

**California Public Utilities Commission**  
**RSSIMS Bulk Update Project (#8660-073)**



## VERSION HISTORY

Version #	Date	Author	Key Differences
1.0	9/14/2022	Dennis Hong	Initial Draft
1.1	9/23/2022	Dennis Hong	Updated FAW, added SPR transmittal approvals, and added text for additional details.



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# 1 Information Technology Project Summary Package

## 1.1 Section A: Executive Summary

1. **Submittal Date**  
8/26/2022

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2. **Type of Document**  
 **SPR**       **PSP ONLY**       **Other:** Enter a description if you selected Other

**Project Number:** 8660-073

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3. **Project Title**  
Rail Safety & Security Information Management System Bulk Record Update

<b>Project Acronym</b> RSSIMS Bulk Update	<b>Estimated Project Dates</b> Start: 10/1/2021      End: 10/18/2024
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4. **Submitting Agency/state entity**  
California Public Utilities Commission

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5. **Reporting Agency/state entity**  
California Public Utilities Commission

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### 6. Project Objectives

**Objective 1:**

Reduce the data entry workload for engineers when updating railroad crossing records in the RSSIMS database by providing bulk record update processing to the exiting RSSIMS system for updating basic information on the railroad crossing records.

Example: Allow an entire railroad line to be bulk updated with train count information, a railroad corridor may have 10 to 100 crossings that all need the same updates. Now these crossings are being updated one at a time. Similar updates may be appropriate in the future for railroad bridge records.



**Objective 2:**

Improve engineering productivity by providing RSSIMS functionality to bulk process current RSSIMS records in order to perform hazard analysis/risk assessment and enable a larger number of records (e.g., 1,000+ records) to be selected for simultaneous processing through the Hazard Assessment calculation process. An automated process would provide greater consistency to help ensure that a calculation is run for all selected records with the most recent data. Similar functionality is generally needed throughout RSSIMS where a group of records meeting selection criteria receive formula driven updates to any number of data fields that are saved back to the RSSIMS database.

**Objective 3:**

Improve engineer productivity by simplifying the process and reducing time needed to upload and link supporting documents to multiple data records at one time. This would be helpful for various RSSIMS record types. Enable multiple supporting files for a single record or a group of records to be uploaded as a single process rather than how is currently being done, one file at a time. Uploading one file at a time requires the user to constantly monitor the screen to confirm completion of one upload, then specify the next file. Much of this time could be used for other tasks if the upload of multiple files is being handled by the application in the background.

**Objective 4:**

Develop a data management capability for users to identify multiple crossing records to be updated with the same data in a bulk processing mode. For example: Select all records whose DataField "X" is equal to "Value A (or Null)" and set DataField "X" to value = "0 (zero)." This same functionality should support loading the initial, default value for new data fields added to RSSIMS record types.

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**7. Proposed Solutions**

The proposed solution for RSSIMS is to develop a custom 3-tier software system that is cloud-based. The system will consist of a User Interface tier, an Application Logic tier, and a Database tier residing on a Government Cloud environment. This system will satisfy all business and technical requirements through technology mostly supported by an external vendor. Some tasks such as basic configuration, report development, and user management will be supported by CPUC staff. Infrastructure, disaster recovery, software updates, detailed configuration/customization and advanced help desk support will be managed by the system vendor.



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<b>8. Major Milestones</b>	<b>Estimated Completion Date</b>
Project Start	10/1/2021
Project Initiation	10/1/2021
Project Planning & Analysis	5/31/2023
System Design	2/15/2023
System Test Scripts	12/27/2022
Development for RSSIMS Integration	7/13/2023
Legacy Data Migration	9/18/2023
Testing	8/22/2023
Deployment	10/20/2023
Post Implementation Review	12/21/2023
CPUC Staff Training	9/20/2023
User Manuals	8/28/2023
Warranty	10/18/2024
System Maintenance & Operations Support	10/18/2024
Organization Change Management	3/4/2024
<b>Key Deliverables</b>	<b>Estimated Completion Date</b>
Baseline Report	12/17/2021
Project Schedule	5/3/2023
Work Breakdown Structure	12/15/2021
Implementation/Deployment Plan	9/28/2022
Test Plan	8/24/2022
Training Plan	11/23/2022
Knowledge Transfer Plan	9/14/2022
Data Migration & Specification Plan	9/14/2022
Service Level Management Plan	5/31/2023
Maintenance & Operations Plan	5/16/2023
Disaster Recovery Plan	3/21/2023
Configuration Management & Version Control	8/10/2022
Test Scripts	12/27/2022



Sprint 1	9/29/2022
Sprint 2	10/26/2022
Sprint 3	11/23/2022
Sprint 4	12/22/2022
Sprint 5	1/24/2023
Sprint 6	2/21/2023
Sprint 7	3/20/2023
Sprint 8	4/17/2023
Sprint 9	5/12/2023
Sprint 10	6/9/2023
Sprint 11	7/6/2023
Administrative Hands-On Training	6/9/2023
Migrate Data	9/18/2023
User Acceptance Testing	8/22/2023
Transition Plan	11/1/2022
Release Plan	12/9/2022
Go Live	9/22/2023
Application Training	9/20/2023

