

# RFP 2022-215 Annual Contract for EpiTrax Cloud Hosting, Support, and Professional Services

			<b>Award</b>
Evaluation Criteria	Max Points	End Point Corporation New York, NY HUB - No	<b>Resolve Tech Solutions LLC Addison, TX HUB - No</b>
Executive Summary and Technical Specifications	200	128.44	<b>148.13</b>
Implementation and Project Management	300	188.40	<b>234.13</b>
References	200	133.30	<b>119.97</b>
Price	300	296.98	<b>300.00</b>
Total Score	1000	747.12	<b>802.23</b>

**Note:**

InductiveHealth Informatics LLC was deemed non-responsive for failure to submit a signed Compliance with Federal and State Laws Form, failure to submit references, and failure to submit proposal price forms, as required.

## RESOLVE TECH SOLUTIONS MASTER SERVICES AGREEMENT

**THIS MASTER SERVICES AGREEMENT** ("MSA") is by and between Resolve Tech Solutions, LLC and its affiliates ("RTS") and Tarrant County ("Customer") and is entered into as of the date it is accepted by RTS following Customer's execution ("Effective Date").

**1. Services.** RTS will provide the Services in accordance with the Agreement. The "Agreement" means this MSA plus all applicable Service Schedules, RTS Service Guides, Service Orders, Statements of Work ("SOWs"), service level agreements ("SLAs") and any other documents that are expressly incorporated herein (collectively "Service Attachments"). RTS will not be bound by any Service Order or SOW until it is accepted by RTS.

**2. Term.** The term of the Agreement will commence on the Effective Date and continue until the expiration of the last Service term, unless earlier terminated in accordance with the Agreement ("Term").

**3. Billing.** Billing for each Service shall commence on the Billing Commencement Date ("BCD"), as defined in the applicable Service Schedule. Except as may otherwise be set forth in the applicable Service Order or SOW, (a) monthly recurring charges ("MRCs") will be billed monthly in advance, (b) varying or usage-based charges will be billed monthly in arrears and (c) installation or other non-recurring charges will be billed upon the Billing Commencement Date.

**4. Payment.**

**4.1.** Invoiced amounts are due in accordance with Texas Govt. Code Chapter 2251, "The Texas Prompt Payment Act."

**4.2.** To dispute a charge on an invoice, Customer must identify the specific charge in dispute and provide a written explanation of the basis of the dispute by the Due Date. The parties will work in good faith to resolve the dispute. If RTS determines that a disputed charge is in error, RTS shall issue a credit or reverse the amount incorrectly billed. If RTS determines in good faith that a disputed charge was billed correctly, Customer's payment shall be due in accordance with the requirements of the "The Texas Prompt Payment Act" after RTS provides notice of such

determination.

**5. Compliance and Security.** Each party shall comply with all laws and regulations applicable to the provision (in the case of RTS) and use (in the case of Customer) of the Services provided hereunder. RTS has adopted and implemented, and shall maintain throughout the Term, a corporate information security program designed to comply with applicable laws and protect Customer information, materials and data "Customer Data" from loss, misuse and unauthorized access or disclosure. Such program includes annual employee security awareness training and formal information security policies and/or procedures. Customer will ensure that all customer data stored or transmitted via the Service complies with all applicable laws and reasonable information security practices, including without limitation those relating to the encryption of data.

**6. Use of Service.** Customer and its End Users will not use or access the Services in a manner that is tortious or violates any third party right. To the extent permitted by the laws and Constitution of the State of Texas, Customer agrees to defend, indemnify, and hold RTS harmless from third party claims, arising from non-compliance with the preceding sentence.

**7. Termination.** Either party may terminate the Agreement or affected Services (i) upon 30-day prior written notice in the event of a material, uncured breach of the Agreement (unless a different notice period is expressly set forth in the Agreement); or (ii) in accordance with any other express term contained in the Agreement. RTS may suspend the affected Service: (a) upon 5-day notice in the event of any uncured payment default; or (b) upon notice in the event Customer violates Section 6. If the Agreement is terminated prior to conclusion, the Customer shall be liable for (a) Service charges accrued but unpaid as of the termination date; and (b) any out-of-pocket costs incurred by or imposed upon RTS (e.g., ordered equipment, licenses, carrier termination charges). The parties agree that any cancellation fees and early termination charges set forth in the Agreement constitute liquidated damages and are not intended as a penalty. If a particular Service is

terminated upon which another service is dependent, all such dependent services shall be deemed to be terminated as well.

**8. Disclaimer of Warranties.** THE FOLLOWING DISCLAIMERS SHALL NOT LIMIT CUSTOMER'S ABILITY TO SEEK ANY APPLICABLE SLA REMEDIES. THE SERVICES AND ANY RELATED EQUIPMENT, SOFTWARE AND OTHER MATERIALS PROVIDED BY RTS IN CONNECTION WITH THE SERVICES ARE PROVIDED WITHOUT ANY WARRANTIES OF ANY KIND, WHETHER STATUTORY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF TITLE, NONINFRINGEMENT, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, ACCURACY, COMPLETENESS, COMPATIBILITY OF SOFTWARE OR EQUIPMENT, OR ANY RESULTS TO BE ACHIEVED THEREFROM. RTS MAKES NO WARRANTIES OR REPRESENTATIONS THAT ANY SERVICE WILL BE FREE FROM LOSS OR LIABILITY ARISING OUT OF HACKING OR SIMILAR MALICIOUS ACTIVITY, OR ANY ACT OR OMISSION OF THE CUSTOMER.

**9. Limitation on Liability.** NEITHER PARTY, NOR ITS AFFILIATES, CONTRACTORS, SUPPLIERS OR AGENTS, SHALL BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, RELIANCE, PUNITIVE, CONSEQUENTIAL DAMAGES, ANY LOST OR IMPUTED PROFITS OR REVENUES, REGARDLESS OF THE LEGAL THEORY UNDER WHICH SUCH LIABILITY IS ASSERTED, AND REGARDLESS OF WHETHER A PARTY HAD BEEN ADVISED OF THE POSSIBILITY OF SUCH LIABILITY. EXCEPT FOR CUSTOMER'S PAYMENT OBLIGATIONS HEREUNDER AND CUSTOMER'S OBLIGATIONS SET FORTH IN SECTION 6, THE TOTAL AGGREGATE LIABILITY OF EACH PARTY ARISING FROM OR RELATED TO THIS AGREEMENT SHALL BE LIMITED TO TWELVE (12) TIMES THE MONTHLY RECURRING CHARGE PAID OR PAYABLE IN THE MONTH IMMEDIATELY PRECEDING THE DATE IN WHICH THE CLAIM ARISES.

**10. Intellectual Property Infringement.** RTS shall, at its own expense, defend Customer against any claim, demand or suit made or brought against Customer by a third party alleging that Customer's use of the Services as allowed hereunder infringes or misappropriates the patent, copyright, or trademark rights of a third party and RTS shall pay any costs of

settlement, or any damages finally awarded against Customer. RTS shall have no obligation hereunder to the extent that a claim arises from (a) the combination, use or operation of any Services with any service or product not provided by RTS (other than combinations approved in writing by RTS); (b) any modification of the Services made by Customer or by any party at Customer's direction; (c) use by Customer other than the then current unaltered release of any software used in the Services, or (d) use or operation by Customer or its agents or contractors of the Service other than in accordance with this Agreement. This Section 10 provides the sole and exclusive obligations and remedies of the parties in connection with any third party claim, suit or other demand described herein.

**11. Confidentiality.** Neither party shall, without the prior written consent of the other party, use or disclose the Confidential Information of the other party during the Term of this Agreement and for two (2) years following the expiration or termination hereof. Each party will take all reasonable precautions to protect the other party's Confidential Information, using at least the same standard of care as it uses to maintain the confidentiality of its own Confidential Information. Notwithstanding the foregoing, a party may disclose Confidential Information: (i) to any consultants, contractors, and counsel who have a need to know in connection with this Agreement and have executed a reasonably protective non-disclosure agreement with the disclosing party, or (ii) pursuant to legal process or in accordance with the requirements of the Texas Public Information Act; provided that, the disclosing party shall, unless legally prohibited, provide the non-disclosing party with reasonable prior written notice sufficient to permit it an opportunity to contest such disclosure.

**12. Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of Texas, without regard to its principles for resolving conflicts of law.

**13. Force Majeure.** Neither party will be liable for any failure or delay in its performance under the Agreement (other than a failure to comply with payment obligations) due to an event beyond a party's reasonable control ("Force Majeure Event"). If a Force Majeure Event prevents the

provision of Service for a period of 30 days, either party may terminate the affected Service by providing 30-day written notice to the other party.

**14. Notices.** All notices required to be given hereunder shall be in writing and deemed given if sent to the addressee specified below either (a) by registered or certified U.S. mail, return receipt requested, postage prepaid, three days after such mailing; (b) by national overnight courier service, the next business day. Other routine operational notices (e.g., notice reminder of non-payment) may be sent via facsimile or email and will be deemed given on the day such notice is delivered; (c) by email with confirmed read receipt.

**To RTS:**

Resolve Tech Solutions, LLC  
15851 Dallas  
Parkway, Suite 1103  
Dallas, Texas 75001

**To Customer:**

Tarrant County  
100 E. Weatherford  
Suite 303  
Fort Worth, Texas 76196

**15. Insurance.** Vendor shall carry and maintain during the Term, at its own cost and expense, insurance as specified in RFP 2022-215, Annual Contract for EpiTrax Cloud Hosting, Support, and Professional Services.

**16. Maintenance.** Customer acknowledges that the Services may be subject to routine maintenance or repair and agrees to cooperate in a timely manner and provide reasonable access and assistance as necessary to allow such maintenance or repair.

**17. Waiver.** Except as otherwise expressly set forth in the Agreement, neither party's failure to insist upon strict performance of any provision of the Agreement shall be construed as a waiver of any of its rights hereunder. Neither the course of conduct between parties nor trade practice shall act to modify any provision of the Agreement.

**18. Miscellaneous.** All provisions in the Agreement which by their nature are intended to survive expiration or termination shall so survive. If any term of the Agreement is held

unenforceable, the unenforceable term shall be construed as nearly as possible to reflect the original intent of the parties and the remaining terms shall remain in effect. The Agreement is intended solely for RTS and Customer and does not provide any third party with any right or benefit. Neither party may assign this Agreement or any portion hereof without the other party's prior written consent, which consent shall not be unreasonably withheld. Notwithstanding the foregoing, either party may assign this Agreement or a portion thereof: (i) in the event of a merger in which the party is not the surviving entity; (ii) in the event of a sale of all or substantially all of its assets; or (iii) to any party that controls, is controlled by or is in common control with such party. Subject to the foregoing, this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective permitted successors and assigns. In the event of conflict among terms, the order of priority shall be as follows: the Service Schedule, then this MSA, then the Resolve Tech Service Guide, and then the Service Order with the latest date. Except as otherwise set forth herein, all amendments to the Agreement shall be in writing and signed by the parties' authorized representatives. This MSA together with all applicable Service Attachments, Tarrant County's RFP 2022-215, Annual Contract for EpiTrax Cloud Hosting, Support, and Professional Services, and the Resolve Tech Solutions' response to Tarrant County's RFP 2022-215, Annual Contract for EpiTrax Cloud Hosting, Support, and Professional Services, constitutes the entire agreement of the parties with respect to the Services and supersedes any other prior or contemporaneous agreement or understandings, whether oral or written, related to the subject matter hereof. Tarrant County's RFP 2022-215, Annual Contract for EpiTrax Cloud Hosting, Support, and Professional Services, and the Resolve Tech Solutions' response to Tarrant County's RFP 2022-215, Annual Contract for EpiTrax Cloud Hosting, Support, and Professional Services, take precedence. All handwritten or typed modifications to the Agreement which are not mutually agreed to in writing are null and void.

**19. Compliance with Laws.** In providing the services required by this Agreement, Vendor must observe and comply with all applicable federal, state, and local statutes, ordinances, rules, and regulations, including, without limitation, workers' compensation laws, minimum and maximum salary and wage statutes

and regulations, and non-discrimination laws and regulations. Vendor shall be responsible for ensuring its compliance with any laws and regulations applicable to its business, including maintaining any necessary licenses and permits.

## **20. Definitions.**

"Confidential Information" means non-public information of the parties hereto relating to their business activities, financial affairs, technology, marketing, or sales plans that is exchanged by the parties in the formation and implementation of the Agreement. Confidential Information includes the terms and pricing of the Agreement. Confidential Information shall not include information which: (i) is or becomes public knowledge through no breach of the Agreement by the receiving party, (ii) is received by recipient from a third party not under a duty of confidence, or (iii) is already known or is independently developed by the receiving party without use of the Confidential Information.

"End Users" means Customer's end-users, customers, agents or any other third parties who utilize or access the Services or RTS data centers via the Services provided hereunder.

"Service" means the service provided by RTS and/or its licensors and contractors as set forth on the Service Order or SOW.

"Service Order" means a service order request submitted on a form issued by RTS and signed by Customer that includes the type and details of the specific Services ordered by Customer.

"Service Schedule" means those service descriptions providing additional terms pursuant to which RTS will provide and Customer shall purchase the Services described therein.

"SLA Attachment" means the attachment that sets forth the SLA applicable to each individual Service, if any, which provides Customer's sole and exclusive remedies for any Service quality or performance deficiencies or failures of any kind (e.g., uptime, latency). To clarify, such sole and exclusive SLA remedies shall not apply to breaches of unrelated obligations under the Agreement such as infringement, confidentiality, etc. RTS may modify SLAs during a renewal term upon 60-day notice.

"Taxes" means any applicable foreign, federal,

state, or local taxes and charges assessed or incurred in connection with the Service, including without limitation, all governmental excise, use, sales, value-added, or occupational levies and environmental assessments or charges, regulatory administration and similar pass-through fees, and other similar surcharges and levies, but excluding any taxes based on RTS' net income.

The parties have read and agree to the terms of this MSA and any applicable Service Attachments, all of which are made a part of the Agreement.

