

Modified Informed Community Self Determination (ICSD) EMS Evaluation in and for the Towns of Camden, Hope, Lincolnville, and Rockport and the Pen Bay Medical Center - Final Report

I. Executive Summary

The towns of Camden, Hope, Lincolnville and Rockport have received 9-1-1 emergency medical services (EMS) response coverage from North East Mobile Health Services (NEMHS – a private company based in Scarborough, Maine) since 2013. For some 77 years before, that service was provided by the Camden First Aid Association (CFAA), a non-profit ambulance agency overseen by a community board. Pen Bay Medical Center (PBMC) had been served by NEMHS prior to 2013 to transport its patients requiring certain emergency services to other facilities (called “inter-facility transport” or IFT) for that care. In mid-2020 and anticipating the NEMHS contract conclusion on June 30, 2021, PBMC and the towns of Camden and Rockport sought advice on weighing options for future EMS coverage. This report summarizes the process that ensued.

In the most recent years of NEMHS’ service to the area, increasing discussion among local public safety, government and hospital officials about satisfaction with elements of that service has occurred. Presentations of potential fire-based EMS alternatives for 9-1-1 response have been entertained, and PBMC continues its use of NEMHS but without a current contract. A Maine-based EMS system professional was asked to lead this project utilizing aspects of the EMS “informed community self-determination” (ICSD) approach he had developed with other national experts. He and two colleagues served as Project staff to conduct an evaluation of the current service within an overall process to determine what options, in addition to a status quo option (in other words, no change from the current service) would best serve the area, and who would make the decision in choosing among options.

An initial Steering Group was selected by the towns of Camden and Rockport and PBMC to guide the Project and to review and approve its modified ICSD process in summer, 2020. In subsequent meetings, the Steering Group invited and added representatives selected by Hope and Lincolnville and helped to translate findings into recommendations for the Project. An initial example of this was a recommendation based on Project staff input to not proceed with a request for proposals (RFP) for EMS service in the area as an option. Staff research indicated that EMS workforce constraints in Maine EMS agencies, uncertainty created by the pandemic and other issues made that a likely unpromising route.

Through Fall and Winter as the evaluation component continued, the Steering Group met frequently (weekly at times), and reviewed staff research and findings, developing what evolved into ten potential options. In early 2021, it became evident to the Steering Group that issues identified in the evaluation precluded consideration of a status quo option because at least some contractual changes with NEMHS would be needed if it continued service. The Steering Group considered other options that called for starting a new fire-based service or a joint NEMHS/fire service venture. They felt that these had

possibilities but not in the timeframe beginning July 1, and especially in the uncertainty of the operational and financial environment created for EMS and PBMC by the pandemic.

Ultimately, the Steering Group consulted with the select boards as the decision-making entities at this level, to select an option to present to taxpayers in the referenda that COVID conditions dictated would be used in place of town meetings. The town decision-makers agreed with an option that called for continuing NEMHS for an additional one-year contract with an option for a second year. The contract would contain a number of new provisions that addressed issues identified in the evaluation and included operational and medical leadership staffing and communications, accountability and reporting, and participation in accreditation and other processes that better assure performance oversight and improvement. NEMHS and PBMC renewed communication about interfacility transport and other joint issues identified in the evaluation.

This option also recommended that a fire-based first response unit be formed in the four towns in an initiative with one town serving as the Maine EMS licensee and administrator, the same or another town providing the EMS chief, but all four towns benefitting and soliciting members. The four towns would contribute to a small fund to cover insurance, licensing and other administrative costs, but would individually budget to equip and pay for first responders answering calls in their towns.

Finally, the option recommended that the towns sponsor an EMS regionalization planning project in 2021-2022, guided by an experienced municipal planner, to evaluate the options for a new form of service to address EMS and possibly fire service needs. Other area towns would be invited to participate. An estimate of cost was received from a planner approved by the Steering Group.

The financial impact of this option for the towns would be:

- A .6% increase for the NEMHS contract for 2021-22 based on the New England Consumer Price Index,
- A population apportioned split of \$20,000 for the regional planning initiative,
- A population apportioned split of \$1,200 for the first responder unit administrative costs.

Table 1

Town	2010 Population	2010 Population %	2019-20 NEMHS Contract	2020-21 NEMHS Contract	2021-22 NEMHS Contract	2021-22 Regionalization Plan Initiative	2021-22 1st Responder Admin. Costs
Camden	4,851	41%	\$122,066	\$123,202	\$123,941	\$8,200	\$492
Rockport	3,330	28%	\$83,810	\$84,138	\$84,643	\$5,600	\$336
Lincolnville	2,164	18%	\$54,463	\$54,089	\$54,413	\$3,600	\$216
Hope	1,536	13%	\$38,658	\$39,064	\$39,298	\$2,600	\$156
Total	11,880	100%	\$298,997	\$300,492	\$302,295	\$20,000	\$1,200

II. Background and Project Overview

Community-based emergency medical services (EMS) find themselves somewhere between the all-volunteer, first-aid providing, donation-supported rescue service which first came to be and the all-paid, paramedic, professional health care operation of a hospital, fire or other municipal department, or private company now common in most cities.

The public's expectation of the EMS professionals who arrive at their door is high. In 1973, the public expected no more than a lights and siren, "horizontal taxi" ride to the hospital frequently provided by community volunteers. By 1983, the media-influenced public didn't know whether to expect just the fast ride to the hospital or life-saving care in the back of the ambulance. But by 1993, a Maine EMS study showed that almost 90% of Maine's citizens expected paramedics (the highest level of EMS capabilities) to arrive at their doorstep for their heart attack. With media influence, there is no reason to believe they expect anything different today regardless of what is actually available.

Most emergency medical services are moving from the volunteer/basic care end of the spectrum to some point closer to the paramedic, all-paid end in urban and suburban centers. Rural EMS agencies face challenges in doing so, because of intertwined transport volume, financial and workforce availability issues exacerbated by the declining availability of other health care resources in their communities. The need to transport patients to more distant urban facilities to which higher levels of health care have gravitated takes ambulances away from availability for 9-1-1 response.

The Camden-Rockport-Hope-Lincolnvile area was served for 77 years by the Camden First Aid Association until financial issues led to a significant increase of subsidy request to the four towns in 2013. Subsequently, the towns contracted with North East Mobile Health Services ("NEMHS") for 9-1-1 service. Additionally, NEMHS has already been and continued to be a principal transporting agency for patients transported out of Pen Bay Medical Center (PBMC) in Rockport.

NEMHS' initial contracts with the towns have been renewed to date with all four town agreements aligned for a common sunset date of July 1, 2021. There have, however, been increasing discussions among principals in the towns and the hospital about NEMHS's ability to meet the demands of 9-1-1 response and the interfacility transport needs of PBMC. These discussions resulted in a request, with approval of the town and hospital parties involved, to Kevin McGinnis to utilize a modification of an EMS evaluation process called Informed Community Self-Determination (ICSD) to study the situation and provide options for future action.

Finally, for the sake of transparency, the principal advisor in this process, Mr. McGinnis, is a past chief/CEO of NEMHS from 2011 to 2014 and advisor to NEMHS from 2014 to 2016. The hospital and Camden and Rockport town principals recognize this past affiliation and have requested this proposal regardless of that fact. In turn, Mr. McGinnis partnered with Michael Senecal, an experienced EMS director in western Maine, for the

evaluative components regarding NEMHS to assure objectivity. Enhancing this expert objectivity, the project also utilized Dr. Richard Narad, a California university health services systems faculty member and expert on EMS systems evaluation, comparison and contracting. The Project staff advisors and their backgrounds are in Appendix E.

III. Purpose and Format of the Evaluation

Kevin McGinnis and his associates, Mr. Senecal and Dr. Narad, (the Project Staff advisors), conducted an independent, objective evaluation of emergency medical services capabilities and needs in and for the towns of Camden and Rockport and for PBMC, and expanded to include Hope and Lincolnville. This evaluation produced a description of the current operation with recommendations for improved response and patient care as were indicated, and options for alternative delivery models. The advisors worked with the towns and PBMC through a Steering Group selected by them, and a local EMS expert and facilitator, to define the process by which these options will be considered and by which decision-makers. The advisors then assisted the towns and PBMC in informing the decision-makers about the process and options that they will consider. The scope of the contract spanned from evaluation to selection of an option, and was extended to include contract discussions with NEMHS. Subsequent implementation of the selected option was, otherwise, beyond that scope.

The advisors drew upon the ICSD evaluation process and template as they deemed relevant to this project. They worked with Tom Judge who was the local EMS expert/facilitator of the project staff and initial contact and project organizer with town and PBMC principals. The evaluation and recommendations components included, as the project evolved under the Steering Group's direction and as represented in this final report:

North East Mobile Health Services in the Camden-Rockport Area

This is an historical and quantitative picture of the services now provided. It provides decision-makers with a foundation of critical information from call and interfacility transport response profiles (call volumes, types, times, level of care and other response characteristics as available) to current staffing methods.

North East's Other Capabilities and Performance

This is a qualitative look at the functional effectiveness of the service. It is organized to assess critical components of an ambulance service such as governance, general operations, patient care, facilities and equipment, staffing, training, safety, budgeting/finance (as information is made available), and community relations/services. It will gather and analyze issues identified by stakeholders and/or observed by the advisors as a part of the foundation upon which to develop operational options for decision-makers to consider.

Camden-Rockport-PBMC: Options to Meet Community Needs for an Agile, Responsive EMS Resource

This section takes the NEMHS organization in the Camden area and Maine in general, as profiled in the previous two sections, and analyzes its strengths and weaknesses, as well as its opportunities and challenges. It then offers recommendations to make NEMHS, with consideration of possible fire department first response partners, a reasonable model for continuing its service to the area. Finally, other operational options and their relative cost implications will be considered by the Steering Group in an agreed-upon ICSD format.

IV. ICSD and the Camden-Rockport-PBMC Project

Rural and Frontier EMS Agenda for the Future, a book published by the National Rural Health Association in 2004, proposed the Informed Community Self-Determination (ICSD) model of community-engaged planning. It was designed to help communities with jeopardized EMS agencies redesign EMS services that fit with local tax-base and other resources and capacities and that reflect community preferences. Most simply stated, ICSD is designed to credibly inform taxpayers and/or their elected representatives regarding the type and level of EMS they currently have, reveal flaws or limitations to address, explain alternative levels of basic or advanced care and types of response that could be available, approximate the cost of adopting those alternatives, and facilitate a taxpayer decision to fund their current coverage or adopt a new plan. Specifically, ICSD provides a process in which:

- An outside expert or entity conducts an objective evaluation of the EMS service;
- The evaluator reports openly on the level of care, method/speed/availability of response and any issues which affect those factors;
- The evaluator reports any deficiencies which jeopardize service performance in order that they can be addressed immediately or entered into the ICSD discussion as indicated;
- Based on accepted national practices and state EMS law and regulations, options are presented and their implementation and financial impacts explained in terms of costs, projected revenues, other sources of funding, and the effects of changes on local, tax-based subsidies; and
- The community holds a meeting(s) of taxpayers and/or their representative decision-makers to select a level and type of service it desires and establish the level of funding needed to implement and sustain it.

In short, the ICSD process is designed for isolated rural communities with EMS operations in jeopardy and involves informing taxpayers or their authorized representatives about the type and performance of their EMS agency, what options for change they might consider, and at what cost to them. Then they are guided through a process to decide among the options.

The greater Camden EMS service area is not strictly the type intended for application of ICSD. It is more urban, wealthier, and includes multiple towns, a health-system affiliated

hospital with interfacility transport needs and, therefore, multiple sets of decision-makers. However, ICSD principles have been successfully applied in similarly more complex settings as well, addressing other EMS-related issues in Maine.

In this case, an evaluation of NEMHS' type and level of performance in meeting 9-1-1 and interfacility obligations was requested. Based on this evaluation, the current and alternative operational models addressing both 9-1-1 and interfacility needs would be described as options.

In the proposal for this process, it was specified that the project staff would "Meet with town, PBMC and North East principals to agree on the process to be followed in the project and execute the "Emergency Medical Services (EMS) Informed Community Self-Determination Program Agreement" (Appendix B of the ICSD template: <https://nasemso.org/wp-content/uploads/2020-Template-for-Informed-Community-Self-Determination-v-6.1.pdf>)". This would include a definition of the decision-making process and decision-makers to be involved. Because of the Project contracts established with Camden, Rockport, PBMC, and the Project staff, and the voluntary participation of NEMHS and two of the towns, the consensus on process developed throughout the Project by the Steering Group, sufficed to meet this ICSD agreement procedure. This was but one of the ways Project staff adapted the ICSD process to facilitate the needs of the stakeholders as allowed by the contracts in force.

The ICSD process initially utilizes a core group of key stakeholders to guide and help the staff through the evaluation and option development processes. In this Project, it included representatives of the Project clients, the towns of Camden and Rockport, and PBMC. As previously mentioned, it also included a volunteer facilitator who is a local resident and respected national EMS system expert and was a part of the original discussions among local town government, public safety and PBMC members about EMS coverage. He had been asked to help formalize this process by stakeholders and secured the consulting staff for the Project. After initial organizing meetings in the summer of 2020, the core group invited the Town of Hope and the Town of Lincolnville to be represented on the Steering Group as key stakeholders which included:

- **EMS Project Steering Group**
 - Tom Judge. Volunteer facilitator. Executive Director, LifeFlight of Maine.
 - Audra Caler-Bell. Camden Town Manager.
 - William Post. Rockport Town Manager.
 - Chris Michalakes, MD. Emergency Physician. PBMC.
 - Nancy Jackson, RN. Director of Emergency Services. PBMC.
 - Stephen Skinner, MD. Emergency Physician. PBMC
 - Sarah Ann Smith. Chair, Hope Select Board.
 - Thom Ingraham. Member, Hope Select Board.
 - David Kinney, Lincolnville Town Administrator.

The Project proposal and contracts were developed and completed through July and August, 2020 by the Project staff leader, the Towns of Camden and Rockport, and PBMC. The Project staff was assembled and began work in September.

The core of the evaluation included a review of Maine EMS, NEMHS, KRCC (Knox Regional Communications Center) and other data relevant to the functioning of EMS in the project area. This was accomplished by the three Project Staff advisors. An evaluation of NEMHS itself, including all relevant inspections of facilities, equipment, records, operating procedural and other materials, and interviews with leadership, staff, and KRCC officials was conducted by Mr. Senecal. Evaluation of contract materials and review of findings and recommendations as they emerged was done by Dr. Narad and Mr. Senecal, when presented or developed by Mr. McGinnis. The remaining interviews were conducted by Mr. McGinnis with some assistance by Mr. Senecal. Interviewees were those recommended by the Steering Group or on their own action by the Project staff (virtually all of these were accomplished with only a few who did not respond to multiple phone calls and/or emails; only two resulted from e-mail correspondence and not a direct interview). Interviewees were assured of anonymity in their participation and comments, but resulted in 43 interview sessions which included all or a sampling of the following (where “town(s) is cited it means the four Project towns unless otherwise specified):

- Town managers/administrators and other officials
- Town select board chairs and members, and past EMS Performance Review Committee members
- Town and neighboring fire department chiefs, other officials and a sampling of members
- Town and county law enforcement officials
- Knox Regional Communications Center staff
- Town residents and business operators
- PBMC leadership and staff
- Staff involved in emergency department operation in Waldo County General and Miles Memorial Hospitals
- Maine EMS and Atlantic Partners EMS (Mid-Coast EMS Council) officials
- NEMHS leadership and a sampling of Rockport-based EMTs/Paramedics

The first option to be considered was whether the towns and hospital could entertain a request for proposal (RFP) process, given a 2012-13 process for EMS in the area that was successfully concluded. The area has approximately 1,500 9-1-1 calls and 1,000 interfacility transports, making it a reasonable prospect for at least an in-state service to initiate an operation. Staff research revealed little interest from likely respondents to such an RFP given the EMS workforce fragility in Maine and regionally, and the operational and financial uncertainties created by the pandemic. The fluctuations in call volume and staffing needs among potential respondents and the uncertain future of the pandemic and its effects were specifically cited. The Steering Group was also concerned that an RFP might prematurely preclude, with long-term consequences, the opportunity for growth of a community-based service or a locally sponsored, regional service in the

future. The Steering Group agreed, then, not to attempt an RFP for EMS service in the area as an option.

