



BALTIMORE POLICE DEPARTMENT



Bernard C. "Jack" Young
Mayor

Michael S. Harrison
Police Commissioner

To: The Honorable President and Members of the Board of Estimates
From: Michael S. Harrison – Police Commissioner
Date: March 17, 2020
Subject: Professional Service Agreement Acceptance

Dear Honorable President and Members:

ACTION REQUEST OF BOARD OF ESTIMATES:

The Board of Estimates is requested to approve and authorize execution of a professional services agreement between the Baltimore Police Department ("BPD") and Persistent Surveillance Systems, LLC, an Ohio limited liability company (the "contractor"). The contractor will undertake the Aerial Investigation Research ("AIR") pilot program in an effort to assist BPD in the investigation of certain crimes. The funding for this professional service agreement does not come from any City or public sources, but rather will be paid for by Arnold Ventures, a philanthropic organization. The term of the agreement is one year following approval of the agreement by this Board.

BACKGROUND/EXPLANATION:

The purpose of this agreement is for BPD to test and rigorously evaluate the Aerial Investigation Research (AIR) pilot program which will be used to assist BPD investigate and reduce violent crime in Baltimore City. The program is at no cost to the City, and is being donated through the term of the agreement by Arnold Ventures, a philanthropic organization. During the term, the Contractor will fly aircraft over Baltimore City to collect imagery data. The resolution is limited and therefore individuals and vehicles are unidentifiable but are shown as a single dot and/or movement that can be tracked from a crime scene. This program will be used for investigative "look-back" after an incident has already occurred and can only be used after receiving a case number or incident number. Included in the agreement are additional safeguards and oversight:

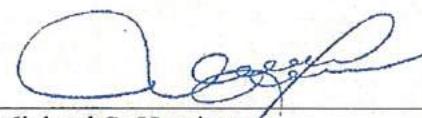
- **Limited Scope and Duration:** Flight operations will be active for up to 6 months in order to collect sufficient data to evaluate and determine the efficacy of the technology. The program will be focused on the following crimes: murder, non-fatal shootings, armed robberies and car-jackings.
- **Civilian Review and Audits:** Independent research partners will evaluate the effectiveness of the program: Potential partners include: Morgan State University, New York University,

University of Baltimore, and the RAND Corporation. Independent civilian verification and validation auditors will be engaged to review system use logs to ensure the program is only being used for its intended public safety purpose.

- **Data Protection:** That data that is obtained can only be used for the purposes related to criminal investigations and will not be authorized for any other purpose. Unanalyzed imagery data will be stored for 45 days after which point it will be deleted during the pilot period. However, with respect to specific imagery analyzed to investigate incidents of crimes, the evidence will be compiled into packets and become a permanent part of the case file. As with all evidence, the imagery data and investigative findings will be provided to the prosecution and be made available to defense counsel through the discovery process.

Respectfully,

Agency: Baltimore Police Department



Michael S. Harrison
Police Commissioner

MBE/WBE PARTICIPATION:

N/A

EMPLOY BALTIMORE:

Not Applicable.

LIVING WAGE:

Not Applicable

Attachment:

APPROVED BY BOARD OF ESTIMATES

DATE

CLERK

PROFESSIONAL SERVICES AGREEMENT
Aerial Investigation Research (“AIR”)

PROFESSIONAL SERVICES AGREEMENT (this “Agreement”) dated as of _____, 2020 by and between the POLICE DEPARTMENT OF BALTIMORE CITY, an agency and instrumentality of the State of Maryland (“BPD”), and PERSISTENT SURVEILLANCE SYSTEMS, LLC, an Ohio limited liability company (the “Contractor”). BPD and Contractor are each referred to as a “Party” and collectively as the “Parties.”

RECITALS

WHEREAS, Baltimore City suffers from extremely high levels of violent crime and the City, through the Mayor’s Office and BPD, its principal law enforcement agency is engaged in a continuous effort to use evidence-based law enforcement strategies to reduce violent crime and improve public safety;

WHEREAS, the Contractor has developed an aerial investigation research system designed to assist law enforcement and in 2017 the Contractor conducted flight operations on approximately 68 days over Baltimore City in an effort to assist BPD in the investigation of various crimes;

WHEREAS, the Contractor proposes to conduct a 6-month pilot project (the “Pilot Project”) using its experimental AIR technology and analytics to assist BPD in investigating certain crimes;

WHEREAS, BPD desires to participate in the Pilot Project and work with the Contractor pursuant to the terms and conditions set forth below;

WHEREAS, Arnold Ventures, a philanthropy dedicated to tackling some of the most pressing problems in the United States, intends to pay for Contractor’s costs for the Pilot Project in order to assist the BPD in assessing whether Contractor’s technology can be a helpful tool in furtherance of BPD’s public safety objectives;

WHEREAS, Arnold Ventures also intends to provide grants to several independent research organizations (the “Independent Evaluators”) to objectively evaluate the Pilot Project and their results and findings will be detailed in reports that will be broadly disseminated and made available to the public.

NOW, THEREFORE, in consideration of the foregoing recitals and the mutual covenants set forth below and for other good and valuable consideration receipt and sufficiency of which is hereby acknowledged, BPD and the Contractor agrees as follows:

1. PURPOSE:

- 1.1.** BPD seeks to continuously develop effective, evidenced based policing strategies to improve public safety and police community relations. The purpose of this Agreement is for BPD to test out and rigorously evaluate an innovative AIR technology used to assist BPD investigate and reduce violent crime in Baltimore

City. The Contractor will provide technical assistance, training, technology and research and subject matter expertise to assist BPD assess, develop, implement and evaluate this public safety technology and community building strategy.

- 1.2. On January 12, 2017, following an investigation by the U.S. Department of Justice (“DOJ”), the DOJ, the Mayor and City Council of Baltimore (the “City”) and BPD entered into an Agreement and proposed consent decree (the “Consent Decree”) to ensure that, among other things, the City and BPD protect individuals’ statutory and constitutional rights, and promote public safety in a manner that is fiscally responsible and responsive to community priorities. On April 17, 2017, the Consent Decree was entered as an Order of the United States District Court, District of Maryland (the “Federal Court”) in the case titled *United States v. Baltimore Police Dept., et al.*, No. 17-cv-00099-JKB (ECF 2-2). The Federal Court retains jurisdiction over the City’s and BPD’s police reform requirements under the Consent Decree.

2. SCOPE OF SERVICES:

- 2.1. The Contractor shall provide the services, on a non-exclusive basis, as described in the Scope of Services that is attached hereto at **Exhibit A** and made part of this Agreement.

3. CONTRACTOR’S RESPONSIBILITIES:

- 3.1. The Contractor’s primary point of contact (the “POC”) for the Pilot Project is Ross T. McNutt, PhD, the Contractor’s founder and sole member. The Contractor shall exercise independent professional judgment and shall assume professional responsibility for all services provided hereunder.
- 3.2. The Contractor shall be available for monthly management meetings with BPD, or as needed to ensure on-going communication and resolution of concerns.
- 3.3. The Contractor will employ sufficient personnel to staff its Baltimore City Offices to analyze video and draft reports and otherwise assist in the investigation of criminal activity. Where Contractor’s data and analysis is used in a criminal case that result in arrest, charges or prosecution, the Contractor will also provide relevant data, analysis and reports to the prosecution and defense. The Contractor will work with the BPD to ensure that recommendations on policy and procedure are consistent with the requirements of the Consent Decree.
- 3.4. Contractor shall provide the Independent Evaluators with access to personnel, offices, documentation, and information as are reasonably required for the Independent Evaluators to conduct the evaluations which are described in the Description of Independent Evaluation that is attached hereto at **Exhibit C**.
- 3.5. Contractor shall provide an independent verification and validation firm (the “Independent Validators”) with access to personnel, offices, documentation, and information as are reasonably required for the Independent Validators to conduct

the verifications and validations which are described in the Description of Independent Verification and Validation that is attached hereto at Exhibit D.