**Resolve Tech Solutions, LLC**



Name: Vinod Muthuswamy

Title: COO

Date: 02/14/2023

**Tarrant County**

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**STATEMENT OF WORK**  
**EPITRAX CLOUD HOSTING, SUPPORT, AND PROFESSIONAL SERVICES**

SOW #	202210-21
Project Name:	EPITRAX cloud hosting, support, and professional services
Effective Date:	Upon Signature
Payment Terms:	In accordance with the Texas Prompt Payment Act
Billing frequency:	Monthly according to Pricing Table
Purchase Order Required:	Purchase order will be issued after contract award.
Currency:	USD

This Statement of Work ("SOW") is made between Resolve Tech Solutions, LLC set forth below ("RTS") and Tarrant County ("Tarrant County") as client pursuant to the terms and conditions of the Master Services Agreement, as drafted, or other such agreement executed by the parties ("Agreement"). This Agreement will be effective on the date set forth above or in the event such date is not populated, upon the last signature date noted below ("Effective Date"). Any term not otherwise defined herein shall have the meaning specified in the Agreement. In the event of any inconsistency or conflict between Tarrant County's RFP 2022-215, Annual Contract for EpiTrax Cloud Hosting, Support, and Professional Services, Resolve Tech Solutions' response to Tarrant County's RFP 2022-215, Annual Contract for EpiTrax Cloud Hosting, Support, and Professional Services, the Agreement, and this SOW, the terms of RFP 2022-215, Annual Contract for EpiTrax Cloud Hosting, Support, and Professional Services and Resolve Tech Solutions' response to RFP 2022-215, Annual Contract for EpiTrax Cloud Hosting, Support, and Professional Services, shall control with respect to the services set forth herein. The terms of this SOW are limited to the scope of this SOW and shall not be applicable to any other SOWs that may be executed between the parties.

**AGREED AND ACCEPTED.**

**RESOLVE TECH SOLUTIONS, LLC**

**TARRANT COUNTY**

By (Signature):  \_\_\_\_\_

By (Signature): \_\_\_\_\_

Print Name: Vinod Muthuswamy

Print Name: \_\_\_\_\_

Print Job Title: COO

Print Job Title: \_\_\_\_\_

Signature Date: 02/14/2023

Signature Date: \_\_\_\_\_

Address:  
15851 Dallas Parkway, Suite 1103  
Addison, Texas 75001  
USA

Address:  
100 E. Weatherford, Suite 303  
Fort Worth, Texas 76196-0104  
USA

## A. SCOPE OF WORK

### 1. Description of Services.

The objective of this engagement is to provide cloud hosting, support, maintenance, and professional services for the EpiTrax product suite, as explained in the scope section. Expitrax is a Linux-based software system used by the Public Health Department for disease surveillance, disease detection, and outbreak management.

The scope of work to be performed will provide the EpiTrax Hosting Environment, Management Services 24x7x365, Disaster Recovery Services, and Implementation approach as explained below.

### 2. EpiTrax Hosting Environment.

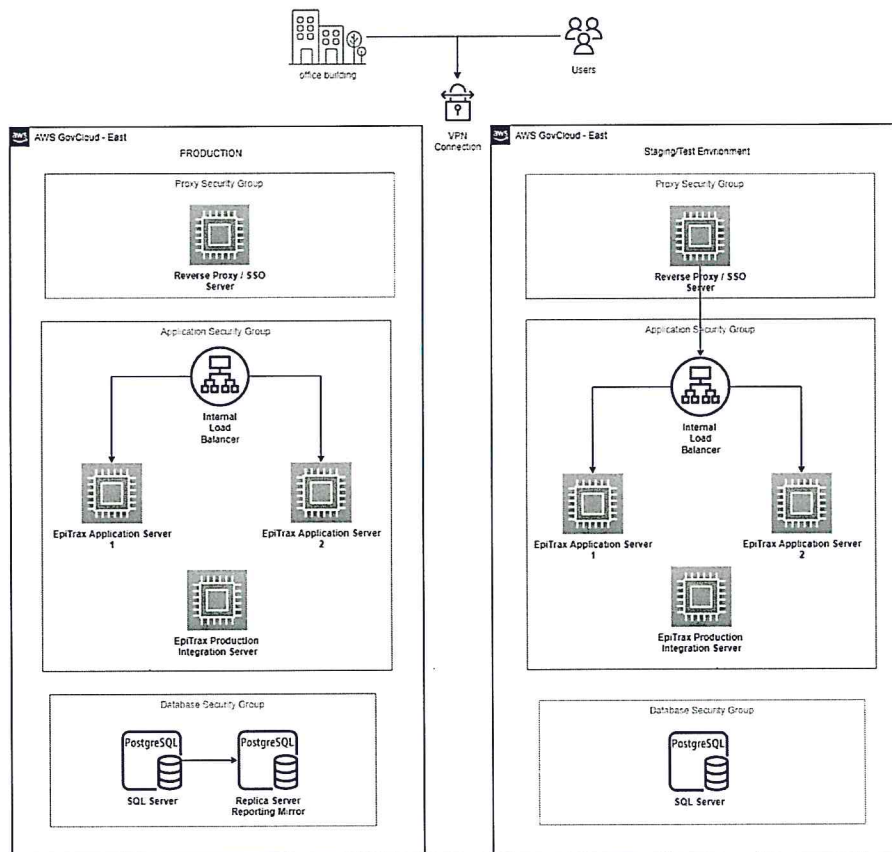


Fig 01: High-level systems architectural diagram

Features and Functionalities as expected in RFP Section Tab 2

Requirements per RFP:

1. **Compatibility:** System is compatible with EpiTrax supported internet browsers. These include Google Chrome based browsers (Chrome Enterprise, Microsoft Edge) and Firefox
2. **Content Security and Accessibility:** Solution is protected with TLS encryption for web traffic, data will be encrypted at the storage level and an encrypted Virtual Private Network (VPN) will be available for private connectivity.
3. **Environments:**
  - a. **Solution includes:**

- i. *One production Environment*
    - ii. *One Staging/Test Environment for development and testing*
  - 4. *Hosting: Solution will be entirely hosted in the AWS GovCloud and managed by a US-based team that fully meets ITAR, FedRAMP, FISMA, and CJIS requirements. Furthermore, Resolve Tech Solutions will execute a HIPPA Business Associate Agreement (BAA) with Tarrant County to assist in HIPPA Compliance.*
  - 5. *Network connectivity: Solution Design will use best practices and architectures for connectivity. Included in the solution design is a Virtual Private Network setup and management from Tarrant County's network to the AWS GovCloud. The connection includes a primary and failover (redundant) connection and will be monitored by the Managed Cloud Team*
  - 6. *Annual support and maintenance for the EpiTrax instance(s):*
    - a. *The proposal includes:*
      - i. *Service management & Service governance to support operation*
      - ii. *24/7 x 365 Monitoring and support of cloud/hosting infrastructure*
      - iii. *Incident response, incident management, change management, problem management for the production and test/staging environments*
- 3. Management Services 24x7x365.**
- (a) Service Delivery Location: Resolve Tech Solutions & Commonwealth Informatics Team will provide ALL management and services with dedicated team of US Based engineers that meet ITAR requirements
  - (b) All County data MUST always remain in the forty-eight (48) contiguous United States: Data will be hosted in AWS US GovCloud Regions & protected by Encrypted Authentication and private connectivity. Furthermore, additional security filters can be enabled to prevent IP ranges located outside of the United States from connecting to the environment. These configuration options are included.
  - (c) Support 24X7X365: The proposal includes a Production environment based on high availability designed to meet 99.9% uptime Service Level Agreement (SLA). When maintenance needs to occur the RTS Managed Cloud service team has standard operational procedures to work with Tarrant County to schedule the maintenance window, communicate outage window to the user community, execute the maintenance with proper roll-back and security plans, and re-establish production environment on completion
- 4. Disaster Recovery and Business Continuity Measures.**
- (a) The solution includes continuity patterns to protect data integrity, availability, and reliability. The architecture is highly available within 1 region of AWS GovCloud and backups will be replicated to a second AWS GovCloud region.
    - (i) The backup schedule will meet Tarrant County's Recovery Point Objective and Recovery Time Objectives.
    - (ii) Each server, file store, and database will be backed-up each day based on Tarrant County's schedule.
    - (iii) The Backups retention policy will be based on Tarrant County's requirements
    - (iv) The most recent backup set will be replicated automatically to the adjacent GovCloud Region in-case of catastrophic local outage so that environment can be reconstituted in new region to meet MEFs for Tier 1 applications.

- (v) Example – if Primary region is GovCloud East Region – most recent backups will be replicated automatically to the GovCloud West Region.

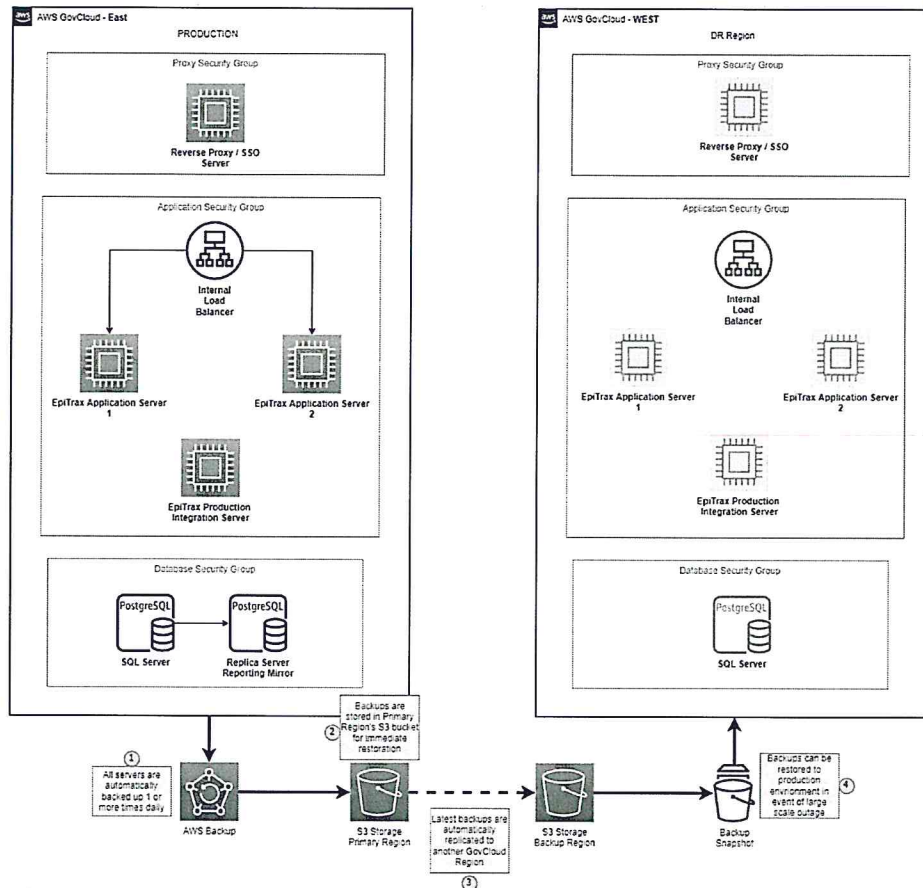


Fig 02: High-level Disaster Recovery approach

- (b) Outages or unplanned maintenance: This is standard operational procedures for the RTS Managed Cloud team. All incidents and pre-planned maintenance will be included in the communication plan established with Tarrant County at the start of the contract.
- (c) Tarrant County's right to retain absolute data access and ownership:
- The RTS acknowledges that ALL DATA is property of Tarrant County and will work with all efforts to maintain access to the hosted data
  - Data Retention:
    - The solution design is based on standard technologies that fully support the export of data from BOTH the cloud platform and Database Platform. Tarrant County will maintain full authority to migrate the solution and/or data upon contract termination, expiration, or cancellation.
    - Data retention policies will be based on Tarrant County's requirements. The vendor team will work with Tarrant County to establish the data retention policies, schedule, and procedures at the start of the contract

- (iii) Software Escrow: Resolve Tech Solutions, LLC will setup, configure, and submit all code/configuration/files to a software escrow service of Tarrant County's choice. Tarrant County will be the beneficiary of the software escrow account.

**5. Implementation/Migration Approach.**

- (a) Our migration plan is to use a straight-forward "lift and shift" methodology.
  - (i) We will replicate the current set of testing/production servers from the Tarrant County data center in our cloud environment.
  - (ii) We will install the most up to date version of the required OS and technology stack elements on the replicated servers.
  - (iii) We will install the EpiTrax system components (EpiTrax, EMSA, MIRTH) on those servers and copy existing configurations.
  - (iv) We will work with Tarrant County Information Technology and Tarrant County Public Health to fork electronic data feeds to the cloud environment.
  - (v) We will work with Tarrant County IT to define how SSO using the County's AD service would work with our cloud environment.
  - (vi) We will develop a database migration process that uses AWS DMS and Postgres DB replication. We will turn on logical replication from the Tarrant County DB servers to the Resolve Tech Cloud servers.
  - (vii) We will develop and execute a test plan to ensure that all systems are working as required once the replication process is complete.
  - (viii) We will work with Tarrant County to define a full UAT test plan and test environment.
  - (ix) We will develop training and training presentations around the use of the new system and the planned transition.
  - (x) Once all testing and training is complete, we will work with Tarrant County to schedule the system shift. We will schedule this on a weekend to minimize the impact on Tarrant County staff access to the system.
- (b) Resolve Tech Solutions Managed Cloud team has been hosting US government workloads in the public cloud since 2010. We have a dedicated team of US based engineers that provide:
  - (i) Service management & Service governance personnel to support operational standards
  - (ii) 24/7 x 365 Monitoring and support of cloud/hosting infrastructure & application availability.
  - (iii) 24/7 x 365 Incident response, incident management, change management, problem management for the production and test/staging environments

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## **B. FEATURES AND FUNCTIONALITY PROJECTS**

### **1. Implementing New EpiTrax DSMS Capabilities.**

Migrate COVID-19 case investigation, contact follow-up, and data processing from Quickbase to EpiTrax.

