Use of individually assigned patrol cars on and off duty in Rock County, Wisconsin

Robert P. Spoden

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THE USE OF INDIVIDUALLY ASSIGNED
PATROL CARS ON AND OFF DUTY
IN
ROCK COUNTY, WISCONSIN

by
Robert P. Spoden

A thesis
submitted in partial fulfillment
of the requirements for the degree of
Master of Science in Management
Cardinal Stritch College
May, 1985
This thesis has been approved
by the following committee:

Liana Champagne 4/15/85
Project Advisor Date

Second Reader 5/1/85

Robert M. M. 4/20/85
P.M.A. Director/Representative Date
Abstract
THE USE OF INDIVIDUALLY ASSIGNED
PATROL CARS ON AND OFF DUTY
IN
Rock County, Wisconsin
Robert P. Spoden

The use of individually assigned patrol cars on and off duty was researched for Rock County, Wisconsin to determine if such a program would increase patrol car visibility while decreasing the crime and accident rates. This research was in response to the public's concern for the lack of rural patrol by the Sheriff Department. This thesis is an analysis and evaluation of the individually assigned patrol car program. The purpose and the project proposal are detailed in Chapter One.

The purpose of the project was to evaluate the individually assigned patrol car program for Rock County by reviewing and evaluating the results of five police departments with experience in the program. The five police departments were selected for their experience with the program and documentation of that experience. Chapter Two is a review of the five police department's experience with the program.

The five police departments chosen for research were:
Indianapolis, Indiana; Prince George County, Maryland; St. Louis County, Missouri; Appleton, Wisconsin and Dane County, Wisconsin. The researcher found each police department had a problem area which they were concerned with when initiating their program and yet the overall findings of the five police departments were consistent with each other. The officers at the Rock County Sheriff Department were given a questionnaire as to their desire to participate in the program. The results of the questionnaire were compiled with the findings of the five police department's experiences in the program and reviewed for conclusions and recommendations.

Chapter Three examined the findings of the five police departments and compared them to the needs of Rock County. The researcher concluded from the findings of the five police departments, and the results of the officers questionnaire, that a modified form of the individually assigned patrol car program would be beneficial and cost effective for Rock County. The individually assigned patrol car program would increase the visibility of the patrol cars in Rock County without an increase in patrol officers.
Acknowledgments

This thesis is dedicated to my wife, Shari, without her understanding and encouragement I could have never completed it. A special thanks to Sheriff Joe Black and Chief Deputy Terry Fell who arranged my work schedule so I was able to attend the required classes.
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CHAPTER 1
Project Proposal

Purpose of the Project

The purpose of the project was to determine the value of individually assigned patrol cars for use on and off duty by patrol officers in Rock County, Wisconsin. The current system consists of twelve patrol cars being used on three shifts by all of the patrol officers. In a twenty-four hour period, one patrol car will have three different operators, while in a five day work period, one officer may be assigned several different patrol cars. This tends to promote a lack of concern and dedication to good maintenance and upkeep of the cars. With the officer-to-patrol car assignments consistently changing, there is very little accountability for any misuse of these cars.

Additional information on the effectiveness of individually assigned patrol cars was derived from five police departments that had extensive experience with the system. The individually assigned patrol cars are those assigned to one officer for his use on and off duty. The officer becomes responsible for appearance, operation, and maintenance of the patrol car. The patrol car is no longer just another car, but a reflection of the officer.
himself, much like his uniform and personal appearance.

The researcher compared the two systems with emphasis on cost savings and increasing the visibility of patrol cars in Rock County. After compiling the cost figures of both systems along with any advantages and disadvantages, the researcher forwarded a report to the Public Safety Committee of Rock County for their review and action.

Statement of the Problem

Law enforcement must respond to demands for service from the public. Those increased demands from the people of Rock County have created a serious void in patrol time which has drastically reduced the visibility of patrol cars in all areas of Rock County.

There existed a need for increased visibility of patrol cars in Rock County which would promote public confidence, while decreasing the crime and accident rate through prevention and awareness. Cost reduction can also be realized through decreased maintenance and repair of the patrol cars.

Need for the Study

Historically the people in the rural areas of Rock County have felt neglected in having their area patrolled. Four years ago the residents in the rural southwest area of the county went to the County Board to request an increase in deputies to improve the lack of frequent patrols. Extra deputies were approved and hired, but this
did not alleviate the problem. The extra deputies that were hired became part of the jail division so there was no visible increase in patrol cars realized.

There has been some effort to increase the visibility of patrol cars, but none have been successful. A mid-shift, operating from 7:00 p.m. to 3:00 a.m., was created to increase the visibility of patrol cars during a peak problem time. Due to manpower shortage, this had to be discontinued, once again reducing the amount of patrol cars on the road.

The use of patrol cars is directly related to the needs of the public with certain priorities. Patrol cars first respond to all emergency calls, such as motor vehicle accidents and criminal assaults. Their second priority is to respond to calls for assistance, such as minor criminal complaints and belated damage reports. The balance of the time is divided among patrolling, serving civil papers, building security checks, and other miscellaneous duties.

The time that can be used for patrolling varied from one to four hours depending on other needs. The limited time spent on patrolling must be utilized to the best interest of the county and must be concentrated on the areas with a history of problems. The majority of the problems were experienced in the area with the greatest amount of people and traffic flow, or in the center of the county. Clearly, the complaints of the rural residents...
that they were neglected, with respect to patrolling, were valid and sincere.

**Background Information**

Rock County is a totally developed area with a population of 139,420 people. The county covers 723 square miles with approximately 1900 miles of roadway which was patrolled by the Rock County Sheriff Department.

The Rock County Sheriff Department was headed by an elected Sheriff for a term of two years. Request for major expenditures must first go to the Public Safety Committee for approval. The Public Safety Committee was made up of members of the Rock County Board. After approval by the Public Safety Committee, the item then went before the full County Board for final approval. The present study on personally assigned patrol cars needed to follow this procedure.

