

**STATE OF CALIFORNIA**  
**Budget Change Proposal - Cover Sheet**  
 DF-46 (REV 07/23)

<b>Fiscal Year</b> 2024-25	<b>Business Unit Number</b> 2660	<b>Department</b> Transportation
<b>Hyperion Budget Request Name</b> 2660-079-BCP-2024-GB		<b>Relevant Program or Subprogram</b> 9900100 – Administration 1835029 – Program Development

**Budget Request Title**  
 Enterprise Data Governance Technology Solution Implementation

**Budget Request Summary**  
 The California Department of Transportation requests \$7,747,000 in fiscal year (FY) 2024-25 from the State Highway Account. The request includes consulting services, equipment, and software for year 1 of the Enterprise Data Governance Technology Solution implementation.

<b>Requires Legislation (submit required legislation with the BCP)</b> <input type="checkbox"/> Trailer Bill Language <input type="checkbox"/> Budget Bill Language <input checked="" type="checkbox"/> N/A	<b>Code Section(s) to be Added/Amended/Repealed</b> Click or tap here to enter text.	
<b>Does this BCP contain information technology (IT) components?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, departmental Chief Information Officer must sign.</i>	<b>Department CIO</b> Marcie Kahbody, Interim CIO	<b>Date</b> Click or tap to enter a date.

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

**Project No.** 2660-547    **Project Approval Document:** Stage 3 Solution Analysis  
**Approval Date (anticipated):** 2/2/2024 **Total Project Cost:** Click or tap here to enter text.

**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.*

<b>Prepared By</b> CHAD BAKER	<b>Date</b> Click or tap to enter a date.	<b>Reviewed By</b> KEITH DUNCAN	<b>Date</b> Click or tap to enter a date.
<b>Department Director</b> TONY TAVARES	<b>Date</b> Click or tap to enter a date.	<b>Agency Secretary</b> TOKS OMISHAKIN	<b>Date</b> Click or tap to enter a date.

**Department of Finance Use Only**

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

<b>Principal Program Budget Analyst</b> JAMES MOORE	<b>Date submitted to the Legislature</b> 1/12/2024
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## A. Problem Statement

The California Department of Transportation (Caltrans) requests \$7,747,000 in fiscal year (FY) 2024-25 from the State Highway Account. Requested resources include a one-time increase of \$7,747,000 for equipment, software, and consulting services. These resources are needed to procure and implement a suite of enterprise data governance-related tools for data stewards and data custodians to provide documented, quality controlled, findable, and accessible data to consumers.

Caltrans instituted a formal enterprise data governance program beginning in late 2017. As part of the organizational change management efforts, a formally branded data governance initiative was developed, known as CTDATA, which stands for Caltrans Data is Authoritative Trusted and Accessible. The initiative was designed to address the people, processes, and technology required to effectively govern and manage the datasets that Caltrans has responsibility over. In order to accomplish the vision of CTDATA, the following goals were adopted:

1. **Data Value:** Increase the value of agency data for decision-making by establishing and supporting data stewards responsible for improving data relevance, quality, usability, discoverability, and accessibility.
1. **Data Sharing:** Maximize sharing of existing data across agency business units by building awareness of agency data resources and encouraging data re-use.
2. **Data Literacy:** Build agency staff awareness of available data sources and capabilities to make effective use of data.
3. **Data Efficiency:** Reduce data redundancy by establishing single authoritative sources for data elements and encouraging collaboration across business units on new data collection or acquisition efforts.
4. **Data Consistency:** Increase data consistency and interoperability through standardizing data definitions and formats.
5. **Data Protection:** Protect sensitive and confidential data from unauthorized access.

Caltrans then defined the roles and responsibilities for data stewardship; defined processes and behaviors around how data is managed; and is now working to address the technology required to provide data stewards with an enterprise solution to manage corporate data assets consistently and effectively.

Specifically, this solution would provide the ability to (1) assess and report on data quality; (2) manage metadata and data dictionaries that describe what a dataset represents, its limitations, and its structure; (3) catalog data to enhance findability and accessibility; (4) create and execute data extract-transform-load (ETL) processes to automate data preparation and system interoperability activities; and (5) manage and discover terminology and definitions used by the various business areas to minimize misunderstandings when working with data.

Historically, each business area develops processes and methods of data management, documentation, and sharing separately through an array of manual and automated approaches. An enterprise approach enables Caltrans, to adopt a consistent and comprehensive practice regarding how data is governed and managed that breaks down data silos and makes data understandable and accessible to all data consumers that respects data security and licensing constraints. This improves operational effectiveness in training offerings and in implementation as well as minimizes implementation and maintenance costs associated with using multiple solutions.

