CITY OF PHILADELPHIA

Office of Innovation and Technology
(on behalf of the Office of the Chief Administrative Officer)

REQUEST FOR INFORMATION

FOR

COVID-19 EMPLOYEE TESTING SOFTWARE

February 14, 2022

Deadline for questions, requests for clarification, or requests for additional information
February 22, 2022, before 5pm
(Local Philadelphia Time)

City Responds to Questions
February 28, 2022

Responses to RFI Due
March 11, 2022, before 5pm
(Local Philadelphia Time)

JAMES F. KENNEY, Mayor
On behalf of Stephanie Tipton, Chief Administrative Officer
Mark Wheeler, CIO, Office of Innovation and Technology
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COVID-19 EMPLOYEE TESTING SOFTWARE
REQUEST FOR INFORMATION

I. RESPONSE CALENDAR

Deadline for questions, requests for clarification, or requests for additional information (email Libby.Peters@phila.gov and Gayle.Ruggeri@phila.gov)
February 22, 2022, before 5pm (Local Philadelphia Time)

City Responds to Questions
(http://www.phila.gov/rfp)
February 28, 2022

Responses to RFI Due
(email Libby.Peters@phila.gov and Gayle.Ruggeri@phila.gov)
March 11, 2022, before 5pm (Local Philadelphia Time)

II. PURPOSE OF REQUEST FOR INFORMATION

The City of Philadelphia (City) is implementing a COVID-19 testing program for unvaccinated employees with an approved exemption. As part of this initiative, the City intends to implement a new system to set up testing requirements on a department by department basis, send reminders to employees and notifications to supervisors, and produce reports to track compliance, overall testing numbers, and positive cases. The City, through its Office of Innovation and Technology (OIT), has issued this Request for Information (RFI) in order to solicit statements of interest, capabilities, and Rough Order of Magnitude (ROM) cost estimates from all Respondents interested in, and capable of, providing commercial off-the-shelf (COTS) software as part of the City’s solution.

Respondents are asked to provide OIT with information regarding their available COTS products and solutions, subject to the following guidelines:

- Identify only COTS products that are modifiable or configurable to meet specific City requirements, and that focus on interoperability, reliability, usability, availability, capacity and scalability
- Include an architectural diagram of the solution with a description of the solutions scalability; responses may include one or more models or solutions
- Describe the configurability of the software to meet the specified requirements and services.

Responses should include implementation, integration, and/or configuration services. If, the software can be installed and configured only by the Respondent, that must be clearly stated in the Response, including the reasons why that is the case.
Respondents may, in the City’s discretion, be invited to engage in discussions with the City’s project team and/or demonstrate their products, services and solutions.

No contract will be awarded pursuant to this RFI. Anyone who does not respond to this RFI is not precluded from responding to any future solicitation issued by the City. The City intends to procure software for this project as soon as reasonably possible, in accordance with the City’s procurement laws and practices for software purchases, which may include, but are not limited to, the use of existing City contracts or certified cooperative purchase agreements. Respondents will not be bound by the ROM cost estimates provided in their responses to this RFI in a future procurement. The City also reserves the right to not procure any software.

III. RFI CONTACT INFORMATION FOR QUESTIONS, REQUESTS FOR CLARIFICATION

All questions (see RFI Question Template Exhibit) and requests for clarification concerning this RFI must be in writing and submitted via email no later than 5:00 pm, Local Philadelphia Time, on Tuesday, February 22, 2022, to:

<table>
<thead>
<tr>
<th>Name</th>
<th>Libby Peters</th>
</tr>
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<tbody>
<tr>
<td>Title</td>
<td>Chief of Staff</td>
</tr>
<tr>
<td>Department</td>
<td>Office of the Chief Administrative Officer</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:Libby.Peters@phila.gov">Libby.Peters@phila.gov</a></td>
</tr>
</tbody>
</table>

CC: Gayle Ruggeri
    
| Department     | Office of Innovation and Technology |
|                | Gayle.Ruggeri@phila.gov |

Responses to questions and requests for additional information shall be at the sole discretion of the City. Any additional information and/or responses to questions will be posted only on the City’s website at http://www.phila.gov/rfp (“Additional Opportunities”). No additional information and/or responses to questions will be sent by email. Nothing in this RFI shall create an obligation on the City to respond to a Respondent submitting a response.