The majority of the population in Rock County was located in the center of the county where the cities of Beloit and Janesville are situated. Consequently, the greatest demand for service came from this area.

The present system of patrolling had a maximum of seven - eight one officer patrol cars per shift. However, due to vacations, holidays, and sick time, a realistic average was four - five one officer patrol cars per shift. The individuals who most often see the patrol cars either live in the central area or travel the main highways.
The patrol officers of the Rock County Sheriff Department resided throughout the county and traveled many different routes to work in their private cars. If these same patrol officers were driving a marked patrol car to work, it would double the exposure of patrol cars in Rock County. The patrol officers would have all the necessary equipment with them to act in any emergency while enroute. This could reduce response time and possibly save lives.

Project Title, Location and Duration

A. Title of Project
The Use of Individually Assigned Patrol Cars On and Off Duty in Rock County, Wisconsin.

B. Location
The survey of the patrol officers took place at the Rock County Sheriff Department. Comparisons were made to systems in Indianapolis, Indiana; Prince George County, Maryland; St. Louis County, Missouri; Appleton, Wisconsin and Dane County, Wisconsin. The cost figures were from the Rock County area.

C. Duration
The duration of the project was approximately eight months long beginning in November 1983 and concluding with the presentation of the report to the Public Safety Committee of Rock County in July 1984.

Participants
All of the deputies assigned to the patrol division
took part in a questionnaire-survey related to attitudes toward the proposed program. Lieutenant Herrington, who was in charge of vehicle procurement and maintenance, assisted the researcher in compiling cost figures for new cars and maintenance and for the cost of the current system.

Objectives

Development Objective I

By February 15, 1984 the researcher developed a questionnaire-survey to be administered to all patrol officers.

Implementation Activities

To make the questionnaire-survey a valuable part of the project, the following information must be complete.

a. Would the officer want to participate in the program? If not, why?
b. What city, village or township does the officer live in?
c. What shift is the officer assigned to?
d. A general evaluation of how the officer feels the program will work if implemented.

Evidence of Completion

The objective was met when the questionnaire-survey was prepared and given to all the patrol officers for their completion.
Development Objective II

By March 1, 1984 the researcher administered to all patrol officers the questionnaire-survey on their attitudes toward the proposed system.

Implementation Activities

To make the officer a valid part of the project, the following results must be achieved:

a. The majority of the officers would take part in the program.

b. The officers participating reside in different areas of Rock County.

c. All shifts are represented in the program.

d. The majority of the officers feel the program has merit and will work.

Evidence of Completion

The objective has been met when the results of the questionnaire-survey became part of the project.

Development Objective III

By April 15, 1984 the researcher contacted Prince George County, Maryland; St. Louis County, Missouri; Indianapolis, Indiana; Appleton, Wisconsin and Dane County, Wisconsin for their experience with the personally assigned patrol cars.

Implementation Activities

The researcher requested the following information from each department.
a. The length of their program.
b. Cost effectiveness of the program.
c. The effect of the program on their crime and accident rates.
d. The response to the program by their officers and the public.
e. Suggestions and guidelines for a program such as the one they have.

**Evidence of Completion**
The objective was met when all the information requested had been received by the researcher.

**Development Objective IV**
By May 1, 1984 the researcher updated and compiled the results from the five additional police department's experiences with personally assigned patrol cars.

**Implementation Activities**
The researcher determined:

a. The length of time each department's program had been in effect.
b. The costs of initiating the program.
c. The effect of the program on their maintenance and fuel costs.
d. The influence of the program on accident and crime rates in their areas.
e. The response to the program from the public and the officers that participated in the program.
f. Guidelines set down by the departments for the program.

Evidence of Completion
The objective was met when the results from the five police departments were up-dated and included in the final report.

Development Objective V
By July 1, 1984 the researcher presented the combined reports and literature to the Sheriff for review and consideration.

Implementation Activities
a. The researcher will meet with the Sheriff for the review.
b. The researcher will clarify any points requested by the Sheriff.
c. The Sheriff and researcher will agree on content and readiness of the report that will be presented to the Rock County Public Safety Committee.

Evidence of Completion
The objective was met when the report was forwarded to the Rock County Public Safety Committee.

Evaluation Objective I
By March 15, 1984 the researcher collected the questionnaire-survey from all shifts providing information on: 1) the desire of the officers to participate in the program, 2) where they live in the county, and 3) what
shift they work.

**Implementation Activities**

a. Review each questionnaire for completeness and accuracy.

b. The results will be totalled and graphed for ease of reading.

**Evidence of Completion**

The objective was met and completed when the results were ready for inclusion in the final report.

**Evaluation Objective II**

By May 1, 1984 the researcher completed the evaluation of the five police department's experiences with the personally assigned patrol cars justifying this program for Rock County.

**Implementation Activities**

The objective will be accomplished by proving positive response on the following points:

a. The reduction of crime and vehicle accidents in the researched areas after implementation of individually assigned patrol cars.

b. The decrease in maintenance costs and major repair.

c. The public acknowledgement of increased visibility of patrol cars in their areas.

d. The turnover time of the patrol car from one year to several years.
e. The officer's assessment of the program.
f. The increased space made available for parking at the Sheriff Department.
g. An assessment of the program's cost effectiveness for Rock County.

Evidence of Completion
The objective was completed when the report was finalized for consideration by the Sheriff.

Evaluation Objective III
By January 1, 1986, if the program is adopted, the researcher will make a comparison report to be used by the Sheriff to determine the value of the program.

Implementation Activities
a. Crime and accident rates will be compared with the years prior to enactment of the program.
b. Officer and public opinion of the program will be solicited and compared to preprogram survey.
c. Cost effectiveness of the program will be determined.

Evidence of Completion
The objective will be completed upon presentation of the findings and report to the Sheriff.

Limitation of Project Finding
The first limiting factor of this project was in the five police departments used for reference. Their size in manpower and population served was much larger than
that of Rock County. For example, the number of patrol cars needed and used by them was much greater, so their cost figures were much higher.