This approach recognizes data as a valuable asset and the improvements will reduce time spent finding and accessing data, will maximize data usability, will maximize data quality, and

will most effectively inform decision makers regarding transportation challenges related to addressing the homelessness crisis, reducing fatalities on roadways, understanding land use impacts on transportation, assessing, and understanding transportation equity, etc.

This request covers year one of three years planned for the implementation. An annual BCP request will be submitted to provide for continued funding to implement the solution with the final BCP in the series requesting resources for the long-term maintenance and operation of the implemented solution.

**Resource History  
Administration Program**  
*(Dollars in thousands)*

<b>Program Budget</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>
Authorized Expenditures	\$433,309	\$419,247	\$408,232	\$409,527	\$451,704
Actual Expenditures	\$437,194	\$416,391	\$401,830	\$405,655	\$448,329
Authorized Positions	1,536.5	1,518.5	1,515.5	1,520.5	1,622.5
Filled Positions	1,546.3	1,582.5	1,617.4	1,677.7	1,715.5
Vacancies	-9.8	-64.0	-101.9	-157.2	-93.0

**Resource History  
IT Program**  
*(Dollars in thousands)*

<b>Program Budget</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>
Authorized Expenditures	\$127,285	\$114,390	\$112,153	\$135,136	\$167,191
Actual Expenditures	\$123,433	\$114,454	\$110,818	\$136,341	\$168,330
Authorized Positions	556.0	556.0	556.0	561.0	596.0
Filled Positions	519.5	521.9	517.0	548.3	541.0
Vacancies	36.5	34.1	39.0	12.7	55.0

**Resource History**  
**DRISI Program**  
*(Dollars in thousands)*

<b>Program Budget</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>
Authorized Expenditures	\$68,506	\$64,463	\$65,896	\$69,363	\$73,494
Actual Expenditures	\$52,645	\$54,734	\$55,725	\$68,015	\$73,107
Authorized Positions	130.7	130.7	130.7	134.7	165.0
Filled Positions	134.9	138.0	142.6	168.14	149.5
Vacancies	-4.2	-7.3	-11.9	-33.44	15.5

**B. Justification**

Much like physical assets, data needs to be maintained; good stewardship of data involves ensuring that data are of sufficient quality to serve the intended purposes. Further, data has tremendous value in helping answer questions and inform decision making on a range of topics including but not limited to transportation equity, climate change, impacts of land use on travel, understanding where people are experiencing homelessness, and where to locate services that will provide the greatest positive impact.

As part of Caltrans' response to the release of California's Open Data Policy<sup>1</sup>, State Open Data Portal<sup>2</sup>, State Data Strategy<sup>3</sup>, and internal efforts to implement a robust enterprise data governance framework known as CTDATA, a three-pronged approach of addressing the people, processes, and technology around data governance and management has been developed. The CTDATA initiative is meant to be the long-term approach that Caltrans takes to data governance and management, and is meant to benefit all data consumers, whether internal or external.

In addressing the people component, Caltrans has adopted a data governance organizational structure; defined roles and responsibilities; and named data stewards and data custodians (current estimates are that over 250 data stewards and custodians will ultimately be identified). In addressing the processes component, Caltrans has and continues to develop data documentation templates, standards, guidance, and training materials, as well as develop and adopt data formatting and system management standards and best practices.

The California Open Data Policy requires adoption of standards covering data documentation, open file formats, and applying as open of a license to data as possible. Caltrans' approach is directly aligned with these requirements and in being coupled with publishing data to the State Open Data Portal, maximizes data accessibility to all data consumers. The approach supports use of free, open-source software to access, view, and work with the data through its use of machine readable and open file formats.

<sup>1</sup> <https://www.dgs.ca.gov/Resources/SAM/TOC/5100/5160>

<sup>2</sup> <http://data.ca.gov/>

<sup>3</sup> <https://www.govops.ca.gov/the-future/caldata/>

This request is to fund activities for the technology component, specifically, to implement an enterprise set of data governance and management tools, which will be made available for all Caltrans staff to use. The proposed solution specifically covers the following six primary functions:

### **Metadata**

- Description
  - Data that describes a dataset.
- Function / Benefit
  - Describes what the dataset represents,
  - Explains how the dataset was created, and
  - Provides access and uses restrictions or limitations.
  - Explains extent of the data (time and geographic)
  - Provides contact information for person responsible for dataset

### **Data Dictionary**

- Description
  - Contains information about the different data elements or fields in a dataset or database.
- Function / Benefit
  - Records and preserves information about the structure of the data fields.
  - Helps data users to understand the meaning of each data field.
  - Identifies sensitive, confidential, personal, and financial data fields.

### **Data Catalog**

- Description
  - A listing of corporate datasets.
- Function / Benefit
  - Meets data cataloging requirement of the California Open Data Policy.
  - Enables staff to identify current data resources and associated points of contact
  - Minimizes data duplication.
  - Serves as the source to discover and access authoritative data.

