WRIVA: Walk-through Rendering from Images of Varying Altitudes

Ashwini Deshpande | Program Manager | April 6, 2022

Intelligence Advanced Research Projects Activity

IARPA

Creating Advantage through Research and Technology

Welcome to the WRIVA Proposers' Day!

- Thank you for your interest in this program and participating in this event
- To assure a clear broadcast stream, audio and video are disabled for meeting participants
- Comments and questions can be submitted to the IARPA team via the WebEx chat tool submission or via index cards for in-person attendees
  - Please direct questions to "All Panelists" in the chat if you are virtual
- Questions submitted to the alias (dni-iarpa-wriva-proposersday@iarpa.gov) prior to this meeting and during this presentation, and corresponding answers, may be posted in writing online

Disclaimers

- This presentation is provided solely for information and planning purposes
- The Proposers' Day does not constitute a formal solicitation for proposals or proposal abstracts
- Nothing said at Proposers' Day changes the requirements set forth in a BAA
- **The BAA language supersedes anything presented or said by IARPA at the Proposers' Day**
- This meeting is being recorded and will be posted for public viewing
- For those viewing the recording, email aliases and POCs may be dated, please refer to IARPA.gov for updated information.

Proposers' Day Goals

1. Familiarize participants with IARPA's interest in the WRIVA program and solicit questions and feedback
2. Foster discussion of complementary capabilities among potential program participants, i.e., TEAMING
   - Teaming information can be found at the following address: **https://www.iarpa.gov/index.php/research-programs/wriva**
   - An attendance list, with contact information of participants who approved of sharing will be distributed soon
   - The chat feature is enabled for participants to plan future discussions associated with teaming
   - Teaming interests, capability summaries, and lightning talk slides will be posted publicly on the WRIVA IARPA webpage until the BAA submission period closes

Please ask questions and provide feedback, this is your chance to alter the course of events.
Please talk with others, find great team members.

Feedback and Questions

- Questions can be submitted **until 12:00pm ET**.
- There will be a break after the contracting presentation at 12:00pm ET.
- Responses to selected questions will be broadcast at 1:00pm ET, so please don't log out or close your WebEx connection.
  - All programmatic and contractual questions will be captured but will not be answered in this session
- Feedback (but not questions) about the draft technical section may be submitted to the IARPA team email at dni-iarpa-wriva-proposersday@iarpa.gov.
  - A new alias will be established for when the full BAA is released
- After this Proposers' Day, IARPA will review all the feedback received for a final BAA to be posted on beta.SAM.gov.

Teaming

- Participants are encouraged to find partners and collaborators . . . someone might have a missing piece of your puzzle.
- Lightning talks will take place following the Program presentations.
- Collaborating and capability summaries will be accepted, with minimal review for appropriateness, and made available to the public.
  - Teaming documents and summaries can be submitted until the BAA closes, submit to dni-iarpa-wriva-proposersday@iarpa.gov.
  - If you would prefer your information not be shared (any recorded videos cannot be modified or removed) email dni-iarpa-wriva-proposersday@iarpa.gov.

Agenda

Time	Topic	Speaker
10:00am-10:30am	(Attendees can log in early)	
10:30am-10:40am	Welcome, Logistics, Proposers' Day Goals	Ashwini Deshpande, Program Manager
10:40am-10:50am	IARPA Overview	Robert Rahmer, Office Director, Analysis Research, IARPA
10:50am-11:40am	WRIVA Program Overview	Ashwini Deshpande
11:40am-12:00pm	Contracting Overview	DOI
12:00pm-1:00pm	Break (Submit questions in chat before 12:00pm)	
1:00pm-1:30pm	Answers to Selected Technical Questions	Ashwini Deshpande
1:30pm-1:35pm	Introductions to Lightning Talks	Ashwini Deshpande
1:35pm-3:00pm (et.)	Lightning Talks*	Selected Presenters
3:00pm-5:00pm	Teaming Discussions*	In-Person Participants

*The Government will not attend these events

Agenda – Lightning Talks

Time	Organization	Speaker
1:35	Chooch Intelligence Technologies	Andy Roberts
1:40	Toyon Research Corportation	Andrew Brown
1:45	Kitware, Inc.	Matt Leotta
1:50	Peraton Labs	Steve Sablak
1:55	Arete	Erford Porter
2:00	Intelligent Automation	Kyle Ashley
2:05	Daybreak, LLC	Manik Rath
2:10	VISIMO, LLC	Alexander Moskowitz

IARPA Overview

Robert Rahmer | Director, IARPA Office of Analysis | WRIVA Proposers' Day, 06 April 2022

Intelligence Advanced Research Projects Activity

IARPA

Creating Advantage through Research and Technology

Office of the Director of National Intelligence

IARPA Mission

IARPA envisions and leads *high-risk, high-payoff research* that delivers innovative technology *for future overwhelming intelligence advantage*

- Our problems are complex and multidisciplinary
- We emphasize technical excellence & technical truth

IARPA Method

- **Bring the best minds to bear on our problems**
  - Full and open competition to the greatest possible extent
  - World-class, term-limited Program Managers
- **Define and execute research programs that:**
  - Have goals that are clear, ambitious, credible and measurable
  - Run from three to five years
  - Publish peer-reviewed results and data, to the greatest possible extent
  - Employ independent and rigorous Test & Evaluation
  - Involve IC partners from start to finish
  - Transition new capabilities to intelligence community partners

IARPA R&D

- Technical and programmatic excellence are required
- Each program has a clearly defined and measurable end-goal
  - Intermediate milestones to measure progress are also required
  - Every program has a beginning and an end
- This approach, coupled with term-limited PM positions, ensures
  - IARPA does not “institutionalize“ programs
  - Fresh ideas and perspectives are always coming in
  - Status quo is always questioned
  - Only the best ideas are pursued, and only the best performers are funded

IARPA Snapshot

IARPA's research portfolio is diverse, including math, physics, chemistry, biology, microelectronics, neuroscience, linguistics, political science, cognitive psychology, and more.

- 70% of completed research transitions to U.S. Government partners
- 3,000+ journal articles published
- IARPA funded researchers have been awarded the Nobel Prize in Physics for quantum computing research, a MacArthur Fellowship, and a Bell prize
- IARPA serves on National Science and Technology Council (NSTC) committees and actively engages with the White House BRAIN Initiative, National Strategic Computing Initiative, and the NSTC Select Committee on Artificial Intelligence, the NSTC Subcommittee on Quantum Information Science (SCQIS), and NSTC Subcommittee on Economic and Security Implications of Quantum Science (ESIX)

How to Engage with IARPA

ENGAGE WITH US

Throughout our website you can learn more about engaging with us on our highly innovative work that is having a positive impact in the Intelligence Community and society in general. Click on any of the below links to learn more.

iarpa.gov | 301-243-1995

dni-iarpa-info@iarpa.gov

- Reach out to our Program Managers.
- Schedule a visit if you are in the DC area or invite us to visit you

Open BAAs

Broad Agency Announcements (BAAs) solicit research proposals for specific programs. Learn more about current BAA opportunities and ways to get involved...