## 1.2 Section B: Project Contacts

<b>Project #</b>	8660-073
<b>Doc Type</b>	SPR

### Executive Contacts

	First Name	Last Name	Area Code	Phone #	Ext.	Area Code	Fax #	E-mail
<b>Executive Director</b>	Rachael	Peterson	415	703-3808		415	703-1758	rachel.peterson@cpuc.ca.gov
<b>Budget Officer</b>	Harsh	Thakar	916	894-5629		916	894-5629	harsh.thakar@cpuc.ca.gov
<b>CIO</b>	Ryan	Dulin	916	894-5726				ryan.dulin@cpuc.ca.gov
<b>CTO</b>	Harry	Mayo	916	327-1488				harry.mayo@cpuc.ca.gov
<b>Project Director</b>	Roger	Clugston	213	308-7698				roger.clugston@cpuc.ca.gov
<b>Project Sponsor</b>	Anton	Garabetian	213	576-5778				antranig.garabetian@cpuc.ca.gov
<b>Project Sponsor</b>	Daren	Gilbert	916	928-6858				daren.gilbert@cpuc.ca.gov
<b>Project Sponsor</b>	Robert	Grimes	951	870-1565				robert.grimes@cpuc.ca.gov





### Direct Contacts

	First Name	Last Name	Area Code	Phone #	Ext.	Area Code	Fax #	E-mail
<b>Document prepared by</b>	Dennis	Hong	415	703-1724				dennis.hong@cpuc.ca.gov
<b>Primary contact</b>	Dennis	Hong	415	703-1724				dennis.hong@cpuc.ca.gov
<b>Project Manager</b>	Dennis	Hong	415	703-1724				dennis.hong@cpuc.ca.gov
<b>Project Manager</b>	Bree	Arnett	916	928-2516				bree.arnett@cpuc.ca.gov



### 1.3 Section C: Project Relevance To State And/Or Departmental Plans

Project #	8660-073
Doc Type	SPR

1. What is the date of your current Technology Recovery Plan (TRP)? Date 1/2020
2. What is the date of your current Agency Information Management Strategy (AIMS)? Date
3. For the proposed project, provide the page reference in your current AIMS and/or strategic business plan. Doc. N/A Page # N/A
4. Is the project reportable to control agencies?  
 Yes       No

If YES, CHECK all that apply:

<input type="checkbox"/>	a) The project involves a budget action.
<input type="checkbox"/>	b) A new system development or acquisition that is specifically required by legislative mandate or is subject to special legislative review as specified in budget control language or other legislation.
<input checked="" type="checkbox"/>	c) The estimated total development and acquisition costs exceed the Department of Technology's established Agency/state entity delegated cost threshold and the project does not meet the criteria of a desktop and mobile computing commodity expenditure (see SAM 4989 – 4989.3).
<input type="checkbox"/>	d) The project meets a condition previously imposed by the Department of Technology.



### 1.4 Section D: Budget Information

Project #	8660-073
Doc Type	SPR

Budget Augmentation Required?  No  Yes

If yes, indicate fiscal year(s) and associated amount:

FY	2021/22	FY	2022/23	FY	2023/24	FY		FY	
	(-986,290)		\$124,332		\$2,388,247		\$		\$

#### Project Costs

1.	Fiscal Year	2021/22	2022/23	2023/24	2024/25	TOTAL
2.	One-Time Cost	\$1,257,309	\$2,643,572	\$2,388,247	\$0	\$ 6,289,128
3.	Continuing Costs	\$0	\$0	\$0	\$798,829	\$ 798,829
4.	TOTAL PROJECT BUDGET	\$ 1,257,309	\$ 2,643,572	\$ 2,388,247	\$ 798,829	\$ 7,087,957

#### Project Financial Benefits

5.	Cost Savings/Avoidances	\$	\$	\$	\$	\$
6.	Revenue Increase	\$0	\$0	\$0	\$0	\$0

#### Project Variance From PAL Stage 4 to SPR

		Original	New Estimate	Variance
1.	Cost	\$9,051,961	\$10,094,689	+\$1,042,728
2.	Schedule	27 Months	34 Months	+7 months



### 1.5 Section E: Vendor Project Budget

Project #	8660-073
Doc Type	SPR

Vendor Cost for SPR Development (if applicable)	\$325,000
Vendor Name	Trinity Technology Group

#### Vendor Project Budget

1.	Fiscal Year	2021/22	2022/23	2023/24	TOTAL
2.	Primary Vendor Budget	\$231,541	\$825,160	\$1,823,732	<b>\$2,880,433</b>
3.	Independent Oversight Budget	\$16,500	\$52,920	\$13,230	<b>\$82,650</b>
4.	IV&V Budget	\$38,700	\$115,000	\$88,550	<b>\$242,250</b>
5.	Vendor Project Manager	\$155,480	\$276,280	\$54,000	<b>\$485,760</b>
6.	<b>TOTAL VENDOR BUDGET</b>	<b>\$442,221</b>	<b>\$1,269,360</b>	<b>\$1,979,512</b>	<b>\$3,691,093</b>

#### Primary Vendor History Specific to this Project

7.	Primary Vendor	Trinity Technology Group
8.	Contract Start Date	9/16/2021
9.	Contract End Date (projected)	9/20/2024
10.	Amount	\$ 2,880,432.60

#### Primary Vendor Contacts

	Vendor	First Name	Last Name	Area Code	Phone #	Ext.	Area Code	Fax #	E-mail
11.	Trinity Technology Group	Stephen	Williamson	916	213-4358				svwilliamson@trinitytg.com
12.									
13.									