### **Business Data Glossary**

- Description
  - A business data glossary provides a central location for documenting shared definitions of common business terms.
- Function / Benefit
  - Serves as the single place to document and find authoritative definitions of terms,
  - Minimizes confusion from multiple definitions of a single term or multiple terms with the same definition, and
  - Minimizes mistakes due to incorrect assumption of term definition.

### **Data Quality**

- Description
  - Documentation, assessment, and reporting of data quality at all stages of its lifecycle.
- Function / Benefit
  - Enables identification, reporting, and tracking of data's conformance to business rules,
  - Improves trust in data and decreases time spent double-checking data,
  - Can identify non-conforming data before being loaded into or reported out of a database, and
  - Can show changes over time to demonstrate progress and identify systemic impacts.

## Data Extract-Transform-Load

- Description
  - Method of automatic, scheduled, and on-demand extraction, processing, and loading of data between databases and between formats.
- Function / Benefit
  - Automates data processing tasks,
  - Builds process once, uses it many times,
  - Eliminates errors introduced from hand-processing data, and
  - Enables integrations between systems, without native data-sharing support.
  - Can perform complex data transformations

Applied usage benefit examples are, but not limited to, the following:

- SB 1 (Rebuilding CA) reporting – Caltrans creates and maintains a map and tabular data reporting the status of delivery of SB 1 funded projects. Adoption of the proposed solution will improve data findability for Caltrans staff creating SB 1 reports through the data catalog component, improve the quality of provided data through the data quality component, and enable the creation of automated data extraction processes from the data's source systems through the data extract-transform-load component.
- Transportation Asset Management – Transportation asset management requires data from multiple sources covering asset location, asset type, asset condition, budget, needs, outputs, etc. Adoption of the proposed solution will improve data findability through the data catalog component, improve the quality of asset data through the data quality management component, provide system interoperability tools through the data extract-transform-load component, enable the management of business data terminology to ensure data is not misused through the business data glossary component, and confirm the current version of data is being provided, as well as minimize the chance of data misuse through the metadata component.
- Creating and maintaining 10-Year SHOPP – Data that feeds into the 10-Year SHOPP is sourced from multiple enterprise systems. Implementation of this project enables the data stewards and custodians of each of those systems to efficiently and effectively document, assess, manage, and share required data. This is realized by all staff following the same set of practices for data documentation and utilizing tools to create a one-stop-shop for data discovery and access as well as providing data maintainers with the capability to assess data for quality and address found issues proactively as well as develop automated processes to share data between systems. System interoperability minimizes the possibility of introducing errors through the manual handling and transformation of data.

Funding has been secured for all four PAL stages: PAL Stage 1 Business Analysis (S1BA), Stage 2 Alternatives Analysis (S2AA), PAL Stage 3 (Solution Development), and PAL Stage 4 (Project Readiness and Approval). This request is to secure the first fiscal year funding for project implementation.

## C. Departmentwide and Statewide Considerations

Implementing an enterprise set of tools to enable a robust approach to data management is consistent with the California State Data Strategy<sup>4</sup> published by the California Chief Data Officer in August 2020. The resources requested are in direct alignment with the mission of the Office of the Chief Data Officer, which is to *empower use of data by ensuring the state has the infrastructure, processes, and people to manage, access, and use data efficiently, effectively, securely, and responsibly*. Additionally, this request is in alignment with the strategic goals of streamlining data access, as well as improving data management and governance (as shown in

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<sup>4</sup> <https://www.govops.ca.gov/caldata/>

Figure 1). Further, Caltrans is following the ideals and practices of data governance, which are documented in national research reports<sup>56</sup> and the Data Management Body of Knowledge<sup>7</sup> (DMBOK).



**Figure 1:** California Data Strategy, Strategic Goals

Data consumers, both inside and outside of Caltrans, will benefit from data and information products that are properly documented, quality controlled, findable, and accessible. Data consumers outside of Caltrans are federal agencies, such as the Federal Highway Administration, which requires Caltrans to provide an annual submittal of roadway inventory and performance information; Metropolitan Planning Organizations such as the Southern California Association of Governments; non-governmental agencies (NGO), such as The Nature Conservancy; consultants and private companies; other California State entities, such as the Office of Emergency Services; and the general public who can request certain information as transparency laws apply. Other external users of Caltrans data include the California Transportation Commission (CTC) and the California State Legislature, both of which review project delivery status, financial data, and outputs as part of Senate Bill 1 (SB 1), the Road Repair and Accountability Act of 2017. Similar to SB 1, the recently passed Infrastructure Investment and Jobs Act (IIJA) brings new grant programs and funding that will require their own data collection, management, and reporting requirements. Failing to meet these requirements could result in forfeiture of existing funding and not approving allocations of funding for new projects. Effectively managing data provides the decision-making information needed to maximize the impact of IIJA and SB 1 funds.

