

STATE OF CONNECTICUT

**PERFORMANCE AUDIT
ADMINISTRATION OF
EMERGENCY MEDICAL SERVICES
DEPARTMENT OF PUBLIC HEALTH**

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**AUDITORS OF PUBLIC ACCOUNTS
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EXECUTIVE SUMMARY

On December 1, 2000, the Auditors of Public Accounts of the State of Connecticut issued a performance audit report, which contained recommendations to improve the Connecticut Department of Public Health's administration over the State's emergency medical services (EMS) system. We have conducted a follow up review to determine the status of those recommendations. This review examined the action taken by the Department of Public Health to address the recommendations made in that report. We also conducted a review to determine the current status of recommendations included in three reports issued by the Legislative Program Review and Investigations Committee; the results of which are included in the "Appendix" section of this report. Our current findings, summarized below, are described in more detail in the "Results of Review" section of this report.

Follow Up to Recommendations One and Two From Prior Report:

We noted that the Department of Public Health has implemented substantial portions of the first and second recommendations contained in our prior report, but found that there is a need for further improvements in the contracting for and the monitoring of emergency medical services. We, therefore, are restating those prior recommendations, as follows.

- 1. The Department of Public Health should complete and implement the pilot program, submitted to the General Assembly under provisions of Public Act 00-151, which calls for the selection of providers based on the issuance of requests for proposals. It should also implement the expedited approval process, part of a study completed under that same Public Act, to operate additional vehicles or operate at branch locations. It should request any legislation needed to accomplish these changes (See Item No. 1).**
- 2. To help ensure that each municipality establishes and implements a plan to provide emergency medical services to its residents, the Department should seek legislation that:**
 - (1) Requires each municipality to establish contractual agreements that include performance standards with all the providers of emergency medical services for that municipality, including agreements for cooperative aid in times of need and agreements to provide advanced life support.**
 - (2) Require each municipality to submit a copy of its plan and the related contractual agreements to the Office of Emergency Medical Services (See Item No. 2).**

Follow Up to Recommendations Three and Four From Prior Report:

In June 2002, the Department of Public Health had contracted for an on-line data system designed to meet statutory requirements for a uniform data collection system. Having measurable data available would allow for an evaluation of the EMS delivery system and for the establishment of a quality assurance program. It is expected that full implementation of the on-line data system will take place by January 2003. Until it is implemented, we are repeating recommendations three and four from our prior report, as follows.

- 3. The Commissioner of Public Health should comply with Section 19a-177, subsection (8)(A) of the General Statutes, and develop a data collection system that will follow a patient from initial entry into the emergency medical service system through arrival at the emergency room (See Item No. 3).**
- 4. The Department of Public Health should comply with the provisions of Section 19a-177, subsection (10) of the General Statutes and research, develop, track and report quantifiable outcome measures for the State's emergency medical services system. It should begin with the reporting and analysis of the number of transports, both emergency and non-emergency, the number of covered or mutual aid calls and the number of calls requiring advanced life support. The analysis should include the response time for service delivery. It should make this information available to the municipalities (See Item No. 4).**

Recommendation Resulting From Our Current Review:

Our survey of municipal officials and the regional councils, as well as our review of other materials available, identified significant differences in the perceptions that Department of Public Health officials, municipal officials, commercial providers, volunteer organizations and regional EMS councils have, as to the current state of the EMS system and what is needed for the future. Several sources indicated dissatisfaction with the Department's leadership in the area of EMS system development. There has been a continued call to reorganize the State Office of Emergency Medical Services. Issues involving the Department of Public Health and its relationship and communication with the municipal governments and the EMS community still need to be addressed. Accordingly, we are making the following new recommendation:

- 5. The Department of Public Health needs to improve its communications and relationship with municipalities and the EMS community (See Item No. 5).**

INTRODUCTION

Background:

In response to widely publicized turmoil in the State's emergency medical services system, the Legislative Program Review and Investigations Committee (LPRIC) conducted a study of the State's emergency medical services system in February 1997. The report resulting from that review noted that oversight, investigation and inspection of various parts of the EMS system were lacking; and, after 20 years of operation, key components of a proper EMS system were still absent.

In March 1999, the Legislative Program Review and Investigations Committee conducted the first phase of a second study of emergency medical services in the State by reviewing the State's system of regulating ambulance companies, the need for local EMS plans and a system of outcome measures. Later in the year, the Legislative Program Review and Investigations Committee conducted the second phase of a study of emergency medical services in the State by reviewing the setting of maximum rates, the determination of need process and emergency medical dispatch and data collection.

In February 2000, the Commissioner of Public Health unveiled his plan for the revitalization of the Office of Emergency Medical Services. The plan included increasing the current staffing of the Office from eight to 13 employees. The Office of Emergency Medical Services was organizationally elevated to report directly to the Commissioner, through an internal EMS Committee comprised of the Department Bureau Chiefs of Community Health, Policy, Planning and Evaluation and Regulatory Services. The plan included the reestablishment and refilling of the position of Director of the Office of Emergency Medical Services, that position reporting directly to the Commissioner.

In June 2000, the National Highway Traffic Safety Administration performed a reassessment of Connecticut's EMS program. It noted some progress had been made since its 1991 Assessment. Among the most important points, it recommended that the Department should:

1. Assure stable, ongoing funding for the Office of Emergency Medical Services,
2. Eliminate the rate setting and certificate of need requirements for EMS,
3. Ensure that appropriate standards of quality are in place prior to issuing to an organization a license or primary service area assignment,
4. Ensure that the Director of the Office of Emergency Medical Services reports directly to the Commissioner of Public Health,
5. Review, revise and implement the Statewide EMS plan,
6. Complete the development of a comprehensive EMS data system capable of supporting the planning, management and evaluation of the EMS system,
7. Develop quality standards for the licensing of services,
8. Develop triage and destination policies for all types of patients, along with a system for monitoring and improving performance and outcome,
9. Phase in implementation of an EMS system evaluation plan with identified priorities.

During 1999, the Office of Emergency Medical Services had been the subject of considerable adverse publicity. In response to that publicity, in January 2000, the Auditors of Public Accounts were asked to perform a review of the entire network of EMS functions across the State. On December 1, 2000 we issued a report on that review that contained four recommendations. Our current examination is a follow up of that report.

Significant Legislation:

As noted in our prior report, the 2000 Session of the General Assembly enacted legislation that required the Commissioner of Public Health to make changes in the administration of the EMS system. Among those changes were:

1. Requiring the Commissioner of Public Health to develop an EMS data collection system by October 1, 2001. That system will collect on a quarterly basis from each licensed or certified ambulance service, and by March 31, 2002, report on an annual basis: the total number of calls for emergency medical services received during the reporting year by each licensed ambulance service or certified ambulance service; the level of emergency medical services required for each call; the name of the provider; the response time, by using the common definition of response time as provided in the regulations; and the number of passed calls, cancelled calls and mutual aid calls during the reporting year.
2. Requiring the Commissioner to make changes to regulations in order to streamline the rate setting process.
3. Requiring the Commissioner to research, develop, track and report on appropriate quantifiable outcome measures for the State's emergency medical services system. The Commissioner is to submit to the Public Health Committee of the General Assembly, on or before July 1, 2002, and annually thereafter, a report on the progress toward the development of such outcome measures and, after such outcome measures are developed, an analysis of emergency medical services system outcomes;
4. Requiring the Commissioner to establish primary service areas and assign in writing a primary service area responder for each primary service area; and revoking such assignments when it is in the best interests of patient care to do so.
5. Requiring, by July 1, 2001, the Office of Emergency Medical Services to develop model local emergency medical services plans and performance agreements to guide municipalities in the development of such plans and agreements.
6. Requiring each municipality to establish a local emergency medical services plan by July 1, 2002. The plan is to include the written agreements or contracts developed between the municipality, its emergency medical services providers for initial response, basic ambulance service, and advanced life support; the 911 dispatcher that covers the municipality, and any mutual aid call arrangements.
7. Allowing a municipality to petition the Commissioner for the removal of a primary service area responder, if at any time: an allegation that an emergency exists and that the safety, health and welfare of the citizens of the affected primary service area are jeopardized by the responder's performance, or the unsatisfactory performance of the responder as determined based on the local emergency medical services plan established by the municipality and associated agreements or contracts.
8. Requiring the Commissioner of Public Health to submit to the Public Health Committee of the General Assembly, by February 1, 2001, a plan of action for the implementation of a pilot program, in not more than two municipalities that consent to participate, to assess the effect of assigning a primary service area to a selected provider of emergency medical services based on the issuance of requests for proposals. The Public Health Committee

shall meet to consider the plan of action not later than sixty days after the date of its submission. If the Committee rejects the plan of action, the Commissioner shall submit a revised plan of action not later than ninety days after the date of such rejection.

