



Town of Lisbon

Town Council
Fern Larochele
Don Fellows
Mark Lunt
Raymond Robishaw
Harry Moore Jr.
Jo-Jean Keller
Christine Cain

MEMORANDUM

To: Lisbon Town Council
From: Glenn Michalowski, Town Manager
Date: September 28, 2023
Subject: Public Safety Study - Final Draft and Key Updates

Dear Council Members,

We have recently received the final draft of the Public Safety Study. Before delving into its details, I'd like to provide a concise overview of the study's background, timeline, and highlight some key updates, emphasizing that our community's environment has evolved since the study was conducted, and the report now reflects the present status.

1. Background and Timeline:

- **March 1st, 2022:** The Council outlined objectives for the public safety building, ranging from creating a Public Safety Committee to determining the building's design by 2026.
- **May 3rd, 2022:** The council approved Option #2 for a Public Safety Building study by Port City at a cost of \$38,410.00, focusing on the town's fire and police department's infrastructure needs.
- **July 12th, 2022:** Updates on the feasibility analysis for a Public Safety building by Port City were discussed.
- **January 3rd, 2023:** Further discussions on the progress of Port City's assessment for the Public Safety building took place.
- **July 11th, 2023:** Port City presented their recommendations, supporting the establishment of a Public Safety Building.

2. Key Updates Reflecting the Present Environment:

- **Page 3:** The report's current mill rate is updated to \$21.10.
- **Page 4:** The report's count of Lisbon's sworn officers is now 17, with one delegated to MDEA and funded by the state of Maine.
- **Pages 34-35:** In 2023, the Town of Lisbon awarded the EMS contract to Lisbon Emergency. Additionally, negotiations have commenced on regionalizing the service, with considerations of dissolving Lisbon EMS to establish a new entity.
- **Page 35:** The town has bolstered its firefighter staffing. We currently employ four full-time firefighters, with two consistently on active duty every day of the week, supplemented by per diem staff.

3. Study Insights:

From the glimpses of the report, it is evident that Port City Architecture undertook a comprehensive assessment, considering the town's current operational practices and future goals. The emphasis on a combined public safety building reflects a modern approach to streamline services and enhance operational efficiency.



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4. Recommendation:

The recommendation from PortCity is to Combine the Police and Fire into one Public Safety building that is centrally located in the community. Considering the dynamic nature of our community and the positive strides made since the study's initiation, it's crucial to interpret the findings in the context of the current environment. The final report is enclosed for review.



Town of Lisbon, Maine

Public Safety Needs Study

September 27, 2023



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Executive Summary

Purpose of the Study

Port City Architecture (PCA) was hired by the Town of Lisbon, Maine, in 2022 to evaluate their police and fire operations, their existing facilities, and their current and future facility space requirements. The purpose of this study is to recommend the best and most efficient operational practices for the police and fire departments and to provide them with a facility plan well suited to achieve these operational goals.

Team

Port City Architecture, Public Safety Design specialist
Neil Courtney, Municipal Fire Protection Consultant

Facility Assessment

Our first task was to interview the police and fire departments and determine the physical space requirements necessary to meet the needs of the Town for the next 50 years. We based the space program on Lisbon's unique current and future needs and compared them to benchmarks from other similar sized towns employing modern police and firefighting practices.

We then examined the two existing fire stations and the police station space in town to determine their existing physical conditions and their ability to accommodate the town's future space requirements. The fire stations were extremely inadequate in both their physical condition and functional layout to accommodate modern firefighting and EMR needs. The most obvious problem with both sites is that together they are all too small to accommodate the required space program. The Police (including dispatch) are located in a wing of the town hall. Their space is also extremely deficient. There is no room to expand into the building or onto the site. The layout of the station is very awkward and does not allow for efficient police operations. Any significant remodel of the police area would require that the entire building be upgraded to essential facility structural requirements of the IBC which could be costly.

Facility Recommendations

Based on the conclusions of Neil's study (see appendix A) we are recommending that the two existing fire stations be sold and that a new fire station be constructed on land purchased by the town in one of the two areas recommended by the study. A single centrally located station will improve operations for the department. We also recommend that the town include the police station in the new facility to take advantage of areas that could be shared in common. This would also free up much-needed space for an expansion of town hall.

Cost

The estimated turn-key cost of constructing the new 29,570 sf public safety building at an estimated cost of \$525/sf is \$15,500,000. For approximately the next year there is an opportunity of acquiring \$1 million to \$2 million of federal funds to offset this cost.

Community Profile and Public Safety Services

The town of Lisbon, Maine covers an area of approximately 24 square miles and is bordered by the communities of Durham, Lewiston, Sabattus, Bowdoin and Topsham.

The 2020 U.S. Census population for Lisbon was 9,711 residents. This represents a 7.8% increase in population since the 2010 Census, when the number of residents at that time was 9,009. Officials postulate that the population in Lisbon could grow by 15% to 11,168 by 2030, and 30% to 14,518 residents by 2040. The current population density stands at approximately 426 people per square mile. Lisbon is the 23rd largest community in Maine for population and the third largest in Androscoggin County.

The median age as of 2010 was 39.4, while in 2000 the median age was 36 years. Lisbon's current Comprehensive Plan was adopted in 2019.

In 2021, Lisbon placed #6 in the category of the largest increase in home sales in Maine, up from the previous year's list at #10. Seeing a growth of 14.5% in the number of homes sold in 2021, there was also an increase in the median sale price, rising from \$213,500 to \$240,00, yielding a 12.4% increase.

The Maine Department of Revenue Services has Lisbon's assessed value for 2023 set at \$807,500,000. This figure represents both personnel property and real estate values. The mil rate for 2022-2023 is \$23.10.

The town of Lisbon operates on a fiscal year budget platform with a seven-member town council/town manager form of government. The town has adopted a detailed Capital Improvement Plan (CIP) that encompasses all municipal departments. The CIP is a five-year plan, however, it also includes an additional five-year forecast. The current Plan is for 2023-2027.

The town's location between Topsham and Lewiston puts Lisbon in a prime spot for potential commercial and residential growth. The town hosts numerous civic and cultural events that draw people in throughout the year. The town offers a variety of opportunities for the outdoor enthusiast, including Lisbon's signature 337-acre Beaver Park, a network of multi-use trails, and the Androscoggin River.

In 2021 it was reported that Springworks, an organic lettuce producer, is expanding its facility with an estimated 500,000 square feet of additional production space over the next six years that could bring as many as 300 new jobs to the region. The town is putting an emphasis on promoting itself as a business-friendly community. The recent announcement that the chef of a local restaurant was nominated as a semi-finalist for the James Beard award could also bring new attention to Lisbon.

Lisbon's public safety services consist of a full-time police department with 16 sworn officers, a full-time dispatch center, an on-call fire department and contract ambulance service provided by Lisbon Emergency, Incorporated. The Lisbon Fire Department is licensed by the State of Maine as an emergency medical service provider. The licensure allows the department to function as a non-transporting Emergency Medical Responder (EMR) service, as well as the ability to operate at the Emergency Medical Technician (EMT) level.

Introduction and Study Approach

Port City Architecture (PCA) was hired by the Town of Lisbon, Maine, in 2022 to evaluate their police and fire operations, their existing facilities, and their current and future facility space requirements. We evaluated the current facilities physical conditions, code compliance, site locations, and operational suitability. The purpose of this study is to recommend the best and most efficient operational practices for the police and fire departments and to provide them with a facility plan well suited to achieve these operational goals.

To achieve these objectives, Port City and our Municipal Fire Consultant followed the following process. We began with Neil researching and interviewing the Fire Department. His objective was to determine the most efficient mix of personnel and apparatus. In addition, he reviewed the department's geographical history of call locations to determine the best locations to site a future station for the fastest response times to the majority of future calls.

While Neil was assessing the fire department's operations, Port City interviewed the fire and police departments to determine how much space each one needed to efficiently operate using modern police and fire protocols. The spaces and square footage requested by the departments was compared to other modern departments in similar sized towns and was modified if necessary to respond to the projected growth needs of the departments for the next fifty to seventy-five years.

Once the space needs matrix was reviewed and approved by the town and aligned with the personnel and apparatus needs from Neil's investigation, we proceeded to design a schematic floor plan and site plan indicating how the facility would be efficiently arranged.

At this time the town is in search of a suitable parcel in one of the two geographic areas recommended by Neil's study. Once a parcel is located and secured, we will modify the floor plans as necessary to accommodate the site and provide a rendered site plan and 3D model of the facility. We will also fine tune the cost estimate. With this information in hand the town can determine the best funding plan for the facility. This plan may include municipal bonds, tiffs, and grants. Currently there are Federal grants available for police and fire stations that may offset one to two million dollars or more in costs. We expect the grants to be available for one to two more years.

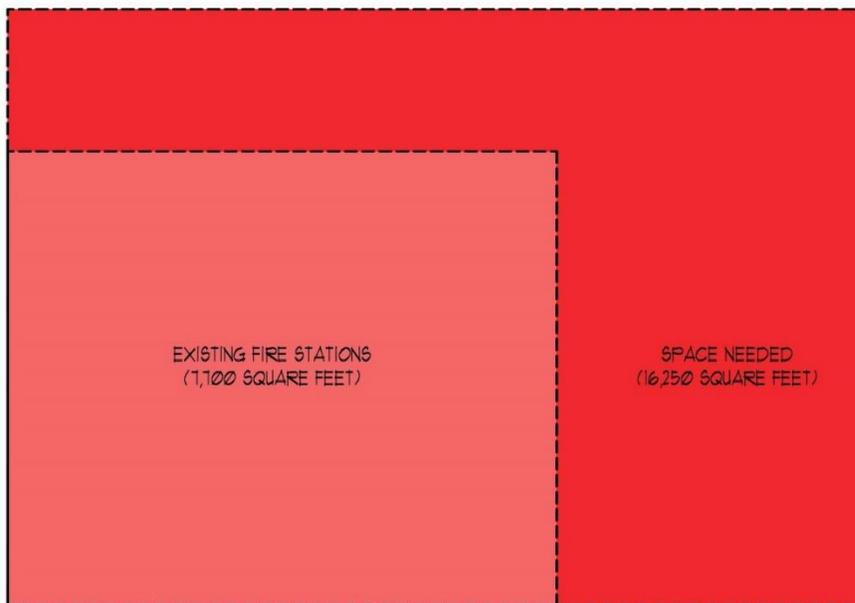
Space Needs Assessments

Our first task was to interview members of the Fire Department and Police Department to determine the physical space requirements necessary to meet the needs of the town. We based the space program on the town’s specific requirements and projected growth and compared them to benchmarks from similar sized towns employing modern fire, EMS, and police practices to get the appropriate space needs for the town. The space programming findings show that both departments are very deficient in space. (See Appendix “A”)

Fire Department

The fire department is deficient by approximately 75% of their required space. This is due largely to insufficient apparatus bay requirements. The other major deficiency of the fire department is the number of bunk rooms required. In Lisbon, as in most municipalities in the country, volunteer departments are diminishing, requiring town’s to hire paid staff. The growing number of paid firefighters and EMS responders requires an increase in sleeping accommodations for the shifts. The department needs to provide sleeping arrangements to meet the changing shift in staff requirements.

