AGENDA ITEM or FINAL CONTRACT REVIEW SUBMITTAL FORM

Agenda Item: EMPG Grant

Action Requested:

Parties to the Agreement:

Term Begins: **Term Ends:** **Grant Contract #:**

Summary:

EMPG Grant

Fiscal Impact:

Submitted by: Liz Mense **Submitter's Email Address:** EMense@gunnisoncounty.org

Finance Review: (●) Required ( ) Not Required

Comments:

No concerns, match will come from CARES Act reimbursements. ln

Reviewed by: GUNCOUNTY1\lNienhueser Discharge Date: 8/13/2020

County Attorney Review: (●) Required ( ) Not Required

Comments:

Reveiwed by: GUNCOUNTY1\mhoyt Discharge Date: 8/13/2020 Certificate of Insurance Required

Yes ( ) No (●)

County Manager Review:

Comments:

Reveiwed by: GUNCOUNTY1\mbirnie Discharge Date: 8/14/2020

( ) Consent Agenda (●) Regular Agenda ( ) Worksession Time Allotted: 5

Agenda Date: 8/18/2020

Revised April 2015

CoVID19 Data Management Project Proposal

This proposal is for Slopeside Technology to develop CoVID19 Incident Data Management Database. The proposal is not a final proposal. We wish to work with project stakeholders to further refine the requirements, scope, and projected projects costs.

Refine Initial Scope - No Cost

Slopeside would work with key stakeholder to discuss requirements and application design. The goal would be to solidify scope such that a fixed bid could be created with an acceptable bid-range to accommodate for minor issues identified in the project.

Estimated Project Cost - $15-24K

We realize this is a wide range and we would not want to move forward on the project without narrowing this range down. However, we also believe that after further discussion that this range could shift up or down. We feel at this point that this range is a 'guestimate' based on our experience with projects of this size, but we also see places where we could easily be over complicating or oversimplifying the project.

While we do have an signature line at the bottom of this document, we feel more discussion is needed before we are willing to commit to a price range.

Scope Creep

For scope changes, new requirements and/or functionality, we would work with key stakeholders to see if the changes can be handled within the existing bid-range or if a separate change control and estimate were needed.

Technology Approach

Slopeside's plan is to implement a WordPress plugin for the Data Management system. A WordPress plugin can consist of several forms, pages, capabilities, etc. This will encapsulate the functionality such that it could be deployed on a stand-alone WordPress site or on an existing WordPress site, but we do not feel it would limit functionality in any way.

Because of the HIPPA requirement, we are expecting this to be deployed into a stand-alone site in a HIPPA compliant hosting environment.

WordPress is a content management system used on millions of websites. WordPress provides a significant security foundation for user management, user roles, user account self-management. As well as a foundation for a client-server web-based application that minimizes the effort and time on 'application plumbing' such that we can focus on building the application capabilities.

Project Approach

1. Refine Requirements
    a. Define specific forms, field types, sizes, entry validation, etc.
        i. Entry forms, Update form, Specialized forms/functionality (merging duplicate records as an example)
        ii. Identify where form functionality may need to differ depending on the role of the user
    b. Document User Roles

        i. Several different types of users have been already been identified, which we will refer to as a 'role'. We would like to define a role matrix that explains what each role has access to:
            1. What forms do they need
            2. Should certain fields be read-only, not visible, etc. based on role
            3. Does the role need special functionality not needed by other roles
    c. Document Reports / Queries
        i. Define interactive reports
            1. What fields are used to query the data
            2. What data should be displayed and how
            3. Should the data be exportable and if so in what format(s)
        ii. Define scheduled report
            1. What are the report parameters
            2. What data should be displayed and how
            3. Should the data be exportable and if so in what format(s)
    d. Document Dashboard(s) Functionality
        i. Define functionality of dashboard by role
            1. Some roles may see additional data, functionality, etc
2. Development / Testing
    a. Create a development environment, testing environment
    b. Create a database, code objects/classes, basic CRUD operations
    c. Create Forms / UI
        i. Work with key stakeholders to test/validate forms function as expected as forms are created
        ii. Implement security within forms and associated web services
    d. Create Reports
    e. Create Dashboard
    f. This stage will likely be iterative with different aspects of functionality being released every few weeks for testing and validation
3. Migration
    a. Once a substantial portion of the project is complete, we would work with the project team to determine at what point the new application takes over, and the existing application is migrated into the new system. The migration would initially be done in a test/staging environment for testing and validation purposes, then repeated in production once system issues are resolved.

