

SCO ID:

STATE OF CALIFORNIA - DEPARTMENT OF GENERAL SERVICES

STANDARD AGREEMENT

STD 213 (Rev. 03/2019)

AGREEMENT NUMBER

19-13081

PURCHASING AUTHORITY NUMBER (If Applicable)

CDT-7502

1. This Agreement is entered into between the Contracting Agency and the Contractor named below:

CONTRACTING AGENCY NAME

California Department of Technology (CDT)

CONTRACTOR NAME

Johns Hopkins University

2. The term of this Agreement is:

START DATE

April 15, 2020 or upon approval

THROUGH END DATE

October 14, 2020

3. The maximum amount of this Agreement is:

\$422,000 (Four Hundred Twenty-Two Thousand Dollars and Zero Cents)

4. The parties agree to comply with the terms and conditions of the following exhibits, which are by this reference made a part of the Agreement.

| Exhibits | Title | Pages |
|--------------------|--|--------|
| Exhibit A | Statement of Work | 7 |
| Exhibit A-1 | Work Authorization Form | 1 |
| Exhibit A-2 | Work Authorization Acceptance Document | 1 |
| + - Exhibit B | Budget Detail and Payment Provisions | 1 |
| + - Exhibit B-1 | Cost Worksheet | 2 |
| + - Exhibit C* | General Terms and Conditions (GTC 04/2017) | Online |
| + - Exhibit D | Security and Data Protection | 1 |

Items shown with an asterisk (*), are hereby incorporated by reference and made part of this agreement as if attached hereto.

These documents can be viewed at <https://www.dgs.ca.gov/OLS/Resources>

IN WITNESS WHEREOF, THIS AGREEMENT HAS BEEN EXECUTED BY THE PARTIES HERETO.

CONTRACTOR

CONTRACTOR NAME (if other than an individual, state whether a corporation, partnership, etc.)

Johns Hopkins University

CONTRACTOR BUSINESS ADDRESS

1101 E. 33rd Street

CITY

Baltimore

STATE

MD

ZIP

21218

PRINTED NAME OF PERSON SIGNING

Marcy DeSantis

TITLE

Assistant Director

CONTRACTOR AUTHORIZED SIGNATURE



Marcy DeSantis (Apr 16, 2020)

DATE SIGNED

Apr 16, 2020

SCO ID:

STATE OF CALIFORNIA - DEPARTMENT OF GENERAL SERVICES

STANDARD AGREEMENT

STD 213 (Rev. 03/2019)

AGREEMENT NUMBER

19-13081

PURCHASING AUTHORITY NUMBER (If Applicable)

CDT-7502

STATE OF CALIFORNIA

CONTRACTING AGENCY NAME

California Department of Technology (CDT)

CONTRACTING AGENCY ADDRESS

P.O. Box 1810

CITY

Rancho Cordova

STATE

CA

ZIP

95670

PRINTED NAME OF PERSON SIGNING

Lea Anne Basco


TITLE

Purchasing Manager

CONTRACTING AGENCY AUTHORIZED SIGNATURE

DATE SIGNED

Apr 15, 2020


Leanne basco (Apr 15, 2020)

CALIFORNIA DEPARTMENT OF GENERAL SERVICES APPROVAL

EXEMPTION (If Applicable)

- This is for State of CA use in response to COVID-19, not for CDT use only.
- PCC is exempted.

EXHIBIT A STATEMENT OF WORK (SOW)

Johns Hopkins University (hereinafter referred to as the "Contractor") agrees to provide the California Department of Technology (hereinafter referred to as "CDT," or the "State"), support with California Department of Public Health (CDPH) in its response to the ongoing SARS-CoV-2 public health emergency by conducting scenario and strategic modeling of the SARS-CoV-2 epidemic for the California region and state of California using large-scales patio-temporal modeling approaches based on Contractor's best understanding of SARS-CoV-2 epidemiology and the health outcomes of patients in other locations. Contractor will provide weekly summaries on emerging data and evidence-based research pertaining to SARS-CoV-2 epidemic dynamics of relevance to state and local public health policy.

1. BACKGROUND AND OBJECTIVE

The epidemic of the novel coronavirus SARS-CoV-2 is progressing rapidly with more than 450,000 cases globally and more than 20,000 virus-associated deaths (<https://coronavirus.jhu.edu/map.html>). There is community spread of SARS-CoV-2 across the United States, and many states and counties are ramping up emergency response activities in anticipation of exponential growth in the demand for healthcare services. As of March 23, 2020, there were over 2,100 laboratory-confirmed cases and 40 virus-related deaths in California (<https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/ncov2019.aspx>).

Understanding regional and local transmission dynamics of SARS-CoV-2 as the epidemic unfolds in real-time is essential for epidemic preparedness and response at both county and state levels.

The activities will be performed by the Johns Hopkins Infectious Disease Dynamics group (<http://www.idynamics.jhsph.edu/>), based at the Johns Hopkins Bloomberg School of Public Health (BSPH) in the Department of Epidemiology. The group, led by Dr. Justin Lessler, is made up of faculty, post-doctoral fellows, and graduate students with expertise in the dynamics of infectious diseases, including emerging viral infections and infection control. Our group has recently published on the incubation period, secondary attack rate, and reproductive number period for SARS-CoV-2 using data from China (Bi et al. 2020; Lauer et al. 2020), and we have been leading ongoing strategic modeling initiatives in the states of Maryland and Delaware, and we have a modeling pipeline that can be adapted readily to new settings.

2. TERM/PERIOD OF PERFORMANCE

- a. The period of performance for the Contract shall be from April 15, 2020 or upon approval, whichever is later through October, 14, 2020 with option(s) to extend for an additional 6 months term(s) at the original rates evaluated and considered.
- b. The Contractor shall not be authorized to deliver or commence the performance of services as described in this SOW until written approval has been obtained from all entities. Any delivery or performance of service that is commenced prior to the signing of the Contract shall be considered voluntary on the part of the Contractor and non-compensable.