9. Requiring the Commissioner of Public Health to study and make recommendations for the implementation of an expedited approval or waiver process for the operation of additional vehicles and branch locations by emergency medical service providers licensed or certified by the Commissioner, where such operation is not the offering of a new service and does not result in any change in rates. The Commissioner was to submit a report of his findings and recommendations to the Public Health Committee of the General Assembly by December 31, 2000,

As part of our current examination, we have reviewed the Department's compliance with these new requirements.

In the 2001 Session of the General Assembly, legislation was proposed to transfer the Office of Emergency Medical Services from the Department of Public Health to the Department of Public Safety. That legislation was not passed. Legislation was also proposed in that Session to repeal the rate setting process. That legislation was not passed. However, Public Act 01-04 was passed in the June Special Session. It is intended to streamline the rate setting process. It exempted those providers who are not seeking a rate increase in excess of the National Health Care Inflation Rate Index for the prior year from submitting detailed financial information and; any rate increase not in excess of the National Health Care Inflation Rate Index shall be deemed approved by the Commissioner.

In the 2002 Session of the General Assembly, the Council of Regional Chairpersons, a group formed by the Regional Councils, and working through the Connecticut EMS Advisory Board, presented a plan to establish an EMS Commission. The Commission would replace the current organizational structure by placing the Office of Emergency Medical Services within the Department of Public Health for administrative purposes only. A five-member commission would assume the duties and powers currently assigned to the Commissioner of Public Health, with the Office of Emergency Medical Services headed by an Executive Director. The proposal was in answer to the complaint that progress in the State of Connecticut EMS system suffered because of a lack of leadership from the Department of Public Health, and that an independent EMS commission was a growing national trend among EMS systems. The proposed plan did not proceed into a legislative proposal.

AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

The Auditors of Public Accounts, in accordance with Section 2-90 of the Connecticut General Statutes, are responsible for examining the performance of State entities to determine their effectiveness in achieving expressed legislative purposes. We conducted a follow up review of our performance audit of the Department of Public Health's administration of the State's emergency medical service system. The report on the original performance audit was issued December 1, 2000. We conducted our audit in accordance with generally accepted auditing standards and the standards applicable to performance-related audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. The audit covered economy, efficiency and effectiveness issues, all of which are types of performance audits. The objective of the original review was to identify the major deficiencies in the State's emergency medical services system that could be addressed by legislative action. We focused on the most significant components of the State system for administering emergency medical services - the Department of Public Health, and its Commissioner and the Office of Emergency Medical Services within the Department. The objective of this review was to follow-up on the prior performance audit findings and recommendations to determine the current status of actions taken by the Department in response to our recommendations.

As the first step of our examination, we have reviewed the status of the recommendations made by the Legislative Program Review and Investigations Committee. Studies were done in 1997 and 1999. (See Appendix) We have also reviewed the implementation of changes mandated by recent legislation enacted by the General Assembly. Following that, we reviewed the status of the recommendations made by our prior performance audit and the attainment of those goals.

We also conducted surveys by contacting municipal officials responsible for the administration of EMS services. We included the 26 largest towns in the State, covering over 50 percent of the State's population. We also surveyed several of the smaller municipalities in the State and the five regional EMS councils. As we did not rely on any computer-based data for this audit, there was no need to test the reliability of such data.

RESULTS OF REVIEW

Our follow up examination noted significant improvements in the operation of the Office of Emergency Medical Services. We found the Department has implemented most of the recommendations made by the Legislative Program Review and Investigations Committee. Our review of those recommendations, and the corrective action implemented by the Department of Public Health, can be found in the "Appendix" section of this report. Our prior report made four recommendations for the improvement in administration of emergency medical services by the Department of Public Health. They generally reflected statutory requirements established by Public Act 00-151. Those recommendations and the results of our follow up examination follow:

Item No. 1. Determination of Need and Assignment of Service Areas

Prior Audit Recommendation:

The ability of municipal governments to control ambulance service within their jurisdiction should not be limited by the determination of need and assignment of service areas made by the State Office of Emergency Medical Services.

Department of Public Health's Response:

- "Although the Phase II Legislative Program Review and Investigations Committee Report recommended streamlining the determination of need process, a recommendation which was fully supported by the Department, this recommendation was not enacted by the General Assembly. Public Act 00-151 does require the Department to study and make recommendations concerning the implementation of an expedited approval, or reporting process, or a waiver of any required approval for the operation of additional ambulances, invalid coaches, non-transport emergency vehicles and branch locations and report to the General Assembly no later than December 31, 2000, on its recommendation."
- "It is important to point out that, in and of itself, response times are not a true measure of poor performance in that there are other factors that must be taken into consideration such as the direct impact on patient care or safety, the use of Emergency Medical Dispatch, the differences in the delivery of EMS in urban, suburban and rural settings and other EMS providers that respond to the scene (e.g. first responders). Currently, the regulations do allow the Department to take an enforcement action against an EMS provider that places a patient at risk."
- "Public Act 00-151 clearly provides the framework which enables the Department to continue to work with the regional councils and representative municipalities in order to further improve Connecticut's emergency medical services system."

Results of Follow Up Review:

As noted in our previous report, the administration of emergency medical services at the Department of Public Health has two separate functions, one of regulatory enforcement, and one of system development. In the area of regulatory enforcement we found the changes made in recent years have improved the Department's administration in the areas of licensing, inspecting and investigating of complaints. The number of staff in the Office of Emergency Medical

Services has been increased and management improved. However, issues involving municipal governments and the State Department of Public Health still need to be addressed. Respondents to our survey stated that greater freedom should be granted the municipalities in selecting providers. Respondents added that by allowing such freedom, municipalities could provide additional services to residents by having municipal resources work in conjunction with assigned private providers. It was noted that the reduction in reimbursements by government and medical insurers placed and will continue to place financial pressure on providers. An industry under such pressures requires effective regulation that is flexible and responsive. Advances in emergency medical care, such as paramedic care, and the use of first responders with automatic external defibrillator capability, frequently require both municipal and private responders, and hospitals, to work in partnership. As an example, in our survey, one municipality explained that by allowing its certified provider to perform and bill for nonemergency transports within its community, an expansion of services for that community would result, as well as a reduction in operating costs, because of the more productive use of resources.

Our prior audit noted that the municipalities within the State need both the ability to administer the task of providing emergency medical services to their residents and a definition of their responsibilities. We noted that providers are selected by the State with very little input from the municipalities and regional councils. Providers were selected and assigned in a manner that inhibited market competition and the search for alternatives. It is also noted that this system reduced accountability. The chief executive officer of a municipality and/or its elected officials are responsible for the public safety services in a community; as with police and fire services, public expectations are to rely upon those leaders, and not the State or a regional council as being responsible for emergency medical care.

By statute, the Commissioner of Public Health assigns the primary service area responder for each primary service area. Municipalities are required to disclose contractual agreements with providers in their local emergency medical services plans, but municipalities do not select that provider. The regional councils and the chief elected official of a municipality are only allowed to recommend the assignment of a provider. Attempts have been made in the Legislature to eliminate one or more parts of this structure. To enable the Department to be more responsive to the municipalities three legislative changes were made during the 2001 calendar year:

Section 19a-181e of the General Statutes, established by Public Act 00-151, required the Commissioner of Public Health to submit to the Public Health Committee of the General Assembly a plan of action for a pilot program for the selection of providers based on the issuance of requests for proposals.

Section 19a-181c of the General Statutes, established by Public Act 00-151, allows the municipalities to petition the Commissioner of Public Health to remove an assigned responder if an emergency exists, and the safety, health and welfare of the citizens of the affected area are jeopardized, or to a maximum of once every three years, if the municipality responder's performance is unsatisfactory as determined by the local EMS plan. Our survey of municipal officials found that they considered this change highly desirable.