- (a) Public Health is currently using Quickbase for COVID-19 case investigation, contact follow-up, and all related activities. Quickbase is a low-code database solution. Public Health intends to move COVID-19 case management into the DSMS, EpiTrax. Historical case and investigation data for COVID-19 must be migrated to EpiTrax to maintain a single disease database. Tasks include but are not limited to:
  - (i) Investigate Quickbase data model and data values
  - (ii) Investigate Quickbase forms and workflows with Public Health
  - (iii) Develop a migration plan
  - (iv) Develop the necessary forms in EpiTrax
  - (v) Test
  - (vi) Implement
- (b) This request is straight-forward and well described by the RFP. The work will be most efficiently completed by having separate staff working on three overlapping work threads.
  - (i) One thread will investigate the data structures and data ETL process. We will follow these steps:
    - 1) Obtain access to QuickBase data system with privileges required to export data as CSV. Generate CSV exports. Investigate and document data structures.
    - 2) Develop a data map document that indicates how the QuickBase columns map to EpiTrax data tables and columns
    - 3) From the data map, develop and test ETL in a test environment
  - (ii) A second thread will investigate the QuickBase forms and workflows:
    - 1) Obtain any training documents available for the QuickBase COVID forms Obtain access to QuickBase forms and work with Tarrant County form users (EPI staff) to annotate existing Tarrant County documents or create additional new documents as required to fully define entry forms and workflow requirements
    - 2) Review relevant state data collection requirements for COVID and update entry form and workflow requirements as needed.
    - 3) Build new custom forms in the EpiTrax test environment and apply the required workflows. (We assume these custom forms will be built under task b.0011 required below, but this work will need to be coordinated.)

(iii) A third work thread will involve development of testing protocols:

- 1) Specify unit testing for the data mapping and ETL task based on documented data structures and data content
- 2) Specify unit testing for the Custom form creation and workflows, based on the documented form requirements and workflows
- 3) After unit testing of data mapping and custom forms/workflows, develop a system test to migrate testing data and use with new custom forms and workflows as a combined system
- 4) Perform the system-tested migration on a UAT system
- 5) Work with Tarrant County EPI staff to develop a UAT test plan
- 6) Support Tarrant County EPI staff in UAT testing
- 7) Support Tarrant County development of any necessary training materials relevant to use of the migrated system
- 8) When UAT testing is complete, schedule cut-over with Tarrant County EPI staff, perform migration in production as scheduled

## **2. Develop a Temporary COVID-19 Data Exchange between EpiTrax and DSHS NEDSS.**

DSHS has developed COVID-19 reporting specification through a csv format. Public Health will need to set up a weekly export and exchange of COVID-19 closed case csv, based on DSHS reporting requirements.

(a) This request is also straight-forward and well described. The most efficient approach will be to complete the work as two separate task threads.

(i) One thread will involve building the ETL process to extract COVID data to the DSHS NEDSS specified CSV format.

- 1) Obtain any specification documentation available from the state for the CSV file format.
- 2) Review existing CSV file format structure of COVID data as currently exported from QuickBase
- 3) Work with Tarrant County EPI staff to resolve or understand any discrepancies found
- 4) Develop and test SQL query to generate CSV export

(ii) A second thread will involve development of testing protocols:

- 1) Specify necessary tests to demonstrate required data structures are being generated with the appropriate required data.
- 2) In particular, since these CSV files are already being produced by QuickBase, a straight-forward test will be to compare the output from EpiTrax to the output from QuickBase, using the same data.

- 3) Work with DSHS to meet any additional testing requirements they may have.
- 4) Perform the tests to demonstrate the system's functionality.
- 5) Since this is an automated process (no user interfaces or actions required), no UAT testing is required.

Once testing is complete, work with Tarrant County and DSHS to schedule cut-over.

At scheduled time, stop exports from QuickBase, turn on exports from EpiTrax, confirm with all parties that data transfers are working as expected.

### **3. Develop an Address Verification Process in EpiTrax.**

EpiTrax does not have the current capability to verify a patient address.

- (a) Public Health would like to develop the ability to securely batch geocode and correct addresses for electronic data processed in EMSA. Additionally, Public Health would like to develop a tool to support manual address corrections during manual case entry. Tasks include but are not limited to:
  - (i) Identify the GIS API
  - (ii) Modify the current DB trigger function to use the newly identified API
  - (iii) Modify the current DB trigger to store the formatted address selected as the best candidate for auto-correction.
  - (iv) Design and develop the tools necessary to support the workflow for manual address corrections
  - (v) Test
  - (vi) Implement
- (b) This request is not as straight-forward. There are two components to this request. One is to validate addresses coming in from electronic messages, the other is to validate addresses during manual entry. Confirming correct addresses is trivial and the County has a GIS server and API that can be used for this purpose. The API and GIS data system used should be hosted within the County data domain or at the EpiTrax hosting site, since patient addresses are PHI and should not be sent over the open internet to a 3rd party managed API (such as the USPS address validation API). With an appropriate GIS system and API, automatically correcting a misspelled street or municipality name (assuming the misspelling is fairly close) is straightforward. The difficult work will be developing workflows and an interface for reviewing incorrect addresses that cannot be autocorrected. Minimally, this interface will enable selecting an alternative address from available options or enabling deletion of the address from the system if no viable options are available. Because manual address entry occurs in EpiTrax, this work necessarily requires a modification to the EpiTrax interface, and because the concept of a "bad address" does not exist currently in EpiTrax, this will also require modifications to the system data model. By developing this as part of EpiTrax, the same data model modifications and interface for reviewing bad addresses will be accessible for both components. In one case, the interface will automatically open if a bad address is manually entered, in the other case the interface will be opened by someone reviewing the "bad address" list created from ELR and eCR

messages. Since the work will involve modification to the EpiTrax software and data model We will advise Tarrant County to collaborate with the EpiTrax Consortium and the Utah EpiTrax development group to design and develop this system. The alternative will be for Tarrant County to maintain their own EpiTrax software branch, which will require perpetual maintenance costs around regular merging of code-lines from the master Consortium version to the Tarrant County fork. Commonwealth Informatics will attend the routine EpiTrax Consortium calls to stay up to date with bug fixes and other updates. From this work outline, we can plan for a number of concurrent work threads.

(i) The first thread will focus on the development of workflow requirements and data model changes required to support the specified workflows.

- 1) We will work with Tarrant County EPI staff to capture their vision for the required interfaces, and how they will work.
- 2) Once we have Tarrant County's requirements, we will work with the Consortium to specify a design that will meet the Consortium's requirements for a flexible and configurable sub-system that will work with a variety of address validation APIs.
- 3) With requirements and a design, we will develop changes to the data model and the EpiTrax user interface.
- 4) There are existing database triggers in EpiTrax at Tarrant County for assigning a geocode to a valid address, and these will be updated as part of this task.

(ii) The second thread will be to develop a test plan for the new features.

- 1) Work with the Tarrant County EPI group to design a set of appropriate test cases and test data.
- 2) Perform testing on both manual entry and ELR or eCR automated address processing.
- 3) Since we are developing a new user interface, UAT testing will be required, and we will work with Tarrant County to develop a UAT test plan and support testing.
- 4) Any necessary training will be developed along with the UAT plan.

Once UAT testing and training is complete, the production version of the software will be updated with the new features and made available for use

#### **4. Integrate Data Visualization Software with EpiTrax.**

EpiTrax currently has an export feature to export patient cohorts based on the query capabilities provided by the Export interface.

- (a) The new task is to integrate the EpiTrax data into a dedicated single data visualization platform, such as PowerBI, Tableau or R Shiny. Tasks include but are not limited to:
  - (i) Specify the Reporting DB structure that is separate from the Transactional DB
  - (ii) Create the reporting DB and develop the DB mirroring approach

- (iii) Test
  - (iv) Implement
- (b) Because the task is not to develop and implement a specific BI visualization platform, but to develop a database infrastructure to support one, our approach will be simply to:
  - (i) Implement a nightly DB replication process from the transactional EpiTrax database to a reporting database. We will use a nightly approach in order to minimize resource requirements on the transactional database during its primary use period during normal working hours. We will use PostgreSQL for the reporting database -- the same open-source DB infrastructure as for EpiTrax.
  - (ii) We will work with Tarrant County to specify a separate schema of materialized reporting views, built from the nightly replication of the transactional EpiTrax database.
  - (iii) We will work with Tarrant County staff to incorporate a simple use case with Power BI and the Postgres ODBC driver. This will not require Tarrant County to stay with Power BI but will simply demonstrate the functionality of the Reporting Database.
  - (iv) Once a BI tool is selected by the County, CI will work with the EPI group to define and implement additional materialized views to meet reporting needs

**5. Implement COVID-19 Reinfection Rule in the Migrated COVID-19 EpiTrax.**

The EMSA system allows for extensive control over re-infection rules.

- (a) Public Health would like to configure the COVID-19 reinfection logic into EMSA to auto assign reinfection status to cases. Tasks include but are not limited to:
  - (i) Specify the reinfection rules for COVID-19 in the EMSA
  - (ii) Develop the rules in EMSA and document the process
  - (iii) Test
  - (iv) Implement
- (b) This is a somewhat trivial configuration task in EMSA, once the reinfection rules are specified. Tasks will be:
  - (i) Work with Tarrant County to document the reinfection rules
  - (ii) Develop a test plan and test data to demonstrate the rule is working correctly
  - (iii) Test the changes in the test environment
  - (iv) Implement in production (There are no user features to test, so no UAT required)

**6. Update the MIRTH and EMSA Configured Functionality to Perform Additional Functions Using CSV and eCR Data.**

Public Health would like the system to be able to ingest CSV files as a new type of data source for ELR or eCR.

- (a) These files could either represent new cases, or updates for existing cases. Additionally, Public Health would like the current processing of XML eCR messages to be able to read and ingest more data segments than is currently done. Tasks include but are not limited to:
  - (i) Identify the set of CSV file structures that will be processed
  - (ii) Design MIRTH channels to automatically restructure the data as hl7 or eCR XML
  - (iii) Investigate and design the ingestion of additional case message elements and load them appropriately to EpiTrax for eCR XML.
  - (iv) Develop the new channels and EMSA functionality
  - (v) Test
  - (vi) Implement
- (b) Tarrant County has begun receiving electronic lab results and disease case reports in CSV format. EpiTrax and its lab/case report processing sub-system EMSA do not have the capability to automatically process and import CSV data files. To manage this data flow, the County will require new MIRTH processing channels to consume CSV files, validate their contents, convert the data to ELR or eCR data structures consumable by EMSA, and send these converted files on to the EMSA system. As with many of these requests, development and testing will be managed as separate work threads.
  - (i) For development:
    - 1) Review the existing set of CSV file formats and their column structure.
    - 2) For each file, develop a map to convert the CSV columns to the appropriate HL7 message element
    - 3) Design two extensible MIRTH Channels, one for ELR data, the other for eCR data -- each channel will convert a given CSV file to an HL7 format ingestible by EMSA.
    - 4) We will enhance the existing XSLT documents currently in use by the EMSA application that parse and manage the extraction and transformation of data from eCRs into EpiTrax cases. We will extend the system to process and manage additional eCR data fields that correspond to the core EpiTrax demographic, clinical and laboratory fields. Any disease-specific eCR content that cannot be mapped to the core EpiTrax fields will be considered out-of-scope for this task. The corresponding HTML eICR document will be attached to the document section of each record.

- 5) We will enhance the existing XSLT documents currently in use by the EMSA application that parse and manage the extraction and transformation of data from eCRs into EpiTrax cases. We will extend the system to process and manage additional eCR data fields that correspond to the core EpiTrax demographic, clinical and laboratory fields. Any disease-specific eCR content that cannot be mapped to core EpiTrax fields will be considered out-of-scope for this task.
- 6) Copy and extend the new Channels as needed to consume new incoming CSV files.

(ii) For testing:

- 1) Work with the Tarrant County EPI group to identify a set of representative ELRs and eCRs in CSV format.
- 2) Identify a set of test eCRs in standard XML format for testing enhanced ETL of eCR content.
- 3) Identify a set of test eCRs in standard XML format for testing enhanced ETL of eCR content.
- 4) Develop a test plan to demonstrate the sample CSVs and eCRs are converted and ingested correctly, and the corresponding data is loaded automatically to EpiTrax.
- 5) Test in the test environment.
- 6) Implement in production (There are no user features to test, so no UAT required)

**7. Expand the PHDCexporter to Electronically Send Case Data for One Hundred Thirty-Two (132) Diseases to the Department of State Health Services.**

Public Health has a java-based software called PHDCexporter which integrates with EpiTrax to automatically collect case data from the DSMS database and generate XML files for reporting disease cases to the Department of State Health Services (DSHS). These XML messages are generated to conform to the Center for Disease Control's (CDC) Public Health Document Container (PHDC) XML specification, which in turn is based on the HL7 v3 Clinical Document Architecture (CDA) standard.

- (a) The software is being piloted for Pertussis but needs to be expanded to 132 additional diseases. Many diseases will have the same messaging requirements so they can be grouped into 84 total "efforts". These are current estimates provided by DSHS and may change as the project progresses. Tasks include but are not limited to:
  - (i) For each disease group, DSHS reporting requirements differ, and disease specific information is collected in the DSMS database. A new version of the XML template must be created for each disease so that its contents will conform to the reporting structure for that disease.
  - (ii) The Java code will require modifications to handle data and reporting requirements that were not present for Pertussis.