Requests For Information

Requests for Information (RFIs) are designed to gather more information on an idea in an area in which our program managers are not fully informed...

Seedlings

Seedlings are typically 9 – 12 month research efforts that are less than $1M in cost. They are intended to address highly innovative ideas and concepts within...

WRIVA Overview

Ashwini Deshpande | Program Manager | WRIVA Proposers' Day, 06 April 2022

Intelligence Advanced Research Projects Activity

IARPA

Creating Advantage through Research and Technology

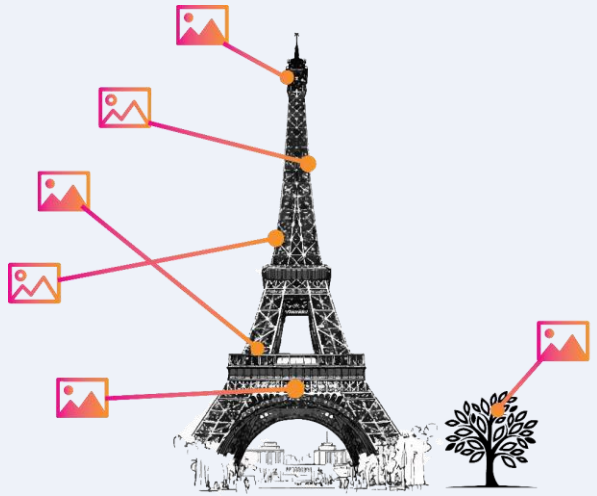
Technical Slides Disclaimer

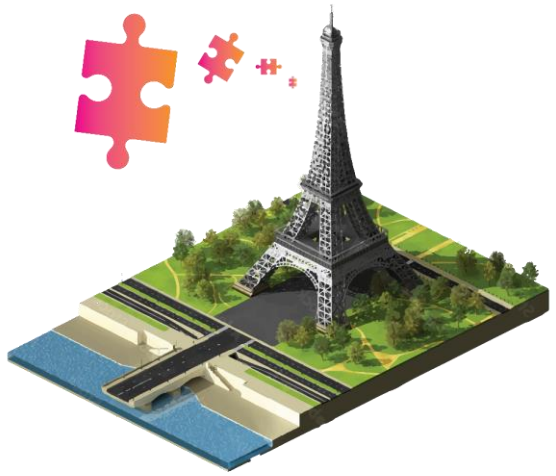
- All images, references, and articles are included as illustrative examples only
- ODNI and IARPA do not endorse any product or company referenced within
- Changes have occurred since the draft technical document was released and additional changes may occur in the final released BAA

Problem Statement

Combine imagery from variety of sources into an immersive site model and predict information about cameras collecting these images

Images from a variety of sources of a site





Navigable, photorealistic site model, with accurately geolocated imagery

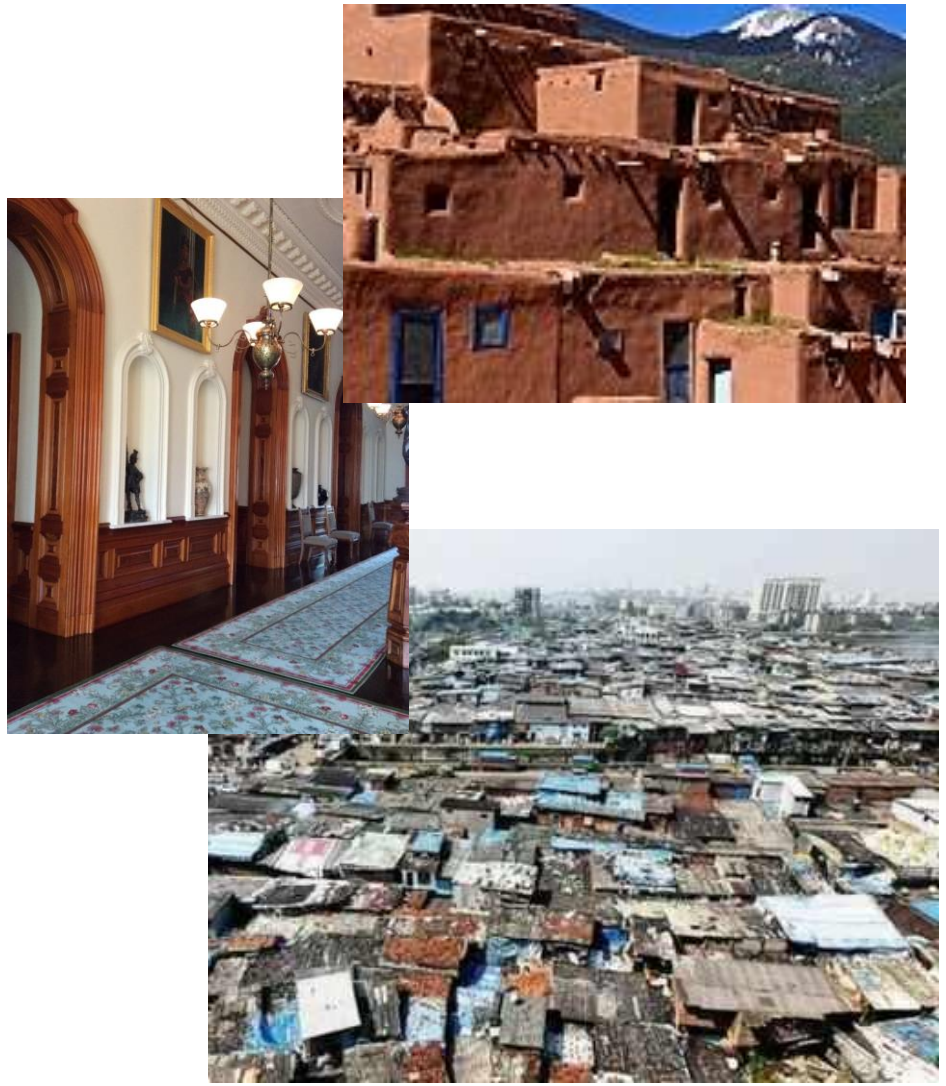
Foster site familiarization and rehearsal without prior visits

IC Applications for Site Familiarization and Image Correction

Potential application	Capability requirements
• Humanitarian/Disaster relief • Navigation • First responder preparedness • Law enforcement • Mission rehearsal • Metadata repair • Geolocate images • Artifact mitigation	• Rapid production (Under 24 hours post data assembly) • No specialized equipment • No highly skilled collectors • Modelling of interior structures • Modelling of low contrast structures

Solving the IC Problems: The Big Challenges

- Model low contrast features
- Able to model interior
- Need to model dense and complex “structures”
- Incorporate imagery and synthesize views from a variety of altitudes
- Produce quality models with a highly constrained volume of imagery
- No required knowledge of viewpoints



WRIVA Objectives

- WRIVA's objectives:
  - Construct **immersive, photorealistic site models** in areas with **highly limited** imagery collected from a range of altitudes
  - **Repair flawed imagery** to geolocate imagery, determine camera position, identify, remove and replace artifacts.