## 1.6 Section F: Risk Assessment Information

<b>Project #</b>	8660-073
<b>Doc Type</b>	SPR

### RISK ASSESSMENT

Has a Risk Management Plan been developed for this project?

Yes       No

#### General Comment(s)

Preliminary risks for this project have been identified, captured, and discussed. The highest priority risks will be escalated as needed for resolution. The Preliminary Risk Management Plan is located on the project's SharePoint site. An updated Risk Register is attached. The Risk Management Plan will be updated on an ongoing basis. The project is using a risk process as documented in the approved Risk Management Plan. Those risks are identified, reviewed weekly, mitigated, and escalated as needed as described in the project Risk Management Plan.



## 2 Project Background

The California Public Utilities Commission (CPUC) regulates services and utilities, protects consumers, safeguards the environment, and assures Californians' access to safe and reliable utility infrastructure and services. The essential services regulated include electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies.

Oversight of the railroad and rail transit systems falls under the Rail Safety Division (RSD). It consists of three branches: Rail Transit Safety Branch, Rail Crossings and Engineering Branch, and Railroad Operations Safety Branch. Each of the Branches has developed numerous business processes to meet the oversight needs. The data and workflows which stem from the business processes are currently stored in a database system which was developed and implemented in 2012.

The current database is reaching the end of its life and cannot be modified to support the changing business process needs. The most significant change is the addition of bulk processing features where RSD staff can update data on multiple records within a record type, create multiple new records in a batch process, run formulas across multiple records in a single action, or upload multiple attachments in one process step. This has been identified in order to significantly reduce the time spent on data entry and processing in the database. Improvements to the user interface and workflow will also make the system more user friendly and enhance staff productivity.

CPUC seeks a completely new system, built to modern industry standards that is reliable, efficient and meets our business needs. The new system needs to replicate and enhance on the functions of the current system to continue RSD's important safety work.



### 3 Project Schedule Change

#### 3.1 Reasoning For Change

The adjustments to the project schedule are necessary to accommodate for several factors:

1. The baseline schedule did not account for the onboarding period which took approximately 7 weeks.
2. Several baselines scheduled tasks were discovered upon further analysis and discussion to have been misplaced on the project timeline. Originally the Development, Testing and Data Migration activities were scheduled early, but in practice will occur later and had minor impacts to the critical path.
3. Holiday period right after the project starting interrupted project momentum related to analysis and design.
4. The Design phase took longer than planned which ensured that it was sufficiently detailed and complete.
5. Unpredictable resource changes from the vendor contributed to needing more time for knowledge transfer.

There is no current work around. Adjusting the project schedule start dates is necessary for project coordination and reporting.

The following table shows the original approved dates.

Table 1

Task Name	Duration	Baseline Start	Baseline Finish
▲ <b>RSSIMS Implementation</b>	<b>628 days</b>	<b>Fri 10/1/21</b>	<b>Thu 3/28/24</b>
▷ 1 - Baseline Report	53 days	Fri 10/1/21	Fri 10/29/21
▷ 2 - Project Management	433 days	Fri 10/1/21	Thu 6/29/23
▷ 3 - System Design	323 days	Fri 10/1/21	Wed 12/7/22
▷ 4 - System Test Scripts	259.75 days	Fri 10/29/21	Tue 11/15/22
▷ 5 - Development for RSSIMS Integration	251.5 days	Wed 11/10/21	Tue 11/15/22
▷ 6 - RSSIMS Legacy Data Migration	306 days	Tue 11/23/21	Mon 2/20/23
▷ 7 - Testing	281.5 days	Tue 12/7/21	Thu 1/26/23
▷ 8 - Deployment	233 days	Thu 4/21/22	Tue 3/28/23
▷ 9 - Post Implementation Review	192.5 days	Mon 8/22/22	Thu 6/1/23
▷ 10 - CPUC Staff Training	202.5 days	Wed 5/4/22	Mon 2/27/23
▷ 11 - User Manuals	154.5 days	Wed 6/15/22	Tue 1/31/23
▷ 12 - Warranty	260 days	Wed 3/29/23	Thu 3/28/24
▷ 13 - System Maintenance and Operations Support	260 days	Wed 3/29/23	Thu 3/28/24
▷ A-Organizational Change Management	444 days	NA	NA



The second table shows the new proposed dates.

