SAN GABRIEL VALLEY MOSQUITO AND VECTOR CONTROL DISTRICT
REQUEST FOR PROPOSALS:

GEOSPATIAL VECTOR CONTROL DATABASE SOFTWARE

Proposals Due By: June 25, 2018

1. PROPOSALS REQUESTED

The San Gabriel Valley Mosquito & Vector Control District (the "District") solicits proposals from qualified firms and/or entities ("proposers") to provide the software services described below. Both small and large qualified firms and/or entities with competitive rates are encouraged to apply.

2. BACKGROUND

The District is tasked with protecting public health in performing mosquito control and vector surveillance in the San Gabriel Valley in southern California. The District uses database software to collect, manage and plan operations and surveillance activities. The existing database software is outdated and cannot be upgraded, and replacement software with additional features and functionality is requested. (visit www.sgvmosquito.org for more information about the District)

3. SCOPE OF WORK

The District has decided to retain software programming and support services. The selected proposer will be expected to have substantial knowledge and experience relating to these tasks and services. The scope of work is found in the section labeled: Detailed Technical Specification Requirements.

4. PROPOSAL CONTENT

Interested and qualified proposers are requested to submit three copies of a written proposal no later than 4:30 p.m. on the date set forth above. It is the proposer's responsibility to ensure that proposals are submitted and received in a timely manner. The submittal materials shall provide the following information:

(a) Firm or entity name, address, telephone number and website, and principal contact name, telephone number and e-mail address.

(b) Description of the firm or entity and a statement of the qualifications to perform the requested services.

(c) Name of the principal staff persons who will be primarily responsible for providing services to the District and their resume and qualifications.

(d) Description of the firm or entity proposed fees, costs and charges, including an explanation of what services will be provided on an hourly rate, flat rate, fixed retainer or other basis. Explain how often the District will be invoiced for services. Explain what costs would be charged to the District and the firm's policy for billing fees and costs relating to travel.

(g) Description of the firm or entity general liability, automobile liability and professional liability insurance coverages. The successful firm will need to provide proof of insurance satisfactory to the District.

Proposals shall be addressed and delivered to:
Jared Dever, District Manager, via email to jdever@sgvmosquito.org

5. EVALUATION AND SELECTION CRITERIA AND PROCESS

The District will review all submitted proposals and evaluate them against the following selection criteria: demonstrated positive experience performing the requested services; capability to perform the services, agreement to provide software source code for use only by District staff, software features that meet or exceeds required and optionally requested specifications, demonstrated qualifications and resources to competently and timely perform the work; firm and principal staff reputation in the community; quality of references; location of the firm's nearest office that would service the work; and, proposal price and fees.

The District may schedule interviews with selected firms or it may make a selection based on the written submittal materials. Interviews may be conducted in person or via phone or internet.

Proposals will be reviewed and considered by the District Executive Committee, based on a recommendation from District staff. Contract award, if any, will be on the basis of the selection criteria set forth above. Proposal price alone will not be the determinative criterion. If the Board decides to proceed with retaining a firm, the District will enter into contract negotiations with the selected firm. The contract will be based on the District's standard form of services contract. The selected firm or entity will be expected to begin work without delay.

6. GENERAL CONDITIONS AND REQUIREMENTS

(a) The District reserves the right to conduct contract negotiations with any firm or entity (whether or not it has submitted a proposal), to verify the information in any proposal, to waive any informality in the process, to alter the selection process in any way, to request additional information or clarifications, to allow corrections of errors or omissions, to revise the scope of services and work, to extend the deadline for submission, to withdraw this request for proposals at any time without prior notice, to reject any and all proposals, and to decide whether or not to contract with any firm.

(b) The District makes no representation that any contract will be awarded to any firm responding to this request. Nothing in this request for proposals shall be construed to obligate the District to negotiate or enter into a contract with any particular firm. This request for proposals is not an offer to contract.

(c) All costs of response and proposal preparation shall be borne by the proposer. The District shall not be liable for any pre-contractual expenses incurred by the proposer, including any time and costs associated with the preparation and submission of the proposal and any interview.

(d) All submitted proposals shall become the property of the District. The District shall have the right to copy, publicly review and discuss, retain and dispose of each proposal. All responses received by the District will be considered public records subject to disclosure under the California Public Records Act.

(e) Proposals (three copies) must be submitted in writing. Please be succinct. Unnecessarily elaborate or lengthy responses or other presentations beyond those needed to give sufficient and clear response to the request for proposals requirements are not desired. Proposals generally should not exceed 50 pages.

