Fiscal Year 2023-24	**Business Unit** 7502	**Department** California Department of Technology		**Priority No.** 5
Budget Request Name 7502-007-BCP-2023-GB	**Program** 6230		**Subprogram** N/A	

Budget Request Description
Digital Identification Continuation

Budget Request Summary
The California Department of Technology (CDT) requests a renewal of 2.0 positions and $1.2 million in General Fund (GF) in Fiscal Year (FY) 2023-24 and FY 2024-25, to launch and maintain planned and existing pilot partner integrations, evaluate and implement additional requested features, scale the solution to additional state agencies, and engage with other public entities and the external developer community to provide a blueprint for privacy-centered SSO services.

Requires Legislation ☐ Yes ☒ No	**Code Section(s) to be Added/Amended/Repealed** N/A	
Does this BCP contain information technology (IT) components? ☐ Yes ☒ No *If yes, departmental Chief Information Officer must sign.*	**Department CIO** N/A	**Date** N/A

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. N/A **Project Approval Document:** N/A

Approval Date: N/A

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 Jarrett Krumrei	**Date** 12/20/2022	**Reviewed By** Miles Burnett	**Date** 12/20/2022
Department Director Liana Bailey-Crimmins	**Date** 12/20/2022	**Agency Secretary** Amy Tong	**Date** 12/20/2022

Department of Finance Use Only

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

PPBA Daniele Brandon	**Date submitted to the Legislature** 1/10/2023

A. Budget Request Summary

The California Department of Technology (CDT) requests a renewal of 2.0 positions and $1.2 million in General Fund (GF) in Fiscal Year (FY) 2023-24 and FY 2024-25, to launch and maintain planned and existing pilot partner integrations, evaluate and implement additional requested features, scale the solution to additional state agencies, and engage with other public entities and the external developer community to provide a blueprint for privacy-centered SSO services.

B. Background/History

In Fiscal Year (FY) 2021-22, CDT received two positions and $1,111,000 in General Fund (GF) through FY 2022-23 to deploy a Digital Identification (ID) ecosystem for an initial subset of state services that would provide a consistent, secure, privacy-enabled, reliable, and consent-based method to authenticate and verify the identity of California residents when they access the subset of digital state services.

Since 2021, CDT's Digital ID program has engaged a set of pilot partners, evaluated, and selected a vendor platform, and launched the first pilot integration into a production environment. Below is a more detailed summary of the milestones to date:

Selected Pilot Partner for initial proof of concept launch. After reviewing requirements of prospective pilot partners, CDT selected the Department of Transportation (Caltrans) as the program's first partner to move into active development, given the alignment with our strategic priorities and a shared interest in key use cases capable of providing valuable insights for future applications. Specifically, this initial pilot is in partnership with the California Integrated Travel Project (Cal-ITP), a Caltrans program tasked with designing a modern and consistent experience for transportation throughout the State.

This service is compliant with Provision 3 of 2021-22 Budget Act which requires CDT not to work with departments or agencies that knowingly hold personal information on minors, students, or health data. Lessons learned from this initial effort will help inform the solution we offer to other development partners, including the Department of Alcoholic Beverage Control (ABC) and the Department of Parks and Recreation, among others.

Executed Contract with Login.gov. CDT executed a contract with the US General Services Administration's (GSA) Technology & Transformation Services (TTS) group to procure identity authentication and verification services through Login.gov. This allows CDT to provide authorization services necessary for accessing state services, whether they be lightweight, consistent authentication solutions for simple actions, or eligibility-based services such as discounted transit fares for seniors and students, geographical or membership-based benefits, or any other potential category defined by state or agency policy.

Developed technical architecture for a flexible, privacy-preserving authentication system. Based on initial development prototypes and with guidance from industry experts, created a service-agnostic system for authentication that limits storage of personal information by default, requires proactive user permission, and maintains separation of individual agency systems.

Developed and launched initial proof of concept. As a result of the partnerships with Cal-ITP and Login.gov, the Digital Identity team developed a functional proof of concept to provide identity verification and authorization to senior transit riders for discounted fares in select regions throughout California. This proof of concept soft launched into production at the end of June to one municipal transit agency. After ensuring the proof of concept meets KPIs, it will be made available to scale to other transit agencies across the state.

