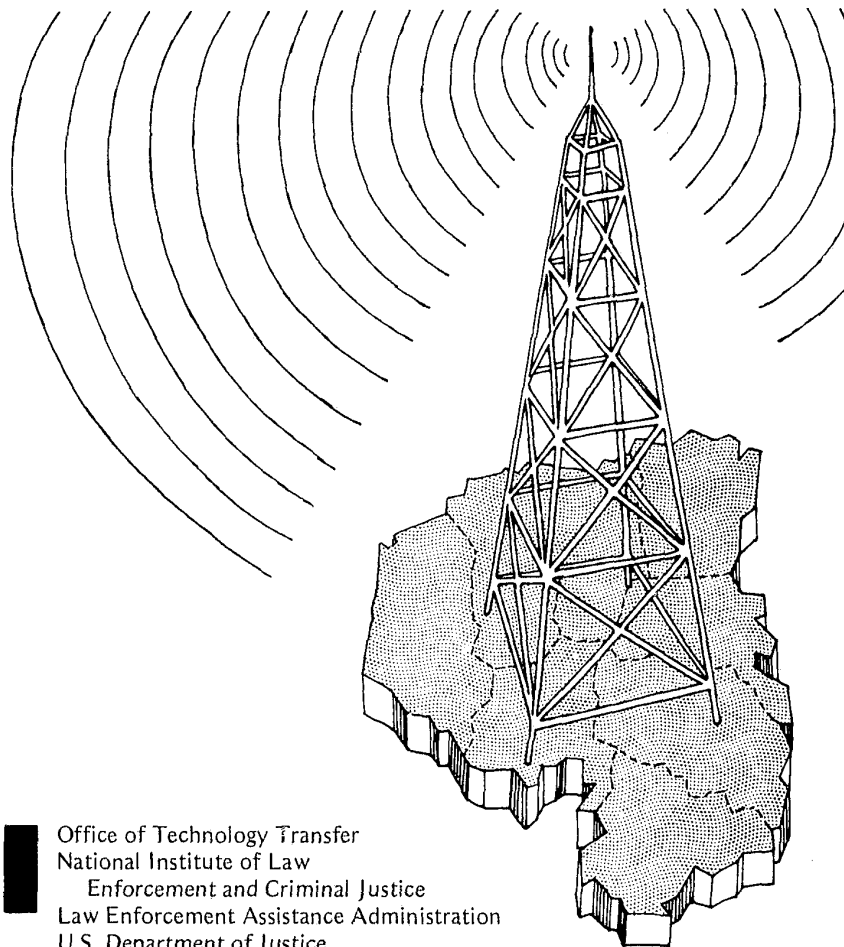


# Central Police Dispatch

Division of  
Central Operations for  
Police Services (COPS)  
Muskegon, Michigan

**3039300p**  
An Exemplary Project



Office of Technology Transfer  
National Institute of Law  
Enforcement and Criminal Justice  
Law Enforcement Assistance Administration  
U.S. Department of Justice

**LAW ENFORCEMENT ASSISTANCE  
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**AN EXEMPLARY PROJECT**

**CENTRAL POLICE DISPATCH**

Division of:  
Central Operations for  
Police Services (COPS)

Muskegon, Michigan

Principal author:  
John J. McDonnell

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**Office of Technology Transfer  
National Institute of Law Enforcement  
and Criminal Justice  
Law Enforcement Assistance Administration  
U.S. Department of Justice  
Washington, D.C.**

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## FOREWORD

The Central Police Dispatch (CPD) system of Muskegon County, Michigan, responds to two major law enforcement concerns: regionalization of police services, and improved police communications. Through an inter-local agreement, eight communities in the County have pooled their resources to provide an around-the-clock, civilian-staffed, efficient, and high quality centralized police dispatching service. This is an attractive alternative to the police dispatching systems of many jurisdictions.

In Muskegon's case, a centralized dispatching service is being provided to a medium-sized city and its surrounding suburbs. This type of system is also suitable for many other cities—both larger and smaller. But it need not involve a city at all. Such systems are just as appropriate for groups of suburban communities.

Under its parent organization, Central Operations for Police Services (COPS), Muskegon's CPD is providing more extensive and effective dispatching services to its member jurisdictions than these members separately could provide. Administrative control is vested in a board of directors composed of a municipal official from each jurisdiction. Operational control rests in the hands of experienced senior police officers from the participating agencies.

The Muskegon project exemplifies the benefits to be derived from the pooling of resources. Participating jurisdictions have saved money while continuing to improve their dispatch operations. The National Advisory Commission on Criminal Justice Standards and Goals has recommended that "at a minimum, police agencies that employ fewer than 10 sworn employees should consolidate for improved efficiency and effectiveness." CPD is an important step in that direction.

This manual provides a detailed description of the Muskegon County project. A brochure containing a general description of the project is also available through the National Criminal Justice Reference Service, P.O. Box 24036, S.W. Post Office, Washington, D.C. 20024.

Gerald M. Caplan  
Director  
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## CHAPTER 1 PROJECT SUMMARY

In recent years, there has been a rapidly growing recognition of the interdependence which exists among all levels of government. In areas as diverse as environmental protection and police protection, there is an increased awareness of the benefits to be derived from pooling resources when solving problems that transcend the jurisdictional boundaries of individual governmental units. The cities and towns of Muskegon County, Michigan, recognized this fact several years ago when they established a Central Police Dispatch (CPD) system. Since then its member agencies have been receiving more and better services at lower costs than would have been possible with their independent, decentralized dispatching operations. There are many other localities which would benefit from establishing similar centralized police dispatching services.

### 1.1 Introduction

In 1973 the National Advisory Commission on Criminal Justice Standards and Goals (the "National Commission") considered the subject of combining police services and acknowledged that:

"Because of the desire to keep police service responsive to local needs (and often for less lofty personal reasons--jealousy and fear of loss of prestige, for example), there is often a reluctance on the part of local government and agencies to initiate programs involving combined services." \*

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\* Report of the National Advisory Commission on Criminal Justice Standards and Goals, *Police*, p. 111.

Nevertheless, it strongly recommended:

"regionalization of specific police services--the combination of personnel and physical resources of various agencies to provide specific services on a geographic rather than jurisdictional basis." \*

Similar recommendations have been made by the International Association of Chiefs of Police (IACP) and the American Bar Association (ABA). In 1969, eight governmental units of Muskegon County, Michigan recognized the advantages of a centralized police dispatching service and entered a formal agreement for such services:

"The primary purpose of the Central Dispatch System shall be to afford a more efficient and economical means of transmitting information from and to law enforcement officers. . . . " \*\*

At that time project officials stated that:

"The Central Dispatch Authority is an attempt to surmount the impediments to contemporary law enforcement that are perpetuated by the jurisdictional autonomy which exists between police departments within a given metropolitan area. The Authority is to be set up initially to provide the equipment, facility and personnel necessary to demonstrate that increased efficiency and quality of police work will result through cooperation in the crucial area of communication." \*\*\*

The Law Enforcement Assistance Administration (LEAA) supports such regionalization of police services and believes that Muskegon's approach to police dispatching should be considered by many

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\* Op. cit., p. 109.

\*\* Muskegon County Interlocal Public Agency Agreement Providing for a Central Dispatch System, Section IV.

\*\*\* Initial Grant Application of the Muskegon Central Dispatch Authority to the Michigan Commission on Law Enforcement and Criminal Justice, Section 10.

communities especially those with small police forces. This is consistent with the recommendation of the National Commission that:

". . . at a minimum, police agencies that employ fewer than 10 sworn employees should consolidate for improved efficiency and effectiveness." \*

Even in jurisdictions for which consolidation is unacceptable, unnecessary or unwise, LEAA is encouraging police departments to consider the advantages of centralized dispatching as an important step in the cooperative delivery of police services.

This manual has been prepared so that police and government officials who are interested in considering similar centralized systems for their communities, can benefit from Muskegon's experience in establishing and operating its CPD. The information presented has been compiled from project documentation, on-site observation, and interviews with city managers, police chiefs and line officers of both participating and non-participating jurisdictions in Muskegon County.

There are several perspectives from which centralized police dispatching systems can be considered. One of these is radio communications technology. Although an important factor in any centralization plan, this manual does not consider the subject of radio communications technology for two reasons. First, it is virtually impossible to satisfy the *specific* information needs of interested jurisdictions because of their widely varying situations in terms of number of users, volume of radio traffic, available frequencies and equipment, and the topography and radio propagation characteristics of their areas. Such specialized information should be obtained from experts in this field. Second, a *general* treatment of this subject would be a poor substitute for the many textbooks and studies which have been written on the subject.

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\* Op. cit., p. 108. Michigan's Criminal Justice Goals and Standards recommends that "local governments should be encouraged, through consolidation if necessary, to have law enforcement agencies containing no fewer than 20 sworn officers who are involved in the delivery of police services."

The manual concentrates instead on the less technical, but in many ways equally challenging aspects of organizing and operating a centralized police dispatching system. It may not provide answers to all the questions which can arise in this context. However, it does provide a general understanding of how Muskegon has organized and operated its system. It also documents the viability of the centralized services concept and the benefits which can accompany it.

The remainder of this chapter provides an overview of Muskegon County's Central Police Dispatch (CPD) system and a summary of the major benefits of such a system. Chapter 2 details the development and implementation of Muskegon's approach to centralized dispatching. The administrative and organizational structure of CPD is discussed in Chapter 3; Chapter 4 details the operations of the dispatching service. Chapter 5 describes the achievements of CPD while Chapter 6 presents an analysis of operational costs and Chapter 7 provides a discussion of monitoring and evaluation processes. Finally, Chapter 8 presents an overall approach to the implementation of a central dispatch system in other jurisdictions:

## 1.2 Project Overview

The Central Police Dispatch is a civilian-staffed organization which provides around-the-clock, high-quality police dispatching services to almost all of Muskegon County. It is just one of the centralized services provided by its parent organization, Central Operations for Police Services (COPS).

Organizationally, Central Operations for Police Services is structured to provide all participating jurisdictions with an equal voice in the control of the Central Police Dispatch System. The COPS board of directors is comprised of one public official from each participating jurisdiction. All legislative control is vested in this board. Serving under this group is a board of administration comprised of a senior law enforcement official from each participating agency. This board is vested with the administrative and operational responsibility of providing the centralized police services.

Financially, all jurisdictions support the Central Police Dispatch system through an annual assessment based on population, equalized property valuation, and service usage. It should be noted that LEAA funding was critical in the implementation stage of the CPD project.

Operationally, CPD provides more extensive and effective dispatching services to its member jurisdictions than these members separately could provide. Civilian staff keep the costs down while supervision by former police officers keeps the quality up. This staff has the responsibility for receiving and routing calls for assistance, maintaining location and status information on all mobile units, contacting appropriate service providers, and submitting queries to and relaying information from a computerized criminal information data bank.

## 1.3 Benefits of Centralization

There are four major benefits to Muskegon's centralized dispatching service:

### *Organizational*

The concept of the COPS/CPD organizational structure has evolved and been tested over several years. It gives every participating agency an equal voice at both policy and operating levels. It is flexible enough to accommodate other centralized police services as they develop.

### *Operational*

It is generally agreed by the participating agencies that CPD provides more and better dispatching service than was available through decentralized operations. Operating statistics show substantial efficiency gains since the establishment of centralized services. Moreover, the use of civilian dispatchers enables the participating agencies to reassign to more suitable tasks the police officers who were formerly assigned to dispatching.

### *Technical*

With centralization has come specialization. Relying on the economies of scale, CPD has been able to acquire staff, equipment and facilities that would be beyond the reach of the participating agencies if they were operating independently. The CPD has been able to use these resources to establish a communications system which adheres closely to the standards proposed by the National Commission.

### *Financial*

While providing improved services CPD has also affected substantial cost savings primarily through improved utilization of staff. Before CPD, its eight original member agencies assigned a total of 19 police officers to dispatching. When the CPD began operating, 13 civilian personnel were able to satisfy the dispatching requirements of these agencies. This represented a 32% savings in personnel time and about 42% savings in personnel costs, the latter reduction being augmented through the use of lower-paid civilian personnel. Since then the staff of the CPD has grown to 19 in response to the substantial growth that has occurred in the level of service demand during this period.

- - - -

It is hoped that other jurisdictions will recognize the benefits to be enjoyed from a centralized dispatching system like Muskegon's. Such a coordinated effort represents a realistic response to satisfying ever-increasing public demands for the improvement of both resource allocation and delivery of municipal services.

## CHAPTER 2 PROJECT DEVELOPMENT

The development of the Central Police Dispatch System has been a dynamic process requiring the imagination and problem-solving abilities of the involved public and police officials. The initial establishment of CPD along certain organizational lines and its subsequent re-establishment within a different organizational structure provides an excellent context in which to view both the assets and liabilities of centralization. This chapter explores the story of CPD's origin, evolution, and current status.

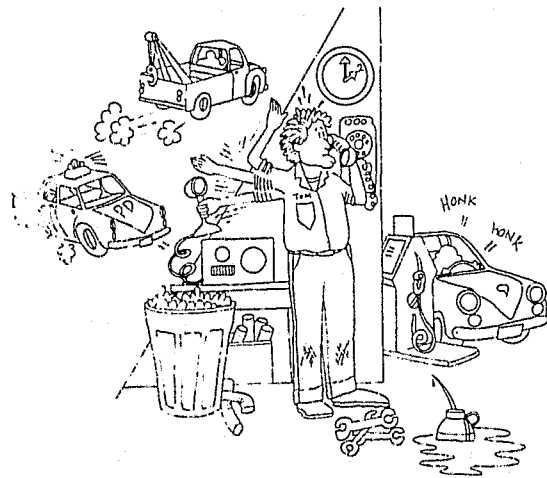
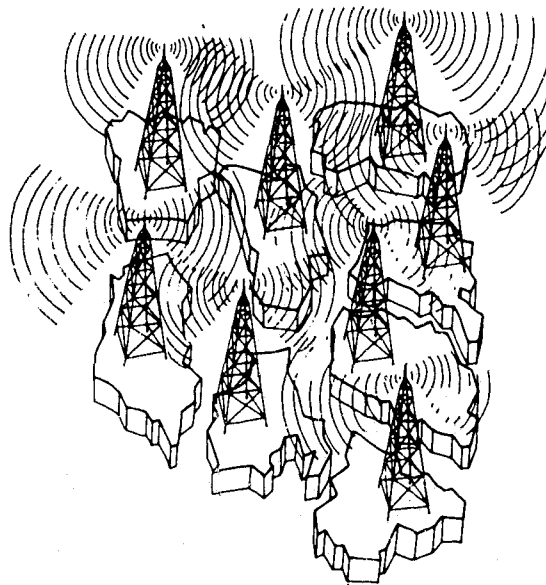
### 2.1 Background

Muskegon County covers an area of 514 square miles and has a population of approximately 160,000. It has a metropolitan area of 92.5 square miles which constitutes a Standard Metropolitan Statistical Area (SMSA). It is the largest metropolitan area on the east shore of Lake Michigan.

There are 11 independent law enforcement agencies in the county. The nine largest ones provide police services to over 99% of the county's population and land area. In 1969 there was a total of about 250 police officers in these nine agencies. At that time, eight of these nine jurisdictions were interested in establishing a centralized police dispatching system. There were approximately 210 officers employed in these eight agencies, 19 of whom were assigned to dispatching operations.

The dispatching operations of the law enforcement agencies prior to Central Police Dispatch were characterized by the following problems.

- There was a combination of piecemeal and relatively independent efforts in dispatching, resulting in an inefficient and confused operation.
- The eight agencies interested in centralized dispatching operated on one radio frequency, but each was operating from its own jurisdiction.



- Three of the eight jurisdictions conducted 24-hour per day, 7 day per week dispatching operations.
- The other five jurisdictions satisfied their dispatching requirements in various ways. These ranged from receiving "satellite" services from the three departments with round-the-clock dispatching, to having an all-night gas station provide off-hours dispatching for two of the smaller departments.

- Some of the dispatchers were not suitably trained for this task, or had been assigned to it through necessity rather than skill.
- The smaller agencies had a special problem. Utilizing experienced police officers as dispatchers resulted in a severe manpower drain, but field units needed to rely on the dispatcher's knowledge of police procedures since these agencies rarely had supervisors in the field.

Because of these difficulties, on August 15, 1969, the city managers, police chiefs and other officials in eight of the major jurisdictions in the County entered into an Interlocal Public Agency Agreement to establish a Central Dispatch System.

Only one major jurisdiction did not enter the agreement. Shortly before the CPD was formed, that city had obtained a separate radio frequency for its dispatching, a fact which may have influenced its decision. Since then key officials who were involved in making that decision have left, and the city now participates in the the CPD.

The foundation for the agreement had been laid during the preceding year when research on the feasibility of a centralized police dispatching system was begun. There were two major components to this research effort—technical and organizational. The technical aspects were investigated on a no-cost basis by a major manufacturer of police communications equipment. The organizational aspects were studied by representatives of the eight jurisdictions, who determined the needs to be satisfied and the problems to be resolved in the areas of financing and organization. All of these activities culminated in the preparation of the Interlocal Public Agency Agreement which created the Central Dispatch System.



## 2.2 The Initial Agreement, 1969-1972

The Muskegon Interlocal Public Agency Agreement provided for the establishment of a central dispatch system administered by a commission composed of representatives from the participating jurisdictions. Each agency's power was in direct proportion to its financial contribution. The agreement's key provisions were as follows:

- The System was to be administered by a Commission, with each agency having one representative on the Commission.

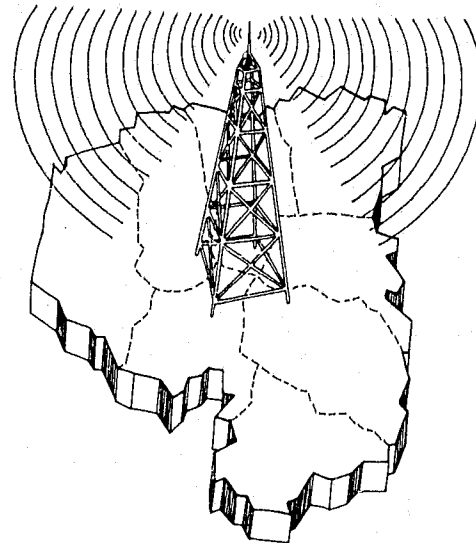
- The Commission was to have full power and authority to achieve the stated purpose of the System to provide "a more efficient and economical means of transmitting information from and to law enforcement officers."

- Each agency's vote was to be weighted in proportion to its financial contribution.

- To establish and operate the System for the first year each agency was to contribute funds on the basis of its population.

- In later years the Commission could by resolution, specify some other formula for each agency's contribution of funds.

- Any agency could withdraw from the System by giving 90 days written notice.



On the basis of this agreement and its grant application, the Muskegon Central Dispatch System received its initial funding from the Michigan Commission on Law Enforcement and Criminal Justice and began operating in early 1970. However, some provisions of the agreement eventually caused problems in the operation of the system. These problems, which are enumerated below, were caused primarily by deficiencies in the original agreement, which were aggravated by some of the Commission's actions during 1970-1971.

- Although it was intended that each agency would be represented by someone knowledgeable in the law enforcement field, the agreement never specified this. As a result some members of the Commission were primarily politicians, others were administrators, and others were law enforcement personnel. Because of the differing backgrounds and interests of its members, the Commission's administration and policy-making were reportedly ineffectual.

- Each of the eight agencies on the Commission had one vote but each vote was weighted by the jurisdiction's contribution to the annual costs of the System. As a result, there was a wide variation in the degree to which each agency could control the actions of the Commission, and hence the central dispatching operation. The largest jurisdiction had 39.2% of the total voting power, while the smallest had only 1.8%. The two most powerful agencies could completely control Commission votes with 67.7% of the total vote, while the four smallest agencies had a combined voting power of only 8.7% of the total vote. The minutes of the Commission meetings document the fact that some resolutions were passed even though the majority of the agencies voted against them. On these occasions the minority of the agencies had the majority of the voting power.

- Early in 1971 some of the agencies wanted to consider, as permitted under the provisions of the interlocal agreement, assessment formulas that were not based exclusively on relative populations. In September, 1971, a new assessment formula took effect, over the objections of three small jurisdictions which represented 6.7% of the total voting power. The new formula was based on population, property valuation and System usage. It also established a 5% minimum charge which caused the assessments for the four smallest agencies to increase substantially from their prior levels of 1.8% to 2.9%.

- This action of the Commission severely strained relationships among many of the member agencies. The smallest agency tried to block the action by claiming that it violated the "price freeze" then in effect, and appealed the matter to the U.S. Office of Emergency Preparedness. This appeal did not cause any roll-back or change to the revised assessment formula, and by early 1972 that agency had completely withdrawn from the project. There were also indications that some of the other agencies were considering withdrawal. It was clear that some action was required to assure that the Central Dispatch System would continue to operate on a county-wide basis.

Recognizing the gravity of the situation, the representative of the largest agency proposed a new organization which would be more responsive to the concerns of the smaller agencies, correct the deficiencies of the Systems' administrative structure, and provide additional county-wide law enforcement services to all its member agencies. This led to the preparation of a new agreement to replace the original interlocal agreement. Under the new agreement a new organization, Central Operations for Police Services (COPS), was established to replace the original Central Dispatch System. In March of 1972 the seven agencies which had continued in the System formally executed this agreement.

### 2.3 The COPS Agreement, 1972 to the Present

The purpose of the new agreement was to create a means for:

" cooperating with other governmental agencies within the Muskegon County area in providing those police services and operations, without regard to territorial boundaries, which shall benefit mutually and equally the citizens of those agencies participating."

The new agreement<sup>\*</sup> provided for equal representation of all agencies and created an organizational structure which vested legislative control in a board composed of public officials and operational control in a board comprised of senior law enforcement officials. The agreement's key provisions are listed below:

- " . . . membership in 'COPS' shall be open to any incorporated city or township in the Muskegon County area having a full-time, paid, law enforcement department; the County sheriff shall represent the unincorporated areas. . ."
- " . . . the legislative division of 'COPS' shall be known as the Board of Directors. Each participating agency shall be entitled to appoint a representative

<sup>\*</sup> A copy of the complete agreement is provided in Appendix A.

to serve on this Board. It is the intent of this agreement that such appointments will be made from senior elective or administrative officials. . . "

- ". . . each member of the Board of Directors shall be entitled to one (1) vote in the operations of the Board."
- ". . . all matters brought to the attention of this Board shall be decided by a majority vote of those present and voting, with the exception of financial matters which shall require a two-thirds (2/3) majority of the entire Board."
- ". . . the administrative division of 'COPS' shall be known as the Board of Administration. Each participating governmental agency shall be entitled to appoint one representative to serve on this Board. It is the intent of this agreement that such appointments will be made from senior law enforcement officials."
- ". . . each member of the Board of Administration shall be entitled to one vote in the operation of the Board. This Board shall be directly responsible for the administration and operation of the functions assigned to it by the Board of Directors . . . . This Board (of Administration) shall review and submit its recommendations to the Board of Directors on annual operating budgets for each of its functions. . . ."
- ". . . it is the intent of this agreement that 'COPS' shall be established with three major functions of operations. However, the Board of Directors may from time to time add additional functions as it may deem in the best interest of the agencies involved." (One of these functions is Central Dispatch. All functions are discussed under Organizational Structure and Policies, Section 3.3.)
- ". . . Central Dispatch shall be charged with the responsibility of operating a central dispatch system for law enforcement agencies participating in the central services program."