4. BPD'S RESPONSIBILITIES:

- 4.1.** BPD shall provide the Contractor with access to its offices and personnel as are reasonably required for the Contractor to perform its duties and responsibilities under this Agreement.
- 4.2.** BPD's Deputy Commissioner, Operations Bureau, or designee, shall be BPD's POC for this Pilot Project. BPD's POC shall assign a Lieutenant or other officer to coordinate activities with the Contractor personnel who (i) are assigned to BPD's facilities, (ii) access BPD data or information systems or (iii) work with BPD criminal investigators.
- 4.3.** BPD shall take the necessary steps to ensure their capacity to meet the recommendations the Contractor has outlined for success. This includes but is not limited to:
 - 4.3.1.** Subject to available funding, a project manager to facilitate the work of BPD investigators, the Contractor, the Independent Evaluators, an independent reviewer of the Contractor's use of the aerial imagery and public interest in the Pilot Project.
 - 4.3.2.** One Sergeant level liaison officer to assist with implementation
 - 4.3.3.** A commitment to the implementation of new policing approaches for crime reduction.
- 4.4.** BPD shall provide the Independent Evaluators with access to personnel, offices, documentation, and information as are reasonably required for the Independent Evaluators to conduct the evaluations which are described in the Description of Independent Evaluation that is attached hereto at **Exhibit C.**

5. TERM:

- 5.1.** The term ("Term") of this Agreement will commence immediately upon the date (the "Effective Date") first above written and will expire one (1) year after the Effective Date, unless terminated prior to that date in accordance with Section 9 below.

6. FUNDING:

- 6.1.** Arnold Ventures intends to pay to Contractor fees and expenses in respect of the Pilot Project, as described in the Budget that is attached hereto at **Exhibit B,** subject to mutual agreement of Arnold Venture and Contractor as to grant agreement terms

and conditions and Contractor's compliance with those terms and conditions. Arnold Ventures also intends to provide grants to the Independent Evaluators to evaluate the Pilot Project, subject to mutual agreement of Arnold Ventures and such Independent Evaluators as to grant terms and conditions and the Independent Evaluators' compliance with those terms and conditions. Except as may be explicitly agreed upon in those grant agreements, neither Arnold Ventures nor any of its associated entities shall have any obligation with respect to the Pilot Project, including but not limited to Contractor's performance or obligations under this Agreement, any continuation of the project beyond the pilot, or any Renewal Term.

- 6.2. The Abell Foundation, Inc. intends to pay the fees and expenses of the Independent Validators for its activities in respect of the Pilot Project, subject to mutual agreement of The Abell Foundation, Inc. and the Independent Validators as to grant agreement terms and conditions and Independent Validator's compliance with those terms and conditions.
- 6.3. BPD and the City have no responsibility or liability to pay any fees or expenses of the Contractor, the Independent Evaluators or the Independent Validators or any other person or entity in connection with the Pilot Program.

7. INSURANCE:

- 7.1. The Contractor shall procure and maintain the following specified insurance coverage during the entire life of this Agreement, including extensions thereof.
 - 7.1.1. Professional Liability, Errors and Omissions Insurance, at a limit of not less than One Million Dollars (\$1,000,000) per occurrence and three (\$3,000,000) in the aggregate, for claims related to the services under this Agreement.
 - 7.1.2. Aviation Liability Insurance at limits of not less than One Million Dollars (\$1,000,000) per occurrence for claims arising out of bodily injuries or death, and property damages.
 - 7.1.3. Workers' Compensation coverage as required by the State of Maryland or other applicable State's law.
 - 7.1.4. Commercial General Liability Insurance, at a limit of not less than One Million Dollars (\$1,000,000) per occurrence for claims arising out of bodily injuries or death, and property damages, including products and completed operations coverage. For those policies with aggregate limits, a minimum limit of Two Million Dollars (\$2,000,000) is required. Such insurance shall include contractual liability insurance.
- 7.2. The Contractor's insurance shall apply separately to each insured against whom claim is made and/or lawsuit is brought, except with respect to the limits of the insurer's liability.

- 7.3. To the extent of the Contractor's negligence, the Contractor's insurance coverage shall be primary insurance as respects the Mayor and City Council of Baltimore, a Maryland municipal corporation (the "City") and BPD, its elected/appointed officials, employees, and agents. Any insurance and/or self-insurance maintained by the City or BPD, its elected/appointed officials, employees, or agents shall not contribute with the Contractor's insurance or benefit the Contractor in any way.
- 7.4. Required insurance coverage shall not be suspended, voided, canceled, or reduced in coverage or in limits, except by the reduction of the applicable aggregate limit by claims paid, until after forty-five (45) days prior written notice has been given to BPD. There will be an exception for non-payment of premium, which is ten (10) days' notice of cancellation.
- 7.5. Unless otherwise approved by BPD, insurance is to be placed with insurers with a Best's rating of no less than A:VII, or, if not rated with Best's, with minimum surpluses the equivalent of Best's surplus size VII and said insurers must be licensed/approved to do business in the State of Maryland.
- 7.6. The Mayor and City Council of Baltimore and BPD, its elected/appointed officials, employees, and agents shall be covered, by endorsement, as additional insured as respects to liability arising out of activities performed by or on behalf of the Contractor in connection with this Agreement.
- 7.7. The Contractor shall furnish to BPD a "Certificate of Insurance", with a copy of the additional insured endorsement as verification that coverage is in force. BPD reserves the right to require complete copies of insurance policies at any time.
- 7.8. Failure to obtain insurance coverage as required or failure to furnish Certificate(s) of Insurance or complete copies as required shall be a default by the Contractor under this Agreement.
- 7.9. Notwithstanding anything to the contrary in any applicable insurance policy, the Contractor expressly warrants, attests and certifies that there are no carve outs or exclusions to the policy coverage and limitations stated herein, except as required by law.

8. INDEMNIFICATION AND RELEASE:

- 8.1. The Contractor shall indemnify, defend and hold harmless the City and BPD, its elected/appointed officials, employees, and agents from any and all claims, demands, liabilities, losses, damages, fines, fees, penalties, costs, expenses, suits, and actions, including attorneys' fees and court costs, connected therewith, brought against the City or BPD, its elected/appointed officials, employees, and agents, arising as a result of: (a) breach of the Contractor's representations, warranties, covenants, or agreements under this Agreement; (b) the Contractor's violation or breach of any federal, state, local, or common law, regulation, law, rule, ordinance, or code, whether presently known or unknown; (c) breach of the Contractor's confidentiality obligations, including data security and privacy

obligations; (d) any claim that the intellectual property provided or used by the Contractor within the scope of this Agreement infringes any patent, copyright, trademark, license or other intellectual property right; and (e) any direct or indirect, willful, negligent, tortious, intentional, or reckless action, error, or omission of the Contractor, its officers, directors, employees, providers, agents, or volunteers in connection with the performance of this Agreement, whether such claims are based upon contract, warranty, tort, strict liability or otherwise.

