Describe your financial need to include descriptions of the following:

- Income vs. expense breakdown of the current annual budget
- Budget shortfalls and the inability to address financial needs without federal assistance
- Actions taken to obtain funding elsewhere (i.e. state assistance programs or other grant programs)
- How your critical functions are affected without this funding

The FY21 operating budget for the Town of Ayer totals \$30,202,940 with 44% appropriated for the school system and the remaining 56% divided across all other governmental units: 12% for General Government; 18% for Public Safety; 12% for Employee Benefits; 6% for Public Works; 4% for Debt Service; and 4% for Human Services.

Slightly more than one-third of the Public Safety budget (\$1,987,926) is allocated for the Fire Department, funded 75% from the General Fund and 25% from EMS billings. Personnel costs require 94% (\$1,863,679) of the appropriation, leaving 6% (\$124,247) to fund all other needs including fire-fighting supplies and gear replacement, EMS equipment and medications, OSHA-mandates, building and apparatus maintenance, plus office supplies and equipment. Not enough cuts can be made in the department's operating budget to fund additional personnel.

Like many other communities, Ayer faces limited revenue growth, caused in part by caps on annual tax increases, while unregulated expenses and personnel costs outpace tax growth. The Town works strategically to maintain a high level of community services while ensuring that the tax rate remains affordable to both residential and commercial payers. This is increasingly challenging because of factors affecting state aid and local revenue available to municipalities. Since 1980 Massachusetts has capped property tax increases to 2.5% annually. Additionally, the Education Reform Act of 1993 reduced state funding to public schools, resulting in greater dependence on local taxes. Local revenue was again reduced in 1995 when Ayer's immediate neighbor, the US Army's Fort Devens closed. The Base provided many fiscal benefits including funding for students in public schools. In recent years, Ayer's tax base has produced limited annual growth. To stimulate local business and income, Ayer has turned to Tax Increment Financing (TIF). The growth produces new tax revenue, but less than needed for increased demands for Town services and the resulting cost increases for personnel and supplies across all departments.

To meet the increasing demand for emergency responses, mandated inspection, and training, the town increased our total career staffing by 3 in 1998, allowing for 3 groups of 3 personnel, working 56 hours a week. In 2004 the department transitioned to a 42-hour work week, resulting in the addition of 3 more personnel to maintain the same level of daily staffing. In 2014 a fulltime fire prevention officer was added, followed by the addition of a Deputy Chief in 2020,

both working a weekday administrative schedule. Since the last increase in per-shift staffing in 1998, call volume has increased by 53%. As the volume of calls and demand for services continue to escalate it is critical to increase staffing to 4 personnel per shift to respond and perform as expected, keeping citizens safe and maintaining a safe environment for our members. The Town administration, while recognizing that this staffing increase is badly needed, cannot identify a path to fund new positions without a tax increase which would require a public vote to override the limit. In the aftermath of the coronavirus, the likelihood of passing an override – which would involve a time-consuming campaign --is diminished.

Massachusetts does not have any funding assistance available to help cities or towns staff fire departments to an adequate, safe level. This grant represents our only near-term opportunity to add the needed firefighters. This is the second consecutive time we have applied. Without help, Ayer citizens will lack proper protection, unless and until they vote to override the tax cap, a risky approach that, even if successful, can happen only in the long term, not now when it is urgent.

Please provide an explanation for other funding sources in the space provided below.

The Town of Ayer's grant application for the COVID19 Supplemental Round 2 (AFG-S2) has been approved for \$3,353.33. The Town has also received reimbursement from the Coronavirus Aid, Relief, and Economic Security Act of 2020.

Please describe your organization and/or community that you serve

The Town of Ayer is a small suburban community of approximately 8,100 it is located in north central Massachusetts, approximately 30 miles northwest of Boston and near the New Hampshire border. Ayer is just minutes from Interstate 495 and State Route 2. Covering 9.5 square miles, Ayer is unique from its neighbors in that 40% of our land area is used for commercial and industrial purposes and only 4% is used for open space and agriculture. Ayer's neighbors are bedroom communities with significantly more open space, agricultural and residential usage. Due to the high industrial base within the Town of Ayer, the workforce population nearly equals the residential population, many businesses operate 24/7 with multiple shifts.