3D model of the Stonewall Memorial produced with LiDAR and photographs from CYARK

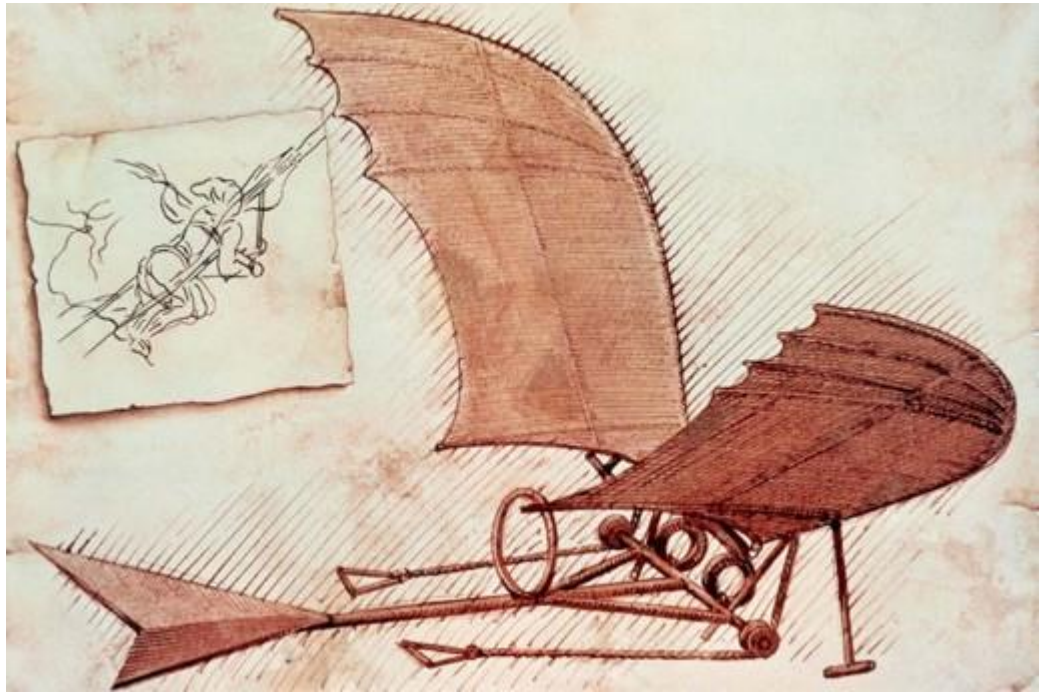
WRIVA will deliver repaired imagery and an immersive high-quality walk-through in areas where site access is unavailable

Impact of WRIVA Success

- The development of this technology will enhance missions requiring rehearsal or site familiarization as exquisite models can be created with a limited volume of input imagery.
- Inversion process may allow us to predict the collection geometry and lighting conditions under which images with unreliable metadata were collected
  - Making flawed data usable across a variety of applications
  - Indications of geolocation of cameras
- Mitigate artifacts and increase the utility of collected imagery

What is New in WRIVA

- Humans have always dreamt of flying through the world
- WRIVA seeks to leapfrog off recent advancements by applying IC needs and requirements to develop technology to create IC desired technology
- Extend the technology to aid in the challenge of geolocation, timestamps, and artifact mitigation



The Challenge

- New advances are promising, but this is not a solved problem for the IC
- Data starved for ground level imagery
- Non-optimized image collection angles result in blurring
- Despite these issues, the IC requires high quality models and image repair

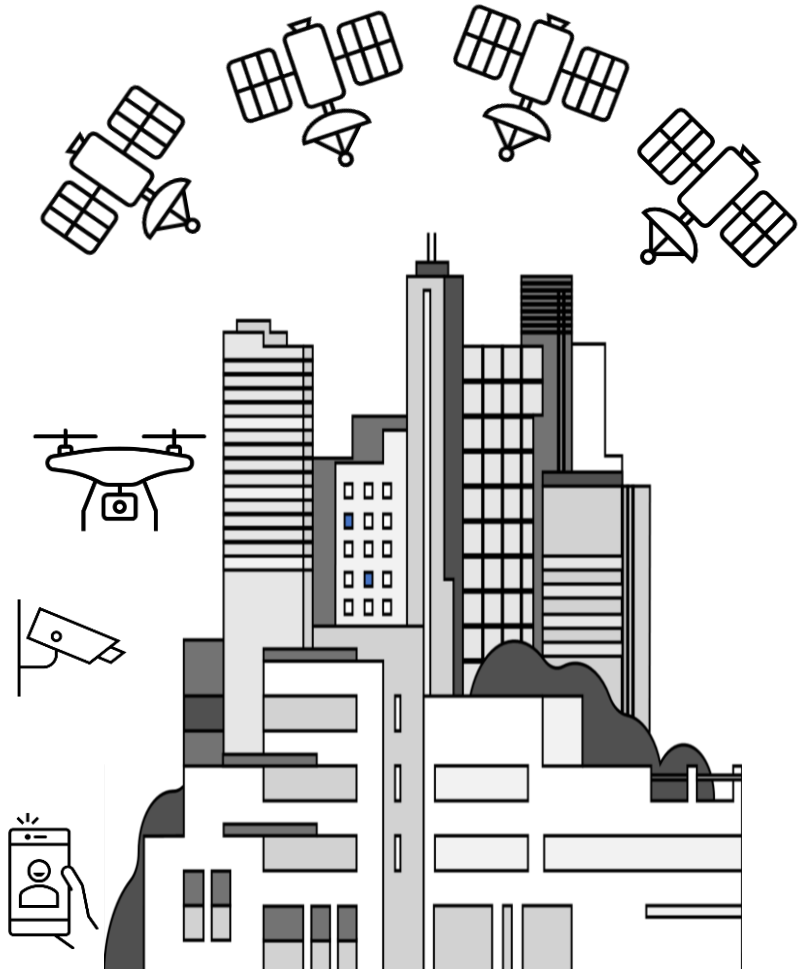
A solution to the IC needs are within reach, but require a capability that exceeds these limitations and more

You tell us!