- 8.2.** BPD shall have the right to control the defense of all such claims, lawsuits, and other proceedings. In no event shall the Contractor settle any such claim, lawsuit or proceeding without BPD's prior written approval. In the event of any liability claim against the Contractor, the Contractor shall not seek to join the City, BPD, its elected/appointed officials, employees, or agents in such action or hold such responsible in any way for legal protection of the Contractor.
- 8.3.** In recognition of Arnold Ventures' and The Abell Foundation, Inc.'s sole role as a philanthropic funder, each Party, on behalf of itself and its respective present and former parents, subsidiaries, affiliates, officers, directors, shareholders, members, successors, and assigns (collectively, "Releasors") hereby releases, waives, and forever discharges Arnold Ventures, The Abell Foundation, Inc., their respective associated entities, and each of their respective present and former, direct and indirect, founders, parents, subsidiaries, affiliates, employees, officers, directors, managers, members, agents, representatives, permitted successors, and permitted assigns (collectively, "Releasees") of and from any and all causes of action, suits, losses, liabilities, debts, sums of money, obligations, costs, expenses, liens, covenants, agreements, damages, judgments, claims, and demands, of every kind and nature whatsoever, whether now known or unknown, foreseen or unforeseen, matured or unmatured, suspected or unsuspected, in law or equity, which any of such Releasors ever had, now have, or hereafter can, shall, or may have against any of such Releasees for, upon, or by reason of any matter, cause, or thing whatsoever arising out of or relating to this Agreement.
- 8.4.** The Parties hereby designate all Releasees as third-party beneficiaries of Section 8.3, having the right to enforce such Section.
- 8.5.** The obligations of this Section 8 shall survive the expiration or earlier termination of this Agreement.

9. TERMINATION:

- 9.1. Termination for Convenience.** BPD shall have the right to terminate this Agreement at any time during the Term of this Agreement, for any reason, including without limitation, its own convenience, upon thirty (30) days' prior written notice to the Contractor. The Contractor shall have the right to terminate this Agreement at any time during the Term in the event that Arnold Ventures terminates funding for the Contractor under its grant agreement.

9.2. Termination for Cause. If the Contractor shall fail to fulfill in a timely and proper manner its obligations under this Agreement, or if the Contractor shall violate any of the representations, warranties, covenants, terms or stipulations of this Agreement, BPD shall have the right to terminate this Agreement, provided the Contractor has failed to cure such violation within ten (10) days after receiving written notification from BPD. Notwithstanding the above, the Contractor shall not be relieved of liability to BPD for damages sustained by BPD by virtue of any breach by Contractor of this Agreement prior to the date of termination.

9.3. Notice of Termination and Performance Matters. Arnold and the Contractor will provide prompt written notice to BPD and The Abell Foundation if it Arnold Ventures notifies Contractor that it will discontinue funding Contractor or any Independent Evaluator for the Pilot Project under any of its grant agreements. The Abell Foundation will provide prompt written notice to BPD and Arnold Ventures if it decides to discontinue funding the Independent Validators for the Pilot Project under its grant agreement. If BPD decides to terminate this Agreement, it shall immediately provide written notice of such termination to Arnold Ventures and The Abell Foundation. The Parties shall also immediately notify Arnold Ventures and The Abell Foundation, Inc. in writing of any event or circumstance that does or would reasonably be expected to impact the performance of either Party under this Agreement.

10. RETENTION OF RECORDS:

10.1. The Contractor shall retain and maintain all records and documents relating to this Agreement for a minimum of three (3) years from the date of final payment under this Agreement or pursuant to any applicable statute of limitations, whichever is longer, except in cases where unresolved audit questions, investigations, or cases require retention for a longer period as determined by BPD. The Contractor shall make such records and documents available for inspection and audit at any time to authorized representatives of BPD, and if applicable to state and/or federal government authorized representatives. If the Contractor should cease to exist, custody of all records related to this Agreement will be transferred to BPD; provided, that any such records or documents that relate exclusively to the relationship or agreements between Arnold Ventures and Contractor shall be transferred to Arnold Ventures.

11. AUDITS:

11.1. At any time during business hours and as often as BPD may deem necessary, there shall be made available to BPD for examination, the Contractor's records with respect to matters covered by this Agreement. The Contractor shall permit the BPD to audit, examine and make excerpts or transcripts from such records, and to make audits of all contracts, invoices, materials, records of personnel, conditions of employment and other data relating to matters covered by this Agreement.

12. INFRINGEMENT PROTECTIONS:

- 12.1.** The Contractor represents and warrants to the BPD that any concepts, idea, studies, models, presentations, graphics, images, maps, guides, photos, printed materials, reports, brochures, operating manuals, designs, data, electronic files, software, processes, plans, procedures and other materials prepared or used by the Contractor in performance of services under this Agreement do not infringe or otherwise violate any intellectual property right of others, including patent, copyright, trademark, or trade secret.
- 12.2.** The Contractor agrees to defend at its expense any action brought against the BPD to the extent based on a claim that the work product or services provided by Contractor violates any third party intellectual property right. The Contractor will pay any costs and damages finally awarded against the BPD in such action that are attributable to such claim, provided that the BPD promptly notifies the Contractor in writing of the claim (provided, however, that the failure to so notify shall not relieve the Contractor of its indemnification obligations), allows the Contractor to control the defense, provides the Contractor with the information and assistance necessary for the defense and/or settlement of the claim, and does not agree to any settlement without the Contractor's prior written consent. In no event shall the Contractor agree to any settlements related to this Agreement without first receiving the BPD's written consent.
- 12.3.** Should the Contractor's work product or services become, or in the Contractor's opinion be likely to become, the subject of any intellectual property claim, the BPD may at its sole option direct the Contractor to (i) procure for the BPD the right to continue using the product or services, (ii) replace or modify the product or services so as to make it non-violating, or, if (i) and (ii) are not commercially reasonable, (iii) terminate this Agreement and the BPD shall be entitled an equitable adjustment in accordance with the Agreement.

13. WORK FOR HIRE:

- 13.1.** To the extent any graphics, images, maps, guides, photos, printed materials, brochures, operating manuals, designs, data, processes, plans, procedures and information prepared by the Contractor in performance of services under this Agreement include material subject to copyright protection, such materials have been specifically commissioned by BPD and they shall be deemed "work for hire" as such term is defined under U.S. copyright law. The Contractor shall secure a "work for hire" agreement on behalf of BPD for any subcontractor who provides materials for this Agreement.
- 13.2.** To the extent any of the materials may not, by operation of law, be a work made for hire in accordance with the terms of this Agreement, the Contractor hereby assigns to BPD all right, title, and interest in and to any intellectual property, and BPD shall have the right to obtain and hold in its own name any copyrights, registrations, and other proprietary rights which may be available