- (b) The PHDCexporter uses an XML template document to specify the PHDC data contents and structure. It was developed around Pertussis reporting. The work will involve modifying the template document to identify the specific data field from standard and custom forms required for reporting, as well as modifying the Java code as needed to support the additional XML structures not previously required for Pertussis reporting. Additionally, diseases fall into disease groups with similar reporting requirements. We anticipate that the first disease in any disease group will require considerably more effort than subsequent diseases in the same group.
- (c) Because the work will involve transmitting case data files to DSHS, and because the DSHS testing approach is meeting-intensive, we assume that Tarrant County will assign a project manager to primarily work with DSHS staff to coordinate the effort and to minimize time spent by contractor staff in meetings with DSHS. That said, please see Tab-4 item C for a discussion of the significant risks associated with this work. The tasks for each disease are the same:
  - (i) Obtain and review the disease specific PHDC data requirements from DSHS.
  - (ii) Work with DSHS and Tarrant County EPI staff to develop a map of the EpiTrax data (including custom form data) to the PHDC message fields.
  - (iii) Copy, Modify and Extend XML template document for new disease requirements
  - (iv) Create SQL extract code for the new template to conform to the map developed above.
  - (v) Modify the Java application as required to meet PHDC reporting requirements for new disease.
  - (vi) Validate PHDC data structure with DSHS. (In this case, we follow the DSHS testing requirements, so no separate test planning is required on our side.)
- (d) The volume of this task is enormous. We anticipate that for the first ten or so diseases, each will take four days of effort to complete, using highly expert staff. For the second set of twenty diseases, we assume there will be sufficient shortcuts to enable completion in three days each, using expert staff. The remaining one hundred and two diseases will take an average of two days each to complete, using a combination of skilled and expert staff. Please keep in mind this comes to just over three-hundred person-days of effort. We would advise Tarrant County not to undertake implementation of the PHDCexporter for all notifiable disease conditions. For extremely rare diseases, it would be more cost-effective to use double-entry for the rare occurrence of a disease case: once into EpiTrax, a second time into DSHS NBS.

## **8. Develop a Duplicate Record Flag in EpiTrax.**

Cases in EpiTrax can be generated electronically through ELR and eCRs or through manual entry by case investigators and epidemiologists. Automatic case generation triggered by electronic messages are de-duplicated in EMSA. A duplication flag needs to be developed in EpiTrax when a manual entry matches a previous case based on predetermined criteria.

We are aware that the duplication issue is more problematic than this. In fact, recent investigations into duplicate ELR records sent from DSHS indicate that if EMSA receives multiple versions of the same ELR or eCR at once, its multi-threaded approach to processing incoming data causes it to create duplicate cases, and in some cases duplicate patients. In essence, EMSA can't determine that a record represents

a duplicate of another record if that other record has not been saved yet to EpiTrax. If the two records are being handled simultaneously in parallel acquisition processes, both are saved.

(a) So, there are really two aspects to this request.

- (i) EMSA can't handle being passed simultaneous duplicate messages while efficiently processing incoming messages in parallel. This means the duplicate ELRs and eCRs must be handled in MIRTH or eMPI. The first set of tasks will be to update the MIRTH channels so that incoming data streams are de-duplicated for any given set of files being processed. This will require the creation of two new DB write and read channels, and the creation of a new MIRTH data processing schema with underlying automated SQL processing that will identify, and mark duplicate incoming data rows, and only pass along one version of the duplicate message.
- (ii) Once the duplication source coming from MIRTH and EMSA is handled, the second set of tasks will be to develop SQL code to identify duplicate patients and duplicate cases. The request suggests that the EPI group wants this process to alert an EpiTrax user that they are creating a duplicate case as they are creating it. This implies the creation of additional database triggers and a new EpiTrax interface feature. However, EpiTrax already has a number of features to alert users to creating new patients when another patient with a similar name already exists, and to alert users to existing cases of a particular disease when a patient is selected, and a new case is being manually created. Adding additional triggers that will support an additional alert interface has the potential to slow down an already slow user interface, adding frustration to the user workload. While we recognize the need for a SQL-based method to identify duplicate cases and patients, we believe that we first need to better understand the situations where this duplication occurs manually and understand how the existing features fail to alert the users to the existing patients and existing cases. This investigation may indicate the need to make updates to existing EpiTrax sub-systems, or it may indicate the need to enhance user training.

(b) Tasks for this effort will include:

- (i) Identify any existing duplicate patients or cases in EpiTrax that are the result of this EMSA bug.
- (ii) Identify the source messages as processed in EMSA and MIRTH. Use these as test cases.
- (iii) Develop the new MIRTH channels to deduplicate incoming ELR and eCR messages.
- (iv) Test the new channels against the identified duplicates and demonstrate that these will no longer be passed to EMSA.
- (v) Identify any existing duplicate patients or cases in EpiTrax that are the result of manual duplicate entry.
- (vi) Determine how the users involved were not alerted to the duplication of patients or of disease cases.
- (vii) Where the investigation indicates the need for updates to the EpiTrax system that identified duplicate patients and cases, work with the Consortium to design and develop these updates

- (viii) Where the investigation indicates the need for additional user training to minimize the creation of duplicates, work with Tarrant County EPI staff to create that training
- (ix) Develop a set of nightly running SQL scripts that will identify and report to Tarrant County EPI management when duplicate Cases and Patients have been created

**9. Develop a Bi-Directional Interface with a Mass Messages System.**

Develop or enhance the EpiTrax and/or EMSA APIs for bi-directional interface with a mass messaging system to send scheduled and on-demand communication to cases or contacts and to receive and document responses from the mass communication system. The message communication methods may include text, phone, and email. The generic message to send will be provided by Tarrant County Public Health and will not include personal health information or personal health information.

- (a) Tasks for the effort will include:
  - (i) Work with Tarrant County EPI and IT data security and privacy staff to identify the set of disease case data elements that they would like to be able to use in a mass messaging system
  - (ii) Work with our own data privacy specialists to determine how carefully the risk of data loss must be managed.
  - (iii) Develop workflows and requirements from these investigations.
  - (iv) Investigate existing EpiTrax API endpoints to determine which can be extended and what new endpoint will need to be developed.
  - (v) Design a contact data verification sub-system for patients who will use the system.
  - (vi) Design EpiTrax data model changes required to ensure patient contact data inviolability.
  - (vii) Develop the API and data model changes
- (b) Test development and implementation will be done by an overlapping team in parallel with the above effort.
  - (i) Identify the use cases that need to be tested. In particular, identify cases where a user with bad intent is sent an invitation to falsely confirm identity and contact information, and create tests that will quantify the risk of a data breach along those lines.
  - (ii) Develop a test plan to use those test cases
  - (iii) Test the system
  - (iv) Work with Tarrant County to develop a UAT test plan and implementation plan.
  - (v) Support the County while they perform that testing
  - (vi) Once UAT is complete, roll out the system in production according to the implementation plan

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**10. Develop an Interface with a Public Survey Tool.**

Public Health may use a survey tool to collect investigation or other related information for disease management. Public Health would like to develop and interface between the survey tool and EMSA to create or update records based on information collected in the survey.

The same issues as discussed above for item 0009 are at play here. We consider an interface with a survey system to be an additional use case for a bi-directional mass communication system. We will roll this task into 0009.

**11. Implement Thirty-One (31) Additional Diseases for Case Management in EpiTrax.**

- (a) Tasks include but are not limited to:
  - (i) Expand electronic lab and case report ingestion for each disease
  - (ii) Set up reporting forms in EpiTrax for each disease
- (b) Commonwealth Informatics has implemented several custom disease form sets for specific disease conditions, both with the older TriSano and more recently with EpiTrax and Monkey Pox. The tasks are straightforward.
  - (i) Work with Tarrant County EPI staff to develop a standard UAT protocol that includes creation of and editing of several test cases.
  - (ii) For each disease:
    - 1) Obtain the PDF version of the data forms as used for manual data collection from DSHS.
    - 2) With Tarrant County EPI staff, review the form data as it will be entered via the DSHS NBS. Compare and note any deviations from the PDF form, and if these are not straight-forward, (e.g., Yes-No vs Yes-No-Not Done), contact DSHS for resolution.
    - 3) Create the forms necessary to collect the required data in the EpiTrax UAT system.
    - 4) With Tarrant County EPI staff, review the forms in UAT.
    - 5) Perform the standard UAT testing to ensure the form is working correctly.
    - 6) Export the tested form from UAT, import to production, release for production use.

**12. Migrate STD/HIV and TB Case Historical Data from the DSHS Disease Surveillance System to EpiTrax.**

STD/HIV and TB case management is currently performed in the Texas Department of State Health Services Disease Surveillance System. To consolidate disease management and surveillance into one system, Public Health will need to migrate historical data into EpiTrax.

- (a) Tasks include but are not limited to:
  - (i) Investigate data model and data values
  - (ii) Investigate forms and workflows with Public Health
  - (iii) Develop a migration plan
  - (iv) Develop the necessary forms in EpiTrax
  - (v) Develop the SQL load and transform scripts
  - (vi) Test
  - (vii) Implement
- (b) This task will be very similar to the task 0001 outlined above, with the exception that it will require collaboration with DSHS to define how the data will be extracted and the structure of the data, and that with multiple disease conditions kept in the DSHS system, we assume at least that the DSHS data export will need to be subset by disease condition, with separate data maps developed for each disease. Additionally, before this data can be imported into EpiTrax, the set of custom forms required for entry and collection of STD/HIV and TB cases will need to be created, to have defined EpiTrax data target structures to import the data into. (We assume the custom form work will be completed under task b.0011, but the work will have to be sequenced accordingly.)
- (c) Tasks will include:
  - (i) Obtain an export from the DSHS system. Investigate and document data structures.
  - (ii) Develop a data map document that indicates how the DSHS data structure maps to EpiTrax data tables and columns. This will likely require multiple data maps, one for each disease condition. In this way that task becomes more complex
  - (iii) From the data maps, develop and test ETL in a test environment
- (d) A second thread will involve investigation and documentation of workflows using the DSHS application, and determining how those workflows will be replicated in EpiTrax
  - (i) Obtain any training documents available for the DSHS system/
  - (ii) Work with Tarrant County DSHS app users to annotate existing documents or create additional new documents as required to fully define entry forms and workflow requirements
  - (iii) Review any relevant state data collection requirements and update entry form and workflow requirements as needed.
  - (iv) Build new custom forms in the EpiTrax test environment and apply the required workflows. (We assume these custom forms will be built under task b.0011 required below, but this work will need to be coordinated.)
- (e) A third work thread will involve development of testing protocols:

- (i) Specify unit testing for the data mapping and ETL task based on documented data structures and data content
- (ii) Specify unit testing for the Custom form creation and workflows, based on the documented form requirements and workflows.
- (iii) After unit testing of data mapping and custom forms/workflows, develop a system test to migrate testing data and use with new custom forms and workflows as a combined system.
- (iv) Perform the system-tested migration on a UAT system.
- (v) Work with Tarrant County STD/HIV and TB staff to develop a UAT test plan.
- (vi) Support Tarrant County staff in UAT testing.
- (vii) Support Tarrant County development of any necessary training materials relevant to use of the migrated system
- (viii) When UAT testing is complete, schedule cut-over with Tarrant County staff, perform migration in production as scheduled.

**13. Develop an Interface for Electronic Data Exchange between EpiTrax and the DSHS STD/HIV and TB System.**

As we move STD/HIV and TB case management into EpiTrax, an interface needs to be developed to send cases from EpiTrax to the DSHS surveillance system.

- (a) Tasks include but are not limited to:
  - (i) Investigate the document type and mapping with the DSHS surveillance team
  - (ii) Develop an interface to generate the appropriate document for data exchange
  - (iii) Test
  - (iv) Implement
- (b) This requirement will involve tasks very similar to b.0002. The most efficient approach will be to complete the work as two separate task threads. The primary difference is that the transfer structure and format have not been specific by the DSHS group responsible, and no working version of the transfer is available for comparison test (as will be the case with the COVID export from QuickBase). We assume that this specification is required before work on this requirement can begin. (See also discussion of risk below in section 4.c.)
  - (i) One thread will involve building the ETL process to extract COVID data to the DSHS specified structure and file format.
    - 1) Obtain any specification documentation available from the state for the transfer file format.
    - 2) Work with Tarrant County STD/HIV and TB staff to resolve or understand any discrepancies found between the transfer specification and the available data.

- 3) Develop a mapping document that specifies how EpiTrax data structures will map to the DSHS transfer format.
  - 4) Develop and test SQL queries to generate the transfer files.
- (ii) A second thread will involve development of testing protocols:
- 1) Specify necessary tests to demonstrate required data structures are being generated with the appropriate required data.
  - 2) Work with DSHS to meet any additional testing requirements they may have.
  - 3) Perform the tests to demonstrate the system's functionality.
  - 4) Since this is an automated process (no user interfaces or actions required), no UAT testing is required.
  - 5) Implement in production (Once testing is complete, work with Tarrant County and DSHS to begin automated transfers.)
- (c) Develop User Guides and Trainings.
- (i) Public Health users will need detailed user guides and training for each individual workflow. User guides and trainings include but are not limited to:
- 1) EMSA data processing and management
  - 2) Disease management and surveillance
  - 3) Reporting
- (ii) This is a straightforward documentation request, and the tasks are well understood:
- 1) Create outlines for all work tasks and processes, including:
    - Managing intake channels in MIRTH, including information about network configuration and contacts, data source providers, and contacts, data flows and the regular administrative tasks around the process.
    - Managing the MIRTH processing channels.
    - Managing the MIRTH output channels
    - Managing the EMSA dictionaries queue, with emphasis on the distinction between administrative tasks versus Public Health Informatics support staff tasks.
    - The EpiTrax workflows for each of the different disease groups.
    - Managing the automated data processing and data reporting systems around EpiTrax.

- 2) From each outline, develop a set of draft documents. Provide these to Tarrant County staff for their review and feedback. Incorporate the feedback into modified versions of the draft documents. We assume there will be on average two review-and-update cycles. Release the completed documents.
  - 3) From the outline for the EpiTrax workflows, develop a set of slide deck presentation for training. Provide these to Tarrant County staff for their review and feedback. Incorporate the feedback into modified versions of the draft slides. We assume there will be on average two review and update cycles for the slides. Release the completed slides.
  - 4) Schedule an in-person training session with Tarrant County. Present the slides and make a series of recordings for each set. These recordings will be made available for self-paced training for new staff.
- (d) Ongoing maintenance of the Public Health DSMS system including EpiTrax, EMSA, MIRTH and ESP starting May 23, 2023 (existing contract expires on May 22, 2023). The following tasks will be performed on a regular basis for ongoing application support and is annual:
- (i) Apply software updates to operating system and application software stack as required.
  - (ii) Vendor will attend consortium virtual meetings and any in person meetings.
  - (iii) Monitor DB performance and disk usage. Identify and resolve emergency issues as required. Assess potential performance tuning measures in test, then apply in production.
  - (iv) Monitor all system logs, including access logs. Resolve system issues as they are detected.
  - (v) Provide primary support for user issues.
  - (vi) Provide weekly data mapping assistance with EMSA as new unmapped labs may be provided.
  - (vii) Monitor incoming and outgoing MIRTH channels for data feed issues, and data reporting issues. Fix issues that may arise. (This does not include creation of new MIRTH channels to support new electronic data sources, but if new sources can be added to existing channels, this will be supported under maintenance.)
  - (viii) Create up to four (4) new reporting views per year in the EpiTrax integrated business intelligence reporting system.
  - (ix) Trouble-shoot and resolve any system issues as they arise.
  - (x) Patch software bugs as expeditiously as possible and provide workarounds until patches are tested and then installed in production.
  - (xi) Modify existing reporting forms for up to 4 disease conditions per year.