The Town of Ayer, although small in land area at 10 square miles is diverse in its make up with 40% commercial, 56% residential, and only 4% in open land area. Ayer is similar to a small city with many critical infrastructures protected by the Ayer Fire Department. Ayer's economy has grown around the railroad, which is considered critical infrastructure. Combined with access to the interstate highway system it has allowed for the development of a high percentage of industrial and commercial property. These rail features are significant to the current economy of Ayer. This easy access to the transportation system has increased the diversity and complexity of the situations that the Department is tasked with responding to.

The Ayer Fire Department is a combination department with 15 fulltime members including a fulltime chief and is supplemented by a 27 member on-call department. The department's primary responsibilities are fire suppression, emergency medical response, hazard materials response, technical rescue, and fire prevention for the Town of Ayer. The fire department is a member of two regional mutual aid districts which provide aid and support to all surrounding communities. As part of these mutual aid groups, the department has been involved with numerous task force responses within the Commonwealth of Massachusetts. The Ayer Fire Department ambulance is the regional Advanced Life-Support Service (ALS) for Ayer, Shirley, and Groton. The Fire Department also provides back-up ALS and BLS for the towns of Devens, Harvard, Littleton, Westford, Lunenburg, Lancaster, Pepperell, and Townsend. To facilitate this level of service the Ayer Fire Department operates two transport ambulances and one non-transport ambulance. The Department is also a participating member of the District 8 Regional Technical Rescue Team and the District 6 Fire Investigation Unit.

Please provide details on the department's existing staffing model to include the number of shifts, number of positions per shift, chief level officer staffing per shift (i.e., Battalion Chief, District Chief, etc.), and contracted shift hours per week/pay period. If the contracted shift hours included FLSA overtime or Kelly Days, please be sure to include details. 3,000

The department currently employs 15 fulltime employees and the department's rank structure includes the Chief, Deputy Chief, four Captains with one per group, five Lieutenants with one per group and one assigned to Fire Prevention, along with four firefighters with one per group. The minimum manning for a shift is three personnel not including the Chief, Deputy Chief, or the Fire Prevention Lieutenant. To maintain this minimum staffing, overtime is paid to fill any vacancies on a shift, hour for hour.

Three employees work an administrative schedule of forty hours a week of daytime shifts. The Chief of the department and Deputy Chief work a Monday through Friday schedule of day shifts, while the Fire Prevention Lieutenant works forty hours over four shifts of ten hours Monday through Thursday. The Chief, Deputy Chief, and the Fire Prevention Lieutenant have cars and respond to incidents when available and not occupied with other administrative duties.

The remaining 12 fulltime employees work an average work-week of 42 hours over a four-week schedule. They work 24 hours on shift and 72 hours off shift and are divided in to four groups of three personnel per group to cover this schedule. A normal shift is comprised of one Captain, One Lieutenant, and one Firefighter. The shift personnel are assigned to cross staff the first due engine and ALS ambulance for the town. The on-shift personnel can be augmented by the Fire Prevention Lieutenant when available, or by a Per Diem firefighter working an eight-hour day shift on Friday, Saturday, and Sunday. While the shift make-up would initially appear heavy on an officer-to-firefighter ratio, this system accommodates the use of on-call firefighters that may respond to any call or incident to ensure that an acceptable span of control is maintained.

The fulltime staff is augmented with 27 on-call personnel. The call department includes one Captain, three Lieutenants, and 23 Firefighters. The call department is used to support any emergency operations conducted by the department. A mix of call personnel and off-duty fulltime personnel will staff additional pieces of equipment as needed beyond the initial engine and/or ambulance.

Please provide details on how the part-time firefighters are used within your department to include the number of part-time firefighters, the number of full-time, NFPA compliant positions these parttime firefighters occupy, if applicable, and how they are scheduled to meet your staffing needs. 3,000

The department utilizes part-time help on a limited basis covering eight hours during the day on Friday, Saturday, Sunday. The positions were originally created (and continue to be used) to allow call department members an opportunity to gain experience and operational knowledge of the department's procedures. These per-diem shifts are in addition to normally scheduled fulltime personnel and do not replace staff out on paid leave; those vacancies are filled one-for-one with overtime. Currently the department has 27 on-call members, and of that 12 members work per-diem shifts. Each works an average of one per-diem shift per month. To be eligible to work a per-diem shift, call members must meet the minimum training and certification standards that the fulltime staff are required to meet.

Please provide a brief description on how the positions will be sustained.

The Town manager, Fire Chief, and the Union have been working collectively to prepare this grant application. A plan has been outlined to bring this process through a period of public education for both elected officials and town residents. The process is intended to build support for approving funding during the grant period and to sustain these new positions long-term with local funding. This grant will provide the Town with an opportunity to increase the staffing on our first due engine to four personnel immediately, while allowing the associated cost to be stepped in over a period of years to potentially avoid the need for a tax override.