Launched stakeholder engagement effort. We recognize the importance of engaging a diverse pool of stakeholders—from identity solution providers and payments experts to public entities and

advocacy organizations—to provide input and participate in realizing the outcomes our program sets forth. We initiated a Market Sounding as a method to receive such critical insights from leaders in the digital identification, payments, and government benefits delivery spaces, with the goal of informing the CDT's direction in modernizing identification systems for state and local agency benefits delivery. A summary report of this effort was published in November 2022.

Resource History
(Dollars in thousands)

Program Budget	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Authorized Expenditures	N/A	N/A	N/A	N/A	$889	889
Actual Expenditures	N/A	N/A	N/A	N/A	$142	TBD
Revenues	N/A	N/A	N/A	N/A	0	0
Authorized Positions	N/A	N/A	N/A	N/A	2	2
Filled Positions	N/A	N/A	N/A	N/A	1	1
Vacancies	N/A	N/A	N/A	N/A	1	1

Workload History

Workload Measure	2017-18	2018- 19	2019-20	2020-21	2021-22	2022-23
PROTOTYPE DEVELOPMENT	N/A	N/A	N/A	N/A	≥1 pilot prototype launched to production environment	≥3 pilot integrations launched to production environment; ≥2 state agencies / departments operating with development prototypes; ≥150K users reached

C. State Level Consideration

This request aligns with goals outlined as part of the California Technology Strategic Plan, Vision 2023:

Deliver easy-to-use, fast, dependable, and secure public services (Goal 1)

It is imperative that the state creates a seamless experience for Californians accessing its public services that at a minimum begins to mirror the convenience and simplicity of the strides made in the private sector in the last decade. This includes accelerating the move towards common platforms and shared services, embracing user-centered design, and leveraging technology to transform government processes and operations.

Analysis of Problem

This request would enable CDT to deliver major strides in the development and evolution of CA.gov, a critical element of the state's digital infrastructure and the primary digital touchpoint for residents of California looking to engage with services offered by their state government.

Make common technology easy to access, use, share and reuse across government (Goal 3)

Vision 2023 states that to deliver value to users more quickly, we must pool our investments and efforts into a shared digital infrastructure. We can do this by using common technology that can be adapted, shared, and reused across the state. For most common problems, this will mean developing a suite of demonstrated approaches to be used by default, unless exceptions are met.

Centralizing and standardizing on common technology choices makes it easier for the State to take advantage of its scale as the world's fifth-largest economy. By leveraging the State's size, we can deliver better services at a responsible cost and use public funds to better serve Californians. This does not mean locking the state into a single choice, or vendor, or inflexible static standards. It means understanding user needs and providing managed choices and flexibility. Most importantly, achieving this goal will make it faster and easier for teams to solve actual problems for our residents, such as receiving emergency grant funding, starting businesses, or finding childcare.

Goal 3 includes the Challenge 3.5: How can we develop a more secure, reliable, and consistent way for people seeking state services to prove who they are?

Delivering options for a common approach to identity verification and authentication is the right first step and requires significant work to understand the public's needs and expectations for privacy and security, how and when government shares information, transparency about information and information sharing, and informed consent. This project provides Californians the ability to opt-in and maintain control of their identify information as they enroll to receive state services. Similarly, significant work is required to understand program, departmental, agency and statewide needs.

Build confident, empowered multi-disciplinary teams (Goal 5)

Technology does not solve problems alone. Successful departments and teams organize themselves around common goals, working across silos, from the bottom up and from the executive level down. Much technology capability is organized largely based on a historical IT structure focused on operations ("keeping the lights on") and supporting commodity technology, even as roles have increasingly intertwined with core programs.

In order to attract and keep the technology and technical talent needed for 21st-century government, critical roles such as user researchers, user experience designers, and content designers are needed to achieve our goals and vision and help ensure that CDT will keep pace with the ever-changing digital needs and expectations of both state entities as well as the Californian populace.

This request also aligns with the Governor's Proposed 2021-22 Budget:

Digital Transformation and Results-Oriented Government

One of the significant projects mentioned under Modernize and Improve the User Experience section in the Governor's Budget is researching the development of a Digital ID system to be used across all state departments. This project is one of the many next steps identified to modernize and improve the way in which individuals engage with state government.