Table 2

Task Name	Duration	Start	Finish
▲ RSSIMS Implementation	763.25 days	Wed 9/22/21	Wed 9/25/24
▲ RSSIMS Project Work	756.25 days	Fri 10/1/21	Wed 9/25/24
▲ RSSIMS Project Initiation	53 days	Fri 10/1/21	Fri 12/17/21
▷ 1 - Baseline Report	53 days	Fri 10/1/21	Fri 12/17/21
▲ RSSIMS Project Planning and Analysis	393 days	Fri 10/1/21	Wed 5/3/23
▷ 2 - Project Management	393 days	Fri 10/1/21	Wed 5/3/23
▲ RSSIMS System Design	468.5 days	Fri 10/1/21	Fri 8/18/23
▷ 3 - System Design	338.5 days	Fri 10/1/21	Wed 2/15/23
▷ 4 - System Test Scripts	345.5 days	Mon 4/4/22	Fri 8/18/23
▲ RSSIMS System Development	509.25 days	Fri 10/1/21	Mon 10/16/23
▷ 5 - Development for RSSIMS Integration	433 days	Fri 10/1/21	Thu 6/29/23
▷ 6 - RSSIMS Legacy Data Migration	188.75 days	Mon 8/1/22	Fri 5/5/23
▷ 7 - Testing	70 days	Wed 5/31/23	Wed 9/6/23
▷ 8 - Deployment	227.75 days	Fri 10/28/22	Wed 9/27/23
▷ 9 - Post Implementation Review	34 days	Tue 8/29/23	Mon 10/16/23
▲ RSSIMS Training, Maintenance and Operations Support	434.25 days	Mon 1/23/23	Wed 9/25/24
▷ 10 - CPUC Staff Training	109 days	Mon 1/23/23	Tue 6/27/23
▷ 11 - User Manuals	162.75 days	Wed 2/1/23	Wed 9/20/23
▷ 12 - Warranty	365 days	Tue 5/2/23	Wed 9/25/24
▷ 13 - System Maintenance and Operations Support	322.25 days	Thu 6/29/23	Mon 9/23/24
▲ A-Organizational Change Management	599.25 days	Wed 9/22/21	Thu 2/8/24
▷ OCM Kickoff Activities	50 days	Tue 11/23/21	Tue 2/8/22
▷ OCM Assessment Activities	599.25 days	Wed 9/22/21	Thu 2/8/24
▷ OCM Communication Activities	394 days	Wed 2/9/22	Mon 9/4/23
▷ OCM Workshops	35 days	Tue 3/21/23	Tue 5/9/23
▷ OCM Testing Activities	111 days	Wed 9/22/21	Mon 3/7/22
▷ OCM Training Activities	25 days	Tue 3/8/22	Tue 4/12/22
▷ OCM Go Live Activities	5 days	Wed 4/13/22	Tue 4/19/22
▷ OCM Reinforcement Activities	368.25 days	Wed 4/20/22	Thu 10/5/23

### 3.2 Potential Impact\*

The potential cost impacts related to adjusting the schedule are:

1. Additional costs for hosting and storage. The contract includes costs for 15 months of hosting/storage for implementation. The risk is to TrinityTG who by contract absorbs any cost which is 5% above the contract amount (\$80,856 x 1.05 = \$84,899). Costs overages are deducted by CPUC from TrinityTG's invoices. As of August 2022, the running cost is under \$4,000 compared to the \$84,899 limit.
2. Additional staff time costs by CPUC.
3. Additional CPUC costs for extending M&O on the Legacy System up to \$95,000.

Specific cost impacts are CPUC direct cost. There are no changes to the contract cost. This change extends the deployment date by 7 months with the new deployment date of 10/20/23. Estimated schedule impact is adding 7 months (going from 15 months to 24 months). Contract Amendment #1 adjusted the contract end date to September 20, 2024. So, a contract amendment for time is not proposed as part of this change request. No scope impacts are identified. The project team also understands that there will be increased risk of resource changes due to the extended project time. The mitigation is to have clear documentation so onboarding new resources can be expedited and to establish a resource contingency plan.

\*Please see SPR FAW cell A24 for additional details.





## 4 Mapping Services Change

### 4.1 Reasoning For Change

This change is to shift from the use of Azure Maps to Esri ArcGIS Enterprise as the foundational mapping software used by RSSIMS.

This change in mapping services will require:

1. Completion of a Proof of Concept to vet the proposed solution.
2. Update/Replace the Mapping To-Be Process Flows.
3. Update/Replace the corresponding Use Cases.
4. Update some of the existing Requirements.
5. Add new Requirements accordingly.
6. Potential Design Modifications: Potential change to the mapping functionality. Major proposed changes include:
  - Include pre-defined GIS layers, such as railroad alignments and rail transit alignments on the map.
  - Allow the user to easily identify and populate coordinates.
  - Allow the user to map multiple data sets on the same map

In 2020, CPUC acquired a license for Esri ArcGIS Enterprise, which allows CPUC to host ArcGIS maps on CPUC servers. RSSIMS mapping could build on prior efforts of RSD and reduce the number of separate mapping resources being maintained for RSD. Trinity gave CPUC the option to take advantage of CPUC's newly stood up Esri servers. With this, RSD determined to take advantage and added additional requirements for better functionalities such as layered mappings and plotting mileposts.