The City may, in its sole discretion, issue addenda to this RFI containing responses to questions, clarifications of the RFI, revisions to the RFI or any other matters that the City deems appropriate. Addenda, if any, will be posted on the City’s website at http://www.phila.gov/rfp (“Additional Opportunities”). It is the Respondent’s responsibility to monitor the Additional Opportunities site for Addenda and to comply with any new information.

Oral responses made by any City employee or agent of the City in response to questions or requests for information or clarification related to this RFI are not binding and shall not in any way be considered as a commitment by the City.
If a Respondent finds any inconsistency or ambiguity in the RFI or an addendum to the RFI issued by the City, the Respondent is requested to notify the City in writing by the above deadline for questions and requests for information or clarification.

IV. ABOUT THE CITY OF PHILADELPHIA AND OIT

The City of Philadelphia is the largest city in the Commonwealth of Pennsylvania and the sixth-most populous city in the United States with over 1.5 million residents. Additionally, due to its rich historic and cultural heritage, the region is visited by more than 40 million people each year.

Philadelphia is located in the southeastern section of Pennsylvania and the coterminous city/county covers 143 square miles. The City is bordered by the following counties: Bucks, Montgomery and Delaware in Pennsylvania, and Burlington, Camden and Gloucester in New Jersey.

As an operating department of the City, OIT provides technology and telecommunication services to the City, its employees, and the community. There are over 25,000 city employees in Philadelphia.

V. RESERVED

VI. ANTICIPATED SOLUTION REQUIREMENTS

The overarching goal of this initiative is to improve the current COVID-19 employee testing process by enhancing the workflow process, eliminating data entry redundancy, producing real time dashboards and reports, monitoring compliance, and protecting employee privacy.

The proposed solution should include the following functionality:

- Ability to securely manage compliance with the City’s COVID-19 testing policy for unvaccinated employees.
  - Please see the General Technical Requirements attached to this RFI for security and other requirements.
  - Each department may have a different day of the week or timeline for when employees are required to submit test results. Software must allow for some level of customization in terms of testing schedule based on the needs of the department.

- Ability to track, at a minimum:
  - Individuals with an approved exemption
    - First and last name
    - Department
    - Supervisor
    - Employee ID#
- Individual taking the test as well as work location and contact information
  - First and last name
  - Department
  - Supervisor
  - Employee ID#
  - Work location
  - Email address
  - Phone number
- Type of test taken
  - Ex: Abbott Binax, Flowtest
- Date test taken
- Test result, including photo or file
  - Positive
  - Negative
  - Invalid/inconclusive

- Ability to quickly notify employees and supervisors of the employee’s work status based on test result.
  - For negative test results, employees should be cleared for work until their next required test.
  - For positive results, employees should be instructed to stay home and follow up directly with their HR manager and report their result to their physician.

- Ability to automate notifications and share other aspects of this data on an as-needed basis with:
  - HR managers
  - Pandemic safety coordinators
  - Supervisors
  - Department heads
  - City leadership

- Ability to pull reports by employee, supervisor, department, as well as across the City.

- Compatibility with any FDA-approved at-home, rapid antigen, or lab-based molecular test.

- Ability for approximately 2,500 users to login and see appropriate user-based views of the application.
  - 50 administrators who can view number of employees enrolled in the testing program by department, compliance rates, positivity rates, and other high-level analytics.
  - 200 HR managers who can add employees to the testing pool for their department, set schedules for testing, view results of all tests submitted by employees in their
department, view compliance rates, view positivity rates, and other high-level analytics for their department.

- 2250 employees who can view their profile, previous test results, date of upcoming test, and access the form for submitting results.

- Ability to quickly identify positive tests in order to commence contact tracing if necessary.
  - Auto-message to employee about next steps in terms of not reporting to work, isolation, and following up with their HR manager.

VII. SUBMISSION GUIDELINES

The City expects each Respondent to include in their response to this RFI the following items in the order listed:

**Company Overview:**
Include company name, physical address, phone number, fax number, and web address, a brief description of the company, its services, business size (total revenue and number of employees), and point(s) of contact, including name, address, phone and email address. Note the company’s operations including the number of years the company has been supporting this solution; location of company’s headquarters and all other office locations; and three years of financial data to ensure company stability.

If applicable, please describe any subcontractors or partners with which you have worked. Resumes need not be included.