In addition, Public Act 00-151 required the Commissioner of Public Health to study and make recommendations on implementing an expedited approval process to operate additional vehicles or branch locations, if that operation is not a new service, or does not result in a rate change. We reviewed the Department's study and recommendations; it appeared to meet the requirements of the legislation.

We reviewed the proposed plan of action for a pilot program for the selection of providers. Our review found that the Department submitted the plan to the Public Health Committee of the General Assembly on June 14, 2001, rather than by February 1, 2001 as required. At the time of our review (June 2002), the Committee did not review and approve the proposed plan by February 1, 2002 as required by statute. Our review of this plan noted that it did not completely meet the requirements of the legislation. The plan did not fully identify the means of implementing such a pilot program. We believe that the implementation of such a program is desirable because it would place the selection of service providers in the hands of those entities most affected.

We recommend the Department complete and implement the pilot program for competitive selection of EMS providers and the recommended changes to its determination of need process. Section 19a-181e, subsection (b) of the General Statutes requires the approved pilot program to begin by October 1, 2005. The pilot program will improve the relationship between the Department and the municipalities. Municipalities will be given a louder voice when their providers are selected: they also will have the ability to hold these providers accountable.

We are modifying our prior audit recommendation to address the need for improvements in the delivery of emergency medical services within the existing regulatory structure.

The Department of Public Health should complete and implement the pilot program, submitted to the General Assembly under provisions of Public Act 00-151, which calls for the selection of providers based on the issuance of requests for proposals. It should also implement the expedited approval process to operate additional vehicles or operate at branch locations that was part of a study completed under that same Public Act. It should request any legislation needed to accomplish these changes (See Recommendation 1.).

Department of Public Health's Response:

“The Department of Public Health agrees that municipalities should take leadership in the local administration of Emergency Medical Services systems. The Department has, and will continue to develop and promote the availability of the pilot program for municipal self-determination of EMS providers. The Department is considering legislative language to simplify the determination of need process.”

Item No. 2. Local Responsibility for Emergency Medical Services

Prior Audit Recommendation:

The Department should ensure that each municipality complies with Section 9 of Public Act 00-151 and establishes a plan to provide emergency medical services to its residents. It should require each municipality provide a copy of the plan to its regional EMS council, and to the Office of Emergency Medical Services. Each municipality should be required to establish contractual agreements with the provider of emergency medical services for that municipality, including agreements for mutual aid call arrangements and agreements to provide advanced life support. The Department should also ensure that each municipality reports those agreements to the Office of Emergency Medical Services.

Department of Public Health's Response:

- "The newly appointed Director of OEMS is responsible for the implementation of Public Act 00-151. However, it is important to point out that this legislation only requires municipalities to submit their EMS plan to their regional emergency medical services council for review and comment. Although previously proposed legislative initiatives required the municipalities to also submit their EMS plans to OEMS, this requirement was not included in Public Act 00-151."
- "In accordance with Public Act 00-151, OEMS, with the advice of the Emergency Medical Services Advisory Board, will develop a model local EMS plan and performance agreement. These models will be distributed to all regional councils and municipalities and will serve to guide municipalities as they develop their individualized local plan. The Department also intends to offer educational sessions to local municipalities on the model plan and performance agreement."

Results of Follow Up Review:

Section 19a-181b of the General Statutes, established by Public Act 00-151, requires each municipality to establish a local emergency medical services plan by July 1, 2002. Our current examination found that, at the time of our review (June 2002), progress had been made. The Department of Public Health has prepared a model plan and has prepared other resources as a guide. To aid the municipalities in this effort regional councils have also been providing assistance.

Our prior audit also noted that in accordance with the Statute, the Department does not directly receive and review these plans. Section 19a-181b of the General Statutes, states – “each municipality...shall submit the plan to its regional emergency medical services council for the council's review and comment.” The Department of Public Health does not directly receive a copy of the local plan, and is not empowered to review it and if necessary require its revision.

Section 19a-181b of the General Statutes also states that - “Such plan shall include the written agreements or contracts developed between the municipality, its emergency medical services providers and the public safety answering point, ... that covers the municipality.” We understand that this does not specifically require that such contracts be established. Our prior audit noted that by requiring municipalities to obtain contractual agreements with a provider, a

framework of accountability would be established. Municipalities will develop contractual agreements with providers at all levels of service that closely meet the needs of that municipality. Local considerations such as the available resources, the desired performance standards, and geography and population demographics would be taken into account when the contractual agreement is prepared.

The Commissioner of Public Health is assigned by statute with the responsibility for determining the primary service area responder for each municipality; and the Department of Public Health is the primary agency regulating emergency medical services. In order to properly administer, coordinate, and regulate the State's emergency medical service system, we believe that the Department of Public Health, and its Office of Emergency Medical Services should receive a copy of each local plan and a copy of each contractual agreement a municipality establishes with its providers. By requiring municipalities to submit the contractual agreements to both the State and the regional councils, regulation would be facilitated, resources could be inventoried, and regional planning facilitated.

Our survey found contractual agreements are already in use in many municipalities, and response time and other performance criteria are monitored. We noted that many municipalities in Connecticut maintain EMS committees or assign the monitoring of EMS services to the police or fire department. That assigned agency has been delegated the responsibility of supervising emergency medical services by the chief municipal official.

Our survey also contained several reports of important documentation not being found on file. Documentation of several long standing primary service area assignments, or first responder assignments could not be found by either the municipality, the regional council, or with the Department. There were also reported inconsistencies between the records maintained by the Department and those of the regional councils. We believe that as part of the establishment of local plans, and the establishment of contractual agreements with providers, all such assignments and agreements should be newly documented.

We are modifying our prior audit recommendation to address the need for improvements within the existing regulatory structure.

To help ensure that each municipality establishes and implements a plan to provide emergency medical services to its residents, the Department should seek legislation that:

- 1. Requires each municipality to establish contractual agreements that include performance standards with all the providers of emergency medical services for that municipality, including agreements for cooperative aid in times of need and agreements to provide advanced life support.**
- 2. Requires each municipality to submit a copy of that plan and the related contractual agreements to the Office of Emergency Medical Services (See Recommendation 2.).**

Department of Public Health's Response:

“The Department of Public Health agrees that each municipality should develop and implement a local EMS system plan, and where practical, municipalities should consider participating in regional systems. Each community should have written agreements with its EMS component providers. It would be highly valuable for the Department of Public Health to have access to these documents for planning and performance improvement purposes.”

Item No. 3. Uniform Data Collection System

Prior Audit Recommendation:

The Commissioner of Public Health should comply with Section 19a-177 of the General Statutes, as amended by Public Act 00-151, and develop a data collection system that will follow a patient from initial entry into the emergency medical service system through arrival at the emergency room.

Department of Public Health's Response:

"In addition to more clearly defining the components of a pre-hospital care data collection system, Public Act 00-151 has also established an annual funding stream for this previously unfunded mandate. This source of funding will finally enable the Department to implement this critical care data collection system. During the development stage, the Department will continue to collect baseline data from all ambulance provider services utilizing the EMS Provider Activity Report Form, as previously provided."

Results of Follow Up Review:

Section 19a-177, subsection (8)(A) of the General Statutes, as amended by Public Act 00-151, requires the Commissioner, not later than October 1, 2001, to develop a data collection system that will follow the patient from initial entry through arrival at the emergency room. The Commissioner is required to collect information from each ambulance service, on a quarterly basis, of the total number of calls received; the level of services required for each call; the response time for each level of service furnished; the number of passed calls, cancelled calls and mutual aid calls for the reporting period. This requirement includes the collection of the pre-hospital data for the nonscheduled transport of trauma patients required by regulations, which are the run reports prepared by the responding personnel.

Our current examination found some progress has been made. Starting with the quarter beginning July 1, 2000, the Department has reported a basic data set consisting of 18 data elements that included, among others: total number of requests, total calls responded, average response time, number of calls passed to another provider, number of mutual aid 911 calls responded and the response time for those calls, number of 911 calls that involved a first responder and/or paramedic, number of traumatic injury patients, medical emergency patients and pediatric patients, and the number of cardiac arrest patients, with the number of patients defibrillated and number successfully defibrillated. We note that the requirement is for a more complete data system; the current system only reports data collected and submitted by the service providers on an aggregate basis.