- (xii) Create reporting forms for up to 2 new disease conditions per year.

### C. PROJECT MANAGEMENT

For the purpose of creating a project schedule, we will assume a project start date of March 14, 2023. Our anticipated project schedule would have us complete work (except for the PHDCexport configuration) by the end of July 2023.

We plan to complete the migration to the cloud as the first task, then use three collaborative teams working in parallel to complete the remaining required tasks. Once migration is complete, and other than the PHDCexporter task set where the schedule is driven by DSHS, and the specified May start date for system maintenance, the schedule of priority for the remaining required tasks is up to Tarrant County. We propose the order stated in the Pricing Table but will be flexible depending on the needs of the County.

- (a) The Program / Project Management Plan will be used as guidance to resolve issues, control cost and schedule, and as a roadmap to planning. The project plan is a living, working document which the project team will update as necessary. List any known risks that could impact the project schedule and/or your success during implementation as well as a recommended risk mitigation strategy.
- (b) The primary risks to the project will be for work that must be coordinated with organizations outside the control of the County or Resolve Tech/Commonwealth. This will include any work that requires substantial interaction and effort from DSHS or the EpiTrax Consortium. Of these two, our primary concern is with DSHS.
- (c) Of greatest concern is task 007 "Expand the PHDCexporter to electronically send case data for one hundred thirty-two (132) diseases to the Department of State Health Services". This work seems particularly problematic because the just-completed PHDC work with DSHS for the single disease pertussis (under separate contract with Commonwealth Informatics) took eight months to complete. Work on PHDC document creation for any specific disease cannot begin until the PHDC specification for that disease has been provided by DSHS, and work cannot be completed until DSHS completes testing of some amount of test PHDC transfers. It is difficult to conceive of how DSHS will be able to support the development of 132 additional PHDC disease reports without significant changes to their testing and development process. We have proposed milestone billing at the individual disease level so that the County pays for the work as it is completed. We are excluding this work from our project schedule and GANTT chart.
- (d) Our next greatest concern is for tasks 0012 "Migrate STD/HIV and TB case historical data from the DSHS Disease Surveillance System to EpiTrax." and 0013 "Develop an interface for electronic data exchange between EpiTrax and the DSHS STD/HIV and TB system". Task 0013 will require fairly extensive collaboration with DSHS, and the completion of task 0012 without completion of task 0013 will mean that the STD/HIV and TB teams will either be performing double entry into EpiTrax and the DSHS data system, or they won't be using EpiTrax until DSHS is able to support the completion of test 0013.
- (e) Project Management Software: MS Project

### D. TERM

This Agreement shall commence on the date of award and will continue for a period of 1 year thereafter, unless terminated earlier in accordance with this Agreement ("Initial Term"). Thereafter, the County will have the option to renew for four (4) additional twelve (12) months periods ("Renewal Terms"). The Initial Term and Renewal Terms shall collectively be referred to herein as the "Term".

## E. FEE SCHEDULE

Monthly Billing will be based on milestones completed based on Pricing Table inserted below. Resolve Tech will not invoice Tarrant County for a milestone without first receiving written approval that the milestone is complete except AWS GovCloud hosting for Production and Testing Environments, Maintenance and Support, and Project Manager, which will be invoiced monthly. Software Escrow will be invoiced annually.

**PRICING TABLE  
PROJECT DELIVERABLES**

		Start	Finish	Amount
Year 1 Cost	<b>PROFESSIONAL SERVICES</b>			
	a.001 Transition EpiTrax from on-premises to an externally hosted Government Cloud environment.	3/20/2323	4/24/2023	\$115,775.00
	Year 1 Software Escrow confirmation provided			\$2,700.00
	b.001 Migrate COVID-19 case management and data processing from Quickbase to EpiTrax.	4/24/2023	5/15/2023	\$43,705.00
	b.002 Develop a temporary COVID-19 data exchange between EpiTrax and DSHS NEDSS	5/15/2023	5/29/2023	\$9,652.50
	b.003 Develop an Address Verification process in EpiTrax	4/24/2023	5/22/2023	\$60,200.00
	b.004 Integrate data visualization software with EpiTrax	5/29/2023	6/19/2023	\$21,397.50
	b.005 Implement COVID-19 reinfection rule in the migrated COVID-19 EpiTrax	6/19/2023	6/26/2023	\$3,838.75
	b.006 Update the MIRTH and EMSA configured functionality to perform additional functions using CSV and eCR data	5/22/2023	6/19/2023	\$57,208.75
	b.008 Develop a duplicate record flag in EpiTrax	6/26/2023	7/17/2023	\$26,871.25
	b.009 Develop a bi-directional interface with a mass messages system	6/19/2023	7/17/2023	\$51,627.50
	b.0010. Develop an interface with a public survey tool	6/19/2023	7/17/2023	\$25,000.00
	b.0012 Migrate STD/HIV and TB case historical data from the DSHS Disease Surveillance System to EpiTrax	7/17/2023	8/28/2023	\$68,885.00
	b.0013 Develop an interface for electronic data exchange between EpiTrax and the DSHS STD/HIV and TB system	8/28/2023	9/18/2023	\$28,758.75

		Start	Finish	Amount
	b.0014 Develop User Guides and other Training Materials	9/18/2023	10/2/2023	\$25,148.75
	b.0011 Implement 31 new disease conditions in EpiTrax	7/17/2023	11/13/2023	
	First 10 conditions	7/17/2023	8/25/2023	\$54,002.50
	Second 10 conditions		10/4/2023	\$54,002.50
	Third 11 conditions		11/13/2023	\$54,002.50
	<b>PROFESSIONAL SERVICES COST</b>			<b>\$702,776.25</b>

**Expand PHDCexporter**Expand the PHDCexporter to electronically send case data for one hundred thirty-two (132) diseases to the Department of State Health Services

		Amount
<b>Year 1 Cost (continued)</b>	<b>b.007 PHDC exporter extension</b>	
	Disease 1	\$8,390.81
	Disease 2	\$8,390.81
	Disease 3	\$8,390.81
	Disease 4	\$8,390.81
	Disease 5	\$8,390.81
	Disease 6	\$8,390.81
	Disease 7	\$8,390.81
	Disease 8	\$8,390.81
	Disease 9	\$8,390.81
	Disease 10	\$8,390.81
	Disease 11	\$5,812.50
	Disease 12	\$5,812.50
	Disease 13	\$5,812.50
	Disease 14	\$5,812.50
	Disease 15	\$5,812.50
	Disease 16	\$5,812.50
	Disease 17	\$5,812.50
	Disease 18	\$5,812.50
	Disease 19	\$5,812.50
	Disease 20	\$5,812.50
	Disease 21	\$5,812.50
	Disease 22	\$5,812.50
	Disease 23	\$5,812.50
	Disease 24	\$5,812.50
	Disease 25	\$5,812.50
	Disease 26	\$5,812.50
	Disease 27	\$5,812.50
	Disease 28	\$5,812.50
	Disease 29	\$5,812.50
	Disease 30	\$5,812.50
	Disease 31	\$2,962.10
	Disease 32	\$2,962.10
	Disease 33	\$2,962.10
	Disease 34	\$2,962.10
	Disease 35	\$2,962.10
	Disease 36	\$2,962.10
	Disease 37	\$2,962.10
	Disease 38	\$2,962.10
	Disease 39	\$2,962.10

		<b>Amount</b>
	Disease 40	\$2,962.10
	Disease 41	\$2,962.10
	Disease 42	\$2,962.10
	Disease 43	\$2,962.10
	Disease 44	\$2,962.10
	Disease 45	\$2,962.10
	Disease 46	\$2,962.10
	Disease 47	\$2,962.10
	Disease 48	\$2,962.10
	Disease 49	\$2,962.10
	Disease 50	\$2,962.10
	Disease 51	\$2,962.10
	Disease 52	\$2,962.10
	Disease 53	\$2,962.10
	Disease 54	\$2,962.10
	Disease 55	\$2,962.10
	Disease 56	\$2,962.10
	Disease 57	\$2,962.10
	Disease 58	\$2,962.10
	Disease 59	\$2,962.10
	Disease 60	\$2,962.10
	Disease 61	\$2,962.10
	Disease 62	\$2,962.10
	Disease 63	\$2,962.10
	Disease 64	\$2,962.10
	Disease 65	\$2,962.10
	Disease 66	\$2,962.10
	Disease 67	\$2,962.10
	Disease 68	\$2,962.10
	Disease 69	\$2,962.10
	Disease 70	\$2,962.10
	Disease 71	\$2,962.10
	Disease 72	\$2,962.10
	Disease 73	\$2,962.10
	Disease 74	\$2,962.10
	Disease 75	\$2,962.10
	Disease 76	\$2,962.10
	Disease 77	\$2,962.10
	Disease 78	\$2,962.10
	Disease 79	\$2,962.10
	Disease 80	\$2,962.10
	Disease 81	\$2,962.10
	Disease 82	\$2,962.10
	Disease 83	\$2,962.10
	Disease 84	\$2,962.10
	Disease 85	\$2,962.10
	Disease 86	\$2,962.10
	Disease 87	\$2,962.10
	Disease 88	\$2,962.10
	Disease 89	\$2,962.10
	Disease 90	\$2,962.10
	Disease 91	\$2,962.10

	Amount
Disease 92	\$2,962.10
Disease 93	\$2,962.10
Disease 94	\$2,962.10
Disease 95	\$2,962.10
Disease 96	\$2,962.10
Disease 97	\$2,962.10
Disease 98	\$2,962.10
Disease 99	\$2,962.10
Disease 100	\$2,962.10
Disease 101	\$2,962.10
Disease 102	\$2,962.10
Disease 103	\$2,962.10
Disease 104	\$2,962.10
Disease 105	\$2,962.10
Disease 106	\$2,962.10
Disease 107	\$2,962.10
Disease 108	\$2,962.10
Disease 109	\$2,962.10
Disease 110	\$2,962.10
Disease 111	\$2,962.10
Disease 112	\$2,962.10
Disease 113	\$2,962.10
Disease 114	\$2,962.10
Disease 115	\$2,962.10
Disease 116	\$2,962.10
Disease 117	\$2,962.10
Disease 118	\$2,962.10
Disease 119	\$2,962.10
Disease 120	\$2,962.10
Disease 121	\$2,962.10
Disease 122	\$2,962.10
Disease 123	\$2,962.10
Disease 124	\$2,962.10
Disease 125	\$2,962.10
Disease 126	\$2,962.10
Disease 127	\$2,962.10
Disease 128	\$2,962.10
Disease 129	\$2,962.10
Disease 130	\$2,962.10
Disease 131	\$2,962.10
Disease 132	\$2,962.10
<b>DISEASES TRACKED COST</b>	<b>\$502,292.30</b>
Even though all Diseases are listed in the Year 1 Cost section, not all are expected to be completed within the initial 12 months and Tarrant County will only be invoiced for each after confirmation it has been implemented.	

#### PROJECT MANAGEMENT

This resource is responsible for overseeing the coordination, execution, and delivery of the Epitrax Cloud Hosting, Support, and Professional services contract. This includes managing coordinating Tarrant County, Commonwealth Informatics, and RTS personnel, managing and updating project plans and timelines, monitoring budgets, and ensuring that the project is completed within scope and on time. Additionally, the Project Manager would be responsible for coordinating with other

health and government agencies or stakeholders to ensure that the project deliverables align with overall government objectives, and for reporting progress and any issues to Tarrant County senior management. This service will only be used for the period that Tarrant County deems it necessary. Tarrant County can cancel Project Management at any time.

		Start	Finish	Amount
Year 1 Cost (continued)	Project Management/ RTS Project Manager (As Needed)			
	Month 1	3/20/2023	4/20/2023	\$16,000.00
	Month 2	4/21/2023	5/20/2023	\$16,000.00
	Month 3	5/21/2023	6/20/2023	\$16,000.00
	Month 4	6/21/2023	7/20/2023	\$16,000.00
	Month 5	7/21/2023	8/20/2023	\$16,000.00
	Month 6	8/21/2023	9/20/2023	\$16,000.00
	Month 7	9/21/2023	10/20/2023	\$16,000.00
	Month 8	10/21/2023	11/20/2023	\$16,000.00
	Month 9	11/21/2023	12/20/2023	\$16,000.00
	Month 10	12/21/2023	1/20/2024	\$16,000.00
	Month 11	1/21/2024	2/20/2024	\$16,000.00
	Month 12	3/21/2024	4/20/2024	\$16,000.00
	PROJECT MANAGEMENT COST			\$192,000.00

#### AWS GovCloud HOSTING (ESTIMATED COST\*)

\*AWS GovCloud Cost in an estimated cost. Vendor will bill the AWS GovCloud account as a direct pass through to Tarrant County included with all associated work. No fees will be added. Vendor's AWS GovCloud invoice for this contract must be sent to Tarrant County with payment request.

