Fiscal Year: 2022-23

**Business Unit:** 7730

**Department:** Franchise Tax Board

**Priority No.:** 007

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**Budget Request Description:**
Network Infrastructure Refresh

**Budget Request Summary:**
The Franchise Tax Board (FTB) requests $1,005,000 General Fund and $42,000 special funds in 2022-23, $3,206,000 General Fund and $133,000 special funds in 2023-24, and $4,709,000 General Fund and $198,000 special funds in 2024-25 to refresh, by way of replacement, a portion of FTB’s network infrastructure. Some components of the network are reaching end of life (EOL) beginning May 2023 and some have capacity constraints.

**Requires Legislation:** ☑ Yes  ☐ No

**Code Section(s) to be Added/Amended/Repealed:** None

**Does this BCP contain information technology (IT) components?** ☑ Yes  ☐ No

**If yes, departmental Chief Information Officer must sign.**
Department CIO: John Sulenta

**Project No.:** 7730-208

**Project Approval Document:** FSR 15-01

**Approval Date:** 7/14/2015

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.

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<th>Prepared By</th>
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<th>Reviewed By</th>
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<tr>
<td>Julie Moreno</td>
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<td>Gil Cortez</td>
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<th>Department Director</th>
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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 $1,005,000 General Fund and $42,000 special funds in 2022-23, $3,206,000 General Fund and $133,000 special funds in 2023-24, and $4,709,000 General Fund and $198,000 special funds in 2024-25 to refresh, by way of replacement, a portion of FTB’s network infrastructure. Some components of the network are reaching end of life (EOL) beginning May 2023 and some have capacity constraints.

B. Background/History

FTB’s primary function is to administer the California Revenue and Taxation Code (R&TC), which includes helping taxpayers file timely and accurate tax returns and pay the correct amount to fund services important to Californians. FTB strives to serve 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.

Annually, FTB processes more than 17.8 million Personal Income Tax (PIT) returns and 1.2 million Business Entity (BE) returns, responds to more than three million telephone calls, handles over eight million internet contacts and collected approximately $ 92.3 billion in revenue for fiscal year 2019/20, representing approximately 74 percent of the State’s General Fund revenue\(^1\). FTB’s network-dependent programs contribute to or generate the majority of California’s General Fund revenue.

Current Network Infrastructure at EOL. FTB’s current network infrastructure was put in place by the E-Commerce Portal Infrastructure (EPI) Feasibility Study Report (FSR), as approved by the California Technology Agency (currently California Department of Technology) on January 10, 2007. That effort provided up-to-date network designs, infrastructure, and tools to effectively and efficiently manage, maintain, and enable growth of FTB’s network infrastructure, which allowed FTB to increase its internet presence and internal services. Due to EOL announcements and end of capacity equipment, FTB received approval to refresh the network infrastructure in FY 2016-17, and implemented the network refresh in phases (via approved FSR FTB 15-01 and BCP 7730-002-BCP-BR-2016-GB; PIER completed 2/14/2020), which has kept the network healthy. Generally, the network infrastructure refresh is performed in phases every 5-years. Some components of FTB’s network infrastructure are again reaching EOL and capacity constraints exist as all physical port connections are in use. When equipment reaches EOL, manufacturers will no longer provide emergency or non-emergency technical support, technical and security patches, software and firmware upgrades, parts, or whole replacements of equipment.

FTB Programs that Rely on the Network. FTB programs rely heavily on the network infrastructure to support our return processing, compliance operations, and connecting FTB staff, as well as California taxpayers, to information, tools, and applications on our systems to help taxpayers file timely and accurate tax returns and pay the correct amount.

All of FTB’s return and payment processing is dependent on the network infrastructure, and use of electronic services continues to rise. For example, network infrastructure allows taxpayers to securely fulfill their tax obligations using the 24x7x365 self-service filing (e-file services) and payment options available on FTB’s website and access MyFTB. As of 2014, when FTB last requested a network refresh, e-filed tax returns have increased from 79 percent of taxpayers e-filing 14 million electronic returns to, in 2020, 88 percent of taxpayer’s e-filing nearly 18 million electronic returns, a 26 percent increase. Since 2014, electronic payments have increased from 33 percent of payers making nearly 4.5 million electronic payments to, in 2020, 53 percent of payers making nearly 7 million electronic payments, a 57 percent increase.

\(^1\) Revenue figures based on the 2019-20 Cash Report reported in the Department of Finance’s July 2020 Finance Bulletin. Due to the filing extension of April 15, 2020 to July 2020, the total revenue collected was lower than previous years.
Much of FTB’s communication occurs over the network, either directly through webpage access, chat, and email or indirectly through supporting internal technologies, which for example, enable FTB’s callback feature. FTB currently offers web applications via ftb.ca.gov, which allow FTB’s external customers (taxpayers, tax professionals, business entities, and non-tax debtors), access to our services using the web. Examples of applications and services include the following:

- **FTB’s online presence and assistance**: ftb.ca.gov, MyFTB, chat with FTB (general tax and account specific questions), virtual hold (FTB’s call back/busy service), tax forms, and free tax help through VITA (Voluntary Income Tax Assistance) and TCE (Tax Counseling for the Elderly).