Our prior report noted that the EMS system is composed of many different organizations, including both State and municipal governments, and municipal, private, commercial and volunteer service providers. It includes the functions of dispatch, communications, pre-hospital care, transport, treatment and rehabilitation. We concluded that the use of run reports prepared by the responding personnel, and data on the call volume and response times collected from ambulance companies and public safety answering points was the start of the required data collection system. We noted that each transfer between jurisdiction, provider or function represented a break in the reporting chain. Reports from several sources would result, and a common identifier is needed to track the patient through the entire system. Further work will be

necessary to establish this common identifier. The ability to track a single patient through the system or the response time or other details of a particular call would be essential in a quality assurance program.

In June 2002, the Department of Public Health had contracted for an on-line based data system designed to fully meet the statutory requirements. It is expected that full implementation will take place by January 2003. The new system would establish a common base of reporting among all providers, and with other parts of the trauma data system. Until the required data system is implemented, we are repeating our prior recommendation.

The Commissioner of Public Health should comply with Section 19a-177, subsection (8)(A) of the General Statutes, and develop a data collection system that will follow a patient from initial entry into the emergency medical service system through arrival at the emergency room (See Recommendation 3.).

Department of Public Health's Response:

“The Department of Public Health has been making progress in the acquisition and implementation of an EMS and trauma data collection system. In collaboration with the Department of Information Technology and EMS community, a vendor has been selected and a contract is pending. While contractual issues are being brought to closure, a uniform data dictionary and model report formats have been developed.”

Item No. 4. Quality Assurance Program

Prior Audit Recommendation:

The Department of Public Health should implement the provisions of Public Act 00-151 and establish and employ performance measures over all aspects of the emergency medical services system; it should begin with the reporting and analysis of the number of transports, both emergency and non-emergency, the number of covered or mutual aid calls and the number of calls requiring advanced life support. The analysis should include the response time for service delivery. It should make this information available to the municipalities.

Department of Public Health's Response:

- "The Department is in the process of filling an Epidemiologist III and a staff support position. These two individuals will be dedicated to ensuring an effective pre-hospital care database is developed and has the capability of analyzing program performance."
- "The Director of the Office of Emergency Medical Services has extensive experience with a Level I Trauma Hospital Registry and is well prepared to direct this project."
- "In addition to a data collection system serving as a basis for the Department's Quality Assurance Program, the Department will also continue to rely on its system of unannounced complaint investigations and on-site inspections to ensure regulatory standards are met."

Results of Follow Up Review:

Section 19a-177, subsection (10) of the General Statutes, requires the Commissioner of Public Health to research, develop, track and report on appropriate, quantifiable outcome measures for the State's emergency medical services system. It also requires the Commissioner to report to the Public Health Committee of the General Assembly, on July 1, 2002, and annually thereafter, on the progress of developing those measures and after such outcome measures are developed, an analysis of emergency medical services system outcomes.

We reviewed the progress made in reaching this goal. At the time of our review (June 2002), the Department of Public Health had prepared and issued an outline document - *Performance Improvement for Emergency Medical Service Systems*, intended as a start to guide EMS executives and providers on performance improvement. This should be considered as a first step only; the National Highway Traffic Safety Administration evaluation from June 2000 indicated that the most significant issue that must be addressed in the State's EMS system was data collection and evaluation.

The statute does not specifically detail the outcome measures required. However, the standard used in the National Highway Traffic Safety Administration evaluation states - "A comprehensive evaluation program is needed to effectively plan, implement and monitor a Statewide EMS system...A uniform, Statewide out of hospital data collection system exists that captures the minimum amount of data necessary to measure compliance with standards...Preestablished standards, criteria and outcome parameters are used to evaluate resource utilization, scope of services, effectiveness of policies and procedures, and patient outcome...The quality improvement program should include an assessment of how the system is

currently functioning according to the performance standards, identification of system improvements that are needed to exceed the standards and a mechanism to measure the impact of the improvements once implemented"

Our survey of the municipalities and regional councils found that, for the most part, municipalities are making progress on their own in preparing local plans, establishing agreements with providers and monitoring the performance of those providers. Most indicated that a Statewide data system would be useful for monitoring response times, and as a benchmark for gauging provider performance. Our survey found that several resourceful municipalities utilized the State's regional EMS communications network - CMED, to obtain statistics on response times for the purpose of monitoring their providers.

As our previous report noted, for the proper, effective administration of a program or service, a timely and reliable measure of the effectiveness of that program or service is required. The second step to be made, after a Statewide data system is established, is the analysis of that data. This step includes the identification of problems in the system, determining the progress made in attaining program goals, determining the effective application of resources, and planning for the future. We note that development and application of such outcome measures is a large task, and by necessity, dependent upon the successful implementation of the Statewide data system described in Item No. 2. These outcome measures will be the foundation for a quality assurance program for the emergency medical service system. Until such a system of outcomes measurement and performance improvement is implemented, we are repeating our recommendation.

The Department of Public Health should comply with the provisions of Section 19a-177, subsection (10) of the General Statutes and research, develop, track and report outcome measures for the State's emergency medical services system. It should begin with the reporting and analysis of the number of transports, both emergency and non-emergency, the number of covered or mutual aid calls and the number of calls requiring advanced life support. The analysis should include the response time for service delivery. It should make this information available to the municipalities (See Recommendation 4).

Department of Public Health's Response:

"The Department of Public Health is making progress in the development of a performance improvement initiative. The data collection system is key to a successful program. While the computerized system is being developed, aggregate quarterly data are collected from EMS agencies. These data including call volume and average response times are posted on the Department's website."

Item No. 5. EMS Program Development

The Department of Public Health needs to address its communications and relationship with the municipalities and the EMS community.

As noted in our previous report, in addition to regulatory enforcement, the Department is also charged with the responsibility of EMS system development. This role encompasses the areas of program development and planning, providing and administering grant programs and funding, and public education.

The lead agency to advocate improvements in services or addition of higher-level services in emergency medical services should be the Department of Public Health, working in concert with the Regional Councils and the municipalities. The Department needs to be able to provide incentives, or employ enforcement measures to ensure citizens receive the most advanced emergency medical care. Our survey of municipal officials and the regional councils, as well as other sources indicated that, despite the progress made in recent years, there remains dissatisfaction in the EMS community with the progress the Department has made toward program development. We found that although many municipal officials believed the Department was progressing in the right direction, the majority thought further resources could be made available, and many stressed that leadership on the State level could be improved.

Our survey identified significant differences in the perceptions that Department of Public Health officials, municipal officials, commercial providers, volunteer organizations and regional EMS councils as to the current state of the EMS system and what is needed. The proposal for an EMS Commission, which is described earlier in this report, is an example of this.

Our survey revealed complaints about the staff members of the Department of Public Health - Bureau of Regulatory Services not being specifically trained and not well experienced in EMS issues. Some municipal officials had complaints about the length of time needed to get a response to a request to the Department, and complained about frequent personnel changes. We note many praised the work of their Regional Councils and stated that they were more often the primary source for technical assistance. The key issue for many of the survey respondents was proper customer service, leadership, and adequate funding. Some complained that the model local EMS plan was issued late, which did not help them toward meeting the statutory deadline. In the area of communication, our review noted that the Department discontinued the quarterly EMS newsletter, originally recommended in the 1997 Legislative Program Review and Investigations Committee Report, after several issues.

In the area of rate setting, some respondents to our survey indicated that the Department should gear its rate setting toward guaranteeing adequate compensation to providers by private insurers, as well as Medicare and Medicaid. Our follow up review found few other States are involved in rate setting for ambulance services. In summary, the surveys indicated that rate setting could be made more responsive to the needs of providers and municipalities, and by establishing greater compensation further resources could be made available to providers.

Officials of the Department of Public Health responded by noting the improvement made in services in recent years. They indicated that the investigators for the Department had 14 to 16 years experience with emergency medical services, either in the Department or in the EMS community. Stability in management has been gained, and increased Federal grant resources are expected. The establishment of local EMS plans and a data system are proceeding, and, at the time of our review (June 2002), a proposal was in process for revision of the Department's rate setting regulations.