		Start	Finish	Amount
Year 1 Cost (continued)	AWS GovCloud Hosting for Prod & Testing Environments*			
	Month 1	3/20/2023	4/23/2023	\$7,148.00
	Month 2	4/24/2023	5/23/2023	\$7,148.00
	Month 3	5/24/2023	6/23/2023	\$7,148.00
	Month 4	6/24/2023	7/23/2023	\$7,148.00
	Month 5	7/24/2023	8/23/2023	\$7,148.00
	Month 6	8/24/2023	9/23/2023	\$7,148.00
	Month 7	9/24/2023	10/23/2023	\$7,148.00
	Month 8	10/24/2023	11/23/2023	\$7,148.00
	Month 9	11/24/2023	12/23/2023	\$7,148.00
	Month 10	12/24/2023	1/23/2024	\$7,148.00
	Month 11	1/24/2024	2/23/2024	\$7,148.00
	Month 12	2/24/2024	3/23/2024	\$7,148.00
	AWS GovCloud HOSTING COST*			\$85,776.00

#### MAINTENANCE AND SUPPORT

Infrastructure and Application Management of the Public Health DSMS system including EpiTrax, EMSA, MIRTH and ESP

		Start	Finish	Amount
Year 1 Cost (continued)	b.0015 Maintenance			
	Month 1	5/23/2023	6/22/2023	\$16,473.18
	Month 2	6/23/2023	7/22/2023	\$16,473.18
	Month 3	7/23/2023	8/22/2023	\$16,473.18
	Month 4	8/23/2023	9/22/2023	\$16,473.18

		Start	Finish	Amount
	Month 5	9/23/2023	10/22/2023	\$16,473.18
	Month 6	10/23/2023	11/22/2023	\$16,473.18
	Month 7	11/23/2023	12/22/2023	\$16,473.18
	Month 8	12/23/2023	1/22/2024	\$16,473.18
	Month 9	1/23/2024	2/22/2024	\$16,473.18
	Month 10	2/23/2024	3/22/2024	\$16,473.18
	Month 11	3/23/2024	4/22/2024	\$16,473.18
	Month 12	4/23/2024	5/22/2024	\$16,473.18
	<b>MAINTENANCE AND SUPPORT COST</b>			<b>\$197,678.16</b>
	<b>YEAR 1 COST</b>			<b>\$1,680,522.71</b>

<b>Year 2 Cost</b>	Year 2 Software Escrow confirmation provided			\$2,778.30
	Year 2 Maintenance and Support Post Implementation			
	Term: May 23, 2024 - May 22, 2025			
	<b>AWS GovCloud Cost*</b>	<b>Infrastructure Management</b>	<b>Application Management</b>	
	\$87,528.74	\$33,245.74	\$168,479.55	\$289,254.03
	<b>YEAR 2 COST</b>			<b>\$292,032.33</b>

<b>Year 3 Cost</b>	Year 3 Software Escrow confirmation provided			\$2,858.87
	Year 3 Maintenance and Support Post Implementation			
	Term: May 23, 2025 - May 22, 2026			
	<b>AWS GovCloud Cost*</b>	<b>Infrastructure Management</b>	<b>Application Management</b>	
	\$89,336.25	\$33,932.28	\$171,958.72	\$295,227.25
	<b>YEAR 3 COST</b>			<b>\$298,086.12</b>

<b>Year 4 Cost</b>	Year 4 Software Escrow confirmation provided			\$2,941.78
	Year 4 Maintenance and Support Post Implementation			
	Term: May 23, 2026 - May 22, 2027			
	<b>AWS GovCloud Cost*</b>	<b>Infrastructure Management</b>	<b>Application Management</b>	
	\$91,196.08	\$34,638.69	\$175,538.60	\$301,373.37
	<b>YEAR 4 COST</b>			<b>\$304,315.15</b>

<b>Year 5 Cost</b>	Year 5 Software Escrow confirmation provided			\$3,027.09
	Year 5 Maintenance and Support Post Implementation			
	Term: May 23, 2027 - May 22, 2028			
	<b>AWS GovCloud Cost*</b>	<b>Infrastructure Management</b>	<b>Application Management</b>	
	\$93,111.04	\$35,366.04	\$179,224.61	\$307,701.69
	<b>YEAR 5 COST</b>			<b>\$310,728.78</b>

	*AWS Cloud Cost in an estimated cost. Vendor will bill the AWS account as a direct pass through to Tarrant County included with all associated work. No fees will be added. Vendor's AWS invoice for this contract must be sent to Tarrant County with payment request.			
	<b>(Assumes AWS GovCloud Cost matches estimated)</b>			
	<b>TOTAL COST</b>			<b>\$2,885,685.09</b>

Optional Item	<b>Project Management</b> This resource is responsible for overseeing the coordination, execution, and delivery of the Epitrax Cloud Hosting, Support, and Professional services contract. This includes managing coordinating Tarrant County, Commonwealth Informatics, and RTS personnel, managing and updating project plans and timelines, monitoring budgets, and ensuring that the project is completed within scope and on time. Additionally, the Project Manager would be responsible for coordinating with other health and government agencies or stakeholders to ensure that the project deliverables align with overall government objectives, and for reporting progress and any issues to Tarrant County senior management.	Per Month	\$16,000.00
Optional Item	<b>Ad-Hoc Customizations</b> (if requested by Tarrant County)	Per Hour	\$220.00

**\*Vendor will bill the AWS GovCloud account as a direct pass through to Tarrant County included with all associated work. No fees will be added. Vendor's AWS GovCloud invoice for this contract must be sent to Tarrant County with payment request.**

**\*Year 1 - AWS GovCloud Hosting Estimate for Prod & Testing Environments:**

**This table is for reference only and is INCLUDED in the Maintenance & Support line items in Pricing Table above**

Category	Region	Description	Service	MRC Estimate
Network	AWS GovCloud (US-East)	Site to Site VPN Connections (1 Primary, 3 Partner)	VPN Connection	\$173.98
Network	AWS GovCloud (US-East)	Site to Site VPN Connections (1 Primary, 3 Partner)	Transit Gateway	\$382.80
Network	AWS GovCloud (US-East)	Partner SFTP Sites (3 Partners)	AWS Transfer Family	\$661.00
Production	AWS GovCloud (US-East)	ProductionDB	Amazon Aurora PostgreSQL-Compatible DB	\$3,413.88
Production	AWS GovCloud (US-East)	SSO - rProxy - Apache	Amazon EC2	\$30.40
Production	AWS GovCloud (US-East)	Integration - Mirth	Amazon EC2	\$101.97
Production	AWS GovCloud (US-East)	App 2	Amazon EC2	\$251.02
Production	AWS GovCloud (US-East)	App 1	Amazon EC2	\$76.55
Production	AWS GovCloud (US-East)	Production LB	Application Load Balancer	\$315.24
Staging	AWS GovCloud (US-West)	App 1	Amazon EC2	\$80.42

Category	Region	Description	Service	MRC Estimate
Staging	AWS GovCloud (US-West)		Amazon Aurora PostgreSQL-Compatible DB	\$666.52
Staging	AWS GovCloud (US-West)	App 2	Amazon EC2	\$142.03
Staging	AWS GovCloud (US-West)	Integration - Mirth	Amazon EC2	\$116.06
Staging	AWS GovCloud (US-West)	SSO - rProxy - Apache	Amazon EC2	\$33.69
Staging	AWS GovCloud (US-West)	Staging LB	Application Load Balancer	\$52.62
Support	All	Business support plan	AWS Gov Cloud Support	\$649.82
<b>Year 1 Monthly Estimate TOTAL</b>				<b>\$7,148.00</b>

**F. INVOICING**

Invoices must be sent directly to the Tarrant County Auditor's Office as the following address:

Tarrant County Auditor's Office  
Attn: Accounts Payable  
100 East Weatherford, Room 506  
Fort Worth, Texas 76196

or Email to [SAP-invoices@tarrantcounty.com](mailto:SAP-invoices@tarrantcounty.com)

**G. ASSUMPTIONS**

1. Vendor will setup, configure and manage the EpiTrax platform in AWS GovCloud Region account.
2. Vendor will bill the AWS GovCloud account as a direct pass through to Tarrant County included with all associated work. No fees will be added. Vendor's AWS GovCloud invoice for this contract must be sent to Tarrant County with payment request.
3. Vendor will bill Tarrant County for AWS GovCloud subscription cost as well as associated milestone, maintenance, and project work as per Fee Schedule Table
4. Vendor will manage the AWS GovCloud instance hosting Tarrant County's EpiTrax application within their AWS GovCloud account and allocate the required resources to manage as per industry standards.
5. Vendor may require help from the Tarrant County resources on demand basis, to ensure network security validations, end users during initial testing and end user testing.

**H. PERIOD OF PERFORMANCE**

1. The SOW shall commence on the Effective Date and shall continue until the Deliverables have been met on or before the Expiration Date set forth above.
2. If Tarrant County believes for any reason that the Project has not been completed consistent with the terms of this SOW, it will promptly notify RTS in writing, in no event more than thirty (30) days

after receipt of Vendor completion notice, and the parties' will discuss any issues in good faith. Unless Client delivers a non-completion notice during the specified time, all aspects of the Project will be deemed accepted without objection by Client. Regardless of this, Resolve Tech will follow the invoicing rules as stated in Fee Schedule.

**I. PROJECT GUIDELINES**

As per defined SLA document attached.

**J. GENERAL**

1. **Limited Warranty and Exclusive Remedy.** RTS warrants to Client(s) that the Services will be performed in a competent and workmanlike manner in accordance with accepted industry standard practice and this SOW. RTS further represents and warrants that the Services will be performed in accordance with any current or future stated mutually agreed upon specifications as described in this or any future SOW. Client's exclusive remedy for breach of these warranties is to notify Client in writing within thirty (30) days of receipt of the non-conforming Services. Upon receipt of such notice, Client, at its option, will either use commercially reasonable efforts to re-perform the Services in conformance with these warranty requirements or will terminate the affected Services and will refund the prorated amount of fees for the unperformed Services. This Section sets forth Client's exclusive rights and remedies and Client's sole liability in connection with the performance of the Services.
2. **DISCLAIMER.** EXCEPT FOR THE WARRANTIES STATED IN THIS SECTION, ALL PROFESSIONAL SERVICES ARE PROVIDED "AS-IS". CLIENT DISCLAIMS ALL IMPLIED WARRANTIES FOR SERVICES, INCLUDING, WITHOUT LIMITATION, ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.
3. **Compliance with Laws.** In providing the services required by this Agreement, Vendor must observe and comply with all applicable federal, state, and local statutes, ordinances, rules, and regulations, including, without limitation, workers' compensation laws, minimum and maximum salary and wage statutes and regulations, and non-discrimination laws and regulations. Vendor shall be responsible for ensuring its compliance with any laws and regulations applicable to its business, including maintaining any necessary licenses and permits.

## **SERVICE LEVEL AGREEMENT**

### **MCD AWS Cloud for EpiTrax**

The purpose of this document is to define the specific service requirements to support the Service Level Agreement Framework to be provided by Resolve Tech Solutions, LLC. (RTS) to our Customers.

The scope of this Service Level Agreement (SLA) covers allocation of resources with the required levels of knowledge and experience to provide support services across RTS' EpiTrax® solution. The agreement does not cover 3<sup>rd</sup> Party Applications, Unsupported Hardware or Peripherals including but not limited to devices such as servers, laptops, telephones, computers or other devices not expressly acknowledged by Resolve Tech Solutions.

#### **SERVICE DEFINITIONS**

RTS offers a set of experienced and competent people knowledgeable of the EPITRAX software ecosystem, as well as the AWS GOV Cloud.

Our software consulting heritage, together with our expertise in networks and IT infrastructure, allow us to deliver and support integrated on-premise and cloud-based solutions within those ecosystems.

The RTS Service Desk provides a single point of contact for all incidents, Service Requests, Change Requests and Escalations. Service Requests are captured through Request Fulfillment, and may include for example Requests for Information, Moves, Adds and Changes (MACs), or Professional Service Days (PSDs) such as training or consultancy.

#### **SERVICE COMMITMENT**

RTS will use commercially reasonable efforts to avoid Unavailable Time for EpiTrax® cloud-based platform services that are hosted by RTS. Understandably, RTS cannot be responsible for Unavailable Time for Customers deploying EpiTrax® On-Premise.

In the event RTS has Unavailable Time in a given calendar month, a Customer may be eligible to receive a Service Level Credit as described below.

#### **DEFINITIONS**

**"Unavailable Time"** means when the RTS EpiTrax® Cloud Service is not in service and not fully available for access and data input by a Customer, as such term is used in the table in Section 3.1 below.

**"Service Level Credits"** mean a dollar credit against amounts payable by Customer to RTS for the RTS EpiTrax® Service. Service Level Credits are computed as a percentage of the pro-rated fees for the RTS EpiTrax® Service for the calendar month in which the applicable service level(s) was not met. Per-use charges, such as Data Bandwidth, SMS Messaging and any Third-Party Services, are not subject to Service Level Credits.

## SERVICE PROVISION

The support service provided under this SLA includes the following standard services:

- EpiTrax® Incident/Request reporting
- EpiTrax® API Incident/Request reporting
- Tier 1 support provided by RTS engineers
- Tier 2 and 3 level Remote and On-site Incident support by RTS engineers, or RTS-authorized Systems Integrator personnel

## SUPPORTED COVERAGE WINDOW

RTS provides three levels of Hour of Service as defined in the Customer's Active Support Order based on the Support Level purchased:

### STANDARD BUSINESS DAY – MONDAY TO FRIDAY, 8:00 AM – 5:00 PM CENTRAL (8x5)

Hours	P1/P2 Incident	P3/P4/P5 Incident	Request Fulfilment
<b>Monday to Friday</b>	8:00 AM – 5:00 PM Central	8:00 AM – 5:00 PM Central	8:00 AM – 5:00 PM Central
<b>Saturday</b>	x	x	x
<b>Sunday</b>	x	x	x
<b>Bank Holiday</b>	x	x	x

All Incidents and Service Requests will be managed within core business hours (8:00 AM – 5:00 PM Central).

### EXTENDED BUSINESS DAY – MONDAY TO FRIDAY, 8:00 AM – 8:00 PM CENTRAL(CST) (12x5)

Hours	P1/P2 Incident	P3/P4/P5 Incident	Request Fulfilment
<b>Monday to Friday</b>	8:00 AM – 8:00 PM Central	8:00 AM – 8:00 PM Central	8:00 AM – 8:00 PM Central
<b>Saturday</b>	x	x	x
<b>Sunday</b>	x	x	x
<b>Bank Holiday</b>	x	x	x

All Incidents and Service Requests will be managed within extended service hours (8:00 AM – 8:00 PM Central (CST)).