14. CONFIDENTIALITY:

- 14.1.** “Confidential Information” refers to any and all information or records that are protected from public disclosure by any federal or state law, including but not limited to the Omnibus Crime Control and Safe Streets Act of 1968, as amended by the Crime Control Act of 1973, and its implementing regulations including 28 C.F.R. § 20.1, et seq.; the Maryland Public Information Act, MD. CODE ANN., GEN. PROV. § 4-101 et seq.; MD. CODE ANN., CTS. & JUD. PROC. § 3-8A-27(a)(1); and MD. CODE ANN., CRIM. PROC. § 10-219. Confidential Information may include: criminal justice information, criminal history record information, personnel files, juvenile records, medical records, employment records, personally identifying information and/or personal data identifiers including, inter alia, names, social security numbers, financial and tax information, dates of birth, home address, current home or cellular telephone numbers, and/or other information of a private nature as defined by the Privacy Act of 1974, 5 U.S.C. § 552(a), which may be contained in any record, document, tangible thing, testimony, information, or other material. Confidential Information shall not include any information that is (i) generally available to the public; or (ii) made available by any independent third party who has the right to disclose the information.
- 14.2.** The Contractor agrees that any Confidential Information received from BPD or its personnel in the furtherance of this Agreement shall remain strictly confidential and shall not be used or disseminated or otherwise made available to any individual or organization without the prior written approval of BPD or pursuant to applicable federal, state, or local laws. Notwithstanding the foregoing, provided that the Independent Evaluator’s and the Independent Validator’s have executed confidentiality agreements with both BPD and Contractor, Contractor may disclose Confidential Information to the Independent Evaluators and Independent Validators for the purpose of conducting the independent evaluations. The provisions of this Section shall remain binding upon the Contractor after the expiration or earlier termination of this Agreement.
- 14.3.** As required under the Maryland Public Information Act, the Contractor shall implement and maintain reasonable security procedures and practices that are appropriate to the nature of the personal information disclosed to the Contractor by BPD or other government agencies and which are reasonably designed to help protect the personal information from unauthorized access, use, modification, disclosure, or destruction.
- 14.4.** Contractor’s Independent Evaluators’ and Independent Validator’s employees and representatives that work with BPD or otherwise access BPD Confidential Information in connection with the Pilot Project or the Independent Evaluations shall be required to sign a Confidentiality and Non-Disclosure Agreement as requested by BPD. Prior to commencement of any of work with BPD and access to any files or databases of BPD, BPD will provide these individuals with applicable BPD policies, and orientation to facilities and activities that analyst

will be involved in. BPD will ensure that these individuals undergo an initial criminal background investigation, the results of which must be acceptable to BPD, and any further background checks as deemed appropriate by BPD. The individuals will be required to consent to these background checks to obtain access to Confidential Information and access to BOD files or databases.

15. PUBLICATION:

- 15.1.** The Parties desire to have a coordinated communication strategy about the Pilot Project. Prior to any advertising, community engagement or education, publicity (i.e., speaking events, press interviews, press release, professional or trade publication, website, advertisement, or other meeting, document or announcement), or promotional materials initiated by (or in response to requests to) the Contractor relating to the services under this Agreement or the Pilot Project, the Contractor shall obtain prior written approval regarding any advertising, publicity or promotional materials from the BPD before such advertising, publicity or materials can be released. Materials shall be presented to the BPD for prior written approval and shall be returned to the Contractor in a timely manner. BPD will be responsible for answering all media requests related to the operation of the Pilot Program, and Contractor will notify BPD of any media inquiry made to Contractor. Failure of Contractor to comply with this provision may result in termination of the agreement
- 15.2.** Prior to any publicity (i.e., speaking events, press interviews, press release, professional or trade publication, website, advertisement, or other public document or announcement) initiated by BPD or Contractor relating to Arnold Ventures or any of its founders, associated entities, employees, representatives or agents, Contractor shall obtain prior written approval regarding such promotional materials from Arnold Ventures before such materials can be released. Materials shall be presented to by the party wishing to initiate the publicity to Arnold Ventures at least three (3) business days in advance of the proposed publicity.
- 15.3.** The Parties hereby designate Arnold Ventures as a third-party beneficiary of Section 15.2, having the right to enforce such Section.
- 15.4.** The provisions of this Section shall survive the expiration or earlier termination of this Agreement.

16. MODIFICATIONS AND AMENDMENTS:

- 16.1.** Any and all modifications, alterations, or amendments to the provisions of this Agreement must be by means of a written amendment that refers to and incorporates this Agreement, is duly executed by an authorized representative of each Party. No modifications, alterations, or amendments of this Agreement are valid and enforceable unless the above requirements have been satisfied.

17. COMPLIANCE WITH LAWS:

- 17.1. The Contractor hereby represents, warrants, covenants, and agrees that:
- 17.1.1. It is qualified to do business in the State of Maryland and that it will take such action as, from time to time hereafter, may be necessary to remain so qualified;
- 17.1.2. The Contractor's name in this Agreement is its full legal name;
- 17.1.3. It has the requisite corporate power (if applicable), authority and legal capacity to enter into this Agreement and fulfill its obligations hereunder;
- 17.1.4. The execution and delivery by it of this Agreement and the performance by it of its obligations hereunder have been duly authorized by all requisite action of its stockholders, partners or members, and by its board of directors or other governing body (if applicable);
- 17.1.5. During the Term, it will comply with all federal, state and local laws, ordinances, rules and regulations, including interim expenditure and annual report requirements, and applicable codes of ethics pertaining to or regulating the services to be performed pursuant to this Agreement, including those now in effect and hereafter adopted;
- 17.1.6. There are no suits or proceedings pending or threatened, whether in law or in equity, to the best of the Contractor's knowledge, which if adversely determined, would have a material adverse effect on the financial condition or business of the Contractor; and
- 17.1.7. It has obtained, at its expense, all licenses, permits, insurance, and governmental approvals, if any, necessary to perform its obligations under this Agreement.
- 17.2. The Contractor's violation of the above representations and warranties shall entitle the BPD to terminate this Agreement immediately upon delivery of written notice of termination to the Contractor.

18. INTENTIONALLY DELETED.**19. BPD AND BALTIMORE CITY REQUIREMENTS:****19.1. Nondiscrimination.**

- 19.1.1. The Contractor shall operate under this Agreement so that no person otherwise qualified is denied employment or other benefits on the grounds of race, color, religion, ancestry, national origin, sex, age, marital status, sexual orientation, disability or other unlawful forms of discrimination except where a particular occupation or position reasonably requires consideration of these

attributes as an essential qualification for the position. The Contractor shall post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

- 19.1.2.** The Contractor shall not discriminate on the basis of race, gender, religion, national origin, ethnicity, sexual orientation, gender identity or expression, age, or disability in the solicitation, selection, hiring, or treatment of subcontractors, vendors, suppliers, or commercial customers. The Contractor shall provide equal opportunity for subcontractors to participate in all of its public sector and private sector subcontracting opportunities, provided that nothing contained in this clause shall prohibit or limit otherwise lawful efforts to remedy the effects of marketplace discrimination that has occurred or is occurring in the marketplace, such as those specified in Article 5, Subtitle 28 of the Baltimore City Code, as amended from time to time. The Contractor understands and agrees that violation of this clause is a material breach of this Agreement and may result in contract termination, debarment, or other sanctions. This clause is not enforceable by or for the benefit of, and creates no obligation to, any third party.
- 19.1.3.** Upon the BPD's request, and only after the filing of a complaint against the Contractor pursuant to Article 5, Subtitle 29, of the Baltimore City Code, as amended from time to time, the Contractor agrees to provide BPD, within 60 calendar days, a truthful and complete list of the names of all subcontractors, vendors, and suppliers that the Contractor has used in the past four (4) years on any of its contracts that were undertaken with the Baltimore BPD Market Area as defined in Article 5, §28-1(d) of the Baltimore City Code, as amended from time to time, including the total dollar amount paid by the Contractor for each subcontract or supply contract. The Contractor agrees to fully cooperate in any investigation conducted by the BPD pursuant to the BPD's Commercial Non-Discrimination Policy, as contained in Article 5, Subtitle 29, of the Baltimore City Code as amended from time to time. The Contractor understands and agrees that violation of this clause is a material breach of this Agreement and may result in contract termination, debarment, and other sanctions.
- 19.2. MBE/WBE.** The requirements of the Baltimore City Code, Article 5, Subtitle 28 (pertaining to Minority and Women's Business Enterprise), as amended, are hereby incorporated by reference into this Agreement. If applicable, failure of the Contractor to comply with this subtitle shall constitute a material breach of this Agreement and shall entitle the BPD to terminate this Agreement immediately upon delivery of written notice of termination to the Contractor. The Contractor will make good faith efforts to utilize minority and women's business enterprises and maintain records reasonably necessary for monitoring compliance with this subtitle. (*See Art. 5, § 28-54, Baltimore BPD Code*)