**Experience:**
Describe your company/organization’s relevant experience (and that of partners, when applicable) with COVID-19 employee testing and tracking software. Identify your experience with clients of similar size and scope to the City of Philadelphia, including client name, engagement title, description of engagement, the solution implemented and the methodology used, cost, the start and completion dates of the project, as well as, the name, address and telephone number of a contact person.

**Product/Software Solution:**
Identify one or more COTS solutions that meet the City’s requirements. Responses that describe solutions which are completely custom software may, in the City’s discretion, be rejected without review.

Respondents are encouraged to include in their response an architectural diagram of the solution with description of the solution’s scalability. Respondents are welcome to provide one or more models or solution sets to meet this requirement for an integrated interoperable solution set.
**Infrastructure/Architecture Model:**
Identify the infrastructure/architecture model(s) you provide and support, and whether they are on-premise, hosted off-premise (e.g., single tenant, private cloud), or Software-as-a-Service (SaaS) models.

Supplement this request with an architectural diagram that illustrates the proposed infrastructure, software components, and integrations if needed for the City’s implementation. Diagrams for SaaS systems may be logical and do not need to illustrate content that is considered Intellectual Property. Diagrams for hosted off-premise systems should accurately reflect infrastructure costs associated with build and support of the hosting environment.

**Key Features:**
Identify best of breed features included in the proposed COTS solution(s), including, at a minimum, the Key Features in Section VI. Anticipated Project Requirements.

**Support and Maintenance Model:**
Provide the anticipated ongoing software maintenance and support services required to sustain the solution including frequency of upgrades and patches/bug releases and the estimated timeframes to complete. Outline the services in your support model including available service level agreements.

**Training Model:**
Outline the services in your training model for administrative and end user training including the training services, methodology, and typical schedule. Include the pricing model for training services and the methodology and schedule.

**Reporting and Key Performance Indicators (KPIs):**
Provide the standard and custom reporting included in your solution and the available KPIs. Include information on data input and export capabilities, security and auditing, and dashboards and metrics.

**Pricing/Licensing Model:**
Include a general pricing model and costs for the software based upon the information provided in this RFI. This pricing should also indicate the licensing model, (i.e., licensing by individual users, by core, by seat etc.), descriptions of the hosting models available, and estimates of associated costs. Include cost estimates for ongoing support and maintenance for three years, and when those support and maintenance costs begin (i.e., at time of purchase, after implementation, etc.). If applicable, include a list of additional items or services/software needed to operate the system that are not included and must be provided/purchased by the City.

Respondents will not be bound by any cost estimates included in responses to this RFI.
VIII. USE OF RESPONSES

Responses to this RFI may be used by OIT to select a software product for the COVID-19 employee testing and tracking software. Responses may also be used to assist OIT in gathering information for planning purposes, and for purposes of identifying sufficient resources for an implementation initiative.

The City does not intend to announce any further actions taken pursuant to this RFI. If any such announcements are made, at the sole discretion of the City, those announcements will be posted with the original RFI. In some cases, at the City’s sole discretion, the City may issue an RFP. The City will notify Respondents to this RFI once the RFP has been posted on the City’s website.

The City will notify you if additional information is required in order to evaluate your response to this RFI. Absent such follow up from the City, we respectfully request that respondents refrain from requesting additional information on the status of this RFI. In order to protect the integrity of the City procurement process, City personnel will not respond to requests for additional information on the status or outcome of this RFI, other than as described above.

IX. HOW TO SUBMIT RESPONSES

Respondents should submit their responses electronically (hard copies are unacceptable) in MS Word or Adobe PDF format, as a single document (see note below), to:

Name: Libby Peters
Title: Chief of Staff
Department: Office of the Chief Administrative Officer
email: Libby.Peters@phila.gov

CC:
Name: Gayle Ruggeri
Title: Office of Innovation and Technology
email: Gayle.Ruggeri@phila.gov

Responses are due Friday, March 11, 2022, before 5:00 pm, Local Philadelphia Time.

Note: Response document(s) are limited to 15 MB; if necessary, please submit multiple files or zip/compress the file(s)

X. CONFIDENTIALITY AND PUBLIC DISCLOSURE

Respondents shall treat all information obtained from the City which is not generally available to the public as confidential and/or proprietary to the City. Respondents shall exercise all reasonable precautions to prevent any information derived from such sources from being disclosed to any
other person. No other party, including any Respondent, is intended to be granted any rights hereunder.