HIPPA

We recommend deploying the application to a HIPPA compliant hosting environment. Our proposal does not include the cost of this hosting, but it does include the time/effort to identify the hosting provider and assist with negotiating and setting up the account.

More on HIPPA in the questions below.

Questions

To date, we have reviewed the Incident Data Management Database RFP and Ian's Description of Gunnison CoVID DMS document. While Ian's document does provide useful insight into the types of data in the system, we feel there are still significant information needed to understand the scope of the project.

CoVID19 Data Management Project Proposal

Questions we have to date:

1. From item 6 in the RFP: Development of a robust unique identifier, such as DOB/name, that allows multiple records for the same individual to be easily tracked across multiple points of record entry involving different organizations (e.g., local clinics and hospitals).
    a. This brings to question the HIPPA Privacy requirements. We are assuming that Gunnison County is invoking some of the exceptions to HIPPA to allow the 'Covered Entity' (ex: a clinic) to share Personally Identifiable Information (PII) along with Personal Health Information (PHI) to a 3rd party (Gunnison County). However, we are concerned that the Privacy Clause states that only PII can be shared when it is required. We believe that there are other means to create a 'Robust Unique Identifier' that doesn't actually store the patients PII in the system unless the patent is directly interacting with the County, in which case the County would be the 'Covered Entity' ad can, therefore, store PII.
    b. We are concerned that storing DOB/name as the unique identifier creates unnecessary risk and believe that using this information to create a cryptographic hash may be a safer approach as long as the information isn't necessary for Gunnison County staff to make use of the system and data.
    c. We are also curious if there have been cases where two people with the same DOB/name have occurred? Should another piece of PII be considered to make up the unique identifier?
2. From item 7 in RFP: Allows patients to be scheduled for testing and tracked at the public health call center
    a. What does tracked mean in this case? Usually, you are 'tracking' something because work may need to be done when certain conditions occur. In this case, what is the point of the tracking? Are there multiple conditions being monitored? Is the tracking manual, if so what data needs to be viewed in order to do the 'tracking'.
3. From Item 8 in RFP: Similar questions as above. Tracking can me a lot of things to different people, so we're unsure how simple or complex this might be.
4. From item 11 in the RFP: Allows for the importation of historical data and/or external data.
    a. To maintain a reasonable project cost, sample data for all sources of import data would need to be provided. The cost to develop a generic importation process that can accept any type of data would be very costly.
5. From item 12 in the RFP: Provides visualization of the data both for the IMT and the public in the form of reports and dashboards (web-hosted).
    a. To maintain reasonable project costs, this needs to define specific visualizations and reports.
6. From item 13 in the RFP: Allows for custom querying of the raw data for the purposes of analysis by the Research Group and their collaborators.
    a. These items likely need discussion. Initial questions are:
        i. How is HIPPA compliance maintained if raw data is accessible?
            1. Is this actually a filtered subset of the raw data? (leaving out identifiable information)
        ii. How is this functionality expected to be delivered? Is this still a web app, just access to raw downloads of files, etc?
            1. A web interface to query any aspect of the data in any combination would be very complicated and costly. Likely to cost more than the rest of the application

combined. Would providing access to raw data files containing flattened data be a reasonable alternative? We could also provide raw data files for each individual table such that someone could reconstruct the database.

2. Can this be refined/narrowed to a specific set of inputs fields and output fields? Or sets of input fields and output fields?
3. We could be lacking information, but if we store DOB/Name as a unique identifier, it seems this requirement would violate the HIPPA Privacy Rules as it would be sharing PII and PHI with other 3rd parties beyond Gunnison County?
4. A separate system such as Microsoft Power BI or some other data analysis tool may be better alternatives that the options above.

Agreement

By signing this document, I (the client) understand the terms and conditions of this proposal. I certify that I have the authority to agree to this proposal, authorize the work to be performed, and to authorize payment for the work performed.

Signed: _____ **Date:** _____

Client

Signed: _____ **Date:** _____

Client

By signing this document, Slopeside agrees to the terms and conditions of this document.

Signed: _____ **Date:** _____

Brian Brown, Owner, Slopeside Technology, LLC.

To: Gunnison County CARES ACT funding partners
From: Covid19 Incident Management Team (Ian Billick, Head of Investigative Science)
RE: Gunnison Covid19 Data Management System Funding Request
Date: Aug. 12, 2020

We are requesting that the CARES Act funding partners approve $11,713 from Gunnison's CARES Act funding towards a data management system (DMS) for managing key data flows such as PCR test results used to manage the community's response to the virus. This funding will be matched dollar per dollar by a federal/state grant obtained by Scott Morrill to be used towards development of the DMS, for a total expenditure of $23,426.