In our follow up review, we found that one municipality believed it could abruptly terminate its current EMS provider and replace it, without following the provisions established by Section 19a-181c of the General Statutes. The Board of Selectmen, Board of Finance and Emergency Medical Services Commission of a municipality replaced that municipality's primary service area provider on short notice without notifying the Department of Public Health, or presenting evidence at the required hearing and without receiving approval from the Department. The Department reviewed this matter and, at the time of our review (June 2002), has let the matter stand. The new provider currently remains as that municipality's primary service area provider. That proper procedures were not followed indicates a lack of communication between the Department and the municipalities, and how municipal officials may not be cognizant of the Department's role in EMS regulation.

Our survey of municipalities and the Regional Councils, as well as other sources, identified continued complaints of miscommunication and mistrust between the State and the EMS community. As an example of this, in March 2002, as part of a budget amendment proposal for the 2002 Session of the General Assembly, a proposal was made to cut the funding for the fourth quarter allotment of the 2001-2002 fiscal year for the Regional EMS Councils by 65 percent and by 22 percent for the entire 2002-2003 fiscal year. The proposed cuts would have significantly disrupted operations of the Councils. The proposed cuts were dropped for the 2001-2002 fiscal year, and at the time of our review (June 2002), funding levels for the Regional Councils were not determined for the 2002-2003 fiscal year. The proposed cuts were considered by much of the EMS community as an illustration of the lack of commitment by the State to emergency medical services.

Because there are a number of complex issues that involve a number of different players in the EMS community, and numerous demands on scarce resources, it is ensured that there will be differences in outlook between the Department and the EMS community. However, we believe that an effective framework of accountability would be established by -

1. Requiring municipalities to prepare local EMS plans that meet the model established by the Department of Public Health and that include enforceable contractual agreements with specified performance standards for all service providers;
2. Having input from regional councils to provide technical assistance to municipalities, coordinate the local plans and promote a regionalized effort;
3. Having the regional councils assisting the Department in administering the EMS system. Currently, the Department relies upon the regional councils to: review provider service applications, review and approve EMS training classes, evaluate instructors, review and recommend grant applications, and receive and forward to the Department the data reports from providers and to follow up on those providers in the region that have not submitted their data reports;

4. Implementing regulatory action by the Department of Public Health that:
 - Ensures that municipalities establish and make public local EMS plans and complete contractual agreements with providers that promote the best available services,
 - Ensures that ambulance companies and other service providers comply with the contractual agreements established by the local plans,
 - Provides the necessary data on response times, complaints, or other quality assurance issues to the municipalities to assist in ensuring such compliance.

5. Developing programs under the leadership of the Department of Public Health, working in concert with the regional councils and the municipalities. This would provide Statewide leadership, and the ability to provide or facilitate the provision of financial or other resources.

The findings and recommendations in this report address only a small part of these issues, in areas that have been previously reviewed. More attention in the areas of organization, funding and leadership still is needed, in order to address the concerns of the EMS community. Issues involving the Department of Public Health and its relationship with the municipal governments and the EMS community still need to be addressed in the area of EMS systems development. Accordingly, we are making the following recommendation:

The Department of Public Health needs to improve its communications and relationship with municipalities and the EMS community. (See Recommendation 5).

Department of Public Health’s Response:

“The Department of Public Health recognizes the importance of communications and capacity building to strengthen the EMS system. The first point of contact for municipalities is their regional EMS council. In addition, the Department provides consulting and technical assistance to municipalities and EMS agencies. The Department is undergoing a significant reorganization that will consolidate all programmatic and regulatory functions related to EMS in the Office of Emergency Medical Services. The Department has also undertaken a major initiative to strengthen the capacity of first responders to respond to acts of terrorism. The OEMS website has been completely rebuilt and is regularly updated with news, minutes of meetings, essential references and links.”

RECOMMENDATIONS

Our prior report contained four recommendations. As noted previously, Recommendations 1 and 2 have been repeated in a restated form to reflect current conditions. Recommendations 3 and 4 are repeated in this report. One recommendation has been added as a result of our current review.

Status of Prior Audit Recommendations:

- The ability of municipal governments to control ambulance service within their jurisdiction should not be limited by the determination of need and assignment of service areas made by the State Office of Emergency Medical Services. Our current review found progress has been made. The Department has developed plans to change some of its regulatory structure. We are recommending the implementation of these plans. (See Recommendation 1.)
- The Department should ensure that each municipality complies with Section 9 of Public Act 00-151 and establishes a plan to provide emergency medical services to its residents. It should require each municipality provide a copy of the plan to its regional EMS council, and to the Office of Emergency Medical Services. Each municipality should be required to establish contractual agreements with the provider of emergency medical services for that municipality, including agreements for mutual aid call arrangements and agreements to provide advanced life support. The Department should also ensure that each municipality reports those agreements to the Office of Emergency Medical Services. Our current review found the Department has made progress toward compliance. We are recommending further improvements. (See Recommendation 2.)
- The Commissioner of Public Health should comply with Section 19a-177 of the General Statutes, as amended by Public Act 00-151 and develop a data collection system that will follow a patient from initial entry into the emergency medical service system through arrival at the emergency room. Our current review found progress has been made. The Department has contracted for an on-line based data system. Until that system is fully implemented, we are repeating the recommendation. (See Recommendation 3.)
- The Department of Public Health should implement the provisions of Public Act 00-151 and establish and employ performance measures over all aspects of the emergency medical services system; it should begin with the reporting and analysis of the number of transports, both emergency and non-emergency, the number of covered or mutual aid calls and the number of calls requiring advanced life support. This analysis should include the response time for service delivery. It should make this information available to the municipalities. Our current review found the Department has not yet developed the required outcome measures. As a result, we are repeating the recommendation. (See Recommendation 4.)

Current Audit Recommendations:

- 1. The Department of Public Health should complete and implement the pilot program, submitted to the General Assembly under provisions of Public Act 00-151, which calls for the selection of providers based on the issuance of requests for proposals. It should also implement the expedited approval process to operate additional vehicles or at branch locations that was part of a study completed under that same Public Act. It should request any legislation needed to accomplish these changes.**

Comment:

Legislation has made some changes in how the responsibilities of the Department and the municipalities are structured. However, the current regulatory structure will continue, and it is the Department of Public Health, rather than the municipality affected, that selects and regulates the provider for a primary service area.

- 2. To help ensure that each municipality establishes and implements a plan to provide emergency medical services to its residents, the Department should seek legislation that:**
 - 1. Requires each municipality to establish contractual agreements that include performance standards with all the providers of emergency medical services for that municipality, including agreements for cooperative aid in times of need and agreements to provide advanced life support.**
 - 2. Requires each municipality to submit a copy of that plan and the related contractual agreements to the Office of Emergency Medical Services.**

Comment:

Currently, municipalities are not required to submit their EMS plans to the Office of Emergency Medical Services. The Department of Public Health is in the position of regulating services that may not be based on contractual agreements with performance standards or being unaware of agreements that were not submitted to the Department.

- 3. The Commissioner of Public Health should comply with Section 19a-177, subsection (8)(A) of the General Statutes, and develop a data collection system that will follow a patient from initial entry into the emergency medical service system through arrival at the emergency room.**

Comment:

The Department was required to submit its first report from such a system by March 31, 2002. We found a basic reporting system in place. At the time of our review (June 2002) the Department was in the procurement stage of implementing a system that would meet the legislative requirements.

- 4. The Department of Public Health should comply with the provisions of Section 19a-177, subsection (10) of the General Statutes and research, develop, track and report outcome measures for the State's emergency medical services system. It should begin with the reporting and analysis of the number of transports, both emergency and non-emergency, the number of covered or mutual aid calls and the number of calls requiring advanced life support. This analysis should include the response time for service delivery. It should make this information available to the municipalities.**

Comment:

By an analysis of resources available and resources used, as compared to the resulting response times, we believe communities and providers can allocate the necessary resources to provide efficient service and adequate coverage. Legislation requires the Department to develop appropriate quantifiable outcome measures and report an analysis of those measures by July 1, 2002. At the time of our review (June 2002) the Department had completed the preliminary stage of implementing such measures. By necessity, these measures are dependent upon the implementation of a Statewide data system.

