STATE OF CALIFORNIA
Budget Change Proposal - Cover Sheet
DF-46 (REV 10/20)

Fiscal Year	Business Unit	Department	Priority No.
2023-24	7730	Franchise Tax Board	002

Budget Request Name	Program	Subprogram
7730-002-BCP-2023-GB	6280/6290/6295	6280010/6280019/6280025

Budget Request Description
Return Processing Technology Support

Budget Request Summary
The Franchise Tax Board (FTB) requests an augmentation of $4.9 million General Fund and $96 thousand special funds for 29.0 permanent positions in 2023-24; and $4.6 million General Fund and $91 thousand special funds in 2024-25 and ongoing to maintain and improve its existing mission-critical applications and return-processing technology support services.

Requires Legislation	Code Section(s) to be Added/Amended/Repealed
☐ Yes ☒ No	

Does this BCP contain information technology (IT) components? ☒ Yes ☐ No *If yes, departmental Chief Information Officer must sign.*	Department CIO	Date

For IT requests, specify the project number, the most recent project approval document (FSR, SPR, S1BA, S2AA, S3SD, S4PRA), and the approval date.

Project No. **Project Approval Document:**

Approval Date:

If proposal affects another department, does other department concur with proposal? ☐ Yes ☐ No
Attach comments of affected department, signed and dated by the department director or designee.

Prepared By	Date	Reviewed By	Date

Department Director	Date	Agency Secretary	Date

Department of Finance Use Only

Additional Review: ☐ Capital Outlay ☐ ITCU ☐ FSCU ☐ OSAE ☐ Dept. of Technology

PPBA	Date submitted to the Legislature

A. Budget Request Summary

The Franchise Tax Board (FTB) requests an augmentation of $4.9 million General Fund and $96 thousand special funds for 29.0 permanent positions in 2023-24; and $4.6 million General Fund and $91 thousand special funds in 2024-25 and ongoing to maintain and improve its existing mission-critical applications and return-processing technology services.

B. Background/History

FTB is responsible for administering the income and franchise tax laws for the State of California. Staff process tax returns and payments, issue refunds to Californian's, conduct audits and filing enforcement actions, collect debts owed the state and support numerous service functions allowing for each of these compliance activities to occur. As a result of FTB's efforts, in FY 2021-22, FTB processed more than 22.5 million tax returns, over 10 million payments, responded to more than 2.9 million telephone calls, serviced over 70 million internet contacts, and collected about $190 billion in revenue, representing approximately 77 percent of California's General Fund revenue.[1] The General Fund is used to fund necessary services for all Californians across the state, including but not limited to education, safety and welfare programs, and law enforcement.

FTB's technology underpins FTB's return-processing and downstream workloads, and many of FTB's processes are automated and rely on technology and technical staff to maintain them. For example, 87% of FTB's tax returns are processed through automation, 83% of FTB's personal income tax collection accounts are resolved through automated collections, 80% of FTB's tax return payments are electronic, and 33% of FTB's audit net assessment revenue is achieved through automated audits. The remaining work requires staff intervention, but still requires technology to facilitate resolution. Additionally, FTB's customer self-service channels also rely heavily on technology. Many of these services are available 24 hours a day, 7 days a week.

Over the past several years FTB's Technology Services Division (TSD) has consistently been asked to implement changes and adopt new workloads in support of FTB's return processing through legislative change or change requests. At the same time, FTB must provide ongoing technical maintenance activities to ensure its systems and related infrastructure are on supported versions and contain the latest security patches so that FTB can continue to safeguard taxpayer information and provide timely return-processing services to a variety of key stakeholders (e.g., taxpayers, tax preparers). These factors have contributed to FTB's TSD struggling to effectively support its return-processing workloads and accomplish all other mandated or necessary workloads, negatively impacting the public services supported by the revenue FTB generates.

As a result, FTB has begun a comprehensive review of resources, both positions and tools, which support FTB technology work for all functions. This proposal focuses on resource gaps impacting FTB's return-processing workloads. As warranted, additional resource gaps may be addressed in other or future year Budget Change Proposals.