The adoption of data governance and management tools is consistent with the Caltrans Strategic Plan 2020-2024 goals as described below.

*Goal 2- Cultivate Excellence, strategy to Support career progression through professional and leadership development*

Offering relevant training resources leads to a well-trained workforce whose skills will improve over time; it also supports the idea that staff are valued and should be invested in. A data literate workforce results in improved adoption of data governance practices. This approach has the natural outcome of increased professional opportunities as staff increase their capability and maturity in managing, preparing, and analyzing data.

<sup>5</sup> <https://www.trb.org/NCHRP/Blurbs/176005.aspx>

<sup>6</sup> <https://www.trb.org/Main/Blurbs/173470.aspx>

<sup>7</sup> <https://www.dama.org/cpages/body-of-knowledge>

Goal 4- Strengthen Stewardship and Drive Efficiency, strategies to *Standardize and modernize our equipment, facilities, technology, and supporting work practices* and *Enhance asset management and decision support tools*.

Implementation of an enterprise data governance and management solution will enable staff to efficiently maintain data documentation; will enable the creation of a one-stop-shop enterprise data catalog for finding and accessing authoritative data; will enable a consistent assessment of data quality; will enable automated data preparation process to enhance interoperability between systems; will enable development of standard data terminology definitions to minimize misuse; and will maximize the usability of data for analytics, visualization, and decision making. This enables certification of data for inclusion in a data warehouse that all data consumers at Caltrans pull from. This approach is a nationally accepted best practice as documented in Transportation Research Board, National Highway Cooperative Research Program Report 814, *Data to Support Transportation Agency Business Needs: A Self-Assessment Guide*. As an enterprise strategy, the benefits apply to strategic questions and needs, as well as to tactical decision making for specific programs such as asset management.

#### **D. Outcomes and Accountability**

The adoption of data governance and management tools is expected to bring the specific benefits listed in Section D above, as well as the following general benefits realized through the implementation of an enterprise data governance and management approach. These tools are an essential component of that approach.

- **Findability and Accessibility:** The location of required data is documented and can be easily discovered. Staff are not spending time waiting to get access, nor trying to figure out if certain data exists and who is responsible for it.
- **Sharing and Collaboration:** Data is classified as to any restrictions for whom it can be shared with. This reduces the risk that data is inappropriately shared, causing complications. Improved sharing also improves future collaboration between business units and meets expectations for open data.
- **Quality, Accuracy, and Completeness:** Data is documented as to its quality and fitness. This highlights data issues and gaps that can be addressed appropriately. This also informs data consumers as to the appropriateness of the data for their intended use and reduces the chance of misinformation being produced.
- **Accountability:** Clearly defined roles and responsibilities set expectations, ownership and pride in the maintenance and quality of data.
- **Interoperability:** Data is accessible and in a directly usable format, which will increase responsiveness and decrease data maintenance and support costs.
- **Setting and Meeting Expectations:** Standard processes and documentation results in overall improved working relationships with all stakeholders and provides for consistency in data management practices across Caltrans.
- **Efficiency:** Consistent practices improve the ability to collect data, analyze it, and correctly inform decision makers.
- **Decision-making:** Data governance maximizes the use of data to make decisions.

#### **Projected Outcomes**

Once funded, contracts related to the implementation of the solution will be released and executed. Follow-on BCP requests will be submitted annually to fund implementation of the solution with the final BCP in the series requesting resources for the long-term maintenance



and operation of the implemented solution. The projected outcome for this project is as follows:

A fully operating data governance solution covering the six functionality areas is in place containing information for at least ten corporate systems in FY 2026-27.

#### **E. Implementation Plan**

The implementation plan tasks, and schedule are provided in Attachment A – Implementation Plan. This request would fund the beginning of implementation of the solution, the system integration contract, the independent verification and validation contract, and the first year of the information technology staff augmentation contract. Work would commence in the second half of FY 2024-25.