In the current design, Azure maps would not display railroad and rail transit infrastructure layers, such as rail alignments, mileposts, and stations. RSD staff would not be able to add such layers to the map. Rail infrastructure would not be clearly identified on the default street maps. The proposed change would allow rail infrastructure layers to be clearly identified on the map upon mapping the location of RSSIMS records.

In recent years, Rail Safety Division (RSD) staff developed interactive maps using Esri ArcGIS Online. The layers used in ArcGIS Online could be included in a map using Esri ArcGIS Enterprise. The feature layers are and would continue to be maintained by RSD staff to display layers of railroad and rail transit infrastructure. A fundamental layer includes vector features for the alignment of railroad and rail transit lines throughout the state. A variety of additional layers are available, such as stations, railroad mileposts, roadway functional classification, and boundaries of cities and towns. The maps are configured to provide clear visibility of rail infrastructure in the default view, but to also allow the user flexibility to adjust the visibility of layers that assist in a variety of RSD work related to rail safety.

Additional data layers showing such rail infrastructure are valuable for a wide variety of reviews involving rail safety. If RSSIMS is implemented with Azure maps, RSSIMS users would need to navigate to the same location in an independent map to cross-reference relevant information. For example, the RSSIMS user might map the location of incidents to display in Azure maps. However, to identify the railroad milepost or the station nearest the incident location would require that the user open a



separate ArcGIS map. If RSSIMS uses an ArcGIS map (rather than Azure Maps) the user may be able to directly identify the rail line, milepost, station and other details on the same map that shows the points based on RSSIMS records. This would result in more accurate RSSIMS data by allowing users a more direct way to reference rail infrastructure details near the location of RSSIMS records.

Using ArcGIS Enterprise may provide users a more consistent way of interacting with maps, rather than having one mapping system for RSSIMS records and an entirely different user interface for other maps showing rail infrastructure.

## 4.2 Potential Impact

Potential cost impacts identified are:

1. Proof of Concept – Trinity will need to complete a proof of concept to ensure an approach using Esri ArcGIS Enterprise will work for the government cloud solution. This will require staff time to complete.
2. Additional level of effort costs.
3. Potential minimal costs for storage on the ArcGIS Enterprise server.
4. Potential cost of API/webservice to communicate between RSSIMS and the Enterprise server.
5. Moving ArcGIS Online to ESRI Enterprise geodatabase/layers.

This change will incur a one-time cost of \$225,000 for TrinityTG to implement. There will also be an ongoing cost of \$40,000 direct cost annually for the ArcGIS Pro Licenses, and a \$20,000 cost for data transmission and other miscellaneous expense associated.



## 5 Change in Firewall Service

### 5.1 Reasoning for Change

This change is to upgrade from the use of Azure Firewall Basic to Azure Firewall Premium as the foundational firewall services used by the RSSIMS application.

The requested change is to:

1. Replace Azure Firewall Basic with Azure Firewall Premium.
2. Add Azure EventHub services.
3. There are an unknown amount of requirements yet to be determined as we are still analyzing the gaps of meeting CDT's security provisions.
4. Address the 14 new Security Control Points identified by CPUC since solicitation was completed.
5. Document the process for handling breaches to the application, including roles and responsibility between Trinity and CPUC.

There currently is no direct work around. A change is needed in the firewall because of changed technical requirements by the State after contract was in place. We now must align our security standard with the Unified Integrated Risk Management (UIRM) statewide initiative. This requires us to have a monitoring process, security logs retention, and required notification process.

### 5.2 Potential Impact

Potential cost impacts identified are:

1. Trinity will need effort to rework the architecture to accommodate log storage, monitoring process, notifications, and breach handling.
2. Additional of added services such as EventHub and storage for logs.

This change will incur a one-time cost of \$57,500 for increasing the cloud hosting/storage, adding other additional services, and to cover cost for VPN tunneling and demo if needed. There will also be an ongoing cost of \$30,000 direct cost annually for EventHub (\$1000/month), Azure Firewall Premium (\$1000/month), data transmission, storage, and other miscellaneous expense associated (\$500/month).