Building upon the state's 2019 investment in digital innovation, the Governor called upon CDT to accelerate the digital transformation of services and how they are delivered to nearly 40 million Californians by working collaboratively with state agencies and departments to find innovative ways to adapt and deliver core government functions online while improving business processes and consumer interactions.

The events of 2020 highlighted the urgent need to modernize government services in an online environment. The state recognizes the need to optimize technology infrastructure and investments, foster digital services, and use data to inform decision-making. Government modernization will lead to improved and equitable decisions, services, and outcomes for Californians.

Privacy and Security Considerations

The Digital ID ecosystem will be architected to deliver program efficiencies and a seamless user experience for residents accessing government services, while prioritizing user consent and privacy, and ensuring the highest levels of security for the data involved. The ecosystem will be fully compliant with state and federal statutes and policies applicable to the type of resident information collected for purposes of authentication, including but not limited to the Information Practices Act (IPA) and Health Insurance Portability and Accountability Act (HIPAA). Privacy controls include the following:

1. Resident will be required to consent to and designate each service that is authorized to receive personal information provided for the creation of the digital id.
2. Resident information required for authentication will be program specific and obtained incrementally on an as-needed basis.
3. Resident information will be provided to departments for designated purposes only.
4. Law enforcement will be required to obtain a subpoena, search warrant or other legal process to access the information in the system.
5. Information collected from residents will be customized to the program requirements for authentication.
6. Resident information uploaded for authentication purposes will be deleted after their identity has been confirmed.
7. Security controls will be implemented to match the Impact Level of the information collected. Data will be further protected through encryption and tokenization.

Equity Statement

The second goal and challenge listed in CDT's Strategic Plan (Vision 2023 – California Technology Strategic Plan) is to "Ensure public services are equitable and inclusive." Achieving this requires focus and work that stretches beyond the myriad languages spoken within the State, requires considerations of access and accessibility, and necessitates that technology be simplified as much as possible. CDT works diligently to ensure all services are provided equitably and are accessible to all Californians. While this request does not directly address matters of equity, diversity, or accessibility, the underlying principles listed above are foundational. Additionally, CDT provides underlying support, and delivers technology, to departments that do address matters of equity such as expanding access to previously marginalized demographics or geographically precluded groups. CDT's Strategic Plan provides the framework for all our service deliveries, and equity is paramount.

D. Justification

The efforts completed, and lessons learned to date, have validated, and reinforced many of our initial assumptions, including the growing proclivity of digital-first service delivery and the reality of a disjointed user experience across hundreds of websites managed by over 150 departments, with no cohesive registration or authentication. The experience for residents has been frustrating

and rife with errors as they are forced to re-register, often with a completely different enrollment experience and credential requirements, including in-person registration for many services.

The public expects digital services that are simple, secure, privacy-preserving, and transparent. Providing digital services to the public relies on digital identification. This is a problem that every department continues to solve independently and differently, frustrating the public and exacerbating unnecessary cost, fraud, high-risk security gaps, and complexity in the State's digital infrastructure. These issues have come to the forefront throughout the COVID-19 pandemic, as demand for digital state services has rapidly increased, as well as the Department of Motor Vehicles and Employment Development Department modernization efforts where each has included identity proofing as a key component of the efforts. Remote services are no longer a luxury, but a necessity, not just due to our current pandemic, but because of the reality of California's extremely large geography and the need to serve remote populations. California residents typically have multiple login accounts, ways of registering, and validating their identity to receive the services they are entitled to receive.

Transforming state services to be digital by default necessitates investing in the common infrastructure required and making it easier for government employees to collaborate and work across silos. This will require CDT to lead the investment in a common infrastructure and building and enforcing simple, useful standards of excellence. To streamline services and create a simple, clear, consistent, and secure user experience, CDT will be responsible for maintaining the Digital ID ecosystem across state services.

Many states (such as Colorado, Ohio, and Texas) have taken an iterative approach to address Digital ID within one agency or department and extending the benefits of Digital ID across multiple agencies and departments upon completion.