Another limiting factor was in figuring the costs of new vehicles, fuel, maintenance and depreciation. All of these items were directly effected by inflation and vary accordingly.

The third and probably most important limiting factor comes under crime and vehicle accident reduction indicators. Law enforcement has tried to project an omnipresence as a means to prevent crimes and accidents. It was felt in law enforcement that "to be seen is to deter." To prove this principle was another issue. It seemed reasonable that the presence of a patrol car in a certain area would reduce criminal activity and make drivers more alert. However, there were other factors that may reduce the same activity, such as weather and time. To measure the value of increased patrol cars, past experience and results were used to control for the confounding effects of weather and time. That is, comparison of crime and vehicle accident rates were made during the same months in previous years.

Definitions of Terms

Mid-Shift: Four patrol officers who worked an overlapping shift from 7:00 p.m. to 3:00 a.m.

Patrol Car: A full size four door car that is
equipped with heavy duty equipment and those items required by law to operate as an emergency vehicle, such as red lights, siren, and other markings that make it obvious to the public of its role.

**Patrol Division Shifts:** Shifts which the patrol people are assigned for their work day.

- **First shift (days)**: 7:00 a.m. to 3:00 p.m.
- **Second shift (evenings)**: 3:00 p.m. to 11:00 p.m.
- **Third shift (nights)**: 11:00 p.m. to 7:00 a.m.

**Patrolman/Patrolwoman:** Deputy Sheriff who is assigned to the patrol division for routine patrol.

**Personally Assigned Patrol Car:** A patrol car that is assigned to an individual patrol officer for his use both on and off duty within certain guidelines.

**Public Safety Committee:** Oversees the operation of the Sheriff Department and is made up of five members of the county board.

**Rock County Board:** Has 29 members elected for a two year term.

**Standby:** A term used in law enforcement to indicate that a police unit or police officer is prepared to act upon receiving orders. It also is used to indicate one unit or person being prepared to assist another if necessary.

**Totally Developed:** Rock County is made up of two large cities (Beloit and Janesville), three small cities (Milton, Edgerton, and Evansville), three villages
(Orfordville, Clinton, and Footville). The balance of the area is made up of sub-divisions and farms.
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<td>Make initial contact with the five police departments</td>
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<td>Review Literature</td>
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<td>x---------------x</td>
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<td>Prepare and Administer patrolman questionnaire-survey</td>
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<td>Complete data and analyze</td>
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<td>x-----------------------------x</td>
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<tr>
<td>Update and compile results from other departments</td>
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<td></td>
<td></td>
<td>x-----------------------------x</td>
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<tr>
<td>Present report to sheriff for review and forward to Public Safety Committee</td>
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Budget

The nature of this project required mostly time spent by the researcher and very little in actual costs. The costs were as follows:

1) Long distance phone calls.............$50.00
2) Mailing costs..........................5.00
3) Typing of Reports......................$50.00

Total $105.00

Funds for the project were shared by researcher and Sheriff Department.

Summary of Project

Chapter 1

The purpose of this project was to determine the feasibility of using personally assigned patrol cars in Rock County, Wisconsin.

Chapter one showed the need to seek another approach for increasing the visibility of patrol cars in rural areas of Rock County. A possible answer was the personally assigned patrol car. Chapter one set forth the procedure for evaluating the use of individually assigned patrol cars in Rock County.

Chapter 2

Chapter two of the report contained extensive information on the experience of the personally assigned patrol cars by the five police departments who utilize the system. This was obtained from literature, personal contact and
research. The research was necessary to modify the system to Rock County.

Chapter 3

Chapter three will indicate to the reader the most significant advantages and disadvantages of personally assigned patrol cars. The researcher will present the most valid facts for interpretation by the Public Safety Committee along with recommendations of the researcher and Sheriff.
CHAPTER TWO
Literature Review

"The Use of Individually Assigned Patrol Cars On and Off Duty in Rock County, Wisconsin" was a study of five different police departments experience with the program. The purpose of the project was to determine whether such a program would be cost effective in Rock County while increasing the visibility of marked patrol cars. The underlying hypothesis was that increased visibility of patrol cars would decrease the crime and accident rates while increasing public confidence.

To determine the value of such a program, the researcher contacted the police departments with the most experience in such a program. The individually assigned patrol car program is relatively new in law enforcement, having been initiated in the last fifteen years. Many police departments presently use individually assigned patrol cars, however, not all of the police departments have documented their experience and findings. The researcher therefore had to seek out the police departments not only with experience but documentation of the experience. The five police departments researched ranged in experience from fifteen years to being in the process of setting up the program. Their findings on the value of the program were readily available. Reports on these programs were reviewed and compared to determine the positive and negative points of each program.
with respect to the needs of Rock County. The information received from the designated police departments was only part of the project and was integrated into the final report consisting of an officer survey, vehicle costs, and maintenance costs in Rock County.

The five designated police departments were located in Indianapolis, Indiana; Prince George County, Maryland; St. Louis County, Missouri; Appleton, Wisconsin; and Dane County, Wisconsin. Each department differed in its priorities and in its degree of program implementation. There was, however, continuity among the many police departments reviewed, particularly the five designated departments that were selected for the study. Three other police departments also were reviewed. Because of close similarity to the five chosen police departments and to avoid duplication, the following three departments were eliminated from the report: Lexington-Fayette Urban County Police, Lexington-Fayette, Kentucky; Palm Springs, California; and Albuquerque, New Mexico. Each of these police departments had the individually assigned patrol car program and experienced similar results as the five researched police departments.