3. CONTRACT REPRESENTATIVES

All notices required by, or relating to, this Contract shall be in writing and shall be sent to the parties of the Contract at the address set below unless changed from time to time, in which event each party shall so notify the other in writing, and all such notices shall be deemed duly given if deposited, postage prepaid, in the United States mail or e-mailed and directed to the addresses then prevailing.

The Technical Contract Managers during the term of this contract will be:

| | |
|--|--|
| State: California Department of Technology | Contractor: Johns Hopkins University |
| Name: Pam Haase | Name: Justin Lessler |
| Phone: 916-291-8512 | Phone: 410-955-3551 |
| E-mail: Pam.haase@state.ca.gov | E-mail: Jlessle1@jhu.edu |

The Business Contract Manager during the term of this contract will be:

| | |
|--|--|
| State: California Department of Technology | Contractor: Johns Hopkins University |
| Unit: Acquisition & IT PMO Branch | Name: Marcy DeSantis |
| Name: Roddy Son | Address: Assistant Director, JHURA |
| Address: P.O. Box 1810 MS Y-18 | Johns Hopkins University |
| Rancho Cordova, CA 95741 | Research Administration |
| Phone: 916-431-5448 | 1101 E. 33 rd Street, B001 |
| E-mail: Roddy.son@state.ca.gov | Baltimore, MD 21218 |
| | Phone: 443.997.1922 |
| | E-mail: Jhura@jhu.edu |

4. PROJECT TASKS/DELIVERABLES

The Contractor shall use reasonable efforts perform the following tasks:

a. Task(s) - Scenario and strategic modeling:

Contractor will perform strategic modeling activities aimed at providing CDPH with information in planning for the impact of the COVID-19 pandemic, and responding to the constantly changing. Contractor will use a mathematical model of SARS-CoV-2 transmission in California and the surrounding states to capture the potential course of the COVID-19 epidemic at state and county scales. The underlying model, which Contractor is presently using to support the states of Maryland and Delaware in their pandemic control efforts, is based on Contractor's best current understanding of COVID-19 natural history and transmission, as well as data on county-level population and commuting patterns from the US Census Bureau. Contractor's flexible model pipeline enables Contractor to generate new model scenarios with different assumptions about air importation and epidemic seeding, and implement interventions such as moderately restrictive social distancing, mandatory stay-at-home policies, travel restrictions, and school closures for pre-specified periods of time. With feedback from public health officials, Contractor can develop precise time- and activity-based intervention scenarios and estimate their comparative impacts. Key model output for the state and counties includes but is not limited to the following: expected hospital and ICU occupancy and expected incident number of infections, hospital and ICU admissions, and deaths over time and for different planning scenarios.

- b. Deliverables – Contractor shall complete Monthly Deliverables which include: weekly technical reports with new planning scenarios, weekly data dumps with raw and processed model output data, semi-weekly planning meetings with the State to discuss planning scenarios, model improvements, report improvements, and to provide technical epidemiological support. Deliverables are listed below.
 - D-1. Technical reports that describe model planning scenario methods and results. Raw and processed model output data. On-demand 1-2 page rapid reports with key takeaways from modeling scenarios. Technical expertise in decision-making.
 - D-2. On-demand figures and tables based on model outputs. Technical expertise in decision-making.
 - D-3. Model improvements that leveraged scalability and reproducibility on AWS. Technical expertise in decision-making.
 - D-4. Model improvements that optimized report generation. Technical expertise in decision-making.
 - D-5. Additional model and report improvements. Technical expertise in decision-making.
 - D-6. On-demand policy action briefs based on model planning scenarios. Technical expertise in decision-making.
- c. Optional Deliverables
 - D-7. Age-standardization and age-stratification of model outcomes like hospitalizations and deaths by county over time.
 - D-8. Integration of real-time mobility information into model pipeline. Extension of intervention modeling framework to include geographically targeted interventions.
 - D-9. Extension of scenario pipeline to provide real-time inference on R0 reductions and intervention effectiveness.
 - D-10. Generation of county-level reports.
 - D-11. Additional model and report improvements will be made in conjunction with CA DPH team on request.

5. CONTRACTOR RESPONSIBILITIES

- a. The Contractor will provide its own equipment necessary to perform the required duties.
- b. The Contractor shall designate a primary contact person to whom all project communications may be addressed and who has the authority to act on all aspects of the services.
- c. The Contractor will adhere to the CDT policies and procedures, guidelines and templates including access and security requirements, to the extent that they are applicable and are explicitly incorporated into this Agreement by reference.

6. DEPARTMENT OF TECHNOLOGY RESPONSIBILITIES

- a. Designate a person to whom all Contractor communication may be addressed, and who has the authority to act on all aspects of the services. This person will review the SOW and associated documents with the Contractor to ensure understanding of the responsibilities of both parties.
- b. Provide a timely review and approval of information and documentation provided by the Contractor to perform its obligations.

7. PERFORMANCE

The CDT will be the sole judge of the acceptability of all work performed and all work products produced by the Contractor as a result of this SOW. The Contractor will use reasonable efforts to complete all associated work. Should the work performed or the products produced by the Contractor fail to meet the CDT conditions, requirements, specifications, guidelines, or other applicable standards set forth in this Agreement, the following resolution process will be employed, except as superseded by other binding processes:

- a. The CDT will notify the Contractor after completion of each phase of service of any problems by identifying the specific inadequacies and/or failures in the services performed and/or the products produced by the Contractor. The costs related to rework of unacceptable work products shall not be billed to the CDT.
- b. The Contractor will respond to the CDT by submitting a detailed explanation describing precisely how the identified services and/or products actually adhere to and satisfy all applicable requirements, and/or a proposed corrective action plan to address the specific inadequacies and/or failures in the identified services and/or products. Failure by the Contractor to respond to the CDT's initial problem notification within the required time limits may result in immediate termination of the Contract.

In the event of such termination, the CDT shall pay all amounts due the Contractor for all work performed prior to termination.