CDT has begun developing one digital identifier across California's state government technology systems in a consistent, unified, and more secure approach with the goal of minimizing duplication in less mature identity management processes operated in a silo within each department today. This approach will provide a higher level of assurance to ensure the most appropriate, seamless, and equitable service experience is delivered while mitigating the opportunities of fraud and abuse by malicious actors. Developing a centralized functional Digital ID ecosystem for public-facing services is a foundation of the State's ability to provide digital services in a consistent manner. Deployment of the Digital ID ecosystem to a subset of state services will be the first step in the State's Digital ID journey that will expand to all state services.

CDT requests the continuation of the two positions approved in FY21-22, and $500,000 in consulting support to develop, execute and maintain a Digital ID ecosystem for a subset of state services.

Positions requested include:

- (1) Digital ID Deputy Director (CEA)
    - The CEA will develop and champion product vision, strategy, and roadmaps for multiple complex Digital ID ecosystem product lines, in support of business goals and objectives. They will also present and clearly articulate the Digital ID strategy and roadmaps to State leadership. From the highest strategic view, the CEA will plan and execute effective new product opportunities and service enhancement(s).
  - (1) Engineering Lead (ITS II)
        The Engineering Lead will serve as the primary engineer for the Digital ID program. This highly skilled position serves as the technical builder and support for the Deputy Director, Digital ID, inclusive of designing, developing, and operating the Digital ID ecosystem. Additionally, the Engineering Lead will be responsible for the security, reliability, and implementation of Digital ID technology statewide. The Engineering Lead

provides data insights and recommendations on potential solutions involving complex technological challenges, requiring a depth of understanding across a variety of technologies. This position was accounted for in the budget proposal approved for FY 21-22 as a business relationship manager (ITS II).

Given the importance of this statewide service, with its implications for the ways that Californians engage with government, a robust team of technical and business savvy professionals is integral to building a digital ID ecosystem based on core principles of privacy-by-design, world-class security, openness and transparency, and access and equity. Given CDT's strong track record of delivering statewide technology products and programs, it is well-positioned as a source of talent and expertise necessary for digital ID efforts, with avenues to augmenting staff with specialized contracted resources to ensure delivery within scope, schedule, and budget. It is equally critical for this team to be led by an executive product owner at the CEA level to ensure this effort has sufficient policy experience and ability to lead product development decisions across government departments and agencies. Also, since the Digital ID ecosystem provides value across the State, General Fund will be the best source of funding.

The recognized critical need for digital identification means that agencies and departments are independently investigating solutions. By continuing this digital identity effort for the State, CDT will not only reduce duplication of effort and further bifurcation of data but will allow agencies and departments to focus more on the services and benefits they provide.

CDT's initial proposed Digital ID ecosystem mitigates the challenges state entities are facing with authentication and identity proofing and creates an extensible foundation for a single entity to provide the ecosystem to support services across the state. By transforming the way records are maintained, we streamline access and reduce risk from identity duplication.

Continuing with the plan set forth when this program was established, this effort will ultimately lead to a single identifier for residents that is consent driven, privacy enabled, secure, reliable, and may be consistently used across all domains of state services. The effort will improve convenience for the residents, enhance user experience, increase efficiencies, eliminate duplicate payments, and reduce program fraud and associated costs.

As secure data storage is critical to the state, this initial Digital ID ecosystem will address security and privacy and compliance with all applicable regulations. The ecosystem is aimed towards making access to services easier for the average resident, without forcing a particular technology, to close the digital divide and increase inclusiveness and equity.

E. Outcomes and Accountability

CDT will build solid digital and technological foundations by focusing on critical shared services and statewide policy outcomes. This Digital ID effort will reduce the number of separate digital identification contracts and approaches and improve the Californian experience by accelerating the delivery of state services. At the same time, technology is constantly evolving, and we must remain flexible to meet the new challenges that arise despite or as a result of technological advances.