#### **F. Supplemental Information (If Applicable)**

Attachment A – Implementation Plan

Attachment B – Workload Analysis

Attachment A - Implementation Plan

2024-25 BCP Enterprise Data Governance Technology Solution Implementation

Data Governance Technology Solutions Project Timeline	2023				2024				2025				2026				2027												
	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Quarter 1		Quarter 2		Quarter 3		Quarter 4		Quarter 1		Quarter 2										
	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May
Project Planning and Procurement	S3SA Procurement SOWs & RFPs																												
									S4PRA Conduct Primary and Ancillary Solicitations																				
Project Execution (Estimated)													Implementation and Users Training/Workshops																
																	User Acceptance Testing												
Project Closeout (Estimated)																	M&O												

**Fiscal Year 2024-25**  
**Department of Transportation**  
**2660-xxx-BCP-2024 - Enterprise Data Governance Technology Solution**

Workload Matrix - Year 1						
1835029-Program Development						
Activity/Task Description	Workload Standard	Number of Times Work Performed	Workload Performed	Positions (1758 hrs/ Position)	Basis for Standard	Classification/Positions Requested
<b>Application Operator &amp; User Recruitment and Retention Specialist</b>						
Become trained on the solution (train the trainer)	240	1	240	0.14	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number applications of in scope.	<b>Research Data Specialist II - 2</b>
Train Caltrans staff in use of the solution	56	10	560	0.32	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Provide technical support on CTDATA and solution (help understand the requirements, create documentation, help with entering data in system, providing quality assurance)	296	10	2,960	1.68	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
User administration vetting (confirming who gets what access)	2	10	20	0.01	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
<b>Subtotal, System Interface Activities:</b>			<b>3,780</b>	<b>2.15</b>		<b>2</b>

Workload Matrix - Year 2						
1835029-Program Development						
Activity/Task Description	Workload Standard	Number of Times Work Performed	Workload Performed	Positions (1758 hrs/ Position)	Basis for Standard	Classification/Positions Requested
<i>Discrete activities that must be performed, steps in a process, etc. Include any assumptions</i>	<i>Hours spent on task each time</i>	<i>Time task done per Year (all sites)</i>	<i>Automatic</i>	<i>Automatic</i>	<i>How workload standard &amp; workload figures derived</i>	<i>List Classifications/# of positions</i>
<b>Application Operator &amp; User Recruitment and Retention Specialist</b>						
User acceptance testing of implemented solution	80	6	480	0.27	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of users in scope.	<b>Research Data Specialist II - 2</b>
On-boarding additional systems post implementation	256	6	1,536	0.87	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Provide ongoing quality assurance of overall system	16	10	160	0.09	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Train Caltrans staff in use of the solution (for post implementation)	56	6	336	0.19	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Develop and implement prioritization methodology for bringing corporate data into the system	172	1	172	0.10	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
User administration vetting (confirming who gets what access)	2	6	12	0.01	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Address bugs and technical issues with vendor	70	10	700	0.40	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Disaster recovery planning and testing (data restoration and testing)	120	1.0	120	0.07	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
<b>Subtotal, System Interface Activities:</b>			<b>3,036</b>	<b>2.00</b>		<b>2</b>

**Fiscal Year 2024-25**  
**Department of Transportation**  
**2660-xxx-BCP-2024 - Enterprise Data Governance Technology Solution**

<b>Workload Matrix Consultant Resourcing Application Development and Support - Year 1</b>						
<b>9900100 - Admin (Information Technology)</b>						
Activity/Task Description	Workload Standard	Number of Times Work Performed	Workload Performed	Positions (1758 hrs/ Position)	Basis for Standard	Classification/Positions Requested
<b>Application Development, Administration &amp; Support</b>						
Application Administration of Secure Agent	8	24	192	0.11	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number applications of in scope.	<b>(2) Sr. Technical Lead Consultant</b>
Application Administration best of breed, 6 modules of EDGS	4	72	288	0.16	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Software Patching support	10	12	120	0.07	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Software patching testing support	20	12	240	0.14	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
User Account Management	1	50	50	0.03	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of users in scope.	
End User support (2nd tier, SaaS vendor is 3rd tier support)	2	60	120	0.07	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Setup and configure jobs	80	5	400	0.23	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Lead development of extract programs	40	5	200	0.11	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Support on-boarding of new ADSD applications	40	5	200	0.11	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Monitor jobs, tools, systems, connections, etc.	1	365	365	0.21	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Review/analyze requirements and technical specifications	40	5	200	0.11	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Create/review/maintain/communicate technical system and application design documents.	10	5	50	0.03	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Support and coordinate with Data Custodians	25	10	250	0.14	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
ETL System on-board, job setup, monitor, troubleshoot, fix issues, etc.	100	5	500	0.28	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Perform unit,interface testing.	40	5	200	0.11	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of interfaces in scope.	
Co-ordinate user assurance testing	20	5	100	0.06	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	

Attachment B - Workload Analysis

Release management	4	5	20	0.01	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.
Incident / Problem resolution - Troubleshoot jobs, tools, systems, connections, etc.	4	60	240	0.14	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.
<b>Subtotal, System Interface Activities:</b>			<b>3,735</b>	<b>2.12</b>	
					<b>2</b>

<b>Resource Calculation Formula</b>	
Annual Hours required	3,735
Estimated TDDC/MSA Rate (\$/hr)	200
Resource Estimated Annual Cost	\$747,000.00