XI. RIGHTS AND OPTIONS RESERVED

In addition to the rights reserved elsewhere in this RFI, the City reserves and may, in its sole discretion, exercise any or more of the following rights and options with respect to this RFI if the City determines that doing so is in the best interest of the City:

1. Decline to consider any response to this RFI (“response”); cancel the RFI at any time; elect to proceed or not to proceed with discussions or presentations regarding its subject matter with any Respondent and with firms that do not respond to the RFI; to reissue the RFI or to issue a new RFI (with the same, similar or different terms);

2. Select a COTS package from a vendor that does not respond to this RFI, or elect not to proceed with any procurement;

3. Waive, for any response, any defect, deficiency or failure to comply with the RFI if, in the City’s sole judgment, such defect is not material to the response;

4. Extend the Submission Date/Time and/or to supplement, amend, substitute or otherwise modify the RFI at any time prior to the Submission Date/Time, by posting notice thereof on the City web page(s) where the RFI is posted;

5. Require, permit or reject amendments (including, without limitation, submitting information omitted), modifications, clarifying information, and/or corrections to responses by some or all Respondents at any time before or after the Submission Date/Time;

6. Require, request or permit, in discussion with any Respondent, any information relating to the subject matter of this RFI that the City deems appropriate, whether it was described in the response to this RFI;

7. Discontinue, at any time determined by the City, discussions with any Respondent or all Respondents regarding the subject matter of this RFI, and/or initiate discussions with any other Respondent or with vendors that did not respond to the RFI;

8. To conduct such investigations with respect to the financial, technical, and other qualifications of the Respondent as the City, in its sole discretion, deems necessary or appropriate;
9. Do any of the foregoing without notice to Respondents or others, except such notice as the City, in its sole discretion, may elect to post on the City web page(s) where this RFI is posted.

This RFI and the process described are proprietary to the City and are for exclusive benefit of the City. Upon submission, responses to this RFI shall become the property of the City, which shall have unrestricted use thereof.

XII. PUBLIC DISCLOSURE

By submitting a response to this RFI, Respondent acknowledges and agrees i) that the City is a “local agency” under and subject to the Pennsylvania Right-to-Know Law (the “Act”), 65 P.S. §§ 67.101-67.3104, as the Act may be amended from time to time; and ii) responses may be subject to public disclosure under the Act. In the event the City receives a request under the Act for information that a Respondent has marked as confidential, the City will use reasonable efforts to consult with Respondent regarding the response and, to the extent reasonably practicable, will give Respondent the opportunity to identify information that Respondent believes to be confidential proprietary information, a trade secret, or otherwise exempt from access under Section 708 of the Act.

Notwithstanding anything to the contrary contained in this RFI, nothing in this RFI shall supersede, modify, or diminish in any respect whatsoever any of the City’s rights, obligations, and defenses under the Act, nor will the City be held liable for any disclosure of records, including information that the City determines in its sole discretion is a public record and/or information required to be disclosed under the Act.
<table>
<thead>
<tr>
<th>Question Number</th>
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COVID-19 Testing Protocol for City Employees

Effective Date: January 27, 2022  
Policy Version No.: 2  
Point of Contact: Stephanie Tipton, Chief Administrative Officer and Michael Zaccagni, Human Resources Director

I. Introduction

The COVID-19 pandemic has seriously impacted the U.S. as well as the ability of the City of Philadelphia to provide services to its residents and businesses. COVID-19 testing helps reduce and limit the risk of unknowingly exposing our employees and residents to COVID-19. Although testing and other safety protocols such as masking and/or social distancing are not substitutes for vaccination in preventing the spread of COVID-19, employees may request religious and medical exemptions to the City’s vaccination requirement. Accordingly, the City will implement the following COVID-19 testing regimen for all City employees who have received an approved vaccination exemption.

II. Permissible Types of COVID-19 Tests

Most departments must use an approved nasal or oral antigen test procured by the City through its Procurement Department and distributed accordingly. These tests are considered “at home” tests, as they are not required to be administered by a licensed medical professional. An antigen test is a test that detects proteins on the virus that causes COVID-19. A positive result means that the virus that causes COVID-19 has been detected in the specimen provided. Departments that have previously administered COVID-19 testing on site through an approved Clinical Laboratory Improvement Amendment (CLIA) Certificate of Waiver may continue subject to the requirements of that Department or site’s Waiver. Departments may also accept any other FDA-authorized COVID tests taken within the requisite time period.

