

GRANT APPLICATION

Grant Fire Prevention & Safety 21-22

Department: FIRE DEPARTMENT

Grantor: U.S. DEPARTMENT OF HOMELAND

Pass-Through Grantor

Total \$82,571.43

Metro Cash \$4,128.57

Department Leigh Anne Burtchaell
862-6364

Status NEW

Program Description:

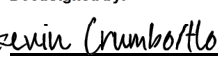
This grant application is to purchase equipment and a trailer as well as training for the Arson Division to conduct investigations of Fires.

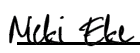
Plan for continuation of services upon

NFD will fund through future 4 % allocations.

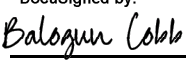
APPROVED AS TO AVAILABILITY OF FUNDS:


APPROVED AS TO FORM AND LEGALITY:

DocuSigned by:
 2/22/2021
 Director of Finance Date ^{DS}
 TE

DocuSigned by:
 2/22/2021
 Metropolitan Attorney Date

APPROVED AS TO RISK AND INSURANCE:

DocuSigned by:
 2/22/2021
 Director of Risk Management System Date

DocuSigned by:
 2/22/2021
 Metropolitan Mayor Date ^{DS}
 EW

(This application is contingent upon approval of the application by the Metropolitan Council.)

^{DS}


Grants Tracking Form

Part One

Pre-Application <input type="radio"/>		Application <input checked="" type="radio"/>		Award Acceptance <input type="radio"/>		Contract Amendment <input type="radio"/>	
Department	Dept. No.	Contact			Phone	Fax	
FIRE DEPARTMENT	032	Leigh Anne Burtchaeil			862-6364	214-3680	
Grant Name:	Fire Prevention & Safety 21-22						
Grantor:	U.S. DEPARTMENT OF HOMELAND SECURITY			Other:			
Grant Period From:	05/17/21	(applications only) Anticipated Application Date:		02/25/21			
Grant Period To:	05/16/22	(applications only) Application Deadline:		02/26/21			
Funding Type:	FED DIRECT	Multi-Department Grant		<input type="checkbox"/> If yes, list below.			
Pass-Thru:		Outside Consultant Project:		<input type="checkbox"/>			
Award Type:	COMPETITIVE	Total Award:		\$82,571.43			
Status:	NEW	Metro Cash Match:		\$4,128.57			
Metro Category:	New Initiative	Metro In-Kind Match:		\$0.00			
CFDA #	N/A	Is Council approval required?		<input checked="" type="checkbox"/>			
Project Description:	Applic. Submitted Electronically? <input type="checkbox"/>						
This grant application is to purchase equipment and a trailer as well as training for the Arson Division to conduct investigations of Fires.							
Plan for continuation of service after expiration of grant/Budgetary Impact:							
NFD will fund through future 4 % allocations.							
How is Match Determined?							
Fixed Amount of \$	\$0.00	or	5.0%	% of Grant	Other: <input type="checkbox"/>		
Explanation for "Other" means of determining match:							
For this Metro FY, how much of the required local Metro cash match:							
Is already in department budget?	yes	Fund	30003	Business Unit	32214600		
Is not budgeted?		Proposed Source of Match:		4%			
(Indicate Match Amount & Source for Remaining Grant Years in Budget Below)					R200216		
Other:							
Number of FTEs the grant will fund:	0.00	Actual number of positions added:		0.00			
Departmental Indirect Cost Rate	29.54%	Indirect Cost of Grant to Metro:		\$25,611.18			
*Indirect Costs allowed? <input checked="" type="radio"/> Yes <input type="radio"/> No	% Allow.	29.54%	Ind. Cost Requested from Grantor:		\$24,391.60 in budget		
*(If "No", please attach documentation from the grantor that indirect costs are not allowable. See Instructions)							
Draw down allowable? <input type="checkbox"/>							
Metro or Community-based Partners:							

Part Two

Grant Budget

Budget Year	Metro Fiscal Year	Federal Grantor	State Grantor	Other Grantor	Local Match Cash	Match Source (Fund, BU)	Local Match In-Kind	Total Grant Each Year	Indirect Cost to Metro	Ind. Cost Neg. from Grantor
Yr 1	FY21	\$82,571.43			\$4,128.57	30003, 32214600	\$0.00	\$86,700.00	\$25,611.18	\$24,391.60
Yr 2	FY									
Yr 3	FY									
Yr 4	FY									
Yr 5	FY									
Total		\$82,571.43	\$0.00	\$0.00	\$4,128.57		\$0.00	\$86,700.00	\$25,611.18	\$24,391.60
Date Awarded:					Tot. Awarded:		Contract#:			
(or) Date Denied:					Reason:					
(or) Date Withdrawn:					Reason:					

Contact: trinity.weathersby@nashville.gov
vaughn.wilson@nashville.gov

VW

Fiscal Year (FY) 2020 Fire Prevention and Safety (FP&S)

Status: Pending submission

Application ID: EMW-2020-FP-00114

OMB number: 1660-0054, Expiration date: 11/30/2022 [View burden statement](#)

System for Award Management (SAM.gov) profile

Please identify your organization to be associated with this application.
All organization information in this section will come from the System for Award Management (SAM) profile for that organization.

NASHVILLE, CITY OF

Information current from SAM.gov as of:	02/07/2021
DUNS (includes DUNS+4):	078217668
Employer Identification Number (EIN):	620694743
Organization legal name:	NASHVILLE & DAVIDSON COUNTY, METROPOLITAN GOVERNMENT OF
Organization (doing business as) name:	NASHVILLE, CITY OF
Mailing address:	P.O. BOX 196300 NASHVILLE, TN 37219-6300
Physical address:	1 PUBLIC SQ NASHVILLE, TN 37201-5007
Is your organization delinquent on any federal debt?	N
SAM.gov registration status:	Active as of 01/10/2021

We have reviewed our bank account information on our SAM.gov profile to ensure it is up to date

Applicant information

Please provide the following additional information about the department or organization applying for this grant.

Applicant name (i.e., fire department name)

Nashville Fire Department

Main address of location impacted by this grant

Main address 1

63 Hermitage Avenue

Main address 2

Optional

City

Nashville

State/territory

Tennessee

In what county/parish is your organization physically located? If you have more than one station, in what county/parish is your main station located?

Davidson County

Applicant characteristics

The FP&S (Fire Prevention and Safety) program intends to enhance the safety of the public and firefighters with respect to fire and fire-related hazards by assisting fire prevention programs and supporting firefighter health and safety research and development. Grant funds are available in two activities: Fire Prevention and Safety Activity and Research and Development Activity. Please review the Notice of Funding Opportunity for information on available categories within each activity area and for more information on the evaluation process and conditions of award.

Please provide the following additional information about your organization.

Which activity are you applying for?

Fire Prevention and Safety (FP&S)

Applicant type

Fire Department/Fire District

What kind of organization do you represent?

All Paid/Career

Do you currently report to the National Fire Incident Reporting System (NFIRS)? You will be required to report to NFIRS for the entire period of the grant.

- Yes
- No

Please enter your FDIN/FDID.

19532

Operating budget

What is your organization's operating budget for programs that enhance the safety of the public and firefighters with respect to fire and fire-related hazards (including fire prevention, fire code enforcement, fire/arson investigation, wildfire prevention, and firefighter health and safety research and development)? Please include costs (e.g., personnel, maintenance of apparatus, equipment, facilities, utility costs, purchasing expendable items, etc.) for the current (at the time of application) fiscal year, as well as the previous two fiscal years.

Current Fiscal Year

2021

Fiscal Year	Operating budget
2021	\$133,444,800
2020	\$130,017,600
2019	\$128,639,700

Please explain the applicant's need for financial assistance to carry out the proposed project(s). Provide detail about the applicant's total operating budget, including a high-level breakdown of the budget. Describe the applicant's inability to address financial needs without federal assistance. Discuss other actions the applicant has taken to meet their needs. Include information on efforts to obtain funding elsewhere and how similar projects have been funded in the past.

The Nashville Fire Department Fire/Arson Investigation Unit continues to show its resiliency. Over the past year we have sustained direct hits from tornadoes, suffered historic floods, viruses, numerous riots/civil unrest, Christmas day bombing, economic downturns while providing continued services to the Metropolitan Government of Nashville and Davidson County as well as providing support to surrounding counties as a result of mutual aid requests for investigations. The challenges and incidents faced throughout the last fiscal year constricted and impacted the department in terms of operating budget. Overall, 92% of the budget is for personnel salaries, 4% goes towards maintenance, fuel, cost of equipment and supplies, and the

impacted the department in terms of operating budget. Overall, 92% of the budget is for personnel salaries, 4% goes towards maintenance, fuel, cost of equipment and supplies, and the other 4% goes towards utilities and incidental costs encountered. Since 2012, the Fire/Arson Investigation Unit has been unable to address its needs and have fallen behind on national standards set out in the field of fire/arson investigations. Due to the ongoing constrains placed on the budget there is no foreseeable timeframe to obtain the funding that will allow needs of the Fire/Arson Investigation Unit to return its capabilities back to meet at minimum the national standards in the field of fire/arson investigations.

In cases of demonstrated economic hardship, and upon the request of the grant applicant, the FEMA Administrator may grant an Economic Hardship Waiver. Is it your organization's intent to apply for an Economic Hardship Waiver?

- Yes
- No

Other funding sources

This fiscal year, are you receiving Federal funding from any other grant program for the same purpose for which you are applying for this grant?

- Yes
- No

This fiscal year, are you receiving Federal funding from any other grant program regardless of purpose?

- Yes
- No

Community description

Please provide the following additional information about the community your organization serves.

What type of community does your organization serve?

What is the permanent resident population of your first due response zone/jurisdiction served?

Grant request details



Instructions

If you intend to request funds for an activity, you must answer all of the activity specific questions and specify at least one budget item ([budget object class information](#)). The cost figures you provide do not have to be firm quotes from your vendors, but they should be estimated based on research of current prices (i.e., check with at least two vendors for your estimates). If you do not have these estimates, you can come back and modify this area at any point before you submit your application to DHS. Select grant writer fee when adding an activity if there is a grant-writing fee associated with the preparation of the request. Note that an eligible applicant may submit up to three projects under the FP&S Activity.

Grand total: \$86,700.00

Review and make changes to the recipient's activity below. Then, enter justifications for each change.

Program area: Fire prevention and safety

Total requested for Fire & Arson Investigation activity: \$86,700.00

Remove activity

Below is a list of project(s) included in your application for Fire & Arson Investigation.