- "... Central Dispatch shall be financed by contributions from each of the participating agencies. Such contributions shall be determined by the formula presently approved and enacted for the year 1972 by the existing Central Dispatch Board. This formula is derived by a combination of the percentages of population, assessed valuation, and usage, with a minimum charge to any agency of three percent (3%). This formula shall be utilized in future years with the percentages re-computed annually on the basis of the past 12 months' experience."
- "... upon the creation of 'COPS' it will no longer be necessary to operate Central Dispatch under the existing agreement. Therefore, upon execution of this Agreement, the governmental agency entitled herein agrees that its existing agreement with Central Dispatch shall become null and void and that this new organization shall replace the existing Central Dispatch Board."

Since its formation in March, 1972, COPS has operated under these provisions. The participating agencies have had ample opportunity to assess the benefits and costs of this centralized service, and all remain positive about their membership in COPS.

### CHAPTER 3 ORGANIZATION AND ADMINISTRATION

The Muskegon Central Police Dispatch System operates under an attractive organizational structure. While basic policy considerations are controlled by responsible public officials of the participating jurisdictions, operational decisions are made by the chief law enforcement officials of the involved agencies. Such a division of responsibility ensures that policies will be set by those individuals whose experience enables them to make the best decisions. Furthermore, the basic agreement among the jurisdictions provides for all to have an equal voice in the operation of CPD and establishes an equitable assessment formula. In this chapter the features of this organizational structure are considered in greater detail, including local autonomy, financing, staffing and training.

#### 3.1 Local Autonomy

There are two essentially different models which can be followed in establishing a centralized service. Muskegon's approach exemplifies the more widely applicable and readily acceptable one. In this model individual agencies, recognizing their common needs, work together to create a service delivery system which meets these needs. This model permits all the participating agencies to have a voice in the administration and operation of the system, and finances the system by equitably assessing all the agencies who receive the service.

Within this model there can be many variations in the degrees and ways in which the participating agencies control the system. In the Muskegon CPD's relatively short history, two such variations have been tried. Initially, each community's ability to control

the system was determined by the amount of its financial contribution. While it may be argued that representation should be based on the relative size and/or financial contribution of the participants, one need only refer to the arguments raised at the Constitutional Convention in support of the creation of the Senate of the United States Congress to be provided with the opposite viewpoint. The Muskegon experience prior to COPS illustrates the types of problems that may be encountered by the smaller jurisdictions when control is essentially determined by size.\* The anticipation of such problems might well deter smaller communities from participating at all. The present general organizational structure of CPD is the recommended model for establishing a centralized system to serve strong and independent jurisdictions.

However, in those areas where county or regional government predominates or is able to exercise the bulk of power, a radically different model may be considered. In this model, the county or regional government may unilaterally establish a centralized system, encourage the jurisdictions within its boundaries to accept the service, and may even impose a penalty on those which refuse to do so. In one case where such a system is operating, the county is providing services to 27 of its 42 jurisdictions. Sixty percent of the operating costs for the service are assessed on all 42 jurisdictions, and the remaining forty percent is covered by an additional assessment on the 27 users. Clearly such a model is only appropriate where the regional or county government has the requisite power and support.

### 3.2 Financing

Although there may be many variations in the details of sharing centralized dispatching costs, there are only a few principles to be considered. Cost assessment formulae are normally based on system usage--either actual usage, potential usage or both. Within these two categories, variations occur depending on how each type of usage is defined.

\* See Chapter 2.

Since police services provide protection for people and property, potential usage of police services is often based on the jurisdiction's total population and the assessed valuation of its properties. However, there may be variations in assessment practices from one jurisdiction to another. For example, one town may assess property at 30% of its current market value, while another town may assess property at 85% of its original cost. Therefore, it is usually necessary to adjust the assessed valuation amounts to correct for such variations from one jurisdiction to another. In Muskegon's case the adjusted figure is called the "equalized assessed valuation." The equalized assessed valuation for each jurisdiction is redetermined annually by the county's Board of Tax Assessors.

The population figures used are those of the U.S. Bureau of the Census for 1970. Although it is recognized that the County's current population is somewhat higher, it is assumed that each participating jurisdiction has had the same relative increase. In this way the problem of differentially estimating the current population of each jurisdiction is avoided. The absolute and relative levels of potential usage for 1974 are presented below.

Figure 3-1

	Population		Equalized Valuation	
	#	%	\$	%
City of Muskegon	44,631	28.79	223,076,683	33.11
County of Muskegon	45,634	29.43	169,670,405	25.19
Township of Muskegon	13,754	8.87	49,143,238	7.29
Muskegon Heights	17,304	11.16	57,044,498	8.47
Norton Shores	22,271	14.37	100,741,861	14.94
North Muskegon	4,243	2.74	23,852,621	3.53
Roosevelt Park	4,176	2.69	29,531,550	4.38
Whitehall	3,017	1.95	20,890,308	3.09
Totals	155,030	100.00	673,951,164	100.00

There are two measures of actual system usage which are considered in Muskegon's assessment formula. One measure is the number of dispatch requests and administrative messages to/from mobile units processed by the system. For every request and message a Status Card is prepared specifying the nature of the service and the

jurisdiction that received it. The other measure is the number of messages submitted to/from a computerized data bank of information on criminals and stolen property, known as Michigan's Law Enforcement Information Network (LEIN). Both of these measures are discussed in detail in the next chapter. For the purposes of this discussion it is sufficient to show how they are used in determining the assessment for each jurisdiction. The absolute and relative levels of actual service usage in 1974 are presented below.

Figure 3-2

	Status Cards		LEIN Usage	
	#	%	#	%
City of Muskegon	39,827	35.96	75,090	34.46
County of Muskegon	16,252	14.67	54,335	24.94
Township of Muskegon	8,967	8.10	13,983	6.41
Muskegon Heights	18,581	16.77	32,215	14.79
Norton Shores	14,569	13.15	24,807	11.39
North Muskegon	3,591	3.24	2,854	1.31
Roosevelt Park	4,370	3.95	9,035	4.15
Whitehall	4,610	4.16	5,568	2.55
Totals	110,767	100.00	217,887	100.00

The assessment factor for each jurisdiction is the arithmetic average of its relative potential and actual service usage levels. The levels and assessment factors for 1975 are summarized in the table on the following page.

The Muskegon CPD imposes a minimum assessment factor of 3% regardless of usage. Therefore, the actual 1975 assessments for North Muskegon and Whitehall are slightly higher than what would be required based on the calculated assessment factors, and the actual assessments for the other jurisdictions are slightly lower. The procedures for making these adjustments are described in detail in Section 5.2. Although this method of assessment has proven to be satisfactory for Muskegon, other jurisdictions may wish to consider alternatives to it.

Figure 3-3

	Relative Potential Use		Relative Actual Use		Assessment Factor
	Population	Valuation	Status Cards	LEIN Usage	
City of Muskegon	28.79	33.11	35.96	34.46	33.08
County of Muskegon	29.43	25.19	14.67	24.94	23.56
Township of Muskegon	8.87	7.29	8.10	6.41	7.67
Muskegon Heights	11.16	8.47	16.77	14.79	12.80
Norton Shores	14.37	14.94	13.15	11.39	13.46
North Muskegon	2.74	3.53	3.24	1.31	2.70
Roosevelt Park	2.69	4.38	3.95	4.15	3.79
Whitehall	1.95	3.09	4.15	2.55	2.94
Total	100.00	100.00	100.00	100.00	100.00

One of the simplest variations would be to eliminate the 3% minimum assessment factor. It is difficult to justify in terms of being equitable, although it may help to keep small jurisdictions more involved in the activities of the COPS Boards than would otherwise be the case. The savings that a minimum assessment provides to larger jurisdictions is relatively small, while the burden it imposes on smaller jurisdictions may be substantial.\* Imposing a minimum assessment may deter small jurisdictions from participating in a centralized system. In Muskegon's case the initial imposition of a minimum assessment factor (5%) caused the smallest jurisdiction to withdraw from the system. Seldom do the advantages of a minimum assessment factor adequately compensate for excluding an interested jurisdiction that refuses to participate because of this factor.

In comparing Muskegon's assessment formula with those of other centralized dispatching systems, it is clear that Muskegon's formula is more complicated. It represents a compromise between the simpler approaches of assessing solely on the basis of potential usage or actual usage. While it gives equal weight to four usage

\* For example, the actual 1975 assessments for North Muskegon and Whitehall are \$6,633 (3% of 221,090). This represents respective increases of 11.1% and 1% over what they would have been without the minimum assessment factors.

indicators, other systems base assessments on only one or two factors, e.g., population and/or dispatch requests processed. There are advantages to both approaches. The simpler approaches are easier to understand and apply. However, their formulas necessarily overlook some important factors. Therefore, they cannot be as equitable and responsive to inter-jurisdictional differences and changes as Muskegon's. Nevertheless, it is recommended that assessments for the first year of centralized operations be based on potential usage as determined by relative population. Although assessed valuation could also be considered, it is usually so highly correlated with population that this refinement is seldom necessary. Basing assessments on only potential usage when measures of actual usage are readily available is usually undesirable, but it does avoid some potential problems as discussed below. Generally, after the first year of centralized operations when sufficient data are available, assessments should take account of actual usage in the previous year.

There are various ways to compute each usage factor. Muskegon takes an arithmetic average of the four factors, thereby giving equal weight to each one. Other jurisdictions may wish to apply differential weightings, e.g., giving status card counts twice the emphasis of LEIN messages because they are more costly to process. Of course such increased complexity may be difficult to justify and understand, and may have little net effect. It should be introduced, therefore, only when there is a general agreement that there is a need for it.

Although there is sound justification for including actual usage factors in determining assessments, this is a sensitive area. Placing undue emphasis on usage may act as a deterrent to utilization of the system. It is unlikely that this deterrent would operate with respect to dispatch requests because of their immediate and usually more serious nature. However, there is a potential deterrent to using some features of the system if the users perceive that the associated costs outweigh the benefits. For example, in the Muskegon system there is a wide variation in the volume of administrative messages processed. While other measures of service have grown substantially from 1971 through 1974, the volume of administrative messages has tended to drop during this period. Moreover, there is wide variation in the relative volume of administrative messages for each jurisdiction. For some agencies these messages constitute 60-75% of all their status cards, and only about 40% for others. These differences may reflect

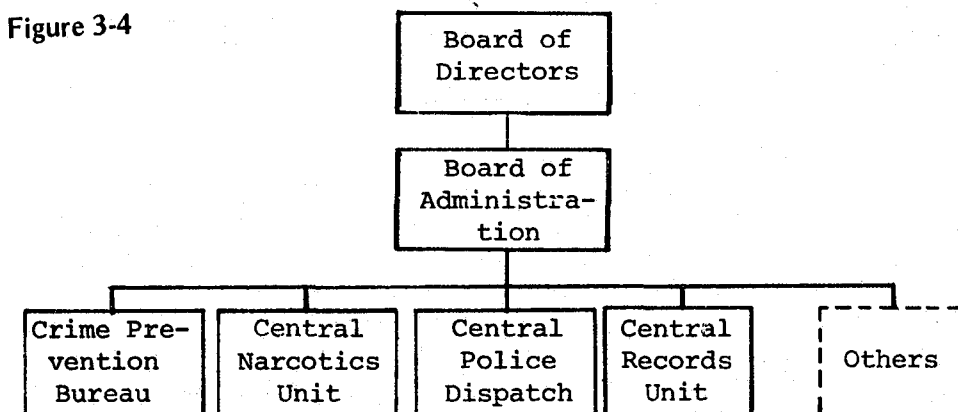
differing policies of each agency, but they may also be due to the nature of the assessment formula. That is, some agencies may have calculated what each of their administrative messages costs and decided to cut back on these messages to reduce their assessment for the next year. Such benefit/cost analysis is certainly commendable, but carried to the extreme it could adversely affect the overall performance of the system. For example, a severe cutback in administrative messages could lead to dispatchers futilely trying to contact mobile units that have gone out of service without notifying the CPD. Similar concerns could be voiced about LEIN usage.

Clearly, there are a variety of issues to be considered in establishing an assessment formula. Interested jurisdictions should keep these issues in mind when developing the formula for their system. Furthermore, they should be prepared to modify their formula if serious deficiencies are found in it.

### 3.3 Organizational Structure and Policies

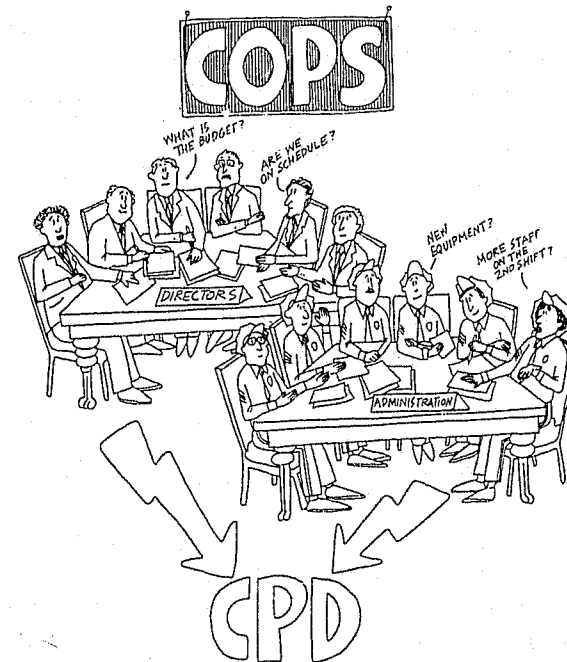
When the Interlocal Public Agency Agreement governing the centralized dispatching system was replaced, major changes were made in the organizational structure and policies for delivering centralized services. A parent organization, Central Operations for Police Services (COPS), was established. It is organized as shown below.

Figure 3-4



As previously mentioned, the COPS agreement specified that each participating agency could have one political/administrative representative on the policy-making Board of Directors, and one law enforcement representative on the operationally oriented Board of Administration. There are eight jurisdictions participating in COPS. Each has one representative on each Board, and each representative has one vote.

Board meetings are held frequently, minutes are taken and absences noted. The Board of Directors meets once a month, while the Administrative Board convenes every two weeks. Although not required by the terms of the COPS agreement, the Board of Directors' meetings are held jointly with the Board of Administration's meetings. These joint meetings provide an opportunity for the administrators and police officials to discuss problems common to both boards and to all jurisdictions.



The Central Police Dispatch Authority is a separate legal entity. Its employees are responsible only to it and not to the individual police agencies. Employees who were police officers (the Director and the shift supervisors) resigned from their respective police agencies and were hired for CPD. Thus, CPD is controlled only by the Board of COPS which provides a valuable buffer between CPD and the eight police departments which it serves.

The COPS agreement specified three functional areas in which service would be provided and permitted additional functions to be added when deemed in the best interests of the agencies involved. The Central Police Dispatch system and the Central Narcotics Unit are now fully operational, and development of the Central Records Unit has recently begun. In addition to these original areas, one other, the Crime Prevention Bureau, has been added and is fully operational. Two others, a Central Aviation Unit and a Legal Advisor, have been considered by the Board of Directors, but at this time have not been selected for inclusion in COPS.

To receive the services of any COPS unit, an agency must receive the services of all COPS units. Although an agency may want only one service, it must subscribe to all of the services, at a specified minimum level of manpower and/or money.

### 3.4 Staffing and Training

Before CPD, its eight original member agencies had a total of 19 law enforcement officers assigned to dispatching. After CPD, a total of 13 civilian personnel was sufficient to satisfy the dispatching requirements of these agencies. Because of the substantial increase in demand for services during the past four years, the CPD staff has been gradually increased to 19. Currently the staffing levels are as follows:

- |                     |  |
|---------------------|--|
| 1 Director          | 13 LEIN Operators/Radio Dispatchers/Complaint Takers |
| 4 Shift Supervisors | 1 Clerk-Typist                                       |

Overlapping shifts are used with the following staffing levels\*:

Position	Shift Number and Hours					Utility Staff+
	1 7 am-3 pm	2 11 am-7 pm	3 3 pm-11 pm	4 7 pm-3 am	5 11 pm-7 am	
Staff Supervisor	1	—	1	—	1	1
LEIN Operator	1	—	1	—	1	1
Radio Dispatcher	1	1	1	1	1	1
Complaint Takers	—	1	—	1	—	1

+ The utility staff provides the additional coverage needed for days off, vacations, and sick time.

\* This staff handles LEIN and dispatching activities for the following levels of mobile units (all participating jurisdictions combined):

On duty Mobile Units	1 7 am-3 pm	2 3 pm-11 pm	3 11 pm-7 am
Maximum	50	50	30
Normal	40	40	20
Minimum	30	30	15

The director and shift supervisors are former police officers with at least five years of police service. These individuals provide sufficient police experience for situations which require police expertise. As a result, no police experience is required of the LEIN operators and radio dispatchers, all of whom have been trained so that they can be assigned to either radio or LEIN positions. With two exceptions all the dispatchers and LEIN operators are women. The use of civilians as dispatchers has resulted in substantial cost saving since police earn approximately \$15,000 per year while civilian dispatchers are paid about \$8,000. However, even if police were retained as dispatchers, centralized dispatching would still result in a substantial saving because of the smaller number of staff required.

Until recently the selection and training of CPD operating staff was performed in a rather informal fashion. In 1974, steps were taken to formalize the selection process with the development of employment standards and job descriptions. Further steps were taken in 1975 with the introduction of standardized screening and testing procedures for selecting operations staff.\* The latter procedures include an examination of the applicant's ability in reading comprehension, abstract reasoning, arithmetic calculations, filing skills, tabular interpretation, and pronunciation.

Although the CPD has not developed its own formal staff training program, it does send staff--both old and new--to orientation, training and refresher courses on dispatching and LEIN. At these sessions the staff usually hear local experts speak, participate in group discussions, and receive reference materials for their later use.\*\* However, training is primarily provided "on-the-job" by shift supervisors. Until recently this training had tended to be very informal, but, with the CPD's increasing emphasis on establishing formal standards and procedures, this is likely to change.

\* Employment standards, job descriptions, and notice of employment possibilities are provided in Appendix B.

\*\* The primary reference documents provided at these sessions are:

- Operating Procedure Manual for Public Safety Communications, prepared by the Associated Public-Safety Communications Officers (APCO), Inc., 2503 Allender Ave., Pittsburgh, PA 15220;
- LEIN Operations Manual, prepared by the Michigan State Police.

## CHAPTER 4 DISPATCHING OPERATIONS

Efficient, well-equipped dispatching operations enable Muskegon's CPD system to respond promptly to a wide range of assistance requests and needs. This chapter details the capabilities and equipment of CPD, examining in detail the four major service delivery activities performed by the system.

### 4.1 Communications Systems

The CPD communications center is located in the Muskegon City Hall, a modern facility completed in 1969, which also houses the Muskegon Police Department. The CPD facilities are in the lower level of the building (below ground), behind locked doors which are monitored by a closed circuit television system. About one-quarter of the approximately 1200 square feet is allocated to administrative activities--the administrator's office, a reception area, a lounge area, and file cabinets. Separating the reception area from the operations area is another wall, the upper half of which is glass, and another locked door. In the operations area are a shift supervisor and the line staff who perform the four major service delivery functions. These are:

- receiving and routing calls
- maintaining location status information on all units
- contacting/dispatching service providers
- submitting queries to the computerized criminal information data bank and relaying the requested information to field units.

Much of the equipment\* needed to perform and support these activities is located in the operations area, including three radio communications consoles with identical capabilities, tape recording system, large wall map displays which show the area and service/status of all mobile units, and telephones. A floor plan of the CPD facility is provided on the following page; on the second following page, the major communication linkages of the system are shown graphically.

The CPD has the capability to transmit and receive on nine frequencies, and to monitor radio traffic on an additional three frequencies. They are grouped into primary and secondary frequencies. The five primary frequencies include:

<u>Users</u>	<u>Usage**</u>	<u>Uses</u>
Mobile/Dispatch	T/R	"Business" frequency for base-to-mobile and mobile-to-base
Mobile/LEIN Operator	T/R duplex	Direct contact between mobile and LEIN operator for query traffic
Interstate law enforcement agencies	T/R	Point-to-point communications of interstate law enforcement agencies
Public safety agencies	T/R	Public safety involving state-wide emergencies and coordination efforts
Fire departments throughout county	T/R	Relaying fire calls to many departments, dispatching

\* Other essential equipment is located at the transmitter facility, in the mobile units, and on the individual law enforcement officers of each jurisdiction.

\*\* Transmit and receive (T/R) or receive only (R); the latter are the frequencies "monitored" by the CPD.

