stored agency data.

Recommendation #1 – Adjustments

Adjustment	Amount (in \$000)	Description
Enterprise Data Analytics – Enterprise Business Intelligence Use Case	\$300	This project delivers relevant tangible benefits to the agency through the implementation of business intelligence, reporting, and visualization capabilities to streamline current labor intensive reporting challenges while also providing new tools and developing agency internal expertise. In addition, the project will utilize the data and management controls implemented through the data lake to streamline and automate current reports involving manual aggregation of data sets from multiple program offices, such as the repeat offender report and integration with trade data.
CPSC.gov Redesign/Modernization	\$1,100	The redesign and modernization of CPSC.gov will provide a better user experience and allow users to access content in a more effective and consistent manner. Part of this project is to migrate from Drupal 7 to Drupal 8, which will not be supported after 2021. Also, in keeping with best practices, the agency will create an archive site for outdated content that may be needed in the future.
Enterprise IT Security Improvements	\$800	This project will enhance agency-wide visibility into the security posture of information systems and will improve security operations with faster response to cyber events and abnormal activity, and decision making regarding cyber threats. The impact will be increased protection against cyber-attacks— including malware, ransomware, and eavesdropping attacks as well as address audit weaknesses.
IG FISMA Audit	\$93	This increase accounts for a request from the OIG to increase funds for the statutorily mandated Federal Information Security Management Act (FISMA) audit contract. Specifically, the funding will allow further audits of security vulnerabilities discovered during previous IT audits. The addition of these funds would provide the OIG with a total of \$513 thousand in operating funds for FY 2020.

Recommendation #2 – Detailed Project Descriptions

MY#	Project Title	Amount (in \$000)	Description
1	Legacy Applications Modernization – Web NEISS	\$800	This project implements the agency’s multiyear effort to modernize obsolete and no-longer-supported legacy platform applications that support important mission functions. NEISS will be the first area addressed. This specific project will develop a Web-based application for the NEISS coders hosted in the cloud. In addition, it will reduce costs for supporting legacy laptops, minimize dependencies on outdated technologies, and improve security compliance.
2	Online Clearinghouse Query Tool	\$200	This project will provide an online searchable Clearinghouse database. The envisioned Online Clearinghouse will provide visitors/users the ability to customize searches to particular time periods, products, victim characteristics, etc. similar to the functionality of NEISS online. This will provide users the ability to self- service cleared clearinghouse data without having to request the data from the agency.
3	New Fast-Track Portal	\$600	This proposal is for contractor support to create a new section 15(b) reporting portal for Fast-Track recall cases. This project will generate an online database and information-submission portal, either as a portal imbedded in Saferproducts.gov, or outside of that existing portal, where stakeholders required to report information to the CPSC can do so in a standardized, efficient, and user-friendly way. This portal will be designed not only to ensure that CPSC receives more comprehensive and standardized reporting information at the entry point, but it will also guide users to improve the quality and comprehensiveness of the information submitted. Additionally, the portal will facilitate regular communication between users and the agency following the submission. CPSC staff will engage stakeholders at the outset of this project and seek their input from the initial development through user testing of the portal. The existing portal in its current configuration cannot accommodate the necessary enhancements.

Recommendation #2 – Detailed Project Descriptions

MY#	Project Title	Amount (in \$000)	Description
4	Modernization of Integrated Field System – Phase II	\$250	This proposal seeks funds for the second phase of a multiyear project to build a holistic system through which the Office of Compliance and Regulatory Enforcement (CRE) would conduct its essential functions. The first phase of this project identified organizational, technological, procedural, and staffing challenges associated with the Integrated Field System (IFS), and it examined and updated CRE’s core business processes and identified key system functional requirements for a holistic data system. The proposed second phase will independently and objectively compare and contrast available technology and existing data systems to conduct an Analysis of Alternatives.
5	ROV Debris Penetration – Full-Scale Testing and Evaluation	\$200	This project will develop and conduct full-scale testing of ROV floorboards subjected to scenarios mimicking branches or other debris penetrating the floorboards. Testing will be conducted on the sled test rig to measure the energy levels that can penetrate the plastic floorboards. Multiple floorboards of various brands, supplied by CPSC staff, will be tested. This testing will support Commission direction to drive development of the voluntary standard in the approved FY2020 Operating Plan.
6	IoT Intergovernmental Collaboration and Research	\$100	As new connected product standards, frameworks, and other industry-developed recommended practices continue to be created, this project extends and expands the current Interagency Agreement with the NIST NCCoE (currently focused on providing guidance to staff on testing infrastructure) to provide consultation on voluntary standards development and staff training related to IoT products.