- 5. The Department of Public Health needs to improve its communications and relationship with municipalities and the EMS community.**

Comment:

Our survey of municipal officials and the regional councils, as well as our review of other materials available, identified significant differences in the perceptions that Department of Public Health officials, municipal officials, commercial providers, volunteer organizations and regional EMS councils have as to the current state of the EMS system and what is needed for the future.

CONCLUSION

In conclusion, we wish to express our appreciation for the cooperation and courtesies extended to our representatives by the officials and staff of the Department of Public Health during this examination.

Matthew Rugens
Principal Auditor

Approved:

Kevin P. Johnston
Auditor of Public Accounts

Robert G. Jaekle
Auditor of Public Accounts

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APPENDIX

Review of Prior Reports Issued by the Legislative Program Review and Investigations Committee:

The section that follows lists the recommendations made in the three previous reports conducted by the Legislative Program Review & Investigations Committee on the EMS system, the status of the recommendations during our previous review and the current status of those recommendations. To aid in reviewing these reports, our prior report assigned identification numbers to each recommendation made.

Legislative Program Review & Investigations Committee's Report on the Office of Emergency Medical Services – December 1997

Recommendations, and Status of Recommendations:

Administrative Structure -

Recommendations:

- 97-1** The Department of Public Health shall be the lead agency for the EMS program. An Office of Emergency Medical Services shall be established within the Department of Public Health. The Office shall be responsible for program development activities.
- 97-2** Section 19a-175(14) of the General Statutes should be amended to delete the reference that the Commissioner of Public Health must act through the Office of Emergency Medical Services.

Prior Status of Recommendations:

With the enactment of Public Act 00-151, we considered the recommendation implemented.

EMS Grant Program -

Recommendation:

- 97-3** An EMS Equipment and Local System Development Grant Program should be established to provide incentive grants for enhancing emergency medical services and equipment.

Prior Status of Recommendation:

Under Section 19a-178b subsection (a) of the General Statutes, a grant program of \$100,000 (plus personal services) was established in the 1999-2000 fiscal year. It was originally \$500,000 in the Governor's budget, but \$400,000 was deleted from the appropriation by the Legislature. Also, at the time of our review, (May 2000) the Department was in the process of having EMS grant regulations approved.

Follow up Review:

Our current review found the Department has its EMS grant regulations approved. We also found that for the three-year period ending June 30, 2001, the Department received grant applications for the EMS Equipment and Local System Development Grant Program totaling \$1,518,916, and distributed all of its available funding, which totaled \$300,000. We consider the recommendation implemented.

Advisory Board -

Recommendation:

- 97-4** The Department of Public Health shall formally establish an EMS Advisory Board. The Advisory Board shall develop bylaws.

Prior Status of Recommendations:

With the enactment of Public Act 98-195, we considered the recommendation implemented.

Oversight of Regional EMS Councils -

Recommendation:

97-5 Each Regional EMS Council shall develop a five-year plan for its region. The Department shall develop an annual contract compliance process that includes performance measures for evaluating Regional EMS Council accomplishments.

Prior Status of Recommendation:

We considered the recommendation implemented.

Training -

Recommendation:

97-6 EMS instructors should be evaluated every two years by Regional Council staff. The OEMS should analyze State EMT test results to recognize questions commonly missed on examinations, identify weak instructors, and take corrective actions. Corrective action may include requiring additional training, suspension, and revocation of certification.

Prior Status of Recommendations:

We considered the recommendation implemented.

Complaint Investigations -

Recommendations:

97-7 The Committee recommended the Department develop standards for investigating and documenting all complaints, including training for complaint investigators and formalized procedures for documenting complaints.

Prior Status of Recommendations:

We considered the recommendation implemented.

Inspection of Emergency Vehicles -

Recommendations:

97-8 The Committee recommended the development of a database to determine the number of providers requiring vehicle inspections, the date of last inspection, the date of next inspection, and any violations found. Emergency vehicles shall be inspected biannually and the Department shall perform spot checks on a routine basis.

Prior Status of Recommendations:

In our previous review the Department stated that vehicle spot checks and a database of the inspection history have been initiated.

Follow up Review:

We reviewed the current inspection database with the management of the Department of Public Health; it is our observation that the Department has maintained an adequate inspection program. We consider the recommendation implemented.

Communication -

Recommendation:

97-9 The Committee recommended that the Office of Emergency Medical Services create and distribute a quarterly newsletter and that it should be made available over the Internet.

Prior Status of Recommendations:

In our previous review the Department stated that a quarterly EMS newsletter was established in August 1998, and was available over the Internet.

Follow up Review:

Our current examination found the EMS newsletter was produced for a short period of time and, due to the costs of preparing printed brochures, was subsequently discontinued. At the time of our review (June 2002), the Department was considering a revised method, using electronic distribution (See Recommendation 5 of this report.).

Legislative Program Review & Investigations Committee's 1999 Report on Regulation of Emergency Medical Services – Phase I (May 1999)

Recommendations and Status of Recommendations:

Local EMS Plans -

Recommendation:

99.1-1 The legislative body of each town shall establish a local EMS plan that would include, but not be limited to:

- identification of who will carry out each level of service – dispatch; first response; basic life support (ambulance transport) and advanced life support (paramedic);
- establishment of performance measures for each segment of the system;
- establishment of a monitoring system that will identify who will receive information necessary for monitoring, who will provide the information, how frequently the information will be monitored, and what areas will require corrective action on the part of any service providers, including provisions for progressive sanctions; and
- any written agreements or contracts developed between the town and its providers (including any subcontracts, written agreements, and/or mutual aid agreements providers may have with other entities to provide service).

All plans shall be filed with the Department of Public Health, and be updated and refiled with the Department every three years. Towns are encouraged to consult their Regional EMS Council, their regional coordinator for EMS, the regional EMS medical advisory committees and the sponsor hospital(s) in their area for assistance in development of the plan, and shall submit the plans to their Regional EMS Council for review and comment. The Department may reject a plan if it deems it in the best interest of patient care to do so.

Prior Status of Recommendation:

Section 9 of Public Act 00-151 requires each municipality to establish a local EMS plan by July 1, 2002.

Follow up Review:

We could not review the records documenting the submission of local EMS plans at the Department of Public Health, no records are maintained at that agency; we note that Section 19a-181b of the General Statutes, as established by Public Act 00-151, requires local plans to be submitted to the Regional EMS Council rather than the Department of Public Health. We believe that as the lead agency in the administration of emergency medical services in the State, and the agency that makes the determination of service providers for all areas of the State, the Department of Public

Health should receive and review all local EMS plans and contractual agreements (See Recommendation 2 of this report.).

Resolution of Differences Between Providers and Municipalities -

Recommendations:

99.1-2 The Department of Public Health shall monitor receipt of written agreements or contracts that must be submitted with a local EMS plan. If no written agreements are submitted, the Department shall notify the town and the assigned responder that a hearing will be held within 60 days of the notice, if agreements are not submitted by that date. The hearing would be held to determine if the standards adopted in a local EMS plan were reasonable based on certain criteria, including the State EMS plan, model guidelines developed, and standards, contracts and written agreements in use by towns of similar population and characteristics. If the standards were determined reasonable, the assigned responder would have 30 days to sign the agreement or lose the assignment. If the Department found the standards were unreasonable it would establish standards considered reasonable given the criteria used above. If a town refused to agree to the standards established by the Department, the assigned responder holder would have to meet the minimum State regulatory standards in place.

Prior Status of Recommendations:

Section 9 of Public Act 00-151 requires each municipality to establish a local EMS plan by July 1, 2002.

Follow up Review:

As noted above, local plans are to be submitted to the Regional EMS Council rather than the Department of Public Health; Section 19a-181d of the General Statutes, as established by Public Act 00-151, does not require municipalities to submit their local plans, agreements or contracts to the Department. We are recommending the Department seek legislation that would require the municipalities to do so (See Recommendation 2 of this report).

Model Guidelines for Local EMS Plans and Agreements -

Recommendation:

99.1-3 OEMS shall develop model local EMS plans and performance agreements to guide municipalities in the development of these documents.

