The Franchise Tax Board (FTB) is requesting $2.76 million, $2.7 million General Fund and $60,000 special funds, for two permanent positions, one limited-term position, and software costs in FY 2023-24; $2.16 million, $2.1 million General Fund and $50,000 special funds, for two permanent positions, one limited-term position, and software costs in 2024-25; $1.9 million, $1.87 million General Fund and $30,000 special funds, for two permanent positions and software costs in 2025-26; and $1.5 million, $1.47 million General Fund and $30,000 special funds, for two permanent positions and software costs in 2026-27 and ongoing to replace obsolete legacy and custom-coded solutions and implement a new, enterprise-class low-code service management platform that will reduce risks, sustain legacy integration efforts, and improve service delivery for both internal and external customers.

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

Additional Review: ☐ Capital Outlay ☐ ITCU ☐ FSCU ☐ OSAE ☐ Dept. of Technology
A. Budget Request Summary

The Franchise Tax Board (FTB) is requesting $2.76 million, $2.7 million General Fund and $60,000 special funds, for two permanent positions, one limited-term position, and software costs in FY 2023-24; $2.16 million, $2.1 million General Fund and $50,000 special funds, for two permanent positions, one limited-term position, and software costs in 2024-25; $1.9 million, $1.87 million General Fund and $30,000 special funds, for two permanent positions, one limited-term position, and software costs in 2025-26; and $1.5 million, $1.47 million General Fund and $30,000 special funds, for two permanent positions and software costs in 2026-27 and ongoing to replace obsolete legacy and custom-coded solutions and implement a new, enterprise-class low-code service management platform that will reduce risks, sustain legacy integration efforts, and improve service delivery for both internal and external customers.

B. Background/History

FTB’s primary function is to administer the California Revenue and Taxation Code (R&TC), which includes collecting the proper amount of taxes by assisting taxpayers in filing returns timely and accurately in the most cost-effective manner while operating other entrusted government programs. FTB serves the public by continually improving the quality of products and services and performing in a manner warranting the highest degree of public confidence with integrity, efficiency, and fairness. In fiscal year 2021-22, FTB received more than 22.5 million tax returns and processed more than 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 the California’s General Fund revenue.¹

FTB’s technology underpins FTB’s various 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. In 2021, 2.5 million calls were handled through FTB’s Interactive Voice Response system, and FTB’s website had over 240 million page views, and over $70 billion in web payments were received.

Over the past several years, FTB’s Technology Services Division (TSD) has consistently been asked to implement changes and adopt new workloads 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 services to a variety of key stakeholders (e.g., taxpayers, tax preparers). These factors have contributed to FTB’s TSD struggling to effectively mature its Information Technology Service Management (ITSM) practices and accomplish all other mandated or necessary workloads.

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

FTB’s target architecture for information technology (IT) includes ITSM framework, which helps technical staff oversee the end-to-end delivery of IT services to customers. ITSM encompasses all the processes and activities to design, create, deliver, and support IT services. A core concept of ITSM is the premise that IT should be delivered as a service. A typical ITSM scenario could involve asking for new hardware like a laptop. A customer would submit a request through a portal, filling

¹ Revenue figures based on the 2021-22 Cash Report reported in the Department of Finance’s July 2022 Finance Bulletin.
out a ticket with all relevant information, and kicking off a repeatable workflow. Then, the ticket would land in the IT team’s queue, where incoming requests are sorted and addressed according to importance.

Currently, FTB’s ITSM processes are built on multiple technology platforms that create bottlenecks and oftentimes slow the delivery of new services by months. These disparate technologies include:

- Computer Associates products to manage user support and tracking of hardware and software.
- Nearly 60 custom-coded solutions for business needs and to better leverage data.
- ServiceNow Governance, Risk, and Compliance (GRC) module, with a limited Configuration Management Database (CMDB).

Services that leverage this model are requested by both business and IT users to solve specific business and IT problems, and many of the implemented solutions are used enterprise wide. There is an ongoing demand and requests for IT solutions for new self-service business functions and reporting (e.g., COVID-19 vaccination verification, telework metrics, and leave buy-back reporting). Although FTB’s development of custom-coded tools – coupled with the existing products – has helped meet some of the most critical customer needs, this model is not sustainable and does not support modernization, effective maintenance, or further innovation. As needs arise, the number of custom-coded solutions continues to grow, as does the time needed to support the existing disparate solutions through the IT system development lifecycle (SDLC).