- c. The CDT will notify the Contractor in writing whether it accepts or rejects the explanation and/or plan. If the CDT rejects the explanation and/or plan, the Contractor will submit a revised corrective action plan within three (3) State business days of notification of rejection. Failure by the Contractor to respond to the CDT's notification of rejection by submitting a revised corrective action plan within the required time limits may result in immediate termination of the Contract. In the event of such termination, the CDT shall pay all amounts due the Contractor for all work performed prior to termination.
- d. The CDT will notify the Contractor in writing whether it accepts or rejects the revised corrective action plan proposed by the Contractor. Rejection of the revised corrective action plan will result in immediate termination of the Contract. In the event of such termination, the CDT shall pay all amounts due the Contractor for all work performed prior to termination.

8. WORK AUTHORIZATIONS (WA)

- a. Each WA shall consist of a detailed statement of the purpose, objective, or goals to be undertaken by the Contractor and all information requested to be provided per WA form, Exhibit A-1.
- b. All WA must be in writing prior to beginning work and signed by the Contractor and the CDT Technical Contract Manager.
- c. The CDT has the right to require the Contractor to stop or suspend work on any WA.
- d. Personnel resources will not be expended (at a cost to the CDT) on task/deliverable accomplishment in excess of estimated work hours required unless the procedure below is followed:
 - (1) If, in performance of the work, the Contractor determines that a WA to be performed under this Contract cannot be accomplished within the estimated work hours, the Contractor will immediately notify the CDT in writing of the Contractor's estimate of the work hours which will be required to complete the WA in full. Upon receipt of such notification, the CDT may:
 - i. Authorize the Contractor to expend the estimated additional work hours or service in excess of the original estimate necessary to accomplish the WA;
 - ii. Terminate the WA; or
 - iii. Alter the scope of the WA in order to define tasks that can be accomplished within the remaining estimated work hours.
 - (2) The CDT will notify the Contractor in writing of its decision within seven (7) calendar days after receipt of the notification. If notice of the decision is given to proceed via an amended WA signed by the Contractor and CDT, the Contractor may expend the estimated additional work hours for agreed upon services. The CDT agrees to reimburse the Contractor for such additional work hours.

9. PROBLEM ESCALATION

The parties acknowledge and agree that certain technical and project related problems or issues may arise, and that such matters shall be brought to the CDT's attention. Problems or issues shall normally be reported in regular status reports. There may be instances, however, where the severity of the problems justifies escalated reporting. To this extent, the Contractor will determine the level of severity and notify the appropriate CDT personnel. The CDT personnel notified, and the time period taken to report the problem or issue, shall be at a level commensurate with the severity of the problem or issue. The CDT personnel include, but are not limited to, the following:

- First level: Pam Haase, IT Manager II
- Second level: Scott Gregory, Chief Digital Innovation Officer
- Third level: Richard Rogers, Chief Deputy Director

10. AMENDMENTS

Consistent with the terms and conditions of the original agreement, and upon mutual consent, the CDT and the Contractor may execute amendments to this Agreement, including revisions

to Exhibit A – Statement of Work (i.e. objective, project tasks and deliverables). There shall be options to amend for additional time and funds. No amendment or variation of the terms of this Agreement shall be valid unless made in writing, and agreed upon by both parties and approved, as required. No verbal understanding or agreement not incorporated into the Agreement is binding on any of the parties.

11. CANCELLATION

The CDT may exercise its option to terminate the Contract at any time with 30 calendar days' prior written notice. In the event of such termination, the CDT shall pay all amounts due the Contractor for all tasks/deliverables accepted prior to termination

12. OTHER CONTRACT CONSIDERATIONS

- a. The Contractor will act as prime contractor under this Contract. In addition to identifying all personnel proposed to work under this Contract, the Contractor shall also identify its subcontractor affiliation, as applicable.
- b. The CDT reserves the right to approve all subcontractors prior to the performance of any work by the subcontractor.
- c. Nothing contained in this Contract shall create any conceptual relationship between the State and any subcontractors, and no subcontract shall relieve the Contractor of its responsibilities and obligations hereunder. The Contractor is fully responsible to the CDT for the acts and omissions of its subcontractors and of persons either directly or indirectly employed by any of them.
- d. If a subcontractor is a California Certified Small Business (SB) and/or Disabled Veteran Business Enterprise (DVBE), then those amounts paid to certified subcontractors shall be identified on the Contractor's invoice(s).
- e. The Contractor's obligation to pay its subcontractors is an independent obligation from the State's obligation to make payments to the Contractor. As a result, the State shall have no obligation to pay or to enforce the payment of any monies to any subcontractor.
- f. Military and Veteran Code (MVC) 999.5(d), Government Code (GC) 14841, and California Code of Regulations (CCR) 1896.78(e) requires all Prime Contractor's that had a DVBE firm perform any element of work for a contract to report DVBE information.

Prime Contractors are required to maintain records supporting the information that all payments to DVBE subcontractor(s) were made. The Prime DVBE Subcontracting form can be found at the following link: https://www.documents.dgs.ca.gov/dgs/fmc/gs/pd/pd_810P.pdf and the instructions can be found at the following link: <https://www.dgs.ca.gov/PD/Services/Page-Content/Procurement-Division-Services-List-Folder/File-a-DVBE-Subcontractor-Report#@ViewBag.JumpTo>. Completed forms are to be e-mailed to: primeDVBE@state.ca.gov.

13. SECURITY AND DATA PROTECTION REQUIREMENTS

The CDT must ensure agreements with state and non-state entities include provisions, which protect and minimize risk to the state when engaging in the development, use, or maintenance of information systems, products, solutions, or services. In order to comply with the State Administrative Manual (SAM) Section 5305.8, Contractor must comply with Exhibit D, Security and Data Protection.