Total requested for Fire & Arson Investigation Equipment (including PPE) project: \$48,200.00

Remove project

Add item to Fire & Arson Investigation Equipment (including PPE)

Please provide the following information about the project you want funded.

Project name

Is this a national-level project, with a national impact?

- Yes
- No

Is this project a regional request? A regional request provides a direct regional and/or local benefit beyond your organization. You may apply for a regional request on behalf of your organization and any number of other participating eligible organizations within your region.

- Yes
- No

Who is the target audience for the planned project?

- Children under 14
- Adults over 65
- Firefighters
- People with disabilities (e.g., deaf/hard-of-hearing)
- College/university housing
- Low-income families/neighborhoods
- Geographic Area
- Other

What is the estimated size of the target audience?

701400

How was this target audience determined?

- Formal Assessment
- Informal Assessment
- Will Be Conducting Assessment
- None of the above

Please provide a brief synopsis of the proposed project and then identify the specific goals and objectives of your project.

The Fire/Arson Investigations Unit of the Nashville Fire Department is requesting funds to purchase investigative equipment to enhance effectiveness and maximize operational capabilities and improve investigator safety. The overall objective for this proposed project is that it will result with the increase of effectiveness, enhance operational abilities allowing for a more extensive and thorough examination of fire incident scene, identifying possible sources of evidence, and preservation of evidence, in an attempt to increase the number of fire incidents that result with a cause being determined and to increase the percentage of arson arrest and conviction rates, and to aggressively combat the act of arson for the citizens of Nashville.

Please provide a brief synopsis of the proposed project and then identify the specific goals and objectives of your project.

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Will this project aim to aggressively investigate every fire?

- Yes
- No

Please explain how this project will assist you in reaching this goal

This project will replace, and upgrade fire investigative technology and allow the Arson Investigations Unit to achieve operational, technical, and deployment standards that will greatly surpass current standards in the field of fire investigation. The Arson Investigations Unit will achieve its goal of being more self-sufficient allowing investigations to be conducted more efficiently and effectively processing fire incident scenes, identify and the collection of evidence thus eliminating the delay of fire scene investigations by eliminating the dependence on outside local, state, and federal agencies for resources and/or support and will result with the identification of possible sources of evidence, and preservation of evidence, increase the

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Explain your jurisdiction's training requirements for fire investigation personnel

Each investigator is required to attend 40 hours of In-Service training each year that is provided by the NFD Training Academy staff. These training modules/topics are related to Life Safety Code, Haz-Mat and changes in departmental OPGs. Also, investigators are required to hold multiple certifications such as NAFI-CFEI, IAAI-CFI, TN Fire Inspector, CLAN-LAB Technician, Post Blast, P.O.S.T, etc. Based on budget restraints, it is the individual fire/arson investigators responsibility to ensure they have obtained all necessary CEUs required for all certifications and/or recertifications required by the department.

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Please explain your experience and ability in developing and conducting (i.e., timely and satisfactory project completion) past fire prevention and safety projects. Additionally, please demonstrate the experience and expertise you have in managing the type of project you are proposing.

I have been employed with the Metropolitan Government of Nashville and Davidson County for 30 years and during that time I have assisted with the implementation and management of various projects and grants. I have worked closely and cooperatively with other departments such as the Purchasing Department to set up bids and the procurement of equipment, materials, and training. All projects have been conducted in a timely and carried out following Metropolitan Government and Federal guidelines. During this time, I have been responsible for fiscal, statistical and other related business services as well as intent to bids, purchase orders, corresponding financial reports, and other required documentation related

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Narrative

The narrative statements must provide all the information necessary for you to justify your needs and for FEMA to make an award decision. A panel of peer reviewers will evaluate the applications by using the narrative statements below to determine the worthiness of the request for an award. Please ensure that your narrative clearly addresses each of the following evaluation criteria elements to the best of your ability with detailed but concise information. You may either type your narrative statements in the spaces provided below or create the text in your word processing system and then copy it into the appropriate spaces provided below. Please note the narrative block does not allow for formatting. Do not type your narrative using only capital letters. Additionally, do not include tables, special fonts (i.e., quote marks, bullets, etc.), or graphs. Please review the Notice of Funding Opportunity for additional narrative details.

Commitment to Mitigation: Fire Department applicants that can demonstrate their commitment and proactive posture to reducing fire risk will receive higher consideration. Applicants must explain their code adoption and enforcement (to include Wildland Urban Interface and commercial/residential sprinkler code adoption and enforcement) and mitigation strategies (including whether or not the jurisdiction has a FEMA-approved mitigation strategy). Applicants can also demonstrate their commitment to reducing fire risk by applying to implement fire mitigation strategies (code adoption and enforcement) via this application.

The loss of any commercial, industrial, and residential structure fires that have occurred in the city of Nashville have resulted with the total loss of historical infrastructure that is vital to us and have accumulated in millions of dollars. Although tragic, nothing effects our communities more than a fire incident resulting with the loss of life. One of the most important responsibilities for the Arson Investigations Unit of the Nashville Fire Department is the investigations of fatal fire incidents that occur our city. With the new code adoption, from the 2012 International Fire Code to the 2018 NFPA Codes, the AHJ will be able to adhere to and enforce the most current industry standard. This coupled with the approval of this project, we feel that this will prove to reduce the number of fire fatalities, injuries, and property loss. Not only will this make safer our communities by identifying and reducing risks associated with fire-hazards and other related hazards, we feel a direct result will be the reduction with the percentage fire fatalities and the number of total fire losses that occur to inspectable occupancies. During the implementation of this project and throughout the years to come, the Nashville Fire Department Administrative Staff along with the Arson Investigations Unit will be committed to continuous evaluation of this project and will adjust any departmental policies and/or procedures necessary that ensure the objectives and overall goal of this project are met.

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Vulnerability Statement:

- The assessment of fire risk is essential in the development of an effective project goal, as well as meeting FEMA's goal to reduce risk by conducting a risk assessment as a basis for action. Vulnerability is a "weak link," demonstrating high-risk behavior, living conditions, or any type of high-risk situation. The Vulnerability Statement should include a description of the steps taken to determine the vulnerability and identify the target audience. The methodology for determination of vulnerability (i.e., how the vulnerability was found) should be discussed in-depth in the application's Narrative Statement.
- The specific vulnerability that will be addressed with the proposed project can be established through a formal or informal risk assessment. FEMA encourages the use of local statistics, rather than national statistics, when discussing the vulnerability.
- In a clear, to-the-point statement, the applicant should summarize the vulnerability the project will address, including who is at risk, what the risks are, where the risks are, and how the risks can be prevented, reduced, or mitigated.
- For the purpose of the FY 2020 FP&S NOFO, formal risk assessments consist of the use of software programs or recognized expert analysis that assess risk trends.
- Informal risk assessments could include an in-house review of available data (e.g., National Fire Incident Reporting System [NFIRS]) to determine fire loss, burn injuries or loss of life over a period of time, and the factors that are the cause and origin for each occurrence, including a lack of adoption and enforcement of certain codes.

In 2020, the Arson Investigations Unit of the Nashville Fire Department responded to 254 fires that required investigation. Investigators deemed 88 fires as arson. Investigators also investigated 17 fire fatalities. Investigators also investigated two homicide cases and closed both of those cases by arrest and responded to 6 calls for mutual aid to surrounding counties for assistance with fire scene investigations.

The Arson Investigations Unit saw a 44 percent increase in arson fires from 2019-2020.

Since 2017, investigators deemed 216 fires as arson and investigated 51 fatality fires.

Since 2015, 1 out of every 3 fires investigated are an act of arson resulting millions of dollars in damages and property damage and at times loss of life.

During this current year 2021, the Nashville Fire Department Fire Marshal's Office will be adopting the 2018 NFPA Codes moving away from the current 2012 International Codes

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During this current year 2021, the Nashville Fire Department Fire Marshal's Office will be adopting the 2018 NFPA Codes moving away from the current 2012 International Codes allowing the AHJ to adhere to the most current and enforceable code to date. As a result of this NFPA code adoption by the Metropolitan Government of Nashville and Davidson County, the Arson Investigations Unit will utilize and would conform to industry standards and adhere to changes and revisions made by NFPA 921 since 2011, and allow every and all investigations adhere to changes and revisions made that meet the current NFPA 921, 2017 Edition and the most current standard of NFPA 1033.

We feel that with this new code adoption it will prove to reduce the number of fire fatalities, injuries, and property loss by reducing the percentage fire fatalities and the number of total fire losses that occur to inspectable occupancies, and to make safer our communities by identifying and implementing the new code. Therefore, reducing risks associated with fire-hazards and other related hazards with the 2018 NFPA Codes. Furthermore, this trend could be mitigated by advocating for public policy that clearly communicates the inherent risk

associated with commercial, industrial, and residential structure fires effecting our communities and the public cost of financing public safety and emergency responses.

The overall objective for this proposed project is that it will result with the increase of effectiveness, enhance operational abilities allowing for a more extensive and thorough examination of fire incident scene, identifying possible sources of evidence, and preservation of evidence, in an attempt to increase the number of fire incidents that result with a cause being determined and to increase the percentage of arson arrest and conviction rates, and to aggressively combat the act of arson for the citizens of Nashville.

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Due to the current budget constraints, the Nashville Fire Department is not able the requested equipment for the Arson Investigations Unit to meet our need. The Arson Investigations Unit feels approval of this funding will significantly aid with the fire cause determinations and the identification of incendiary or other arson related crimes and will result with the identification of possible sources of evidence, and preservation of evidence, increase the number of fire incidents that result with a cause being determined and to increase the percentage of arson arrest and conviction rates, eliminating the need for the Nashville Fire Department to hire additional investigators at current time.

Project Description: Applicants must describe in detail not only the project components but also how the proposed project addresses the identified capability gap, due to financial need and/or the vulnerabilities identified in the vulnerability statement. The following information should be included:

- Project Components
- Review of any existing programs or models that have been successful.
- Detailed description of how the proposed project components fill the identified capability gap
- If working with Fire Service Partners/Organizations, identify each partner/organization and the role(s) they will fill in the successful completion of the proposed project.

The Fire Investigation Equipment included in this project will consist of the L-TRON OSCR360, a two-part, multi-use system. The paired system includes software and a 360-degree spherical image capture kit used for documenting various scenes ranging from simple municipal code violations, fire incident scenes, to biological threats, to the most involved homicide scene investigations. OSCR360 is used for crime scene investigations, fire service, emergency management planning, active shooter training, forensic science curriculum, environmental safety and more. If request for funding is approved, Nashville will be the first city in the State of Tennessee to utilize this system. Also, approved funding will replace the obsolete CVSA, Computerized Voice Stress Analyzer it currently has and allow for investigators to receive certification as a Certified CVSA Examiner through the NITV Federal Services and obtain state-of-the-art digital photography equipment and digital drawing software that meet the standard described in NFPA 921.