The Project was originally planned to conclude in December, 2020. Since the process would not end with an RFP process, and the ICSD process is intended to match the timeframe for town and hospital decision-making which could extend through town meetings in June (or referenda if town meetings can't be held under pandemic precautions that may then exist), it was agreed during the fall Steering Group meetings that the Project would extend until its members' needs were met. This would be when an option, or options, was selected by the Steering Group and the towns and PBMC agreed that no further Project staff ICSD support would be required. There would be no additional cost for extending these services.

The Steering Group set a regular weekly meeting schedule through the fall and winter and met on most of those occasions for Project updates and to develop and select operational options to be considered. Ten options evolved from Project staff consideration of response data and issues revealed during the evaluation process and especially the interview component. Also, NEMHS and fire service leadership were solicited for ideas for further operational options and these were received and added to the mix. They were assured that details of their proposals would not be made public without permission. There was no need to do this as portions of their proposals were integrated into options anonymously as they evolved during Steering Group consideration.

As described below, one multi-part option emerged as clearly favored by the Steering Group while aspects of three others were recommended for further study as a part of the selected option. An in-person meeting was held for Project staff and a Steering Group member to explain the process, options, and potentially selected option to the four town fire chiefs. Project staff conferred with NEMHS leadership on the option that would likely be pursued. The PBMC Steering Group representatives conferred with leadership at the hospital throughout. Between the interview process and consultation with PBMC Steering Group members individually, the inter-facility transport priority of PBMC was addressed. There had been no specific contract in this regard since 2018, though staff of PBMC and NEMHS seemed to somewhat continue to abide by its provisions (e.g. method of requesting transports). During the ICSD process, a new Steering Team member was added by PBMC. This physician, Dr. Steve Skinner, is new to the area but is an EMS specialist who is becoming the EMS liaison for PBMC. The Project established a communication relationship between Dr. Skinner and NEMHS CEP Butch Russell with promise of discussions and a pathway to improving the leadership and operational communications issues identified by the Project. Dr. Skinner expressed that this, and other results of the Project, constituted a satisfactory result for the time being and that no further Project staff effort was required from his perspective.

Based on input from these informational meetings, details of the option were revised and budget figures further developed. Informational meetings were held on February 8 and 9 for the Lincolnville, Rockport, Hope, and Camden select boards on the Steering Group

process and option selected. A further meeting was held on March 25 for the Hope select board and budget committee.

Following these sessions, disagreements with budgeting for a first responder unit were raised. Some members felt that equipping and providing call pay for members responding in their towns would be less than the costs projected. As a result, these projected costs were taken off the proposed first response unit expense request to be apportioned to the towns. These would be managed internally by the towns in their budgeting processes. Only a \$1,200 shared administrative cost would be requested to be apportioned to the towns.

Project staff researched alternative means for apportioning the EMS coverage and other shared costs of the option selected and over three weeks' meetings these were reviewed and discussed by the Steering Group, with time to review with their town colleagues. Finally, a population-based apportionment method using most recent census figures was chosen, as it had been in previous years.

V. North East Mobile Health Services in the Camden-Rockport Area

The towns of Camden, Hope, Lincolnville and Rockport have received 9-1-1 emergency medical services (EMS) response coverage from North East Mobile Health Services (NEMHS – a private company based in Scarborough, Maine) since 2013. For some 77 years before, that service was provided by the Camden First Aid Association (CFAA), a non-profit ambulance agency overseen by a community board. When financial and other difficulties evolved for CFAA around 2012, their ensuing request for an eight-fold increase in town subsidies led to a request for proposal process that attracted four candidates with NEMHS subsequently being awarded the contract.

Pen Bay Medical Center (PBMC) had been served by NEMHS prior to 2013 to transport its patients requiring certain emergency services to other facilities (called “inter-facility transport” or IFT) for that care. This relationship reflected NEMHS’ pattern of serving the evolving Maine Health system service area, of which PBMC was increasingly a part, as widely as possible.

That CFAA was a community-based service gave it hometown characteristics that are appreciated in the area: local board and executive leadership, staff largely drawn from the communities served, and an informal “first response” capability created by ambulance staff listening to public safety dispatch radio traffic and assisting with calls in their home areas even when not on duty. CFAA was born out of the volunteer tradition common in EMS, and evolved into a version of a paid service also frequently the path of modernizing ambulance services in an era of declining volunteerism.

Volunteer services often depended on their appeal as a social organization to attract and retain members, while fully paid services implemented modern business and human resource development principles to succeed. CFAA’s demise spoke of the pitfalls that

such services can also experience when the business acumen and leadership required of modern EMS agencies does not evolve as fast as the move from volunteer to paid service.

NEMHS is, by volume of calls, the largest of the Maine's ambulance service providers. It is based in Scarborough, has over 200 employees, and operates bases there and elsewhere in southern Maine. Its base in Rockport serves the Camden-Rockport area, and a base in Brunswick is a resource for additional ambulances and crews when Rockport's are busy. The NEMHS company is a private for-profit that shared roots in a family-owned venture that also created what is now Northern Light Medical Transport in Bangor.

Health care services such as NEMHS, that are "for-profit" entities, tend to be negatively cast to some degree, especially by others with whom they compete. In EMS, the fire service, which vies for the EMS role in the face of declining fire suppression needs, is a significant source of this tension for private services, including nonprofits. No EMS operator or sponsorship model has proven superior to another. This is fortunate, as Maine has a varied group of these among its 276 EMS first responder or ambulance agencies:

- 173 Fire Service First Responder or Ambulance Services (e.g. Rockland)
- 41 Non-Profit Community EMS Services (e.g. St. George)
- 35 Independent Municipal EMS Services
- 11 Private EMS Services (e.g. NEMHS, St. George)
- 11 Hospital-Based EMS Services
- 3 College-Based EMS Services
- 2 Tribal EMS Services

Nonetheless, the transition from CFAA to NEMHS does present a contrast from a community-based service with primarily local staff to a more generic identity with a mix of local staff and a changing set of faces from other NEMHS bases.

At the Rockport base of NEMHS, two ambulances are budgeted for staffing 24/7 at the Rockport base with a third staffed 12 hours during the daytime. A fourth vehicle is generally present as a back-up (consistent with a loose industry practice of one spare for every 3-5 ambulances in frontline use). A wheelchair van is maintained for transports not requiring an ambulance. With approximately 1,500 9-1-1 calls and 1,000 IFT calls per year, this ambulance availability seems to be more than enough to cover demand (in EMS measurement terms, this is a "Unit Hour Utilization" or UHU of 0.12 – or ambulances in use 12% of their time available for use). This is a fallacy of sorts since the Rockport base's ambulances are often on four-to-five-hour transports to Portland, and once there, may be used for local transfers on occasion. This practice, however, keeps the Rockport fleet from achieving a higher UHU enjoyed by more urban operations.



Picture 1 - NEMHS Rockport Base Garage During Project Inspection – October 25, 2020

When staffing is short and only two trucks are able to be staffed during the day, that is when Brunswick-based resources may be moved north or used for out-of-town interfacility transports. Use of these resources occurs several times a week according to NEMHS leadership and staff interviews.

NEMHS is licensed at the Advanced EMT level, with a permit to Paramedic level, by Maine EMS. This means that it must provide at least one Advanced EMT in the two-person crew responding to every 9-1-1 call. It may also substitute a Paramedic for one or more of those crew who may practice at that more advanced level. It also can provide a “Paramedic Interfacility Transport” or “PIFT” certified Paramedic on inter-facility transports when indicated.

NEMHS has, by town contract, agreed to provide a Paramedic on 9-1-1 calls that are classified by KRCC as likely to require “advanced life support” or “ALS” capabilities. These would be the skills reflected in the table below as Advanced EMT or Paramedic. Skills listed as EMT in the table are generally considered more “basic life support” or “BLS”. All three levels of practitioner provide BLS to which Advanced EMT, Paramedic and PIFT Paramedics add ALS appropriate to their licensure and certifications.

Table 2

Who Can Do What When?			
BASIC LIFE SUPPORT	BLS/ALS Skills	ADVANCED LIFE SUPPORT	
EMT	Advanced EMT	Paramedic	
Assists with Meds (OLMC*) Assists with Inhaler (OLMC*) CPR Oxygen Heart Defibrillation (AED) Glucometer (Glucose Testing) Splinting Spinal Motion Restriction Bleeding control (including Tourniquet and hemostatic agent) Airway Management (BVM,OPA, NPA) Albuterol (Patient's)(OLMC*) Aspirin 324 mg (Heart) Oral Glucose (Paste) Epinephrine (Auto Injector) Naloxone (Atomized)(Overdose) Nitroglycerin (Patient's) (OLMC*)	Assists with Meds Assists with Inhaler CPR Oxygen Heart Defibrillation (AED/Manual) 4 Lead Heart Monitor (Limited) 12 Lead Placement Secure Vein Access (IV) Glucometer (Glucose Testing) Spinal Motion Restriction Splinting Laryngal Mask Airway Blind Insertion Airway Device Capnography EZ I/O Aspirin (Heart) Albuterol (Breathing)(OLMC*) Acetaminophin (Pain)(OLMC*) Nitroglycerin SL (OLMC*) Epinephrine (Auto Injector) Glucagon (Diabetes) Naloxone/Narcan Dextrose D10/D50 Oral Glucose (Paste)	Assists with Meds Assists with Inhaler CPR Oxygen Heart Defibrillation (AED/Manual) 4 Lead Heart Monitor 12 Lead Heart Monitor Secure Airway (Intubation) Secure Vein Access (IV) Glucometer (Glucose Testing) Heart Pacing Heart Cardioversion Surgical Procedures (Breathing) Splinting Spinal Motion Restriction Capnography EZ I/O Gastric Tube Blind Insertion Airway Device Tourniquet and Hemostatic Agent Chest decompression Acetaminophin (Pain) Activated Charcoal (Poison) Adenosine (Heart)	Albuterol (Breathing) Amiodarone (Heart) Aspirin (Heart) Atropine (Heart) Calcium Gluconate (Heart) Dexamethasone (Breathing) Dextrose/D10/D50 (Diabetes) Diphenhydramine/Benadryl (Allergy) Epinephrine (Heart/Breathing) Fentanyl (Pain) Glucagon (Diabetes) Ipatromium Bromide (Breathing) Levophed (Heart/BP) Lidocaine (Pain) Ketamine (Pain)(OLMC*) Magnesium (Heart, Breathing) Metoprolol/Lopressor (Heart) Midazolam/Versed (Seizures) Naloxone/Narcan (Overdose) Nitroglycerin (Heart/Breathing) Nitrous Oxide (Pain) Ondansetron/Zofran (Nausea) Sodium Bicarbonate (Heart) Tetracaine (Eye Pain) Tranexemic Acid (Bleeding)

*After Consultation with On Line Medical Control
 Effective December 1, 2019 (Updated 11/3/2020)

Courtesy of NorthStar EMS ~ www.fchn.org/NorthStar

The staffing budget for NEMHS at the Rockport base includes an EMT and a Paramedic for each of the three staffed shifts described above (two 24-hour and one 12-hour) seven days a week. Ideally, this constitutes a staff of mostly full-time personnel with some shifts filled by part-timers or full-timers working over-time. This allows flexibility to staff with less than a Paramedic level when only BLS is required, to staff an extra truck when not otherwise scheduled, to add a PIFT Paramedic for an interfacility transport, and to address staffing challenges when staff call out or leave. Such challenges have been a problem in recent years and are discussed below.

NEMHS’ specific contractual staffing agreement is to provide a Paramedic on at least 95% of calls classified as ALS. There is a financial penalty when this does not occur. Table 3 presents an NEMHS report for 2019-2020 demonstrating compliance with this contract provision in all quarters of the year.

Project staff reviewed evidence of patient satisfaction surveying done by NEMHS. This indicated satisfactory reviews when performed.

Table 3

Paramedic Response to Advanced Life Support Trips*

*Contract Requirement: As measured quarterly, a paramedic will respond to 95% or greater of all Advanced Life Support trips

Camden					Hope					Lincolntonville					Rockport					Quarter Average
Month	Total Calls	ALS Calls	Medic	Average	Month	Total Calls	ALS Calls	Medic	Average	Month	Total Calls	ALS Calls	Medic	Average	Month	Total Calls	ALS Calls	Medic	Average	
July '19	89	41	41	100.0%	July '19	7	5	5	100.0%	July '19	14	7	7	100.0%	July '19	37	13	13	100.0%	
Aug '19	70	22	22	100.0%	Aug '19	4	3	3	100.0%	Aug '19	13	7	7	100.0%	Aug '19	49	22	22	100.0%	
Sept '19	90	34	33	97.1%	Sept '19	0	0	0	-	Sept '19	7	4	4	100.0%	Sept '19	35	14	14	100.0%	
Q1	249	97	96	99.0%	Q1	11	8	8	100.0%	Q1	34	18	18	100.0%	Q1	121	49	49	100.0%	99.42%
Oct '19	92	37	37	100.0%	Oct '19	6	6	6	100.0%	Oct '19	14	7	7	100.0%	Oct '19	25	10	9	90.0%	
Nov '19	64	21	21	100.0%	Nov '19	6	3	3	100.0%	Nov '19	14	10	10	100.0%	Nov '19	40	21	21	100.0%	
Dec '19	68	24	24	100.0%	Dec '19	2	0	0		Dec '19	14	6	6	100.0%	Dec '19	31	25	25	100.0%	
Q2	224	82	82	100.0%	Q2	14	9	9	100.0%	Q2	42	23	23	100.0%	Q2	96	56	55	98.2%	99.41%
Jan '20	71	29	29	100.0%	Jan '20	8	5	5	100.0%	Jan '20	4	4	4	100.0%	Jan '20	44	23	23	100.0%	
Feb '20	68	26	25	96.2%	Feb '20	4	2	2	100.0%	Feb '20	3	1	1	100.0%	Feb '20	24	8	8	100.0%	
Mar '20	73	31	31	100.0%	Mar '20	7	4	4	100.0%	Mar '20	8	6	6	100.0%	Mar '20	26	14	14	100.0%	
Q3	212	86	85	98.8%	Q2	19	11	11	100.0%	Q2	15	11	11	100.0%	Q2	94	45	45	100.0%	99.35%
April '20	53	25	24	96.0%	April '20	5	1	1	100.0%	April '20	14	9	9	100.0%	April '20	17	9	9	100.0%	
May '20	42	16	16	100.0%	May '20	5	1	1	100.0%	May '20	20	15	15	100.0%	May '20	23	10	10	100.0%	
June '20	54	23	23	100.0%	June '20	10	5	5	100.0%	June '20	12	7	7	100.0%	June '20	18	7	7	100.0%	
Q4	149	64	63	98.4%	Q4	20	7	7	100.0%	Q4	46	31	31	100.0%	Q4	58	26	26	100.0%	99.22%
Annual	834	329	326	99.1%	Annual	64	35	35	100.0%	Annual	137	83	83	100.0%	Annual	369	176	175	99.4%	99.36%

When staffing at any EMS agency is not sufficient to respond at the time a 9-1-1 call is received, the agency staff can request (or an automatic request is triggered by agreement) to have a neighboring ambulance dispatched in a process called mutual aid. Mutual aid agreements describe the circumstances in which aid will be provided, any conditions for that aid, and how it is paid for. The towns and NEMHS participate in a somewhat generic countywide mutual aid agreements, a plan with Union enabling that ambulance to bill for NEMHS ALS assistance when needed, and a mutual aid billing arrangement with the Rockland Fire Department (RFD). Possible over-dependence on mutual aid from RFD was one of the concerns expressed in interviews and is addressed below. NEMHS pays a fee to RFD for mutual aid use and loses its normal revenue on all calls RFD handles, so there is a financial penalty built into decisions to use mutual aid. Neither NEMHS nor RFD feels that the current frequency of mutual aid use is excessive.