Geospatial Vector Control Database
Detailed Technical Specification Requirements

1. Project Overview

1. The San Gabriel Valley Mosquito and Vector Control District (District) would seeks to acquire a cloud-based Geospatial Vector Control Database (GVCD). This system must include specialized mobile applications that will be used to collect data during operations and surveillance field operations, support on- and offline functions associated with those operations, facilitate intake of service requests from the public, and integrate data from all departments of the District.

2. Technical Specifications

2. The GVCD must be a geospatial web and service data management system. All workflow of each department in the District should be automated, streamlined, and be visible and sharable by the entire District in real time. The GVCD must be capable of the following functions:

3. Management

   a. User account creation and management. Provide administrative control for each user and their access rights to specific functionality.

   b. Track employee time.

4. Operations

   a. Comprehensive recording of Inspection, Service Request, and Treatment activities.

   b. Pesticide inventory tracking.

   c. Field staff activities

      i. Real time tracking of all mobile assets.

      ii. Maintenance for vehicles and equipment.

5. Laboratory processes

   a. Automatically synchronize with the California Vectorborne Disease Surveillance (CalSurv) reporting system.

   b. Generate Reports.

6. Specialized interactive mapping

   a. Geospatially relate all sites such as mosquito sites, traps, service requests, real time assets, disease incidents, treatment sites, no spray/notify sites and properties.

7. Be browser compatible with mobile devices, e.g., Apple and/or Android phones and tablets.

8. Offer offline caching solutions for restricted cellular connectivity.

The GVCD must:

1. Provide comprehensive role-based access for users to include:
    a. Access groups - administrator, supervisor, technician, laboratory, maintenance.
    b. User preferences selectable for each user to define their data and mapping needs.
    c. Maintain at minimum the type of employee, permanent, exempt or seasonal status.
2. Track user login history including user name, log in time, log out time and total time online.
3. Provide a geospatial activity log that records and display over maps the employee's geographic location by event, synchronized with a table report that contains information such as site ID, site name, action, habitat, start time, end time, notes, material applied, quantity and unit of measure.
4. Track all start, end, and duration times associated with activities.
5. Have a system to submit, validate, and approve electronic time cards.
6. Track labor hours, material used, and equipment used based on site activity.
7. Be capable of documenting requests for service from the public
    a. Accept service requests (SRs) submitted through the system's District public website.
    b. Provide storage so SRs which are submitted can be reviewed before distributed to appropriate staff.
    c. Electronically transferrable in real time to the appropriate field staff.
    d. Search the existing database and auto-populate all data associated with the contact.
    e. Automatically geocode the address location and assign an operational zone to the address.
    f. Accommodate the site location if it is different than the caller location.
    g. Provide the ability for the caller to remain anonymous.
    h. Allow user to mark SRs by geographic location of the service if it is different from the physical address of the caller.
    i. Require entry for data fields.
    j. Provide detailed forms and questions for each type of SR.

k. Reassign SRs when necessary.

l. Associate sites with SRs if required by the technician or supervisor.

m. The history of SRs must be easily and rapidly accessible.

n. Manage SRs with a process that validates work flow, including whether SRs are have been responded to, closed, and/or re-inspected.

o. Staff must be capable of creating service requests in the field.

p. Administrators and supervisors must be able to assign service requests in batches.

8. The GVCD must have the following capabilities for field mapping:

a. Be built on open source maps including satellite imagery, street maps, terrain, and other mapping layers.

b. Overlay additional mapping layers, i.e., KML layers.

c. Provide the ability for KML overlays and be user selectable and viewable in both the field and operations map.

d. Ability to map all sites types, e.g., mosquito breeding, service request, residential, positive disease and other site types must be displayed geospatially over field and operations map.

e. Ability to customize in a user preference setting what site types and data are displayed on the map.

f. Temporarily display and hide any mapping data layer and associated data without modifying user preferences.

g. Track users and display their location in real time.

h. Have at a minimum mapping tools to measure distances in feet and meters, measure, create a radius that can be "dragged" to increase or decrease the size of the radius, measure an area in acres using a free hand polygon drawing tool and search for an address.

i. Perform a proximity search of all sites within a radius of a circle defined by the user. All sites within the proximity search will be mapped and accessible.

j. Maintain a field map and operations planning map.

k. Display the user's real-time location and all site type icons including but not limited to mosquito sites, service requests, lab surveillance results for adult and larval mosquito populations, treatment blocks, rain level and pesticide resistance tests.

l. Easily and efficiently create new sites by clicking on the map to place the new site icon.

m. System should automatically open a site form and auto-populate the zone, latitude and longitude, address to include city, state and zip code and site type.

