

## DRAFT

### Scope of Work Sacramento 511/STARNET 2024-2025 Castle Rock – Maintenance and Operations Agreement

#### INTRODUCTION

Castle Rock will perform Maintenance and Operations (M&O) services for the SACOG Region's 511 traveler information system, Condition Acquisition Reporting System STARNET user interface ("CARS"), and the associated third-party data feed interfaces as set forth in this Scope of Work for the period covering **October 1, 2024-September 30, 2025**.

The description of the services to be provided in this Scope of Work, as described in Tasks 1 - 4, are the minimal services to be provided. The costs are contained in Exhibit A - Summary of Costs attached hereto and incorporated herein.

In no case shall the contract maximum exceed the total value of this amendment, which is set at **\$434,759**, without the execution of a formal contract amendment.

The following sections detail the work to be performed.

#### DESCRIPTION OF SERVICES/TASKS

##### **Task 1: Software Maintenance & Hosting & Operation Services**

Castle Rock shall provide *Software Maintenance Services* and *Joint Hosting and Operations Services* to CVR-SAFE for the following CARS modules that comprise the STARNET and 511 system.

The modules currently operated for CVR-SAFE include:

1. CARS 5, the core operator data entry interface for inputting events into the overall 511 system.
2. OneWeb, the responsive, full-feature 511 traveler information web site available at [riverregion511.org](http://riverregion511.org).
3. Modes, the transit components of the overall 511 traveler information system.
4. CARS-Imports, which automates the import of crash reports from the California Highway Patrol (CHP) CAD system; Caltrans Lane Closure, and Waze data into CARS and 511.
5. CARS-Hub, the XML interface that makes event data from CARS available to authorized third-party subscribers.

6. CARS-API, the REST-based JSON service that makes data available from CARS to third-party developers
7. CARS-CAP, which imports NWS Warnings from the National Weather Service (NWS) using Common Alerting Protocol (CAP).
8. CARS-Signs, which imports Caltrans Dynamic Message Sign messages into the 511 traveler information system.
9. CARS-Metrics, which provides a data warehouse and reporting tool.
10. CARS-Alert D, which allows members of the public to sign up for personalized text and email push alerts.
11. CARS-Alert B, the automated system that tweets traffic events in the system to Twitter.
12. CARS-App, the downloadable 511 app for the Sacramento area, available both for the iOS and Android platforms.
13. CARS-511, the telephony component of the 511 traveler information system.
14. CARS-Delay, a module that measures and quantifies the delays associated with traffic events and incidents in STARNET.
15. Data entry into STARNET support, in which Castle Rock staff assist local agencies with entering data into the CARS regional operator interface on an as-needed basis.

**Services to be provided under this task include:**

- 24/7 software support by phone (1-844-326-4011) or email ([support@castlerockassociates.zendesk.com](mailto:support@castlerockassociates.zendesk.com)) for emergency issues.
- Email support during business hours for non-emergency issues, which are Monday through Friday, from 8 AM – 5 PM, Pacific Time, excluding holidays. Emails should be sent to the designated Project Manager.
- Software bug fixes
- Annual version upgrade for each module incorporating enhancements funded by CVR-SAFE or other CARS member agencies.
- Hosting of modules on AWS cloud
- Secondary, warm pilot Disaster Recover site on a geographically separate AWS region.
- 24x7 system health monitoring. Monitoring includes CPU utilization, web server availability, memory utilization and free disk space. When automated monitoring systems detect an item that is out of specification, they send e-mail and pager notifications to Castle Rock's support team for response.
- Virtualization, load balancing, and redundancy for high availability.
- Automated and manual failover to disaster recovery systems.

- Firewall services. These include port lockdown, Secure Network Address Translation (SNAT), IP load balancing/routing, and Denial of Service (DoS) prevention.
- Intrusion detection and prevention services.
- Anti-virus software management. System downloads virus definition updates and performs regular system scans.
- Database management, maintenance, upgrades and replication.
- Software installation and updating using remote access facilities.
- Periodic application server-related software updates.
- Application and database recovery and manual switchovers to backup systems as necessary.
- Domain name registration and maintenance services.
- Port availability and specific port management.
- FTP and HTTP redirector support.
- Testing, loading and management of all upgrades, new releases and patches.
- WAN/LAN and I/O connectivity management.
- External interface monitoring and troubleshooting
- Hosting of telephony on Verizon platform and/or AWS Connect platform
- Management of CARS-511 long distance services, including toll-free features.
- Management of NeoSpeech TTS license for CARS-511
- Road event data entry support for SACOG's agencies into STARNET. This task involves monthly outreach to each agency, manual checks of their construction maps (if applicable), and input of new road closures and construction into CARS-5/STARNET upon receiving notification from the agency.

**Task 1 Period of Performance:**  
**30, 2024**

**October 1, 2023 – September**

Total:

\$334,541

TASK 1 TOTAL \$334,541

**Task 2     Phone Charge Pass-Through (Estimate).**

In this task, Castle Rock shall pay Verizon and/or AWS Connect for IVR, long distance, and call transfer services incurred by the Sacramento 511 phone service. The amounts included in this task are estimates that are "ballpark" in nature due to the unpredictability of events such as major weather or other special events, which can cause considerable variations in annual 511 calls. The dollar amounts given in this contract is an estimate to help CVR-SAFE plan its 511 budget for the contract period. The final costs to be billed to CVR-SAFE each month throughout the M&O period covered in this scope will be determined by actual usage and associated tax, fees, and shared platform costs.

