REQUEST FOR PROPOSALS:

INFORMATICS TECHNICAL ASSISTANCE AND SERVICES

April 18, 2016

www.aphl.org

8515 Georgia Avenue, Suite 700

Silver Spring, Maryland 20910

CONTENTS

INTRODUCTION

The Association of Public Health Laboratories (APHL) is a membership organization in the United States representing the laboratories that protect the health and safety of the public. In collaboration with members, APHL advances laboratory systems and practices, and promotes policies that support healthy communities. APHL serves as a liaison between laboratories and federal and international agencies, and ensures that the network of laboratories has current and consistent scientific information in order to be ready for outbreaks and other public health emergencies. Membership consists of local, territorial, county and state public health laboratories; environmental, agricultural and veterinary laboratories; and corporations and individuals with an interest in public health and laboratory science. APHL is a non-profit, 501(c)(3) organization with a history of over fifty years.

For over ten years, APHL's Informatics Program has dedicated itself to helping public health laboratories and agencies with data standards development and implementation, public health data messaging, and the deployment of novel tools to simplify data exchange efforts. This assistance has included the development of the APHL Informatics Messaging Service (AIMS) and a team to deliver technical assistance (TA). The deployment of AIMS, a HIPAA compliant and FEDRAMP certified cloud-computing platform, has allowed APHL to look at solutions that may sit outside the traditional highly standardized, integrated health data exchange model. The APHL TA team works closely with public health partners to deliver the most advanced, efficient, and scalable solutions as possible to further electronic data exchange and interoperability.

The purpose of this Request for Proposals (RFP) is to identify informatics subject matter experts (SMEs) to work individually and/or within a team setting with APHL and other contractors, partners and key stakeholders, to support the current work plan of the APHL Informatics Program. These SMEs will work with Informatics Program staff to deliver technical assistance, including development of IT solutions, technical and terminology support, and project coordination to state and local public health laboratories (PHLs), public health agencies (PHAs), and other messaging partners. Coordinated technical assistance to PHLs, PHAs and messaging partners will be delivered across multiple projects. Project team members will work together to follow agreed upon project processes and provide deliverables within project constraints of cost, scope, quality, customer satisfaction, risk and time. APHL may request that the contractor provide information management consultations regarding appropriate technologies that may include enterprise, systems and data architecture, HL7 data exchange, integration broker solutions, commercial off-the-shelf (COTS) and open-source technologies, database development methodologies and models, project management expertise or other technology related options.

APHL may make separate awards to one or more SMEs in each of the specific areas discussed in the Scope of section of this RFP. Applicants are strongly encouraged to indicate the areas for which they should be evaluated within their response to this RFP.

BACKGROUND

APHL is seeking to identify expert informatics technical staff to support various TA initiatives and APHL informatics programmatic efforts. APHL works with PHLs, PHAs, and partners to coordinate data exchange initiatives and share best practices. The association's staff collaborates with local, state and national public health partners to advance standards-based electronic data exchange to improve surveillance. Sharing laboratory data is essential for public health reporting and planning, and crucial in responding to outbreaks, events and emerging health threats. The APHL Informatics Program developed the TA approach to guide and support PHLs and PHAs in developing standards-based, interoperable electronic data exchange platforms. The TA team works with laboratory, technical, and epidemiology SMEs, both remotely and on-site, to assist with project management and business analysis; data standards expertise; workflow analysis; and technical architecture solutions. APHL's TA provides a focused, accelerated approach that targets knowledge transfer, capability-building, and resource sharing.

The APHL Informatics Program is currently supporting a number of electronic messaging initiatives that provide assistance to local, state and national public health organizations. These initiatives increase the ease of electronic reporting for laboratory and agency stakeholders, as well as enable electronic laboratory reporting (ELR) between PHAs, PHLs, hospitals, commercial Labs and other partners while enhancing the reporting capabilities and capacity at the PHL and PHA. Broad goals of the data exchange initiatives include:

- Promote adherence to interoperability standards in areas including laboratory processes, data structure and vocabulary (syntax and semantics of data exchange objects and applicable value sets like HL7 codes, LOINC, SNOMED, etc.) and information technology (data transport and transmission, data security, cross-reference mapping and directory look-ups, etc.);
- Collaborate with other parallel efforts in data exchange such as the Standards & Interoperability Framework (further information on this framework may be found at http://www.siframework.org/) and the Laboratory Messaging Community of Practice (LabMCoP) (further information on Communities of Practice may be found at http://www.cdc.gov/phcommunities/index.html);
- Provide feedback to Standards Development Organizations based on best laboratory practices and implementation experience (further information on SDOs may be found at http://www.standardsportal.org/usa_en/resources/sdo.aspx);
- Compile and share knowledge on a variety of data exchanges efforts across agencies through tools, webinars, presentations, vocabulary harmonization efforts, and other resources;
- Accelerate and enhance electronic reporting, leveraging existing efforts across public health;
- Build capabilities within the public health community through knowledge transfer and developing reusable, scalable tools and resources; and
- Improve data quality and timeliness for electronic surveillance and reportable data including laboratory, case reporting and case notifications.

