



REQUEST FOR INFORMATION (RFI)

for

Street Level Imagery Solution

for

The City of Philadelphia

Issued by:
The Office of Innovation and Technology (OIT)
June 1, 2016

Submission Due Date: Monday, June 20, 2016 @ 5 PM (Local Philadelphia Time)

Charles Brennan, Chief Information Officer

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I. Response Timeline

Posting

Posting of Request for Information (RFI)	June 1, 2016
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Deadline for Questions

Deadline for questions, requests for clarification Or requests for additional information	June 10, 2016, 5:00 PM (Local Philadelphia Time)
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Due Date

Submission Due Date	June 20, 2016, 5:00 PM (Local Philadelphia Time)
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II. Contact Information

All questions, including requests for clarification or requests for additional information, must be submitted via email no later than 5:00 PM (Local Philadelphia Time) on June 10, 2016 prior to the submission due date and directed to:

Brian Ivey, Office of Innovation and Technology
1234 Market St. Suite 1850
Philadelphia, PA 19107
Brian.Ivey@phila.gov

Oral responses by any City employee or agent of the City are not binding and shall not in any way be considered as a commitment by the City of Philadelphia.

III. Statement of Purpose

The City of Philadelphia ("City"), through the Office of Innovation and Technology (OIT), is seeking information regarding a street level imagery solution that will allow departments to view, measure and capture the position of features and physical assets in the right-of-way (e.g., signs, street furniture) and buildings that face the street. The City is seeking this information in anticipation of posting one or more requests for proposal (RFPs) to provide solutions to meet the needs of the City's various organizational units.

Products and workflows that OIT and City departments would benefit from a street level imagery solution may include:

- Property inspection
- Infrastructure of asset inspection and tracking
- Feature measurement calculations
- Preparation of reports, maps or plans
- Block, neighborhood or commercial corridor condition assessment
- Code enforcement

IV. Background

Currently, City departments (e.g. Streets, Water, Public Property, Licenses & Inspections, Parks & Recreation, etc.) have access to geo-referenced, high resolution, high accuracy orthogonal (straight down) and oblique (at a 40 to 45-degree angle) imagery that assists staff to more efficiently perform day-to-day operations. OIT would like to provide City departments with access to imagery at a street level to expand the ability to visualize property conditions in combination with aerial imagery.

For several years, City departments have used high resolution, high accuracy aerial imagery. However, departments believe they can be more effective at their jobs if they had access to street level imagery. City departments such as Licenses and Inspections (L&I) or the Office of Property Assessment (OPA) can prepare for and optimize field inspections by viewing residential, commercial and industrial property fronts in imagery beforehand. The Streets Department could inventory, track and examine street assets (street poles, signs, etc.) while having the ability to measure these features on an image. When orthogonal, oblique and street level imagery along with planimetric and elevation geospatial data are combined within GIS software, an accurate land base of the city is generated with the location and heights of all man-made structures represented. This project strengthens the City's ongoing effort to maintain an accurate land base for use by all City agencies in support of public safety, emergency response, inspections, maintenance, and planning operations.

The streets system in Philadelphia totals 2,575 miles – 2,180 miles of city streets, 35 miles of Fairmount Park roads and 360 miles of state highways. Along with an estimated density of over 3,500 structures per square mile, the ability to evaluate the built environment of Philadelphia is a challenge. Accurate and timely data is vital to making informed decisions. Inspectors, first responders, and planners across all agencies rely on digital imagery and GIS data to understand the precise location, size and layout of structures, public works, and utilities. The more accurate and current the imagery and geospatial data, the greater the capacity of City personnel to respond with clarity and situational-awareness to emergencies, review of construction/development plans along with engineer infrastructure improvements. The following examples illustrate the specific needs and benefits of a street level imagery solution:

- **Public Safety** – Visualize and detect hazards and risks for pre-planning and for event/disaster responses including structures that are vacant (see L&I below).
- **L&I** – Property inspection pre-planning and event response assessment are both made more accurate and reliable when performed with street level imagery. Imagery will also allow for targeted review of code violations.
- **City Planning** – Evaluate impact of construction projects on a neighborhood (e.g., building height, proximity to structures, and density) and to prepare more accurate land use models for coordinated approaches to blight and re-investment.
- **Water Department** – Street level imagery can assist in calculating impervious surface area for billing of storm water fees and for planning of Green Stormwater Infrastructure and to confirm infrastructure asset inventories.
- **Parks & Recreation** – Street level imagery can assist in inventory of street trees and the progress towards meeting the Greenworks goal of 30 percent coverage citywide. The same imagery can also be used to identify potential trees hazards for field inspection and to inventory park assets visible from roadways.