9. Operations Map:

    a. System should provide the District an operations planning map designed to overlay critical data associated with but not limited to service requests, all adult and larval surveillance data, historical treatments, ground and aerial larvaciding and adulticiding missions, rainfall data, positive virus test results for mosquito pools and dead birds and multiple KML data layers.

    b. Operations map should provide the District the ability to import shapefiles, create new treatment areas, import historical treatment areas, browse treatment plans, create treatment routes, browse treatment routes.

    c. The operations map should provide an overall situational awareness of all data sets in an effort to develop response strategies specifically related to inspections, surveillance, ground or aerial adulticiding or larvaciding and other common response strategies.

10. Inventory Management:

    a. System should provide an inventory item and material list that contains information related to materials used in operational applications.

    b. Inventory item data should include, but not be limited to, inventory item ID, trade name, current inventory amount and associated unit of measure, all inventory warehouse locations and the total available inventory on hand and a transaction journal with transaction date, amount, unit of measure, lot number, date received, physical count and employee responsible for transaction.

    c. Inventory materials should contain the material name, CDPR registration number, material description, unit of measure for inventory and reports, activity card default unit, unit cost, ability to create product mix sheets consisting of one or multiple inventory items, the mixture ratios, the materials' minimum, maximum and target rate and material residual efficacy value.

    d. System should provide the user the ability to add one or unlimited number of inventory locations to include warehouse(s), trucks, or other locations.

11. Lab Inventory Management:

    a. System should provide user the ability to create laboratory test processes. Each process contains one or multiple inventory items.

    b. System will track individual laboratory inventory items to include lab item ID, trade name, common name, reorder level, expiration date, inventory unit of measure, biohazard y/n, actively used, manufacturer, city, state and zip of manufacturer, label item description, precautionary statements and other comments.

    c. System will maintain one or multiple inventory locations and provide the users the ability to create unlimited number of inventory locations.

12. Maintenance:

a. System is required to provide a maintenance log for any equipment owned by the District. System should maintain current and historical maintenance performed on any equipment to include, but not limited to, vehicles, foggers, fire extinguishers, etc. For vehicle maintenance, system should maintain current and historical maintenance performed, service dates, next service date, current mileage and total hours of work performed.

13. Surveillance Laboratory:

   a. Based on field surveillance performed by technicians, if a larval sample is collected in the field, a record is automatically created in the laboratory. System must provide laboratory personnel the ability to efficiently and accurately identify the larval sample to include species, egg, instar 1, 2, 3, 4, pupa, average larvae per dip from field and lab, % breakdown by species, lab notes, total count including number of larvae, eggs and pupae.

   b. Following the identification of larval sample, system should update field technicians with sample results.

   c. System should provide the ability for the laboratory to identify adult mosquito species from an adult trap. Identification should include trap ID, trap type, trap site ID, the date of trap placement, trap collection and trap identification. If the trap site is a CalSurv site include CalSurv site code.

   d. System should provide the ability to generate mosquito pool samples for virus testing testing. Test pool data should include but not be limited to test ID, site ID, date created, notes, pool#, pool size/quantity, species, test date, test lab, test agent (one or multiple), test method, status of test, test value results, received date and comments. If the site is a CalSurv site, include CalSurv site code.

   e. System should provide for single or combined test agent selections.

   f. System should provide the work flow and data sets for managing carcass.

   g. System should synchronize with the CalSurv for all dead bird samples reported to the state hotline.

   h. System should provide for a concentrated or heightened surveillance feature

      i. Heightened surveillance must provide the ability to select a geospatial location, select the trap type, number of traps to deploy and the radius of the trap deployment.

      ii. Heightened surveillance traps must automatically populate around the geospatial focal point and be distributed within the radius defined on the map.

   i. System must provide the field technician an efficient method to move or drag the trap sites into the actual geographic location the actual trap was deployed.

   j. System must provide the following fields of data for the heightened surveillance: ID, issue, trap ID, site details, date created, area radius, number of

traps, type of trap and a geospatial map displaying the focal point, all traps and circle radius.

k. System must provide a parcel inspection program for concentrated door-to-door data collection associated with surveillance and treatments.

l. Parcel inspection plan must include ID, site location, radius, number of teams, team members, incident type.

m. The parcel inspection plan is required to remove all parcels outside the radius and divide the parcels evenly between the number of teams.

n. Parcel inspection plan must provide at a minimum the ability to display the technicians' real-time position relative to each parcel.

o. Parcel inspection plan should provide the ability to "click" on the parcel and respond with an inspection, treatment, access granted, breeding (front, back, all) and information about the parcel.

p. The parcel color is required to change depending on the inspection, treatment or access results.

q. The parcel inspection plan must be compatible with iPad, iPhone and Android browsers.