14. ACKNOWLEDGEMENT OF STATE OF EMERGENCY

The parties acknowledge that Contractor has been requested by CDT to enter into this Contract expeditiously on the CDT's standard form agreement in recognition of the Governor of California's declaration of a State of Emergency on March 4, 2020 and the serious threat to the health of California residents as a result of the impacts of the global COVID-19 epidemic. Accordingly, notwithstanding anything to the contrary herein:

- a. Detailed Statement of Work.
 - (1) Promptly after the execution of this Contract, the parties will jointly collaborate to develop one or more Detailed Statement of Work based on the CDT's detailed requirements (the "Detailed Statement of Work") mutually agreed to by the parties, which Detailed Statement of Work will include a description of work products and deliverables.
 - (2) The parties acknowledge that the requirements are fluid and will require continuous revision and collaboration to further refine the Statement of Work.
 - (3) The parties acknowledge that the Detailed Statement of Work may clarify or amend the scope of work described in this SOW and other requirements in the Contract to reflect the detailed requirements of the CDT and any limitations or constraints that Contractor must operate within to meet such requirements.
 - (4) To the extent of any conflict or inconsistency between the Detailed Statement of Work and this Contract, the Detailed Statement of Work will prevail to the extent of such conflict or inconsistency.
- b. Good Faith Efforts to Make Necessary Amendments. CDT acknowledges the good faith efforts that Contractor has exercised in entering into CDT's standard-form agreement on an expeditious basis under the extraordinary circumstances. Accordingly, if requested by either party, the parties will use good faith efforts to make reasonably amendments pursuant to Section 9 to reflect any necessary changes in order to protect the interest of either party, including each party's intellectual property rights and confidential information.

**EXHIBIT A-1
WORK AUTHORIZATION FORM**

The task/deliverable(s) will be performed in accordance with this Work Authorization and the provision of Contract Number:

| | |
|---------------------------|-------------------|
| WORK AUTHORIZATION NUMBER | PAGE(S) of |
|---------------------------|-------------------|

TITLE OF TASK/DELIVERABLE

TASK/DELIVERABLE SUMMARY *(Brief description of task/deliverable to be performed under work authorization)*

| | |
|-----------------------------|----------------------|
| START DATE | COMPLETION DATE |
| TOTAL ESTIMATED LABOR HOURS | TOTAL ESTIMATED COST |

APPROVALS

CONTRACTOR CONTRACT ADMINISTRATOR NAME

SIGNATURE

DEPARTMENT OF TECHNOLOGY CONTRACT ADMINISTRATOR NAME

SIGNATURE

TITLE

DATE

TITLE

DATE

EXHIBIT A-2
WORK AUTHORIZATION ACCEPTANCE DOCUMENT (WAAD)

CONTRACTOR NAME: _____

DEPARTMENT OF TECHNOLOGY CONTRACT NUMBER: _____

WORK AUTHORIZATION ACCEPTANCE DOCUMENT (WAAD) NUMBER: _____

TITLE: _____

COMPLETION DATE: _____

TOTAL COST: \$_____

| DESCRIPTION: |
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| DEPARTMENT OF TECHNOLOGY ACCEPTANCE OR REJECTION: |
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AUTHORIZED AND APPROVED:

CONTRACTOR OFFICIAL SIGNATURE / DATE

DEPARTMENT OF TECHNOLOGY
CONTRACT ADMINISTRATOR SIGNATURE /
DATE

Note: Once the Contractor and the Department of Technology have approved the AD as stipulated in the contract, the Contractor may submit an invoice to the Department of Technology. Refer to payment terms in Exhibit B.

**EXHIBIT B
BUDGET DETAIL AND PAYMENT PROVISIONS**

1. Payment for services performed under this Contract shall be Firm Fixed by Deliverables. It shall be the CDT's sole determination as to whether a deliverable has been successfully completed and is acceptable. A signed Acceptance Document, Exhibit A-2 is required from the Contractor and CDT Contract Administrator before processing an invoice for payment.
2. Upon successful completion and acceptance of each project deliverable, the Contractor will submit an invoice for payment associated with the individual payment amounts. Payment shall be based on the cost worksheet and acceptance by the CDT.
3. Invoices shall be submitted in triplicate, and shall identify labor and costs charged for each deliverable. Invoices shall be submitted monthly, in arrears, identifying Contractor personnel by name and classification, hourly rate of pay and hours expended by deliverable; however, invoices shall be due and payable, and payment shall be made, only after the CDT acceptance of hours worked or completion of each deliverable under this Contract.
4. The Contractor costs related to items such as travel and per diem are costs of the Contractor, shall be inclusive of the hourly rate bid, and **will not be paid separately** as part of this Contract.
5. Submit your invoice using ONE of the following options referencing the Contract Number or Agency Order Number:
 - a. Send via U.S. Mail in **TRIPLICATE** to:
California Department of Technology
Financial Management Branch – Accounting Office
P.O. Box 1810
Rancho Cordova, CA 95741
 - OR**
 - b. Send electronically to: APInvoices@state.ca.gov
6. It is mutually agreed that if the Budget Act of the current year and/or any subsequent years covered under this Contract does not appropriate sufficient funds for the program, this Contract shall be of no further force and effect. In this event, the State shall have no liability to pay any funds whatsoever to the Contractor or to furnish any other considerations under this Contract and Contractor shall not be obligated to perform any provisions of this Contract.
7. If funding for any fiscal year is reduced or deleted by the Budget Act for purposes of this program, the State shall have the option to either cancel this Contract with no liability occurring to the State, or offer a contract amendment to the Contractor to reflect the reduced amount.
8. Payment will be made in accordance with, and within the time specified in, Government Code Chapter 4.5, commencing with Section 927. Payment to small/micro businesses shall be made in accordance with and within the time specified in Chapter 4.5, Government Code 927 et seq.

**EXHIBIT B-1
COST WORKSHEET**

The Contractor shall provide all labor, materials, and equipment necessary to provide the services for **Strategic modeling activities aimed at providing the State with information in planning for the impact of the COVID-19 pandemic** in accordance with the specifications described in Exhibit A - SOW, at the rates specified below. **Payment for services performed under this contract shall be Firm Fixed by Deliverables.** Submission of this information is required.

| Deliverable # | Deliverables | Cost |
|---------------|--|------------------|
| D-1 | Technical reports that describe model planning scenario methods and results. Raw and processed model output data. On-demand 1-2 page rapid reports with key takeaways from modeling scenarios. Technical expertise in decision-making. | \$140,666 |
| D-2 | On-demand figures and tables based on model outputs. Technical expertise in decision-making. | \$70,334 |
| D-3 | Model improvements that leveraged scalability and reproducibility on AWS Technical expertise in decision-making. | \$70,334 |
| D-4 | Model improvements that optimized report generation. Technical expertise in decision-making. | \$70,334 |
| D-5 | Additional model and report improvements. Technical expertise in decision-making. | \$35,166 |
| D-6 | On-demand policy action briefs based on model planning scenarios. Technical expertise in decision-making. | \$35,166 |
| | TOTAL COST | \$422,000 |