Figure 4.1  
CENTRAL DISPATCH COMMUNICATION CENTER

\* Solid state multi-station radio control positions are located at positions A, B, & D. 27'9"

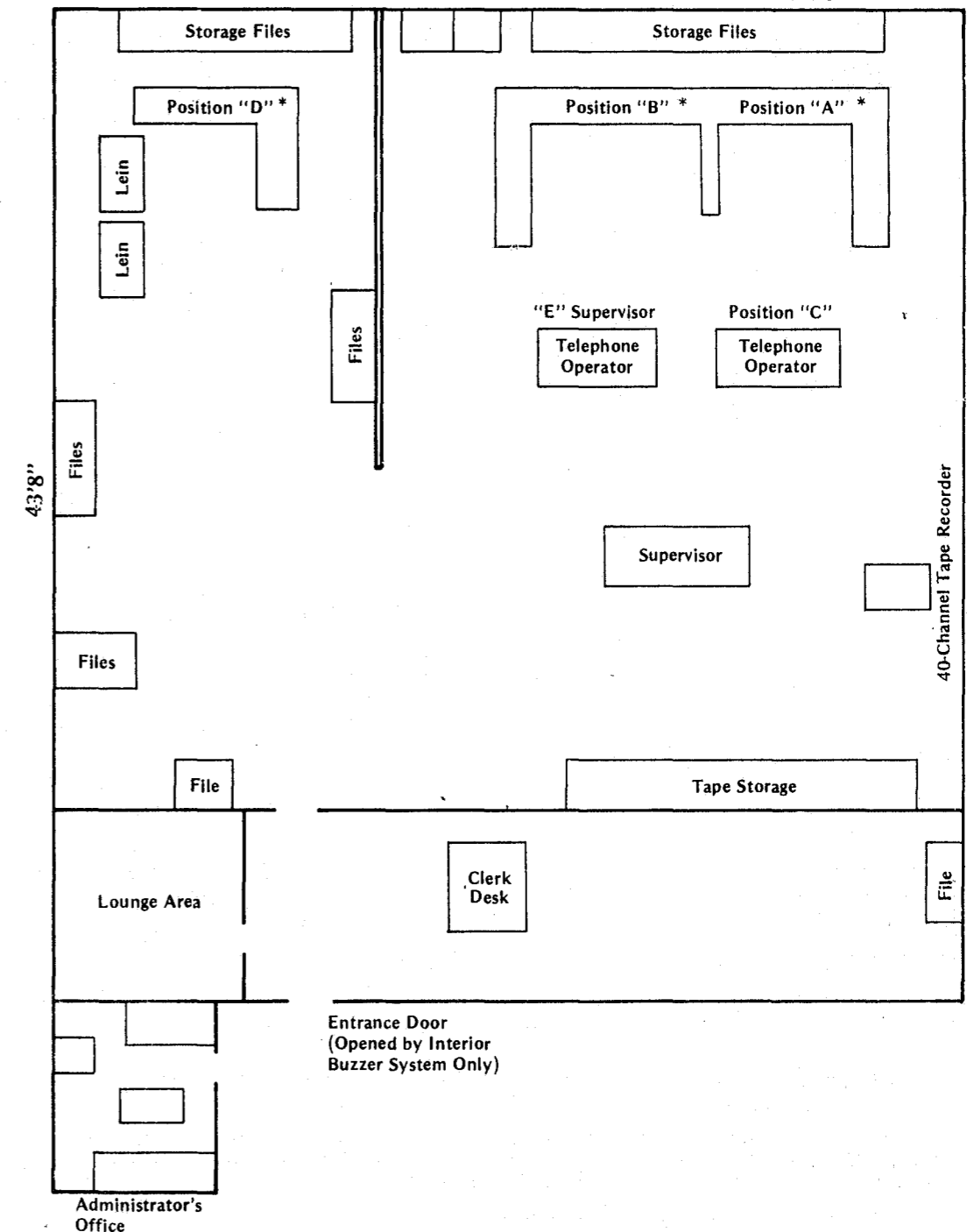
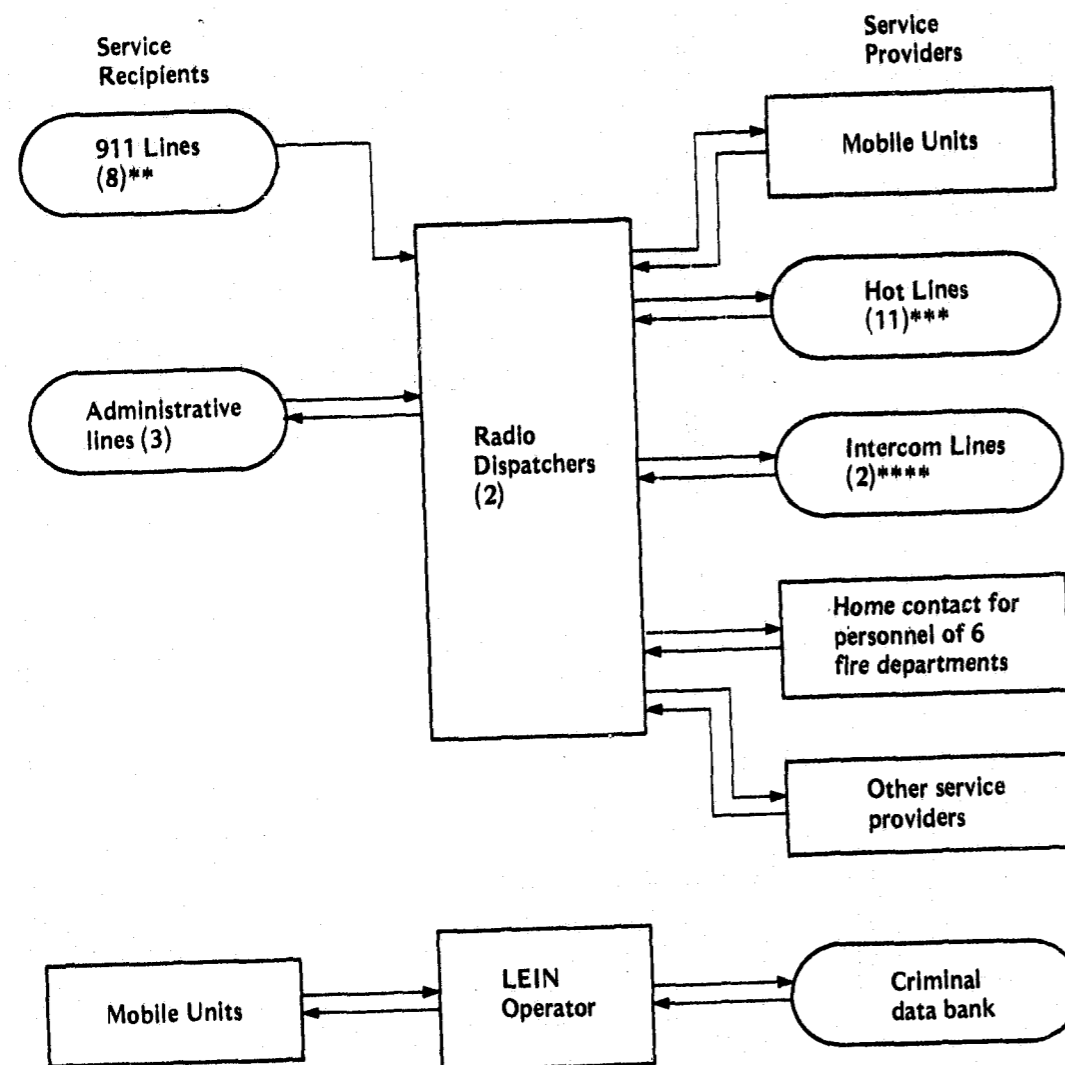


Figure 4.2  
CPD COMMUNICATIONS NETWORK\*  
CPD  
OPERATIONS



\* Telephone linkages are indicated by ovals, and radio linkages are indicated by rectangles.

\*\* 911 lines are emergency telephone lines.

\*\*\* There are hot lines to three police departments (Muskegon Heights, Norton Shores, Muskegon Township), three fire departments (Muskegon City, Muskegon Heights, Norton Shores), and other service providers (two ambulance services, wrecker answering services, gas company and youth services).

\*\*\*\* There are intercom lines to the County Sheriff and the Muskegon City Police Department.

The seven secondary frequencies consist of the following:

Users	Usage	Use
Michigan Dept. of Natural Resources	T/R	Fire and conservation emergencies at the state level
City of Muskegon's Dept. of Public Works	T/R	City emergencies related to water, streets, traffic signals, etc.
City of Muskegon Heights' Dept. of Public Works	T/R	City emergencies related to water, streets, traffic signals, etc.
Mobile/Mobile	T/R	Car-to-car communications for Muskegon Heights
Law enforcement agencies of Michigan's Region II (north of Muskegon County)	R	Statewide emergency
Law enforcement agencies of two adjoining counties	R	Area emergencies
Michigan State Police: 2 posts in Muskegon County	R	Muskegon County emergencies

In addition to these twelve radio frequency channels, CPD utilizes a variety of telephone lines. Their uses are best explained in terms of CPD's major functions described below.

## 4.2 Major Functions

There are four major service delivery functions performed by the CPD.

### 1) Receiving and Routing Requests for Assistance

Requests for assistance may reach the CPD by telephone or radio, with the vast majority coming through the emergency telephone ("911") lines. From almost all sections of the county, emergency calls can be made by dialing the three-digit number, 911. All 911 calls come directly to CPD, where there are eight lines to accommodate peak periods. Calls may also be received on three administrative lines having standard seven-digit numbers.

When a telephone rings it is usually answered by either a complaint taker or a radio dispatcher. During most hours of the day two dispatchers and one complaint taker are on duty. If all of them are busy when the phone rings, the LEIN operator\* and/or shift supervisor can fill in, with the clerk/typist and CPD director available if necessary.

When a call is answered, there is a system which automatically counts it. For dispatching services handling larger volumes of telephone calls, systems are available for evenly distributing the calls among available answerers. Similarly, systems are available for measuring the time it takes to answer the phone once it starts ringing.\*\*

The CPD responds primarily to requests for law enforcement, fire and ambulance services. However, it also handles requests for wrecker service, youth service, or gas company assistance. Usually the CPD contacts these service providers only when requested by police or fire units. If a caller needs assistance which cannot be obtained from or through CPD, he is quickly and courteously referred to the appropriate service provider. Selected CPD training bulletins related to receiving and routing requests for assistance are provided in Appendix C.

\* See Section 4.2 (4) for a description of LEIN.

\*\* Muskegon does not employ either of these systems.

### 2) Maintaining Location/Status Information on All Units

In addition to requests for assistance, the CPD also receives administrative messages from the mobile units. Most of these are radio messages which advise the CPD whenever a unit is going out of service, leaving its patrol area, etc. This type of information is provided so that the dispatchers will always know the location and status of all units.

The dispatcher prepares an Administrative Status Card every time such a message is received, time-stamping the card when the unit becomes unavailable and again when it becomes available. A sample of this card is provided on the following page. Information on the location and status of mobile units is maintained as described below.

### 3) Contacting/Dispatching Service Providers

For every request for a dispatch service the dispatcher prepares a Status Card.\* There are two types of cards, one for each category of dispatching service:

- Traffic. Prepared when the complaint or service requested involves a traffic matter.
- General. Prepared when the complaint or service requested involves some type of police service other than traffic.

The type of assistance needed and the location where it is needed are recorded, and if possible the name, address, and telephone number of the caller are obtained. The form is time-stamped when the request is received. Samples of these forms also are shown on the following page.

The dispatcher is responsible for determining the most appropriate type of service provider and, if law enforcement services are needed, for selecting the specific mobile unit to provide the

\* Traffic and General Status Cards are also referred to as Complaint Forms.

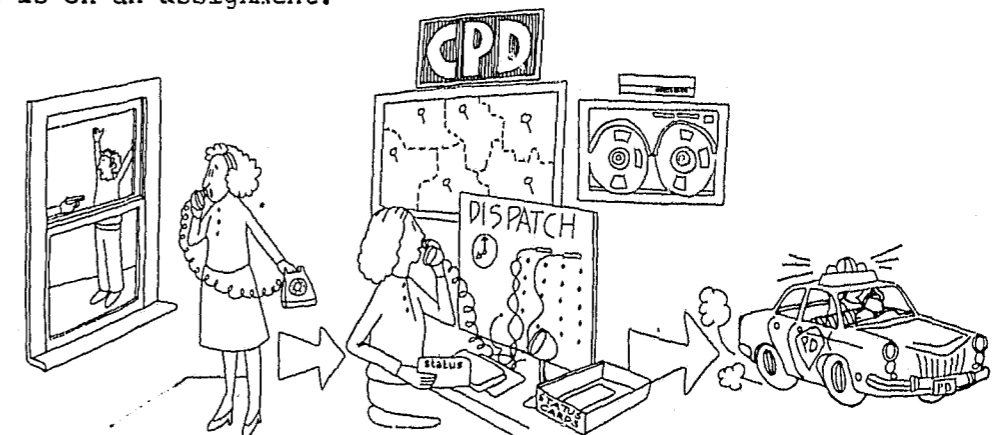
UNIT	AREA	W361604	ADMINISTRATIVE FORM	COMPLAINT NO.
DISPATCHER	REC'D BY			
		<input type="checkbox"/> 10-7 <input type="checkbox"/> 10-21 <input type="checkbox"/> 10-25 <input type="checkbox"/> 10-76 <input type="checkbox"/> 10-59		

UNIT	AREA	P3 20698	TRAFFIC COMPLAINT FORM	COMPLAINT NO.
DISPATCHER	REC'D BY			
HOSPITAL		LOCATION		
1 2 3 4		COMPLAINANT		
OTHER		ADDRESS		
AMBULANCE		PHONE NO.		
WRECKER		<input type="checkbox"/> ACCIDENT <input type="checkbox"/> PROPERTY DAMAGE <input type="checkbox"/> INJURY <input type="checkbox"/> PEDESTRIAN <input type="checkbox"/> HIT & RUN <input type="checkbox"/> ASSIST <input type="checkbox"/> MOTORIST <input type="checkbox"/> OFFICER <input type="checkbox"/> ESCORT <input type="checkbox"/> ON VIEW <input type="checkbox"/> ENFORCE <input type="checkbox"/> ROAD CONDITION <input type="checkbox"/> ABANDONED <input type="checkbox"/> CHILDREN IN STREET <input type="checkbox"/> X-WAY <input type="checkbox"/> SIGN-SIGNAL <input type="checkbox"/> BLOCKING <input type="checkbox"/> INSPECTION <input type="checkbox"/> HAZARDOUS <input type="checkbox"/> SPEEDING <input type="checkbox"/> MOVING <input type="checkbox"/> ARREST <input type="checkbox"/> DWI <input type="checkbox"/> INVESTIGATE <input type="checkbox"/> VEHICLE <input type="checkbox"/> PARKING <input type="checkbox"/> MOTORCYCLE <input type="checkbox"/> VIOLATION <input type="checkbox"/> WORK TRAFFIC <input type="checkbox"/> IMPOUND <input type="checkbox"/> SNOWMOBILE		

UNIT	AREA	G343609	GENERAL COMPLAINT FORM	COMPLAINT NO.
DISPATCHER	REC'D BY			
HOSPITAL		LOCATION		
1 2 3 4		COMPLAINANT		
OTHER		ADDRESS		
AMBULANCE		PHONE NO.		
WRECKER		<input type="checkbox"/> Abandoned <input type="checkbox"/> Assist Officer <input type="checkbox"/> Prowler <input type="checkbox"/> Failure To Pay, Fraud <input type="checkbox"/> B/E <input type="checkbox"/> Assault <input type="checkbox"/> Molesting <input type="checkbox"/> Acting Suspicious <input type="checkbox"/> Male <input type="checkbox"/> Bicycle <input type="checkbox"/> Holding <input type="checkbox"/> Purse Snatching <input type="checkbox"/> Female <input type="checkbox"/> Burglar Alarm <input type="checkbox"/> In Progress <input type="checkbox"/> Property Found, Lost <input type="checkbox"/> Adult <input type="checkbox"/> Escort <input type="checkbox"/> Investigate <input type="checkbox"/> Disturbance, Flight <input type="checkbox"/> Juvenile <input type="checkbox"/> Call For Assistance <input type="checkbox"/> Stolen <input type="checkbox"/> Drunk, Disorderly <input type="checkbox"/> Dead <input type="checkbox"/> Exposing <input type="checkbox"/> Wanted <input type="checkbox"/> Vehicle <input type="checkbox"/> Larceny <input type="checkbox"/> Domestic Trouble <input type="checkbox"/> Shoplifting <input type="checkbox"/> Explosion <input type="checkbox"/> Mental <input type="checkbox"/> Robbery <input type="checkbox"/> Vandalism <input type="checkbox"/> Drowning <input type="checkbox"/> Fire <input type="checkbox"/> Building <input type="checkbox"/> Grass <input type="checkbox"/> Gas Spill <input type="checkbox"/> Box Alarm <input type="checkbox"/> Shooting <input type="checkbox"/> Animal Bite <input type="checkbox"/> Weapon Involved		

service. Generally a mobile unit of the jurisdiction in which the service is needed is dispatched to the scene. However, mobile units from other jurisdictions can be assigned in an emergency. In selecting the mobile unit to be assigned, the dispatcher refers to an alphabetized street index\* of all the streets in the county, which also specifies which mobile unit of the jurisdiction would normally be assigned, and reviews the status and location of mobile units in the general area using the large wall map display.

After selecting the most appropriate unit and contacting it by radio, the dispatcher transmits the necessary information and time stamps the status card a second time. The card is entered in a special file which is electrically connected to the wall map display unit. The card is filed according to the geographic area, requesting assistance, and the corresponding section of the lighted status board is darkened indicating that the unit covering that area is on an assignment.



As additional information is received, the dispatcher records it on the status card. When the mobile unit reaches the scene, it radios the dispatcher who again time stamps the status card. Later the mobile unit radios the dispatcher to give the disposition of the assignment when it is completed. Then the dispatcher time stamps the status card a fourth time, removes the card from the special file, and returns the mobile unit to unassigned status. These status cards may also be used for other needs such as for a medical examiner, ambulance, wrecker, or other service provider.

\* See sample in Appendix D.

Some assistance requests involve types of assistance that cannot be provided by mobile units. For these cases, the CPD has eleven "hot lines" which are directly connected (i.e., no dialing is necessary) to other service providers who pay telephone company line charges of \$25 to \$30 a month for this service. Hot line access is currently installed for two private ambulance answering services, the wrecker (tow truck) answering service, the Child Haven Social Service Bureau, the gas company, three police departments, and three fire departments. Intercom lines, with 2-digit dialing, are available to the Sheriff's Department and the Muskegon City Police Department, and an additional interconnect line to the Sheriff's Department is also available.

Although fire calls are often received on the 911 emergency number, Central Dispatch does the dispatching for only one department--the Muskegon Heights Fire Department. Emergency fire calls are immediately routed to one local fire department using a hot line. For six other departments Central Dispatch activates a system that signals firemen at their homes by radio on an encoder system (many of the jurisdictions have volunteer fire departments). All fire dispatching in the County is done over the same frequency but from separate departments.

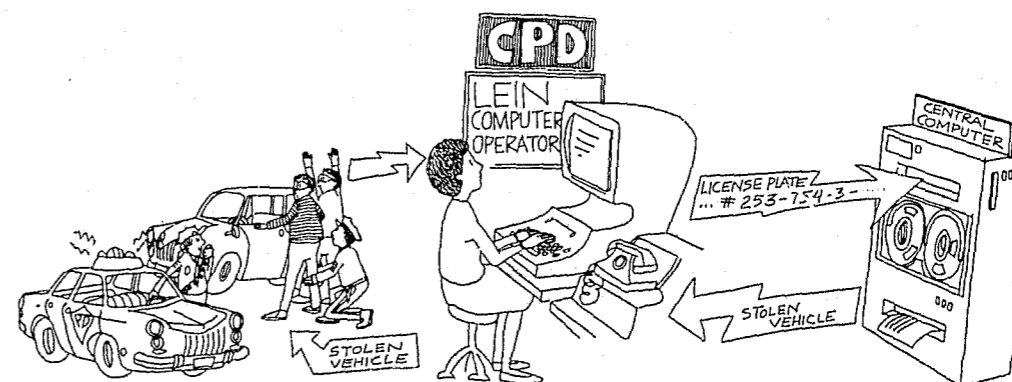
#### 4) Interacting with the Criminal Information Data Bank

In addition to serving the general public, participating law enforcement agencies, and other service providers with its dispatching services, the CPD also provides a valuable service to individual law enforcement officers in their mobile units. These officers are usually considered to be service providers, but they are also recipients of CPD services.

Because CPD is linked to several criminal information data banks, it is able to provide valuable information to officers who think they have encountered a "wanted person" or stolen property. In these cases, the officer radios the LEIN operator giving the essential identifying information.\* The LEIN operator translates

\* For individuals this includes name, sex, race, and date of birth. For motor vehicles this includes license plate number, or vehicle identification number (VIN), year, and make. For other property this includes type of article, brand name, model, and serial number.

the information into the proper form for processing and types it directly into the LEIN computer system using a teletype machine. When the system responds to the request, the LEIN operator relays the information back to the officer. All of this can occur within a few minutes.



LEIN is a computerized, on-line, real-time data storage and retrieval system operated by the State Police. Its files contain data on wanted persons and stolen and missing property, including vehicles. LEIN is also interfaced with the National Crime Information Center in Washington, D.C. (NCIC), the Automated Law Enforcement Communications System (ALECS), and the Michigan Department of Motor Vehicles' computer for access to operators' driver records and auto registration. Similar systems are operating in other states. Additional information on LEIN and its linked systems is provided in Appendix E.

#### 4.3 Equipment and Facilities

As previously noted, prior to centralizing all eight of the originally participating jurisdictions were dispatching on the same frequency.

For this reason, equipment and facilities expenditures associated with centralizing were minimal. However, CPD's initial grant did include a substantial allowance for purchasing a communications console with three work stations, various office equipment and

supplies, and a nominal amount to reimburse the City of Muskegon for the radio transmitter facility.

The major pieces of equipment include those indicated on the floor plan of the CPD communications center provided at the beginning of this chapter. At the transmitter site there are two radio towers and antennas, one 250-watt transmitter, one 60-watt reserve transmitter, power supplies, and a building to house this equipment.

The system also includes 75 mobile radio units owned by the various agencies represented in the Central Dispatch. The vast majority of this equipment was in good condition, so none of the initial grant funds were expended on it. However, since the initial CPD grant, substantial funds have been allocated to upgrading and expanding the equipment and facilities of the system. Purchases have included such items as:

- communications consoles
- wall map display and vehicle status system
- tape recording system
- mobile and portable radio systems.

The CPD's equipment and facilities costs are considered in detail in Section 6.4.

## CHAPTER 5 CPD PERFORMANCE

In this section CPD performance is considered in terms of how closely it conforms to national standards, and the trends in its service levels over the last four years. In both respects the CPD's performance is worthy of emulation by many communities.

### 5.1 Comparison with National Standards and Goals

Six of the standards proposed in 1973 by the National Advisory Commission on Criminal Justice Standards and Goals are directly relevant to the operations of the CPD and its parent organization, COPS.

#### (1) Standard 5.2 Combined Police Services

##### Standard calls for:

Sharing of public support services on a geographic rather than jurisdictional basis, when study shows that such regionalized service delivery is appropriate.

##### CPD provides:

An excellent example of cooperation by local governments and local police agencies in regional sharing of a police support service.

(2) Standard 10.1 Assignment of Civilian Police Personnel

Standard calls for:

Assigning civilian personnel to positions that do not require the exercise of police authority or the application of the special knowledge, skills, and aptitudes of the professional police officer.

CPD provides:

An excellent example of how civilian personnel can be used as dispatchers, a task that has traditionally been performed by police officers.

(3) Standard 23.1 Police Use of Telephone System

Standard calls for:

Immediate implementation of full-time telephone service with:

- prompt answering (30 seconds for emergency calls and 60 seconds for other calls)
- procedures to control the quality of police response

Immediate installation of enough emergency lines to insure that the caller will not receive a busy signal during normal periods of peak activity.

Immediately insure that misdirected emergency calls are accepted, and that the critical information is immediately relayed to the appropriate agency.

CPD provides;

Full time telephone service with eight "911" emergency lines and additional direct and intercom lines to minimize waiting time; trained dispatchers with close supervision.

Eight "911" emergency lines and several personnel to answer them (see Section 3.4 for discussion of staffing levels).

Acceptance of misdirected emergency calls and prompt relaying of the critical information (see Section 4.2).

Standard calls for:

By 1976 provide continuous recording of all complaint calls, with capability for instantaneous playback.

By 1982 operate from facilities that are secure from physical attack and sabotage.

By 1982 obtain a single universal emergency telephone service.

Install Pilot Automatic Number Identification (ANI) Universal Emergency Telephone Systems.\*

CPD provides:

Continuous dual recording of all radio and telephone conversations. (Current system provides 20-channel recording with provision for an additional 20). There is also a playback capability; instead of being instantaneous it is delayed about 15 seconds.

Protected, isolated and reasonably secure facilities.

"911" emergency telephone lines for police, fire, ambulance and other emergencies cover almost all of the county and small parts of adjoining counties.

No ANI system. However, the Commission recommended only that "a pilot system should be installed in a city to assess technical feasibility, cost effectiveness for police, and public acceptance." (Emphasis added.)

\* Theoretically a caller using an ANI system could dial 911, say "help" and hang up, and the system would provide the location information needed to dispatch assistance.