C. State Level Consideration

FTB's administration of California's income tax laws is facilitated by a committed focus to fulfilling FTB's Strategic Plan. Within the Strategic Plan, FTB's Mission is "to help taxpayers file timely and accurate tax returns and pay the correct amount to fund services important to Californians". To accomplish this mission, FTB established four Strategic Goals and Strategies, and has proven successful by considering them while maintaining FTB's Foundational Principles and Values. FTB's TSD provides vital support to FTB's operations, with a mission to deliver and modernize information technology infrastructure, data, and services essential to the success of the

[1] *Revenue figures based on the 2021-22 Cash Report reported in the Department of Finance's July 2022 Finance Bulletin.*

department's programs. TSD supports FTB's strategic goals by developing, maturing, streamlining, and modernizing information technology (IT) solutions and processes. With increased benefits realized through technology and automation comes an increased need to maintain IT programs, processes, and infrastructure with the goal of protecting FTB's ability to deliver reliable and sustainable critical return-processing services essential to FTB's mission of fairly and securely administering the state's income tax system. This BCP request aligns with three of FTB Strategic Goals:

Goal 1: Exceptional Service states the FTB will "Strive to continuously enhance our customers' experience." FTB's ability to provide exceptional service relies on the data and systems maintained by TSD.
Goal 2: Effective Compliance states the FTB will "Fairly administer the law to ensure taxpayers file and pay the correct amount." FTB's compliance activities require accurate data and timely information, which require effective and up-to-date technology solutions.
Goal 4: Operational Excellence states that FTB will "Optimize our processes, products, services, and resources to better serve our internal and external customers." TSD's automation solutions allow FTB internal business partners to improve their operational excellence; at the same time, TSD continues to standardize and modernize software development lifecycle (SDLC) processes to increase efficiencies and deliver quality solutions to FTB customers.

D. Justification

Return processing is a core function of FTB and includes:

- Receiving, analyzing, and processing tax returns (either electronically or via paper) from California individuals and business entities.
- Capturing, storing, processing, and using taxpayer data within FTB's programs.
- Processing payments and issuing refunds.
- Responding to customer contacts and providing customer self-service tools.
- Securing data and detecting and preventing fraud.

The monies received by the state via FTB's return-processing function provide funding for vital services important to Californians, such as public health and safety, fire, and educational services. Over the past several years, FTB's return-processing workloads have increased in scope and complexity, and as a result require increased levels of ongoing technical support. These changes in scope and complexity have resulted from:

- **Mandatory federal and state tax law changes**
    - California's lawmakers and Congress continue to respond to global and nationwide issues by looking for opportunities to manage emerging issues, while at the same time helping those Californian's most in need, triggering urgent legislative initiatives that FTB resources are called upon to implement in condensed, accelerated timeframes.
    - Many of these urgent initiatives – as well as IRS conformity requirements – have direct impacts on FTB's return-processing systems and require major modifications that require initial and ongoing technical maintenance.
- **Enhanced fraud detection and validation needs**
    - Nationwide, fraud and identity theft incidents continue to increase. The Federal Trade Commission (FTC) data show that consumers reported losing more than $5.8 billion to fraud in 2021, an increase of more than 70% over the previous year.[2]
    - Across the nation, federal and state tax entities – including FTB – are seeing a higher volume of attempts at refund fraud as fraudsters continue to modify their techniques and grow in sophistication.
- **Exponential growth in the amount of data acquired, exchanged, and consumed**

[2] *Federal Trade Commission*, 22 Feb. 2022, https://www.ftc.gov/

- Data access and accuracy is at the core of FTB's success, and it requires a high level of technical support to oversee its receipt, storage, processing, security, and use. The support for return-processing data has increased – and will continue to increase – in the following areas:
    - Volume: The amount of data created and received continues to grow.
    - Variety: The sources of data continues to diversify.
    - Veracity: Ensuring the quality of the data has increased in time and complexity.
    - Velocity: Data creation and availability needs to happen as quickly as possible.
- Exchanges of data with third parties to support tax administration continue to grow, requiring FTB to implement and maintain secure data exchange applications.
- Increases in the volume of data and expanded system availability requirements continue to impact nightly batch processing, increasing the need for monitoring and technical support to ensure all systems come up on time and data is updated for the next work shift.
- As FTB continues to work with state business partners to acquire, update, and use data sources to support tax administration, events have occurred where changes in their technology platform have required that FTB staff change FTB's systems as well.
    - A recent example is related to the Secretary of State's Business Connect Project that fundamentally changed the structure and use of the tax identification number for business entities. As a result, significant changes are needed (and are still ongoing) to ensure FTB's systems can accept these new numbers and historical data remains linked to any new numbers.