III. Testing Protocols

a. Frequency and Timing

Employees who are expected to work at a City worksite1 each week, regardless of length of time spent onsite, must take one COVID-19 test per week. Departments may not accept test results for tests taken more than 72 hours prior to a deadline to report a test result (e.g., if an employee must report a test result by Monday at 9 a.m., that employee must have taken the test no earlier than the preceding Friday at 9 a.m.) Departments may require that an employee self-test prior to the beginning of that employee’s first onsite shift during a workweek, or require all employees at a given worksite, or within a given operational division, provide self-test results by a specified day each week.

Example: Employee A works onsite five days a week, Monday through Friday, 9 a.m. to 5:00 p.m. Employee A’s Department may require Employee A provide a test result by 9 a.m. on Monday morning.

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1 Employees working from home are not considered to be working at a City worksite.
Example: Employee B ordinarily works from home five days a week, but sporadically works from a City facility. On this particular week, Employee B worked from home on Monday and Tuesday, and plans to work onsite on Wednesday. Employee B’s department may require Employee B provide a test result prior to reporting to work onsite on Wednesday.

Example: Employee A works onsite five days a week, Monday through Friday, 9 a.m. to 5:00 p.m. in Sanitation District 3. The Department may require all employees working in Sanitation District 3 provide test results by 9 a.m. Wednesday morning.

Departments may set a deadline by which an employee must provide a test result prior to a shift, e.g., employees who work a Monday through Friday schedule must provide a test result no later than Friday at 1 p.m. to be permitted to report to work on Monday morning. Departments have the discretion to accept test results provided after the deadlines but prior to reporting for work consistent with operational necessity.

b. Administration of Tests

Most employees will be provided with at-home testing kits and will be expected to take those tests at home. Tests must be taken and results provided within the timeframes set forth in Section III(a). Employees will not be expected to record the time spent taking such tests as work time and departments should not compensate employees for the minimal amount of time spent taking such tests.

Departments may organize an onsite testing program in which employees self-administer at home tests at a worksite after reporting to work. Departments must request and obtain approval from their cabinet member prior to instituting an onsite testing program. All onsite testing programs must contain appropriate infection control and medical record confidentiality measures. Any onsite testing is considered part of the compensable workday, and departments must compensate employees for time spent taking COVID-19 tests onsite.

c. Reporting of Testing Results

Employees must report test results obtained using the provided at-home testing kits, as soon as possible, but no later than 24 hours after taking the test. Employees should make all reports using the secure online form at phila.gov/employee-test. This form requires:

- The name, email address, phone number, and employee I.D. number (payroll number) of the person submitting the test.
- An uploaded photo or file of the test result.
- The name(s) and email address(es) for the appropriate departmental designee who should receive results, such as a departmental HR professional, safety professional, or infectious disease control professional, as well as the employee’s direct supervisor.

Employees who have a positive test result are strongly encouraged to follow up with a PCR test administered by a lab or testing site in order to confirm the result. If a positive antigen is followed by a negative PCR the same day then the employee should not be considered to have COVID. A second antigen test should not be done to confirm or dispute a positive antigen. Employees should

2 Departments should ensure all individuals affected by this policy are aware of their departmental contact to whom they should direct test results.
follow the City’s COVID-19 Policy with respect to isolation requirements. Leave usage will be permitted in accordance with that Policy.

Additionally, Departments must submit positive test results to the Philadelphia Health Department as soon as they are received by the appropriate departmental designee, such as a departmental HR professional, safety professional, or infectious disease control professional. Positive test results must be submitted via secure online form at https://redcap.phila.gov/surveys/?s=HXCWJHRJC3.

In the event of an invalid or inconclusive antigen test result, the employee should retest. The employee should not be permitted to work until they receive a valid negative result on their antigen test. If the employee retests and receives a positive result, they should follow the steps outlined above,

IV. Policy Violations

Employees who fail to provide test results within the timeframes set forth in this policy and in any departmental communications implementing this policy will not be permitted to work until that failure is rectified and will be carried AWOL for all work time missed as a result. Employees may also face discipline up to and including termination for violating this policy.

It is the responsibility of the Department to monitor compliance with this policy on a weekly basis.