Award

APHL expects to provide funding for the TA work on a cost-reimbursable basis. APHL will make these payments in accordance with the payment terms specified in the written contract between APHL and the selected organization(s) and/or individual(s) or as otherwise mandated by applicable federal law or regulation or the terms of APHL's funding notice from the Centers for Disease Control and Prevention (CDC). See the Term of Award section of this RFP below for details on the anticipated contract period. The selected applicant(s) will perform the duties described in the Scope of and Appendix A or modified or related services needed to meet then current TA needs as might be specified in the contract with APHL. APHL anticipates that a selected applicant would only perform duties related to the skill set(s) for which that selected applicant applied.

Project Period

While APHL envisions that the TA work described in this RFP will be needed for up to four years, there is no guaranteed funding associated with this RFP. The amount and type of TA work in a given time period will depend on the needs of APHL's Informatics Program at the time and the level of CDC funding provided during that period.

Range of Funding Available

APHL anticipates that funding fort the TA work will range from $101,000 to $2,310,000 during initial budget period.

The organization(s) and/or individual(s) selected to serve as consultants delivering TA and services will receive a notice of award from APHL.

SCOPE OF WORK

Each selected organization or individual SME will provide consultation for informatics and IT assistance used for public health surveillance and laboratory data management. This may include, but is not limited to: expertise and development of enterprise systems and data architecture; HL7 data exchange and implementation expertise; standard vocabularies (e.g. LOINC, SNOMED, etc.) management and expertise; development of IT solutions using one or more integration brokers (e.g. Rhapsody, Mirth, etc.); expertise with commercial off-the-shelf (COTS) and open-source technologies (e.g. surveillance information systems, laboratory information management systems, etc.); database development, administration, and modeling; health informatics training; and expertise in project management.

Each selected organization or individual will work within a team consisting of APHL Informatics Program staff, other contractors/consultants to APHL, IT technical experts, other SMEs, and project management/business analysts. The team will operate as a collaborative unit under the direction of APHL Informatics Program Staff. Selected applicants will need to possess strong communication skills and the ability to work with public health and IT professionals and within PHAs and PHLs.

Listed below are the specific services that APHL expects to be accomplished during the initial contract period in each of the seven defined project areas. Applicants are advised that the specified services may shift slightly during the first project year in response to changes in APHL's programmatic needs. In addition, APHL is likely to revisit and potentially modify the specified services any of the seven project areas in the future project years in order to reflect the amount of funding available in a given project year and to meet then-current APHL programmatic needs. General requirements and detailed explanations of the skill sets required for each area are outlined in Appendix A.

1. Project Management and Coordination - Develop and maintain project management plans and schedules to track activities needed to meet project goals and objectives. This may include coordination and management of human resources, budgets, collaborative tools, and other activities needed to provide consultation and assistance on informatics activities for public health surveillance and laboratory data management.

2. Business Analysis - Work directly with APHL staff and appropriate persons (e.g. partners, system owners, users, etc.) as authorized by APHL staff to develop innovative specifications, implementation guides and documentation to capture requirements based on program goals and objectives. This will include the ability to translate requirements, including standard measures and indicators, needed for systems designers, developers, and technical architects designing applications and prototypes.

3. Vocabulary, Terminology and Coding – Develop, configure, implement, and maintain national health information technology standards and codes to support the interests of TA recipients to achieve electronic data exchange and interoperable surveillance needs. Develop and manage project-related value sets, mapping tools and encoding guidelines.

4. Architecture - Develop and support data exchange solutions to meet specific and broad project requirements using national standards for public health, where available and appropriate. This includes the ability to 'think outside the box' and introduce innovative and specific program analysis to align with other activities supported by APHL; and further interoperability.

5. System Integration and Development - Utilize integration engine software (preferably Orion Health Rhapsody and Mirth), XML encoding documentation, and other IT workflow components (e.g. mapper files, JavaScript filters, database filters and transport/I.O. configuration, web services, etc.) to support PHAs, PHLs, and other data exchange partners. Develop solutions for enterprise data integration for health information exchange, and continuity of operations.

6. Database Development, Administration and Modeling – Design methods to store, analyze, utilize, and organize data with a focus on public health data standards. Formulation and documentation of existing processes and events that occur during application software design and development. Use techniques and tools to capture and translate complex system designs into easily understood representations of the data flows and processes, creating a blueprint for health data exchange and interoperability.

7. Health Informatics Training - Provide training on data exchange standards, data integration tools and resources, and project-related deliverables.

Applicants must identify the scope of work areas (#1-7) upon which their proposal should be evaluated. Applicants selected for the RFP will agree to coordinate activities and work together – both across the seven scope of work area and within a given scope of work area if more than one applicant is selected for that area – to accomplish the goals and objectives outlined in this RFP.

RFP PROCESS OVERVIEW

Confidentiality and submitted response material ownership

All information submitted in response to this RFP will be treated as confidential and will only be used to assist APHL in the selection process. APHL will not share responses outside of APHL and those involved with the RFP review process described in the Evaluation of Responses section of this RFP. All responses to the RFP will become the property of APHL and will not be returned.