- Agnostic to research approach
- Propose what is needed to meet the program objectives:
  - Research
  - Staff
  - Resources
  - Teaming plans
- Highlight innovative, novel, and scientifically supported research and development approaches

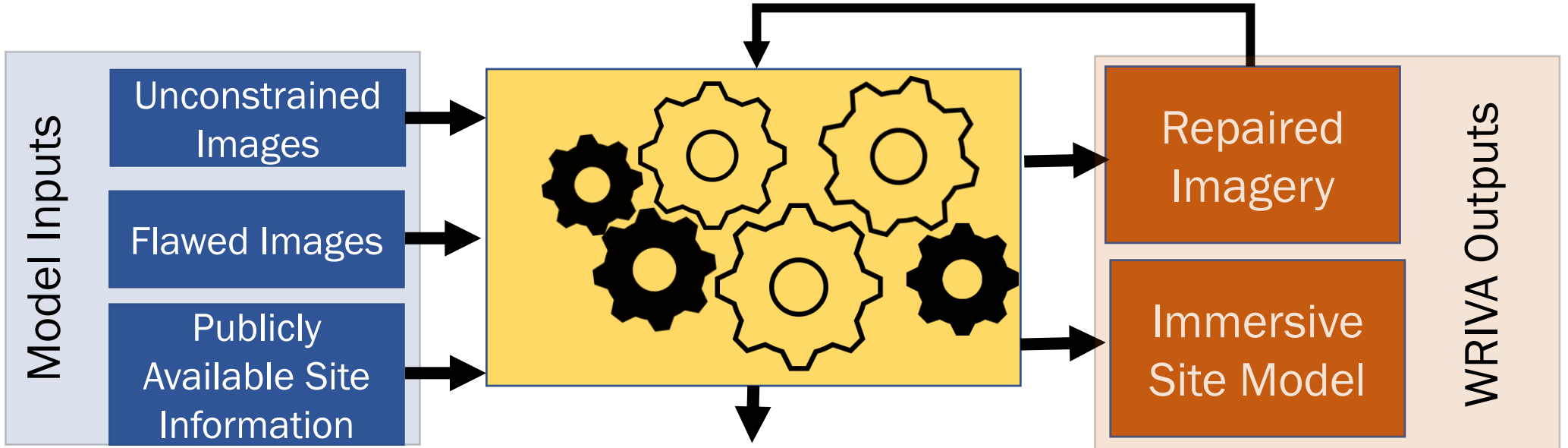
The WRIVA Approach

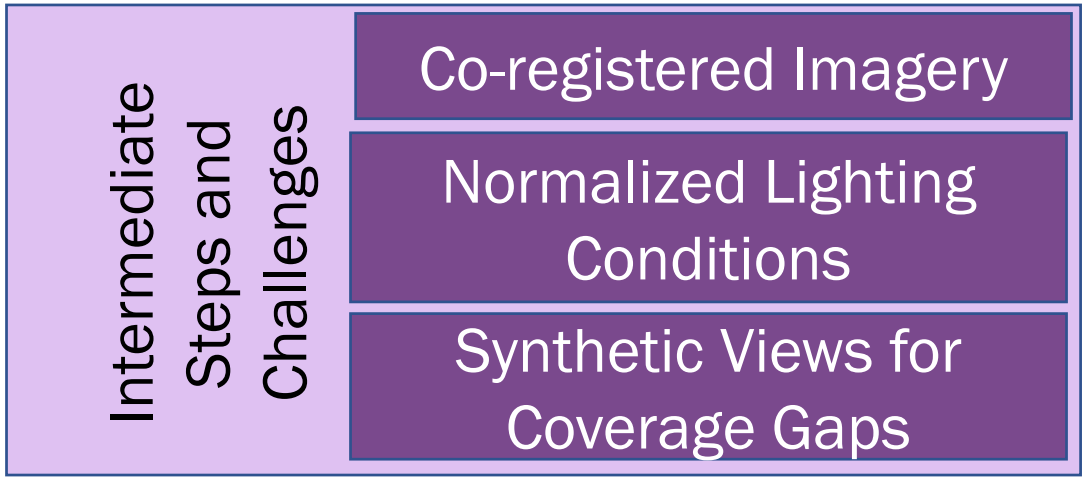
- Accept that site familiarization is needed even when a large, rich ground-level image corpus, with myriad unique viewpoints collected with near temporal coincidence, is unavailable.
- Supporting images can come from a variety of altitudes and sources
  - Satellite
  - UAV
  - Security Camera
  - Traffic Camera
  - Handheld images
- The images that are available may be flawed
  - Lack metadata
  - Artifacts
  - Collected by unskilled photographers



Use all the imagery. Fix the flaws. Predict and synthesize through the gaps.

WRIVA Processing Vision





Not prescriptive . . . Innovative approaches and solutions welcome for all stages!

Task Area Descriptions

Task Area 1

Site Model Generation

Performers will predict synthetic views where no true image exists (in time and space) and create a seamless, navigable walk-through

Task Area 2

Image Correction and Repair

Correct metadata and mitigate artifacts through predictive processors

Compliant proposals **MUST** address **BOTH** Task Areas

Automation

Look, no hands!

We strongly believe automation is key to successful transition

Full automation is required starting with the first solution drop for the quarterly evaluation challenges

Automated image selection
Automated synthetic view generation
Automated model creation
Automated refined co-registration
Automated image artifact detection
Automated artifact extraction
Automated geolocation

Out of Scope

- Development of optical sensor hardware or platforms.
- The use of LiDAR data
- Approaches involving the use of multi-spectral or hyperspectral imagery
- Approaches that consist merely of integrating currently existing software
- Approaches that depend on data beyond electro-optical images. Note that approaches may include provisions for leveraging other data, but they must not rely on that data.
- Approaches that require or obtain non-cooperative real time augmentation to provided data, e.g., opportunistic imagery from cameras located in handheld devices, computers, or automobiles.
- Research involving the use of non-visible band imagery (e.g. SAR)
- Methods that require a human-in-the-loop as part of the integrated end-to-end system, for image selection, or fine tuning of end product

Site definition

- Sites to be modelled will be 2 city blocks
  - 200mx200m
- WRIVA will focus on Urban and suburban environments
  - Manmade, non-transient structures will be visible in the scene
  - Some occlusion by features such as foliage should be tolerated by WRIVA processing
    - Impacts of seasonality should be addressed
      - Snow, Foliage change, etc

Phase 1 and 2 Objectives

Phase 1

- Initial algorithm development
- Minimum Viable Product available for transition partners
- **Task Area 1:**
  - Demonstration on low and moderate challenge cases for site models with limited holdouts
- **Task Area 2:**
  - Geolocation, time stamps
  - Detection of artifacts

Phase 2

- Advance algorithm development to moderate to high challenges, including interior structures.
- **Task Area 1:**
  - Maintain quality for site models
  - Improve processing speed
- **Task Area 2:**
  - Improved geolocation, time stamps
  - Predictive mitigation of artifacts
- Periodic transition of advancing products to the interested partners

Data for Development vs Evaluation

Data for development

- Performers are expected to collect, assemble, or simulate their own data for development and algorithm training
  - This data will be turned over to T&E to add to archive for evaluation disambiguation and to be made available to other performers for development.
- Custom collected imagery, purchased data, simulated and open source data can all be used for development
- Data deliveries must be made with a minimum of Government Purpose Rights

Data for evaluation

- Data collected, assembled and simulated by T&E teams to evaluate algorithm performance during challenges
- As challenges conclude, relevant evaluation results and data used will be released to performers