Indianapolis, Indiana was a pioneer in the personally assigned patrol cars. Their program started in August 1969. The Indianapolis department planned to prevent crimes and vehicle accidents through the increased visibility of patrol cars. Their secondary goals were to increase
the rate that crimes were being cleared, improve police morale, improve the public image of police and reduce citizen fear of crime. Their success rate varied among the goals sought, but their results were relevant to the needs of Rock County.¹

After eight months of the program, outdoor crimes in Indianapolis decreased. There was a fifteen percent drop in auto theft and an eight percent drop in purse snatching. The rate of auto accidents and related injuries declined more dramatically. The percentage of fatalities decreased a remarkable twenty-nine percent from the previous reporting period while total accidents dropped eight percent and injuries dropped just one percent. The Indianapolis police department felt that the increased visibility of marked patrol cars produced a slower flow of traffic, which in turn decreased the fatalities and serious injuries. The above statistics are related to activities which correspond directly to the presence or absence of a marked patrol car, further confirming the value of patrol car visibility.

Indianapolis police officers received an unexpected benefit for participating in the program. By using the patrol car for personal needs, it gave the officers an additional $2000 per year income through savings.²

As the Indianapolis program matured, however, a problem area surfaced with the officers participating in the program. After the second year of involvement in the pro-
gram, some of the officers asked to be dropped from the pro-
gram. The officers felt that they were contributing too much
of their off-duty time responding to complaints and assign-
ments while receiving no compensation. They also felt the
reporting system for off-duty activity was lengthy and com-
plicated. The reports consumed even more of their off-duty
time.

To prevent further desertion of the program by the
officers, certain modifications were made to the Indianapolis
program. First, the officers were paid overtime after put-
ting in two hours on any assignment or complaint. Secondly,
the off-duty officer would only be used in an emergency and
would be relieved by an on-duty patrol car as soon as possi-
ble. Finally, the reports for off-duty activity were modi-
fied so they were less confusing and easier to fill out.
Following these modifications, the program has stabilized.

In 1972, Raymond A. Walton, Jr. conducted a study of
the Indianapolis Police Department's Fleet Plan. To
arrive at a conclusion on a cost versus savings basis, as
many areas as possible have been translated into dollar
values. Table 2.1 gives the findings. The results of this
study was that the citizens of Indianapolis had saved about
1.3 million dollars on the Indianapolis Police Department
Fleet Plan. This study further recommended that any police
department considering conversion to a Fleet Plan should
include in this conversion a pre-established method of
collecting data for periodic analysis of the plan's effectiveness. In this way a department can either justify the continuation of a Fleet Plan or make necessary changes in the plan which keep it an on-going and effective program.

Table 2.1
Indianapolis Police Department Fleet Plan
Cost versus Savings

<table>
<thead>
<tr>
<th>Costs</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Initial Cost</td>
<td>$650,000</td>
</tr>
<tr>
<td>Minus the 255 cars which would have been purchased under the old plan in 1969, 1970 and 1971</td>
<td>-$510,000</td>
</tr>
<tr>
<td>Net Cost</td>
<td>$140,000</td>
</tr>
<tr>
<td>Increase in Preventive Maintenance and Repairs</td>
<td>$317,000</td>
</tr>
<tr>
<td>Increase in cost of insurance coverage</td>
<td>$52,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Savings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Car washes</td>
<td>$7,000</td>
</tr>
<tr>
<td>Decrease in Visible Crimes</td>
<td>$500,000</td>
</tr>
<tr>
<td>Decrease in Citizen's Accidents</td>
<td>$700,000</td>
</tr>
<tr>
<td>Increased Man-hours of Patrol Time</td>
<td>$635,000</td>
</tr>
<tr>
<td>Total Costs</td>
<td>$509,000</td>
</tr>
<tr>
<td>Total Savings</td>
<td>$1,842,000</td>
</tr>
<tr>
<td>Difference</td>
<td>$1,333,000</td>
</tr>
</tbody>
</table>
Prince George County, Maryland initiated its personal patrol car program in 1970. The department required the accomplishment of seven primary objectives to make the program a success. Their first objective was the same as the overall objective of Rock County. Prince George County planned to promote the security of the citizens through greater police visibility as a result of increased numbers of police vehicles on the streets and roads of the county. Prince George County also wanted to: 1) improve police-community relations through more personal contacts; 2) deter crime with the presence of police vehicles; 3) provide a quicker response time to certain calls; 4) reduce maintenance costs; 5) provide quicker response time for off-duty personnel when called back to duty; and 6) create an incentive to improve the morale of the officers on the department.

Prince George County found that in 1972, off-duty officers handled, stood by or assisted on-duty officers in 13,239 calls or incidents. The result was 119 felony arrests, 363 misdemeanor criminal arrests, and 1,049 traffic arrests. It must be remembered that prior to the program, off-duty involvement of the officers was seldom required and was only in response to an immediate emergency. For this reason no statistics were compiled or kept. Despite the fact that no baseline data was kept, the program was judged to be successful and a follow-up report recommended that the
program be retained and expanded. The report also recommended that public opinion be solicited to test the effectiveness of the program.\(^7\)

Prince George County set new guidelines and expanded the program. They improved their accounting and cost-analysis so they could better monitor the program. This better monitoring of the program was accomplished through an improved reporting system of vehicle monthly operating costs and officer's off-duty activity sheet. Prince George County also realized that some benefits cannot be put into monetary terms. Factors such as citizen concern with crime and accidents and the emotional shock or inconvenience to the victims must be weighed too.\(^8\)

St. Louis County, Missouri made citizen attitude an important part of their program and follow-up. They randomly surveyed the residents by telephone. The first survey was conducted October 3-21, 1977 and the second survey was conducted August 14-19, 1978. Questions in both surveys were the same and were placed in the same order. Sampling methods were not altered. Survey One sampled 193 residents and Survey Two sampled 198 residents.\(^9\)

A significant number of respondents in both surveys believed that the Police Personal Car Program was a worthwhile concept and were in agreement with the specific goals of the program. Eighty-three percent of the respondents in Survey Two felt that the program was a good idea. A
majority of the respondents in Survey Two also continued to think that the Personal Car Program was a better alternative than "hiring more police officers," "expanding the Helicopter Program," or "expanding and improving police-community relations." Although program support levels declined somewhat from Survey One to Survey Two, the predominant attitude toward the program continued to be overwhelmingly positive. Respondents who noticed an increase in the number of marked county police cars patrolling their neighborhoods went from twenty-six percent in Survey One to forty-one percent in Survey Two, reflecting an increase awareness of the additional patrol cars.