- **OPA**– Street level imagery can be used in conjunction with building footprints and aerial photography to allow assessors to target areas with significant new development and also identify changes to existing structures to prompt site visits and reassessment.
- **Streets**– Use in conjunction with planimetric data, which includes all features in the street and sidewalk including trash cans, manholes, signage, and light poles, etc., for comprehensive asset management to replace time-consuming manual field data collection.
- **Records** – Deed verification and tax parcel map construction rely heavily on aerial photography and planimetric data as reference points. Injecting street level imagery will significantly reduce error and improve efficiency.

V. [Submission Requirements](#)

The City is open to nearly any solution including, but not limited to:

Requirements:

- 360 Degree, panoramic imagery (street to sky).
- Capture every street within the City of Philadelphia boundary ([Download Street Centerline Data](#)).
- Software as a Service or SaaS solution.
- Provide a web based client that includes measuring tools for use by non-GIS, non-technical staff.
- The solution should not require technical expertise with GIS.
- Imagery service must integrate with both Esri ArcGIS desktop and ArcGIS Online solutions.
- Imagery service must allow for direct editing of geodatabase or feature services features within the imagery.
- The solution must include an API or widget to access imagery from internal web-based applications.
- Functionality
 - Pan and zoom controls like Google Street View.
 - Editable and accurate measuring tools for length, area and height of features.
 - Calculate heights from observable street or sidewalk elevation in the image and reported in feet or meters.
 - Editable text and report formatting.
- Proposed solution should include any related innovative and technical options that would benefit the City.
- In-person and online training and tutorials options for City departments and staff.
- An explanation of why any particular street will not be captured and why.

VI. Submission Guidelines

A. Understanding Your Solution

- Describe key features of the solution.
- Describe how the solution improves the business activities.
- Include any new and innovative products or solutions not listed in the requirements or deliverables.
- Pricing models and corresponding costs, including but not limited to the following details:
 - a. Imagery Capture and processing
 - i. Cost of Capture by the mile, once annually
 - ii. Cost of Capture by the mile, twice a year
 - b. SaaS Licensing and Access to Web Client and Esri Integrated Tools
 - i. By packaged number of named, concurrent users
 - ii. Cost to add per user
 - c. API/widgets
- Respondents to the RFI may be invited to engage with stakeholders from the City and have the opportunity to demonstrate their products, services and solutions.

B. Understanding Your Company

1. **Business History**

Provide a brief history of your business including information regarding the founding of your business, acquisitions within the past 5 years, major shifts in direction, and changes in market position.

2. **Firm Size and Locations**

Provide the following information, at a minimum, regarding the size and distribution of your company.

- Total number of employees.
- Total number of locations.
- Location and size (number of employees) of main offices.
- Location and size (number of employees) of offices within the Greater Philadelphia Area.

3. **Current Implementations**

Provide information about installations of your solutions that best align with the following criteria:

- At least one (1) installation of your street view solution for a state or local government agency, if applicable.

4. **Range of Solutions Provided**

Provide a description and/or listing of the range of products and services provided by your business.

VII. 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 one 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. to decline to consider any response to this RFI (“Response”); to cancel the RFI at any time; to 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; or to reissue the RFI or to issue a new RFI (with the same, similar or different terms);
2. to 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;
3. to 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;
4. to 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;
5. to require, request or permit, in discussions with any Respondent, any information relating to the subject matter of this RFI that the City deems appropriate, whether or not it was described in the Response or this RFI;
6. at any time determined by the City, to discontinue 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;
7. to 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.

The City is not obligated to conduct subsequent discussions with any Respondent to this RFI, and reserves the right to conduct discussions regarding its subject matter with firms that do not respond to this RFI. This RFI and the process it describes are proprietary to the City and are for the exclusive benefit of the City. No other party, including any Respondent, is intended to be granted any rights hereunder. Upon submission, Responses to this RFI shall become the property of the City, which shall have unrestricted use thereof. Responses may be subject to public disclosure under applicable law. By submitting its Response, the Respondent agrees to the terms and conditions of this RFI.