Need

Having transparent, easy to understand, and meaningful data around infection rates is critical to the ability of our communities to analyze and understand patterns of infection, make management decisions, and provide transparency to the public around disease transmission dynamics (e.g., the public dashboard) as well as decision-making. Furthermore, good information on infection rates is critical as we have discussions with the state government concerning maintaining local control over decision-making.

Managing data around the disease is complicated, and only becoming more complicated. We have four different types of data that we use to understand infection: PCR swabs, Rapid tests, antibody tests, and symptoms. Furthermore, for any one type of data, there can be multiple entities generating results. For example, as we work to scale up the number of PCR swab tests, we expect to see increasing number of test results generated by private clinics, in additional the public testing center operated by Gunnison Valley Hospital. Integrating these multiple data streams in an effective and cost-efficient manner requires creating a DMS that did not exist before the virus.

Early in the response an initial DMS was created by a volunteer. However, due to the practical limitations of a volunteer-generated piece of software, the incident management team has struggled to obtain needed functionality. Given the critical nature of the DMS to our ability to manage a response, and the fact that it involves highly sensitive and personal data, we have decided to make it a priority to create a professional DMS. Furthermore, at times public reporting of results has lagged considerably, creating confusion and undermining public trust. Hiring a professional firm to create a DMS will ensure the county has control over its data, including operational redundancy, appropriate back-ups and security, and allow professional management of the system. We can build upon, and consolidate lessons, from the volunteer DMS to build an effective and professional system relatively cheaply.

Process

When the Incident Management Team decided to move ahead with a DMS we developed a request for proposals for a firm to build the DMS acting as a consultant. After consulting with both Gunnison Public Health and Gunnison County about the mechanics for moving forward, we publicly advertised a request for proposals. We received and reviewed 16 responses. We initially eliminated approximately half of the firms simply based upon cost. We sent all firms additional detailed information concerning the data structure and number of records that we are managing and encouraged them to update their scope of

work, schedule, and costs. We offered every firm an opportunity to talk by phone or email to pose any questions they had about what we were looking. Ian Billick talked with a number of firms by phone and answered every email query he received.

Ian Billick, Erik Niemeyer, and Jordan Williford reviewed the applications in detail and provided an analysis and recommendation, along with all RFP responses, to Joni Reynolds, CJ Malcolm, and Jodie Leonard. They accepted our recommendation to go with Slopeside Technology. We recommended Slopeside based upon cost, the fact that they are local, demonstrated effectiveness on other projects, and the fact that they are using an existing platform (WordPress content management system) which will be cheaper to build, and maintain. After agreeing to a tentative recommendation, Ian Billick spent additional time with them talking through the details of the scope of work and reviewing a potential schedule. They determined they could complete the work in approximately 6 weeks, which is our preferred timeframe. Jodie Leonard then spent an additional 1.5 hrs talking with them about the county's needs. She indicated she felt comfortable working with them and felt that they had a good understanding of the system. There was a sense that having a local firm that was invested in our community professionally and personally was desirable, if a local firm could be found that was competitive. Scott Morrill and Ian Billick had a conversation with our state partners to review the process and deliverables and confirmed that they approved of use of the grant funds for the expenditure.

Deliverables and Cost Management

The grant funds must be spent by the end of the year. They will build a HIPAA-compliant DMS that will have controlled access with different levels of restrictions such that we can enter records, update information, and generate reports. They will migrate the existing data into the new system, and train personnel on use of the new system.

We anticipate that Gunnison will need to manage data after 2020. We have chosen this system in part because we anticipate relatively low costs to maintain or upgrade the system. Slopeside will work with us to make certain the system is appropriately hosted and backed up, which we estimate to be $100-200/month.

Slopeside will perform the work on a cost and materials basis. If we run into cost overruns we will reduce scope, prioritizing PCR swab and Rapid data first, antibody testing second, and symptom data last. Additionally, we have some planned improvements to the system we can scale back if needed in order to maintain the budget.

Additional Information about the Gunnison CoVID DMS
July 25, 2020

Number of PCR Records
We currently have about 2000 records and are adding about 150/week. Historic records will need to be transferred.

Number of Antibody Records
I am less certain of the number of records, but anticipate it is approximately 1000 records with 25-50 added per work.

Number of Self-Report Records
I am also less certain of the number of records, but guess that it is about 2000 records with minimal additional records now. It is less critical that these historic records be transitioned. If this adds significant cost, we could drop this.