Prior to award, respondents to this RFP cannot include or reference this RFP in any materials (e.g. press releases, websites, etc.) without prior written approval from APHL.

Eligibility

This is an open and competitive process.

Anticipated RFP Schedule

At this time, APHL anticipates the following schedule:

April 18, 2016   –   RFP issued

April 25, 2016   –   Letter of intent due by 5PM EST to APHL (see Confirmation of Intent to Respond below)

April 28 2016   –   Last day to submit questions (APHL may grant exceptions if its Informatics Program staff believe that the extension is needed to provide important clarification in response to the additional questions and that the extension would not adversely impact applicants or the evaluation process described below)

May 18, 2016   –   RFP responses due by 5PM EST to APHL (the RFP Due Date)

May 31, 2016   –   Proposal review and follow-up completed

June 7, 2016   –   Final review completed; APHL will notify successful candidate(s) within seven days

APHL will communicate any modification to this schedule on www.aphl.org/rfp, APHL's procurement website.

Response Submittal

Confirmation of Intent to Respond

APHL requests that prospective applicants submit a brief email statement indicating intent to submit a proposal. Although a letter of intent is not binding, and does not enter into the review of the RFP, the information that it contains allows APHL Informatics Program staff to estimate the potential review workload and plan the contract development and review process. Potential applicants must include the following in their email:

- The name of the organization or individual that will submit the proposal; and
- Identify which specific Scope of Work areas (all or any portion of #1 – 7) that they expect their proposal to cover.

The prospective bidders should email this statement to the contacts identified in the Final Response section below using the subject line: CONFIRMATION OF INTENT TO RESPOND: APHL TECHNICAL ASSISTANCE AND SERVICES. APHL should receive this information by **5:00 pm EST on April 25, 2016**.

Final Response

APHL must receive complete responses by no later than **5:00 pm EST on the RFP Due Date, May 18, 2016**. Applicants may send proposals to APHL by using either of the following methods:

- Via email using the subject line: SUBMISSION OF RFP RESPONSE FOR APHL INFORMATICS TECHNICAL ASSISTANCE AND SERVICES to the following APHL staff members:

  o Linda Cohen at linda.cohen@aphl.org
  o Laura Carlton at laura.carlton@aphl.org

  With a cc to:

  o Rachel Shepherd at rachel.shepherd@aphl.org

- By United States Postal Service (USPS) – Priority or Express Mail service, Federal Express (FedEx), United Postal Service (UPS) or some other trackable shipping service with established delivery routes in the Washington, DC metropolitan area; addressed to:

  Association of Public Health Laboratories Attn: Rachel Shepherd
  8515 Georgia Avenue, Suite 700
  Silver Spring, MD 20910

APHL expects to send an email to each applicant acknowledging the receipt of their application. Any applicant who does not receive an email acknowledgement within 48 hours of the Final Response Deadline, please email the RFP points of contact above to confirm receipt.

Contact for RFP

Potential applicants must submit all correspondence regarding the RFP, including questions or clarifications, via email to the following:

- Linda Cohen: Manager, Informatics Program: linda.cohen@aphl.org; and
- Laura Carlton: Senior Specialist, Informatics Program: laura.carlton@aphl.org.

When emailing correspondence to APHL, applicants should send the message to both points of contacts above and should also copy the following individual as a cc on the message:

- Rachel Shepherd, Associate Specialist: Rachel.shepherd@aphl.org

APHL will promptly post questions received from interested parties, together with the answers provided by APHL to APHL's procurement website (www.aphl.org/rfp).

Evaluation of Responses

Initial Review

APHL's Informatics Program staff will conduct an initial review of all proposals for completeness. Any application that is incomplete on the RFP response due date (see the Anticipated RFP Schedule section above) will not be considered and will not receive a formal evaluation.

Evaluation Team

After the initial review, an evaluation team will be assembled to evaluate competitive proposals and then assess their relative qualities based on the Evaluation Criteria outlined below and any other factors and sub-factors noted in this RFP. This evaluation team will consist of at least three SMEs (but no more than seven SMEs) familiar with health informatics TA and messaging standards. The SMEs may consist of APHL members, CDC employees, SMEs with whom APHL has previously worked, or other SMEs referred to APHL by CDC or one of the association's members. APHL's Senior Director for Public Health Systems will have final approval over the selected review team's composition.

APHL will ask proposed review committee members to disclose any potential conflict of interest and APHL will not place any individual with a conflict of interest on the evaluation team. In the event that a reviewer identifies a conflict of interest (or if APHL staff have reason to believe that a reviewer may not be impartial) after the evaluation team has been assembled, APHL will exclude that reviewer from further participation in the review process and will eliminate that reviewer's completed reviews from the evaluation process.