**Workload Matrix Consultant Resourcing Application Development and Support - Year 2**

<b>9900100 - Admin (Information Technology)</b>						
Activity/Task Description	Workload Standard	Number of Times Work Performed	Workload Performed	Positions (1758 hrs/ Position)	Basis for Standard	Classification/Positions Requested
<i>Discrete activities that must be performed, steps in a process, etc. Include any assumptions</i>	<i>Hours spent on task each time</i>	<i>Time task done per Year (all sites)</i>	<i>Automatic</i>	<i>Automatic</i>	<i>How workload standard &amp; workload figures derived</i>	<i>List Classifications/# of positions</i>
<b>Application Development, Administration &amp; Support</b>						
Application Administration of Secure Agent	8	24	192	0.11	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Application Administration best of breed, 6 modules of EDGS	4	72	288	0.16	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Software Patching support	10	12	120	0.07	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Software patching testing support	20	12	240	0.14	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
User Account Management	1	100	100	0.06	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of users in scope.	
End User support (2nd tier, SaaS vendor is 3rd tier support)	2	120	240	0.14	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Setup and configure jobs	80	5	400	0.23	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Lead development of extract programs	40	5	200	0.11	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Support on-boarding of new ADSD applications	40	5	200	0.11	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	
Monitor jobs, tools, systems, connections, etc.	1	365	365	0.21	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	<b>(2) Sr. Technical Lead Consultant</b>
Review/analyze requirements and technical specifications	40	5	200	0.11	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.	

Attachment B - Workload Analysis

Create/review/maintain/communicate technical system and application design documents	10	5.0	50	0.03	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.
Support and coordinate with Data Custodians	20	20	400	0.23	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.
ETL System on-board, job setup, monitor, troubleshoot, fix issues, etc.	100	5	500	0.28	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.
Perform unit,interface testing.	40	5	200	0.11	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.
Co-ordinate user assurance testing	20	5	100	0.06	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.
Release management	4	5	20	0.01	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.
Incident / Problem resolution - Troubleshoot jobs, tools, systems, connections, etc.	4	120	480	0.27	Workload standard is based on the average percentage of their time that an individual in this role would spend performing the particular task and the number of applications in scope.
<b>Subtotal, System Interface Activities:</b>			<b>4,295</b>	<b>2.44</b>	
					<b>2</b>

<b>Resource Calculation Formula</b>	
Annual Hours required	4,295
Estimated TDDC/MSA Rate (\$/hr)	200
Resource Estimated Annual Cost	\$859,000.00

**Fiscal Year 2024-25**  
**Department of Transportation**  
**2660-xxx-BCP-2024 - Enterprise Data Governance Technology Solution**

Workload Matrix Consultant Resourcing Infrastructure Management - Year 1						
9900100 - Admin (Information Technology)						
Activity/Task Description	Workload Standard	Number of Times Work Performed	Workload Performed	Positions (1758 hrs/ Position)	Basis for Standard	Consulting/Positions Requested
<i>Discrete activities that must be performed, steps in a process, etc. Include any assumptions</i>	<i>Hours spent on task each time</i>	<i>Time task done per Year (all sites)</i>	<i>Automatic</i>	<i>Automatic</i>	<i>How workload standard &amp; workload figures derived</i>	<i>List Classifications/# of positions</i>
<b>Infrastructure Management Implementation Resourcing Consultant</b>						
Participation and collobrate in project kickoff and implementation startup efforts	10	6	60	0.03	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent	
Participate and collobrate with integrator and project team in planning rollout tasks and activities	6	6	36	0.02	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent	
Participate and collobrate with integrator and project team to review, consult on project Deliverables and Approvals	8	6	48	0.03	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent	
Participate and collobrate with integrator and project team on Project Initiation Plan	6	6	36	0.02	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent	
Participate and collobrate with integrator and project team on data management planning.	6	6	36	0.02	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent	
Project implementation meetings related to transition requirements, work Session, functional work Sessions.	5	20	100	0.06	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent	
Participate and collobrate in status and progress meetings with integrator and business project teams.	5	20	100	0.06	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent	
Drive activities pertaining to EDGTS task and collobration work efforts.	10	20	200	0.11	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent	
Direct and Guide - participation in architecture planning, design, review and approval. Server, Identity, Storage, Network, DBA and Middleware	20	10	200	0.11	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent	
Collobrate on the project requirements and set up Database Agents, Secure Agent connecting to databases in 3 phases, API integration for ETL Process, . FME for geospatial ETL, 1Integrate for geospatial ETL processes	30	10	300	0.17	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent	