Data Collection/Gathering Details

TA1: Site Model evaluation

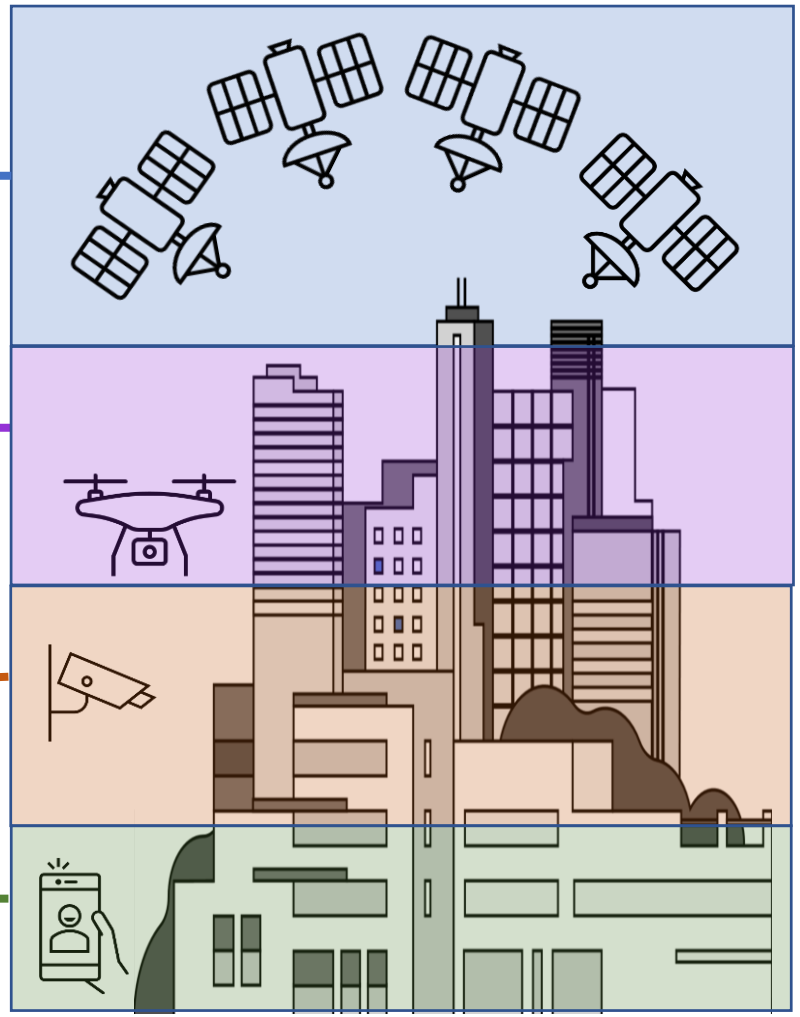
TA2: Flawed Image correction evaluation

Satellite collection

UAV/Aerial collection

Security/Traffic

Ground-level data: Handheld imagery and public information



Collected data may be intentionally spoiled by T&E to emulate true data conditions but allow for robust evaluation

Additional data may be collected for the purpose of validation, but not used in processing.

Data may be collected at different times of day or times of year

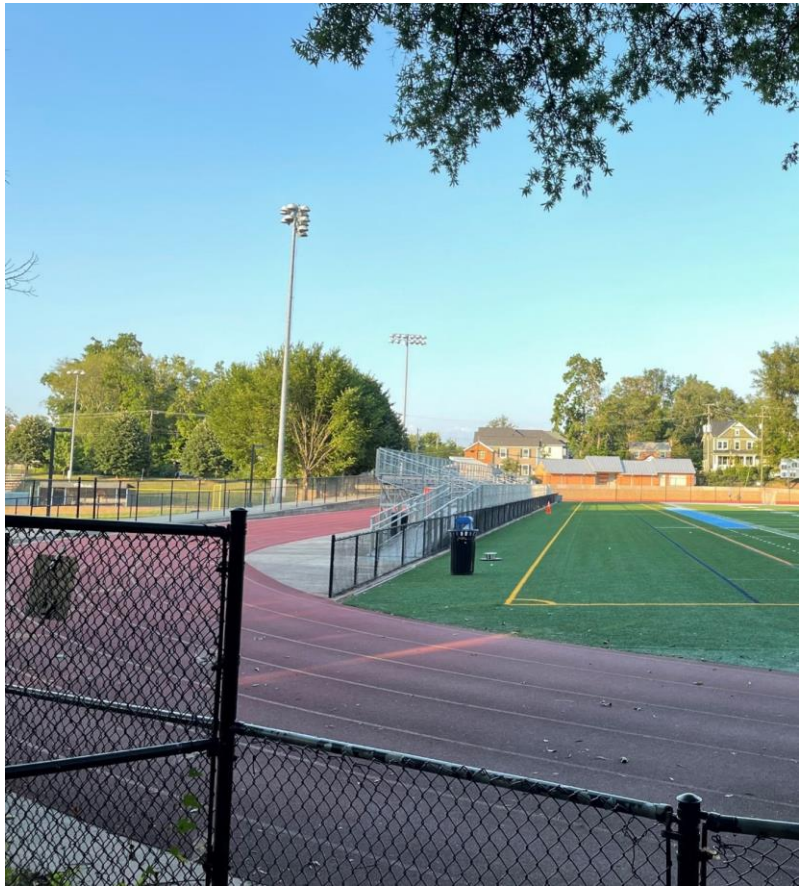
Imagery and Data in Use

- Use **any and all available** images collected for any purpose
- Repaired flawed imagery
- Collected under all lighting and environmental conditions
- Non-image data
  - Building footprints
  - Building permits
  - Building blueprints
  - Open street maps and street views

Data Spoiling and Holdouts

- T&E will spoil data and maintain comparison holdouts
- Spoiling potentials
  - Removal of entire altitude of imagery
  - Removal of publicly available information
  - Increased size of temporal and spatial gaps
  - Reduction of available ground imagery
  - Exclusively scraped/scrapable source
  - Geolocation and time stamps removal

Repairing Flawed Data



Beyond geolocation, the repair of flawed imagery would also seek to extract and replace the artifact

- Flaws:
  - Lack of geolocation
  - Lack of camera parameters
  - Obscuring artifacts
  - Prediction of what would be in image without the artifact in a nominal background
- Fill-in through synthetic view generation
  - Privacy preservation applications

T&E Roles

- Robust, independent test and evaluation is a crucial part of every IARPA program
- In WRIVA, T&E will:
  - Data collection from field sites, hangar constructions
  - Synthetic data creation
  - Data spoiling and staging
  - Management of shared cloud-based development environment and test harness
  - Product evaluation through quarterly evaluation challenges

Primary Program Deliverables

- Performer curated development data
- Quarterly solution deliveries to support evaluation challenge events
  - Solutions will include:
    - Software to create site models and predict imagery from provided viewpoints
    - Software to predict camera geometry and geolocation
    - Software to detect and mitigate image artifacts
    - Specific intermediate processing modules to support error propagation studies
- Periodic status reports
- All software and data deliverables must be provided with unrestricted rights or Government Purpose Rights.