Drones are becoming critical tools for law enforcement agencies and fire departments by providing, aerial insight enabling rapid, efficient, and informed decisions to maximize safety. With our approved funding the Arson Investigations Unit will immediately implement the Phantom Pro 4 drone or any equivalent available during the time of funding on every fire incident scene upon arrival of the scene, to identify and evaluate smoke, buildings, and obstacles can make it challenging to determine the scope of a fire and its threat. The ability to stream live video intelligence back to command centers to direct scene personnel, align teams and eliminate uncertainty. Not only will the use of the drone prove valuable for the Arson Investigations Unit, but every unit or specialized division attached to the Nashville Fire Department and any agency request for mutual aid.

The new digital cameras will replace the current 9-year-old cameras utilized by investigators providing higher resolution photographs, record videos, and are waterproof. The intrinsic combustible gas detectors will be utilized on the fire scene by the investigator for both safety and the determination of possible evidence. Currently the investigators assigned to the

The new digital cameras will replace the current 9-year-old cameras utilized by investigators providing higher resolution photographs, record videos, and are waterproof. The intrinsic combustible gas detectors will be utilized on the fire scene by the investigator for both safety and the determination of possible evidence. Currently the investigators assigned to the Arson Investigations Unit does not possess any combustible gas detectors.

With the approval of funding for training the Arson Investigations Unit will reach its goal of being more self-sufficient allowing investigations to be conducted more efficiently and effectively processing fire incident scenes, identify and the collection of evidence thus eliminating the dependence of outside local, state and federal agencies for resources and/or support.

Implementation Plan: Each project proposal should include details on the implementation plan which discusses the proposed project's goals and objectives. The following information should be included to support the implementation plan:

- Goals and objectives
- Details regarding the methods and specific steps that will be used to achieve the goals and objectives
- Timelines outlining the chronological project steps (this is critical for determining the likelihood of the project's completion within the period of performance)
- Where applicable, examples of marketing efforts to promote the project, who will deliver the project (e.g., effective partnerships), and the manner in which materials or deliverables will be distributed
- Requests for props (i.e., tools used in educational or awareness demonstrations), including specific goals, measurable results, and details on the frequency for which the prop will be utilized as part of the implementation plan. Applicants should include information describing the efforts that will be used to reach the high-risk audience and/or the number of people reached through the proposed project (examples of props include safety trailers, puppets, or costumes)
- Where human subjects are involved, describe plans for submission to the Institutional Review Board (IRB) (for further guidance and requirements, see the Human Subjects Research section of the NOFO)
- **NOTE:** For applicants proposing a complex project that may require a 24-month Period of Performance, please include significant justification and details in the implementation plan that justify the applicant's need for a Period of Performance of more than 12 months.

The goal for this proposed project is that it will increase the effectiveness, enhance operational abilities allowing for a more extensive and thorough examination of fire incident scenes and will aim to aggressively combat the act of arson, for the Arson Investigations Unit and the citizens of Nashville.

The Arson Investigations Unit are responsible for origin and cause investigations and circumstances of fire, explosion and/or fatality fire incidents that occur within the jurisdiction of Metropolitan Government of Nashville and Davidson County within 10 days of the fire incident as required by the Tennessee Code Title 68-102-111. By reaching the objectives set out in this project the Arson Investigations Unit will become self-sufficient, allowing investigations to be conducted more efficiently and effectively process fire incident scenes, identify and the collection of evidence, eliminating the dependence of outside local, state, and federal agencies for support which results with the delay conducting fire scene investigations. The proposed fire investigation equipment for this project will be utilized and immediately implemented by each investigator. Our unit will be in the forefront by being the first agency

within the State of Tennessee utilizing the L-TRON OSC360. This will provide state of the art technology allowing for the documenting of various scenes ranging from simple municipal code violations, fire incident scenes, crime scenes, to the most involved homicide scene investigation, and enable criminal case files to comply with the legal standards of data required for prosecution in a court of law.

The CVSA III 5000 will aid the Arson Investigations Unit with the determination of deception or truthfulness regarding information being acquired. Once the acquisition of the CVSA II and all investigators have successfully completed and received certification as a Certified CVSA Examiner by the NITV Federal Services the implementation of the CVSA III 5000 will immediately occur. Our goal is by the end of FY 2021 have a minimum of 3 Fire and Arson Investigators obtain certification.

Evaluation Plan: Projects should include a plan for evaluation of effectiveness and identify measurable goals. Applicants seeking to carry out awareness and educational projects, for example, should identify how they intend to determine that there has been an increase in knowledge about fire hazards, or measure a change in the safety behaviors of the audience. Applicants should demonstrate how they will measure risk at the outset of the project in comparison to how much the risk decreased after the project is finished. There are various ways to measure the knowledge gained about fire hazards, including the use of surveys, pre- and post-tests, or documented observations. Applicants are encouraged to attend training on evaluation methods, such as the National Fire Academy's "Demonstrating Your Fire Prevention Program's Worth."

The Arson Investigations Unit will conduct a formal evaluation of the proposed project fire investigative equipment requested. This evaluation will ensure we are meeting grant criteria by establishing specific measures. Each measure will look at specific items and will gather specific information. After the conclusion of the first year the Arson Investigations Unit will conduct a study and determine cost savings and cost associated to improve on the annual results.

The following will be a preliminary outline of the specific measure that will be collected:

- Percent of investigated fires per investigators.
- Percentage decrease of fire fatalities per 1,000 residents.
- Percentage decrease in total fire losses occurring in inspectable occupancies

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The following will be a preliminary outline of the specific measure that will be collected:

- Percent of investigated fires per investigators.
- Percentage decrease of fire fatalities per 1,000 residents.
- Percentage decrease in total fire losses occurring in inspectable occupancies
- Percent increase of closed arson cases by arrest.

Cost Benefit: Projects will be evaluated and scored by the Peer Review Panelists based on how well the applicant addresses the fire prevention needs of the department or organization in an economic and efficient manner. The applicant should show how it will maximize the level of funding that goes directly into the delivery of the project. The costs associated with the project also must be reasonable for the target audience that will be reached, and a description should be included of how the anticipated project benefit(s) (quantified if possible) outweighs the cost(s) of the requested item(s). The application should provide justification for all costs included in the project in order to assist the Technical Evaluation Panel with their review.

Currently 92 percent of the operating budget for the Nashville Fire Department is consumed by personnel salaries. The remaining 8 percent is taken for utilities, fuel, maintenance, etc. Such a strain is on the current budget that the department can't afford to replace a single light fleet vehicle valued at \$35,000. With the existing budget constraints and no foreseeable funds that will be available to the Arson Investigations Unit, we strive to identify any help to obtain and, maintain the investigative effectiveness and operational abilities to aggressively combat the act of arson for the Arson Investigations Unit and the citizens of Nashville.

The cost/benefit ratio of the proposed project is found by the following equation: Cost of proposed fire investigator equipment project is \$43,000 divided by the immediate response area population of 701,400, divided by the expected time for new development of industry standards of NFPA 921 and NFPA 1033 of 3 years. Therefore, the cost/benefit of this proposed grant is \$0.02 per resident.

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Furthermore, when the total population of our mutual aid areas where a Fire and Arson Investigator is utilized the cost benefit would be far less per person than that identified with only the immediate response population.

Sustainability: Is it your organization's intent to deliver this program after the grant performance period? If so, how will the overall activity be sustained and what are the long-term benefits? Examples of sustainable projects can be illustrated through the long-term benefits derived from the delivery of the project, the presence of non-federal partners likely to continue the effort, or the demonstrated long-term commitment of the applicant.

The proposed project will be sustained within the Arson Investigations Unit provide a new standard level of training for any current or future Fire and Arson Investigators assigned to the Arson Investigations Unit. This project will be evaluated and updated at least annually ensuring it remains with the standards set forth by NFPA 921 and NFPA 1033. The Arson Investigations Unit and the Information Technology support group will conduct routine maintenance checks on the equipment as necessary to ensure all software remains updated and in proper working order. Any software or hardware licenses will be supported by departmental IT support services and the Nashville Fire Department. The Nashville Fire Department Administrative Staff will continue to work with the Arson Investigations Unit will be committed to continuous evaluation of this project and will adjust any departmental policies and/or procedures necessary that ensure the objectives and overall goal of this project are met and assist with advocating for public policy that clearly communicates the inherent risk associated with commercial, industrial, and residential structure fires effecting our communities and the public cost of financing public safety and

Sustainability: Is it your organization's intent to deliver this program after the grant performance period? If so, how will the overall activity be sustained and what are the long-term benefits? Examples of sustainable projects can be illustrated through the long-term benefits derived from the delivery of the project, the presence of non-federal partners likely to continue the effort, or the demonstrated long-term commitment of the applicant.

The Nashville Fire Department Administrative Staff will continue to work with the Arson Investigations Unit will be committed to continuous evaluation of this project and will adjust any departmental policies and/or procedures necessary that ensure the objectives and overall goal of this project are met and assist with advocating for public policy that clearly communicates the inherent risk associated with commercial, industrial, and residential structure fires effecting our communities and the public cost of financing public safety and emergency responses necessary to combat arson related crimes. The Nashville Fire Department will also communicate and work with the Arson Investigations Unit to ensure any licenses or certifications obtained by the Fire and Arson Investigator from this proposed project are maintained within any timeframe identified by the professional organization or agency the credentials were obtained.

Additional Comments: If you have any additional comments about your project, please provide them here.

✓
Close ▾

Item ✖ Remove item

Other (Explain) ▾

Other description

Intrinsic Safe Combustible Gas Detector

Budget class

Equipment ▾

YEAR	QUANTITY	UNIT PRICE	TOTAL
1	8	\$400.00	\$3,200.00
YEAR	QUANTITY	UNIT PRICE	TOTAL
2	0	\$0.00	\$0.00
TOTAL			\$3,200.00

Description

CGD900 or equivalent Intrinsic Safe Combustible Gas Detector is utilized by the investigator for detecting more combustible gases, including hydrocarbons. Detects Methane, Propane, Ethane, Butane, Hydrogen, Ethylene, Ethanol, ISO-Butane, NOL, Gasoline, Acetylene, Methyl Ether, Ammonia, Hydrogen Sulfide, Industrial solvents, Benzene, Alcohols, Acetone, Toluene, and Xylene.