Fire Department Space Comparison



Over double the existing square footage is needed for the Fire Department



Insufficient Dayroom, Workroom, kitchen



Insufficient App Bays with modified floor

Finally, the fire department currently has eight apparatus vehicles. The department has one additional vehicle on order, with more apparatus expected, and no covered space for these vehicles. A larger apparatus bay will be required.

Police Department

The police department is deficient by approximately 50% of the space required to perform their duties safely and in conformance to modern law enforcement practices. The department lacks space in almost every category including offices, patrol room space, a sally port, locker facilities, records storage, and evidence storage.

Police Department Space Comparison



Almost double the existing square footage is needed for the Police Department



Insufficient locker room space



insufficient storage –files in hallway



Police Cruiser parts stored in Conaco box



insufficient storage –unclaimed property

Common support spaces for both departments were also deficient. The training room (which if larger would be used as an emergency operations command post) is approximately 50% too small. There is no fitness area in any of the buildings, which is necessary to help mitigate the physical and emotional stress of first responders. The exterior spaces required for both departments is insufficient. Besides parking, the police should also have a secure exterior covered impound area for vehicles and other bulky items.

Existing Buildings Assessments

We have reviewed all three buildings for functionality, lot size, code compliance, physical conditions, as well as structural, mechanical, electrical, and plumbing systems in the buildings.

Village Street Fire Station Building Assessment

The Village Street Fire Station does not meet modern firefighting/EMS needs or health and safety requirements, and it does not contain many of the required support spaces. The overall condition of the building from the exterior looks fair, but on deeper inspection, many concerning issues arise.



Village Street Fire Station, Lisbon, Maine



Village Street Station Site Plan showing insufficient lot size

There is a large parking lot off to the side of the building that is used for parking, but it is public parking so security issues could arise. Because of how the building sits on the parcel, the apparatus equipment when leaving a call struggle to turn hard right out of the building onto the road. They must make a multiple point turn in order to turn the corner, which is time that can't be spared in an emergency. This extra turning also can cause more accidents in the high stress of responding to the call. The apparatus bays contain many carcinogens related to diesel exhaust and to fire and smoke particulates that remain on the equipment after a call. The apparatus are attached to a Plymovent exhaust system which helps remove the exhaust, but there is no system to keep contaminated air from entering the working/living portions of the building.

In addition, the turn out gear is presently stored inside the apparatus bays along with a lot of random storage. The turn out gear extractor is located in the app bays. This is a hazard to the health of the firefighters. Clean turnout gear is being exposed immediately after being cleaned.



Turnout gear improperly stored in app bay



Extractor in app bay

The current living space is attached to the apparatus bay. It has a work desk, a computer desk, television, and couch in the large space with a small office, bathroom, and tiny galley kitchen off of it. This building has no bunkrooms or shower for any firefighters staying overnight. The kitchen is very small and difficult to access. The only spot to have any privacy from other inhabitants is the one office.

The building envelope was not inspected for insulation, but we can determine that the building does not meet current energy codes because of the year the building was built, and it does not have the continuous insulation required.

ADA code compliance is not met. There are multiple floor level changes between the apparatus bays and the living space, which cannot be accessed to someone in a wheelchair. There is no ADA entry into the building. The bathroom and kitchen also do not meet ADA clearances.

Electrical fixtures are outdated. All fixtures are fluorescent and should be updated to LED for energy efficiency. There is a back-up generator in good condition. The heating system was upgraded a few years back and is still in good condition.

The “essential facility” code comes from the International Building Code chapter 16 risk category 4 requirements. Risk category 4 is the most stringent in the code. It requires greater seismic, flood, and structural resistance for fire stations, police stations, hospitals, and other facilities considered essential in a potential disaster situation. Any significant renovation to the building would require that the entire existing building comply with risk category 4 requirements. Structurally, it appears this building will not meet essential facility code requirements, without significant structural upgrades. Even if the building was demolished and replaced, the site is far too small to accommodate an expansion.

Village Street Station Deficiencies

- **Poorly Insulated**
- **Lot size insufficient**
- **No Sprinkler System**
- **Does not meet Essential Facility Structural Code**
- **Turn-out Gear stored in Apparatus Bay**
- **No Bunkrooms**
- **No Decontamination Room**
- **Major Need of Storage**
- **Poor Apparatus Apron for rapid call response**
- **Extractor located in Apparatus Bay**
- **ADA code compliance is not met**
(Multiple steps inside building)
- **Electrical Service and Fixtures outdated**
- **Mechanical systems functional but past their life expectancy**
- **Inadequate ventilation and separation of living and garage areas**

Main Street Fire Station Building Assessment

Upon the first walk-around, it is obvious that this building has multiple envelope issues, parking issues, apparatus apron issues, apparatus door issues, and overall safety issues. There is room to park two personal vehicles on site while any additional vehicles need to find on-street parking on Main Street. There are two apparatus doors that are insufficient to fit the average sized apparatus equipment. The Town of Lisbon has modified the last bay to provide an adequately sized apparatus door to fit their ladder truck. This modification resulted in a retaining wall within the apron that creates a safety hazard for anyone handling the apparatus equipment. Main Street is a narrow road that allows on-street parking across from the Fire Department. This creates an almost impossible turn for the apparatus equipment because of the small apron, the retaining wall, and small width of the street. The overall lot size is grossly insufficient even if the existing building were demolished and a new station built.



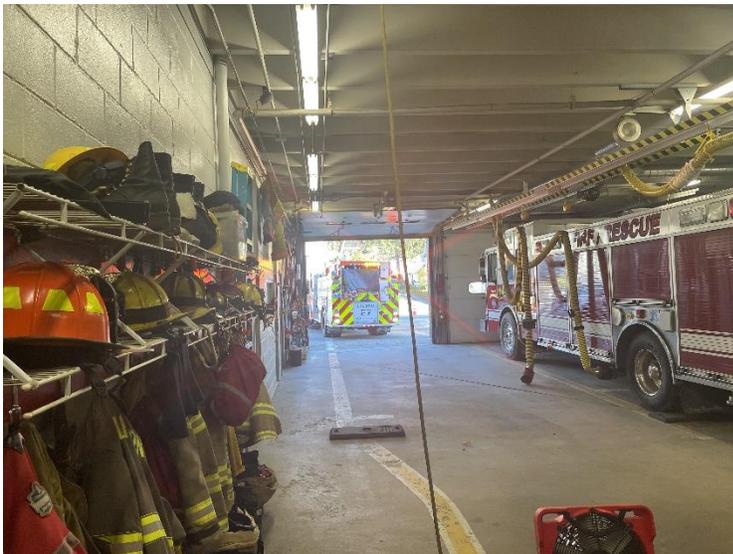
Main Street Station Insufficient Site, Poor Apron space, and Poor Turning



Main Street Station - Insufficient apron and entry

The concrete exterior wall is deteriorating and creating large airspaces and gaps that allow water and air infiltration. In some areas, you can see through into the interior of the building. The Fire Department has done their best to infill these gaps with spray foam, but issues in these areas are still arising.

Just like the Village Street building, this building does not meet modern firefighting/EMS needs or health and safety requirements, and it does not contain many required support spaces. Turn-out gear is being stored in the apparatus bays, as well as other personal equipment which is a safety hazard to everyone using these spaces. There is an active vehicle exhaust system in use in the apparatus bay.



Lack of storage forces improper gear and PPE storage

There is one room off the apparatus bay that is the living and work area for the department. It has two worktables, a television, and some couches. There is a kitchen and two adjacent bathrooms. This building has no bunkrooms or showers for the firefighting staff. There is no privacy in this facility from other inhabitants.



Grossly insufficient space to work and live

The building's electrical system at the time of inspection was very antiquated. It was the original fuse style. The town has informed us that they were upgrading this currently to a code compliant system. The building is on a generator that is in good condition. The mechanical equipment is functional and in good condition as well.



Main Street Station Electric Service



Main Street Station structural problems

The building envelope does not meet current energy codes because of the style and age of the building. It does not have the continuous insulation required and has very little insulation as a whole.

ADA code compliance is not met. There is no ADA entry into the building. The bathroom and kitchen do not meet ADA clearances.

Similar to the Village Street station, the building does not comply with risk category four requirements, and even if the building were demolished and replaced with a new facility, the site is grossly insufficient in size for the departments space requirements.

Maine Street Station Deficiencies

- **Overall Building quality is poor**
 - Water infiltration in multiple areas**
 - Can see light through building envelope**
- **Lot size is grossly insufficient**
- **No Sprinkler System**
- **Does not meet Essential Facility Code**
- **Turn-out Gear stored in Apparatus Bay**
- **No Bunkrooms**
- **No Decontamination Room**
- **Major Need of Storage**
- **Apparatus doors are small**
- **Poor & Dangerous Apparatus Apron**
- **Very limited parking for staff**
- **Mechanical systems functional but past their life expectancy**
- **Inadequate ventilation and separation of living and garage areas**

Police Station Building Assessment

The police station shares the building with the town hall. There are some police only parking spaces in the rear of the building, but they are not secured. They have a small impound area that is fenced in but is filled completely with confiscated bicycles and other miscellaneous objects. One of the specialty vehicles is stored in this impound area because they have no room in the parking lot.



Police Station Section of town hall

The building was constructed in the late 1990's, so the overall physical condition is good. The main issue is that the police department has outgrown their space and are in dire need of more space. They have storage of records in their hallways, which block egress, is a fire hazard and is not code compliant. The Evidence Storage room is at maximum capacity. and evidence needs to be stored in a secure location that doesn't break the chain of custody requirements, therefore they need a larger evidence room. The police department has installed an exterior storage box to hold more of their various items as they have run out of room, but this arrangement does not comply with modern police practices.

The building itself does have some structural issues that would want to be addressed in the future for any possible Town Hall renovations. The end walls seem to be pulling away from the overall building. This will need to be further evaluated before a determination of the condition can be given.

- **Police parking is not secure**
- **The building most likely does not meet Essential Facility Code**
- **There is no opportunity for expansion on the site without losing needed parking**
- **Poorly marked entrance**
- **More office spaces are needed**
Department is rapidly growing
- **Major need for Storage Space**
Storage in hallways is not code compliant
- **Larger locker room needed**
- **Training room/EOC is too small**
This is used by both departments
- **Apparent structural issue with one end of building**

Recommendations

Construct a New Central Fire Station to replace the two existing stations

The overall conditions of both fire stations are deficient. They are deficient in space needs, apparatus bay needs, and code compliance with essential facilities and ADA. The mechanical, electrical, and plumbing systems are functional but beyond their life expectancies. The overall costs to bring each facility up to code compliance would be extensive, but this is a moot point as the sites of both facilities do not allow for the required expansions for space requirements to be met. Keeping two separate facilities running comes at a larger operational cost than a single facility, and they require additional staff for safe operations. Because of these factors we recommend a new single fire station on a site centrally located between the two stations and central to the call frequency.