Program Schedules

Phase 1 (18 months)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Kickoff Meeting	X																	
Sample data	●																	
PI Meetings												X						
Site Visits					X						X						X	
Data Delivery			♦			♦			♦			♦			♦			♦
Solution delivery			♦			♦			♦			♦			♦			♦
Monthly Status Reports	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Phase 1 Final Report																		♦

Legend:

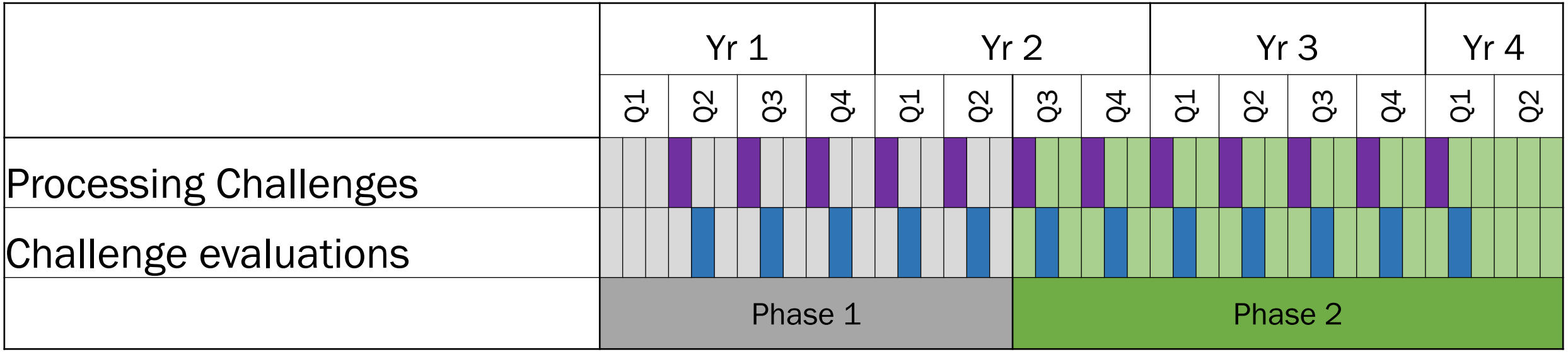
● GFI

♦ Deliverable

X Meeting

Phase 2 (24 Months)	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Kickoff Meeting	X																							
PI Meetings						X												X						
Site Visits					X						X						X						X	
Data delivery			♦			♦																		
Solution Delivery			♦			♦			♦			♦			♦			♦			♦			♦
Monthly Status Reports	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
Phase 2 Final Report																								♦

Evaluation Challenge Events

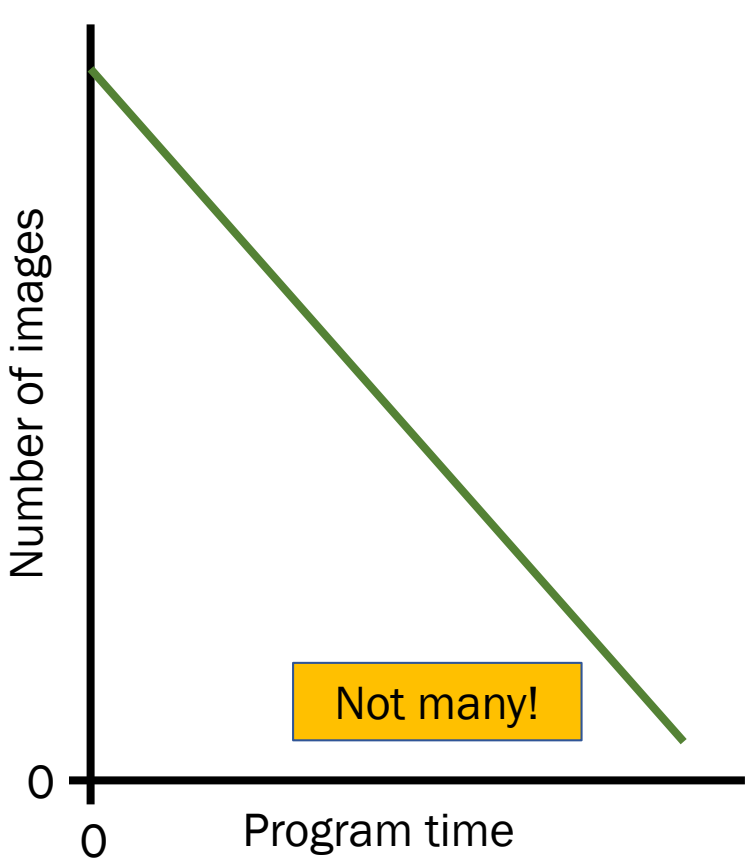


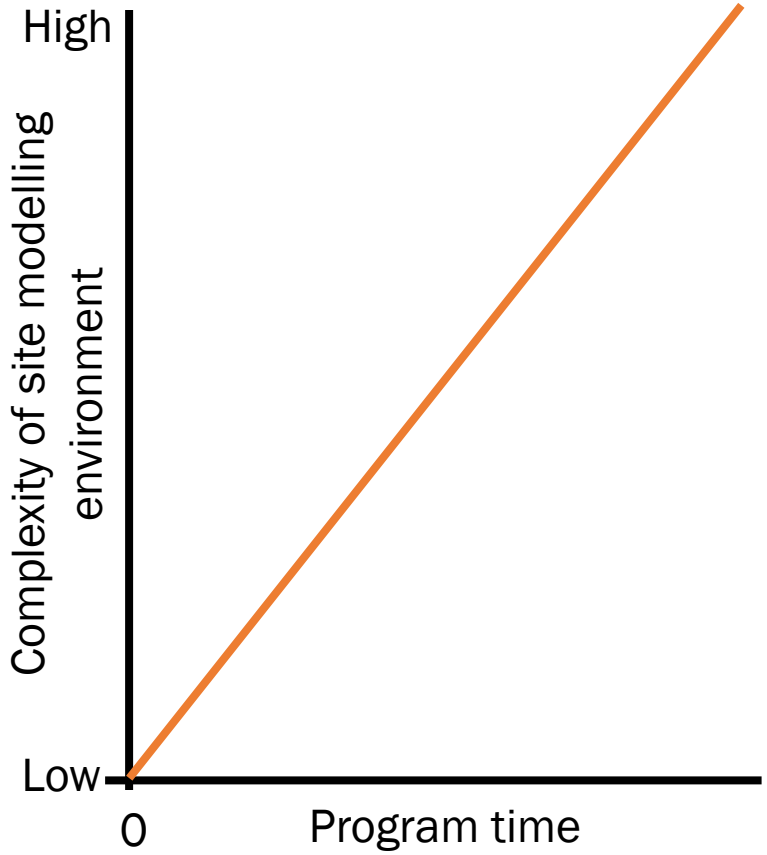
- Rapid challenge/submission/evaluation cycle
- Approximately ever 12 weeks
- Goal is to provide the performers rapid feedback (within 4 weeks of challenge completion) to allow the algorithms to evolve to address increasingly hard environments
- Performers will deliver containerized solutions and processing modules to foster error propagation analysis