The information on NEMHS call performance follows a request to Maine EMS for five years of operational data. A request was also made to NEMHS for data reports that it had supplied to the towns and PBMC, based on various data including that from Maine EMS and KRCC. Maine EMS was extremely helpful in providing raw and report data for this project. Project staff advisors analyzed Maine EMS data, and found inconsistencies in the call volume and response performance data across years that we sought to employ. These appeared to have been caused by transitions in the data system used by Maine EMS as they were implemented by NEMHS and services chosen with which to compare NEMHS. These transitions were not accomplished by all services at the same time.

In addition to these idiosyncrasies, it is easy to get lost in the weeds of data reports, so Project staff present data here which demonstrate the preponderance of their impressions of response performance in the Project area and comparison towns in the most recent

years for which data was complete, reliable and understandable. They found that calendar year 2019 and NEMHS contract years 2019-20 were representative of the entirety of data reviewed. They are the most contemporary without seemingly large impact by the pandemic onset.

Table 4

**Maine EMS 2019 Data:
9-1-1 Call Response Time of Incident to Time Ambulance Arrived on Scene
(In Minutes)**

Response	Total	Mean Average	90th Percentile
NEMHS to Camden	903	9.4	14.0
NEMHS to Hope	70	16.4	23.0
NEMHS to Lincolnville	165	19.0	27.2
NEMHS to Rockport	423	8.8	14.7
Rockland FD to Rockland	1436	7.2	10.2
Belfast FD to Belfast	1254	11.3	16.0
Belfast FD to Northport	113	17.0	22.75
Belfast FD to Morrill	57	18.1	24.0

Table 4 shows the distribution of the 1,561 9-1-1 calls in 2019 among the four Project towns. Table 4 is representative of the 9-1-1 response time characteristics for the Project four-town response area as well as that of neighboring comparison services, RFD and Belfast Fire Department (BFD), and other comparison service data reviewed for recent years. These other comparison services included Central Lincoln County EMS (approximately 10.9 minutes overall during same period), in the Damariscotta area, Pace Ambulance (approximately 9.8 minutes overall) in the Norway area. Project staff have worked in many similar areas in the state, including NorthStar EMS throughout Franklin County and Winthrop Ambulance Service in a seven town area of Kennebec County, and were struck by no significant performance differences from those.

NEMHS response time to Camden and Rockport, the more urban centers closer to the Rockport base, ranges around nine minutes. This is consistent with RFD and BFD times for responses to their own population centers of seven to eleven minutes.

NEMHS response times to its more distant and rural areas of Hope and Lincolnville are sixteen to nineteen minutes. This compares reasonably with BFD response times (RFD not having significant volume to similar areas) of seventeen to eighteen minutes to two of its more frequent distant rural call areas.

The response times used for comparison were Maine EMS times that EMS crews recorded for time of incident to time that the ambulance arrived on scene. They should not be casually compared with “response times” used in other reports, at risk of not comparing apples to apples. This is because there are also other ways that are commonly used to measure response time performance. For instance, these include

- *“Notified to Arrival”* Time – This is the interval from when the EMS crew was informed by dispatch of the need for response to the time that EMS arrived at the scene. This includes the time it takes for the crew to prepare to respond (e.g. get out of bed at night, dress and get the ambulance started and on its way). This may be more accurate than the times recorded as “time of incident” used in the table and comparison above because it is usually recorded by a dispatcher with a universal time clock rather than an EMT or person on scene estimating the time of incident. One might expect these times to be less than the incident to arrival times reported above, because of delays between the incident occurring and the dispatcher notifying NEMHS of the incident.
- *“Travel to Scene”* Time – This is the interval from the time the crew notifies dispatch that it has left for the scene to the time of its arrival on the scene. It is expected to be less than *“Notified to Arrival”* time because it does not include time required for the crew to get in the ambulance and get it moving.

The following are these times as reported by Maine EMS for 2019 in minutes:

Table 5

NEMHS Response Town	Notified to Arrival Time	Travel to Scene Time
Camden	8.3	7.1
Hope	14.9	13.4
Lincolnville	17.6	15.9
Rockport	7.4	6.2

The primary purpose for mentioning these differences is that there has been a fair amount of discussion about response times leading up to this Project, and Project staff was aware of some apples-to-oranges comparison issues that have existed. This could be, in part, addressed by having consistent language in the NEMHS/town contracts across the board, which was not the case in 2020-2021.

While response times are a practical concern for a community and its leaders, using an EMS agency’s performance on response times alone does not equate to the “life-saving” or life-improving capabilities of the modern service. Table 4 introduces another way of looking at response times which is more useful than the mean average response times now being used in Project towns as a measure and upon which to base penalties for

noncompliance by NEMHS. That method is the use of fractile response times. The last column in the table shows these for “90th percentile” responses. For Camden, by way of example, one would read the table to say that 90% of all the 9-1-1 calls in Camden represented in the table were answered in 14.0 minutes or less. This offers a more precise and manageable target for performance review and mitigation of calls exceeding a locally adopted standard (in this example, having an EMS performance review group look at all calls exceeding 14 minutes; or selecting the 95th percentile if 90th percentile still produces an unmanageably large group of calls to review). Even better is reviewing responses to calls for specific patient conditions by as small a geographic zone as possible. In this approach, times to the administration of specific treatment for those conditions is considered along with more precise response times.

Table 6 presents another example of a report made by NEMHS on a regular basis for the Project towns on response times. The original NEMHS/town contract language that governed response time was “total time from when the call is acknowledged by NEMHS to the time NEMHS's ambulance arrives at the incident”. The data in Table 6 seems to reflect that this is “travel to scene time.” As mentioned above, response time had engendered much discussion on how it is computed in recent time leading up to this Project. NEMHS indicated that, as a result, the Camden/Rockport agreements contained a change to response time reporting which was “notified to arrival” time, while the other two contracts retained the above language. This should be addressed if NEMHS continues service to the towns in the next year.

Table 6

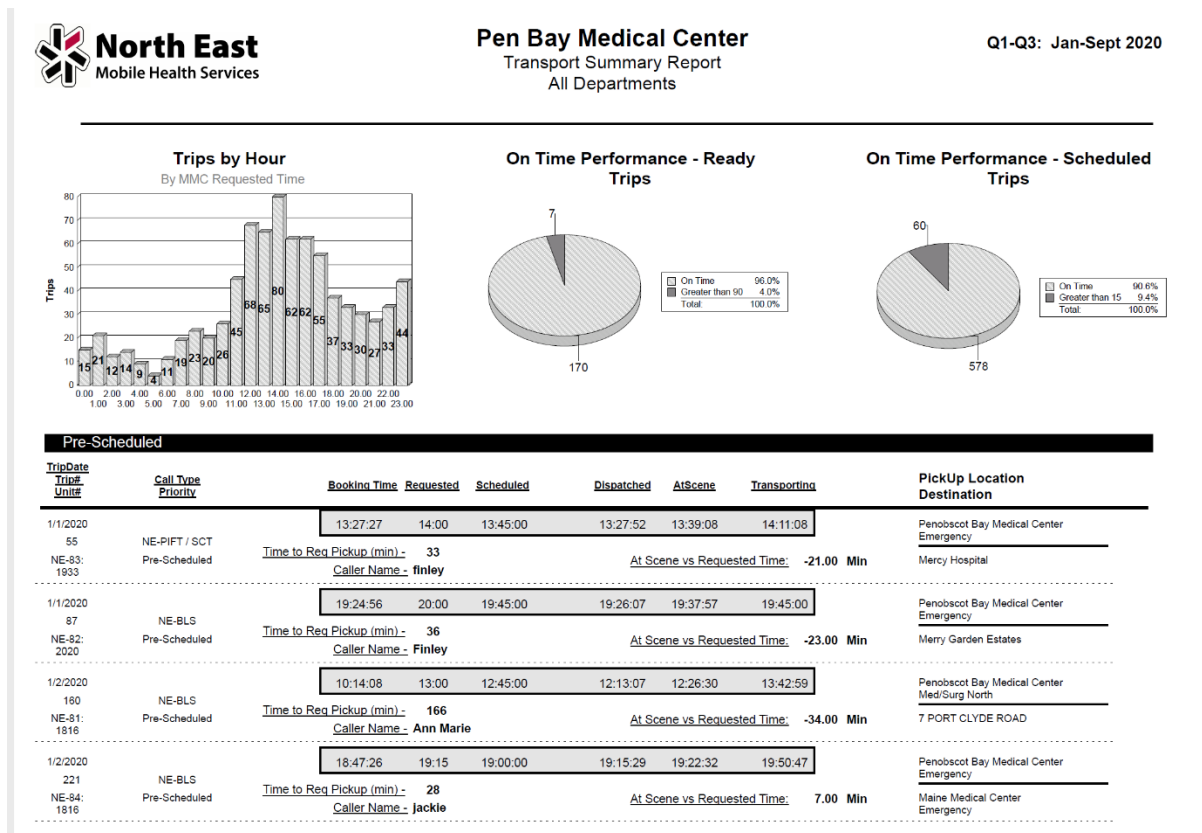
Average Response Time by Town*

*Contract Requirement: Each town will have an **Average** response time measured quarterly. Fiscal year begins July 1st.

Contractual Time		Contractual Time		Contractual Time		Contractual Time	
Camden: 9 minutes		Hope: 17 minutes		Lincolnvilleville: 19 minutes		Rockport: 9 minutes	
Month	Ave. Response Time	Month	Ave. Response Time	Month	Ave. Response Time	Month	Ave. Response Time
July '19	07:33.0	July '19	16:09.0	July '19	15:39.0	July '19	06:23.0
Aug '19	08:04.0	Aug '19	13:30.0	Aug '19	15:40.0	Aug '19	06:04.0
Sept '19	07:27.0	Sept '19	-	Sept '19	20:00.0	Sept '19	07:43.0
Q1	07:40.0	Q1	15:11.0	Q1	16:14.0	Q1	06:39.0
Oct '19	07:15.0	Oct '19	11:20.0	Oct '19	13:44.0	Oct '19	06:10.0
Nov '19	08:04.0	Nov '19	14:00.0	Nov '19	18:14.0	Nov '19	06:11.0
Dec '19	07:52.0	Dec '19	17:00.0	Dec '19	19:26.0	Dec '19	06:02.0
Q2	07:40.0	Q2	13:17.0	Q2	17:22.0	Q2	06:08.0
Jan '20	07:38.0	Jan '20	15:23.0	Jan '20	15:50.0	Jan '20	06:25.0
Feb '20	07:47.0	Feb '20	13:52.0	Feb '20	16:47.0	Feb '20	06:37.0
Mar '20	07:57.0	Mar '20	14:05.0	Mar '20	16:55.0	Mar '20	05:15.0
Q3	07:48.0	Q3	14:35.0	Q3	16:37.0	Q3	06:09.0
April '20	07:20.0	April '20	11:45.0	April '20	15:35.0	April '20	05:35.0
May '20	06:50.0	May '20	12:56.0	May '20	15:46.0	May '20	07:32.0
June '20	07:16.0	June '20	13:13.0	June '20	15:25.0	June '20	06:34.0
Q4	07:10.0	Q4	12:47.0	Q4	15:37.0	Q4	06:40.0
Annual	07:37.0	Annual	13:50.0	Annual	16:24.0	Annual	06:23.0

Table 7 presents a standard report NEMHS indicates it has provided PBMC for its interfacility transport (IFT) support despite its formal contract having lapsed in 2018. The report indicates compliance with provisions made in the earlier contract to respond a transport crew to PBMC within 15 minutes of the agreed upon time for a “scheduled” call (in this 9-month report 91% of the time), and within 90 minutes for a “ready trip” (an unscheduled IFT request (in this report 96% of the time). The report also provides a list of the IFTs accomplished during the period. When asked for data documenting the IFT activity from the PBMC point of view, an IFT call log similar to NEMHS’ list of calls was presented, but no aggregated or analyzed data were available. This call log included calls that NEMHS was not able to make and presented insights into such events that supported interview accounts by PBMC ED staff of the types of difficulties encountered in arranging occasional IFTs.

Table 7



Maine EMS data report “response time” for IFT calls. These are not significant indicators in and of themselves because there is no definition of whether these involve “ready now,” “scheduled,” or other types of calls. These 2018-19 response times range from 15 minutes for PACE and Central Lincoln County services, and 15.7 minutes for Belfast Fire, to 18.7 for NEMHS. Emergency department staff who work at both Miles Hospital, served by Central Lincoln County, and PBMC favor the former’s IFT performance during interviews over NEMHS’ despite the small difference in times reported here.

Tables 8 and 9 describe the volume of NEMHS' IFT activity from PBMC to other facilities in 2019 according to Maine EMS data. Table 10 summarizes these, with Table 4's data on 9-1-1 calls, totaling the 2,606 calls that Maine EMS data indicate NEMHS responded to in 2019.

Table 8

NEMHS IFTs from PBMC to Hospitals	2019
Maine Medical Center	295
Other Facility	52
Waldo	32
Eastern Maine Medical Center	20
Maine General Augusta	18
Lincoln Health	15
Boston Area Facilities	14
VA Togus	14
Central Maine Medical Center	13
Acadia Hospital	8
New England Rehab. Center	7
Mid-Coast Hospital	5
St. Mary's Hospital	5
Dorothea Dix Psych. Center	2
Total	500

Table 9

NEMHS IFTs from PBMC to Nursing/Rehab. Homes	2019
Sussman House	116
Windward Gardens	113
Penn Bay	105
Woodlands	72
Knox Center	55
The Garden	33
Bella Point	12
Quarry Hill	10
Crawford Commons	8
Harbor Hill	7
Country Manner	6
Other	8
Total	545

Table 10

Total NEMHS Calls by 9-1-1 and IFT Origin	2019
9-1-1 Calls to Camden, Hope, Lincolnville and Rockport	1,561
IFT Calls from PBMC to Other Facilities	1,045
Total NEMHS Calls in Project Towns and PBMC	2,606

VI. North East’s Other Capabilities and Performance

The NEMHS Rockport base was inspected and formal interviews of leadership and a sampling of staff carried out in October, 2020 by Mike Senecal. Additional staff input was solicited informally at other times during the Project.