Attachment B - Workload Analysis

Collobrate and participation in architecture planning, design, review and approvals.	20	6	120	0.07	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Assessments for server, storage, network, database and Middleware for SaaS connector services and Secure Agent Service.	16	6	96	0.05	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Assessment, analysis collaboration for network connectivity; firewall rules (Dev, test , prod). Consultations and review with Caltrans network architect	10	1	10	0.01	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Database build, setup and configration support and collaboration with integrator and project team.	15	2	30	0.02	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Participate and collobrate with integrator and project team to build, implement and execute - configuration and set up Caltrans secure agent to integrate databases. Configration and set up connection, ports, firewall from Cloud SaaS Application to Caltrans secure agent.	40	2	80	0.05	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Set up, configure, collobrate with integrator, project team to set up ETL jobs and API Integration for 1) FME for geospatial ETL processes and 2) Integrate for geospatial ETL processes.	40	2	80	0.05	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Backup, restore, refresh, update, services, logs, troubleshoot, tuning, monitoring (Dev, Test, Prod) through the implementation phase.	16	4	64	0.04	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Participate and collobrate architecture based on the requirements and use cases in collobration with the system integrator and project team.	10	6	60	0.03	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Participate and collobrate on design SaaS connector services and Secure Agent Service.	10	6	60	0.03	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Perform in-depth and thorough testing of the secure agent and database connector integration services all environments.	10	6	60	0.03	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Defect diagnosis and troubleshooting activities	10	6	60	0.03	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Participate and collobrate on development of technical procedures and documentation for the applications including operations, user guide, release guide, etc.	4	6	24	0.01	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Respond to Service Requests, User Group creation, Configuring access to Storage Accounts, Deploying resources such as VMs, DB connections etc in support of the project implementation efforts.	3	24	72	0.04	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent

(1) Sr. Technical Lead Consultant



Attachment B - Workload Analysis

Work on change requests associated with infrastructure resources such as VM, configuration of Load Balancer, server, environment, network firewall configuration, storage etc in support of the project implementation efforts.	4	24	96	0.05	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Provision Multiple environments of Development, test and production with IDP - Identity provider setup and configuration, SSO, Active Directory Integration. Set up and manage user groups, teams, roles and access in support of the project implementation efforts.	3	6	18	0.01	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Patching infrastructure components to minimize service disruption risks. Upgrades and Patches - Security, VM and DB version Updates (Dev, test, prod) in support of the project implementation efforts.	4	12	48	0.03	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Upgrading, installing, and patching for virtual machine, secure agent and cloud SaaS - Development, test and Production environment in support of the project implementation efforts.	3	12	36	0.02	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Monitor the services/infrastructure components to ensure service continuity. Set up monitoring services for components, secure agent and cloud SaaS - Development, test and Production environment in support of the project implementation efforts.	1	12	12	0.01	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
<b>Subtotal, System Interface Activities:</b>			<b>2,142</b>	<b>1.22</b>	

<b>Resource Calculation Formula</b>	
Annual Hours required	2,142
Estimated TDDC/MSA Rate (\$/hr)	200
Resource Estimated Annual Cost	\$428,400.00

**Workload Matrix Consultant Resourcing Infrastructure Management - Year 2**

9900100 - Admin (Information Technology)						
Activity/Task Description	Workload Standard	Number of Times Work Performed	Workload Performed	Positions (1758 hrs/ Position)	Basis for Standard	Consulting/Positions Requested
<i>Discrete activities that must be performed, steps in a process, etc. Include any assumptions</i>	<i>Hours spent on task each time</i>	<i>Time task done per Year (all sites)</i>	<i>Automatic</i>	<i>Automatic</i>	<i>How workload standard &amp; workload figures derived</i>	<i>List Classifications/# of positions</i>
Participation and collobrate in project kickoff and implementation startup efforts	10	6	60	0.03	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent	
Participate and collobrate with integrator and project team in planning rollout tasks and activities	6	6	36	0.02	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent	
Participate and collobrate with integrator and project team to review, consult on project Deliverables and Approvals	8	6	48	0.03	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent	
Participate and collobrate with integrator and project team on Project Initiation Plan	6	6	36	0.02	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent	