### 24/7 SUPPORT (24/7)

Hours	P1/P2 Incident	P3/P4/P5 Incident	Request Fulfilment
<b>Monday to Friday</b>	24/7	8:00 AM – 8:00 PM Central	8:00 AM – 8:00 PM Central
<b>Saturday</b>	24/7	x	x
<b>Sunday</b>	24/7	x	x
<b>Bank Holiday</b>	x	x	x

For Incidents that are raised out of hours (5:00 PM – 8:00 AM Central (CST)), support from RTS will be solely focused on service restoration; the associated root cause analysis will be carried out within normal business hours. Problem management and Request Fulfilment is provided within business hours. Requests for support received outside of the coverage window will be logged the next working day.

## INCIDENT AND SERVICE REQUEST TARGETS

RTS provides the following levels of response for requests in relation to the corresponding Severity Levels:

Priority Level	Incident Severity	Remote Response	Manager Escalation
<b>Priority 1</b>	Critical	<2 hours	Immediate
<b>Priority 2</b>	High/Urgent	<4 hours	<4 hours
<b>Priority 3</b>	Medium/Major	<8 hours	<2 Business Days
<b>Priority 4</b>	Low/Minor	<24 hours	<3 Business Days
<b>Priority 5</b>	Cosmetic/Very Low	<48 hours	<5 Business Days

RTS's initial response to a request will be made by the single point of contact service desk at RTS. The Service Desk will take all the necessary details and log, categorize, and complete an initial assessment on priority.

The Service Desk will provide the Customer with a reference number for the request and will allocate the necessary technical resource from RTS to respond to the request within the timeframes indicated in the table above. The timeframes are based on the agreed priority set when raising the request.

RTS's Technical Response to a reported request will involve the incident being accepted by a qualified resource and commencing with performing necessary diagnostics on the Incident.

On all Priority One Critical Incidents, the Senior Management Team and Service Operations Management Team at RTS are instantly notified and kept updated on progress.

The table below details the triggers that will Start, Stop and Pause the above Service Levels:

Service Level	Start	Stop	Pause
<b>Response</b>	Incident is raised within RTS's Service Desk	Incident is accepted by the Technical Team	Status is awaiting Customer response, or is outside of Customer's supported hours

RTS will pause the targets on a reported Incident for the following reasons:

- Unsupported Hardware Failure
- Unsupported Network Failure
- 3<sup>rd</sup> Party Infrastructure or Middleware causing the failure
- Unsupported or unapproved change in design outside the scope of the Statement of Work (SOW)
- The failure is caused by a code bug which requires support from a Manufacturer or Vendor.

## MAINTENANCE

During the term of this agreement, RTS will provide the Customer with copyrighted patches, updates, releases, and new versions of the Software along with other generally available technical material. These maintenance materials including the Software may not be used to increase the licensed number of versions or copies of the Software.

The Customer agrees not to use or transfer the prior version but to overwrite or archive the prior version of the Software. All patches, updates, release, and new versions shall be subject to the license agreement related to the Software.

## WARRANTY

RTS will undertake all reasonable efforts to provide technical assistance under this agreement and to rectify or provide solutions to problems where the Software does not function as described in the Software documentation, but RTS does not guarantee that the problems will be solved or that any item will be error-free. This agreement is only applicable to RTS' EpiTrax® Software running under the certified environments specified in the release notes for that product. RTS will provide the Customer with substantially the same level of service throughout the term of this agreement. RTS may from time to time, however, discontinue Software products or versions and stop supporting Software products or versions one year after discontinuance, or otherwise discontinue any support service. THE FOLLOWING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, CONDITIONS OR PROMISES TO CUSTOMER OR ANY THIRD PARTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING BY STATUE, LAW, COURSE OF DEALING, CUSTOM AND PRACTICE OR TRADE USAGE. EXCEPT AS PROVIDED ABOVE, THE SERVICES AND MAINTENANCE ARE PROVIDES 'AS IS'. RTS is not liable for incidental, special or consequential damages for any reason (including loss of data or other business or property damage), even if foreseeable or if Customer has advised of such a claim. RTS's liability shall not exceed the fees that Customer has paid under this agreement.

Customer agrees that the pricing for the services would be substantially higher but for these limitations.

## MANUFACTURER TIER 2 AND 3 SUPPORT ENGAGEMENT

Where RTS is unable to resolve the Incident or Request at Tier One on the Service Desk and it appears a fault is deemed to be due to a probable failure in the Manufacturer's provided service and not a simple configuration issue, the Service Desk will functionally escalate to the Manufacturer for support.

RTS will manage the Incident with the Manufacturer, providing the relevant information and coordination of resources. Where an Incident is escalated to the Manufacturer, the following SLA's are provided depending on the associated Care Level for your Service:

Care Level	Manufacturer Response and Resolution
Response Only	Response only within 24 hours on standard support only.

---

## CHANGE CONTROL PROCEDURE

The following process will be followed if a change in the Design is required or if new requirement is introduced:

- A written change authorization and/or PCR (as defined below) must be signed by both parties to authorize implementation of the investigated changes.
- If a Project Change Request (“PCR”) is required, it will be the vehicle for communicating all changes contemplated for the SOW. The PCR must describe the change, the rationale for the change, and the effect the change will have on the project and fees (if applicable).
- The designated Project Manager (as defined in Section 6 above) of the requesting party (Customer or RTS) will review the proposed change and determine whether to submit the request to the other party.
- Each party’s Project Manager will review the proposed change and approve it for further investigation or reject it. Customer and RTS will mutually agree upon any charges for such investigation, if any. If the investigation is authorized, Client will sign the PCR, which will constitute approval for the investigation charges. RTS will invoice Customer for any such charges. The investigation will determine the effect that the implementation of the PCR will have on SOW price, schedule, and other terms and conditions of the Agreement.
- Upon completion of the investigation, both parties will review the impact of the proposed change and, if mutually agreed, a change authorization will be executed.

APPROVED AS TO FORM:

CERTIFICATION OF  
AVAILABLE FUNDS: \$ \_\_\_\_\_

Kimberly C. Wesley  
Criminal District Attorney's Office\*

\_\_\_\_\_  
Tarrant County Auditor

\*By law, the Criminal District Attorney's Office may only approve contracts for its clients. We reviewed this document as to form from our client's legal perspective. Other parties may not rely on this approval. Instead those parties should seek contract review from independent counsel.

STATE OF TEXAS §

§

## BUSINESS ASSOCIATE AGREEMENT

COUNTY OF TARRANT §

This Business Associate Agreement ("BA Agreement") is between Tarrant County, Texas, ("COUNTY"), and Resolve Tech Solutions, LLC, ("Business Associate"), for the purpose of complying with the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), the Standards for Privacy of Individually Identifiable Health Information (the "Privacy Rule"), and the Standards for Security of Electronic Protected Health Information (the "Security Rule") promulgated thereunder, and the Health Information Technology for Economic and Clinical Health Act (Division A, Title XIII and Division B, Title IV, of the American Recovery and Reinvestment Act of 2009, Pub. L 111-5) (the "HITECH Act"), and the regulations implementing the HITECH Act and other applicable law with regard to the provision of services to Tarrant County Public Health.

Business Associate and COUNTY are engaged in a business relationship whereby Business Associate provides certain services to COUNTY ("Business Relationship").

As part of this Business Relationship, Business Associate performs or assists in performing a function or activity on behalf of COUNTY that involves the use and/or disclosure of Protected Health Information (as defined in 45 CFR § 164.501).

### 1. Definitions

"Covered Entity" shall generally have the same meaning as the term "covered entity" at 45 CFR § 160.103, and in reference to the party to this agreement shall mean the COUNTY.

"Business Associate" shall generally have the same meaning as the term "business associate" at 45 CFR § 160.103, and in reference to the party to this agreement, shall mean Resolve Tech Solutions, LLC.

Terms used but not otherwise defined in the BA Agreement shall have the same meaning given to such terms in HIPAA, the HITECH Act, or any implementing regulations promulgated thereunder, including but not limited to the Privacy Rule and the Security Rule.

### 2. Purpose

Business Associate has a legal and ethical responsibility to safeguard the privacy of individuals and protect the confidentiality of their health information. Business Associate may hear things that relate to Protected Health Information or read or see computer or paper files containing confidential or Protected Health Information, even though Business Associate may not be directly involved in providing services. Business Associate may create documents containing Protected Health Information if directed to do so by COUNTY. Because Business Associate may have contact with Protected Health Information, COUNTY requests that Business Associate agrees to the following as a condition of Business Associate's assignment.

### 3. Permitted Uses and Disclosures by Business Associate

Except as otherwise limited in the Business Relationship or this BA Agreement, Business Associate may:

- 3.1 use and/or disclose Protected Health Information to perform functions, activities, or services for or on behalf of COUNTY, provided that such use and/or disclosure,
  - (a) would not violate the Privacy Rule if done by COUNTY;
  - (b) is reasonably limited to the minimum necessary information to accomplish the intended purpose of the use or disclosure;
  - (c) is in compliance with each applicable requirement of 45 CFR § 164.504(e);
  - (d) is in compliance with the HITECH Act and its implementing regulations;
- 3.2 use or disclose Protected Health Information as required by law;
- 3.3 use Protected Health Information for the proper management and administration of Business Associate or to carry out the legal responsibilities of Business Associate;
- 3.4 use Protected Health Information to provide Data Aggregation services relating to the health care operations of COUNTY.

All other uses and/or disclosures not authorized by the Business Relationship, or this BA Agreement are prohibited.

- 3.5 Business Associate agrees to use and disclose confidential information only in the following manner:
  - As needed to fulfill the obligations described in base contracts between the parties pursuant to COUNTY RFP 2022-215, including SOW # 202210-21
  - BA will provide cloud hosting for the EPITRAX product suite, and will have access to COUNTY Protected Health Information

### 4. Responsibilities of Business Associate

With regard to the use and/or disclosure of Protected Health Information, Business Associate agrees:

- 4.1 not to use and/or disclose Protected Health Information other than as permitted or required by the Business Relationship or this BA Agreement or as Required by Law;
- 4.2 to use appropriate safeguards to prevent the use and/or disclosure of Protected Health Information other than as provided for by the Business Relationship or this BA Agreement;
- 4.3 to protect any Protected Health Information taken off-site from COUNTY from disclosure to others, and to return all Protected Health Information in any form to COUNTY or destroy such Protected Health Information in a manner that

renders it unreadable and unusable by anyone else, if COUNTY agrees to the destruction;

- 4.4** to comply with the Security Rule provisions set forth in 45 CFR Part 164, Subpart C, including provisions relating to Security Standards General Rules (45 CFR § 164.306), Administrative Safeguards (45 CFR § 164.308), Physical Safeguards (45 CFR § 164.310), Technical Safeguards (45 CFR § 164.312), Organizational Requirements (45 CFR § 164.314) and Policies and Documentation (45 CFR § 164.316), and to implement administrative, physical, and technical safeguards that reasonably and appropriately protect the confidentiality, integrity, and availability of the Electronic Protected Health Information Business Associate creates, receives, maintains, or transmits on behalf of COUNTY.
- 4.5** to report to COUNTY any Security Incident of which it becomes aware within 2 business days, and to report any potential Breach of Unsecured Protected Health Information within 2 business days of discovery. Any such report shall include the identification of each individual whose Unsecured Protected Health Information has been, or is reasonably believed by Business Associate to have been accessed, acquired, used or disclosed during any such Security Incident or potential Breach. Any such report shall also include all other information known to Business Associate at the time of the report (such as the type of Protected Health Information involved in the event, the nature of the information, etc.) or promptly thereafter as such other information becomes available;
- 4.6** to notify COUNTY in writing within 2 business days of any use and/or disclosure of Protected Health Information that is not provided for by the Business Relationship or this BA Agreement;
- 4.7** to mitigate, to the extent practicable, any harmful effect that is known to Business Associate of a use or disclosure of Protected Health Information by Business Associate in violation of the requirements of this BA Agreement, or as the result of any Security Incident or potential Breach, using mitigation actions that are disclosed to COUNTY in advance and authorized by COUNTY, all at the sole cost and expense of Business Associate;
- 4.8** to work cooperatively with COUNTY in connection with COUNTY's investigation of any potential Breach and in connection with any notices COUNTY determines are required as a result, and to refrain from giving any notice itself unless COUNTY expressly agrees in advance and in writing to Business Associate giving notice and to the form, content and method of delivery of such notice, all at the sole cost and expense of Business Associate;
- 4.9** to ensure that all agents and/or subcontractors that create, receive, maintain or transmit Protected Health Information on behalf of Business Associate agree in writing to the same restrictions and conditions that apply to Business Associate with respect to such Protected Health Information;
- 4.10** to provide access (at the request of, and in the time and manner designated by COUNTY) to Protected Health Information in a Designated Record Set to

COUNTY or, as directed by COUNTY, to an Individual in order to meet the requirements under 45 CFR § 164.524 and to notify COUNTY of any requests for access it receives from an individual within 2 business days of receipt;

- 4.11** to make any amendment(s) (at the request of, and in the time and manner designated by COUNTY) to Protected Health Information in a Designated Record Set that COUNTY directs pursuant to 45 CFR § 164.526 and to notify COUNTY of any amendment requests it receives from an individual within 2 business days of receipt;
- 4.12** to document such disclosures of Protected Health Information and information related to such disclosures as would be required for COUNTY to respond to a request by an Individual for an accounting of disclosures of Protected Health Information in accordance with 45 CFR § 164.528;
- 4.13** to provide to COUNTY, in a time and manner designated by COUNTY, information collected in accordance with 4.12 of this BA Agreement, to permit COUNTY to respond to a request by an Individual for an accounting of disclosures of Protected Health Information in accordance with 45 CFR § 164.528 (and HITECH Act § 13405(c) when such requirements are effective as to COUNTY;
- 4.14** to the extent Business Associate is to carry out an obligation of COUNTY under the Privacy Rule provisions set forth at 45 CFR Part 164, Subpart E (any such obligation to be carried out only when so directed by COUNTY pursuant to the Business Relationship or this BA Agreement), to comply with the requirements of the Privacy Rule that apply to COUNTY in the performance of such obligation;
- 4.15** to make its internal practices, books, and records relating to the use and/or disclosure of Protected Health Information received from, or created or received by Business Associate on behalf of COUNTY available to COUNTY;
- 4.16** to cooperate with any investigation by the Secretary of Health and Human Services, or his agent, or an oversight agency, in a time and manner designated by COUNTY or the Secretary, for purposes of determining if COUNTY or Business Associate is in compliance with the Privacy Rule;
- 4.17** if Business Associate is aware of a pattern of activity or practice by COUNTY that constitutes a material breach or violation of COUNTY's obligations under this BA Agreement,
  - (a)** to give written notice of such pattern or practice to COUNTY within 2 business days of its discovery and to take reasonable steps to cure the breach or end the violation,
  - (b)** if Business Associate determines that such steps appear to have been unsuccessful, to give COUNTY written notice of such determination and to report the problem to the Secretary and provide COUNTY with a copy of any such report at least 2 business days in advance of its submission to the Secretary.