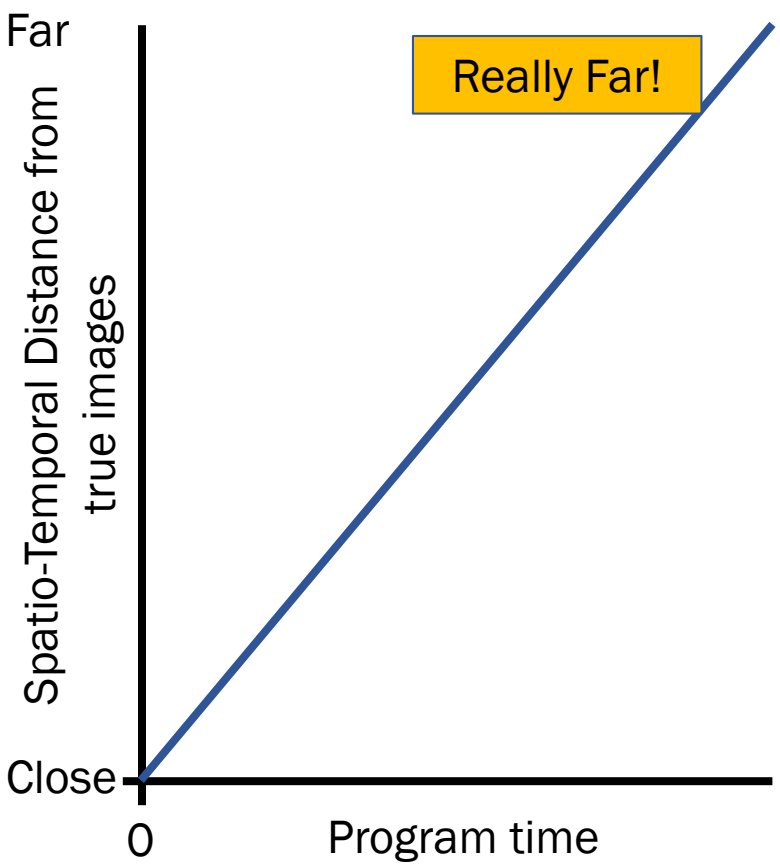
Progressive Challenges

Environmental and architectural Challenges	Ablation Challenges for Site Modelling	Challenges Flawed Image Correction
Urban areas with high contrast	Removal of 100 ground level, non-adjacent images	Geolocation, time stamp, and camera position estimation of 100 ground level, non-adjacent images
Complex, curved structures, high contrast	Removal of 2-5 fifteen deg. sections of ground level imagery	Geolocation, time stamp, and camera position estimation of images with no adjacent images (temporally or spatially)
Poor segmentation due to contrast	Elimination of UAV imagery	Detection and extraction of artifacts
Areas with poorly defined structures	Elimination of publicly available information	Prediction-based replacement of artifacts
Interiors	Elimination of UAV imagery, publicly available information	Geolocation, time stamp, and camera position estimation and artifact replacement with 10 non-flawed ground level images, security camera imagery, and satellite imagery.
	Elimination of 10-15 fifteen deg. sections of ground level imagery	
	Elimination of 15 degree sections, UAV imagery, publicly available imagery	
	Reconstruction with 10 ground level images, security camera images, and satellite imagery	

Challenge Summary







Computational Infrastructure

- Performers are encouraged to deliver code developed using cloud first mindset
- Containerized solutions will be delivered to T&E teams on a quarterly basis to support challenges
- Data will be available on a cloud repository when distributed
- Cloud development environment will also be available for performers

Task Area 1 Metrics

Evaluation point	Description	Phase 1	Phase 2
Synthesized view accuracy	Structural similarity between synthesized image and hold out image	0.95	0.95
Time to create model	Processing wall clock time, not inclusive of data transit or of image corpus assembly	12 hrs	3 hrs
Edge processing	Performance evaluation on edge computer architecture	Not evaluated	<10% loss over solution baseline
Cost for site model creation	Cost of processing required to create site model in a cloud processing environment	$1.00/$m^2$	$0.25/$m^2$

Task Area 2 Metrics

Evaluation point	Description	Phase 1	Phase 2
Camera geolocation	Accuracy of camera geolocation	12m (MSE)	5m (MSE)
Camera capabilities	Prediction of PTZ capability	TPR=0.85	TPR=0.95
	Prediction of Nighttime Imaging capability	Not Evaluated	TPR=0.95
	Prediction of IR capability	Not Evaluated	TPR=0.95
Artifact detection	Detection of artifact impacted portions of images	FDR=0.05 TPR=0.98	FDR=0.05 TPR=0.98
Artifact mitigation	Structural similarity comparison with impacted portions of true image	Not Evaluated	SSIM=0.85
Edge processing	Performance evaluation on edge emulation computer architecture	Not Evaluated	< 10% loss over baseline

Point of Contact Information

Ashwini Deshpande

Program Manager

Office of the Director of National Intelligence

Intelligence Advanced Research Projects Activity (IARPA)

Washington, DC 20511

Email: dni-iarpa-wriva-proposersday@iarpa.gov

Website: www.iarpa.gov/index.php/research-programs/wriva

Thank you and team up!

WRIVA Proposer's Day

William Galvin Jr., DOI – CO

Erin Laymon, DOI – CS

DOI.GOV/IBC

DOI Introduction

Department of the Interior –
Interior Business Center (DOI- IBC)

In partnership with

The Intelligence Advanced Research Projects Activity (IARPA)

Precedence

- Information contained within the BAA takes precedence over what is discussed today.

- All vendors should propose only to what is included in the BAA and any subsequent Amendments.

Award Instruments

- Procurement Contracts, using FAR Part 35 – R&D Contracting - Multiple awards are anticipated.
- The WRIVA program is anticipated to be a 42-month effort, comprised of two (2) Phases. Proposals shall include a solution for Phases 1 and 2, inclusive of all Task Areas. Proposals that do not include a solution for both phases or do not address all Task Areas will be considered non-responsive and will not be evaluated.
- Funding for Phase 2 shall depend upon performance during Phase 1, the availability of funds, and IARPA priorities. Funding of Phase 2 is at the sole discretion of the Government.

General Information

- Carefully read all information in the BAA.
- Certain sections will contain formatting instructions and page limitations. Any information beyond the page limitations will not be considered.
- Be sure to include all required documents and attachments.
- Classified proposals are not anticipated for this program
- Proposal Due Date and Time - Be sure to submit early enough to avoid transmittal issues. Proposals after the due date will not be considered. It is strongly recommended to submit 48 hours before the deadline.

Eligibility Information

- The following are generally **NOT** eligible to submit proposals under this BAA or participate as team members under proposals submitted by eligible entities:
  - Other Government Agencies,
  - Federally Funded Research and Development Centers (FFRDCs),
  - University Affiliated Research Centers (UARCs),
  - Any organizations that have a special relationship with the Government; e.g., that would give them
    - access to privileged and/or proprietary information,
    - access to Government equipment or real property.

Eligibility (cont)

- Foreign entities and/or individuals may participate but only as a part of a U.S. based team. The prime contractor must be a U.S. entity. Foreign entities and individuals may participate as subcontractors or employees of a U.S. based entity; however, all foreign participation must comply with any necessary Non-Disclosure Agreements, Security Regulations, Export Control Laws, and other governing statutes applicable under the circumstances.