14. System should provide the ability to create resistance testing samples for commonly used active ingredients.

a. Resistance testing samples should include ID, setup date, read date, material, species, colony or field samples, tested by, technical grade or material, concentration in ppb, dilution %, amount of dilution, multiple replications, emerged count and total count.

15. Zones & Boundaries:

a. System must display the geospatial boundaries of the District operations and the individual zones within the District's area of responsibility.

16. Master Management:

a. System must provide the ability to add, edit, archive master tables.

b. System management of master tables will allow the District to manage the following master tables: service request status, state, city, county, site type, site sub type, action type, species, trap type, service request type, vehicles, equipment, vehicle equipment, KML, maintenance type, calibration, maintenance, standard treatment and site visit type.

17. Reporting:

a. System must provide at minimum the following reports: NPDES filtered by start and end date, employee, material and action code, Product Use State Report filtered by year and month, Adult Count Graph Report filtered by start and end date, trap type, site type and species, year to date and five-year average, Service

Request Report filtered by start and end date, service request status and zone, Acres Treated Report filtered by start and end date and site property type.

    b. System should provide the District the ability to define custom reports that are displayed on a dashboard and updated in real time. These reports should be designed as tables, multiple types of graphs and geospatial maps.

    c. System must provide the District the ability to design reports and graphs directly from the database tables. District should be able to "drag and drop" database fields, create filters and custom queries.

    d. System must provide an app for iPhone and Android devices for access to all reports and graphs.

18. System Settings:

    a. System must provide the District the ability to set the following settings: main site title, number of records displayed on queries, CalSurv Gateway URL settings, mailing address of District, invoice logo.jpg, District name, public map legend description, define what data sets will be transparent to public website to include planned treatment areas, past treatments (number of days back), positive dead bird information, positive mosquito pool data, invasive mosquitoes present in traps, confirmation or failure of service request submission message and if public submits duplicate service request, legend message for positive mosquito, positive bird, Aedes sp., asset tracking, user tracking, possible pre-existing site matches distance in feet from a service request, map center point (latitude and longitude).

Questions Submitted by Prospective RFP Respondent(s). Agency responses in RED:

1. Do you want the proposal emailed to you and three written copies of the proposal delivered to you by Monday, June 25th?
   a. Please submit the RFP through traditional mail. Protocol for correct handling of government RFP submissions stipulates that all RFP's are opened at the same time, in public, after the close of the submission deadline. Submissions made prior to the close of the deadline via email are subject to claims of inappropriate review and proposal revision requests from the agency or agency contractors.

2. What is your required/desired timeline for implementation and Go Live?
   a. The desired timeline for contract award and initial implementation is August 1, 2018. Software integration and data migration should be completed by October, 2018, and staff training and district-wide deployment should be completed by no later than December 15, 2018.

3. What budget amount is available for this project?
   a. $150,000 has been allocated in the DRAFT FY 2018/19 Annual Budget for the *entire* project. This RFP does not include request for bids for hardware (servers, ipads, fiber upgrade, and cellular data).

4. Under Section 5 in the first paragraph, it states, "The District will review all submitted proposals and evaluate them against the following section criteria: demonstrated positive experience…, software features that meet or exceeds required and optionally requested specifications, …". Could you please designate in the Detailed Technical Specification Requirements which software features are required versus which ones are optionally requested?
   a. The required technical specifications are generally denoted by the phrases "must", "must be", "must have", "must provide", "will track", "will maintain", "is required". The technical specifications deemed to be optional for the implementation phase of a new software are generally denoted by the phrases "should", "should provide", "should include".

5. How many concurrent office users do you have?
   a. A maximum of 10 concurrent office users.

6. How many mobile users do you have?
   a. 35 mobile users are anticipated.

7. Does the district already have mobile devices they intend to use with the software, or target devices in mind?
   a. The District does not have mobile devices allocated for the new software. The target device platform will be dependent on best compatibility for the selected software.

8. Will you want historical data from Sentinel GIS software converted and made available for use in the new system?
   a. Yes.

9. For time cards, labor hours, material used, equipment used is there an asset management, financial or billing, employee management software or other current system that this system should interface with? (Are we building an interface, or is the functionality required in the software?)
   a. The District does not currently use a digital time clock/card system. Material and equipment use are currently being determined from entries made in the Sentinel GIS

software. Financial, billing, employee performance and review are currently handled by other software and are not a requirement of the RFP.

10. For inventory management and maintenance, similar question: is there an asset management software or other current system that this system should interface with?
    a. The District does not have a digitally managed asset/inventory management and maintenance software.