FTB has a very complex technical environment, numerous servers and tools, over 700 business applications, and hundreds of staff modifying and maintaining these systems. As FTB’s technical environment, customer service requirements, and system requests continue to grow in diversity, FTB needs an enterprise solution – coupled with repeatable workflows – to provide a framework to implement customer features that are secure, quick to implement, and have lower ongoing maintenance needs. An enterprise “low-code platform” will help FTB deliver and maintain IT solutions, which means IT staff can deliver digital transformative solutions faster by minimizing the amount of coding required while ensuring appropriate security safeguards are in place. Low-code is a software development approach that requires little to no coding to build applications and processes. Instead of using complex programming languages, you can employ visual interfaces with basic logic and drag-and-drop capabilities in a low-code development platform. In addition to the visual interface, low-code platforms provide reusable actions that users can drag-and-drop into processes for rapid development.

One example that illustrates the value of a low-code platform is a workstation reservation system (aka Hoteling). Building this solution with custom code would take significantly longer than using pre-designed templates and formats available in modern low-code platforms. With low-code, you simply select your template, drag and drop information fields, show a clickable location map, build workflows and publish. Low-code development tools have the same framework and allow developers to quickly use pre-coded templates and features to implement IT solutions quickly and efficiently. To date, FTB has not been able to keep up with the demand for workflow automation requested by the business areas and the critical maintenance on the custom coded applications. The implementation of a low-code platform will create efficiencies and help ensure that FTB can meet service delivery expectations as well as manage required maintenance and operations (M&O) activities.

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
FTB established four Strategic Goals and Strategies, and has proven successful by considering them while maintaining our Foundational Principles and Values.

FTB’s TSD provides vital support to FTB’s operations, with a mission to deliver and modernize IT infrastructure, data and services essential to the success of the department’s programs. TSD supports FTB’s strategic goals by developing, maturing, streamlining and/or modernizing 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 services essential to FTB’s mission of fairly and securely administering the state’s income tax system. This BCP request aligns with two 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. A low-code platform will underpin critical services that FTB offers to both its enterprise and to taxpayers.

**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 business to improve their operational excellence; at the same time, TSD continues to standardize and modernize SDLC processes to increase efficiencies and deliver quality solutions to our customers.

**D. Justification**

Over the past several years FTB’s TSD has experienced several factors that have impacted its ability to effectively implement and maintain key services in the timeframes required while maintaining data security and integration and fully optimizing the use of repeatable workflows. These factors include:

- **Increased demand for services within short timeframes**
  FTB is often asked to create and implement critical services and adopt new workloads with very short timeframes to support key efforts and legislation. These services support FTB’s central tax mission and systems, as well as human resources and legal workloads, but are outside of our core tax systems. Recent examples include credit reservation systems and a system to manage COVID-19 vaccine verification.

- **Decentralized customer tools with outdated support**
  Over time FTB business customers have endeavored to create standalone IT solutions using desktop tools, like Access Databases. These desktop tools do not have the benefit of IT support and the data is not available to other business areas who may benefit. In addition, these applications do not have all FTB’s security controls applied and create unnecessary risk to the department.

- **Outdated disparate legacy systems without integrated support**
  FTB must provide ongoing technical support activities to ensure its systems and related infrastructure are kept up-to-date so that we can continue to safeguard taxpayer information and provide timely services to a variety of key stakeholders (e.g., employees, taxpayers, tax preparers). FTB has several key legacy systems that require special maintenance and patching to maintain viability, which takes away capacity from other activities. The disparate solutions FTB currently uses come with inherent security risks, increasingly complex operational support, over-customization, inconsistent standards, and a lack of solution interoperability.

These factors have contributed to an environment where TSD cannot effectively support the vast array of custom-coded solutions because of the increase in cost of ownership as well as the time required to support the existing disparate solutions through the IT software development lifecycle (SDLC), which in turn has negative impacts to taxpayers, stakeholders, and external stakeholders. As a result of the factors noted above, the following outcomes have occurred:
• Time-sensitive requests requiring custom-coded solutions cannot be completed timely, require resource redirection, or are implemented with limited functionality

Applications created in response to legislative mandates often cannot be completed within needed timeframes without redirecting resources from other critical workloads. For example, the Homeless Hiring Tax Credit reservation was completed at the expense of making annual changes to CalFile, which required FTB to delay implementation of CalFile to mid-January.