✓
Close ▾

Item ✖ Remove item

Other (Explain) ▾

Other description

DJI Phantom 4 Pro

Budget class
 Equipment

YEAR	QUANTITY	UNIT PRICE	TOTAL
1	1	\$4,000.00	\$4,000.00
2	0	\$0.00	\$0.00
TOTAL			\$4,000.00

Description

Phantom Pro 4 drone or any equivalent available during the time of funding on every fire incident scene upon arrival of the scene, to identify and evaluate smoke, buildings, and obstacles can make it challenging to determine the scope of a fire and its threat. The ability to stream live video intelligence back to command centers to direct scene personnel, align teams and eliminate uncertainty. Not only will the use of the drone prove valuable for the Arson Investigations Unit, but every unit or specialized division attached to the Nashville Fire Department and any agency request for mutual aid.

Close

Item ✖ Remove Item
 Other (Explain)

Other description
 CVSA III 5000

Budget class
 Equipment

YEAR	QUANTITY	UNIT PRICE	TOTAL
1	1	\$10,000.00	\$10,000.00
2	0	\$0	\$0.00
TOTAL			\$10,000.00

Description

CVSA - NITV Federal Services Computerized Voice Stress Analyzer is a technological achievement in detecting deception born from a desire to achieve the most accurate results in truth verification for law enforcement, government, and the military. Cost will include up to 3 Fire and Arson Investigators allow to receive certification as a Certified CVSA Examiner through the NITV Federal Services.

✓
Close ▾

Item ✖ Remove item

Other (Explain) ▾

Other description

Pentax Waterproof Digital Camera

Budget class

Equipment ▾

YEAR	QUANTITY	UNIT PRICE	TOTAL
1	8	\$500.00	\$4,000.00
2	0	\$0.00	\$0.00
TOTAL			\$4,000.00

✓
Close ▾

Item ✖ Remove item

Other (Explain) ▾

Other description

Arson Investigation Trailer

Budget class

Equipment ▾

YEAR	QUANTITY	UNIT PRICE	TOTAL
1	1	\$4,500.00	\$4,500.00
2	0	\$0.00	\$0.00
TOTAL			\$4,500.00

Description

The Arson Investigation Trailer will be an single axel enclosed 7' X 12' trailer with a drop-down gate. This investigations trailer will house all items essential for conducting fire scene investigations such as lighting equipment, hand tools, evidence collection equipment. All the scene investigative equipment will remain safe, secure and provide protection from direct exposure to weather events while providing a single piece of scene equipment that will be set up to respond to multiple types of fire scene investigations to include fire fatalities. This Arson Investigations Trailer will be utilized by current light fleet vehicles assigned to the Arson Investigations Unit. This scene trailer will be the first of its kind for the

Description

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✓
Close ▾

Item ✖ Remove item

Other (Explain) ▾

Other description

L-TRON OSC360

Budget class

Equipment ▾

YEAR	QUANTITY	UNIT PRICE	TOTAL
1	1	\$17,500.00	\$17,500.00
2	0	\$0.00	\$0.00
TOTAL			\$17,500.00

Description

L-TRON OSC360, a two-part, multi-use system. The paired system includes software and a 360-degree spherical image capture kit used for documenting various scenes ranging from simple municipal code violations, fire incident scenes, to biological threats, to the most involved homicide scene investigations. OSC360 is used for crime scene investigations, fire service, emergency management planning, active shooter training, forensic science curriculum, environmental safety and more.

Description

from simple municipal code violations, fire incident scenes, to biological threats, to the most involved homicide scene investigations. OSC360 is used for crime scene investigations, fire service, emergency management planning, active shooter training, forensic science curriculum, environmental safety and more.

If request for funding is approved, Nashville will be the first in the State of Tennessee to utilize this system.

✓
Close ▾

Item ✖ Remove item

Other (Explain) ▾

Other description

SmartDraw

Budget class

Equipment ▾

YEAR	QUANTITY	UNIT PRICE	TOTAL
1	1	\$5,000.00	\$5,000.00
2	0	\$0	\$0.00
TOTAL			\$5,000.00

Description

SmartDraw is a diagramming software that runs on any computer or tablet. It includes quick-start diagram templates for over 70 different diagram types from flowcharts to floor plans. Posses over 70 installed templates to include crime scenes, and fire scene reconstruction. Automatic formatting means perfect layouts in minutes.

Total requested for Arson Investigator Training project: \$20,500.00

Remove project

Add item to Arson Investigator Training

Please provide the following information about the project you want funded.

Project name

Arson Investigation Training

Is this a national-level project, with a national impact?

- Yes
- No

Is this project a regional request? A regional request provides a direct regional and/or local benefit beyond your organization. You may apply for a regional request on behalf of your organization and any number of other participating eligible organizations within your region.

- Yes
- No

Who is the target audience for the planned project?

- Children under 14
- Adults over 65
- Firefighters
- People with disabilities (e.g., deaf/hard-of-hearing)
- College/university housing
- Low-income families/neighborhoods
- Geographic Area
- Other

What is the estimated size of the target audience?

701400

How was this target audience determined?

- Formal Assessment
- Informal Assessment
- Will Be Conducting Assessment
- None of the above

Please provide a brief synopsis of the proposed project and then identify the specific goals and objectives of your project.

Acquire the needed equipment to implement the 80-hour Fire and Arson Investigator training providing basic knowledge of fire investigations, identification of possible incendiary fires, processes, procedures of criminal cases, current T.C.A. codes and other laws surrounding arson, identifying possible sources of evidence, and preservation of evidence, among the department's current suppression personnel and will transmit with the increase in the number of fire incidents with a cause being determined and increase the percentage of arson arrest and conviction rates and to connect the gap of present level of knowledge and expertise with current industry standards. This contracted specialized training will conform to industry

department's current suppression personnel and will transmit with the increase in the number of fire incidents with a cause being determined and increase the percentage of arson arrest and conviction rates and to connect the gap of present level of knowledge and expertise with current industry standards. This contracted specialized training will conform to industry standards, adhere to changes/revisions made by NFPA 921 since 2011, and the standard of NFPA 1033. Upon completion the investigator will obtain professional certification and/or professional licensing within specialty areas relating to Arson or Arson related crimes.

Will this project aim to aggressively investigate every fire?

- Yes
- No

Please explain how this project will assist you in reaching this goal

With the new code adoption, from the 2012 International Fire Code to the 2018 NFPA Codes, the AHJ will be able to adhere to and enforce the most current industry standard. We feel that this will prove to reduce the number of fire fatalities, injuries, and property loss. Not only will this make safer our communities by identifying and reducing risks associated with fire-hazards and other related hazards, we feel a direct result will be the reduction with the percentage fire fatalities and the number of total fire losses that occur to inspectable occupancies. The 80-hour course was developed with the purpose of providing suppression personnel the basic knowledge of fire investigations, identification of possible incendiary fires, processes

The 80-hour course was developed with the purpose of providing suppression personnel the basic knowledge of fire investigations, identification of possible incendiary fires, processes, procedures of criminal cases, identifying possible sources of evidence, and preservation of evidence, to increase the number of fire incidents that result with a cause being determined and increase the percentage of arson arrest and conviction rates.

Explain your jurisdiction's training requirements for fire investigation personnel

Each investigator is required to attend 40 hours of In-Service training each year that is provided by the NFD Training Academy staff. These training modules/topics are related to Life Safety Code, Haz-Mat and changes in departmental OPGs. Also, investigators are required to hold multiple certifications such as NAFI-CFEI, IAAI-CFI, TN Fire Inspector, CLAN-LAB Technician, Post Blast, P.O.S.T, etc. Based on budget restraints, it is the individual fire/arson investigators responsibility to ensure they have obtained all necessary CEUs required for all certifications and/or recertifications

Safety Code, Haz-wat and changes in departmental OPGs.

Also, investigators are required to hold multiple certifications such as NAFI-CFEI, IAAI-CFI, TN Fire Inspector, CLAN-LAB Technician, Post Blast, P.O.S.T, etc. Based on budget restraints, it is the individual fire/arson investigators responsibility to ensure they have obtained all necessary CEUs required for all certifications and/or recertifications required by the department.

Please explain your experience and ability in developing and conducting (i.e., timely and satisfactory project completion) past fire prevention and safety projects. Additionally, please demonstrate the experience and expertise you have in managing the type of project you are proposing.

On various projects and grants, I have worked closely and cooperatively with other departments such as the Purchasing Department to set up bids and the procurement of equipment, materials, and training. All projects have been conducted in a timely and carried out following Metropolitan Government and Federal guidelines. During this time, I have been responsible for fiscal, statistical and other related business services as well as intent to bids, purchase orders, corresponding financial reports, and other required documentation related to various projects. I have managed various contracts to ensure compliance with Metropolitan Government purchasing standards.

Narrative

The narrative statements must provide all the information necessary for you to justify your needs and for FEMA to make an award decision. A panel of peer reviewers will evaluate the applications by using the narrative statements below to determine the worthiness of the request for an award. Please ensure that your narrative clearly addresses each of the following evaluation criteria elements to the best of your ability with detailed but concise information. You may either type your narrative statements in the spaces provided below or create the text in your word processing system and then copy it into the appropriate spaces provided below. Please note the narrative block does not allow for formatting. Do not type your narrative using only capital letters. Additionally, do not include tables, special fonts (i.e., quote marks, bullets, etc.), or graphs. Please review the Notice of Funding Opportunity for additional narrative details.

Commitment to Mitigation: Fire Department applicants that can demonstrate their commitment and proactive posture to reducing fire risk will receive higher consideration. Applicants must explain their code adoption and enforcement (to include Wildland Urban Interface and commercial/residential sprinkler code adoption and enforcement) and mitigation strategies (including whether or not the jurisdiction has a FEMA-approved mitigation strategy). Applicants can also demonstrate their commitment to reducing fire risk by applying to implement fire mitigation strategies (code adoption and enforcement) via this application.

The loss of any commercial, industrial, and residential structure fires that have occurred in the city of Nashville have resulted with the total loss of historical infrastructure that is vital to us and have accumulated in millions of dollars. Although tragic, nothing effects our communities more than a fire incident resulting with the loss of life. One of the most important responsibilities for the Arson Investigations Unit of the Nashville Fire Department is the investigations of fatal fire incidents that occur our city. With the new code adoption, from the 2012 International Fire Code to the 2018 NFPA Codes, the AHJ will be able to adhere to and enforce the most current industry standard. This coupled with the approval of this project, we feel that this will prove to reduce the number of fire fatalities, injuries, and property loss. Not only will this make safer our communities by identifying and reducing risks associated with fire-hazards and other related hazards, we feel a direct result will the reduction with the percentage fire fatalities and the number of total fire losses that occur to inspectable occupancies. During the implementation of this project and throughout the years to come, the Nashville Fire Department Administrative Staff along with the Arson Investigations Unit will be committed to continuous evaluation of this project and will adjust any departmental policies and/or procedures necessary that ensure the objectives and overall goal of this project are met.