Access
We have 2-4 individuals that will need to have full access, including setting permissions and the ability to edit records. We have another 25-50 individuals that will need to be able to input records without being able to see results. We have another 10 individuals or so that will need the ability to see some of the records.

Call Center Questionnaire
This allows call center personnel to create a record for an individual that they are scheduling to visit the testing center.

Demographics
This allows local clinics to create a record for someone they have requested a test for. It is shorter to encourage use.

Insta-swab
This allows hospital personnel to create a record for someone that they swabbed.

Schedule
This allows the testing center and others to see who is scheduled for swabbing.

Schedule Record
This allows staff to see information for an individual who is swabbed.

To Schedule
This allows call center personnel to schedule someone for a swab.

Swabbing Site Follow-Up
This allows call center personnel to record what happened for an appointment.

Lab Results

Allows staff to input results from test

Antibody Results
Allows staff to enter record for antibody results

Hospital
Allows staff to track individuals hospitalized, transferred, discharged, and passed away

Self-report
Allows public members to self-report symptoms

Form	Input	Pulldown	Report	Notes
Call Center Questionnaire				
	First			
	Last			
	DOB			
	Phone (xxx xxx xxxx)			
	Sex (M, F, O)			
	Email			
	Street address			
	Location			
	City/State			
	Call center before (Y,N)			
	Self isolating (Y, N)			
	Symptoms (Y, N)			
		None		
		chills		
		cough		
		fever		
		headache		
		loss of taste/smell		
		runny nose		
		shortness of breathe		
		sore throat		
		unusual bluish discoloration on lips or face		
		unusual fatigue or muscle pain		
		unusual rash		
		nausea		
		vomiting		
		diarrhea		
	How severe (1-10)			

	Date of onset of symptoms			
		None		
		cancer		
		diabetes		
		heart disease		
		immunocompromised		
		Lung conditions (asthma, COPD)		
	Contact with confirmed/suspected (Y/N)			
	Older than 60 (Y/N)			
	Pregnant (Y/N)			
	EMS/Fire/LEO (Y/N)			
	Notes			
Demographics				
	First			
	Last			
	DOB			
	Phone (xxx xxx xxxx)			
	Sex (M, F, O)			
	Email			
	Street address			
	Location			
	City/State			
Insta-swab				
	First			
	Last			
	DOB			
	Sample date			
	Reason			
		Contact tracing		
		Essential worker		
		GVH surgery		
		Illness		
		Other surgery		
		POS Anti (IGM)		
		GVH employee illness		
		GVH employee contact tracing		
Schedule				3 minute intervals, 8 to noon (modifiable)
			Day of Week	

			Date	
			Testing location	
			Time	
			Last	
			First	
			DOB	
			Reason	
To schedule				
	First			
	Last			
	DOB			
	Phone			
	Reason			
Schedule record				Print button
	First			
	Last			
	DOB			
	Address			
	Location			
	City/State			
	Email			
	Symptoms			
Notes report				
	First			
	Last			
	DOB			
	Notes			
Swabbing site follow-up				
			First	
			Last	
			DOB	
			Phone	
	Outcome			
		No show		
		Refused		
		Screened		
		Swabbed		
Lab Results				
			First	
			Last	
			Sample date	
	Status Result			
		Pending		
		POS		

		NEG		
		Indeterminate		
		Unsatisfactory		
	Result Date			
Antibody Results				
	First			
	Last			
	DOB			
	Phone (xxx xxx xxxx)			
	Location (city)			
	Sex (M, F, O)			
	Sample date			
	Result			
		POS		
		NEG		
		Indeterminate		
		Unsatisfactory		
	Result Date			
	Timestamp result			
PCR Results				Sort function
			First	
			Last	
			DOB	
			Sex	
			Location (city)	
			Phone	
			Sample date	
			Result date	
			Result	
			Reason	
			Timestamp	
Summary PCR Results				
			Total inconclusive	
			Total Negative	
			Total pending	
			Total Positive	
			Total unsatisfactory	
			Daily inconclusive	
			Daily negative	
			Daily pending	
			Daily positive	

			Daily unsatisfactory	
			Positive by category (symptomatic, contact tracing, critical personnel, surgery, other)	
Hospital				
	First			
	Last			
	DOB			
	Current Admit status			
		Discharge		
		Green		
		Orange		
		Red		
		Passed away		
	Transfer			
		Grand Junction		
		Montrose		
		Other		
Hospital Summary				
	Total admits			
	Total transfers			
	Total discharges			
	Total mortality			
Self Report				
	First name			
	Last name			
	Gender (M, F, O)			
	Age			
	Heart disease, diabetes, lung (Y/N)			
	Immuno-compromised (Y/N)			
	Check all symptoms			
		headache		
		fever		
		Shortness of breath		
		Chills		
		Muscle aches		
		Runny nose		
		Sore Throat		