The inspection found the vehicles and garage space seen in Picture 1, above. Vehicles, garaging facility, and equipment and supplies aboard the vehicles and in storage were found to be clean, operable, well-organized, contemporary and exceeding the requirements of Maine EMS, the State licensing agency. Pictures 1 to 5 reflect this for the EMS-uninitiated. An electronic EMS manager application is used for ambulance and equipment inspections. Electronic and other records of routine vehicle, equipment and supply inventorying and inspection were consistent with these findings with minimal non-compliance noted. Interviews were also consistent with these findings, though indicated that in past periods of absence of a base manager, or ineffectiveness of base managers, compliance with inventorying and inspection procedures varied with crews on duty. By all accounts, this has improved under the current base manager.

The base facility is contemporary construction for the purpose it serves, though lacking dedicated kitchen/dining, bathroom/shower, equipment cleaning, and laundry facilities which would bring these to a more reasonable base of operations for busy crews, and easier to comply with standards of cleaning and disinfection of equipment, uniforms, and other necessities.

Leadership interviews reflected plans to update these aspects of the base prior to the pandemic, and a renewed intention to do so. Important to a number of supervisory-centric criticisms in interviews mentioned in this section, leadership has stated its intent to maintain an effective base manager as a high priority and to add shift supervisory leaders to help make this position more manageable.



Picture 2 – Ambulance Compartment with Patient Extrication Equipment



Picture 3 – Ambulance from Rear Loading Doors



Picture 4 – Ambulance Kits Storage



Picture 5 – Small Supplies Storage and Log

North East Mobile Health Services formed as an enterprise under Charles McCarthy and his partner, Dennis Brockway in 1999. They were also leaders in the development of Capital Ambulance which originated in the Augusta area, moved its headquarters to Bangor and is now Northern Light Medical Transport, affiliated with the health care system of the same name. The operating, licensure, and character history, records and reputations of these two major EMS operations, and the nature of the involvement of its principals in state system development all lend the current NEMHS operation a degree of credibility as a service operator. Therefore, the underpinnings of an ambulance service in jeopardy (the usual focus of an ICDS process) are not in question, nor did the proprietary aspects of NEMHS' governance, financial, and other corporate aspects demand attention. Operational guidelines and procedures, training and education requirements, safety and other practices have been in place without challenge by Maine EMS or regional quality improvement entities in the two decades of its history. These were not, therefore, considered to be necessary to explore in detail beyond surface inspection and interview verification by leadership and staff. Issues that were revealed are indicated below.

System status management is a concept employed in EMS to anticipate needs for EMS response and to move and stage ambulances accordingly. This is more widely deployed and better understood in larger urban/suburban response areas than in more rural areas with fewer EMS resources. While NEMHS does not utilize such a system formally, its dispatch and internal communications center, MedComm (which also dispatches LifeFlight and other ambulance services), does have computer-aided vehicle location, communications and deployment tools. As mentioned previously, moving vehicles and crews between bases in Brunswick and Rockport is a frequent occurrence. Related issues include crews unfamiliar with the Rockport base response area responding to 9-1-1 calls, and crews transporting patients to Portland being caught up in other calls in that area rather than returning to Rockport immediately. Otherwise, MedComm seems to serve this informal system management system adequately.

Communications are a persistent issue in three areas already reflected or reflected below:

1. System Radio and Other Communication: NEMHS uses the MedComm center in Bangor for most of its dispatching needs. It tries to integrate this system with the KRCC dispatch system in Knox County and with an "I am Responding" application commonly used by public safety in the County to track the status (availability and location) of emergency units. This does not always work well. NEMHS staff are frustrated that KRCC won't call MedComm when it dispatches an NEMHS unit, and Knox County staff and some departments don't feel that NEMHS uses the "I am Responding" application as it is intended. The importance of such coordination belies the fact that this has been going on for several years.
2. Leadership Communications: There is a lack of routine communication among town, fire department, and PBMC leaders and NEMHS. NEMHS staff cite a weak town attendance at EMS Performance Review Advisory Committee process meetings that should be a venue for discussion, problem-solving, and updating. They show their efforts at routine reporting which evidences contract compliance and willingness to discuss and resolve issues. Some town and PBMC leaders

characterize NEMHS as being weak on responding to problems and follow-through on promised initiatives. Other towns' officials have indicated that NEMHS leadership has been accessible and reliable on follow-through. NEMHS officials seek a consistent point of contact in PBMC administration as well as that which it has in the emergency department. PBMC emergency department leadership seek a more routinely accessible and present point of contact at the Rockport NEMHS base.

3. Intra-service Communications – The communication issues cited in interviews below.

Finally, with issues raised about staff performance during interviews with some fire and PBMC staff, quality improvement (QI) was reviewed. We were told by leadership that all service studies for Rockport Division have focused on response time performance (and are described above). There have been studies of individual performance. They added that NEMHS has just signed into a second year of an agreement with APEMS for training. This year they added into the agreement skills verification, that will make it mandatory for all licensed EMS personnel to pass an independent, third party skills verification.

Interviews with NEMHS staff consisted of formal sit-downs with on-duty and other staff designated by NEMHS and some informal conversations with other current staff. While staffing issues were often mentioned as a source of response time and mutual-aid-overuse concerns mentioned by fire service officials interviewed, they were not reflected in concerns about pay levels or working conditions of those interviewed. Yet a common refrain from staff was the loss of “the best paramedics” to fire services in the state.

Common themes from NEMHS staff interviews were:

- Feelings of isolation from the rest of NEMHS and being treated as second class considerations, especially feeling that base managers were actually or effectively absent in communicating for them with upper management in Scarborough.
- Lapses in leadership providing performance, administrative and training oversight. Many felt that crews had been left to govern and make decisions for themselves that should have been a base manager's job.
- A mix of receptiveness from staff at PBMC emergency department, making for uncertain relationships for some NEMHS staff.
- Morale suffers with an absence of local leadership and regular communication from Scarborough. There has been a feeling over a few years of “who speaks for us and our base's needs?”
- Training offerings were characterized by most as good up until the pandemic began.
- Constant pressure to “be here right away” for interfacility transports from PBMC.
- Getting stuck in the Portland/Maine Medical Center (MMC) “vortex” when on an IFT to MMC is frustrating when crews feel urgency to be available in Rockport.
- A negative working environment with some fire chiefs on scenes and as a result of their comments in the press and at town meetings.

- Otherwise, there seems to be a generally a good working relationship with most fire and law enforcement staff on scenes, and with long-term facility staff in most situations. That said, when there is hostility, it seems to be passed from certain fire officers down through the ranks.
- New equipment availability requests sometimes not answered.
- Many of the lapses cited above were also mentioned as having improved with the current base manager.

Finally, interviews with area public safety responders, town officials, businesspersons, and nursing/convalescent health care facilities staff added the following:

- Those not involved in public safety or town government generally had neutral or positive attitudes about NEMHS as their ambulance service. Some mentioned missing the familiar faces of, and a community-based service like CFAA, but also acknowledged financial and management issues to which that particular service had subjected the community in terms of.
- Those involved in public safety or town government, more so in Camden and Rockport than Hope and Lincolnville, had general impressions that developing a fire-based EMS agency, perhaps regionally, would be the right direction in the long run. Again, there was a positive attitude expressed toward a community-based service as opposed to a statewide service.
- There were many criticisms expressed by fire service and PBMC staff about individual NEMHS crew members and their performance, readiness for the work involved, knowledge of the response area and its towns and people. Some of this was directly observed and some second-hand accounts, so it was difficult to judge how pervasive these impressions were. It seems that many stories were facilitated by a few because of the consistency of the accounts. No accounts rose to the level of local, regional, or Maine EMS attention to our knowledge.
- Local health care facility staff expressed primarily positive relationships with NEMHS staff.

VII. Camden-Rockport-PBMC: Options to Meet Community Needs for an Agile, Responsive EMS Resource

Following the evaluative work described above, the Project Steering Group assessed the information available and made some initial findings from which options could be developed. With those findings presented, staff analyzed these and all information gathered to date, and took the NEMHS organization and other resources in the four town Project area as profiled in the previous two sections, and analyzed their strengths and weaknesses as well as their opportunities and challenges (an informal “SWOC analysis”). This information enabled staff to develop an initial set of options for the Steering Group to consider.

What follows are:

- The Steering Group/staff findings,

- The staff SWOC analysis,
- The options initially considered,
- The description of the option selected and the process by which it was considered by Town and PBMC decision-makers,
- The resulting NEMHS contract provisions sought by the Steering Group, and
- The draft contracts offered by NEMHS following discussions about the provisions wanted by the Steering Group.

The significant *findings* by the Steering Group included:

- The evaluation process response-related data analysis did not uncover issues with NEMHS performance in meeting 9-1-1 response expectations that required immediate or major intervention. An organized first responder capability could be beneficial, particularly in outlying areas, but efforts to implement this do not seem to have succeeded. Anecdotal interview accounts of issues with NEMHS personnel behavior, attitudes, patient care, communications practices, and readiness on calls were encountered but seemed not to rise to regional EMS attention for intervention. Those reporting such issues attributed them to a lack of consistent supervision in recent years. The preponderance of interview input indicated generally reasonable performance by NEMHS staff on calls.
- Issues with IFT performance were difficult to evaluate beyond the anecdotal input from interviews but seemed to be similar to those experienced in other areas of the state. Potential worsening of this situation by pandemic considerations and patient movement within health systems further clouded this aspect of the operation. Aggregating IFT data collected in a log in the emergency department would be useful. NEMHS officials would like a more defined and contemporary set of expectations by which to operate since the one formal contract expired in 2018. They seek to enhance a communications channel in administration as well as that for day-to-day operations with emergency department staff.
- Interviews with Hospital personnel consistently reflected frustration with the process for securing IFT service from NEMHS through MedComm, concerns about inconsistent patient care and communications from the field for patients brought by NEMHS crews to the Hospital, and a consistent sentiment that Rockland Fire and other towns' crews were "professional" and NEMHS crews were less so. This was frequently attributed to lack of base supervision and use of transient employees and crews from other NEMHS bases. It was also frequently noted that in the first years after NEMHS started 9-1-1 service, base supervisors made themselves frequently available at check-in rounds in the ED and at times when IFT demands were high to manage resources. This has eroded in the past few years. A similar effect was noted in reported NEMHS personnel relationships with fire service personnel over the years. Hospital staff with emergency department responsibility uniformly said that they would welcome NEMHS crews in the ER to help or train between calls.

- Interviews with PBMC officials generally indicated that hospital investment in its own EMS capability for IFT, while considered in a meeting process with another Maine Health system hospital-based ambulance service, does not appear to be an option in the current health system reimbursement and pandemic environments.
- The degree to which NEMHS meets its contractual and other service commitments is subject to accountability issues inherent in the terms of the existing contracts. It has met those terms according to response time and staffing reports provided to the Towns periodically. Renewed agreement about those terms; more frequent and consistent meetings for performance reporting and discussion among the Towns, Hospital and NEMHS; and a reliable process for issue-reporting and resolution would be beneficial. Response time reporting should be based on dispatch to at scene time by KRCC and used in contracts, but additional response measures such as fractile time reporting should be added.
- There is consistent anecdotal evidence from interviews that the lack of a consistent and sustained supervisory presence at the NEMHS base in Rockport over a period of years has impaired communications with hospital and town personnel. This may have contributed to additional anecdotal reports of issues with NEMHS personnel performance and service response performance as well as apparent lack of effectiveness in resolving at least some of them. Substituting in NEMHS leadership staff at the base on a transient basis seems to have been an inadequate solution for assuring routine communication and trust among stakeholders and clinical and operational oversight of field staff. NEMHS intentions to have levels of base management and shift supervisory staff should be carried out.
- There is consistent anecdotal evidence from the interview process that NEMHS experienced problems with filling staffing vacancies at times. This was often mentioned in relation to concerns about meeting response time expectations and dependence on Rockland Fire EMS mutual aid. Over a two-year period to mid-2020, Rockland Fire reported a mutual aid rate for the NEMHS response area of just under once a week. Again anecdotally, these issues have become less apparent, and Rockland Fire is less concerned about mutual aid frequency than a year or so ago. KRCC staff noted no mutual aid issues when asked.
- There are three tensions involved in the background of the Project:
 - One is naturally between the Hospital and the Towns. This is not hostile, just practical, and both realize they are representing essentially the same patient interests. It is simply that 9-1-1 response and IFT response “compete” for the same ambulance resources.
 - A second tension is between the general competition between fire service and private service for provision of EMS. NEMHS is a private service EMS, and fire service EMS is the method in use in neighboring Rockland. Generally, in this country, neither has been proven superior to the other.

An argument has been made publicly for developing fire service EMS in the four-town Project area as a way to address both fire and EMS needs.

- The third tension is between the smaller Towns and the larger Towns in the Project, and goes beyond EMS provision into any area in which they consider joint provision of a service to their citizens and, among other things, is a perceived ability to afford a service. The interview process revealed more satisfaction with maintaining the NEMHS provision of EMS in the small towns than in the large ones where the possibility of developing a new fire-EMS capability seems to potentially solve fire and EMS provision issues in one package. It also leads to less patience with any issue involving NEMHS.

The staff's informal assessment of strengths, weaknesses, opportunities, and challenges ("SWOC") of NEMHS and other EMS system resources in the four-town Project area include:

- Strengths:
 - NEMHS is a large service with deep staff, vehicle, financial and other operational resources making it a relatively stable agency with which to contract for service, as well as agile in meeting demand fluctuations.
 - The overall ability of NEMHS to meet contractual obligations has been positively demonstrated and it is willing to enter another contract without significant increase in cost to the towns and, possibly, PBMC.
 - There is a successful fire-based EMS model in Rockland that offers potential operational options in the future by way of example or partnership.
 - Camden Fire officials and NEMHS officials offered operational options for consideration in the future. All of the suggestions fell within known and generally acceptable practices in the EMS field.
 - There has been an unfulfilled potential for a cooperative, four-town first response initiative based in the fire departments and significantly supported by NEMHS (e.g. medical direction, incidentals resupply, and training).
 - There is a new EMS specialty physician at PBMC with responsibility for EMS liaison.
 - There is PBMC emergency department receptiveness to a closer relationship with NEMHS local leadership and staff.
- Weaknesses:
 - The lack of a contractual or other set of mutual expectations between NEMHS and PBMC.
 - Inconsistent understanding and use of the performance measurement components of the NEMHS/town contracts, and dependence on response-time measurement as one of two sole indicators.