St. Louis County, like the other police departments researched, ranked increased visibility as the primary objective. This objective was broken into two basic elements: 1) the number of off-duty miles driven by the police officers participating in the program; and 2) the increased visibility resulting from marked cars parked in public places (such as parking lots and driveways) while police officers were off-duty. After a nine month period there was a forty percent increase in visibility due to the number of the off-duty miles driven compared to a similar period prior to the Personal Patrol Car Program. There was no attempt to collect data on increased visibility due to parking a vehicle in a public place, but this element was thought to be an additional factor in increased visibility.
A second primary objective of St. Louis County's Personal Car Program was increased public contact. Of 2,319 incidents responded to in the month of May, 1,811 (78.1%) were traffic related. These incidents consisted predominately of occurrences in which a police officer would not normally have been dispatched. The contacts were direct results of the officer utilizing his patrol car off-duty. The officer either encountered the incident in his off-duty travel or was dispatched while in his patrol car off-duty. These incidents constituted a large increase in public contacts which would not have been possible without the program.12

There were consistent increases in the number of incidents handled by off-duty officers. During a period from September 1977 through May 1978, the number of off-duty incidents responded to by participants had risen from 947 per month to 2,319 per month, representing a 145 percent increase in public contact within eight months.13

The Personal Patrol Car Program proved to be an effective method for St. Louis County to augment its on-duty force.14 During the ten month program operation, the off-duty officers handled 14,069 incidents. Of these, 11,004 were handled without involvement of the area car. The remaining 3,065 incidents were assists to regular patrol cars in their areas by the off-duty officer. These latter incidents represented an actual savings to the department.
since another area car did not have to be dispatched to
assist on the call. This not only saved time that a second
area car would have been involved and out of service, but
also reduced response time of the assist car and cut down
the amount of inter-area dispatching. The reduction of
inter-area dispatching allows each patrol car to remain in
its assigned area. Any time a patrol car leaves its
assigned area the potential for problems in that area
increases proportionally. Therefore, it is important to
keep each patrol car in its assigned area as much as
possible.

Appleton, Wisconsin implemented its "one to one" car
plan in 1977 based on the results of a 1975 efficiency
study. Appleton needed a method for increasing the
visibility of patrol cars while holding down personnel
costs.

Appleton has a population of 60,000 with one of the
smallest police departments in the state. There are 1.48
police officers per 1000 citizens. Of their 88 sworn
personnel, 51 patrol officers were eligible for personal
car assignment. Five officers elected not to participate.
This placed 46 marked patrol cars throughout the city of
Appleton, a ratio of 1 car per 1304 citizens. The effect
of marked patrol car visibility was indicated when officers
apprehended a suspect who admitted to more than one hundred
burglaries in the surrounding area. When asked why he only
committed one burglary within Appleton's city limits, he responded, "Appleton has too many cops!" Appleton could not have received a better endorsement of their personal car program. The burglar had no way of knowing which patrol car was on-duty or off-duty, but he did know they were police cars.\textsuperscript{17}

Appleton realized a greater costs savings than initially projected by the consultant. The original study proposed a vehicle turnover at 50,000 miles or every three years. This plan was projected to net the city a savings of $90,000 over a ten year period. Appleton's officers averaged between 9,000 and 10,000 miles per year on their vehicles, producing a turnover rate of five years instead of three years as projected. In 1981, the department purchased six cylinder vehicles for fuel economy. In 1982, they decided they no longer needed the traditional "police package" and ordered assembly line cars with special options such as front wheel drive, air-conditioning, heavy duty alternator and battery, tinted windows, and brighter headlights. The elimination of the police package reduced costs while increasing delivery time of the new cars. Delivery time becomes critical when operating high mileage vehicles that can produce high maintenance costs. Their own part-time mechanic installs radios, cages, red lights, decals and other required items. It takes one day to set up a squad car for duty keeping the down time of the vehicle to a minimum.\textsuperscript{18}
Appleton has been able to buy less cars every year. With the "intensive use plan," they purchased sixteen cars a year, but now purchase fourteen. The department realized a yearly savings of $110,000 more than the initial projections.

Dane County, Wisconsin is in the process of setting up the personally assigned patrol car system. They are unique in that their reason for initiating the system was to complement their precinct program. The precinct program divides Dane County into four precincts covering specific areas within the county. The officers assigned to these precincts report directly to a precinct office to pick up an assigned patrol car.

Since three of these precincts have limited facilities for both the officers and the vehicles, it has become important to look for alternatives to increase space. Through utilizing the personally assigned patrol cars they found certain advantages in addition to those previously noted by police departments. The officers using a personally assigned patrol car kept all of their equipment in their assigned car instead of in a locker. Many of the forms they used were kept in the patrol car freeing up even more space at the precinct. Under the old system, the unused patrol cars were left parked at the precinct with limited security and became targets for vandals. The individually assigned patrol car eliminated this problem completely.
An area of savings for all police departments involved in the program was decreased maintenance costs in addition to decreased time spent while maintenance was being performed. Since the maintenance was done while the officer was off-duty, there was no time lost from patrol nor manhour costs for the officer having the work done. Since individual police departments have different methods for maintaining patrol cars, the costs factor may vary. In most cases one officer is involved during the maintenance of the vehicle during on-duty time and there is a manhour cost for that time. Dane County found it was even more advantageous for them to use the individually assigned patrol car in terms of maintenance time. Previously they assigned one officer to pick up patrol cars and transport them to the garage for maintenance. This was considered a full time job. With the individually assigned patrol cars they eliminated that position. Dane County’s unique combination of precincts and individually assigned patrol cars may produce a new trend in law enforcement. Law enforcement can use such progressive thinking to cut costs.  