AMENDMENT (OPTIONAL)

| Deliverable # | Deliverables | Cost |
|---------------|--|------------------|
| D-7 | Age-standardization and age-stratification of model outcomes like hospitalizations and deaths by county over time | \$84,000 |
| D-8 | Integration of real-time mobility information into model pipeline Extension of intervention modeling framework to include geographically targeted interventions | \$72,000 |
| D-9 | Extension of scenario pipeline to provide real-time inference on R0 reductions and intervention effectiveness | \$72,000 |
| D-10 | Generation of county-level reports | \$48,000 |
| D-11 | Additional model and report improvements will be made in conjunction with CA DPH team on request | \$84,000 |
| | TOTAL COST | \$360,000 |

The total amount of this contract shall not exceed \$782,000

EXHIBIT D SECURITY AND DATA PROTECTION

Contractor shall certify to the State compliance with applicable industry standards and guidelines, including but not limited to relevant security provisions of the California State Administrative Manual (SAM), California Statewide Information Management Manual (SIMM), The National Institute of Standards and Technology (NIST) 800-53 v4 and Federal Information Processing Standard (FIPS) Publication 199 which protect and minimize risk to the State. At a minimum, provision shall cover the following:

1. The Contractor assumes responsibility of the confidentiality, integrity and availability of the data under its control. The Contractor shall implement and maintain all appropriate administrative, physical, technical, and procedural safeguards at all times during the term of the Agreement to secure such data from data breach or loss, protect the data and information assets from breaches, introduction of viruses, disabling of devices, malware and other forms of malicious or inadvertent acts that can disrupt the State's access to its data or affects the integrity of that data.
2. Confidential, sensitive or personal information shall be encrypted in accordance with SAM 5350.1 and SIMM 5305-A.
3. The Contractor shall comply with statewide policies and laws regarding the use and protection of information assets and data. Unauthorized use of data by Contractor or third parties is prohibited.
4. Signed Security and Confidentiality Statement for all personnel assigned during the term of the Agreement.
5. Apply security patches and upgrades, and keep virus protection software up-to-date on all information asset on which data may be stored, processed, or transmitted.
6. The Contractor shall notify the State data owner immediately if a security incident involving the information asset occurs.
7. The State data owner shall have the right to participate in the investigation of a security incident involving its data or conduct its own independent investigation. The Contractor shall allow the State reasonable access to security logs, latency statistics, and other related security data that affects this Agreement and the State's data, at no cost to the State.
8. The Contractor shall be responsible for all costs incurred by the State due to security incident resulting from the Contractor's failure to perform or negligent acts of its personnel, and resulting in an unauthorized disclosure, release, access, review, destruction; loss, theft or misuse of an information asset. If the contractor experiences a loss or breach of data, the contractor shall immediately report the loss or breach to the State. If the State data owner determines that notice to the individuals whose data has been lost or breached is appropriate, the contractor will bear any and all costs associated with the notice or any mitigation selected by the data owner. These costs include, but are not limited to, staff time, material costs, postage, media announcements, and other identifiable costs associated with the breach or loss of data.
9. The Contractor shall immediately notify and work cooperatively with the State data owner to respond timely and correctly to public records act requests.
10. The Contractor will dispose of records of State data as instructed by the State during the term of this agreement. No data shall be copied, modified, destroyed or deleted by the Contractor other than for normal operation or maintenance during the Agreement period without prior written notice to and written approval by the State.
11. Remote access to data from outside the territorial United States, including remote access to data by authorized support staff in identified support centers, is prohibited unless approved in advance by the State.
12. The physical location of Contractor's data center where the Data is stored shall be within the territorial United States.

SCO ID:

STATE OF CALIFORNIA

AGREEMENT SUMMARY

STD 215 (Rev. 10/2019)

AGREEMENT NUMBER

19-13081

AMENDMENT NUMBER

☐ CHECK HERE IF ADDITIONAL PAGES ARE ATTACHED

| | | |
|--|--|--------------------------------------|
| 1. CONTRACTOR'S NAME Johns Hopkins University | | 2. FEDERAL I.D. NUMBER 52-0595110 |
| 3. AGENCY TRANSMITTING AGREEMENT California Department of Technology (CDT) | 4. DIVISION, BUREAU, OR OTHER UNIT Office of Administration | 5. AGENCY BILLING CODE 033000 |
| 6a. CONTRACT ANALYST NAME Roddy Son | 6b. EMAIL roddy.son@state.ca.gov | 6c. PHONE NUMBER (916) 431-5448 |
| 7. HAS YOUR AGENCY CONTRACTED FOR THESE SERVICES BEFORE? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (If Yes, enter prior Contractor Name and Agreement Number) PRIOR CONTRACTOR NAME _____ PRIOR AGREEMENT NUMBER _____ | | |

8. BRIEF DESCRIPTION OF SERVICES

Contractor to provide support with California Department of Public Health (CDPH) in its response to the ongoing SARS-CoV-2 public health emergency by conducting scenario and strategic modeling of the SARS-CoV-2 epidemic for the California region.

9. AGREEMENT OUTLINE (Include reason for Agreement: Identify specific problem, administrative requirement, program need or other circumstances making the Agreement necessary; include special or unusual terms and conditions.)

Contractor will perform strategic modeling activities aimed at providing CDPH with information in planning for the impact of the COVID-19 pandemic, and responding to the constantly changing. Contractor will use a mathematical model of SARS-CoV-2 transmission in California and the surrounding states to capture the potential course of the COVID-19 epidemic at state and county scales. Contractor to generate new model scenarios with different assumptions about air importation and epidemic seeding, and implement interventions such as moderately restrictive social distancing, mandatory stay-at-home policies, travel restrictions, and school closures for pre-specified periods of time. With feedback from public health officials, Contractor can develop precise time- and activity-based intervention scenarios and estimate their comparative impacts.