		Cough		
		Loss of taste/small		
	Date of first symptom			
	Severity (1-10)			
	Location			
		Almont		
		Cimarron		
		Crested Butte		
		Crested Butte South		
		Curecanti		
		Gunnison		
		Lake City		
		Marble		
		Mt. Crested Butte		
		Ohio City		
		Parlin		
		Pitkin		
		Powderhorn		
		Sapinero		
		Sargents		
		Somerset		
		Tin Cup		
		Whitepine		
		Non-resident		
	If visitor, city/state			
	Address			
	Phone			
	Email			
	Comments			
Self-report Summary				
			# self reports by date of first symptoms	

<u>Functionality</u>
Edit privileges
Call center access for scheduling and entering demographic data
Clinic access for entering records for their patients
Hospital access for insta-swab record entry
Ability for anybody to self-report symptoms
We use first, last, and DOB to establish unique individuals
We need to be able to link multiple records for the same individual
Privileges specific to different functionalities

2019 EMPG Special Project Grant Application

Applicant Information
Applicant Name (Tribe/County/City): Gunnison County
Contact (Name): Scott Morrill
Title: Emergency Manager
Address: 200 E. Virginia Av
Phone: O – 970-641-2481; C – 970-275-1370
Email: smorrill@gunnisoncounty.org

Proposed Use of Funds
__X_ Operational (EMPG-eligible costs within the performance period)
___ Project Completion (EMPG-eligible costs within the performance period)
___ Both (award to be used for a combination of costs)

(Performance Period: July 1, 2020 – December 31, 2020)

Please provide a brief description:

Gunnison County is proposing utilizing the 2019 Special Project Grant to fund a COVID Scientific Research Team to assist with data management. Data management is Gunnison County's most critical pandemic need at this point and the foreseeable future. It directly affects all the other pandemic related activities – preplanning, revised public health orders, reopening, recovery etc. Further, the data will feed our public facing Coronameter (attached) with live information, in order for the public to have current, accurate information regarding the status of the pandemic in Gunnison County. This will allow the public to make informed decisions regarding their behavior, relative to the pandemic. The Coronameter can be viewed here: https://covid19.gunnisoncounty.org/ Please note the COVID-19 Data Studio and Economic Recovery Dashboard, which are also critically dependent on collected data.

Currently, there is a Scientific Research group operating with-in the Unified Command. However, with the amount of data, the myriad needs for uses of that data, and their day jobs, the individuals comprising this group are at capacity and unable to meet expectations of command and the jurisdictions. A great deal of time and effort has been put into our data management to date, with considerable success. However, it is not sustainable with current staffing levels. Based on initial inquires, total cost of this project is estimated at $30,000. Local jurisdictions are also contributing to this endeavor. Scope of work will identify goals and objectives to be met by Dec 31, 2020.

_____ __June 29, 2020_____
Signature Date

Budget:

Special Project Costs	Fed. Reimbursed (up to 50%)	Local Cash Match (50% or greater)
Salary/Staffing	$11,713.00	$11,713.00
Design/Planning	$	$
Equipment	$	$
Materials/Supplies*	$	$
Copying/Printing*	$	$
Travel*	$	$
Training	$	$
Administration*	$	$
Total	**$11,713.00**	**$11,713.00**

***Note: Please see the EMPG federal guidance regarding classification of Management and Administration (M&A) costs. The federal share (to be reimbursed) M&A costs may not exceed 3% of the federal share of the budget. M&A costs beyond 3% of the federal share may be approved and documented as part of the non-federal match requirement.**

Note: Please ensure that any equipment proposed is listed as EMPG eligible on the DHS Approved Equipment List (AEL) and outline your procurement procedure followed in making the equipment purchase. Provide a list of equipment to be purchased with these funds.

Authorization (Signature of Authorized Local Government Representative)

The undersigned does hereby warrant and guarantee that he/she is authorized to sign and submit grant applications on behalf of the named local government. The undersigned does hereby submit this application for financial assistance in accordance with the Emergency Management Performance Grant program administered by the Colorado Division of Homeland Security and Emergency Management and certifies that the applicant will fulfill all requirements of the program and that all information contained herein is true and correct to the best of his/her knowledge.