#### (4) Standard 23.2 Command and Control Operations

##### Standard calls for:

Immediate installation of a 24-hour, two-way radio capability providing continuous communication between a communications center and field units.

Immediately insure that delay time\* for emergency calls does not exceed 2 minutes, and for non-emergency calls does not exceed 6 minutes.

By 1975 provide continuous recording of every radio transmission, with capability for instantaneous playback.

##### CPD provides:

24-hour continuous two-way radio capability, as specified.

Prompt dispatching, in the opinion of project officials. However, no statistics are available on delay time. The raw data needed to compute delay time for every complaint are time-stamped on the associated status card, but the computation and analysis are not performed.

Continuous dual recording of all radio and telephone conversations. (Current system provides 2-channel recording with provision for an additional 20.) There is also a playback capability; instead of being instantaneous it is delayed about 15 seconds.

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\* Delay time is the elapsed time between receipt of a complaint call and the radio transmission of the complaint information to a field unit.

##### Standard calls for:

Immediately seek action to regulate private agencies that provide central station alarm service.\*

By 1975 install equipment to access local, State and Federal criminal justice information systems.

By 1978 locate the radio communications center in facilities designed to be reasonably secure from physical attack or sabotage.

##### CPD provides:

No action has been taken on this matter.

Access to Michigan's LEIN system, and through it to other criminal justice information systems (see Section 4.2.)

Protected, isolated and reasonably secure facilities.

#### (5) Standard 23.3 Radio Communications

##### Standard calls for:

By 1978 have a capability of two-way radio communications on a common statewide frequency from base, mobile and portable units.

##### CPD provides:

Two-way communication from base and mobile, on a common frequency; for portable units there is a one-way operation. Work is in progress to convert

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\* Studies have shown that the false alarm rates for most systems are 85% to 95%. This high false alarm rate is experienced in Muskegon, where it:

- causes police to become complacent about all these alarms;
- imposes an unnecessary burden on the taxpayers who pay for providing police service;
- provides insufficient incentive to the manufacturers of these systems to improve their systems' discrimination between criminal intrusions and other stimuli.

Standard calls for

CPD provides:

this to two-way. The frequency is common for a major portion of the state, but it is not common for the entire state.

By 1978 operate multi-channel mobile and portable two-way radio equipment.

Sufficient radio communications equipment to satisfy all the specified requirements.

By 1978 equip every on-duty uniformed officer with a portable radio capable of two-way communications.

Portable two-way radios for all on-duty uniformed officers of its member agencies.

(6) Standard 24.4 Police Telecommunications

Standard calls for:

CPD provides:

By 1974 have immediate access to the existing local, state and Federal law enforcement telecommunications network.

Access to Michigan's LEIN system, and through it to other criminal justice information systems (see Section 4.2).

By 1975 install a telecommunications terminal capable of transmitting to and receiving from established national, state and local criminal justice information systems.

A full-time LEIN operator with direct access, through a teletype, to Michigan's LEIN system, which interfaces with ALECS and NCIC (see Section 4.2).

-----  
In summary, CPD comes very close to satisfying most of the applicable standards whose implementation was called for by 1975, and many of the other standards some of which are not called for until the 1980's.

5.2 Service Levels and Trends

Data on CPD services have been routinely collected ever since the CPD began operating, so ample statistics are available on service levels and trends. There are three basic measures of service on which statistics are maintained as an integral part of CPD operations. They are:

- Number of telephone calls received -- every telephone call received by the CPD, whether on "911" lines or otherwise, is automatically counted. Aggregate statistics on this measure of service are readily available. However, the hardware system for counting the calls gives no indication of the jurisdiction from which the calls originate.
- Number of status cards prepared -- as noted earlier, a status card is manually prepared every time the CPD receives a "complaint" either by telephone from the general public, or by radio from a mobile unit. There are three types of cards: traffic, general and administrative. On each status card, the dispatcher records the code number of the responsible agency. Statistics on the distribution of these cards by type and agency are prepared and distributed periodically.
- Number of LEIN messages processed -- A count of all messages initiated by and sent to each agency is provided automatically by the LEIN computer system every month. Additional statistics are also provided on the number of "hits", i.e., the number of times the system has had information related to a query. For example, if information on a suspect is submitted to the system, and the system indicates that the suspect is "wanted", then this is counted as a "hit".

Since each agency's annual assessment is partially determined by the number of its status cards and LEIN messages, there is an operational requirement to collect and maintain these statistics accurately. This requirement has helped to insure the reliability of these statistics.

For the purposes of this discussion it is convenient to introduce the concept of service units, which are defined as follows:

Total Service Units = Public Service Units + Police Service Units

Public Service Units = General Status Cards + Traffic Status Cards

Police Service Units = Administrative Status Cards + LEIN Messages

These definitions are based on the following assumptions:

- telephone calls should not be explicitly considered as service units because all calls that result in services have associated status cards which are considered;
- every LEIN message and status card receives equal weight in measuring service because there is no clear justification for differential weighting.

Using these measures, the remainder of this section examines the history of CPD's service delivery.

Although central dispatching services began in 1970, the project had its share of such normal start-up problems as staffing, facilities, equipment, and training. Therefore, the first full year of routine dispatching operations was 1971. As a result, there are only full four years of data on which to make comparisons of the levels of services provided.

In reviewing these statistics it should be noted that some of the changes in service levels can be attributed to the withdrawal of one town in early 1972, and the addition of another town in early 1974. However, the graphic and tabular summaries of CPD services presented on the following pages show that over the past four years CPD services have increased dramatically--far more than could be explained by these membership changes. Interim figures for 1975 indicate that this pattern of growth is continuing.

Figure 5-1  
Muskegon Central Police Dispatch  
Selected Service Delivery Statistics\*  
1971-1975

	1971	1972	1973	1974	1975***
Telephone Calls	328,531 1.000	395,883 1.205	381,365 1.161	409,298 1.246	370,000 1.126
LEIN Messages	127,788 1.000	177,019 1.385	204,744 1.602	225,577 1.765	240,000 1.878
Status Cards					
Total	104,247 1.000	98,013 .940	102,915 .987	123,700 1.187	138,000 1.324
Administrative	59,743 1.000	49,035 .821	50,822 .851	59,025 .988	66,000 1.105
Traffic	14,484 1.000	16,388 1.131	17,406 1.202	20,606 1.423	22,000 1.519
General	30,020 1.000	32,590 1.086	34,687 1.155	44,069 1.468	50,000 1.666
Service Units**					
Total	232,035 1.000	275,032 1.185	307,659 1.326	349,277 1.505	378,000 1.629
Public	44,504 1.000	48,978 1.101	52,093 1.171	64,675 1.453	72,000 1.618
Police	187,531 1.000	226,054 1.205	255,566 1.363	284,602 1.518	306,000 1.632

\*Each measure of service delivery is expressed on one line in absolute terms and on the next line in relative terms (using 1971 as the base year).

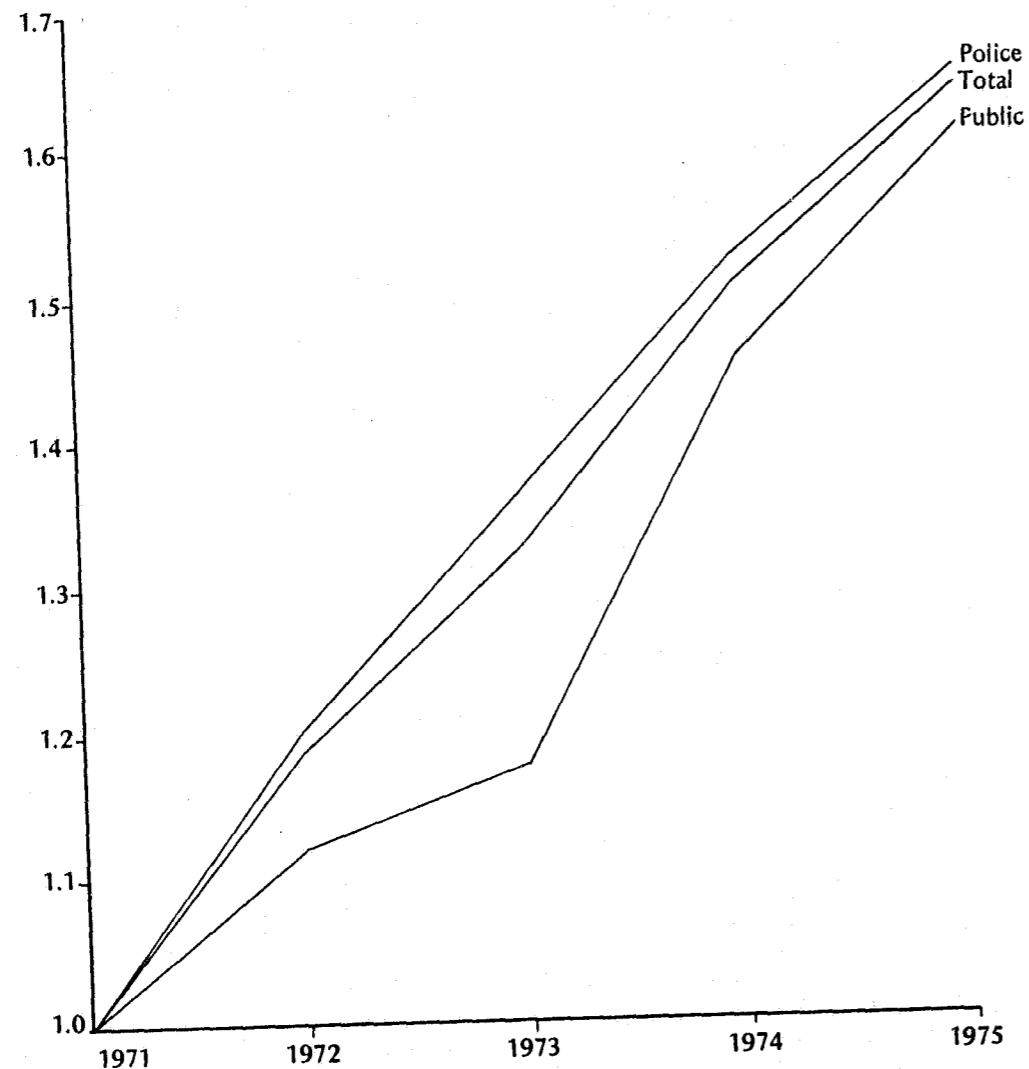
\*\*The Service units are defined as follows:

- Public Service Units = General Status Cards + Traffic Status Cards
- Police Service Units = Administrative Status Cards + LEIN Messages
- Total Service Units = Public Service Units + Police Service Units

\*\*\*Estimated using straight line extrapolations of operating statistics through October 30, 1975.

In summary, over the past four years, CPD services, as measured by all three types of service units, have increased approximately 60%, which represents a compound annual growth rate of 15%. The next chapter relates these service levels to total operating expenses.

Figure 5-2  
Muskegon Central Police Dispatch  
Relative Levels of Service Units Provided



## CHAPTER 6 COST CONSIDERATIONS

With the ever-rising trend in the cost of providing municipal services, the financial aspects of centralized police dispatching are a pivotal concern. Generally, a new approach to delivering services will be favorably received if its costs for delivering the current level of service are significantly lower than the costs for delivering these services under the existing system. This chapter reviews the key cost elements of a centralized dispatching system and analyzes the historical costs of the Muskegon system.

### 6.1 Key Factors in Cost Analysis

Eventually every jurisdiction that is considering centralized police dispatching must address two basic questions related to costs:

- How much do the interested jurisdictions currently pay for their individual dispatching operations?
- How much would these jurisdictions have to pay for the same level of dispatching services provided on a centralized basis?

There are many factors which make it difficult to answer these questions. Some difficulties are due primarily to factors internal to police departments and the municipal organizations of which they are a part. Other difficulties are due primarily to external factors over which the departments have little if any control.

### Internal Factors

The major internal difficulty is due to variations in the accounting systems used by most municipal governments. Although every jurisdiction may be able to specify the total cost of operating its police department, rarely is it possible to isolate the cost of the dispatching function within the department. Therefore, the question of how much the interested jurisdictions currently pay for their individual dispatching operations can usually be answered only with estimates. Similarly, since the interested jurisdictions have not yet established a centralized dispatching service, they can only estimate what they would have to pay for such a service. Estimating dispatching costs for both centralized and decentralized modes of operations is, therefore, a critical step in the decision-making process. Unless all the estimates are developed on a consistent and complete basis, the relative cost advantages of centralized operations versus decentralized operations will vary according to the estimator. Applying the principles of consistency and completeness is simple in theory but may become complicated in practice.

In principle, to estimate what all the interested jurisdictions combined spend for dispatching services, one needs only to add the estimate of each jurisdiction. However, this should be done only if all the estimates have been developed in the same way. Otherwise, the estimates of some jurisdictions will need to be revised before they can be properly combined.

Staff costs represent the largest component of dispatching costs, and they are susceptible to the greatest amount of variation in estimating procedures. For example, in determining its hourly rate for dispatchers one jurisdiction may include allowances for regular days off, sick time, holidays, vacation, uniforms, health insurance, etc., while another may use a rate that reflects only what a dispatcher is paid for an hour of dispatching ("base salary"), and charge the various fringe benefits to other accounts. Obviously with fringe benefits representing 20-25% of base salary these jurisdictions would show substantially different staffing expenses though their dispatchers may have identical base salaries and provide identical levels (i.e., hours) of dispatching services. Adding the salary expenses of these jurisdictions would be like adding apples and oranges. The principle of consistency dictates that the estimates of all jurisdictions be based on a common set

of cost accounting definitions/practices. Moreover, the principle of completeness requires that the estimates include all applicable costs. Therefore, the hourly rate should include allowances for the fringe benefits applicable to the dispatchers.

Similar inconsistencies may be found from one jurisdiction to another with respect to the number of staff needed to provide around-the-clock coverage of one dispatch position. While one jurisdiction may roughly estimate that twenty-four hour coverage can be provided by having three full-time dispatchers each working an eight-hour shift, another may be much more precise. A precise estimate would allow for regular days off, sick time, holidays, and vacation. The National Commission on Law Enforcement and Criminal Justice estimates that five staff are required to assure the availability of one full-time position on a continuous basis.

From one jurisdiction to another there are other aspects of accounting for time spent on the dispatching functions which may vary widely--for example, distributing the time and associated cost of individuals who work on more than one function. One jurisdiction may count as a dispatching expense the time of an officer who supervises the dispatching operation; another may pool all such supervisory costs under a single heading. Similarly, in one jurisdiction an officer who spends some of his time dispatching and some on other activities may be accounted as full-time (or not at all) on dispatching; while in another jurisdiction an accounting of the officer's time would show it to be distributed across multiple functions.

Similar variations may be encountered in estimating the equipment and facilities costs associated with each jurisdiction's current dispatching operation. One jurisdiction may consider the cost of purchasing new equipment but overlook the cost of maintaining existing equipment, while another jurisdiction may include both. One jurisdiction may overlook facilities costs (space, heat, light, power, etc.) while another estimates an assessment based on the number of square feet occupied by the dispatching operation.

Such variations in estimating costs of staff, equipment and facilities must be recognized and corrected before the cost estimates of

\* Op. cit., p. 101.

the individual jurisdictions can be combined to determine the total cost of their current dispatching operations. The corrections should be made based on the principles of consistency and completeness. Thus far in this discussion emphasis has been placed on consistency because without it there is no justification for combining the costs of all the jurisdictions. However, completeness is equally important because without it there is no justification for comparing these combined costs with the estimated costs of a centralized dispatching system. A comprehensive list of revenue and cost categories appropriate for estimating and accounting is provided on the following page.

Adherence to these principles is essential in estimating what each jurisdiction currently pays for its dispatching operation, and what all the jurisdictions combined would have to pay for a centralized dispatch service. Seldom, however, does a jurisdiction make its centralization decision on the basis of these two figures. From its narrow perspective a jurisdiction is concerned with what it now pays and what it would pay--not what all the jurisdictions combined would pay--for the centralized service.\* It is for this reason that the assessment formula takes on so much importance even in the early stages of planning for centralized dispatching. At this point it may be valuable to review the discussion of assessment alternatives in Section 3.2.

Even when consistent and complete estimates have been made of the costs of dispatching under centralized and decentralized modes of operation, it should be recognized that these estimates have been based only on the internal ("controllable") cost components: staff, equipment, and facilities. However, there are other factors which will influence the actual costs. They usually assume greater importance after a centralized dispatching system has become operational.

\* Although cost considerations may be pivotal in each jurisdiction's decision on centralized dispatching, there may be other factors of equal importance. In Muskegon's case some agencies may be accepting the centralized dispatching service not because they believe it offers any advantages over what they could have in a decentralized mode, but rather because they urgently need other COPS services which they would not receive without accepting the CPD service.

Figure 6-1  
Suggested Revenue and Expense Accounts

*Revenues*

Police Departments  
Fire Departments  
Other Service Subscribers  
Interest Earned  
State and Federal Grants  
TOTAL

---

*Expenses*

Salaries and Wages  
Fringe Benefits  
Overtime Premiums  
Training  
Publications  
Contract Services  
Travel  
Office Supplies  
Maintenance Supplies  
Telephone  
Printing and Reproduction  
Building Rental  
Utilities  
Maintenance Services  
Equipment--Office  
Equipment--Radio Communications  
Insurance  
Office Improvements  
Contingency  
TOTAL

---

## External Factors

Even in the best of operations, deviations between actual and estimated costs often occur. In many of these cases, the cause of the deviations can be traced to external factors which are beyond the control of the organizations.

Municipal operations in general and police dispatching systems in particular are not immune to these factors. Changes in the level and type of crimes committed, changes in the level and composition of population and property, the public's continuing demands for expansion of services, and general inflationary trends--all may contribute to budget overruns.

It is especially important to be aware of these factors if a centralized dispatching system has been established and its actual costs are exceeding the original estimates. While many deviations may be due to internal factors, others may be completely beyond the control of the centralized operation regardless of how well it may run.

### 6.2 Cost Analysis of Centralized Dispatching

Estimating what the interested jurisdictions currently pay for their individual dispatching operations is relatively simple because there usually are ample historical data on which to base an estimate. However, it is rather difficult to estimate what these jurisdictions would have to pay for the same level of dispatching service if it were provided on a centralized basis, because they have very limited historical data on which to base an estimate. This section analyzes the historical costs of Muskegon's CPD so that other interested jurisdictions can use Muskegon's experience as a guide in estimating the costs of their own centralized dispatching service.

#### Total System Costs

The total costs of operating a centralized dispatching system are

primarily determined by three factors:\*

Organizational structure--The organizational structure of any group has a major influence on the costs of operating that group. Some groups have a "lean" organizational structure. They are able to perform their job with a minimum number of staff because they make the best use of all their personnel. Everyone puts in a day's work for a day's pay, and all their efforts are concentrated on doing the job for which the group is responsible. Other groups have a "fat" organizational structure. They are able to perform the same job as the "lean" organization but they need more staff to do so, because they do not have the most appropriate staff for the job or because the staff is not properly managed. In keeping with its objective to increase the efficiency of dispatching services, the CPD's organizational structure is "lean." Other interested groups are likely to have similar structures; otherwise, they will need to make some upward adjustment in Muskegon's cost relationships.

Definition and Measurement of Service--There are several ways to define and measure CPD services. This analysis uses the concept of "service units" which was introduced in Section 5.2.

Volume of Service Provided--Certainly the most fundamental factor in estimating the total costs of centralized dispatching service is the amount of service provided. Within reasonable limits, additional service can usually be

\* Among the factors which are considered to play a secondary role are the following:

- Time distribution of service requests (i.e., the average number of calls received each hour of the day, day of the week, etc.). For the purposes of this analysis it is assumed that the distribution of Muskegon's service requests closely approximates those of other jurisdictions.
- Regional economic variations--the hourly rate of pay for a typical CPD dispatcher may vary somewhat depending on the section of the country in which the dispatcher works. For the purposes of this analysis it is assumed that Muskegon's economy is representative of the country as a whole.

provided without significant increases in cost. However, as the demand for services increases beyond these limits, associated increases in costs are inevitable. These costs may include overtime premiums, salary of additional staff and costs for expanded facilities (telephones, dispatching equipment, etc.). Since the relationship of total cost to volume is central to the estimating process, it is considered in detail below.

During the five years Muskegon's CPD has been in operation, it has accumulated sufficient statistics to show the type of relationship which exists between total operating expenses\* and Total Service Units. This relationship is shown graphically on the following page, together with the data on which it is based. It is provided as a means of estimating or verifying the total operating expenses likely to be incurred in a centralized system for a given level of Total Service Units. However, it must be emphasized that this relationship has been determined empirically based on limited data. It is, therefore, subject to the limitations of all such relationships. Although it represents a close approximation, it does not provide a precise theoretical means of relating the two variables. When used to estimate costs outside the range of Muskegon's experience (using the dashed line section of the curve), the reliability of the estimate may be lower. Since the curve is based on the organizational structure, staffing, systems, procedures and experiences of Muskegon's CPD, it may not be totally applicable to other centralized operations in which these factors may differ. Despite all these limitations there are expected to be enough similarities and off-setting factors among all centralized dispatching systems to justify the use of this relationship of total operating expenses to Total Service Units.

To do so, interested jurisdictions must first estimate the level of services which will be provided by their centralized operation. For this purpose, services must be estimated in terms of Total Services Units as previously defined.

\* The cost of capital expenses such as equipment and facilities is so dependent on the details of the centralization plan that it is virtually impossible to estimate. For this reason only operating expenses have been considered.

Figure 6-2  
Relationship of Total Operating Expenses to Total Service Units

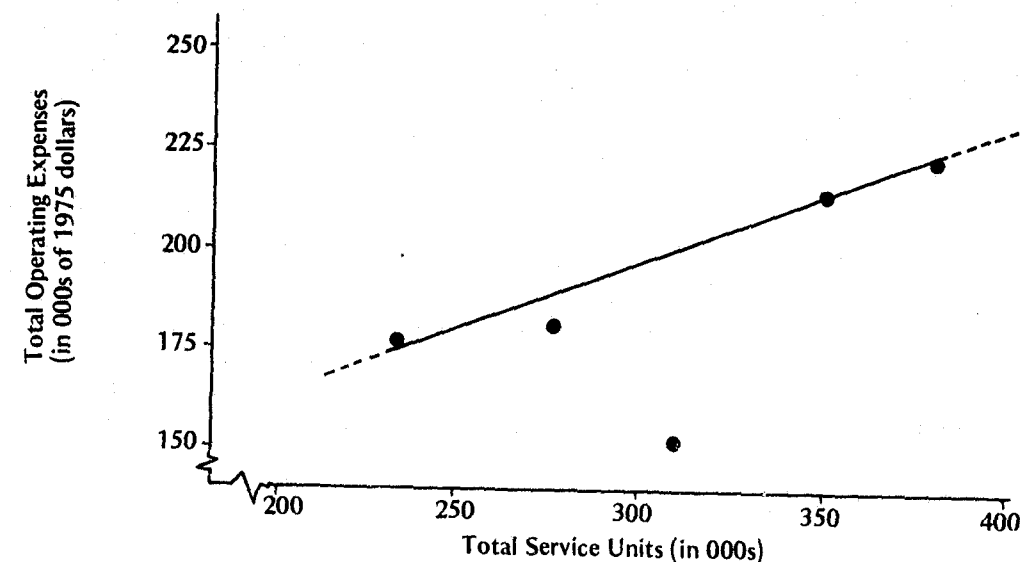


Figure 6-3  
Key Factors in Relating Total Operating Expenses to Total Service Units

	GNP Price Deflator		Operating Expenses		Total Service Units
	1958=100*	Normalized to 1975	Historical	In 1975 Dollars	
1971	175.8	.842	148,907	176,849	232,035
1972	183.2	.877	159,389	181,743	275,032
1973	194.8	.932	141,966	152,324	307,659
1974	200.0**	.957	206,466	215,742	349,277
1975	209.0**	1.000	221,090***	221,090	378,000****

\* See 1975 Statistical Abstract of the United States, p. 405, Table No. 658: Gross National Product, Implicit Price Deflators for state and local government purchases: 1960 to 1973.