With the new code adoption, from the 2012 International Fire Code to the 2018 NFPA Codes, the AHJ will be able to adhere to and enforce the most current industry standard. This coupled with the approval of this project, we feel that this will prove to reduce the number of fire fatalities, injuries, and property loss. Not only will this make safer our communities by identifying and reducing risks associated with fire-hazards and other related hazards, we feel a direct result will the reduction with the percentage fire fatalities and the number of total fire losses that occur to inspectable occupancies. During the implementation of this project and throughout the years to come, the Nashville Fire Department Administrative Staff along with the Arson Investigations Unit will be committed to continuous evaluation of this project and will adjust any departmental policies and/or procedures necessary that ensure the objectives and overall goal of this project are met. Furthermore, this trend will be mitigated by advocating for public policy that clearly communicates the inherent risk associated with commercial, industrial, and residential structure fires effecting our communities and the public cost of financing public safety and emergency responses necessary to combat arson related crimes.

Vulnerability Statement:

- The assessment of fire risk is essential in the development of an effective project goal, as well as meeting FEMA's goal to reduce risk by conducting a risk assessment as a basis for action. Vulnerability is a "weak link," demonstrating high-risk behavior, living conditions, or any type of high-risk situation. The Vulnerability Statement should include a description of the steps taken to determine the vulnerability and identify the target audience. The methodology for determination of vulnerability (i.e., how the vulnerability was found) should be discussed in-depth in the application's Narrative Statement.
- The specific vulnerability that will be addressed with the proposed project can be established through a formal or informal risk assessment. FEMA encourages the use of local statistics, rather than national statistics, when discussing the vulnerability.
- In a clear, to-the-point statement, the applicant should summarize the vulnerability the project will address, including who is at risk, what the risks are, where the risks are, and how the risks can be prevented, reduced, or mitigated.
- For the purpose of the FY 2020 FP&S NOFO, formal risk assessments consist of the use of software programs or recognized expert analysis that assess risk trends.
- Informal risk assessments could include an in-house review of available data (e.g., National Fire Incident Reporting System [NFIRS]) to determine fire loss, burn injuries or loss of life over a period of time, and the factors that are the cause and origin for each occurrence, including a lack of adoption and enforcement of certain codes.

In 2020, the Arson Investigations Unit of the Nashville Fire Department responded to 254 fires that required investigation. Investigators deemed 88 fires as arson. Investigators also investigated 17 fire fatalities. Investigators also investigated two homicide cases and closed both of those cases by arrest and responded to 6 calls for mutual aid to surrounding counties for assistance with fire scene investigations.

The Arson Investigations Unit saw a 44 percent increase in arson fires from 2019-2020.

Since 2017, Investigators deemed 216 fires as arson and investigated 51 fatality fires.

Since 2015, 1 out of every 3 fires investigated are an act of arson resulting millions of dollars in damages and property damage and at times loss of life.

During this current year 2021, the Nashville Fire Department Fire Marshal's Office will be adopting the 2018 NFPA Codes moving away from the current 2012 International Codes

allowing the AHJ to adhere to the most current and enforceable code to date. As a result of this NFPA code adoption by the Metropolitan Government of Nashville and Davidson County, the Arson Investigations Unit will utilize and would conform to industry standards and adhere to changes and revisions made by NFPA 921 since 2011, and allow every and all investigations adhere to changes and revisions made that meet the current NFPA 921, 2017 Edition and the most current standard of NFPA 1033.

We feel that with this new code adoption it will prove to reduce the number of fire fatalities, injuries, and property loss by reducing the percentage fire fatalities and the number of total fire losses that occur to inspectable occupancies, and to make safer our communities by identifying and implementing the new code. Therefore, reducing risks associated with fire-hazards and other related hazards with the 2018 NFPA Codes. Furthermore, this trend could be mitigated by advocating for public policy that clearly communicates the inherent risk associated with commercial, industrial, and residential structure fires effecting our communities and the public cost of financing public safety and emergency responses.

The overall objective for this proposed project is that it will result with the increase of effectiveness, enhance operational abilities allowing for a more extensive and thorough examination of fire incident scene, identifying possible sources of evidence, and preservation of evidence, in an attempt to increase the number of fire incidents that result with a cause being determined and to increase the percentage of arson arrest and conviction rates, and to aggressively combat the act of arson for the citizens of Nashville.

This project will replace, and upgrade fire investigative technology and allow the Arson Investigations Unit to achieve operational, technical, and deployment standards that will greatly surpass current standards in the field of fire investigation. The Arson Investigations Unit will achieve its goal of being more self-sufficient allowing investigations to be conducted more efficiently and effectively processing fire incident scenes, identify and the collection of evidence thus eliminating the delay of fire scene investigations by eliminating the dependence on outside local, state, and federal agencies for resources and/or support.

Due to the current budget restraints, the Nashville Fire Department is not able to purchase the requested equipment for the Arson Investigations Unit to meet our need. The Arson Investigations

efficiently and effectively processing fire incident scenes, identify and the collection of evidence thus eliminating the delay of fire scene investigations by eliminating the dependence on outside local, state, and federal agencies for resources and/or support.

Due to the current budget constraints, the Nashville Fire Department is not able the requested equipment for the Arson Investigations Unit to meet our need. The Arson Investigations Unit feels approval of this funding will significantly aid with the fire cause determinations and the identification of incendiary or other arson related crimes and will result with the identification of possible sources of evidence, and preservation of evidence, increase the number of fire incidents that result with a cause being determined and to increase the percentage of arson arrest and conviction rates, eliminating the need for the Nashville Fire Department to hire additional investigators at current time.

Project Description: Applicants must describe in detail not only the project components but also how the proposed project addresses the identified capability gap, due to financial need and/or the vulnerabilities identified in the vulnerability statement. The following information should be included:

- **Project Components**
- **Review of any existing programs or models that have been successful.**
- **Detailed description of how the proposed project components fill the identified capability gap**
- **If working with Fire Service Partners/Organizations, identify each partner/organization and the role(s) they will fill in the successful completion of the proposed project.**

The Fire Investigation Equipment included in this project will consist of the L-TRON OSCR360, a two-part, multi-use system. The paired system includes software and a 360-degree spherical image capture kit used for documenting various scenes ranging from simple municipal code violations, fire incident scenes, to biological threats, to the most involved homicide scene investigations. OSCR360 is used for crime scene investigations, fire service, emergency management planning, active shooter training, forensic science curriculum, environmental safety and more. If request for funding is approved, Nashville will be the first city in the State of Tennessee to utilize this system. Also, approved funding will replace the obsolete CVSA, Computerized Voice Stress Analyzer it currently has and allow for investigators to receive certification as a Certified CVSA Examiner through the NITV Federal Services and obtain state-of-the-art digital photography equipment and digital drawing software that meet the standard described in NFPA 921.

Drones are becoming critical tools for law enforcement agencies and fire departments by providing, aerial insight enabling rapid, efficient, and informed decisions to maximize safety. With our approved funding the Arson Investigations Unit will immediately implement the Phantom Pro 4 drone or any equivalent available during the time of funding on every fire incident scene upon arrival of the scene, to identify and evaluate smoke, buildings, and obstacles can make it challenging to determine the scope of a fire and its threat. The ability to stream live video intelligence back to command centers to direct scene personnel, align teams and eliminate uncertainty. Not only will the use of the drone prove valuable for the Arson Investigations Unit, but every unit or specialized division attached to the Nashville Fire Department and any agency request for mutual aid.

The new digital cameras will replace the current 9-year-old cameras utilized by investigators providing higher resolution photographs, record videos, and are waterproof. The intrinsic combustible gas detectors will be utilized on the fire scene by the investigator for both safety and the determination of possible evidence. Currently the investigators assigned to the Arson Investigations Unit does not possess any combustible gas detectors.

The new digital cameras will replace the current 9-year-old cameras utilized by investigators providing higher resolution photographs, record videos, and are waterproof. The intrinsic combustible gas detectors will be utilized on the fire scene by the investigator for both safety and the determination of possible evidence. Currently the investigators assigned to the Arson Investigations Unit does not possess any combustible gas detectors.

With the approval of funding for training the Arson Investigations Unit will reach its goal of being more self-sufficient allowing investigations to be conducted more efficiently and effectively processing fire incident scenes, identify and the collection of evidence thus eliminating the dependence of outside local, state and federal agencies for resources and/or support.

Implementation Plan: Each project proposal should include details on the implementation plan which discusses the proposed project's goals and objectives. The following information should be included to support the implementation plan:

- **Goals and objectives**
- **Details regarding the methods and specific steps that will be used to achieve the goals and objectives**
- **Timelines outlining the chronological project steps (this is critical for determining the likelihood of the project's completion within the period of performance)**
- **Where applicable, examples of marketing efforts to promote the project, who will deliver the project (e.g., effective partnerships), and the manner in which materials or deliverables will be distributed**
- **Requests for props (i.e., tools used in educational or awareness demonstrations), including specific goals, measurable results, and details on the frequency for which the prop will be utilized as part of the implementation plan. Applicants should include information describing the efforts that will be used to reach the high-risk audience and/or the number of people reached through the proposed project (examples of props include safety trailers, puppets, or costumes)**
- **Where human subjects are involved, describe plans for submission to the Institutional Review Board (IRB) (for further guidance and requirements, see the Human Subjects Research section of the NOFO)**
- **NOTE: For applicants proposing a complex project that may require a 24-month Period of Performance, please include significant justification and details in the implementation plan that justify the applicant's need for a Period of Performance of more than 12 months.**

The goal for this proposed project is that it will increase the effectiveness, enhance operational abilities allowing for a more extensive and thorough examination of fire incident scenes and will aim to aggressively combat the act of arson, for the Arson Investigations Unit and the citizens of Nashville.

The Arson Investigations Unit are responsible for origin and cause investigations and circumstances of fire, explosion and/or fatality fire incidents that occur within the jurisdiction of Metropolitan Government of Nashville and Davidson County within 10 days of the fire incident as required by the Tennessee Code Title 68-102-111. By reaching the objectives set out in this project the Arson Investigations Unit will become self-sufficient, allowing investigations to be conducted more efficiently and effectively process fire incident scenes, identify and the collection of evidence, eliminating the dependence of outside local, state, and federal agencies for support which results with the delay conducting fire scene investigations.