Combine the Police and Fire into One Public Safety Facility

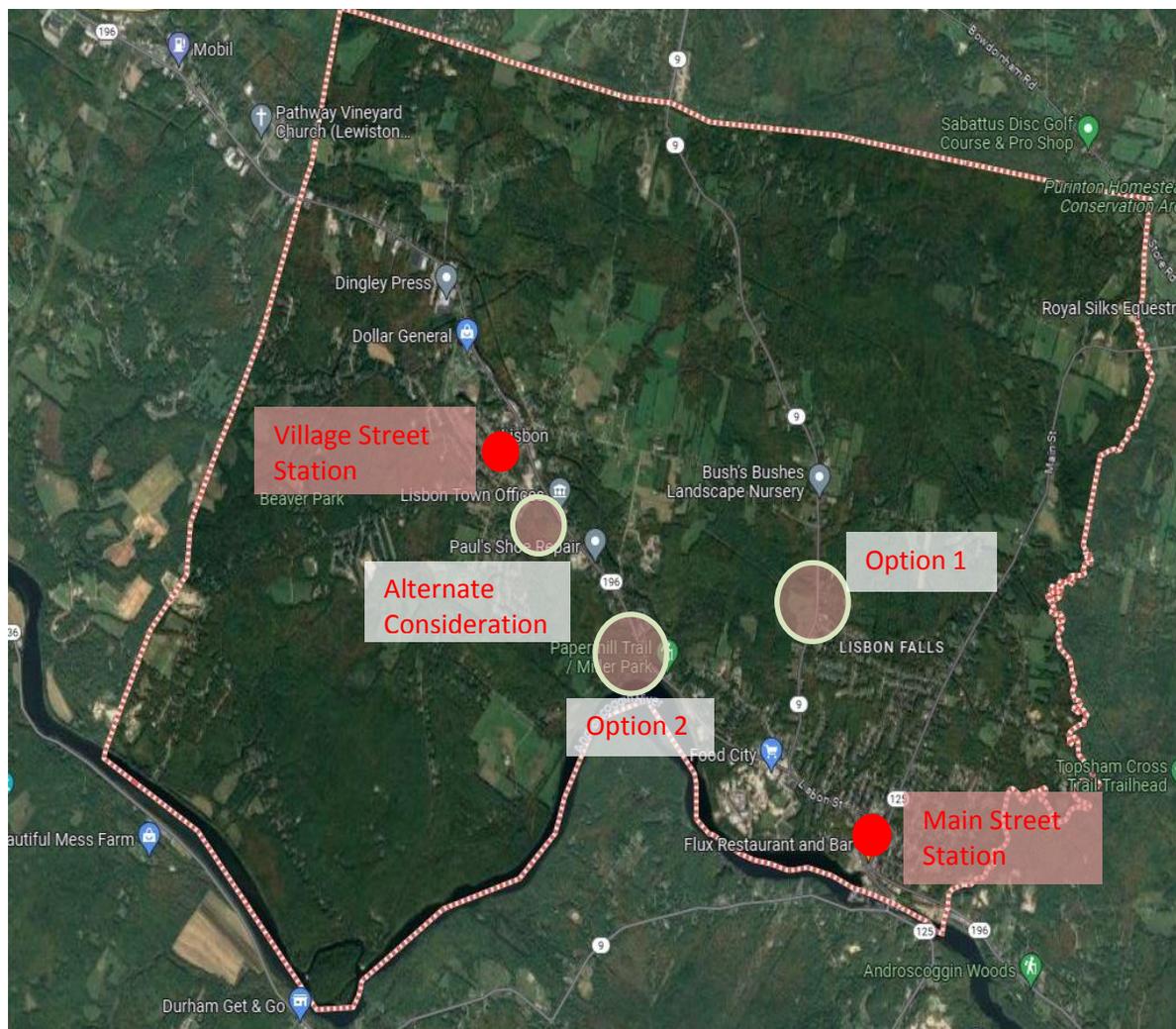
The overall condition of the Police Station is acceptable but is seriously deficient for the department's space needs. Their space requirements have grown over the past few years because the Town of Lisbon is a quickly growing town. To meet the town's safety needs, the Police Department must grow as well. We recommend a new building for the Police Station because there is no more room available on their current site with the Town Hall. The Town Hall could move into the space vacated by the Police Department should they be relocated. The Town Hall, although not part of this report, is also growing as the town grows, and will easily expand into this space with little alteration required.

Both departments require much more space than they currently have. We recommend combining the two projects into a single Public Safety building instead of two separate buildings. There are benefits to having the Fire and Police Departments together. The overall required square footage of two separate buildings decreases because there are spaces that can be shared by both departments. The main space that can be shared is the training room. This room is beneficial to both the fire and police for training events as well as an emergency operations center (EOC) when major events occur, such as severe weather incidents, police manhunts, or missing person searches. Conference rooms, the main entry, and fitness rooms are also rooms that can be shared.

Combining the departments also allows for a lower overall cost to the project than constructing two separate buildings. We currently are estimating a required 8,753 square feet of space program for the Police Department, 16,462 square feet for the Fire Department, and 4,356 square feet of shared space for both departments for a total of 29,571 square feet for a Public Safety Building.

Site Selection recommendations

Site selection will have unforeseen costs. In Appendix “C”, we have identified two areas that are deemed suitable for the single fire station based on response times to the entire town. In both areas, there is no town owned land that can be used. The town would have to obtain land which is not included in the costs above. Also mentioned as an additional consideration in Appendix “C”, the town owned land across the street from the Town Hall and Police Station would be a viable option for location of the Fire Department although it does favor the northern side of town for response times. While investigating this site, we found that there is a major drop-off as you move towards the rear of the site and a lot of unforeseen costs would arise to level the site out to allow building of a public safety building.



Map of Recommended Locations for the new Public Safety building – Option 1 and Option 2

Estimated Turnkey Construction Costs

Construction costs for municipal projects are currently estimated at \$500 to \$550 per square foot for a turn-key project. This includes all furnishings, soft-costs, fees, and any other costs required for the town to move into a fully operational building. With these costs in mind, we have a rough cost of about **\$15,500,000** for this Public Safety building. Preliminary building layouts and alternate construction methods could reduce the overall costs of the building. We will be able to refine this cost once a site has been chosen. We would also like to note that there are Federal grants currently available for public safety buildings, hopefully, for another year or two. Similar clients are receiving one to two million dollars for their projects.

APPENDIX "A"

Lisbon Public Safety
 Building Space Programming
 September 27, 2023



Police Department Additional Space Needs				
Room Name:	# Rooms	Sqft per Room	Total Sqft	Notes:
Outdoor spaces				
officer parking	1	varies		
Covered Vehicle Parking	1	varies		carport, 10 cars covered, Humvee, tires, speed sign
Pole Barn	1	varies		2 auxiliary vehicles storage, fully enclosed from elements and critters
Impound Lot	1	varies		
Sub-Total outdoor additional space needs for Police Department			0	
Circulation Factor of 15%			0	
Total outdoor additional space needs for Police Department			0	
Room Name:	# Rooms	Sqft per Room	Total Sqft	
Indoor spaces				
Admin/Office Area				
Chief's Office	1	150	150	
Supervisor Office	1	250	250	3 workstations, may not need separate offices
Detective Office	3	120	360	
Detective Storage	1	100	100	IN OFFICES
Community Police Office/SRO	1	180	180	2 Workstations
Leutenants Office	1	120	120	1 Workstation
Animal Control Office	1	120	120	1 Workstation
Admin Office	1	120	120	
Assistant Admin Office	1	120	120	
Breakroom	1	300	300	
Small Conference	1	120	120	
MDEA OFFICE	1	120	120	
Restrooms	2	60	120	
Secured Area				
Patrol Workroom	1	340	340	4 Workstations
Interview Rooms	3	70	210	3 separate rooms (1 lobby, 1 detective, 1 near sally)
Monitoring	1	60	60	
Evidence Storage	1	500	500	Rolling racks for guns/drugs/money - Lockable
Evidence Bagging	1	60	60	
Evidence Processing	1	140	140	Full pass-through system w. reffridgerator setup
Locker Room Female	1	340	340	COMBINED FOR 46 LOCKERS
Locker Room Male	1	720	720	
Patrol Restrooms	2	60	120	ONE RESTROOM
Police Bunkrooms	3	108	324	
Armory	1	140	140	Storage for guns, ammo, etc.
Weapon Cleaning Room	1	120	120	32 gun safe
non-leathal Room	1	140	140	Storage for tasers, radios, camera vests
General Storage	1	120	120	
Sallyport Area				
Sallyport	1	800	800	3 bay w/ large doors and storage stuff off of it
Restroom	1	60	60	
Booking w/ 2 holding cells	1	300	300	Toilet in holding cells
Processing & Fingerprinting	1	60	60	
Sallyport Storage	1	160	160	Bicycles, extra
Support spaces				
Records	1	400	400	
Police Server Room	1	120	120	
Sub-Total Square Footage Space Needs for Police Department			7,414	
Circulation/grossing Factor of 30%			1,483	
Total Programming for Police Department			8,897	

Police Department Space Program

Port City Architecture, 65 Newbury Street, Portland Maine 04101 207 761-9000



APPENDIX "A" (cont.)

Room Name:	# Rooms	Sqft per Room	Total Sqft	Notes:
Fire Department Additional Space Needs				
Room Name:	# Rooms	Sqft per Room	Total Sqft	
Outdoor spaces				
Fire employee parking	1	varies		
Pole Barn	1	varies		3 Antique vehicle storage - fully enclosed from elements and critters
General Parking	1	varies		
Sub-Total outdoor additional space needs for Fire Department			0	
Circulation Factor of 25%			0	
Total outdoor additional space needs for Fire Department			0	
Room Name:	# Rooms	Sqft per Room	Total Sqft	
Admin/Office Area				
Admin Office	1	120	120	record storage near w/ personnel files
Dep. Chief Office	2	120	240	Separate offices
Fire Chief Office	1	150	150	
Supervisor Office	1	200	200	4 Workspaces
Small Conference Room	1	120	120	
Report/computer room	1	100	100	3 Workspaces
Restrooms	2	160	320	
Records/Storage	1	120	120	
Living Quarter Area				
Bunkroom	12	108	1,296	12 bunkrooms
Bunkroom Bath/Shower	4	80	320	a Sauna
Bunkroom Storage	1	80	80	
Laundry (General)	1	80	80	2 washer and 2 dryer
Kitchen/dining	1	400	400	large table, patio, grill, picnic table
Dayroom	1	400	400	
App Bay Area				
App Bays (deep)	6	1400	8,400	radiant heat and drive through, 8 vehicles currently - may go to 9
Restrooms	1	40	40	
Decon.	1	310	310	
Turnout Gear/lockers	1	440	440	40 lockers
Call Company Turnout Gear/lockers	1	260	260	20 lockers
Gear Storage Room	1	200	200	
EMS supply Storage	1	144	144	
SCBA Filling Storage	1	125	125	
Projects(Machine Shop)	1	200	200	
Training Tower	1	250	250	
Mezzanine Storage	1			
Sub-Total Square Footage Space Needs for Fire Department			14,315	
Circulation/grossing Factor of 15%			2,147	
Total programming for Fire Department			16,462	