10. PAYMENT TERMS (More than one may apply)

| | | | |
|--|---|---|---|
| <input type="checkbox"/> Monthly Flat Rate | <input type="checkbox"/> Quarterly | <input type="checkbox"/> One-Time Payment | <input type="checkbox"/> Progress Payment |
| <input checked="" type="checkbox"/> Itemized Invoice | <input type="checkbox"/> Withhold _____ % | <input type="checkbox"/> Advanced Payment Not To Exceed _____ | or _____ % |
| <input type="checkbox"/> Reimbursement / Revenue | | | |
| <input type="checkbox"/> Other (Explain) | | | |

11. PROJECTED EXPENDITURES

| FUND TITLE | ITEM | FISCAL YEAR | CHAPTER | STATUTE | PROJECTED EXPENDITURES |
|---|---------------|-------------|---------|-----------------|------------------------|
| <input type="checkbox"/> Tech Services Revolving Fund | 7502-001-973T | 19/20 | 23 | 2019 | \$422,000.00 |
| <input type="checkbox"/> | | | | | |
| <input type="checkbox"/> | | | | | |
| <input type="checkbox"/> | | | | | |
| <input type="checkbox"/> | | | | | |
| <input type="checkbox"/> | | | | | |
| OBJECT CODE 440.522203.914 | | | | AGREEMENT TOTAL | \$422,000.00 |

SCO ID:

STATE OF CALIFORNIA

AGREEMENT SUMMARY

STD 215 (Rev. 10/2019)

AGREEMENT NUMBER

19-13081

AMENDMENT NUMBER

OPTIONAL USE

SC19-0016998/RITM0011364

AMOUNT ENCUMBERED BY THIS DOCUMENT

\$422,000.00

PRIOR AMOUNT ENCUMBERED FOR THIS AGREEMENT

I certify upon my own personal knowledge that the budgeted funds for the current budget year are available for the period and purpose of the expenditure stated above.

TOTAL AMOUNT ENCUMBERED TO DATE

\$422,000.00

ACCOUNTING OFFICER'S SIGNATURE

Teresa Scalose

Teresa Scalose (Apr 15, 2020)

ACCOUNTING OFFICER'S NAME (Print or Type)

Teresa Scalose

DATE SIGNED

Apr 15, 2020

12. AGREEMENT

| AGREEMENT | TERM FROM | TERM THROUGH | TOTAL COST OF THIS TRANSACTION | BID, SOLE SOURCE, EXEMPT |
|--------------------------------------|-----------|--------------|--------------------------------|--------------------------|
| Original | 4/15/20 | 10/14/20 | \$422,000.00 | EXEMPT |
| <input type="checkbox"/> Amendment 1 | | | | |
| <input type="checkbox"/> Amendment 2 | | | | |
| <input type="checkbox"/> Amendment 3 | | | | |
| TOTAL | | | \$422,000.00 | |

13. BIDDING METHOD USED

- ☐ Request for Proposal (RFP) (Attach justification if secondary method is used)
 ☐ Use of Master Service Agreement
- ☐ Invitation for Bid (IFB)
 ☒ Exempt from Bidding (Give authority for exempt status)
 ☐ Sole Source Contract (Attach STD. 821)
- ☐ Other (Explain) Emergency PCC Contract code

Note: Proof of advertisement in the State Contracts Register or an approved form STD. 821, Contract Advertising Exemption Request, must be attached

14. SUMMARY OF BIDS (List of bidders, bid amount and small business status) (If an amendment, sole source, or exempt, leave blank)

15. IF AWARD OF AGREEMENT IS TO OTHER THAN THE LOWER BIDDER, EXPLAIN REASON(S) (If an amendment, sole source, or exempt, leave blank)

16. WHAT IS THE BASIS FOR DETERMINING THAT THE PRICE OR RATE IS REASONABLE?

We are under Emergency EO and PCC is waived. This is for the State of California use in response to COVID-19, not for CDT use only.

17a. JUSTIFICATION FOR CONTRACTING OUT (Check one)

- ☐ Contracting out is based on cost savings per Government Code 19130(a). The State Personnel Board has been so notified.
 ☐ Contracting out is justified based on Government Code 19130(b). When this box is checked, a completed JUSTIFICATION - CALIFORNIA CODE OF REGULATIONS, TITLE 2, SECTION 547.60 must be attached to this document.
- ☒ Not Applicable (Interagency / Public Works / Other Emergency)

17b. EMPLOYEE BARGAINING UNIT NOTIFICATION

- ☐ By checking this box, I hereby certify compliance with Government Code section 19132(b)(1).

AUTHORIZED SIGNATURE

SIGNER'S NAME (Print or Type)

DATE SIGNED

18. FOR AGREEMENTS IN EXCESS OF \$5,000: Has the letting of the agreement been reported to the Department of Fair Employment and Housing? ☐ No ☒ Yes ☐ N/A

19. HAVE CONFLICT OF INTEREST ISSUES BEEN IDENTIFIED AND RESOLVED AS REQUIRED BY THE STATE CONTRACT MANUAL SECTION 7.10? ☐ No ☐ Yes ☒ N/A

20. FOR CONSULTING AGREEMENTS: Did you review any contractor evaluations on file with the DGS Legal Office? ☐ None on file ☐ No ☐ Yes ☒ N/A

21. IS A SIGNED COPY OF THE FOLLOWING ON FILE AT YOUR AGENCY FOR THIS CONTRACTOR?

A. Contractor Certification Clauses

B. STD 204 Vendor Data Record

☒ No ☐ Yes ☐ N/A☐ No ☒ Yes ☐ N/A

22. REQUIRED RESOLUTIONS ARE ATTACHED

☐ No ☐ Yes ☒ N/A

23. IS THIS A SMALL BUSINESS AND/OR A DISABLED VETERAN BUSINESS CERTIFIED BY DGS?

☒ No ☐ Yes

SB/DVBE Certification Number:

SCO ID:

STATE OF CALIFORNIA

AGREEMENT SUMMARY

STD 215 (Rev. 10/2019)

AGREEMENT NUMBER

19-13081

AMENDMENT NUMBER

24. ARE DISABLED VETERANS BUSINESS ENTERPRISE GOALS
REQUIRED? (If an amendment, explain changes if any)

DVBE is waived under Emergency EO.