- Lack of consistent NEMHS base leadership in Rockport over a multi-year period.
 - Negative relationships toward NEMHS responders on scenes and in other settings by some fire officials and their staff.
 - Communications challenges on the part of NEMHS officials.
 - Failed continuity of EMS Performance Advisory Committee and other routine interactions between town and NEMHS, and PBMC and NEMHS officials.
- Opportunities:
 - After years of being an unfulfilled consideration, creating a first response capability is a reasonable option. Local fire and law enforcement staff have completed EMT training and may be resources to call upon. NEMHS remains supportive of helping to implement this under a cooperative fire-service model. This will enhance opportunities to consider other fire-based EMS options in the future.
 - Rewriting an NEMHS/town contract addressing many of the issues cited in this report can improve them at little or no extra cost.
 - NEMHS has offered contract extensions for the next year or two without significant cost increase.
 - There are realistic alternative proposals for improving EMS provision in the future as offered by fire and NEMHS officials.
 - Models offered by Rockland Fire EMS, Brewer Fire/Northern Light Medical Transport, and Waterville Fire /Delta Ambulance for consideration.
 - Challenges:
 - The new contract period begins shortly, on July 1, 2021, limiting implementation of options requiring a longer planning and start-up phase.
 - Many options presented for improving EMS system response involve significant expense increases and require further study, thus limiting their utility this year.
 - The pandemic continues to present operational and financial uncertainty for towns, EMS, and hospitals. This makes it an additionally difficult time to consider wholesale changes in EMS coverage.
 - Strained relationships between fire officials in some of the towns and NEMHS leaders.
 - The costs cited to date of significant changes in how EMS is provided in the area.

Ten initial operational options, in six general categories, for 9-1-1 and interfacility transport coverage after June 30, 2021 were drafted for, and considered by, the Steering Group. These were derived from staff team experience with operational models in other, similar settings and considering proposals requested and received from NEMHS and local fire service professionals. Project staff assured confidentiality of the details of any

such proposal, and the details below do not provide any information other than those previously presented in public by others.

Details of the options considered by the Steering Group, such as pros and cons considered, are displayed in Appendix A.

The costs associated with each option are magnitude estimates only. The current total contract cost for the Towns is, per NEMHS, \$298,997 plus a .5% CPI boost for 2020-2021, or \$300,492. There is no current cost to the Hospital.

The options for 2021 to 2022 (or 2023) that were discussed fell into the following six general categories with ten total options. The costs attached to each were a combination of staff estimates and comparison with information proposed by NEMHS or fire officials in their proposed solutions. These costs were revised as the options were considered, but remained general estimates of anticipated expenses and revenue by Project staff. In Option 2.0, the cost estimate for the first response unit changed significantly in later stages of consideration as the towns felt that they could individually supplant some of the costs estimated. The options considered were:

- **1.0 Status Quo** – Essentially just renew the NEMHS contracts as the sole provider for 9-1-1 with the Towns and IFT with the Hospital. \$311,000. This figure includes a 3.5% CPI-based estimate from NEMHS which may be negotiated.
- **2.0 NEMHS Primary Provider with Fire-Based First Response, Service Improvements and Regional Planning Initiative** – Town and Hospital contracts would be revised to include contemporary performance accountability and issue resolution measures, base supervision assurance, and other improvements indicated by the evaluation. A fire-based first response capability would be developed in cooperation with NEMHS and the four Towns' fire departments. This would enhance response time performance and staffing availability at a cost commensurate with the modest indicated need, as well as a foundation for further fire-based EMS development if that becomes indicated. The contract may extend for two years to enable a planning process to explore regionalization of EMS service to enhance efficiency and effectiveness of EMS and fire response capabilities. General magnitude of cost estimate: \$350,000 - \$400,000 (\$311,000 for NEMHS contract plus first response start-up and regionalization planning initiative costs). This includes an estimate for the first response and planning initiatives which need to be refined before going to budget decision-making.
- **3.1-3.3 NEMHS Sole Provider with Enhanced Crew Coverage** – Continue NEMHS contracts with improvements discussed in 2.0, and fund increased pay for NEMHS staff to be competitive, fund an additional 24/7 ambulance coverage, or fund both. General magnitude of cost \$.85 million to \$1.4 million (\$311,000 of NEMHS contract cost plus additional expenses) depending on solution selected.

- **4.1-4.2 Fire-Based Sole Provider for 9-1-1 and IFT** – Start up and operate an EMS unit from either Rockland Fire/EMS or Camden Fire to cover 9-1-1 and IFT response. Ambulances would be maintained in Camden and West Rockport stations. Crews would be mixed departments depending on option selected. \$1.2 million start-up (largely capital) costs and \$1.2 million annual operating costs. Cost could be somewhat less if operated from Rockland. Revenue from all calls is included as a deduction from costs cited.
- **5.1-5.2 Fire-Based 9-1-1 EMS/NEMHS Based IFT** – Continue to operate IFT as a NEMHS service. Start up and operate 9-1-1 response as a fire-based service from either Rockland Fire/EMS or Camden Fire. Ambulances would be maintained in Camden and West Rockport stations. Crews would be mixed departments depending on option selected. \$600,000 start-up (largely capital) costs and just under \$1 million annual operating costs. This is cost after revenue for 9-1-1 calls deducted. Cost could be somewhat less if operated from Rockland.
- **6.0 Mixed NEMHS and Fire-Based Response (and Possibly Hospital Based Participation)** – Multiple options possible using a model employed by Brewer Fire and Northern Light Medical Transport for several years and more recently instituted by Waterville Fire and Delta Ambulance. This would have one or more agency providing the vehicles, and one or more agency providing the staff (for example, a fire/EMS agency driver and a NEMHS paramedic). Cost estimates vary with exact model selected and whether used for 9-1-1 response only or for both 9-1-1 and IFT.

The Steering Group made the following determinations and option selection:

- Rejected option 1.0 as unresponsive to issues made evident by the Project evaluation. This would ignore legitimate concerns revealed by the Project evaluation.
- Chose not to pursue options 3.1-3.3 at this time as their cost did not seem justified by the findings of the evaluation as to the problems potentially addressed (NEMHS staff pay and number of units covering). The response time data did not present the picture of a problem that necessitated or would be impacted by a sweeping staff pay increase or the addition of another 24/7 staffed ambulance.
- Chose not to immediately pursue options 4.1-6.0 because:
 - they would be unlikely to be successfully approved and implemented by July 1, particularly under the current process limitations imposed on town budget approval functions and impacting the provision of EMS and Hospital services under the pandemic,
 - they may involve a magnitude of costs not found to be merited by the findings of the Project evaluation (e.g. response time data) and difficult to explain and justify to decision-makers including taxpayers, and

- some of the options involve components targeting improvement of fire-response readiness not able to be addressed by the Project.
- Chose to pursue option 2.0, referring options 4.1-6.0 to the regionalization planning process integral to that option, because:
 - It most directly addresses the issues cited by the evaluation as accountability/supervision/response/communication problems at a cost commensurate with those issues (for example, subject to negotiation with NEMHS most issues may be addressed at minimal contractual cost; also, since response time for 9-1-1 calls does not appear to be a critical problem, creating a fire-based first response capability able to provide basic life support a couple to several minutes before ambulance arrival (depending on location and circumstances) and to provide extra hands in some situations, is justifiable at the cost anticipated.
 - It establishes a foundation for further fire-based EMS development (drawing on local personnel already recently trained) if elected following the regionalization planning process, and
 - It assures continuity and improvement of EMS service during a period adequately long to consider alternative regional models of 9-1-1 and IFT response provision.
- Following an analysis of different ways of apportioning costs of Option 2.0 to the towns, the Steering Group selected to continue using the population-based apportionment of costs for the NEMHS contract, for the regionalization planning project and for the shared administrative costs of the first response unit start-up costs. Costs of call-pay and equipping the first response for responders would be individually budgeted and managed by the towns.
- The financial impact of this option for the towns would be:
 - A .6% increase for the NEMHS contract for 2021-22 based on the New England Consumer Price Index,
 - A population apportioned split of \$20,000 for the regional planning initiative,
 - A population apportioned split of \$1,200 for the first responder unit administrative costs.

Table 11

Town	2010 Population	2010 Population %	2019-20 NEMHS Contract	2020-21 NEMHS Contract	2021-22 NEMHS Contract	2021-22 Regionalization Plan Initiative	2021-22 1st Responder Admin. Costs
Camden	4,851	41%	\$122,066	\$123,202	\$123,941	\$8,200	\$492
Rockport	3,330	28%	\$83,810	\$84,138	\$84,643	\$5,600	\$336
Lincolnvillev	2,164	18%	\$54,463	\$54,089	\$54,413	\$3,600	\$216
Hope	1,536	13%	\$38,658	\$39,064	\$39,298	\$2,600	\$156
Total	11,880	100%	\$298,997	\$300,492	\$302,295	\$20,000	\$1,200

The Steering Group chose to utilize a select board/town referendum process for decision-making on enacting the option selected. This was consistent with annual planning and budgeting processes in the towns under the pandemic restrictions on public meetings. Informational meetings were held virtually on this subject for the Camden select board, Rockport/Lincolnvillev/Hope select boards, and again separately for the Hope select board and budget committee. The Rockport select board also hosted an informational session attended by Project staff on the contract it would enter with NEMHS. All sessions were open to the public and were well attended, including by town fire and committee officials.

Contract provisions were drafted by staff and the Steering Group once the informational meetings were held and the option presented received no objections. The Steering Group’s desired contract provisions were discussed with NEMHS and a final set conveyed to NEMHS (see Appendix B for this document). NEMHS officials then drafted a contract which was discussed with staff and then the Steering Group. A final draft contract for each town was discussed by staff and NEMHS officials and then presented to the towns. These are found in Appendix C. The Steering Group agreed that at least one town attorney from Camden and/or Rockport would review the contract provisions. Further contract discussions would be held between NEMHS and the towns directly.

There was no new PBMC/NEMHS contract developed in the Project. However, a relationship was established between the PBMC EMS liaison, Dr. Skinner, and the NEMHS CEO, Mr. Russell. They held an initial meeting with further ongoing discussions planned to address the findings of this Project.

Appendix A. Original Options Considered by Steering Group

Addendum: Original Options Discussed (From 12/10 Steering Group Meeting)

Option Development

- **1.0 NEMHS Sole Provider Status Quo**
 - Baseline Current (2019 - 2020) Service Level/Cost:
 - Cost: \$298,997 + .5% CPI = \$300,492 (Towns Subsidy)
 - 1.0 Status Quo (2021 – 2022) Service Level/Cost:
 - Cost: \$300,492 + 3.5% CPI = **\$311,009**
- **2.0 NEMHS Sole Provider – Strong Interview Based Improvements**
 - Cost: \$300,492 + 3.5% CPI = **\$311,009 (\$336,009** with First Response Option) Annual Operating
 - Option: First Response Incentives: Total - \$25,000
 - ***This is only an example.*** If first response is chosen to be developed, it will need to blend with current FD procedures and payment schemes.
 - Call pay: 1,000 Responses @ \$15 = \$15,000
 - Equipment/Supplies: 25 Responders @ \$100 = \$2,500
 - Insurance, training, miscellaneous: \$7,500
 - Improvements:
 - Accountability:
 - Response Time and Other Contractual and Reporting Provisions
 - Town and FD Coordination/Performance Review Meetings
 - Supervisor/PBMC Staff Routine Meetings
 - First Response Capability Development
 - NEMHS Base Supervision
 - Position Continuity is a Priority
 - PI/QI Measures to be Utilized
 - NEMHS Staff Downtime Utilization
 - Integrate with PBMC ED/Other On-Site
 - Operate a Truck from Camden FD
 - Continue Regional Approach Assessment/Planning

- Cost of Facilitator/Fire Service SME/EMS SME?
 - Pros/Cons:
 - Pros
 - Cost Stability
 - Least Complicated/Intrusive Under COVID Challenge
 - With First Response Option, Begins to Integrate FDs into EMS Response Formally
 - Potential to Address Issues Raised
 - Possible Impact on Response Times
 - Interim Path to Considering Regional/FD Options
 - Cons
 - May Not Address All Staffing Issues Raised by Some
 - May Not Address Unit Availability Issue Raised by Some
 - Doesn't Otherwise Address FD Model for EMS
- **3.0 NEMHS Sole Provider - Mixed Interview Based Changes**
 - 3.1 Increased Coverage by 24/7 Unit (no base pay increase)
 - Cost: \$300,492 + \$475,000 = **\$775,492** Annual Operating
 - 3.2 Increased Base Pay (no increased 24/7 coverage)
 - Cost: \$300,492 + \$205,000 = **\$505,492** Annual Operating
 - 3.3 Increased Coverage by 24/7 Unit and Increased Base Pay
 - Cost: \$300,492 + \$755,000 = **\$1,055,492** Annual Operating
 - Pros/Cons
 - Pros
 - May Address Staffing Issues Raised by Some
 - May Address Unit Availability Raised by Some
 - May be Stronger Interim Measure Than 2.0
 - Cons
 - Additional Unit Without Additional Pay May Not Attract Sufficient Staff
 - Competition for Local Staff
 - Data Consistent With Solution?

- Ability to Explain Solution
- **4.0 Fire-Based EMS Sole – 911 and IFT**
 - 4.1 Camden FD Hub and Rockport Station
 - Cost: \$1,185,000 Capital Start-up; \$1,220,000 Annual Operating
 - 4.2 Rockland FD Hub and Spoke
 - Cost: Less than 4.1
 - Pros/Cons
 - Pros
 - Local “Ownership”
 - Possible Response Time Improvement
 - Possible Assistance to Fire Coverage
 - Regional Solutions Are Potentially More Effective and Efficient – Rockland or Countywide Approach is Worth Further Study
 - Rockland Hub Plan Brings Experienced Fire-EMS Organization
 - Cons
 - Implementation Difficult in Current Time-Frame and Under COVID Environment Uncertainty
 - Competition for Local Staff
 - Data Consistent With Solution?
 - Ability to Explain Solution
 - Local Hub Lacks Fire-EMS Developmental Experience
- **5.0 Fire-Based 911 EMS/NEMHS Based IFT**
 - 5.1 Camden FD Hub and Rockport Station
 - Cost: \$600,000 Capital Start-up; \$990,000 Annual Operating
 - 5.2 Rockland FD Hub and Spoke
 - Cost: Less than 5.1
 - Pros/Cons
 - Pros
 - Local “Ownership” for 911 Response

- Possible Response Time Improvement
 - Possible Assistance to Fire Coverage
 - Regional Solutions Are Potentially More Effective and Efficient – Rockland or Countywide Approach is Worth Further Study
 - Rockland Hub Plan Brings Experienced Fire-EMS Organization
 - Cons
 - Implementation Difficult in Current Timeframe and Under COVID Environment Uncertainty
 - Competition for Local Staff Even More so Than 4.0
 - Data Consistent with Solution?
 - Ability of NEMHS to Attract Staff for Interfacility Only Work
 - Local Hub Lacks Fire-EMS Developmental Experience
- **6.0 Mixed NEMHS and Fire-Based/Possible Future Transition**
 - Cost: Too vague to be estimated at this time. Many options.
 - Pros/Cons
 - Pros
 - Brewer/Waterville Mixed Approaches Have “Sold” in Other Communities
 - Local “Ownership” Introduced
 - Possible Assistance to Fire Coverage
 - Regional Solutions Are Potentially More Effective and Efficient – Rockland or Countywide Approach is Worth Further Study
 - Cons
 - Implementation Difficult in Current Time-Frame and Under COVID Environment Uncertainty

- Data Consistent With Solution?