Fire Department Space Program



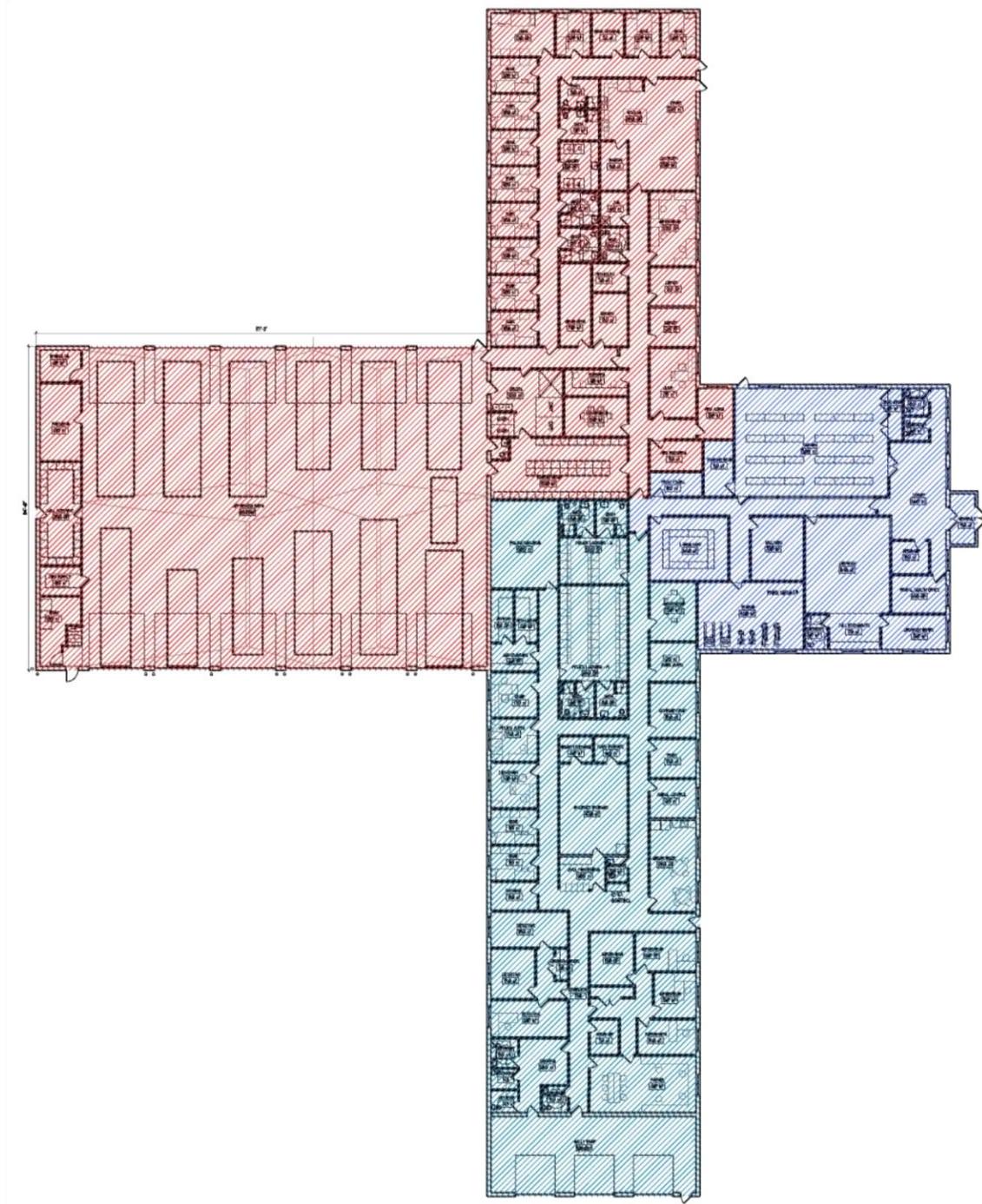
APPENDIX "A" (cont.)

Room Name:	# Rooms	Sqft per Room	Total Sqft	Notes:
Common Functions				
Room Name:	# Rooms	Sqft per Room	Total Sqft	
Title				
Airlock	1	50	50	phone system
Lobby/ Entrance	1	300	300	enlarge for hand tub
Office	1	120		Mental Health workers and substance abuse counselors, off lobby
Dispatch	1	500	500	Small Pantry, Coffee Bar, Sink
Dispatch Bathroom	1	60	60	
Dispatch Supervisor Office	1	120	120	
Large Conference	1	280	280	12 occupant
Wellness Center	1	200	200	
Fitness Room	1	400	400	
Training Room	1	800	800	40 Occupant
Training Room Storage	1	150	150	
Restrooms - General	2	60	120	
IT/Server Room	1	140	140	
Mechanical Room	2	70	140	
Janitor Room	3	60	180	
Electrical Room(s)	1	80	80	
Sprinkler Room	1	120	120	
Generator Room	0	120	0	
Sub-Total Square Footage Space Needs for Common Functions			3,630	
Circulation/grossing Factor of 20%			726	
Total programming for Common Functions			4,356	
TOTAL SITE SQUARE FOOTAGE POLICE & FIRE			Varies	
TOTAL PROGRAMMING SQUARE FOOTAGE PUBLIC SAFETY			29,571	

Shared Space Program

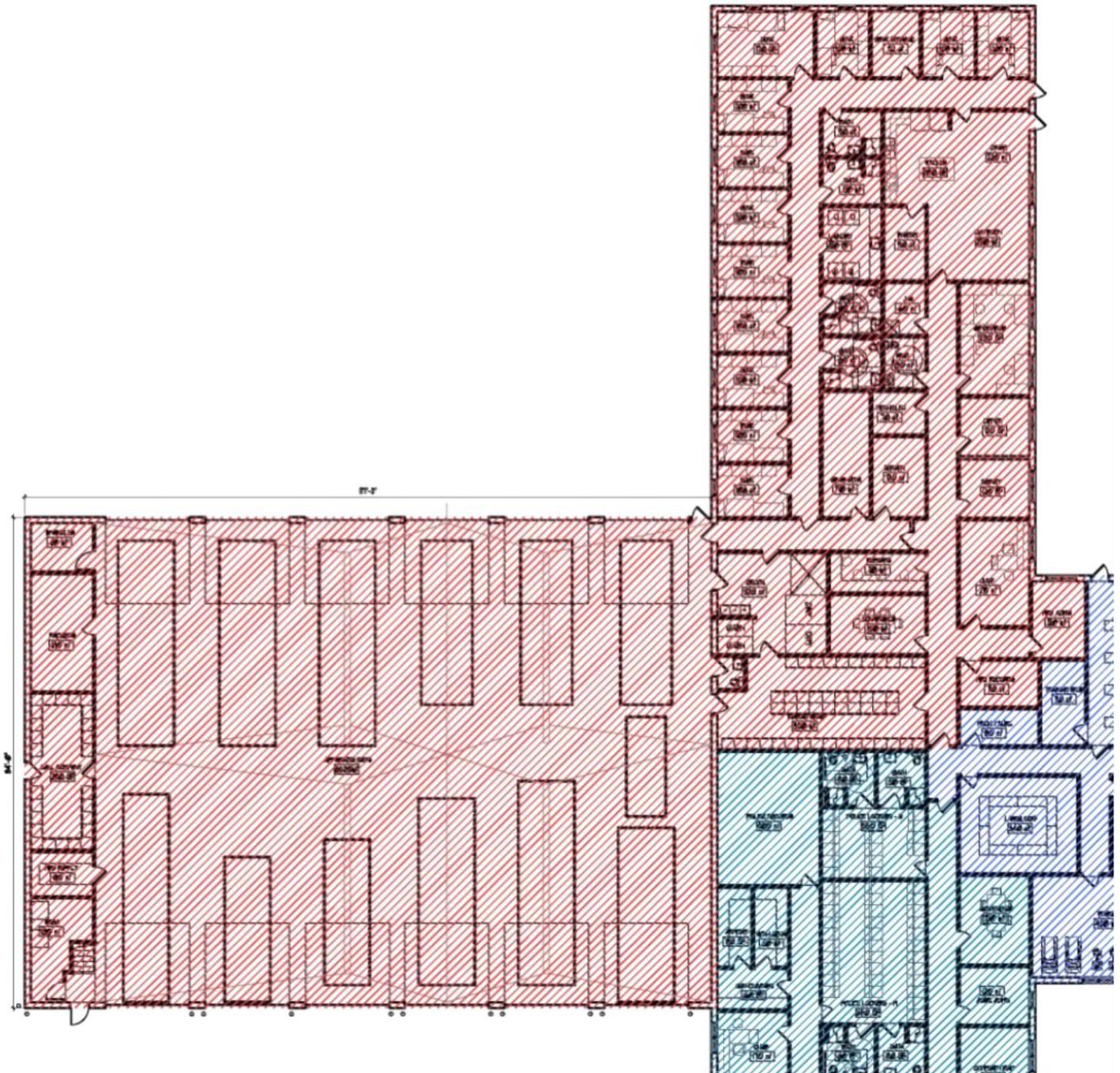


APPENDIX "B"



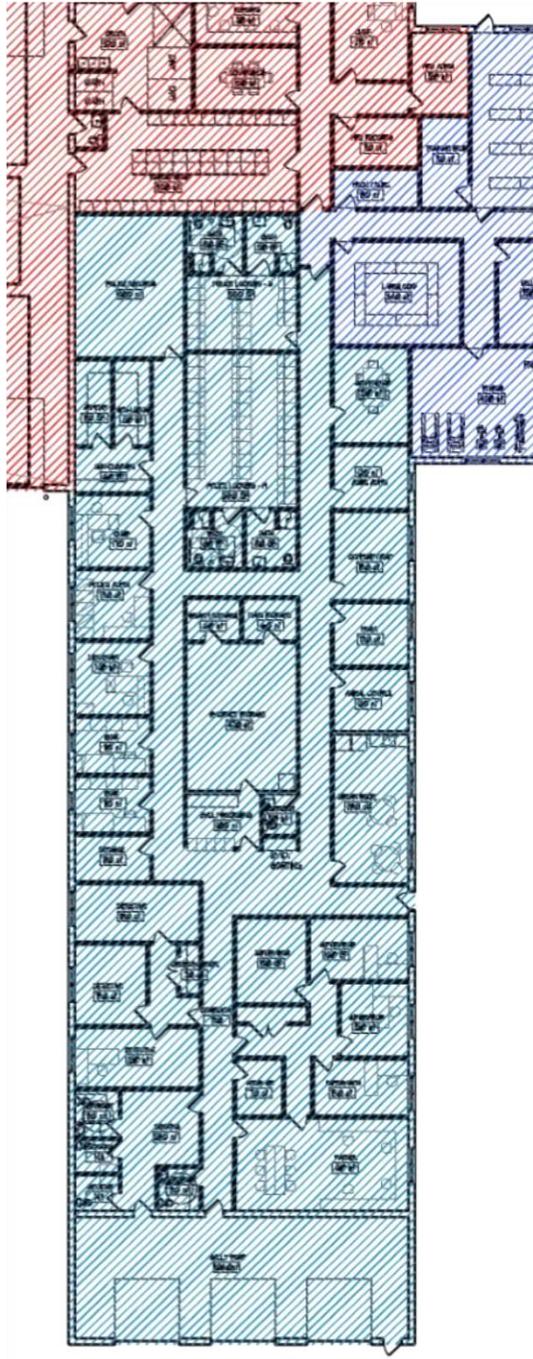
Public Safety Schematic Floor Plan Possible Layout

APPENDIX "B" cont.