Evaluation Criteria

Winning applications to this RFP will be selected only after the evaluation team's assessment of each proposal and each applicant's ability to achieve APHL's Informatics technical assistance and standards goals and objectives included in the Scope of Work or elsewhere in this RFP. The award will be made using a process that is most advantageous and in the best interest of APHL and the evaluation tem may, when appropriate, recommend an award either to one or more applicants who were not the lowest priced applicant or to one or more applicants who did not submit the highest technically rated applicant. The relative strengths, deficiencies, weaknesses, and risks of each application will be documented as part of the review. The perceived benefits of the higher priced proposal must merit the additional cost, and the evaluation team's rationale for tradeoffs will be sufficiently documented and maintained in APHL's procurement files. The APHL Informatics Program will not award a contract to an applicant that submitted a proposal with significantly higher overall cost if that proposal was likely to achieve only slightly superior performance from a lower cost proposal.

In addition to the information contained in an applicant's proposal (including activities and significant factors in the scope of work), the evaluation team may consider subject matter expertise gained from working with PHAs, PHLs, or within the informatics data exchange area as additional factors in the overall evaluation criteria. Other than as noted in the Organizational Experience & Past Performance subsection below, these additional factors will not be used in the initial assessment and review of the individual proposals. The evaluation team may consider the additional factors only when looking at two or more proposals that received a substantially similarly overall evaluation score. The evaluation team may also conduct a price evaluation and price realism analysis as part of this secondary evaluation, as described the Possible Secondary Consideration section of this RFP below.

The evaluation team will use the following criteria in their evaluation of the proposals:

CRITERIA	MAXIMUM POINTS
Management Approach	**30**

Technical Approach & Capabilities	**40**
Organizational Experience & Past Performance	**20**
Transition/Startup Plan	**10**
TOTAL POINTS	**100**

1. *Management Approach*
   (Up to 30 points)

An applicant must demonstrate an overall understanding of the project and provide adequate and feasible plans to address each area from the Scope of Work (#1-7) that they have included in their proposal (the plans must also address each area's associated specific tasks found in Appendix A). An applicant must include a detailed description of specific tasks to be performed, methods and resources (other than staffing) to be used and a discussion of problems likely to occur and plans for addressing them. Each applicant must do each of the following in their proposal:

   a. Describe their organizational structure and how they propose to manage this task, including a discussion of timelines and issues.

   b. Provide a rationale for their management approach.

   c. Describe the methodology for managing the task, performance measures they will use to monitor performance, any management tools they will use, how they will ensure quality products are delivered, how they will mitigate risk and how they will communicate.

      i. Adequately describe the resources they propose to complete the work described in the Scope of Work and Appendix A and a rationale for their proposed approach.

      ii. Identify any resources (facilities, hardware, software, communications, etc.) that would be required above and beyond that already addressed as part of this RFP.

   d. Clearly indicate how the tasks and subtasks will be monitored - and how corrective action will be taken if appropriate – and specify an approach for maintaining control of all contract change management issues.

   e. Provide (i) a detailed description of how conflicts are managed; (ii) a plan to ensure client satisfaction; and (iii) a measurement of fiscal responsibility and accountability.

   f. Identify anticipated management barriers and risks and provide a description of their approach to risk management during the task order from a management perspective and the planned actions to mitigate or eliminate risks.

   g. Identify all assumptions or conditions, if any, relating to their Management Plan and Other Qualification Information.

      APHL may, in its sole and absolute discretion, reject any proposal that includes any assumption or condition that it reasonably believes will have an adverse or detrimental impact or affect the successful implementation of the work envisioned by this RFP or the needs or requirements of APHL's Informatics Program.

2. *Technical Approach and Capabilities*
   (Up to 40 points)

An applicant must specifically address aspects such as technical understanding, methodology and approach and provide adequate qualified technical human resources to address the technical and administrative requirements and services outlined in the RFP. An applicant's proposal must:

a. Provide a detailed and comprehensive statement of the problem, scope, and purpose of the project to demonstrate complete understanding of the intent and requirements of the contract and potential problems that may be encountered.

b. Describe the proposed technical approach (i) to comply with or satisfy each of the requirements specified in a project area listed in the Scope of Work (#1-7) that the applicant has applied for and (ii) to address each project area's associated tasks and subtasks found in Appendix A. An applicant must submit a proposal that is consistent with the stated goals and objectives. An applicant's proposed approach must ensure the achievement of timely and acceptable performance and should include a milestone and/or phasing charts to illustrate a logical sequence of proposed events.

c. Discuss the ability to identify and recruit qualified personnel. An applicant must provide a description of (i) the approach and plan to rapidly obtain and/or replace qualified staffing resources to support existing and new task order work and to meet changing workload requirements and (ii) key skill sets for proposed personnel. Applicants may include resumes, up to 5 pages, for potential personnel as attachments. In addition, APHL strongly encourages applicants to submit a staffing matrix showing type and number of staffing resources readily available for the base effort, including breakdowns by skill sets, security clearances and any related technical IT certifications.

d. Discuss the plan and solutions for overcoming difficulties involved with performing the work requirements.

e. Document the decision-making authority of the project director as related to other elements of the organization, identify the percentage of time each staff member shall contribute to the program, and indicate the extent to which outside consultants or specialists will be used and evidence of availability.