19.3. Conflict of Interest. No elected official of the City, nor other officer, employee or agent of the City or BPD who exercises any functions or responsibilities in connection with this Agreement, shall have any personal interest, direct or indirect, in this Agreement or be an employee of or otherwise engaged by the Contractor. By executing this Agreement, the Contractor asserts that it has not engaged in any practice or entered into any past or ongoing agreement that would be considered a conflict of interest with this Agreement. The Contractor agrees to refrain from entering into all such practices or agreements during the Term of this Agreement (and any extensions thereto) that could give rise to a conflict of interest. Furthermore, the Contractor asserts that it has fully disclosed to BPD any and all practices and/or agreements of whatever nature or duration that could give rise to a conflict of interest and will continue to do so during the Term of this Agreement and any extensions thereto.

20. STATE REQUIREMENTS:

20.1. Political Contribution Disclosure. The Contractor is aware of and will comply with all applicable provisions of the Maryland Annotated Code, Election Law Article, §14-101 et seq., "Disclosure By Persons Doing Public Business", ("Election Law"). The Contractor certifies, in accordance with §14-107 of the Election Law, that it has filed the statement required under §14-104(b)(1) of the Election Law.

21. MISCELLANEOUS PROVISIONS:

21.1. No Waiver. A Party's failure to insist on compliance or enforcement of any provision of this Agreement shall not affect its validity or enforceability or constitute a waiver of future enforcement of that provision or of any other provision of this Agreement.

21.2. Severability. Each provision of this Agreement shall be deemed to be a separate, severable, and independently enforceable provision. The invalidity or breach of any provision shall not cause the invalidity or breach of the remaining provisions or of this Agreement, which shall remain in full force and effect.

21.3. Governance.

21.3.1. This Agreement is made in the State of Maryland and shall be governed by the laws of the State of Maryland, including the applicable statute of limitations, without regard to the conflict of law rules.

21.3.2. The legal venue of this Agreement and any disputes arising from it shall be in Baltimore City, Maryland. The Contractor hereby irrevocably waives any objections and any right to immunity on the ground of venue or the convenience of the forum, or to the jurisdiction of such courts or from the execution of judgments resulting therefrom.

21.4. Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the respective personal and legal representatives, successors, guardians, heirs and permitted assigns of the Parties hereto and all persons claiming by and through them. The Contractor shall not assign, transfer, or subcontract any part of this Agreement without the prior written consent of the BPD, which shall may be withheld in BPD's sole discretion.

21.5. Notice.

21.5.1. All notices, requests, claims, demands and other communications required or permitted under this Agreement (collectively, "Notices") shall be in writing and be given (i) by delivery in person, (ii) by a nationally recognized next day courier service, (iii) by registered or certified mail, postage prepaid, to the address of the Party specified in this Agreement or such other address as either Party may specify in writing to the following:

FOR THE BPD:

Police Commissioner
Baltimore Police Department
242 W 29th St
Baltimore, MD 21211

FOR THE CONTRACTOR:

Persistent Surveillance Systems,
LLC
Attn: Ross T. McNutt, President
140 North Valley Road
Xenia OH 45385

with copy to:

Chief, Police Legal Affairs
Baltimore City Department of Law
City Hall, Suite 101
100 Holliday Street
Baltimore, MD 21201

FOR ARNOLD VENTURES:

Arnold Ventures LLC
1717 West Loop South, Suite 1800
Houston, Texas 77027
Attention: General Counsel

**FOR THE ABELL
FOUNDATION:**

111 S Calvert St
Baltimore, MD 21202
Attention: President

21.5.2. All Notices shall be effective upon receipt by the Party to which notice is given.

- 21.6. **Headings.** Any heading of the paragraphs in this Agreement is inserted for convenience and reference only and shall be disregarded in construing and/or interpreting this Agreement.
- 21.7. **Recitals.** The recitals are hereby incorporated as part of this Agreement.
- 21.8. **Survival.** The representations, warranties, covenants, promises, and agreements contained in this Agreement shall survive the execution and consummation of this Agreement, and shall continue until the applicable statute of limitations shall have barred any claims thereon.
- 21.9. **Interpretation.** Intentionally Deleted.
- 21.10. **Remedies Cumulative.** The rights and remedies provided by this Agreement are cumulative and the use of any one right or remedy by any Party shall not preclude or waive the right to use any or all other remedies. Said rights and remedies are given in addition to any other rights the Parties may have by law, statute, ordinance or otherwise.
- 21.11. **Independent Contractor.**
 - 21.11.1. It is agreed by the Parties that at all times and for all purposes hereunder that the Contractor is not an employee, representative or agent of the BPD. No statement contained in this Agreement shall be construed so as to find the Contractor or any of its employees, subcontractors, servants, or agents to be employees, representatives or agents of the BPD, and they shall be entitled to none of the rights, privileges, or benefits of employees of the BPD.
 - 21.11.2. The Contractor warrants that individual(s) performing work under this Agreement shall be employee(s) of the Contractor for all purposes, including but not limited to unemployment insurance, tax withholdings, workers compensation coverage as required by applicable federal and state law.
- 21.12. **Force Majeure.** Neither Party will be liable for its non-performance or delayed performance if caused by a “Force Majeure” which means an event, circumstance, or act of a third party that is beyond a Party’s reasonable control, such as an act of God, an act of the public enemy, an act of a government entity, strikes or other labor disturbances, hurricanes, earthquakes, fires, floods, epidemics, embargoes, war, or any other similar cause. Each Party will notify the other if it becomes aware of any Force Majeure that will significantly delay performance. The notifying Party will give such notice promptly (but in no event later than fifteen (15) calendar days) after it discovers the Force Majeure. If a Force Majeure occurs, the Parties may modify this Agreement in accordance with the requirements herein.
- 21.13. **Entire Agreement.** This Agreement constitutes the entire, full and final understanding between the Parties hereto and neither Party shall be bound by any representations, statements, promises or agreements not expressly set forth herein.

21.14. Null and Void. Should this Agreement not be approved by the Board of Estimates, it shall be considered null and void.

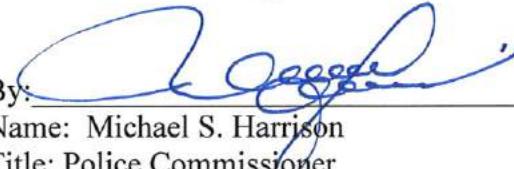
*THE REMAINDER OF THIS PAGE IS BLANK;
SIGNATURE PAGE FOLLOWS.*

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the date first above written.