Signature:_____Date:_June 29, 2020_____

Title:_Emergency Management_____

Organization:__Gunnison County_____

For OEM Use:

OEM Regional Field Manager Approval

Signature:_____Date:_____

Budget:

Planning	Exercise
Organization	Equipment
Training	M&A

Gunnison County
CoVID19 Data Management

1. Description of Service

This Contract is for Slopeside Technology (Slopeside) to develop a data management platform to assist Gunnison County staff in tracking CoVID19 related data, such as Patient demographics, testing results, and scheduling of tests.

The data management platform will include:

a. Phase-1 deployment of existing functionality in 4-6 weeks from a mutual agreement of this Contract.
    i. This timeline assumes that Gunnison County will be able to provide a copy of the existing platform's database and existing source code. The exiting source code will be used to understand the current system and functionality. We do not intend to use existing code in the new platform, but it can be used to better understand existing functionality and reduce the time and effort to deliver an equivalent and more secure environment.
    ii. This timeline assumes that Gunnison County will also be able to agree/acquire HIPAA compliant hosting. Slopeside will work with Gunnison County staff to identify HIPAA compliant hosting providers and assist in evaluating hosting services and associated support, such that Gunnison County staff can make an informed decision regarding qualified HIPAA compliant hosting services.
    iii. The 4-6 week timeline is based on assumptions regarding the availability of staff time, existing database design (or equivalent source code/scripts), access to the live database, access to existing source code, and timely responses from Gunnison County staff and/or associated individuals and system users.
    iv. Slopeside's intent is to deliver equivalent and/or improved functionality in the 4-6 week timeframe, but it should be understood that this can not be accomplished without timely cooperation from existing Gunnison County staff and project stakeholders.
b. Additional deployments will be planned for functional improvements beyond existing functionality. New functionality includes capabilities such as, but not limited to:
    i. The ability for users with administrative capabilities to edit data stored in the system. Such as:
        1. Patient information
        2. Testing results
        3. Scheduling Information
        4. System drop-down or list values
    ii. The ability for appropriate users to be able to add schedules or testing results to existing patient records
    iii. Improved data validation, process-flows, end-user experience, and system capabilities
        1. However, there should also be recognition that some system improvements may result in a some users experiencing increased clicks, data input, or other requirements that could be perceived as reduced end-user experience, increased data-input requirements, or other challenges that could be undesirable to particular user-groups. The intent would be that project stakeholders understand and agree with additional end-user conditions that result in an improved quality and reliability of the overall system.

2. Description of Work Product Cost

As described in referenced "2020 Proposal – COVID Data Management.pdf", we estimate this project's implementation cost to be between $15-24k. Based on the information that we have to date, we believe this project will be completed within the $20-24k range. However, there are still requirements of this project that are not well understood by

Slopeside, which Slopeside believes are covered with the $15-24k range of the project estimate. Slopeside's intent is to complete the project with the least expense required for Gunnison County, but we also recognize that there are likely misunderstood requirements or requirements that are not well understood that could result in higher than expected costs. Our intent with the range of $15-24k is to avoid unexpected costs that fall outside of this estimate.

3. Work Product Ownership

Any copyrightable works, ideas, discoveries, inventions, patents, products, or other information (collectively the "Work Product") developed in whole or in part by Slopeside in connection with the Services will be the exclusive property of Recipient.

The Recipient also agrees and understands that portions of the works, ideas, discoveries, inventions, patents, products, or other information (collectively the "Work Product") may be used by Slopeside for unrelated projects, works, ideas, inventions, products or "Work Products".

In common-terms, Slopeside makes use of existing code patterns, frameworks, and other reusable code and systems from other "Work Products" for completion of this project and may therefore use such items created or used in this project for future "Work Products".

4. Force Majeure

If performance of this Contract or any obligation under this Contract is prevented, restricted, or interfered with by causes beyond either party's reasonable control ("Force Majeure"), and if the party unable to carry out its obligations gives the other party prompt written notice of such event, then the obligations of the party invoking this provision shall be suspended to the extent necessary by such event. The term Force Majeure shall include, without limitation, acts of God, fire, explosion, vandalism, storm or other similar occurrence, orders or acts of military or civil authority, or by national emergencies, insurrections, riots, or wars, or strikes, lock-outs, work stoppages or other labor disputes, or supplier failures. The excused party shall use reasonable efforts under the circumstances to avoid or remove such causes of non-performance and shall proceed to perform with reasonable dispatch whenever such causes are removed or ceased. An act or omission shall be deemed within the reasonable control of a party if committed, omitted, or caused by such party, or its employees, officers, agents, or affiliates.

5. Waiver Of Contractual Right

The failure of either party to enforce any provision of this Contract shall not be construed as a waiver or limitation of that party's right to subsequently enforce and compel strict compliance with every provision of this Contract.