- **Increased taxpayer demand for self-services**
    - FTB continues to meet customer demands for more self-services by moving away from manual and paper-centric processing of its workloads and automating business and IT processes and customer service channels.

As a result of the changes noted above and overall impacts to return-processing operations, the following outcomes have occurred:

- **Mandatory federal and state tax law changes**
    - In many situations, due to timing of implementation and the inability to timely hire and train new staff, even with new resources granted, FTB has to find ways to absorb the new work or redirect experienced staff to complete substantial work necessary to implement legislation.
    - This resource gap continues to present increasing risks to FTB operations, including tax return processing. The level of redirection necessary to support changes is jeopardizing FTB's ability to do existing work. Once FTB is able to hire and train new staff, backlogged workloads are resumed, but risks were accepted unnecessarily.
- **Increased fraud-related modifications**
    - To meet the ever-evolving sophistication of fraudsters, FTB must continuously adapt fraud detection and prevention techniques. FTB continues to make every effort to address fraud, however, in recent years, due to resource gaps, FTB has been unable to fully implement fraud-related system change requests that will take staff an estimated 55,000 hours to implement.
- **Increased costs and system outages due to reduced capacity for M&O return-processing activities**
    - FTB has incurred additional support costs or had to accept additional and unwarranted operating risks as current staffing levels do not always allow FTB to update existing infrastructure before IT assets reach end of life.

- As a result, in some situations FTB's systems are stressed, less resilient, and experiencing significant intolerable system outages and degradations in taxpayer service levels and revenue-generating tax-processing workloads—FTB's core business line. Outages can also impact FTB staff as they are unable to work or transact in the systems, causing idle time by FTB staff if work is not available that can be done without system support.

The changes and outcomes described above have contributed to the growing need for increased ongoing technology support. Due to these changes, FTB has reached a critical point where it can no longer keep up its essential maintenance, operations, and stakeholder-requested workloads. An industry-wide standard often used to indicate the overall health of an IT organization is to compare resources directed to maintenance and operations (annual application development and support) versus resources focused on innovation and change (new development and enhancements). IT organizations are typically in a healthy balance when they allocate their effort 50% to maintenance and operations and 50% to new development and enhancements.

- In 2018, FTB's ratio was 65% maintenance and operations compared to 35% innovation and change.
- By 2021, FTB's ratio had changed to 43% maintenance and operations; and 57% innovation and change.

As an overall analysis, this ratio would indicate an unhealthy allocation of resources and the overall expectation is that this trend will not change without the action of obtaining additional staff. To ensure TSD has staffing to address these deficiencies, **FTB requests 29 positions** in the following classifications:

- **26 Information Technology Specialist I**
- **3 Information Technology Specialist II**

With this requested augmentation, FTB will be able to commit resources to address its struggling workloads and reduce the risk of adverse impacts to return-processing workloads, enhance FTB's ability to react to change, make return processing easier, which helps downstream compliance activities, and improves FTB's ability to deliver reliable and sustainable critical technology and customer services in support of its mission. Further, the augmentation will help FTB:

- Begin to address FTB's imbalance of maintenance and operations work to innovations and change requests.
- Allow FTB to timely and robustly address return processing and supporting workloads including: data acquisition, capture, consumption, and storage.
- Improve taxpayer compliance and employee efficiency and accuracy, and expand customer services through automation, all of which result in faster and more efficient tax administration and return processing.
- Reduce risk of security breaches, outages, work stoppages, and adverse revenue and customer impacts.

Below are the specific resource needs associated with each technology function:

Data Acquire

Analysis – Information Technology Specialist I – 1.0 permanent position
Development – Information Technology Specialist I – 2.0 permanent positions
Quality Assurance – Information Technology Specialist I – 1.0 permanent position

a-1 Third-Party Data

FTB acquires and leverages third-party information to accurately and efficiently process personal income and business entity tax returns. Leveraging third-party data helps ensure accurate income and asset information is reported, the proper amount of tax is paid, and improved tax return processing, while supporting downstream compliance activities, including identifying better audit cases, detecting fraud, and issuing correct notices and bills. FTB is in

the process of updating its framework to efficiently and reliably receive and retain this critical data.