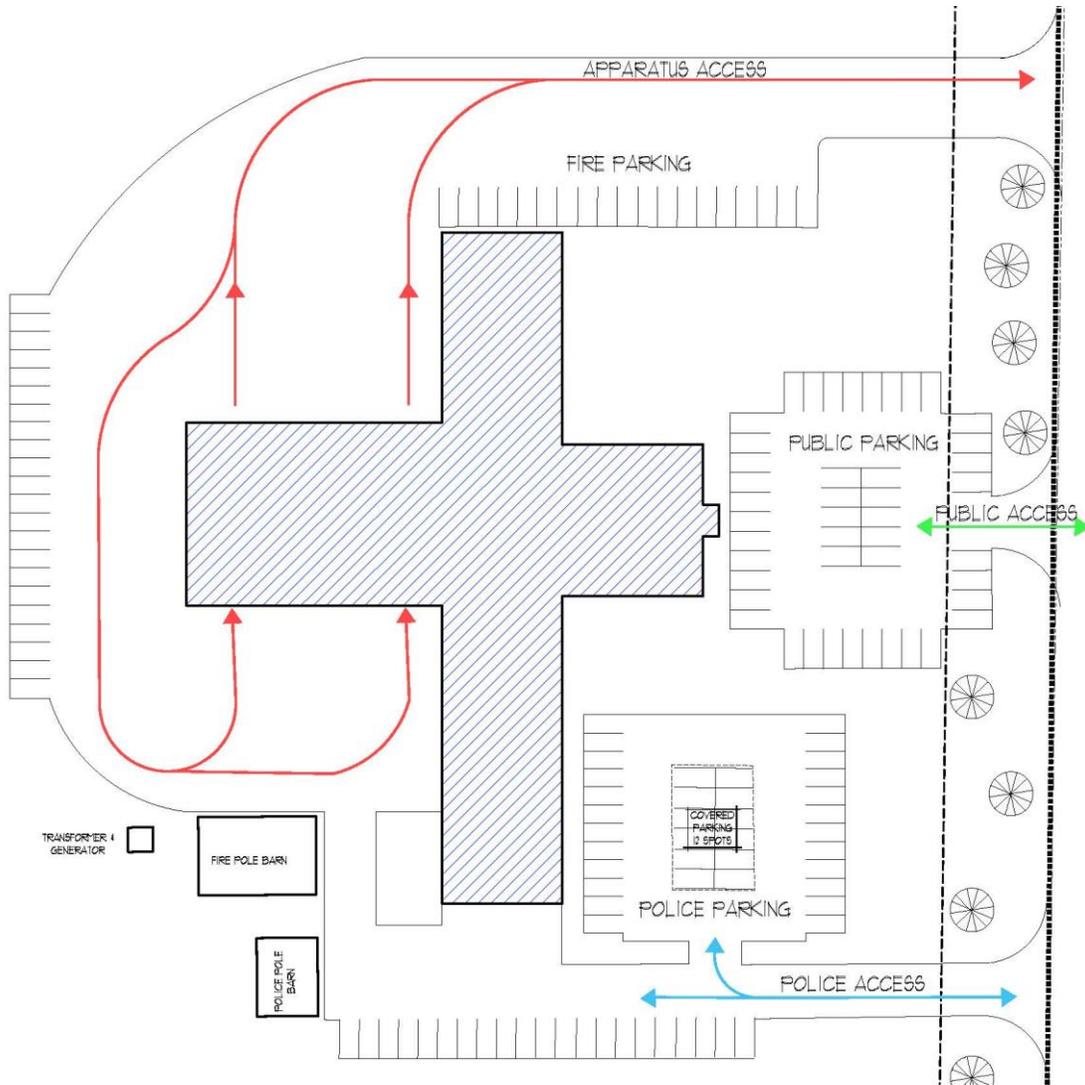
Enlarged Fire Area Potential Layout

APPENDIX "B" cont.



Enlarged Police Area Potential Layout

APPENDIX "B" cont.



Conceptual Site Layout Layout

APPENDIX "C"

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TOWN OF LISBON, MAINE
ASSESSMENT OF THE
LISBON FIRE DEPARTMENT

Final Report

March 2023

Neil D Courtney

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EXECUTIVE SUMMARY

The Lisbon Fire Department Mission Statement:

The Lisbon Fire Department is dedicated to the protection of life and property and the mitigation of man-made and natural emergencies for the citizens of, businesses in, and visitors to the town of Lisbon.

The Lisbon Fire Department is entering its next chapter of progression. There are a multitude of influences playing out that are impacting the department. Proactively, the town has been and is giving these issues needed attention. As such, the matters at hand include the following:

- Allocated funds to conduct a study of the fire department and fire stations
- Created two full-time fire fighter positions
- Established one per diem position
- Ordered an ambulance using ARPA (American Rescue Plan Act) funds
- Through referendum, funding was approved for the purchase of two new pumpers
- Streamlining the fleet of apparatus with the eventual elimination of the heavy rescue
- Preparing for the implementation of emergency ambulance transport service
- Contemplating the construction of a new public safety facility
- Advancing the transformation of the two fire companies into a cohesive department
- Continuing to monitor and address the decline of the on-call fire fighter conundrum
- Ensuring the safety, health, and welfare of fire department personnel
- Collaborating with neighboring jurisdictions in public safety service enhancement

LISBON EMERGENCY, INC.

Emergent and non-emergent ambulance transport service is provided under contract to the town of Lisbon by the non-profit Lisbon Emergency, Inc. The ambulance station is located at 42 Village Road, across the street from the Lisbon Village Fire Station. That facility is sited on a .51-acre plot, with the land valued at \$34,500 and the building valued at \$201,100. The property is tax exempt due to its non-profit status.

Lisbon Emergency also provides contract EMS services to the neighboring town of Bowdoin. The service has two ambulances, however, typically only one is staffed around the clock. With the exception of the service chief, Emergency Medical Technicians and Paramedics affiliated with the service are per diem employees.

The fiscal 2023 fee for ambulance service to Lisbon was \$334,627, whereas the year before that figure was \$199,841. The town of Bowdoin's fee for service in fiscal 2023 was \$111,542 and \$52,851 for the prior period. Lisbon Emergency has established their 2023 fee structure on a per capita basis for both Lisbon and Bowdoin at \$34.73. The per capita fee in fiscal 2022 was \$21.76. In turn, Lisbon Emergency is charged \$7,000 for dispatch services, which is provided by the town of Lisbon. The ambulance service began charging the town of Lisbon a fee for service in fiscal 2018.

In 2022, Lisbon Emergency responded to 1,409 calls for service. The total number of calls answered in Lisbon alone was 935. The remaining calls were in Bowdoin or mutual aid responses to other communities.

THE LISBON FIRE DEPARTMENT

The Lisbon Fire Department operates from two fire stations that are approximately 3.7 road miles apart from one another. The Lisbon Falls fire station, which may be considered the central station, is located at 30 Main Street. At one point in time, this station was home to the independent Lisbon Falls Fire Company. Built in 1965, the town has the fire station assessed at \$213,800. The station shares a .37-acre parcel of land with the town's library, which has a street address of 28 Main Street. The parcel of land is assessed at \$44,800.

The Lisbon Village Fire Station is located at 41 Village Street. At one point in time this station was home to the independent E. T. Smith Hose Company #2. The original building was constructed in 1970, and was expanded in 1985. The station is assessed at \$221,900 and the .26-acre lot of land is assessed at \$46,900.

To a matter of degree, the two fire companies still exist although they are no longer charged with providing fire protection. It appears that the two companies now exist more as benevolent entities since fire suppression, prevention and rescue services—excluding emergency medical transport services—are the responsibility of the municipality. The two fire companies are registered non-profit corporations and are in good standing with the Maine Department of the Secretary of State, Bureau of Corporations, Elections and Commissions.

Currently, the Lisbon Fire Department is licensed by the State of Maine at the Emergency Medical Responder (EMR) level and permitted to the EMT level as a non-transporting service. The department does respond to EMS calls to either assist Lisbon Emergency or as first responders in the event the primary ambulance is unavailable. In 2022, the town directed the fire department to purchase an ambulance and to prepare to set in motion the treatment and transportation of sick and injured patients to the hospital. According to officials, it will take nearly two years for a new ambulance to be built and delivered to Lisbon. This period of time will allow for the department to step into a new phase of service delivery.

The position of fire chief in Lisbon is full-time, appointed by the town manager and confirmed by the town council. The chief's office is not located within either fire station, but is found within the municipal complex located at 300 Lisbon Street. In 2021, the town hired its first full-time fire fighter who is assigned the Lisbon Falls Fire Station for daytime coverage Monday through Friday. In 2022, the town hired its second full-time fire fighter to work alongside his counterpart during the workweek. At the same time, sufficient funds were allocated in the fiscal 2023 budget to establish a per diem position where qualified Lisbon fire fighters are assigned to fulfill that third daytime position. This strategy now allows for three on duty fire fighters every Monday through Friday. With the advent of paid on duty personnel now augmenting the roster of on call fire fighters, the department is transitioning to what is termed a "combination department," which consists of a blend of on-call and career personnel.

The department uses an electronic communications program utilizing fire fighters' cell phones called "I Am Responding." This web-based automated crew confirmation tool is designed to help manage emergency response and messaging capabilities among all Lisbon fire fighters. The Lisbon Fire Department also has a presence on social media with its own Facebook page.

The fire rescue department employs a multi-functional data management software program that is used to store personnel records, retain daily vehicle inspection logs, document equipment inventory, track employee scheduling, catalog incident reports, etc.

The department registers calls for service electronically, and the information is uploaded into the state of Maine Fire Incident Reporting System (MEFIRS). The MEFIRS program is an information and data gathering system initiated and supported by the Office of State Fire Marshal. The goal of the system is to encourage the use of a standardized incident reporting system as a means of addressing the state's fire problem and related emergency service issues. MEFIRS can play a major role in reducing injuries, fatalities, and economic losses from fire and related emergencies by facilitating the collection, compilation, analysis, and use of data to produce and disseminate the information needed by decision makers. Maine statute, Title 25 MRSA 2395 requires that fire chiefs shall submit to the State Fire Marshal an incident report for each response made, regardless of whether or not an actual fire occurred.

It should be noted that in order to qualify for federal grant funding through the U. S. Department of Homeland Security, a fire department must participate with the Office of the Maine State Fire Marshal in filing activity reports. Lisbon does participate in MEFIRS.

According to source documents reviewed for this project, it was learned that in 1993 there were approximately 70 fire fighters in Lisbon. The number of on-call fire fighters in Lisbon is showing a steady decline. In 2017, there were 47 members on the roster. As the years progressed, that number has dwindled down to 37 in 2020, and early January 2023, the roster revealed just 31 active personnel, which includes the two full-time fire fighters and the fire chief. This phenomenon is rampant throughout the ranks of public safety sectors across the country, and is not unique to Lisbon.

This trend spurred the town to initiate a program that now has on duty fire fighters assigned the Lisbon Falls station during the day, Monday through Friday. It is the fire chief's desire to maintain a staff of three during this period of the day, as it is the weakest time frame where many on-call fire fighters are unavailable.

Procedurally, all fire fighters are to respond to their respective fire station when notified of an emergency incident. Once sufficient personnel have mustered at the station, they board the fire apparatus and respond to the incident. Chief officers respond directly to the scene to take command and immediately size up the incident.