3. *Organizational Experience and Past Performance*
   (Up to 20 points)

An applicant must provide a description of three projects completed within the past three years that clearly demonstrate the applicant's experience in performing projects of similar scope, size and complexity to the Scope of Work items for which the applicant's response proposes to address. An applicant must provide the following information for each project reference:

a. The contract number, customer or agency name, the contract title and date, and the name of the project;

b. A brief narrative description of the work performed for each of those contracts, including a discussion of any problems encountered, corrective actions taken and significant accomplishments achieved; and

c. The dollar value, contract type, period of performance, place of performance, and the number and types of personnel used in the performance of the contract.

4. *Transition/Startup Plan*
   (Up to 10 Points)

An applicant must provide a transition plan for the transition or phase-in of this project and must also provide a plan for a project phase-out. The plan must include a technical and management transition approach that is clear and complete and include the timeline and resources required for the transition. An applicant must incorporate the planned transition methodology in logical sequence to ensure a smooth transition of all tasks/subtasks associated with each Scope of Work item that the applicant is addressing in its proposal without

interruption or degradation of service levels. The applicant's plan must include both (i) an approach that ensures the successful achievement of its proposed goals while limiting impact to existing programs/projects and (ii) a complete description of risks (cost, technical and performance to both the applicant and APHL), foreseeable or likely issues and risk mitigation strategies.

Possible Secondary Criteria

In the event that two or more proposals receive substantially similar scores from the evaluation team's review, APHL may introduce the following as secondary criteria that may be considered by the evaluation team in order to differentiate proposals with similar scores.

1. Price Evaluation

APHL my conduct a price analysis of an applicant's proposal to determine the reasonableness of the Applicant's price proposal. Only proposals that the evaluation team rated as technically acceptable will be subject to this type of analysis.

2. Price Realism

APHL may conduct a price realism analysis of an applicant's proposal for such purposes as determining an applicant's understanding of the solicitation's requirements or assessing risk associated with an applicant's proposal.

3. Past Performance

APHL reserves the right to evaluate the past performance of the applicant, the applicant's proposed employees, and subcontractors as part of any secondary criteria review.

Evaluation Process

Primary Evaluation

APHL will conduct the technical review process via a combination of email communications and teleconference sessions between APHL's Informatics Program Manager and members of the evaluation team. APHL expects that its Informatics Program Manager will coordinate the review process and the evaluation sessions but will neither have a vote nor other decision making authority with respect to the scoring or ranking of applications under review. APHL Informatics Program staff will be available to answer questions from evaluation team members but also will neither vote nor have any ability to alter the evaluation team's scoring or ranking of proposals.

At any point during the evaluation phase, the evaluation team may request a phone interview with one or more of the applicants. If an interview is requested, APHL will notify the contact indicated in the selected applicant's proposal.

Possible Secondary Evaluation

After the initial review, APHL may invite applicants who submitted proposals determined to be in a competitive range to participate in negotiations and asked to submit a revised proposal based on their original proposal and the evaluations they received. APHL will engage the revised proposals will go through a final technical evaluation to see if the revisions affected the technical merits of the proposals, their scores and relative standing.

Post-Evaluation Process

APHL expects to notify the successful respondents on or before June 7, 2016 and will post the awardees' names on APHL's procurement website, www.aphl.org/rfp on that same day. Unsuccessful applicants will receive notification of these results by e-mail or by U.S. mail within 30 days of the date the name of the winning vendor is posted. All applicants will be entitled to utilize APHL's RFP Appeals Process to formulate a protest regarding alleged irregularities or improprieties during the procurement process. Specific details of this policy are located on the procurement website.

Timeline to Award

APHL will close the RFP response period at 5:00 pm EST on May 18, 2016, and will evaluate responses immediately thereafter. The evaluation will be conducted in the manner described above in the Evaluation of Responses section and will follow the Anticipated RFP Schedule (unless that timeline is modified on APHL's procurement website).

Once APHL awards the contracts to the winning applicants, APHL may request a meeting with the selected respondents prior to development or ratification of a contract. From the meeting, APHL will permit inclusion of changes that may arise in deliverables or conditions of project work. APHL will finalize a detailed contract, which will include the full terms and conditions of the project as part of the contract negotiations. APHL will indicate the starting and ending dates for the initial funding term (see the Term of Award section immediately below) and key deliverable milestones in the contract.

Term of Award

APHL expects to issue contracts for the initial phase of the TA and TAS work identified in this RFP with a term running from the date APHL completes contract negotiations with a selected applicant (but no earlier than July 1, 2016) to no later than June 30, 2017. APHL further anticipates possible annual extensions/expansions of the work for a period of up to three additional years (with each additional funding year running from July 1 to June 30) for a total of four years.

All of the work contemplated by this RFP, whether the initial project year or any possible future renewal year, will depend entirely on APHL's receipt of a notice of award or similar funding announcement from the CDC. APHL will neither be able to issue contracts nor authorize work until it has received this funding announcement; APHL also will be unable to authorize work until contract negotiations have concluded and it has received a ratified contract from the vendor.

The amount and scope of the TA and TAS work in a given funding year or project period will depend on the amount of funding received by APHL under the Cooperative Agreement identified in the Conditions of Award Acceptance below and on the overall programmatic direction and needs specified by CDC in response to APHL's application for funding in a given funding year. Priorities and funding may shift over time, and APHL may have to adapt or adjust a project's scope in order to meet the changing needs. APHL anticipates that it will work with SMEs in advance of any major shift in order to make necessary adjustments to the contractual scopes of work and deliverables.