The proposed fire investigation equipment for this project will be utilized and immediately implemented by each investigator. Our unit will be in the forefront by being the first agency

within the State of Tennessee utilizing the L-TRON OSCR360. This will provide state of the art technology allowing for the documenting of various scenes ranging from simple municipal code violations, fire incident scenes, crime scenes, to the most involved homicide scene investigation, and enable criminal case files to comply with the legal standards of data required for prosecution in a court of law.

The CVSA III 5000 will aid the Arson Investigations Unit with the determination of deception or truthfulness regarding information being acquired. Once the acquisition of the CVSA II and all investigators have successfully completed and received certification as a Certified CVSA Examiner by the NITV Federal Services the implementation of the CVSA III 5000 will immediately occur. Our goal is by the end of FY 2021 have a minimum of 3 Fire and Arson Investigators obtain certification.

Evaluation Plan: Projects should include a plan for evaluation of effectiveness and identify measurable goals. Applicants seeking to carry out awareness and educational projects, for example, should identify how they intend to determine that there has been an increase in knowledge about fire hazards, or measure a change in the safety behaviors of the audience. Applicants should demonstrate how they will measure risk at the outset of the project in comparison to how much the risk decreased after the project is finished. There are various ways to measure the knowledge gained about fire hazards, including the use of surveys, pre- and post-tests, or documented observations. Applicants are encouraged to attend training on evaluation methods, such as the National Fire Academy's "Demonstrating Your Fire Prevention Program's Worth."

establishing specific measures. Each measure will look at specific items and will gather specific information. After the conclusion of the first year the Arson Investigations Unit will conduct a study and determine cost savings and cost associated to improve on the annual results.
 The following will be a preliminary outline of the specific measure that will be collected:
 Percent of investigated fires per investigators.
 Percentage decrease of fire fatalities per 1,000 residents.
 Percentage decrease in total fire losses occurring in inspectable occupancies
 Percent increase of closed arson cases by arrest.

Cost Benefit: Projects will be evaluated and scored by the Peer Review Panelists based on how well the applicant addresses the fire prevention needs of the department or organization in an economic and efficient manner. The applicant should show how it will maximize the level of funding that goes directly into the delivery of the project. The costs associated with the project also must be reasonable for the target audience that will be reached, and a description should be included of how the anticipated project benefit(s) (quantified if possible) outweighs the cost(s) of the requested item(s). The application should provide justification for all costs included in the project in order to assist the Technical Evaluation Panel with their review.

Currently 92 percent of the operating budget for the Nashville Fire Department is consumed by personnel salaries. The remaining 8 percent is taken for utilities, fuel, maintenance, etc. Such a strain is on the current budget that the department can't afford to replace a single light fleet vehicle valued at \$35,000. With the existing budget constraints and no foreseeable funds that will be available to the Arson Investigations Unit, we strive to identify any help to obtain and, maintain the investigative effectiveness and operational abilities to aggressively combat the act of arson for the Arson Investigations Unit and the citizens of Nashville.
 The cost/benefit ratio of the proposed project is found by the following equation: Cost of proposed fire investigator equipment project is \$43,000 divided by the immediate response area population of 701,400, divided by the expected time for new development of industry standards of NFPA 921 and NFPA 1033 of 3 years. Therefore, the cost/benefit of this proposed grant is \$0.02 per resident.

combat the act of arson for the Arson Investigations Unit and the citizens of Nashville.
 The cost/benefit ratio of the proposed project is found by the following equation: Cost of proposed fire investigator equipment project is \$43,000 divided by the immediate response area population of 701,400, divided by the expected time for new development of industry standards of NFPA 921 and NFPA 1033 of 3 years. Therefore, the cost/benefit of this proposed grant is \$0.02 per resident.
 Furthermore, when the total population of our mutual aid areas where a Fire and Arson Investigator is utilized the cost benefit would be far less per person than that identified with only the immediate response population.

Sustainability: Is it your organization's intent to deliver this program after the grant performance period? If so, how will the overall activity be sustained and what are the long-term benefits? Examples of sustainable projects can be illustrated through the long-term benefits derived from the delivery of the project, the presence of non-federal partners likely to continue the effort, or the demonstrated long-term commitment of the applicant.

The proposed project will be sustained within the Arson Investigations Unit provide a new standard level of training for any current or future Fire and Arson Investigators assigned to the Arson Investigations Unit. This project will be evaluated and updated at least annually ensuring it remains with the standards set forth by NFPA 921 and NFPA 1033. The Arson Investigations Unit and the Information Technology support group will conduct routine maintenance checks on the equipment as necessary to ensure all software remains updated and in proper working order. Any software or hardware licenses will be supported by departmental IT support services and the Nashville Fire Department.
 The Nashville Fire Department Administrative Staff will continue to work with the Arson Investigations Unit will be committed to continuous evaluation of this project and will adjust any departmental policies and/or procedures necessary that ensure the objectives and overall goal of this project are met and assist with advocating for public policy that clearly communicates the inherent risk associated with commercial, industrial, and residential structure fires effecting our communities and the public cost of financing public safety and

The Nashville Fire Department Administrative Staff will continue to work with the Arson investigations Unit will be committed to continuous evaluation of this project and will adjust any departmental policies and/or procedures necessary that ensure the objectives and overall goal of this project are met and assist with advocating for public policy that clearly communicates the inherent risk associated with commercial, industrial, and residential structure fires effecting our communities and the public cost of financing public safety and emergency responses necessary to combat arson related crimes.
 The Nashville Fire Department will also communicate and work with the Arson Investigations Unit to ensure any licenses or certifications obtained by the Fire and Arson Investigator from this proposed project are maintained within any timeframe identified by the professional organization or agency the credentials were obtained.

✓
Close ▾

Item ✕ [Remove Item](#)

Other (Explain) ▾

Other description

Professional and Specialized Training

Budget class

Contractual ▾

YEAR	QUANTITY	UNIT PRICE	TOTAL
1	<input type="text" value="7"/>	<input type="text" value="\$2,500.00"/>	\$17,500.00
2	<input type="text" value="0"/>	<input type="text" value="\$0.00"/>	\$0.00
TOTAL			\$17,500.00

Description

Contracted specialized and professional training for each Fire and Arson Investigator. These are specialty training programs that are conducted by NAFI, IAAI, NFPA and other law enforcement agencies. This specialized training would conform to industry standards and adhere to changes and revisions made by NFPA 921 since 2011 and that meet the standard of NFPA 1033. Upon completion the investigator will obtain professional certification and/or professional licensing within specialty areas relating to Arson or Arson related crimes. With the specialized training the fire/arson investigator will be able to acquire the level of knowledge, identification, recognition, detection, evidence collection, legal

crimes. With the specialized training the fire/arson investigator will be able to acquire the level of knowledge, identification, recognition, detection, evidence collection, legal processes/procedures allowing the investigator to conduct fire incident scene and successfully prosecute criminal acts.

This training for investigative personnel will connect the gap of present level of knowledge and expertise with current industry standards.



Close ▾

Item

Other (Explain) ▾

✖ Remove item

Other description

Fire and Arson Investigator 80-Hour Course Equipment

Budget class

Equipment ▾

YEAR	QUANTITY	UNIT PRICE	TOTAL
1	1	\$3,000.00	\$3,000.00
2	0	\$0	\$0.00
TOTAL			\$3,000.00

Description

Fire and Arson Investigator 80-Hour Course Equipment will consist of TV monitors, 1080p or equivalent mini projector, laptop/pc utilized to conducting recently developed 80-Hour Fire and Arson Investigator Course to the current suppression personnel of the Nashville Fire Department. This training was developed with the purpose of providing Nashville Fire Department Suppression personnel the basic knowledge of fire investigations, identification of possible incendiary fires, processes, procedures of criminal cases, current T.C.A. codes and other laws surrounding arson, identifying possible sources of evidence, and preservation of evidence, in an attempt to increase the number of fire incidents that result

codes and other laws surrounding arson, identifying possible sources of evidence, and preservation of evidence, in an attempt to increase the number of fire incidents that result with a cause being determined and to increase the percentage of arson arrest and conviction rates.

This course has been submitted, accepted and approved the Tennessee Firefighting Personnel Standards and Education Commission.

Total requested for Arson-related Surveillance Equipment project: \$18,000.00

Remove project

Add item to Arson-related Surveillance Equipment

Please provide the following information about the project you want funded.

Project name

Arson Surveillance Equipment

Is this a national-level project, with a national impact?

- Yes
- No

Is this project a regional request? A regional request provides a direct regional and/or local benefit beyond your organization. You may apply for a regional request on behalf of your organization and any number of other participating eligible organizations within your region.

- Yes
- No

Who is the target audience for the planned project?

- Children under 14
- Adults over 65
- Firefighters
- People with disabilities (e.g., deaf/hard-of-hearing)
- College/university housing
- Low-income families/neighborhoods
- Geographic Area
- Other

What is the estimated size of the target audience?

701400

How was this target audience determined?

- Formal Assessment
- Informal Assessment
- Will Be Conducting Assessment
- None of the above

Please provide a brief synopsis of the proposed project and then identify the specific goals and objectives of your project.

Fire Investigation Surveillance Equipment included in this project will consist of multiple surveillance pole camera that will be connected to our network servers allowing 24-hour surveillance capabilities to the investigation unit allowing the gathering of critical information from a fire incident scene, suspect and provide the capability for the investigator to see clearly even in total darkness, giving a tactical advantages allowing the investigator to stay safe and operate effectively at night without deploying investigator(s) to conduct the surveillance and/or making the request for surveillance support from outside agencies and waiting for availability. This surveillance equipment will greatly minimize the opportunity for

surveillance capabilities to the investigation unit allowing the gathering of critical information from a fire incident scene, suspect and provide the capability for the investigator to see clearly even in total darkness, giving a tactical advantages allowing the investigator to stay safe and operate effectively at night without deploying investigator(s) to conduct the surveillance and/or making the request for surveillance support from outside agencies and waiting for availability. This surveillance equipment will greatly minimize the opportunity for surveillance activities to be detected and that the surveillance activities can occur during appropriate times and at multiple locations during the same time.

Will this project aim to aggressively investigate every fire?