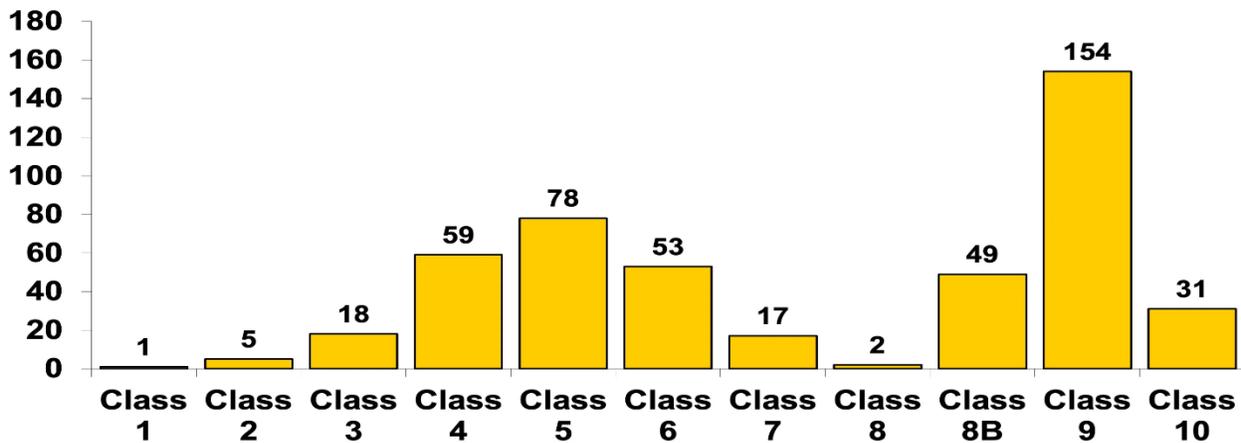
When a new recruit joins the Lisbon Fire Department, one stipulation is that he or she must meet certain credentialing criteria within a specific timeframe. All newly hired on-call fire fighters must attain Fire Fighter II certification within three years of hire. At the start of 2023, three of Lisbon's newest fire fighters were enrolled in a fire fighter training program along with 29 other fire fighters from various fire departments throughout the region. This collaborative effort minimizes the burden of each department having to train new members to a minimum level of competency. This annual process has been in place for many years.

The department's current operating budget stands at \$734,349. Of that figure, there is a line item of \$75,000, which is allocated to a capital reserve account. The fire hydrant rental fee, which is not part of the fire department budget, is set at \$480,000 for the year. There are 241 pressurized fire hydrants distributed throughout Lisbon.

The Insurance Service Office (ISO) has assigned a Public Protection Classification (PPC) for Lisbon as a 5/5Y. The town of Lisbon received its updated PPC in January 2022. The Insurance Services Office PPC program measures and evaluates the effectiveness of fire mitigation services in communities throughout the country. For each fire protection area, the ISO assigns a PPC code—a number from 1 to 10. Class 1 represents exemplary fire protection, and Class 10 indicates that the area's fire-suppression program does not meet ISO's minimum criteria. This grading system is utilized by the insurance industry to set fire insurance premiums. When considering ISO's PPC, it must be noted that any region within a community that is beyond five road miles from a fire station is deemed unprotected. ISO assigns a value of "10" to those properties. Lisbon's previous ISO review was conducted in 1993.

Of the 467 fire departments or fire districts in Maine, Lisbon is positioned within the top 35% of the total number of departments with regard to its Public Protection Classification. (See Table Below)

Maine



Annual Number of Calls for Fire Service Responses:

Calendar Year	Number of Emergency Responses
2018	406
2019	413
2020	470
2021	435
2022	420
Five Year Average	429

The Lisbon Fire Department operates three Class "A" pumpers, and aerial ladder that is equipped with a fully rated fire pump, a heavy rescue truck, a wildland fire fighting vehicle, a pick up truck, a four-wheel drive SUV command vehicle, and boat.

Fleet of Fire Department Vehicles

Designation	Year	Specifications	Features
Engine #1	2003^	2000 gpm/1000 gal tank	Class A Pumper
Engine #2	2000^	2000 gpm/2000 gal tank	Pumper/Tanker
Engine #7	2020*	1500 gpm/1000 gal tank	Class A Pumper
Truck #6	2003*	1500 gpm/300 gal tank 105' Aerial Ladder	Quint
Rescue #10	2004*	Heavy Rescue	Support & Rescue
Squad #3	2009^	Wildland Fire Fighting Vehicle	Off Road
Car #1	2016	Chief of Department	Command
Car #4	2023*	Four Wheel Drive Pick-up	Utility Truck
Marine #1	2007^	12' Inflatable boat/motor/trailer	Water Rescue

* Assigned to the Lisbon Falls Station

^ Assigned to the Lisbon Village Station

RECOMMENDATIONS

PERSONNEL

Although there is no definitive plan to continue adding full-time personnel to the fire department, in all likelihood, the need to augment a diminishing call force may be required. Furthermore, the eventual inclusion of a transporting ambulance will undoubtedly impact the workload and response reliability of the department. It has been communicated to the project manager that when the fire department ambulance has been acquired and placed into service, the initial plan is to have it function as a back-up to the Lisbon Emergency, Inc. ambulance. In essence, it appears that there may be two EMS providers when the town of Lisbon ambulance goes on-line. At this juncture, the long-term direction of emergency medical service delivery in Lisbon has not been firmly predicted.

According to the fire chief, the department has been tracking the response profile of the department's on-call fire fighters to calls for service. There is concern that the number of responders to the assortment of emergency calls is declining. In all probability, the fire department will need to increase the on duty staffing levels going forward. Although many communities hire per diem fire fighters and EMT's as a way of avoiding paying for benefit packages that typically come with full-time positions, it is not necessarily the most reliable manner in which to staff a modern, essential municipal public safety service. As many fire and rescue department managers who operate per diem systems might explain, it can be exhaustive and fraught with logistical drawbacks. More and more communities are pursuing the per diem arrangement to fill the staffing gap, but the pool of potential part time employees is finite and overused. Oftentimes, the per diem system is but a segue to a more resolute program of staffing. In short, it may be in the town's best long-term interest to continue hiring full-time staff as its predominant means of increasing staffing levels.

It may behoove the town to recognize the fact that the on-call system is waning and the need to hire additional dual role fire fighter/EMT's is at hand. To date, Lisbon has phased-in two career positions that are both currently assigned the Monday through Friday daytime schedule for eight hours each day, which yields a 40 hour work week.

The next objective in addressing the staffing matter should be the creation of two additional full-time positions in the next budget cycle and increase the number of hours worked from eight to twelve per day for all four full-time fire fighters. This would have two fire fighters assigned a rotating schedule working an average of 42 hours per week over an eight-week cycle. This recommendation would provide a minimum of two career firefighters on duty for 12 hours every day of the week. As an example, "A" Shift would work Monday, Tuesday, Wednesday and Thursday from 6:00 AM to 6:00 PM one week and then have Friday, Saturday, Sunday and Monday off when "B" Shift would be on duty. The cycle would begin once again only this time the first day back to work for "A" Shift would be Tuesday. This scheduling routine advances by one day every rotation.

When the second fire fighter was hired in 2022, a per diem slot was created at the same time with the premise of having three personnel on duty during the weekdays, with two full-time employees and one part-time slot to be filled by an on-call member.

In an effort to staff up and have three fire fighters on duty every day of the week, an additional per diem position should be funded at the same time the next two full-time fire fighters are to be hired. The per diem positions could be allocated the same proposed 12-hour component as opposed to the current eight-hour segment.

The open per diem slot is exclusively available for on-call Lisbon fire fighters to work at their convenience. Thus far, this position is only filled randomly and the fire chief is contemplating extending the part-time opportunity to qualified fire fighters beyond the roster of Lisbon fire fighters. If the per diem venture does not yield the expected outcome, the town may need to rethink this scheme altogether and shelve the program. This would bring the town to the next phase in a sequential hiring process. That recommendation would be to hire two additional fire fighter/EMT's that would bolster each of the two shifts by one career member, and have three assigned to each of the two shifts.

Due to the current lack of living quarters at either station, there is no recommendation at this time to provide overnight coverage by implementing a paid staffing model. Until such time that a facility replacement or fire station upgrade plan is achieved, it is improbable to house personnel around the clock as the two stations are deficient.

Strive to fortify the ranks of on-call fire fighters

Although this report leans toward hiring additional career personnel, by no means should the community retreat from any attempt at bolstering the cadre of on-call fire fighters. For the foreseeable future, the reliance upon a robust, albeit smaller group of Lisbon residents willing and interested in serving their community as on-call fire fighters will be paramount.

The town may wish to convene a committee charged with exploring the trends within the on-call fire department. This "working group," if you may, could undertake a comprehensive review of why the call company is diminishing. An all-out concerted effort to stabilize and hopefully enhance the call company should be a priority. This task should not be left solely to the fire rescue department to endeavor, as this should be a community-wide objective if it is to be a successful mission.

A larger scope of involvement drawing citizens into working with public safety issues in concert with the town's administration may prove beneficial in future planning and providing high quality service outcomes.

Support the adoption of a statewide Length of Services Award Program (LOSAP)

In the 130th Maine Legislature, the bill LD 1083, entitled "An act to attract and retain firefighters and Emergency Medical Services through the Maine Length of Services Award Program," is moving through the Maine legislative channels that would provide a statewide annuity based retirement program for volunteer, on-call, and per diem fire fighters and emergency medical technicians. Seen as a potential aid in enlisting new and keeping hold of the current troupe of emergency first responders for the long-term, this endeavor may entice people to remain active in their local department knowing there is a financial reward at the end of their community service.

Laws in at least 40 states authorize LOSAP plans and nearly 20% of the volunteer firefighters in America participate in some form of LOSAP. Most follow a model, which involves an annual minimum of training and service hours, with financial credit given toward a LOSAP program. After receiving a minimum number of years of credit, and beginning at a specified age, the volunteer is eligible for a monthly annuity.

The program will establish a statewide pension type program under which Maine volunteers will be paid "length of service awards" for performing qualified services. The term "qualified services" are defined in the bill as firefighting and prevention services, emergency medical services, and ambulance services. Under the program, volunteers will have a program account which will be credited with an annual contribution as of the end of each year during which the volunteer participated in a minimum required level of volunteer activities set forth by the Maine Length of Service Award Program Board of Trustees.

When a volunteer reaches the age of sixty, and has attained a vested status in the program—met the minimum requirements for at least five years—he or she will be paid the contributions credited to his or her program account, plus the net investment income earned on those contributions.

Members would also have to pass all physical requirements set in place by the Authority Having Jurisdiction (AHJ). If during any year a member did not meet requirements then that year would not be counted as usable time. In addition, training must include the mandatory set forth by the Maine Bureau of Labor Standards (MBLS). The terms volunteer, paid on-call and per diem are synonymous with regard to the LOSAP program.

Fire fighters from the towns of Berwick and North Berwick, Maine have been enrolled in a LOSAP retirement program offered through the Volunteer Fireman's Insurance Services (VFIS) for many years. These programs are afforded the fire fighters by their individual communities and are not part of any statewide program.

(Note: Alna, Maine {population 710} At the March 26, 2022 town meeting, voters approved \$18,000 to establish its own LOSAP with the expectation of integrating their program with that of the State of Maine's once it is fully operational)

Apply for federal staffing enhancement grants

The town of Lisbon should consider applying for grants through the United States Federal Emergency Management Agency (FEMA). The Staffing for Adequate Fire and Emergency Response Grants (SAFER) program was created to provide funding directly to fire departments and volunteer firefighter interest organizations to help them increase or maintain the number of trained, "front line" firefighters available in their communities.