\*\* Estimate based on straight line extrapolation of data from 1965, 1967-73.

\*\*\* Budgeted.

\*\*\*\* Estimate using straight line extrapolation of operating statistics through October 30, 1975.

These estimates should be based on historical operating statistics for the dispatching system of each jurisdiction. If such statistics are not available, estimates should be based on "educated guesses" which take account of such factors as the population size and density, the valuation of its public and private property, traffic levels within and through the area, crime levels and trends, etc. The reasonableness of these guesses can be checked by comparing them with the estimates of the other interested jurisdictions, and cross-checked by a procedure described later in this section.

By one means or another it should be possible for the interested jurisdictions to estimate the operating expenses of the centralized systems being considered. However, since total costs are comprised of operating expenses plus capital expenses, some estimate will also be needed for capital expenses such as new equipment and facilities which must be acquired for the system. These estimates should be obtained from communications, architectural and construction specialists.

Once the total costs have been estimated, attention can be focused on how to obtain the funds needed to cover these costs. There are two general classes of funds:

- cash in the form of grants and assessments;
- in-kind (i.e., non-cash) contributions, e.g., free use of a facility.

The sources of these funds may include Federal, state and local governments. Interested jurisdictions should explore the possibilities for such support with appropriate authorities. After determining the likely amount and duration of such support and allowing for other sources of revenue,\* the amount of the total costs to be assessed on the interested jurisdictions can be easily determined. However, this is an aggregate cost--what all the jurisdictions combined would have to pay for a centralized dispatch service. Of more concern to each jurisdiction, most likely, is its individual assessment, not what all jurisdictions combined would have to pay.

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\* Several fire departments in Muskegon County pay a modest charge to have the CPD satisfy their dispatching needs. Similar services may be requested of other centralized dispatching systems.

### *Costs to Individual Jurisdictions*

The distribution of aggregate costs among the interested jurisdictions depends upon the assessment formula developed by them. The principles to be considered in developing this formula have been discussed on a theoretical basis in Section 3.2. This section is concerned with how to apply those principles to a specific situation--estimating what each jurisdiction would have to pay for the dispatching services it would receive from the centralized system.

As previously noted, there are several advantages to basing the first year's assessment on the relative population of each jurisdiction. This figure is known with a high degree of accuracy and is not subject to the vagaries of any estimating process. Determining assessments based on relative populations is a simple process.

First list each interested jurisdiction and its population. The U.S. Census Bureau's population figures are published every ten years and many states conduct their own censuses in "off-years." Unless there has recently been a major change in a jurisdiction's population, one of these sources should provide population figures which are relatively current and generally acceptable. Add these figures to obtain the total population of all the interested jurisdictions combined. Divide each jurisdiction's population by the combined population to determine the relative population of each. Multiply the total assessment by the jurisdiction's relative population to determine its assessment.

If a minimum assessment has been established and a jurisdiction's calculated assessment is less than the minimum, then the process becomes a little more complicated. Assess such jurisdictions the minimum charge, and recalculate the relative populations excluding these jurisdictions. Reduce the total assessment by the amount of the combined minimum assessments and recalculate each jurisdiction's assessment. Repeat this process until the assessment for each jurisdiction is greater than or equal to the minimum assessment.

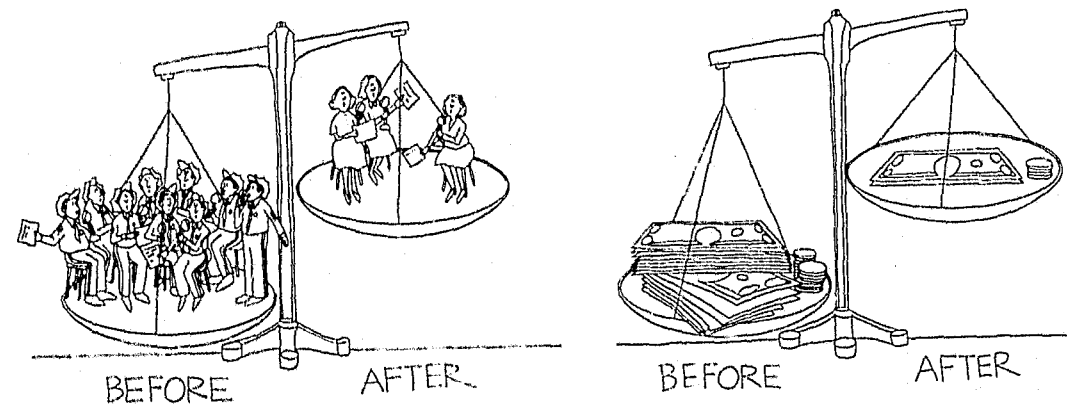
The reasonableness of each jurisdiction's estimate of the Total Service Units which it expects from the centralized system can be checked following a very similar procedure. Instead of using population figures to compute assessments, use the Total Service Unit

estimates of each jurisdiction, following exactly the same procedures. If there are major differences between each jurisdiction's relative population and its relative demand for service units, the estimates for Total Service Units should be reviewed. Although the relative figures obtained by these two methods do not need to match, major differences between them should require an explanation.

If the two figures do match closely, then one may ask, "Why not base assessments on the usage estimates?" Certainly this could be done. It is not recommended for the first year, because assessments are likely to be considered more equitable if based on actual population figures rather than estimated usage figures.

### 6.3 Efficiency

Although sufficient information is not available to permit a comparison of dispatching costs pre- and post-CPD, there is substantial evidence that the CPD has been cost beneficial, i.e., that the benefits derived from the project justify the expenditures of time, money and manpower that went into it. In general, the best support for this statement is the position of the governmental administrators and police chiefs in the nine largest law enforcement



agencies in the county. Eight of these nine\* jurisdictions are apparently satisfied that they are getting more service for less money by using CPD than they would if each attempted to handle its dispatching service individually.\*\*

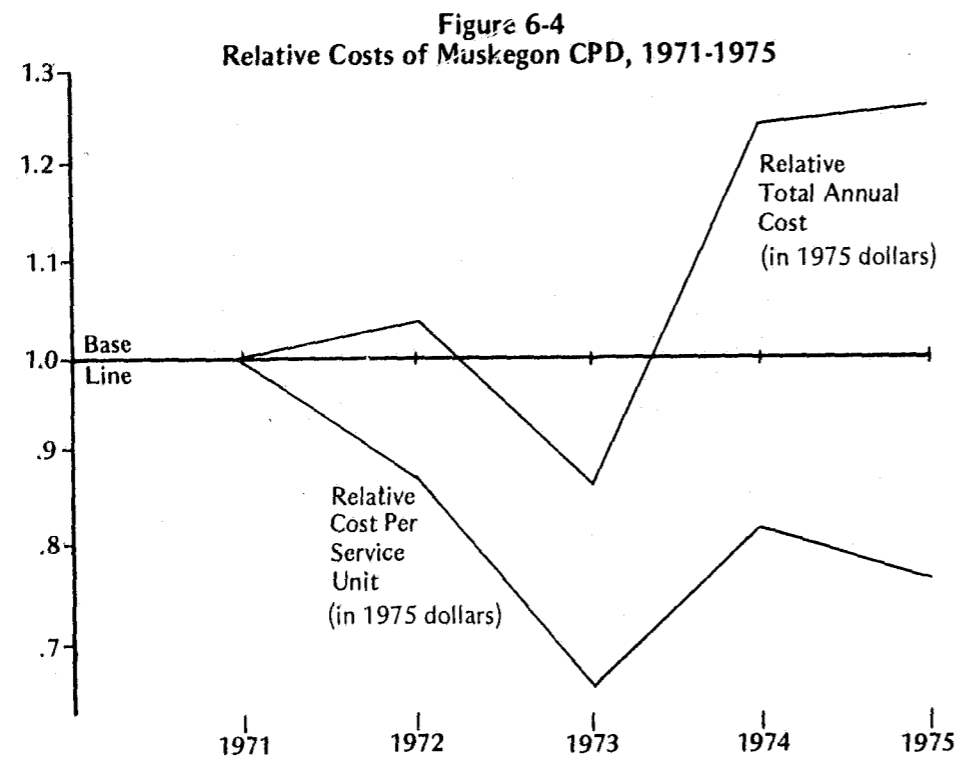
The relative efficiency of CPD operations for the past four years is shown in Figure 6.5. For this analysis, efficiency is measured in terms of total annual cost divided by total annual service units. This approach was used because there was no way to segregate the costs of providing public service units from the costs of providing police service units. It should be noted that all cost figures have been adjusted to 1975 dollars to reflect the effects of inflation. (See Figure 6-3 for all cost and service figures.) These adjustments make the relative efficiency changes from 1971 to 1975 more dramatic than they would be if actual cost figures were used. For instance, using actual costs with no adjustment for inflation, the cost per service unit for 1974 was 92% of the 1971 level. With the adjustment for inflation, the cost per service unit for 1974 is only 81% of the 1971 level. Clearly, there is evidence to support the claim that CPD operations have become increasingly cost-efficient.

### 6.4 Equipment and Facilities Cost

As previously noted, the CPD benefited from several LEAA and matching grants for equipment and facilities improvements. Most of these funds were used to upgrade the mobile communications equipment of the participating jurisdictions. These funds certainly contributed to the improved operation of the CPD but were not critical to its operation, since they were used to replace or improve less sophisticated equipment which could have been used, albeit with less satisfying results. Other funds were used to

\* The ninth jurisdiction receives free dispatching service from the local office of the State Police. However, this option is not feasible or acceptable for most of the agencies participating in CPD.

\*\* If this were not so, the agencies would probably withdraw from COPS. However, it must be acknowledged that some agencies may be accepting CPD service not because they believe it more efficient but because they urgently need other COPS services which they would not receive if they did not receive the CPD service.



purchase equipment, such as the console and wall display system, and to refurbish facilities, without which the CPD could not have begun operating. Interested jurisdictions should recognize the potential need for equipment/facilities investments and address this problem in their feasibility studies.

The table following summarizes CPD expenditures in this area.

**Figure 6-5**

Grant	Amount	Share	
		Federal	State
1	\$139,818	60%	40%
2	\$256,828	75%	25%
3	\$ 50,459	90%	10%

## CHAPTER 7 MONITORING AND EVALUATION

The basic data items needed to monitor and evaluate the CPD dispatch operation have been collected routinely since its inception. These data items have been collected to satisfy the CPD's operational needs. This point deserves emphasis -- the data needed to monitor and evaluate is the same data needed to operate. In this sense the potential for monitoring and evaluating is inherent in any well-run dispatch operation -- whether it is centralized or not.

To realize this potential these data items must be analyzed. It is in this respect that many dispatching operations are deficient. The necessary data is collected and used to satisfy operational requirements, then it is set aside. No attempt is made to analyze trends in the nature of the service provided, or to investigate the reasons for differences in service. It is only when these trends have been identified and investigated that corrective action can be taken to improve the operation of the system. Too often these tasks are not performed because it is mistakenly assumed that they require a highly specialized staff and a computerized data processing system. While it is true that more comprehensive and in-depth monitoring and evaluation can be performed by specialized staff supported by a computerized data processing system, neither is essential for performing basic evaluative functions. Using the CPD as an example, this section shows how routinely collected operating data can be manually processed to satisfy basic monitoring and evaluation requirements.

The monitoring and evaluation system should provide periodic information on how much and what types of services are being provided to whom, and at what costs. The CPD has four types of data available for answering these questions.

First, there is an automatic count of telephone calls received. This is a very simple indicator of services provided to the public. However, as previously discussed, it is inherently imprecise. Although the counts are accurate, there is no automatic way to determine the jurisdiction from which a call originated (who requested service), or the final disposition of a call (what service did the caller receive as a result of the call). Nevertheless, there is strong justification for retaining this feature of the CPD system. It provides useful information automatically and continuously. Although this information is so aggregated that it cannot satisfy operational requirements, it does give a general indication of the services being provided. Suggested forms for the monthly collection and reporting of these counts are provided in Figures 7-1 and 7-2.

The second and third types of data collected by the CPD provide more detailed pictures of what services are provided and to whom. At the end of every month all status cards prepared during the month are manually counted to obtain summary statistics. In addition, the LEIN system automatically provides summary statistics on useage and users. Suggested data collection and reporting formats for these data items are provided in Figures 7-3 through 7-7.

The CPD collects sufficient data on its service units to permit all of these forms to be completed. It also collects other data items which are used exclusively for operational purposes. Further analysis of these items would give a more detailed picture of the services provided by each law enforcement agency. For example, the reason for every traffic and general complaint is specified on the associated status card. Analysis of these reasons for each jurisdiction would provide details on the kinds of services provided. Similarly, by calculating elapsed times from the time stamp data recorded on every Traffic and General Status Card, variations in responsiveness (including "delay time"), could be analyzed by jurisdiction, by reason for complaint, etc. Obviously a computerized data processing system would greatly facilitate such analysis.\*

\* The Standard Police Automated Resource Management Information System (SPARMIS) will soon be introduced as part of COPS' Central Records Unit, providing a major support service to all COPS components, especially to Centralized Police Dispatch. SPARMIS was developed under the sponsorship of Michigan's Office of Criminal Justice Programs in response to the need for modernized crime control in the communities of Michigan. SPARMIS is a modular system which uses a computer to summarize and analyze operating data, i.e. status cards.

Figure 7-1  
Summary of Telephone Calls  
Received During 1975  
year

	This Month	Year-to-Date
January	28,984	28,984
February	24,766	53,750
March	28,816	82,566
April	29,281	111,847
May	31,348	143,195
June	33,363	176,558
July		
August		
September		
October		
November		
December		

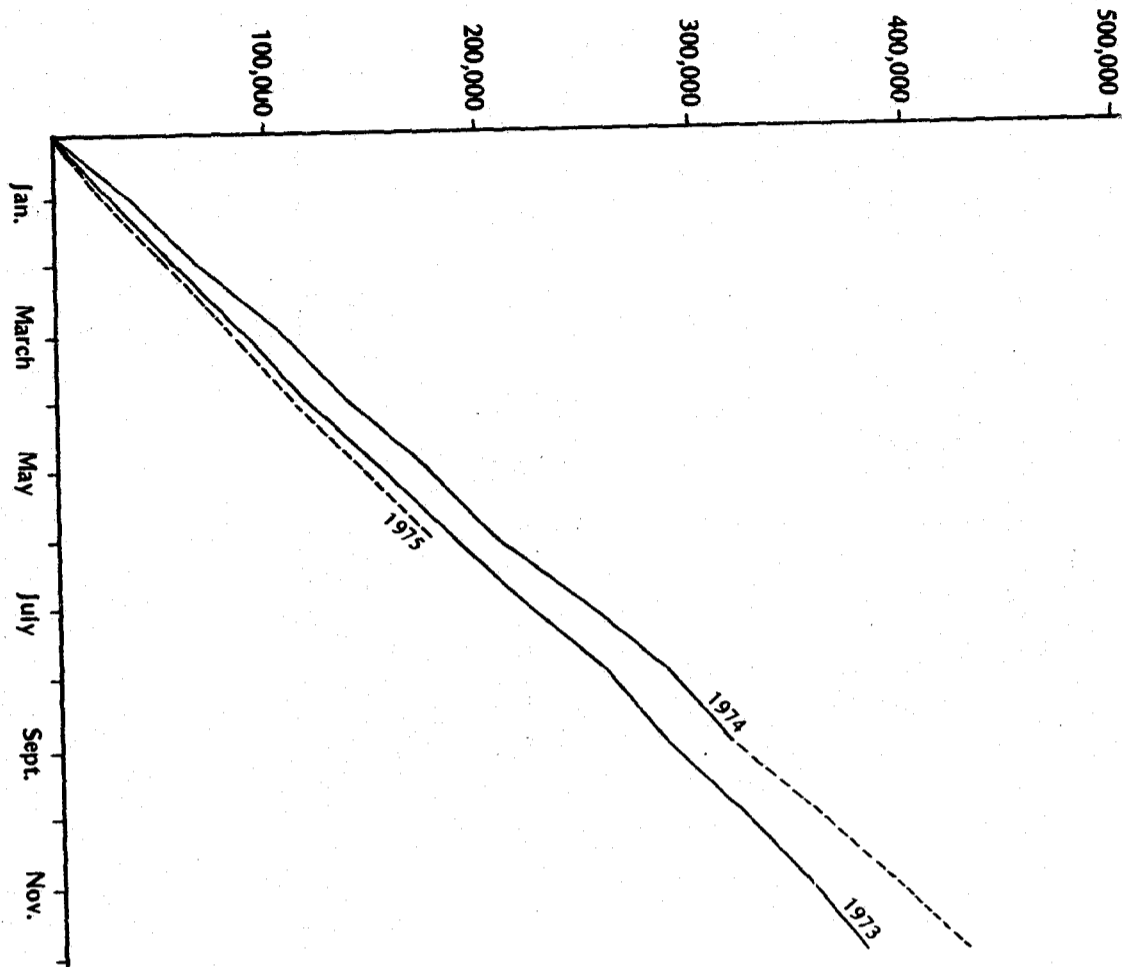


Figure 7-2  
Summary of Telephone Calls Received

Figure 7-3  
Public Service Units Provided During 1975 to all combined  
year jurisdiction

	General Status Cards		Traffic Status Cards		Total Public Service Units	
	This Month	Year-to-Date	This Month	Year-to-Date	This Month	Year-to-Date
January	3174	3174	2027	2027	5201	5201
February	2719	5893	1816	3843	4535	9736
March	3254	9147	1714	5557	4968	14704
April	3567	12714	1588	7145	5155	19859
May	4289	17003	1807	8952	6096	25955
June	4855	21858	1850	10802	6705	32660
July						
August						
September						
October						
November						
December						

Figure 7-4  
Police Service Units Provided During 1975 to all combined  
year jurisdiction

	Administrative Status Cards		LEIN Messages		Total Police Service Units	
	This Month	Year-to-Date	This Month	Year-to-Date	This Month	Year-to-Date
January	4928	4928	15958	15958	20886	20886
February	4528	9456	16755	32713	21283	42169
March	4989	14445	19134	51847	24123	66292
April	5244	19689	18479	70326	23723	90015
May	5332	25021	18802	89128	24134	114149
June	5274	30295	21394	110522	26668	140817
July						
August						
September						
October						
November						
December						

Figure 7-5  
Summary of Services Provided Through June of 1975  
month year

Jurisdiction	Public		Police		Total	
	Number	Percent	Number	Percent	Number	Percent
City of Muskegon	11927	36.5	38486	27.3	50413	29.1
County of Muskegon	4296	13.2	37001	26.3	41297	23.8
Township of Muskegon	2768	8.5	10457	7.4	13225	7.6
City of Muskegon Heights	6161	18.9	22868	16.2	29029	16.7
City of North Muskegon	686	2.1	2804	2.0	3490	2.0
City of Norton Shores	3755	11.5	14224	10.1	17979	10.4
City of Roosevelt Park	667	2.0	4344	3.1	5011	2.9
City of Whitehall	559	1.7	3630	2.6	4189	2.4
Other	1841	5.6	7003	5.0	8844	5.1
TOTAL	32660	100.0	140817	100.0	173477	100.0