- Yes
- No

Explain your jurisdiction's training requirements for fire investigation personnel

Each investigator is required to attend 40 hours of In-Service training each year that is provided by the NFD Training Academy staff. These training modules/topics are related to Life Safety Code, Haz-Mat and changes in departmental OPGs. Also, investigators are required to hold multiple certifications such as NAFI-CFEI, IAAI-CFI, TN Fire Inspector, CLAN-LAB Technician, Post Blast, P.O.S.T, etc. Based on budget restraints, it is the individual fire/arson investigators responsibility to ensure they have obtained all necessary CEUs required for all certifications and/or recertifications

Also, investigators are required to hold multiple certifications such as NAFI-CFEI, IAAI-CFI, TN Fire Inspector, CLAN-LAB Technician, Post Blast, P.O.S.T, etc. Based on budget restraints, it is the individual fire/arson investigators responsibility to ensure they have obtained all necessary CEUs required for all certifications and/or recertifications required by the department.

Please explain your experience and ability in developing and conducting (i.e., timely and satisfactory project completion) past fire prevention and safety projects. Additionally, please demonstrate the experience and expertise you have in managing the type of project you are proposing.

I have been employed with the Metropolitan Government of Nashville and Davidson County for 30 years and during that time I have assisted with the implementation and management of various projects and grants. I have worked closely and cooperatively with other departments such as the Purchasing Department to set up bids and the procurement of equipment, materials, and training. All projects have been conducted in a timely and carried out following Metropolitan Government and Federal guidelines. During this time, I have been responsible for fiscal, statistical and other related business services as well as intent to bids, purchase orders, corresponding financial reports, and other required documentation related

on various projects and grants. I have worked closely and cooperatively with other departments such as the Purchasing Department to set up bids and the procurement of equipment, materials, and training. All projects have been conducted in a timely and carried out following Metropolitan Government and Federal guidelines. During this time, I have been responsible for fiscal, statistical and other related business services as well as intent to bids, purchase orders, corresponding financial reports, and other required documentation related to various projects. I have managed various contracts to ensure compliance with Metropolitan Government purchasing standards.

Narrative

The narrative statements must provide all the information necessary for you to justify your needs and for FEMA to make an award decision. A panel of peer reviewers will evaluate the applications by using the narrative statements below to determine the worthiness of the request for an award. Please ensure that your narrative clearly addresses each of the following evaluation criteria elements to the best of your ability with detailed but concise information. You may either type your narrative statements in the spaces provided below or create the text in your word processing system and then copy it into the appropriate spaces provided below. Please note the narrative block does not allow for formatting. Do not type your narrative using only capital letters. Additionally, do not include tables, special fonts (i.e., quote marks, bullets, etc.), or graphs. Please review the Notice of Funding Opportunity for additional narrative details.

Commitment to Mitigation: Fire Department applicants that can demonstrate their commitment and proactive posture to reducing fire risk will receive higher consideration. Applicants must explain their code adoption and enforcement (to include Wildland Urban Interface and commercial/residential sprinkler code adoption and enforcement) and mitigation strategies (including whether or not the jurisdiction has a FEMA-approved mitigation strategy). Applicants can also demonstrate their commitment to reducing fire risk by applying to implement fire mitigation strategies (code adoption and enforcement) via this application.

Since 2013, one out of every three fires investigated by the investigations unit was an act of arson resulting millions of dollars in damages and property damage and at times loss of life. In 2020 the investigations unit saw a 44 percent increase of arson related fires the prior year. In 2021, the Metropolitan Government of Nashville and Davidson County will be adopting the 2018 NFPA Codes moving away from the current 2012 International Codes. As a result of this NFPA Code adoption by the Nashville Fire Department Fire Marshal's Office and the Arson Investigations Unit will utilize and conduct every and all fire plans review, inspection, and investigations to adhere to and enforce the updated code bringing Nashville back to industry standard. This will enable the Arson Investigations Unit to address and implement any applicable changes that have occurred since NFPA 921, 2011 Edition to NFPA 921, 2017 Edition. We feel that this will not only make safer our communities by identifying and reducing risks associated with fire-hazards and other life safety issues that will reduce the dollar amount associated with loss during a fire incident over time. Also, we feel a direct result will be the reduction with the percentage of fire fatalities and the number of total fire losses that occur to inspectable commercial, industrial, and residential occupancies. The Nashville Fire Department will continue further mitigation efforts by advocating for public policy that clearly

inspectable commercial, industrial, and residential occupancies. The Nashville Fire Department will continue further mitigation efforts by advocating for public policy that clearly communicates the inherent risk associated with structure fires effecting our communities and the public cost of financing public safety and emergency responses. This investigation surveillance equipment will allow the investigators to discover, identify, capture, report, and recover information and evidence from the fire incident scene where processes are followed that comply with the legal standards for investigations that produce data required for prosecution in a court of law to aggressively combat the act of arson for the citizens of Nashville and surrounding counties we support. The arson surveillance equipment will provide 24-hour capabilities allowing the gathering and capture of critical information from a fire incident scene, suspect and provide the capability for the investigator to see clearly even in total darkness, giving a tactical advantages allowing the investigator to stay safe and operate effectively at night without deploying investigator(s) to conduct the surveillance and/or making the request for surveillance support from outside agencies and waiting for the other agencies availability. This surveillance equipment will greatly minimize the opportunity for surveillance activities to be detected and that the surveillance activities can occur during appropriate times and at multiple locations during the same time.

Vulnerability Statement:

- The assessment of fire risk is essential in the development of an effective project goal, as well as meeting FEMA's goal to reduce risk by conducting a risk assessment as a basis for action. Vulnerability is a "weak link," demonstrating high-risk behavior, living conditions, or any type of high-risk situation. The Vulnerability Statement should include a description of the steps taken to determine the vulnerability and identify the target audience. The methodology for determination of vulnerability (i.e., how the vulnerability was found) should be discussed in-depth in the application's Narrative Statement.
- The specific vulnerability that will be addressed with the proposed project can be established through a formal or informal risk assessment. FEMA encourages the use of local statistics, rather than national statistics, when discussing the vulnerability.
- In a clear, to-the-point statement, the applicant should summarize the vulnerability the project will address, including who is at risk, what the risks are, where the risks are, and how the risks can be prevented, reduced, or mitigated.
- For the purpose of the FY 2020 FP&S NOFO, formal risk assessments consist of the use of software programs or recognized expert analysis that assess risk trends.
- Informal risk assessments could include an in-house review of available data (e.g., National Fire Incident Reporting System [NFIRS]) to determine fire loss, burn injuries or loss of life over a period of time, and the factors that are the cause and origin for each occurrence, including a lack of adoption and enforcement of certain codes.

In 2020, the Arson Investigations Unit of the Nashville Fire Department responded to 254 fires that required investigation. Investigators deemed 88 fires as arson. Investigators closed 21 of those cases by arrest and investigated 2 arson related homicide cases and closed both of those cases by arrest and responded to 6 calls for mutual aid to surrounding counties for assistance with fire scene investigations. Since 2013, one out of every three fires investigated are an act of arson resulting millions of dollars in damages and property damage and at times loss of life. Upon acquisition of the fire investigation surveillance equipment the Arson Investigations Unit will deployed all surveillance pole cameras in multiple locations simultaneously and remain in operation 24 hours a day and provide surveillance capabilities to the investigation unit allowing the gathering of critical information from a fire incident scene, suspect and provide the capability for the investigator to see clearly even in total darkness, giving a tactical advantages allowing the investigator to stay safe and operate effectively at night without deploying

investigator(s) to conduct the surveillance. Significantly reducing the risk of surveillance activities being detected and/or making the request for surveillance support from outside local, state and federal agencies and waiting for their availability. Due to the current budget constraints, the Nashville Fire Department is not able to purchase this type of technology and/or capabilities for the Arson Investigations Unit. The Arson Investigations Unit feels that utilizing the proposed arson surveillance equipment will significantly increase the capabilities of the unit by the deployment of the cameras within and around identified and/or targeted areas related to acts of arson.

Project Description: Applicants must describe in detail not only the project components but also how the proposed project addresses the identified capability gap, due to financial need and/or the vulnerabilities identified in the vulnerability statement. The following information should be included:

- **Project Components**
- **Review of any existing programs or models that have been successful.**
- **Detailed description of how the proposed project components fill the identified capability gap**
- **If working with Fire Service Partners/Organizations, identify each partner/organization and the role(s) they will fill in the successful completion of the proposed project.**

This project will significantly reduce the risk of surveillance activities being detected and increase effectiveness, enhance operational abilities allowing for a more extensive and thorough examination of fire incident scene, increasing the percentage of arson arrest and conviction rates, and to aggressively combat the act of arson for the citizens of Nashville. As identified and/or target areas are determined the deployment of the surveillance equipment will be utilized to conduct 24-hour surveillance operations within multiple locations simultaneously while capturing critical information from a fire incident scene and/or suspect and provide the capability for the investigator to see clearly even in total darkness, allowing a safe and effective operation. Thus, eliminating our dependency for surveillance equipment/support from outside local, state and federal agencies and missing the act of arson that would have been captured, waiting for the supporting agency availability.

for the supporting agency availability.

Currently the Arson Investigations Unit possesses 3 surveillance pole cameras and has proven to be a significant tool to utilize to combat the act of arson. During past deployments by the investigations unit these cameras captured footage of actual arson being committed. The video footage proved to be key evidence for critical information from the fire incident scene, suspect and provide the capability for the investigator to successfully arrest and prosecute multiple charges of arson.

We feel that with the requested surveillance equipment the Arson Investigations Unit will have the capability to identify additional areas, remain safe and operate effectively 24-hours a day resulting with an increase of arson cases being closed by arrest and increase the percentage of successful prosecution of arson related crimes.

Implementation Plan: Each project proposal should include details on the implementation plan which discusses the proposed project's goals and objectives. The following information should be included to support the implementation plan:

- **Goals and objectives**
- **Details regarding the methods and specific steps that will be used to achieve the goals and objectives**
- **Timelines outlining the chronological project steps (this is critical for determining the likelihood of the project's completion within the period of performance)**
- **Where applicable, examples of marketing efforts to promote the project, who will deliver the project (e.g., effective partnerships), and the manner in which materials or deliverables will be distributed**
- **Requests for props (i.e., tools used in educational or awareness demonstrations), including specific goals, measurable results, and details on the frequency for which the prop will be utilized as part of the implementation plan. Applicants should include information describing the efforts that will be used to reach the high-risk audience and/or the number of people reached through the proposed project (examples of props include safety trailers, puppets, or costumes)**
- **Where human subjects are involved, describe plans for submission to the Institutional Review Board (IRB) (for further guidance and requirements, see the Human Subjects Research section of the NOFO)**
- **NOTE: For applicants proposing a complex project that may require a 24-month Period of Performance, please include significant justification and details in the implementation plan that justify the applicant's need for a Period of Performance of more than 12 months.**

This project will achieve its goal to aggressively combat the act of arson for the citizens of Nashville and surrounding counties we support while increasing the percentage of arson arrest and conviction rates by acquiring state of the art surveillance pole cameras current with industry standards and reducing the dependence of outside local, state, and federal agencies for resources and/or surveillance support.