Prior Status of Recommendation:

Public Act 00-151 was passed in the 2000 Session of General Assembly; Section 3 requires the Office of Emergency Medical Services, by July 1, 2001, to develop model local EMS plans and performance agreements.

Follow up Review:

We found the model local EMS plans and performance agreements were prepared and made available to the municipalities. In addition, the Department has prepared an informational video and other materials for instructing the municipalities in preparing local EMS plans.

Removing Assigned Responder for Poor Performance -

Recommendation:

99.1-4 Grant municipalities the ability to petition the Department every three years for the removal of a basic life support or advanced life support assigned responder based on unsatisfactory performance of that responder as outlined in the local EMS plan and associated agreements.

Prior Status of Recommendation:

With the enactment of Public Act 00-151, the Recommendation is considered implemented.

Recommendation:

- 99.1-4** A pilot study shall be considered to assess the effect of selecting primary service area holders based on periodic issuance of a Request for Proposal, with right of first refusal for the current holder of a primary service area.

Prior Status of Recommendation:

Section 12 of Public Act 00-151 requires the Commissioner of Public Health to develop a plan for a pilot program that will examine the effects of assigning the geographic area an emergency medical service provider is to serve based on the issuance of requests for proposals.

Follow up Review:

The plan was submitted to the Public Health Committee of the General Assembly on June 14, 2001. Our follow up review found that it did not completely meet the requirements of the legislation. It did not fully identify the means of implementing such a pilot program. We are recommending the Department complete and implement a pilot program that will use a more responsive method of selecting providers for primary service areas (See Recommendation 1 of this report.).

Annual Performance Report On Local EMS Plans -

Recommendation:

- 99.1-5** Each town will be required to annually report by March 31, on a form furnished by the Department of Public Health, on the implementation of its plan for the previous calendar year, including:

- total number of EMS calls;
- number of calls requiring each level of service;
- number of refused calls and number of calls requiring mutual aid response;
- name of service provider for each level of service;
- response times for each level of the EMS system – dispatch; first response; basic life support, and advanced life support, using the common definitions of response times established by the Department of Public Health; and
- the monitoring and compliance of the providers with locally developed performance standards, and if non-compliance has been identified what steps the town has taken, or will take, to enforce provisions of the contract.

The Department of Public Health shall compile the information – grouping towns according to urban, suburban and rural categories, and make the information available to the public in a report card format by July 1 of each year. The Department shall make the report card available on its web site, and shall submit a copy to the Public Health Committee of the General Assembly.

Prior Status of Recommendation:

Section 2 of Public Act 00-151, enacted during the 2000 Session of the General Assembly, requires ambulance services, rather than the towns, to submit data on the number of calls, the response times for those calls, and other data, to the Department of Public Health. Section 8 of Public Act 00-151 imposes the same requirement on public safety answering points (911 dispatchers).

Follow up Review:

The ambulance services and public safety answering points have been reporting to the Department of Public Health on various data points. However, the information

compiled by the Department data system does not meet the requirements established by Public Act 00-151 (See Recommendation 3 of this report.).

Response Time Measurement -

Recommendation:

99.1-6 The Department of Public Health shall establish and reinforce a common definition for response time to include the time the call is received by a public safety answering point to the time each dispatched responder arrives on scene and every significant point in between.

Prior Status of Recommendation:

The Department stated that in the future, in accordance with Public Act 00-151, it would provide a common definition of response time and establish that definition in its regulations. The EMS Regulation Review Committee in conjunction with the Office of Statewide Emergency Telecommunications was to develop the definition.

Follow up Review:

We discussed this matter with Department officials; they responded that as the Statewide data reporting system is established, a common definition of response time would be prepared and included in the regulations.

Sales of Existing Ambulance Companies -

Recommendation:

99.1-7 An express condition of purchase of a business holding a primary service area assignment, subject to the determination of need exemption, should be that the purchaser must abide by performance standards pursuant to which the purchased business was obligated pursuant to its agreement with the municipality.

Prior Status of Recommendation:

With the enactment of Public Act 00-151, the Recommendation is considered implemented.

Outcome Measures -

Recommendation:

99.1-8 The Department of Public Health shall research and develop appropriate outcome measures for the EMS system and shall submit to the Public Health Committee of the General Assembly by January 1, 2001, and annually thereafter, a report on the progress toward development of such measures. After measures are implemented, the Department shall include in its annual report an analysis of system outcomes.

Prior Status of Recommendation:

Section 2 of Public Act 00-151, requires the Commissioner of Public Health to research, develop, track and report on quantifiable outcome measures for the State's emergency medical service system. The Department is to submit to the Public Health Committee of the General Assembly, on or before July 1, 2002, and annually thereafter, a report on the development of those measures, and after the measures are developed, an analysis of emergency medical services system outcomes.

Follow up Review:

Our current examination found that a system of outcomes measurement and performance improvement has not yet been employed. At the time of our review (June 2002), the Department of Public Health had prepared an outline document- *Performance Improvement for Emergency Medical Service Systems*, intended as a start to guide EMS executives and providers on performance improvement (See Recommendation 4 of this report.).

*Legislative Program Review & Investigations Committee's 1999 Report on Regulation of
Emergency Medical Services – Phase II (December 1999)*

Recommendations, and Status of Recommendations

Rate Regulation -

Recommendations:

99.2-1 Rates currently filed and approved by the Department of Public Health would remain in effect. Effective July 1, 2000, regulations concerning rate filing (Sec. 19a-179-21(f)) shall be modified to require only charging providers who wish to increase rates to submit complete financial information currently required by regulation. Rate increase requests could be filed at any time, but not more than annually. Detailed financial and operational information supporting the request should have to be filed for the time period from the provider's last rate review. Charging providers willing to stay at current rates should be required to file, by July 15 of each year, an audited summary financial statement, including total revenue, total expenses, emergency and non-emergency call volume, and a written declaration that no change in the current maximum rates has occurred.

99.2-2 By January 1, 2001, the financial summary forms and the full rate request filings shall be on forms issued by the Department of Public Health. Further, if the Department needs additional information pursuant to Sec. 19a-179-21(f)(2) of EMS regulations, it must specify the additional financial and operational information it wants.

The subcommittee of the EMS Regulation Review Committee established by the Department of Public Health examining the rate-setting process shall review the regulations concerning rates and issue its report to the Department of Public Health by July 1, 2000. The Department shall seek to have the regulations revised through the normal regulation review process.

99.2-3 The Medicaid rate for ambulance services should be raised.

Prior Status of Recommendations:

Section 2 of Public Act 00-151 requires the Commissioner of Public Health to adopt regulations that, on or after July 1, 2000, limits requests for rate increases to one per year; and that specify only ambulance services that apply for a rate increase and do not accept the voluntary maximum allowable rates established by the Commissioner of Public Health be required to file detailed financial information. Such regulations should also allow ambulance services that do not apply for a rate increase or accept the voluntary maximum allowable rates to submit only an audited summary financial statement, including total revenue, total expenses, emergency and non-emergency call volume, and a written declaration that no change in the current maximum rates has occurred and specify that detailed financial and operational information filed by ambulance services seeking a rate increase cover the time period from the last request.

Follow up Review:

Legislation was also proposed in the 2001 Session of the General Assembly to repeal the rate setting process. That legislation was not passed. Public Act 01-04 was passed in the June Special Session that streamlined the rate setting process. It exempted those providers who are not seeking a rate increase in excess of the National Health Care Inflation Rate Index for the prior year from submitting detailed financial information and those rates shall be deemed as approved by the Commissioner.

Legislation was also proposed during the 2001 Session of the General Assembly concerning an increase in the Medicaid rate for ambulance services; it did not pass.

We also note that the Department of Public Health has entered into a contractual agreement with the Office of Health Care Access for assistance in setting maximum allowable rates for all fee-based providers of ambulance services in the State. The Office of Health Care Access will receive applications for rate increases from providers, will meet with, or conduct audits of those providers as necessary to confirm the information submitted, and publish a proposed schedule of rates for all such providers by November 15 of each year.