Initial goals for the program involved launching a prototype digital identity solution to a production environment with a partnering state agency/department. The successful deployment with a focused population in the transit space allows for expansion to other jurisdictions seeking efficient mechanisms to deliver benefits to transit riders in a secure and simple manner. With a significant addressable market and high demand from consumers, we intend to leverage our solution for multiple age-based populations, including in the transit space. For example, many transit agencies provide discounted fares to actively enrolled college students—a population of approximately 2.6 million people in CA—with disparate mechanisms for verifying eligibility and

delivering said discounts in a seamless, secure, and privacy-preserving manner. Many agencies offer similar benefit programs to other populations, such as veterans, people with disabilities, and economically impacted individuals. The Digital ID program will continue to scale and expand our authorization solution to applicable transit use cases while also partnering with other agencies and departments for integrations aimed at reaching additional eligible communities.

A platform that enables individuals to access services with a single, state-recognized identity provides valuable ease of use and security to Californians, especially for disadvantaged communities. The solution we have designed can provide access across a diverse range of governmental programs from a variety of agencies and departments in a seamless manner, giving consumers the experience of a universal access from one session, with authentication when required. This means that an individual who has been verified for one state service and is eligible for others based on like policies and eligibility rules may be able to more easily connect with said agencies/departments to access benefits that they were unaware of or not sure they were entitled to in a seamless, consent-based experience. For instance, an integration with a program like CalFresh and the Cal-ITP Benefits application could enable individuals who meet federal income eligibility rules for CalFresh benefits as well as their local transit agency's income-based transit benefits to prove and verify their eligibility one time through a streamlined system and gain access to benefits from both participating agencies simultaneously. The program plans to reach 150,000 individuals seeking authentication and verification for digital state services by end of FY 2022-2023, with increasing population targets for each subsequent year.

The Digital ID effort will be architected to deliver program efficiencies and a seamless user experience for residents accessing an initial subset of state services, while prioritizing user consent and privacy, and ensuring the highest levels of security for the data involved. The ecosystem will be fully compliant with state and federal statutes and policies applicable for the type of information collected from residents for purposes of authentication, including but not limited to the Information Practices Act (IPA) and Health Insurance Portability and Accountability Privacy Act (HIPAA).

Additionally, in accordance with the state budget bill from which the digital identification pilot program originated, the program shall not collect geolocation information nor hold personal information (PII) on minors, educational records subject to the federal Family Educational Rights and Privacy Act (FERPA), medical information subject to the federal Health Insurance Portability and Accountability Privacy Act (HIPAA), or information on an individual's immigration status without legislative approval.

Projected Outcomes

Workload Measure	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
e.g., Applications Received, Applications Processed, Call Volume, etc.	≥3 integrations launched to production environment; ≥2 state agencies / departments operating with development prototypes; ≥150K users reached	≥5 integrations launched to production environment; ≥3 state agencies / departments operating with development prototypes; ≥300K users reached	≥1M users reached	≥5M users reached	≥10M users reached	≥20M users reached

F. Analysis of All Feasible Options and Alternatives

Option 1 – Approve CDT request to continue 2.0 positions and $1.2 million in GF in FY 2023-24 and FY 2024-25, to maintain and scale product offerings to additional state agencies/departments, and position California as a leader among public entities and the developer community to address critical digital infrastructure needs and solve key problems in the delivery of state services.

PROS:

- Augments efforts to address the critical agency and department need for Digital ID with a unified ecosystem
- Enables proactive risk identification for critical services and begins iterative improvements
- Aligns with strategic principle of putting people first, and goal of easing identification requirements across state services

CONS:

- Requires additional two-year GF investments to make significant progress on statewide issues

Option 2 – Approve the continuation of the existing 2.0 positions and $1.2 million in FY 2023-24 and on-going to support efforts with existing and future identity solutions and take a participatory role in addressing critical digital infrastructure and public needs.

PROS:

- Provides valuable staff and resources long-term to achieve key outcomes in the delivery of a unified ecosystem for Digital ID
- Enables proactive risk identification for critical services and begins iterative improvements
- Aligns with strategic principle of putting people first, and goal of easing identification requirements across state services

CONS:

- Requires on-going GF investments to make significant progress on statewide issues

Option 3 – Deny the request. Programs and departments will be responsible for implementing, maintaining, supporting, and securing multiple identity verification and authentication systems, when identity verification and authentication is a common need.