FTB requests **one IT Specialist I position** to create services to pull data from third-party data sources and create updated third-party data pages within return-processing systems to enable the effective use of the data sources:

- One IT Specialist I developer to create and maintain services to receive and store critical data, thereby increasing the availability and speed at which revenue-related data can be used, while at the same time ensuring the data are secure and appropriately classified, tagged, and made ready to support its return-processing workloads.

a-2 Application Programming Interface (API) – Data In

Fluctuating security vulnerabilities and standards required FTB to adapt and address the ever-growing sophistication of security threats and protect FTB's return-processing workloads. To help address security vulnerabilities and prevent data breaches, FTB updated its data acquisition intake methods to a more secure method that reduces duplicative transmissions and data elements, and limits sensitive data that is shared to further safeguard taxpayer data.

FTB requests **three IT Specialist I positions** to ensure adequate resources exist to maintain and develop APIs through robust functions including analysis, development, and testing:

- One IT Specialist I analyst to analyze, define, and document the data acquisition requirements, and complete technical specification documents and design artifacts, research, troubleshoot, and work with technology partners to resolve production defects.
- One IT Specialist I developer to develop, implement, and perform maintenance and operations of data acquisition services.
- One IT Specialist I tester to focus on quality assurance, including development and completion of test strategies and scripts that validate web services and interface processes. This resource will also document and analyze test results, and condition data.

Data Capture and Consume

Analysis – Information Technology Specialist I – 2.0 permanent positions
Development – Information Technology Specialist I – 2.0 permanent positions
Quality Assurance – Information Technology Specialist I – 2.0 permanent positions
Operations Management – Information Technology Specialist I – 2.0 permanent positions

b-1 Tax Form Data

FTB consumed data from 117 tax forms in 2018 and 204 in 2022, which is a 74% increase. Contained within these forms are a variety of data fields used by FTB business areas to process returns, support revenue functions, or prevent fraud. These forms and fields require analysis, design, development and testing by TSD staff to ensure that the data are calculated properly and accurately transmitted to the proper return-processing databases for further processing. Ultimately consumption occurs by FTB's internal and external stakeholders, including assisting downstream compliance programs, and ensure the proper amount of tax is paid and data are available for legislative projects, such as Golden State Stimulus I and Golden State Stimulus II.

FTB requests **three IT Specialist I positions** to ensure adequate resources exist to maintain and develop services for capturing tax form data through robust functions including design, development, and testing:

- Two IT Specialist I developers to design, implement, maintain, and operate forms data.
- One IT Specialist I tester to perform quality assurance and system testing functions and validate the increase in tax return form data. These tasks include developing and

completing test plans, test cases and executing scripts and queries based on the requirements.

b-2 Public Facing Self-Service Applications

FTB has 44 external facing interactive applications that serve the public and allow FTB to obtain and consume critical return-processing information and intake payments. Some of the key applications include Web Pay and CalFile where taxpayers can file their taxes for free, make payments, or request a payment plan. Over the past four years the number of applications supported have grown almost 30% from 35 applications in 2017-18 to 44 applications in 2021-22. During this same period, the number of analysts supporting the electronic commerce (ECOM) applications has not increased to accommodate the growing need for self-service external applications. In addition to the growing list of applications and the annual changes required, is the need to add additional functionality to many of these applications. The team has required redirection of staff from other workloads to complete mandated changes. For example, this redirection has caused the internal applications team to defer their maintenance and operations work, increasing the risk of system outages and internal applications operating on unsupported hardware and software.