Appendix B – Steering Group Approved Provisions for a New NMHS Contract



Final Contract Gen.
Prov.s 3-25-21.pdf

Appendix C – Draft Town Contracts Delivered by NEMHS



Hope EMS 2021-
Final Draft .pdf



Lincolntonville EMS
2021- Final Draft .pdf



Camden EMS 2021-
Final Draft .pdf



Rockport EMS 2021-
Final Draft .pdf

Appendix D - Select Board Information Sessions Slide Program



Version 2.2
Camden-Rockport-PI

Appendix E - Project Staff Advisors Team

Kevin McGinnis, MPS, Paramedic Chief (Retired)

Kevin McGinnis assists communities and providers to assess their current EMS system capabilities and needs against contemporary standards. He then provides creative guidance in planning to meet those needs with 21st century excellence.

Mr. McGinnis is an independent EMS consultant, with 47 years of experience in EMS systems development. Former director of Maine EMS and Maine’s E-911 Program, he received the Governor’s EMS Award from Governor King in 1997. He authored “*The Rural and Frontier EMS Agenda for the Future*” a milestone book for the federal government and the National Rural Health Association. He coined the term “community paramedicine” a concept now in wide use worldwide. In 2018, Kevin received the *Journal of EMS* “Top Ten Innovator Award”. He was named by the Government *Technology/Solutions for State and Local Government* magazine as one of its 2013 “Top 25 Doers, Dreamers & Drivers in Public-Sector Innovation”.

He is the past Chairman of the U.S. Department of Homeland Security's SafeCom Program and continues to serve on its Executive Committee. Kevin is Vice-Chair of the Governing Board of the National Public Safety Telecommunications Council and was bestowed its top honor, the Richard DeMello Award, in 2017.

In August, 2015, he was named by the U.S. Secretary of Commerce to a second three-year term on the First Responder Network Authority (FirstNet) Board of Directors and termed out in October, 2018.

Mr. McGinnis has been an ambulance service chief of hospital, private, and volunteer ambulance services in Maine and New York, and has significant paramedic experience with urban, suburban, and rural fire rescue/first responder, and ambulance services. He has had experience as a member of, liaison to, or staffing a dozen regional EMS councils, and is responsible for having initiated or helped to develop regional and statewide EMS plans, protocols, QA/QI ASMI, run record data ASMI, and policies in three states.

Kevin has undergraduate degree from Brown University and a graduate degree from Cornell University, both in hospital and health services administration, and holds or has held a variety of EMS clinical and instructor certifications. He has practiced as an EMT or paramedic throughout most of his career.

Mr. McGinnis has participated as principal consultant, or on federal consulting for state or local EMS system evaluations in Arkansas, Alabama, South Dakota, New York and Montana. As a state (Maine) and regional EMS director, he has evaluated and assisted dozens of EMS operations of every type. He has completed service assessments and strategic planning projects throughout Maine.

Richard Narad, D.P.A., J.D.

Rick Narad is professor of health services administration at California State University, Chico. His research interest is public policy related to the planning, implementation, and management of emergency medical services systems. His publications have included evaluation of ambulance regulatory programs, modeling of changes in the ambulance industry, and a model for comparing public and private services.

Dr. Narad started in EMS administration in 1979. He served as Executive Director of the Merrimack Valley (Massachusetts) EMS Corporation and as EMS Coordinator for Sonoma County (California). He has provided consulting services to state and local governments regarding planning, implementation, and evaluation of EMS systems and has served as an expert witness in cases related to EMS.

He received an A.S. in Fire Science from Santa Rosa Junior College in 1975 and a B.A. in Health Care Management from CSU, Chico in 1979. He received his MPA., with a specialty in health services administration, and his DPA., with a specialty in health policy, from the University of Southern California. He also received his JD, with a focus on health law, from Concord Law School and is a member of the State Bar of California. He is a Fellow of the American College of Healthcare Executives.

Dr. Narad served as president of the Northern California EMS Administrators Association and as chair of the American Society for Testing and Materials' Committee

on EMS. He was treasurer of the California Association of Healthcare Leaders and a member of the National EMS Museum Foundation Board of Trustees. Currently, he serves as a board member and as an operations manager of Safe Space Winter Shelter and is a member of the California Medical Assistance Team.

Michael Senecal, NRP

Mr. Senecal is the director of North Star Emergency Medical Services, serving Franklin County, Maine. He attended the University of Illinois and Frontier Community College. He has been with North Star for eighteen years, helping to forge it from five separate ambulance services previously serving the county. North Star is operated by Franklin Memorial Hospital, a part of the Maine Health System. Mr. Senecal oversees 85 employees and a budget of \$4.3 million. He also serves as the hospital's emergency preparedness coordinator.

Camden Fire/EMS Current Situation

- **Camden Fire/EMS is currently staffed:**
 - (1) Chief
 - (1) Assistant Chief
 - (2) full-time Firefighters
 - (15) part-time, on-call Firefighter/EMTs, Firefighters and EMTs
 - Each full-time staff member works a rotating day shift of (4) days on/(4) days off.
 - Realistically the Chief and Assistant Chief are regularly working their “days off”.
 - It is expected that these (4) individuals will regularly respond to incidents off-shift, nights, weekends, holidays.
 - The Fire Department is not staffed overnight and relies on the full-time and part-time staff to respond to incidents from home.
 - Part-time, on-call Firefighter/EMTs, Firefighters and EMTs respond to incidents when dispatched by the KRCC depending on their availability.

- **Impact and Implications**
 - It is a tenuous expectation for the Chief and Assistant Chief to plan, strategize and implement future plans for the Department while working a shift rotation which also expects them to work their “days off”. Regardless, we have been doing this. This schedule is at a breaking point. That is not an exaggeration.
 - The number of actively participating on-call, part-time personnel is 15. This is down from 32 in 2008.
 - As stated repeatedly, this is a nationwide, statewide and Knox County trend. The generations old, cost-efficient model of staffing a professional Fire Department is on life support. This Fire Department is on life support. That is not an exaggeration.

The existing staffing situation cannot be seen as newly found or communicated. The issue is just becoming a town priority. This Department needs to change and is in the formative process of that change. The process we developed to implement change was for the Department to begin an EMS First Responder, non-transporting service with cross-trained Firefighters providing emergency medical and firefighting services. This was a recommendation of the **Modified Informed Community Self Determination (ICSD) EMS Evaluation in and for the Towns of Camden, Hope, Lincolnville, and Rockport and the Pen Bay Medical Center - Final Report** received by the by the Fire Department August 8, 2021. The service was implemented on March 24, 2023. Logistically, the service is currently offered from 6am to 6pm when the Department is staffed by full-time personnel augmented by on-call and per diem staff. This next step in the process is a transition to providing 24-hour staff coverage with a phased approach to implementing an EMS transporting service in

collaboration with North East Mobile Health Services (NEMHS). This is also a recommendation of the ICSD. We have provided numerous plans, budgets, scenarios and implementation models since 2015. Where those plans are and how they have been distributed are valid questions. The probable answer is they have fallen within the municipal priority and capability scale. This is likely the last time current employees will strive to develop this Department. Until the Fire Department and its Mission become more of a town priority, this problem will persist.

Without making changes to FY25 wages and benefits, current staff will be able go to work at Rockport Fire/EMS after July 1, 2024, earn 22% more and have 50% less call volume. We have provided education for staff members, and they are highly marketable to other communities. Additionally, the current (4) on/(4) off rotating schedule is obsolete. Current staff want to transition to a 24-hour schedule and most Departments in the state who employ full-time personnel use this. To retain current staff, we need to change. This is not an exaggeration.

At this point we have invested many hours and over \$200,000 to develop EMS capabilities in personnel and equipment over the last 2 years alone. We're at a pivotal point where we are deciding to support and fund a phased, 5-year implementation plan. This plan is the foundation of future growth and requires support for Fire/EMS staff to utilize more square footage than currently allocated in the public safety building.

All of this is consistent with the Town Manager's 11/21/23 memo to the Select Board and the May 2021 ICSD. That memo reads in part; "As discussed at the October 10th Select Board Workshop, it is inevitable that increasingly more professional full-time personnel will be required to maintain consistent fire coverage due to the decreasing availability of call division personnel." and "The Town recognizes our Fire Department is currently still building the necessary skills, expertise, and most importantly, workforce required to successfully run and sustain a fire-based EMS service." We are now deciding to move ahead or attempt to maintain what we had. The roller coaster of starting and stopping the process of implementing EMS at Camden Fire is not sustainable.

Fire/EMS Call Volume

If Camden Fire/EMS had provided services for Fire and EMS transport in calendar year 2023, the total call volume, including EMS for Hope and Lincolnville, would be 1,955.

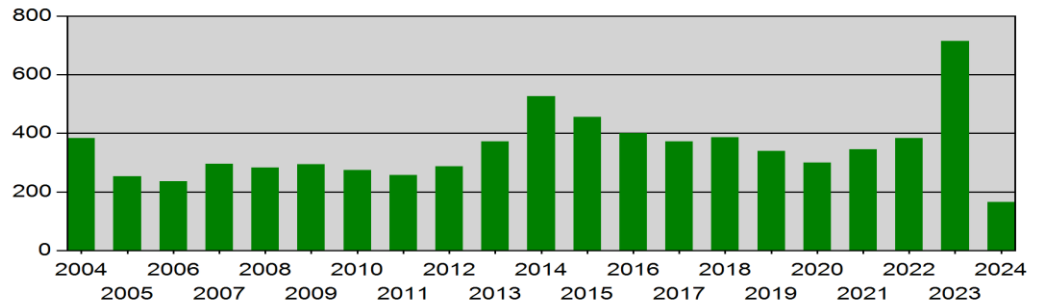
Comparatively, the total call volume for Rockland Fire, including EMS services for Owls Head, is 2,451. Of the 2,451 total incidents, 1,798 are EMS incidents.

Rockland will no longer be the most populous community in Knox County by 2040, according to projections by the state. Rockland's population as of the 2020 US Census had slipped to 6,936. By 2040, that number is projected to drop to 5,628 – a 19% decline. By 2040, Camden is projected to surpass Rockland with a population of 5,677.

Source: https://knox.villagesoup.com/news/state-projects-rockland-to-lose-status-of-most-populous-knox-county-community/article_7ac9153e-a1b8-11ee-8ffe-b76e037eb14d.html

Camden Budget Committee Meeting March 28, 2024

Camden Fire/EMS
call volume trend.
2004 to 2024



Fire Department Tax Impact

FY 2024

Town Tax Assessment: \$23,100,661.59

FD Budget: \$747,900 (operational, excluding capital)

- Percentage of Tax Commitment: 3.23%

So, for a home that's assessed at \$250,000, a person's total tax bill would be \$3,450.00. Of that tax bill, \$111.43 would be Fire only portion.

For that home, it cost you \$111.43 of your property tax per year to have fire trucks and Firefighters respond, or install your smoke detectors/change your batteries.

Fire/FirstResponse/NEMHS Budget: \$1,042,100

- Percentage of Tax Commitment: 4.51%

So, for a home that's assessed at \$250,000, that person's total tax bill would be \$3,450.00. Of that tax bill, \$155.59 would be FD/EMS/NEMHS portion.

For that home, it cost you \$155.59 of your property tax per year to have a fire trucks, Firefighters, Ambulances and EMTs respond.

Residential/Business/Commercial Insurance Impact

Our property insurance premiums are based on Camden Fire's Insurance Services Office (ISO) rating. The ISO creates ratings for Fire Departments and their surrounding communities. The ratings calculate how well-equipped Fire Departments are to put out fires in that community. The ISO provides this score to homeowners insurance companies. A good ISO fire rating brings value to our community. Ultimately, a lower score reflects well on the Fire Department. Like accreditation, a good ISO fire rating demonstrates a commitment to excellence as verified by a third-party review. The ISO uses a grading system from 1 to 10 with 1 being the best and 10 representing a community without an effective fire service. Camden's current rating is 4/4X.

Camden Fire/EMS Implementation Timetable

FY25

- Add (3) FTEs working 12-hour shifts by December 2024
 - This is necessary due to 87% increase in volume CY2022 over CY2023
 - Call volume increase is directly related to the implementation of the EMS First Responder program on March 24, 2023
 - Chief and Assistant Chief incrementally come off from working a shift rotation to be able to fully focus on planning, strategizing and implementing departmental growth to meet the needs of the community
 - Achieved by October 1, 2024
- Reallocate space in the existing Public Safety Building to provide reasonable space for Fire/EMS employees to work
 - Previous efforts to do this have been unsuccessful
 - Assistant Chief shares workspace with all other staff
 - Assistant Chief works from a personal laptop
 - Staff need non-public space to complete medical reports to ensure HIPPA and patient confidentiality requirements



If space is not developed for the Fire Department within the existing public safety building, this timetable stops here. We continue EMS first response, stop planning for EMS transport, and stop planning to implement 24-hour coverage.

- Renovate space in the existing Public Safety Building to accommodate additional staff and work towards providing 24-hour shifts
 - ➡ *This needs to be seen as a temporary, short-term solution*
 - Camden Police make (4) rooms available by November 1, 2024
 - Renovation of available spaces for Fire/EMS occupancy by April 1, 2025
 - Transition to new rooms April 2025
 - Experiment with 24-hour shifts starting April 2025
- Purchase an ambulance by January 2025
 - Use for EMS first response to allow staff to adjust to providing service from an ambulance in place of the current fire truck
- Change to MPERS Plan 3C retirement
- Wage/benefits adjustment to retain current staff and appeal to prospective FTEs
 - This is based on Rockport's published wages which are 22% above Camden's FY25 wages and 25% above Rockland's current wages
- Continue to utilize part-time, on-call Firefighter/EMTs to provide services
- NEMHS continues to provide full EMS transport services

FY26

- Add (3) FTE July 2025
 - Full transition to 24-hour shifts December 2025
 - 2 people per shift, 24/7
 - 24/7 EMS first response (non-transporting) implemented



If the 3 FTEs are not implemented the capacity of the Department to provide EMS is at a hard stop. The capabilities to provide fire and life safety protective services will need to be reviewed.

- NEMHS continues to provide full EMS transport
 - Develop a call sharing method with NEMHS December 2025
 - Implement call sharing method with NEMHS March 2026
 - NEMHS serves the licensed health care facilities
 - Call sharing of 911 incidents between NEMHS and CFD
- Order a new fire truck to replace Engine 5 (30 years old in 2025)
 - Current cost estimate \$1.2 million, predicted 3 year delivery
- Continue to utilize part-time, on-call Firefighter/EMTs to provide services
- Provide Leadership training for staff
- Develop realistic building space needs for Police, Fire /EMS
 - Architectural consultant
 - Community input



Further implementation plans do not need to be developed without an on-going commitment. This commitment needs to include seriously evaluating the space capacity of the existing public safety building.

The 2002/2003 renovation of the public safety building facilitated the movement of the Police to the building at the sacrifice of space for Fire/EMS. The plan was described to us by a member of that Building Committee as a 20-year band aid. We are now at year 21. Attempting to add additional full-time Fire/EMS providers will require additional space. It will also require the availability of personnel to hire.