The goal of SAFER is to enhance the local fire departments' abilities to comply with staffing, response and operational standards established by the National Fire Protection Association—NFPA #1710, the Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments, and NFPA #1720, the Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments.

There appears to be sufficient evidence that the continued downtrend in available on-call personnel, the projected increase in service demand, and the inclusion of ambulance transport services will impact the Lisbon Fire Department's capacity to effectively and efficiently handle the workload. The department has already embarked upon a program of adding full-time staff to cover the shortfall, and the need to continue with staffing increases by most accounts will be necessary.

The towns of Sabattus, Kennebunk and Orono are the most recent recipients to have been granted federal funds to add full-time career positions to their municipal fire rescue departments.

Encourage non-traditional high school age students to embark upon a fire and emergency medical service career path

A number of technical schools throughout Maine offer fire fighter and emergency medical technician (EMT) curriculum at the high school level. These programs are designed to give inspiration and a solid educational foundation to young adults who may be looking to endeavor a public safety vocation, whether it be full-time career, volunteer or on-call.

The two closest Career and Technical Education (CTE) schools to Lisbon are the Lewiston Regional Technical Center and the Region #10 Technical High School in Brunswick. These two schools currently offer the emergency medical technician program, but do not offer a fire fighting program, although Region #10 did at one time.

The collective group of Androscoggin County Fire Chiefs, the local political forces, and the Technical Center's administration could undertake a feasibility study that would determine the merits of such a plan to introduce the fire fighting education module.

The following list includes those Maine schools that offer both fire and EMS programs of study.

- Foster Technology Center in Farmington
- Mid-Maine Technical Center in Waterville
- Capital Area Technical Center in Augusta
- Mid-Coast School of Technology in Rockland
- Westbrook Regional Vocational Center in Westbrook
- Sanford Regional Technical Center in Sanford

Offering these programs at a local technical school may be another way to attract young people into the ranks of the volunteer, on-call and career fire and EMS services. The opportunity to take this specialized training during the junior and senior high school years, at a location close to home may attract the non-traditional student into a vocation, either as a career track or as a way to serve in his or her hometown volunteer or on-call fire or ambulance department. Furthermore, graduating students who achieve certification in these disciplines save the fire or ambulance department they join the time, expense, and effort it takes to get new personnel qualified to perform the duties of an emergency responder.

Collaborative Deployment

Mutual Aid: Outside assistance requested by one community from another after a fire has occurred. Assistance by the outside fire department is rendered upon request.

The long-standing practice of fire departments assisting one another is known as "Mutual Aid." Mutual aid allows for reciprocal, cross-border responses between prescribed fire departments, in order to provide additional resources during moderate to large-scale emergency incidents. These resources are deployed on an "as needed" basis under mutual aid compacts. To an extent, mutual aid was the precursor to today's automatic aid.

Automatic Aid: Outside assistance that responds immediately on the first alarm to reported building fires beyond their boundaries. Two or more departments that participate in an automatic-aid arrangement operate as one fire department for dispatching fire apparatus.

A robust "Automatic Aid" response program among a cluster of communities, in some cases, can meet ISO's five-mile distance criteria without individual communities having to add or retain multiple fire rescue stations. The ISO will recognize engine companies and ladder companies that respond from another community as part of a predetermined deployment arrangement between two or more fire departments. Automatic aid agreements must be formalized, definitive, well versed and practiced consistently in order for ISO to qualify the relationship and quantify the allowable credit.

Not only does having automatic aid companies fulfill the advantage of having the closest fire apparatus respond to structural fire incidents, automatic aid is designed to bring sufficient numbers of firefighting resources needed to mitigate those emergencies from the very onset of the incident and without hesitation. This has become of ever-increasing nationwide importance with the reduction in the number of volunteer and on-call fire fighters.

Another benefit of an automatic aid program may be the avoidance of having to expand a community's fire department. The need for additional fire stations and apparatus may be unnecessary if the location of an existing neighboring town's fire station can effectively protect an adjacent area of that community which may be under protected by its own department. To reiterate, in order to be considered "protected" by ISO standards, a property must be within five miles of a fire station. A number of Maine communities have areas that are more than five miles from the closest fire station within their boundaries, but are closer to a fire station located in a neighboring town. Under a bona fide automatic aid program, the ISO will give credit to those areas of town that may be better served by another town's fire station, which could also impact fire insurance premiums.

Mutual aid response protocols to Lisbon from neighboring communities are currently in place, however, automatic aid is not. According to officials, the concept of automatic aid is not considered a practical venture at this point in time. Nevertheless, the option to invoke an automatic aid program could be seen as a functional solution to any degradation in service capacity. The region's fire department administrators and community risk managers will undoubtedly monitor the future impacts on their respective public safety services and can always address any shortfalls through cooperative agreements.

Strive to meet the objectives of NFPA 1720

NFPA 1720, the standard: *For the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments*, is the nationally recognized consensus on staffing and deployment by volunteer and on-call fire and rescue departments.

"The standard includes minimum requirements relating to the organization and deployment of fire suppression operations, emergency medical operations, and special operations to the public by volunteer and combination departments. The requirements address functions and outcomes of fire department emergency service delivery, response capabilities, and resources. This standard also contains minimum requirements for managing resources and systems, such as health and safety, incident management, training, communications, and pre-incident planning. This standard addresses the strategic and system issues involving the organization, operation, and deployment of a fire department and does not address tactical operations at a specific emergency incident."

NFPA 1720 establishes strategic objectives for the organization and operation of agencies similar to the Lisbon Fire Department. The standard has become the benchmark yardstick that the United States Department of Homeland Security utilizes when evaluating applications for staffing grants under the Staffing for Adequate Fire and Emergency Response (SAFER).

This may be a lofty pursuit, but it is a template that should be followed in formulating a fire rescue department's method of operation. The crux of this standard is directly correlated with ISO's Public Protection Classification and the value associated with "Automatic Aid." The number of fire companies and personnel assigned to first alarm fire incidents within a prescribed time frame can have significant outcomes with regards to fire suppression efforts as well as fire fighter safety. In many small to medium size communities, the realization is that most fire departments cannot effectively handle a typical building fire with their own resources, thus the reliance on outside agencies from the onset may be paramount.

APPARATUS

The following was taken from the Lisbon Fire Department's Capital Improvement Program Footnotes for Fiscal Year 2023:

Vehicle Replacement Plan – The original vehicle replacement plan was written in 2002 and it called for a 25 (engines) to 30 (ladder) year life expectancy on fire apparatus. With the increase in call volume and the added technology, trucks are not lasting that long. Some components are becoming obsolete after 15 years. National Fire Protection Association (NFPA) 1901, which is the standard as adopted by the State of Maine, recommends trucks to be replaced or put into reserve status after 15 years. The presented CIP shows replacing the vehicles sooner than the original replacement plan cited above.

Although there is well-devised Capital Improvement Program in place, there are times a community will stray from that outline for a myriad of reasons. Just such a case played out in Lisbon when the fire chief brought forth a program that diverged from the CIP.

The following letter from the Lisbon Fire Chief to the residents was an explanation of a pending ballot question on an upcoming November 2022 referendum:

This November you will see a Referendum on the Ballot asking you to approve funds for the Fire Department to purchase two (2) new Fire Trucks. This Referendum will allow us to place these two vehicles under contract and secure prices at today's rates.

Our fleet is aging and with an older fleet we see age-related repairs and obsolete components. Parts for these components are difficult to obtain if available at all. The National Fire Protection Association (NFPA) Code 1901 recommends that fire apparatus be removed from front-line service after 15 years. This means the vehicles that we are asking to replace have outlived their useful life.

We've all seen the economy and what it has done to prices—the Fire Truck industry is no different. Normally, the market sees a 3%-5% increase each year. Over the last two years, the industry has seen a 6%-7% increase about every six months. And, like all automobile manufacturers, we will never see prices drop. The production time for Fire Trucks has gone from 10-12 months to 24-30 months—that's nearly two years.

The reason for the request to replace the two trucks now is to get ahead of the price increases and save the Town money. We don't know how long the trend of semi-annual price increases will last, but the history in this industry tells us that the prices will not go down. To place the order now will put the vehicles under contract and secure the prices at the time of the order.

The current plan is as follows: We will merge our 2004 Rescue truck and the 2003 Pumper into ONE vehicle. This will allow for more efficient operations with current and projected lower staff levels. Our 2000 Freightliner Pumper/Tanker will be replaced with another vehicle that will be designed around today's functions for that truck.

With delivery time nearly two years away, full payment will not be due until they arrive. To go under contract now will secure the prices at today's rate, not at the rate of the date of delivery. At the November 2022 polls, residents voted in favor of the referendum question to expend \$1.7 million to purchase two new fire department vehicles. The program is to purchase one custom designed vehicle that is referred to as a rescue-pumper. This single apparatus will combine the functions of both Engine #1 and Rescue #10. This project will reduce the front-line fleet by one major piece of apparatus with the elimination of the heavy rescue truck.

The second vehicle will replace Engine #2 and will be designed to carry 1,800 gallons of water on a two-door commercial chassis. The new Engine #2 will have a single rear axle as oppose

to the dual rear axle found on the current engine. The characteristics of the new chassis will provide a more nimble and maneuverable apparatus in comparison to its predecessor. The department believes that streamlining and modernizing the fleet of vehicles will be cost effective and be a better fit for an organization that has to rely upon a smaller group of fire fighters.

In another example of deviating from script, in 2022, the town's administrative tier instructed the fire chief to purchase an ambulance. Although this project may not have been foreseen, the need to address a growing concern with emergency service delivery required immediate action, again a project not underwritten in the current version of the CIP.

Retain Engine #1, the 2003 engine as a reserve pumper

When the new Engine #1 has been fabricated, received by the town and placed into service at some point in or around 2025, consideration should be given to the functionality, viability, and condition of the former engine #1, the 2003 pumper. At that time, the town should contemplate reclassifying this apparatus from a front-line pumper to that of reserve status. Having a back-up vehicle to cover the absence of a front-line vehicle due to maintenance, repairs, catastrophic failure or accident, may prove beneficial. The ISO Public Protection Classification document verifies the lack of a reserve pumper in Lisbon. The PPC does afford a small measure of credit for communities that have reserve apparatus in their inventory.

Plan to replace Truck #6, the aerial ladder

As previously stated, Lisbon has a Capital Improvement Plan and the town's many future needs are well delineated in this working document. The aerial ladder is a critical component of the fire department's fleet of fire suppression and rescue vehicles, and Truck #6 is now 20 years old and will be the oldest front-line vehicle when the new Engines #1 and #2 are eventually delivered and pressed into service, presumably in 2025. The fire department's objective is to replace the aerial ladder at the 25-year mark when it reaches the end of its expected life cycle.

The CIP has earmarked 2028 for the aerial ladder replacement project. At this moment in 2023, fire apparatus manufacturers are telling their customers that lead times for production schedules are exceeding two to as many as three years as there is a significant backlog in orders. Furthermore, certain components needed in fabrication are in short supply. The town should monitor future timetables fire apparatus manufacturers are experiencing which may impact the timing of upcoming apparatus acquisitions. In other words, waiting to pursue the purchase of a new aerial ladder until 2028 could actually mean that delivery may not occur until 2030 or 2031 under present conditions.