V. Record Keeping

The City places a high priority on maintaining all employee health information in a confidential manner. The City will maintain all test results provided by an employee in a confidential file separate from that employee’s personnel file. City managers are expected to conduct all conversations regarding an employee’s test results in a confidential setting. Employees are not expected to report test results to their immediate supervisors. However, supervisors will be notified of the employee’s work status after the employee submits the online testing form.
General Technical Standards

<table>
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<th>SOP Type:</th>
<th>Family:</th>
<th>Internal [ ]</th>
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<tr>
<td></td>
<td>[ ] Yes [x] No</td>
<td>[ ] Yes [x] No</td>
<td>Director of Enterprise Architecture</td>
</tr>
</tbody>
</table>

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1 Purpose

The City's standard non-functional requirements for IT systems ensure that information systems are resilient and secure so that the City's information is safeguarded, and its staff can continue operations (as supported by IT systems) in the event of a disaster.

2 Scope

All city systems are in scope to be reviewed for compliance with this standard.

3 Policy

Reserved

4 Standards

The non-functional requirements listed below must be included in the requirements sections of documents that specify other system or business requirements. These documents include RFX's.

These requirements must also be adhered by vendors who are developing software for the City, system implementors, and City staff who are developing software for the City.

4.1 City Standard Non-Functional Requirements

All systems and applications must meet the following "non-Functional" requirements:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Operating System Compatibility</td>
<td>If the system is server-based, it must be compatible with the latest stable release of Microsoft Windows Server as defined by Microsoft, or an approved Linux distribution (currently Centos 7 and Ubuntu 18.04). If the system has a thick client, it must be compatible with the latest stable release of Microsoft Windows and Mac OS.</td>
</tr>
<tr>
<td>Standard Database Compatibility</td>
<td>If a database is deployed on-premises or in a City-owned cloud environment, it must be compatible with the latest stable release of Microsoft SQL Server, PostgreSQL, or Oracle.</td>
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<tr>
<td>Requirement</td>
<td>Description</td>
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<tr>
<td>Monitoring</td>
<td>The system has the ability to be monitored to provide metrics that can prevent outages and must provide immediate alerts in case of an outage in any system component. Alerting must be interoperable with third-party software (e.g. Pager Duty) via webhooks.</td>
</tr>
<tr>
<td>Browser Support</td>
<td>The system has been tested to work with the latest versions of popular web browsers, including mobile device browsers.</td>
</tr>
<tr>
<td>Tested</td>
<td>The system has a documented test plan and functional testing is conducted on every update, and has full test suite (smoke, integration, etc.) performed on every release. The system must have a dedicated test environment where all testing occurs.</td>
</tr>
<tr>
<td>Web-Based APIs</td>
<td>The system's components communicate via web-based APIs wherever possible. The system's business data must preferably be available via a secure API call. APIs should be authenticated and use a role-based authentication mechanism. APIs should be versioned, and as new versions are released adequate time must be given for conversion before older versions are retired.</td>
</tr>
<tr>
<td>Secure</td>
<td>The City expects hosting providers to be able to produce a clean SOC2 for non-financial data. The City's security policies are based on NIST 800-53 Rev 4. The system must pass a penetration test to the City's satisfaction, be monitored for security events by the system owner, and ISG must be notified of any malignant events.</td>
</tr>
<tr>
<td>Authentication</td>
<td><strong>For City Users</strong>: The system supports authentication using SAML 2.0 or OAuth 2.0 – OpenID Connect via Microsoft Azure Active Directory. **For External Users**: The system supports authentication using SAML 2.0 or OAuth 2.0 - OpenID Connect, via the City's login.phila.gov platform. The system must be able to require this authentication type for all external users.</td>
</tr>
<tr>
<td>Multifactor</td>
<td>The system is compatible with Microsoft Multi-Factor Authentication.</td>
</tr>
<tr>
<td>Requirement</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Access Control</td>