Figure 7-6  
Summary of Public Services Provided

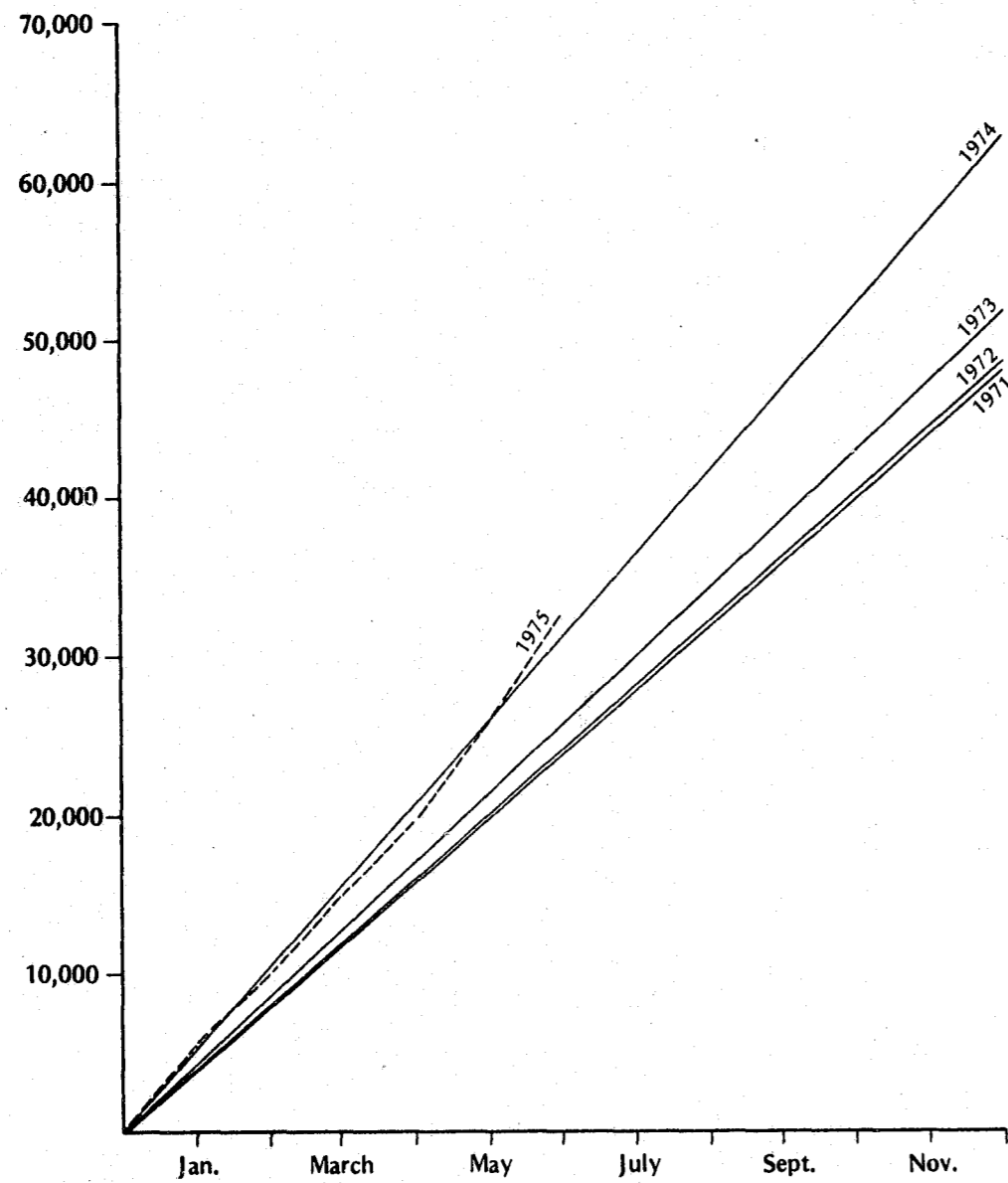
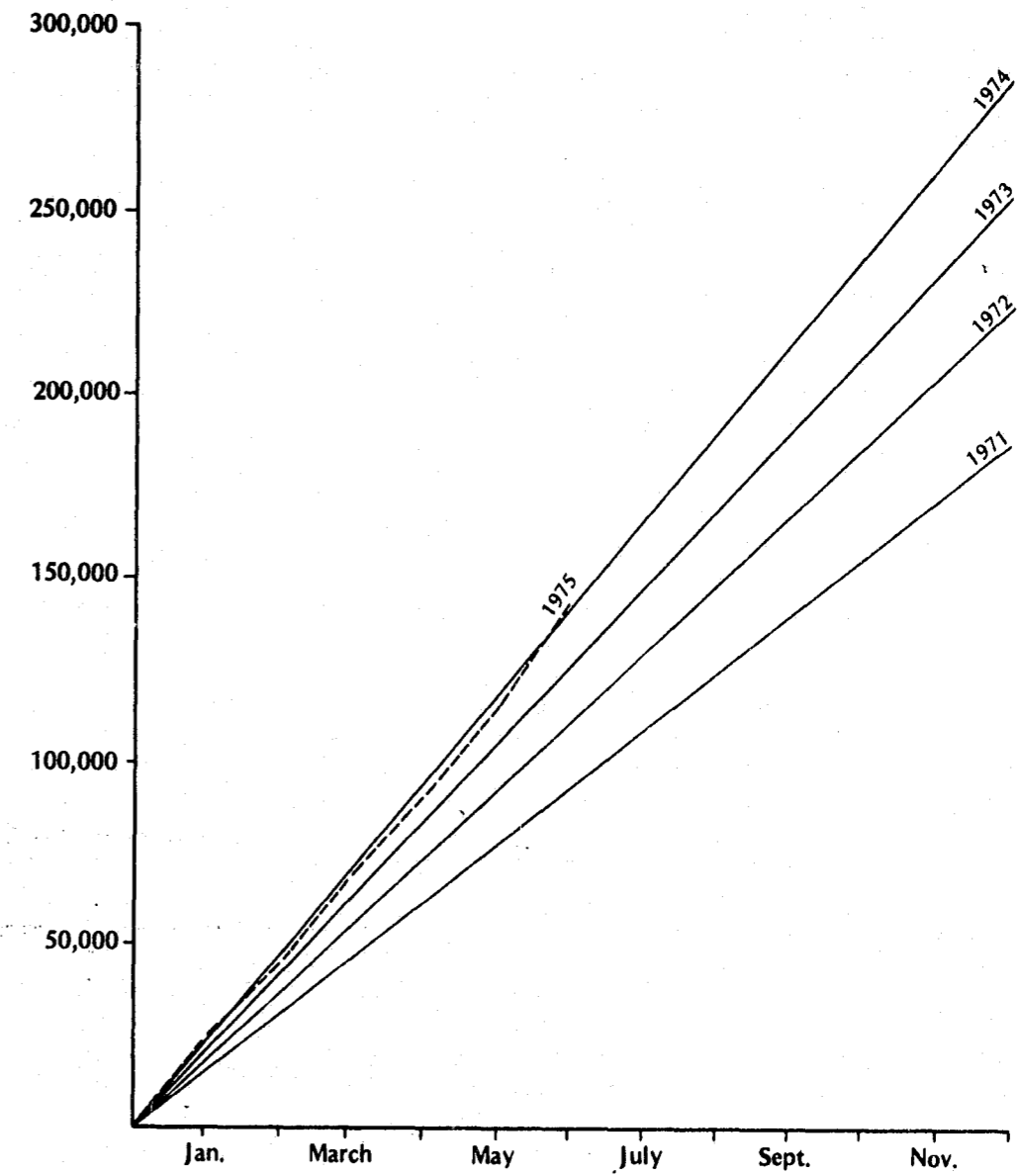


Figure 7-7  
Summary of Police Services Provided



When only manual processing is available, and there is sufficient justification for performing such analyses, they should be performed on a random sample of each jurisdiction's complaints.

The fourth type of data which can be used in monitoring and evaluation is the cost data provided by the CPD's accounting records. These records account for all receipts and expenditures of funds following the traditional methods of double entry bookkeeping systems.

## CHAPTER 8 ESTABLISHING A CENTRALIZED DISPATCH SYSTEM

When interested jurisdictions begin to consider the feasibility of operating a centralized dispatch service, it is hoped they will use this manual as a guide. In addition to this manual, interested jurisdictions should rely on appropriate regional, state and local experts in determining how Muskegon's experiences can be adapted to their specific situations. This chapter provides a discussion of the major steps to be taken in establishing a centralized police dispatching system. It also explores the legal considerations involved in such an effort.

### 8.1 Step-by-Step Approach

Initially, someone must recognize the potential benefits of the service and be sufficiently committed and enthusiastic about the idea to generate interest in it. This person must also have sufficient political and organizational support to assure that action will be taken. This individual could be a Police Chief, Mayor or City Manager, or a similar official in a position of authority. In any case, it is important that key police and city officials in the initiating jurisdiction support the concept, are willing to explore its feasibility and are prepared to "sell" officials in other jurisdictions on doing likewise. It is strongly recommended that representatives of the State Planning Agency (SPA) be advised and involved at this early stage. They may be a source of valuable technical, organizational and financial support and information.

Next, it is necessary to identify the other jurisdictions that logically should be included in a study to explore the feasibility of the centralized service concept. Muskegon's original grant application claimed that:

"Centralized dispatching would be appropriate for any community that has multi-agencies within its area. Two types of areas would not be recommended: inclusion of a very large metropolitan city with its suburban bedroom communities . . . and a very rural community or area with a minimum of agencies plus topographical and 911 applications problems."

Apart from these exceptions there seem to be few constraints on the types and sizes of jurisdictions which could be involved. The important point is, as the National Commission has noted, that the area to be served should be determined "on a geographic rather than jurisdictional basis."\*

There is wide variation among the areas in which centralized dispatching programs have been initiated. In southern California a system is being designed to serve nine jurisdictions covering 27 square miles and a population of over 400,000. In eastern Washington State a system is currently serving 18 law enforcement agencies plus 11 fire districts, covering over 2500 square miles and a population of 265,000. In the Midwest there are at least two systems in addition to Muskegon's. One serves 27 agencies which cover over 500,000 people and 700 square miles within a single county. Another provides service to four agencies and 160,000 people spread over portions of three counties.

Once the jurisdictions have been identified, the concept and potential benefits and costs must be explained to their key police and municipal officials. These officials must be persuaded to participate in a study on the feasibility of the concept for their area. This is certainly one of the most critical steps in the entire process. The feasibility study itself should have two major thrusts, technical and organizational/financial.

The technical aspects should involve the communications specialist from each agency. If a large number of agencies are involved it may be desirable to form subcommittees from among their technical specialists. The subcommittee(s) would conduct the necessary technical studies and submit their reports for review by the other specialists. It may also be desirable, if not essential, to involve independent communications consultants and representatives

\* Op. cit., p. 109.

of major manufacturers of police communications equipment. The latter are usually willing to participate in these studies on a no-cost basis, providing technical support with an obvious interest in selling their equipment. The degree to which they are willing to become involved is highly dependent on their perceived value of the potential sale. The independent consultants are likely to provide a more objective view of the equipment requirements of the centralized system. However, these experts are unlikely to participate in such studies unless they can be paid for their services. The extent to which they can be involved, therefore, depends upon the financial support available to the study from state officials and the interested jurisdictions. Other information sources include the performance standards for police equipment published by the National Bureau of Standards Law Enforcement Standards Laboratory, Washington, D.C. 20234. The technical study should focus on such matters as: number of users and usage levels; available frequencies and frequency saturation problems; equipment availability and compatibility; dispatching facilities, transmitter location, and power requirements.

The organizational/financial study should involve high police and municipal officials from each jurisdiction. Again, it is usually appropriate to form subcommittees especially if large numbers of individuals are involved. However, every effort should be made to have every official participate in some aspect of the study. Unlike the technical study, it is seldom necessary or appropriate to involve outside specialists. The organizational/financial study should focus on such matters as the organizational structure of the service and governing authority; the legal terms of the proposed centralization agreement; staffing requirements and personnel hiring policies; systems and procedures needed to satisfy the requirements of the participating agencies; financial requirements, sources of funds, and alternative assessment formulas. In the interests of time, both the technical and the organizational/financial studies should be conducted simultaneously. They should be run as short-term, intensive efforts rather than long-term, low-key projects which can continue interminably, reaching no conclusions and providing no specific recommendations.

When the studies are finished, representatives of the interested jurisdictions can make informed decisions on the centralization question. Perhaps the studies will indicate that there are no significant advantages to a centralized dispatching service for any of the interested jurisdictions, in which case the discussion can

be quickly closed. More likely, the studies will show some benefits to all the jurisdictions. If all the jurisdictions recognize these benefits and want to proceed with the implementation of such a system, then the next steps are rather obvious and are discussed briefly below. In most instances, however, the decision for or against centralization will not be so clear cut. The steps to be taken in these cases are more difficult to discuss in general terms, but the principles to be applied are those of accommodation and compromise.

The reasons for an agency's opposition must be analyzed in detail, remembering that there may be several reasons, some explicitly stated, and others never voiced. Agency opposition may be based on sound technical, organizational or financial considerations; or, as the National Commission has noted, it may be

" . . . because of the desire to keep police service responsive to local needs (and often for less lofty personal reasons -- jealousy and fear of loss of prestige, for example)."

Regardless of the reasons, representatives of those jurisdictions favoring centralization should explore with representatives of the other jurisdictions, feasible alternatives which would cause them to support a centralized service. If no acceptable resolution is possible, then the jurisdictions favoring centralization must decide whether it is worth pursuing without the others. If it is not, there is nothing more to do. More likely, however, there will still be advantages to proceeding while giving the other jurisdictions the opportunity to join at a later date if they so desire.\*\* As a Muskegon official has noted:

"Because all political subdivisions within a given area do not belong to such an organization, does not prohibit the function of such centralized operations, even though it may impair, to some degree, the total coordination sought."

\* Op. cit., p. 111.

\*\* In Muskegon's case it took three years before one of the largest jurisdictions in the County decided to join.

The final step in establishing a centralized system is to develop and implement a detailed plan which culminates with the installation and operation of the system. Within this step there are several specific tasks to be performed, including developing a detailed budget and implementation schedule; establishing the necessary organizational structures, assigning responsibilities, and hiring and training the necessary staff; obtaining the funds needed to make the plan an operational reality; and, monitoring adherence to the plan's budget and schedule, taking appropriate corrective actions when deviations are observed.

## 8.2 Timing

Although centralized dispatching can be profitably explored at any time, there are additional benefits to be gained when centralization is associated with the implementation of "911." In Muskegon's case centralized dispatching had been operating for almost two years before "911" began to be used in the county. Nevertheless, there was a strong and positive interaction between CPD growth and "911" implementation. The existence of CPD facilitated the introduction of "911" and contributed to the growth in its acceptance and use. This growth then led to further improvements and expansion of services within the CPD.

However, interested jurisdictions should not reject the concept of centralized dispatching simply because the introduction of "911" in their area may be years away. Whenever it comes it will be easier to implement if centralized dispatching is available; and, if it never comes, centralized dispatching will still provide substantial improvements in their service delivery systems.\*

\* Additional information on "911" is provided in Appendix F.

8.3 Legal Considerations

Governmental decisions on centralized service delivery system necessarily involve legal considerations. The two primary concerns in the joint delivery of municipal services are the existence and interpretation of enabling legislation and the preparation of a proper interlocal agreement.

The Enabling Legislation

For two separate governmental entities to exercise their powers jointly, state legislation permitting them to do so must be enacted. This legislation confers upon a municipality, county or other governmental unit the power to act jointly with other such units to provide services, construct facilities, etc. that they are already authorized to do independently. Such legislation is necessary because the power of a municipal corporation is derived solely from the laws of the state, and must be conferred by its charter or the laws which created it, or by other laws, constitutional or statutory. Such powers are always strictly construed.

Enabling legislation can and does take different forms. It may consist of a simple, short, declarative paragraph granting a municipality the requisite power. Or it may limit the grant of power to governmental units of a certain size. It may enumerate the specific powers which can be exercised jointly. Or it may specify the terms to be included in an interlocal agreement, and require that such an agreement be subject to the approval of the state attorney general or other public official.

Based on a preliminary review of state constitutions and statutes, there appear to be only five states which lack the enabling legislation needed to establish a centralized police dispatch system. These states are Delaware, Hawaii, Maryland, Mississippi, and New Hampshire. Jurisdictions interested in establishing centralized services in these states should contact their local legal authorities (e.g., the State's Attorney General) to determine if the necessary enabling legislation exists. They may also wish to explore the possibility of getting such legislation enacted if, in fact, it does not exist.

Before any municipalities consider a joint exercise of their powers, they should be thoroughly familiar with their state's enabling legislation. Such familiarity will save time and trouble in the preparation, ratification, and implementation of an interlocal agreement. The following chart presents the statutory citation for each state's enabling legislation.

Enabling Legislation by State

<u>State</u>	<u>Statute or Const. Act.</u>	<u>Title</u>
Alabama	Code of Alabama Recompiled Sec. 1059 (14bbbb) - Sec. 1059 (14jjjj)	Interlocal Cooperation Act
Alaska	Const. Act 10 Sec. 13 Alaska Statutes Sec. 2948 010(4)	Agreements: Transfer of Powers, General Powers of Municipalities
Arizona	Arizona Revised Statutes 11-951 - 11-954	Joint Exercise of Power
Arkansas	Arkansas Statutes Annotated 14-901 - 14-908	Interlocal Cooperation Act
California	West's Annotated California Codes 6500-6514	Joint Powers
Colorado	Colorado Revised Statutes 88-2-1 - 88-2-3	Contracts for Governmental Services
Connecticut	Connecticut General Statutes Annotated 7-339a - 7-339b	Interlocal Agreements
Delaware	-- -- --	-- -- --

Florida	West's Florida Statutes Annotated Const. Act 8 Sec. 4	Transfer of Pow- ers (requires vote of elector- ate; does not specify joint activity)
Georgia	Code of Georgia Annotated Const. 2-5901	Contracts for use of Public Facilities
Hawaii	-- -- --	-- -- --
Idaho	Idaho Code 67-2327 - 67-2333	Joint Exercise of Powers
Illinois	Smith-Hord Illinois Annotated Statutes 127 Sec. 741 128 Sec. 748	Intergovernmen- tal Cooperation Act
Indiana	Burn's Indiana Statutes Annotated 18-5-1-1 18-5-1-7	Interlocal Co- operation Act
Iowa	Iowa Code Annotated 28E1 - 28E14	Joint Exercise of Powers
Kansas	Kansas Statutes Annotated 12-2901 - 12-2907	Interlocal Co- operation Act
Kentucky	Kentucky Revised Statutes 65-210 - 65-300	Interlocal Co- operation Act
Louisiana	West's Louisiana Revised Statutes 33:1321 - 33:1333	Local Services Law
Maine	Maine Revised Statutes Annotated 30 Sec. 1951 - 30 Sec. 1958	Interlocal Co- operation Act
Maryland	-- -- --	-- -- --

Massachusetts	Massachusetts General Laws Annotated 40 Sec. 4A as amended	Joint Operations of Public Acti- vities
Michigan	Michigan Compiled Laws Annotated 124.501 - 124.512	Urban Coopera- tion Act
Minnesota	Minnesota Statutes Annotated 471.59 436.06	Joint Exercise of Power Joint Municipal Police Depts.
Mississippi	-- -- --	-- -- --
Missouri	Vernon's Annotated Missouri Statutes Const. Act 6 Sec. 16	(Cooperation By local govern- ments with other governmental units)
Montana	Revised Codes of Montana Annotated 16-4901 - 16-4904	Interlocal Co- operation
Nebraska	Revised Statutes of Nebraska 23-2201 - 23-2207	Interlocal Co- operation Act
Nevada	Nevada Revised Statutes 277.080 - 277.180	Interlocal Co- operation Act
New Hampshire	-- -- --	-- -- --
New Jersey	New Jersey Statutes Annotated 40.8A-1 - 40.8A-11	Interlocal Ser- vices Act (8B- 1-9 deals with State aid in this area)
New Mexico	New Mexico Statutes Annotated 4-22-1 4-22-7	Joint Powers Agreements Act
New York	McKinney's Consolidated Law of New York Annotated 119-m - 119-o	Municipal Coop- eration Act

North Carolina	General Statutes of North Carolina 160A-460 - 160A-465  160A-470 - 160A-478	Joint Exercise of Powers Regional Councils of Government
North Dakota	North Dakota Century Code Annotated 59-40-01 - 54-40-09	Joint Exercise of Governmental Powers
Ohio	Page's Ohio Revised Code Annotated 715.02	Joint Municipal Improvement
Oklahoma	Oklahoma Statutes Annotated 74 Sec. 1001 - 74 Sec. 1008	Interlocal Cooperation Act
Oregon	Oregon Revised Statutes 190.007 - 190.030 (city w. city) 190.110 (city w. state agency)	Intergovernmental Cooperation
Pennsylvania	Purdon's Pennsylvania Statutes Annotated 53 Sec. 481 - 53 Sec. 490	Cooperation in Governmental Function (limitation excludes cities of the first law)
Rhode Island	General Law of Rhode Island 45-40-1 - 45-40-4	Interlocal Cooperation Commission
South Carolina	Code of Laws of South Carolina Sec. 1-75	Contracts between local governments
South Dakota	South Dakota Compiled Laws 1-24-1 - 1-24-10	Joint Exercise of Governmental Powers
Tennessee	Tennessee Code Annotated 12-801 - 12-809	Interlocal Cooperation Act
Texas	Vernon's Texas Codes Annotated 4413 (32c)	Interlocal Cooperation Act

Utah	Utah Code Annotated 11-13-1 - 11-13-24	Interlocal Cooperation Act
Vermont	Vermont Statutes Annotated 24 Sec. 4801 - 24 Sec. 4933	Intermunicipal Cooperation and Service
Virginia	Code of Virginia Sec. 15.1 - 21	Joint Exercise of Powers by Political Subdivision
Washington	Revised Code of Washington Annotated 39.34.010 - 39.34.920	Interlocal Cooperation Act
West Virginia	West Virginia Code 8-23-1 - 8-23-9	Intergovernmental Relations-- Contracting and Joint Enterprises
Wisconsin	West's Wisconsin Statutes Annotated 66.30 as amended	Intergovernmental Cooperation
Wyoming	Wyoming Statutes 9-18.13 - 9-18.20	Wyoming Joint Powers Act

### *The Interlocal Agreement*

An interlocal agreement specifies the terms under which the jurisdictions will work together to provide a centralized service. These terms should be jointly developed and accepted by officials of the participating jurisdictions, and be tailored to the type of centralized service being provided. There are, however, general concerns which should be addressed in any agreement. These include the following:

- purpose of agreement
- duration of agreement
- organization and composition of any separate administrative entity to be created

- manner of financial support from participating governments
- manner of disbursement of funds by separate administrative entity
- equitable distribution of any revenue generated
- employment and compensation of personnel
- manner in which purchases will be made and contracts formalized
- acquisition, ownership, custody, operation, maintenance, lease, or sale of real or personal property
- acceptance of gifts, grants, assistance funds, or bequests
- application for federal or state aid
- accountability for liabilities incurred and insurance against such liabilities
- adjudication of disputes or disagreements among participants
- financial accounting procedures.

After an agreement is prepared it must, of course, be ratified by all the participating governments. Ratification procedures will vary from city to city and town to town depending upon the municipality's by-laws. Some public official must be authorized by the interested jurisdiction to sign the agreement on behalf of the jurisdiction. Preliminary approval should be obtained prior to the preparation of the agreement to avoid unnecessary expenditure of time and effort should the governing body of a community not wish to participate in the joint venture. A copy of the interlocal agreement establishing COPS is included in Appendix A as an example that other jurisdictions may wish to use as a guide. Again, it is strongly recommended that the advice of legal counsel should be sought, not only in the interpretation of the enabling legislation, but also in the preparation of the interlocal agreement.

The success of the Muskegon County CPD has demonstrated that cooperative municipal efforts can meet effectively the needs of participating jurisdictions. Such coordinated efforts as illustrated by the entire COPS operation represent a realistic response to satisfying ever-increasing demands for law enforcement and other municipal services.

## APPENDICES

- A. COPS Interlocal Agreement
- B. Employment Standards, Job Descriptions and Notice of Employment Possibilities
- C. Selected CPD Training Bulletins on Dispatching
- D. Sample of CPD Street Index and Legend
- E. LEIN Training Materials
- F. "911" Information

APPENDIX A  
COPS Interlocal Agreement

**CONTINUED**

**1 OF 2**

AGREEMENT TO PARTICIPATE  
CENTRAL OPERATIONS FOR POLICE SERVICES

THIS AGREEMENT is entered into and executed in the name of: County of Muskegon, Cities of Muskegon, Norton Shores, North Muskegon, Roosevelt Park, Whitehall, and Township of Muskegon for the express purpose of cooperating with other governmental agencies within the Muskegon County Area in providing those police services and operations, without regards to territorial boundaries, which shall benefit mutually and equally the citizens of those agencies participating.

Upon execution of this Agreement by the existing membership of Central Dispatch, there shall be established an organization to be known as "Central Operations for Police Services", hereinafter referred to as "COPS". Membership shall be open to other governmental agencies upon execution of this Agreement. The following numbered paragraphs shall comprise the foundation for the organization and operations of this cooperative effort and shall not be amended or changed except by a majority vote of the governing bodies of the participating municipalities.

1. Membership

Membership in "COPS" shall be open to any incorporated city or township in the Muskegon County area having a full-time, paid, law enforcement department, upon execution of a copy of this agreement.

The County of Muskegon shall act as the representative of the unincorporated areas of the county wherein the Sheriff provides law enforcement services.

2. Board of Directors

The legislative division of "COPS" shall be known as the Board of Directors. Each participating governmental agency shall be entitled to appoint a representative to serve on this Board. It is

the intent of this agreement that such appointments will be made from senior elective or administrative officials. However, the selection shall be the individual decision for each participating agency.

Each member of the Board of Directors shall be entitled to one (1) vote in the operations of the Board.

Members shall serve without recompense and shall select from their own membership a Chairman and Secretary. The Board shall establish such rules and regulations for its conduct as it may deem necessary.

All matters brought to the attention of this Board shall be decided by a majority vote of those present and voting, with the exception of financial matters which shall require a two-third (2/3) majority of the entire Board.