FTB requests **one IT Specialist I position** to conduct analysis of legislation, new system changes to enhance system functionality, and maintenance and operations of existing functionality, including annual tax year changes:

- One IT Specialist I analyst to perform analysis activities to ensure the ECOM applications fully meets FTB business and program needs, both internally and externally.

b-3 Secure Data Capture

The Secure Data Capture and Tech Tools Section provides return-processing system support for FTB's paper state and federal tax forms intake systems, including two data capture applications, a bank deposit application, nine high-speed scanners, and 19 scan jobs. This workload has increased substantially. At the end of 2016, the team supported the data capture of 89 state forms. It has since absorbed an additional 20 state forms and 65 federal forms and is continuing to grow. The additional forms and fields directly translate into operational support needed for scan jobs, scanners, and the data capture systems. The operation, integrity, and expediency of these systems are critical to the daily operation of the department.

FTB requests **two IT Specialist I positions** to augment the existing Paper Data Capture Operations Team to provide resolution of the technical and application issues that affect performance, functionality, and availability of FTB's mission-critical data capture systems, scanners, and scan jobs:

- Two IT Specialist I operations specialists to support, troubleshoot, and perform workflow analysis related to the increase in data capture of state and federal forms and data capture design descriptions.

b-4 Reports

FTB's Enterprise Reports aid FTB's program areas in performing their mission-critical work and making informed decisions in the planning and operations of their return-processing work, while detecting any anomalies that adversely impact workloads, such as tax return and refund processing delays that could result in FTB paying interest on delayed refunds.

FTB requests **two IT Specialist I positions** to ensure the accuracy and availability of enterprise reports to support all of FTB's core enterprise functions, including filing, processing, and downstream compliance activities, through robust functions including analysis and testing:

- One IT Specialist I analyst to assist in maintaining existing reports and implementing new enterprise reports that will define the long-term strategy to build out the complex

centralized repository of enterprise data (called a "data lake"). This also includes supporting the location for enterprise metrics gathering of data from source systems.

- One IT Specialist I tester to assist in system testing and validation activities, including analyze system requirements; collaborate with internal SDLC partners to review, edit, and understand system requirements and technical documentation; plan and manage workloads to meet release timeframes; develop and execute test plans, test scripts and create accounts based on the requirements; and document and report results.

Data Store

Operations Management – Information Technology Specialist I – 1.0 permanent position
Technical Environments – Information Technology Specialist I – 2.0 permanent positions
Development – Information Technology Specialist I – 2.0 permanent positions

c-1 Data Tools Administration

Processing petabytes of return-processing data to its repositories requires a host of complex tools to administer, manage, replicate, and protect the data from its origin source to the many data stores and warehouses on which FTB relies. If there are data accuracy issues, bottlenecks, or data-flow outages because of insufficient resources to perform data administration, this creates a greater potential for issues with the data integrity within FTB's revenue-supporting systems, processes, and downstream compliance work. Data issues can cause incorrect information and data elements within systems, incorrect notices sent to taxpayers, and incorrect taxes paid, and system outages. This places FTB at greater risk of being able to perform its tax administration work, while decreasing the public's trust.

FTB requests **four IT Specialist I positions** to ensure the accuracy and availability of enterprise data that support all of FTB's core enterprise functions, including filing, processing and downstream compliance activities:

- Three IT Specialist I technical environment administrators to manage the tools, including version upgrades, patching, integration with new and existing tools, and troubleshooting issues and resolving incidents.
- One IT Specialist I data developer to implement and enforce data integration processes and procedures to ensure the health and stability of FTB's data pipeline.

c-2 Batch

Batch processing is a technique for automating and processing multiple transactions as a single bundle to help ensure accuracy of tax information contained within FTB's return-processing systems. Computerized batch processing allows FTB to run jobs without end user interaction and schedule them to run as computing resources permit to avoid negative business operation impacts. Batch operators monitor batch job processing, respond when batch jobs abend (abnormal end), and schedule and execute ad hoc batch jobs as needed.

FTB requests **one IT Specialist I position** to ensure FTB's return-processing systems store and contain the most current information and transactions thus ensuring FTB's customer service agents have access to and provide accurate information, correct notices are generated to taxpayers, and FTB business area staff are not idle due to lack of current data being available in FTB's systems:

- One IT Specialist I operations specialist to perform technical tasks to support batch job scheduling and job execution, respond to and resolve aborted batch jobs, validate data transfers to and from third-party entities, actively monitor resource consumption and performance and provide status.