- **Filing applications**: e-file for PIT and BE through third-party tax software companies, CalFile (FTB’s free PIT e-filing software), Earned Income Tax Credit (EITC) Calculator, and FTB internal applications that scan and process tax returns.

- **Payment applications**: WebPay, Credit Card Payments, Electronic Funds Transfer, Electronic Funds Withdrawal, and Apply for Installment Agreement.

- **Refund applications**: Check Refund Status and Direct Deposit of Refund (DDR).

- **Bank deposits**.

FTB’s network infrastructure ensures bank deposits are transmitted effectively and timely to allow the state to realize interest earned on timely deposits for California’s General Fund and special funds. Similarly, the timely direct deposit of refunds the department electronically transmits to taxpayer’s bank accounts allows the state to avoid paying interest on refunds.

**Components that Require Refresh.** FTB’s network infrastructure distributes workloads across multiple computing resources at FTB, such as servers, security devices, and other technology systems. Like a utility, this network must be at the ready to address peak demand for service as well as reasonable workload growth. This prevents FTB from having to resize the network in a crisis or for routine requests for service and allows FTB to add services in a timely manner.

The following components are at or approaching EOL or at capacity and proposed for refresh:

2. Network (Production, Internet, and Core) Switches – EOL March 31, 2024.
3. Edge Switches – EOL March 31, 2024.
4. Load Balancers – EOL April 1, 2025.
5. Next Generation Firewalls (NGFWs) – EOL August 31, 2025.
6. Routers – Maximum port-capacity reached.

**C. State Level Consideration**

Generally, on an annual basis, programs we administer produce approximately 75% of California’s General Fund revenue. FTB’s network infrastructure is a central part of securely, privately, and efficiently producing revenue through modern electronic channels. It significantly contributes to process improvements by enabling the reduction of paper-based processing and the speed with which customers can communicate with FTB to resolve time-sensitive tax matters.

Replacing EOL equipment and sizing the capacity of the network for anticipated workload growth and demand, meets the policy requirements and industry recommended standards for high-performing networks and allows FTB to continue to provide excellent customer service and carry out its mission to help taxpayers file timely and accurate tax returns, and pay the correct amount to fund services important to Californians. Conversely, failure to perform these
Maintenance activities could result in policy violations, security breaches, and service degradation or outage. This would severely affect FTB’s internal and external customers and General Fund revenue.

FTB is required by state and federal policy and industry standards to conduct its business in a safe, secure, and private manner to protect customer and taxpayer personal information. FTB's network infrastructure is designed and maintained to be compliant with all security requirements, as routinely verified by ongoing security assessments.

FTB Strategic Plan Considerations. This proposal supports FTB’s Strategic Plan goals:

**Goal 1: Exceptional Service** states, “Strive to continuously enhance our customers' experience.” FTB’s network infrastructure is one of the key channels supporting customer needs. FTB’s network infrastructure supports voluntary compliance by providing web applications, allowing taxpayers the ability to review their notices, make payments, and correspond with FTB at their convenience.

**Goal 4: Operational Excellence** states, “Optimize our processes, products, services, and resources to better serve our internal and external customers.” FTB’s network infrastructure allows the creation and addition of new features and applications to benefit the customer online experience. This particular replacement mitigates emerging and evolving threats, manages risks, protects customer privacy and security, and modernizes our hardware and software to optimize operations.

D. Justification

It is time, once again, to refresh the network infrastructure. This request is for FTB’s second major maintenance refresh of the current network infrastructure and is very similar to the request made in 2016-17. No permanent baseline funding exists to refresh and tune it. Through this network refresh, FTB will replace EOL and at-capacity\(^2\) components of FTB’s network infrastructure and will meet expected workload increases and demand for online services through June 2030. Timely, planned action to refresh FTB’s network infrastructure will ensure that FTB can meet its commitments to fulfill FTB, state, and federal policy requirements and operational excellence goals, as well as continue to provide exceptional service to all of FTB’s customers, and sustain General Fund and special fund revenue generation.

**Timing.** Beginning May 2023 and through 2025, various critical components of FTB’s network infrastructure reach EOL and will no longer be supported by the manufacturer. Because FTB will no longer receive updates and patches or receive technical support and easy access to replacement components from the manufacturer beginning in May 2023, FTB’s ability to conduct business on behalf of the State of California will be at high risk of technical failure or security vulnerability, if no action is taken. To address this in a timely manner, FTB proposes to begin network refresh activities in mid-2022 and coordinate replacement in phases commensurate with the equipment’s EOL date through mid-2025.