☒ No (Explain below) ☐ Yes _____ % of Agreement

25. IS THIS AGREEMENT (WITH AMENDMENTS) FOR A PERIOD OF TIME
LONGER THAN THREE YEARS?

☒ No ☐ Yes (If Yes, provide justification below)

I certify that all copies of the referenced Agreement will conform to the original agreement sent to the Department of General Services.

SIGNATURE

Roddy Son

Roddy Son (Apr 15, 2020)

NAME/TITLE (Print or Type)

Roddy Son, Procurement Analyst

DATE SIGNED

Apr 15, 2020

SCO ID:

STATE OF CALIFORNIA

AGREEMENT SUMMARY

STD 215 (Rev. 10/2019)

AGREEMENT NUMBER

19-13081

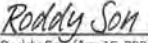
AMENDMENT NUMBER

JUSTIFICATION - CALIFORNIA CODE OF REGULATIONS, TITLE 2, SECTION 547.60

In the space provided below, the undersigned authorized state representative documents, with specificity and detailed factual information, the reasons why the contract satisfies one or more of the conditions set forth in Government Code section 19130(b). Please specify the applicable subsection. Attach extra pages if necessary.

Waived. Emergency proclamation is attached.

The undersigned represents that, based upon his or her personal knowledge, information or belief the above justification correctly reflects the reasons why the contract satisfies Government Code section 19130(b).

| | | | |
|---|---|-----------------------------|--------------|
| SIGNATURE  Roddy Son (Apr 15, 2020) | NAME/TITLE(Print or Type) Roddy Son, Procurement Analyst | DATE SIGNED Apr 15, 2020 | |
| PHONE NUMBER (916) 431-5448 | STREET ADDRESS 10860 Gold Center Drive | | |
| EMAIL roddy.son@state.ca.gov | CITY Rancho Cordova | STATE CA | ZIP 95670 |

**EXECUTIVE DEPARTMENT
STATE OF CALIFORNIA**

PROCLAMATION OF A STATE OF EMERGENCY

WHEREAS in December 2019, an outbreak of respiratory illness due to a novel coronavirus (a disease now known as COVID-19), was first identified in Wuhan City, Hubei Province, China, and has spread outside of China, impacting more than 75 countries, including the United States; and

WHEREAS the State of California has been working in close collaboration with the national Centers for Disease Control and Prevention (CDC), with the United States Health and Human Services Agency, and with local health departments since December 2019 to monitor and plan for the potential spread of COVID-19 to the United States; and

WHEREAS on January 23, 2020, the CDC activated its Emergency Response System to provide ongoing support for the response to COVID-19 across the country; and

WHEREAS on January 24, 2020, the California Department of Public Health activated its Medical and Health Coordination Center and on March 2, 2020, the Office of Emergency Services activated the State Operations Center to support and guide state and local actions to preserve public health; and

WHEREAS the California Department of Public Health has been in regular communication with hospitals, clinics and other health providers and has provided guidance to health facilities and providers regarding COVID-19; and

WHEREAS as of March 4, 2020, across the globe, there are more than 94,000 confirmed cases of COVID-19, tragically resulting in more than 3,000 deaths worldwide; and

WHEREAS as of March 4, 2020, there are 129 confirmed cases of COVID-19 in the United States, including 53 in California, and more than 9,400 Californians across 49 counties are in home monitoring based on possible travel-based exposure to the virus, and officials expect the number of cases in California, the United States, and worldwide to increase; and

WHEREAS for more than a decade California has had a robust pandemic influenza plan, supported local governments in the development of local plans, and required that state and local plans be regularly updated and exercised; and

WHEREAS California has a strong federal, state and local public health and health care delivery system that has effectively responded to prior events including the H1N1 influenza virus in 2009, and most recently Ebola; and

WHEREAS experts anticipate that while a high percentage of individuals affected by COVID-19 will experience mild flu-like symptoms, some will have more serious symptoms and require hospitalization, particularly individuals who are elderly or already have underlying chronic health conditions; and

WHEREAS it is imperative to prepare for and respond to suspected or confirmed COVID-19 cases in California, to implement measures to mitigate the spread of COVID-19, and to prepare to respond to an increasing number of individuals requiring medical care and hospitalization; and

WHEREAS if COVID-19 spreads in California at a rate comparable to the rate of spread in other countries, the number of persons requiring medical care may exceed locally available resources, and controlling outbreaks minimizes the risk to the public, maintains the health and safety of the people of California, and limits the spread of infection in our communities and within the healthcare delivery system; and

WHEREAS personal protective equipment (PPE) is not necessary for use by the general population but appropriate PPE is one of the most effective ways to preserve and protect California's healthcare workforce at this critical time and to prevent the spread of COVID-19 broadly; and

WHEREAS state and local health departments must use all available preventative measures to combat the spread of COVID-19, which will require access to services, personnel, equipment, facilities, and other resources, potentially including resources beyond those currently available, to prepare for and respond to any potential cases and the spread of the virus; and

WHEREAS I find that conditions of Government Code section 8558(b), relating to the declaration of a State of Emergency, have been met; and

WHEREAS I find that the conditions caused by COVID-19 are likely to require the combined forces of a mutual aid region or regions to appropriately respond; and

WHEREAS under the provisions of Government Code section 8625(c), I find that local authority is inadequate to cope with the threat posed by COVID-19; and

WHEREAS under the provisions of Government Code section 8571, I find that strict compliance with various statutes and regulations specified in this order would prevent, hinder, or delay appropriate actions to prevent and mitigate the effects of the COVID-19.

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, in accordance with the authority vested in me by the State Constitution and statutes, including the California Emergency Services Act, and in particular, Government Code section 8625, **HEREBY PROCLAIM A STATE OF EMERGENCY** to exist in California.