The police departments in the study varied in size and population served, but the results were similar and consistent across studies. The time span of the literature review was from 1969 to November 1983. The researcher contacted the three police departments with the longest operating programs to confirm their results of the past to their findings of
the present. The researcher was advised by these departments that their programs are constantly reviewed for effectiveness and efficiency and there was very little change from their original findings.22

The five police departments agreed on two major points. They all agreed that the initial investment was difficult to handle, both in terms of cost and in requesting the necessary funds to meet those costs. The use of prior successful experiences with the program in the other departments proved to be the best justification for the cost. All of the police departments found it necessary to revise their officer guidelines. The review indicated that clear guidelines were necessary for the operation of the patrol car and that these guidelines must be constantly reviewed.

The success of the program experienced by the five police departments in the study was partially based on a system of continued review and up-dating of the program.23

The need for increased visibility was a primary objective of all the police departments researched as well as that of Rock County, Wisconsin. The literature review indicated that the individually assigned patrol cars increased the visibility of marked patrol cars not only in the opinion of the police, but most importantly in the opinion of the public.24 This increased visibility created certain positive side effects, such as decreases in vehicle accidents, accident deaths, accident injuries, vehicle
thefts, and an increase in public confidence. These findings are directly compatible to the needs of Rock County.

Of the four foundation questions, only two were related to the current literature; the historical and psychological. All of the programs were based on these concepts. Historical issues were important in determining the need for and success of the individually assigned patrol car. The response of the public was based on a psychological need to feel safe through the increased visibility of marked patrol cars. When this need is viewed in a broader spectrum, the psychological points overlap into the sociological area. The philosophical were entwined with the historical points. An example of this was with the police historical belief in the theory of omnipresence and its benefits. This is just another philosophy of law enforcement that may or may not be valid. The point of individually assigned patrol cars as a deterrent is based on this. The results of the police departments researched would indicate that omnipresence works.25

Chapter Three will present the vehicles costs, estimated savings, officer survey, and suggested program guidelines for Rock County. The findings of the five police departments will be compared with the needs of Rock County. Once the data has been compiled and reviewed, the researcher will recommend the program to the Public Safety Committee of Rock County.
CHAPTER THREE
Findings of the Project and Conclusions

Historical Review of Project

Purpose of Project

The purpose of the project was to determine the value of individually assigned patrol cars for use on and off duty by the patrol officers in Rock County, Wisconsin. The project was a response to public demand for increased visibility of marked patrol cars in the rural areas of Rock County.

The researcher sought to determine whether increased visibility would decrease the crime and accident rate while increasing public confidence. Cost factors were equally important considerations both in initiating the program and in maintaining it. The experiences of five additional police departments were beneficial in determining the value of the program and its potential costs.

Since the individually assigned patrol car program is relatively new to law enforcement there was a limited amount of literature to review. The five designated police departments were selected for their experience in the program and for their documentation of this experience.

The experiences of the five police departments were compared to the needs of Rock County. A questionnaire was administered to all patrol officers at the Rock County
Sheriff Department. The questionnaire was designed to determine their willingness to participate in the program. Without complete cooperation the program could never be initiated since the officer is an essential part of the program. Anything less than complete willingness on their part could mean failure for the program. The questionnaire also determined where the patrol cars would be kept while off duty and the area to be served by each vehicle.

Participants: Researcher

The researcher was a deputy sheriff with eighteen years experience in the Rock County Sheriff Department. Sixteen years were served as a patrol officer with assignments to all shifts in all areas of Rock County. These sixteen years of contact with the public made the researcher aware of community concerns and needs.

The researcher's experience was combined with advanced education in the forms of an Associate Degree in Police Science and a Bachelor of Science Degree in Criminal Justice. Education was supplemented with numerous in-service training covering all areas of law enforcement.

Participants: Technical Assistant

Lieutenant Herrington, who is in charge of the motor pool, assisted in compiling vehicle costs, equipment costs and routine maintenance cost. He has been a member of the
Rock County Sheriff Department for twenty years. First, as a patrol officer then as maintenance sergeant for the past eight years. Four years ago Lieutenant Herrington was promoted to his current rank and position. During this time the number of vehicles he is responsible for has doubled.

The lieutenant position requires him to prepare the annual vehicle specifications for bids on the new vehicles. He then reviews the bids for compliance and acceptances. Lieutenant Herrington is responsible for the annual change over for all vehicles being replaced by the sheriff department. Once the vehicles are on the road as patrol cars Lieutenant Herrington is responsible to see that all routine maintenance is done and that all vehicles are kept at maximum performance. Lieutenant Herrington's experience and knowledge of vehicle maintenance and costs was invaluable to the project.

Implementation of Activities

A literature search provided documentation of previous experience with the individually assigned patrol car program. Since there was a limited amount of literature available, five police departments were contacted directly to confirm findings and gather additional information. Since some of the reports were several years old, contact was also necessary to verify continuance of the program, and to note
any modifications to the program.

Since some of the findings were consistent across the five police departments, they were indicated once in the literature review to avoid any lengthy duplication of information. Areas that each police department felt most important to their needs were stressed. The findings were then matched to the needs of Rock County. As previously stated a second part of the project was the questionnaire given to all of the patrol officers at the Rock County Sheriff Department.

Evaluation Objective I

By March 15, 1984 the researcher will collect the questionnaire from all respondents to provide information on the willingness of the officers to participate in the program, the location of their residence, and the shift they worked. The final question assessed their opinion on the success or failure of the program in Rock County.

The questionnaire was developed to determine whether the officers would participate in the program. If they were willing to participate they were asked which of two versions of the program they would prefer. In addition, the questionnaire determined where the officers lived and what shift they were assigned. This information would indicate where the patrol car would be located during off duty hours. It would also provide some ideas of the route traveled by
the officers to and from work and where the increased visibility would be. (See Appendix)

Evaluation Objective II

By May 1, 1984 the researcher will complete the evaluation of the five police department experiences with the personally assigned patrol cars to justify the program for Rock County. Certain areas were important to the success of such a program in Rock County. These areas of concern were:

a. The reduction of crime and vehicle accidents in the researched areas after implementation of individually assigned patrol cars.

b. The decrease in maintenance costs and major repairs.

c. The public acknowledgement of increased visibility of patrol cars in their areas.

d. The turnover time of the patrol car from one year to several.