Describe the department's step-by-step hiring process (application period, written test, physical, approval) and the timeline for each step.

The department has historically hired fulltime employees from the current call department when enough qualified applicants are available. For this process, an internal posting is made for a seven-day period and qualified applicants are required to submit a letter of interest, resume, and applicable certifications for both fire and EMS education. Applicants are required to be a certified Massachusetts Paramedic, hold a valid driver's license, current CPR certification, and preferably hold Fire Fighter I/II Pro Board certification. After the application period the candidates are reviewed by a committee and a selection of qualified candidates are interviewed. The interview committee's composition is determined by the Chief and may include officers of the department, Human Resources, or others as needed. The interview committee rates candidates are ranked in order of performance, references are checked, and a candidate's ability to be credentialed with our medical director is verified. The top candidate is conditionally offered employment pending a physical and CORI check. The process is generally completed within thirty days of the posting, with the physical and CORI taking additional time to schedule and complete based on availability.

In the event that a position cannot be filled internally, the same process is used, substituting the internal posting of seven days with an outside posting of 14 days. The remainder of the process would follow the steps and timetable described previously.

How many recruits can be trained in one academy class?

36

How long after award will the department be able to start a recruit class? 1,000

If we are able to hire internal candidates from the call department, these hires have typically already completed the academy program and require only a short orientation locally to begin work. With previous hires, this orientation has taken about one week to complete. If the candidate needs to be sent for training, this would be completed through the Massachusetts Fire Fighting Academy. Enrollment for this program can take anywhere from one month to several months depending upon available space.

How often are your recruit classes held? 1,000

Recruit classes at the Massachusetts Fire Fighting Academy begin about every 5 weeks throughout the year. The program is ten weeks long and is divided into two 5 week sessions. The academy currently has a backlog of students, but a small number of openings are usually available if the student's availability to begin the program remains flexible. However, as stated earlier, it is our expectation to hire applicants who have completed the academy program requiring us to have only a short local orientation.

Narrative statements

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 perform the second phase of the applications' evaluations 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. Provide only the information being requested for each element; if you provided information pertaining to the narrative elements elsewhere in the application you must still include it below. Failure to provide the information being requested may result in a lower score or the application not being funded.

Project descriptions

Why does the department need the positions requested in this application?

The Ayer Fire Department's staffing has been adequate to support the town since 1998 when the last increase in per shift staffing occurred. Since that time, the Department has seen a dramatic increase in call volume along with a broadening scope of responsibilities. In 1998, the department responded to 1,444 calls and completed approximately 450 inspections. In 2020 the department responded to 2,215 calls for service and approximately 650 inspections. This represents an increase of approximately 53.5% in the total call volume of the department. Additionally, about 6% of the department's annual call volume requires a simultaneous response to multiple incidents. This required the dispatch of an under staffed unit or mutual aid to approximately 129 calls for service in 2020.

The increased call volume has put a strain on the current staffing model that uses off-duty or oncall members to act as additional responders to fulfill the staffing requirements of the department beyond the initial ambulance or engine response. This strain been increased by a reduced level of available on-call personnel. The on-call membership has diminished over the past 20 years. Ayer is not unique in dealing with reduced availability of on-call personnel due to increased training requirements, work arrangements, and personal commitments. Today many residents no longer work in the town where they live, and of those who do, few employers want to accommodate responses during work hours. Other time requirements for activities involving family, school, and the community are also taking up more available hours, further limiting time that call members could commit to training and or emergency responses.

This is further compounded by the fact that fewer members of the full-time staff are living in the town as they once did. This is occurring for various reasons including housing costs and the limited availability of affordable rentals in the area.

When assessing these factors, the most direct solution is an addition of one full-time member per group. This is the best option as it will increase the staffing of the primary engine to four personnel. This will give the department the most efficient initial response while positioning the department to reach the staffing levels of NFPA 1720 a majority of the time.

How will the positions requested in this application be used within the department? (e.g., 4th on engine, open a new station, eliminate browned out stations, reduce overtime)?