Recommendation #2 – Detailed Project Descriptions

MY#	Project Title	Amount (in \$000)	Description
7	IoT/Connected Consumer Products - Evaluation of Software/Firmware Vulnerabilities	\$250	<p>This project will extend current contracted support on the development of test methods for software flaws and vulnerabilities, including those due to hacking, which could cause safety issues, providing for additional product categories including small kitchen appliances and programmable thermostats. The firm will provide a report detailing software weaknesses and vulnerabilities and how they could lead to safety issues. The report will provide details of the weakness, how the software is compromised, and it will make recommendations for corrective actions, as needed. Methodologies will be reported to provide CPSC staff with recommendations on improving safety of connected consumer products for voluntary standards development and improvements.</p>
8	Safety Campaigns	\$600	<p>This project will be used to amplify safety messages on a number of critical projects/subjects, including:</p> <ul style="list-style-type: none"> • Marketing the relaunch of SaferProducts.gov to raise awareness and increase usage of SaferProducts.gov following the agency’s major investment in the site’s redesign; • Increasing recall effectiveness by promoting recall email signups and promoting awareness and usage of the CPSC recall app; advancing awareness, education, and protection of consumers concerning issues such as counterfeit products on e-commerce websites and from third-party sellers; • Promoting awareness of and developing creative assets such as photography and video for safety campaigns such as residential elevators, window coverings, and poison prevention (conventional poison prevention concerns and liquid nicotine); • Targeting distribution for CPSC’s upcoming e-scooter public service announcement and upcoming senior safety efforts; and • Expanding baby safety campaigns including safe sleep concerns such as inclined sleepers, and padded crib bumpers in addition to our traditional bare is best/back to sleep messaging.

Recommendation #2 – Detailed Project Descriptions

MY#	Project Title	Amount (in \$000)	Description
9	Gas Appliance CO Sensors Testing	\$200	This proposal will test a limited set of gas boilers equipped with CO sensors and/or combustion controls to evaluate the effectiveness in protecting against CO. This supports the voluntary standards and rulemaking activities identified in the FY 2020 Operating Plan.
10	Magnet Strength Measurement Research	\$150	This project proposes to develop new test methods for measuring the hazard potential of the small, powerful, spherical magnets that have recently emerged onto the market. Obtaining repeatable and accurate flux index measurements (required in ASTM F963), particularly for small, spherical (2.5 to 3 mm diameter) magnets is challenging. Furthermore, due to the effect of the cross-sectional area on the flux index, this measurement can give false positive results for larger “traditional” weak magnets and false negative results for very small, extremely strong, rare earth magnets, the latter being of greatest concern.
11	3D Printer Exposures and Physical Testing	\$150	This project seeks to advance CPSC’s knowledge of hazards associated with 3D printing, including both mechanical and chemical concerns. This project will include the purchase of low-cost printers using various technologies and printing and testing products made from various materials on those printers. In addition, this project extends prior work characterizing printer emissions to characterize exposure from 3D printed products, including printing and post-processing phases.
12	Smart Toy Age Grading Research	\$250	This child-observational study of how children use smart toys constitutes Phase II of ongoing work by an already engaged contractor (currently doing online/literature review) in response to comments received on Age Determinations Guidelines. In Phase II, the vendor will conduct cognitive interviews with children playing with toys, focusing on smart toys.

Recommendation #2 – Detailed Project Descriptions

MY#	Project Title	Amount (in \$000)	Description
13	Chemical Hazards Exposure Research	\$150	<p>This project is comprised of two complementary research elements intended to strengthen staff capabilities to assess chronic hazards. In the first, the proposal will develop a quantitative and transparent approach for predicting the number of injuries and deaths in the U.S. population associated with exposures to chemicals in consumer products. Using methods developed and employed by the Defense Department, the CPSC intends to integrate U.S. population mortality and morbidity information, chemical risk assessment data, consumer product data, and user exposure information to predict the population attributable risk (PAR) for a specific consumer product. Staff will subsequently use the PAR in staff risk assessments, where it will form the basis for evaluating chronic risk. The second component is to develop a guide for how to use biomonitoring data (<i>e.g.</i>, NHANES) and toxicokinetic data together to estimate exposure. These are needed to improve our ability to predict the annual number of injuries or deaths attributable to the chemical component of a consumer product. This will help to estimate how many mortality and injury cases (both acute and chronic) are attributable to chemicals in specific consumer products, as well as across all products within the CPSC's jurisdiction.</p>
14	Bath Tub Test Method Development	\$50	<p>This project is for the development of new modern methods and test procedures for full-size bath tub and will support ASTM's ongoing revision of F462. The standard was created in the 1970s and has not undergone any substantial updates in more than 20 years.</p>