6. Assignment

Neither party may assign or transfer this Contract without the prior written consent of the non-assigning party, which approval shall not be unreasonably withheld.

7. Expiration & Modification

This Agreement shall remain in effect until such time as one or the other party provides written notice of cancellation. This Agreement may be modified or amended as necessary after negotiations are initiated by either Party. If an agreement is reached, only a written instrument signed by both Parties will modify or amend this Agreement.

8. Termination

All services may be terminated by either party for any reason. Both parties agree to 45 (forty-five) days advance written notice of intent to cancel.

9. Payment Obligations

Even after termination or expiration of this agreement, each party shall pay any amounts it owes to the other party, including payment obligations for services already rendered, works already performed, work that has started but has not been completed, goods already delivered, or expenses already incurred.

10. Reciprocal Indemnification

Slopeside Technology and Gunnison County each agree to indemnify the other from all costs and expenses (including reasonable attorney fees) from any breach of any representation, warranty, covenant, undertaking or promise (whether or not so captioned) set forth in this Amendment; proved, however, that neither party will be liable to the other for consequential damages, special damages, punitive damages, lost profits or similar claims.

11. Mutual Non-Disclosure Agreement

It is understood and agreed that the parties to this Agreement may provide the other with certain information that may be considered confidential. To ensure the protection of such information and in consideration of the agreement to exchange said information, the parties agree as follows:

The confidential information to be disclosed under this Agreement ("Confidential Information") can be described as and includes:

> Technical and business information relating to proprietary ideas, patentable ideas and/or trade secrets, existing and/or contemplated products and services, research and development, production, costs, profit and margin information, finances and financial projections, customers, clients, marketing, and current or future business plans and models, regardless of whether such information is designated as "Confidential Information" at the time of its disclosure.

In addition to the above, Confidential Information shall also include, and the parties shall have a duty to protect, other confidential and/or sensitive information which is (a) disclosed as such in writing and marked as confidential (or with other similar designation) at the time of disclosure; and/or (b) disclosed by in any other manner and identified as confidential at the time of disclosure and is also summarized and designated as confidential in a written memorandum delivered within thirty (30) days of the disclosure.

12. Agreement

By signing this document, I (the client) understand the terms and conditions of this Contract. I certify that I have the authority to agree to this Contract, authorize the work to be performed and to authorize payment for the work performed.

Signed: _____ Date: _____
Client

Signed: _____ Date: _____

Brian Brown, Owner, Slopeside Technology, LLC.

Gunnison CoVID19 Incident Data Management Database
Request for Proposals
Final

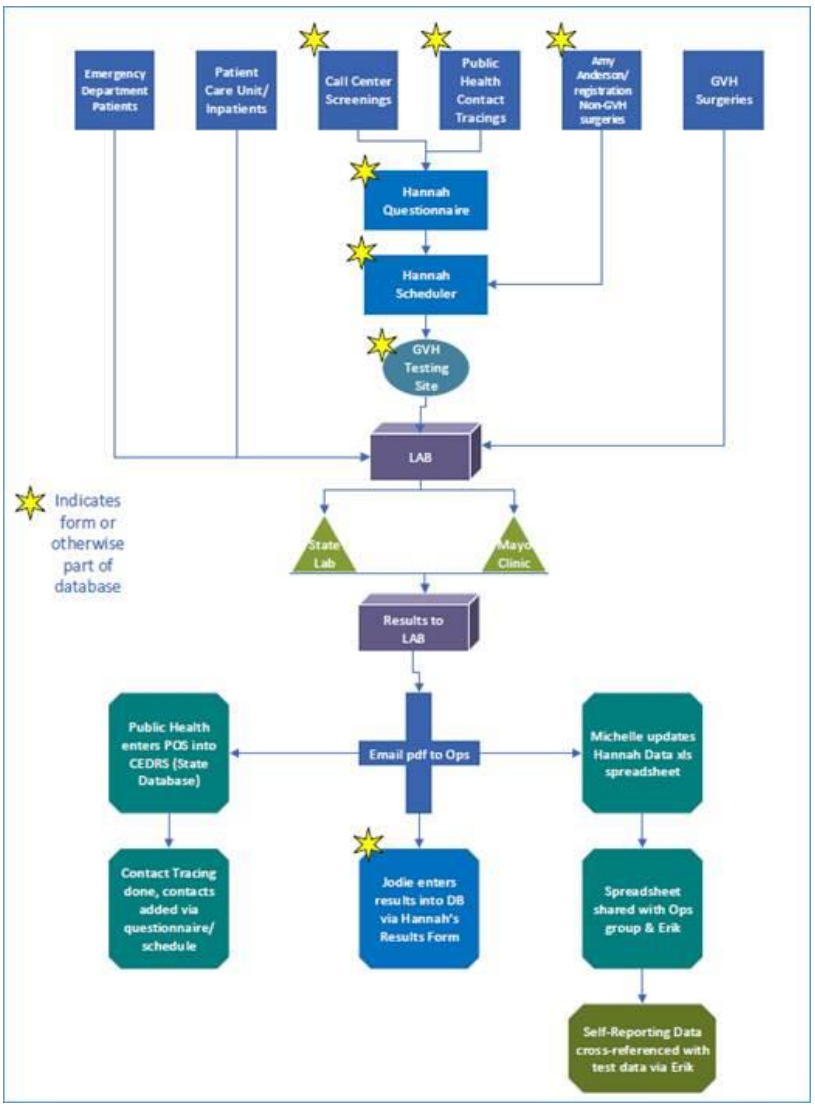
We are looking for firms that can build a Gunnison CoVID19 Incident Management Data Management System (DMS). Responses and queries should be sent to Ian Billick, ibillick@gmail.com, and include: cover letter, description of relevant experience, list of key individuals on project team and relevant experience, anticipated schedule/timeline, a list of additional questions, approximate costs (including billing rates of key individuals), and the preferred billing method (e.g., time and materials, fixed bid). Proposals should address how cost uncertainty and scope creep will be managed. We will begin reviewing responses on Friday, July 20th, though reserve the right to accept responses after that date. On or after July 20 we will develop a short list of firms to hire. At that point we will answer any questions the firms have, providing enough detail for firms to reduce uncertainty on cost estimates, and take final bids.