Attachment B - Workload Analysis

Participate and collaborate with integrator and project team on data management planning.	6	6	36	0.02	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Project implementation meetings related to transition requirements, work Session, functional work Sessions.	5	20	100	0.06	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Participate and collaborate in status and progress meetings with integrator and business project teams.	5	20	100	0.06	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Drive activities pertaining to EDGTS task and collaboration work efforts.	10	20	200	0.11	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Direct and Guide - participation in architecture planning, design, review and approval. Server, Identity, Storage, Network, DBA and Middleware	20	10	200	0.11	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Collaborate on the project requirements and set up Database Agents, Secure Agent connecting to databases in 3 phases, API integration for ETL Process, . FME for geospatial ETL, 1Integrate for geospatial ETL processes	30	10	300	0.17	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Collaborate and participation in architecture planning, design, review and approvals.	20	6	120	0.07	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Assessments for server, storage, network, database and Middleware for SaaS connector services and Secure Agent Service.	16	6	96	0.05	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Assessment, analysis collaboration for network connectivity; firewall rules (Dev, test , prod). Consultations and review with Caltrans network architect	10	1	10	0.01	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Database build, setup and configuration support and collaboration with integrator and project team.	15	2	30	0.02	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Participate and collaborate with integrator and project team to build, implement and execute - configuration and set up Caltrans secure agent to integrate databases. Configuration and set up connection, ports, firewall from Cloud SaaS Application to Caltrans secure agent.	40	2	80	0.05	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Set up, configure, collaborate with integrator, project team to set up ETL jobs and API Integration for FME for geospatial ETL processes and 1Integrate for geospatial ETL processes.	40	2	80	0.05	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Backup, restore, refresh, update, services, logs, troubleshoot, tuning, monitoring (Dev, Test, Prod) through the implementation phase.	16	4	64	0.04	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Participate and collaborate architecture based on the requirements and use cases in collaboration with the system integrator and project team.	10	6	60	0.03	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Participate and collaborate on design SaaS connector services and Secure Agent Service.	10	6	60	0.03	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent

(1) Sr. Technical Lead Consultant

Attachment B - Workload Analysis

Perform in-depth and thorough testing of the secure agent and database connector integration services all environments.	10	6	60	0.03	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Defect diagnosis and troubleshooting activities	10	6	60	0.03	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Participate and collaborate on development of technical procedures and documentation for the applications including operations, user guide, release guide, etc.	4	6	24	0.01	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Respond to Service Requests, User Group creation, Configuring access to Storage Accounts, Deploying resources such as VMs, DB connections etc in support of the project implementation efforts.	3	24	72	0.04	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Work on change requests associated with infrastructure resources such as VM, configuration of Load Balancer, server, environment, network firewall configuration, storage etc in support of the project implementation efforts.	4	24	96	0.05	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Provision Multiple environments of Development, test and production with IDP - Identity provider setup and configuration, SSO, Active Directory Integration. Set up and manage user groups, teams, roles and access in support of the project implementation efforts.	3	6	18	0.01	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Patching infrastructure components to minimize service disruption risks. Upgrades and Patches - Security, VM and DB version Updates (Dev, test, prod) in support of the project implementation efforts.	4	12	48	0.03	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Upgrading, installing, and patching for virtual machine, secure agent and cloud SaaS - Development, test and Production environment in support of the project implementation efforts.	3	12	36	0.02	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
Monitor the services/infrastructure components to ensure service continuity. Set up monitoring services for components, secure agent and cloud SaaS - Development, test and Production environment in support of the project implementation efforts.	1	12	12	0.01	Workload standard is based on the average time in hours that an individual in this role would spend performing these particular tasks. The FTE value is derived by the duration of the task multiplied by the frequency performed to determine a factor of a full time equivalent
<b>Subtotal, System Interface Activities:</b>			<b>2,142</b>	<b>1.22</b>	

<b>Resource Calculation Formula</b>	
Annual Hours required (1.22 FTE)	2,142
Estimated TDDC/MSA Rate (\$/hr)	200
Resource Estimated Annual Cost	<b>\$428,400.00</b>

# BCP Fiscal Detail Sheet

BCP Title: Enterprise Data Governance Technology Solution

BR Name: 2660-079-BCP-2024-GB

## Budget Request Summary

			FY24			
	CY	BY	BY+1	BY+2	BY+3	BY+4
Operating Expenses and Equipment						
5340 - Consulting and Professional Services - External	0	4,919	0	0	0	0
5340 - Consulting and Professional Services - Interdepartmental	0	282	0	0	0	0
5346 - Information Technology	0	2,522	0	0	0	0
5368 - Non-Capital Asset Purchases - Equipment	0	24	0	0	0	0
<b>Total Operating Expenses and Equipment</b>	<b>\$0</b>	<b>\$7,747</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Total Budget Request</b>	<b>\$0</b>	<b>\$7,747</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

## Fund Summary

Fund Source - State Operations						
0042 - State Highway Account, State Transportation Fund	0	7,747	0	0	0	0
<b>Total State Operations Expenditures</b>	<b>\$0</b>	<b>\$7,747</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Total All Funds</b>	<b>\$0</b>	<b>\$7,747</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

## Program Summary

Program Funding						
1835029 - Program Development	0	6,289	0	0	0	0
9900100 - Administration	0	1,458	0	0	0	0
<b>Total All Programs</b>	<b>\$0</b>	<b>\$7,747</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>