Rescue #10

The fire department has decided not to replace nor retain the heavy rescue truck. When the new rescue pumper that was ordered in late 2022 is delivered, Rescue #10 will be traded or sold. The functions associated with the heavy rescue will be conveyed to the aptly designed rescue pumper. This cost avoidance maneuver will effectively reduce the front line fleet from three pumpers, an aerial ladder and the heavy rescue, to a reconfigured fleet consisting of a conventional pumper, a rescue pumper, a pumper tanker, and the aerial ladder. The current version of the CIP had the rescue truck replacement scheduled for 2026 at an estimated cost of \$766,000.

FIXED FACILITIES

The opportunity to construct a single new modern fire rescue facility should prove to be a beneficial undertaking for the town's public safety department and the community it protects. A new station would need to be located in an area of town where response distances, routes of travel and corresponding drive times would allow for the most optimal town-wide response template possible.

The question may arise asking whether two stations are better than one. At one point in time the configuration of Lisbon's two on-call fire companies was just. They serve identified districts that were easily accessed by volunteer and on-call fire fighters who lived and perhaps worked nearby. Lisbon also had a third fire station located in Lisbon Center. This station was decommissioned in the early 1970's and the fire company was relocated to the Lisbon Falls fire station. Due to changing demographics, life-styles, cultural shifts, population migration, a reduction in the number of on-call fire fighters, modifying fire and rescue service missions, among other factors, the need to continue with two stations may be unnecessary.

Consolidating all of the fire department's physical assets and all of the organization's human attributes into a single, well-designed, properly sited facility should prove to be a good overall decision for Lisbon. Presently, the office of fire chief is disconnected from the inner workings of the department. It is imperative that the chief is visible and that office needs to be incorporated within physical framework of the fire station. This is especially important now that the department has begun hiring on-duty staff. And, as the fire department embarks upon delivering EMS transport services in the foreseeable future, it will be vitally important to maintain scrupulous oversight and guidance.

Having the entire fleet of apparatus under one roof will allow for the immediate deployment of the appropriate piece of equipment designed to handle whatever the emergency. This is especially true now that on-duty personnel are assigned weekday coverage. Personnel will be better able to maintain equipment and retain familiarity with the full array of tools and equipment that is now dispersed between the two stations.

The conundrum of building a single new fire station may result in the loss of identity the two independent fire associations have known since their inception. Although the true mission of the fire companies has changed, the individuality of each separate association and the attachment to the facility from which they have operated may be ingrained within the fabric of those vested members. To merge the two factions as a single entity within the context of one facility may be difficult for some members to come to terms with. Nevertheless, the movement towards constructing a properly sited, well-devised modern fire and rescue station is vitally important to the goal of providing a most favorable level of emergency service delivery to the town of Lisbon.

As a benchmark, the subsequent list of towns that possess certain characteristics that are somewhat comparable to Lisbon operate from a single fire rescue station:

<u>Town/City</u>	<u>Population</u>	<u>Area</u>	<u>Valuation</u>	<u>Fire Dept. Ambulance</u>
Lisbon	9,711	24.0	\$ 807,500,000	No
Topsham	9,560	35.6	\$1,248,150,000	Yes
Skowhegan	8,620	60.5	\$1,256,250,000	No
Ellsworth	8,399	93.9	\$1,297,200,000	No
Berwick	7,950	37.8	\$ 950,300,000	No
Hampden	7,709	38.8	\$ 910,100,000	Yes
Farmington	7,592	55.8	\$ 606,500,000	No
South Berwick	7,467	32.6	\$ 972,350,000	No
Old Town	7,431	43.2	\$ 678,150,000	Yes
Belfast	6,938	69.3	\$1,049,450,000	Yes

A number of towns in Maine either have or are deliberating reducing the number of fire and rescue stations in their communities as they address the shift from an exclusively volunteer or on-call system, to one where paid on-duty fire fighter/EMTs are assigned a predetermined schedule and staff fire rescue stations in a ready-to-respond mode. The steep drop in the number of volunteer and on-call fire fighters and emergency medical technicians throughout Maine has forced some communities to reconfigure how to deliver essential public safety services. Although the true number of volunteer and on-call fire fighters in Maine is somewhat elusive, the Maine Fire Chiefs Association is attempting to capture a realistic snapshot of what those figures are. Towns that once operated multiple "village" fire stations are in some cases decommissioning those that become underutilized. This phenomenon can often be realized when on-duty personnel occupy one particular fire rescue station routinely, which can lead to the decline of an un-staffed station within the same department.

The decision to redress the arrangement of a community's fire rescue stations may be due to numerous circumstances, such as a reduction in the number of dependable volunteer or on-call firefighters, the infusion of career personnel, overlapping coverage areas by existing stations, deficient facilities, further collaboration amongst a consortium of communities, as well as the opportunity to streamline and centralize operations in an effort to contain costs or to shift financial resources towards a more proficient enterprise.

Although the town will continue to depend upon on-call fire fighters for the foreseeable future, the fire department will likely need to add more on-duty personnel to its roster in the coming years, to eventually include nighttime hours. Having personnel at the fire station allows for an expeditious response to an emergency call typically within 60-90 seconds—an industry performance standard—of being alerted. This factor gives a community some flexibility in choosing locations for fire rescue stations when accounting for travel times. The turn-out time is that segment of a deployment sequence where fire fighters are alerted to the call, don personal protective equipment, board apparatus and begin the next sequence which is known as response time. In a on-call fire department, that turn-out is exacerbated by the fact that fire fighters are not at the fire station, must disengage from what they are doing, get in a vehicle, drive to the station, suit up in their PPE, get on the apparatus, and begin the journey to the incident.

Option #1

Construct a new fire rescue station on Ridge Road within the vicinity of the Wing Street intersection. This project would have both current fire stations decommissioned and replaced with a single facility.

This general location would be 1.7 miles away from the Lisbon Falls station at 30 Main Street via Lisbon Street to Ridge Road, and 2.7 miles from the Lisbon Village station by transiting Upland Road. If the station were to be located further along Ridge Road toward the Upland Road intersection, the distance to the Lisbon Falls station would be in the realm of 2.2 miles and 2.3 miles to Lisbon Village station.

This suggestion brings the single station concept to a more centric location and away from the individual village district model. This proposed location should allow reasonable access to the station in order for on-call fire fighters to get to the station and turnout to emergency calls. Officials indicated that the neighborhood within proximity to the Lisbon Falls fire station currently has the strongest showing of on-call personnel who respond to emergency incidents. Therefore, it may be important to capitalize on this fact when identifying a suitable location for a new fire rescue station.

Moreover, it could be assumed that the town will continue to increase on-duty staffing levels within the fire department in the coming years. The need to staff an ambulance in addition to providing fire and rescue services, and the possibility that a further decline in the reliability of the on-call force were to occur, may be trigger points that warrant hiring additional personnel.

Option #2

This would have a new station constructed as suggested in Option #1, but would retain Lisbon Village as a un-staffed "call company" station with a single engine. This option could be run as an experiment for a set period of time once a new station was fully operational. The Village station's performance would be measured and its viability would be reviewed to determine if continuing to operate the station was beneficial or not.

Option #3

The general vicinity of the River Road, Frost Hill Road and Lisbon Street intersection is equidistant from both fire stations at approximately 1.8 miles distance. This location would draw on-call fire fighters from both the Lisbon Falls and Lisbon Village.

It appears the Route #196 corridor may also be a plausible consideration in locating a single new fire rescue station. The goal is to find a site somewhere in the middle between the two village districts. As stated, the two fire stations are 3.8 miles apart, and in theory, it may make sense to seek-out a location somewhere at midpoint along Lisbon Street. Using this metric, the intersection of River Road, Frost Hill Road and Lisbon Street meets that synopsis. There are however, many factors that would play into finding a lot of land that is for sale, an occupied site that could be acquired, or ideally, a parcel of town owned property. Other issues impacting a choice would include topography, flood zone designation, types of soils, access to utilities, road frontage, etc. To that end, and as a concession, an adjustment in either direction may be required in an effort to find an available, suitable site.

Alternate Consideration

Over the course of this study, there was a focus on town-owned land across from the town office complex with regard to locating a public safety facility. It is believed there are two abutting parcels, which together, encompass 7.4 total acres. The property has road frontage along Lisbon Street.

These parcels (309 and 313 Lisbon Street) are a distance of approximately 0.8 miles from the Village fire station at 41 Village Street and 3.0 miles from the Lisbon Falls fire station at 30 Main Street. Locating a new station at this address somewhat tips the balance of coverage more toward the Lisbon Village as opposed to Lisbon Falls. The intent is to find one single location that best addresses the fire protection needs of the two village districts. The appeal is that the town owns the property, however, the location does not necessarily meet the ideal requirements in situating a singular fire rescue station if the town were to merge the two stations.

Alternative Water Supply

The town of Lisbon may be able to improve upon its Public Protection Classification rating in those areas not serviced by the municipal water system. The ISO's Fire Suppression Rating Schedule (FSRS) recognizes alternative water supply systems, including dry hydrants, suction points, large-diameter hose relays, and hauled water using tanker shuttles. This opportunity does require the assistance of the region's fire departments working in partnership to meet the criteria set forth by the Insurance Service Office.

The water delivery system must be available 365 days a year and provide 250 gallons per minute (gpm) for a two-hour duration within five minutes of the arrival of the first apparatus. If a community uses a dry hydrant or suction supply point, ISO may need certification of the water capacity available during a 50-year drought cycle — by a state-certified professional — and many state and local governments have geological engineers or hydrologists who can provide that information. A good place to start is with the local department of environmental conservation. ISO treats suction points — with or without dry hydrants — in the same way it treats standard fire hydrants. Any property within 1,000 feet of a creditable suction point may be eligible for a protection class better than Class 9, provided the building is within five road miles of a responding fire station and the community has obtained 20 percent credit or more under the Fire Suppression Rating Schedule.

ISO may extend credit beyond 1,000 feet of a fire hydrant when the company uses large-diameter hose — if the fire department can demonstrate a standard procedure for deployment of hose and establish a relay operation.

To determine the fire department's eligibility for recognition of a tanker shuttle, ISO needs to understand the delivery capability of each apparatus.

ISO considers the following:

- Fire-site pump capacity
- Drop-tank capacities
- Distance of responding apparatus from the fire station to the fire site
- Distance of responding supply pumper to supply site
- Distance from the fire site to the supply site
- Amount of water carried by apparatus
- Discharge rate of water supply apparatus
- Fill rate of water supply apparatus
- Quantity of water available and the rate available from the supply source
- Set-up times

The procedure for determining the system's capability involves running a timeline analysis. ISO considers apparatus arrival times, travel times, discharge rates, fill rates, fire flow at the fire site, wait times for apparatus to fill or discharge their water supply, and supply delivery capability.

As an example, the town of York, Maine which is comprised of 56 square miles, achieved a PPC of "4" across the entire community when it proved to ISO its ability to deliver sufficient fire flow in the non-hydranted areas of town. A number of other Maine communities have also achieved improved PPC with demonstrating a rural water delivery evolution that meets the intent of ISO's alternative water supply criteria.

End of Report