The goals of the DMS are to:

1. Provide the Incident Management Team (IMT) information needed to assess critical metrics concerning the status of CoVID19 in Gunnison County, including tracking PCR results (PCR tests, antibody tests, hospitalization data, and self-report data).
2. Provide the Operations Section of the Incident Management Team database support to manage and schedule PCR/swab testing across the range of locations at which individuals are being tested, including the public health testing sites, Gunnison Valley hospital, local clinics, and the emergency department. This database will include collecting contact/demographic information, scheduling tests, tracking test results, and support the ability of public health to follow up with individuals who have missed tests.
3. Provide timely transparency to the public on metrics used by Gunnison Public Health to establish public health orders.
4. Provide the Incident Management Research Group the data they need to analyze and contextualize disease transmission dynamics within Gunnison County to inform public health decision-making.

To achieve these goals we will build a system that has the following functionalities or characteristics:

1. Security to protect confidential patient information, with access controlled by Jodie Leonard.
2. HIPAA compliant.
3. Redundancy/back-up.
4. Documentation.
5. Enable multiple points of data entry via custom web-based forms (name, DOB, demographic, contact info) for patients who are getting PCR tests. The multiple points of data entry will include: the Gunnison County public health call/test center, GVH surgeries, non-GVH surgeries, public health contact tracking, emergency department, patient care center, and local clinics.
6. Development of a robust unique identifier, such as DOB/name, that allows multiple records for the same individual to be easily tracked across multiple points of record entry involving different organizations (e.g., local clinics and hospitals).
7. Allows patients to be scheduled for testing and tracked at the public health call center



8. Allows tracking of CoVID19 patient status as they move through the hospital system, including hospitalization status, transfers, and deaths.
9. Provides standardized and automated reports for the incident management team, Gunnison County's public dashboard (key metrics used to establish public health restrictions), and the operations team (the testing schedule, the results of PCR tests).
10. Allows entry of antibody results and associated information.
11. Allows for the importation of historic data and/or external data.
12. Provides visualization of the data both for the IMT and the public in the form of reports and dashboards (web-hosted).
13. Allows for custom querying of the raw data for the purposes of analysis by the Research Group and their collaborators.

<u>Needed Services</u>

1. Create data entry portals.
2. Build database.
3. Produce reports.
4. Create dashboards
5. Maintain system and create improvements as directed.

<u>Additional Information</u>

1. There is an existing system that defines most of the data entry needs as well as the database architecture.
2. There is a need to work with critical stakeholder groups to better define needed reports.
3. It is anticipated that there will be additional requested improvements once the database is online as Gunnison Public Health refines their needs.
4. The anticipated length of project is through Dec 31, 2020 w/ the possibility of extending every 6 months based on progression or regression of the COVID-19 pandemic.
5. The work must be done on a contract basis, with hiring subject to final review and approval of the Gunnison County Board of Commissioners.