<td>Access to data and administrative functions is segmented based on a user's role. The system provides A) Just-In-Time temporary elevated privileges or B) Privileged accounts that are separate and not used for normal operations. The system must provide Access Control based on Policy, Role, and/or Attribute.</td>
</tr>
<tr>
<td>Logging</td>
<td>Application and server logs are searchable, accessible, and stored in a discrete fault-tolerant location—not on the application server.</td>
</tr>
<tr>
<td>Disaster Recovery</td>
<td>The system can be recovered within the Recovery Time Objective and to a Recovery Point defined by the business stakeholders.</td>
</tr>
<tr>
<td>Web Accessibility</td>
<td>User interfaces meet WCAG AA 2.1 Standards.</td>
</tr>
<tr>
<td></td>
<td><a href="https://www.w3.org/TR/WCAG21/">https://www.w3.org/TR/WCAG21/</a></td>
</tr>
<tr>
<td>User Experience</td>
<td>The system’s ornamentation, including branding, color schemes, look-and-feel, and navigation schemes et. al. should to adhere to City Digital Standards. <a href="standards.phila.gov">standards.phila.gov</a></td>
</tr>
<tr>
<td>System documentation</td>
<td>Documentation for administrators and end-users is provided. Administrator documentation includes instructions for deploying, maintaining, and auditing the system for security events such as unauthorized access.</td>
</tr>
<tr>
<td>Interface documentation</td>
<td>The solution must clearly identify all service and external interactions including data sets transferred, frequency and schedules of flows, mechanisms and protocols of transfer, and API services used and offered to others</td>
</tr>
<tr>
<td>Data documentation</td>
<td>The solution design should identify data managed by the solution that is considered ‘system-of-record’, data that is duplicated from other sources and offered to others as ‘authoritative sources’, and data that integrates with any master data management processes</td>
</tr>
<tr>
<td>Requirement</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>User Analytics</td>
<td>The software must provide web page use analytics, such as user interactions, time spent on a page, and site referrals, etc., or otherwise be able to integrate with an analytics package.</td>
</tr>
<tr>
<td>SLA</td>
<td>The system must be available at least 99.9% of the time, or higher if there is a business need. Deploying updates to the system should not cause downtime outside of those scheduled and documented as part of a Service Level Agreement.</td>
</tr>
<tr>
<td>Encryption</td>
<td>Data is encrypted in transit and at rest using contemporary standards such as TLS and AES. For appropriate regulated data (e.g. CJIS) the City should have the ability to manage the encryption keys.</td>
</tr>
<tr>
<td>Remote Worker Friendly</td>
<td>Users should not have to log on to the City's VPN in order to establish a secure connection to an application. The system should be able to operate on internal networks and securely over the Internet.</td>
</tr>
<tr>
<td></td>
<td>If the above is not possible, the system should be offered on Virtual Desktop Infrastructure (VDI) that has secure communications with the system and is segmented appropriately from the end users’ PC.</td>
</tr>
<tr>
<td>Shared Services</td>
<td>The system must use as many OIT shared services applicable to avoid duplicating capabilities. These include, but are not limited to:</td>
</tr>
</tbody>
</table>
|                   | • OIT Middleware such as DataBridge and Software AG Webmethods  
• Active Directory  
• Monitoring (Solarwinds, CloudWatch)  
• Enterprise VxRail or AWS hosting environments  
• Enterprise Database environment |
|                   | A full list of shared services is available via hyperlink at the end of this document and can be exported in MS Word format to share externally as needed. |
### Additional requirements for custom apps:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deployable</strong></td>
<td>At least 2 City staff members must know how to deploy the application.</td>
</tr>
<tr>
<td></td>
<td>The deployment process is documented.</td>
</tr>
<tr>
<td><strong>CI / CD</strong></td>
<td>The application has CI and CD in place.</td>
</tr>
<tr>
<td><strong>Version Control</strong></td>
<td>• Source code for the application is uploaded to version control environment (Github).&lt;br&gt;• The app has a supported branching strategy.</td>
</tr>
<tr>
<td><strong>Mobile</strong></td>
<td>• Either a fully native version of the app must be developed or a fully responsive version.&lt;br&gt;• Applications must be developed &quot;mobile first.&quot;</td>
</tr>
<tr>
<td><strong>Developer Documentation</strong></td>
<td>• Documentation exists and covers at least the following:&lt;br&gt;  o how to develop the app locally.&lt;br&gt;  o how to deploy the app.&lt;br&gt;  o how to debug the app.</td>
</tr>
<tr>
<td><strong>Repository</strong></td>
<td>• City Github account&lt;br&gt;• City NPM account&lt;br&gt;• City Terraform Enterprise account</td>
</tr>
</tbody>
</table>
5 Roles and Responsibilities