Organizational Conflicts of Interest

- IARPA follows FAR Part 9 regarding Organizational Conflicts of Interest (OCIs).

  The main principles being:

  - Preventing conflicting roles that might bias a Contractor's judgement.
  - Preventing an unfair competitive advantage.
- BAA describes how Offerors are to identify/disclose all facts relevant to potential OCIs for the Offeror as well as any proposed team members .
- OCI disclosures may require a Mitigation Plan describing the actions the Offeror will take to prevent the conflict .
- IARPA generally prohibits Contractors from concurrently providing System Engineering Technical Assistance (SETA) and T&E support while being a technical R&D Performer due to OCI concerns. Each case will be determined individually.

BAA Release Information

- BAA will be posted to SAM.gov via Department of the Interior, Interior Business Center (DOI-IBC).
- The BAA will be released for 45 days.
- All information required for submitting a proposal will be outlined in the BAA.

Proposal Submission Process

- Proposals must be submitted through IARPA's IDEAS system.
  - Interested Offerors must register electronically IAW instructions on https://iarpa-ideas.gov (available after the BAA is posted).
  - Interested Offerors are strongly encouraged to register in IDEAS at least one week prior to the proposal "Due Date".
  - Offerors must ensure the version submitted to IDEAS is the "Final Version".

Evaluation Process

- Each BAA will detail the method for evaluation and selection; IARPA generally follows a two-step process:
  - Fist step is technical evaluation and selection for negotiations. This is conducted through a scientific/peer review process after which Offerors are notified of selection.
  - Second step is negotiation and contract award conducted by the CO.

- Proposals will be reviewed individually against the BAA requirements in accordance with FAR Part 35, R&D Contracting, and not against other proposals.

Evaluation Process (cont)

- Preliminary review of proposals for completeness, eligibility requirements, conformance with BAA requirements.

- All information necessary for the review and evaluation of a proposal must be contained in the proposal itself. No other material will be provided to the panel. Proposals should contain sufficient technical detail to allow for an in depth technical assessment.

Pre-Publication Review

- IARPA encourages publication of **UNCLASSIFIED** IARPA-funded research in peer-reviewed journals, presentation at conferences and publication in conference proceedings.

- Prior to public release of any work submitted for publication, the Performer will:
  - Communicate results to be publicly released with the IARPA Program Manager to discuss any sensitivities (e.g., security, speculation on IC use cases, etc.)
  - Provide advance courtesy copies to the IARPA PM and Contracting Officer Representative (COR).

Academic Institutional Acknowledgement

- According to Executive Order 12333, contracts or arrangements with academic institutions may be undertaken only with the consent of appropriate officials of the institution.
- An Academic Institution Acknowledgement letter is required for Offerors that are academic institutions.
- A template for this letter will be included in the BAA. Each letter must be signed by a senior official of the institution (e.g. President, Chancellor, Provost or other appropriately designated individual).
- IARPA requires this letter before entering into negotiations and/or awarding a contract. It is highly advised that it be submitted with the proposal.

Intellectual Property

- The Government needs to effectively manage the program and evaluate the output and deliverables, communicate the information across Government organizations and support further use and development of program results.

- Offerors will address their IP Rights assertions in their proposal. The Government may request additional information as necessary to evaluate.

- The Government will evaluate the IP rights being offered and determine whether they are in the Government's best interest.

Proposal Evaluation Criteria

- Current Evaluation Factors:
  - A. Overall Scientific and Technical Merit
  - B. Effectiveness of Proposed Work Plan
  - C. Contribution and Relevance to the IARPA Mission and Program Goals
  - D. Relevant Experience and Expertise
  - E. Resource Realism
- The above factors are **anticipated,** proposers should review the BAA for the criteria as factors may change when the BAA is released.
- Cost Proposal – The BAA will provide specific instructions.

Communications

- All questions or discussions regarding the BAA must be directed to the CO and CS.
- CO: William Galvin Jr. (William_Galvin@ibc.doi.gov);

  CS: Erin Laymon (Erin_Laymon@ibc.doi.gov).
- All communication throughout this process must be handled formally and through the proper channels, which means all parties must ensure a DOI CO or CS is present and/or engaged during any and all communication exchanges.
- Any informal or outside communications will delay and may jeopardize a potential award.

Potential Important Dates

- Proposals will be due approximately 45 days from BAA issuance. Proposals submitted after the closing date will not be considered or evaluated by the Government.
- Submit your proposal package at least 24-48 hours prior to the closing date/time.
- Q&A must be submitted: ~ 6 May 2022
- Full BAA Posting: ~ 27 April 2022
- Proposals Due: ~ 10 June 2022, Via IDEAS
- BAA may involve amendments after initially released – these will be posted on SAM.gov. Proposals will be expected to incorporate/comply with all amendments.

Questions & Answers (time permitting)

- Q&As at today's Proposers' Day reflect informal information and do not override the BAA. Information contained within the BAA takes precedence.

- Please read entire BAA before submitting questions

- Pay close attention to Proposal & Submission Instructions.

Break – Last chance to submit questions is at 12:00 PM EST

We will start again at 1:00 PM EST

Intelligence Advanced Research Projects Activity

IARPA

Creating Advantage through Research and Technology

Addressing Submitted Questions

Intelligence Advanced Research Projects Activity

IARPA

Creating Advantage through Research and Technology

Lightning Talks – Starting at 1:35 PM EST

Intelligence Advanced Research Projects Activity

IARPA

Creating Advantage through Research and Technology

Lightning Talk Agenda

Time	Organization	Speaker
1:35	Chooch Intelligence Technologies	Andy Roberts
1:40	Toyon Research Corportation	Andrew Brown
1:45	Kitware, Inc.	Matt Leotta
1:50	Peraton Labs	Steve Sablak
1:55	Arete	Erford Porter
2:00	Intelligent Automation	Kyle Ashley
2:05	Daybreak, LLC	Manik Rath
2:10	VISIMO, LLC	Alexander Moskowitz

Lightning Talk Overview

- Teams have 5 minutes to highlight capabilities aligning with WRIVA interests
- Use this opportunity to fill gaps in your team
- Slides and documents will be made available on IARPA.gov until the full BAA closes

Closeout

Intelligence Advanced Research Projects Activity

IARPA

Creating Advantage through Research and Technology

Reminder on Teaming

- Participants are encouraged to find partners and collaborators, someone might have a missing piece of your puzzle.
- Lightning talks will take place following the Program presentations.
- Collaborating and capability summaries will be accepted, with minimal review for appropriateness, and made available to the public.
  - Teaming documents and summaries can be submitted until the BAA closes, submit to dni-iarpa-wriva-proposersday@iarpa.gov.
  - If you would prefer your information not be shared (any recorded videos cannot be modified or removed) email dni-iarpa-wriva-proposersday@iarpa.gov

Point of Contact Information

Ashwini Deshpande

Program Manager

Office of the Director of National Intelligence

Intelligence Advanced Research Projects Activity (IARPA)

Washington, DC 20511

Email: dni-iarpa-wriva-proposersday@iarpa.gov

Website: www.iarpa.gov/index.php/research-programs/wriva