Stabilizing Foundation for Changes

Analysis – Information Technology Specialist I – 4.0 permanent positions

Analysis – Information Technology Specialist II – 1.0 permanent position
Development – Information Technology Specialist I – 3.0 permanent positions
Quality Assurance – Information Technology Specialist I – 2.0 permanent positions
Enterprise Architecture – Information Technology Specialist II – 2.0 permanent positions

With the significant changes in FTB's technology platform and risks to FTB's workloads including return processing, ensuring adequate resources to support change for the short and long run is critical. The following resources will address this current gap.

d-1 Enterprise Architecture

Enterprise Architecture (EA) provides strategic plans, frameworks, models, standards, and roadmaps to guide FTB's staff and vendors toward FTB's best and most fiscally prudent business and technological future in support of FTB's mission. EA also provides an essential oversight role to ensure proposed solutions leverage existing investments and do not introduce unnecessary complexity that negatively impacts long-term maintenance costs and resource needs, system uptime, and availability.

FTB has a very complex technical environment, numerous servers and tools, over 700 business application, and hundreds of staff modifying and maintaining these systems. EA plays a critical role in this complex environment. The critical role ensures:

1. FTB does not add unnecessary complexity. By eliminating unnecessary complexity, FTB will improve the maintainability and uptime of FTB systems.
2. Technical teams leverage existing tools. By leveraging existing tools, FTB will reduce the overall fiscal burden to the state and improve the maintainability of FTB's systems.
3. FTB's systems are modernized, and meeting stakeholder needs. Without an EA program, FTB would not have had the vision or the capability to master plan its 30-year tax-system modernization program, Enterprise Data to Revenue (EDR). This vision and its execution have proven to be of significant value to the state with the initial EDR project generating new revenue over $1 billion annually for the General Fund.

By providing these essential predecessor and oversight functions, EA keeps the big enterprise picture in mind, while providing oversight of the over 700 applications and the teams that support them. Without a mature and effective EA program, FTB systems would not have the resiliency and interoperability that we have today, resulting in even more delays for critical workloads.

FTB requests **two IT Specialist II positions** to provide the EA functions that ultimately result in better uptime, lower cost, and vision for FTB and the state. Without these positions, FTB will not be able to plan and establish FTB's technological future state, defining and implementing a strategic, sustainable, and resilient technological architecture that meets the department's current and future needs in support of FTB's mission. FTB requests:

- Two IT Specialist II architects to define and guide the IT Strategic Plan and establish, master plan, and enforce FTB's Target Architecture, perform gap analysis on existing solutions to develop roadmaps that modernize FTB's IT portfolio, and manage the retirement of older applications to reduce FTB's risk in aging technologies.

d-2 Solution Assessments

The Solution Assessment (SA) Team works in collaboration with business and technical stakeholders to conduct requirement analysis that results in high-level technical solutions on multi-impact and complex enhancement change requests. Solution assessments examine and analyze the changes requested, accurately identify the impacted systems and level of effort so the work can be efficiently planned and coordinated, preventing costly downstream rework if the SA was not completed. These solutions aid in the prioritization and scheduling of

SDLC work, while at the same time ensuring that the needs of internal and external stakeholders are met.

FTB requests **two IT Specialist I positions and one IT Specialist II position** to support FTB's ongoing success in supporting return processing through effective solution assessments of external and internal system change requests:

- Two IT Specialist I analysts to focus on analyzing and planning system changes. The positions are key in addressing maintenance and operations requests.
    - Work closely with program areas, technical staff, and other project teams to evaluate, develop, and design complex technical solutions to ensure long-term business and technology strategies are met.
    - Leverage the direction provided by the EA team to ensure the recommended solutions are in alignment with FTB's strategic direction.
    - Create detailed documentation that includes recommended solutions.
- One IT Specialist II lead analyst to focus on analyzing and planning system changes. The position will perform as the functional lead for the SA team. This includes oversight for the quality of the SAs, planning and prioritizing SA workload, mentoring team members, maturing the SA program, and is the point of escalation when needed.

d-3 Automating Manual Workflows

FTB continues to move away from resource-intensive manual and paper-centric processing of its workloads to automating business and IT processes. Automation improves employee efficiency, increases accuracy, improves security, and expands services, all of which result in faster and more efficient tax administration and return-processing workloads.