In other situations, applications may only go forward with limited functionality as workarounds. For example, in support of the teleworking directive a workstation reservation application is necessary to support a remote workforce. Unfortunately, due to the time associated with the development of this tool FTB could only implement a basic workaround using Microsoft Outlook to calendar “busy” time for workstations, which doesn’t fully meet requirements such as supervisor approval or notifications. Because workarounds are implemented with limited functionality due to length of time to build, many business needs never get fully implemented due to volume of work and the redirection of resources to other priorities.

• Non-working applications and vulnerable data

Due to long development timeframes, business customers may opt to use Microsoft Office tools like Access or Excel to develop their own solutions. Typically, these customer-created solutions are maintained by the business areas and may cease to function when manufacturer upgrades are rolled out or security standards are updated. For example, some business areas have created Access databases to manage production reports that are outside of FTB’s main systems, which segregates data and has the potential for inaccurate and inconsistent information. Additionally, an application created on an older version of Access will eventually not be supported and will experience compatibility issues with newer Access versions, resulting in the underlying database being inoperable.

• Inability to meet maintenance upgrade timeframes

FTB has incurred additional support costs or had to accept additional and unwarranted operating risks because the number of disparate applications we must support takes staff capacity away from updating existing systems before software goes out of support. For example, when our primary operating system and development framework is upgraded by the manufacturer, FTB must update so many standalone systems that we often cannot get the updates done before the old version of the software is out of support, introducing unnecessary cost and risk to the department.

• Inadequate support for existing commercial-off-the-shelf (COTS) product

The functionality provided by the COTS product for service desk operations is outdated and no longer meets FTB’s needs. Additionally, the manufacturer of FTB’s legacy service desk tool has reduced the number of system improvement releases to near zero, with lead times of several years between releases. To compensate, FTB staff have had to implement custom augmentations for the tool to be functional for our users and support staff. These modifications, while necessary, create risk for upgrades and security patches.

FTB is seeking to refresh and realign platforms and tools that enable solving critical issues more quickly, with industry-designed platforms and COTS pre-built solutions, thereby reducing the maintenance burden, and providing enhanced security protocols. The platform and tools FTB currently use for IT service management rely heavily on both an outdated COTS tool as well as nearly 60 custom-coded applications developed using the system development lifecycle (SDLC), which includes planning, analysis, design, testing, implementation, and maintenance. Compared to industry-designed COTS solutions, the SDLC cycle can be quite lengthy and must ensure that new and old components function seamlessly together. The continual maintenance of disparate designs and ongoing security demands require rework to ensure all solutions continue to work together and do so securely.

To ensure TSD can address these challenges, reduce risk, and ensure appropriate security and integration,

FTB requests $2,760,000 in OEE funding and 3 positions in the following classifications:
• 2 permanent Information Technology Specialist I positions
• 1 limited-term Information Technology Specialist II position

With this requested augmentation, FTB will be able to implement a new enterprise-class low-code platform that will sustain expected levels of customer service for our internal business users and better position FTB to meet the needs of external stakeholders based on a solid, modern, security integrated, and extensible service management platform with significantly lower overall maintenance costs. This implementation will allow FTB to retire its outdated COTS solution as well as replace most legacy and custom-coded solutions for IT Service Desk, asset management and business operations interfaces, simplify our portfolio, streamline operational processes through standardization, and reduce departmental security risks. Although this proposed solution will resolve our most challenging problems, FTB will still need to maintain a population of legacy applications that do not readily lend themselves to the low-code solution.

To continue to meet customer and stakeholder expectations on very tight timeframes, FTB needs to employ every technological advantage. Low-code development platforms enable IT to quickly assemble new processes and build applications without having to research, write, and test new scripts. In addition, low-code development removes complexity from building robust, modern business applications. This reduced complexity improves an organization’s ability to build applications and support them for M&O. With these low-code benefits, organizations are better equipped to quickly adapt and respond to fast-changing business conditions. Three key benefits of a low code platform include:
• Speed of Development
• Improved Business Agility
• Legacy Integration