<table>
<thead>
<tr>
<th>Writing</th>
<th>Implementing</th>
<th>Using</th>
<th>Auditing</th>
</tr>
</thead>
<tbody>
<tr>
<td>OIT Enterprise Architecture</td>
<td>IT Leadership</td>
<td>City staff in a Procurement role</td>
<td>IT Leadership</td>
</tr>
<tr>
<td>OIT Software Engineering</td>
<td></td>
<td>Software Engineers</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vendors and Implementors</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Staff writing RFIs and RFPs</td>
<td></td>
</tr>
</tbody>
</table>

All City staff responsible for decision-making regarding procuring or developing information systems are responsible for implementing this policy as criteria in their work — including RFP documents, vendor system selection, system assessments/reviews, and system design.

6 Compliance

If OIT, through its process for reviewing IT implementations, finds a system to be non-compliant, OIT reserves the right to:

- temporarily halt or permanently cancel implementations
- remove associated systems and assets from the City's network
- order hosting and SaaS providers to quarantine or shut down associated assets
- suspend any accounts associated with the system
- perform a security review or forensic analysis on the system, and/or
- take further action as needed.

Personnel that violate this Policy may be subject to disciplinary action, up to and including, termination of employment, in accordance with the disciplinary policies of his or her agency and, for personnel represented by the Fraternal Order of Police, International Association of Fire Fighters, District Council 47 or District Council 33, the terms of the applicable collective bargaining agreement.

If a City contractor or third party user knowingly or negligently commits or permits a material violation of this policy, the City may terminate the contract in accordance with its terms, and/or terminate the contractor's or third party user's access to City information.
systems and information, in addition to any legal or remedial actions the City may take to enforce and protect its interests.

7 Guidance

The table of City Standard Non-functional Requirements must be used as an RFX Appendix.

The list of OIT Shared services is provided as an example and must be changed depending on the type of solution sought. For example, a GIS based solution must list ArcGIS. Refer to OIT Shared Services in the Additional Resources section below for a full list.

8 Waivers

Waivers may be requested from the Compliance Office by submitting a justification based on:

- Substantive business case need(s)
- Demonstration of, or a proposal for, establishment of adequate compensating controls that provide a suitable alternative to the mandated protection

The Compliance Office will coordinate with the authorizing bodies within OIT to issue a decision on a waiver for sufficient reasons exercising judgment in the best interests of the City.

The Compliance Office shall maintain the central repository of all waivers.

9 Definitions

Terms defined in this policy shall have the meanings in this policy that are here provided. Terms not defined in this policy shall have the meanings contained in City Policies and Standards Glossary of Terms.

10 Authority

City of Philadelphia Executive Order no. 12-11

11 Related Links

OIT Shared Services: [https://phila.city/display/ea/OIT+Shared+Services](https://phila.city/display/ea/OIT+Shared+Services)

City Digital Standards: [standards.phila.gov](https://standards.phila.gov)
City of Philadelphia Web Accessibility Policy

WCAG AA 2.1 Standards: [https://www.w3.org/TR/WCAG21/](https://www.w3.org/TR/WCAG21/)

# 12 Change Log

<table>
<thead>
<tr>
<th>Version No.</th>
<th>Date</th>
<th>Author</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>8/26/2020</td>
<td>Regis Shogan</td>
<td>Initial Version</td>
</tr>
<tr>
<td>1.1</td>
<td>1/28/2021</td>
<td>Regis Shogan</td>
<td>Added Remote Worker Friendly Requirement</td>
</tr>
<tr>
<td>1.2</td>
<td>10/7/2021</td>
<td>Regis Shogan</td>
<td>Annual review</td>
</tr>
<tr>
<td>1.3</td>
<td>12/1/2021</td>
<td>Dan Lopez &amp; Regis Shogan</td>
<td>Add External User Authentication. Update Shared Services examples</td>
</tr>
<tr>
<td>1.4</td>
<td>1/12/2022</td>
<td>Regis Shogan</td>
<td>Add Encryption</td>
</tr>
<tr>
<td>1.5</td>
<td>1/13/2022</td>
<td>Regis Shogan</td>
<td>Add interface documentation and data documentation. Generic Updates</td>
</tr>
</tbody>
</table>
13 Approval

By direction of the Chief Operating Officer:

(Signed original copy on file)

__________________________________________  _____________
Sandra Carter                                  Date

Chief Operating Officer