FTB requests **six IT Specialist I positions** to ensure FTB's return-processing systems benefit from improvements in system automation through robust functions including analysis, development, and testing. FTB's return-processing function relies heavily on an automated set of rules that authenticate and validate returns. Any returns that fail these tests fall out for manual processing. With more than 22.5 million returns annually, this activity is critical to ensure that returns do not fall out of normal processing without a valid reason. Erroneous fallout can result in delayed refunds and unnecessary contacts to taxpayers. As tax laws increase in complexity, new data sets are added to enhance FTB's work, fraud related actions continue to increase, FTB's rules for return processing continue to increase in complexity, and the window of opportunity to implement these rules is fixed over a short duration of time. FTB has insufficient resources to ensure these rules are established timely or in some situations robustly, which results in delayed return processing or FTB's inability to identify areas of concern as quickly as possible. FTB requests:

- Two IT Specialist I analysts to manage the analysis, implementation, maintenance, and operations workloads associated with automating manual workflows and processes.
- Two IT Specialist I developers to perform the design and development of these solutions. This includes developing web services to integrate with other applications to receive data for processing, designing and developing the workflow, and implementing required rules and validation checks.
- Two IT Specialist I testers to develop and execute comprehensive test cases based on business requirements, write and execute complex queries and condition data, and submit bugs and defects using FTB approved software and work with analysts and developers to resolve and close bugs within the release.

d-4 Development and Testing Environment (Non-Production)

A non-production environment is an environment where patch, development, and all testing work can safely be conducted – and all bugs can be eliminated – before releasing new or changed return-processing software updates into the production environment. Code deployments are complex and have dozens of steps that must be coordinated and executed smoothly, otherwise the environments experience a negative event and become unavailable

and the testers and developers are unable to do their work in support of critical systems and services. Analysts, developers, and quality assurance testers rely on the non-production environments to perform their work. Any environment outage creates work stoppage issues for technology staff and adverse impacts to delivery dates, product quality, and project costs. Negative events in these environments can have a large impact on FTB's ability to provide IT services, meet key dates, and fully test application changes prior to production deployments.

- During a recent quarterly release, the environments experienced over 20 days of outages causing disruptions in SDLC work and testers reducing their regression and performance testing. The inability to fully test changes in FTB's non-production environment could mean that system upgrades are deployed without sufficient testing, allowing for issues to display for the first time in the production environment. Depending on the issue, this presents a greater risk for outages and data quality issues, impacting staff productivity and taxpayers' ability to obtain the service they need to meet their obligations.

FTB requests **one IT Specialist I position** to support the administration, coordination, maintenance, and monitoring of critical enterprise tax services non-production software environments and code stream deployments:

- One IT Specialist I developer to administer, coordinate, maintain, restore, and monitor critical non-production environments via a single point of contact. This position will also collaborate with analysis, development, architecture, and testing groups on scheduling and coordination of activities to support implementation of new, and modifications to existing technical environments during all phases of the SDLC. The IT Specialist I will also facilitate all incidents in the non-production environment. This will enable analysts, developers, and quality-assurance testers to use these environments as planned to perform their SDLC work, with little or no disruption. If there is an outage or incident, this position will focus on providing a single point of contact for troubleshooting and restoring service functionality as soon as possible. This allows planned releases to go to production on time, particularly for FTB's annual tax changes.

E. Outcomes and Accountability

Once approved, the TSD bureau directors will work with their Chief Technology Officer (CTO) and Chief Information Officer (CIO) to oversee the position augmentation allocations to the targeted units and workloads. TSD bureau directors and subordinate leadership will actively oversee the corresponding capacity, release, and operational plans. Using its established release planning processes and governance, TSD will ensure the relevant change requests and targeted workloads are planned and addressed. Using the workload metrics and TSD's planning tool, Team Foundation Server (TFS), TSD leadership will monitor weekly the corresponding change requests, change orders, and tasks as key metrics to measure progress and make any adjustments needed through to completion. As a result, the resources will be able to address the struggling workloads that support FTB's return-processing activities.