## 6 Financial Analysis Worksheet (FAW)

Summary Proposed Alternative 1 RSSIMS rebuild (include Bulk Record U	Average Current Operations Costs (Before Project) (A)		Project Costs (During Project)							Average Future Operations Costs (After Project) (B)		Change in Operations Costs (B-A)		
	Positions	Dollars	FY	2021/22	FY	2022/23	FY	2023/24	Total One-Time (Project) Costs		Positions	Dollars	Positions	Dollars
<b>Total Project Costs</b>														
Total Personal Services Expenditures	1.0	\$141,138	4.0	\$719,388	4.9	\$864,147	1.9	\$329,444	10.9	\$1,912,979	0.8	\$139,600	-0.1	-\$1,538
Total OE&E Expenditures		\$691,709		\$537,921		\$1,779,425		\$2,058,803		\$4,376,149		\$323,503		-\$368,206
Total Local Assistance		\$0		\$0		\$0		\$0		\$0		\$0		\$0
<b>Total Costs</b>	<b>1.0</b>	<b>\$832,847</b>	<b>4.0</b>	<b>\$1,257,309</b>	<b>4.9</b>	<b>\$2,643,572</b>	<b>1.9</b>	<b>\$2,388,247</b>	<b>10.9</b>	<b>\$6,289,128</b>	<b>0.8</b>	<b>\$463,103</b>	<b>-0.1</b>	<b>-\$369,744</b>
<b>Annual Savings/Revenue Adjustments</b>														
Cost Savings									7.3	\$3,561,541	TOTAL PROJECT COSTS (Planning + One-Time + Total Future Annual Costs)			
Cost Avoidances/Increased Revenues									0.0	\$0	Planning Costs			
Net Cost (+) or Benefit (-)										\$3,561,541	One-Time (Project) Costs			
Cum. Net Cost (+) or Benefit (-)										\$3,561,541	Total Fut. Ops. IT Staff & OE&E Costs			
											TOTAL:			
<b>Annual Future Operations Costs (M&amp;O)</b>											Annual Fut. Ops. Costs (M&O):			
Simple Return on Investment - (Future Costs Compared to Current Costs)											22.24% =% of Current Costs (Decreased)			

Attachment of the full FAW.