Conditions of Award Acceptance

The eligible applicant must be able to contract directly with APHL. The selected applicant(s) must agree to comply with duties, services and expectations outlined in the Scope of Work and Appendix A. As noted in the Term of Award section above, APHL anticipates that it will be able to financially support this project for a period through June 30, 2017 with funding provided by the CDC under Cooperative Agreement Number 1U60OE000103 (CFDA No. 93.322) (the Cooperative Agreement). CDC provides funding under the Cooperative Agreement on a July 1 to June 30 budget year cycle and any future TA or TAS project years will likely follow this budgetary cycle.

DISCLAIMER AND OTHER GENERAL MATTERS

This RFP is neither an agreement nor an offer to enter into an agreement with any respondent. Once the evaluation is complete, APHL may choose to enter into a definitive contract with the selected RFP applicant(s) but is not required to do so.

APHL must ensure that the selected applicant(s) are neither suspended nor debarred from receiving federal funds and that the applicant(s) meet any other funding eligibility requirement imposed by the Cooperative Agreement. APHL's determination of whether the applicant is eligible to receive Cooperative Agreement funding will be definitive and may

not be appealed. In the event that APHL determines that the selected applicant(s) is ineligible to receive Cooperative Agreement funding, APHL will nullify the contract or will cease negotiation of contract terms.

Each applicant will bear its own costs associated with or relating to the preparation and submission of its application. These costs and expenses will remain with the applicant, and APHL will not be liable for these or for any other costs or other expenses incurred by the applicant in preparation or submission of its application, regardless of the conduct or outcome of the response period or the selection process.

APPENDIX A

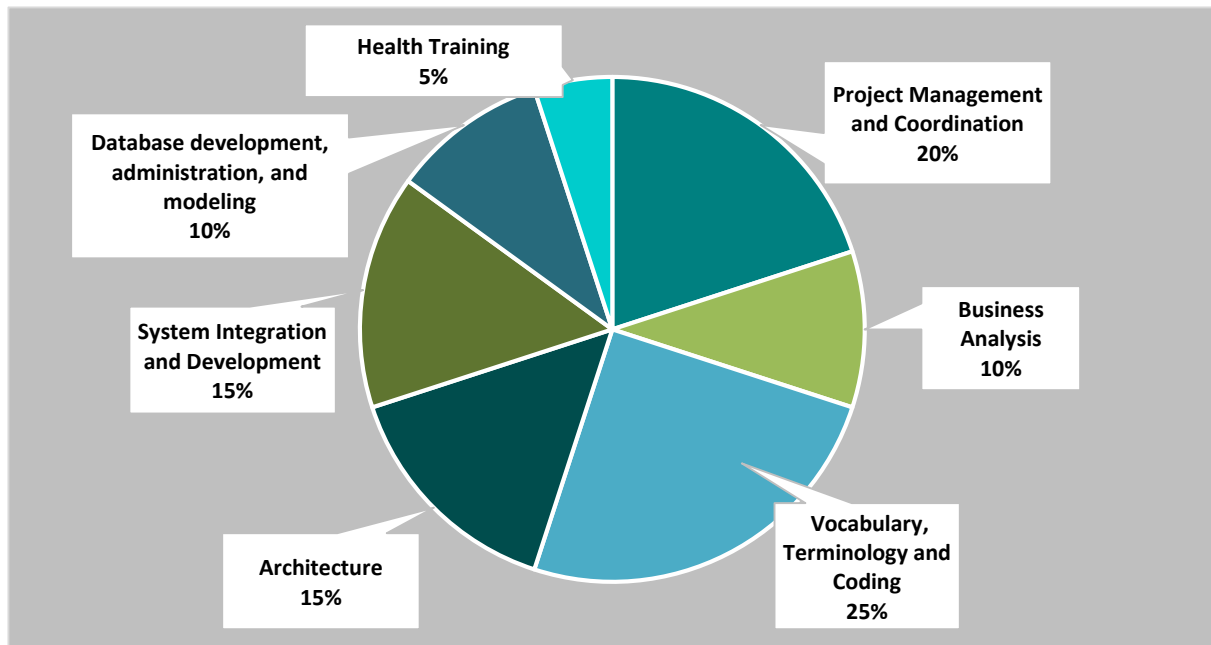## SERVICES TO BE PROVIDED BY THE INFORMATICS TECHNICAL ASSISTANCE TEAM (TAT)

Tasks and/or Sub-Tasks – Expertise Areas

The following general requirements apply to all **staff** needed to support APHL health informatics activities and technical assistance.