ATTEST:

POLICE DEPARTMENT OF BALTIMORE CITY

Custodian of the City Seal

By: 
Name: Michael S. Harrison
Title: Police Commissioner

WITNESS:

PERSISTENT SURVEILLANCE SYSTEMS, LLC



By: 
Name: Ross T. McNutt, PhD
Title: President

**APPROVED AS TO FORM
AND LEGAL SUFFICIENCY**

APPROVED BY THE BOARD OF ESTIMATES


Mark Dewire, Chief Solicitor

Clerk

Date

Exhibit A
Scope of Services
Pilot Project to Test Aerial Investigation Research (“AIR”)

Overview

Contractor will conduct a 6-month pilot project (the “Project”) using experimental aerial investigation research technology and analytics (the “Activities”) to assist BPD investigate certain crimes in Baltimore City. The Parties acknowledge that this technology has not been implemented in any US City and its effect on crime has not been analyzed and is unknown at this time. The Project is designed to determine whether AIR is effective to accomplish Project goals (the “Goals”). The Project Goals include (i) increasing the solvability of crimes, (ii) improving clearance rates, (iii) improving police community relations, and (iv) deterring criminal activity. The Project is an initiative of BPD to develop effective, evidenced based policing strategies to improve public safety and police community relations. The Project will be independently evaluated as described in Exhibit C and independently validated as described in Exhibit D. The Pilot Project and the related Independent Evaluation and Independent Validation will be funded by Arnold Ventures and The Abell Foundation, third party philanthropists and will not require any funding by BPD or the City.

During this experimental pilot Project, Contractor’s imagery data will be used by BPD to investigate only the following reported crimes (the “Target Crimes”):

Homicides and Attempted Murder
Shootings with Injury
Armed Robbery
Car Jacking

In addition to these Target Crimes, BPD may request Contractor’s technology and analytical support in extraordinary and exigent circumstances, on a case by case basis, **only** as identified and specifically approved in writing by the Baltimore Police Commissioner. Exigent cases may include for example, cases involving imminent danger or loss of life, a kidnapping, chemical spill or train derailment.

This Scope of Services is subject to change based upon BPD operational requirements.

2020 Project Schedule

March	Set up Analysis Center and Analyst Training Technical set up and integration and test flights
April	Projected start of Independent Oversight Organization Start of Contractor support and analysis operations
April – October	Contractor AIR operations in support of BPD

Operations

During the term, Contractor will fly three (3) aircraft over Baltimore City to collect imagery data of major portions of Baltimore City. Weather permitting, each aircraft will fly a minimum of forty hours per week and use its Hawkeye Wide Area Imaging System to capture up to 32 square miles of the City per image every second. The resolution is limited to 1 pixel per person and therefore individuals and vehicles are shown as a single dot and these dots are tracked from a crime scene. At a resolution of one pixel per person or vehicle, it is not possible to determine any identifiable characteristic including an individual's ethnicity, sex, or clothing or a vehicle color, make, model or license plate. The system will not differentiate between police or non-police personnel or vehicles. Contractor's system will not use infrared or night vision technology. Contractor's camera systems are sensitive enough to capture images at night with ambient City lighting. Contractor will not track individuals or vehicles in real time.

Contractor data is transmitted from the aircraft to Contractor's ground stations where Contractor analysts use imagery data to locate crimes, track individuals and vehicles from a crime scene and extract information to assist BPD in the investigation of Target Crimes. During the Project, only Target Crimes will be investigated using AIR investigation except in exigent circumstances as described above.

Contractor will analyze Target Crimes upon specific request by BPD or based on alerts from BPD's Computer Aided Dispatch ("CAD") system or Shot Spotter alerts that relate to the approved Target Crimes. Contractor analysts will document their work product in writing and present it to BPD during investigative briefings and in written reports. In cases where these briefings and reports result in an arrest that is based in whole or in part on Contractor's briefings or reports, copies of these briefings and reports will be provided to prosecutors and defense attorneys in the ordinary course of BPD's operations and in fulfillment of any *Brady* or *Giglio* obligations. Prosecutors and defense counsel may request and Contractor will provide additional analysis from Contractor in furtherance of criminal prosecutions and defense of those cases.

Contractor, at its sole expense, will provide all personnel, planes, equipment, pilots, mechanics and logistical support required to fly the planes, collect the data, analyze the data and provide BPD, prosecutors and defense counsel with briefings and reports, and project reports.

Contractor expects to hire between 15 and 25 analysts for this Project. Analysts will work in two shifts per day, seven days per week in support of this effort. Contractor will hire and train analysts from the Baltimore region. Contractor analysts will develop the investigation briefings and reports to be presented to BPD investigators. Upon request of BPD, prosecutors or defense counsel, Contractor will brief and provide AIR reports on specific cases.

Contractor analysts will be located at a Contractor office located in Baltimore, Maryland. In addition, one or more Contractor analysts may be located in BPD's Watch Center to be teamed with a BPD sworn officer or BPD analyst. Additional Contractor analysts will be located at Contractor's Dayton, Ohio headquarters to provide quality control of the investigation briefings, project reports and augmenting analysis as needed.

Contractor may integrate its imagery data analysis with BPD systems to aid in the investigation process. Contractor will provide program management support for integration efforts as may determined by BPD. These BPD systems include:

Computer Aided Dispatch (CAD) System: Contractor analysts will monitor BPD's CAD system from monitors in BPD facilities to identify Target Crimes.

CitiWatch Ground Based Cameras Integration: In its briefings and reports, Contractor analysts will track individuals and vehicles that pass the Baltimore CitiWatch CCTV cameras noting the time the vehicles pass the cameras. Contractor analysts will access or request CitiWatch camera information to provide more detailed descriptions of the vehicles and include that information in the investigation briefings.

Shot Spotter Gun Shot Detection System: Contractor will use the Shot Spotter Acoustic Gunshot Detection System to speed the identification of the location of active gun shots within the imagery. Contractor has integrated the Shot Spotter Gun Shot Detection System into its iView Software allowing analysts to quickly identify the location and time of gunshots. This assists analysts and allows more rapid support to the citizens and responding officers.

License Plate Readers – Contractor will provide time and location of the vehicles that are tracked from the crime scene pass license plate readers allowing the vehicles to be identified.

In accordance with written authorization from technology vendors, Contractor may integrate its iView software to accept and utilize the CAD, the CitiWatch system, the Shot Spotter Gunshot Detection System, and the License Plate readers to help make all of the systems work together to enhance their ability to help solve and deter crimes.

Investigation Briefings and Reports: As quickly as possible and within eighteen (18) hours of Contractor's notice of a Target Crime on the CAD System monitors or BPD's request to Contractor to analyze a Target Crime, Contractor will provide BPD an investigative briefing that details the information associated with a reported Target Crime to assist BPD in its investigations. The briefing will include the results of the imagery analysis, the location and timing of a crime, the observable actions at the crime scene, the tracks of vehicles and people to and from the crime scene, the location the vehicles and people from the crimes scene visited after and before the crime. Contractor investigation briefings will include observations of driving patterns and driving behaviors of vehicles from the crime scene prior to and after a crime.

Contractor will provide a detailed Investigation Briefing Report (the "Report") on a Target Crime within three days (72 hours) of Contractor's observation of or BPD's request to Contractor to analyze a Target Crime. The Report will include the imagery of the crime scene, tracks of vehicles and people who were at the scene of the crime as potential suspects or witnesses prior to and after the crime, locations the vehicles and people visited prior to and after the crime, ground-based camera video made available to Contractor by BPD including but not limited to CitiWatch camera video images of the vehicles and people tracked from the crime

scene for the cameras they pass on the way to and from the crime scene. The Report will also include tracks of people and vehicles that met with people who were tracked from the crime scene and the locations they came from and went to. Contractor will work with BPD investigators to identify information helpful to solving their cases. BPD intends to use the imagery, reports, and briefings provided by Contractor only for the purpose of investigating the Target Crime for which it was requested.