Evaluation Objective III

By January 1, 1986, if the program is adopted, a comparison report will be produced to determine the value of the program. Crime and accident rates prior to enactment of the program will be included. The report will also include a survey of the opinions of the patrol officers involved in the program and the public served by the program along with
Presentation of Findings

Evaluation Objective I

By March 15, 1984 the researcher will collect the questionnaire from all shifts providing information on the desire of the officers to participate in the program, where they reside in the county, what shift they are assigned, and their opinion on the success of the program in Rock County.

Evaluation Tool for Objective I

The questionnaire was based on the need for officer participation in the program and for their opinion on the potential success of such a program in Rock County. The questionnaire was administered to thirty-five deputies assigned to the patrol division and included all three shifts.

Evaluation Question I

The questionnaire presented to the officers three options of the personally assigned patrol car program. Of the thirty-five officers who responded, twenty-three preferred being assigned a personal patrol car to keep at home but to be used exclusively for duty, nine officers did not want to participate in the program, and three officers preferred the use of the patrol car on and off duty.
The second part of the questionnaire assessed opinions toward the potential success of the program. Responses were related to desire to participate in the program. Twenty-five officers felt the program would be successful while ten did not.

**Evaluation Objective II**

By May 1, 1984 the researcher will complete the evaluation of the five police departments experience with the personally assigned patrol cars justifying this program for Rock County.

**Evaluation Tool for Objective II**

The tool consisted of a list of the most important criteria that had to be satisfied if the personally assigned patrol cars were to be beneficial to Rock County. The criteria were as follows:

a. Reduced crime and vehicle accident rates in the target areas after implementation of individually assigned patrol cars.

b. Decreased maintenance costs and major repair.

c. Public acknowledgement of increased visibility of patrol cars in the target areas.

d. Positive officer assessment of the program.

e. Decreased turnover rate of patrol cars from one year to several years.
f. Increased space for parking at the Sheriff Department.
g. Cost effectiveness.
Positive ratings were given to each criteria after a review of the additional five programs. Each department established their own priorities before initiating the personally assigned patrol car program. There was a direct correlation between these priorities and those of Rock County. The combined results of the five police departments appeared able to meet the needs of Rock County.

Evaluation Objective III

By January 1, 1986, if the program is adopted, the researcher will make a comparison report to be used by the Sheriff to determine the value of the program.

Evaluation Tool for Objective III

Crime and accident rates will be compared to rates prior to enactment of the program. Officer and public opinion will be solicited to compare to opinions expressed prior to enactment of the program. The cost effectiveness of the program will be determined for the period of time served.
Conclusions

Results of Evaluation Objective I

The questionnaire showed that 65.71% of the officers preferred the personally assigned patrol car program that allowed them to keep the car at home. These respondents however, would only use the car while on duty. The program that allowed the officers to use the patrol car both on and off duty received only 8.57% of the officer's votes. Those not wishing to participate at all made up 25.71%.

In terms of evaluating the potential success or failure of the program, 71.43% of the officers felt it would be successful while 28.57% felt the program would fail to produce the desired results.

Conclusion of Question I

The results of the questionnaire were somewhat surprising since the underlying hypothesis was that the officers would select the same program used by the five researched police departments which was the use of patrol cars both on and off duty by the patrol officer. The respondents chose the alternative program with the officers being assigned an individual patrol car for use on duty and kept at the officer's residence when off duty. The main point of difference between the two alternatives is in the time the vehicles will be on the road. The decreased
visibility would be offset with decreased mileage resulting in savings on fuel, maintenance, and turnover time of the vehicle.

Outside of the questionnaire, the officers did not want to sacrifice their off duty time for the use of a patrol car off duty. The officers also felt uncomfortable with the idea of using a marked patrol car for family shopping or other outings that may arise. These thoughts affected the majority decision to operate the patrol cars exclusively while on duty. The officers living some distance from the Sheriff Department and spending fifteen minutes to a half hour driving to work each day felt driving a patrol car during this time would be a great advantage to them and to Rock County. The travel time could be productive patrol time that could act as a deterrent to traffic violations and potential crimes. This extra time in the patrol car would increase visibility while allowing the officers their off duty time.

Results of Evaluation Objective II

The evaluation of the five police department programs produced positive indications in the seven criteria required to meet the needs of Rock County. Those areas were as follows: Reduced crime and accident rates in the target areas after implementation of the program; decreased maintenance costs and major repair; public acknowledgement
of increased visibility in the target areas; positive officer assessment of the program; decreased turnover rate of patrol cars; increased space for parking; and cost effectiveness. Each of the five police departments stressed a priority need for their community. Even though it was not preplanned, all five needs were different and distinct from each other while being part of the predetermined needs of Rock County.

Conclusion of Question II

All seven points specified as criteria for the adoption of the program by Rock County resulted in positive responses which indicate the potential of such a program in Rock County.

The five additional police departments found a decrease in crime and accident rates while the public served reported an increase in the visibility of the marked patrol car in the respected areas. There was an immediate reduction of maintenance costs and the turnover rate went from one year to as high as four years. Dane County, Wisconsin found a hidden value in the easing of a parking problem at precinct stations along with more office and storage space.

The officers involved in the five programs felt the program was successful. In some cases the officer guidelines were modified to prevent attrition from the program. The areas of concern were related to off duty time spent on an
assignment and the lengthy reports required when an officer acted while off duty. The necessary modifications were accomplished with little effort and did not affect the overall program. The solutions were satisfactory to the officers and the administration, producing an effective program for the department.

Results of Evaluation Objective III
Since this objective is based upon the adoption of the program any results or conclusion would be premature and invalid at this time.