- Five years of relevant on the job experience or advanced technical training or experience in health informatics. A bachelor's degree in informatics, health information technology, or public health health/laboratory field is a plus;

- Excellent client relations, presentation, organizational, writing, and communication skills;
- Familiarity with MS Office Suite including MS Excel, MS SharePoint, MS Outlook, MS Visio, MS Project, and MS Access. Familiarity with statistical software is a plus;
- Experience gained by working with Federal agencies, public health agencies or laboratories, or member-based organizations;
- Self-directed, highly organized, and a team-player with commitment to the provision of quality customer service;
- Capable of working under tight deadlines and handling multiple projects;
- Ability to communicate with a broad array of individuals from varying technical aptitudes, professional backgrounds and affiliations;
- Ability to record and deliver information, to explain procedures, and to contribute to the broad range goals of delivering overarching technical assistance initiatives while capitalizing on historical efficiencies and reusability when possible.

Specific expertise for each area identified in Scope of Work

APHL anticipates the following distribution of needed resources:

Pie chart showing distribution of needed resources:
- Health Training 5%
- Database development, administration, and modeling 10%
- System Integration and Development 15%
- Architecture 15%
- Vocabulary, Terminology and Coding 25%
- Business Analysis 10%
- Project Management and Coordination 20%

Project Management and Coordination

- Lead TA efforts in support of public health data exchange initiatives for PHLs, PHAs, and other partners and promote more efficient and effective electronic PHL data exchange, transfer and use.
- Oversee the delivery of TA and ensure support is provided to meet terminology and technical architecture needs for a sustainable data exchange solution per project requirements.
- Engage project stakeholders and assist with project management, identifying risks and solutions for data exchange implementation and support, and ensure milestones are met through post-go-live or per project requirements.
- Lead the TA team using APHL's TA method and develop documentation to support TA approach and delivery, tracking, collaborative tools and templates to ensure project goals are met. Ensure ongoing communication and collaboration within the Technical Assistance Team to successfully accomplish project requirements using the APHL TA method.
- Provide project management activities following APHL policies and Project Management Institute (PMI) Body of Knowledge, which may include but are not limited to informatics business needs, project process agreements, project plans, work breakdown structure, project schedule, requirements, SOWs and public health information security considerations.
- Utilize project development methods that are appropriate for the scope of each project and approved by informatics program management, business owners and business stewards.

Business Analysis

- Provide high level and in-depth business requirements analysis of HL7 data exchange initiatives and technical assistance engagements.

- Enable communication between project stakeholders and technical assistance team, and ensure knowledge transfer between the technical assistance team and assistance recipients and collaborating partners.

- Ensure successful collaboration with Informatics staff and consultants to coordinate technical assistance across all informatics initiative and provide consistent delivery of maintainable and scalable data exchange solutions.

- Prepare project reports, presentations, and meet other project reporting requirements as directed by Informatics leadership. Communicate issues and updates to program management, business stewards, and other involved stakeholders.

- Provide review, quality control and assurance on technical assistance processes and deliverables.

Vocabulary, Terminology and Coding

- Provide Technical expertise in health information exchange, Electronic Medical Record/Electronic Health Record Integration Architecture, and national and international data standards including: HL7 2.x/3.x, XML, CCD, SNOMED, LOINC, ICD-9, ICD-10, CDA, and FHIR.

- Provide terminology and standards support for public health entities across multiple initiatives. Some example tasks include:

- Assist PHL or PHA staff with mapping local to standard codes, such as Logical Identifiers Names and Codes (LOINC) and Systemized Nomenclature of Medicine Clinical Terms (SNOMED-CT), and apply solutions to messaging issues from a terminology perspective.

- Coordinate with data exchange partners to ensure data exchange solutions follow national standards (e.g., HL7 2.x/3.x, SNOMED, LOINC) and meet project requirements.

- Coordinate with data exchange partners to ensure vocabulary solutions follow national standards appropriate for the respective domain and data exchange paradigm, and meet project requirements.

- Provide vocabulary support to meet the requested services, provide knowledge transfer, and promote more efficient and effective electronic data exchange, transfer and use.

- Assist in development of new data models or assessment of existing ones in support of TA recipients' efforts to implement more structured data based analysis models.

- Represent public health communities' requirements at Standards Development organizations to improve underlying international standards.

- Develop terminology related work product for informatics projects such as encoding guidelines, business rules, standards guidance, and white papers.

- Participate in national and international health information exchange discussions, recommendations and standards development.

- Identify proper approach and method to incorporate standardized vocabulary and code sets (e.g. SNOMED, LOINC) into the PHL Test Service Directory.

- Ensure successful collaboration on standards use, interpretation & assistance with Informatics staff and consultants working across technical assistance.

- Provide subject matter expertise in the area of standardized vocabulary, primarily for electronic case reporting, Meaningful Use compliant electronic laboratory reporting, nationally notifiable diseases, and electronic test orders and results. Provide project coordination necessary to implement vocabulary solutions and resolve terminology related problems.

- Provide expertise as directed to contribute to a synopsis of Meaningful Use (MU) stage 3 rules and information on the 2015 Certified Technology Standards, and to maintain Meaningful Use Stage 2 Public Health Readiness website.

- Provide expertise as directed to contribute to review and comment on evolving national interoperability requirements for 2016 and beyond.

Architecture

- Provide expertise in technical architecture assessment and design, health information exchange, Electronic Medical Record/Electronic Health Record Integration Architecture, including: HL7 2.x/3.x, XML, CCD, SNOMED, LOINC, ICD-9, ICD-10, CDA, and FHIR.