If Contractor's Briefings or Reports are used in connection with an arrest related to a Target Crime, Contractor's Briefings and Reports will be provided to prosecutors when they are assigned to a case. Prosecutors will provide the Briefings and Reports to defense attorneys once a suspect has been arrested for a Target Crime. In providing this information to prosecutors and defense attorneys Contractor will follow the procedures outlined in BPD Policy 1014 Video Surveillance Procedures as is done with the CitiWatch system.

Real Time Support: Contractor will not provide BPD real time support except in exigent circumstances and only at the written request of the BPD Police Commissioner.

Project Reports. Contractor will provide BPD and the Independent Evaluators and Arnold Ventures with the following reports on a weekly, monthly and quarterly basis:

Dates, times and area flown covered by Contractor imagery
Number of discrete Briefing Reports
Number of Discrete Investigative Reports
Total Number of Number of Target Crimes that use AIR investigative resources
Total Exigent Cases with categories
Court Orders related to AIR received
Expert Testimony related to AIR provided
Other appropriate details as agreed by the Parties

Contractor will include details provided by BPD on the
Arrests that resulted from use of AIR analysis
Convictions or pleas that result from AIR analysis

The above reports will not include any personally identifiable information.

Expert Witness Service

Upon request of BPD or any prosecuting agency, Contractor will provide an expert to testify in legal proceedings, free of charge, regarding the Contractor's surveillance technology and services and on issues related to security, chain of custody and other matters related to the Contractor's technology and work product. The requesting agency will provide Contractor reasonable notice of the need for this testimony. This covenant will survive the expiration or termination of this Agreement and these services will be provided at no cost or expense to the BPD or Baltimore City.

Ownership of Contractor Data; Use Limitation Contractor's imagery data shall be owned and controlled by Contractor and not BPD. Contractor may use its imagery data for the sole and

limited purpose of assisting BPD with the Activities, and as provided above to prosecuting agencies and defense counsel in specific cases. In addition, Contractor may provide imagery data to the Independent Evaluators and Validators in support of the activities described in Exhibits C and D. Contractor will not use the data for any other purpose. Contractor will not disclose or otherwise sell or convey any imagery data from the Project and will not allow anyone else to use the data for any other purpose, except as provided in this Agreement. Contractor will comply with any court orders related to production of its imagery. In addition, at the sole cost and expense of defense counsel, Contractor may provide analytic support and review of imagery within its retention period to assist defense counsel in specific criminal cases involving its clients.

Data Retention Program and Policies Contractor will retain the AIR imagery data for forty-five (45) days. Investigative briefings and Reports used in the prosecution of Target Crimes, including related AIR imagery will be maintained by Contractor for a longer duration in accordance with applicable law until legal proceedings and appeals are complete and until the statute of limitations expires. Contractor will institute physical, technical and policy systems to ensure the integrity of the data it records in its surveillance and analysis. The Parties acknowledge that if the Pilot Program is successful and is extended, the Parties may revisit the data retention period for AIR imagery that is not used in furtherance of criminal prosecutions.

Privacy Protection Program

Contractor will institute a program to protect individual privacy. These measures include (i) limits on crimes and other activities that may be analyzed, (ii) limited use of AIR imagery and data, (iii) limits on locations Contractor may analyze, (iv) limits on the individuals and vehicles that may be analyzed, (v) limits on the allowed resolution of imagery, and (vi) the recording, review, oversight and reporting processes associated with the Project.

Contractor will track and report all use of AIR data. All use of the data will be documented and annotated as to the purpose, justification, and use of the information provided. Detailed records of each investigation and support effort will be documented and maintained.

Contractor analysts and personnel will sign into the system and log their work against an approved investigation or support effort.

Tracks of individuals to and from crime scenes form the basis of the analysis. Each track must be assigned to a BPD approved investigation. Each track is documented as to the investigation supported and the analyst creating the track. Each track point is documented as to the time created and the analyst who created it. While non-useful tracks and track points can be hidden from the analyst's screens, no track points or tracks can be deleted from the system. All tracks and track points can be reviewed by Contractor managers and audit organizations to ensure that only authorized tracks are created and that the system is not misused.

Security videos will be taken of the Vendor's analysis center and stored for use in the event that unauthorized use of the AIR technology system occurs to determine the circumstances of the misuse.

Contractor will have both internal and external reviews oversight of its actions during the Project.

Internal review: Contractor provides internal review of its analysts to ensure that only authorized use of the system occurs. Any detected unauthorized use of the system will be self-reported by Contractor and included in the weekly, monthly and quarterly reports.

Independent Verification and Validation: This effort will also include an external organization to ensure that only authorized use of the AIR system occurs. BPD will identify an appropriate audit organization which will be paid for by an outside entity to ensure its independence. The outside audit organization will report monthly as to the compliance of Contractor with its privacy protection program and authorized use of the data. The external auditor will flag any unauthorized use of the data.

Public Education

BPD and Contractor intend that there is full transparency and public awareness of its Project and its results. Contractor and BPD believe that full awareness will increase public support for the program and help deter people from committing crimes. Contractor will support program

awareness, subject to Section 15, as directed and approved by BPD , and will support BPD request for media and public awareness support.

Media Access and Briefings Contractor will support BPD efforts to enhance public awareness of the program. Contractor will, subject to Section 15, provide support and allow access to media only as directed and approved by BPD.

Exhibit B
AIR Budget for Pilot Program

Organization Name: Persistent Surveillance Solutions, LLC
Total Project Budget: \$3,690,667

EXPENSE DESCRIPTION		Total
PROJECT PERSONNEL ¹		03/01/20 - 12/01/20
Name or Position, Job Title	Hrs:	9 mo.
Chief Pilot		68,000
Pilots (\$38.40/hr)	4200	161,280
Trackers (15) (\$25.90/hr)	19197	497,199
Analysts (4) (\$40.45/hr)	5120	207,114
Deployed Analysts (\$55.01/hr)	1280	70,410
Perdiem - Deployed Analysts	255	16,560
IT Installation and Setup (3) (\$69.56/hr)	960	66,782
IT Maintenance and Support (2) (\$46.27/hr)	2801	129,593
IT Integration Effort with BPD Systems (2) (\$69.56/hr)	2880	200,345
Shift Manager (3) (\$55.01/hr)	4080	224,433
Site Manager (\$88.04/hr)	1440	126,777
Program Director (\$109.03/hr)	1440	157,009
Office Manager (\$67.04/hr)	1440	96,545
Public Awareness - Briefing Teams (\$40.45/hr) ²	3040	122,974
PERSONNEL SUBTOTAL		\$ 2,145,020
OTHER PROJECT EXPENSES		
<i>Airborne Camera System (usage only):</i>		
HawkEye II/III Sensor Units: 27 months; \$8,222 per month		222,000
Image Processing Units: 27 months; \$788 per month		21,264
Airborne Data Links: 32 months; \$216 per month		5,826
Airborne User Control Station: 27 months; \$73 per month		1,958
Hawkeye III: components and costs		299,000
Hourly Flight Costs: 200 hrs/month per aircraft, \$187 per hour (3-4 aircrafts in orbit)		786,399
Hangars		9,450
Airport Office		9,000
Facilities Operational Costs: office rent, parking, utilities, supplies		95,100
Delivery Disk Drives: Uber package delivery disk drives		5,250
Facilities Setup: modifications/upgrades, security cameras, furniture		17,700
Analyst Stations: server disk drives and 10 workstations at \$1,000 each		20,800
Switches and IT Equipment: projectors and screens, data links, and printers		8,900

¹ Hourly amounts represent fully loaded personnel rates inclusive of 28% fringe.