If the department receives this grant, it will add one member to each of the four working groups. This would increase the staffing to 4 members per group and would be assigned to the primary engine for the Town and cross staff the primary ambulance. The four personnel would be available to respond on the primary engine when all personnel are in the building. This staffing model would also ensure that a two-person engine company can remain available and able to respond to incidents without delay when the ambulance is out. The majority of our ambulance transports are to the community hospital located in Ayer. This will allow for those members on the ambulance to rejoin the Engine at the scene as soon as they are returned to service. During

periods of extended transport time due to hospital destination, the engine company could be returned to a full complement of four personnel using on-call or recalled off-duty personnel. The four-person shift would also allow the staffing at the Paramedic level of both of the department's ambulances during times of simultaneous calls.

What specific services will the requested positions provide to the fire department and community? 2,500 l'm at 1,536

Safety is the priority, first and foremost, under the axiom of strength in numbers. The Dallas Study and NIST reporting all prove the increase of staffing is monumental to health and safety. A 2010 NIST report stated that a four-person crew completed the assigned tasks 30% faster than a two-person crew and 25% faster than a three-person crew. The four-person crews operating... completed the same number of tasks on the fire ground, on average, seven minutes faster than the two-person crews. Similar comparisons can be said of going from a two-person crew to a threeperson crew. Within our organization it is not uncommon for the shift OIC to have to operate as a line member, and be unable to appropriately command the incident and interior crews. The addition of the fourth member on the engine would allow the OIC to retain better situational awareness of the entire incident and monitor the safety of crews operating within an IDLH environment. Having that extra person immediately available on the fire ground means less double dipping of responsibilities, thus allowing crews a better situational awareness. Beyond the immediate results, long-term benefits include reducing over-exertion injuries and associated costs, and increased coverage and decreased response times when an ambulance is being crossstaffed. Having the primary Engine staffed with four personnel will give the department the most efficient initial response while positioning the department to reach the staffing levels of NFPA 1720 a majority of the time.

Describe how funds awarded through this grant would enhance the department's ability to protect critical infrastructure within the primary response area. 2,500 I'm at 2,264

With the current staffing arrangement of cross-manning of the engine and the ambulance, there is a significant portion of time that the engine is in a low-staff level or browned-out. As highlighted earlier in this application, the department responds to about 6% of the annual call volume simultaneously. The remaining one member must await the arrival of call-back or on-call members before being able to operate effectively and safely. With the addition of a fourth member per group, the staffing configuration will be at a level where the engine is able to remain in-service, staffed with the ability to be augmented on scene by the ambulance crew, or by oncall or off-duty personnel. This will result in a more effective fire ground responses by having the first due engine staffed and on-scene within the normally expected response times versus requiring mutual aid responses. As there is a significant life hazard risk with the occupancies in the town and high potential loss of property and revenue, the ability to respond with a fully staffed engine will reduce the loss that can occur during an event. The increase in the ability of an engine company to act efficiently an effectively will be the largest enhancement in the protection of critical infrastructure. The added benefit that additional shift staffing will bring to the community was impressed on the Town of Ayer in 2018 from a response to a reported explosion and fire at a commercial structure in town. The Primary engine should have been staffed with three personnel for that response, but luckily was able to respond with four due to a per diem firefighter that had not left the building after their shift had ended. The response of four personnel allowed the engine to arrive on scene establish the their own water supply, stretch the first line into the fire, and to locate and remove a victim to waiting EMS in about 11 minutes of the engines response. The results of that event have been a driving force for the department to continue to work towards permanently adding a fourth firefighter per shift. This event also highlighted to the town's management, citizens, and businesses the benefits that the additional staffing will bring to our critical infrastructure and to the Town as a whole.

Impact on daily operations

Explain how the community and the current firefighters employed by the department are at risk without the positions requested in this application.

Currently the members of the department face decisions that need to be made based on the reality of limited staffing. The current shift strength of three personnel is assigned to cross-staff both the primary engine and ambulance. Last year the department responded to over 1,500 medicals that resulted in engine staffing levels being reduced from three to potentially one firefighter for a significant period of time throughout the year. At the firefighter level, to get a task done requires extreme extra effort for a three-person task to be completed by two or a two-person task that must be completed by one. Firefighters get the job done even if they must over-exert and risk injury. We owe it to our people to prevent this from occurring. Even if calls are responded to during periods of full staffing, a three-person engine company is much less efficient than a four-person company. The addition of the fourth person to the assigned crew will allow us to operate at an optimal staffing level, or as close that that as possible, the majority of the time.

In addition to the benefits outline above the department will also see a benefit from having two personnel to respond to a second emergency call while the primary ambulance is out. Currently the department refuses an unknown amount of mutual aid responses for a transport or ALS intercept ambulance because of inadequate staffing. This metric has not been tracked as of yet so a factual number is impossible to determine or estimate.