- o   Orion Rhapsody and Mirth Certifications preferred

- o   Experience with data architecture design (Transactional, Business Intelligence).

- o   Experience with the needs assessment methodology, Joint Application Development (JAD)

- Provide technical architecture design solutions to public health entities and data exchange partners with varying degrees of information technology abilities. Tasks may include:

  - o   Conduct technical infrastructure needs assessments and IT use case analyses to identify potential barriers to implementing electronic messaging efforts and make recommendations for building a scalable, maintainable messaging solution per project requirements.

  - o   Assist TA recipients and data exchange partners with designing, developing, testing and validating data exchange solutions that may include data extraction from Laboratory Information Management Systems/Laboratory Information Systems, Surveillance Information Systems, other databases or data warehouses; designing, building, and documenting databases, queries, scripts, or other components; developing integration engine routes to transform and translate information per data exchange specification; and transportation to data exchange partner(s).

  - o   Assist TA recipients and data exchange partners with receiving, validating, and parsing electronic data.

  - o   Architect scalable systems per project requirements that support future expansion needs, and develop re-usable technology components to promote efficiencies.

- Provide technical architecture trouble-shooting and maintenance support for public health entities and data exchange partners to meet the requested services per project requirements, provide knowledge transfer, and promote more efficient and effective electronic PHL data exchange, transfer and use.

- Provide subject matter expertise in the area of technical architecture, routing options, and system integration to support data exchange efforts. Provide project coordination necessary to implement computer software products and resolve technical problems.

- Ensure successful collaboration and knowledge transfer on technical architecture assistance approach, reusable components and route development with Informatics staff and consultants working across technical assistance.

- Perform knowledge transfer and share reusable technical components with technical assistance recipients and collaborating partners.

System Integration and Development

- Provide Technical expertise in enterprise data integration, health information exchange, Electronic Medical Record/Electronic Health Record Integration Architecture, including: HL7 2.x/3.x, XML, CCD, SNOMED, LOINC, ICD-9, ICD-10, CDA, and FHIR.

  - o   Orion Rhapsody and Mirth Certifications preferred
  - o   Experience with data architecture design (Transactional, Business Intelligence).

  - o   Experience with the needs assessment methodology, Joint Application Development (JAD)

- Provide integration solutions to public health entities and data exchange partners with varying degrees of information technology abilities. Tasks may include:

  - Assist TA recipients and data exchange partners with developing, testing and validating data exchange solutions using various data integration programs (e.g., Orion Rhapsody, Mirth, etc.) and other IT workflow components (e.g. mapper files, JavaScript filters, database filters and transport/I.O. configuration, web services, etc.) to transform and translate information per data exchange specification and transport to data exchange partner(s).

  - Assist TA recipients and data exchange partners with receiving, validating, and parsing electronic data.

  - Develop integration solutions per project requirements that support future expansion needs, and develop re-usable technology components to promote efficiencies.

  - Develop and maintain documentation for data exchange solutions.

- Provide technical architecture trouble-shooting and maintenance support for public health entities and data exchange partners to meet the requested services per project requirements, provide knowledge transfer, and promote more efficient and effective electronic PHL data exchange, transfer and use.

- Provide subject matter expertise in the area of technical architecture, routing options, and system integration to support data exchange efforts. Provide project coordination necessary to implement computer software products and resolve technical problems.

- Ensure successful collaboration and knowledge transfer on technical architecture assistance approach, reusable components and route development with Informatics staff and consultants working across technical assistance.

- Perform knowledge transfer and share reusable technical components with technical assistance recipients and collaborating partners.

Database Development, Administration and Modeling

- Provide subject matter expertise in the area of database creation, storage, organization, and presentation of data.

- Perform complex technical, analytical and professional services involving public health data modeling and exchange standards.

- Provide ongoing support to all team subject matter experts in the development, support and migration of interfaces.

- Develop and support high-level reporting systems, as well as maintain functionality to audit, modify, and amend data in systems using commands, hand-editing, and bulk imports as needed.

- Support, troubleshoot and correct database issues as they arise.

- Responsible for testing and coordinating database modifications.

- Responsible for the administration of database applications and related software products, including the addition or deletion of system users as needed.

- Ability to plan and coordinate security measures alongside AIMS and APHL Informatics team members, as well as enhance or build database designs for the most sustainable, efficient database product.

- Experience with administration of:

    o MS SQL

    o PostgreSQL

Health Informatics Training

- Knowledge and experience in management, training, technical communications, and instructional design of public health informatics and surveillance regarding skills and resources needed to send HL7 messages.

- Experience with online education platforms such as Blackboard or other.

- Ability to develop training curriculum for multiple education tracks including:

    o HL7

    o Data Integration Tools

    o Data Administration

    o Data Interoperability

    o HIT Project Management Methods

    o Disease Surveillance Systems & Reusable Technical Tools

    o Healthcare Vocabulary

    o Data Exchange Transport Protocols

    o HIPAA and security measures for personally identifiable information (PII)