² Release of funding for Public Awareness personnel and support materials is contingent upon review and approval of BPD written confirmation to proceed with a written plan for Grantee's Public Awareness activities.

Public Awareness Support Materials ²	43,000
<i>OTHER EXPENSES SUBTOTAL</i>	\$ 1,545,647
TOTAL FUNDING REQUEST	\$ 3,690,667

Exhibit C
Independent Evaluation of the Pilot Project

Arnold Ventures intends to provide grants to the following Independent Evaluators to objectively evaluate the Pilot Project, subject to mutual agreement of Arnold Ventures and such Independent Evaluators as to grant terms and conditions and the Independent Evaluators' compliance with those terms and conditions. Arnold Ventures may adjust or supplement these evaluations as needed to objectively assess the Pilot Project.

Contractor will provide full support to the Independent Evaluators and their efforts. Contractor shall provide the Independent Evaluators with access to personnel, offices, documentation, and information as are reasonably required for the Independent Evaluators to conduct the evaluations. Contractor will promptly execute any necessary data sharing and confidentiality agreements with the Independent Evaluators and provide all data requested by the Independent Evaluators as needed to conduct their evaluations.

BPD Support: BPD will provide full support to the Independent Evaluators. BPD shall provide the Independent Evaluators with access to personnel, offices, documentation, and information as are reasonably required for the Independent Evaluators to conduct the evaluations. BPD will promptly execute any necessary data sharing and confidentiality agreements with the Independent Evaluators and provide all data requested by the Independent Evaluators as needed to conduct their evaluations, subject to compliance with BPD policies and in accordance with applicable law.

Evaluation of the Causal Impact of Technology on Police Activity and Crime, RAND Corporation, Estimated Grant of \$900,000

RAND proposes to conduct a mixed method evaluation of the Pilot Project that evaluates how often the Pilot Project is accessed and used by criminal investigators, how often the information provided by the Pilot Project provides evidence that is useful to the investigator, and how the Pilot Project affects crime rates, clearance rates, and prosecution success in Baltimore.

RAND's evaluation is designed to answer three primary questions:

1. What did the Pilot Project consist of, and how was it implemented in practice?
2. How often were Pilot Project data available and useful for target crimes that occurred during coverage periods?
3. Did the Pilot Project produce improved policing outcomes as measured by increased clearance rates and reduced crime rates for targeted crimes?

To answer the three primary research questions, the proposed evaluation includes five complementary tasks:

1. a detailed description of the Pilot Project as implemented to understand key aspects of the Pilot Project and how it may have changed over time;
2. an audit examining the frequency with which the Pilot Project delivers useable surveillance data for targeted crimes committed during coverage periods to understand the extent to which data were available and used by police investigators;

3. a detective survey of Baltimore Police Department (BPD) investigators inquiring about their assessment of the Pilot Project, the value it provides in solving crimes, and how it could be improved;
4. a causal analysis of the effects of the Pilot Project on crime, arrests, clearance rates, and prosecutions to understand the extent to which it is leading to intended benefits over the short and longer term; and
5. coordination with the other research partners – University of Baltimore and the New York University Law school – who are executing complementary evaluation efforts.

Two primary research products will result from the evaluation, as well as ongoing crime trend reporting to BPD. The research team will produce an interim report shortly after the Pilot ends, to provide BPD and the public with initial data and evidence on the possible value of the Pilot Project as a crime solving tool. The second and final report would describe the Pilot Project's effects on crime and clearance rates in Baltimore and would be completed by spring 2022.

Assessment of Technology on Resident Perceptions, University of Baltimore, Estimated Grant of \$175,000

To understand whether and the extent to which the AIR technology is related to residents' perceptions, the Schaefer Center for Public Policy is proposing to conduct two waves of residents surveys in a sample of Baltimore neighborhoods. The proposed research is intended to complement the larger effort to evaluate the Pilot Project. Specifically, the research is designed to answer the following research questions:

1. What are residents' perceptions of their neighborhood conditions, police and police legitimacy, and the effectiveness of the program over a period of sustained implementation of the Pilot Project?
2. What are residents' perceptions of the effectiveness of program over a period of sustained implementation?
3. How do attitudes about police legitimacy and effectiveness relate to perceptions of the technology?
4. What are residents' concerns about the technology and how are those concerns addressed by the police department?

The Schaefer Center's proposed methodology includes: documentation of the questions raised by community members during BPD's planned community meetings and two waves of surveys with residents living in neighborhoods most expected to benefit from the Pilot Project (e.g., residents in neighborhoods with high concentrations of crime and poverty). The Schaefer Center will produce an interim report on its documentation of the community survey meetings and a final report on the findings of the community survey data by spring 2021.

Civil Rights and Civil Liberties Evaluation of the Pilot Project, Policing Project at New York University School of Law, Estimated Grant of \$80,000

The Policing Project proposes to conduct a civil rights and civil liberties audit of the Pilot Project in Baltimore. The audit will:

1. Gather information by reviewing documents about the technology and operations, attending the various community meetings organized by the police department and the Contractor, and conducting interviews with the Contractor, BPD, and select civil liberties and civil rights leaders in Baltimore;
2. Examine how BPD is using the technology's data and assistance and integrating the technology into operations;
3. Evaluate potential civil rights and civil liberties concerns, such as disparate racial impacts, privacy concerns, constitutional risks, evidentiary and trial risk, and risk of increased criminalization; and
4. Make recommendations for possible improvements to the technology partner and BPD.

Based on previous experience conducting similar audits of technology for police departments, the recommendations to BPD and the technology partner will focus on the technological design, internal corporate operations, and use of the technology by BPD. The Policing Project team will then work closely with Contractor and BPD to implement those changes. The project will complement the other research activities and conclude in early 2021.

Exhibit D
Independent Verification and Validation (“IV&V”) of the Pilot Project

The Abell Foundation, Inc. (“Abell”) intends to provide funding support to an IV&V firm to verify that the aerial imagery is used solely for the limited purposes intended under the Pilot Program, subject to mutual agreement of Abell and such IV&V firm as to grant terms and conditions and the IV&V firm’s compliance with those terms and conditions.

Contractor will provide full support to the IV&V firm and its efforts. Contractor shall provide the IV&V firm and its personnel with access to personnel, offices, documentation, and information as are reasonably required to conduct the verification and validation. Contractor will promptly execute any necessary data sharing agreements with the IV&V firm and provide all data requested by the IV&V firm as needed to conduct their evaluations.

BPD Support: BPD will provide full support to the IV&V firm. BPD shall provide the Independent Evaluators with access to personnel, offices, documentation, and information as are reasonably required for the IV&V firm to conduct the evaluations. BPD will promptly execute any necessary data sharing agreements with the IV&V firm and provide all data requested by the IV&V firm as needed to conduct their evaluations, subject to compliance with BPD policies and in accordance with applicable law.

The IV&V firm will provide periodic to BPD, the Contractor, the Independent Evaluators and also make certain reports publicly available.