**Benefits of Refreshing.** FTB will successfully continue business functions, with protection from major outages, security breaches, or workload issues caused by EOL equipment or insufficient capacity.

**Risks of Not Refreshing.** FTB’s systems will be vulnerable to security breach, violate FTB, state, and federal policies, and jeopardize the security and privacy of taxpayer data.

Once the components reach capacity or age beyond EOL, which includes end of support by the manufacturer, FTB is at a higher risk of experiencing degradation and total failure of the components.

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\(^2\) FTB will leverage inherent capacity improvements included with new router models. Manufacturers continually increase capacity as standard with each new model.
Analysis of Problem

A significant technology failure that makes FTB’s network infrastructure unusable or brings it down, will likely damage the public’s perception and trust of FTB, upset interactions with FTB’s state and federal partners and control agencies, and likely adversely impact the State of California’s General Fund. As access to internal and external systems relies on the network infrastructure, failure would result in enterprise-wide work stoppage until an emergency replacement of the failed network infrastructure component could be completed. This could temporarily stop and then delay nearly all FTB workloads and services to FTB’s customers.

Implementation Schedule. Due to the magnitude of this effort and mindful of FTB’s peak filing season (typically January - May), FTB will use a phased approach (as in the past) from mid-2022 through 2025 to refresh the network infrastructure.

E. Outcomes and Accountability

The FTB’s mission is to help taxpayers file timely and accurate tax returns, and pay the proper amount to fund services important to Californians. To accomplish this mission, FTB uses a network infrastructure that consists of switches, routers, load balancers, and firewalls. This proposed solution will refresh the network infrastructure to replace EOL equipment and increase port capacity for projected workload growth through June 2030.

Refreshing FTB’s network infrastructure will allow FTB to continue to provide excellent customer service and grow the network to meet internal and external customer demand, which accomplishes its mission and generates General Fund and special fund revenue.

F. Analysis of All Feasible Alternatives

Alternative 1: Approve $1,005,000 General Fund and $42,000 special funds in 2022-23, $3,206,000 General Fund and $133,000 special funds in 2023-24, and $4,709,000 General Fund and $198,000 special funds in 2024-25 to refresh a portion of the network infrastructure and ensure capacity for projected workload growth through June 2030.

This alternative meets the needs of the request and is the best approach for implementation purposes, giving the maximum flexibility for procurement and implementation timing. It also saves on costs, as it is the least expensive of the alternatives.

Alternative 2: Approve $1,005,000 General Fund and $42,000 special funds in 2022-23, $3,206,000 General Fund and $133,000 special funds in 2023-24, and $4,709,000 General Fund and $198,000 special funds in 2024-25, with the option to finance part of 2023-24 and 2024-25 purchases over a three year period to refresh a portion of the network infrastructure and ensure capacity for projected workload growth through June 2030.

This alternative meets the needs of this request and will allow for the costs of the refresh to be spread over multiple years at a lower amount, per year. However, FTB estimates that financing the refresh through 2024-25 would cost approximately $96,000 more compared to paying up front, but would defer expenses to the state of $1.7 million in 2023-24 and $4.2 million in 2024-25.

Alternative 3: Deny request. By denying the request, FTB will not be able to refresh and support its network infrastructure in a timely manner, putting FTB and the state at risk. Without having a secure network, FTB’s systems will be vulnerable, jeopardizing the security of taxpayer data. Network infrastructure failure would result in enterprise-wide work stoppage, which directly impacts FTB’s ability to contribute to California’s General Fund and special funds. Even a minor breach in security would lead to a severe loss of public trust and impact the perception of FTB as a government leader in data security.
G. Implementation Plan

2022-23
- July 1, 2022 – Funding provided.
- Implement firewalls and switches into production

2023-24
- July 1, 2023 – Funding provided.
- Implement routers and switches into production.

2024-25
- July 1, 2024 – Funding provided.
- Implement load balancers, NGFWs, and remaining production switches.

H. Supplemental Information

None.

I. Recommendation

Alternative 1: Approve $1,005,000 General Fund and $42,000 special funds in 2022-23, $3,206,000 General Fund and $133,000 special funds in 2023-24, and $4,709,000 General Fund and $198,000 special funds in 2024-25 to refresh a portion of the network infrastructure and ensure capacity for projected workload growth through June 2030.

This alternative is the most cost effective and best ensures FTB’s continued success in providing robust and secure network services that are critical to serving taxpayers and other customers and partners. FTB will remain compliant with FTB, state, and federal policy, particularly security policy, as well as industry recommended standards for high-performing networks. All staff and customers will be afforded the ongoing workflow and services provided through the network, with maximum availability. FTB will continue producing General Fund and special fund revenue.
BCP Fiscal Detail Sheet

BCP Title:

BR Name:

Budget Request Summary

Personal Services