Determination of Need -

Recommendations:

99.2-4 The determination of need process should be streamlined to allow providers the opportunity to operate any number of vehicles and any number of branches they believe is necessary. New services and providers requesting to charge for the first time would be required to go through an initial determination of need process to prove need exists before operating. Providers shall continue to notify the Department of the number of vehicles they have in service each year and receive a permit for each vehicle in use. The Department may consider the appropriateness of the number of vehicles when analyzing any application for a rate increase. If, during the normal course of a rate review, the Department finds an excessive number of vehicles and branch offices, it may revoke authorization for those vehicles and disallow the expenses related to those vehicles and branch operations for rate determination purposes.

Prior Status of Recommendations:

Section 13 of Public Act 00-151 requires the Commissioner of Public Health to study and make recommendations on implementing an expedited approval process to operate additional vehicles or at branch locations, if that operation is not a new service, or does not result in a rate change. The Department was to report on the results of that study to the General Assembly by December 31, 2000.

Follow up Review:

We reviewed the Department's study and recommendations; it appeared to meet the requirements of the legislation. We are recommending the Department implement the changes to its determination of need process (See Recommendation 1 of this report.).

Data Collection -

Recommendations:

99.2-5 By January 1, 2001, the Department of Public Health shall collect and maintain data from the ambulance run form currently used for each ambulance call. Data points required to be submitted to the Department of Public Health shall be uniform for all EMS providers. Providers shall submit copies of the run form information monthly via a method that accommodates needs of both the providers and the Department. The trauma reporting requirements shall be consolidated on this run form to satisfy both general EMS and specific trauma data fields.

By March 2002, and annually thereafter, the Department shall report on the following information, which shall include, but not limited to:

- total number of EMS calls;
- number of calls requiring each level of service;
- number of refused calls and number requiring mutual aid response;
- names of service providers for each level of service; and

- fractile (fractional percentile), rather than average, response times for each level of the EMS system -- dispatch, first response, basic life support, and advanced life support. Data may be subject to audit, as the Department deems necessary.

The report shall compile the information and report it in an aggregated format by town – with towns grouped according to urban, suburban, and rural categories – and make the information publicly available, including through the Department's web site. The Department shall notify the Public Health Committee of the General Assembly of the report's availability. If a provider does not comply with the submission of required data for a period of six months, or if the Department has cause to believe the provider knowingly and intentionally submitted incomplete or false information, it shall notify the provider and the towns served by the provider that compliance is mandatory. If full compliance is not achieved within the following quarter, the Department shall hold a hearing at which the provider would be required to demonstrate why the primary service area assignment should not be removed.

In addition to EMS providers, each public safety answering point shall, beginning January 1, 2001, submit quarterly aggregated data on its EMS calls to the Office of Statewide Emergency Telecommunications, within the Department of Public Safety. The data submitted from public safety answering points shall include all 911 calls where a medical emergency is involved. The aggregated data shall report elapsed time for dispatch, from the time the call was received to the time the call was dispatched or transferred, and shall be reported in fractile and not average response times.

- 99.2-6** Beginning July 1, 2000, an allocation of no more than \$250,000 annually from the surcharge on telephone lines that cover the 911 system shall be made to finance data collection, maintenance and reporting for the emergency medical system.

Prior Status of Recommendation:

Section 2 of Public Act 00-151, requires the Commissioner of Public Health, not later than October 1, 2001, to develop a data collection system that will follow a patient from initial entry into the emergency medical service system through arrival at the emergency room. The Commissioner shall, on a quarterly basis, collect information from each ambulance company on the number of calls received; the level of services required for each call; the number of passed calls, cancelled calls, and mutual aid calls; and, the pre-hospital data for the nonscheduled transport of trauma patients that has been required by Department of Public Health regulations. The Commissioner is required to prepare a report that includes this information on a yearly basis for each municipality; and, not later than March 31, 2002, and annually thereafter, submit such report to the Public Health Committee of the General Assembly and make the report available to the general public.

In addition, Section 8 of Public Act 00-151 also requires, on or after January 1, 2001, public safety answering points to submit to the Department of Public Safety - Office of Statewide Emergency Telecommunications, on a quarterly basis, a report on all of the calls for emergency medical services received. The report shall include the number of calls that involved a medical emergency, for each call the elapsed time period from the time the call was received to the time the call was answered, and the time period the emergency response services was dispatched or the call was transferred, expressed in time ranges or fractile response times. The Office of Statewide Emergency Telecommunications is required to furnish this data to the Department of Public Health on a quarterly basis.

Section 6 of Public Act 00-151 provides for the funding of expenses related to data collection and reporting activities.

Follow up Review:

Our follow up examination reviewed the available report; it was based on a single page form that was prepared by the ambulance companies, it collected 18 data points. The report covered each quarter of the fiscal year ended June 30, 2001. It did not include information for every quarter for all ambulance service providers. It provided only average response times, not time ranges or fractile response times, it did not track individual patients, but reported totals compiled by the providers. The recommendation has not been implemented. (See Recommendation 3 of this report.). Our follow up review found a quarterly report of EMS response times from public safety answering points for July through September 2001 on file at the Office of Statewide Emergency Telecommunications. That part of the recommendation is implemented.

Our follow up review found funding has continued for EMS data collection. That part of the recommendation has been implemented.

Emergency Medical Dispatch -

Recommendation:

99.2-7 The Committee recommended that all public safety answering points be required to provide Emergency Medical Dispatch (EMD) or arrange for EMD services to be provided to all callers requiring emergency medical services. The Office of Statewide Emergency Telecommunications shall provide oversight of EMD implementation.

Prior Status of Recommendation:

Public Act 00-151, enacted in the 2000 Session of the General Assembly, requires each public safety answering point to provide emergency medical dispatch not later than July 1, 2004.

Follow up Review:

Our follow up review did not include this activity of the Office of Statewide Emergency Telecommunications.

Inadequate Management Controls -

Recommendation:

99.2-8 The Committee recommended that the Department of Public Health leadership communicate to Department employees and the regulated EMS community the Department's intention to discharge its regulatory and administrative responsibilities in the EMS area diligently and uniformly.

Prior Status of Recommendation:

At the time of our prior review (May 2000), we placed an inquiry with the Department about the Recommendation. The Department responded by providing the following:

1. The Department has verified that each primary service area is currently covered by basic ambulance service. The Department is continuing to support the assignment of first responders, and has been successful in assigning first responders to additional primary service areas. With the implementation of Public Act 00-151, the Department, through revision of its regulations, will seek to remove the requirement for assigning advanced life support level of services for each primary service area. The Department is in the process or reviewing

- currently assigned primary service areas, investigating any discrepancies in assignments and resolving any outstanding issues.
2. The Department's Division of Health Systems Regulation has been working with municipalities to resolve contested primary service assignments. It has been successful through the utilization of consent agreements.
 3. The Department is in the process of identifying those certified providers who perform non-emergency transport services. Investigations will be conducted as appropriate.
 4. Since its reorganization of the Office of Emergency Medical Services in 1997, the Department has ensured that critical records, such as the adjudication documents, are maintained on file at the Department.
 5. With the implementation of Public Act 00-151, Section 19a-177-7(e) of the Regulations of the Department of Public Health will be revised to reflect the new requirements.

Follow up Review:

We reviewed the prior findings with the management of the Department of Public Health; we note that Section 19a-177-7(e) of the Regulations has not yet been revised; all other matters have been addressed. We consider the Recommendation implemented.

We also observed the Department's intention to discharge its regulatory and administrative responsibilities in the EMS area. As part of our review, the Department of Public Health has provided a summary of recent complaint investigations:

2000 Calendar Year

EMS Organizations - 27 cases opened, 26 dismissed, 1 closed by enforcement action.

EMS Personnel - 17 cases opened, 6 dismissed, 9 closed by enforcement action, and 2 pending action.

Also in the 2000 calendar year the Department of Public Health conducted 499 inspections of ambulances, invalid coaches, mobile intensive care units and helicopters; as a result of those inspections it issued two violation letters.

2001 Calendar Year

EMS Organizations - 29 cases opened, 19 dismissed, none closed by enforcement action, and 10 pending action.

EMS Personnel - 28 cases opened, 11 dismissed, 3 closed by enforcement action, and 14 pending action.

In the 2001 calendar year, the Department of Public Health conducted 445 vehicle inspections and issued seven violation letters.