The Board shall meet quarterly and at such other times as the membership shall determine.

### 3. Board of Administration

The administrative division of "COPS" shall be known as the Board of Administration. Each participating governmental agency shall be entitled to appoint one representative to serve on this Board. It is the intent of this agreement that such appointments will be made from senior law enforcement officials. However, the selection shall be the individual decision for each participating agency.

Each member of the Board of Administration shall be entitled to one vote in the operation of the Board.

This Board shall be directly responsible for the administration and operation of the functions assigned to it by the Board of Directors. It shall immediately supervise each of the functions assigned to it and shall be responsible for the hiring and firing of such personnel as may be necessary to carry out the specific functions.

This Board shall meet once each month and at such other times as the Board may deem necessary.

Members shall serve without recompense and shall select from its own membership a Chairman and a Secretary. It shall divide itself

into committees with each committee responsible for the day-to-day supervision of one of the functions.

This Board shall review and submit its recommendations to the Board of Directors on annual operating budgets for each of its functions, and such other matters as require a policy decision.

### 4. Functions

It is the intent of this agreement that "COPS" shall be established with three major functions of operations. However, the Board of Directors may from time to time add additional functions as it may deem in the best interests of the agencies involved.

- A. Central Dispatch. Central Dispatch shall be charged with the responsibility of operating a central dispatch system for the law enforcement agencies participating in the central services program. It shall have a Supervisor selected and appointed by the Board of Administration, and such other employees as it may deem necessary. In addition to his supervisory responsibilities, the Supervisor shall prepare the annual budget for the operation of Central Dispatch for submission through the Board of Administration to the Board of Directors. He shall further keep an accurate accounting of the financial operations of his department and shall report monthly to the Board of Administration the financial condition of this function.
- B. Central Narcotics. Central Narcotics shall be responsible for the investigation and apprehension of all narcotics activities within the boundaries of the governmental entities participating. It shall be headed by a Supervisor who shall be responsible to the Board of Administration for the operation of this function. Such Supervisor shall be appointed by the Board of Administration, as shall such additional employees as the Board may deem necessary. In addition to his other responsibilities, the Supervisor shall prepare and submit an annual budget through the Board of Administration to the Board of Directors and shall provide the Board of Administration with monthly accounting of the financial condition of the operation.

## 5. Financing

- A. Central Dispatch. Central Dispatch shall be financed by contributions from each of the participating agencies. Such contributions shall be determined by the formula presently approved and enacted for the year 1972 by the existing Central Dispatch board. This formula is derived by a combination of the percentages of population, assessed valuation, and usage, with a minimum charge to any agency of three percent (3%). This formula shall be utilized in future years with the percentages re-computed annually on the basis of the past 12 months experience.
- B. Central Narcotics and Central Records. Central Narcotics and Central Records shall be funded, primarily, by means of the Emergency Employment Act. Muskegon County shall allocate Emergency Employment funds to those agencies providing personnel to man these operations. Such actual cash outlays as may be necessary for matching funds for LEAC grants or "buy money" shall be provided by the participating agencies. This allocation shall be on a population basis except that the share allocated to Muskegon County shall be determined on the basis of the unincorporated population plus 10% of the incorporated population. In effect, each participating agency shall have its proportionate cost reduced by ten cents on each dollar and Muskegon County will pay the balance necessary.

## 6. Continuation

In the event that the Emergency Employment Act shall expire and funds shall no longer be available for the operation of Central Narcotics and Central Records, these functions shall cease to operate unless, by mutual agreement of the participating agencies, a plan of financing can be agreed upon.

Muskegon County hereby agrees that, upon approval of the Board of Administration, it would place the question of a county-wide millage vote to support these functions before the citizens of Muskegon County. It would be the intent of such an election to replace the Emergency Employment Funds with a county-wide supported mill levy.

## 7. Dissolution of Central Dispatch

Upon the creation of "COPS" it will no longer be necessary to operate Central Dispatch under the existing agreement. Therefore, upon execution of this Agreement, the governmental agency entitled herein agrees that its existing agreement with Central Dispatch shall become null and void and that this new organization shall replace the existing Central Dispatch Board.

## 8. Right of Withdrawal

Each participating agency shall retain the right to withdraw from "COPS" at any time. Such withdrawal must be by a formal majority vote of the governing body of such participating agency and shall become effective sixty (60) days after such vote has been taken in formal session. The financial obligations as hereinbefore determined shall cease as of the termination date indicated above.

## 9. Termination of Organization

Upon termination of the Organization for any cause, all obligations and creditors of the Organization shall be satisfied and an accounting made of all assets, whereupon said assets shall be allocated to the then participating governmental agencies in equal liquidated values or in kind, and all relevant data, records and files shall be distributed to the respective governmental agencies.

APPROVED AND EXECUTED THIS \_\_\_\_\_ day of \_\_\_\_\_, 1972  
IN ACCORDANCE WITH THE CERTIFIED RESOLUTION ATTACHED HERETO.

\_\_\_\_\_  
Chairman, County Board

\_\_\_\_\_  
County Clerk

## APPENDIX B

Employment Standards, Job Descriptions  
and Notice of Employment Possibilities

The minimum employment standards for employees of Central Dispatch as established and adopted by the Central Dispatch Commission.

#### STANDARDS

Be a citizen of the United States.

Minimum age of (18) eighteen years.

Graduation from high school or equivalent. Equivalent defined as having attained a passing score on the General Education Development test indicating high school graduation level.

Fingerprinting of applicants with a search of local, state and national fingerprint files to disclose any criminal record.

The applicant shall not have been convicted of a felony offense.

Good moral character as determined by a favorable report following a comprehensive background investigation covering school and employment records, home environment, personal traits and integrity. Consideration will be given to any and all law violations, including traffic and conservation law convictions and indications of a lack of good character.

Acceptable physical, emotional and mental fitness as established by a licensed physician following examination to determine the applicant is free from any physical, emotional or mental condition which might adversely affect his performance of duty.

The applicant shall possess normal hearing and normal color vision. He/she shall be free from any impediments of the senses. He/she must possess normal vision functions and visual acuity in each eye acceptable to performance of assigned duties. The applicant shall be free from any chronic disease, organic diseases, organic or functional conditions, or mental instabilities which may tend to impair efficient performance of duty or which might endanger the lives of others or himself/herself if he/she lacks these qualifications.

A declaration of the applicant's medical history shall become a part of the background investigation. The information shall be made available to the examining physician.

An oral interview shall be held by the hiring authority or his representative, to determine the applicant's acceptability for a position as applied for and to assess appearance, background and ability to communicate.

CENTRAL DISPATCH ADMINISTRATOR

General Statement of Duties:

To be responsible for the activities of the Central Dispatch System; to plan, supervise and coordinate employee recruiting, employee training, telephone operation, dispatch operation, budgeting and purchasing.

Supervision Received:

Work is performed under the general supervision of the Central Dispatch System Commission.

Supervision Exercised:

Supervision is exercised over Shift Supervisors and other personnel during the shift worked by the position.

Typical Examples of Work:

Prepares annual budget for the system. Consults with heads of member police departments on all aspects of the operation.

Directs the acquisition of supplies and equipment.

Supervises all record keeping.

Handles personnel procedures and problems.

Interviews all personnel seeking employment.

Investigates complaints about system activities.

Coordinates activities with other member police departments.

Keeps the Central Dispatch Commission fully advised on all aspects of the operation, including financial status, current problems, and future needs.

Prepares operating and financial reports.

Evaluates performance of all personnel.

Desirable Qualifications for Employment:

Considerable knowledge of police work and police communication systems.

Considerable knowledge of general administrative procedures and techniques.

Ability to supervise others effectively.

CENTRAL DISPATCH ADMINISTRATOR  
(con't)

Ability to prepare and administer an annual budget.

Ability to work effectively with other officials, employees and the general public.

Ability to prepare and analyze effective financial and activity reports.

Desirable Training and Experience:

Any combination equivalent to graduation from high school and several years of experience in a responsible supervisory capacity. Preferably training and experience should be related to police-oriented activities.

## SHIFT SUPERVISOR

### General Description

An employee in this class, under the direction of the Administrator, supervises the daily activities of the shift; and performs related work assignments.

### Examples of Work

Assists the Administrator in supervising the work of the department.

Assists the Administrator in formulating departmental policies and procedures.

Makes decisions concerning complicated situations or problems submitted by subordinate personnel

Receives and supervises the receiving of citizens' complaints, determines if they are of a criminal or civil nature and takes appropriate action.

Reviews actions of subordinates and determines whether or not proper departmental action has been taken.

Keeps the Administrator informed on general police conditions, important developments, serious crimes, criminal conditions, and unusual occurrences taking place that may require departmental actions.

Represent the Administrator at communication or law enforcement functions, as required.

Assist the Administrator in the selection of department personnel.

Participates in the department's inservice training program.

Capable of operating all equipment available to dispatchers.

Conducts correspondence and maintains records related to work.

## SHIFT SUPERVISOR (con't)

### Experience and Education Requirements

#### Education

Graduation from high school

#### Experience

Five years police experience or other outstanding features.

#### Other Requirements

Physical condition adequate for performance of the work

Tact and similar qualities necessary in meeting and dealing effectively with others.

Knowledge of laws and law enforcement.

Knowledge of command responsibility in police work.

Knowledge of contemporary methods of criminology.

Knowledge of the principles and practices of personnel administration including recruitment, selection and ability to assist in training.

Ability to direct, instruct, and control men/women in dispatch operation.

Ability to assign and coordinate police activities on a county wide basis.

Ability to create and maintain favorable public relations.

Ability to interpret and apply laws, rules and regulations relative to the work.

Ability to conduct departmental organization and operation studies.

Ability to perform all the duties of a Dispatcher and/or LEIN Operator.

General Description

An employee in this class serves as radio dispatcher and/or LEIN operator and performs clerical and other related work.

Examples of Work

Operates the dispatch desk.

Receives, transmits and reroutes teletype messages between agencies and other switchboard centers.

Receives complaints and accident reports from the public.

Dispatches patrol cars and emergency vehicles.

Monitors state and local police radio frequencies to intercept and relay information regarding crimes and disasters.

Receives and initiates broadcasts concerning stolen cars, wanted criminals, hold-ups, and missing persons.

Initiates and transmits messages requesting information regarding driving and records and vehicle records.

Maintains teletype log sheets, the stolen car file, the wanted persons file, and other related records.

Performs minor maintenance on the teletype equipment.

Performs related duties.

Experience and Education Requirements

Education

Graduation from high school or equivalent General Educational Development tests may be substituted for high school graduation.

Training in the operation of General Office Equipment with minimum typing speed of 40 words per minute.

Experience

Two years of office experience which shall have involved the satisfactory full-time operation of office equipment.

Other Requirements

Physical condition adequate for performance of the work

Judgement and coolness in emergencies.

Tact and similar qualities necessary in meeting and dealing effectively with others.

Willingness to participate in inservice training.

Willingness to work on a rotating shift basis.

Ability to write and speak effectively.

Knowledge of laws and their enforcement.

Knowledge of courts and court procedure.

Knowledge of departmental policies, rules, and regulations.

Knowledge of equipment used and its care.

Knowledge of dispatch procedures.

Knowledge of state highways and of county and city streets.

Ability to meet new situations and to act as quickly as required.

Ability to meet the public and gain the cooperation of others.

Ability to maintain favorable public relations.

Ability to follow oral and written instructions.

Ability to exercise judgement in the performance of clerical routines.

PUBLIC NOTICE OF OPEN COMPETITIVE EXAMINATION

CENTRAL DISPATCH

Division of

Central Operation for Police Service

980 Jefferson, Muskegon, MI 49440

EMERGENCY COMMUNICATIONS OPERATORS . . . . . \$6,661 to \$8,099

"An Equal Opportunity Employer - M/F"

GENERAL DESCRIPTION

An Employee in this classification performs as a Emergency Telephone Operator and/or Radio Communications Operator and/or LEIN Teletypewriter.

DESIRABLE QUALIFICATIONS

High school graduation or G.E.D.; Ability to type 30 words per minute; Ability to think and act promptly in emergencies; Ability to speak clearly and distinctly at all times; Ability to reduce rambling and disconnected material into concise and accurate messages; Ability to analyze a situation accurately and to take or suggest an effective course of action; Physical and mental ability to work effectively under all conditions encountered.

EXAMINATION PARTS

A qualifying typing performance and filing test will be given before proceeding with the below parts of the examination.

Written Examination . . . . . Oral interview upon passing.

Voice Test

HOW TO FILE APPLICATION

Applications must be made on forms which may be secured at the Civil Service Office, City Hall, Muskegon, MI. Applicants will be notified when and where to appear for examinations.

LAST DATE FOR FILING APPLICATIONS FOR TESTING IN MARCH 1975

Tuesday - March 25, 1975 - 5:00 p.m.

Further information may be obtained by telephoning 722-3524, CENTRAL DISPATCH Administrative Office.

Muskegon County Central Dispatch Authority  
Michael W. Gaunt, Director

Public Notice

Dated: March 10, 1975

APPENDIX C

Selected CPD Training Bulletins  
on Dispatching

CENTRAL DISPATCH

PREFACE

Policies, procedures, rules and directives which, at the time of their promulgation are intended to be of a permanent nature shall be published on the adoption of the Administrative Board of Central Operations for Police Services.

These directives are intended for the guidance of members to insure a uniform method of communications procedures and shall govern the administration of this organization.

From time to time as the circumstances warrant, these written policy directives may be amended, revoked, add or otherwise revised. A copy of any such additions or revisions will be forwarded to each member for insertion in this manual and it shall be his/her duty to maintain this manual up-to-date.

In establishing such written policy directives it is impossible to anticipate every possible situation, however, the lack of a policy or rule shall not lessen the requirement that good discretion and judgement must be exercised in the performance of your duty at all times.

It is important that all members of this organization shall familiarize themselves with all policy directives and lack of knowledge of such directives shall, in no case, constitute excusable grounds for disobedience or nonobservance of any written policy directives.

With the issuance of this manual or portions thereof, all previous procedures, policies, rules and written directives in conflict are hereby revoked.

Michael W. Gaunt  
Central Dispatch Director  
April 1, 1975

CENTRAL DISPATCH

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\* Excerpted from CPD Policy and Procedures Manual from which samples have been selected.

POLICY



STATEMENT

SUBJECT: Release of information to News Media

- I. The Muskegon County Central Dispatch Center receives information and dispatches cars to almost every incident that occurs in the County. It should also be kept in mind that most news media have monitors which are constantly manned; and when they hear a call of particular interest, they will call and attempt to get further information.
- II. The Director and/or Supervisor of Central Dispatch are authorized to furnish information to bona fide members of the news media regarding incidents of interest.
- III. The following policy shall prevail relative to news media inquiries:
  - A. If a call is received at the Center requesting information concerning a certain incident, the caller shall be referred immediately to the Center Supervisor.
    1. Authorized Center personnel will restrict their release of the information to the following extent and content.
      - a. That the particular incident has been reported.
      - b. The location of such incident.
      - c. The name of the agency having jurisdiction over the incident.
      - d. Advise that pertinent information will not be available for a \_\_\_\_\_ period of time, when so advise by the jurisdictional agency.
  - B. If the news media should call and request to know if anything newsworthy has occurred, they should be referred to the Center Supervisor who may advise of incidents that might be of interest and the agency that handled it.
    1. If they are told of a particular incident and request more information, they shall be referred immediately to the investigating agency.

July 2, 1975  
Adopted COPS

Number 8.1

C. Center personnel should not put themselves in a position where a friendly news man talks on the telpehone long enough to elicit the information he or she wants.

D. All news information released through Central Dispatch shall be of an unofficial nature until verified by the agency having jurisdiction over the incident.

July 2, 1975  
Adopted COPS

Number 8.1

## POLICY

July 2, 1975  
Adopted COPS



## PROCEDURE

Number 2.1

SUBJECT: Lunch break, duration and location

POLICY: Central Dispatch personnel are allowed an allotted amount of time for the purpose of obtaining a lunch break.

RULE: All personnel working a straight eight (8) hour shift are entitled to one lunch break.

### Duration of break:

1. A lunch break not to exceed thirty (30) minutes duration to be taken as near as possible to the fourth of such scheduled shift.

### Location of break:

1. Personnel at their option shall either utilize the Central Dispatch lounge or the Muskegon City Hall coffee lounge for the purpose of their lunch break.

PROCEDURE: The following listed procedures shall be considered as further extensions of the RULE.

When personnel are going to take advantage of a lunch break, they must comply with the following:

1. Advise on-duty Supervisor of their intent-location of such lunch break and to receive acknowledgement of approval before such break is taken.
2. Shall be required to log on their status card the time of such break. Personnel shall be responsible for curtailing their break to the time allotted.

RESTRICTIONS: 1. Not more than one (1) personnel member shall be granted a lunch break at one time.

2. During periods of emergency situations, the Supervisor may terminate any personnel's lunch break and/or assign said lunch break period at the convenience and smooth operation of the Center.
3. No eating of food will be allowed at the console positions.



## TRAINING BULLETIN



Number 75-0

### TRAINING BULLETINS

April 1, 1975

Commencing with this bulletin all numbered Training Bulletins must be retained permanently by each member of Central Dispatch. Personnel shall be responsible for the content of the numbered bulletins.

The Training Bulletin will be an informal yet official, publication of Central Dispatch, covering such subjects as the following:

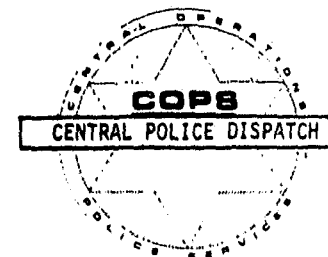
1. New Departmental Procedures;
2. New Equipment;
3. Information concerning activities of COPS Agencies; and
4. Information needed to assure a proper and uniform method of operation.

Supervisory personnel will distribute the bulletins to each member at the beginning of their work shift. The bulletin will be handed to each individual member personally. The Supervisor shall be responsible for reviewing the contents of the bulletin with members under his/her direction.

It will be the duty and responsibility of each dispatch member to maintain all numbered bulletins in the section provided of the Manual of Policy and Procedures. Up-to-date Manuals will also be kept at each position.

Michael W. Gaunt  
Central Dispatch Director

NUMBERED BULLETINS SHALL BE RETAINED BY ALL MEMBERS OF CENTRAL DISPATCH



## TRAINING BULLETIN



Number 75-1

April 1, 1975

### WHERE-WHAT-WHEN-WHO-HOW MANY

Quite often a dispatcher will describe a detail to a mobile unit, giving the entire case in detail over the radio. So frequently does this occur that for the most part, in many areas, the field officers have come to expect it. Not only is this additional information not desirable, but it is also prohibited by Sections 13.66 (FCC Rules and Regulations). "No licensed radio operator shall transmit unnecessary . . . or superfluous radio communications or signals."

The following guidelines have been carefully prepared to assure that the Police Officer responding to the call has the most complete and accurate information available, without giving complete detail of the message contents. Remember, the most important information is WHERE DID IT HAPPEN. If we have a location and the caller is disconnected or too excited to give further information, we can always send a car.

#### 1. WHERE DID IT HAPPEN (where police are to go)

- A. Address
- B. Cross Street
- C. Front, rear, side
- D. Single home or two-family
- E. If four family:
  1. Up or down
  2. Right or Left
- F. If apartment:
  1. Apartment number
  2. Floor number
- G. If Project:
  1. Address
  2. Building number
  3. Unit number
  4. Apartment number
  5. Floor number

NUMBERED BULLETINS SHALL BE RETAINED BY ALL MEMBERS OF CENTRAL DISPATCH

2. WHAT HAPPENED

- A. Concise description of what happened
- B. Do they need Ambulance, Fire, Police, etc.
- C. Is a weapon involved

3. WHEN DID IT HAPPEN

- A. In progress
- B. Just happened
- C. Report (hours or days later)
- D. Attempt situation

4. WHO DO THE POLICE MEET (who will be at the scene)

- A. Meet a man/woman/child
- B. Meet the owner/manager
- C. Meet the driver
- D. Meet the officer

5. HOW MANY ARE/WERE INVOLVED

- A. Single person, two, three, etc.
- B. Large crowd/gang

An example of utilizing the above guidelines in giving out the message might be the following:

"A suspicious man . . .  
there now . . .  
see the woman . . .  
4273 Sunshine Drive near Centerline"

It can be readily seen how much more orderly and concise this message is than the following:

"Contact Mrs. Fannie Price, P-R-I-C-E, at 4273 Sunshine Drive. The nearest cross-street is Centerline. Mrs. Price reports a suspicious man has been hanging around the neighborhood for the last half hour."



**TRAINING BULLETIN**



Number 75-3  
November 1, 1975

**GENERAL PROCEDURE  
MOBILE AND BASE STATION**

Pronounce words distinctly and rather slowly. The normal dispatch rate should be between 40 and 60 words per minute. When putting a somewhat lengthy message on the air, break it up into phrases of several words and repeat each phrase. On short dispatches, the whole dispatch may be given and then repeated. Remember, the receiving operator has to have time to write down what you are saying.

Lengthy transmissions should be broken up at thirty second intervals by the operator, using the word "break" and shutting off his transmitter. This allows the receiving operator to keep up and obtain the information or if unable to receive, ask for a repeat. This also allows any other station on the net which may have emergency traffic to break in and get the traffic through without delay.

Make your voice as emotionless as possible on the air, regardless of the situation. Emotion tends to distort the voice and render it incapable of being copied. Excitement in a tense situation will make the voice rise and cause you to start shouting. Also, when you show anger on the air, you only become the laughing stock of those who listen to you. Don't try to be humorous on the air. It never sounds as funny as you think it does and only clutters up the air, the same as throwing litter on the highway. Maintain good self-control. Attempt to make your voice a regular monotone. Police messages require no expression but a high degree of intelligibility.

Keep your face near the microphone, within four or five inches. Speak in an ordinary but firm tone of voice, neither mumbling nor shouting. Let the radio do the work for you. By shouting you are

NUMBERED BULLETINS SHALL BE RETAINED BY ALL MEMBERS OF CENTRAL  
DISPATCH

only defeating yourself, because above a certain level of modulation the signal becomes distorted and unreadable.

Be impersonal on the air. Never use "I" in referring to yourself. Refer to members of the department and other police officers by the proper title or rank and name, never by name alone. Do not use first names or nicknames. Police radio stations are not licensed for person-to-person communications.

Don't guess. Check all doubtful words, names and locations, etc., with sending operator. Never approve a message until definitely sure it is correct in every detail.

Choice of words in making up a message determines, to a large extent, whether the receiving operator will copy it correctly the first time, or find it necessary to ask for repeats. Unnecessary words which do not affect the meaning of the message should be avoided. Choose words that are distinct and forceful in sound and that convey a definite meaning. Keep messages and dispatches as short and to-the-point as possible but still give all the information necessary without rambling. Use the police phonetic alphabet in spelling difficult names of persons and places.