IT IS HEREBY ORDERED THAT:

1. In preparing for and responding to COVID-19, all agencies of the state government use and employ state personnel, equipment, and facilities or perform any and all activities consistent with the direction of the Office of Emergency Services and the State Emergency Plan, as well as the California Department of Public Health and the Emergency Medical Services Authority. Also, all residents are to heed the advice of emergency officials with regard to this emergency in order to protect their safety.
2. As necessary to assist local governments and for the protection of public health, state agencies shall enter into contracts to arrange for the procurement of materials, goods, and services needed to assist in preparing for, containing, responding to, mitigating the effects of, and recovering from the spread of COVID-19. Applicable provisions of the Government Code and the Public Contract Code, including but not limited to travel, advertising, and competitive bidding requirements, are suspended to the extent necessary to address the effects of COVID-19.
3. Any out-of-state personnel, including, but not limited to, medical personnel, entering California to assist in preparing for, responding to, mitigating the effects of, and recovering from COVID-19 shall be permitted to provide services in the same manner as prescribed in Government Code section 179.5, with respect to licensing and certification. Permission for any such individual rendering service is subject to the approval of the Director of the Emergency Medical Services Authority for medical personnel and the Director of the Office of Emergency Services for non-medical personnel and shall be in effect for a period of time not to exceed the duration of this emergency.
4. The time limitation set forth in Penal Code section 396, subdivision (b), prohibiting price gouging in time of emergency is hereby waived as it relates to emergency supplies and medical supplies. These price gouging protections shall be in effect through September 4, 2020.
5. Any state-owned properties that the Office of Emergency Services determines are suitable for use to assist in preparing for, responding to, mitigating the effects of, or recovering from COVID-19 shall be made available to the Office of Emergency Services for this purpose, notwithstanding any state or local law that would restrict, delay, or otherwise inhibit such use.
6. Any fairgrounds that the Office of Emergency Services determines are suitable to assist in preparing for, responding to, mitigating the effects of, or recovering from COVID-19 shall be made available to the Office of Emergency Services pursuant to the Emergency Services Act, Government Code section 8589. The Office of Emergency Services shall notify the fairgrounds of the intended use and can immediately use the fairgrounds without the fairground board of directors' approval, and

notwithstanding any state or local law that would restrict, delay, or otherwise inhibit such use.

7. The 30-day time period in Health and Safety Code section 101080, within which a local governing authority must renew a local health emergency, is hereby waived for the duration of this statewide emergency. Any such local health emergency will remain in effect until each local governing authority terminates its respective local health emergency.
8. The 60-day time period in Government Code section 8630, within which local government authorities must renew a local emergency, is hereby waived for the duration of this statewide emergency. Any local emergency proclaimed will remain in effect until each local governing authority terminates its respective local emergency.
9. The Office of Emergency Services shall provide assistance to local governments that have demonstrated extraordinary or disproportionate impacts from COVID-19, if appropriate and necessary, under the authority of the California Disaster Assistance Act, Government Code section 8680 et seq., and California Code of Regulations, Title 19, section 2900 et seq.
10. To ensure hospitals and other health facilities are able to adequately treat patients legally isolated as a result of COVID-19, the Director of the California Department of Public Health may waive any of the licensing requirements of Chapter 2 of Division 2 of the Health and Safety Code and accompanying regulations with respect to any hospital or health facility identified in Health and Safety Code section 1250. Any waiver shall include alternative measures that, under the circumstances, will allow the facilities to treat legally isolated patients while protecting public health and safety. Any facilities being granted a waiver shall be established and operated in accordance with the facility's required disaster and mass casualty plan. Any waivers granted pursuant to this paragraph shall be posted on the Department's website.
11. To support consistent practices across California, state departments, in coordination with the Office of Emergency Services, shall provide updated and specific guidance relating to preventing and mitigating COVID-19 to schools, employers, employees, first responders and community care facilities by no later than March 10, 2020.
12. To promptly respond for the protection of public health, state entities are, notwithstanding any other state or local law, authorized to share relevant medical information, limited to the patient's underlying health conditions, age, current condition, date of exposure, and possible contact tracing, as necessary to address the effect of the COVID-19 outbreak with state, local, federal, and nongovernmental partners, with such information to be used for the limited purposes of monitoring, investigation and control, and treatment and coordination of care. The

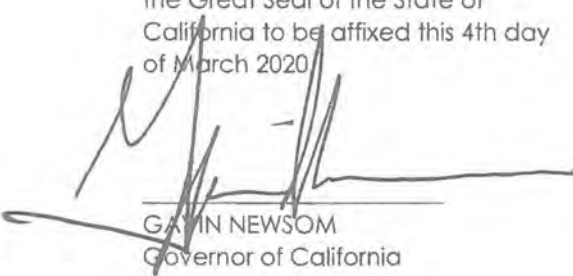
notification requirement of Civil Code section 1798.24, subdivision (i), is suspended.

13. Notwithstanding Health and Safety Code sections 1797.52 and 1797.218, during the course of this emergency, any EMT-P licensees shall have the authority to transport patients to medical facilities other than acute care hospitals when approved by the California EMS Authority. In order to carry out this order, to the extent that the provisions of Health and Safety Code sections 1797.52 and 1797.218 may prohibit EMT-P licensees from transporting patients to facilities other than acute care hospitals, those statutes are hereby suspended until the termination of this State of Emergency.

14. The Department of Social Services may, to the extent the Department deems necessary to respond to the threat of COVID-19, waive any provisions of the Health and Safety Code or Welfare and Institutions Code, and accompanying regulations, interim licensing standards, or other written policies or procedures with respect to the use, licensing, or approval of facilities or homes within the Department's jurisdiction set forth in the California Community Care Facilities Act (Health and Safety Code section 1500 et seq.), the California Child Day Care Facilities Act (Health and Safety Code section 1596.70 et seq.), and the California Residential Care Facilities for the Elderly Act (Health and Safety Code section 1569 et seq.). Any waivers granted pursuant to this paragraph shall be posted on the Department's website.

I FURTHER DIRECT that as soon as hereafter possible, this proclamation be filed in the Office of the Secretary of State and that widespread publicity and notice be given of this proclamation.

IN WITNESS WHEREOF I have
hereunto set my hand and caused
the Great Seal of the State of
California to be affixed this 4th day
of March 2020.



GAVIN NEWSOM
Governor of California

ATTEST:

ALEX PADILLA
Secretary of State