**Period of Performance: Oct 1, 2023-Sep 30, 2024**

**Total: \$15,000**

[TASK 2 TOTAL \\$15,000](#)

### Task 3 Cloud Hosting Pass-through:

In this task, Castle Rock shall pay third-party cloud vendors (e.g., AWS, Google, AT&T Soprano) for the cloud-hosting, cloud-based maps and APIs that are used to provide the infrastructure on which the SACOG CARS and 511 platform are operated. The amounts included in this task are estimates that are "ballpark" in nature due to the unpredictability of events such as major weather or other special events, as well as the number of My 511 account holders, which can cause considerable variations in cloud, maps, API, and SMS usage costs. The dollar amounts given in this contract is an estimate to help CVR-SAFE plan its budget for the contract period. The final costs to be billed to CVR-SAFE each month throughout the M&O period covered in this scope will be determined by actual usage and associated tax, fees, and shared platform costs.

**Period of Performance: Oct 1, 2023-Sep 30, 2024**

**Total: \$25,000**

[TASK 3 TOTAL \\$25,000](#)

### [Task 4 Core Updates Program](#)

This task represents CVR-SAFE's contribution to the annual CARS Group Core Updates plan. The purpose of the Core Updates plan is to provide necessary updates to the CARS system as the foundational and environmental technologies (e.g., OnePhone 511 system upgrade, CARSx user interface upgrade, etc.) evolve. The Core Update plan for 2023-2024

is to provide a new IVR for the phone system and an upgraded, mobile-responsive interface for the CAR operator UI.

**Period of Performance:**

**Oct 1, 2023-Sep 30, 2024**

**Total:**

**\$60,218**

TASK 4 TOTAL \$60,218

**BUDGET AND PAYMENT**

A detailed budget by sub task for these ongoing M&O services is attached as Exhibit A and incorporated herein.

All Tasks above will be billed on a monthly, pro-rated basis over the period of the contract, with the exception of Task 2 (Phone Charge Pass-through costs), and Task 3 (Cloud Hosting Pass-through costs), which are explained below.

**Task 2: Phone Charge Pass-Through Billing**

CVR-SAFE shall be invoiced month-by-month for its actual usage of the Verizon and/or AWS Connect call platform, as well as its % cost shares for remaining platform costs, which may include telephony surcharges, fees, taxes, miscellaneous costs and other contingencies.

Because of the timing of the Verizon billing cycle (in which the invoice typically appears on the 10th of the month), there may be a delay in passing along those charges in the monthly CARS-511 M&O bill to the agencies. For example, Castle Rock will receive a Verizon invoice for phone charges for the month of January on February 10th. Castle Rock's M&O invoices for January typically have already been issued by the 10th of the month. As such, those January charges would not be passed along to CVR-SAFE until March invoices go out.

Under this contract, if CVR-SAFE elects to upgrade the 511 phone system from CARS-511 to the new OnePhone platform, Verizon will no longer be the telephony vendor. Instead, charges will be incurred on the AWS Connect platform. These will be passed through to CVR-SAFE on the same basis through this line item in lieu of Verizon.

**Task 3: Cloud Pass-Through Billing**

CVR-SAFE shall be invoiced month-by-month for its usage of the AWS cloud hosting environment, Google Maps API services, and AT&T Soprano SMS text delivery services, all

of which are 3<sup>rd</sup> party cloud-based services on which STARNET and 511 depends. The AWS is the cloud environment in which STARNET software is operated, including a disaster recovery site. Google Maps API is used for map tile and real-time traffic data integrations. AT&T Soprano provides text message or “SMS” delivery to subscribers who have signed up to receive traffic alerts by text through the platform.

## EXHIBIT A: SUMMARY OF COSTS

### Maintenance and Operations Budget

EXHIBIT A: SUMMARY OF COSTS		
		Oct 2023 - Sep 2024
<b>Task 1</b>	<b>CARS Module Maintenance and Operations</b>	
<b>1.1</b>	<b>Hosting, Operations, Software Maintenance, and Support</b>	
	1.1 CARS 5	\$ 56,714.00
	1.2 OneWeb	\$ 60,322.00
	1.3 Modes (inc. Modes-Update)	\$ 15,468.00
	1.4 CARS-Imports/CAD (3 sources+)	\$ 15,468.00
	1.5 CARS-Hub (3 functions: standard publish, Caltrans Lane Closure, Waze)	\$ 15,468.00
	1.6 CARS-API	\$ 5,154.00
	1.7 CARS-CAP (Level 2)	\$ 15,468.00
	1.8 CARS-Signs (Level 1)	\$ 5,154.00
	1.9 CARS-Metrics	\$ 7,732.00
	1.10 CARS-Alert D	\$ 15,468.00
	1.11 CARS-Alert B (1 feed)	\$ 7,732.00
	1.12 CARS-App	\$ 60,322.00
	1.13 CARS-511	\$ 30,360.00
	1.14 CARS-Delay	\$ 15,468.00
	1.15: Data Entry into STARNET support	\$8,243
	<b>Subtotals</b>	<b>\$ 334,541.00</b>
<b>Task 2</b>	<b>Phone Charge Pass-through (Estimate)</b>	<b>\$ 15,000.00</b>
	<b>TASK 2 TOTAL</b>	<b>\$ 15,000.00</b>
<b>Task 3</b>	<b>Cloud Hosting Pass-through Costs</b>	<b>\$ 25,000.00</b>
	<b>TASK 3 TOTAL</b>	<b>\$ 25,000.00</b>
<b>Task 4</b>	<b>Core Update Program</b>	<b>\$ 60,218.00</b>
	<b>TASK 4 TOTAL</b>	<b>\$ 60,218.00</b>
	<b>GRAND TOTAL</b>	<b>\$ 434,759.00</b>