Beyond the possibility of responding to mutual aid requests is the response to multiple calls for service at the same time. Over the past few years the department has averaged 130 responses annually that occur while at least one other call for service is happening. The addition of one more firefighter per group will provide an increased level of flexibility to respond adequately and safely to any call for service.

How will that risk be reduced if awarded?

For the community it will provide better coverage and greater chance of getting on scene in our desired response times. The crew will also be able to complete the initial fire-ground operations more rapidly and effectively thus decreasing the risk of injury or harm to personnel and members of the community. It will also provide more flexibility during calls requiring crews to be split due to the need for multiple ambulances or an engine and an ambulance, for example. For department members, the extra set of hands per shift will provide a mechanism in which the level of over-exertion can be reduced. In addition, the largest risk reduction from the added staffing will be achieved with the ability of the department to reach the assembly requirements of NFPA 1720.

The need for risk reduction was highlighted in June of 2019, when the primary engine responded to what would end up as a Four Alarm fire. The response is a clear example of the risk that we are attempting to reduce with the additional staffing, as the engine responded to that incident with only one firefighter. The shift had been staffed with the department's minimum of three personnel, with two personnel being called of on a medical transporting to a distant hospital. The medical resulted in the engine responding with less that sufficient help and has reinforced the need for the department to address staffing levels and call back procedures.

Cost benefit

Describe the benefits (e.g., quantifying the anticipated savings and/or efficiencies) the department and community will realize if awarded the positions requested in this application.

The addition of a fourth member to each group will have the biggest impact on the efficiency of the crew's ability to work as a single engine company on the fire ground. The additional personnel will allow for a faster tempo of task completion than what is able to be done with the current staffing level. Having that one more person on the fire ground also means less double dipping of responsibilities, allowing crews to be more aware and focused on their assigned tasks and duties. Beyond the immediate results of efficiency, long-term benefits are reduced chances of over-exertion of a member with the costs associated with that type of possible injury and lost work hours and the need for overtime to fill their vacancy.

The community will realize the effects of this added manpower due to increased flexibility to respond in a multitude of arrangements based on the type or number of emergency calls. In addition to the enhancement of a four-person engine company for firefighting, benefits to the community will be seen across all our response models through, for example, the ability to staff both ambulances when multiple calls happen at the same time or to allow for the engine to respond with two personnel along with an ambulance to auto accidents.

There is no simple way to display or figure out a direct cost savings that is attributable to the addition of this personnel. While we may never be able know if this was unnecessary, it will be readily apparent that it should have been done if it is ever needed and we do not have it. Until a

time when our engine is staffed with four personnel 100% of the time the level of staffing of that apparatus will always be scrutinized. If there was ever an injury or worse to a member of the engine company or to the public at the current staffing level of one, two, or three personnel on the apparatus, we will always have to question the cost when dealing with that injury or loss of life and judging whether or not it could have been prevented. The same logic is applicable in terms of property conservation in evaluating whether property could have been saved or a loss prevented with increased personnel levels.

Additional information

If you have any additional information you would like to include about the department and/or this application in general, please provide below. *Optional*

Often times grant money is used for financially strapped communities who will not increase the tax levy to pay for their services. Communities who increase their tax levies to maintain services are often overlooked because they do what needs to be done to maintain, which is what Ayer has done. The town is considered desirable to live in and has a long history of maintaining service levels once they are established or increased. Ayer follows a conservative budgeting model to remain fiscally sound and provide the highest service level possible. An aging resident population, a median household income that is below the area average, and limited state aid also influences this model.

In Addition to budgeting issues, the current COVID-19 pandemic has had several effects on the department. The uncertainty of the scope of future state aid payments for education and other services makes it unlikely that the town would be willing or able to shoulder the financial burden associated with a staffing increase without the assistance of this grant. The need for additional personnel has perhaps never been so great, as the response from call members has decreased during the pandemic, in no small part due to concerns over health, as well as the potential financial impact if a call member had to be quarantined and miss work at their regular job for an extended period due to exposure to COVID-19 on an emergency call.

Without this grant, the hiring of new members will continue to be pushed forward and the strain that the Fire Department faces each day will only increase putting at risk the lives of citizens and security of the property we are charged to protect. This grant would provide the Town with a jump-start to implement a staffing increase immediately, while allowing the budget to grow organically over several years, avoiding the need for an override.