Below describes the specific resource needs associated with the overall technology function:

a) Platform software and consulting

To implement this solution FTB will need the following OEE funding:

a-1 Software - $1.5 million annually
• To successfully implement an enterprise low-code platform, FTB will need to purchase a software product suite that is scalable and meets our functional and security requirements.
• This software solution will consist of a cloud-based, low-code platform with IT service management, asset management, asset discovery, security task integration, HR management, and workplace resource and usage management.
  o Solution will also include automation allowing Application Programming Interface (API) connectivity to other related tools such as our application lifecycle management system, which will improve data integrity and support workflow automation.
  o Solution will replace FTB’s legacy COTS service desk tool, which will result in a net offset of some of the ongoing costs.
• If FTB does not have sufficient funds to purchase and cover the increased expenses for the enterprise software solution, we will not be able to meet critical business needs and perform critical timely maintenance activities.

a-2 Consulting Services - $1.5 million over three years
• To ensure the solution is properly installed, configured and optimized, FTB is seeking implementation assistance from a qualified vendor.
  o FTB IT staff will work with and gain product specific experience from a qualified vendor to ensure success.
  o Estimated costs are $1.5 million over 3 years:
• Y1: $750,000
• Y2: $500,000
• Y3: $250,000

- If FTB cannot contract for vendor support, FTB risks incomplete installations due to inexperience with the specialized software, which could significantly reduce the effectiveness of the solutions resulting in FTB not achieving the desired benefits.

b) Platform implementation and maintenance
Information Technology Specialist I – 2.0 permanent positions
Information Technology Specialist II – 1.0 three-year limited term position

b-1 Process Automation and Configuration Tools
The Process Automation and Configuration Tools (PACT) Unit currently supports legacy ITSM tools and develops custom-coded solutions and automation that interfaces with the legacy service desk tool, configuration management database, IT asset management, and self-service enterprise offerings.

The proposed low-code platform will bring new functionality to business and technology users necessitating PACT to use a different method for delivering the new services.

FTB proposes to incrementally redirect seven staff members who currently support the legacy platform and tools for ITSM to the new low-code platform. In addition, FTB requests two permanent IT Specialist I positions to implement the new platform, receive real-time training, transition existing solutions/services to the new platform, and maintain and continue to provide new solutions. The remaining existing staff members will continue to support the legacy tools that do not readily lend themselves to the low-code solution. FTB recognizes moving to a standardized low code platform will produce savings in staff hours as described previously. However, insufficient staffing levels to begin with, backlogs for new enhancements, and the trend for new work that is needed each year either for internal or external customers, drives the need for these additional two staff. They are needed ongoing for implementation, addressing the backlog, assisting with the conversion of custom-coded solutions that can now be maintained with this new software platform, and assisting in developing new solutions annually as needed by our internal and external stakeholders.

- Staff will, with the help of consulting services, stand up the low-code platform and develop a deep knowledge of the platform and its capabilities.
- As staff become familiar with the platform and services, they will be able to process new IT and business requests for solutions or solution changes; typical activities include:
  o Define complex requirements to ensure the solution meets the needs of the request.
  o Work closely with enterprise customers to ensure requirements are accurately captured.
  o Evaluate how to configure and implement the requested solution to meet users’ needs.
  o Perform testing of all functions, analyzing and resolving issues, and creating knowledge documentation.

- For the first three years, new and existing staff will collaborate in the transitioning of custom-coded solutions, manual processes, and IT service management functionality to the new platform.

b-2 Project Management Office
The project management office within TSD provides key services to help projects succeed, such as planning, organizing, and directing the completion of specific projects while ensuring these projects are on time, on budget, and within scope. Because the low-code platform implementation will be complex, FTB plans to utilize a skilled project manager to oversee all phases of the implementation.

FTB requests **one three-year limited term IT Specialist II position** to employ industry-standard project management techniques and ensure project success, including following the State’s requirements for IT projects. Typical activities include planning and executing activities defined within project management disciplines including schedule, communication, cost, quality, human resources, risk, and scope management.

**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.

The low-code platform implementation is an expansion of a solution that meets FTB’s operational needs. In combination, fully implementing this new tool aligns with the scope and scale of FTB’s enterprise and provides the capability to rapidly develop solutions that address business value and much improved operational insights in support of FTB’s strategic goals. FTB will procure its license renewals with a fully-funded budget and manage the software timely to the needs of the department and in compliance with all policies.