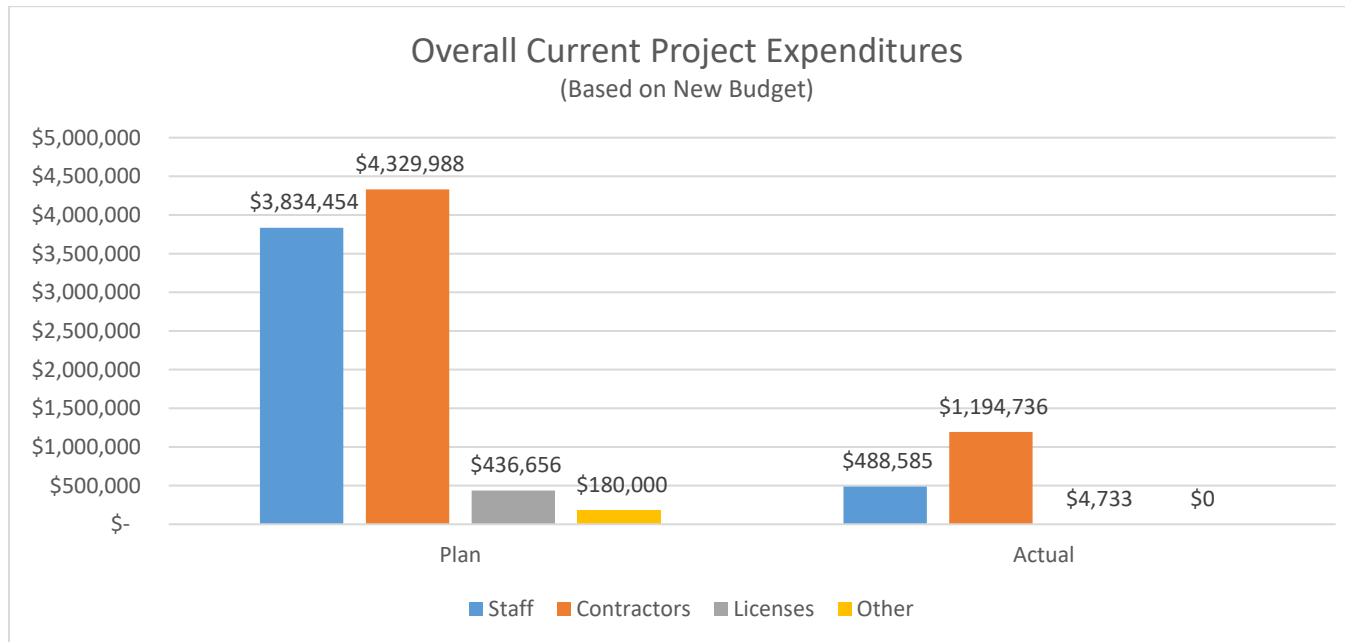
## 7 Project Schedule

Task Name	% Complete	Duration	Baseline Start	Baseline Finish	Start	Finish	Gantt Chart																											
							2021	Half 1, 2022				Half 2, 2022				Half 1, 2023				Half 2, 2023				Half 1, 2024				Half 2, 2024				H		
							S	N	J	M	M	J	S	N	J	M	M	J	S	N	J	M	M	J	S	N	J	M	M	J	S	N	H	
RSSIMS Implementation	34%	778.25 days	Wed 9/22/21	Wed 10/16/24	Wed 9/22/21	Wed 10/16/24	[Gantt bar from 9/22/21 to 10/16/24, 34% complete]																											
RSSIMS Project Work	30%	771.25 days	Fri 10/1/21	Wed 10/16/24	Fri 10/1/21	Wed 10/16/24	[Gantt bar from 10/1/21 to 10/16/24, 30% complete]																											
RSSIMS Project Initiation	100%	53 days	Fri 10/1/21	Fri 12/17/21	Fri 10/1/21	Fri 12/17/21	[Gantt bar from 10/1/21 to 12/17/21, 100% complete]																											
RSSIMS Project Planning and Analysis	65%	393 days	Fri 10/1/21	Wed 5/3/23	Fri 10/1/21	Wed 5/3/23	[Gantt bar from 10/1/21 to 5/3/23, 65% complete]																											
2 - Project Management	65%	393 days	Fri 10/1/21	Wed 5/3/23	Fri 10/1/21	Wed 5/3/23	[Gantt bar from 10/1/21 to 5/3/23, 65% complete]																											
RSSIMS System Design	33%	468.5 days	Fri 10/1/21	Fri 8/18/23	Fri 10/1/21	Fri 8/18/23	[Gantt bar from 10/1/21 to 8/18/23, 33% complete]																											
3 - System Design	98%	338.5 days	Fri 10/1/21	Wed 2/15/23	Fri 10/1/21	Wed 2/15/23	[Gantt bar from 10/1/21 to 2/15/23, 98% complete]																											
4 - System Test Scripts	3%	345.5 days	Mon 4/4/22	Fri 8/18/23	Mon 4/4/22	Fri 8/18/23	[Gantt bar from 4/4/22 to 8/18/23, 3% complete]																											
RSSIMS System Development	6%	369.25 days	Thu 5/19/22	Mon 11/6/23	Thu 5/19/22	Mon 11/6/23	[Gantt bar from 5/19/22 to 11/6/23, 6% complete]																											
5 - Development for RSSIMS Integration	7%	278 days	Thu 5/19/22	Thu 6/29/23	Thu 5/19/22	Thu 6/29/23	[Gantt bar from 5/19/22 to 6/29/23, 7% complete]																											
6 - RSSIMS Legacy Data Migration	15%	188.75 days	Mon 8/1/22	Fri 5/5/23	Mon 8/1/22	Fri 5/5/23	[Gantt bar from 8/1/22 to 5/5/23, 15% complete]																											
7 - Testing	0%	70 days	Wed 5/31/23	Wed 9/6/23	Wed 5/31/23	Wed 9/6/23	[Gantt bar from 5/31/23 to 9/6/23, 0% complete]																											
8 - Deployment	0%	242.75 days	Fri 10/28/22	Wed 10/18/23	Fri 10/28/22	Wed 10/18/23	[Gantt bar from 10/28/22 to 10/18/23, 0% complete]																											
9 - Post Implementation Review	0%	34 days	Tue 9/19/23	Mon 11/6/23	Tue 9/19/23	Mon 11/6/23	[Gantt bar from 9/19/23 to 11/6/23, 0% complete]																											
RSSIMS Training, Maintenance and Operations Support	0%	449.25 days	Mon 1/23/23	Wed 10/16/24	Mon 1/23/23	Wed 10/16/24	[Gantt bar from 1/23/23 to 10/16/24, 0% complete]																											
10 - CPUC Staff Training	0%	109 days	Mon 1/23/23	Tue 6/27/23	Mon 1/23/23	Tue 6/27/23	[Gantt bar from 1/23/23 to 6/27/23, 0% complete]																											
11 - User Manuals	0%	162.75 days	Wed 2/1/23	Wed 9/20/23	Wed 2/1/23	Wed 9/20/23	[Gantt bar from 2/1/23 to 9/20/23, 0% complete]																											
12 - Warranty	0%	380 days	Tue 5/2/23	Wed 10/16/24	Tue 5/2/23	Wed 10/16/24	[Gantt bar from 5/2/23 to 10/16/24, 0% complete]																											
13 - System Maintenance and Operations Support	0%	337.25 days	Thu 6/29/23	Mon 10/14/24	Thu 6/29/23	Mon 10/14/24	[Gantt bar from 6/29/23 to 10/14/24, 0% complete]																											
A-Organizational Change Management	46%	614.25 days	Wed 9/22/21	Thu 2/29/24	Wed 9/22/21	Thu 2/29/24	[Gantt bar from 9/22/21 to 2/29/24, 46% complete]																											
OCM Kickoff Activities	95%	50 days	Tue 11/23/21	Tue 2/8/22	Tue 11/23/21	Tue 2/8/22	[Gantt bar from 11/23/21 to 2/8/22, 95% complete]																											
OCM Assessment Activities	56%	614.25 days	Wed 9/22/21	Thu 2/29/24	Wed 9/22/21	Thu 2/29/24	[Gantt bar from 9/22/21 to 2/29/24, 56% complete]																											
OCM Communication Activities	46%	394 days	Wed 2/9/22	Mon 9/4/23	Wed 2/9/22	Mon 9/4/23	[Gantt bar from 2/9/22 to 9/4/23, 46% complete]																											
OCM Workshops	6%	35 days	Tue 3/21/23	Tue 5/9/23	Tue 3/21/23	Tue 5/9/23	[Gantt bar from 3/21/23 to 5/9/23, 6% complete]																											
OCM Testing Activities	0%	111 days	Wed 9/22/21	Mon 3/7/22	Wed 9/22/21	Mon 3/7/22	[Gantt bar from 9/22/21 to 3/7/22, 0% complete]																											
OCM Training Activities	0%	25 days	Tue 3/8/22	Tue 4/12/22	Tue 3/8/22	Tue 4/12/22	[Gantt bar from 3/8/22 to 4/12/22, 0% complete]																											
OCM Go Live Activities	0%	5 days	Wed 4/13/22	Tue 4/19/22	Wed 4/13/22	Tue 4/19/22	[Gantt bar from 4/13/22 to 4/19/22, 0% complete]																											
OCM Reinforcement Activities	0%	383.25 days	Wed 4/20/22	Thu 10/26/23	Wed 4/20/22	Thu 10/26/23	[Gantt bar from 4/20/22 to 10/26/23, 0% complete]																											

Attachment of the new full project schedule.