Implications

Evaluation Objective I
The results of the officer questionnaire were attributed to the feelings that the officers held toward responding to a call while off duty. The officers felt that their off duty time must be clearly separated from their duty time. The officers were also uncomfortable with the thought of using the patrol car to take their families anywhere. This may be an unconscious response to years of preconditioning against such a practice. There was also an outward concern for family safety while riding in the patrol car.
The results of the questionnaire indicated a positive attitude toward participation in a limited form of the personally assigned patrol car program. The officers who indicated that they did not want to participate at all may be persuaded to do so based on the advantages of the program. Once they realize that there will be no infringement on their off duty time and that the advantages of the program will benefit them as well as the people of Rock County, they willingly join the program. Once the officers realize the success of the program they will appreciate their part in it.

**Evaluation Objective II**

The evaluation of the five additional programs confirmed the value of the personally assigned patrol car. Each of the five departments had a definite need to be met upon implementation of their program. The programs were specifically designed to meet the achievement of their needs and their experience indicated they accomplished other unexpected benefits.

The results of the five police departments strongly supports such a program for Rock County. Their success in areas they had designated as important matched the needs of Rock County.
Recommendations

The literature review indicated that the personally assigned patrol car program would fill the vacancy left by the current system. The five police departments experienced success in the areas that parallel the needs of Rock County. The desire to participate in a limited version of the program does not affect the potential effectiveness of the program in Rock County. The disadvantages of such a program must be balanced with certain advantages such as the decreased time the patrol car would be on the road and the decreased mileage on the car allowing for an extra year of operation before replacement. Since the officers reside in every city, town, and township in Rock County the patrol cars would be well distributed throughout the area. Once an officer entered his patrol car he would be capable of handling complaints in that area. This would result in a quicker response since the assigned area car may be some distance away. The present system allows for a half hour overlap between shifts which is spent returning the patrol car to the Sheriff Department to be used by the on coming shift. If there is a complaint received and a patrol car is needed the on duty shift must respond which means overtime for that officer. With the personally assigned patrol cars this would be eliminated and overtime cost would be reduced.

The accountability of the officer's operation of the patrol car would improve one hundred percent. Under the
current system it is easy for an officer to misuse or
damage a patrol car and pass the damage onto another shift
or officer. The patrol cars are used by so many different
officers that it is not always easy to determine who caused
the damage unless the officer acknowledges it. The person­
ally assigned patrol car program assigns one officer to one
vehicle providing the accountability that is lacking now.
This would reduce unnecessary maintenance costs and pinpoint
any operator problems that could be corrected. The officer
would also take greater pride in the overall appearance of
his patrol car which would improve the maintenance record.

The researcher feels that the personally assigned
patrol car program under specific limitations would be
beneficial to Rock County and the officers at the Sheriff
Department.

Summary
This study determined the value of instituting the use
of marked patrol cars on and off duty by patrol officers as
a method to decrease crime and accident rates while increas­
ing patrol car visibility in Rock County.

Five police departments with experience and documenta­
tion of their experience in the individually assigned patrol
car program were chosen. The information on these programs
was up-dated to assure accuracy and evaluated to determine
whether the results were relative to the needs of Rock
County. In addition, a questionnaire was developed to assure interest in participating in a similar program if initiated.

Two main questions were considered: 1) Would the program work in Rock County? and 2) Would the officers participate in such a program? The answers to both questions were positive with some modification. A modified program, however, would still meet the needs of Rock County and be successful overall. The program would increase the visibility of the patrol cars throughout Rock County with their presence at the officers' homes and while being driven to and from work. Once an officer was in the patrol car the officer would be ready to respond to any call or emergency. The present system promotes wasted time in travel to and from work. This time could be turned into productive time with the personally assigned car.

Once the initial cost of the program is overcome there will be a projected annual savings in overtime, vehicle turnover, vehicle maintenance, vehicle parking space, and an increased response time especially during shift change.
NOTES


2 Fisk, p. 18.

3 Fisk, p. 19.


5 Raymond A. Walton, Jr., *Study of Twenty-four-Hour Patrol*, (Indianapolis, Ind.: Indianapolis Police Department, 1972), p. 8.


7 Prince George County Research and Development Division, p. 19.

8 Prince George County Research and Development Division, p. 43.

9 St. Louis County Staff Committee, *Personal Patrol Car Program-Evaluation*, (Clayton, Missouri: St. Louis County Police Department, 1980), p. 15.

10 St. Louis County Staff Committee, p. 16.

11 St. Louis County Staff Committee, p. 1.
12 St. Louis County Staff Committee, p. 2.
13 St. Louis County Staff Committee, p. 2.
14 St. Louis County Staff Committee, p. 2.
15 St. Louis County Staff Committee, p. 2.
16 Linda J. Voster, "The Family Car," Law and Order.
18 Voster, p. 33.
19 Voster, p. 34.
20 Dane County Sheriff Committee, Personal Patrol Car
21 Progress Report, April 15, 1983 (Dane County, Wisconsin:
22 Dane County Sheriff Department) p. 6.
23 Telephone interview with Joseph White, Captain,
24 Traffic Division, Indianapolis Police Department, 17 July
24 St. Louis County Staff Committee, p. 1.
25 St. Louis County Staff Committee, p. 2.


Appendix
OFFICER'S QUESTIONNAIRE-SURVEY

If the Rock County Sheriff Department adopted the personally assigned patrol car program which of the following program would you prefer?

1. ___ The officer would take the patrol car home daily for his use both on and off duty. The officer would agree to follow certain guidelines in the operation of the patrol car.

2. ___ The officer would be assigned a patrol car that would be exclusively used by him/her and kept at their residence when off duty. (Similar to State Patrol).

3. ___ Would not like to participate in either program.

Please fill out the following information regardless of your above choice.

What shift are you presently assigned?________________________

The city, village or township you reside.________________________

Note: If city what area such as NE, NW, SE, SW.

YES ___ NO ___ Do you feel the personally assigned patrol cars would be beneficial to Rock County?