**F. Analysis of All Feasible Alternatives**

**Alternative 1:** Approve FTB’s request for $2.76 million, $2.7 million General Fund and $60,000 special funds, for two permanent positions, one limited-term position, and software costs in 2023-24; $2.16 million, $2.1 million General Fund and $50,000 special funds, for two permanent positions, one limited-term position, and software costs in 2024-25; $1.9 million, $1.87 million General Fund and $30,000 special funds, for two permanent positions, one limited-term position, and software costs in 2025-26; and $1.5 million, $1.47 million General Fund and $30,000 special funds, for two permanent positions and software costs in 2026-27 and ongoing to implement a new, enterprise-class tool set that will re-establish expected levels of customer service for our internal business users. FTB will replace obsolete legacy and custom-coded solutions for IT Service Desk, asset management and business operations interfaces, simplify FTB’s portfolio, and streamline operational processes through standardization.

**Pros:**

- Leveraging a robust, integrated, and secure ecosystem for ITSM is efficient and effective, requiring less time to produce more standardized, repeatable services.
- Migrating the custom-coded, individual solutions onto the low-code platform will substantially reduce the total effort required to maintain services going forward, converting maintenance time to time spent on new services and automation of manual services.

**Cons:**

- Ongoing FTB expenditure and allocation from the state.
Alternative 2: Approve FTB’s request for $2.76 million, $2.7 million General Fund, $60,000 special funds, three limited-term positions and software costs in 2023-24; $2.16 million, $2.1 million General Fund, $50,000 special funds, three limited-term positions and software costs in 2024-25; $1.9 million, $1.87 million General Fund, $30,000 special funds, three limited-term positions and software costs in 2025-26; and $1.2 million, $1.18 million General Fund, $20,000 special funds in 2026-27 and ongoing for software costs to implement a new, enterprise-class tool set that will re-establish expected levels of customer service for our internal business users. FTB will replace obsolete legacy and custom-coded solutions for IT Service Desk, asset management and business operations interfaces, simplify FTB’s portfolio, and streamline operational processes through standardization.

Pros:
• Leveraging a robust, integrated, and secure ecosystem for ITSM is efficient and effective, requiring less time to produce more standardized, repeatable services.
• Migrating the custom-coded individual solutions onto the low-code platform will substantially reduce the total effort required to maintain services going forward, converting maintenance time to time spent on new services and automation of manual services.

Cons:
• Inability to maintain existing and produce new solutions. FTB considers the need for two positions to be permanent in nature to manage this work ongoing.
• Ongoing FTB expenditure and allocation from the state.
• Premature loss of knowledge, capacity, and momentum as staff in limited-term positions find fulltime work and leave the limited-term position prior to the expiration of their limited term.
• Loss of knowledge as limited-term positions expire.

Alternative 3: Do not approve the request.

Pros:
• No increase of FTB’s expenditure or allocation from the state.

Cons:
• FTB will not be able to leverage modern tools to deliver improved and new solutions in support of FTB’s mission.
• FTB will not have the bandwidth to add new IT and back-office business solutions due to using its resources to maintain custom-coded solutions.

G. Implementation Plan

2023-24:
• July 1, 2023 – Funding provided.
• Hire new positions and onboard for low-code platform workloads.
• Install and configure low-code platform.
• Begin retiring custom-coded solutions.
• Begin standing up IT Service Management foundational and functional components.

2024-25:
• July 1, 2024 – Funding provided.
• Continue standing up IT Service Management foundational and IT functional components.
• Begin standing up business functional services.
• Continue retiring custom-coded solutions.
2025-26:
- July 1, 2025 – Funding provided.
- Complete standing up IT Service Management foundational and IT functional components.
- Continue standing up business functional services.
- Continue retiring custom-coded solutions.

H. Supplemental Information
None

I. Recommendation
Approve FTB’s request of $2.76 million, $2.7 million General Fund and $60,000 special funds, for two permanent positions, one limited-term position, and software costs in 2023-24; $2.16 million, $2.1 million General Fund and $50,000 special funds, for two permanent positions, one limited-term position, and software costs in 2024-25; $1.9 million, $1.87 million General Fund and $30,000 special funds, for two permanent positions, one limited-term position, and software costs in 2025-26; and $1.5 million, $1.47 million General Fund and $30,000 special funds, for two permanent positions and software costs in 2026-27 and ongoing.

This funding and staffing will enable FTB to purchase a modern IT Service Management (ITSM) platform that will allow the new and existing resources, with the help of consulting services, to implement the new platform, transition legacy solutions to the new platform, enable better service delivery, and add new services to support IT and back-office business solutions that underpin the workings of FTB IT and business.