## 8 Current Project Status



Last Project Report Status



## 9 Special Project Report Transmittal

<b>Information Technology Project Request</b>			
<b>Special Project Report Executive Approval Transmittal</b>			
<b>Agency/state entity Name</b>			
<b>California Public Utilities Commission</b>			
<b>Project Title (maximum of 75 characters)</b>			<b>Project Acronym</b>
RSSIMS Bulk Update Project			RSSIMS
<b>Project ID</b>	<b>Approval Date</b>	<b>State entity Priority</b>	<b>Agency Priority</b>
8660-073		N/A	N/A
<p>I am submitting the attached Special Project Report (SPR) in support of our request for the California Department of Technology's approval to continue development and/or implementation of this project.</p> <p>I certify:</p> <ul style="list-style-type: none"> <li>• The SPR was prepared in accordance with the State Administrative Manual Sections 4945-4945.2, my agency/state entity has considered the cost benefits analysis associated with the proposed project changes and the changes are consistent with our information management strategy as expressed in our current Agency Information Management Strategy (AIMS).</li> <li>• The acquisition of the applicable information technology (IT) product(s) or service(s) required by my department that are subject to Government Code 7405 applying Section 508 of the Rehabilitation Act of 1973 as amended meets the requirements or qualifies for one or more exceptions (see following page).</li> <li>• The document(s) being submitted are accessible to persons with disabilities based on the requirements specified in Section 508 of the federal Rehabilitation Act of 1973, as amended, the Government Code section 11135, and the Web Content Accessibility Guidelines (WCAG 2.0).</li> </ul> <p>I have reviewed and agree with the information in the attached Special Project Report.</p>			



APPROVAL SIGNATURES		
<b>Rail Safety Division, Director</b>		<b>Date Signed</b>
<i>Roger Clugston</i>		9/6/2022
<b>Printed name:</b>	Roger Clugston	
<b>IT Project Management Office, Manager</b>		<b>Date Signed</b>
<i>geoffrey mack</i>		9/8/2022
<b>Printed name:</b>	Geoffrey Mack	
<b>IT Procurement &amp; Project Management Section, Division Chief</b>		<b>Date Signed</b>
<i>Tracy Barbosa</i>		9/13/2022
<b>Printed name:</b>	Tracy Barbosa	
<b>Budget Officer</b>		<b>Date Signed</b>
<i>Harsh Thakar</i>		9.8.2022
<b>Printed name:</b>	Harsh Thakar	
<b>Chief Technology Officer</b>		<b>Date Signed</b>
<i>Harry Mayo</i>		09.15.2022
<b>Printed name:</b>	Harry Mayo	
<b>Chief Information Officer</b>		<b>Date Signed</b>
<i>Ryan O. Dulin</i>		09/16/2022
<b>Printed name:</b>	Ryan Dulin (Acting CIO)	
<b>Deputy Executive Director, Internal Operations</b>		<b>Date Signed</b>
<i>Ryan O. Dulin</i>		09/16/2022
<b>Printed name:</b>	Ryan Dulin	
<b>Executive Director</b>		<b>Date Signed</b>
<i>Rachel Peterson</i>		09/20/2022
<b>Printed name:</b>	Rachel Peterson	





## Executive Approval Transmittal IT Accessibility Certification

**Yes or No**

Yes <input type="checkbox"/>	<b>The Proposed Project Meets Government Code 7405 / Section 508 Requirements and no exceptions apply.</b>
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**Exceptions Not Requiring Alternative Means of Access**

Yes or No	Accessibility Exception Justification
No <input type="checkbox"/>	The IT project meets the definition of a national security system.
No <input type="checkbox"/>	The IT project will be located in spaces frequented only by service personnel for maintenance, repair, or occasional monitoring of equipment (i.e., "Back Office Exception.")
No <input type="checkbox"/>	The IT acquisition is acquired by a contractor incidental to a contract.

**Exceptions Requiring Alternative Means of Access for Persons with Disabilities**

Yes or No	Accessibility Exception Justification
No <input type="checkbox"/>	Meeting the accessibility requirements would constitute an "undue burden" (i.e., a significant difficulty or expense considering all agency resources). Explain:
	Describe the alternative means of access that will be provided that will allow individuals with disabilities to obtain the information or access the technology.
No <input type="checkbox"/>	No commercial or solution is available to meet the requirements for the IT project (does not require a fundamental alteration) or provides for accessibility. Explain:
	Describe the alternative means of access that will be provided that will allow individuals with disabilities to obtain the information or access the technology.