FY27

- Continue to build EMS capacity
- Add (3) FTEs July 2026
- Purchase a replacement Pickup truck (current will be 20 years old) November 2026
- Purchase new PPE washing machine
- Continue call sharing with NEMHS
- Provide Leadership training for staff
- Continue to utilize part-time, on-call Firefighter/EMTs to provide services
- Review realistic concepts for Police, Fire/EMS building space needs

FY28

- Continue to build EMS capacity
- Add (3) FTEs July 2027
 - Begins transition to having (4) shifts of (4) Firefighter/EMS
2 ambulances 24/7
- Continue call sharing with NEMHS with growing reliance on CFD covering 911 transport services
- Purchase second ambulance July 2027
- Provide Leadership training for staff
- Review call sharing process with NEMHS
- Continue to utilize part-time, on-call Firefighter/EMTs to provide services
- Implement building space needs concept

FY29

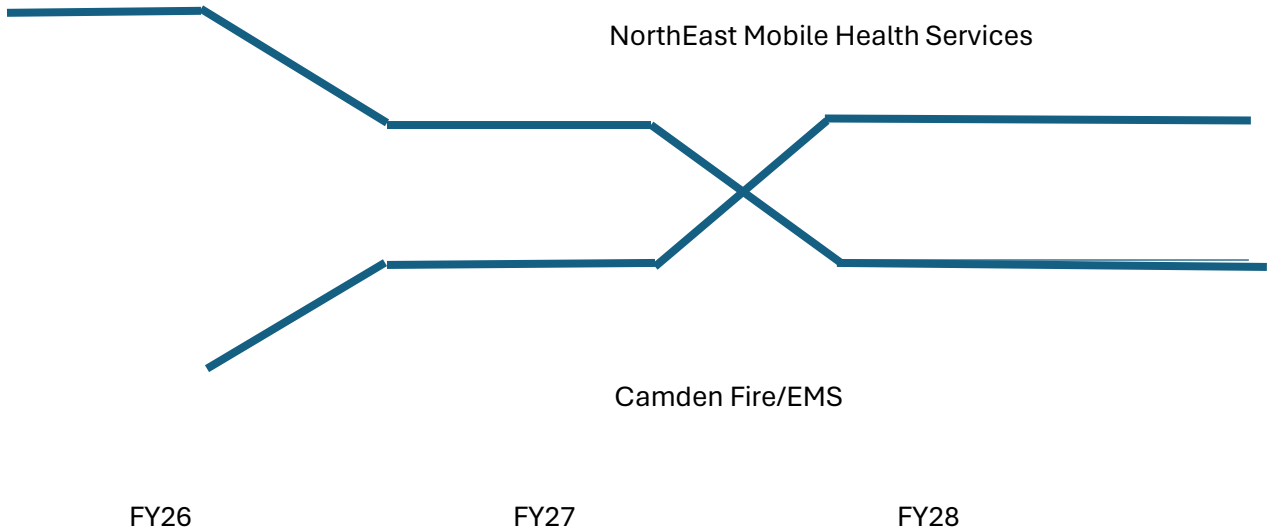
- Continue to build EMS capacity
- Add (2) additional FTE July 2028
- Begin staffing (2) ambulances 24/7 during December 2028
- Continue to utilize part-time, on-call Firefighter/EMTs to provide services
- Provide leadership training for staff to plan for upcoming retirements

FY30

- Purchase replacement ambulance for first acquired unit July 2029
- Order a new ladder truck to replace existing (current will be 33 years old in 2030)
 - Current cost estimate \$2.2 million, predicted 4 year delivery
- Exploration of implementation of Community Paramedicine program
- Plan for forthcoming retirements of Farley, Lowe, Anderson, Holt

EMS Transport Provider Capacity

This chart depicts a phased implementation of EMS transport services by Camden Fire/EMS. Camden increases service capacity while NEMHS continues to be primary transport provider through at least FY29.



2023 NEMHS Local Division Response Summary

Camden	1,197	(545 of these are in the licensed health care facilities)
Rockport	598	
Lincolnville	236	
Hope	<u>108</u>	
Total	2,139	

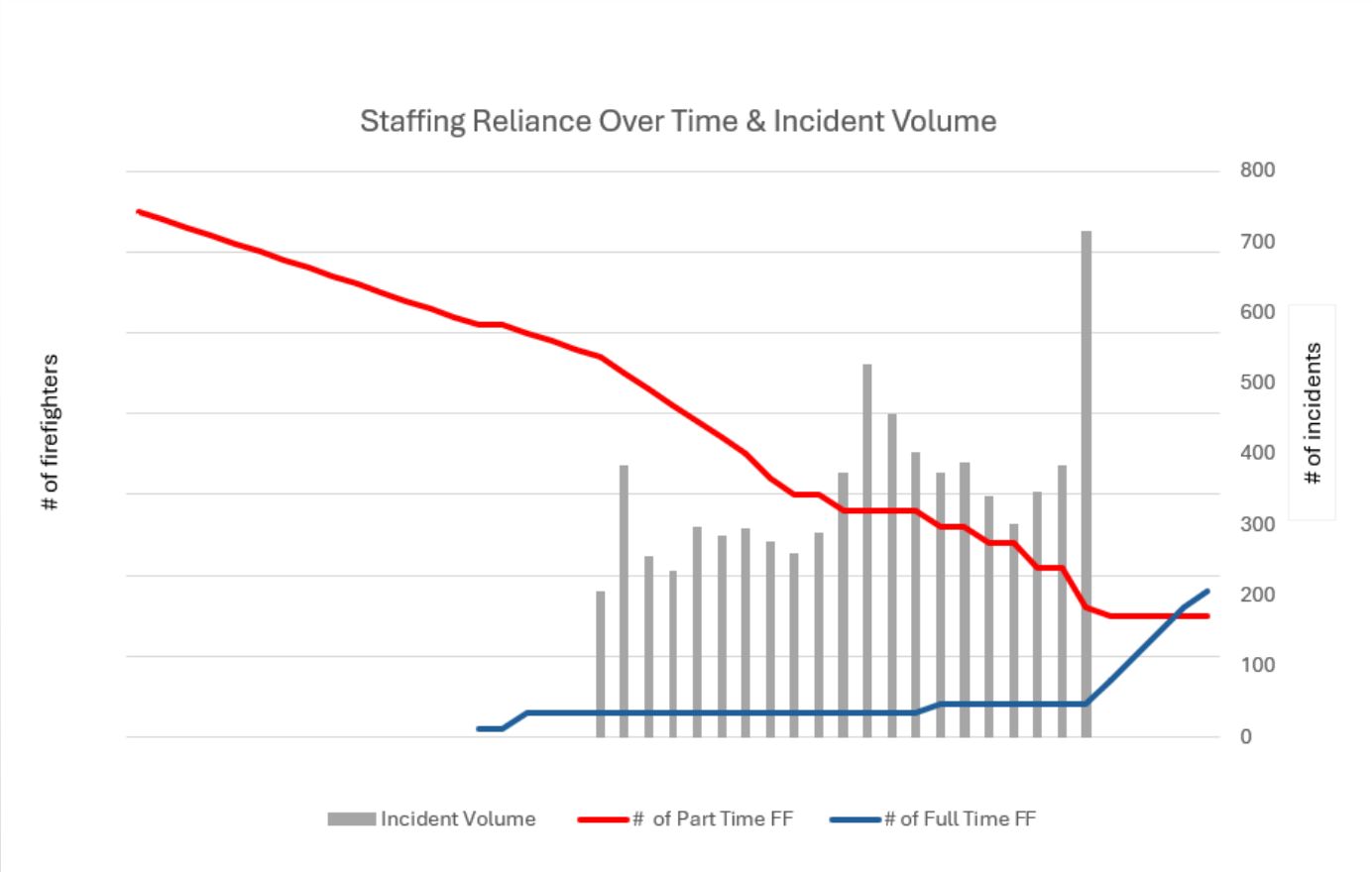


Situational Status

- Camden Fire is attempting to function with generations old acquired habit of relying on “Civic minded community residents” to provide Fire and Life Safety protective services.
- Across the country communities became accustomed to the inexpensive labor pool provided by volunteer and on-call Firefighters.
- It *was* easy for communities to recruit/retain from within for the labor pool.
- The National Fire Academy began forecasting the nationwide downward trend in the number of Firefighters during the 1980s.



Situational Status



1
9
6
6

2
0
0
3

2
0
2
3

- 1847 – Foundation of Camden Fire Engine Company – 65 personnel
- 1966 – Chief Robert Oxtan
First full-time employee
Dispatchers provided maintenance
Started paying part-time wages
- 2000 – (2) FTE added
- 2017 – (1) FTE added
Assist with Code Enforcement

Situational Status

- With fewer “Civic minded community residents” working in Fire Departments, communities need full-time personnel to provide Fire and Life Safety protective services – which comes at additional costs
- *This is where we are and have been for quite few years*
- Budget Committee member Mary Beth Thomas advocated for ‘public safety officers’. Employing cross-trained Firefighter/EMTs moves us in that direction
- The process towards this started in 2019 with the commission of the **Modified Informed Community Self Determination (ICSD) EMS Evaluation in and for the Towns of Camden, Hope, Lincolnville, and Rockport and the Pen Bay Medical Center - Final Report**, which recommended the Fire Departments begin an EMS First Responder program

Why are we hesitating to move forward? One stated reason is cost.

Fire/EMS Department Tax Impact

FY 2024

Town Tax Assessment \$23,100,661.59

- Fire Department budget: \$747,900 (operational, excluding capital)

➡ Percentage of Tax Commitment: 3.23%

For a home that is assessed at \$250,000 a person's total tax bill would be \$3,450.00. Of that tax bill, \$111.43 would be the Fire Department portion.

For that home, it cost you \$111.43 of your property tax bill per year to have fire trucks, and Firefighters respond – or install your smoke detectors and change your batteries.

- Fire/FirstResponder/NEMHS budget: \$1,042,100

➡ Percentage of Tax Commitment: 4.51%

For a home that is assessed at \$250,000 a person's tax bill would be \$3,450.00. Of that tax bill, \$155.59 would be FD/EMS/NEMHS portion.

For that home, it cost you \$155.59 of your property tax per year to have fire trucks, Firefighters, Ambulances and EMTs respond.

Transformative Era

- Moving towards cross-trained employees at Camden Fire/EMS
- Education provided for Firefighters and community members started pre-Covid and delayed during this time
- Firefighters and community members obtained licenses through the Maine Office of EMS
- Camden Fire went through an 8-month licensure and inspection process by the Maine Department of Public Safety's Office of EMS
- This phase is intended to build Camden Fire's capacity to provide EMS as outlined in the ICSD
- This phase is intended to build Firefighters and EMTs skills, abilities and experiences

Transformative Era

- EMS non-transporting First Responder service initiated on March 24, 2023
- Since then, we have responded to more than 360 First Responder incidents in collaboration with NEMHS
 - Staffing levels allow us to provide this service 6am to 6pm



Camden Fire/EMS Strategic Plan

Background

- The Camden Fire/EMS service is being developed as a sustainability model to provide cross trained Firefighters for the Town of Camden to ensure the long-term delivery of Fire & Life Safety protective services.
- This timetable is based on the model of building Camden Fire's capacity to deliver 24/7 EMS transport services over time while continuing to collaborate with NEMHS to provide 24/7 transport services.
- This service is **NOT** being developed in response to dissatisfaction with the current provider. We have repeatedly stated that the service provided by NEMHS has vastly improved in recent times under the direction of the current management at the local base.

Our Vision

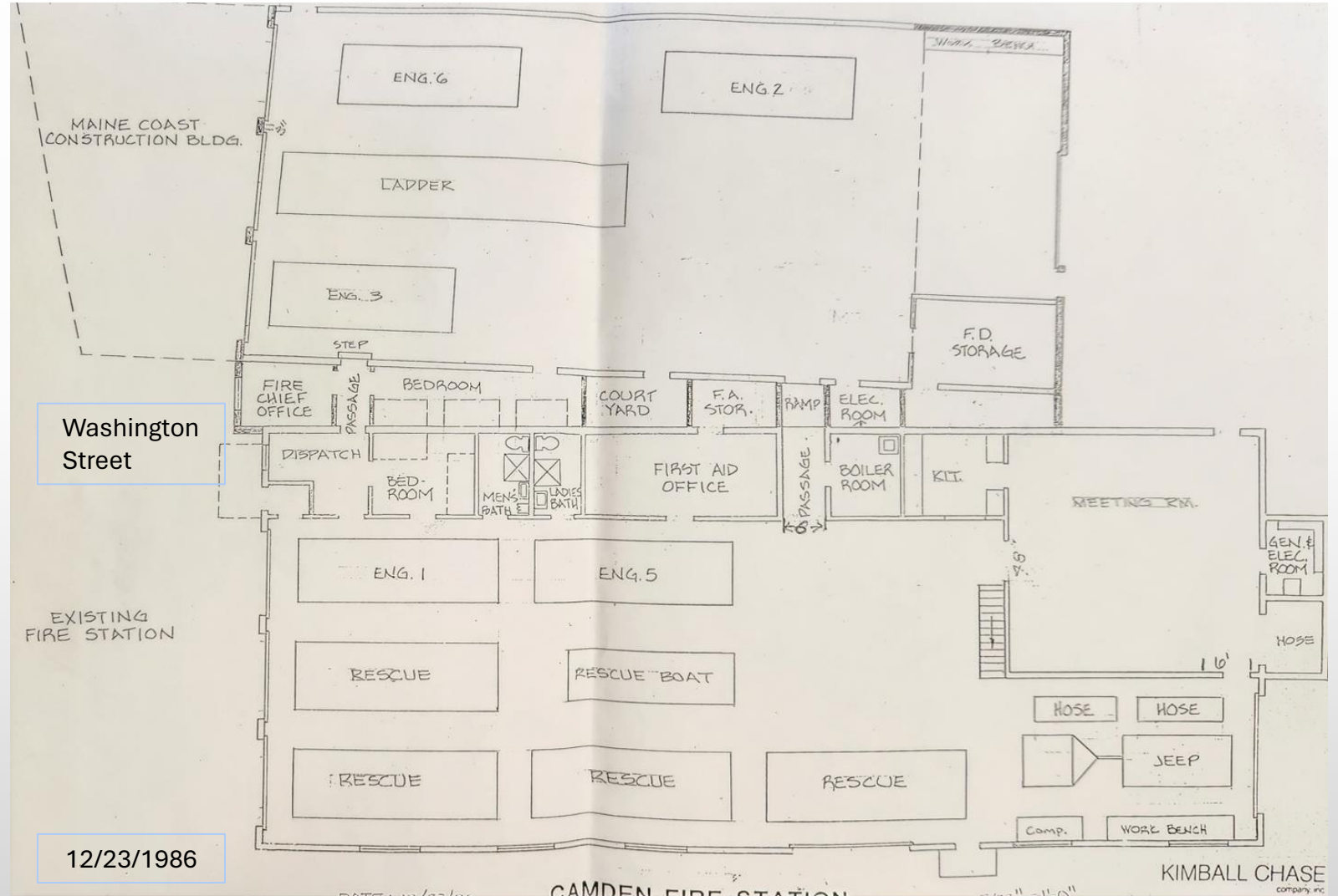
- To transform and stabilize the Camden Fire Department from the faltering staffing model it currently operates under to a sustainable model which employs professional, cross-trained Firefighter/Emergency Medical Technicians who are providing Fire and Life Safety protective services to our community.
 - We will strive to maintain the corps of part-time/on-call and per-diem Firefighter/EMTs.
- To continue to evolve the First Responder service offerings of the Camden Fire/EMS Department that was launched on March 24, 2023.
 - First Responder services are currently provided when the Department is staffed 6am to 6pm.
 - We attempted to provide First Responder services 24/7. Our review of this determined it was not logistically possible using the existing staffing model.
 - We respond to assist NEMHS during off-shift hours as requested.