PROS:

- No increase in General Fund spending for CDT

CONS:

- Multiple solutions expose security and privacy risks with sensitive user data being propagated through and potentially stored in multiple systems, creating more attack surfaces and wider distribution of PII

- Multiple solutions may not result in the ultimate goal of an improved user experience and a single identifier for residents

- Some departments and agencies cannot afford to develop their own Digital ID solution

- It will be considerably more difficult to integrate a web of different solutions, or discard agency solutions later, and will be much more expensive to remediate

G. Implementation Plan

If approved, CDT will continue efforts to support and scale existing Digital ID products and expand integrations to additional state agency and department partners. The work will continue with currently engaged partner entities and expand to additional use cases. Support for existing and planned implementations will be provided on an ongoing basis with a combination of staff and contracted resources as necessary.

H. Supplemental Information

N/A

I. Recommendation
Approve CDT request to continue 2.0 positions and $1.2 million in GF in FY 2023-24 and FY 2024-25.

BCP Fiscal Detail Sheet

BCP Title: Digital Identification Continuation

BR Name: 7502-007-BCP-2023-GB

Budget Request Summary

		FY23				
	CY	BY	BY+1	BY+2	BY+3	BY+4
Personal Services						
Positions - Permanent	0.0	2.0	2.0	0.0	0.0	0.0
Total Positions	**0.0**	**2.0**	**2.0**	**0.0**	**0.0**	**0.0**
Salaries and Wages						
Earnings - Permanent	0	284	284	0	0	0
Total Salaries and Wages	**$0**	**$284**	**$284**	**$0**	**$0**	**$0**
Total Staff Benefits	0	153	153	0	0	0
Total Personal Services	**$0**	**$437**	**$437**	**$0**	**$0**	**$0**
Operating Expenses and Equipment						
5301 - General Expense	0	2	2	0	0	0
5304 - Communications	0	2	2	0	0	0
5320 - Travel: In-State	0	2	2	0	0	0
5322 - Training	0	2	2	0	0	0
5340 - Consulting and Professional Services - External	0	500	500	0	0	0
5342 - Departmental Services	0	236	236	0	0	0
Total Operating Expenses and Equipment	**$0**	**$744**	**$744**	**$0**	**$0**	**$0**
Total Budget Request	**$0**	**$1,181**	**$1,181**	**$0**	**$0**	**$0**

Fund Summary

Fund Source - State Operations	CY	BY	BY+1	BY+2	BY+3	BY+4
0001 - General Fund	0	1,181	1,181	0	0	0
Total State Operations Expenditures	**$0**	**$1,181**	**$1,181**	**$0**	**$0**	**$0**
Total All Funds	**$0**	**$1,181**	**$1,181**	**$0**	**$0**	**$0**

Program Summary

Program Funding	CY	BY	BY+1	BY+2	BY+3	BY+4
6230 - Department of Technology	0	1,181	1,181	0	0	0
Total All Programs	**$0**	**$1,181**	**$1,181**	**$0**	**$0**	**$0**

BCP Title: Digital Identification Continuation   **BR Name: 7502-007-BCP-2023-GB**
Personal Services Details

Positions	Salary Information			CY	BY	BY+1	BY+2	BY+3	BY+4
	Min	Mid	Max						
1414 - Info Tech Spec II				0.0	1.0	1.0	0.0	0.0	0.0
7500 - - C.E.A. - C				0.0	1.0	1.0	0.0	0.0	0.0
Total Positions				**0.0**	**2.0**	**2.0**	**0.0**	**0.0**	**0.0**

Salaries and Wages	CY	BY	BY+1	BY+2	BY+3	BY+4
1414 - Info Tech Spec II	0	127	127	0	0	0
7500 - - C.E.A. - C	0	157	157	0	0	0
Total Salaries and Wages	**$0**	**$284**	**$284**	**$284**	**$284**	**$284**

Staff Benefits						
5150350 - Health Insurance	0	43	43	0	0	0
5150450 - Medicare Taxation	0	4	4	0	0	0
5150500 - OASDI	0	18	18	0	0	0
5150600 - Retirement - General	0	88	88	0	0	0
Total Staff Benefits	**$0**	**$153**	**$153**	**$0**	**$0**	**$0**
Total Personal Services	**$0**	**$437**	**$437**	**$0**	**$0**	**$0**