In order to meet the objectives, the Arson Investigations Unit will establish and implement the project in three phases.

First phase will require the Arson Investigation Unit to identify specific camera capabilities needed and work with the finance division of the Nashville Fire Department in setting up any required process for the purchase of the surveillance equipment.

Phase two will require the Arson Investigation Unit to identify possible target area and ensure the deployment of the cameras within that area.

The third phase will at the conclusion of the deployment. Assessment of the deployment will be conducted and evaluated by the investigation unit to identify and improve any issues that

Phase two will require the Arson investigation unit to identify possible target area and ensure the deployment of the cameras within that area.

The third phase will at the conclusion of the deployment. Assessment of the deployment will be conducted and evaluated by the investigation unit to identify and improve any issues that were encountered and/or techniques utilized for the deployment.

This project will return the unit to the most current practices, procedures related to fire investigations it will greatly enhance the safety of all the fire and arson investigators assigned to the investigation unit and community we serve or to any future mutual aid request from our office. Allowing the Arson Investigations Unit to aggressively combat the act of arson for the citizens of Nashville and surrounding counties we support.

Evaluation Plan: Projects should include a plan for evaluation of effectiveness and identify measurable goals. Applicants seeking to carry out awareness and educational projects, for example, should identify how they intend to determine that there has been an increase in knowledge about fire hazards, or measure a change in the safety behaviors of the audience. Applicants should demonstrate how they will measure risk at the outset of the project in comparison to how much the risk decreased after the project is finished. There are various ways to measure the knowledge gained about fire hazards, including the use of surveys, pre- and post-tests, or documented observations. Applicants are encouraged to attend training on evaluation methods, such as the National Fire Academy's "Demonstrating Your Fire Prevention Program's Worth."

The Arson Investigations Unit will conduct a formal evaluation of the fire surveillance equipment requested. This evaluation will ensure we are meeting grant criteria by establishing specific measures. Each measure will look at specific items and will gather specific information. After the conclusion of the first year the Arson Investigations Unit will conduct a study and determine cost savings and cost associated to improve on the annual results.

The following will be a preliminary outline of the specific measure that will be collected.

Number of deployments for each surveillance camera.

Number of arson related fires closed by arrest.

Successful prosecution of arson related cases.

Cost Benefit: Projects will be evaluated and scored by the Peer Review Panelists based on how well the applicant addresses the fire prevention needs of the department or organization in an economic and efficient manner. The applicant should show how it will maximize the level of funding that goes directly into the delivery of the project. The costs associated with the project also must be reasonable for the target audience that will be reached, and a description should be included of how the anticipated project benefit(s) (quantified if possible) outweighs the cost(s) of the requested item(s). The application should provide justification for all costs included in the project in order to assist the Technical Evaluation Panel with their review.

Currently 92 percent of the operating budget for the Nashville Fire Department is consumed by personnel salaries. The remaining 8 percent is taken for utilities, fuel, maintenance, etc. Such a strain is on the current budget that the department can't afford to replace a single light fleet vehicle valued at \$35,000. With the existing budget constraints and no foreseeable funds that will be available to the Arson Investigations Unit, we strive to identify any help to obtain and, maintain the investigative effectiveness and operational abilities to aggressively combat the act of arson for the Arson Investigations Unit and the citizens of Nashville.

The cost/benefit ratio of the proposed project is found by the following equation: Cost of proposed fire investigator equipment project is \$18,000 divided by the immediate response area population of 701,400, divided by the expected time for new development of industry standards of NFPA 921 and NFPA 1033 of 3 years. Therefore, the cost/benefit of this proposed grant is \$0.008 per resident.

combat the act of arson for the Arson investigations unit and the citizens of Nashville.

The cost/benefit ratio of the proposed project is found by the following equation: Cost of proposed fire investigator equipment project is \$18,000 divided by the immediate response area population of 701,400, divided by the expected time for new development of industry standards of NFPA 921 and NFPA 1033 of 3 years. Therefore, the cost/benefit of this proposed grant is \$0.008 per resident.

Furthermore, when the total population of our mutual aid areas where a Fire and Arson Investigator is utilized the cost benefit would be far less per person than that identified with only the immediate response population.

Sustainability: Is it your organization's intent to deliver this program after the grant performance period? If so, how will the overall activity be sustained and what are the long-term benefits? Examples of sustainable projects can be illustrated through the long-term benefits derived from the delivery of the project, the presence of non-federal partners likely to continue the effort, or the demonstrated long-term commitment of the applicant.

The proposed project will be sustained within the Nashville Fire Department Arson Investigations Unit for many years beyond the grant period. The Arson Investigations Unit will directly work the appropriate information technology staff and appropriate administrative staff of the Nashville Fire Department with the continuous evaluation of this project and will adjust any departmental policies and/or procedures necessary all current laws and processes are followed and to ensure the objectives and overall goal of this project are being achieved. The Arson Investigations Unit will perform routine maintenance on the surveillance cameras after the conclusion of every deployment to ensure the cameras operational integrity and functionality. Additionally, departmental information technology will address any issues that may occur with the function of these surveillance cameras. Allowing the Arson Investigations Unit to aggressively combat the act of arson for the citizens of Nashville and surrounding counties we support.

Additional Comments: If you have any additional comments about your project, please provide them here.

✓
Close ▾

Item
✗ Remove item

Other (Explain) ▾

Other description

Surveillance Pole Camera

Budget class

Equipment ▾

YEAR	QUANTITY	UNIT PRICE	TOTAL
1	3	\$6,000	\$18,000.00
2	0	\$0.00	\$0.00
TOTAL			\$18,000.00

Description

These surveillance pole cameras will be deployed in multiple locations simultaneously and remain in operation 24 hours a day a day and provide surveillance capabilities to the investigation unit allowing the gathering of critical information from a fire incident scene, suspect and provide the capability for the investigator to see clearly even in total darkness, giving a tactical advantages allowing the investigator to stay safe and operate effectively at night without deploying investigator(s) to conduct the surveillance and eliminating the dependency for surveillance support from outside local, state and federal agencies and waiting for their availability.

Grant request summary

The table or tables below summarize the number of items and total cost within each FP&S activity category you have requested funding for. This table or tables will update as you change the items within your grant request details.

Fire prevention and safety

Activity – Project	Number of items	Total cost
	7	\$48,200.00
	2	\$20,500.00
	1	\$18,000.00
Total	10	\$86,700.00

Is your proposed project limited to one or more of the [following activities](#) : Planning and development of policies or processes. Management, administrative, or personnel actions. Classroom-based training. Acquisition of mobile and portable equipment (not involving installation) on or in a building.

- Yes
 No

Please download the EHP Screening form available at <https://www.fema.gov/media-library/assets/documents/90195>. Once you have been awarded the grant and have accepted the award, please complete and send your screening form and attachments to GPDFHPinfo@fema.dhs.gov.

Budget summary

Budget summary

Object class categories	Year 1	Year 2	Total
Personnel	\$0.00	\$0.00	\$0.00
Fringe benefits	\$0.00	\$0.00	\$0.00
Travel	\$0.00	\$0.00	\$0.00
Equipment	\$69,200.00	\$0.00	\$69,200.00
Supplies	\$0.00	\$0.00	\$0.00
Contractual	\$17,500.00	\$0.00	\$17,500.00
Construction	\$0.00	\$0.00	\$0.00
Other	\$0.00	\$0.00	\$0.00
Total direct charges	\$86,700.00	\$0.00	\$86,700.00
Indirect charges	\$0.00	\$0.00	\$0.00
TOTAL	\$86,700.00	\$0.00	\$86,700.00

Non-federal resources

Applicant	\$4,128.57
State	\$0
Other sources	\$0
Remarks	Nashville Fire Department's indirect cost rate is 29.54%.

Total Federal and Non-federal resources

Federal resources	\$82,571.43	\$0.00	\$82,571.43
Non-federal resources	\$4,128.57	\$0.00	\$4,128.57
TOTAL	\$86,700.00	\$0.00	\$86,700.00

Program income	\$0
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Contact information

Did any individual or organization assist with the development, preparation, or review of the application to include drafting or writing the narrative and budget, whether that person, entity, or agent is compensated or not and whether the assistance took place prior to submitting the application?

- Yes
- No

Secondary point of contact

Please provide a secondary point of contact for this grant.

The Authorized Organization Representative (AOR) who submits the application will be identified as the primary point of contact for the grant. Please provide one secondary point of contact for this grant below. The secondary contact can be members of the fire department or organizations applying for the grant that will see the grant through completion, are familiar with the grant application, and have the authority to make decisions on and to act upon this grant application. The secondary point of contact can also be an individual who assisted with the development, preparation, or review of the application.

<p>MRS Leigh Anne Burtchaeil Executive Administrator</p> <p>leighanne.burtchaeil@nashville.gov</p>	<p>Primary phone 6158626364 Work</p> <p>Fax</p>	<p>Additional phones 6158625424 Work</p>	<p>Edit</p>
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Assurances and certifications

SF-LLL: Disclosure of Lobbying Activities

OMB number: 4040-0013, Expiration date: 02/28/2022 [View burden statement](#)

Complete only if the applicant is required to do so by 44 C.F.R. part 18. Generally disclosure is required when applying for a grant of more than \$100,000 and if any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions. Further, the recipient shall file a disclosure form at the end of each calendar quarter in which there occurs any event described in 44 C.F.R. Â§ 18.110(c) that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed by the applicant.

- The applicant is not currently required to submit the SF-LLL

Review application

[Submit for signature](#)

Please select any of the following links to view or edit a particular section of your application. You may submit your application for signature once your application is complete and without any errors.

	<p>This application is ready to submit for signature Submit this application for final signature to complete the application submission process.</p>
	<p>SAM.gov profile View/edit</p>
	<p>Applicant information View/edit</p>
	<p>Applicant characteristics View/edit</p>
	<p>Operating budget View/edit</p>
	<p>Community description View/edit</p>
	<p>Grant request details View/edit</p>
	<p>Grant request summary View/edit</p>
	<p>Budget summary View/edit</p>
	<p>Assurances and certifications View/edit</p>
	<p>Contact information View/edit</p>

APPLICATION FOR Fire Prevention and Safety Grant 21-22

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY



Director-Chief
Fire Department

February 16, 2021

Date