Goals and Objectives

- This timeline is based on the concept of building Camden Fire's capacity to deliver 24/7 EMS transport services over time while continuing to collaborate with NEMHS to provide 24/7 transport services.
- The service is being developed as a sustainability model to provide cross trained Firefighter/EMTs for the Town of Camden and mutual aid partners.
- Throughout this process continued collaboration with NEMHS is imperative for successful outcomes.

How Do We Get There?

- The 1986 design of the Fire/EMS building provided space to staff, house and operate the Department.
- The building was occupied by Camden Fire and Camden First Aid.

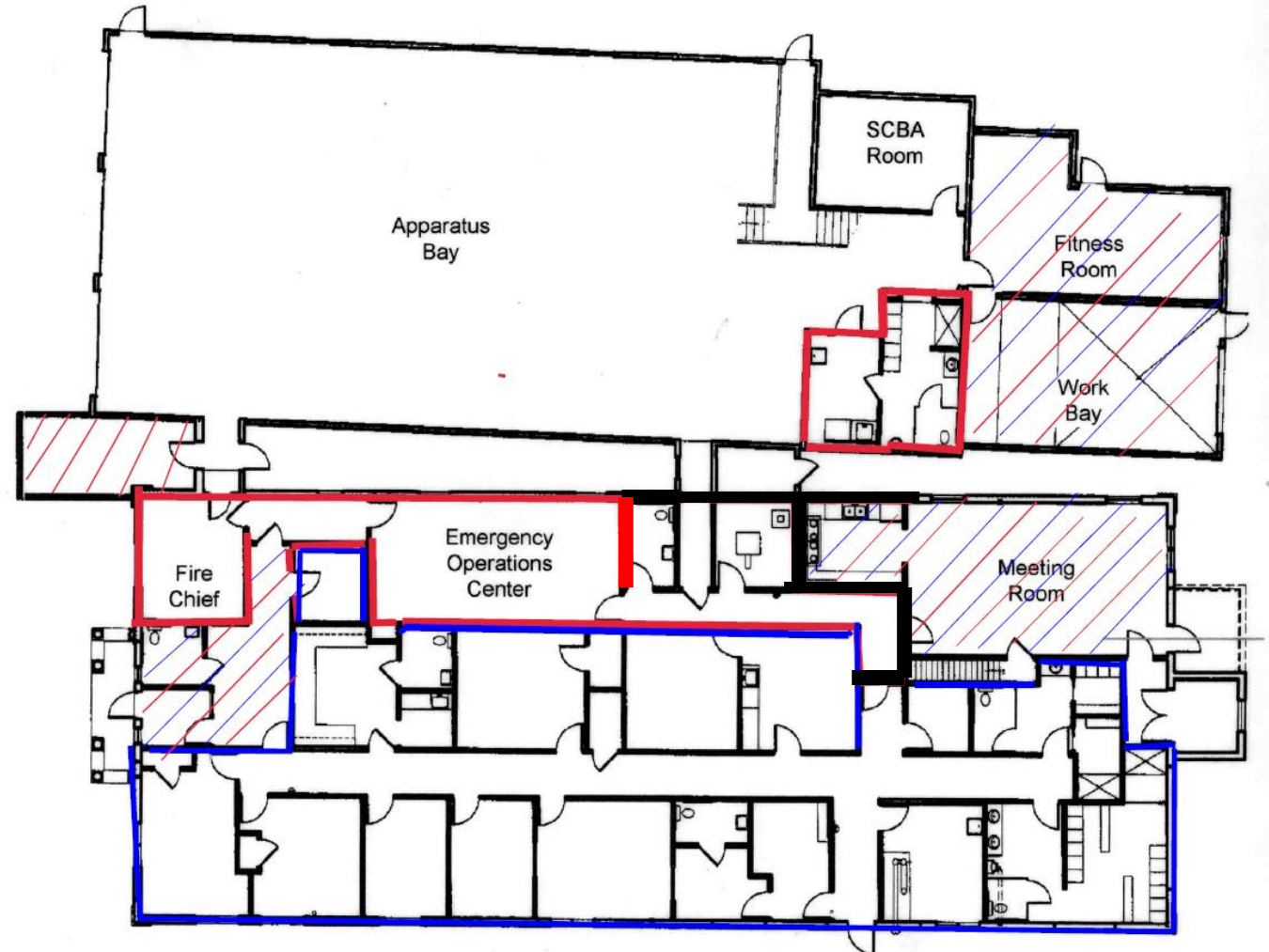


Today's Situation

- Hindered ability to develop a vision, strategic plan and timetable within the current allocated space.
- How does a plan get developed and implemented without adequate space?

Public safety building space allocation after 2002/2003 renovation project

- Blue spaces are Camden Police
- Red spaces are Camden Fire/EMS
- Blue and red striped spaces are shared

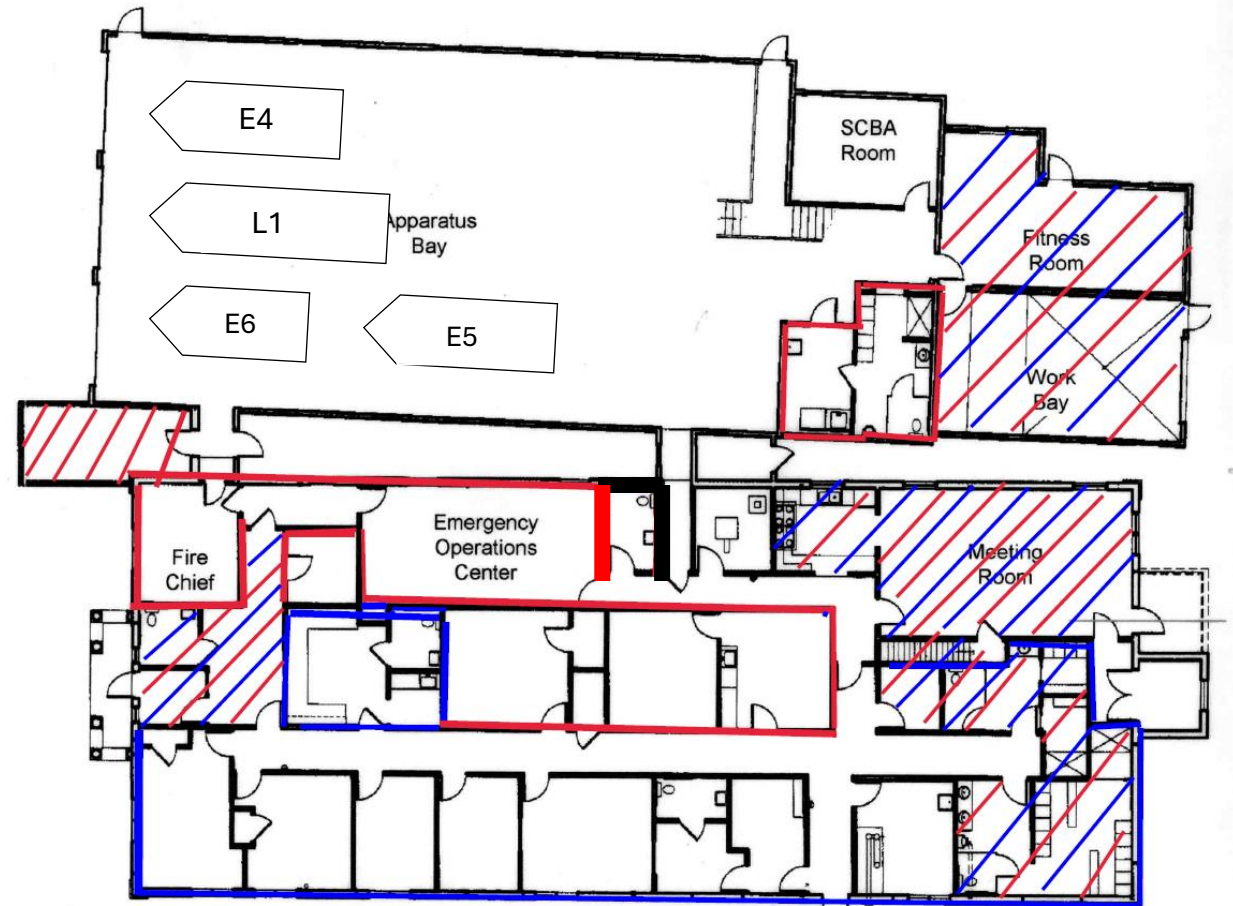


What helps us get there?

- Immediate need to reallocate equitable space in the public safety building between the Camden Police Department and Camden Fire/EMS Department.
- These reasonable, available and time saving modifications will enable the Fire/EMS Department to accommodate strategic expansion.
 - Without allocating space, implementing a strategic plan is not feasible.

2024 Proposed reallocation of public safety building space

- Blue spaces are Camden Police
- Red spaces are Camden Fire/EMS
- Blue and red striped spaces are shared



Proposed reallocation of spaces by November 1, 2024.

PHASE 1

Camden Fire first responding to EMS calls in Camden 6am – 6pm with NEMHS providing ALS and transport.

July 1, 2024
Wages/Benefits Adjustment

- Change to MPERS Plan 3C retirement.
- Wage/benefits adjustment to retain current staff and appeal to prospective FTEs.
- This is based comps including Rockport's FY25 published wages which are 22% above Camden's current wages and 25% above Rockland's



July 1 – December 1 2024
Hire 3 FTE

- Hire (3) FTE 12 hour shifts. Working 4 days on, 4 days off.



November 1, 2024 – April 1, 2025
Renovate the building

- Renovate four rooms located on the PD side of the building to accommodate more staff.
- Two of these room would be bunkrooms to be used by 24 hour staff.

Once Phase 1 is complete move to Phase 2

PHASE 2

Camden Fire first responding to EMS calls in Camden 6am – 6pm with NEMHS providing ALS and transport.

January 1, 2025

Purchase an Ambulance

- Purchase an Ambulance
- Camden Rescue 1

July 1 – September 1 2025

Hire 3 FTE
Order New Fire Engine
\$1.2 Million

- Order new fire engine to replace 30 year old Engine 5
- Hire (3) FTE

December 1, 2025

Transition to 24-hour shifts
Develop a call sharing method with NEMHS

- Staffing level at this point is:
- (4) 24 hour shifts, 2 FTEs per shift.

Once Phase 2 is complete move to Phase 3

PHASE 3

Camden Fire responding and transporting to EMS calls in Camden 24/7 with NEMHS providing ALS.
Camden Fire and NEMHS will share calls during this phase.

March 1, 2026
Start Transporting at BLS level
Call sharing of 911 incidents with NEMHS

- Responding and transporting at BLS level 24/7.
- NEMH to provide ALS support.
- Call sharing with NEMHS.
- NEMHS serves the licensed health care facilities.



July 1 – September 1, 2026
Hire 3 FTE

- Hire (3) FTE



November 1, 2026
Purchase Pickup
Purchase new PPE washing machine

- Purchase a pickup to replace 20-year-old U1.
- This vehicle could also serve as an EMS fly car.

Once Phase 3 is complete move to Phase 4

PHASE 4

Camden Fire responding and transporting to EMS calls in Camden 24/7 with NEMHS providing ALS.

Camden Fire and NEMH continue to share calls during this phase.

July 1, 2027

Purchase 2nd Ambulance

- Purchase 2nd Ambulance
- Camden Rescue 2

July 1 – December 31
2027

Hire 2 FTE

- Hire (2) FTE for 24 hour shifts.

Once
Phase 4 is
complete
move to
Phase 5

PHASE 5

Camden Fire responding and transporting to EMS calls in Camden 24/7 with NEMHS providing ALS.

Camden Fire and NEMHS continue to share calls during this phase.

July 1 – September 1, 2028

Hire 2 FTE

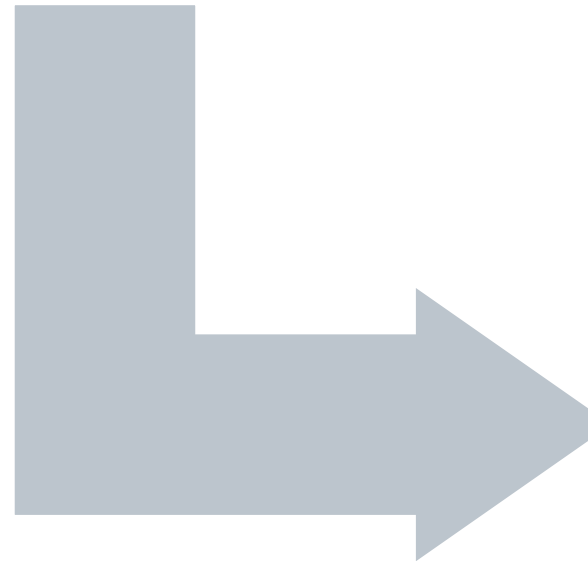
- Hire (2) FTE.

December 1, 2028

Begin staffing 2
ambulances 24/7

Staffing levels at this point are:
(4) 24-hour shifts, (4) FTEs per
shift.

Once
Phase 5 is
complete
move to
Phase 6



PHASE 6

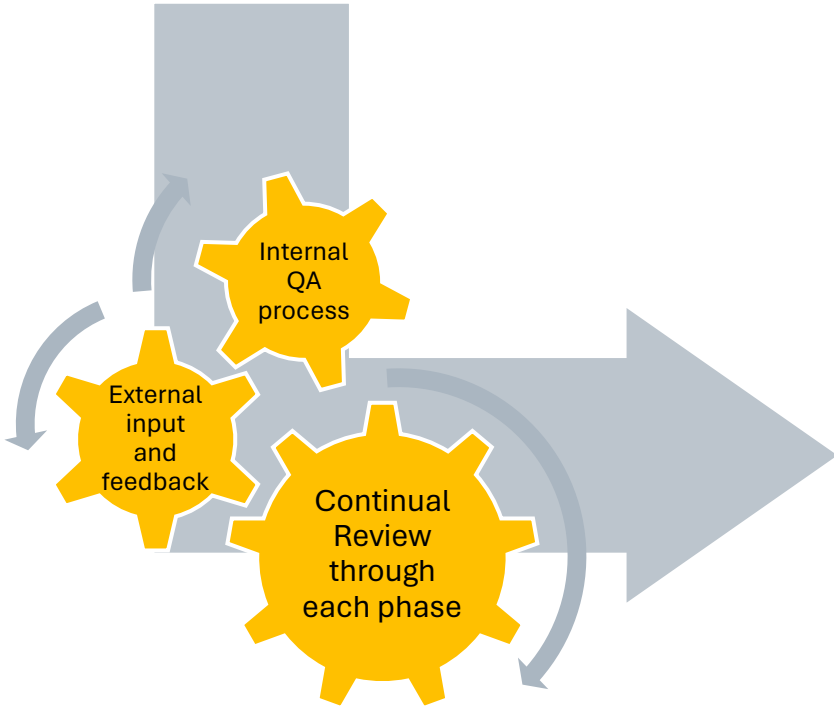
July 1, 2029

Purchase Ambulance

- Purchase new ambulance to replace Camden Rescue 1.

Camden Fire responding and transporting to EMS calls in Camden 24/7 with NEMHS providing ALS.

Camden Fire and NEMHS continue to share calls during this phase.



July 1, 2029

Order New Ladder Truck
\$2.2 Million

- Order New Ladder Truck to replace 33-year-old L1.
- 4-year delivery time frame.