After executing a majority of the targeted workloads, TSD expects to revive its ability to redirect and reprioritize its technology work to meet the needs of FTB's stakeholders and continue to sustain FTB's revenue-generating mission. These positions will help TSD achieve a better balance of a 40-hour work week for under-allocated areas. They will also improve TSD's ratio of maintenance and operations work percentages compared to new and enhancement work percentages, creating a healthier alignment with industry standards. Additionally, these positions will contribute to preventing or reducing risk of security breaches, outages, work stoppages, security variances, incidents, fraud, and adverse return-processing, and revenue impacts.

F. Analysis of All Feasible Alternatives

Alternative #1: Approve augmentation of $4.9 million General Fund and $96 thousand special funds for 29.0 permanent positions in FY 2023-24; and $4.6 million General Fund and $91 thousand special funds in 2024-25 and ongoing to maintain and improve its existing mission-critical applications and technology services. This alternative enables FTB to most effectively perform its mission-critical work.

Pros:

- Improve FTB's ability to deliver reliable and sustainable critical technology services in support of its mission.
- Begin to address FTB's imbalance of maintenance and operations work to innovations and change requests.
- Allow FTB to timely and robustly address return-processing and supporting workloads including data acquisition, capture, consumption, and storage.
- Improve taxpayer compliance and employee efficiency and accuracy, and expand customer services through automation, all of which result in faster and more efficient tax administration and return processing.
- Reduce risk of security breaches, outages, work stoppages, and adverse revenue impacts.

Cons:

- Create a General Fund expenditure.

Alternative 2: Approve augmentation of $4.9 million General Fund and $96 thousand special funds for 22 permanent positions and 7 three-year limited-term positions; $4.6 million General Fund and $91 thousand special funds in 2024-25 and 2025-26; and $3.6 million General Fund and $72 thousand special funds in 2026 -27 and ongoing to maintain and improve its existing mission-critical applications and technology services. This alternative enables FTB to partially improve FTB's ability to perform its mission-critical work.

Pros:

- Reduce the impact to the General Fund expenditure.
- Partially improve FTB's ability to deliver reliable and sustainable critical technology services in support of its mission.
- Partially allow FTB to begin to address its imbalance of maintenance and operations work to innovations and change requests.
- Partially allow FTB to address a portion of return-processing and supporting workloads including data acquisition, capture, consumption, storage.
- Partially improve taxpayer compliance and employee efficiency and accuracy, and expand customer services through automation, all of which result in faster and more efficient tax administration and return processing.
- Somewhat reduce risk of security breaches, outages, work stoppages, and adverse revenue impacts.

Cons:

- Considerably compromises ability to deliver reliable and sustainable critical technology services in support of FTB's mission.

Alternative 3: Deny request. Without an augmentation to FTB staffing levels, FTB will not be able to perform its mission-critical work.

Pros:

- Avoid a General Fund expenditure.

Cons:

- Render FTB unable to deliver timely reliable and sustainable critical technology services in support of its mission.
- Endanger FTB's ability to address its imbalance of maintenance and operations work to innovations/change requests.

- Disable FTB's ability to address return-processing and supporting workloads including: data acquisition, capture, consumption, storage.
- Significantly increase FTB's risk of security breaches, outages, work stoppages and adverse revenue impacts.

G. Implementation Plan

- June 2023 - All documents to establish permanent position are prepared and approved by the FTB Budget Officer and forwarded to Department of Finance.
- June 2023 - Department of Finance notifies FTB of position approval.
- July 2023 - Permanent positions are established and FTB begins hiring.

H. Supplemental Information

None.

I. Recommendation

Approve Alternative 1: Augmentation of $4.9 million General Fund and $96 thousand special funds for 29.0 permanent positions in FY 2023-24; and $4.6 million General Fund and $91 thousand special funds in 2024-25 and ongoing to maintain and improve its existing mission-critical applications and technology services. This alternative best addresses FTB's need.

This alternative enables FTB to most effectively perform its mission-critical work by improving FTB's capability to deliver critical technology services in support of its mission, reduces risk of security breaches, outages, and work stoppages, and adverse revenue impacts. FTB will be able to address outstanding IT return-processing workloads and remain responsive to legislative change and customer needs.

BCP Fiscal Detail Sheet

BCP Title:

BR Name:

Budget Request Summary

Personal Services