## **5. Responsibilities of COUNTY with Respect to Protected Health Information**

If deemed applicable by COUNTY, COUNTY shall:

- 5.1** provide Business Associate with the notice of privacy practices that COUNTY produces in accordance with 45 CFR §164.520 as well as any changes to such notice;
- 5.2** provide Business Associate with any changes in, or revocation of, permission by Individual to the use and/or disclosure of Protected Health Information, if such changes affect Business Associate's permitted or required uses and/or disclosures;
- 5.3** notify Business Associate of any restriction to the use and/or disclosure of Protected Health Information that COUNTY has agreed to in accordance with 45 CFR § 164.522.

## **6. Sanctions**

Business Associate understands that violation of this agreement may result in sanctions, including, but not limited to, termination of the ability to perform services on behalf of COUNTY.

## **7. Disclosures Required by Law**

Nothing in this agreement prevents Business Associate from making a disclosure of Protected Health Information, if required by law to make such a disclosure.

## **8. Term and Termination**

**8.1 Term.** This agreement will begin on the date approved by COUNTY's Commissioner's Court, and will terminate when all of the Protected Health Information provided by COUNTY to Business Associate or created or received by Business Associate on behalf of COUNTY is destroyed or returned to COUNTY, or, if it is infeasible to return or destroy Protected Health Information, protections are extended to such Protected Health Information, in accordance with 8.3 below, or at termination of the Business Relationship between COUNTY and Business Associate.

**8.2 Termination for Cause.** COUNTY may immediately terminate the Business Relationship and/or this BA Agreement if COUNTY determines that Business Associate has breached a material term of this BA Agreement.

**8.3 Effect of Termination.** Upon termination of the Business Relationship and/or this BA Agreement, for any reason, Business Associate agrees to return or destroy all Protected Health Information received from COUNTY or created or received by Business Associate on behalf of COUNTY. If permitted by COUNTY, Protected Health Information shall be destroyed in a manner that renders it unreadable and unusable by anyone else. Discharge or termination, whether voluntary or not, shall not affect Business Associate's ongoing obligation to safeguard the confidentiality of Protected Health Information and to return or destroy any such information in Business Associate's possession.

This Section 8.3 shall apply to Protected Health Information that is in the possession of subcontractors or agents of Business Associate.

In the event that Business Associate determines that returning or destroying the Protected Health Information is infeasible, Business Associate shall provide in writing to COUNTY notification of the conditions that make return or destruction infeasible. Upon mutual written agreement of the Parties, Business Associate shall extend the protections of this BA Agreement to such Protected Health Information and limit further uses and disclosures of such Protected Health Information for as long as Business Associate maintains such Protected Health Information.

## **9. Miscellaneous**

### **9.1 INDEMNIFICATION.**

NOTWITHSTANDING ANYTHING TO THE CONTRARY IN THE UNDERLYING AGREEMENT(S), AT BUSINESS ASSOCIATE'S EXPENSE, BUSINESS ASSOCIATE AGREES TO INDEMNIFY, DEFEND AND HOLD HARMLESS COVERED ENTITY AND COVERED ENTITY'S EMPLOYEES (THE "INDEMNITEES") AGAINST ALL DAMAGES, FINES, PENALTIES, COSTS OR EXPENSES (INCLUDING REASONABLE FEES OF ATTORNEYS AND EXPERTS) AND ALL LIABILITY TO THIRD PARTIES ARISING FROM ANY MATERIAL BREACH OF THIS AGREEMENT BY BUSINESS ASSOCIATE OR ITS EMPLOYEES, DIRECTORS, OFFICERS, SUBCONTRACTORS, AGENTS OR OTHER MEMBERS OF BUSINESS ASSOCIATE'S WORKFORCE. BUSINESS ASSOCIATE'S OBLIGATION TO INDEMNIFY THE INDEMNITEES SHALL SURVIVE THE EXPIRATION OR TERMINATION OF THIS AGREEMENT.

COUNTY MAY EMPLOY ATTORNEYS SELECTED BY IT TO DEFEND ANY SUCH ACTION, THE COSTS AND EXPENSES OF WHICH WILL REMAIN THE RESPONSIBILITY OF BUSINESS ASSOCIATE. COUNTY WILL PROVIDE BUSINESS ASSOCIATE WITH TIMELY NOTICE OF THE EXISTENCE OF SUCH PROCEEDINGS AND SUCH INFORMATION, DOCUMENTS AND OTHER COOPERATION AS REASONABLY NECESSARY TO ASSIST BUSINESS ASSOCIATE IN ESTABLISHING A DEFENSE TO SUCH ACTION.

THESE INDEMNITIES SURVIVE TERMINATION OF THIS BA AGREEMENT, AND COUNTY RESERVES THE RIGHT, AT ITS OPTION AND EXPENSE, TO PARTICIPATE IN THE DEFENSE OF ANY SUIT OR PROCEEDING THROUGH COUNSEL OF ITS OWN CHOOSING.

**9.2 Survival.** The respective rights and obligations of Business Associate survive the termination of the Business Relationship and/or this BA Agreement.

**9.3 Notices.** Any notices pertaining to this BA Agreement must be given in writing and will be deemed duly given when personally delivered to a Party or a Party's authorized representative, as listed below, or sent by means of a reputable overnight carrier, or sent by means of certified mail, return receipt requested, postage prepaid. A notice sent by certified mail shall be deemed given on the date of receipt or refusal of receipt. All notices shall be addressed to the appropriate Party as follows:

**If to Business Associate:**  
Resolve Tech Solutions, LLC  
15851 Dallas Parkway, Ste. 1103  
Dallas, TX 75001

**If to Covered Entity:**  
Tarrant County Public Health  
1101 South Main Street, Suite 2500  
Fort Worth, TX 76104

Attn: Vinod Muthuswamy

Attn: Privacy Officer

**9.4 Amendments.** This BA Agreement may not be changed or modified in any manner except by an instrument in writing signed by a duly authorized officer of each of the Parties hereto. The Parties, however, agree to amend this Agreement from time to time as necessary, in order to allow COUNTY to comply with the requirements of the Privacy Rule, the Security Rule, HIPAA, the HITECH Act and its implementing regulations.

**9.5 Interpretation.** Any ambiguity in this BA Agreement shall be resolved in favor of a meaning that permits COUNTY to comply with the Privacy Rule.

**9.6 Third Parties.** Nothing in this BA Agreement is intended, nor shall be deemed, to confer any benefits on any third party.

**9.7 Assignments.** Neither Party may assign its rights or obligations under this BA Agreement without the prior written consent of the other Party, which consent may not be unreasonably withheld.

**9.8 Independent Contractor.** This BA Agreement does not create any relationship between the Parties other than that of independent parties contracting with each other for the sole purpose of effecting the provisions of this BA Agreement and any other agreements between them evidencing their Business Relationship.

**9.9 Governing Law and Venue.** This BA Agreement will be interpreted under the laws of the State of Texas. The venue for any lawsuit arising out of this BA Agreement will be the Fort Worth Division of the Northern District of Texas, if the lawsuit arises in Federal Court, or Tarrant County, Texas, if the matter arises in State Court.

**9.10 Third Party Interpretation.** This agreement shall not be interpreted to inure to the benefit of a third party not a party to this contract. This agreement may not be interpreted to waive any statutory or common law defense, immunity, including governmental and sovereign immunity, or any limitation of liability, responsibility, or damage to any Party to this contract, Party's agent, or Party's employee, otherwise provided by law.

**9.11 Form 1295 Compliance.** Resolve Tech Solutions, LLC acknowledges and agrees that it has fully, accurately, and completely disclosed all interested parties by following the instructions in the attached Form 1295 and has acknowledged the completeness of this disclosure by filing the Form 1295, attached as Exhibit A, with the Texas Ethics Commission as required by law.

**9.12 Compliance with Laws.** In providing the services required by this Agreement, Vendor must observe and comply with all applicable federal, state, and local statutes, ordinances, rules, and regulations, including, without limitation, workers' compensation laws, minimum and maximum salary and wage statutes and regulations, and non-

discrimination laws and regulations. Vendor shall be responsible for ensuring its compliance with any laws and regulations applicable to its business, including maintaining any necessary licenses and permits.

**9.13 Required Attachments.** This BA Agreement will be considered incomplete without the submission of the completed Form 1295 as referenced in section 9.11. COUNTY shall be responsible to include Form 1295, attached as Exhibit A, to this BA Agreement prior to Business Associate review and execution. For the purposes of this BA Agreement, the following statement applies in regard to Form 1295:

- ☒ Exhibit A is a required component of this BA Agreement. Form 1295 is attached and must be completed prior to approval of this BA Agreement by COUNTY.
- ☐ The Parties involved in this BA Agreement are governmental entities and are not required by the Texas Ethics Commission to complete their Form 1295.

Approved on this 7<sup>th</sup> day of March, 2023, by Commissioners Court Order  
No. \_\_\_\_\_.

**SIGNED AND EXECUTED** this 15 day of February, 2023.

**BUSINESS ASSOCIATE**



\_\_\_\_\_  
Signature

Vinod Muthuswamy

\_\_\_\_\_  
Printed Name

COO

\_\_\_\_\_  
Title  
2/15/2023

\_\_\_\_\_  
Date

**COUNTY OF TARRANT  
STATE of TEXAS**

\_\_\_\_\_  
Tim O'Hare  
County Judge

**APPROVED AS TO FORM:**



Criminal District Attorney's Office\*

\*By law, the Criminal District Attorney's Office may only approve contracts for its clients. We reviewed this document as to form from our client's legal perspective. Other parties may not rely on this approval. Instead those parties should seek contract review from independent counsel.

# CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties.  
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

## OFFICE USE ONLY CERTIFICATION OF FILING

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

Resolve Tech Solutions, LLC  
Addison, TX United States

Certificate Number:  
2023-982948

Date Filed:  
02/13/2023

Date Acknowledged:

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

Tarrant County

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

RFP 2022-215  
Annual Contract for EpiTrax Cloud Hosting, Support, and Professional Services

4	Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
			Controlling	Intermediary
	Resolve Tech Solutions, LLC	Addison, TX United States	X	

5 Check only if there is NO Interested Party. ☐


### 6 UNSWORN DECLARATION

My name is VINOD MUTHUSWAMY, and my date of birth is 02/17/1978.

My address is 15851, DALLAS PKWY, STE 103 ADDISON TX 75001 DALLAS,  
(street) (city) (state) (zip code) (country)

I declare under penalty of perjury that the foregoing is true and correct.

Executed in DALLAS County, State of TX, on the 13 day of Feb, 20 23.  
(month) (year)

  
\_\_\_\_\_  
Signature of authorized agent of contracting business entity  
(Declarant)

VEERINDER (VINNY) TANEJA, MBBS; MPH  
PUBLIC HEALTH DIRECTOR



CATHERINE A. COLQUITT, M.D.  
LOCAL HEALTH AUTHORITY & MEDICAL DIRECTOR

**TARRANT COUNTY PUBLIC HEALTH**  
*Accountability · Quality · Innovation*

February 2, 2023

Gwen Peterson  
Senior Buyer  
Tarrant County Purchasing Department

Re: 2022-215-RFP for Annual Contract for Epitrax Cloud Hosting, support, and professional Services

Gwen,

After careful consideration and evaluation of the Vendor responses for the above RFP, the Public Health Department recommends that the following Vendors receive this award:

Resolve Tech Solutions, LLC  
15851 Dallas Parkway, suite 1103  
Addison, TX 75001

*Rasneet Kumar*

Rasneet Kumar  
Informatics Manager  
Tarrant County Public Health



**Tarrant County Public Health**  
*Accountability. Quality. Innovation.*



*A healthier community through leadership in health strategy*





**INFORMATION TECHNOLOGY**

*• Business First •  
Technology Second*

2/10/2013

**Chief Information  
Officer**

Chris Nchopa-Ayafor

**Executive Assistant  
to CIO**

Cecilia Webb

**Deputy CIO**

Russell Scott

**Project Portfolio  
Management Office**

**Director**

Adepeju Ajunwon

**IT Service Delivery**

**Director**

Carolyn J. Bogan

**Network & Data  
Center Infrastructure**

**Director**

Anthony Jackson

**SAP**

**Director**

Sudhir Kaushik

**Business Application  
Development & Support**

**Director**

Michael Webb

**Information Security**

**Officer**

Darren May

Gwen-Peterson, C.P.M., A.P.P

Senior Buyer

100 E. Weatherford Street, Suite 303

Fort Worth, Texas 76196

Re: RFP2022-215 EpiTrax Cloud Hosting, Support, And Professional  
Services

Dear Ms. Peterson:

Based on the information provided in the RFP response, Tarrant County  
Information Technology Department approves award of RFP 2022-215 to  
Resolve Tech Solutions Inc.

Very sincerely,

A handwritten signature in black ink, appearing to read "Russ Scott".

Russ Scott  
Deputy CIO

*Our vision is to be the best IT  
organization in state and  
local government within the  
United States.*

200 Taylor Street  
Fort Worth, TX 76196

Phone: 817.884.3888  
Fax: 817.212.3060

[www.tarrantcounty.com](http://www.tarrantcounty.com)