## APPENDIX D

Sample of CPD Street Index and Legend

LEGEND

Blue Lake Township	BL	BLFD
Casnovia Village	CV	CSFD
Casnovia Township	CT	CSFD
Cedar Creek Township	CC	TWFD
Dalton Township	D	DF & TWFD
Egelston Township	E	EGFD
Fruitland Township	FRL	MTFD & MNTG
Fruitport Township	FT	FPFD
Fruitport Village	FV	FPFD
Holton Township	H	HFD
Lakewood Club	LC	DFD
Laketon Township	LT	MTFD
Muskegon City	M	MFD
Muskegon Heights	MH	MHFD
Muskegon Township	MT	MTFD
Montague City	MC	MNTG
Montague Township	MONT	MNTG
Mooreland	MOOR	MRFD
North Muskegon City	NM	NMFD
Norton Shores City	NS	NSFD
Ravenna Village	RV	RVFD
Roosevelt Park City	RP	NSFD
Ravenna Township	FT	RVFD
Sullivan	S	FPFD
Whitehall	W	WHFD
Whitehall Township	WT	WHFD
White River Township	WR	MNTG

STREET NAMES	POLITICAL UNIT	FIRE DEPT.	NUMBERS	(6)							LOCAL
				7	6	5	4	3	2	1	
Annette	MT	MTFD							236	235	
Antisdale Rd.	NS	NSFD						424	411	411	
Apple Avenue	M	MFD	W 1-200	111	111	111	111				
			E 0-176	117	111	111	111				
			E 195-387	117	114	112	112				
			E 400-796	117	113	112	112				
			E 801-1400	113	113	112	112				
			Even E 1400-1500	113	112	112	112				
			Odd								
Apple Avenue	MT	MTFD	1401-1501						235	235	
			1600-4000						235	235	
		EGFD	4000-7200				880	880	881		
		EGFD	7200 Out				882	882	881		
		MRFD	8800-13600				882	882	881		840
		CSFD	13600-18400				882	882	881		840
Applewood	NS	NSFD						424	411	411	
Arbor	NS	NSFD						411	411		
Argyle	E	EGFD					880	880	881		
Arlene	E	EGFD					882	882	881		
Arlington	BLT	BLFD					884	883	883		
Arlington	M	MFD		116	116	115	115				
Arlington Rd.	RP	nsfd								605	
Armstrong	NS	NSFD						424	411	411	
Arnim	BLT	BLFD					884	883	883		
Arnold	FT	FPFD					880	880	881		830
Arnoldi	LT	MTFD					884	883	883		820
Arthur St.	M	MFD		117	114	113	113				
Arva	MONT	MNFD					884	883	883		MONT
Ash Avenue	RP	NSFD								605	

APPENDIX E  
LEIN Training Materials

# POLICY



# STATEMENT

TO: Central Police Dispatch Personnel and Participating Agencies of "COPS"

SUBJ: LEIN Usage - "System Security"

FROM: Michael Gaunt, Director, Central Police Dispatch

Recently there has been some misunderstanding on the part of Central Police Dispatch personnel, specifically LEIN operators, as to who may utilize the LEIN System and under what circumstances.

Section 2.2 of the LEIN Operators Manual states that data stored in the LEIN and other interfaced law enforcement and/or other criminal justice systems (NCIC) must be restricted to the use of police and other authorized Criminal Justice agencies. LEIN operators and agency heads must be extremely cautious to assure that information is given only to authorized persons.

## Who may utilize the LEIN System:

On-duty or off-duty officers may utilize the system providing that the requestor (officer) can be readily identified by the LEIN operator. If the officer appears in person, there should be no problem in making proper identification. If the request for LEIN usage is made by phone, the LEIN operator should honor that request only if there is no question as to the identity of the person who claims to be a police officer. If the LEIN operator is not positive that the caller is a police officer, the caller should be advised to make his request through one of his department's on-duty command officers.

## Who may not utilize the LEIN System:

Persons who are not authorized to access the LEIN and interfaced systems generally would include but would not necessarily be limited to:

April 23, 1975

1. Insurance Personnel
3. Private Attorneys
5. The General Public

2. Private Business
4. Private Investigators

Agency heads, LEIN operators, and officers using the system must adhere to the rules in effect regarding System Security to insure against misuse of the System. Violations could result in the removal of this agency's LEIN terminal.



## TRAINING BULLETIN



Number 1975

### GUNS

A check with East Lansing Operations thru LEIN for registration or stolen on guns.

A check on all guns should be made through NCIC, with

1. Serial Number
2. Make
3. Model
4. Caliber

This will give information of stolen or wanted guns from all over the United States.

East Lansing Operations handles only Michigan information.

### STOLEN PROPERTIES

A check with East Lansing Operations for any report of stolen property may be requested with

1. Make
2. Model
3. Serial Number

A check with NCIN can be obtained with information of type of article, Serial number and brand name.

NUMBERED BULLETINS SHALL BE RETAINED BY ALL MEMBERS OF CENTRAL  
DISPATCH

#### VEHICLE INFORMATION

Query of license plate will provide the following information:

10-28      Owners name  
            Owners address and city  
            State will be specified if not Michigan  
            Year, make, and body style

Out of state plates can be queried for stolen and wanted in Michigan. Registration information may be obtained also, but slight delay for out of state responses.

10-28 Query of Vehicle Identification Number will show if stolen or wanted.

Registration by VIN may be obtained, if year and make is given, from the Secretary of State thru LEIN.

From the license number the insurance information and entire vehicle record, plus the registration may be obtained thru LEIN.

#### QUERY ON PERSONS

10-29

Request for check on person(s) for any wanted:

e.g. Traffic warrants, (not including parking tickets); misdemeanor warrants; felony warrants; or miscellaneous warrants (e.g. missing persons, etc.) may be obtained on LEIN.

##### Information needed:

Name:            Need first, middle (if any), last and any suffix, e.g., Jr., etc.

Race Sex:        Race is white, Indian, Chinese, Negro, Japanese, Mexican.

Date of Birth  
or Age:          Preferable date of birth. Information can be obtained from age, however, date of birth will give response from NCIC.

For more precise information when similar names and physical descriptions, it is advisable to submit Social Security Number and/or Drivers license number.

#### DRIVERS INFORMATION

10-27 or Query on persons with suspended, revoked, denied, etc., drivers license use the following information:

Name:            Need first, middle (needed in this case if none advise no middle name), last name and any suffix: Jr. or Sr., etc.

Race Sex:        Male/Female    White, Negro, Indian, Mexican, etc.

Date of Birth  
or Age:          00/00/00

Drivers license number should be submitted if available.

The following information may be obtained:

Status of license  
Complete driving record  
License information  
Current address

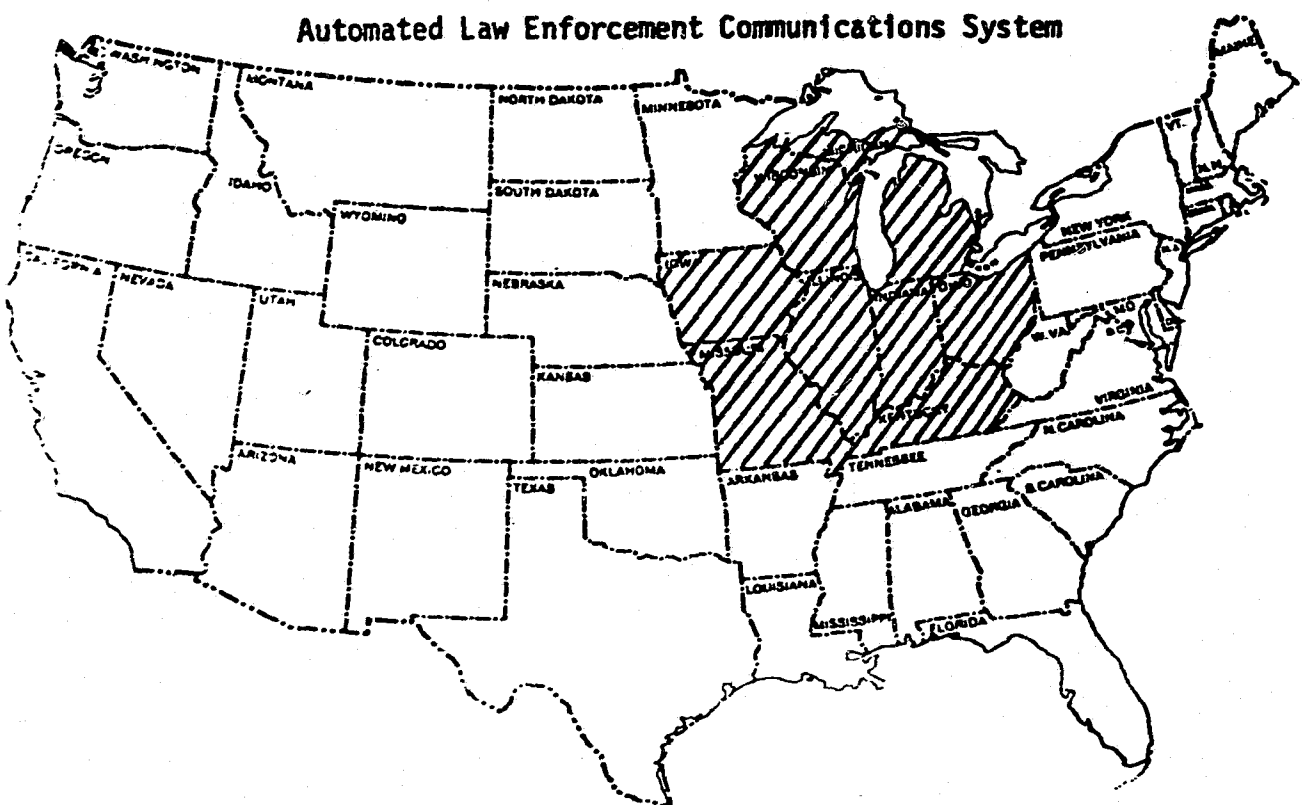
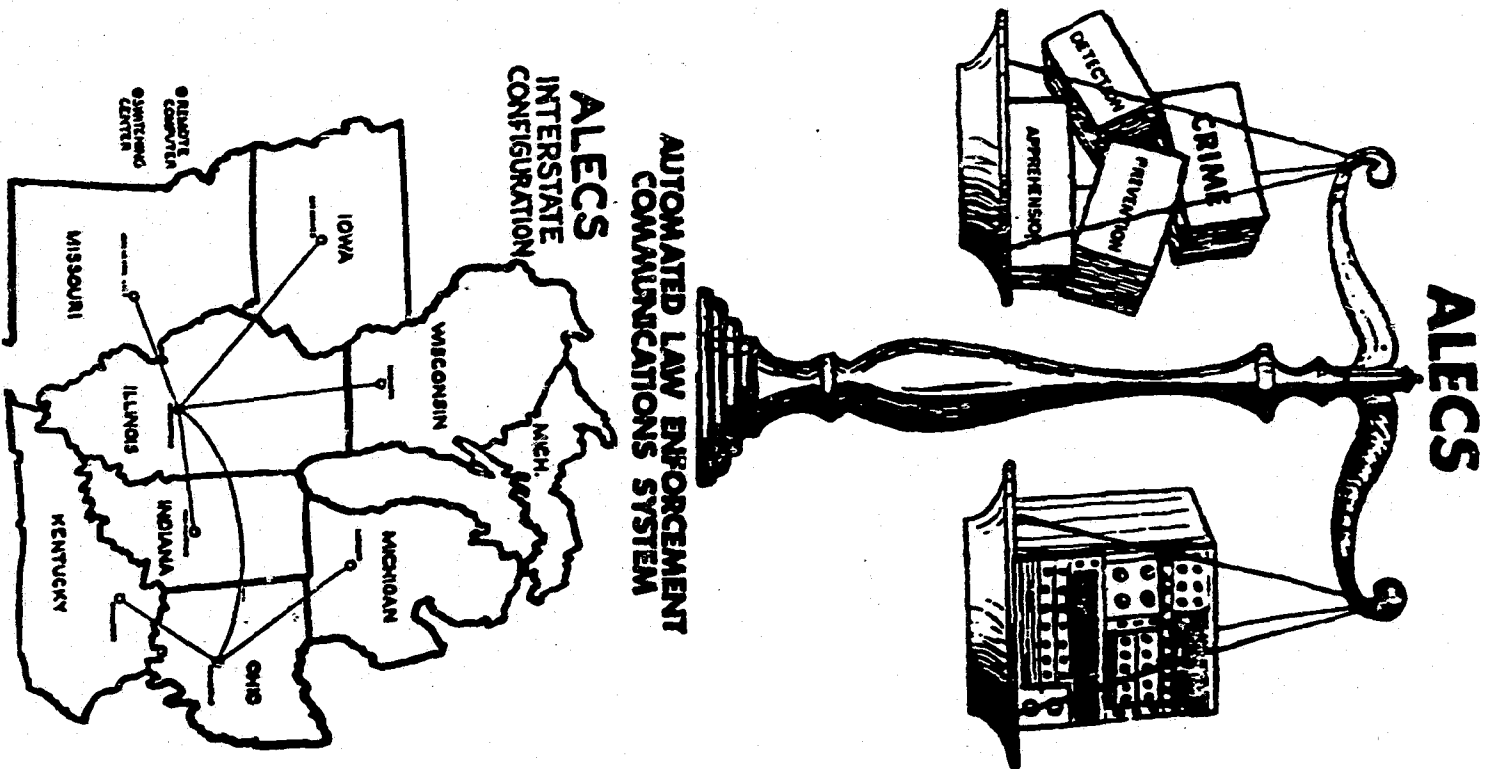
If a certified driving record is needed for court purposes a request for certified driving record may be requested to Secretary of State.

Class II request for complete driving record for court immediately. Response comes same day.

Class III request for complete driving record to be mailed for later court date. This is most commonly used.

Class IV used for subjects complete physical description and latest address. Messages should state Class IV and complete driving record.

1. Note license on his pad.
2. Class dispatcher - give 10-20 (location).
3. If this is a 10-38 (suspicious vehicle stop) or 10-37 (investigate suspicious vehicle) be sure to give as much info as possible.
4. This procedure is also to be followed when asking for a 10-29, 10-28, when the officer is holding on the road. This can be done by indicating to Dispatch 10-26 (detaining subject expedite).
5. The officer request should keep in mind, not give the info any faster than he can copy it. This will eliminate having to ask for repeats, or in some cases there may not be time to give it out again.



# ADMINISTRATIVE MESSAGES DIRECTED TO THE ALECS SYSTEM

The administrative message format adopted for ALECS is the same as that recommended by the Associated Public Safety Communications Officers (APCO). To insure uniformity between the various police agencies using the ALECS system, it is necessary that the same format be used by all users. A simple way to remember the format is to keep the words "PARTS" in your mind. "PARTS" will be explained below.

## ADMINISTRATIVE MESSAGE EXAMPLE:

Header Line A MI3300203 KYKSP0000 (not part of the message)  
 AREA 1 (P) MESSAGE NO. 15 MI3300203 042575 ORIGINAL  
 AREA 2 (A) KENTUCKY STATE POLICE KYKSP0000 FRANKFORT  
 AREA 3 (R) REF: ATTEMPT TO LOCATE  
 AREA 4 (T) ATL JOHN SMITH DRIVING 1974 FORD 75/MI/BBB123.  
 ENROUTE TO EASTERN KENTUCKY VIA I-75, STATE ROADS  
 28 and 71. ADVISE HIM TO CONTACT TOM JONES REF  
 A DEATH IN THE FAMILY.  
 AREA 5 (S) MICHIGAN STATE POLICE, EAST LANSING  
 04/25/75 10:15AM OPR WA

The header line should not be considered part of the message, as this is a direction to the computer on where to direct the message.

- P - Preamble - who is sending the message, message number date and type of message.
- A - Address to whom the message is directed. ORI and city.
- R - Reference - what the message is about, use previous message number if available, etc.
- T - Text of message. Tell what you want, be brief and concise.
- S - Signature of agency sending the message, date, time, operators initials and authority if needed.

# CAN DIRECT INQUIRIES BE MADE INTO THE COMPUTER FILES BY USING THE INDICATED SCAN LINES:

\*See ALECS section of LEIN Manual.

AGENCY	DRIVER LICENSE INQUIRIES			VEHICLE REG INQUIRIES	
	NAME: (1:) RACESEX: (2:) DOB: (7:)	DRILICNO: (11:)	SOCSECNO: (12:)	VIN (32:)	PLATETYPE: (28:) LICPLATE: (31:)
Illinois	YES	YES	NO	YES	YES*
Indiana	YES	YES	YES	YES	YES
Iowa	YES*	YES	YES	YES*	YES*
Kentucky	YES*	YES*	YES*	YES	YES
Missouri	YES	YES	NO	YES**	YES*
Ohio	YES***	YES**	YES	YES	YES*
Wisconsin	YES	YES	NO	NO*	YES

At times the information desired is not in the computer file, then it becomes necessary to send an administrative message to the State information file you wish to access. The PARTS format must be used. To save look up time for the proper ORI, several general ORI's have been established for the most commonly used information files. They are:

- A. Vehicle Reg. by License Plate XXLIC0000
- B. Vehicle Reg. by VIN number XXVIN0000
- C. Driver License Status XXOLN0000
- D. For Criminal Records XXSIR0000

The "XX" portion is the two digit code for the State you wish the message to be directed to. Example: Ohio registration by plate number would appear as: OHLIC0000.

# NCIC STOLEN PROPERTY FILE

	<u>Required for ENTRY</u>	<u>Required for INQUIRY</u>
GUNS	Serial - Make - Caliber - Type - Date of Theft - Complaint Number - Miscellaneous (Model, Shots & Barrel)	1 - Serial - Make - Cali- ber - Miscellaneous
ARTICLES	Type - Serial - Brand - Date of Theft - Complaint Number - (OPTIONAL: Model & Miscellaneous)	1 - Type - Serial - Brand
SECURITIES	Type - Serial - Denomina- tion - Issuer - Owner - Date of Theft - Complaint Number (OPTIONAL: Social Security Number - Security Date - Miscellaneous)	1 - Type - Serial - Denomination - Issuer 2 - Type - Owner 3 - Social Security Number 4 - Owner & Complaint Number
BOATS	Boat Hull Number - Make - Date of Theft - Complaint Number (OPTIONAL: Regis- tration - Hull Material - Propulsion - Boat Type - Length - Color - Miscellan- eous)	1 - Boat Hull Number 2 - Registration Number
VEHICLE PARTS	VIN - Year - Make - Date of Theft - Complaint Num- ber - Miscellaneous (VEHICLE PARTS ARE: Engines - Transmissions and VIN Plates)	1 - VIN

# PATROL OFFICERS INQUIRY GUIDE

## Inquiries into LEIN and NCIC may be made by:

A - License Plate Number	D - Social Security Number
B - VIN	E - Name, Sex & DOB
C - Driver License Number	F - Any Combination of A thru E

## Inquiries to SOS may be made by codes of:

### Vehicle Records

13 - Owner & Insurance Information  
 16 - Owner & Insurance Information on:  
     Dealers - Amateur Radio - Manufacturers - Personalized &  
     Handicapped plates  
 19 - Partial Plate Search (Passenger & Commercial plates)  
 21 - Watercraft  
 25 - Snowmobile  
 29 - Combination of 13 & 52  
 51 - VIN Registration  
 52 - VIN Registration with Lien Holder

### Driver Records (Name, Sex, DOB & License Number)

35 - Status of License  
 40 - Latest Address  
 43 - History of all Convictions  
 71 - Financial Responsibility Status

## THE ALECS STATES

Michigan - Ohio - Kentucky - Indiana - Illinois - Iowa - Wisconsin  
 Missouri

LEIN provides information for decision making. The information  
 furnished must be evaluated with other facts known to the police  
 officer. The data furnished through LEIN is an informational tool.  
 It is no substitute for professional police judgement.

APPENDIX F

"911" Information

**MUSKEGON COUNTY  
CENTRAL DISPATCH**

FOR EMERGENCY ONLY

**POLICE - FIRE**

EFFECTIVE FEBRUARY 10, 1972

**Dial 911**

SEE DIRECTORY FOR EXCEPTIONS

COURTESY  
GREATER MUSKEGON EXCHANGE CLUB



PLACE NEAR  
YOUR TELEPHONE

# 911

## The Emergency Telephone Number

### ***A \*Check List For Action, Designed To Be Of Assistance To Planners For 911.***

\* An excerpt from the "911 Handbook for Community Planning", available from:

Superintendent of Documents  
U.S. Government Printing Office  
Washington, D.C. 20402

Stock Number 2205-003  
Price - \$1.35 per copy

## ***911-a checklist for action***

The following checklist is provided as a guide to the activities which are usually necessary in order to develop and implement a 911 system. Not all the activities listed here will apply to every community.

### ***Phase I. planning decisions***

1. Formation of a planning task force to include local authorities
  - Chief of Police
  - Fire Chief
  - Representatives from other emergency service agencies
  - Civil Defense representative
  - Mayor or other elected official
  - Representatives of citizens' groups
  - Telephone company representative
  - Others as desired
2. Review of existing information on 911
  - Written materials
  - Contacts with communities already having 911
  - Information provided by local telephone company
3. Decision about area to be served
  - Single or multijurisdictional
  - Central office boundary considerations
4. Inventory of emergency services in 911 area
  - Fire departments
  - Police agencies, local, county, state, and federal
  - Ambulance services
  - Hospitals
  - Poison control centers
  - Suicide prevention centers
  - Drug abuse centers
  - Civil defense agencies
  - Weather warning stations
  - Public works departments
  - Others
5. Selection of agencies to be included
  - Identification of primary responsibilities
  - Identification of secondary responsibilities and qualifications
6. Location of answering center
  - Police headquarters
  - Fire stations
  - Separate communications center
  - Other
7. Answering center design decision
  - Centralized reception-decentralized dispatch (relay)
  - Centralized reception-decentralized dispatch (transfer)
  - Centralized reception-centralized dispatch
  - Combinations of above
8. Equipment specifications
 

■ Basic 911 service	■ Direct trunking
■ Called party hold	■ Central office identification
■ Ring back	■ Others

### *Phase II. planning activities*

1. Negotiations with neighboring jurisdictions, if multijurisdictional system
  - Inclusion of representatives on planning team
  - Arrangements for sharing responsibility for operating answering center
  - Cost-sharing arrangements
2. Assignment of responsibilities and drawing up of cooperation agreements with participating agencies
3. Establishment of procedures for handling 911 calls
  - Procedures for each kind of emergency
  - Procedures for nonemergency calls
  - Procedures for nuisance or false alarm calls
4. Planning of publicity campaign
  - Television, radio, newspapers
  - Printed materials
  - Telephone stickers
  - Signs or decals painted on public safety vehicles
  - Presentations to school and citizens' group
  - Other publicity activities

### *Phase III. implementation activities*

1. Telephone equipment modifications
  - Central office modifications
  - Installation of special equipment in answering center
2. Training of 911 operators
  - Techniques for dealing with distressed callers
  - Procedures for each kind of call
  - Familiarity with emergency resources
  - First Aid
  - Practice under simulated conditions
3. Publicity campaign

### *Phase IV. implementation of 911*

1. Acceptance of 911 calls on priority basis
2. Discouraging nonemergency use of 911
3. Record-keeping activities
4. Continuation of 911 publicity

### EXEMPLARY PROJECT: Central Police Dispatch

To help LEAA better evaluate the usefulness of Exemplary Project documentation, the reader is requested to answer and return the following questions.

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